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Top Consulting Interview Prep

KCC Case Book 2014

November 21, 2014

Kellogg School of Management
Consulting Club

Kellogg Case Book – 2014 Edition

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<u>This book was edited in 2014 by KCC</u>

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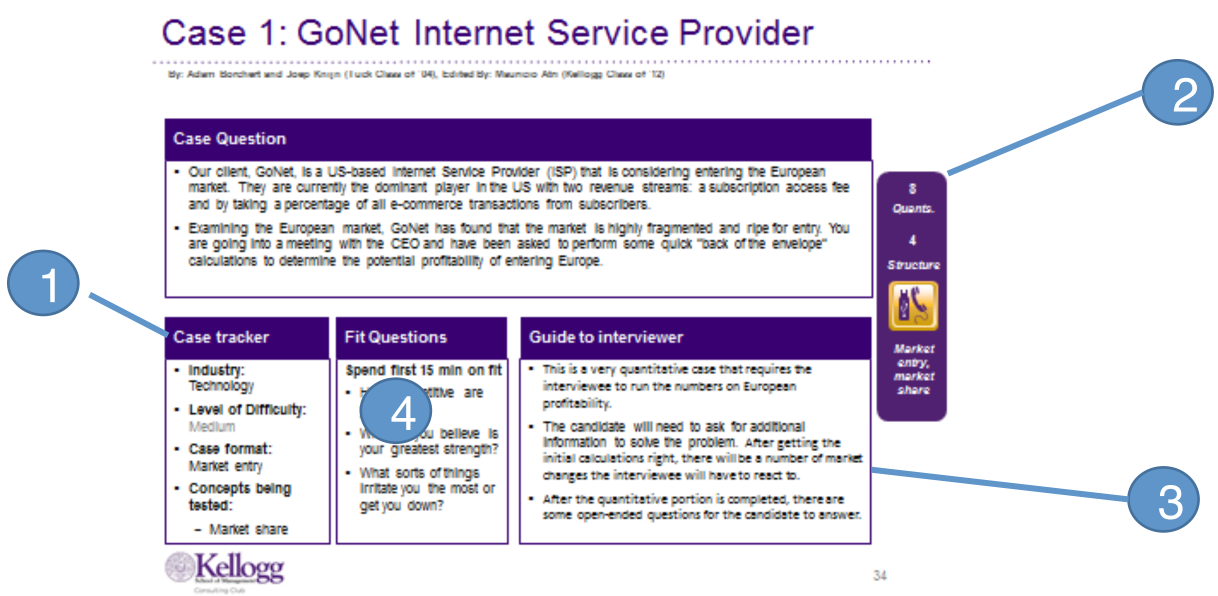
The title page for each case contains details that will inform case selection

Overview of case title page



1	**Case tracker:**	**Provides overview on case including industry, format, and concepts tested**
2	**Status bar:**	**Includes ratings for quant intensity and structure (1 = low, 10 = highest), as well as industry logo, case format, and concepts tested**
3	**Guide to interviewer:**	**Contains the overview of the case and allows users to determine whether they should <u>give</u> the case based on its attributes**
4	**Fit questions:**	**Contains 3 fit questions to begin the interview. After fit, then ask the case question**

The "Clarifying answers" page contains supplemental information and a suggested guide to the case's flow

Overview of clarifying answers and case guide page

Clarifying answers and case guide

1

Clarifying answers to provide

(Provide this information on request)

Competitive dynamics
- Highly fragmented industry
- No information about market leaders or trends

European industry overview
- GoNet plans to capture a base of 10 million subscribers
- Subscriptions will cost $20/month
- The average GoNet subscriber purchases $1,800 of goods on the internet annually
- GoNet receives 3% commission
- Fixed costs are $1 billion annually
- Variable costs are $110/subscriber annually

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Guide to case

Part 1 – Quantitative discussion
- This should be the meat of the case and should be completed before discussing any general or qualitative responses.

Part 2 – Qualitative discussion
- After navigating the math, ask the candidate the following questions:
  - 1) How could we reduce the fixed costs of investment?
  - 2) Would there be any reason to continue with the investment even if it looks like it will lose money?
  - 3) Are there are any other risks/benefits that GoNet should consider?
  - 4) How would you sum up the situation and what is your recommendation?

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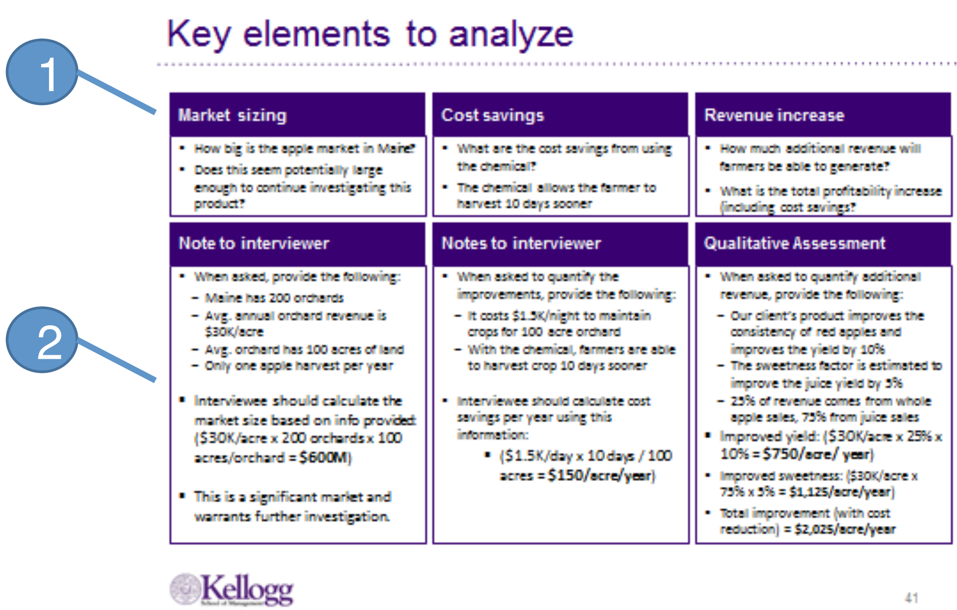
1 **Clarifying answers:** **Contains information that is less crucial to the main solution path. This is for supplementary information such as: "we do not know the competitive dynamics" or "the market has been growing at GDP."**

2 **Guide to case:** **Lays out the ideal structure for the case and includes hints on how to walk through the interview/handouts, as well as when to show them to the interviewee.**

The "Key elements to analyze" page contains the analysis of the key case concepts

Overview of key elements to analyze page


Key elements to analyze

Market sizing
- How big is the apple market in Maine?
- Does this seem potentially large enough to continue investigating this product?

Cost savings
- What are the cost savings from using the chemical?
- The chemical allows the farmer to harvest 10 days sooner

Revenue increase
- How much additional revenue will farmers be able to generate?
- What is the total profitability increase (including cost savings?

Note to interviewer
- When asked, provide the following:
  - Maine has 200 orchards
  - Avg. annual orchard revenue is $30K/acre
  - Avg. orchard has 100 acres of land
  - Only one apple harvest per year
- Interviewee should calculate the market size based on info provided: ($30K/acre x 200 orchards x 100 acres/orchard = $600M)
- This is a significant market and warrants further investigation.

Notes to interviewer
- When asked to quantify the improvements, provide the following:
  - It costs $1.5K/night to maintain crops for 100 acre orchard
  - With the chemical, farmers are able to harvest crop 10 days sooner
- Interviewee should calculate cost savings per year using this information:
  - ($1.5K/day x 10 days / 100 acres = $150/acre/year)

Qualitative Assessment
- When asked to quantify additional revenue, provide the following:
  - Our client's product improves the consistency of red apples and improves the yield by 10%
  - The sweetness factor is estimated to improve the juice yield by 5%
  - 25% of revenue comes from whole apple sales, 75% from juice sales
- Improved yield: ($30K/acre x 25% x 10% = $750/acre/ year)
- Improved sweetness: ($30K/acre x 75% x 5% = $1,125/acre/year)
- Total improvement (with cost reduction) = $2,025/acre/year

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1 **Concept box:** Includes the key question or objective associated with a main case concept tested. The interviewee should naturally move to asking or addressing the information in this box, but you may need to provide a little "push" at times.

2 **Notes to interviewer:** Contains additional information that you may provide to the interviewee during an investigation of the particular case concept. This information is CRITICAL to the interviewee solving the case both numerically and conceptually.

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Industry logos

The following logos will be located underneath the quant/structure scores on the case title page to indicate the industry being covered

Financial Services	Shipping & Transportati on	Retail	Airline	Tech & Telecom	Media & Entertainme nt	Other	Healthcare
Industrial Goods	Energy	Consumer Products	Travel & Leisure				

Tips for effective pre- and post-case activities

	Interviewer (delivering case)	Interviewee (receiving case)
Before meeting	• Ask the interviewee if they wish to focus on specific: – Case formats / concepts – Levels of difficulty – Industries • Inform interviewee which case you plan to deliver to confirm they have no prior knowledge of the case • Spend at least 30 minutes to review the case	• Inform your interviewer if you have specific areas for improvement • Send the interviewer a list of cases you have already done • DO NOT read the case ahead of time or discuss the case contents with peers! • Bring plenty of paper to take notes!
After the case	• Provide detailed feedback (both positive and constructive) to interviewee • Seek feedback from the interviewee on your case delivery	• Seek feedback from the interviewer on your case performance • Review the case and log your performance in a "case tracker" • Provide detailed feedback (both positive and constructive) to interviewer

Additional tips for giving an effective case

While there is no single "right way" to give a case, here are a few suggestions:

Take the interview seriously; pretend that you are a real interviewer

- While your interviewee may be your friend, providing a formal atmosphere will be much more valuable and provide a more realistic interview experience

Learn to be comfortable with silence

- While silence may be uncomfortable, resist the urge to jump in with pointers, hints, or additional information

Solve the case math on your own beforehand

- Not only will you gain practice with the math required, thinking through the approach may help you identify traps your interviewee may fall into

If you are not familiar with the industry, spend a few minutes quickly reviewing of the industry summaries (found in the back of this deck) or Vault.com

Case prep scoring: Provide tangible points that can be practiced and improved

1.- General feedback	Needs improvement	Good	Strong
Quantitative: comfort with complex math; shows math and logically lays out data			
Qualitative: conveys understanding of big picture takeaways; realistic thinking			
Creative: identifies different approaches to solve the problem			
Communication: strong listener, openly shares thought process, good body language			

2.- Case specific Feedback	Needs improvement	Good	Strong
Clearly understands and defines the problem/question; breaks problems into components			
Prioritizes analysis; Identifies critical path to the recommendation and most important issues			
Provides a structured and thoughtful approach to solve the problem (e.g. draw issue tree with critical pieces of analysis)			
Summarizes key findings through the solution of the case and translates them into insights or important takeaways			
Pragmatic/ realistic solution that answers the initial question with supporting evidence			
Assesses risks and consequences for the recommendation; identifies key next steps to further prove the solution			

Evaluation criteria (1/2)

Case skills and driving the case	Communication skills
Problem definition: Clearly understands and defines the problem/ question; summarizes the *essence* of the issue	Structure: Shares thinking process throughout the case and aligns his communications with the structure of the case
Problem breakdown: Breaks problem into most important components	Focus: Highlights key insights, important findings and critical issues
Structure: Uses a structured and thoughtful approach to solve the problem (e.g. draw issue tree with critical pieces of analysis)	Questions: Ask clear questions related to the case process and solution
Prioritization: Identifies critical path to the recommendation and most important issues/components	Engagement: Engages with the interviewer during the solution of the case
Information: Identifies and addresses key pieces of information and assumptions needed to solve the problem	Support: Clearly supports any conclusion or important claim with relevant arguments
Solution oriented: Formulates hypothesis when needed and maintains focus on the recommendation	Business language: Feels comfortable discussing the case with business terminology
80-20 approach: Deep dives into identified critical issues to develop a recommendation (80% of solution with 20% of analysis)	Body language: Communicates naturally and uses body language to support the communication process
Recommendation: Ends up with a pragmatic/ realistic solution that answers the initial question; supported with the analysis	

Evaluation criteria (2/2)

Polish and interpersonal skills	Business sense and high level thinking
Self confidence: Shows confidence when solving and attacking the case without sounding arrogant	Creativity: Identifies or uses different approaches to solve the problem. Out of the box thinking; uses creative methods and arrives at creative solutions
Quantitative skills: Feels comfortable handling complex calculations and analytics; shows clear calculations and data framing	Synthesis: Summarizes key findings through the solution of the case and translates them into insights or important take-aways
Analysis: Deep dives in identified critical issues or components and comes up with a solution for each issue	Concepts: Clearly understands and uses the key business concepts to solve the case
Interpersonal skills: Drive a conversation and acts naturally	"So what" thinking: Clearly addresses and articulates what each analysis, conclusion or recommendation means to the case, solution or the client
Balance: Good balance of quantitative and qualitative analysis during the solution	Testing: Frequently tests assumptions and conclusions with reality checks or other quick analysis
	Assessment: Assesses risks and consequences for the recommendations; identifies key next steps to further prove the solution
	Business sense: Uses common sense and realistic thinking to get to pragmatic recommendations; has the ability to think from different perspectives (e.g. client, competitor, consumer, etc.)

CONTENTS

Broad Range of Business Concepts Evaluated

Each case will follow a specific format and cover multiple business concepts

Sample Business Concepts	
Quantitative focus	**Qualitative focus**
Accounting	Customer strategy
Basic NPV	Competitive analysis
Break-even analysis	Creativity
Capacity expansion/Contraction	Operations
Elasticity	Marketing strategy
Investments	Organizational changes
Macroeconomics	Pricing strategy
Market share	Supply/value chain
Market sizing	Vertical integration
Microeconomics	Brain teaser (rare)

Case Topics Vary

The following represent the most common case topics on which a case interview may be based (ranked in descending order of frequency)

Format	Focus
Profit improvement	Analyzing causes for recent drop in profits / ways to increase profits
Market entry	Analyzing a firm's opportunity to expand into a new business or segment
Opportunity assessment	Examining the potential purchase / sale of a new or existing business or installation / abandonment of infrastructure
Increasing sales	Identifying ways in which a firm can optimally increase sales
Merger / Acquisition	Evaluating whether a firm should merge or purchase another company
Market sizing	Determining the size, usually in terms of a firm's revenue potential, of a market
Industry analysis	Evaluating an industry's structure and/or desirability
Starting a new business	Similar to entering a new market; then taking an investment point of view
Growth strategies	Determining the optimal ways to grow a company
Developing a new product	Assessing a new product offering
Reducing costs	Identifying internal or external costs that are out of line
Competitive response	Evaluating ways to address a competitor's action (*e.g.*, new product launch)
Turnarounds	Gathering info on why company is failing and then suggesting corrective action

A Typical Case Flow (Standard Case)

5-10 min	20-30 min	5 min
Intro & Fit Interview	**Case Interview**	**Wrap Up/ Q&A**

5 -10 min

1 Structure the problem

- Summarize the essence of the problem
- Ask clarifying questions
- Structure thoughts

2 Develop Hypothesis

- Develop a hypothesis
- Prioritize analyses

15 min

3 Deep Dive

- Deep dive into priority areas
- Make connections between information given throughout case

4 Develop Solution

- Refer back to the initial problem and your hypothesis
- Be creative
- Ask 'so what?'

5 min

5 Synthesize

- Summarize recommendation for client
- Lay out risks and next steps

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Structure the Problem

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Structure the problem → Develop Hypothesis → Deep Dive → Develop Solution → Synthesize

- **Get the facts right – ask clarifying questions**
  - Make 100% sure that you understand the objective: e.g. if the objective is to be the market leader, clarify what this means (highest market share, revenue, profit?)
- **Summarize the essence of the problem**
  - Do not just repeat all of the facts back to the interviewer
- **Draw out your approach to solving the problem (i.e. framework)**
  - Try to include at least 2 levels of depth in your framework
  - Customize your framework to the case
  - Be MECE
- **Walk your interviewer through your framework**

Remember: since every case is unique, don't try to force fit standard frameworks!

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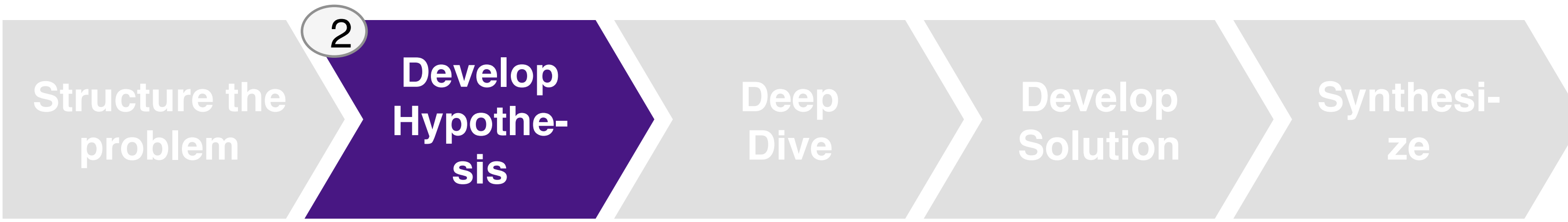
Develop Hypothesis



- **Use the info provided to form an initial hypothesis**
  - For example, if the case asks you to determine whether to enter a new market, take a position (e.g., enter), and list out the questions you would need to answer in order to validate your hypothesis
- **Use your hypothesis to prioritize your analyses**
  - What is most important to look into first, second, and third?
- **Engage with the interviewer**

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Deep dive into 1 or 2 areas

Structure the problem | Develop Hypothe-sis | 3 **Deep Dive** | Develop Solution | Synthesi-ze

- **Treat your notes as "slides"**
  - e.g. separate pages for revenue analysis, cost analysis, profit analysis
- **Link various data points together**
  - Look at the case holistically and tie together information provided at various points in the case
- **Structure quantitative data "Excel-style" / in tables**
  - Before doing any calculations, write out your approach to solving the math problem (e.g., write the formula in words)
  - Turn the page around and walk the interviewer through your math structure (similar to how you would walk them through your framework)
  - Don't start calculating numbers until you've received your interviewer's buy-in that your approach will lead you to the right solution

Develop Solution

Structure the problem → Develop Hypothe-sis → Deep Dive → 4 **Develop Solution** → Synthesi-ze

- **Be sure to ask the 'so what' questions**
  - Don't just state the obvious; explain what each conclusion means for your client
- **Develop creative solutions**
  - Pressure test your solution
  - If you think the goal is not achievable then suggest alternatives
- **Always consider implementation implications, risks and mitigation**
- **Utilize your analysis to make a powerful statement – take a stand, don't hesitate**
- **Always end your case with a succinct recommendation**

A good solution is:

1. **Best among alternatives**
2. **Practical**
3. **Based on facts**

Synthesize

- **Take a moment to prepare your thoughts**
  - But be prepared for the “elevator test”(interviewer doesn’t allow you time to prepare your thoughts)
- **Provide your recommend approach, backed up by facts**
- **List out risks that the client should consider when evaluating your recommendation**
- **Recommend next steps for analysis**

Tip: Highlight or circle main points as you go through the analysis to facilitate a concise summary

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What firms are looking for in a fit interview

- **Gravitas/Confidence** – Are you poised and professional? Can I trust you in front of a client?
- **Eloquence** – Can you speak concisely but accurately about complex issues? Do you communicate with impact?
- **Amicability** – Are you friendly and easy to talk to? Are you a good fit for our culture?
- **Engagement** – Are you excited to be here? Do you have positive energy and presence?
- **Leadership ability** – Can you lead a team through obstacles? What kind of impact can you make?
- **Drive** – Do you take initiative? Do you persist to achieve your goals? What kind of goals do you have?
- **Genuine Interest** – Do you really know what this job entails? Does your story make sense? Do you really know how one firm is different from another?

How to prepare for fit interviews

- **Know your resume inside and out**
  - Your resume is free game – ALL parts of it
  - Be prepared to answer detailed questions about any item on it
  - Have a couple of favorites – you may be given free reign to talk about one or more specific bullets
- **Know your personal stories inside and out**
  - Prepare 2 stories for each attribute (see next slide)
  - Memorize *broader content*, not a word-for-word story
  - Use the STAR-L (Situation, Task, Action, Result, Lesson) framework
  - Emphasize the decisions you made and the impact you personally had
  - The better you tell a story, the more memorable you will be
- **Review lists of typical fit questions and prepare answers**
- **Take advantage of video-taped CMC mock interviews**

How to define your stories (illustrative)

	Attributes					STAR-L				
	Leadership	**Team Player**	**Drive/ Initiative**	**Intellectual Curiosity**	**Overcoming adversity**	**Situation**	**Task**	**Action**	**Results**	**Learning**
Started a non-profit	✓		✓			As a retail banker, I noticed that many customers did not understand basic personal finance	I decided to start a non-profit that teaches financial education to underprivileged adults and teens.	1. I created a mission statement and business plan 2. I recruited volunteers and staff 3. I promoted the non-profit and found a venue for seminars.	We had 81 people in the first event, 200 in the 2nd, and over 500 in the final event. From these students, roughly 30% went on to buy a home	I learned how to successfully raise funds and effectively motivate volunteers/staff. I also got very comfortable presenting in front of large audiences
Built a value-based culture in my company	✓				✓	I owned a company where the overly aggressive sales team was making promises we could not keep to customers	Customers were outraged and I had to not only reprimand multiple sales people, but recreate positive momentum	1. I openly discussed the actions with all my employees and sales staff. 2. I led an initiative to create customer value code	While we experienced an initial dip in sales, annual sales increased by 20% and customer satisfaction metrics were higher than	I learned that I must always develop a value-based culture when building a team

Strong fit stories are clear, show individual impact, and highlight key learnings

Your Stories Template

	Attributes					STAR-L				
	1.	2.	3.	4.	5.	Situation	Task	Action	Results	Learning
1. Story										
2. Story										
3. etc.										

Research your target firms' most emphasized attributes and fill in purple cells. Prepare 2 stories for each attribute. Each story should highlight 1 or 2 attributes

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General tips for fit interviews

- Use the pronoun "I"…not "We"
- Don't be modest, now is your time to highlight your accomplishments
- Be authentic
- Be energetic and enthusiastic
- Be specific and emphasize your decisions, not the context
- Make good eye contact and watch your posture and body language (fit interviews are your first impression!)
- Know why you really want to do consulting
- Practice, practice, practice

Most frequently asked fit interview questions

- Idle chit chat (What's your favorite class at Kellogg? Why?)
- Tell me about yourself…
- Why are you interested in consulting?
- Why are you interested in working at this firm?
- Why are you interested in this office?
- Can you tell me about [any bullet] on your resume?
- Tell me about a time you exhibited leadership skills/influenced a team/worked through adversity/failed…
- What makes you unique?
- Do you have any questions for me?

Sometimes asked: Goals, Career Questions

- Where do you see yourself in 5/10/20 years?
- Why did you pick your prior job?
- What experiences/skills do you feel are transferrable to consulting?
- What kind of work are you best at?
- Tell me about your most significant project/experience at your last job
- What is your most significant career accomplishment to date?
- What do you think consultants do?
- What motivates you?
- What would you change if you could start your career over?

Sometimes asked: Team Issue Questions

- Give me a specific example that shows you are a good team player…
- How do you manage conflicts in teams? Give me an example…
- Tell me about a time you influenced a group…
- What positive and negative things would your teammates and colleagues have to say about you?
- What was the best constructive criticism you received? How did you respond?
- What types of roles have you played in teams?
- How do you deal with a difficult superior?
- What was your greatest team accomplishment? What role did you have on the outcome?

Sometimes asked: Other Personal Questions

- How would you friends, family and colleagues describe you?
- Why did you choose Kellogg?
- What has been your favorite Kellogg class? Why?
- What has been your most significant experience so far at Kellogg?
- What are you passionate about outside of work?
- What is your GPA?
- What is your GMAT?
- How are your quantitative skills?

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Table of Contents

Case 1: GoNet Internet Service Provider

By: Adam Borchert and Joep Knijn (Tuck Class of ‘04), Edited By: Mauricio Atri (Kellogg Class of ‘12)

Case Question

- Our client, GoNet, is a US-based Internet Service Provider (ISP) that is considering entering the European market. They are currently the dominant player in the US with two revenue streams: a subscription access fee and by taking a percentage of all e-commerce transactions from subscribers.
- Examining the European market, GoNet has found that the market is highly fragmented and ripe for entry. You are going into a meeting with the CEO and have been asked to perform some quick “back of the envelope” calculations to determine the potential profitability of entering Europe.

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Quants.

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Structure

Market entry, market share

Case tracker

- **Industry:** Technology
- **Level of Difficulty:** Medium
- **Case format:** Market entry
- **Concepts being tested:**
  - Market share
  - Profitability

Fit Questions

Spend first 15 min on fit

- How competitive are you?
- What do you believe is your greatest strength?
- What sorts of things irritate you the most or get you down?

Guide to interviewer

- This is a very quantitative case that requires the interviewee to run the numbers on European profitability.
- The candidate will need to ask for additional information to solve the problem. After getting the initial calculations right, there will be a number of market changes that the interviewee will have to react to.
- After the quantitative portion is completed, there are some open-ended questions for the candidate to answer.

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Clarifying answers and case guide

Clarifying answers to provide

(Provide this information on request)

Competitive dynamics

- Highly fragmented industry
- No information about market leaders or trends

European industry overview

- GoNet plans to capture a base of 10 million subscribers
- Subscriptions will cost $20/month
- The average GoNet subscriber purchases $1,800 of goods on the internet annually
- GoNet receives 3% commission
- Fixed costs are $1 billion annually
- Variable costs are $110/subscriber annually

Guide to case

Part 1 – Quantitative discussion

- This should be the meat of the case and should be completed before discussing any general or qualitative responses.

Part 2 – Qualitative discussion

- After navigating the math, ask the candidate the following questions:
  - 1) How could we reduce the fixed costs of investment?
  - 2) Would there be any reason to continue with the investment even if it looks like it will lose money?
  - 3) Are there are any other risks/benefits that GoNet should consider?
  - 4) How would you sum up the situation and what is your recommendation?

Math questions (1 of 2)

Math question

1) Please determine the annual net income (before taxes) in Europe, given the current revenue model and set of assumptions. What is the annual gross mark-up, in percentage?

2) GoNet just found out that a new entrant is charging $10/month and capturing market share. Can we lower our fee to $10/month?

Math solution

1) Revenues each year will be $2.4B for subscription (10 million subscribers X $20/month X 12 months) and commissions will be $540M (10 million subscribes X $1,800/year X 3% commission) for a total of $2.94B.

- Fixed costs are $1B and variable costs are $1.1B (10 million subscribers X $110/year) for a total of $2.1B each year. Profits are $840M and the annual profit margin is ~29% ($840M/$2.94B)

2) Annual revenues drop to $1.2B (10 million subscribers X $10/month X 12 months) from subscriptions, while commissions remain constant at $540M. Total revenues are $1.74B. Because total costs remain $2.1B, we lose $0.36B by halving subscription charges, making the answer "No."

- At this point, ask the interviewee what the elasticity of demand is in this market and the implications for GoNet. The market should be highly elastic, meaning that GoNet will not win over enough subscribers at $20/month.

Math information

- 10 million subscribers
- $20 month subscription fee
- $1,800/year of online spending @ 3% commission
- Fixed costs: $1 billion
- Variable cost: $110/year per subscriber

Math questions (2 of 2)

Math question

3) With high market elasticity, GoNet will not be able to charge more than $10/month. How much would each subscriber have to buy on the Internet to keep profits at the same level as $20/month subscription fees?

4) How much would each subscriber have to buy on the Internet to enable us to break even?

5) Given that we cannot charge more or realistically increase shopping significantly, how many subscribers would we need in order to maintain the same level of expected profits (at $10/month)?

Math solution

3) To keep profits at $840B, we know that costs remain at $2.1B so revenue will need to be $2.94B. Subscription revenue will be $1.2B, so commissions need to be $1.74B. There are 10 million subscribers, so each subscriber need to bring in $174/year of commission. At 3%, they will need to buy $5,800/year in goods ($174/3%).

- Ask the candidate if this realistic. The answer should be “No”.

4) To breakeven, we will need commission to be $900M over 10 million subscribers. That is $90/year per subscriber ($900M/10M), which means $3,000/year in goods purchased online ($90/3%). The candidate should identify that this is also unrealistic, representing more than a 50% increase from last year.

5) To find the answer here, we need to find incremental revenue per subscriber. Each subscriber brings in $174/year ($10/month X 12 months + $1800/year X 3%) at a cost of $110/year for a profit of $64/year. These profits must cover the fixed costs of $1B/year, so we must bring in 15.625 million customers ($1B/$64)

- Note: many people forget the variable costs during the completion of this case.

Solution and recommendations

Solution & Recommendations

1) Some potential ways (not exhaustive) to reduce fixed cost: outsourcing capacity, leasing networks, working in specific geographies, etc.

2) GoNet may still be interested in this move as a way to break into Internet retailing and expanding its subscriber base. Based on the math though, this should not be an attractive option long-term either.

3) Very open ended and reliant on candidate's creativity.

4) This is very open-ended and should be evaluated based on the candidate's argument, not answer. Based on initial estimates, this is a very attractive market to enter, but with price pressures and high elasticity the market is far less attractive. If we are to undertake this initiative, GoNet needs to find ways to convert a much higher number of customers or differentiate its product, which both require market research. There is also potential to reduce costs or establish this foothold as a loss leader, but these require strong arguments from the candidate.

Bonus/Guide to an Excellent Case

- This case tests two things – the interviewee's comfort with numbers and ambiguity. An excellent case interview will result in an intuitive grasp on what is being asked quickly and solid execution on the quantitative portion of the case.
- Ultimately, the best interviewees will make a very strong argument using the facts provided and support the decision to invest/not invest with a strong business sense about the costs and implications of the project.
- Creative solutions beyond those listed are possible and encouraged, though should be done within the framework of the information available.

Case 2: Maine Apples

By: Adam Borchert and Joep Knijn (Tuck Class of '04), Edited By: Peter Manoogian (Kellogg Class of '12)

Case Question

- Our client is a Korean conglomerate named Danut that has acquired a small Boston-based biotechnology firm
- The biotech firm acquired has developed a chemical that helps control the ripening of produce. After testing, this chemical appears to work especially well with apples: it allows apple orchards to harvest earlier and it improves the overall quality of the harvest.
- Danut traditionally uses a test market to determine commercialization. Given proximity to Boston and average apple yields, Maine has been chosen.
- Danut would like to know if they should attempt to commercialize this chemical.

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Quants.

6

Structure

CPG

Mkt. Size
Price Stgy
Invest.

Case tracker

- **Industry:** Consumer Goods
- **Level of Difficulty:** Medium
- **Case format:** Developing a new product
- **Concepts being tested:**
  - Market sizing
  - Investment
  - Pricing Strategy

Fit Questions

Spend first 15 min on fit

- Tell me about a recent positive team experience
- How would you describe your learning ability? In what kinds of situations are you fast or slow to learn?
- Describe the last time you "put your foot in your mouth."

Guide to interviewer

- After hearing the prompt, the interviewee should be able to develop a variant of the following question:
  Is the market size large enough and the estimated profitability high enough for Danut to attempt to commercialize this chemical?
- Key case steps:
  1. Confirm market attractiveness (size)
  2. Evaluate orchard revenue and cost structures
  3. Project farmers margins and pricing for Danut
  4. Identify qualitative issues (Risks) to consider

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Clarifying answers and case guide

Clarifying answers to provide

Product Benefits

- Reduced costs through earlier harvesting
- Improved apple yields
- Improved juice yields (with higher quality apples)

Client Characteristics

- Only concerned about a "test-market" in the state of Maine

Competitive Dynamics

- No other competitive products on the market currently

Local industry Characteristics/Economics

- Growing at the rate of GDP

Guide to case / Guide to handouts

1. **Calculate Market Size (determine attractiveness)**
   - Share market size information with interviewee after probing questions are received
   - Is the market large enough to continue?

2. Evaluate orchard profitability – Share product benefit details – i.e. 10% increase (from calculation page)

- How much incremental profit does our product create for an apple orchard owner?
- Next, the interviewee should determine the profit margins for the farmers given the costs of purchasing the product. Additionally the interviewee should determine a reasonable price for the product

3. Risks & Other Considerations – Guide the interviewee to consider qualitative risks and issues before moving forward with commercialization

Key elements to analyze

Market sizing

- How big is the apple market in Maine?
- Does this seem potentially large enough to continue investigating this product?

Cost savings

- What are the cost savings from using the chemical?
- The chemical allows the farmer to harvest 10 days sooner

Revenue increase

- How much additional revenue will farmers be able to generate?
- What is the total profitability increase (including cost savings)?

Note to interviewer

- When asked, provide the following:
  - Maine has 200 orchards
  - Avg. annual orchard revenue is $30K/acre
  - Avg. orchard has 100 acres of land
  - Only one apple harvest per year
- Interviewee should calculate the market size based on info provided: ($30K/acre x 200 orchards x 100 acres/orchard = **$600M**)
- This is a significant market and warrants further investigation

Notes to interviewer

- When asked to quantify the improvements, provide the following:
  - It costs $1.5K/night to maintain crops for 100 acre orchard
  - With the chemical, farmers are able to harvest crop 10 days sooner
- Interviewee should calculate cost savings per year using this information:
    - ($1.5K/day x 10 days / 100 acres = **$150/acre/year**)

Qualitative Assessment

- When asked to quantify additional revenue, provide the following:
  - Our client's product improves the consistency of red apples and improves the yield by 10%
  - The sweetness factor is estimated to improve the juice yield by 5%
  - 25% of revenue comes from whole apple sales, 75% from juice sales
- Improved yield: ($30K/acre x 25% x 10% = **$750/acre/ year**)
- Improved sweetness: ($30K/acre x 75% x 5% = **$1,125/acre/year**)
- Total improvement (with cost reduction) = **$2,025/acre/year**

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Key elements to analyze (cont.)

Product Profitability

- If our product costs $100K per 200 acre farm, what will the farmer's profit margin be if they buy it at cost?
- What should our client sell the product for? Is a 50% margin realistic?

Note to interviewer

- Farmer's incremental revenue/cost savings = $2,025/acre
- Product costs = $100K/200 acres = $500/acre
- Profit margin = ($2025-$500)/$2025= 75%
- The interviewee should note that this is an **extremely high profit margin** for the farmer and realize that there is a significant opportunity for profits with this product.
  - How much of this benefit can we capture in our pricing?
  - Interviewee should provide a percentage between 25% and 50%. Anything higher than 50% should be questioned due to the novelty of the product and resulting lack of social proof.
- A 50% profit margin for our client would also realize a 50% profit margin for farmers. This is absolutely a realistic price to set, if not a little low.
  - Given the costs provided, will we make a profit? **Yes**
  - Interviewee should calculate profit: ($100,000 / 200 acres = $500/acre). Assuming $1,000 price per acre, gross margin will be **50%.** [($1,000 - $500) / $1,000]

Solution and recommendations

Solution & Recommendations

- Overall, our client should commercialize this chemical and price it at approximately $1,000 per acre to make a 50% margin.
- Ask the interviewee if there are other non-financial risks/benefits that our client should consider.
- A potential answer would note that the client should consider several qualitative issues:
  - Differentiation: What is our positioning?
  - Environmental issues: Is there a risk of backlash and/or boycott from the general public? Could the U.S. government attempt to regulate our product?
  - Operational reality check: Does the company have the resources to do this?
  - Patenting: Is the product already patented? If yes, then when does it expire? If no, then is it possible to patent? If not, then can we patent the manufacturing process?
  - Representativeness of test market: Does it cost less to cover apples in other states?
  - Strategic fit: Is this opportunity too small relative to the size of the client?

Bonus/Guide to an Excellent Case

- Excellent interviewees need to address value-based pricing: the need to quantify added profits that our client's product will make for *its* clients and how much of that money our client can capture.
- Additionally, a strong interviewee will share several qualitative issues listed above to supplement the recommendation to enter the market.

Case 3: Orrington Office Supplies (OOS)

By: Andy Grieve (Kellogg Class of '01), Edited By: Peter Manoogian (Kellogg Class of '12)

Case Question

- Our client, OOS is a leading manufacturer of office products in 1992, with sales of $275M in 1991. They have strong brands, invest heavily in marketing / advertising, and have grown through prod. line extensions and four key acquisitions
- OOS is organized into 5 autonomous divisions, but shares manufacturing and marketing functions. Shared costs (45% of total) are allocated on a % of sales method. There are three plants running at a current capacity utilization is 50%
- Analysts predict OOS is a potential acquisition target given its strong balance sheet but weakening earnings. They are publicly traded and have little long-term debt. As a potential investor, how would you improve its profitability.

Case tracker

- **Industry:** Consumer Products
- **Level of Difficulty:** Medium/Hard
- **Case format:** Improving profitability
- **Concepts being tested:**
  - Capacity expansion / contraction

Fit Questions

Spend first 15 min on fit

- Name a time when you have caved under pressure. How did you recover?
- Describe a time you have disagreed with your supervisor.
- How do you keep abreast of current events?

Guide to interviewer

- This case combines public math with key qualitative insights. At its core, this is a case about rapidly declining profitability and finding ways (i.e. plant consolidation) as a way to improve its future performance.
- The interviewee should recognize that this is a performance improvement case and will look for ways to improve profitability. They will have to use the information provided up front to determine that capacity contraction is the prime means to improve profitability.
- Because there are many potential avenues to explore, the interviewer may need to nudge along the interviewee.

6

Quants.

7

Structure

CPG

Profit Imp.
Cap. Exp.

Clarifying answers and case guide

Clarifying answers to provide

Industry trends

- U.S. Office supplies market grew at 5% CAGR historically. In 1990 and 1991, the market declined at 5%/yr.
- Superstore channel is becoming increasingly critical
  - Gained 10 share pts in past 2 yrs
  - Typically discount products 30% to small retailers/dealers
- Superstores are aggressively substituting private label products for traditional brand names

Client Characteristics

- Broader product line than competitors (12.5K SKUs vs. 4-5K for competitors)
- Distribution: 75% wholesalers, 15% superstores, 10% end customers
- Most profitable product is a high-end branded stapler
- Staples, Inc. is OOS's largest customer

Guide to case / Guide to handouts

A sample case structure would include the following:

1) Examination of OOS's recent performance to deep-dive declining profits.
2) Discussion of potential for potential for plant consolidation.
3) A profitability analysis of plant consolidation.

Exhibit 1– Hand out after interviewee asks about profitability

Exhibit 2– Hand out after interviewee concludes that plant consolidation is a worthy area for a "deep-dive." This should be evident from the case introduction, but provide hints if necessary.

Exhibit 3– Following the discussion of plant closures, the interviewee should ask about the cost structures about the various plants.

- If interviewee asks about revenues, gently suggest to calculate on a per SKU basis (*e.g., t*otal sales / total SKUs = $22K / SKU).

Key elements to analyze

Profitability

- Using Exhibit 1, have a discussion about why the slopes for sales and profits differ as time elapses

Capacity utilization

- Using Exhibit 2, qualitatively discuss the potential options for plant consolidation.

Plant closures

- Using Exhibit 3, crunch the numbers on the profitability of a possible plant closure?

Notes to interviewer

- Exhibit 1 - interviewee should not only be able to interpret the data on this slide, but also come up with two insights:

  1) the fact profits have been declining more steeply than sales reflects the fixed-cost nature of this business, and

  2) the reason that sales did not grow at a faster clip than profitability during the 1980s likely reflects a strategy to grow through acquisitions, which prevented OOS from seeing the gains through economies of scale that one would normally expect in a business such as this

Notes to interviewer

- Interviewee should recognize the Chihuahua plant is close to having capacity to produce OOS's 12.5K SKUs. Either OOS can close that plant and move all production to the US, or it could close the US plants, discontinue 500 SKUs and move production to Chihuahua.
- Insightful interviewees will note that Chihuahua is the most feasible strategy, but will ask to see fixed and variable cost data; if so, then produce Exhibit 3.

Notes to interviewer

- They should have identified that the Chihuahua plant is the most feasible, but there are some key considerations.
- **Key questions to ask:**

  How would this change revenues? (currently $275M / year)

  How would this change production costs? What are they now?

  How would this change pre-tax profits (currently $25M /year?)

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Calculations

Math questions

1. How would consolidating to Chihuahua change revenues? (currently $275M / year)
2. How would this change production costs? What are they now?
3. How would this change pre-tax profits? (currently $25M /year)

Calculations

1. Revenues: Each SKU earns annual revenues of $22K ($275M divided by 12,500 SKUs) therefore, eliminating 500 SKUs will decrease annual revenue by $11M, or 4%

2. Prod. costs: Each plant currently has the following annual costs, totaling to $136M

Chihuahua: $20M + ($4K * 4.5K SKUs) = $20M + $18M = $38.0M

Michigan: $15M + ($7.9K * 5K SKUs) = $15M + $39.5M = $54.5M

New Jersey: $18M + ($8.5K * 3K SKUs) = $18M + $25.5M = $43.5M

Consolidating revenues to Chihuahua will reduce annual costs by 50% to:

Chihuahua: $20M + ($4K * 12K SKUs) = $20M + $48M = $68.0M

3. Profits: We have reduced costs by $68M and lowered revenues by $11M, thus increasing profits by $57M, to a total of $82M, which more than triples them.

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Solution and recommendations

Solution & Recommendations

- Overall, our client should eliminate 500 SKUs and consolidate all production to the Chihuahua plant to raise annual profits from $25M to $82M.
- The client should also consider several qualitative issues:
  - Implementation Timeframe: Will not be done tomorrow.
  - Relationships with Union: If organized labor is part of our production employee pool in the two plants that we are going to close, we will need to address that situation.
  - Changes in Distribution and Warehousing: We will need a carefully-developed transition plan.
  - Purchasing: We will need to transition to a strong central purchasing department, rather than smaller local ones.
  - Culture: Communicating the change properly is key, and we will need to ensure that morale does not take a nosedive.

Bonus/Guide to an Excellent Case

- Excellent interviewees need to recognize what macroeconomic issues are beyond the scope of the client's control and then quickly dive into the plant consolidation, then analyze the cost structures
- Additionally, common sense and basic familiarity with manufacturing operations should guide the successful interviewee to some or all of the qualitative issues provided

Exhibit 1: OOS Sales / profit trend

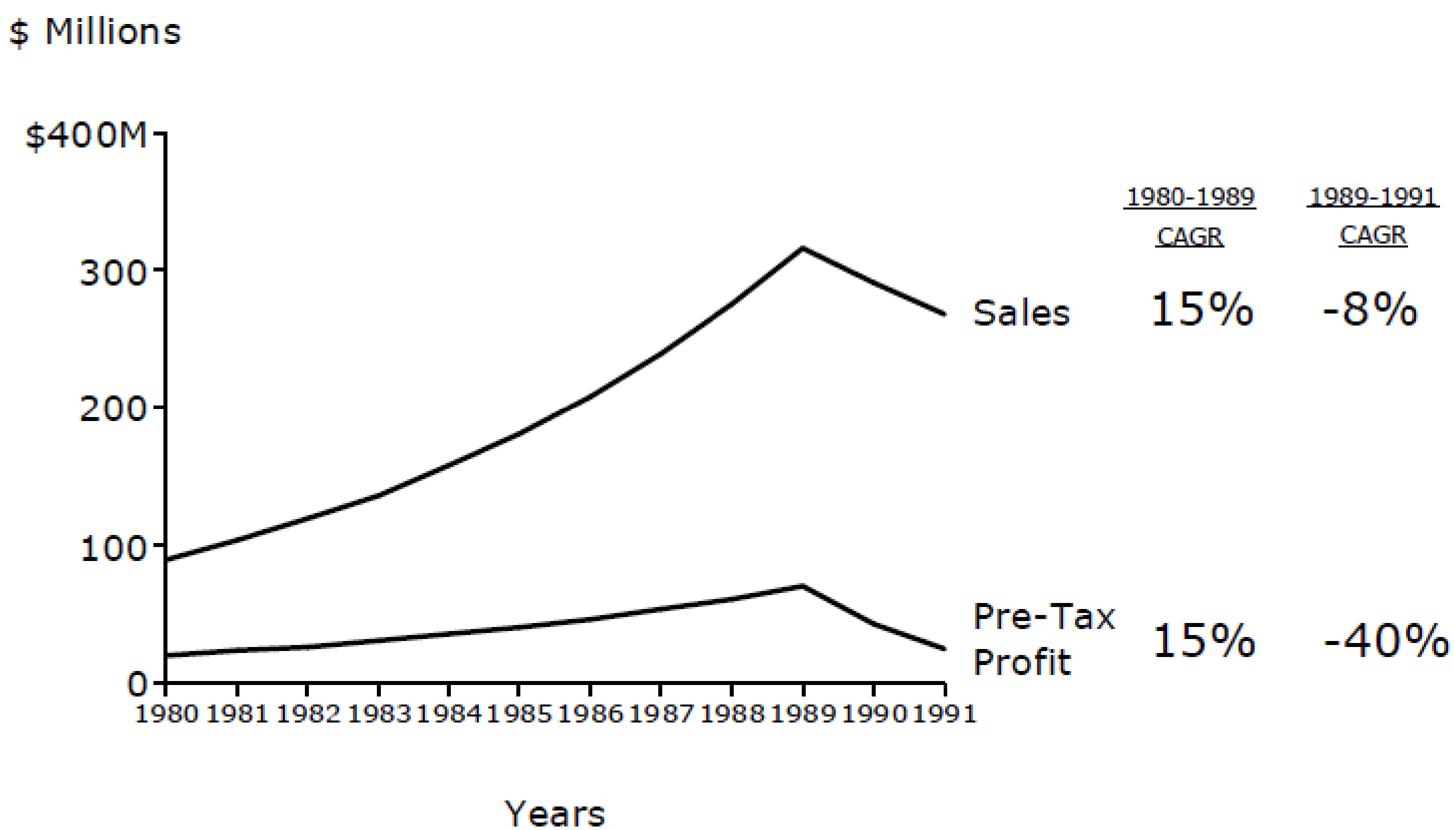

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Exhibit 2: Overview of OOS production plants

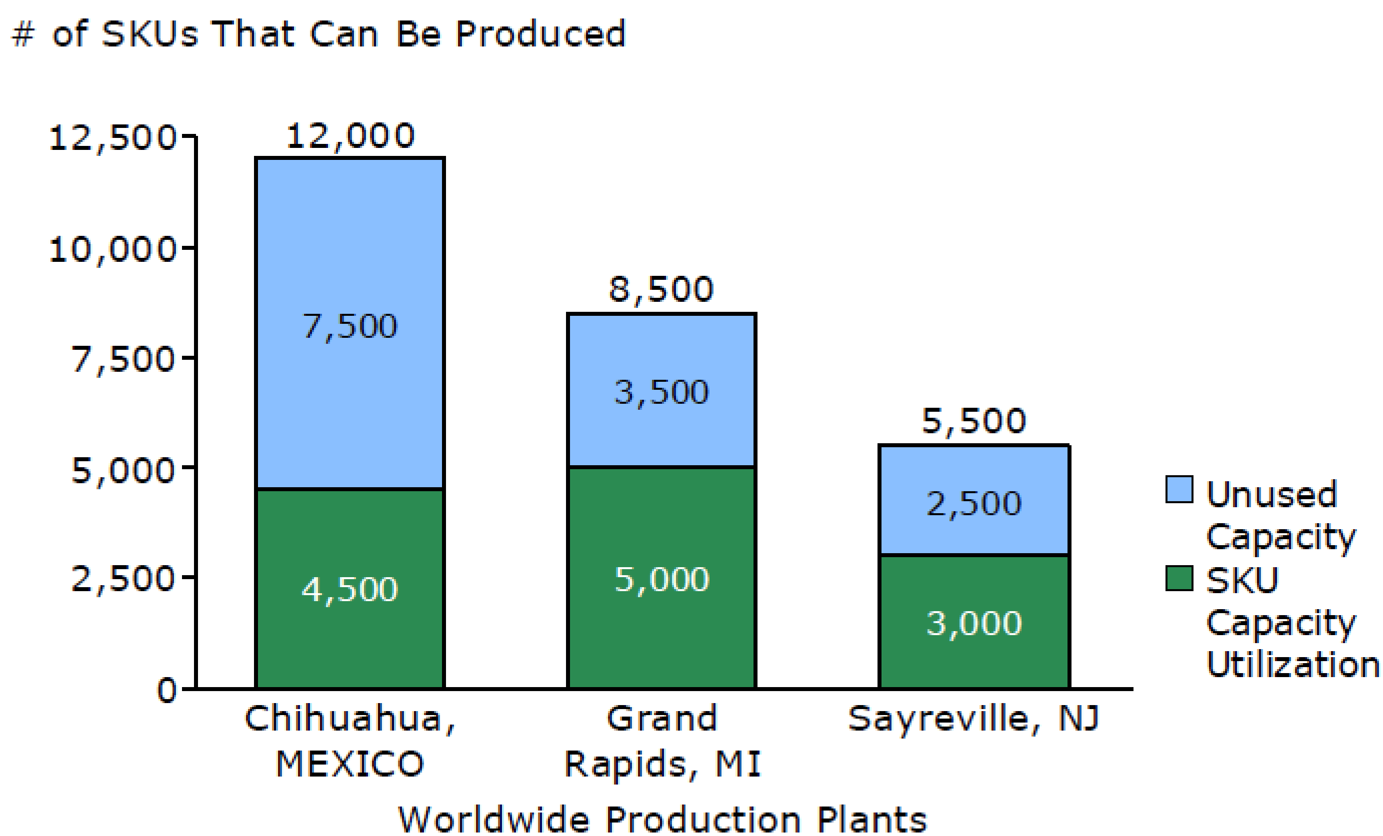

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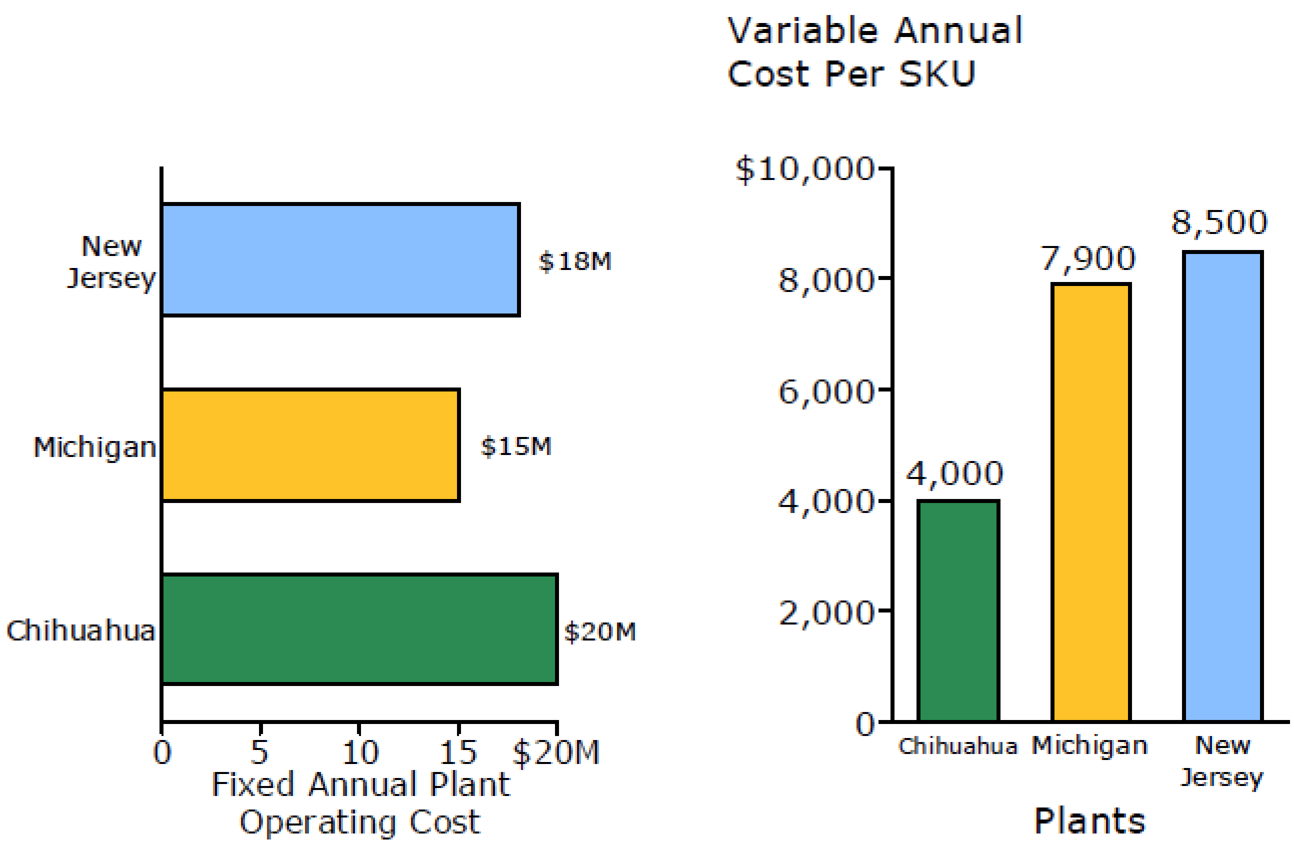
Exhibit 3: Plant operating costs



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Case 4: Syzygy Supercomputers

By: Edwin Van Dusen, Brian Fox and David Welch (Kellogg Class of '04), Edited By: Uri Kalir (Kellogg Class of '12)

Case Question

- Syzygy Supercomputers is a large international fully-integrated computers and communications company with annual revenues of approximately $20 billion U.S.. In the past several years, the company has seen a steady decline in profits.
- The CEO has asked us to look into this problem. How can Syzygy Supercomputers get back on track?

3

Quants.

7

Structure

Profit Imp. Comp. Anl Ops.

Case tracker

- **Industry:** Tech & Telecom
- **Level of Difficulty:** Hard
- **Case format:** Improving profitability
- **Concepts being tested:**
  - Competitive analysis
  - Operations

Fit Questions

Spend first 15 min on fit

- What is the single most important detail in your resume?
- What is the least important detail in your resume?
- Why is the lifestyle of this job right for you?

Guide to interviewer

- This case is about a tech company undergoing a decline in profitability, despite a strong competitive position. Syzygy has been overinvesting in R&D relative to its returns and performance has suffered as a result.
- The interviewee is expected to go through these general steps while presenting a solution:
  1. Confirm profitability issues and ask to see historical revenue and cost information.
  2. Ask to see market position and related data.
  3. Realize that this case is going to be decided based on information regarding the products.
  4. Identify the main issue affecting profitability – the company's R&D spending

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Clarifying answers and case guide

Clarifying answers to provide if Asked

General Information on Syzygy

- Only the information that has already been given. Other information currently unavailable.

Competitive Dynamics

- There are several players in the market, but everything has remained stable from a competitive standpoint.

Profitability drivers

- COGS, SG&A, and other profitability factors are on-par with Syzygy's competitors (except for R&D, about which the candidate should ask specifically).

Interviewer Guide to Case

A sample case structure would include the following:

1) Examination of historical performance to deep-dive declining profits.
2) Discussion of market dynamics and competitive positioning.
3) Deep-dive into drivers and profitability , ultimately leading to a discussion of SG&A

Necessary Information that should be given only when <u>specifically</u> asked for by interviewee:

- Historical costs, revenues and profits – exhibit 1
  - Note that the interviewee should be asking for historical trends in the company's profitability. If they are asking only for current profitability, interviewer should point them in the direction of historical trends
- Market data – exhibit 2 followed by exhibit 3
  - Interviewer should give the interviewee a few seconds to understand slide 2 and then handout slide 3. Interviewer should ask interviewee which product in slide 3 is which (on slide 2).
- R&D spending data – exhibit 4 and exhibit 5
  - The candidate will naturally ask about potential drivers of profitability (S&GA expense, COGS, etc.).
  - These exhibits should only be given once the candidate has identified R&D as a driver of Syzygy's profitability.

Key elements to analyze

Interpreting Exhibit 3

- The X axis represents absolute market share (AMS), which correlates with the height of Syzygy's rectangles in exhibit 2.
- The Y axis represents relative market share (RMS), calculated as Syzygy's market share divided by the market share of the closest competitor. If Syzygy is the market leader, this number is greater than 1. If Syzygy is not the market leader, its market share divided by the market leader's share will be lower than 1. This correlates with the the ratio of the height of Syzygy's rectangles to that of competitors' rectangles for each product in exhibit 2.
- The diameter of the bubbles is driven by Syzygy's total revenues in that category, comprised of its market share in the category multiplied by the category's size.

Notes on Exhibits 2 & 3

- Correctly interpreting slides 2 and 3 will lead the candidate to correctly identify the products on slide 3:
  - Product #1 is custom applications
  - Product #2 is supercomputers
  - Product #3 is telecom equipment
  - Product #4 is satellites
  - Product #5 is operating software

Notes on Exhibits 4 & 5

- The key insight in exhibit 4 is that Syzygy is the only major competitor in this industry whose R&D spending is below the "normative band"
- We would expect each company's degree of technical leadership to go up as it invests in R&D, but Syzygy, with slightly more R&D spending than Cray Research and Sonic Wave, enjoys less of a perception of technical leadership from its customers
- Exhibit 5 builds on this point. The key insight is the absolute expense (not percentage) Syzygy is spending on R&D. Correct analysis will show that Syzygy is spending money on features that do not generate customers' "willingness to pay". Syzygy is spending money to develop features that consumers are not willing to pay for.

Solution and recommendations

Solution & Recommendations

- The candidate should be able to produce one of the following insights:
    - Cut R&D to eliminate spending on unnecessary customer features.
    - Keep R&D spending the same, but switch the work to developing features that consumers will be willing to pay for at a level that is higher than the R&D expense itself.
- A second-order insight from the case is that Syzygy should exit the operating software business (product #5 in this case) since it's small market share will continue to erode as a result of economies of scale, network economics and the experience curve all working against it.

Bonus/Guide to an Excellent Case

- An excellent interviewee will –
    - Take a few seconds to fully understand each of the complex graphs he/she is given before giving an answer.
    - Immediately ask about R&D spending and not go through COGS or SG&A first (this is a hi-tech company, so R&D spending should be looked-at before other drivers of profitability).
    - Conclude their recommendation by not only stating that Syzygy should exit the operating software business, but also focus on the categories in which it is the market leader in order to get some or all of those economies to work for it and against its competition.

Exhibit 1: Syzygy's Historical Costs, Revenues and Profits

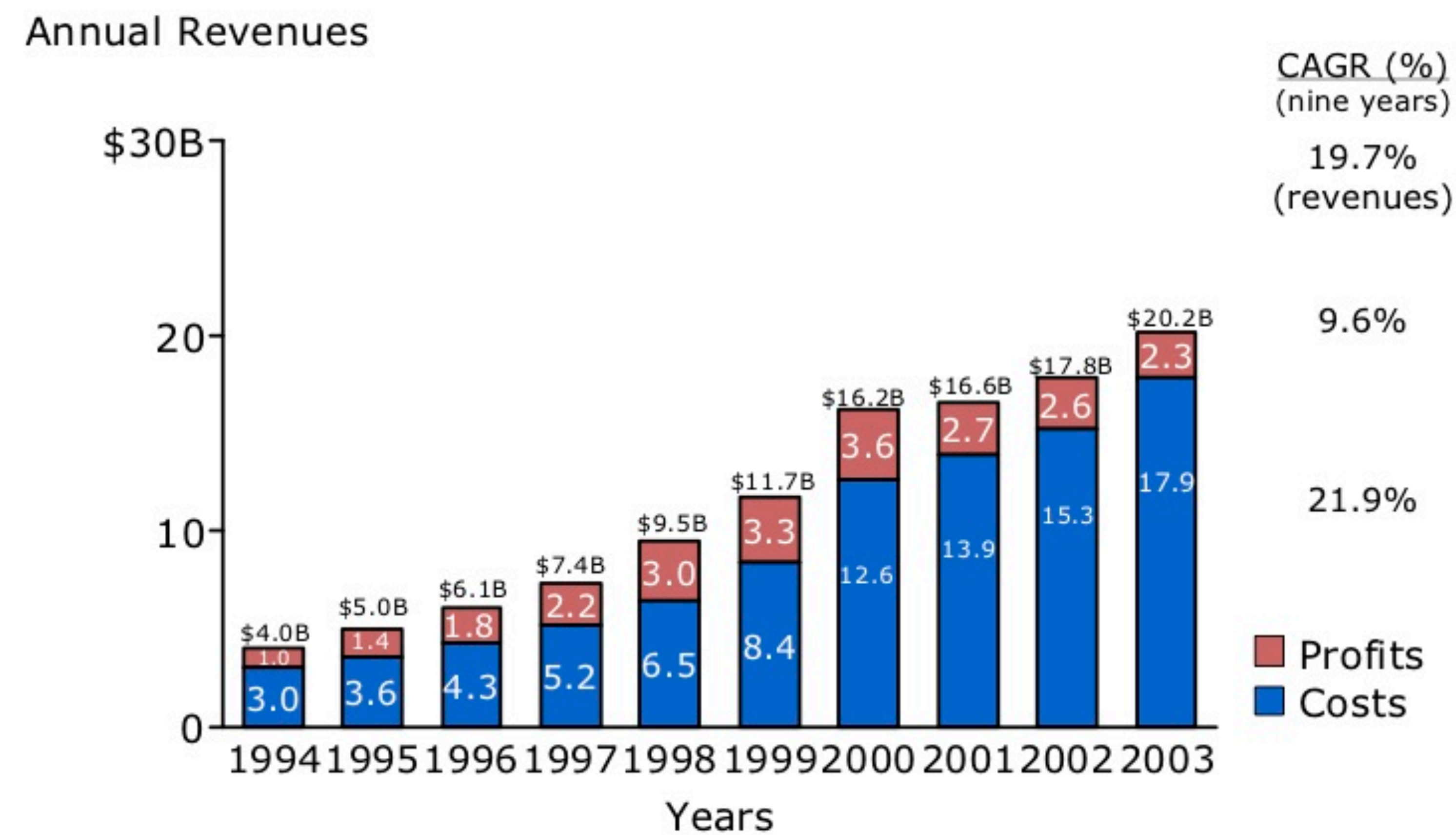

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Exhibit 2: Worldwide Telecom Computing Market (Today)

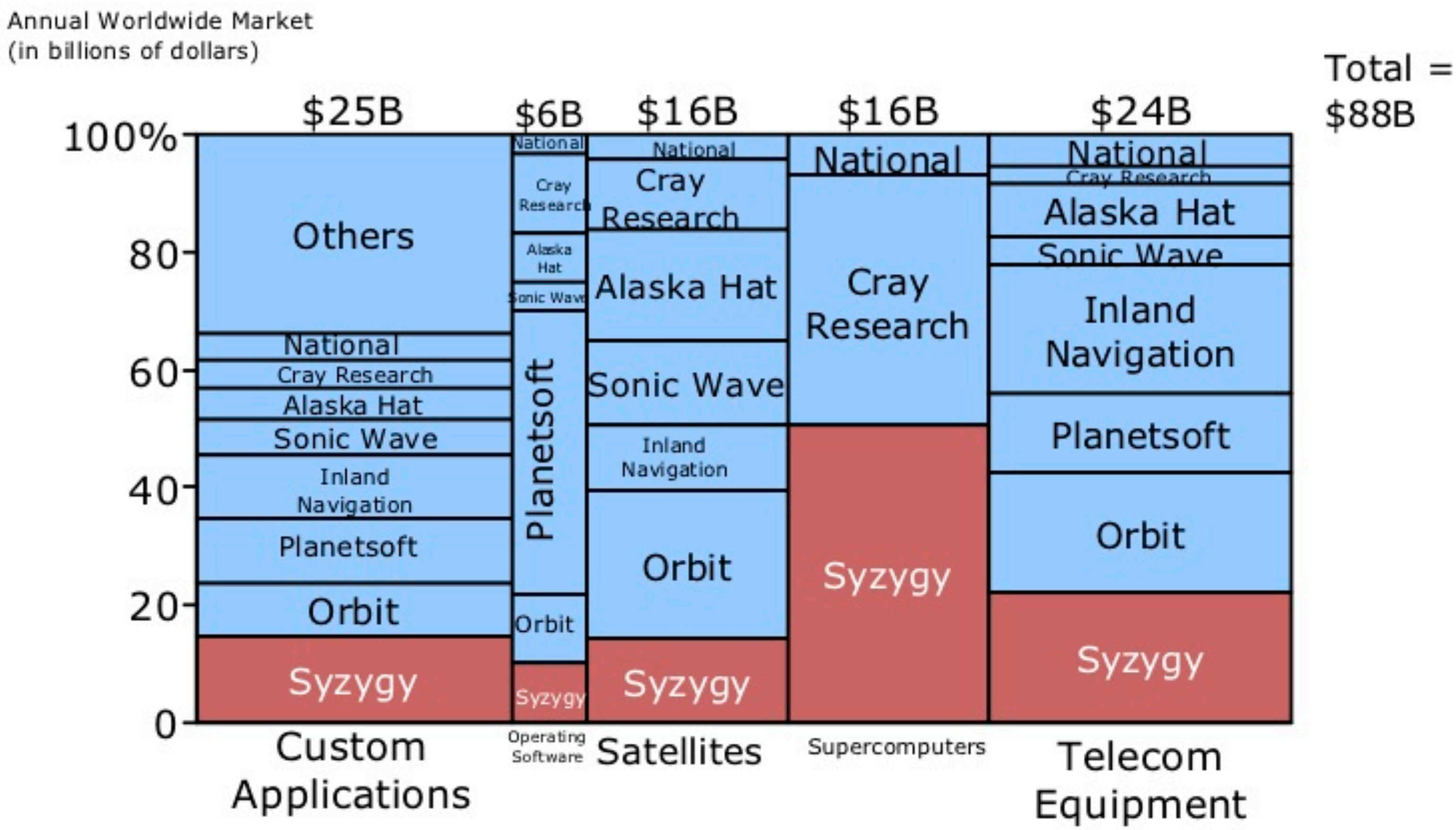

Exhibit #3: Syzygy's Absolute vs. Relative Market Share

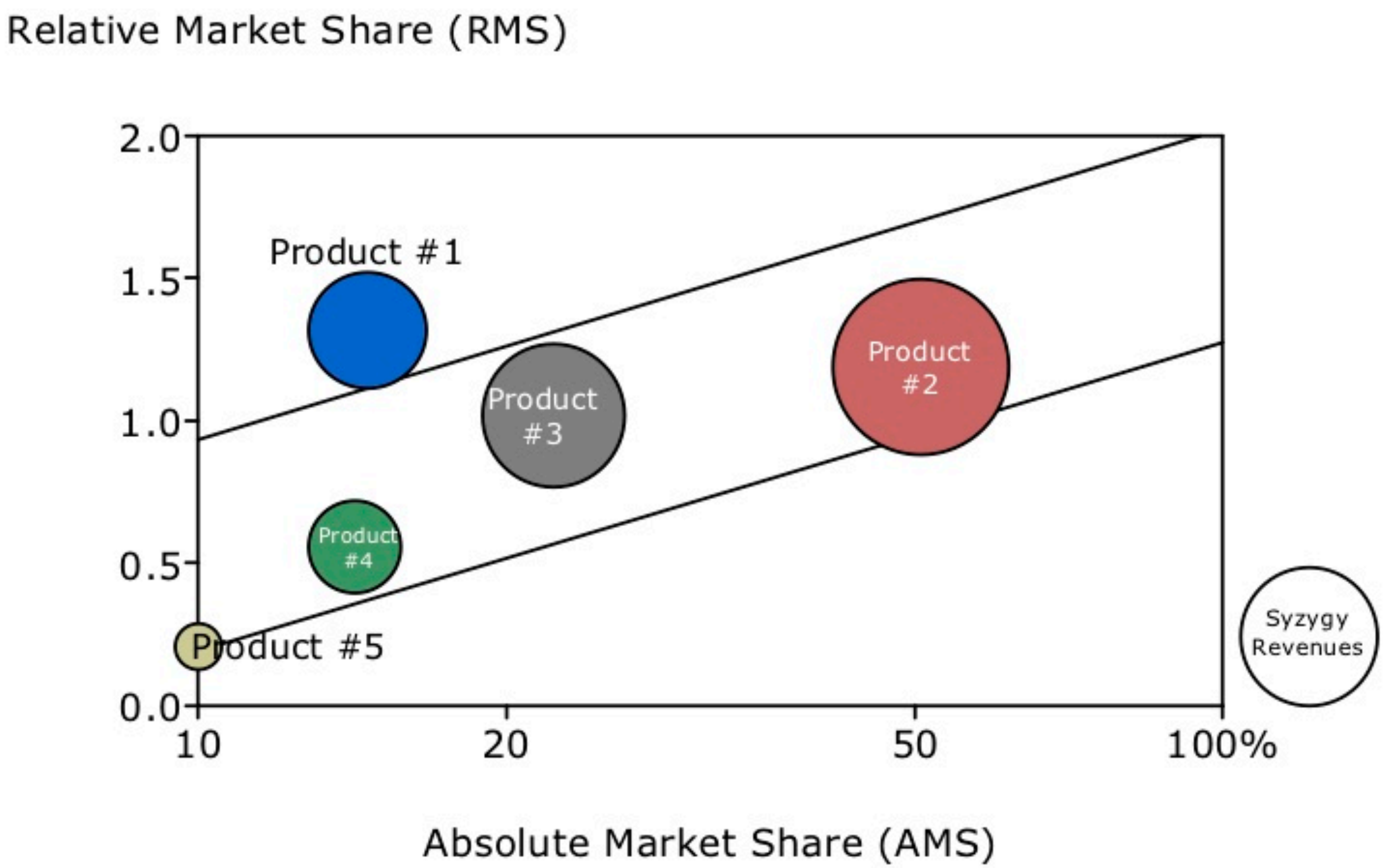

Exhibit #4: Companies' R&D vs. Degree of Technical Leadership

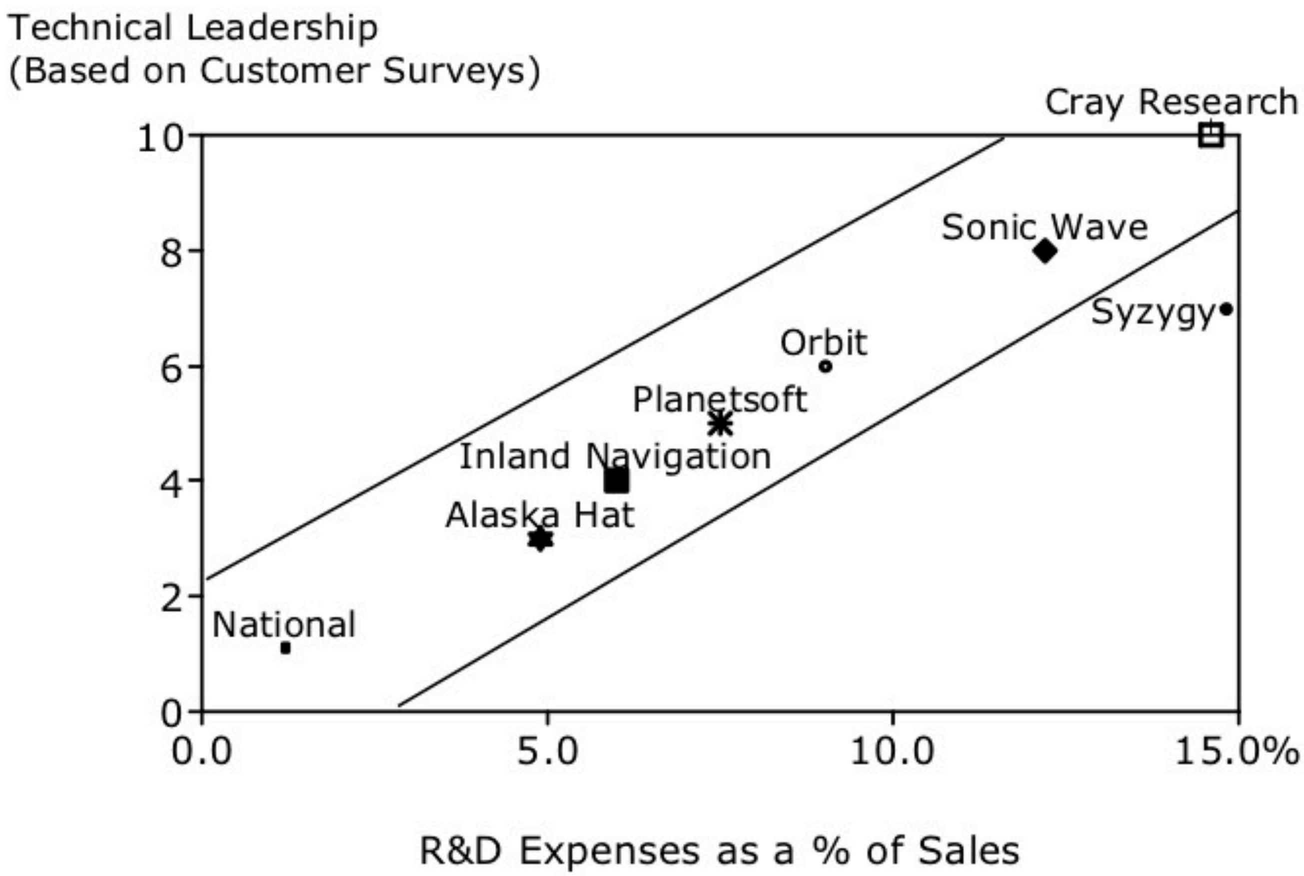

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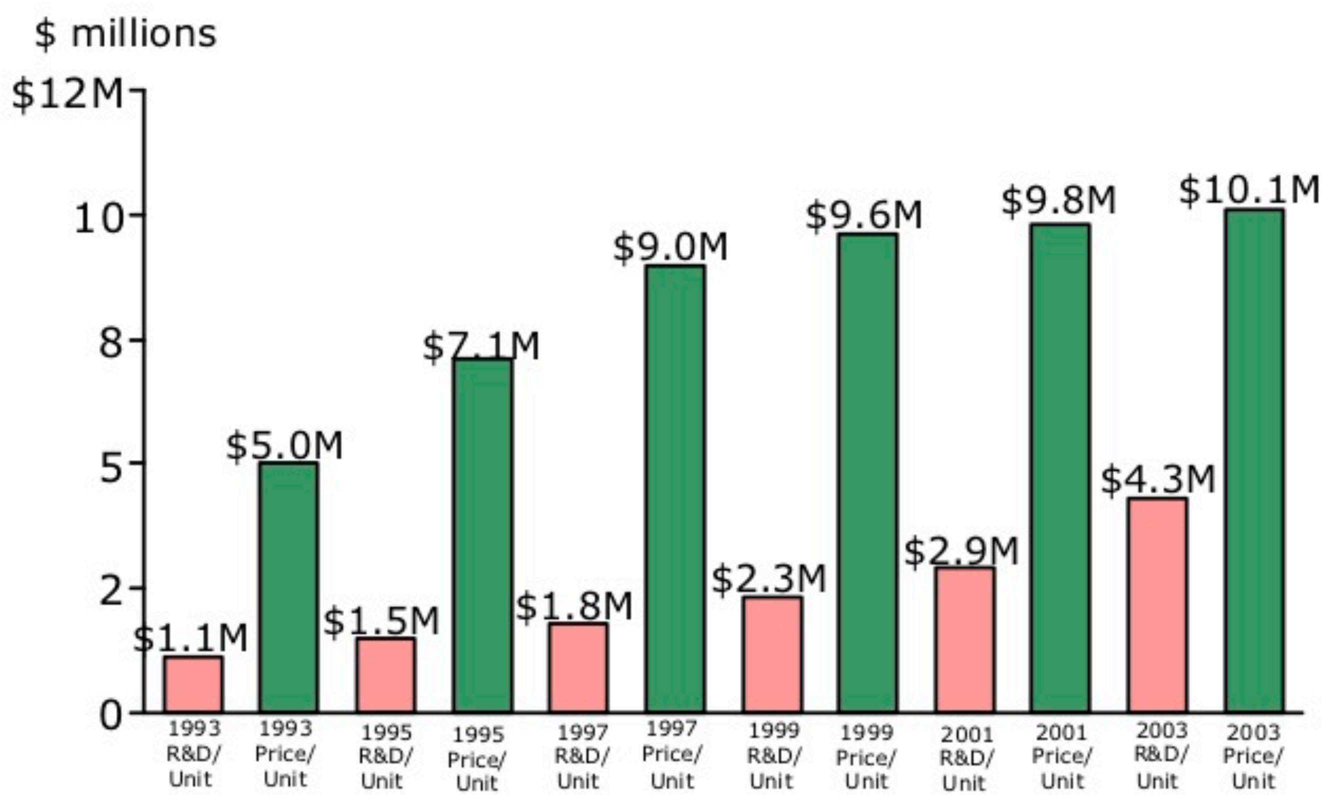
Exhibit #5: Syzygy's R&D Expenses and Selling Prices for Supercomputers



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Case 5: Winter Olympics Bidding

By: Chris Dupre (Kellogg Class of '03), Edited By: Uri Kalir (Kellogg Class of '12)

Case Question

- Our client, a major US television network, is trying to figure out how much to bid for the exclusive right to broadcast the 2018 Winter Olympics Games in the U.S.
- The Winter Olympics are a huge deal and will require a significant amount of capital to secure the rights, so our client has brought us in to help them figure out the right bid amount after considering all relevant factors.

8

Quants.

4

Structure

Basic NPV B/E

Case tracker

- **Industry:** Media & Entertainment
- **Level of Difficulty:** Medium
- **Case format:** Opportunity Assessment
- **Concepts being tested:**
  - Basic NPV
  - Breakeven analysis

Fit Questions

Spend first 15 min on fit

- How would you describe your problem solving skills?
- Do you consider yourself a more visionary or more pragmatic thinker….and why?
- What did you like least about your last job?

Guide to interviewer

- This is a very quantitative case that requires the interviewee to run the numbers on an Olympics bid. The candidate will have to decide potential ad revenue/cost information, as well as the NPV, to determine bid size.
- The candidate will need to ask for additional information that is necessary to solve the problem, rather than relying on the interviewer to dispense it. After getting the initial calculations right, there are a lot of implications that may change the level of the bid.
- Especially for less finance-minded interviewees, you may have to help nudge candidates through the math.

Clarifying answers and case guide

Clarifying answers to provide

Revenues
- No subscription revenue, but can keep 100% of advertising revenue
- Ad rates are $400K/30 second ad for prime time (M-F 7-11 PM, all weekend) and $200K/ad for non-prime time
- Market research has shown that you can include no more than 10 minutes of advertising per hour.

Costs
- $482M of total production costs
- Opportunity cost: $1M/hour
- Time value of money: 4 year lag for receipt of revenue

Guide to case

Part 1 – Quantitative discussion
- Candidate should determine that this is a cost-benefit / NPV analysis.
- Candidate should identify potential revenue streams from hosting the Olympics, i.e. ad revenue, product placements, etc.
- Then, the candidate will have to figure out if this is a good investment. They should identify 3 costs (production costs, opportunity costs, and time value of money). By factoring in these costs, the candidate will find out if the Olympics are worth the investment.
- Some of the numbers and assumptions here are difficult, so nudge the candidate along if necessary.

Exhibit 1 – Provide Winter Olympics schedule if asked
- Give to candidate once he/she identifies ad revenues

Part 2 – Qualitative discussion
- After finding the NPV of $200M, ask the candidate about intangible factors, benefits, and risks. Some critical factors:
  - Might give network access to new viewers
  - There is prestige associated with hosting this event
  - We can use the air time to promote other programming
  - Opportunities for product tie-ins, supplemental revenue
- After finishing the discussion, ask the candidate for a recommendation.

Math questions

Math question

1) Calculate the revenue from broadcasting the Winter Olympics.

2) Factoring in costs, is this a good investment? Find the NPV.

Math solution

1) Total revenues should be equal to $928M for the project.

- Primetime: Weekdays (M-F): 10 weekdays x 4 hrs/day x 10 min/hr x 2 slots/min x $400,000/ad = $320M
- Non-prime: Weekdays (M-F): 10 weekdays x 6 hrs/day x 10 min/hr x 2 slots/min x $200K/ad = $240M
- Weekend: 4 days x 10 hrs/day x 10 min/hr x 2 slots/min x 400K/ad = $320M
- Opening/Closing: 2 days x 3 hrs/day x 10 min/hr x 2 slots/min x 400K/ad=$48M

2) Total profit should be equal to $300M.

- Profit: Revenues $928M - $482M of total costs - $146M of opportunity cost (2 days x 3 hours x $1M/hr + 14 days x 10 hours x $1M/hr) = $300M

3) NPV should be equal to $200M.

- Discount rate: $1.10^4 = 1.4641$ (ask candidate to round to 1.50)
- $300M/1.5 = $200M

Math information

Revenues
- $400K/ad for prime time (M-F 7-11 PM, all weekend) and $200K/ad for non-prime time
- 10 minutes/hour of advertisements

Costs
- $482M of production costs
- Opportunity: $1M/hr
- WACC: 10%

Solution and recommendations

Solution & Recommendations

- While the NPV of the project is $200M, the fact that there are other intangibles (new viewers, plugging our programs, and prestige) the bid should just be $200M.
- While there is no one correct answer, most answers should be in the range of $200M. If there is significant fluctuation from $200M, the candidate will have to provide in-depth justifications and make a concrete argument.

Bonus/Guide to an Excellent Case

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

Exhibit #1

Winter Olympics Schedule

Day 1 Opening Ceremonies (Friday)	Day 2-15	Day 16 Closing Ceremonies (Saturday)
8-11pm	Weekday: 9am-12pm, 2-5pm, 7-11pm Weekend: 11am-9pm	8-11pm

Case 6: Rotisserie Ranch

By: Brian Fox (Kellogg Class of '04), Edited By: Adam Louras (Kellogg Class of '11)

Case Question

- Our client is Rotisserie Ranch, a poultry farming company that specializes in growing chickens for rotisserie roasting. Its main line customer segment is comprised of large grocery chains, who buy its chickens to fresh roast in the meat departments of their grocery stores. Market research has revealed to Rotisserie Ranch that more and more consumers have begun buying flavored rotisserie chickens recently.
- Rotisserie Ranch is thinking of pre-flavoring some of its chickens for grocers. Should Rotisserie Ranch begin selling this new product?

Case tracker

- **Industry:** Consumer Goods
- **Level of Difficulty:** Medium
- **Case format:** Developing a new product
- **Concepts being tested:**
  - Microeconomics
  - Elasticity
  - Customer strategy

Fit Questions

Spend first 15 min on fit

- What are your top 9 weaknesses? (Stress Test – If interviewee gets 9, ask for 9 more until they cannot answer)
- Ok, what are 9 of your strengths?
- Imply that interviewee answered the strengths much faster than the weaknesses and ask, why?

Guide to interviewer

- This case is similar in style to a McKinsey & Company 1st round case in that the *Interviewer* should drive the case.
- The case is primarily tests the ideas behind a new product introduction and forces the interviewee to consider market testing, profitability, etc. before rolling out a new product.
- Because this is a "Market Introduction" case, the interviewee SHOULD ask questions about *competition*.
  - For the purposes of this case, assume that Rotisserie Ranch will only compete against existing Private Label brands at grocery stores.

6

Quants.

5

Structure

CPG

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Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Characteristics/Market Economics

- *Perishability*: Predicting demand for cooked chickens is difficult for grocers; any leftover cooked chickens at the end of the day are thrown out; unthawed chickens cannot be re-frozen

Client Characteristics

- *Competitive Advantage*: Client has patented process for sterilely packaging chicken, so that it will remain fresh for 30 days, making freezing unnecessary
- Client is currently the industry *market share leader* in rotisserie-ready chicken
- Four New "Flavored" Products to be introduced concurrently: Barbecue, lemon herb, tandori and teriyaki

Competitive Dynamics

- No competition in new product market due to patented process

Interviewer Guide to case and handouts

Case Structure – Interviewee's structure should include:

- *Value to customers (grocery chains) – Will they buy it?*
- *Revenue and Cost implications of new venture*
  - Cost increase to client is offset by price increase to grocers
- *Competition*
  - None. Competition freezes chicken so can't be pre-seasoned.

Prompt 1 & 2 – After Interviewee walks through structure, ask them:

- *Do you think that grocery retailers would be interested in pre-seasoned chickens from Rotisserie Ranch?*
  - No correct answer; however, should be logically defended
- *After several interviews, it turns out that the grocers are very interested in Rotisserie Ranch's proposed new product, but first they want to be sure that the Rotisserie Ranch chickens will sell well. How would you make sure?*
  - The correct answer is to run a test market.

Prompt 3 – After discussing Prompt 2, discuss the results of the market test:

- Assumes that the demand function for Rotisserie Ranch chickens is <u>linear</u>.
- Store 1 is comparable to test store A and store 2 to test store B

Key elements to analyze

Value to Grocers

- Do *you think that grocery retailers would be interested in pre-seasoned chickens from Rotisserie Ranch?*

Market Testing

- After several interviews, grocers are interested in Rotisserie Ranch's proposed new product, but first they want to be sure that the chickens will sell well. *How would you make sure?*

Demand Elasticity

- A test market launch for the new Rotisserie Ranch BBQ chicken was administered (Hand out Exhibit 1).
- *Should the grocers carry our product?*

Prompt 1 Sample Answers

- Sample "YES" response:
  - *Labor Cost Reduction*: Meat department workers; don't need to spend time seasoning the chickens.
  - *Economies of Scale*: Seasoning centralization; lower cost.
  - *Product Consistency:* Centrally managed; able to spend more on R&D.
- Sample "No" response:
  - *Loss of Differentiation*: Grocery chains differentiate by value-added .
  - *Attune to Local Needs*: Likely to be better at gauging consumer tastes.
  - *Increases Inventory & SKUs.*

Prompt 2 Answer

- The correct answer is to run a test market for the new products.
  - The candidate may begin going into detail on how this test would be run. Cut him or her off as soon as you are comfortable that they understand that:
    - *A pilot test should be run.*
    - *The pilot needs to have some control or comparison group.*

Notes on Exhibit 1 & 2

- Using Exhibit 1, interviewee should calculate:
  - Retail Margin ($):
    - Store A: 25% x $4 = $1 Per Unit
    - Store B: 25% x $3 = $0.75 Per Unit
  - Gross Profit:
    - Store A: $1 Per Unit x 400 = $400
    - Store B: $0.75 Per Unit x 1000 = $750
- Cannot answer with Exhibit 1 alone, so they should ask for "Control Group" information: Hand out Exhibit 2 when this is asked
- Interviewee should calculate (NOTE: Answer is the same for both chicken types):
  - Variable Margin ($) Rotisserie:
    - Store 1: 30% x $3.33 - $0.20 = $1 /Unit
    - Store 2: 30% x $2.50 - $0.15 = $0.75 /Unit
  - Gross Profit Rotisserie:
    - Store 1: $1 Per Unit x 300 = $300
    - Store 2: $0.75 Per Unit x 800 = $600

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Solution and recommendations

Solution & Recommendations

- Overall, our client should launch the Pre-Seasoned BBQ Chicken product and test other products because:
  - *Competitive Necessity*: Consumers are spending more money on seasoned rotisserie chicken than traditional rotisserie chicken and the market is shifting in this direction
  - *Benefit to Grocers*: Assuming test market was representative, Grocers can expect to earn $100 to $150 more gross profit using our client's product relative to their own "Private Label"
    - Cannibalization is not an issue because the variable margins and gross profits are the same on standard and seasoned rotisserie chicken, i.e. shifting from either of these products to our clients is a net benefit
  - *Benefit to Client:* Assuming that the increased price to the Grocers offsets the increased cost of production, our client will make more money due to increased sales of the new chicken

Bonus/Guide to an Excellent Case

- An excellent interviewee will note:
  - The benefit to the Grocers based on a linear interpretation of Demand, i.e. At a $3.50 price point, sales are expected to be 700 units. This give a variable margin of $0.875 /unit and total operating profit of $612.50
  - The benefit to the Grocers as percentages, i.e. Store 1 would gain 33.3% and store 2 would gain 25% to their operating profit by shifting to our client's product.
  - Potential scale benefits to our Client over time as more pre-seasoned chickens are sold
  - Potential labor reductions by grocers as the workload is "Outsourced" down the value chain to our client

Exhibit #1: Market Test of Pre-Seasoned BBQ Chicken

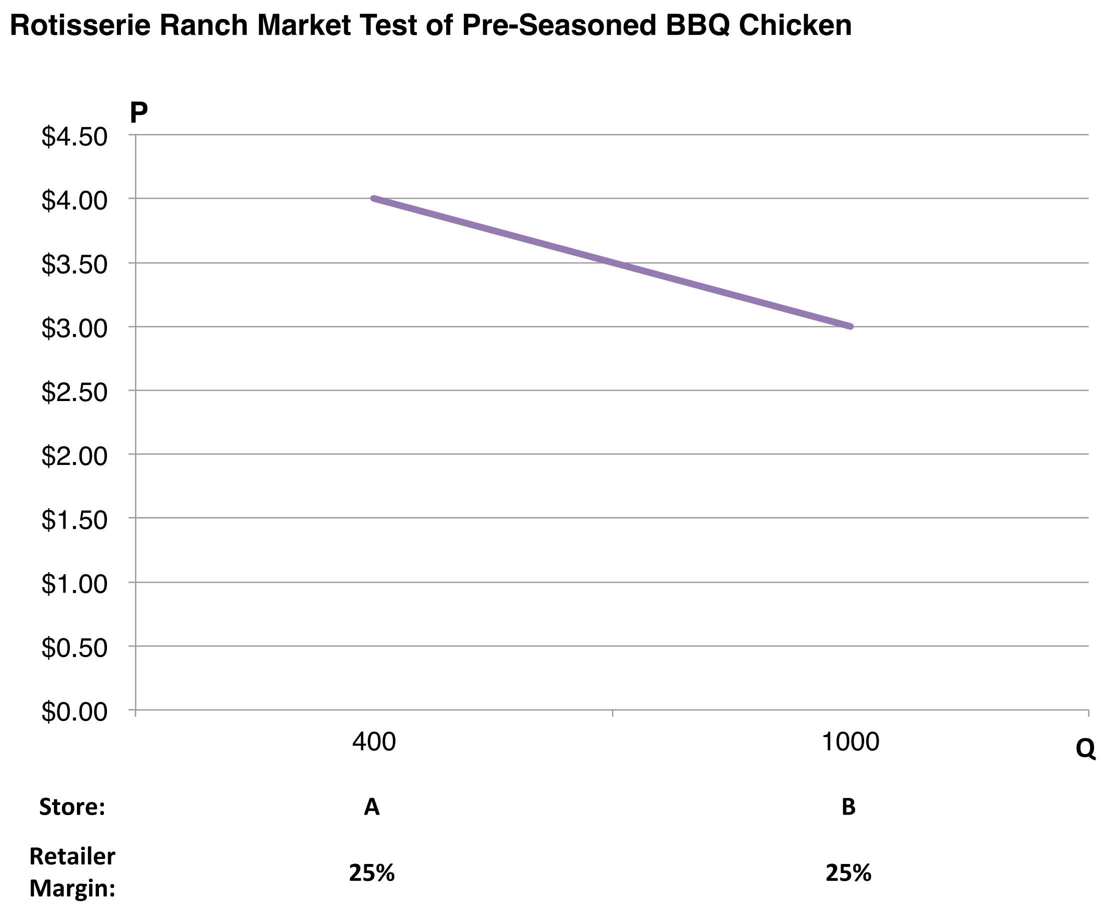

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Exhibit #2: Control Group Stores

Standard Rotisserie

	Store 1	Store 2
Chicken Type	*Standard*	*Standard*
Weekly Sales	$1,000	$2,000
Retail Price	$3.33	$2.50
Seasoning Cost	$0.00	$0.00
Retailer Margin	30%	30%

Seasoned Rotisserie

	Store 1	Store 2
Chicken Type	*Store Seasoned*	*Store Seasoned*
Weekly Sales	$1,200	$2,400
Retail Price	$3.99	$2.99
Seasoning Cost	$0.20	$0.15
Retailer Margin	?	?

Case 7: Tarrant Fixtures

By: David Welch (Kellogg Class of '04), Edited By: Adam Louras (Kellogg Class of '11)

Case Question

- Our client, Tarrant Fixtures, is a low-intensity manufacturing company that produces display fixtures for retail clients. The company's financial performance has deteriorated in each of the last three years. Specifically, they are concerned with the company's falling Return on Investment (ROI).
- The CEO has asked us to look into this problem. How can Tarrant Fixtures get back on track?

8

Quants.

7

Structure

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Case tracker

- **Industry:** Industrial goods
- **Level of Difficulty:** Medium
- **Case format:** Improving profitability
- **Concepts being tested:**
  - Operations
  - Accounting

Fit Questions

Spend first 15 min on fit

- What do you see as the most challenging aspect of this job?
- Tell me about your written communication skills.
- What are a couple of the best and worst decisions you have made in the past year?

Guide to interviewer

- This case is about improving ROI and requires a real understanding of finance to solve. There has been a massive increase in working capital due to inventory build-up from an increase in the number of SKUs.
- This is a short case, designed to be solved in approximately 15-20 minutes. There are no slides.
- The important steps are:
  - Establishing a viable structure (Using ROI formula)
  - Breaking down the problem into component parts
  - Continuing to examine issues until the correct ones are identified.

Clarifying answers and case guide

Clarifying answers to provide if asked

Industry Characteristics/Market Economics

- The market has grown 25% in total over the past three years

Client Characteristics

- Client has remained the industry *market share leader* in displays over the past three years and has maintained 25% market share

Competitive Dynamics

- There are several players in the market, but everything has remained stable from a competitive standpoint

Interviewer Guide to Case

A sample case structure would include the following:

1) Start with the definition of ROI and identify the potential areas for problems
2) Identify differences in profits over the last three years
3) Identify capital employed and deep dive increase in working capital

Necessary Information that should be given only when <u>specifically</u> asked :

- Product Types:
  - *Custom displays* (50% of Sales) - Produced only when an order is placed and the payment is received
  - *Standard displays* (50% of Sales) - Manufactured to "open standard" for display sizes/ types and stored in inventory (Built-to-stock)
    - 5 standardized products account for 80% of sales in standardized products; Number of standardized products increased from 5 to 12 over last 3 years
- Past Three Years of Financial Performance:
  - *Total Revenues*: Grew by 25%, from $100M to $125M, equally across both types
  - *Costs of production* (COGS, labor, SG&A, etc.): Remained stable as a percentage of revenue [80%]
  - *CAPEX:* The company has no new investments in Property, Plant, & Equipment
  - *Working Capital*
    - Total Working Capital Employed three years ago = $80M
    - Total Working Capital Employed today = $130M
    - Inventory levels increased by 200% (primarily in finished goods), from $25 million to $75 million

Key elements to analyze

Definition of ROI

- To begin this case correctly, the interviewee must understand the components of ROI
- If the interviewee doesn't know the formula for ROI, the case is dead; however, you should guide the interviewer to help them practice

Net Profits

- The interviewee will likely begin by discussing the "top line" of the ROI equation
- Net Profit is not the cause of the ROI issue as shown from the calculation below

Capital Employed

- The interviewee should examine Capital Employed to find that PP&E is constant as no CAPEX was employed, Inventory is the culprit
- Once identified, follow up with, "What can management do to improve the Inventory Problem?"

Notes to Interviewer

- The formula for ROI:

$$ROI = \frac{\text{Return}}{\text{Investment}} = \frac{\text{Profits}}{\text{Capital Employed}} = \frac{\text{f(price, quantify, fixed costs, variable costs)}}{\text{f(PPE, working capital)}}$$

Notes to Interviewer

- Net Profit can be calculated based on the information from the prior page as follows:

	Year 1	Year 3
Revenue	100M	125M
Cost of Production $	80M	100M
Net Profit	20M	25M
Cost of Production % of Revenue	80%	80%

- The company's absolute level of profits have increased 25% during the last three years, so this is not the cause of the ROI issue

Notes on Exhibit 1 & 2

- A line-by-by line examination of a typical Working Capital statement will indicate all of the relevant categories of capital for purposes of calculating ROI.
- Based on the data from the prior page, following conclusion may then be drawn:
  - Total Working Capital increased by $50M because Inventory levels increased by $50M
  - PP&E, AR, AP, Cash etc. are all stable
- Potential Causes/fixes for Inventory Increase:
  - Proliferation of standardized product lines
  - Inaccurate demand forecasts resulting in excess safety stock
  - Obsolete inventories of outdated product lines

Solution and recommendations

Solution & Recommendations

- The client's ROI has fallen over the past three years due to a $50M increase in Working Capital caused by a 200% increase in inventory. Inventory has grown because of:
  - The increase in the Total number of standardized product SKUs from 5 to 12
  - Inaccurate demand forecasts resulting in excess safety stock
  - Obsolete inventories of outdated products
- To correct this issue, the client should work to reduce its inventory by:
  - Writing off or working down obsolete inventory (a write-off will cause an immediate hit on profits, so management may be reluctant)
  - Improving demand forecasting to set more realistic safety stock levels
  - Reducing the "Standard" product-line down to the top 5 products (80% of current sales)

Bonus/Guide to an Excellent Case

- An excellent interviewee will:
  - Provide creative, logical reasons for the inventory increase
  - Provide creative, logical solutions to reduce Inventory
  - Detail a cohesive demand forecasting plan that would improve accuracy
  - Provide a plan to limit future product proliferation in the "Standard" product lines

Case 8: Vindaloo Corporation

By: Ben Walter (Kellogg Class of '03), Edited By: Ameed Mallick (Kellogg Class of '12)

Case Question

- Our client, Vindaloo Corporation, is a small biotechnology company that has developed a new seed for sugar beets, which produces twice as much sugar as the seeds that are currently in use. They now want to sell the company, and wonder how much it is worth.

Case tracker

- **Industry:** Consumer products
- **Level of Difficulty:** Medium
- **Case format:** Developing a new product
- **Concepts being tested:**
  - Basic NPV
  - Marketing Strategy
  - Operations

Fit Questions

Spend first 15 min on fit

- What do you read?
- What is the most important issue facing the industry of your last job?
- Describe your methods of diagnosing client's needs.

Guide to interviewer

- This is a valuation case and, as such, has a lot of number crunching. To calculate the NPV, the interviewee will have to size its impact up and down the value chain and determine its value using assumptions about market penetration and growth rates.
- There are also several important qualitative insights for the candidate to make, the main one of which is that the new technology will halve the land rather than doubling production, which would cause an immediate worldwide sugar glut and rapidly falling prices.

8

Quants.

4

Structure

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Basic NPV
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Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Characteristics/Market Economics

- The market has grown at GDP over the last few years which is predicted to grow at 2% annually.
- Sugar is a mature commodity. The wholesale market is $2 billion worldwide per year.

Competitive Dynamics

- We can assume a 100% market penetration, since there are no competing products, and the efficacy of the product is proven.
- There is no imminent threat of competition and a patent would protect the investment for a number of years.

Interviewer Guide to Case

A sample case structure would include the following:

1) Start with an understanding of the sugar industry and market economics
2) Analyze the product benefits and potential impacts for farmers
3) Identify the channel structure and assess the opportunities to minimize costs within the value chain
4) Calculate NPV of cost savings to value the company

- Beets grown from the new seeds will produce 2x the sugar that traditional seeds yield. For example: Currently 100 beets produce 100 lbs of sugar while the new seeds will produce 200 lbs of sugar, or 2 lbs/beet.
- The elasticity of demand for sugar is 1.
- The value chain can be broken down into four primary processes:
  1. Farming (planting, harvesting, and selling beets), which is 40% of cost
  2. Trucking, which is10% of the cost
  3. Refining, which is 30% of the cost
  4. Distribution, which is 20% of the cost.
- Farmland that is not used for sugar can be repurposed to grow cabbage, which is currently one fifth as profitable as sugar.
- Trucking costs for sugar are 5% fixed and 95% variable, with the variable costs directly related to the weight of what is being trucked.
- Refining costs are all variable, and it will cost 25% more per beet to refine the new beets than it cost to refine the old beets.
- There are no cost savings in distribution from the reduced volume.

Calculations

Math question

- What are the cost savings/increase in profits from farming?

Math solution

- **Solution - Farming**
  - The product allows farmers to grow the same amount of sugar on half of the land. So we can assume that farmers will keep half of their land for sugar and repurpose the rest of the land for growing cabbage. Previously, one acre of land produced "X" profits of sugar - now half an acre can produce profits of "X" while the other half produces profits of ".1X" of profits from cabbage. Recall that **cabbage is a fifth (20%) as profitable as sugar <u>currently</u>** – accounting for the 2x yield from the new sugar beets, **cabbage would only be 10% as profitable as the <u>"new" sugar</u>**. Since profits per acre go from X to 1.1X, there is a 10% increase in profits from farming.
- **Common mistakes:**
  - Candidates who think that farmers will just use the same amount of land and produce twice as much sugar have not thought the question through. Sugar is a mature commodity and if everyone produced twice as much sugar, there would be far more supply than demand, causing global prices to crash. Additionally, some candidates will try to calculate the costs savings of the entire value chain here (make sure to remind them in the debrief to answer the question that is asked.)

Calculations (cont.)

Math question

- What are the cost savings from Trucking, Refining, and Distribution?

Math solution

- **Solution - Trucking**
  - Variable trucking costs, which represent 95% of the total cost structure, will decrease by 50%, leading to an overall costs savings of 95% x 50% = 47.5%.

- **Solution - Refining**
  - Refining costs have two components. Initially the costs will drop by 50% because only half as many sugar beets need to be refined. However, the variable cost/beat increases by 25% for the new sugar beets. In step the costs go from "X" to ".5X" to ".625X", an overall cost savings of 37.5%.

- **Solution – Distribution**
  - There are no cost savings in distribution.

Calculations (cont.)

Math question

- What are the total cost savings in the value chain?

Math solution

Step	A – Cost Portion	B – Cost Savings	Weighted Cost Savings (A x B)
Farming	40%	10%	4%
Trucking	10%	47.5%	4.75%
Refining	30%	37.5%	11.25%
Distribution	20%	0%	0%
Total	100%		20%

Calculations (cont.)

Math question

- How valuable is this product?

Math solution

- **Solution – Net present value of cost savings**
- Our client's product will save 20% a year in sugar costs - multiplied by the $2 billion market size, that cost savings comes out to $400 million per year. The final question then, is how valuable is that? Here, it would be valuable for the candidate to know the perpetuity formula, which is:
  - Value = Annual Cash/(r-g)
- We are given the growth rate, g, as 2%. "r" (the discount rate is not given), so it is fine for the candidate to use the standard assumption of 10%. Therefore the company can be valued at:
  - Value = $400M/(10%-2%)

    = $5B

Solution and recommendations

Solution & Recommendations

- This product will only allow our client's clients (sugar growers) to produce sugar more efficiently. It won't cause the sugar to taste any better or cause consumers to demand more of it. Therefore the product cannot be expected to grow revenue, but it will reduce costs. The value of Vindaloo Corporation is directly related to cost savings.
- After running the NPV analysis, Vindaloo Corporation should be valued at $5B.
- The interviewee should also identify a number of risks and potential benefits along the way (i.e. adoption rates given the required change to farmland and likely capex for equipment, competitive response, other uses for sugar in adjacent or completely separate markets, other uses for newly acquired farmland, potential buyers, government intervention, etc.) before making their final recommendation.

Bonus/Guide to an Excellent Case

- This is a quantitatively heavy case. A excellent interviewee can quickly identify the important drivers of cost and can crunch the numbers easily and with little error. Additionally, they will organize the data in a tabular form for ease of calculation and presentation.
- Additionally, an good interviewee will synthesize each relevant cost savings, the final valuation, and next steps/risks as part of their final presentation.

Case 9: Zephyr Beverages

By: Edwin Van Dusen, Brian Fox and David Welch (Kellogg Class of '04), Edited By: Ameed Mallick (Kellogg Class of '12)

Case Question

- Our client, Zephyr Beverages, is a division of a large consumer products company. The division produces fruit juices in three forms, all under the Zephyr name: chilled, juice boxes, and frozen concentrate. Zephyr had sales of $600 million last year, about 3% of the company's overall sales of $20 billion.
- The chilled segment represents $120 million in sales per year. While juice boxes and frozen concentrate have been consistently profitable, chilled juices are only breaking even in good quarters and are losing money in bad quarters. Zephyr has received a proposal from upper management to sell the chilled juices business. We need to help them decide whether or not this is a good idea.

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Quants.

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Structure

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Case tracker

- **Industry:** Consumer Goods
- **Level of Difficulty:** Easy
- **Case format:** Opportunity assessment
- **Concepts being tested:**
  - Competitive analysis
  - Capacity contraction

Fit Questions

Spend first 15 min on fit

- What do you do for fun?
- What did you contribute in your last job that made a difference to the organization?
- Outside of school and work, what is your greatest personal accomplishment?

Guide to interviewer

- This is a relatively short case that requires the candidate to create a holistic structure for solving the problem: what does Zephyr do with an underperforming business? It can divest chilled juices, sell its whole juice division, or remain in all its business. Any of the three possible solutions listed at the end can be argued, but the third solution makes the most economic sense.
- The candidate will need to ask for additional information that is necessary to solve the problem, rather than relying on the interviewer to dispense it all at once.
- This case is not representative of the quantitative rigor of interview cases and therefore we recommend it only be given as a warm-up early in the process.

Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Characteristics/Market Economics

- It has been growing at GDP (~3%) the last few years and is projected to continue that growth rate.
- The market for chilled juices is dominated by mothers with young kids.
- Brand name is important in this market, as mothers tend to prefer reliable products. However, the brand premium must be in line with other branded products and all branded juices sell in the same price range.
- This is a highly price sensitive market that loves coupons, promotions, etc.

Competitive Dynamics

- This is a highly concentrated market. There has not been a lot of change, technological or otherwise, recently and there are no obvious entrants.

Interviewer Guide to Case

A sample case structure would include the following:

1) Identifying the options: sell chilled juice, sell all juice businesses, continue on with all businesses
2) Qualitative discussion of competitive dynamics
3) Discussion of product selection/components, as well as ways to cut costs

When asked, the interviewer can reveal the following additional information:

- Chilled beverages are a $1 billion worldwide industry
- The two largest players have market shares of 40% and 25%, respectively. Zephyr's market share, 12% makes it third in the industry.
- The two market leaders are able to do more advertising, couponing, promotion, and trade than Zephyr is able to do. We do not know about their profitability, but assume it is positive.

Key elements to analyze

Competitive Dynamics

- Using basic information provided, interviewee should deep dive the competitive dynamics in further detail.

Notes to interviewer

- Relevant info:
  - Bad market position: 12% vs. 40% and 25%
  - Assumed profitability differences
  - Disadvantage on trade promotions
- Interviewee should be able to see that Zephyr is at a serious disadvantage on all fronts as a smaller company that is both less profitable and less engaged in the kinds of trade promotions that key customers covet. The overall conclusion should be that this is a weak competitive position.

Product selection

- Using information about our products vs. our competitors, the interviewee should focus on discussion about how to cut costs.

Notes to interviewer

- Relevant info (when asked):
  - The market leaders produce pure orange juice/blends based on citrus juices. Zephyr uses more elaborate blends, usually with a base of pear or peach juice (60% of inputs) and flavor with cranberries, bananas, mangoes, etc. (the other 40%). Pear and peach juice are a similarly price to orange juice, but the other flavorings cost about twice as much.
  - A plant in California produces all products; chilled, juice boxes and frozen. Each of the three products uses different machinery. It would be difficult to find another use for the plant without a major conversion.
- Additionally, there are currently synergies between chilled, frozen and juice boxes – mothers are slightly more likely to buy products from the same brand
- This indicates that, despite a disadvantage, divesting is not realistic and there may be room for cost reduction based on reformulation to make Zephyr profitable.

Solution and recommendations

Solution & Recommendations

There are three possible solutions, with no right answer. The recommendation should be well-reasoned, comprehensive, and include as much relevant information as possible.

- Sell the chilled juice business. This would, however, affect the juice and frozen concentrate businesses, as there are both advertising and manufacturing synergies.
- Sell all of the juice business. This may be more feasible, as the buyer could capture the synergies, but would not be too likely to turn the business around. The selling price is likely to be low.
- Keep the chilled juice business and rework the ingredients and costs. This is the most feasible option, as evidenced by the success of the competitors. We are probably developing extra features in our ingredient mix that the market does not want and is not willing to pay for. Eliminating or scaling back those features will probably allow us to cut costs without affecting revenue.

Bonus/Guide to an Excellent Case

- Prospects who do well on this case will have to be comfortable with ambiguity and with a lack of perfect information. They will quickly grasp the issues and delve into the underlying qualitative discussions, coming up with a lot of additional risks/potential benefits for each option.
- Creative solutions beyond those listed are possible and encouraged, though should be done within the framework of the information available.

Case 10: A+ Airline Co.

By: Adam J. Louras (Kellogg Class of '11)

Case Question

- Our client is A+Airline Co., the third largest airline in the United States by passengers carried. This week, we have been flying on our primary competitor, Gamma airline, and we noticed something interesting; they stopped accepting cash for in-flight food and beverage services and they now only accept major credit cards.
- *The CEO of A+Airline Co. wants to know, why did Gamma Airline switch from a Cash & Card system to a credit card only system, and should we follow them?*

8

Quants.

8

Structure

Basic NPV
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Case tracker

- **Industry:** Airline
- **Level of Difficulty:** Hard
- **Case format:** Opportunity Assessment
- **Concepts being tested:**
  - Basic NPV
  - Operations
  - Market Sizing
  - Customer Strategy

Fit Questions

Spend first 15 min on fit

- Tell me about a time when you had to adjust a project schedule because you didn't have all the resources that you needed
- Describe a situation in which you had to change your communication style to influence stakeholders from different groups

Guide to interviewer

- This case will force an interviewee to rely on logic, business acumen, and structure
- Commonly, the interviewee will ask a lot of questions about historical costs, revenues, etc. **This is not the correct approach to this question.**
- The savvy interviewer will realize that this is a BEFORE vs. AFTER comparison of switching from a CASH & CARD system to a CARD ONLY system. Therefore, the questions asked should focus on the DELTA, or the cash changes that occur when the switch is made.

Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Characteristics/Market Economics

- *Card Use*: Roughly 99% of all consumers purchase their airline tickets using a credit card, i.e. all consumers on an airplane have a credit card available to them.

Client Characteristics

- *Items Sold*: Only food and alcoholic beverage items are sold on A+Airline flights
- *Locations:* This is a US Domestic decision only. Ignore international.

Competitive Dynamics

- Gamma is the only airline that has made the switch; however all other airlines are evaluating the switch.
- For the purposes of this case, Gamma and A+Airline should be considered to be exactly the same in all regards.

Interviewer Guide to case and handouts

Case Structure – Interviewee's structure should be a BEFORE vs. AFTER comparison of the switch from CASH & CARD to CARD only and should include:

- *Revenue Changes:* Loss of Cash Only customers vs. Increase in Credit Card customers
- *Cost Changes:* Benefit of Cash Management Cost Removed vs. Incremental Cost (Fee) of Credit Card
- *Cash Flow Changes:* Interest and Time Value of Money (TVM), and Working Capital impacts due to an increase in collection speed

Exhibit 1 – After Interviewee walks through structure, they will likely ask questions about consumer purchase behavior on airplanes. Once you feel that they have identified the need to do a market sizing, hand out Exhibit 1. (**DO NOT ALLOW ROUNDING**)

- *Ask the interviewee to determine the Total Market Size in ($) for food and beverage purchases on an average flight*
    - *The interviewee should calculate the CURRENT allocation of purchases (Cash Vs. Card) for an average flight.*
    - *The interviewee should correctly identify that some of the current "Cash" customers will not convert to Card.* ***Tell them we will lose 1/3.***

Exhibit 2 – The interviewee should recognize that there might be a cost savings due to the change. Most interviewees know that there is a Credit Card processing fee but do not realize that there are many costs associated with cash management. Ask them about the types of costs A+Airline might face under both processes before handing out the exhibit. When asked, explain that **the total, per flight, savings from eliminating overhead due to Cash Management Operations is $35/flight**

Key elements to analyze

Changes in Revenue

- Interviewee will likely begin with the correct assumption that revenue will be lost due to unhappy, cash-only passengers
- Once asked about how many are lost, hand out **Exhibit 1** to do a market sizing

Changes in Costs

- Interviewee should make mention of Cost changes due to the shift to a Card Only strategy.
- Ask the interviewee to detail the types of costs that might be involved before handing out **Exhibit 2**

TVM & Working Capital

- **Exhibit 2** also shows that there is a 30 day time benefit to collecting payment via Credit Card vs. Cash
- ***Prompt 1****: Ask the interviewee to qualitatively explain the impact this time savings will have*

Notes on Exhibit 1

- Using Exhibit 1, interviewee should calculate:

1. *Total Number of Passengers per Plane*

	Seats	Occupants	Business	Leasure
First Class	50	50	50	0
Economy	150	120	60	60
Total	**200**	**170**	**110**	**60**

2. *Total Number that Purchase & Total Spend ($)*

	# that Purchase	Total Purchase $
Business	45	$450
Leasure	15	$75
Total	**60**	**$525**

3. *Cash vs. Card Spend + LOSS*

	Cash	Card	Total
Inflight $	$105	$420	$525

Lose 1/3 of Cash Customers	#	$	New Total
Business	3	($30)	$420
Leisure	1	($5)	$70
Total	**4**	**($35)**	$490

Notes on Exhibit 2

- Exhibit 2 shows the current operations for Cash Management and Card Management at A+Airline.
- The interviewee should notice the following information:
  - Cash Management & Card Management both have 2% fees associated, so this is a "wash" in terms of savings.
  - Cash Management requires additional overhead, 7 total employees per airport, that could be eliminated for further savings.
- When asked, explain that the total, per flight, savings from eliminating overhead due to Cash Management Operations is **$35/flight**
- **Interviewee should notice that the $35 savings offsets the $35 loss in Revenue** (Slightly more because this impacts bottom line, but ignore margin)

Qualitative Assessment

- The interviewee should qualitatively mention that there are benefits to eliminating the longer cash management process:
  - *Time Value of Money*: A+Airline will receive their money 30 days sooner, and this money could be used to:
    - Invest in interest earning accounts or growth projects
    - Pay off suppliers early and take advantage of discounts
    - Pay down lines of credit faster
  - *Working Capital Improvement:* $50 per flight in change can be eliminated, thus freeing up cash flow. Additionally, there will be a reduction in loss of cash due to theft and damage
  - *Happier Customers:* The majority of customers will be able to place and receive their order faster on the plane which will also increase sales

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Solution and recommendations

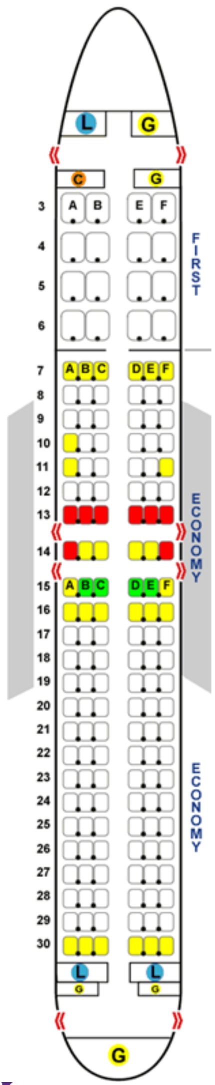
Solution & Recommendations

- Overall, our client, A+Airline, should switch to a Credit Card only system for in-flight food & beverage because:
  - *Quantitative Benefits*: We calculated that there would be a loss of 3 business customers and 1 economy customer per flight which amounted to a Revenue loss of $35. We also found that we could save $35 in overhead expenses by eliminating the Cash Management process. In sum, the decision to switch is in favor because the savings are to the bottom line and the revenue losses are top line.
  - *Qualitative Benefits:* We also found that we will receive payment 30 days sooner by only accepting credit cards. This improves our cash flow and could allow us to earn interest, pay down creditors, or invest in projects. Additionally, by reducing cash losses and eliminating "Change" tied up on airplanes, we can improve our Working Capital and also put this money to work for us. Finally, it appears as though customers, in general, might actually be happier because the speed of transactions on the airplane will improve.

Bonus/Guide to an Excellent Case

- An excellent interviewee will note:
  - Due to the increased transaction speed, probability of purchase for both Business and Economy passengers in the AFTER state should go up due to a reduction in frustration. The people on the back of the airplane often abandon a purchase if it takes too long to place an order. Making change takes a lot of time!
  - Average purchase amount should also increase. There is a proven psychological phenomenon that shows how consumers who do not carry cash purchase less when a cash option is offered because they feel guilty using their card. A card-only option eliminates this guilt and consumers don't mind using the card.
  - Being creative when listing the change of costs as: Wifi cost (connect with banks and verify transaction), Fraud cost (increased chance of fraud to happen after implementing card only payment).

Exhibit #1: An Average A+Airline Flight



A+Airline Boeing 737-800 Vers. 2 (738)

Total Seats	**200**

	% of Seats	Load Factor	% Business	% Leisure
First Class	25.0%	100%	100%	0%
Economy	75.0%	80%	50%	50%

	% that Purchase	Avg. Spend ($)
Business	75.0%	$10
Leisure	25.0%	$5

*Note: First Class Passengers Receive Free Food & Beverage

	% of In-flight Purchases
Cash	20%
Card	80%

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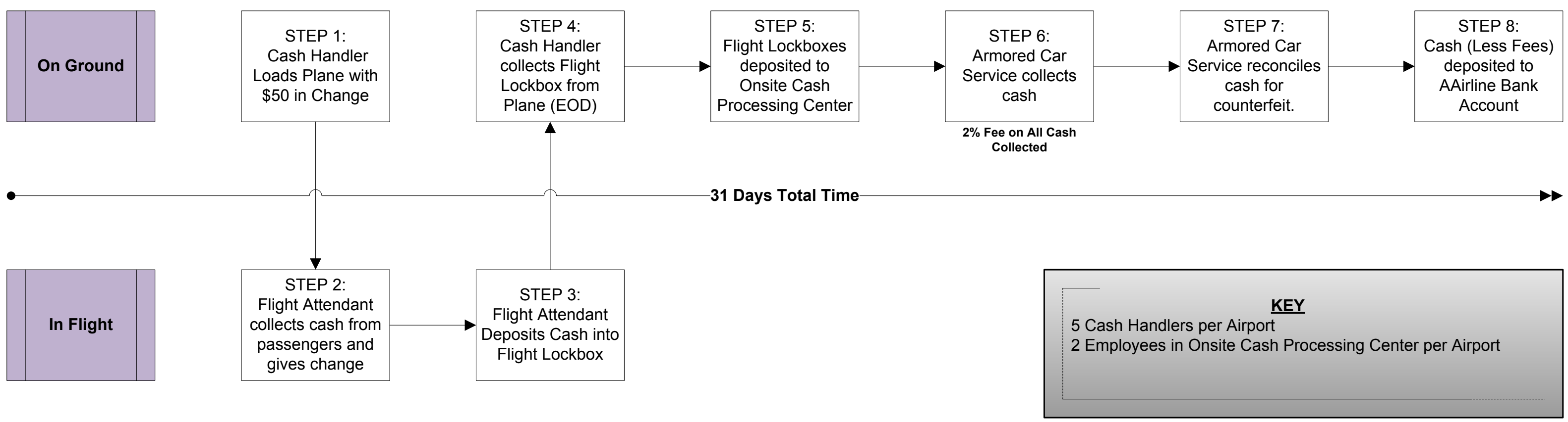
Exhibit #2: A+Airline Cash & Card Operations

AAirline Cash Management Process



AAirline Credit Card Process

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Case 11: Bell Computer Inc.

By: Adam J. Louras (Kellogg Class of '11)

Case Question

- Our client, Bell Computer Inc., is the second largest PC manufacturer, by unit sales, in the United States. Over the past 5 years, Bell has been gaining market share and growing revenue, but at the same time, their net income is eroding.
- The founder of Bell has returned to the company and taken over as CEO. He has hired us to determine:
  - Why have our profit margins declined?
  - What can we do to improve our profitability and reach our "Full Potential"?

8
Quants.

10
Structur

Mkt. Stgy
Comp. Als
Sup Chain

Case tracker

- **Industry:** Tech/Telecom
- **Level of Difficulty:** Hard
- **Case Format:** Improving profitability + Reducing Costs
- **Concepts Tested:**
  - Marketing Strategy
  - Competitive Analysis
  - Supply/value chain

Fit Questions

Spend first 15 min on fit

- What skills can you bring to this position?
- Give me an example of a business problem your company faced and tell me how you solved it.
- What other types of jobs are you considering? Why and how did you choose the companies? How do they compare to consulting?

Guide to interviewer

- This case is primarily about product mix changes in the PC industry combined with Average Selling Price (ASP) Declines resulting in lower overall revenues for the industry. Competitors that did not keep up with cost reductions are faced with tighter margins
- The interviewee should recognize that this is a "Profit Equation" style question and use a version of the following equation in their "Framework":
  - Profit/Unit = Price/Unit – Variable Cost/Unit – Fixed Costs/Unit
- Various terms from the PC industry are used throughout the case and it is not expected that the interviewee knows these terms. Help as needed.

Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Definitions

- *ASP*: ASP or Average Selling Price is the term used for the average price sold by the company for a computer. Multiplying units sold by ASP will give you total revenue.
- *Client Segment*: PCs designed for, and sold to, retail consumers either direct or through a retailer like Best Buy.

Client Characteristics

- *Items Sold*: Assume that only hardware is sold as shown in Exhibit 1. Interviewee could suggest selling additional items such as printers, software, warranty service, etc. to improve profit
- *Locations:* This is a US Domestic decision only. Ignore international.

Competitive Dynamics

- All competitors face the same ASPs and sell comparable products.

Interviewer Guide to case and handouts

Case Structure – Interviewee's structure should be structured as a comparison of Bell Computer's financials from Before, i.e. 2005, and After, i.e. 2010. The interviewee should note the "Profit Equation" and they should make the following inferences from the question setup:

- *Revenues are going up and Market Share is Increasing* AND *Net Income is going down*
- *Thus: Prices (ASPs) are being reduced to buy market share. This is causing more units to be sold, but, with Net Income going down, it is clear that **costs have not reduced to keep up with the reduction in ASPs.***

Exhibit 1-3 – After Interviewee walks through structure, they should ask questions about the components of Net Income, i.e. Revenue and Costs.

- *Have a conversation with the Interviewee to force them to talk through the essential components of the Profit Equation that are needed to answer the question.*
- *Let the Interviewee drive the case. When you feel that they have asked enough information about the following topics, give them the exhibit that shows this information:*
  - *Sales Units* → *Exhibit 1*
  - *Prices* → *Exhibit 2*
  - *Costs* → *Exhibit 3*

Answer – The interviewee cannot solve this case without all three exhibits. Once they have given you sufficient reason to hand them each exhibit, they should drive through the case to answer both questions.

Key elements to analyze

Marketing Strategy

- Using Exhibits 1-3, the interviewee should be able to determine that margins are falling due to product mix shifting and price declines

Notes to interviewer

- The Interviewee should be able to answer the question, "Why have our profit margins declined?" with the following rationale:
  - Exhibit 1: Shift in Client preference towards Laptops & Netbooks
  - Exhibit 2: Declining ASPs for Laptops and Low ASPs for Netbooks
  - Exhibit 3: Cost position has remained unchanged
- The interviewee could answer the question qualitatively by interpreting Exhibits 1-3. To make this case more quantitatively focused, ask the interviewee to calculate various metrics for 2005 and 2010.
- The interviewee should be able to calculate the following using Exhibits 1-3 (Math calculations on following page):
  - Net Income per Unit by product type
  - Revenue by product type and Total Revenue
  - Cost by product type and Total Cost
  - Net Income by product type and Total Net Income

Competitive Analysis + Supply Chain

- Using Exhibit 3, the interviewee should identify a "Full Potential" improvement for Bell to improve its margins by copying the strategy of its direct competitors.

Notes to interviewer

- The interviewee should be able to answer the question, "What can we do to improve our profitability and reach our "Full Potential"?" with the following COST REDUCTION strategy:
  - Copy Haysus' strategy for part procurement to reduce the build cost of PCs
  - Copy Racer's strategy for Direct Labor to reduce the labor cost of producing PCs
  - Copy HC's strategy for G&A to reduce the total company overhead
- The interviewee could answer the question qualitatively by interpreting Exhibit 3. To make this case more quantitatively focused, ask the interviewee to calculate various metrics for "Full Potential".
- The interviewee should be able to calculate Bell's "Full Potential" using Exhibits 1-3 (Math calculations on following page):
  - Net Income per Unit by product type
  - Revenue by product type and Total Revenue
  - Cost by product type and Total Cost
  - Net Income by product type and Total Net Income

Math Solutions

Math Part I

BELL FY2005

	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
Units Sold (K)	20.0	10.0	0.0	5.0	5.0	**40.0**
ASP	$1,000.0	$2,000.0	$0.0	$3,000.0	$250.0	
CPU	800.0	800.0	0.0	800.0	200.0	
NI/Unit	*$200.0*	*$1,200.0*	*$0.0*	*$2,200.0*	*$50.0*	
Revenue ($M)	$20.0	$20.0	$0.0	$15.0	$1.3	**$56.3**
Total Cost ($M)	16.0	8.0	0.0	4.0	1.0	**$29.0**
NI ($M)	*$4.0*	*$12.0*	*$0.0*	*$11.0*	*$0.3*	**$27.3**
Profit Margin	*20.0%*	*60.0%*		*73.3%*	*20.0%*	**48.4%**

BELL FY2010

	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
Units Sold (K)	30.0	30.0	5.0	10.0	5.0	**80.0**
ASP	$1,000.0	$750.0	$500.0	$3,000.0	$250.0	
CPU	800.0	800.0	800.0	800.0	200.0	
NI/Unit	*$200.0*	*($50.0)*	*($300.0)*	*$2,200.0*	*$50.0*	
Revenue ($M)	$30.0	$22.5	$2.5	$30.0	$1.3	**$86.3**
Total Cost ($M)	24.0	24.0	4.0	8.0	1.0	**$61.0**
NI ($M)	*$6.0*	*($1.5)*	*($1.5)*	*$22.0*	*$0.3*	**$25.3**
Profit Margin	*20.0%*	*(6.7%)*	*(60.0%)*	*73.3%*	*20.0%*	**29.3%**

Math Part II

BELL Full Potential

	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
Units Sold (K)	30.0	30.0	5.0	10.0	5.0	**80.0**
ASP	$1,000.0	$750.0	$500.0	$3,000.0	$250.0	
CPU	350.0	350.0	350.0	350.0	200.0	
NI/Unit	*$650.0*	*$400.0*	*$150.0*	*$2,650.0*	*$50.0*	
Revenue ($M)	$30.0	$22.5	$2.5	$30.0	$1.3	**$86.3**
Total Cost ($M)	10.5	10.5	1.8	3.5	1.0	**$27.3**
NI ($M)	*$19.5*	*$12.0*	*$0.8*	*$26.5*	*$0.3*	**$59.0**
Profit Margin	*65.0%*	*53.3%*	*30.0%*	*88.3%*	*20.0%*	**68.4%**

Results:

	Desktop PCs	Laptop PCs	Netbook PCs	Servers	Other	TOTAL
NI ($M) Improved	$13.5	$13.5	$2.3	$4.5	$0.0	**$33.8**
Cost Per Box Reduced	$450.0	$450.0	$450.0	$450.0	$0.0	

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Solution and recommendations

Solution & Recommendations

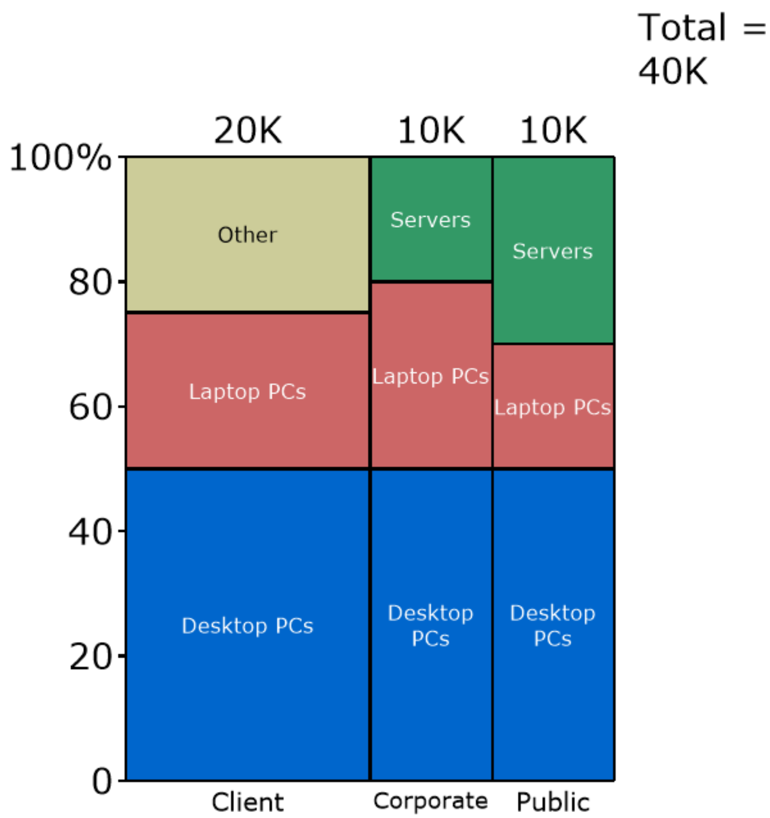
- Bell Computer Inc. and the PC industry have faced five years of Average Price declines in the Laptop product segment. At the same time, "Client" or retail consumers have shifted their preferences towards Laptops and a new product segment called Netbooks. Because Bell Computer has not reduced its costs over this same timeframe, profit margins and net income have deteriorated despite increases in revenue.
- In order for Bell Computer Inc. to return to profitability, they must reduce their cost per unit sold. The best approach we identified was through an analysis of our competitors. Using our competitors line-item costs as a benchmark, we could potentially reduce our cost per box by $450. This amounts to a total Net Income improvement of roughly $34M.

Bonus/Guide to an Excellent Case

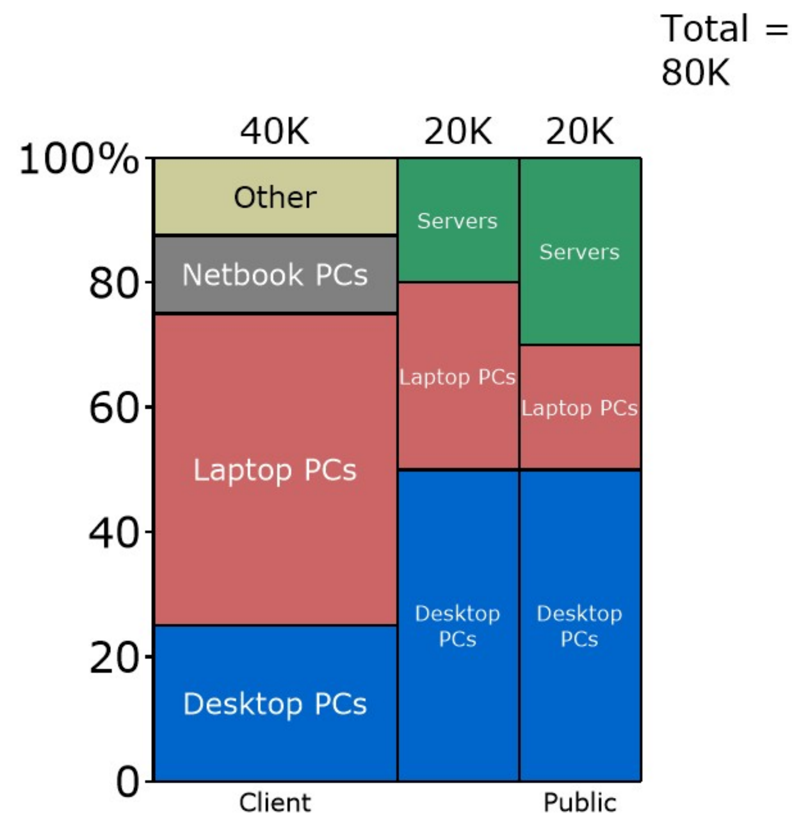
- An excellent interviewee will note:
  - Additional ways to improve net income by selling complimentary, high margin products such as:
    - Printers
    - Software
    - Parts upgrades
    - Warranties
  - Additional ways to cut costs, such as:
    - SKU Rationalization (Reducing the number of product models)

Exhibit 1: Product Mix breakdown by Business Segment for 2005 and 2010

PC Units(K) Sold in 2005



PC Units(K) Sold in 2010



*Note: Netbook PCs did not exist in 2005; “Other” products include Pocket PCs and Calculators

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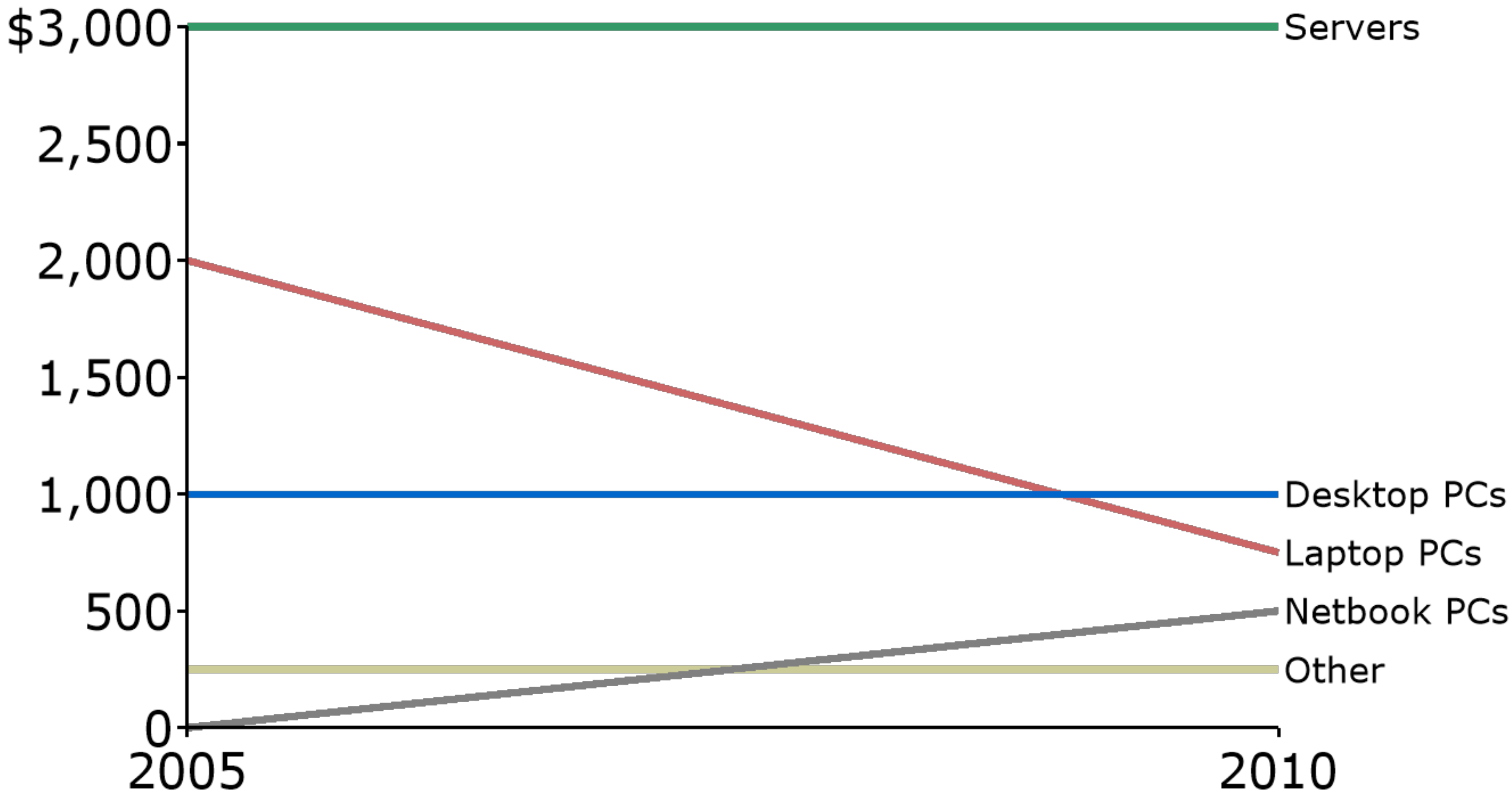
Exhibit #2: ASPs by Business Segment 2005 and 2010



*Note: Netbook PCs did not exist in 2005

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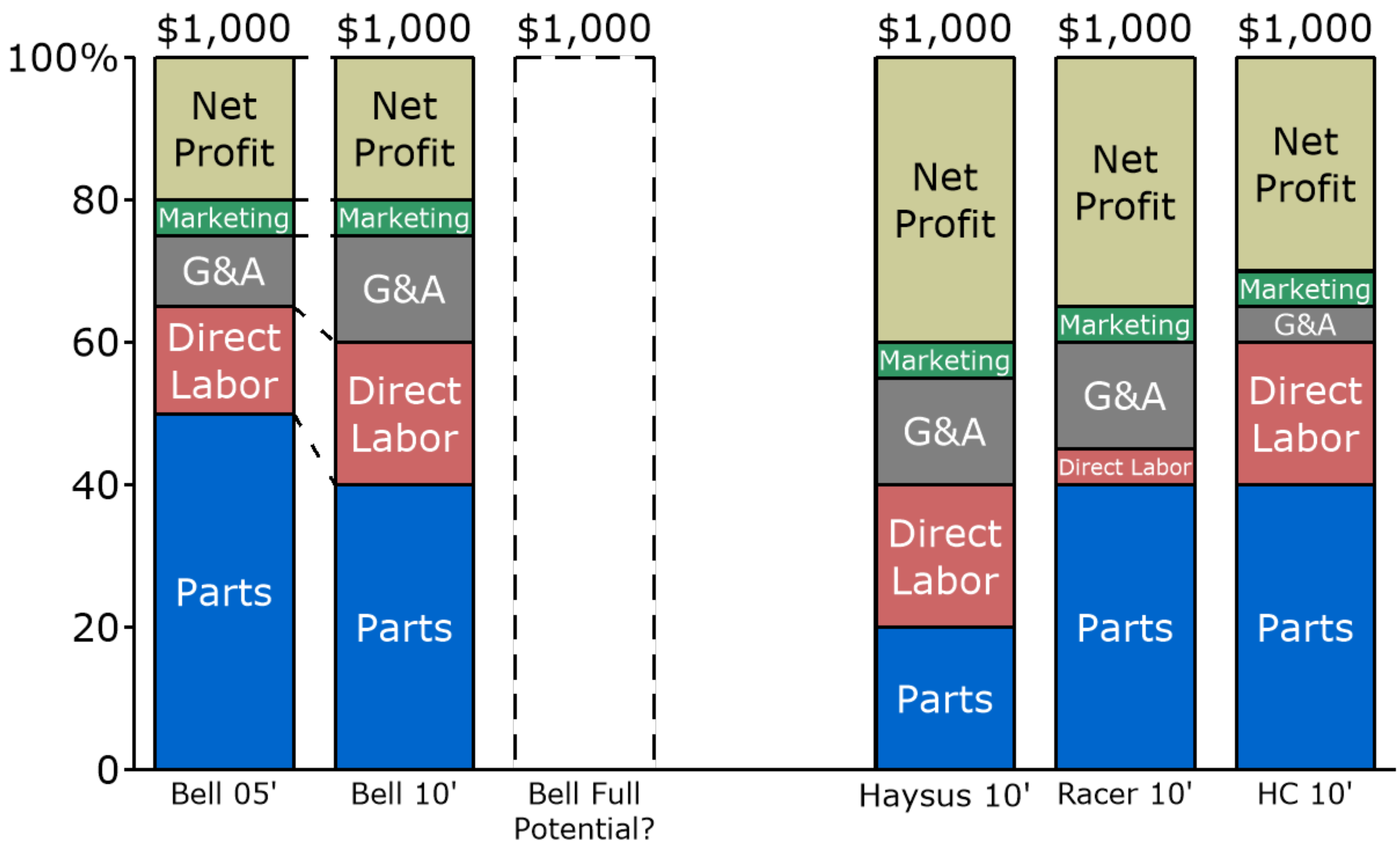
Exhibit 3: Avg. Per Unit Cost Breakdown of a Desktop PC for Bell (05',10') and Top 3 Competitors



*Note: Servers, Laptops, and Netbook Product types have the same costs per unit; however, Net Income will vary based on ASP.
"Other" products have a total CPU of $200

Case 12: Shermer Pharma

By: Ameed Mallick (Kellogg Class of '12)

Case Question

- Our client, Shermer Pharma, is a venture backed start-up Pharmaceutical company. Over the past 15 years, Shermer has been developing a molecule that has been approved by the FDA to cure Alzheimer's with 90% efficacy.
- Shermer's owners have hired us to determine:
  - How should we sell our product?
  - Is our product going to be profitable?

Case tracker

- **Industry:** Health Care
- **Level of Difficulty:** Medium
- **Case format:** Market entry
- **Concepts Tested:**
  - Break Even analysis
  - Marketing strategies
  - Organizational changes

Fit Questions

Spend first 15 min on fit

- Give me an example of a time you had to change someone's mind.
- What are the most difficult or challenging decisions you have made recently?
- In what kind of work environment are you most comfortable?

Guide to interviewer

- This case is focused on 2 questions: can you determine what it takes to launch a new product profitably through a cost benefit analysis, and can you think through the implications of starting a Sales & Marketing organization from scratch. The case should be driven by the interviewee.
- The interviewee should be guided towards 2 primary options for the Sales & Marketing question
  1. Start your own sales force
  2. Contract sales
- Bonus sales force answer is sell Shermer to a larger firm
- Profitability will center on the interviewees ability to read tables and data on the market and our market share.

5

Quants.

5

Structure

B/E
Mkt. Stgy
Org. Chg.

Clarifying answers and case guide

Clarifying answers to provide if asked

Industry Definitions

- Our product is a pill that cures Alzheimer's, an illness that currently has no treatment that cures or stops the progress of this disease
- Alzheimer's is a degenerative, terminal disease that causes senility and dementia. 30 MM people suffer worldwide
- Sales would be focused on Neurologists and Geriatric psychiatrists (not the consumer of the product)

Client Characteristics

- We don't have a Sales or Marketing organization, the company has purely been a research firm to this point.
- FDA approval, etc has been granted

Competitive Dynamics

- We will not focus on competitive response during this case as we are the only firm that has a cure for this illness and will be for the next 5 years

Interviewer Guide to case and handouts

Case Structure – Interviewee should focus on the questions separately. First we will brainstorm how to sell our product and ask questions to get after the costs of a sales force (Exhibit 1). An optional middle step is a brain teaser to determine the size of the Alzheimer's market. (provide answer of 5MM at the end of the exercise. They then need to ask about the costs and revenues from our new product (Exhibit 2).

Exhibit 1-3 – After Interviewee walks through structure, they should ask questions about the costs of sales and then ultimately the profit equation.

- *Let the Interviewee drive the case. When you feel that they have asked enough information about the following topics, give them the exhibit that shows this information:*
  - *Sales force options* → *Exhibit 1*
  - *Revenues vs Costs* → *Exhibit 2*
- *If the interviewee isn't getting to the question on the three Sales Force options, guide them back toward this and provide Exhibit 1.*
- *Have a conversation with the Interviewee to force them to talk through the essential components of the profit equation that are needed to answer the question.*

Answer – The numbers reveal that our product will be profitable. However, a critical question will be the sales channel, which is why they need to determine to use contract sales in order to be profitable. It is also correct to state that Shermer should sell the product to a larger firm, but the second half of the case should be under the assumption that the owners decide to do contract sales.

Key elements to analyze

Market Entry

- Using Exhibits 1 the interviewee should be able to determine that contract sales is the best financial option

Profitability

- Using Exhibit 2, the interviewee should determine that our product will be profitable utilizing either type of sales force.

Notes to interviewer

- The question boils down to realizing that our client's competencies are rooted in developing a product, not Sales and Marketing. The correct approach is therefore to contract sales or sell the company
- The qualitative approach to the answer is appropriate, but once the interviewee has discussed enough of the inputs, **exhibit 1** should be shared:
  - There is missing data in the chart that should be easy to calculate (solutions provided)
- A third option with no attached data would be to sell the company to a larger firm, this is an appropriate discussion to have and if prompted the interviewee should discuss the tradeoffs of this more qualitatively
- A contract sales organization is typically less effective than internal sales, though most interviewers wont pick up on this and simply giving the financial answer is appropriate

Notes to interviewer

- You should let them try to size the market as a first step, but then provide the actual number of 5MM.
- The firm requires that R&D costs be recovered by Year 5 of the product (a window before which there will be no competitive response)
  - We can ignore NPV for this question and just assume a straight line amortization…interviewee should come to this conclusion on their own, but course correcting is okay if they get stuck
- Critical information on the exhibit should be provided as the interviewee asks, though should only be volunteered if the interviewee is stuck
- We can ignore tax, however a good interviewee will ask about it, and doing so would realize we still hit our profit targets by year 5
- Manufacturing & Packaging costs are included in the Gross Margin

Math Solutions: Exhibit 1

	Develop own Sales Force	Contract Sales Force
Percent of visit focused on our product	100%	50%
Annual fully loaded cost per Sales Rep	$200k	n/a
Cost per sales call	$170 (($200k*85)/100)	$60
Total calls required	100k (should be asked/given)	200k (100k*2)
Total Sales Reps needed	85	170 (85*2)
Total annual Selling Cost	$17MM ($200k*85)	$12MM ($60*200k)

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Math Solutions: Exhibit 2

Total Market	5MM
Annual gross margin per user	$1000
R&D Cost	$1.5B
G&A cost	$25MM

*Data at left to be provided as the questions are asked by interviewee

	Year 1	Year 2	Year 3	Year 4	Year 5
Projected Market penetration	5%	10%	25%	40%	60%
Total Users	250k (5%*5M)	500k (10%*5M)	1.25MM (25%*5M)	2MM (40%*5M)	3MM (60%*5M)
Total Gross Margin	$250MM (250*$1000)	$500MM (500*$1000)	$1.25B (1.25MM* $1k)	$2B (2MM* $1k)	$3B (3MM* $1k)
Amortized R&D Costs	$300MM ($1.5B/5)	$300MM ($1.5B/5)	$300MM ($1.5B/5)	$300MM ($1.5B/5)	$300MM ($1.5B/5)
Selling Costs	$12 MM (from ex.1)	$12 MM (from ex.1)	$12 MM (from ex.1)	$12 MM (from ex.1)	$12 MM (from ex.1)
G & A Costs	$25 MM	$25 MM	$25 MM	$25 MM	$25 MM
Net Income	($87MM)	$163MM	$913MM	$1.663B	$2.663B

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Solution and recommendations

Solution & Recommendations

- Shermer Pharma's core competency is their research focus. The plausible argument can be made that they should sell the company to a larger firm that has the appropriate capabilities that it takes to market and sell a product. Though this might be the right answer, the client isn't always going to do take the optimal approach, particularly when it comes to ownership of the firm. We need to be flexible to account management's wishes
- Assuming the owners decide not to sell the company, contract sales is the next best option, that gives us the best scenario when determining overall profitability of our product.
- The latter half of the case is simple math, determining a P & L for our product and coming up with the correct answer that Shermer can be profitable.
- Ask for high level analysis at the end of the case, what else should be consider before engaging this plan?

Bonus/Guide to an Excellent Case

- An excellent interviewee will note:
  - There is an option to sell the company, even though there is no data provided to support this conclusion
  - Some of the numbers give an obvious answer before needing the exact calculations
  - Challenging the interviewer on the effectiveness of a contract sales organization is a bonus. A qualitative argument can be made that for an additional $5MM a year, we can realize the benefit of a more effective sales force, this isn't the financially correct answer but may be the right tradeoff given the relatively minimal impact to the bottom line vs. revenues of $3B
  - $1000 per year for a life saving cure for a currently incurable ailment is definitely under priced!

Exhibit 1: Sales force options

	Develop own Sales Force	Contract Sales Force
Percent of visit focused on our product	100%	50%
Fully loaded annual cost of 1 sales rep	$200k	n/a
Cost per sales call		$60
Total calls required		
Total Sales Reps needed	85	
Total annual Selling Cost		

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Exhibit 2: Annual Net Income

	Year 1	Year 2	Year 3	Year 4	Year 5
Projected Market penetration	5%	10%	25%	40%	60%
Total Users					
Total Gross Margin					
Amortized R&D Costs					
Selling Costs					
G & A Costs					
Net Income					

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Case 13: Hospitality Co

By: Craig DePriester (Kellogg Class of '12)

Case Question

- Our client owns a large hotel chain and is thinking about investing in an add-on for a waterpark on one of its properties. This has been tested in some places and has a lot of potential benefits: family friendly, year-round availability, and potential to bring in new clientele. They have done a lot of work surveying their chain and believe that they have found the right hotel to experiment with a waterpark add-on. Currently, this hotel has a lot of business travelers, but our client believes it would also be attractive for families.
- Our client is nervous about the capital required to build the add-on and wants to make sure that they are making the right investment. That's why we brought you on board. What do you think?

5

Quants.

5

Structure

Invest. B/E

Case tracker

- **Industry:** Leisure
- **Level of Difficulty:** **Medium**
- **Case format:** Opportunity Assessment
- **Concepts Tested:**
  - Investment
  - Breakeven analysis

Fit Questions

Spend first 15 min on fit

- Tell me about a time when you've had a conflict with a teammate.
- How would your friends describe you?
- How would you compare our industry with others you are interested in?

Guide to interviewer

- This case forces the interviewee to focus on the right issues and can be tricky. The candidate will need to ignore competitive positioning and focus on the profitability of the waterpark. The waterpark should recoup its investment and can even charge a premium.
- They will need to ask the right questions about the investment, its buyback period, and make assumptions about vacancy.
- There are also lots of potential risks and benefits that a great interviewee will recognize that allow them to consider the case on another level of detail.

Clarifying answers and case guide

Clarifying answers to provide

(Ignore any discussion of competition or market dynamics)

Competitive dynamics

- There are no competitors immediately nearby for a waterpark
- We have no information about competitors
- There is no possibility for a competitive response in the short run

Market information

- We do not have any specifics about the market and are unable to conduct additional survey data

Hotel characteristics

- Hotel's normal clientele is business travelers, but we believe that this waterpark will bring in families as well

Interview guidelines

This is a simple profitability calculation (Profit = Revenue – Costs) for the investment of a water-park add on. Many candidates will focus on the revenue side, but we need to back into the minimum amount the hotel *has* to charge to break-even on its investment in the payback period. The math portion assumes that all guests are incremental (the 50% vacancy rate). This is done to simplify the case, but it may require a little explanation to the interviewee .

A sample case structure would include the following:

1) Cost structure - Identify the costs (fixed and variable) as well as the relevant payback period for the investment.
2) Breakeven analysis - Based on the estimated room rates and payback period, identify how much the hotel would have to charge (fixed + variable costs) for each room to breakeven over the life of the investment.
3) Additional risks and benefits – Qualitative assessment of other potential benefits/issues that may arise from the investment.

Math question and solution

Math question

- How much will the hotel need to charge per room to recoup its costs?

Math solution

The math is about backing into how much the hotel needs to charge per room over the course of the three years to recover its investment. The interviewee needs to ignore the variable cost and focus on how to spread the fixed cost of the investment over the payback period.

$6 million investment / 3 years = $2 million / year in revenues

400 rooms X 50% vacancy X 350 days (don't use 365) year = 70,000 rooms per year

(Many candidates will struggle with this, try to combine costs, and will make the difficult on themselves. Let them struggle for a few minutes before helping).

$2 million/year divided by 70,000 rooms/year = 28.6, or about $30/night in fixed cost

The candidate should add this with the variable cost for around $70/night total for the three year period. If they do not interpret the number immediately, ask them what they think about the $70/night total.

Math information

- Investment:
  - $6 million investment
  - Payback in 3 years
- Hotel:
  - 400 rooms
  - With waterpark, 50% vacancy on average for the year
- Cost structure:
  - Investment is fixed cost
  - Variable cost is $40/night per room

Key elements to analyze

Pricing decisions

- How should we interpret the breakeven point on the hotel costs?
- How do we think about pricing?

Other revenue streams

- What other potential benefits/ revenue streams might this have?

Potential risks and issues

- What are the potential risks and issues associated with ?

Notes to interviewer

- The interviewee should realize $70 is an extremely low number, especially considering that families may be staying at the park.
- This will also ask the interviewee to gauge this number against the real cost of hotels and their personal experiences.
- Realistically, the hotel will be able to charge significant premium in addition to covering its basic costs.
- There are two options: charge an additional fee for waterpark entry or make it all-inclusive with hotel fee.

Notes to interviewer

- There are a lot of potential places to go here, but here are some ideas:
  - Charging admission entry
  - Food/restaurants at the park
  - Promotional tie-ins
  - Merchandise/swim suit apparel
  - Expansion to other hotels

Notes to interviewer

- Similarly, there are a lot of potential risks:
  - Management competency (do we have any experience?)
  - Regulatory/insurance risks
  - Health/litigation risks associated with theme parks
  - Competitive response
  - Alienating business customers with family friendly atmosphere

Solution and recommendations

Solution & Recommendations

- This project should be undertaken. While there are a number of potential risks and considerations (including competitive dynamics), the economics are extremely attractive and the price ($70/room) to earn back our investment is relatively low for almost any hotel, much less one with these amenities.
- The interviewee should make a solid case for their recommendation, using the other potential avenues for profit and the low payback price as key points for its undertaking.
- While the model answer suggests undertaking the investment, if an interviewee has a compelling, logical story on why the risks outweigh the benefits, it should be judged on its own merits. It would have to be a powerful argument though.

Bonus/Guide to an Excellent Case

- This case is defies a lot of candidate's expectations, with a lot of them really focusing on competitive/market dynamics. An excellent interviewee will get to the math quickly by focusing on the important issues: returning the investment.
- Additionally, an excellent interviewee will interpret the breakeven point as low. Asking them to "interpret" these numbers provides a good check of business judgment. Furthermore, an excellent interviewee will provide a lot of creative risks/benefits from this investment as well.

Case 14: Rock Energy

By: Mauricio Atri (Kellogg Class of '12); Edited by: Ron Mantel (Kellogg Class of '15)

Case Question

- Rock Energy, an Oil & Gas company, is evaluating the purchase of one of three oil fields in Latin America. After Rock Energy has decided which oil field to purchase, it will outsource all drilling related activities. You have been brought in to identify the best investment for Rock Energy.
- *How would you evaluate the three oil fields, and which oil field should Rock Energy purchase?*

Case tracker

- **Industry:** Energy
- **Level of Difficulty:** Medium
- **Case Format:** Opportunity Assessment
- **Concepts Tested:**
  - Investments
  - Creativity

Fit Questions

Spend first 15 min on fit

- What are you most proud of?
- Describe a time at Kellogg where you worked with a team to achieve a challenging goal

Guide to interviewer

- Main steps the interviewee should take:
  - You will likely see something similar to the Revenue/ Cost framework where the interviewee assess the investment opportunity for each field; provide Exhibit #1 once they are ready to approach Revenues/Costs (after initial questions)
  - With the info from Exhibit #1, interviewee is expected to calculate Revenues and Costs (interviewee should identifying that they need to ask for price of oil and cost to secure initial rights)
  - The price and barrels extracted by day will allow the interviewee to estimate the total revenue and profit by well.
  - After calculating profit, the interviewee should consider other factors, risks that could affect the decision investment

7

Quants.

5

Structure

Invest. Creativity

Clarifying answers and case guide

Clarifying answers to provide

Industry Characteristics/Market Economics

- The rights being offered to Rock Energy gives them the right to drill during year 1, and produce oil for 20 years. Assume that no oil is produced until the beginning of year 2.
- Rock Energy can get the drilling operator to deploy a maximum of 10 rigs in each of the regions
- The cost of the rig day includes crew, consumables and services
- Any amount of oil being extracted will be sold at the spot market price of the moment
- For simplicity assume that the oil wells will produce the same amount of oil for the next 20 years with no maintenance costs
- The rights to extract oil cost $40M in each region

Guide to case / Guide to handouts

Part 1 – Hand out exhibit #1 once the interviewee is at the point in their framework where they will analyze Revenue & Costs

- This handout should lead the interviewee to understand that each region will have different geological characteristics which will affect the drilling time, production, revenues and costs for Rock Energy

Part 2 – Profitability

- Provide the price of oil **($50/bbl)** if the interviewee does proactively ask for it when trying to calculate profitability; ask the interviewee to work out the profitability for each field, and not only by well.
- The answer will be a function of the investment, variable costs, and quantity of oil extracted by field. This last variable will depend on the number of wells drilled in one year.

Part3 – Conclusion and other issues

- Rock Energy should choose to buy the rights for **Region 2** because it will offer the best profits, but there are other factors that could impact the decision to invest:
    - Insurance costs; political stability of the region; labor contracts and unions; volatility of oil prices; oil quality differences

Math question and solution

Math question

- What are the first profits during the first year of production (i.e. 1st year spent on drilling, and production begins in 2nd year)

Math solution

- **Time to complete a well** = (Depth/Penetration Rate): Region 1 = 60, Region 2 = 90, Region 3 = 180
- **Production per well by region =** Daily production * 360 days: Region 1 = 36K, Region 2=72K, Region 3= 108K
- **Cost per well** = Days to complete well*Cost per rig day. **Yearly Revenue per well** = Price * # barrels per year. **Number of wells per year =** 360/(Time to complete a well) * number of rigs. Profit Margin = (Profit per well)/(cost per well). **Total Revenue** =(Yearly Revenue) *(Number of wells per year). **Total Cost =** (Cost per well)*(number of wells)+(Rights to extract oil). **Profit =** Total Rev – Total Cost.

Concept	**Region 1**	**Region 2**	**Region 3**
Investment Cost (Rights to extract oil)	$ 40,000,000	$ 40,000,000	$ 40,000,000
Cost per well	$ 300,000	$ 900,000	$ 3,600,000
Yearly Revenue per well	$ 1,800,000	$ 3,600,000	$ 5,400,000
Profit per well	$ 1,500,000	$ 2,700,000	$ 1,800,000
Profit margin per well	500%	300%	50%
Number of wells per year	(360/60)=6x10 Rigs=60	40	20
Total Revenue	$ 108,000,000	$ 144,000,000	$ 108,000,000
Total Cost	$ 58,000,000	$ 76,000,000	$ 112,000,000
Profit	**$ 50,000,000.00**	**$ 68,000,000.00**	**$ (4,000,000.00)**

Solution and recommendations

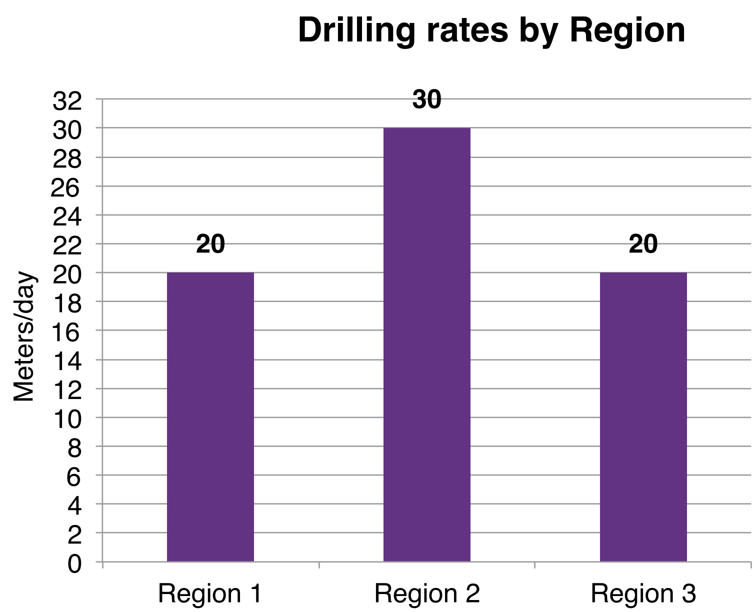
Solution & Recommendations

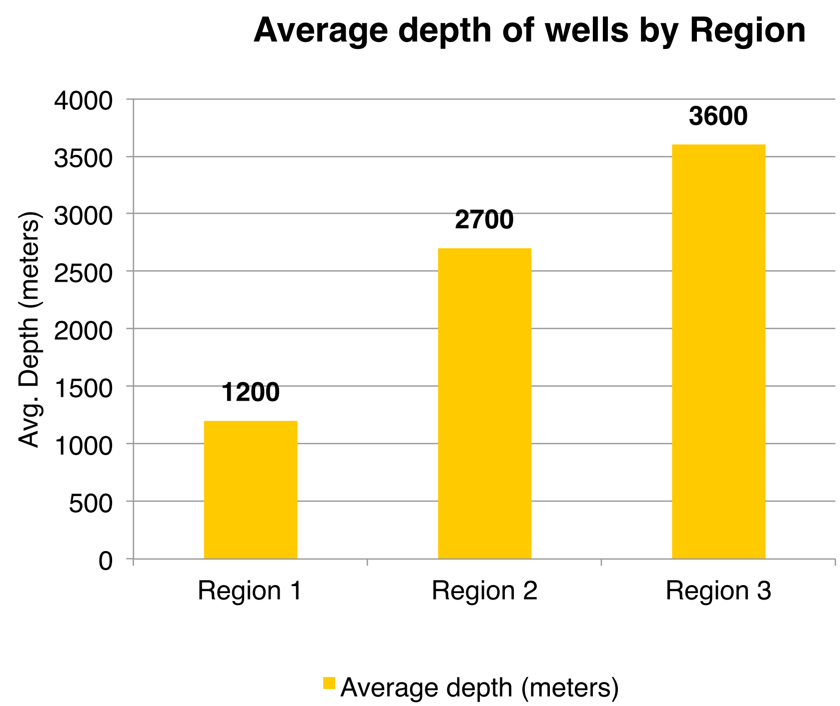
- Rock Energy should invest in buying the rights for Region 2
- It is important to recognize that even though the profit margin for Region 1 is significantly higher on a per well basis, the return of the investment depends on the total number of wells that you can drill in the first year and the upfront cost for the rights to extract oil in that Region
- Additionally, the interviewee should be able to identify other qualitative aspects of the investment that might affect the decision to invest in a certain Region

Bonus/Guide to an Excellent Case

- An excellent answer would mention and briefly summarize the impact of including an expected value analysis, which would assign different probabilities of extracting the expected barrels per day

Exhibit #1: Oil Field profiles, 2010





	Region 1	Region 2	Region 3
Max number of Rigs that would operate concurrently	10	10	10
Average well production (barrels per day)	100	200	300
Cost per rig day ($US)	$5,000	$10,000	$20,000

*Note: Wells are continuously dug during year 1 (assume 360 days), and oil is extracted beginning of year 2. Wells are dug by "Rigs". Once a Well has been completed, the Rig moves on to dig another well.

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Case 15: Orange Retailer Co.

By: Mauricio Atri (Kellogg Class of '12)

Case Question

- Orange Retailer Co. (ORC) manufactures, import/exports and distributes **high-end** world known brands and conservative/ traditional apparel brands in several countries in Latin America. ORC is considering entering a new country in Latin America, and you have been hired to determine whether they should enter this new market or not.
- *Don't mention this until they have determined to enter the market:* What would be the best entry strategy?

5

Quants.

5

Structure

Mkt Size.
Mkt. Stgy
Creativity

Case tracker

- **Industry:** Retail
- **Level of Difficulty:** Medium
- **Case Format:** Market Entry
- **Concepts Tested:**
  - Market Sizing
  - Marketing Strategy
  - Creativity

Fit Questions

Spend first 15 min on fit

- Ask interviewee the name of a firm with which they have an interview, then ask Why this firm?
- Tell me about a time when you led a team through a challenge

Guide to interviewer

- This case tests the ability to understand business concepts and quantify the potential benefits and risks of entering a new market.
- The interviewee should be able to size the potential market, distinguish different type of customer segments, and identify entry strategy for Orange Retailer Co.
- Additionally, the interviewee should identify some associated risks and potential ways to mitigate them
- Hand out exhibit #1 – Size of potential market and customer segments
- Hand out exhibit #2– Current players' share and margins
- After quantifying the size of the opportunity and the ideal strategy to enter this market, the interviewee should identify qualitative aspects of entering this new market
- *Consider doing this case as an interviewer led case for beginners, and interviewee driven case for advanced casers*

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Clarifying answers and case guide

Clarifying answers to provide

Industry Characteristics/Market Economics

- Macroeconomic outlook is positive in the new market
- Distribution channels are primarily department stores, free standing points of sale, and online sales

Client Characteristics

- Client is currently the third biggest apparel retailer and has focused on F/H and T/C brands for over 30 years
- ORC has traditionally targeted High-End clients, men and women of ages 15-40

Guide to case / Guide to handouts

Part 1 – Hand out after introducing case

- Is there a market opportunity for ORC? What is the size of the relevant market? Interviewee should quantify the size of the market for fashion/ high end and conservative/traditional apparel
- Additionally, there should be insight about the most attractive customer segments to target

Part 2 – Hand out Exhibit 2 after solving Exhibit 1

- The data should lead the interviewer to recognize that the high-end fashion market is probably driven by brand and/or other factors besides price. The margins are more attractive. ORC should be able to leverage the "world known" brands to attract customers in this segment. Additionally, by targeting "young adults" and "teen & children" it can serve +80% of the market
- In the conservative/traditional market, there seems to be stronger competition, which is probably driven primarily by price. Achieving low costs in this market by importing would be unlikely due to tariffs, and local manufacturing would probably require significant fixed (plants, …) and variable (labor, …) costs

Part3 – What other elements should ORC consider in its decision to enter this market?

Key elements to analyze

Topic 1 being tested

- What is the potential of the market for this apparel brand?
- *When asked, answer the following: ORC has traditionally targeted **High-End** clients, men and women of ages 15-40*
- *When asked, say that Young Adults and Adults make 70-80% of the market*

Topic 2 being tested

- What could the client drivers be for each segment?
- Should ORC compete in both segments, one or neither?
- *When asked, current players include local/domestic players*

Topic 3 being tested

- What channels would you use to enter the market
- What other elements need to be considered?
- What factors would impact how much market share we could get?

Notes to interviewer

- With Exhibit 1, you can estimate the size of each market: Value Driven (245M), Conservative (155M), Fashion & High-end (105M)
- Although the high-end market is smaller (105M) than the conservative market (155M), its concentrated in two customer segments that account for ~70%-80% of the market, which would make entry efforts simpler and more focused.
- Value Driven apparel is not something in which ORC focuses, so they should not enter this segment

Notes to interviewer

- The Fashion/High-end market seems to be driven by factors such as brand, *trendiness* items, aspiration aspects, or similar. Assuming manufacturing costs are similar, players seem to be able to charge more for products that have a brand recognition
- The Traditional market appears to be a price sensitive market, driven by cost. Assuming that ORC has no cost advantages over local players, this seems like a less attractive market (tariffs, or investment cost would drive ORC prices up)
- ORC should only enter the F/H market

Notes to interviewer

- ORC should probably enter the market by distributing to department stores coupled with online options, limiting costs of testing the market. Once this has proven successful, ORC should think about rolling out a series of free standing stores, beginning by flagships stores for the brand which will help them position in the new market
- Some of the other elements that could be considered are: new organizational structure, investments in advertising, transportation times and costs , and exchange rates risk

Solution and recommendations

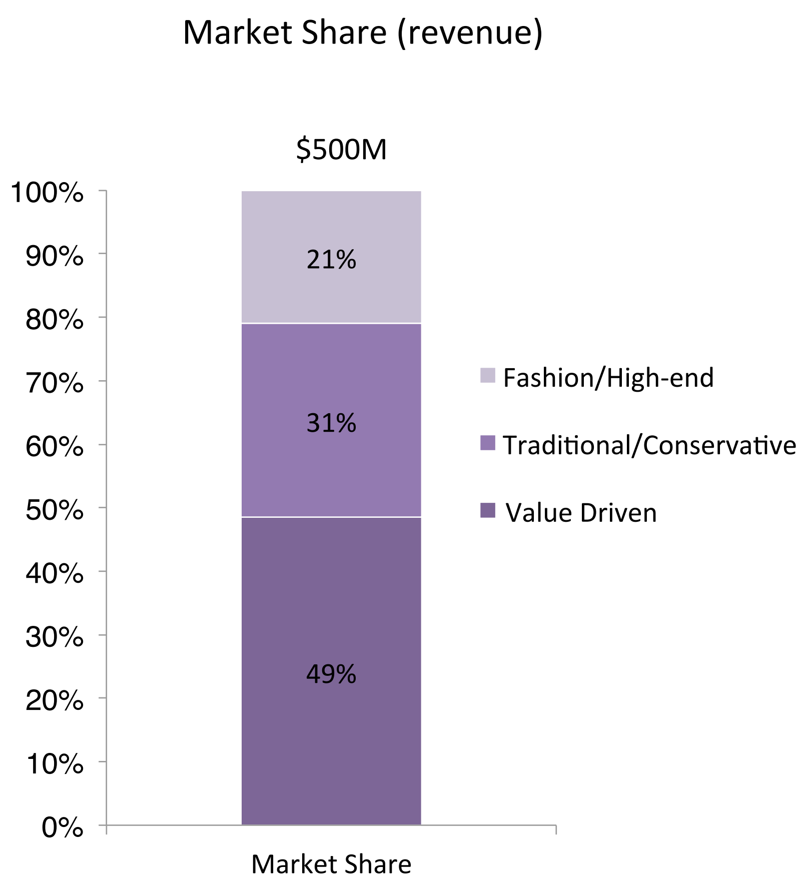
Solution & Recommendations

- ORC should enter the Fashion/High-end market. It should be able to leverage the "world known" brands to position itself in this market as an attractive option for the "adults" and young adults." Assuming ORC has competitive capabilities for "teens & children" segments, or can develop these with little risk or cost, then it should also consider entering this segment.
- To enter this market, ORC should focus on department stores first to test the market with low risk. It could enter the department stores and online channels without the need of a local partner. Once the market has been tested, it could be convenient to acquire/form a JV to build an independent store network

Bonus/Guide to an Excellent Case

- An excellent answer should mention investments costs, manufacturing costs, transportation costs, and exchange rate risks. If costs are expensed outside of the new market, there are options to mitigate exchange rate risks by buying currency financial options

Exhibit #1: Apparel market



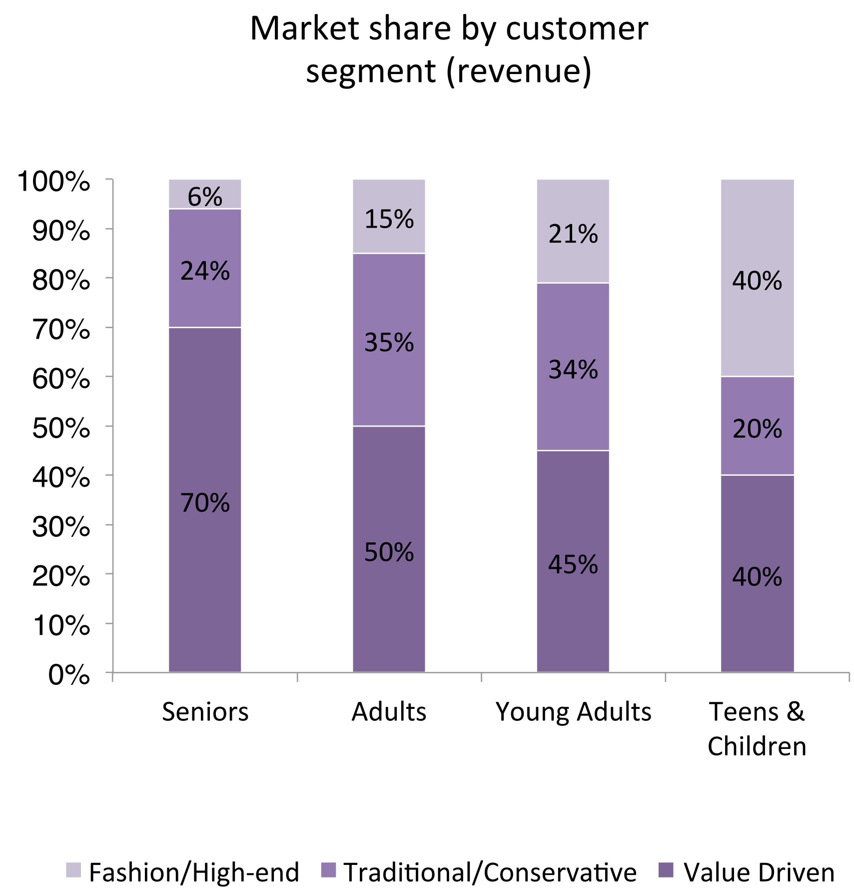


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Exhibit #2: Current players

Current players in the Fashion/High-end market

Fashion/High-end	**Player 1**	**Player 2**	**Player 3**
Market share	40%	26%	34%
Gross Margin	70%	43%	55%
Operating Margin	45%	18%	30%

Current players in the Conservative/Traditional market

Conservative/ Traditional	**Player 1**	**Player 2**	**Player 3**	**Player 4**	**Player 5**
Market share	21%	18%	19%	21%	21%
Gross Margin	21%	22%	20%	23%	20%
Operating Margin	11%	12%	10%	13%	10%

Case 16: Vitality Insurance, Inc.

By: Peter Manoogian (Kellogg Class of '12)

Case Question

- Our client, Vitality Insurance, is a leading provider of supplemental insurance products in the United States.
- Vitality agents partner with companies to offer their employees optional, supplemental insurance for such conditions as life, long-term disability, etc.
- Vitality has undergone fairly steady growth in the past two years, but profit margin is decreasing. W*hat should they do about it?*

Case tracker

- **Industry:** Financial Services
- **Level of Difficulty:** **Medium**
- **Case Format:** Improving profitability; Reducing Costs
- **Concepts Tested:**
  - Supply/value chain
  - Marketing strategy
  - Customer strategy

Fit Questions

Spend first 15 min on fit

- Give me an example of when you had to motivate others who did not report to you
- How would a friend, or a professor who knows you well, describe you?

Guide to interviewer

- This case is primarily about diagnosing the source of cost increases for an insurance firm and then determining whether those increases are justified by increased profits
- The case is fairly structured in that the interviewee will need to "peel back" the layers of this case in the following process
  - Recognize that sales costs are rising drastically
  - Identify the shift in sales contest mix for 2010
  - Evaluate the effectiveness of the new contest mix
- With any cost reduction case, an interviewee may seek information on other cost drivers. If this occurs, politely tell the interviewee nothing else exists and then refocus

3
Quants.

7
Structur

Reducing costs; profit

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Clarifying answers and case guide

Clarifying answers to provide

Client Characteristics

- Vitality is the leader in its category and has over 10K field sales agents
- Vitality sells all policies through its field sales agents who are solely compensated on a % commission of total new premium, defined as premium from new customers or additional premium (up-sell) from existing policyholders
- In addition to the commission, short term priorities are often communicated via sales contests that focus on a particular customer segment or activity and pay a bonus in addition to standard commission
- Major costs: sales, G&A, and advertising

Competition

- Vitality has a few other competitors in this market who have seen similar growth, but Vitality is a leader in the space and thus competition is not the focus

Industry trends

- Mature market
- Agent turnover is very high on a yearly basis (though was lower during the recessionary period)

Guide to case / Guide to handouts

Exhibit 1– Provide once interviewee receives clarifying information (left pane) and asks for more detail on costs

Interviewee should recognize the following:

- All line items except for sales costs growing at 10% per year
- Sales costs grow at 10% from 2008 to 2009, but at 45% from 2009 to 2010 (while premium growth remains at 10%)
- Stronger interviewees will quickly note that something is strange w/the 2010 sales costs, but will calculate to confirm
- Finally, profit margins are declining significantly from 09-10, suggesting that the increase in sales costs is not paying off

Exhibit 2– Provide if interviewee asks about the value chain or selling process. If the interviewee asks about the **new contests** focused on **premium**, provide the following information:

- Vitality launched a contest called "Sweeps Week" that aimed to drive increased premium in weeks that were traditionally low volume for the company. Vitality paid an extra 10% bonus on all premium booked in those two weeks.
- Sales agents thought "Sweeps Week" was a great contest
- We have no info on the additional two contests on new accounts

Exhibit 3- Provide if interviewee asks for further detail on the effectiveness of "Sweeps Weeks"

Key elements to analyze

Supply/value chain

- As seen in **Exhibit 2**; Vitality's sales agents are engaged in several activities along the sales process, and that new premium can be generated in many ways.
- The interviewee should recognize the shift in contest mix from 2008/09 to 2010. Coupled with the additional information provided in the previous slide, the interviewee should realize that Vitality has shifted its focus more toward total premium and new accounts in 2010

Marketing strategy

- **Exhibit 3** shows weekly premiums for all of Vitality from 2008 – 2010. The chart is shown in a way that compares each year's actual premium to the average of historical premium for that year, so as to provide for a "benchmark" comparison.
- The "Sweeps Week" contest launched in 2010 is shown in weeks 4 and 20 in the chart, and clearly yields high premium volume for those particular weeks. However, it is done at the expense of the weeks surrounding the sweeps week.
- This implies that agents may be "gaming" the system by pushing/pulling sales into that week to earn the contest $$

Notes to interviewer

- Assume the types of contests run in 2008 and 2009 were fairly similar
- Do not share **Exhibit 3** until the interviewee recognizes this shift in mix and begins asking questions about the new programs

Notes to interviewer

- If asked, confirm that agents have authority to "book" sales whenever they want by influencing the enrollment timing by up to one week
- Strong interviewees will also recognize that, despite not having charts to support it, a shift in customer focus toward acquiring new accounts in 2010 will likely also hinder profit margins, as acquiring a new customer costs considerably more than retaining (or up-selling) an existing customer

Solution and recommendations

Solution & Recommendations

- The interviewee should conclude that Vitality overspent in 2010 on the "Sweeps Week" sales contest, thus hurting its profitability
  - Exhibit three indicates that the contest influenced the sales force to conduct undesirable selling practices by pushing / pulling forward business to earn the extra commission
  - Further, the contest's focus, driving new premium was duplicative with that of the main commission system, therefore it did not add much value
- Recommendation: eliminate "Sweeps Week" for 2011 and potentially repurpose those funds toward an activity that is not already covered by the main commission structure
- It is unclear whether we should remove the increased contests on new accounts, as this could be a new customer focus that we do not know about

Bonus/Guide to an Excellent Case

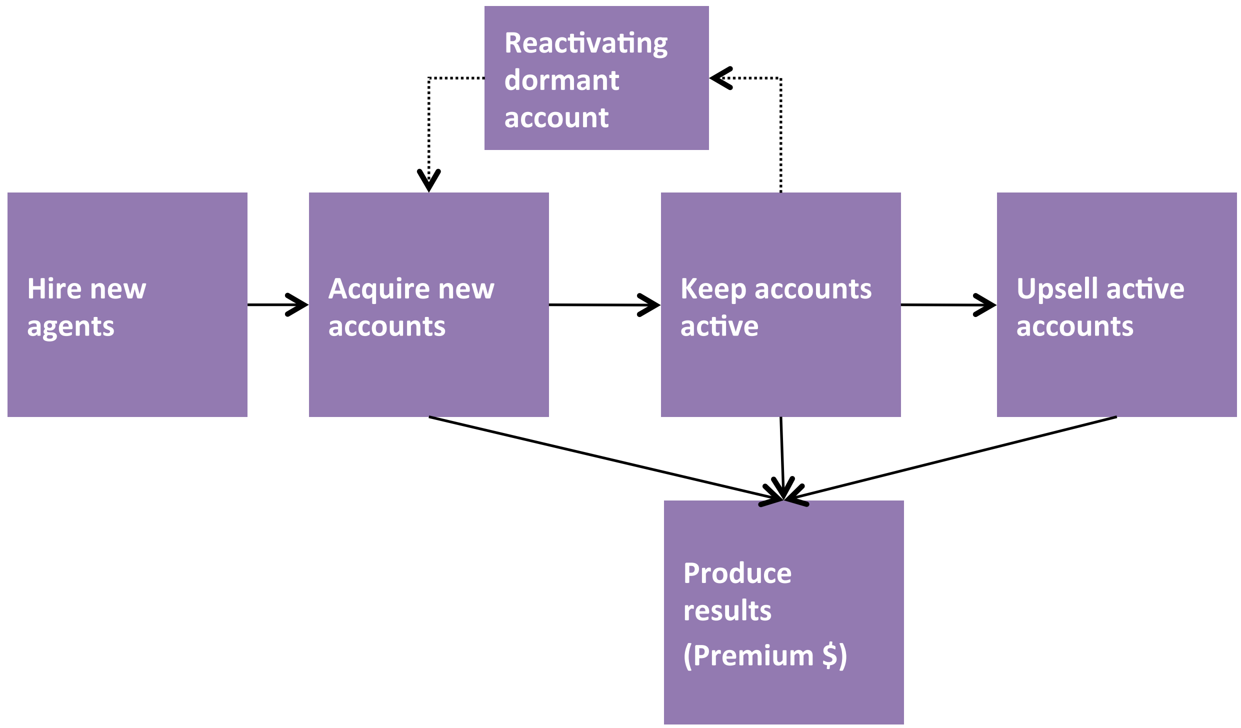
- Strong candidates will make the following observations:
  - Recognize that the likely decline in profit margin from 2009 to 2010 is linked to the abnormal increase to sales costs
  - That the "contest mix" in Exhibit two is similar to a firm's marketing mix, especially given that the sales channel has already been established as the main marketing channel for these products
  - Suggest that the added contests on acquiring new accounts will also decrease profitability because acquiring new customers is more costly than retaining existing ones.

Exhibit 1: Vitality results and major costs

Vitality insurance key results and costs (Figures in 000s)

	2008	2009	2010
Accounts converted	500	550	605
Total policyholders enrolled	1,500	1,650	1,815
Total premium from policyholders	$2,500,000	$2,750,000	$3,025,000
Total costs			
General and Administrative	$50	$55	$58
Sales	$250	$275	$400
Advertising	$25	$28	$30
Profit margin	9.50%	9.40%	8.50%

Exhibit 2: Vitality insurance sales process



# of sales contests targeted at these leverage points on the selling process

Year		New Agents	Acquire new accounts (bonus based on # of accounts)	Keep accounts active (bonus based on # of accounts)	Upsell active accounts (bonus based on # of accounts)	Produce results (bonus based on total premium $)
	2008	N/A	2	4	1	2
	2009	N/A	2	4	1	2
	2010	N/A	4	0	1	4

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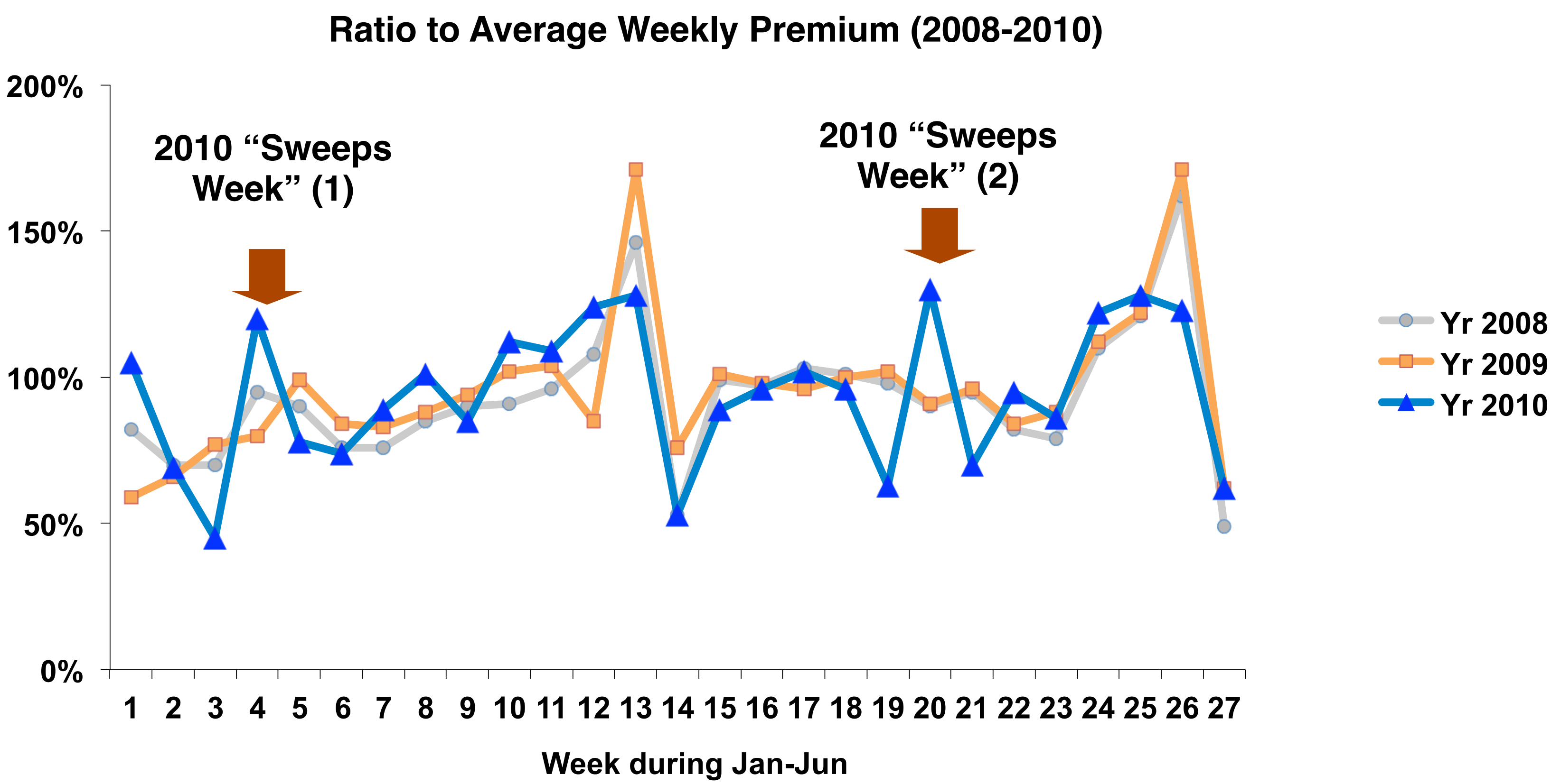
Exhibit 3: Snapshot of “Sweeps Week” contest results



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Case 17: Chic Cosmetology University

By: Peter Manoogian (Kellogg Class of '12)

Case Question

- Our client is a for-profit, specialty college named Chic Cosmetology University (CCU). Founded in 2005, CCU is a program for high school graduates seeking their professional cosmetology license. CCU is currently the market leader for cosmetology education with campuses in ten major metropolitan areas in the US.
- *CCU has capital to invest in a new campus and is considering Chicagoland as a location – should they do it?*
- *(If interviewee asks about OTHER objectives or defining success for opening the new location):* The client considers a successful launch as achieving positive operating profit for the new campus two years after opening

Case tracker

- **Industry:** Education
- **Level of Difficulty:** Medium
- **Case Format:** Opportunity Assessment
- **Concepts Tested:**
  - Break-Even Analysis
  - Marketing Strategy
  - Market Share
  - Investments

Fit Questions

Spend first 15 min on fit

- Tell me about a difficult or sensitive situation that required careful communication
- Describe a project or idea that was introduced or implemented because of your efforts

Guide to interviewer

- This case involves some number crunching but is more structurally focused. It is critical to ensure that the interviewee lands on the figures presented (or is course corrected toward them) in order to proceed with the later parts of the case.
- The interviewee should be able to develop a variant of the following question:
  Will CCU be able to enroll enough students to offset the initial investment and achieve positive profit?
- Key case steps:
  1. Evaluate CCU revenue and cost structures
  2. Project CCU's market share
  3. Estimate CCU Chicago enrollments
  4. Identify qualitative issues to consider

7

Quants.

8

Structure

B/E
Mkt. Stgy
Mkt Share
Invest.

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Clarifying answers and case guide

Clarifying answers to provide

Client Characteristics

- Enrolled students take classes at a physical campus for one school year to earn degree (FY begins on 9/1)
- CCU boasts the best campuses in the industry with state of the art equipment
- Strong job placement due to CCU's relationships with top salons in local areas
- CCU and industry enrollments growing at 5% per year

Competitive Dynamics

- 2-3 other large specialty colleges, some of which are in the same geographies as CCU
- Community colleges beginning to offer cosmetology degrees at lower prices
- All ten CCU campuses have been present for at least three full school years
- All competitor campuses have also been present for similar lengths of time

Industry Characteristics/Economics

- H.S. Diploma and cosmetology degree required to enter the field
- 98% of cosmetologists are women

Guide to case / Guide to handouts

Share **Exhibit 1** with interviewee after probing questions are received about CCUs revenues and costs . Interviewee should be able to compute the following:

- Average revenue per enrollment = $15K (revenue / total enrollments)
- Total annual fixed cost per campus = $4.8M ($48M / 10)
- Total variable cost per student = $8K ($80M / 10K)
- Gross profit per student = $7K ($15K - $8K)

After that, the interviewee should begin to tackle the overall opportunity in the area as well as how many enrollments CCU could reasonably expect to obtain in year 1

Share **Exhibit 2** with interviewee after some of the qualitative aspects of CCU's targeting and marketing strategy are covered. Additionally, the interviewee should have asked about competitor information or made some attempt to assess what share of the market they should expect in Chicago.

- See "Market Share" section in next slide for further information on **Exhibit 2**

Key elements to analyze

Break-even analysis

- How many students will CCU need to break-even in year 1?

Notes to interviewer

- Interviewee should ask about the investment cost of building a new campus in Chicagoland
- After asking, tell interviewee that the total cost is $4.5M in initial building costs to renovate its chosen site. These costs can be amortized evenly over a three year period.
- Assume fixed costs remain flat per year

Interviewee should calculate

- Total fixed costs per year = $6.3M ($4.8M + $1.5M from amortization).
- Gross profit per student = $7K
- Break-even number of enrollments per year = 900 ($63M / $7K)

Marketing strategy

- What types of schools / students do you think CCU targets?

Notes to interviewer

Possible responses (schools):

-Public schools (private HS more likely to have grads go to 4yr univ)

-HS's in middle-class cities (may be an affordability issue w/lo income)

-Closest to the campus (geography)

Possible responses (students)

-Women HS graduates

-Not attending 4yr college

-Interested in cosmetology

After a few of the above criteria are noted, share:

- CCU has identified 1,000 targeted high schools in the Chicagoland area
- Within these HS, CCU's market research estimates that on average 6 students per HS have "potential" for CCU enrollment

Market share

- What is the highest share we could expect CCU Chicago to capture in Y1?

Notes to interviewer

- Show **Exhibit 2** to interviewee
- Interviewee should recognize:
  - Campuses w/competitors present tend to have a lower share (10%) than those w/out (15%)
  - However, presence of >1 competitor does not have an increased negative impact on market share (Boston has 8% share w/only one competitor)
  - Interviewee should assume a projected 10% market share for a Chicago campus (one competitor)
- **Also share the following :** 80% of enrolled students directly from high school, the other 20% of students come from the "Adult" market

Calculations

Math questions

1. What is the breakeven number of students required for CCU Chicago?
2. How many students should CCU Chicago expect to enroll in year 1, at the most?
3. <u>(If time permits)</u> = Suppose CCU finds a lot with a one time construction cost of $300K with the same amortization schedule. Should they enter Chicago now?

Calculations

1. Break-even: (Estimated campus fixed cost + Yearly amortization) / gross profit per student

($4.8M + $1.5M) / $7K = 900 students

2. Students: Total potential students x maximum projected market share

Total potential students = Potential (HS) + Potential (Adult) = 7,500 students

Potential (HS) = 6 / HS X 1,000 targeted HS = 6,000 students

Potential (Adult) = 6,000 students * 25% = 1,500 students

Total potential students (year 1) = 7,500 students x 10% share = 750 students

Total potential students (year 2) = 750 students x 1.05 (growth) = 788 students

3. Break-even: (Estimated campus fixed cost + new yearly amortization) / gross profit per student

($4.8M + $0.1M) / $7K = 700 students

Solution and recommendations

Solution & Recommendations

- Overall, our client should NOT enter the Chicago market under the current cost structure. Even with a 10% market share assumption in year 1, the Chicago campus will enroll only 750 students, this is 150 fewer than the 900 required to break-even.
- The client should also consider several qualitative issues:
  - Consider offering scholarships to increase the number of potential students and/or conversion rate of potential students
  - Consider other cities beyond Chicagoland that currently do not have a CCU presence, or add a second campus to a city such as NYC that has high market share and potentially low capacity
  - Perform market research in other cities to understand if there is a greater potential per target high school to increase ROI
  - Consider ways to reduce fixed costs (*e.g.,* transporting equipment / materials from campuses that are not at capacity)

Bonus/Guide to an Excellent Case

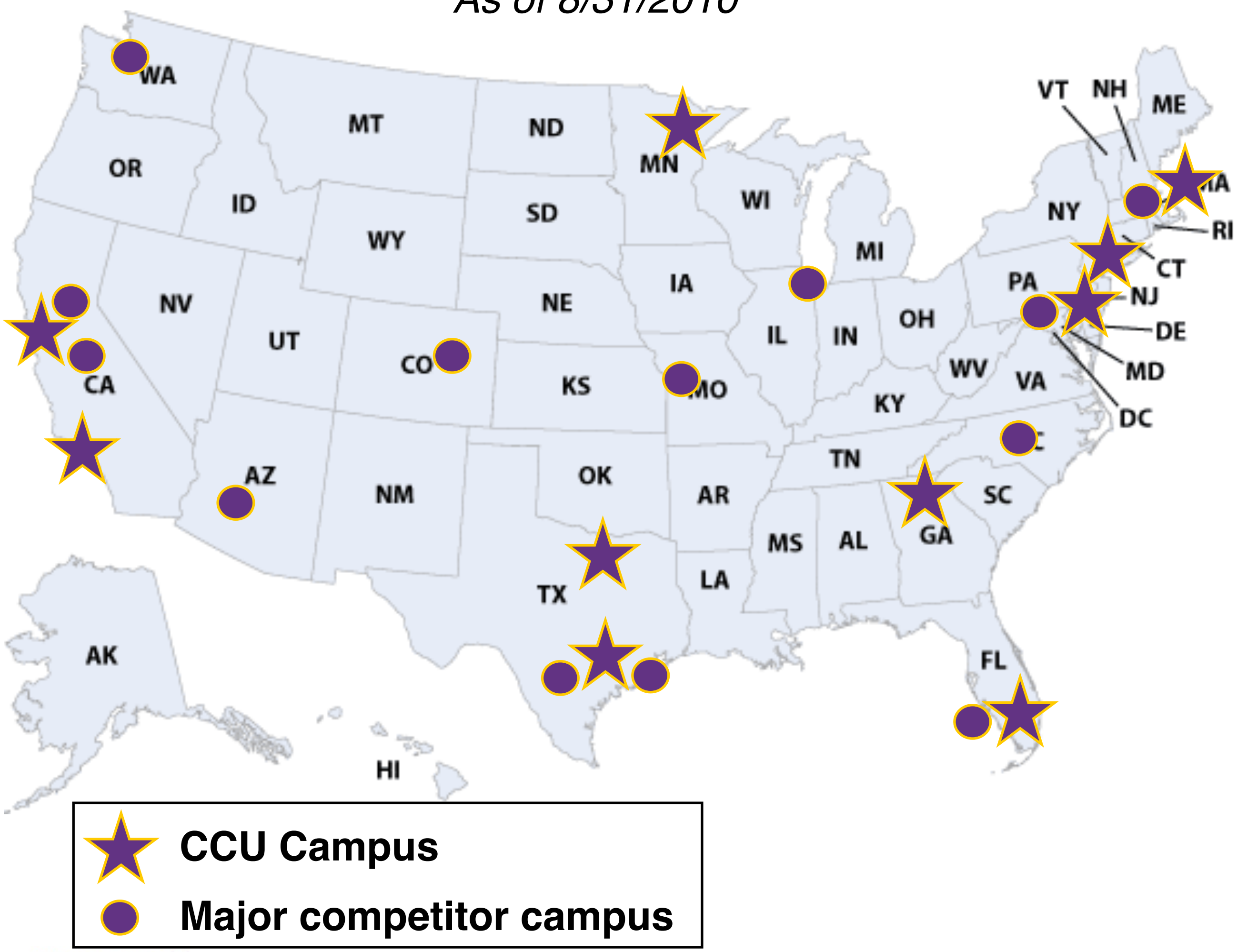
- Excellent interviewees will recognize that the 10% market share is for campuses that have been in place for at least three years , therefore Chicago is unlikely to achieve that share in year 1 or 2; this rules out the feasibility of the follow-up question that suggests the possibility of reducing the one-time investment from \$4.5M to \$300K.
- Additionally, a strong interviewee will identify several of the qualitative issues listed above as ways in which CCU could proceed

Exhibit 1: 2010 CCU Financials

CCU Financials as of 8/31/2010 ('000s)	
Student enrollments (all campuses)	10
Revenue from enrollments	$150,000
Total fixed campus costs	$48,000
Buildings and equipment	$32,000
Recruiting, general, and administrative	$16,000
Total variable campus costs	$80,000
Instructors	$40,000
Student supplies	$40,000
Operating profit	$22,000

Exhibit 2: CCU and major competitor locations

As of 8/31/2010



Campus	2010 share*
San Fran	8%
LA	14%
Minneapolis	15%
Dallas	14%
Houston	10%
Atlanta	16%
Miami	12%
Philly	12%
New York City	16%
Boston	8%

* Measured as share of total "potential" students, as defined by CCU

Case 18: DigiBooks Inc.

By: Shobhit Chugh (Kellogg Class of ’11), Edited By: Adam Louras (Kellogg Class of ’11)

Case Question

- Our client, DigiBooks, is a manufacturer and seller of electronic book readers (tablets). DigiBooks also distributes e-books for the tablets through their website. The tablet is only compatible with books sold through the DigiBooks site.
- DigiBooks is planning the launch of its tablets in a country where no electronic book readers are currently sold. Only 1% of the population has ever used an electronic book readers , though 50% is aware of the concept. The Chief Marketing Officer of DigiBooks has come to you to help determine:
  - *How should DigiBooks launch and market DigiBook tablets in this new country?*

4

Quants.

7

Structure

MKT Stgy
Cust. Stgy
Creativity

Case tracker

- **Industry:** Tech/ Telecom
- **Level of Difficulty:** Easy
- **Case Format:** Developing a new product
- **Concepts Tested:**
  - Marketing Strategy
  - Customer strategy
  - Creativity

Fit Questions

Spend first 15 min on fit

- Tell me about a time when you failed.
- Share me a time when you faced a difficult situation in a team and how you solved this .

Guide to interviewer

- The case primarily tests the understanding of marketing concepts, specifically a new product launch.
- The case is written in McKinsey style format; the interviewer is expected to guide the interviewer step by step through each question.
- Begin by laying out the situation and case question, allow the interviewee to layout their structure, and then jump immediately to question 1. The interviewer is expected to drive this case rather than the interviewee.

Clarifying answers and case guide

Clarifying answers to provide if Asked

Industry Definitions

- *Electronic book readers*: Is a software, hardware and network platform that utilizes wireless connectivity to enable users to shop for, download, browse, and read e-books, newspapers, magazines, blogs, and other digital media.

Client Characteristics

- *DigiBook's Tablet*: Uses an e-ink electronic paper display that features 16 shades of grey. This allows for a 12 hour long battery life and easy readability.
- *Locations:* DigiBook has never sold a product outside of the US.

Competitive Dynamics

- No competitors in the e-book or tablet space plan to enter this country

Market Characteristics

- Total population of the country 76MM, high literacy level

Interviewer Guide to case and handouts

Case Structure – Interviewee's structure should cover the key areas needed to explore in order to determine how DigiBooks should launch and market the tablets in this country.

- The interviewee should take a few minutes to sketch out a framework for analysis of the marketing plan
- Key elements expected to be included in this framework are:
  - **Segmentation, targeting and positioning**: Are there particular segments in the population that will be ideal customers for us?
  - **Product:** What key capabilities are people looking for? Can we use our existing products or do we need to develop a new one for this country?
  - **Price:** What price should the tablets and books be sold at? What is customers willingness to pay? Should we price the tablet at a low price so as to capture most of the market, and make margin on e-books?
  - **Promotion:** How should the tablets be marketed? What promotion mechanisms should be used?
  - **Place/Distribution**: Should the tablets be sold through retail channels, internet or other alternative means?
  - **Selection of e-books**: Is a wide selection of books available for this country?

Prompts 1-3 – After the interviewee has laid our their structure, begin by asking the question in Prompt 1. Once each prompt has been sufficiently covered, move to the next prompt. After all prompts are complete, ask the interviewee to summarize their findings. NOTE: Prompt 2 allows for creativity, so use your judgment when evaluating.

Key elements to analyze

Prompt #1: Cust. Strategy

- Through research, we found several segments. (Hand out **Exhibit 1**). We are only able to target one segment with our product.
- *Using a 3-year projection, which segment should DigiBook target?*

Prompt #2: MKT Strategy

- DigiBooks is now considering how it should sell its e-book readers: through retail stores or through the internet.
- *How would you go about evaluating this decision?*

Prompt #3: MKT Strategy

- Based on revised market estimates, we decided to price the e-reader at $100 and target the Occasional Reader segment.
- *Using this information and **Exhibit 2**, can you estimate the profit potential of each of these sales channels? Which should we choose?*
- What segment would you recommend to your client?

Notes on Exhibit 1

- If unclear, the interviewee should answer based on Revenue Potential (i.e. Ignore probability of purchase) assuming all tablet sales happen immediately (Ignore TVM).
- The missing data is that the average price of an e-book is $10, for each of the segments, and that e-books and tablets have the same margin
- Using **Exhibit 1**, interviewee should calculate:
  - SR Revenue = [(15 books x $10 X 3 Years) + ($200 x 1 tablet)] x 8M People = $5.2B
  - OR Revenue = [(10 books x $10 x 3 Years) + ($125 x 1 tablet)] x 20M People = $8.5B
  - RR Revenue = [(5 books x $10 x 3 Years) + ($175 x 1 tablet)] x 10M People = $3.25B
- **ANSWER: Segment to be targeted = occasional readers (OR) with a Revenue Potential of $8.5B**

Notes on Prompt #2

- **Retail Channel Sample Responses:**
  - CONS:
    - Lower margin due to value chain expansion
    - Will take time and money to set up and adds training costs
  - PROS:
    - Should encourage Trial of the product
    - Retailers can help with joint marketing campaigns
    - Retailers can help with customer service, returns
- **Internet channel Sample Reponses:**
  - PROS: Likely cheaper to establish, will result in higher margins
  - CONS: Hard to encourage trial

Notes on Exhibit 2

- If unclear, the interviewee should answer this with a 1-year Gross Profitability calculation for each of the Sales Channels and back out the Upfront Investment. They should ignore all other costs such as SG&A.
- There is no missing data; however, the Market Size of 20M people in the OR segment is needed from **Exhibit 1** and the price per e-book of $10.
- Using **Exhibit 2**, interviewee should calculate:
  - *Retail Profit* = [(10 Books x $10/book x 50%GM) + ($100/tablet x 30%GM)] x (10M People x 40% Penetration) = $320M - $20M II = **$300M**
  - *Internet Profit* = [(10 Books x $10/book x 50%GM) + ($100/tablet x 60%GM)] x (10M People x 10% Penetration) = $110M - $10M II = **$100M**
- **ANSWER: Sales Channel to Use = Retail with a profit of $300M**

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Solution and recommendations

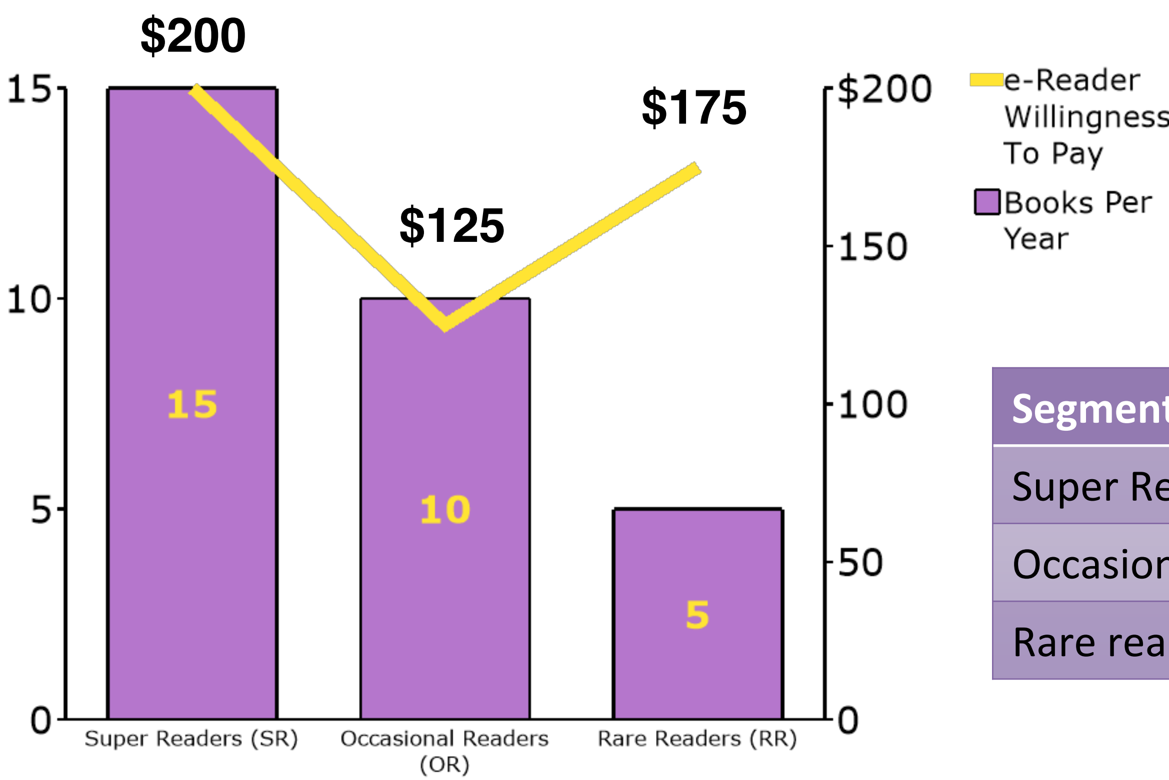
Solution & Recommendations

- Overall, DigiBooks should launch the e-book reader for the Occasional Reader segment through the Retail Sales Channel.
- Based on our calculations, we expect to earn a $300MM return on an initial investment of $20MM
- **Other items to consider:**
  - What advertising mechanisms do we use in this case?
  - Do we setup a manufacturing facility in the country or do we source the products from our current manufacturing facilities?
  - Are there any prospects of competitors entering the market?

Bonus/Guide to an Excellent Case

- An better interviewee notices key nuances in the case such as: Time Value of Money impacts on Exhibit 1 and Probability of Purchase or Penetration on Exhibit 1
- An excellent interviewee will detail various elements of marketing strategy of a new product launch
- A key element of this case is being able to do relatively complex calculations at a fast pace. Laying out the tables appropriately for this case is essential to success

Exhibit #1: Market segments



Segment	Size
Super Readers (SR)	8M
Occasional Readers (OR)	20M
Rare readers (RR)	10M

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Exhibit #2: Channel decisions

Channel	Percent of Total potential market	E book Gross Margin %	E-reader Gross Margin %	Penetration	Initial investment
Retail	50%	50%	30%	40%	$20M
Internet	50%	50%	60%	10%	$10M

Case 19: After School Programming

By: David Morse (Kellogg Class of ’11), Edited By: Ameed Mallick (Kellogg Class of ‘12)

KELLOGG CONSULTING CLUB
CASE COMPETITION
GOLD MEDAL WINNER

Case Question

- It is 2003, and our client offers after school programming focused on supporting at-risk youth through high school, enabling them to enter and succeed in college.
- The client is trying to identify the best approach to meet its growth target. The client’s goals for expansion are to most efficiently serve students at 7 new sites, while raising their national profile. We have been hired to help them vet potential sites to maximize their social and financial impact.

Case tracker

- **Industry:** Other (Non-Profit)
- **Level of Difficulty:** Hard
- **Case Format:** Growth Strategies
- **Concepts Tested:**
  - Organizational
  - Capacity Expansion
  - Customer Strategy
  - Marketing Strategy

Fit Questions

Spend first 15 min on fit

- “Why are you interested in Consulting as a career and our firm in particular?”
- “Tell about a time you failed and what you learned from the experience?”

Guide to interviewer

- This case should be delivered McKinsey-style, i.e. following presentation of the framework, the interviewer should guide the interviewee from question to question. The secret to this case is thoroughly understanding the client’s business and goals. Interviewers should encourage the interviewee to take time to understand the client’s business model and to be sure they thoroughly understand the questions being asked.
- This case focuses on understanding not only the financial objectives but also the other objectives/impact that a client wishes to achieve and these should impact the analysis and recommendations to be delivered.

10 *Quants.*

10 *Structure*

Org. Chg
Cap. Exp.
Cust. Stgy
Mkt. Stgy

Clarifying answers and case guide

Clarifying answers to provide if Asked

The following information can be provided if the interviewee asks, but should not be volunteered:

—'At-risk' youth are those who, due to behavior or grades, are at risk of dropping out of high school or have already done so
—The client operates local centers attached to high schools with full time staff
—The client offers tutoring and test prep support to the youth with whom it works, as well as connecting youth to internships and career opportunities
—All centers are Massachusetts or southern New Hampshire
—The client operates 8 sites with 2,500 youth served
—School districts and state agencies reimburse the client for activities
—The client has a high national profile and has received calls from high school systems in Florida and California offering to pay for the client to establish centers in their districts; the client has declined these offers to date

Interviewer Guide to case and handouts

Question 1: what are the client's options for locating and for opening new sites, and what are some considerations the client should consider in selecting among these options?

Question 2: let's look at the financial considerations, particularly at the effect of additional sites on central costs. The client allocates central office costs to each wholly owned site on a uniform basis, i.e. total central office costs / 8 = allocation per site. The client wants to understand how expanding sites will affect the per wholly owned site allocation of central costs. For this analysis, assume that central costs don't vary depending on the method selected for expansion. **(Show Exhibit 1)**

Question 3: from a mission perspective, our client thinks that serving areas with a high density of at-risk youth will best deliver its mission as well as raise its national profile. As such, it would like to determine which geographic areas show the most promise for mission fulfillment. They provided some data from representative school districts for an initial analysis: **(Show Exhibit 2)**

Question 4: earlier, you listed some additional factors that might help the client screen new locations. What do you think are the pros and cons of these additional factors in each geographic area? How might this influence the client's choice of target geographies?

Question 5: let's wrap up with a summary of your findings and a recommendation to the client.

Answer – The interviewee cannot solve this case without understanding the client's business and goals

Key elements to analyze (1)

Question 1: Organizational Changes

- **Question 1:** what are the client's options for locating and for opening new sites, and what are some considerations the client should consider in selecting among these options?

Notes to interviewer

- The interviewee should quickly focus on geographic options for sites:
  - Adjacencies to existing sites (middle schools, neighboring high schools)
  - New sites in existing states, separate from existing sites
  - New states neighboring existing states
  - New states that have contacted the client

- The three primary methods for opening new sites are:
  - Partnerships
  - Branching / licensing
  - Wholly-owned sites

- The interviewee should go back to their original question, and hopefully their framework, to remember that the client wants to vet potential sites for mission and financial impact. Based on this, they should come up with two sets of criteria, which might include:
  - Mission related:
    - Number of at risk youth
    - Presence of other youth service organizations
    - Potential to work with high schools
    - Knowledge of target market
  - Finance / operations related:
    - Potential to attract funding
    - Ability to leverage relationships and engage in political advocacy
    - Ability to leverage existing infrastructure
    - Ability to recruit talent

Key elements to analyze (2)

Question 2: Capacity Expansion

- **Question 2:** let's look at the financial considerations, particularly at the effect of additional sites on central costs. (Show Exhibit 1)

Notes to interviewer

- A good interviewee will quickly point out that the 74% increase in costs is less than the 88% increase in the number of sites, and that central office cost allocation per site should decrease. Interviewees should quantify the impacts of growth on costs per site.

Question 3: Customer Strategy

- **Question 3:** our client thinks that serving areas with a high density of at-risk youth will best deliver its mission as well as raise its national profile (Show Exhibit 2)

Notes to interviewer

- Note 1: Worcester, MA neighbors an existing site for the client. Nashua, NH does not have a site.
- Note 2: This is a tough problem to solve. Work actively with interviewees to get to the answer. Assume that class sizes, dropout rates and GPA averages are uniform across grades.
- Note 3: Mention that high school is 4 years i.e. There are 4 classes in school at any given time.
- *Solution on "Math Solution"*

Key elements to analyze (3)

Question 4: Marketing Strategy

- **Question 4:** What do you think are the pros and cons of these additional factors in each geographic area? How might this influence the client's choice of target geographies?

Notes to interviewer

- Good interviewees will draw a table matching geographic options against the screening criteria they listed in question one, then will give a quick summary of the pros and cons of each criteria in each geography. The interviewer can help the interviewee set the chart up but should let the interviewee take the lead on walking through the analysis. This question is highly qualitative and intended to test the interviewees' judgment and communication skills.

- Here is an illustrative Chart

	Neighboring site	New site in existing state	Neighboring state	New state
Mission fit	Pro: knowledge of local youth; relationships with policy makers and school admins Con: might not spread model		Pro: would spread model Con: need new relationships, regulations could differ and affect operations	
Financial fit	Pro: model already approved for funding, ability to move staff / hire easily Con: might hit funding limits		Pro: access to new sources of funding, higher national profile Con: districts / states might not fund model	

Math Solutions (1)

ANSWER: Question 2/Exhibit 1

	Current	Additional costs
Staff	$750K	$600K
IT	$110K	$80K
Office expenses	$115K	No change
Training and support	$25K	$55K
Total central office costs	$1,000K	$735
Cost per site	$1,000K / 8 = $125K	=$1,735K / 15 = $115.67K

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Math Solutions (2)

ANSWER: Question 3/ Exhibit 2

Column	A	B	C	D	E
	Average enrollment, HS	Annual % change in at risk youth, 2003	# high schools	HS completion rate, class of 2002	2002 % of enrolled students with GPA of D or lower
Worcester, MA	1,000	-10%	3	70%	30%
Nashua, NH	800	-5%	2	75%	25%
Barrington, CT	800	10%	1	75%	20%
San Mateo, CA	1,300	1%	4	85%	20%

Column	F	G	H	I	J	K	L	M
Formula	A * C	F/4 * (1-D)	G*3	G + H	F - I * E	I+J	K * (1 + B)	L / F
	Total Enrollment	Dropouts, class of 2002	Dropouts, other classes	Total Dropouts	Low GPA Students	Total at Risk, 2002	Total at risk, 2003	Total % of students at risk, 2003
Worcester, MA	3000	225	675	900	630	1530	1377	45.9%
Nashua, NH	1600	100	300	400	300	700	665	41.6%
Barrington, CT	800	50	150	200	120	320	352	44.0%
San Mateo, CA	5200	195	585	780	884	1664	1681	32.3%

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Solution and recommendations

Solution & Recommendations

- The case is designed to indicate that the client should focus on existing states, and perhaps on neighboring states. The client should not consider expanding outside its existing geographic foot print in New England.
- The interviewee should note that the client benefits financially from scale, but that a financial analysis does not indicate a geographic area for expansion. From a mission perspective, existing and neighboring geographies provide the highest density of at-risk youth. New geographies in existing states are also promising from a mission perspective. Thinking further about non-financial benefits from scale, as should be done in question 4, should also indicates that growing within existing states or in neighboring states poses fewer risks for the client.

Exhibit 1: Addt'l central costs from expansion

	Current	Additional costs
Staff	$750K	$600K
IT	$110K	$80K
Office expenses	$115K	No change
Training and support	$25K	$55K
Total central office costs		
Cost per site		

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Exhibit 2: Representative data on at-risk youth

	Average Enrollment, HS	Annual % Change in at risk youth, 2003	# high schools	HS completion rate, class of 2002	2002, % of enrolled students with GPA of D or lower
Worcester, MA	1000	-10%	3	70%	30%
Nashua, NH	800	-5%	2	75%	25%
Barrington, CT	800	10%	1	75%	20%
San Mateo, CA	1300	1%	4	85%	20%

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Case 20: Dark Sky Co.

KELLOGG CONSULTING CLUB
CASE COMPETITION
SILVER MEDAL WINNER

By: Sean Burrow (Kellogg Class of '11), Edited By: Eugene Kim (Kellogg Class of '15)

Case Question

- Our client, Dark Sky, is a small manufacturer of unmanned (i.e. remotely piloted) data collection aircraft. Dark Sky produces the Assessor, an aircraft originally designed for unmanned weather exploration. In 2006, the United States military began purchasing Assessors for use in Intelligence, Surveillance and Reconnaissance (ISR) missions. The Assessor is profitable, but sales have stagnated and the client wishes to grow.
    - *What are some steps Dark Sky could take to achieve growth?*

5
Quants.
5
Structure

Mkt. Stgy
Creativity

Case tracker

- **Industry:** Industrial Goods – Aerospace and Defense
- **Level of Difficulty:** Easy/Medium
- **Case Format:** Growth Strategy
- **Concepts Tested:**
    - Marketing Strategy
    - Creativity

Fit Questions

Spend first 15 min on fit

- "What was the hardest piece of feedback you ever got? What did you do about it?"
- "How would your classmates and/or teammates describe working with you?"

Guide to interviewer

- This case intentionally uses terminology that may not be familiar to the typical MBA student. This is meant to challenge the interviewee to dismiss superfluous information and to focus on the business problem.
- After asking the initial question, engage in a qualitative discussion regarding organic and inorganic growth opportunities.
- Knowledge of the Aerospace and Defense industry is not necessary – creativity is encouraged.

Clarifying answers and case guide

Clarifying answers to provide if Asked

Customer / Price:

- Dark Sky's only customer is the U.S. Military.
- Dark Sky has a Cost-Plus-Fixed-Fee contract with the U.S. Military for Assessor sales:
  - The contract has been extended in the past and is up for renegotiation; the Military has agreed to a marginal fee (i.e. price) increase to account for inflation
  - Contracts for new aircraft will be structured similarly

Company:

- The firm has additional capacity and is positioned to strengthen any division of the workforce, if required (e.g. sales force, manufacturing, R&D)

Product:

- Dark Sky designs a unique aircraft that is launched from a catapult device; the aircraft can be launched from ships at sea or from harsh terrain (e.g. desert, mountains).
- Dark Sky only sells the Assessor, but has designed prototypes specifically for military operations.

Competition:

- There are approximately 20 competitors that manufacture unmanned aircraft.
- Though too small to purchase a competitor, Dark Sky has been considered an acquisition target. Dark Sky's lack of growth in recent years concerns potential buyers.

Interviewer Guide to case and handouts

This case is meant to stimulate the growth conversation and is designed to funnel the interviewee toward a new product launch.

Exhibit 1 – Provide following growth discussion

- The military started purchasing the Assessor in 2006. The price of the aircraft has remained constant at $100,000 per unit. Throughout the past decade, The Assessor has been Dark Sky's only source of revenue.

Exhibit 2 – Provide following Exhibit 1 calculations

- Dark Sky has developed several aircraft prototypes designed specifically for military missions. The company has the capability to continue producing the Assessor and to introduce one new aircraft.
  - SeaBird is specially designed for maritime (i.e. Naval) operations and can be sold to the Navy for $220,000 per aircraft.
  - SandBird is specially designed for desolate land-based operations and can be sold to the Army for $210,000 per aircraft.
  - JointBird is designed as a compromise for Army and Navy operations and can be sold to either service for $180,000 per aircraft.
  - The Military has agreed to a 10% Assessor price increase.

Exhibit 3 – ONLY PROVIDE IF ASKED

- The introduction of a new aircraft will have a negative impact on Assessor sales.

– *Continue to next page for further detail of the analysis to be performed*

Key elements to analyze

Current Revenues & Growth Strategy

- **Exhibit 1**: a) How many units were sold in 2014? b) What was the growth rate from 2006 to 2010?
- What are some steps to achieve growth (original question)

Notes to interviewer

- **Exhibit 1** should be treated as a math warm up. **Price = 100K/Unit**
- **Organic Growth** – the interviewee should consider internal options to could stimulate growth. Some potential examples include:
  - **Increase penetration** – negotiate additional Assessor sales to the military.
  - **Product development** – develop new products that may appeal to the military (e.g. new aircraft, training services, aircraft accessories / add-ons).
  - **New market entry** – sell the Assessor in international markets or additional domestic markets (e.g. Border Patrol, police, news channels)
  - **Diversification** – develop a new product to serve a new market.
  - **Increase / Reduce prices** (based on elasticity of demand)
- **External growth** – the interviewee should consider growth options using external resources. Some potential examples include:
  - Joint Venture – contract with a firm to increase market accessibility or to develop a new product beyond the capability of Dark Sky.
  - Merger / Acquisition – acquire a new firm to add additional capacity and/or product mix. Because Dark Sky is relatively small in the Defense industry, consider becoming an acquisition target.

Opportunity Assessment

- **Exhibit 2**: To maximize short-term growth, which aircraft should Dark Sky produce?

Notes to interviewer

- **Exhibit 2**: To maximize growth, Dark Sky should focus on maximizing revenue.
- To calculate the revenue for each scenario, the interviewee should add Assessor sales to the sales of the new product.
  - Assessor sales are based on:
    - 50 units sold with no new product launch
    - Cannibalization forecast specific to each new product launch
    - $110,000 per aircraft
  - New product sales can be easily calculated using shortcuts. For example:
    - SeaBird: $220k * 100 = $22m… then half of this
    - SandBird: $210k * 100 = $21m… then half of it and add (10% of $21m)
    - JointBird: Add to get 90… then $180k*100 = $18m, subtract (10% of $18m)

Math Solutions

Math Exhibit 1

- How many units were sold in 2014?
  - **Answer:** 50 units or $5,000k ÷ $100k/unit = 50 units

- What was the growth rate from 2006 to 2010?
  - **Answer:** 900% o ($5,000k - $500k) ÷ ($500k) x 100 = 900%

Math Exhibit 2

- To maximize short-term growth, which aircraft should Dark Sky produce?
- Answer: **JointBird**
  - Assessor Sales (Units, Revenue):
    - No new product = 50 aircraft, **$5,500,000**
    - With SeaBird = 50 + (50 * (-40%)) = 50 - 20 = 30 aircraft, **$3,300,000**
    - With SandBird = 50 + (50 * (-70%)) = 50 - 35 = 15 aircraft, **$1,650,000**
    - With JointBird = 50 + (50 * (-90%)) = 50 - 45 = 5 aircraft, **$550,000**
  - New Product Revenue:
    - SeaBird = 50 * $220,000 = **$11,000,000**
    - SandBird = 60 * $210,000 = **$12,600,000**
    - JointBird = (38 + 52) * $180,000 = 90 * $180,000 = **$16,200,000**
  - Total Revenue:
    - Assessor Only = $5,500,000
    - Assessor and SeaBird = $3,300,000 + $11,000,000 = **$14,300,000**
    - Assessor and SandBird = $1,650,000 + $12,600,000 = **$14,250,000**
    - Assessor and JointBird = $550,000 + $16,200,000 **= $16,750,000**

Solution and recommendations

Solution & Recommendations

- Based on 2015 forecasted revenue alone, Dark Sky should introduce the JointBird to the U.S. Military in order to boost short-term growth. However, there are several connected issues that Dark Sky should consider to include profitability, long-term revenue forecasts, competitive response, etc.

Bonus/Guide to an Excellent Case

- An excellent interviewee will note:
  - How quickly could Dark Sky start manufacturing a third model (i.e. can Dark Sky produce SandBird this year, and be producing SandBird and SeaBird the following year)? If so, what are the revenue implications?
  - If Dark Sky produces JointBird, is $550,000 in Assessor revenue worth the associated cost to produce the aircraft? Should resources be allocated to another project?
  - How profitable are the four aircraft models in comparison? Note: Because Dark Sky has a Cost-Plus-Fixed-Fee contract, profitability for each aircraft is likely equivalent. For this reason, Dark Sky should focus on maximizing the number of aircraft sold. • How much and how long is the payback period for the investment in manufacturing each type aircraft?
  - Potential benefits of have two customer bases for new product (Navy and Army).

Exhibit #1

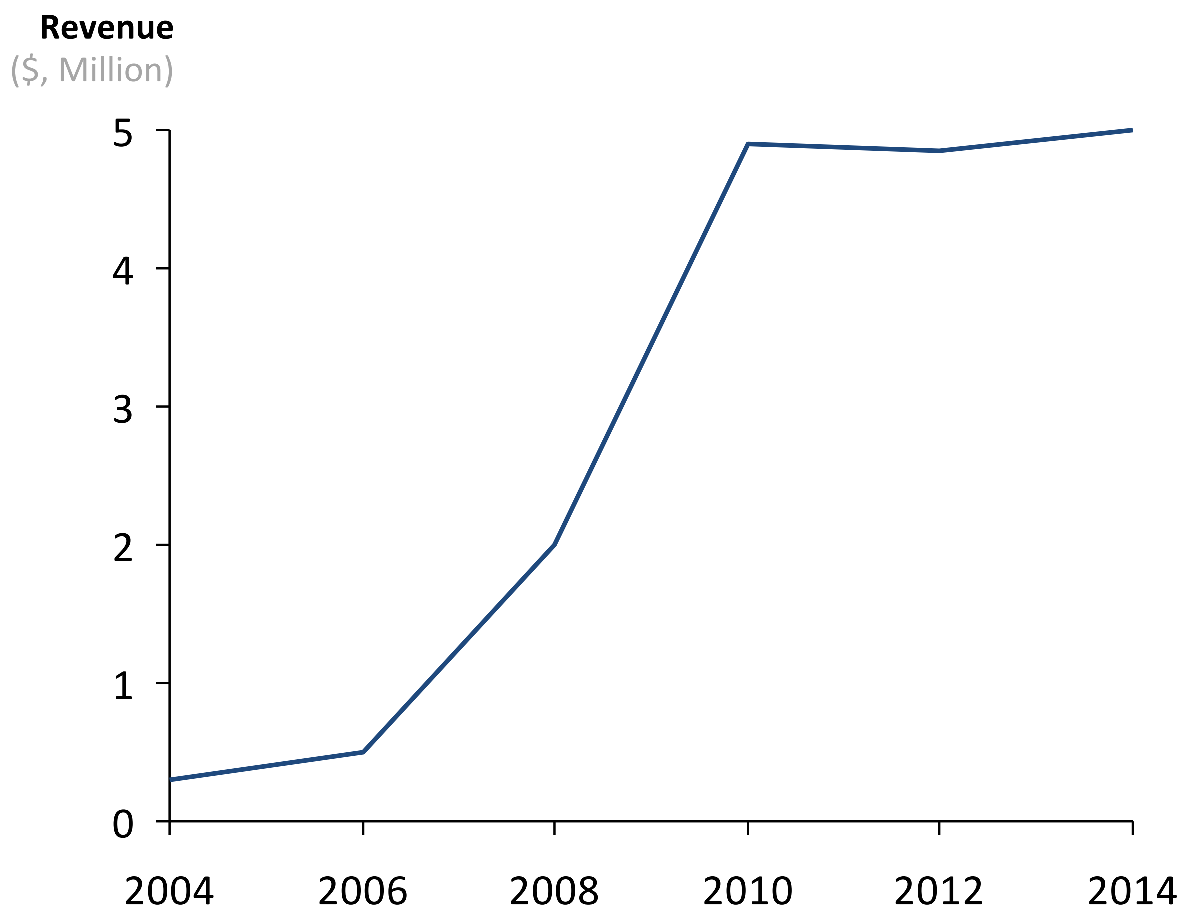

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Exhibit #2

New Product Sales Forecast, 2015

New Product Offering	New Product Sales (# of aircrafts) Navy	New Product Sales (# of aircrafts) Army	Price Per Aircraft
SeaBird	50	--	$220,000
SandBird	--	60	$210,000
JointBird	38	52	$180,000

Exhibit #3

Impact of New Product on Assessor Sales

New Product Offering	New Product Sales (# of aircrafts): Navy	New Product Sales (# of aircrafts): Army	Assessor unit sales lost due to cannibalization
SeaBird	50	--	40%
SandBird	--	60	70%
JointBird	38	52	90%

Case 21: Health Coaches

By: David Wellner (Kellogg Class of '11), Edited By: Craig DePriester (Kellogg Class of '12)

Case Question

- Our client is a large national health care payer (health insurance company, think Aetna) exploring the launch of a new disease management ("DM") program to better serve its 5 million members. The idea is to hire and train a team of "Health Coaches" to specialize in a single disease area (e.g., heart disease, diabetes, etc). Each Coach will manage a portfolio of patients to reduce the costs of overall health expenditures (e.g., reminders to take drugs, provide limited medical advice, suggested diet, etc). Studies show that once a month contact with each patient reduces health spending by 5%, on average.
- *Should our client launch the program? If so, what steps should it take?*

Case tracker

- **Industry:** Healthcare
- **Level of Difficulty:** Medium
- **Case Format:** Developing a new product/Service
- **Concepts Tested:**
  - Customer strategy
  - Break-even analysis

Fit Questions

Spend first 15 min on fit

- How do you feel about working in a feedback-intensive environment?
- Why is consulting a better career move for you compared to your next best option?

Guide to interviewer

- The case tests the interviewee's ability to probe and develop a customer segmentation, digest a relatively complex chart, isolate the most critical information and determine profitability
- The data provided by both exhibits should be requested; try not to show the exhibits until need for the data is demonstrated
- Strong interviewees should use common sense to make reasonable assumptions before you provide required inputs

8
Quants.

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Clarifying answers and handout guide

Clarifying answers to provide

Competitive dynamics (not core to case)

- With spiraling health care costs, the industry is under pressure to innovate new products that will control spending
- Assume client is first to market
- Past attempts to purely automate DM have yielded minimal savings

Health Coaches

- All activity conducted remotely via phone/email
- Typical profile is registered nurse that wants to work from home
- It's difficult to actually reach patients, so Coaches can contact 8 members per day (assume 25 days per month)
- Annual costs per Coach: $60K salary +20% other (training, benefits, laptop, etc)
  - There are no other program costs

Guide to handouts

Before showing exhibits, interviewee should convey the essence of the case:
Are the costs associated with the DM program justified by the savings?

Sample set-up:

Program Savings	Program Costs	Risks
– Customer segmentation by disease area and cost per member	– Salary and other – Portfolio size/capacity (members/coach)	– Do assumptions hold? – Competitive response – Regulatory, liabilities

Exhibit 1 – Hand out when interviewee establishes need for understanding client's membership segmentation and/or exposure to disease areas. If he/she is not headed there alone, you can ask "how would you segment the client's members?"

- "What can we get out of this chart? Please let me know if you have questions"
- Definitions (if needed): Group are employee sponsored plans (e.g. ,if you work for McKinsey, you are in a group plan), Individual are non-groups (e.g., private contractors, unemployed, etc). 65+ (see asterisk below chart).
- "Which segment is likely to generate the greatest <u>per member</u> costs.? Why?"
- "Which disease area should we look at first?"

Exhibit 2 – Hand out when interviewee asks for medical cost data. Try to avoid handing out exhibit 2 until exhibit 1 has been discussed *(hint: if interviewee leads with profitability, steer him/her to first think about the customer segmentation)*

- "What can we do with this information?"

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Key elements to analyze

Segmentation and disease focus

Using **Exhibit 1**, discuss which segments and disease areas are most important to explore

Notes to interviewer

Interviewee should choose to focus on the 65+ segment

- 65+ (Medicare) patients are the sickest, followed by Individual
- Group members are the healthiest (younger, working)
- Sicker patients are likely to drive higher costs, which will make them riper candidates for the DM program (i.e., the 5% cost reduction will have a bigger impact)

Interviewee should choose to focus on diabetics (Assume all are Type 2 for the purposes of this case)

- Diabetics make up the largest portion of sick members
- As a chronic disease primarily brought on by behavior, T2 diabetics are most likely to benefit from DM program

Number of 65+ diabetics:

$$\frac{20\%}{segment\ \%}\ x\ \frac{40\%}{\%\ diabetic}\ x\ \frac{5MM}{members} = \frac{\mathbf{400,000}}{\mathbf{65+\ diabetics}}$$

Program profitability

Leveraging all data (Both Exhibits), interviewee should determine if Health Coaches are profitable in each of the three segments

Notes to interviewer

Cost per Coach: $\frac{\$60{,}000\ +\ 20\% =\ \$72{,}000}{\text{Base Salary + other = per coach per year}}$

Size of Portfolio: $\frac{8}{contacts\ per\ day} + \frac{25}{days\ per\ month} = \frac{\mathbf{200}}{\mathbf{max. patient\ portfolio}}$

Savings for one portfolio of 65+ diabetics:

$$\frac{\$300}{avg.\ PMPM}\ x\ \frac{4}{diabetic\ factor}\ x\ \frac{5\%}{avg.\ savings} = 60\ x\ \frac{12}{mos.}\ x\ \frac{200}{patient\ portfolio} = \frac{\mathbf{\$144,000}}{\mathbf{savings\ per\ Coach\ per\ yr.}}$$

Overall savings: $\frac{\$144K}{savings} - \frac{\$72K}{costs} = \frac{\$72K}{profit\ per\ Coach}\ x\ \frac{2{,}000}{Health\ Coaches} = \frac{\mathbf{\$144\ MM}}{\mathbf{profit\ per\ year}}$

Conclusion:

- Profit is $72K per Health Coach, 2x cost of a Coach
- Based on PMPM diabetic cost data, Individual segment is break-even (50% less savings), Group segment is a loss

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Solution and recommendations

Solution & Recommendations

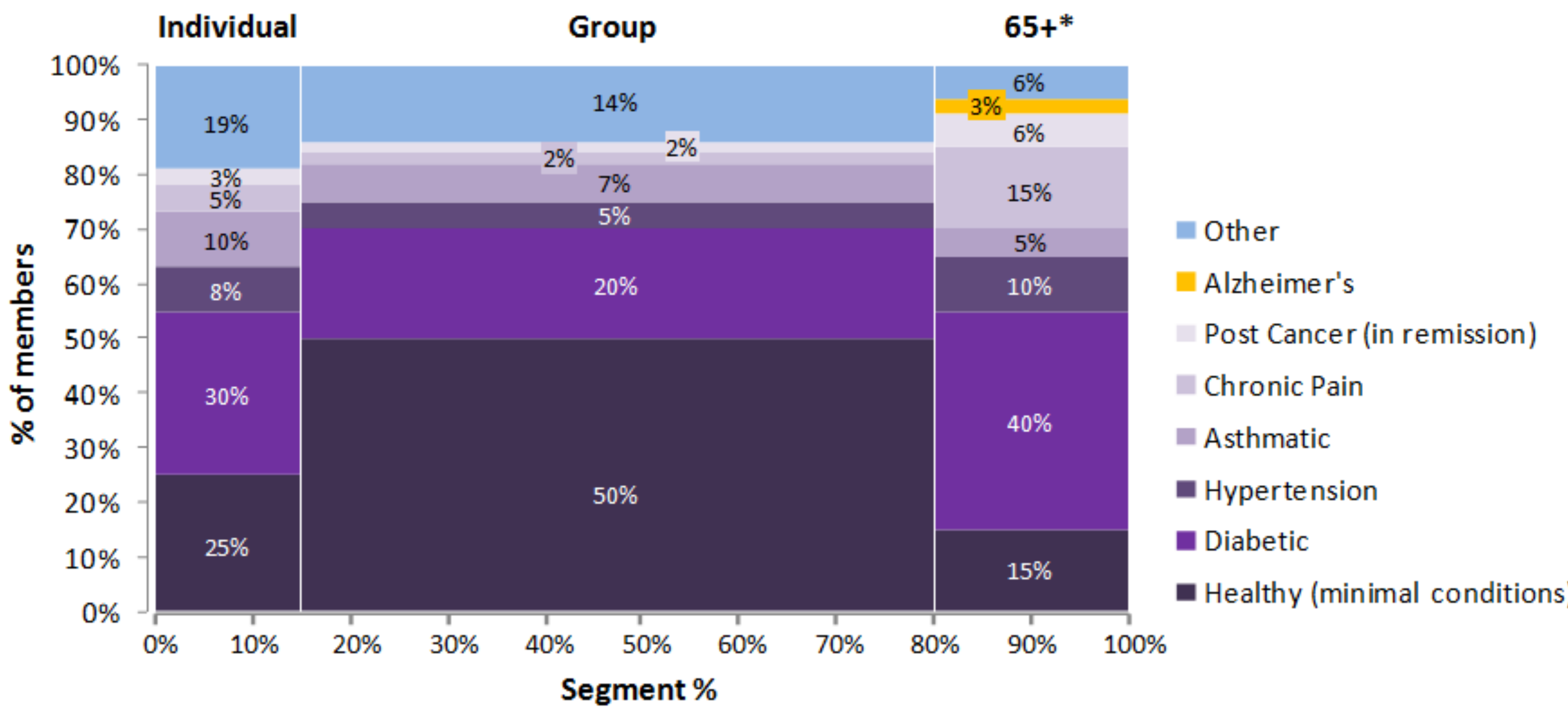
With 3-4 minutes remaining, give interviewee a moment to prepare a recommendation. Here is a strong sample:

- Client should launch the Health Coaching program, and first focus on diabetes for the 65+ Medicare segment
- The client should take the following steps:
  - Launch a pilot program to prove out assumptions (e.g., 5% cost reduction, Coach portfolio capacity, etc)
  - First expand to entire 65+ diabetes segment ($144M per year savings per coach, a 2x return on each Health Coach)
  - Consider introducing to Individual diabetes segment despite break-even (customer retention, moral rationale, etc)

Follow-up questions (if time permits)

- There are 650K Group diabetics left "uncoached." Is there a way to make the segment profitable? Ideas include:
  - More efficient DM program (e.g., Coaching at work, bi-monthly contact, automated correspondence, etc)
  - Seek additional revenue sources (e.g., Employers might be willing to pay a fee, government support)
  - Since 5% is the average savings, program can target members who will respond with savings well above 5%
- As first to the market, client plans to expand Health Coach program externally. Who should they target?
  - It's tempting to suggest that the client should market to 65+ Medicare patients with diabetes, since this is where the program yields the greatest savings. While it's good that we have lowered the cost of older diabetics, client should keep in mind that more diabetic members will increase overall health care costs, considerably – (still almost 4x after savings)
  - An instinctive interviewee might suggest an alternative: Client should sell its Health Coach service to other payers. But how would you price that? What are the challenges (e.g., regulatory, info sharing, etc)

Exhibit #1: Client's member segmentation by health condition



* Members 65 years of age and above. Known as "Medicare Advantage", premiums funded by government

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Exhibit #2: Average cost data (Per Member Per Month)

Segment	Average PMPM	Average Diabetic
Individual	$150	4x (Avg. PMPM)
Group	$100	
65+	$300	

Case 22: Wine & Co.

By: Anil Goteti (Kellogg Class of '11), Edited By: Mauricio Atri (Kellogg Class of '12)

KELLOGG CONSULTING CLUB CASE COMPETITION BRONZE MEDAL WINNER

Case Question

- Wine & Co. is a niche wine manufacturer in the San Francisco Bay area. Wine & Co. recently acquired 12 acres of land outside San Francisco. The company wants to investigate opportunities to best use the land and needs a recommendation from you.

Case tracker

- **Industry:** CPG
- **Level of Difficulty:** Medium
- **Case Format:** Opportunity Assessment
- **Concepts Tested:**
  - Marketing strategy
  - Basic NPV

Fit Questions

Spend first 15 min on fit

- Tell me about a time when you failed.
- Share me a time when you faced a difficult situation in a team and how you solved this .

Guide to interviewer

- The case tests the interviewee's ability to:
  a. Structure the problem and brainstorm
  b. Determine valuation and discounting
  c. Recommend a marketing strategy
  d. Synthesize the answers.
- This case is a McKinsey style case and has to be asked in a question and answer format. The interviewer should ask each question given below and wait for the interviewee to respond. If the interviewee is stuck, direction should be provided based on the information given below. The interviewee should be able to drive the case while at the same time seek direction based on the question asked.

7

Quants.

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Clarifying answers and case guide

Clarifying answers to provide

- **Question 1.** Some interviewees ask which geographical regions the company serves, the type of wines they manufacture and if they have other types of products (like other liquors or wine tasting tours in Napa valley). The following information can be provided if asked. a) They only manufacture red wines. b) The company serves only the local market (the San Francisco Bay area). c) The company does not sell any other products. d) The company is currently very healthy and does not face any problems.
- **Question 2.** Profit Margins on Merlot are 10% while the margins on Bordeaux are 15%.
- **Question 3.** a) Discount rate is 12% (provide only when asked). Many people forget the time value of money and add profits across years without discounting. b) Assume the costs are only incurred when the revenues are realized after aging (no costs until year 6 for Merlot and no costs until year 12 for Bordeaux). c) If people are struggling with the division or approximations, suggest the "Rule of 72" (If r is the discount rate, 72/r is the number of years it takes to double your money)
- **Question 4.** Customer segments that are currently served by Wine & Co.- niche wine enthusiasts.

Guide to case / Guide to handouts

- Question 1. What are the different ways in which Wine & Co. can use the land?
- Question 2. Wine & Co. has decided to use the land to manufacture wine. Each acre of land produces 1000 kg of grapes annually. Wine & Co. has an option to manufacture Merlot or Bordeaux. The two wines use different grapes and the grapes have varying yields. While the Merlot grapes yield 2litres/kg, the Bordeaux grapes yield 1litre/kg. Wine & Co. can charge $20 per liter of Merlot and can charge $40 per liter of Bordeaux. Which wine yields more profits annually?
- Question 3. Aging has an effect on the revenues and profitability. Merlot has to be stored for 6 years while Bordeaux has to be stored for 12 years before revenues can be generated. Which wine would you choose for manufacturing?
- Question 4. Wine & Co. has decided to manufacture Merlot. How should they market this product in the San Francisco Bay area?
- Please summarize your recommendations to the CEO of Wine & Co.

Key elements to analyze

Topic 1 being tested

- What are the different ways in which Wine & Co.wines can use the land?

Notes to interviewer

- The interviewee should create a framework and structure the problem. The interviewee should suggest options including manufacturing the wine, creating adjacent products (like wine tasting tours), using the land for other uses (commercial real estate/selling the land for a profit/ other opportunity costs). A good candidate would provide a detailed structure (eg. profitability framework for manufacturing feasibility with customization of the framework - yield of grapes, cost per liter of wine, etc.) and outline the risks or considerations involved in some of these options (like usability of land for manufacturing or company competency in pursuing in other opportunities unrelated to wine manufacturing).

Topic 2 being tested

- Which wine yields more profits annually?

Notes to interviewer

- A good candidate would ask for the profit margins/costs without being prompted. Look for organization and structure when the candidate evaluates the annual profits for each wine (a good candidate would use a table like structure when doing the math). The revenues would be $480,000 for both wines annually but the margins would be higher for Bordeaux ($72,000 for Bordeaux vs. $48,000 for Merlot). After the candidate arrives at the profits, look for interpretation. A good candidate would recommend using Bordeaux while at the same time consider other factors (competency in manufacturing either of the wines, customer demand in the bay area, sensitivity to product yields, customer reservation price, etc.). A creative candidate might suggest that we compare the age of the two wines (and hence will impact when the profits might actually start)

Math for Topic 2

		Value	Comments	
A	Acres of Land	12	Given	
B	kg of grapes produced/acre	1000	Given	
C	kg of grapes produced total	12000	=A*B	
		Merlot	**Bordeaux**	**Comments**
D	Yield (Litre/kg)	2	1	Given
E	Total Yield (Litre)	24000	12000	=C*D
F	Price / Litre	$20	$40	Given
G	**Total Revenue**	**$480,000**	**$480,000**	**=E*F**
H	Profit Margin	10%	15%	Given
I	**Total Profit**	**$48,000**	**$72,000**	**=G*H**

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Key elements to analyze

Topic 3 being tested

- Which wine would you choose for manufacturing?

Notes to interviewer

- Candidate should identify that the cash flows for Merlot would be $48,000 annually starting year 6. Cash flows for Bordeaux would start in year 12 ($72,000 annually). A good candidate would then consider the time value of money and discount the two perpetuities to the same year for an apples-to-apples comparison. Merlot: Annual Cash flow starting year 6: $48,000 Perpetuity value of cash flow (value in year 6) = $48,000/0.12 = $400,000 Bordeaux: Annual cash flow starting year 12: $72,000 Perpetuity value of cash flow (value in year 12) = $72,000/0.12 = $600,000 Value of perpetuity in year 6 = $600,000 / (1.12^6) = $300,000 (Rule of 72). Provide help here if the candidate is struggling with the division. Look for the candidate's approach than the exact number. Since value of pursuing Merlot ($400,000) is higher than value of pursuing Bordeaux ($300,000), the company should manufacture Merlot. A good candidate would interpret the result and suggest we take into account other factors like inventory costs, sensitivity to discount rate, etc.

Topic 4 being tested

- How should they market this product in the San Francisco Bay area?

Notes to interviewer

- Candidate should ask for the customer segments that the company might sell to and suggest appropriate marketing channels/strategies to consider. Look for a MECE structure here. Suggestions should include retail strategies, direct to consumer strategies (like wine clubs, wine tasting), traditional media and print advertising and online advertising.

Math for Topic 3

			Merlot	Bordeaux	Comments
	A	Annual Profit	$ 48,000	$ 72,000	See Q. 2
	B	Years to maturity	6	12	Given
	C	Discount Rate	12%	12%	Given
	D	Merlot NPV once ripe - at year 6	$ 400,000		=A/C
	E	Bordeaux NPV once ripe - at year 12		$ 600,000	=A/C
Method 1	F	Bordeaux NPV at year 6 (using discount rate)		$ 300,000	=E/(1.12)^6
Method 1	G	Comparison at year 6	$ 400,000	$ 300,000	=D and F
Method 2	I	Merlot NPV at year 12 (using discount rate)	$ 800,000	$ 600,000	=D*(1.12)^6
Method 2	J	Comprable comparison at year 12	$ 800,000	$ 600,000	=I and E

Alternative method using "Rule of 72" instead of (1.12)^6	**Value**	**Comments**
Discount Rate	12%	Given
Years to double value = 72/Discount rate	6	=72/12
Bordeaux: changing from year 12 to year 6 = halving the value of year 12 Merlot: changing from year 6 to year 12 = doubling the value of year 6		

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Solution and recommendations

Solution & Recommendations

- A good candidate would recommend a solution (manufacturing Merlot) but would detail out the risks/next steps associated with the recommendation. Next steps may involve market research, land usability testing, evaluation of opportunity costs. Risks have been outlined above already.

Bonus/Guide to an Excellent Case

- An excellent answer should include:

  a) Identification of opportunity costs, particularly of not selling/leasing the land, which might be more profitable considering the current value of land in the Bay Area and/or Napa

  b) Considering industry specific issues like aging of wine

  c) Considering time value of money/perpetuity of cash flow

  d) Considering risks like customer demand, land usability

  e) Potential benefits of diversifying the acreage and producing multiple types of grapes (compensate for shifts in consumer demand, broader appeal to local market, etc.)

Case 23: Healthy Foods Co.

By: Milija Medic, Edited By: Mauricio Atri (Kellogg Class of '12)

KELLOGG CONSULTING CLUB
CASE COMPETITION
BRONZE MEDAL WINNER

Case Question

- Our client is Healthy Foods Co, a wholesaler serving a variety of clients with Food products. The client is profitable but they want you to help them find revenue growth opportunities from their current business.
- *How can we help Healthy Foods Co. drive their revenue growth?*

5
Quants.
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Cust. Stgy

Case tracker

- **Industry:** CPG
- **Level of Difficulty:** **Medium**
- **Case Format:** Growth Strategies
- **Concepts Tested:**
  - Creativity
  - Marketing Strategy
  - Customer Strategy

Fit Questions

Spend first 15 min on fit

- Tell me about a time when you failed.
- Share me a time when you faced a difficult situation in a team and how you solved this .

Guide to interviewer

- This case tests growth opportunities identification, and share of wallet analysis.
- It tests conceptualization skills as the interviewee needs to formulate prioritization criteria. The case is mainly qualitative.

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Clarifying answers and case guide

Clarifying answers to provide

- **Customers**
  - The client serves various customer categories (shown **in Exhibit 1**).
  - Customer sensitivities are (highest to lowest):
    - Price
    - convenient delivery
    - help with location planning
    - help with menu
    - web site development
    - inventory
    - Help with management optimization
- **Competition**
  - The client is one of the market leaders and is not loosing the market share

Guide to case / Guide to handouts

- **Exhibit 1:** Hand out when interviewee asks about customers or revenue by customer type. Interviewee should notice that independent restaurants are the largest customer category and revenue source, and that there is a number of other customer types of similar revenue contributions comprising the rest.
- **Exhibit 2:** Hand out when interviewee identifies share of wallet as a relevant parameter, in search of revenue growth from existing customer types. Interviewee should generate a key insight that Healthy Foods Co's share of wallet is already large for the customers who bring in the largest revenues. The opportunity for growth therefore is in the smaller revenue-generating customers.
- **Exhibit 3:** Hand out when interviewee recognizes that in order to find the smaller customer types with highest revenue growth potential, (s)he needs the plot of the size of the wallet vs. the current client's share of wallet for that customer. The customers with large wallets, where the client has small share of wallet, are at the moment the best candidates to achieve increase in revenue from. Interviewee should identify hospitals and hotels as the customers with largest potential for revenue growth.

Key elements to analyze

Topic 1 being tested

- Identify the main customer types and their current contributions to the client's revenues, using **Exhibit 1**

Topic 2 being tested

- Share of wallet analysis, using **Exhibit 2**

Topic 3 being tested

- Wallet size vs. share of wallet

Notes to interviewer (Topic 1)

- The interviewee will probably explore opportunities for growth in the independent restaurant category. If they inquire about customer satisfaction and sensitivities, provide information from the "clarifying information" section, and emphasize that **the needs of this segment are already met**.
- The interviewee should inquire about the share of wallet in the customer categories to get a better idea on where the growth opportunities lie.

Notes to interviewer (Topic 2)

- The interviewee should recognize that share of wallet in the highest-revenue-generating customer categories is already high, and that the client is already a key provider for a lot of them.
- Ask the interviewees to list all options to increase revenue and the reasons behind.
- Help interviewee to reach that the growth opportunity in the smaller revenue-generating customers, where client's share of wallet is smaller. Now the interviewee should formulate the criteria to prioritize among the smaller revenue-generating customer types: the bigger their wallet and the smaller client's share of wallet, the better.

Notes to interviewer (Topic 3)

- The bigger their wallet and the smaller client's share of wallet, the larger the revenue growth opportunity for the client.
- Using **Exhibit 3**, the interviewee should identify the hospitals and the hotels as the most promising candidates for revenue growth given their large wallets and small client's share of wallet. The interviewee should identify the strongest sensitivities these clients would have and suggest ways to increase client's share of wallet there.

Solution and recommendations

Solution & Recommendations

- In the current business, the largest growth opportunities lie in customer segments:
  - hospitals and hotels.
- The interviewee should suggest ways to better serve those customers and increase client's share of wallet there, capturing significant new revenues due to the large size of those clients' wallets.

Bonus/Guide to an Excellent Case

- An excellent interviewee should identify share of wallet as an important parameter, quickly recognize that there is little opportunity for growth in the largest-revenue-generating customers, and come up with the size of wallet vs. share of wallet plot as a good prioritization tool for identifying promising customer categories for the client's revenue growth.

Exhibit #1: Total Market Revenues by Customer Type

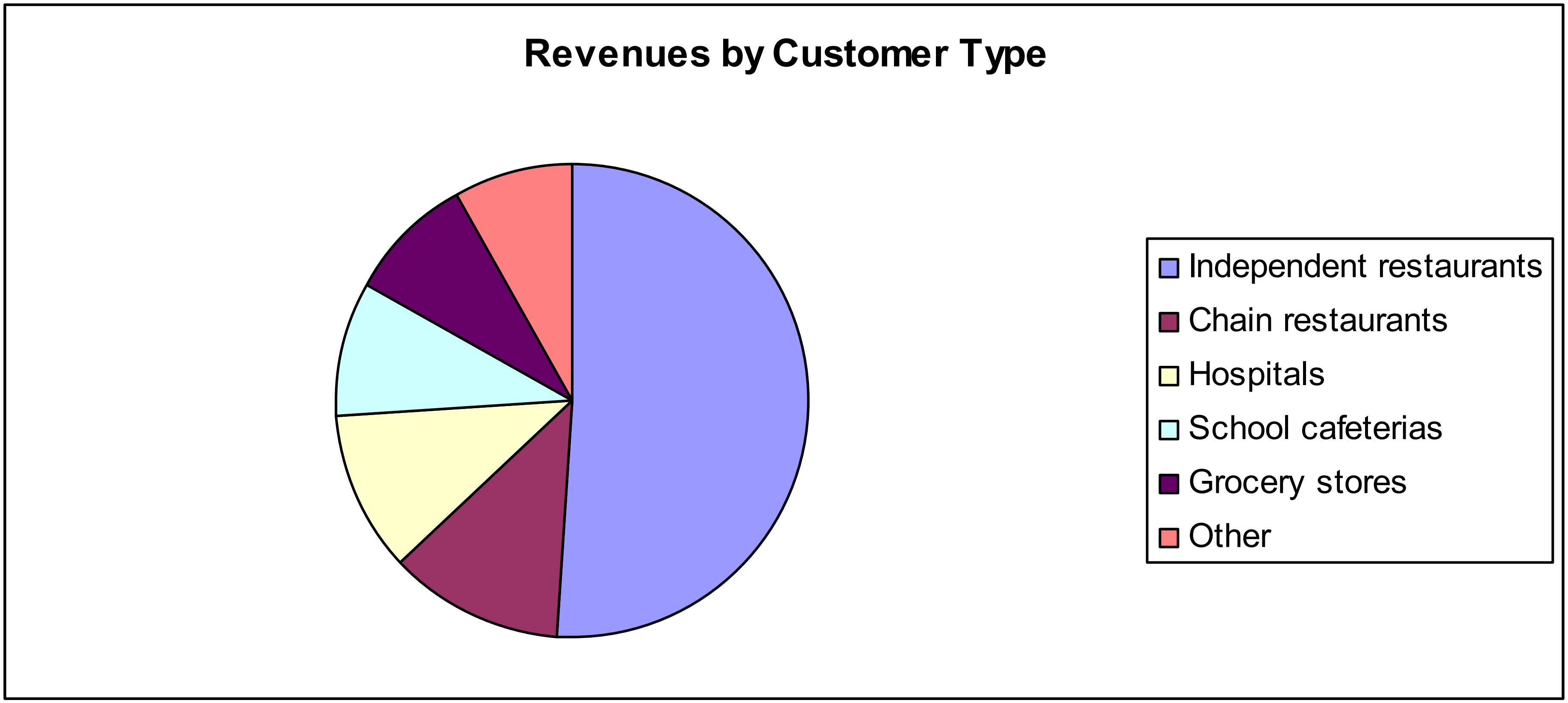

Exhibit #2: Client's Share of Wallet

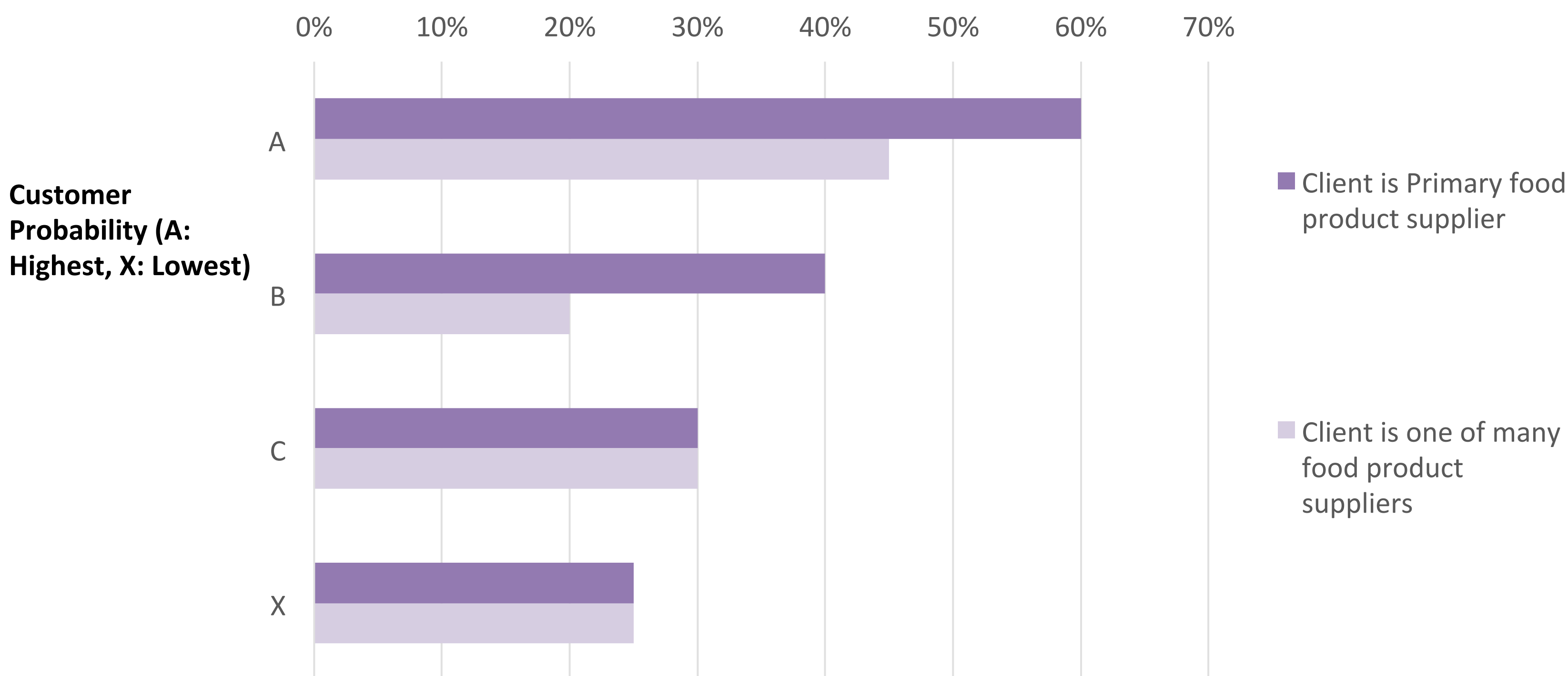

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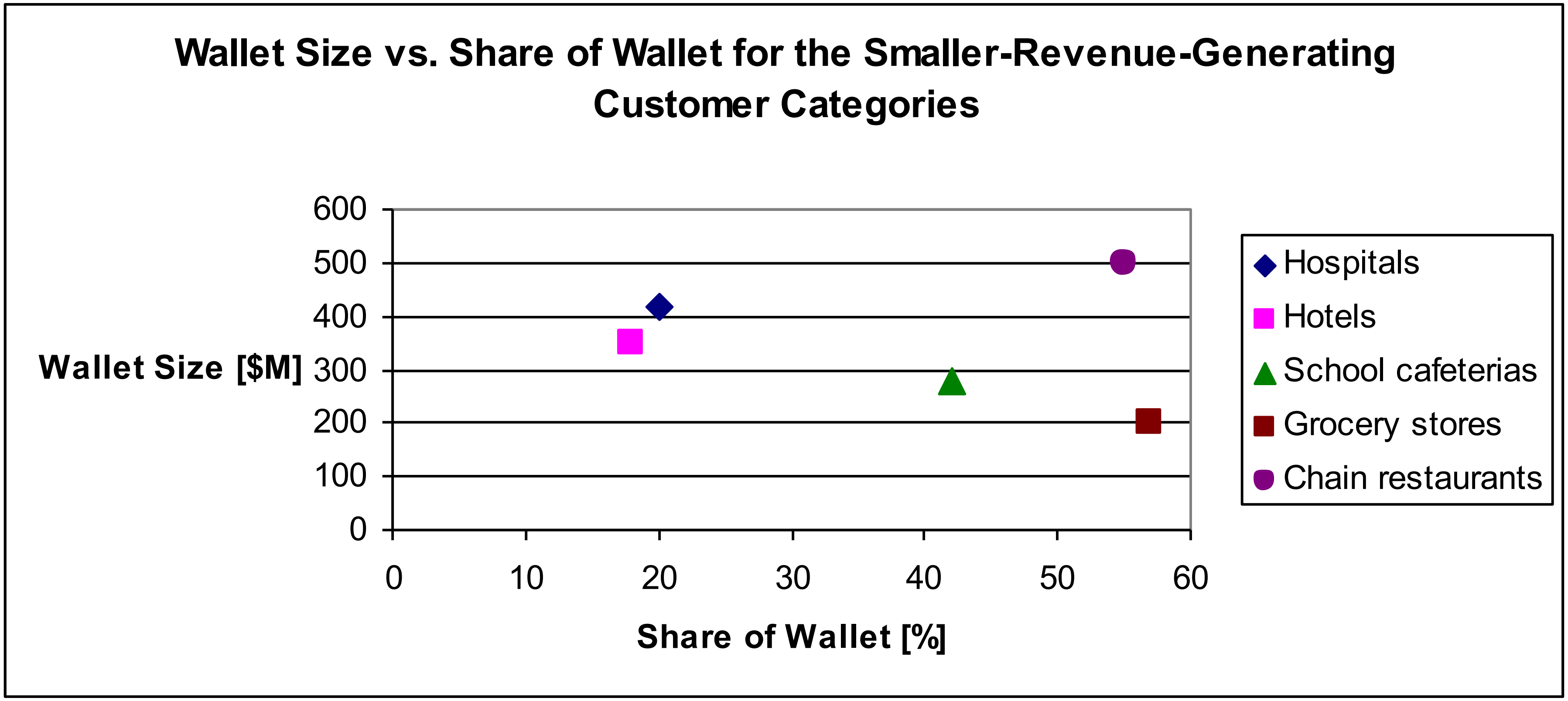
Exhibit #3: Wallet Size vs. Share of Wallet



Case 24: High Q Plastics

KELLOGG CONSULTING CLUB
CASE COMPETITION
SILVER MEDAL WINNER

By: Erin Brooks (Kellogg Class of '11), Edited By: Uri Kalir (Kellogg Class of '12)

Case Question

- Our client, High Q Plastics, is an automotive parts supplier in the U.S. They primarily manufacture and sell plastic injection-molded parts, such as grills, door handles, decorative trim etc., to automotive customers.
- The client has two primary revenue sources: large automotive OEMs, and aftermarket. The client has recently seen declining profits, primarily due to increased price competition from new overseas competitors in China. Annual profits have declined from $50M to $20M over the past few years.
- *What is the reason behind declining profitability? How can High Q improve profits? Can they reach $100M in profits by 2014?*

Case tracker

- **Industry:** Industrial Goods
- **Level of Difficulty:** Medium
- **Case Format:** Improving Profitability; Cost Reduction
- **Concepts Tested:**
  - Competitive Analysis
  - Creativity
  - Operations

Fit Questions

Spend first 15 min on fit

- Tell me about your greatest challenge, and how you overcame it.
- What is the best way to deal with a difficult client who does not agree with your recommendations?

Guide to interviewer

- The interviewee should examine the following MECE questions about the competitive dynamics of the industry:
  - *Industry*: What is the sales volume trend? What is the % of demand and growth of OEM vs. aftermarket segment? Is one of these segments more profitable than the other?
  - *Competitors:* Who are they? What is their relative market share? What are their prices vs. our clients'? What is their cost structure vs. our clients'? Do they have a technology or quality competitive advantage relative to our client?
  - *Revenue:* How have our clients' prices changed in recent years? Have they declined across all customers and products?
  - *Costs:* What trends is our client seeing in their cost structure? Increasing labor or material costs?

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Clarifying answers and case guide

Clarifying answers to provide

Industry Characteristics/Market Economics

- Automotive sales overall still growing steadily, driven by emerging markets
- Automotive manufacturing is leaving the U.S.

Client Characteristics

- Client is currently one of the leaders in this category
- Client has U.S.-based manufacturing
- Revenues have been slowly declining over last 5 years
- Client's products are of a higher quality than most Chinese competitors' products

Competitive Dynamics

- Automotive OEM customers are looking to reduce cost, driving increased price competition among parts suppliers

Questions and Hand-out Guide

1. What key questions would you ask an industry expert in order to better understand the reasons behind High Q's declining profits?
2. The CEO of High Q wants to know if$100M in annual profits is achievable by 2014. What would you need to know in order to determine this? What data would you ask for?
3. What ways can you think of to increase revenues? What ways can you think of to reduce costs?
4. Our client is planning on implementing lean manufacturing across all 4 of its U.S. plants, in order to provide cost savings and increase profits. *Hand out exhibit 1.*
   - The client is expecting to produce 80% of 2010 volumes in 2014. They are also planning on reducing prices by 10% due to increased competition.
   - Lean manufacturing implementation across all plants will provide an additional 20% savings in raw material, and 30% savings in labor.
   - What is the change in profits the High Q CEO can expect from 2010 to 2014, based on this information?
5. High Q 's CEO has also asked us to take a look at competitive dynamics among the automotive OEMs, in order to predict any increase in profits from increased sales. Hand out exhibits 2 and 3.
   - Based on the information given, what do you expect High Q will see in additional profits due to Toyota's predicted 30% increase in market share in truck and SUVs?
6. Please summarize your findings to the CEO, including any other potential opportunities to increase High Q's profits over the next few years.

Solution and recommendations

Solution & Recommendations

1. The interviewee should examine the following MECE questions about the competitive dynamics of the industry:
   a) **Industry:** What is the sales volume trend? What is the % of demand and growth of OEM vs. aftermarket segment? Is one of these segments more profitable than the other?
   b) **Competitors**: Who are they? What is their relative market share? What are their prices vs. our clients'? What is their cost structure vs. our clients'? Do they have a technology or quality competitive advantage relative to our client?
   c) **Revenue:** How have our clients' prices changed in recent years? Have they declined across all customers and products?
   d) **Costs**: What trends is our client seeing in their cost structure? Increasing labor or material costs?
2. In order to understand if $100M in profits by 2014 is achievable, you would need to know the annual qty of units sold, the selling price, and the clients' fixed and variable costs. Profit = Q*(P-VC) – FC
3. The interviewee should come up with 2-3 ways each for cost reduction and increasing revenues:
   a) **Reduce Cost**: find alternative material sources, invest in process automation to reduce labor, consolidate multiple manufacturing sites to reduce SG&A costs, relocate close to customers to reduce transportation costs.
   b) **Increase Revenue:** segment customers to determine sensitivity to price, increase marketing in aftermarket segment, negotiate long-term contracts with OEM customers.

Solution and recommendations (2)

Solution & Recommendations

4. The interviewee should use the information provided in **Exhibit 1** to calculate the following profitability for each plant in 2014, and walk the interviewer through the calculation steps. It is important to first note that revenues, labor, and material will decrease by 20% due to the reduced quantity output from each plant, plus the additional 20% savings in material and 30% in labor. Revenue will decrease by an additional 10%, in a cost cutting maneuver. Overhead costs will not change.

*all figures are in $ million USD.				
	Plant A	**Plant B**	**Plant C**	**Plant D**
Revenues	72.0	72.0	72.0	72.0
Labor	11.2	22.4	33.6	16.8
Material	35.2	25.6	12.8	22.4
Overhead	20.0	15.0	15.0	30.0
Net Profits	5.6	9.0	10.6	2.8
Total 2014 Profits				28.0
Additional Profits				**8.0**

From this calculation, the interviewee should reference back to question 2. Even with the lean manufacturing implementation, High Q is still a long way from the CEO's goal of $100M in annual profits, and this is therefore not a realistic target. A strong interviewee should note the importance of aligning a client's expectations.

Solution and recommendations (3)

Solution & Recommendations

5. The interviewee should be able to use the information provided in the Exhibits to calculate the following revenue growth ("Sales" figures below are in units/vehicles). Rounded answers ($13 or $14M) are fine, given that interviewee has already demonstrated math proficiency.

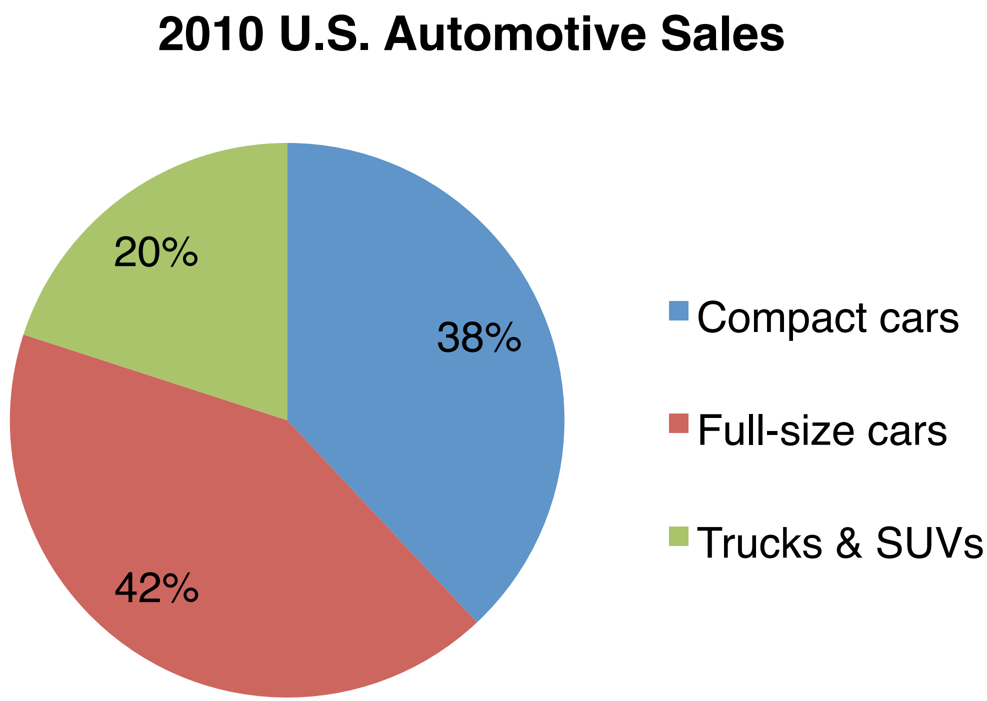
	2010	2014
U.S. Auto Market	16,000,000	
U.S. Truck & SUV Sales	3,200,000	
Toyota Truck & SUV Sales	320,000	1,280,000
High Q's Toyota Qty. Sold	224,000	896,000
High Q's Toyota Revenues	$ 4,480,000	$ 17,920,000
Additional Revenue		**$ 13,440,000**

6. The interviewee should concisely summarize the overall goal of the case (to increase High Q's declining profitability due to new, low-cost competition), and main findings from each question, and a recommendation (yes, High Q should implement the lean manufacturing initiative, while recognizing that this initiative alone will not hit the CEO's total profit goal in 2014). The interviewee should also generate a list of additional opportunities that were not explored in the case, including:
   a) Consolidation of the 4 manufacturing plants (especially Plant D, with its high overhead costs)
   b) Pursue growth in the aftermarket segment of their business
   c) Diversify their business into plastic injection-molded parts for other industries (outside of automotive), with less price competition

Exhibit #1: High Q's 2010 Financials, By Facility

*all figures are in $ million USD.				
	Plant A	**Plant B**	**Plant C**	**Plant D**
Revenues	100	100	100	100
Labor	20	40	60	30
Material	55	40	20	35
Overhead	20	15	15	30
Net Profits	5	5	5	5

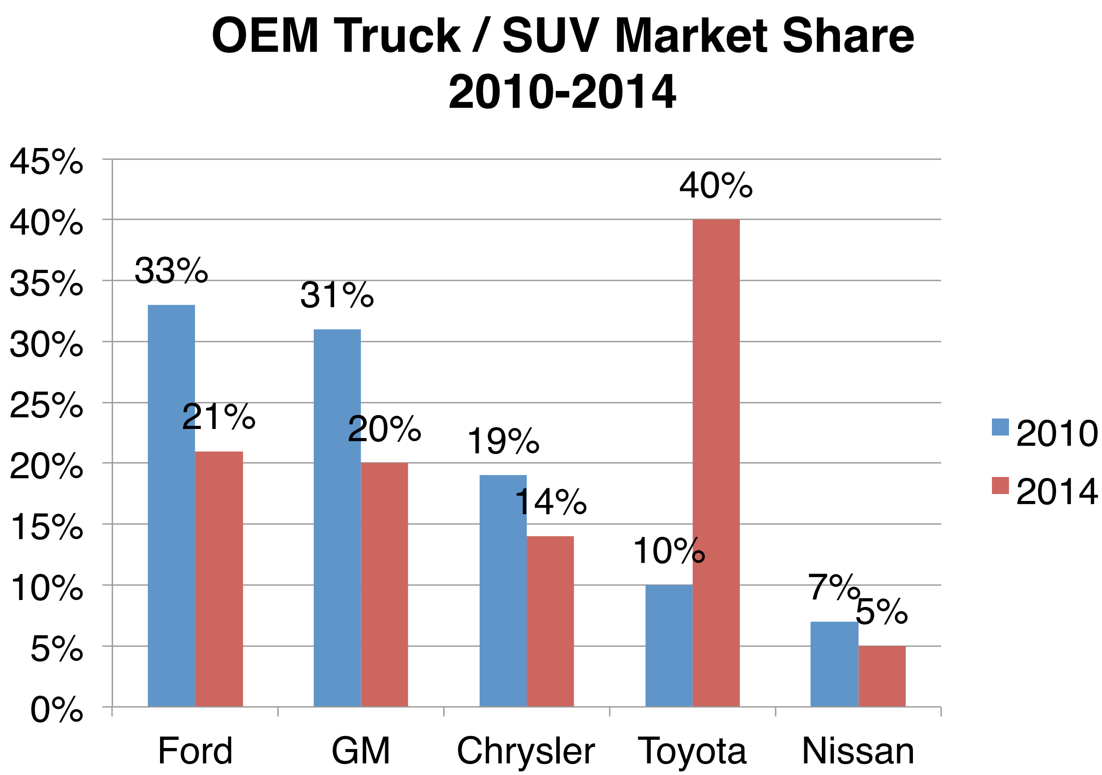
Exhibit #2: 2010 U.S. Automotive Market



***Additional Information**

2010 U.S. Automotive Sales = 16 Million vehicles

Exhibit #3: U.S. Automotive OEM Market



***Additional Information**

High Q supplies 70% of Toyota's business

Avg. Price of High Q products sold to Toyota = $20

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Case 25: Salty Sole Shoe Co.

KELLOGG CONSULTING CLUB
CASE COMPETITION
SILVER MEDAL WINNER

By: Meredith Tierney (Kellogg Class of '11), Edited By: Uri Kalir (Kellogg Class of '12)

Case Question

- Your client is a large retail-focused private equity firm that owns Salty Sole, a leading designer of junior women's footwear, primarily targeting the 14 – 22 year old age group. Salty Sole was purchased last year by the private equity firm expecting to realize substantial profits upon sale in 2012 by increasing the company's EBITDA. The situation, however, is that due to a current recession, annual profit has only grown modestly post the acquisition and is not on track to generate the double-digit returns that the private equity firm originally anticipated.
- *How can the company increase profitability and achieve the private equity firm's return on investment objectives?*

Case tracker

- **Industry:** Retail Apparel
- **Level of Difficulty:** Medium
- **Case Format:** Improving profitability
- **Concepts Tested:**
  - Creativity
  - Accounting
  - Microeconomics

Fit Questions

Spend first 15 min on fit

- Tell me about a problem you faced in your professional life, how you resolved it, and what the results were.
- Tell me about a time when you worked in a contentious or high-stress situation and how you handled it.

Guide to interviewer

- **The case primarily tests an understanding of profitability and profitability growth strategies**
- Begin by reading the case question and asking the interviewee to take a few moments and then explain how they would like to proceed in the client's problem

7
Quants.

6
Structure

Creativity
Acct.
Micro.

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Clarifying answers and handout guide

Clarifying answers to provide

Industry Characteristics/Market Economics

- Client is the market leader in junior women's footwear in the U.S. only.
- Apparel industry is characterized by cyclicality due to economy and consumer preferences.

Client Characteristics

- Client designs and distributes footwear to discount retailers (like Kohl's) and is considered mid-priced.
- Client outsources all manufacturing on a fixed-contract basis (i.e. manufacturing costs with outsourced providers fall under Fixed Costs for simplicity).

Competitive Dynamics

- Client follows a "me-too" strategy and follows fashion rather than inventing it then offering lower prices than name brands (i.e. not subject to fashion risk).
- Client competes on the basis of trendy fashion and value pricing.

Guide to handouts

- After asking the case question, the interviewee should draw a framework that outlines the basic concept that profit is driven by revenue (price and volume) and cost (fixed and variable)
- **Exhibit 1** – Hand out after interviewee presents his/her framework.
  - What observations can be made from this chart?
  - Interviewee should point out that the company experienced significant growth during the pre-recession years, but a decline and only gradual pick-up following.
  - Interviewee should pick-up on the fact that the change in net sales is not due to increased discounts/allowances (remains 1% throughout years).
  - On the cost side, interviewee should note that variable costs remained flat at 50% and fixed costs remained flat
- **Exhibit 2** – Hand out when discussing revenue / increasing volume.
  - Note that the "casual" footwear market is used as a proxy for the junior women's category in which the client competes and is the market leader.
  - What observations can be made from this chart?
  - Candidate should note that the client is already the market leader with greater than 35% share and that the industry is not projected to grow.

Key elements to analyze

Costs

- Using **Exhibit 1**, have a quick discussion about the company's cost structure.

Revenue

- Once interviewee determines that cost is not the issue, have a discussion on the components of revenue – price and volume.

Notes to interviewer

- Fixed: Interviewee should note that fixed costs are not extremely high (about 23-25%), but could be an area for improvement. Ask how interviewee would reduce fixed costs? Examples include: renegotiate contracts, find cheaper manufacturing partners, etc.
  - State that in-fact fixed costs cannot be adjusted based on the company's research.
- Variable: Interviewee should note that variable costs are approximately 50% of sales. Ask how interviewee would think about reducing variable costs? Examples include: reduce labor/sales force, use technology, renegotiate / volume purchase materials
  - State that variable costs are currently at the lowest possible rates based on market research.

Notes to interviewer

- Price: Interviewee should ask if pricing has remained constant over time or if the company has adjusted its pricing to reflect lower consumer discretionary income.
- Ask what considerations the interviewee would have when considering adjusting price?
  - Answers should be price sensitivity / elasticity, cost structure, brand equity (dilute brand through price decrease but compete with more upscale brands if increase).
  - State that pricing has remained constant at an average of $25/unit. The company has determined that it would not be prudent to adjust pricing based on industry research. Interviewee can now determine the number of pairs of shoes sold for later in the case.

Key elements to analyze

Revenue (cont' d)

- Now that the interviewee has hopefully zeroed-in on the fact that the issue is volume, ask how many units must be sold by 2012 in order for the private equity firm to achieve a 20% return on the investment in Salty Sole Shoe, which equals approximately $300 million sale value (give this number). Note that interviewee should *ignore* discounts/allowances for simplicity.

Notes to interviewer

- Interviewee should determine that if the sale value needs to be $300mm in 2012, then EBITDA will need to be $300 / 6.5 = $46.15 (round up to $50 million).
- The formula to determine how many pairs of shoes must be sold to reach that EBITDA level is as follows:
  - $50,000,000 = $25*v – (.5 * 25 * v) – 15,000,000
  - $65,000,000 = 12.5v
  - V = 5,200,000 pairs of shoes
- Interviewee should note that this is more than double the 2008 and 2009 volume levels.
- Ask what the interviewee would want to know to determine if this volume is feasible? Answer: market size / share.

Market Size

- Show the candidate Exhibit 2 when he/she notes that market size/share would be helpful.
- Candidate should note that the client is already the market leader with greater than 35% and that the market size is not projected to increase.
- This should lead to the conclusion that the client can increase volume by stealing share and/or new products in other categories.

Solution and recommendations

Solution & Recommendations

- The interviewee should zero-in on the fact that since cost-structure is fixed and price is also fixed, volume is the only real way to increase profitability.
- However, volume must more than double in order to achieve the growth desired by the private equity firm for a 20% return, which could be difficult given recession and the fact that the industry as a whole isn't growing.
- Interviewee should recommend potentials strategies for achieving that volume growth while outlining the risks of each: 1) Volume: new products / geographies / distribution channels (international?); increase marketing to steal share; acquire growth (brands); adjust product mix to higher-margin products. 2) Price: add value / features. 3) Risks: Capacity, cannibalization if new products.

Bonus/Guide to an Excellent Case

- An excellent interviewee will quickly identify that volume is the issue by ticking through the parts of the profitability equation.
- An excellent interviewee will also ask about product mix and question the 50% gross margin. Interviewer should note that it's assumed that all products have the same margin, but that's a great question.
- An excellent interviewee will also note that since the company is not projected to have to adjust discounts / allowances, then it probably has a good product that is highly-valued by customers and/or this may be aggressive projecting.

Exhibit #1: Client Financial Estimates

Salty Sole Financial Estimates
($ in millions)

	2006A	2007A	2008A	2009E	2010E	2011E	2012E
Sales	50.00	65.00	60.00	61.00	62.00	65.00	70.00
Less: Discounts/Allowances	(0.50)	(0.65)	(0.60)	(0.61)	(0.62)	(0.65)	(0.70)
Net Sales	$49.50	$64.35	$59.40	$60.39	$61.38	$64.35	$69.30
% Increase / Decrease	*20.0%*	*30.0%*	*(7.7%)*	*1.7%*	*1.6%*	*4.8%*	*7.7%*
Cost of Goods Sold	24.75	32.18	29.70	30.20	30.69	32.18	34.65
Fixed Costs	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Total Costs	39.75	47.18	44.70	45.20	45.69	47.18	49.65
EBITDA	$9.75	$17.18	$14.70	$15.20	$15.69	$17.18	$19.65
Sale Multiple	6.50x	6.50x	6.50x	6.50x	6.50x	6.50x	6.50x
Purchase/Sale Price		$111.64	$95.55	$98.77	$101.99	$111.64	$127.73
Return on Investment							2.7%

Note: Acquisition occurred on December 31, 2006.

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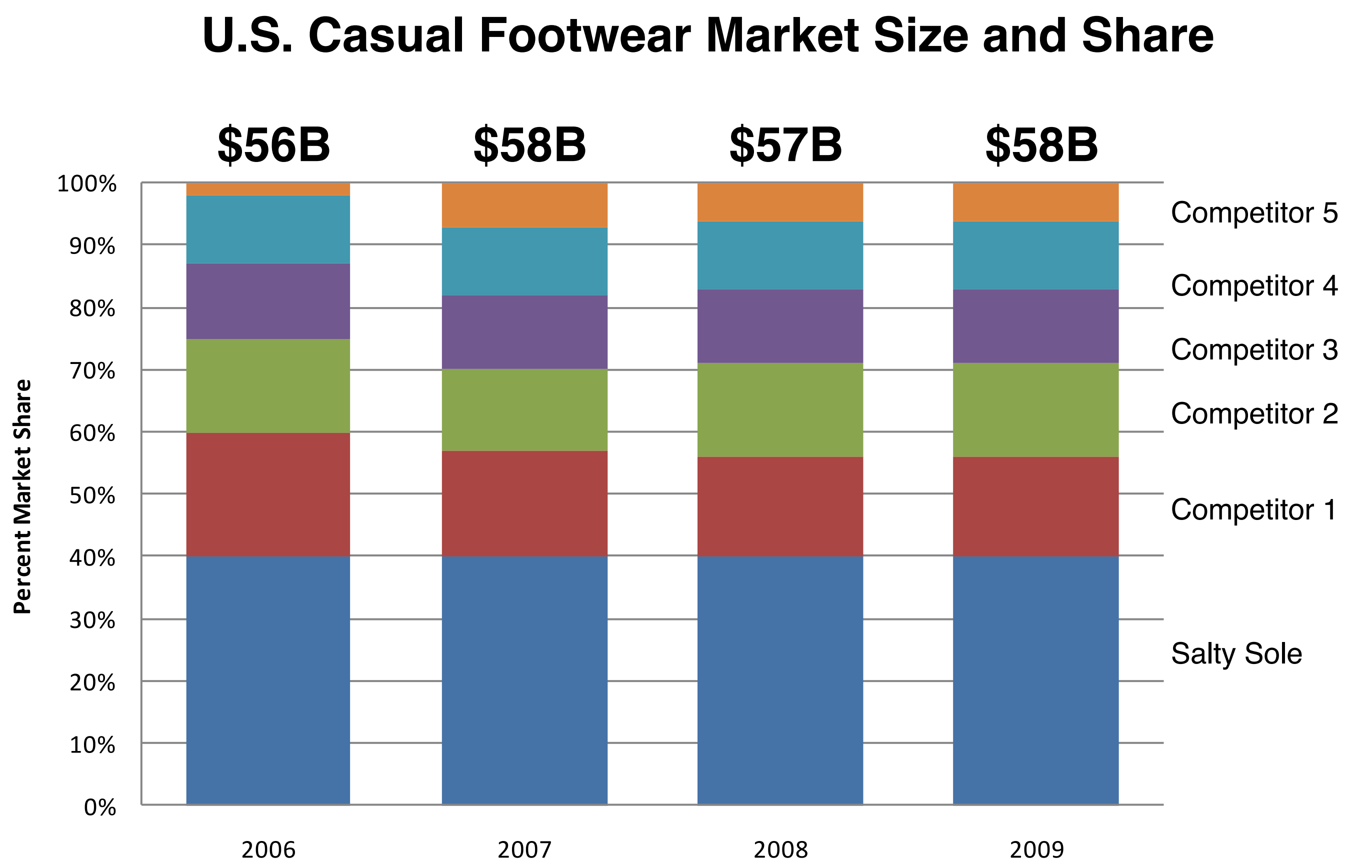
Exhibit #2: Market Size and Share



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Case 26: Plastic World

By: Milija Medic, Edited By: Peter Manoogian (Kellogg Class of '12)

KELLOGG CONSULTING CLUB
CASE COMPETITION
BRONZE MEDAL WINNER

Case Question

- Our client is a private equity firm interested in PlasticWorld, a plastic packaging manufacturer.
- *PlasticWorld's owners are requesting $25M. The offer is final. Should our client buy?*

3
Quants.
4
Structure

Org. Chg.
Mkt. Share
Cust. Stgy

Case tracker

- **Industry:** Financial Services
- **Level of Difficulty:** **Medium**
- **Case Format:** M&A
- **Concepts Tested:**
  - Organizational changes
  - Market share
  - Customer strategy

Fit Questions

Spend first 15 min on fit

- Tell me something about yourself that is not listed on your resume.
- What was the most difficult problem you solved in your previous job, business-wise?

Guide to interviewer

- **The case primarily tests the ability to gain insight from quantitative data , value a company and find potential improvements… As such, it is a little bit more data-driven than the average case.**
- The interviewee should focus on the company value – the recommendation regarding the offer depends on it – and on feasibility of identified profit-improving changes.
- The interviewee should be able to come up with the key improvements if (s)he invests some effort in understanding the price drop and its relationship to the sales force incentives. S(he) should also come up with innovation-related costs from the pressure from the customers and how to push back.

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Clarifying answers and case guide

Clarifying answers to provide

PlasticWorld Characteristics

- Makes plastic packaging for beverages, cosmetics, household and automotive chemicals
- Products are top quality, they have 350 sets of molds, with different materials, finish, colors, always innovating
- Overall product mix has not changed in recent years
- The sales force is "the best in breed", they hold market share, and they are compensated on market share
- Two years ago they invested further in equipment for product innovation

Customers

- PlasticWorlds' customers exhibit strong loyalty
- They are experiencing increasing pressures in their industries to innovate the plastic packaging

Guide to handouts

Begin by handing out exhibit #1 after stating the case question.

Exhibit 1 – Hand out after introducing case

- What observations can be made from this P&L statement?
- Interviewee should calculate the profit margin (-6%), notice that sales volume is growing but revenues are dropping, and infer that the cause may be pricing (*more detail on next page)*
- To check if it's an industry-wide or company-specific drop in profitability, *they should request competition profitability data*

Exhibit 2 – Hand out if the candidate requests competition data

- Note that it's a company-specific problem
- Push the interviewee to postulate what would be a realistic profit margin goal for PlasticWorld based on this industry profitability data (*more detail on next page*)

Exhibit 3 – Hand out after discussion of Exhibit 2

- Sensitivity analysis indicates that the company would be worth the offered $25M if the profit margin was brought from –6% to 0%
- Interviewee should investigate the profitability drop and the low prices further and suggest options to get PlasticWorld's profitability in line with the industry, and their feasibility

Key elements to analyze

Sales Force Incentives

- Using Exhibit 1, What could be the reasons behind what is in the data?

Profit Margin Improvement Feasibility

- Use Exhibit 2 to conclude it's a client-specific problem, use Exhibit 3 to discuss company's value if the profit margin is increased to the industry average.

Notes to interviewer

- Exhibit 1 – PlasticWorld has experienced a steady drop in revenues while the sales volume has been growing.
- There are three major points to identify: 1) the profit margin is dropping and negative; 2) given the unchanged product mix and increasing sales volume, the drop in revenues is caused by a reduction in prices; 3) depreciation change – it was equipment investment.
- The interviewee should find, asking independently or with your help, that sales force is compensated based on market share. This gives the sales force incentive to drop the prices.
- Interviewee should ask about the product quality and customer loyalty to discard price competition as the reason to drop prices. The products are high-quality and customers are loyal, so most of them would buy even at a higher price.

Notes to interviewer

- Exhibit 2 - the candidate should identify the profitability problem is client-specific, all competitors are profitable.
- Exhibit 3 – the observation from the graph is that the company would be worth the $25M if PlasticWorld increased profit margin from –6% to 0%. If the profit margin reached the industry average, the company would be worth $40M.
- Now the question is how easily can the profitability be increased above zero (making the company worth more than the $25M). The sales force incentive change is easy to make.
- Looking for other high-impact improvements, the dense product line and constant innovation is the next largest candidate. Eliminate some molds to cut costs, mindful of innovation pressures in PW's clients' industries.

Solution and recommendations

Solution & Recommendations

- Our client should accept the $25M offer and boost the profitability (and value) of PlasticWorld.
- The client should engage in the following easy-to-implement changes:
    - Compensate sales force based on company earnings instead of market share.
    - Simplify the product line - eliminate some of the 350 molds to cut costs while leveraging the superior sales force to maintain client satisfaction.
    - Examine the industry best practices to find other areas for improvement.

Bonus/Guide to an Excellent Case

- An excellent interviewee will quickly identify the pricing as the issue behind the revenue decrease and lay out potential causes for the price drop, finding the sales force incentive.
- Additionally, a strong interviewee will immediately notice that the company would be worth more than $25M if its profit margin was at the level of industry average.
- A framework comprehensive enough to find the product line size problem would be a plus.

Exhibit 1: PlasticWorld P&L statement in the past three years

	2009	2008	2007
Sales ($)	18,824,000	19,180,000	19,650,000
Volume (units)	36,200,000	34,250,000	32,750,000
COGS ($)	9,050,000	8,900,000	8,650,000
SG&A ($)	7,500,000	7,200,000	7,300,000
Depreciation ($)	3,450,000	3,450,000	2,250,000
EBIT ($)	-1,176,000	-370,000	1,450,000

Exhibit 2: PlasticWorld and Industry Peers Profit Margins

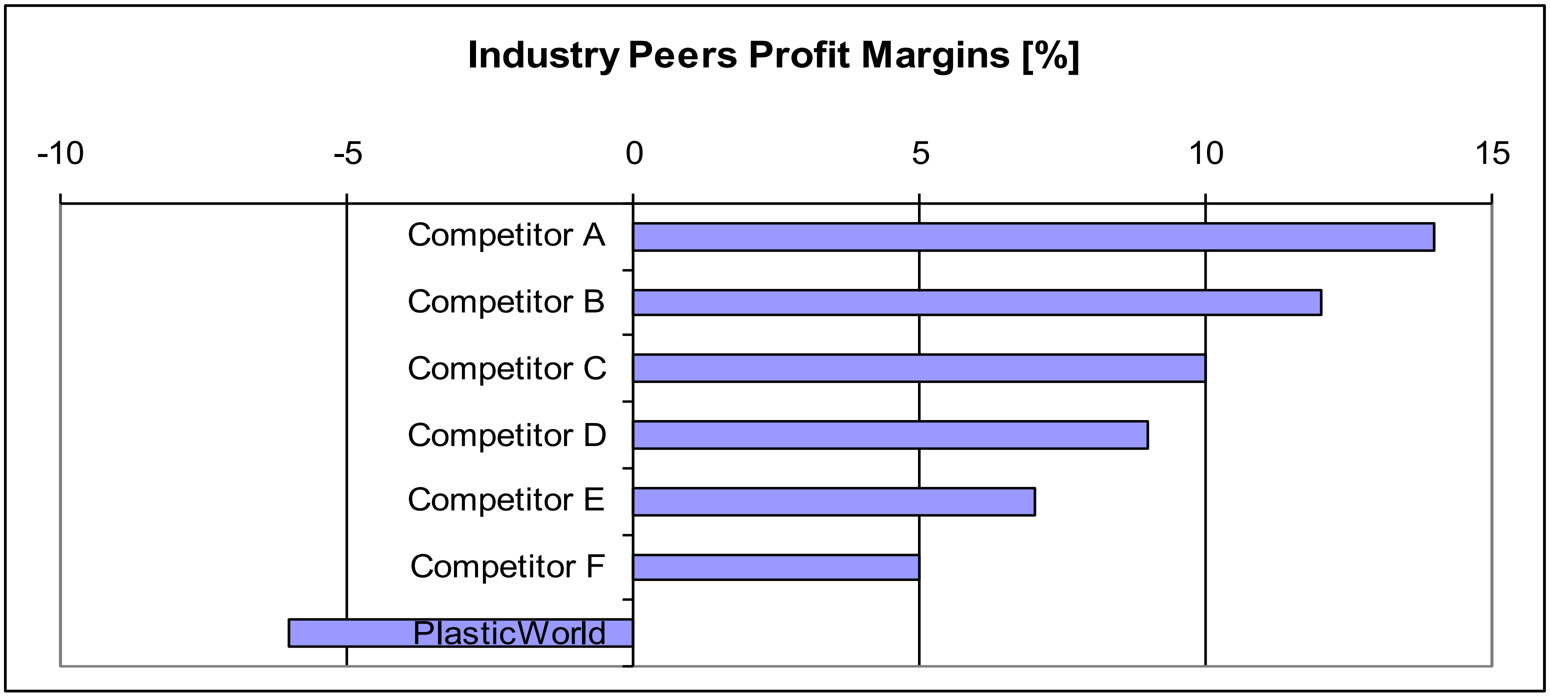

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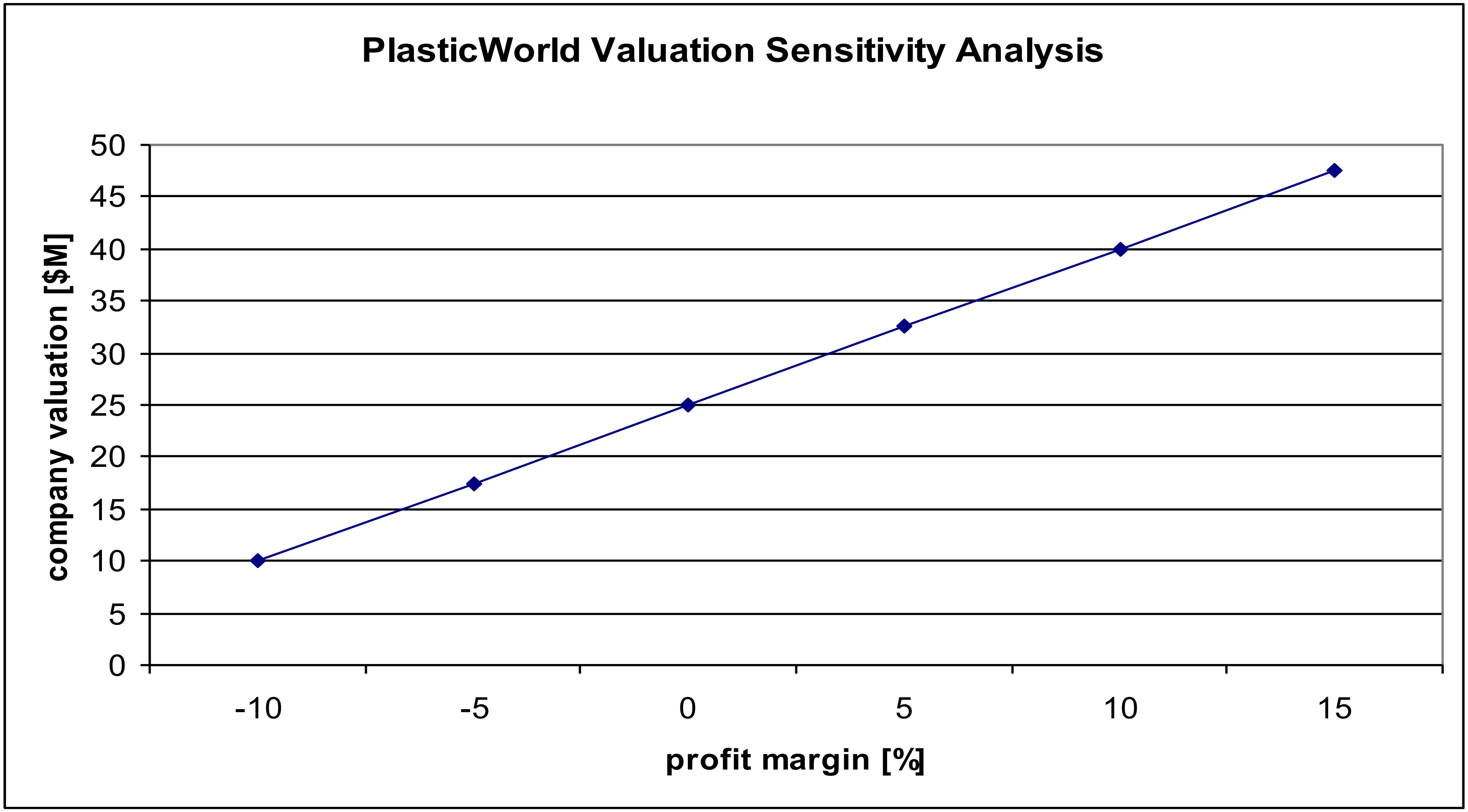
Exhibit 3: PlasticWorld Valuation by Profit Margin



Case 27: Zoo Co.

By: Aneri Jambusaria (Kellogg Class of '11), Edited By: Ron Mantel (Kellogg Class of '15)

KELLOGG CONSULTING CLUB
CASE COMPETITION
SILVER MEDAL WINNER

Case Question

- Our client is a zoo that is thinking about acquiring a famous zebra from an African preserve.
- It's a huge investment, but they believe the new zebra would be a great contribution to their animal community. You have been engaged to help decide whether this is a good idea. What would you consider when trying to help your client make this decision?

7

Quants.

5

Structure

Invest. B/E Basic NPV

Case tracker

- **Industry:** Financial Services
- **Level of Difficulty:** **Medium**
- **Case Format:** M&A
- **Concepts Tested:**
  - Investments
  - Break-even Analysis
  - Basic NPV

Fit Questions

Spend first 15 min on fit

- Describe a recent unpopular decision you made. What was the result?
- Tell me about a successful business relationship you built with a client, boss, or peer in your previous job.

Guide to interviewer

- Even though the client is a Zoo, we're undertaking a similar process to what is done when underwriting an insurance policy. The case evaluates basic concepts, but involves many calculations and use of financial and assessment techniques.
- Key case objectives:
  1. Investment Valuation – Walk through the valuation process for an asset
  2. Breakeven Analysis – Determine the revenue increase needed for a positive NPV
  3. Risk Assessment – Should the zoo should use an insurance contract to hedge downside risk?
- Rounding numbers is generally okay but should not be done to the extreme as it will alter the results

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Zoo Co: Clarifying answers and case guide

Clarifying answers to provide

Data to provide when asked

- 300K people visit the zoo yearly
- Admission is $15
- Benefits from acquisition could lead to increased attendance. Another zoo that acquired a similar zebra had an 8% increase

Costs from zebra acquisition

- Immediate costs: acquisition fees, transportation costs, and new facilities.
- Food, health costs and additional trainers are part of annual maintenance costs
- Acquisition cost: $235K
- New facilities: $850K
- Transportation: $110K
- Annual maintenance: $90K
- Discount rate = 20% Assume that immediate cost are paid today, and annual costs and benefits are realized beginning next year and sustained into perpetuity, even thought the Zebra will not live on to perpetuity

Guide to case / Guide to handouts

- The interviewee should think about performing a break even and a sensibility analysis. Afterwards, they need to think about performing a risk assessment (*only when you reach this point you should deliver exhibit 1*)
- They should start by asking about the benefits and costs associated with zebra acquisition (Left)– Share with interviewee after probing questions are received
- Using the data on the left to calculate benefit to zoo from acquisition – Determine whether or not this zebra purchase makes financial sense for the zoo, using the NPV value
- Using the cost and benefit data provided, the interviewee should calculate the NPV of the acquisition
- *Assume that attendance benefits are realized immediately and maintained thereafter*
  - Annual benefits = (300K)*($15)*(0.08) = $360K
  - Upfront costs = $235K + $850K + $110K = $1.195M
  - Annual costs = $90K
  - NPV = -$1,195K+(($360K - $90K)/0.20) = $155K
- Continue by asking questions in next page

Zoo Co: Key elements to analyze

Break-even analysis

- Zoo Co. is concerned about using the other zoo's attendance benefits as a proxy. They think that attendance could increase by less than 8%. What analysis could you perform to address their concerns? What is the breakeven attendance increase required?

Risk assessment

- Since the zoo is very risk-averse, they're interested in hedging some of their downside risk. An insurance company has offered to provide the Zoo with a constant revenue to increase revenue to $250,000 per year if attendance increases are less than or equal to 5% (if revenue is $135K, the insurance will give the Zoo, $115K. In exchange, the insurance company wants the zoo to pay 1% of the zoo's total annual revenues as a premium. What might you do to determine if this was a good deal?

Notes to interviewer

- The interviewee should determine that a sensitivity / breakeven analysis of the NPV calculation with lower attendance increases will help confirm that the project still makes sense
- See calculations page

Notes to interviewer

- The interviewee should recognize that additional information is needed, and that a market research study could aid in this process
- Hand out Exhibit 1 after the interviewee identifies this notion
- The interviewee should use the market research to determine the probable attendance increase

Zoo Co: Calculations

Math questions

1. What is the breakeven attendance increase required?
2. Do you think the insurance company is providing a good deal to the zoo?

Calculations

1. Break-even: = -$1,195,000+((revenue-$90,000)/0.20)

   ($1,195,000)x .20 = revenue-$90,000

   revenue = $239,000 + $90,000 = $329,000 (*required additional revenue to break even)

   $329,000 = (300,000) x (15) x (% increase)

   % increase = ($329,000 / $4.5M) = 7.3%

After handing over exhibit 1

2. Annual cost to zoo: 1% of total zoo revenues = (0.001)*($4,752,000) = $47,520

   Annual expected benefit to zoo = ($250,000 - $225,000)*(0.20) + ($250,000 – 135,000)*(0.40) = $33,000

   *Costs > Benefits, so this is **not** a good deal*

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Zoo Co: Solution and recommendations

Solution & Recommendations

- It is unlikely that the zebra acquisition is a good idea for the zoo to undertake given the information provided. At other zoos, attendance has gone up substantially due to a new zebra; however, based upon our market research, it seems less likely that we can breakeven on the investment through increased attendance. We have received an insurance contract to help mitigate some of the downside risk; however, it is too expensive to create value.
- In order to make the investment more palatable, we may consider negotiating with the insurance company to either increase the revenue benefits provided or decrease the premium cost.

Bonus/Guide to an Excellent Case

Excellent cases will:

- Identify that we can use another zoo's attendance increases as a proxy for estimating our own attendance increases
- Notice in Exhibit 1 that it is unlikely that attendance will increase sufficiently enough for the zoo to break even
- Notice that the insurance company's premiums and benefits are both impacted by attendance increases; so if attendance increases are always greater than 5%, the zoo will be paying even more but getting no benefit
- Notice that the insurance company's contract is essentially an option; so a different structure to the contract may be more suitable for the zoo

Exhibit 1: Market research findings

Exhibit 1: Market Research Findings

Possible Attendance Increases	Annual Revenue	Probability
3% Increase	$135,000	20%
5% Increase	$225,000	40%
7% Increase	$315,000	30%
9% Increase	$405,000	10%
Expected Additional Annual Revenue	**$252,000**	
Plus: Current Annual Revenue	$4,500,000	
Expected Total Annual Revenue	**$4,752,000**	

Case 28: Money Bank Call Center

By: Guruprasad Sankaranarayanan (Kellogg Class'12)

KELLOGG CONSULTING CLUB
CASE COMPETITION
GOLD MEDAL WINNER

Case Question

- Our client is a large financial services firm with multiple locations around the world. Part of their service offering includes a 24 hour helpline. The client has their call centers in New York and Paris.
- The client has recently acquired a small firm (Firm B) in order to expand its reach in a particular geography. Firm B provides a subset of the services and has its call center located in the Philippines
- The client has asked us to determine its strategy going forward for handling customer calls. In particular they want us to look into the call center operations.

8

Quants.

9

Structure

Mkt. Size
Due Diligence
Organization

Case tracker

- **Industry:** Operations / financial services
- **Level of Difficulty:**

  Medium
- **Case format:** Market Size
- **Concepts being tested:**
  - Financial Analysis
  - Organizational fit

Fit Questions

Spend first 15 min on fit

- Tell me about a time when you have to convince a difficult client to follow your recommendations
- What is the achievement you are most proud of?

Guide to interviewer

- This is a typical outsourcing case with some elements of
  - Use a framework that covers the most important areas of M&A and cost cutting
  - Read the exhibits to assess the cost effectiveness and efficiency of the 3 locations
  - Discuss qualitative information on the acquired company – products, culture, customers etc
- There is no right or wrong recommendation, as it will depend on the interviewees assessment of the qualitative concerns
- Key case steps:
  1. Evaluate existing and potential cost structure
  2. Explore alternatives / ideas for implementation
  3. Make a recommendation based on the data

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Clarifying answers and case guide

Clarifying answers to provide

The following information can be provided to the interviewee if asked:

Client Characteristics
- Provides full range of financial services for individuals and small organizations
- Acquired firm was started 5 years ago and is still run by the original founders

Nature of call center
- New employees are college graduates with basic knowledge of financial services and products
- Fluency and English and several European languages required

Regulatory environment
- Very difficult to lay off employees in the Paris location – significant costs will be incurred
- Philippines government encourages investment in the country – significant tax advantage possible

Guide to case / Guide to handouts

Case structure – The interviewee should draft in a couple of minutes a framework that covers the most important areas in this case.

- **Options**
  - No changes – maintain all 3 call centers
  - Close Firm B's call center and route calls to one of the exiting locations
  - Consolidate to a single location
- **Company**
  - Comparison of services offered at the 3 call centers / product mix
  - Metrics for evaluating call center performance (cost / call, calls / rep etc)

Specifics to outsourcing – The interviewee should include specific concerns to the industry such as employment regulations, quality of call, infrastructure capabilities etc

Key elements to analyze

Outsourcing

- Compare the efficiency of the 3 locations – possible explanations for variance
- Identify the cost effective option – how is this impacted by integration cost

Note to interviewer

- When asked, the interviewer should provide data from *exhibit 1*. Key takeaways from the exhibit are:
  - Total cost incurred by the 2 firms is $9.6M
  - Philippines can process 20 calls / employee / day (200 days per year) at $6 per call
  - Currently, we have space, infrastructure necessary to expand. Assume overhead is variable in this case. To process total call volume Philippines will need 250 employees to handle the traffic – total cost including overheads is $6.0M. Total cost savings from closing centers is $7.8M, net = $1.8M
- The interviewee should realize that this does not account for all the costs, including hiring and training costs. When prompted inform the interviewee about a 1 time cost of $5M (includes severance for NY and Paris, expanding the Philippines facility) implying that the move is not profitable

	Calls / employee	Cost / call
New York	40	7
Paris	33.3	9
Philippines	20.0	6

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Key elements to analyze (contd.)

Outsourcing

- Prompt the interviewee to explore ways to make outsourcing to Philippines feasible
- Inform the interviewee that the CEO requires our solution to be at least cost neutral by year 2

Note to interviewer

- The interviewee needs to identify the difference in calls/employee between the New York and Philippines locations
  - Ask the interviewee to assume that the best practices can be transferred and implemented within 3-6 months
- Potential cost savings if Philippines achieves same effectiveness as New York
  - # employees required = 1.3M calls / 40 (calls / employee) * 200 (days / year) = 163
  - New employee cost is 3.25M
  - Ask interviewee to assume overheads double which results in total cost of 3.85M
- Other questions interviewee needs to consider
  - Does Philippines has sufficient space and capacity to handle the expansion
  - Will the client be able to acquire sufficient talented personnel within the short time frame
  - Customer satisfaction with the new location?
  - Legal constraints / requirements in NY and Paris – how quickly can we lay off the staff

Solution and recommendations

Solution & Recommendations

- This is an open ended case. The interviewee needs to justify the recommendation based on the qualitative considerations.
- A good recommendation would include 3 sections:
    1. Recommendations: if the recommendation to outsource the interviewee needs to highlight the risks associated with outsourcing and nature of the acquired firm. If the recommendation uses any other approach sufficient justification needs to be given to overcome the cost savings
    2. Risks
        - Risks associated with increasing capacity ~100% - people, infrastructure, service quality , gaps in knowledge transfer, organizational changes etc
        - Reputational impact - do customers notice difference in service, can the competitor leverage this to steal customers?
    3. Next steps: If outsourcing, some of the next steps would be analyzing the infrastructure requirements and capabilities, finding the right talent, ensuring smooth transfer and implementation of best practices etc.

Bonus/Guide to an Excellent Case

- Excellent interviewees need to address the qualitative information provided in the case: nature of merger, nature of markets being served etc.
- The interviewee should explore the option of improving effectiveness of the Philippines location without being prompted to do so.

Exhibit 1

Call center performance – FY2010

Center	Call / year	Employee cost / year ($)	Overhead cost/year	# Employees
New York	600,000	50,000	450,000	75
Paris	400,000	50,000	600,000	60
Philippines	300,000	20,000	300,000	75

Case 29: Thompson Healthcare

By: Aaron Mowery (Kellogg Class of '13)

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CASE COMPETITION
SILVER MEDAL WINNER

Case Question

- Our client is Thompson Healthcare, a health insurance firm located in the Midwest.
- Customers pay Thompson a fixed monthly premium per person covered under the plan. In exchange, Thompson pays for all health services that each member requires (e.g., physician care, prescription medications, hospitalization).
- In recent years, Thompson's financial and competitive position has begun to erode, and the CEO has retained our firm to help them determine what is causing the problem and how to fix it.

Case tracker

- **Industry:** Healthcare
- **Level of Difficulty:** Medium
- **Case format:** Cost reduction
- **Concepts being tested:**
  - Cost management
  - Sales channel strategy
  - Economic value analysis

Fit Questions

Spend first 15 min on fit

- Tell me about a time when you failed.
- Share me a time when you faced a difficult situation in a team and how you solved this .

Guide to interviewer

Read to the Interviewee before beginning:
This case is based on a real McKinsey study, and has been formatted as a McKinsey-style structured case.

Before asking you any questions about the case, I will give you the background that you will need.

There are a number of issues that I would like to cover with you today; please do not be surprised if I seem to change topics abruptly.

8
Quants.

9
Structur

Profitability
Sales
Channel
strategy

Clarifying answers and case guide

Clarifying answers to provide

Client Characteristics

- Thompson Healthcare is a mutual insurance company, meaning all of its profits are returned to members in the form of lower premiums the following year. As such, Thompson does not seek to maximize profit – it seeks to minimize cost.
- Thompson's prices reflect underwriting of risk and the underlying cost to serve a customer

Competitive Dynamics

- Market share is steady, despite presence of major national health insurance company in the market (United Healthcare - UHC).
- UHC has a 30% market share.
- UHC typically expects to earn a 5% profit margin.

Local industry Characteristics/Economics

- The national average rate of medical cost inflation is 10% over the past five years.
- Thompson has seen medical cost inflation of 12% over the past five years.
- UHC has seen medical cost inflation of 10% over the past five years.

Guide to case / Guide to handouts

- State the information to the left after reading the initial prompt, the interviewee should be able to develop a variant of the following question:

  How can Thompson Healthcare reduce its total cost to serve its policy holders?

- Ideally, the interviewee should be able to break down the question into two parts:
  1. Managing medical costs
  2. Managing administrative costs

- This case is formatted as a McKinsey-style structured case. You should ask the interviewee the questions on pages 3-7 of this case directly and move on to the next page when the interviewee has answered the question sufficiently.

Key elements to analyze

1

Problem structure

What factors would you consider in order to understand Thompson's eroding financial position?

Note to interviewer

- The interviewee should lay out a structure for analyzing the case.
- The interviewee could have determined that revenue is not relevant to this case based on information given in the initial prompt on page 1 and 2, so the interviewee should focus on cost.
- Costs in this case break out into fixed costs and variable costs:
    - Variable costs (medical costs – claims made by policyholders)
    - Fixed costs (administrative costs – e.g., marketing & sales, underwriting, finance, HR)
- Specifically, we will need to understand how these costs have changed in recent years.

Key elements to analyze

2

Initial hypothesis

Medical costs are the largest component of Thompson's costs. However, Thompson's medical costs are increasing faster than the national average. What are some potential reasons why this is taking place? What potential opportunities could you explore to reverse this trend?

Note to interviewer

- Medical cost = (Number of claims) * (Cost per claim)
- Potential answers include:
  - Deductibles are low, leading members to see doctors for minor medical issues -> increase deductibles to make members more conscious of costs
  - Thompson pays more for procedures than average -> conduct benchmarking study to determine what competitors charge for various procedures
  - Thompson insures an older population than average -> increase marketing efforts toward younger customers
  - Thompson insures a sicker population than average -> enhance wellness programs

Key elements to analyze

3

Second hypothesis

In addition to medical costs, administrative costs for Thompson are also higher than average. The biggest driver of this phenomenon is a high cost of sales. Thompson's policies are sold through independent agents. All independent agents work with a "General Agency" which acts as a sales support organization. How much does Thompson pay in commissions each year? What are some potential approaches Thompson could take to reduce its cost of sales? What potential strategic issues exist with these approaches?

Note to interviewer

Additional information to provide after interviewee explains how they would calculate commission expense

- Commission (10% of annual premiums) is paid to the General Agency, which passes a share to the independent agent. Total commission paid is, on average, $25 per agent, per month.
- Interviewee should identify the need for # of agents. Give the number 500,000 if asked.
- Total commission expense = $25 * 500,000 * 12 = **$150,000,000**

- Potential approaches to reduce cost of sales:
  - Reduce commission percentage
  - Cap commission to a certain level per year
  - Change commissions structure from percent of premium to flat fee (percent of premium increases at the rate of medical cost inflation every year)

- Potential risks with these approaches:
  - Agents could shift business from Thompson to another carrier that pays higher commission
  - Agents would lose incentive to sell if their commission is capped

Key elements to analyze

4

Next level of analysis

The team has decided to pay a flat commission directly to agents, and to pay the General Agencies a separate fee for the support services they provide to agents. If the total commission paid to both parties is set at $20 per member per month, what share should be given to the General Agencies?

(If interviewee is unsure of "what share" means, explain they should find the maximum amount that should be allocated to the General Agencies.)

Note to interviewer

Additional information

- General Agencies perform three activities: training, application processing, and performance management.
- If Thompson were to perform these activities internally, they would cost:
    - Training: $6,000,000
    - Application processing: $9,000,000
    - Performance management: $15,000,000

Potential approach

- The total cost of the activities that General agencies perform is $30,000,000 (=$6,000,000 + $9,000,000 + $15,000,000).
- There are 500,000 members and 12 months in a year.
- The maximum amount of money Thompson should be willing to pay the General Agencies for the activities performed is the per member, per month cost of these activities ($30,000,000 / (500,000 * 12) = $5

Wrap-up

5

Final recommendations

Taking into account what you've learned thus far as well as your own additional hypotheses, what initiatives would you recommend to the CEO at this point?

Note to interviewer

- Our client should take action to reduce both medical costs and administrative costs.
- At this point, the interviewee should synthesize the findings from the interview into several clear initiatives, for example:
  - Enhance marketing efforts to attract more young customers and bring down the average claims per member.
  - Conduct a benchmarking study to determine opportunities for reductions in payments for medical services.
  - Change the commission structure to flat fee per member per month. This achieves the goal of reducing commission expense, while at the same time keeping an agent's incentive to sell more business.
- Strong interviewees will demonstrate the ability to analyze issues using a clear structure and will draw out the implications of their analysis. The quantitative calculations in this case are elementary, but the process to get to them is somewhat more complicated.

CONTENTS

Industry Research Overview

A tailored approach to industry research can help you prepare

- Provides insight into industry-wide trends and revenue/cost drivers
  - Allows you to make a more nuanced framework or tack on an additional piece of industry-specific analysis
  - May point you toward sources of issues in cases
  - Can be helpful in Q&A with your interviewers about their own work
- Spend your limited time well
  - No need for extensive research on industries in which you already have significant prior experience or knowledge
  - Read high-level industry summaries (such as those on the following pages) to gauge whether anything is completely new to you
  - Consider reading in-depth guides for industries that
    - Are completely new to you
    - You seek to specialize in
    - You know will come up in interviews (e.g., due to industry focus of firm)

List of Industry Overviews

This section includes brief overviews of 19 industries that are likely to come up in interviews

- Industrial Goods
- Energy
- Airlines
- Automotive
- Online Services and Storage
- Computer Software
- Hardware and Digital Devices
- Semiconductor
- Pharmaceuticals
- Medical Devices
- Hospital Facilities
- Healthcare Payers
- Banking and Financial Services
- Media and Entertainment
- Telecom
- Retail
- Household Durables
- Household Non-durables
- Restaurant
- Non-alcoholic Beverages
- Beer, Wine and Distilled Spirits
- Mining and Precious Metals
- Utilities

Industrial Goods

Overview

- Large and diverse industry that provides products/services primarily used to produce other goods
- Main sectors
  - Electrical Equipment and Components
  - Industrial Automation/Heavy Machinery
  - Construction and Engineering
  - Aerospace & Defense
- Key Players include: GE, Siemens, Cummins, Boeing, Lockheed Martin, Northrop Grumman, Eaton, Honeywell, Raytheon, 3M, Caterpillar, Emerson Electric, Fluor, Tyco, Waste Management, Bosch Rexroth

Trends

- Tighter consumer spending has led to reduced production and stagnant growth for the industry
- Industry has seen increasing consolidation over the past few years; Most sub-segments are Oligopoly
- Emerging markets are key for growth as they are quickly developing and increasing production capacity for a variety of goods
- Local assembly is common since components are easier to ship than finished goods

Drivers

Revenue

- New Product Innovation
- Product quality and reliability including after-sales service
- Specialized products for various customer segments

Cost

- Raw materials including oil, natural gas, metals,
- Human capital costs including engineers, labor/manufacturing force and sales force
- R&D

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Energy

Overview	Trends	Drivers
Major E&P players like BP, ExxonMobil, Pertrobras, Aramco are involved in both upstream and downstream. **Upstream Steps**: 1. Exploration: Finding oil, including geological exploration, research, and purchasing/leasing land. Offshore is leased from gov'ts through auctions 2. Drilling. Companies drill exploratory wells to determine size; if satisfactory, add'l wells are developed. Overheating can cause explosions ("blowouts"). 3. Well Completion. Post drilling, engineers put cement in the walls Steps 1-3 are often contracted out from E&P firms to firms like TransOcean. Delays are very expensive ($500k a day), and may be charged to contractors; but E&P firms make decisions Downstream Steps: Production → Refining → Marketing Liability for spills is extremely costly ($1-4k per barrel spilled, 205M gallons est. spilled)	**New Legislation Post –BP oil spill** the industry is likely to experience major changes. • A hodgepodge of oversight agencies granted exceptions to rules, as government agencies needed to both foster and police the industry • A mix of companies is in charge of each rig, and their interests are not always in sync (see **delays** under overview, eg for maintenance) Foreign countries maintain their own oil standards State-owned oil companies like Saudi Aramco and Petrobras are sitting on enormous oil reserves, but cannot exploit it as efficiently as public companies New players in China (supported by government) is entering the OEM and shipping industry	**Revenue Drivers** **Outside Factors:** economic environment (GDP growth), supply, consumption and demand level, oil and gas inventories. **Prices** of oil, gas, and refined products are the most watched factor in energy. **Key measures:** Supply and demand of oil and natural gas, rig count, rig utilization rates, rig dayrates and daily margins **Drilling companies**: provide the rigs and operate them, either on a project or long-term contract basis, with **rates charged by the day (popular among offshore drilling), foot drilled, or all-inclusive basis**. **Wide range of services**, including: pressure pumping, wireline, directional drilling and measurement while drilling (MWD), and marine support **Cost Drivers** Upstream - exploration and production expenditures; Midstream – transportation, and storage costs; Downstream – refining and marketing costs. **OPEC**: influences global price.

Airlines

Overview

- Airlines provide air transport services for passengers and freight
- The industry was deregulated in 1978 free from government control of fares, routes, merger and acquisitions. This helped to completely transform air travel from a luxury to a mass-market service

INDUSTRY STRUCTURE:
Major Airlines: revenues > $1B
National Airlines: revenues $100 M - $1B
Regional Airlines: revenues < $100M
- Airlines is a low-margin industry

COMPETITION
- Price Competition: airlines compete to provide the lowest fares to the passengers
- To attract leisure travelers they advertise huge discounts
- Niche players like JetBlue, Southwest, and Spirit have entered

Trends

MERGERS
The industry has seen a lot of consolidation in recent years. There are 3 major US carriers, down from 6 a few years ago (eg, United/ Continental Delta/Northwest)

BANKRUPTCY:
Mergers primarily happened as the due to several airlines filing for **bankruptcy and going out of business**
There has been a barrage of bankruptcies in the industry. More than **20 airlines** have filed for bankruptcy in the last decade

Potential problems of declining revenue:
- Inefficient network: look at route profitability and see if some of the routes could be eliminated
- Poor use of fixed capacity: increase volumes to tackle this issue

Drivers

Revenue Drivers
Airlines have been really creative to add several revenue streams to their business
- Passenger fares
- Mail and cargo charges
- Meals / alcohol in flights
- In flight entertainment
- Extra baggage/seat prices

Customers are broadly categorized as:
- Leisure: highly price sensitive
- Business: not price sensitive, hard to reach

Cost Drivers
Airline industry is **capital and labor intensive**
Fuel: Fuel costs are highly volatile and can range anywhere from 25% - 40% of the total cost for an airline
Labor: costs in 2009 was 26% of the total cost. Labor is unionized, and pilots have few substitutes
- Includes pilots, attendants, ground services, dispatchers, maintenance, customer service

Equipment: is around 10% of the total cost
- Some airlines lease fleets rather than buy

Automotive

Overview

The automotive industry is engaged in the design, production, marketing, sale, and servicing of motor vehicles.

New light vehicle sales in the US expected at **11.7 million for 2010**. **Volume increase is forecasted** in 2011, to 13.5 million.
Heavy capital commitments required to keep pace with product development and model changeovers.
Demand is naturally affected by economic environment.
Auto parts manufacturers highly fragmented: produce original parts and accessories for new vehicles, replacement parts, and accessories for older vehicles, or both

Labor is often unionized and wields power.

<u>Competition</u>
Extremely competitive. The US is the world's most competitive auto market.
Detroit Three losing market share: GM, Ford, and Chrysler. The top three foreign companies have a combined US market share of 41.5%: Toyota, Honda, and Nissan.

Trends

US share of global market shrinking: In 2009, China overtook the US as the largest market for new vehicles. US accounted for **16.3% of global demand**.
Demand in developing markets, including the BRIC economies, is projected to outstrip that of the world's mature markets.
US and global sales to advance. Production in NA was up 70% in the first quarter of 2010. Europe may lag.
Companies in China, Russia, India to make **acquisitions in the US.**
Alternative fuel and hybrid vehicles – All automakers are developing the technology: ethanol, methanol, natural gas, and electricity derived from batteries or solar power.
Auto parts – online procurement has changed the business, with increased transparency pressuring selling prices for commodity items.
Bankruptcy: GM, Chrysler, GMAC (auto lender) and suppliers filed for bankruptcy and some for bailouts in 08/09
Distribution: Main channel is – dealership model**.** Rapid consolidation in recent years.

Drivers

Revenue Drivers
Factors affecting new car sales: changes in style, engineering, safety, quality, cost and availability of gasoline and insurance.
Price increases are limited. Rising competition in NA and Europe has restricted manufacturers' pricing power.
Demand, sales rise during sustained economic growth and plentiful employment.
Tactics to stimulate demand: discounts and cash rebates, (dealers' discounts,) financing at lower interest rates, eliminating options on a model to offer a low-priced alternative.

Cost Drivers
Capital expenditures of 2010: GM $6.0 billion, Ford $4.5-5 billion, Toyota $8.1 billion.
Costs breakdown: plants, raw materials, design, production, labor, distribution, marketing, and customer service.
Suppliers: number shrinking, due to globalization, reduced volume from US automakers, high material and labor costs.
Oil prices and raw material prices
Cost cutting tactics: higher unit production volume, savings on parts and labor, improved manufacturing efficiencies.

Online Services and Storage

Google amazon.com Dropbox

Overview

The online industry consists of companies that provide virtual-environment services and products, including data search, cloud data storage, social networking, big data analytics, music and video streaming, e-Stores (fashion, media, etc.), news and gaming.

INDUSTRY STRUCTURE:
Total Revenues: ~$1.8Trillion
Industry Leader in Revenues:
Google ($29.3 Billion)

COMPETITION

- Innovation: companies try to differentiate themselves by investing heavily in innovation, or "the next big thing", such as YouTube, Facebook or eBay, most of which are monopolies in their own specific market.
- In the consumer world, major players include online services companies such as Google or DropBox, e-Retailers such as Amazon and Gilt, entertainment providers such as NetFlix and Hulu, and social networks such as Facebook and Twitter. In the business arena, companies such as IBM, McKinsey, Accenture and other professional services companies are taking the lead.

Trends

CLOUD COMPUTING:
A wide variety of service providers are battling over the right to provide consumers with free cloud based services, most notably storage (DropBox, Google Drive, Amazon Cloud Drive), productivity (Google Docs, Microsoft Office Live), CRM (Salesforce) and professional services (Quickbase, Bill.com).

BIG DATA:
The huge amount of information out there serves not only as an opportunity for companies to study, analyze and predict market trends, but also as an essential tool for survival.

CYBER SECURITY:
Both in the private sector, where many have already entrusted the web with their most intimate information, including bank accounts, emails or work, and in the more global aspect, cyber warfare, spying and intelligence gathering have all increased the need for highly developed cyber security services, to protect both corporate secrets and peoples' lives.

Drivers

Revenue Drivers
In the consumer market, most services are given for free, where most revenues come from advertising and data collection. Some services/products are given for a subscription fee, and some (usually e-retailers) usually come from direct sales. In the business sector, the ability to provide expertise to increase value for clients, where many companies are quickly transitioning themselves from conventional services firms into "one-stop-shop" firms, mostly among consulting companies, accounting firms and technology firms, allow such companies to charge service fees.

Customer base is very broad, i.e. not limited solely to ultra-techy consumers, but also to sophisticated business people, organizations and consumers with low-to-intermediate level of technical experience.

Cost Drivers
The online industry relies heavily on innovation (a large portion of which comes from M&As of startup companies), customer relations and IT infrastructure. Conventional costs such as physical stores, fragmented inventory space and manpower are very low.

Computer Software

Overview

The software industry includes businesses for development, maintenance and publication of software, including productivity suites, games, mobile apps, hardware-specific software (both firmware and custom made software) and operating systems (including mobile platforms).

INDUSTRY STRUCTURE:
Total Revenues: $303Billion (in 2010)
Industry Leader in Revenues:
Microsoft $69Billion (in 2010)

COMPETITION

- Software companies compete not only with other software companies, but also with other technology-based services providers, by focusing on specific clients – whether by creating simple and cheap mobile apps for clients on the go, or niche expertise-based products for sophisticated clients.
- Major players include very large companies such as Microsoft, IBM, Oracle, Symantec and Adobe, which focus on the working environment, and of smaller companies such as Electronic Arts, which focus on gaming across multiple platforms.

Trends

DIGITAL TRANSFORMATION:
For the last few years, there is an apparent slowdown in growth in the software industry, where gains are achieved through operational performance rather than technological innovation, and growth is accomplished through mergers rather than organic development. Due to convenience issues, piracy and security risks related to software-based ecosystems, the tech world is moving towards online services and mobility. Other than switching to other, software developers are also either focus on smaller & simpler versions for the consumer market (mobile apps) or on much more sophisticated software for the business market, mostly for CRM, IT systems, database and online services.

MICROSOFT RISE AGAIN(?):
Despite overwhelming criticism regarding its lack of innovation and inability to create value in the longer term, Microsoft managed to retain its dominance in the productivity software market with its Office cash-cow, while introducing the much anticipated Windows 8 OS, which draws positive attention.

Drivers

Revenue Drivers
The industry experienced very few changes in such respect, as revenues are based mostly online and retail sales, service and client support fees, annual subscriptions and licensing fees.

The customer base has changed in the past couple of years: regular consumers are interested more in simple friendly software rather than sophisticated do-it-all software, and businesses are worried that constant innovation will harm their competitiveness if they commit to the wrong software, and are interested more in "renting" a dynamic software rather than buying a product that requires high implementation costs. Therefore, the software industry focuses on the 2 "extremes": the relatively low-tech customers and ultra-sophisticated ones.

Cost Drivers
The biggest cost software companies traditionally faced was related to the development of the products. In the past, the huge allure of the software industry was its relatively low operational costs once the product has been developed, and such costs have shrunk even more in the last few years due to online distribution. However, piracy has plagued most of the software industry and increased the cost of protecting the companies' intellectual property.

Hardware and Digital Devices

Overview

The Computer Hardware industry consists of companies engaged in assembling and manufacturing computers, computer hardware and computer peripherals, including storage devices, keyboards, printers, monitors, mouse and other pointing devices, Webcams and PC cameras.

INDUSTRY STRUCTURE:
Total Revenues: $842.1 Billion
Industry Leader in Revenues:
Apple ($156.5 Billion)

COMPETITION

- Price/Feature Competition: companies try to differentiate either by selling at low prices and relying on complementary products, or by increasing consumer benefit through innovation and features.
- Major players include manufacturers such as Apple and Samsung, but also Google, which does not manufacture but has tremendous influence over the industry due to its Android mobile operating system and its collaboration with manufacturers such as LG.

Trends

MOBILE COMPUTING:
During the last decade, we experienced a major shift from desktop computing to computing-on-the-go, mainly due to growing popularity of smartphones and the emergence of tablet computers (see below). Cloud computing reduced the need for physical storage, while constant improvement in speed and reliability of mobile internet connectivity allow consumers to communicate, work and play anytime and anywhere. The recent growth also led to increased revenue by component manufacturers (ARM, Broadcom, Samsung) and demand for online services. Tablets and smartphones are estimated to have cannibalized more than 20% of the computer industry.

TABLET WARS:
Despite continuous dominance by the iPad (50.4% market share), industry behemoths such as Microsoft (Surface), Google (Nexus), Amazon (Kindle) fiercely compete over the tablet industry, though most profits do not come from units sold but from complementary products (such as apps and cases).

Drivers

Revenue Drivers
Companies seek to add revenue streams to their business

- App and digital content stores for Smartphones and Tablets
- Advertising through mobile apps
- Collaboration with peripheral product manufacturers (such as keyboards, casing, headphones and audio systems) and with mobile telecommunications companies.

Customer base is very broad, not limited solely to ultra-techy consumers, but also to sophisticated business people and consumers with low-to-intermediate level of technical experience

Cost Drivers
The hardware industry relies heavily on component manufacturers, which are exposed to variance in material prices), environmental regulation, and cost of labor (as most manufacturing is done in developing countries). Hardware companies are also required to invest heavily in R&D.

Semiconductor

Overview	Trends	Drivers
Industry: The research, development, production, and marketing of semi-conductors **Products:** Industry is made up of four product categories: 1. **Memory** – Memory chips are temporary storehouses of data and pass information to and from computer 2. **Microprocessors** – central processing unit that contain the basic logic to perform tasks 3. **Commodity Integrated Circuit** – "standard chips" – produced in large batches for routine processing purposes 4. **Complex SOC** – "System on a Chip" – integrated chip with entire system's capability on it **Key Ratios/Terms:** **Moore's Law** – number of transistors on a chip doubling every two years **"Fabless" Chip Makers –** semi-conductor companies that carry out design and marketing, but outsource the actual manufacturing **R&D/Sales** – research and development expenses as a percent of sales – want high % **Yield** – # of operational devices out of all mfg.	**Growth:** • Semi-conductor industry is highly cyclical • Companies face constant highs and lows for demand of their product • Growth trends track closely with demand for personal computers, cell phones, and other electronic equipment **Trends:** Traditionally, semi-conductor companies have controlled the entire production process, but in order to be lean, efficient, and effective, they are moving away from that model: • Successful companies must be smaller, faster, and cheaper • Chip makers are beginning to delegate manufacturing to foundry companies (whose sole business is manufacturing) • Noticeable increases in specialized designers and chip testers **Competition:** • "Fabless" companies overcome barriers to entry related to large capital requirements • Foundries gaining supplier power because of cutting-edge equipment and production skills • Intense rivalries between companies	**Revenue:** Revenue = Price of chip x quantity sold • Due to Moore's law and the competitive nature of the industry, it is not uncommon for the price of a new chip can fall by as much as 50% in a short time period • By nature of the process, there is a long lead time with product releases, so it may take years before a company sees revenue for certain products **Costs:** • Semi-conductor companies live and die by their ability to be cost efficient • Constant pressure from market and customers to develop better, cheaper products in a short time frame • As noted above, each product has a long lead time, so a company will incur costs for a long time before that product generates any revenue • As noted in "Trends", historically complete process companies have outsourced some of the production process in order to be more lean and cost efficient

Pharmaceuticals

Overview	Trends	Drivers
• Historically among the world's most profitable industries • Total domestic expenditures for prescription drugs were roughly $234.1B in 2008, and is increasing • Worldwide sales are expected to increase 5-8% per year (similar figures in the US), and reach $1.1 trillion in sales by 2014 • In 2009, the US and Europe markets made up approximately 39% and 32% of the world wide market followed by Asia, Africa, and Australia (12.7%), Japan (11.3%), and Latin America (5.7%) • Typically high economic, regulatory and legal barriers to entry	• The growth of the industry has been supported by an aging population (in developed markets), lengthening of the life expectancy, and rising incidence of chronic diseases • Emerging markets are leading industry growth; CAGR is expected to be 14-17% through 2014 • Patent expirations are expected to peak in 2011-2012; resulting revenue loss has forced many companies to downsize to maintain high levels of profitability • Large pharma companies are increasingly relying on purchasing or partnering with young / niche firms to create growth • Uncertainties introduced by PPACA ("Obamacare") and lagging drug approval times by FDA is expected to slow growth • Insurers are getting increasingly more stringent on which medications they will reimburse	<u>Revenue</u> • New products – premium-priced breakthrough therapies that open new markets • Patent protection – commercial life of a branded drug is approximately 10 years • OTC – some pharmas are introducing OTC versions to combat generics when patents expire <u>Cost</u> • R&D – costs higher than any other industry; can take 10+ years for new drug development • Sales and Marketing – US companies spend approximately $20B/year on promotions

Medical Devices

Overview	Trends	Drivers
Industry Definition: any healthcare product that achieves its intended purpose *not through* chemical action or being metabolized **Products:** devices range in complexity from tongue depressors to multi-million $ imaging equipment. - Most common are surgical appliances/ supplies, surgical & medical instruments, electro-medical equipment, in-vitro diagnostic substances, irradiation apparatus (typically x-ray), dental & ophthalmic (eye) goods **Key Stats:** US industry includes about 11,000 companies with combined annual revenue of over $150 billion. Globally, the industry generates annual revenue over $400 billion. Major markets include the US, Japan, Germany, France, and Italy. - Industry is concentrated: 50 largest companies account for ~60% of revenue **Major Companies:** include Baxter International, Boston Scientific, Johnson & Johnson, Medtronic, GE & St. Jude	**Growth:** industry revenue is projected to grow on average 6.6%/yr. from 2012 to 2017 **Trends:** - Uncertainties introduced by PPACA ("Obamacare") and lagging device approval times by FDA is expected to slow growth - PPACA contains med device tax -will cost the industry $20 billion over the next decade - Increased government regulation around the globe threatening growth - Recent difficulties in retaining qualified manpower to design and produce devices - Aging population and increased access to care should help stem some of losses from forces mentioned above - Growing attention to healthcare in developing markets **Competition:** increasingly sophisticated pharmacologic products, growth in preventive medicine **Barriers to entry:** high for small players; economies of scale and access to capital are critical to negotiate complex regulatory and approval processes	**Revenue Drivers:** - expanding emphasis on healthcare in developing countries - standardization of regulatory requirements across countries - Growth in elderly population means increased demand for devices - Improved patient longevity due to higher quality healthcare - Innovation in product development due to strong scientific progress **Cost Drivers** - Research and development - Regulatory approval and compliance process - Federal and local taxes - Sales and marketing operations

Hospital Facilities

Overview

Acute care hospitals – 5,815 in 2008. Non profit entities account for 82% of this segment. Total revenues in 2008: $608 billion. Revenue CAGR (04-08) – 5.4%

Rehabilitation hospitals (both stand-alone units & those attached to a larger facility) – 203 in 2008

Psychiatric hospitals – 447 in 2008; Avg. length of stay has remained stable at 9-10 days

Specialized hospitals – orthopedics (25); obstetrics & gynecology (13); chronic disease (4); eye, ear, nose, and throat (6); & tuberculosis and other respiratory diseases

Nursing homes – 15,531 in 2008, occupancy rate ~84%

Assisted-living facilities, and home healthcare services.

Trends

Patient Protection and Affordable Care Act (**PPACA**) ("ObamaCare") reforms aspects of the private health insurance industry and public health insurance programs, increases insurance coverage of pre-existing conditions, expands access to insurance to over 30 million Americans, and increases projected national medical spending while lowering projected Medicare spending.

Shortage of Physicians and Nursing staff : As the population ages the shortage of primary care physicians would aggravate

Highly regulated by the government which is a key buyer for the hospital industry

Gov't: account for 47% of healthcare spend

Healthcare reform will extend healthcare insurance coverage to approximately 32 million of the previously uninsured by 2019

Consolidation: To reduce costs, nonprofit chains or individual nonprofit hospitals being acquired and/or entering into JV arrangements with the for-profit chains

Drivers

Sources of Revenue:

Inpatient admissions: Has remained flat at ~118 admissions/1000 population

Procedures: Decrease in admissions result of a shift towards procedures performed on an outpatient basis rather than in hospital

Reimbursement rates: Controlled by gov't

Demand Drivers: Increase in **unemployment** → **loss** of employer-based health coverage

Decline in the rate of elective procedures

Shift towards procedures performed in outpatient facility or physicians' offices that don't require an overnight hospital stay

New medical technologies reduce or eliminate the need for hospitalization

Increasing influence of **third-party payers**,

Ageing population

Cost Drivers

Labor Costs (Doctors, Nurses, Admins)

Uncompensated Care: high % bills not billed to insurance is written off as bad debt

Taxes: non-profits are exempt from some taxes

Kellogg School of Management Consulting Club

Healthcare Payors

UnitedHealthcare Humana Aetna WellPoint Cigna

Overview

WHAT PAYORS DO:
- Underwrite (assume risk of, assign premiums for) health insurance policies
- Provide admin services for self-funded plans (e.g. employers providing benefits with own funds)
- Help manage individuals' care

KEY INDUSTRY STATISTICS:
- **Revenues/Profits:** $707.4B / 28.3B (4%)
- **CAGR '07-'12 / '12-'17:** 2.8% / 5.1%
- **Number of businesses:** 927

PRIMARY PLAN OFFERINGS:
- **Fee-for-service:** Provider paid on one-off basis; patient choice not restricted
- **Health maintenance org:** Payer and provider integrated and pre-paid; cheaper, but patient choice limited
- **Preferred provider org:** Mix of FFS, HMO
- **High deductible:** Lower premiums but higher out-of-pocket obligation; patient has incentive to use services efficiently
- **Pharmacy benefits**

Trends

HEALTHCARE REFORM
Directly pressures payors' bottom lines by:
- Eliminating coverage caps, denials based on pre-existing conditions, etc.
- Increasing medical loss ratios (% premium dollars payers must spend on healthcare, with remainder going to admin and profit)
- Increasing gov. scrutiny of premium hikes
- Forcing payors onto exchanges for individuals; more price competition, less G&A scale than with employer groups

However, the law will bolster top-line growth by growing the insured population

COMPETITION
- The top four payors have ~35% share; the rest of the market is fairly fragmented
- Slow but steady consolidation expected to continue given profitability issues

MACROECONOMIC ENVIRONMENT
- Recession precluding payors from increasing premiums in line with healthcare cost inflation

Drivers

REVENUE DRIVERS
Payor revenues are largely dependent on external factors:
- Total health-related expenditures
- Number of physician visits
- Number of employed individuals
- Age of population
- Regulation and legislation

Payors also attempt to steal market share from one another by differentiating on:
- Steeper discounts on provider charges
- Broader network coverage
- Lower administrative fees
- Add-on services (e.g. case management)
- Attractiveness to individual consumers (once exchanges go live in 2014)

COST DRIVERS
- Purchases of medical and Rx services/ products) comprise ~72% of costs; influenced by utilization and cost inflation.
- Relative to other sectors of healthcare, the health insurance industry is neither capital nor labor intensive.

Banking and Financial Services

Overview

Diversified Financial Services firms: large financial conglomerates (e.g. JP Morgan Chase & Co.) which combine insurance, securities, and lending businesses

Consumer finance firms: primarily lend money to consumers: mostly through small to midsized loans ($1,000 to $75,000). The main products include home equity loans, credit card loans, etc

PE/VC firms: invest in and help manage or guide businesses with hopes of company growth resulting in profits from a later sale

(Additional Types under **Drivers**)

Interest Rates are at zero, meaning banks will make no money by investing in government bonds. This is the federal reserve encouraging banks to lend money

Customer deposits in banks are FDIC insured up to $250,000, meaning the government will make you whole if the bank loses that money

Trends

As a result of recent financial crisis, **regulations have increased** (controlled by Treasury Department, The Federal Reserve, House and Senate bills)

The US government intervened in 2007-09 to lend money to banks, insurers, and other key players to keep the financial system afloat.

Consolidation of banks
Trend towards large "financial supermarkets" like Citi may be reversing, as many large banks sold off divisions for needed cash during the downturn

Post- financial crisis, many financial institutions have stopped **proprietary trading**, or placing bets with their own assets.

The Dodd-Frank act, which has not been fully implemented, includes **new and consolidated federal regulatory agencies**, stricter **capital requirements** for banks, and regulates the trading of certain **derivatives**.

Drivers

Revenue Drivers
Commercial Banks earn money by reinvesting customer deposits in higher-yielding funds or lending at higher rates and charging transaction fees
Investment Banks charge fees for advising corporate and governmental clients on mergers, acquisitions, restructuring, and debt and equity issuances
Insurance Companies earn money by taking in monthly premiums from customers, who receive a payout if an event occurs
Credit Card Companies (Visa / Discover) earn fees from customers and merchants by handling the complex processing necessary. AMEX does the same, but also lends the customer money.

Cost Drivers
Research (whether to buy/sell securities, or suggest a specific merger)
Salary and benefits, supplies, insurance.
Losses on investments like loan defaults
Risks, such as a sudden demand from many customers to redeem their money

Media and Entertainment

Overview

- Media and entertainment companies create, license and / or distribute content (TV shows, movies, music, news, video games, books, magazines, radio shows, advertising, etc.)
- The industry has long been known for conglomeration; developing and acquiring multiple brands and multiple distribution channels for their dissemination

INDUSTRY STRUCTURE:
Total: Global revenues of $1.5 T
Consumer / End-User Spend: $1 T
Advertising Spend: $500 B

- The leading 10 companies in the industry account for one third of revenue
- This includes some cable, telecom, hardware, software and internet spend which is hard to split from "content"
- Other national or regional conglomerates and digital startups comprise remaining revenue

Trends

MACROECONOMICS:
Consumer and advertising spending on M&E is tied to economic growth, though some segments (cable, internet access) are resistant to downturns and / or more impacted by secular trends. Annual growth slowed in 2008 and the industry retracted by 2.4% in 2009. Growth has rebounded to ~4.5% since then.

DIGITAL:
The biggest long-term issue for industry players is how to put content online. The internet poses a number of challenges:

- Lowered barriers to entry for creating / distributing, increasing competition
- Increased piracy due to high-speed connections and illegal download sites
- Consumer expectations of lower priced / free content, available on-demand
- New intermediaries and lack of standards (Google search, iOS vs. Android app platforms, new ad formats)
- Limitless advertising inventory and less consumer attention, reducing ad prices
- Distribution and standing out harder given huge libraries (Amazon books, iTunes)

Drivers

Revenue Drivers
Depending on the company's focus, the below revenue mix differs. There has been a lot of experimentation in adapting these business models to digital age:

- **Consumer / end-user**: More of a focus on subscriptions, multi-device access and free or "freemium" with micro-transactions
- **Advertising**: More of a focus on direct response and tying ad exposure to purchases or clicks, also use of web usage data to micro-target, raising privacy issues
- **Licensing / distribution:** More focus on retransmission fees TV networks charge to cable cos. and revenue shares with online marketplaces

Cost Drivers
The M&E industry is **labor intensive** in terms of costs for "creative" talent and sales staffs, which can comprise 40% - 50% of costs for a company or project (one movie). **Marketing** also represents a large portion of costs, given the competition for consumer attention. Capital investments in digital technologies represent a newer but growing area of cost

Telecom

Overview	Trends	Drivers

Industry:
Made up of companies that allow people to connect all over the world through a complex networks of phones, mobile phones, and internet-linked PCs.
 	
Products:
This is not a comprehensive list, but it does provide examples of products from the Telecom industry:
• Telephone
• Fiber optics
• High-speed internet
• Radio
• Satellite communications
• Cell phone networks
 	
Key Ratios:
Churn Rate –rate at which customers leave for a competitor. Telecom industry has highest churn rate of any industry.
Average Revenue Per User (ARPU) – understand purchase level for each user
Broadband – high-speed internet access tech
Telecommunications Act – stimulate competition in the industry
	Growth:
	• Growth in this industry comes from services delivered over mobile networks
	
	Trends:
	• Deregulation and innovation changed the competitive landscape of this industry
	• Telecom companies are beginning to expand out of telecom and into enter other industry spaces
	  • An example of this is Comcast entering the media and entertainment industry
	• The reverse is also true where outside industry companies are expanding into the telecom industry, e.g. Google Fiber
	Competition:
	• The telecom industry requires large capital investments upfront, which creates a potential barrier to entry for new entrants
	• No significant supplier power due to large quantity of equipment suppliers
	• Growing buyer power due to access to substitutes and the telecom becoming a commodity
	• Deregulation and receptiveness of the market has made this industry incredibly competitive
		Revenue:
		Revenue = subscription fee x # of subscribers
		
		• Subscription fee structure will vary by service offering and telecom company
		  • Companies will try to maximize their revenue through the structure of their fee arrangement
		  • Must be very conscious of industry pressures related to fee structure
		• Bundling services is a common practice in the industry in order to maximize revenue
		• Another opportunity for telecom companies to make revenue is to provide network connectivity to other telecom companies
		
		Costs:
		• Fierce competition in an essentially commodity market has led to cost competition between companies
		• Efficient billing systems are a way for companies to decrease cost and improve margins
		• Expanding a company's network and service offering are large cost drivers
		• Smaller players may have to pay for connectivity which will increase their costs

Retail

Overview

- Retail trade makes up $3.8 trillion in sales (second largest US industry)
- Retail industry is comprised of the following sub-industries:
  - General merchandise
  - Apparel
  - Consumer electronics
  - Home improvement
  - Office supplies
  - Drug retail
  - Automotive retail
  - Specialty
  - Food retail
  - Hypermarkets/super-centers

Trends

- The industry has generally been negatively impacted by the economy (discount retailers have done best)
- Due to frequent price promotions, lower profit margins are common in the industry
- Retailers are expanding their share of private label brands
- Many specialty retailers are selling services to differentiate themselves from rivals
  - Best Buy – Geek Squad, Staples – Copy Centers, Pet Smart – Grooming and Training
- Online sales are increasing faster than traditional retail sales (currently 3-4% of retail industry revenue)

Drivers

<u>Revenue</u>

- Promotions – retailers drive traffic through price reductions and in-store displays
- Consumer spending/confidence – retail industry is leading indicator for economic conditions (discount retailers generally do better in bad times than specialty retailers)

<u>Cost</u>

- Inventory management – critical to minimize cost, increase response times and increase profitability
- Real Estate – number of stores and location decisions are important given high fixed costs

Household Non-Durables

P&G · Kimberly-Clark · SC Johnson A Family Company · Colgate-Palmolive · L'ORÉAL

Overview

Industry Definition: Manufactured products with useful life < 3 years

Products

- Household – soap, detergent, cleaning, paper towels, pet care… (US Revenue ~ $100B per year)
- Personal care: hair care, cosmetics, fragrances, skin care, oral care…(US Revenue ~$250B per year)

Major Companies: P&G, Colgate-Palmolive, Ecolab, Henkel KGaA, SC Johnson, Nestle, Georgia Pacific, Kimberly Clark, International Paper, Estee Lauder, J&J, L'Oreal, Unilever

Competition: Markets tends to be concentrated

- Scale, shelf placement at retail critical and promotions critical
- Small companies compete through product specialization or targeting local markets

Trends

Growth: Category is expected to grow at a low to moderate pace; most growth from emerging economies

Trends:

- Industry concentration
- Power of key customers (Wal-Mart)
- Focus on export growth to tap into middle class in emerging economies
- Brand rationalization/optimization
- Private label gaining share and improving in quality
- Pressure for environmental sustainability, compliance and product safety
- Increase cost and scarcity of raw materials
- Growing demand for organic / environmentally friendly products
- R&D– more advanced compounds / multi-use products

Drivers

Revenue

- Household products cash flow generally even throughout the year
- Personal care products are seasonal with loading in first half of year
- New product innovation
- Marketing/Promotions
- Brand equity / loyalty- insulates against switching & price wars

Costs

- Capital intensive significant investment to improve efficiency
- Significant spends on marketing. sales and R&D
- Raw materials costs significant as much as 50% of revenues
- Futures contracts to protect cost of inputs
- Environmental and other regulatory compliance in production / waste disposal

Household Durables

Overview

Industry Definition: highly durable goods useful for at least 3 years

Products: industry if often classified into two segments:

- Electronics (Brown Goods) – TVs, A/V, computers, cameras, tools (>$500B globally)
- Appliances (White Goods) – Refrigerators, AC, microwaves (~$160B globally)
- Home furnishings/furniture are also often considered durables (~$400 globally)

Major Companies: GE, Sony, Samsung, LG, Apple, Whirlpool, Panasonic, Xerox, Cannon, Philips, Furniture Bands International, IKEA

Competition: A/V competes with PCs and games for in-home entertainment

Trends

Growth: Despite recession, demand surging as emerging markets (India, China, Mexico…) buy basic goods due to emerging middle class real estate expansion and access to credit

Trends:

- Slowing housing market in the US has directly impacted purchases
- Raw material costs for appliances (oil and precious metals) increasing
- US manufacturers losing market share to foreign producers
- Demand for products that work with smart grid technology
- Shift from brick and mortar to internet purchases
- Scrutiny re: "dumping" products in competitor markets
- Recent scandals re: working conditions in factories

Drivers

Revenue

- Cash flow partly seasonal (holidays, real-estate purchases)
- Long purchase cycle means goods sold on higher margin
- Demand often tied to fluctuations in real-estate market
- International competition putting downward pressure on price
- Planned obsolescence
- Stiff competition and discounting

Costs

- Often carry large inventories
- Capital intensive manufacturing and R&D processes
- Compliance with regulation re: production and waste disposal
- Currency translations and tariffs impact profit
- Supplier network and sourcing
- Distribution network and shipping

Restaurant

Overview

- Restaurant industry makes up $604 billion in sales
- Restaurant industry is comprised of the following sub-industries:
  - Quick-service restaurants (QSR)
  - Full-service restaurants
- One of the largest private sector employers (~13M jobs)
- Many QSRs operate as franchises

Trends

- Growth and profits have been hurt by soaring food and energy prices
- Explosive growth overseas, especially in QSR industry, due to strong economic growth and growing middle class in emerging markets
- Health and wellness concerns continue to pose problems for QSRs and have resulted in healthier menu options
- Newer "fast casual" restaurants like Chipotle and Panera threaten to steal market share from both QSR and full-service restaurants
- In general, restaurants have been negatively impacted by the economy and reduce consumer spending

Drivers

<u>Revenue</u>

- Food and beverages (usually the higher margin products)
- Merchandise
- Catering
- Franchising fees
- Licensing

<u>Cost</u>

- Labor – largest cost for restaurant operators
- Raw materials – accounts for roughly a third of sales
- Real Estate – number of restaurants and location decisions
- Other – product innovation, consumer research

Non-Alcoholic Beverages

Overview

Non-alcoholic beverages: (NA) industry is highly concentrated: 89% of US retail sales are a few companies: Coca-Cola, PepsiCo, and Cadbury Schweppes PLC (Dr. Pepper & 7UP)

Main NA beverage categories: 1) Carbonated soft-drinks 2) Bottled water (fastest growth) 3) Juice drinks 4) Sports drinks

Trends

Growth in soda is flat. Bottled water's growth will continue well into the future because of increasing demand for natural, organic products.
More manufacturers work with consumers to understand their packaging preferences

Hispanics, followed by Asian-Americans are fastest growing segments.

The low-carbohydrate trend is virtually nonexistent outside of the United States and the United Kingdom
Many US consumers believe that the "better-for-you" substitutes do not taste as good as the traditional brands, and a large majority of them remain committed to traditional high-carb, high-sugar foods.

Competition
Energy drinks is a **growing and competitive** segment. These drinks turn into fashion among youngsters.
Barriers to entry – not high for small players, however economies of scale and brand are important issues

Drivers

Revenue Drivers:
Increasing market share:
new segments (incl. international, especially emerging markets)
new products (incl. acquisitions of niche lines)
expanding distribution channels (cooperating with Wal-Mart Stores, etc)
Squeeze existing users more (premium labels, complementary products such as Coke and chips)
Innovation in product and merchandising strategies, such as the use of mobile internet and online shopping

Cost Drivers
Packaging – the cost of plastic increases over the years
Taxes - on inputs (eg sugar) and vice taxes (falls on end users – reduces demand)
Wages within the industry are noticeably higher than the national average

Beer, Wine & Distilled Spirits

ROBERT MONDAVI

Overview	Trends	Drivers
<u>Beer/Malt Beverages:</u> major products are malt beverages, primarily beer. Major companies: Anheuser-Busch InBev (Belgium), SABMiller (UK), Heineken (Netherlands), MolsonCoors & Boston Beer (US) - Top sellers: Budweiser, Bud Light, Heineken, Corona, Skol, Stella Artois **<u>Wine:</u>** make wine and brandies from grapes. Major companies: Constellation Brands, E&J Gallo, & Jackson Family (US), Veuve Clicquot Ponsard (France), Gruppo Italiano Vini (Italy) Viña Concha y Toro (Chile) - Red & white containing ≤14% ABV (60% of market); Brandy, & other wines (15%); Dessert wine, coolers, & effervescents (~10%) **<u>Distilled:</u>** distill, blend, or mix liquors. Major companies: Brown-Forman (US), Diageo (UK), Kweichow Moutai (China), & Pernod-Richard (France) - Major products: whiskey & bourbon (10% industry revenues); cordials &liqueurs (10%); gin (5%). Other products include vodka, specialty liquors & bottled cocktails	**<u>Growth:</u>** **Beer –** forecast to grow at 3% CAGR between 2012-2016 **Wine –** forecast to grow at 2% CAGR between 2012-2016 **Distilled -** forecast to grow at 3% CAGR between 2012-2016 **<u>Tends:</u>** **Beer –** Consolidation: 8 largest brewers account for ~90% of industry revenue; success of small, independent craft brewers have influenced larger brewers; growing popularity for seasonal brews **Wine –** reliance on restaurant sales ties performance to food service sector, increasing demand from baby boom generation, agritourism (winery visits) **Distilled –** mixed fruity drinks increasingly popular, flavored malt beverages evolving, rise in grain prices **<u>Competition:</u>** Beer, Wine, Distilled compete against each other. Energy drinks **<u>Barriers to entry:</u>** not high for small players, however economies of scale and brand are important issues	**<u>Revenue Drivers</u>:** **Increasing market share:** **new segments** (incl. international, especially emerging markets) **new products** (incl. acquisitions of niche lines, increasing variety of products) **expanding distribution channels** (cooperating with Wal-Mart Stores, increasing importance of convenience stores) **Squeeze existing consumers** more (premium labels, other occasions for use) **Innovation in product development, packaging and merchandising strategies**, such as new flavored malt beverage varieties, use of mobile internet, sports and other event promotion **<u>Cost Drivers</u>** **Packaging & Other raw input costs** – continue to rise over time **Shipping –** heavy products and rising gas prices **Taxes & Regulation** – complex three tier distribution system and heavy federal/state taxation

Mining and Precious Metals

RioTinto | AngloAmerican | bhpbilliton

Overview

Industry:
Includes the constructing and operating mines as well as building and operating production facilities.

Products:
Products include a wide variety of precious metals including gold, silver, copper, diamonds, and lead. Gold is the most popular precious metal for investors.

Industry Structure:
- Industry is not vertically integrated

Three types of firms
1. Exploration – explore and prove gold exists
2. Development – develop mines on sites that have proven that the precious metal exists
3. Production – full-fledged mining companies

Key Ratios/Terms:
Mine Production Rates – quantity produced
Scrap Recovery – supply of metals from sources other than mines, e.g. old jewelry
Future Sales by Producers – indicates producers expectations on future gold prices
Bullion – refined metal that is high quality

Trends

Growth:
Growth of each precious metal will be unique compared to other precious metals

Gold
- Growth for gold is inversely related to the stock market (i.e. it has a negative beta), so the gold market experienced large growth during the recent recession, but has decreased since the recovery of the market

Trends:
- Most gold that is mined today is used for jewelry as opposed to currency or other possible uses for gold and other precious metals
- Technology has greatly changed the mining industry making it more efficient

Competition:
- High capital requirements creates a deterrent to entry to potential new entrants
- Government regulations are main consideration for supply concerns
- Substitutes are other precious metals
- Do not compete on price, but do compete for land with other companies

Drivers

Revenue:
Revenue = output x the selling price of gold

- Prices are determined by market forces
- Output varies by demand and market price
- Low operating costs allow a mine to have higher/more stable outputs at lower market price points and therefore increase revenue
    - E.g. if it costs a company $250/ounce to produce, then they will not produce until the price for gold increases over $250/ounce

Costs:
Main costs of production:
Location – Understand cost in certain areas and risk due to political unrest
Ore Quality – Oxide ores are better because it is easier to extract the precious metals
Mine Type – Most underground mines are more expensive than open pit mines

- Company's must manage costs in order to maintain good financial health and production levels in the face of volatile gold prices
- Producers usually publish their cost of production in their annual report

Utilities

Overview

Industry:
Generate, manage, and provide electrical power to the general population

Historically the industry was run by monopolies, but is now disintegrating into the following four supplier segments:

Supplier Segments:
Generators – Create electrical power
Energy Network Operators – Sell access to their networks to retail service providers
Energy Traders and Marketers – buy and sell energy futures and derivatives. Help secure electricity at a stable, predictable price
Energy Service Providers and Retailers – sells energy to end user

Key Ratios/Terms:
Power Purchase Agreements (PPA) – contract between power producer and its customers
Megawatt Hour – basic industrial unit for pricing electricity
Load – amount of electricity delivered
Federal Energy Regulatory Commission (FERC) – oversees rates and service standards

Trends

Growth:
- Consumption of electricity expected grow rapidly as the world becomes increasingly "electrified"
- Energy Information Administration (EIA) projects that 40% more electric generating capacity will be needed by 2020 to meet growing demand
- Short term direction of the market still remains a risky bet

Trends:
Utility companies are undergoing major changes due to:
- Regulatory changes
- Demand fluctuations
- Price volatility
- New competition

The once stable industry has become much more unstable and risky

Competition:
- High barriers to entry due to large capital requirements and significant regulation barriers
- Fierce rivalry between competitors because product is a commodity

Drivers

Revenue:
Revenue = $ per megawatt per hour x utilization

- Wholesale electricity prices are no longer set by regulatory agencies
  - This heightens the risk of uncontrollable price increases
- Forwards and future options provide energy buyers (not at the consumer level) the tools to help hedge against large volatility in price

- Utilization will vary by utility company and their market strategy
- See the "Growth" section for more information on short term and long term utilization projections

Costs:
- There are high fixed costs upfront in order to build new generation plants
- A lot of capital is required to enter the market
- Marginal costs are relatively low, i.e. it is not costly to offer one more kilowatt-hour to one more person
- Economies of scale are a very effective way to reduce costs in this industry

Additional Industry Research Resources

Several sources may help you further research specific industry topics

- For a basic overview
  - Industry overviews provided on consulting firm websites
- For more in-depth background on industry context and trends
  - Vault industry guides (note: these are lengthy!)
  - Investopedia – http://www.investopedia.com/features/industryhandbook/
- For in-depth information on revenue and cost drivers
  - Standard & Poor's NetAdvantage guides, which include guidance on how to effectively analyze and value companies
- For up to date information on industry developments
  - WSJ (can be accessed for free on CMC website's Factiva link)

All of these resources are public or can be accessed via CMC's Research Guide portal

MasterTheCase.com

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