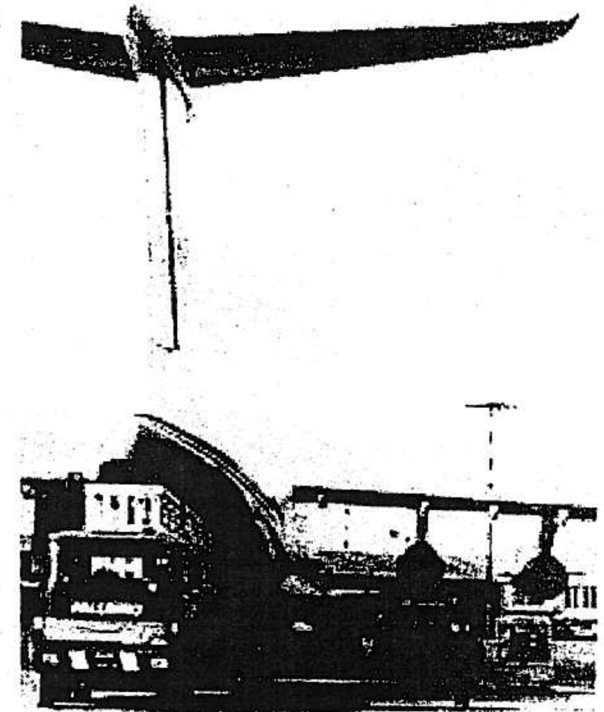
MasterTheCase.com

Top Consulting Interview Prep

All-State Shipping Company



Josh Jensen - Class of 2007

Our client is All-State Shipping Company

CHICAGO GSB

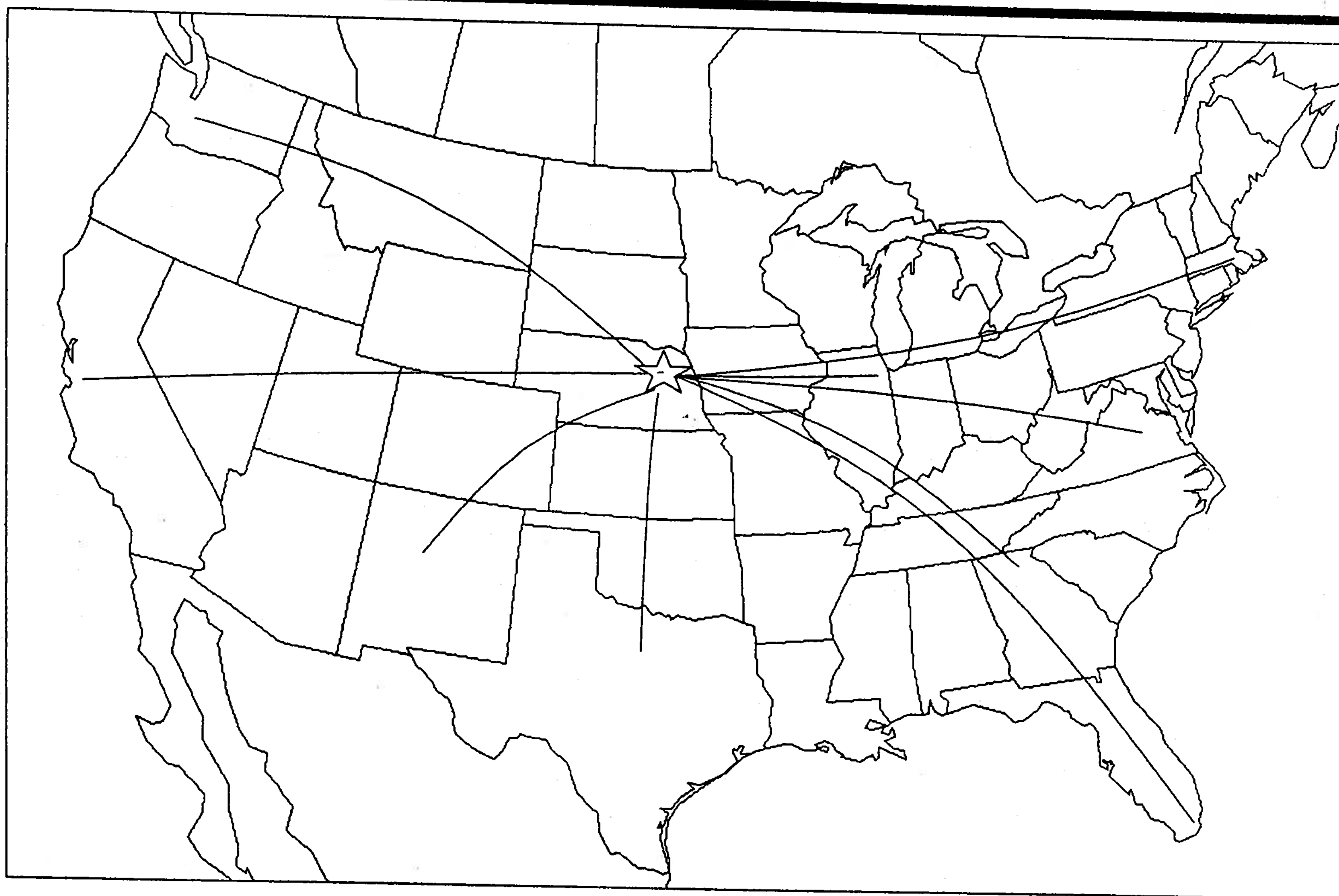
- All-State Shipping Company ships packages to and from retail locations throughout the United States. Customers pick up and drop off packages at these locations. Last year revenue totaled $120 million.

- Our client is the head of transportation. His duties are to ensure the physical transportation of packages from the offices to the central hub, and from the hub to the destination. All transport is by air.

- Our client has seen recent increases in costs that may strain competition. All-State Shipping Costs are believed to be four percent higher than it's direct competitors.

- Bain's task is to identify means of reducing costs.

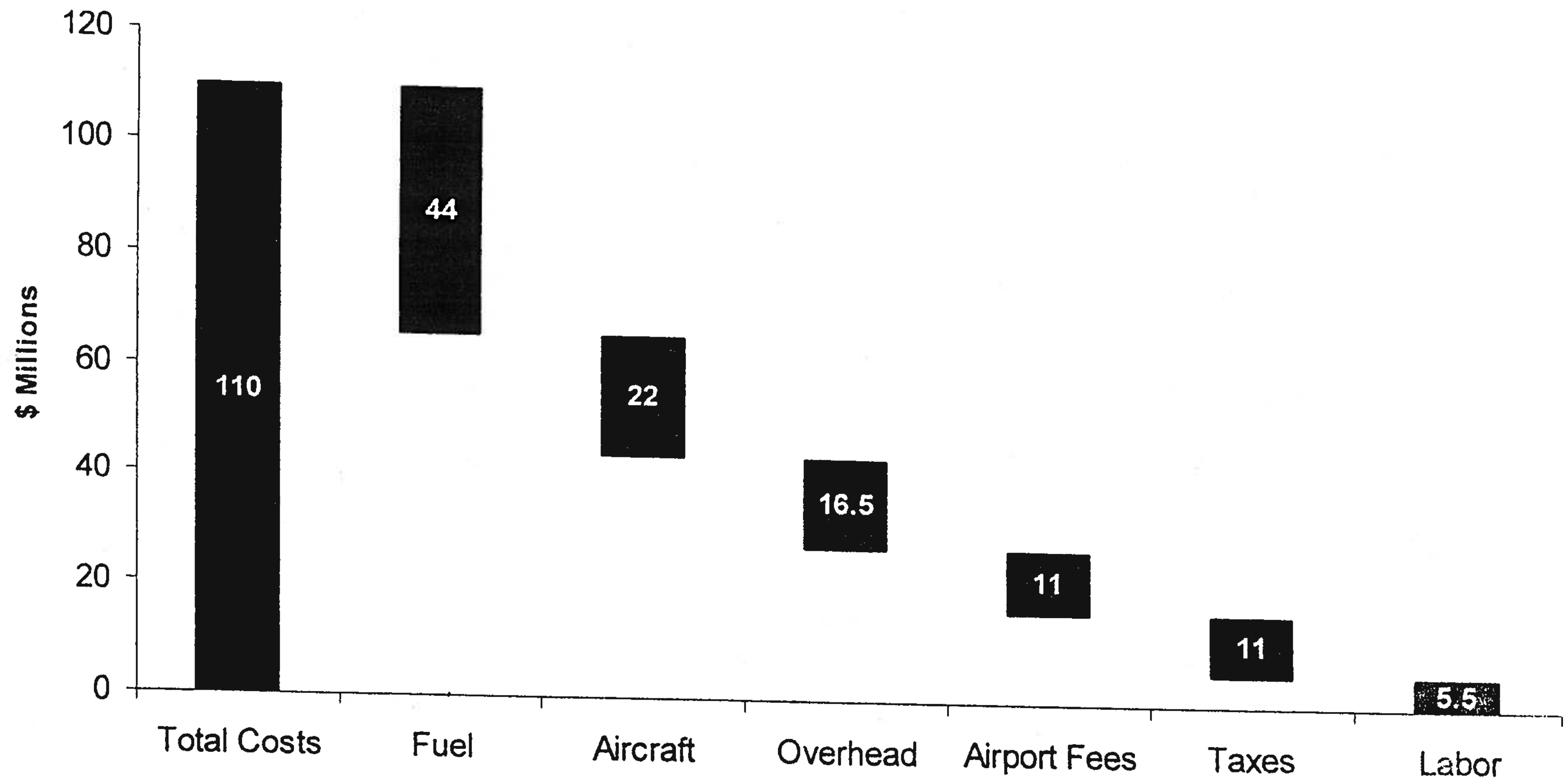
All-State Shipping Company Route Map



Routes shown are a subset that is indicative of the full routing system.

All-State Shipping Company Cost Structure

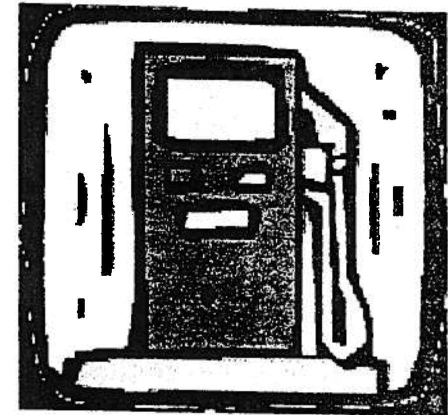
CHICAGO GSB



ruel Cost

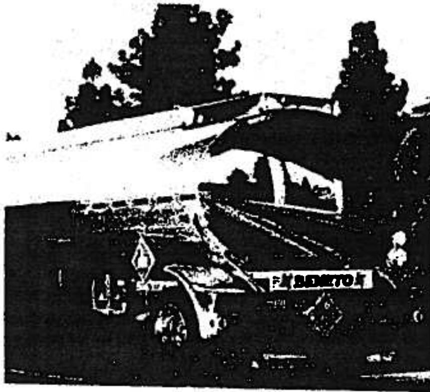
The average price of Fuel at Airports in the United States: $2.00

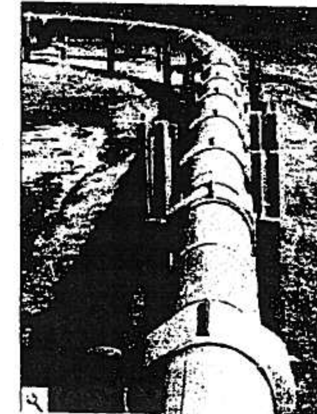
All-State Shipping average cost of Fuel: $2.40



·uel Transportation Options ıvr 500 mile gap

CHICAGO GSB





Truck

Current Method.

Work is performed by contractors; there are no fixed costs.

Each truck charges $840per roundtrip.

Each truck can carry 2000 gallons per trip.

Rail

Each roundtrip by train will cost $1000.

Each train can carry 100,000 gallons.

Construction of the necessary rail system will cost $10,000 per mile.

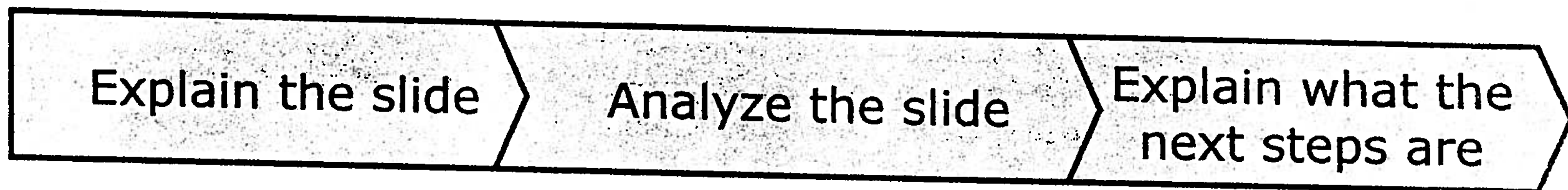
Pipeline

Pumping fuel through the pipeline will cost 0.40 cents per gallon per 100 miles

Construction of the pipeline will cost $3,000 per mile.

Interview Guidelines - General

- Success on this case requires the ability to draw conclusions from slides and make calculations to support recommendations.
- A good candidate should be able to provide a structure that touches on both quantitative and qualitative issues.
- A good candidate should be able to have an analytic way to observe the slide, similar to the approach below:



  - –Explaining the slide – basically reading out-loud all the information on the slide starting with the tag line, going through the axis's and through the data given.
  - –Analyzing the slide – coming up with the most important takeaway from the slide and drilling down to other issues.
  - –Next steps – understanding and conveying which path you want to take next.

Interview Guidelines – Specific (1)

CHICAGO GSB

This case is progressive – the candidate should uncover more of the story with each slide.
Issue Slides 2 and 3 initially.

1. Case Question – Develop a Framework (slide 2)

- A traditional framework is not essential; however, the candidate should be able to brainstorm possible cost concerns. The candidate should avoid non-cost issues.
- The client can only control costs associated with transportation. Redirect the candidate as needed.

2. Route Map (Slide 3)

- If asked, the current transportation network was optimized by a prior Bain study. Assume that it cannot be improved.
- The candidate should consider why the hub was chosen (for its central location). If asked, inform the candidate that the hub is in a small town and that the shipping company owns the facility (it is not a public airport).
- When the candidate is ready to discuss cost specifics, issue Slide 3

3. Cost Structure (slide 4)

- The candidate should look for costs which are likely to be reducible.
- If asked, let the candidate know that although there is no data on competitors costs, they send and receive packages in the same airports.
- The candidate should identify fuel as being the best cost to examine further. If asked, fuel is bought in competitive markets at airports, and competitors don't get discounts.
- The most important realization for a candidate is that the hub is not at a major airport. If candidate asks for fuel costs, give the next handout

4. Fuel Costs (slide 5)

- If asked, fuel is purchased every time a plain lands. Therefore half of fuel is purchased at the hub at $2.40; other half purchase at $2.00.
- Ask Candidate why the client's fuel price may be higher – answers may include lack of scale economy or inefficient transportation.
- If asked, tell the candidate that fuel is shipped to Nebraska, but closest port is 500 miles from the distribution center. The fuel is transported by truck over the remaining distance.
- Candidate should calculate the effect of this difference in fuel price: Yearly fuel consumpt. = ($110M costs * 0.4 fuel share)/ $2.20 avg. price = 110M*0.4/2.20 = 20M gallons. Also could be calculated as 44M / $2.20 = 20M.
  Yearly excess cost = 20M gallons * 0.20 excess cost = $4M
- A strong candidate will recognize that $4M is approximately the cost disadvantage(4/110 ≈ 4%)

Interview Guidelines – Specific (2)

5. Evaluate Alternatives (slide 6)

- Ask candidate to offer quick insight as to which options seem attractive.
- Candidate should be able to construct a table of transportation cost per gallon :

Method		cost/gallon
Truck	840/2000=	$0.42
Train	1,000/100,000=	$0.01
Pipeline	0.004*5=	$0.02

- The train option saves $0.01 more than the pipeline, but is significantly more expensive. Candidate should therefore focus on the pipeline.
  - If there is time later, candidate might show that $0.01/gallon yields 200,000 per year add'l cost savings, which is not significant compared to the 3.5 million add'l investment.
- Candidate should realize that the pipeline will lead to $0.40 savings per gallon, therefore leading to 'normal' fuel prices and no cost disadvantage
- What about the cost of this improvement?

  3,000 per mile * 500 miles = $1.5 million

  Considering this will save about $4 million per year, this seems like a clearly good choice.

6. Conclusion

Candidate's conclusion should roughly cover these points:

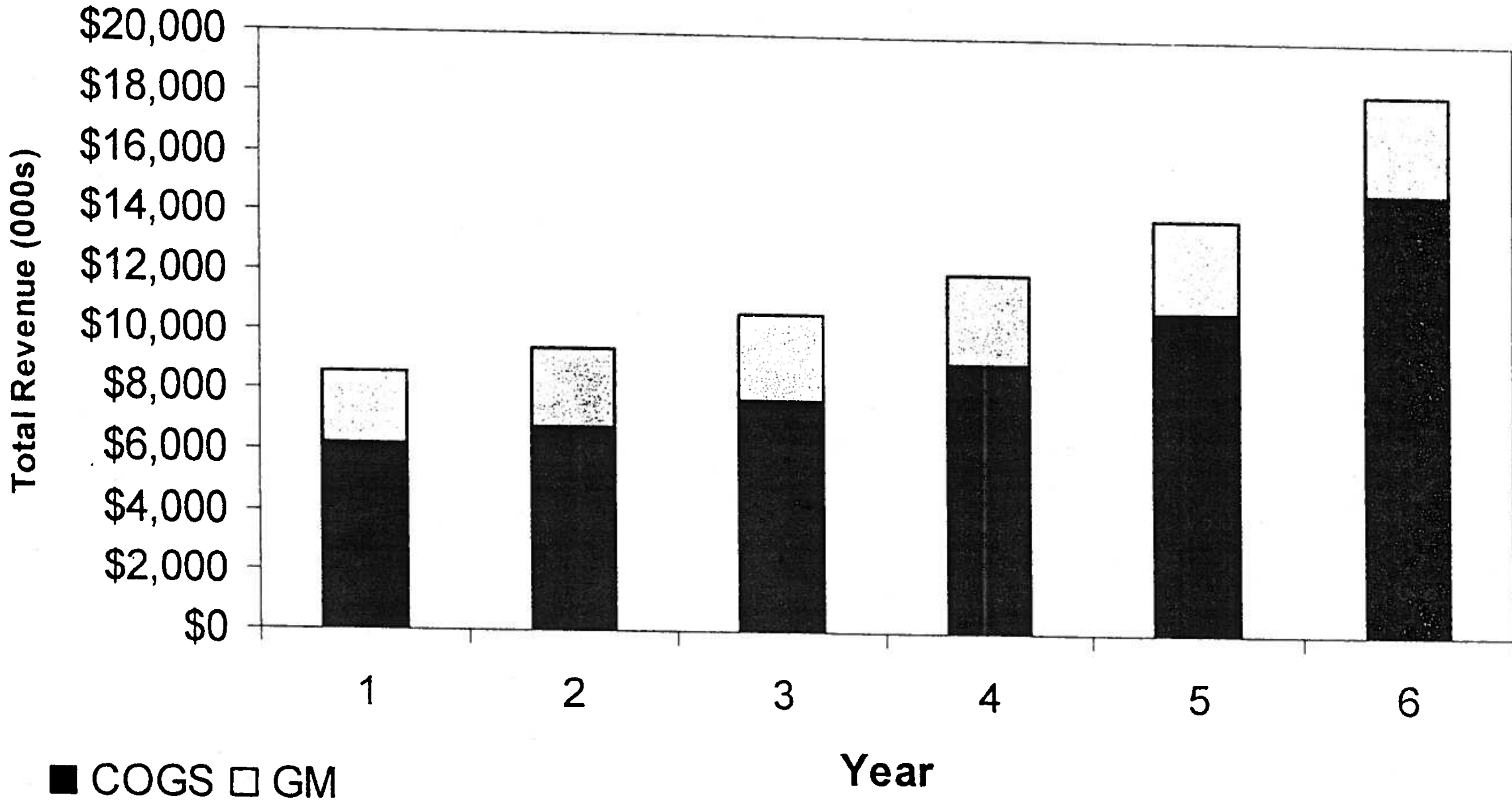
•To reduce costs, I recommend installing a new pipeline to reduce fuel cost.

•The source of All-State Shipping Companies cost disadvantage is the high cost of fuel it pays. This is because significant refueling activities occur at the distribution center, where a premium is paid to transport fuel.

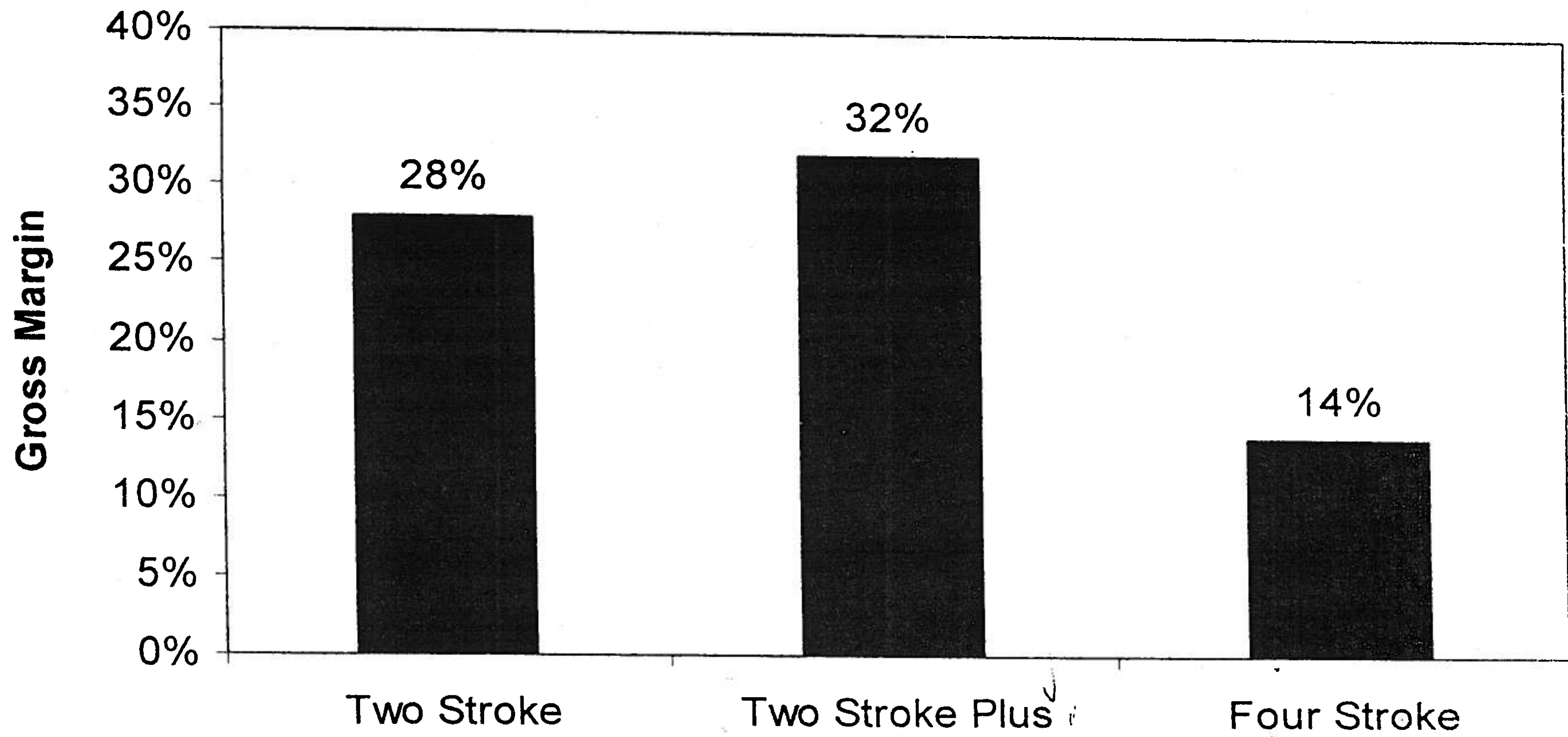
•By constructing a pipeline, fuel costs at the hub will be reduced by $0.40 per gallon, which will keep fuel costs equivalent to the national average and eliminate the cost disadvantage.

•The pipeline will cost 1.5 million. Looking only at the first year, there is a $2.5 million profit as a result.

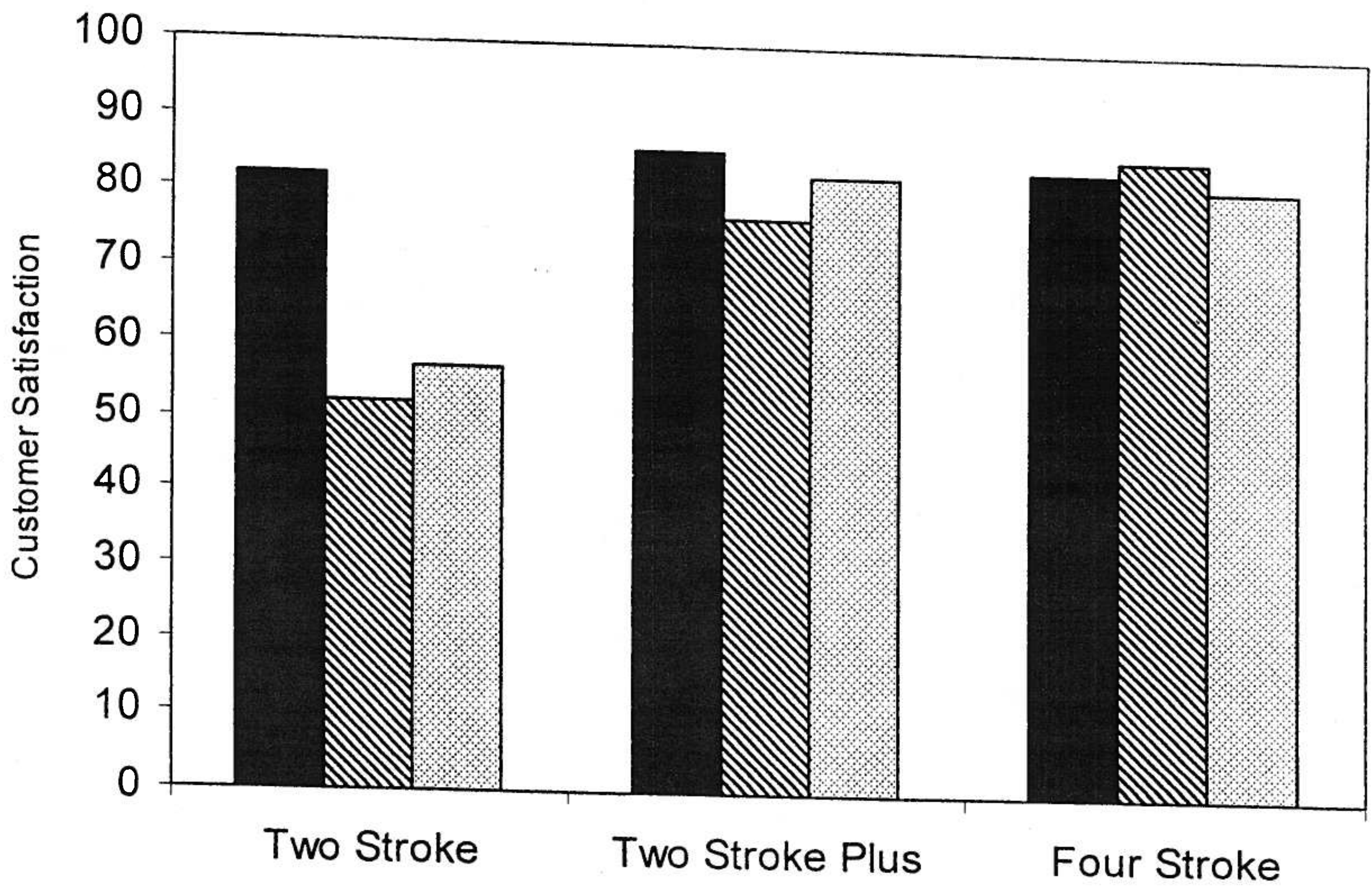
Revenue and Profitability



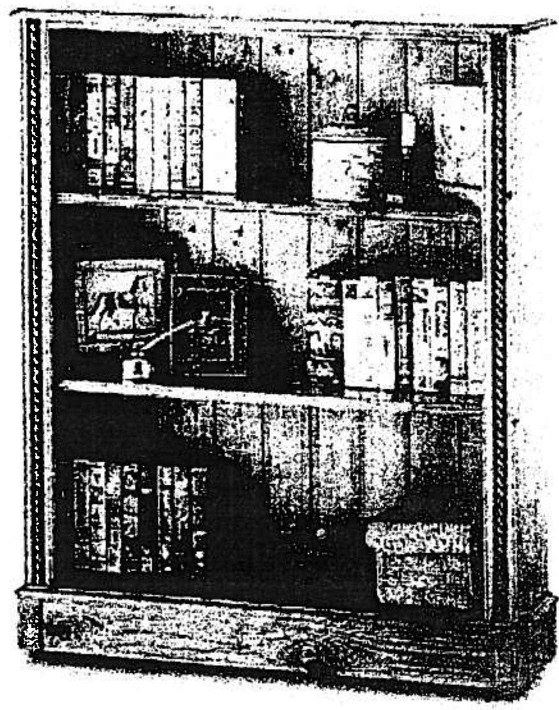
Profitability by Engine Type



	Two Stroke	Two Stroke Plus	Four Stroke
Percent of Sales:	26%	12%	62%
Average Retail:	$855	$1420	$1640


Customer Satisfaction by Engine Type
Customer Satisfaction
100
90
80
70
60
50
40
30
20
10
0
Two Stroke
Two Stroke Plus
Four Stroke
Cruising Speed
Quietness
Engine Exhaust

Brass Tacks Information Services Case

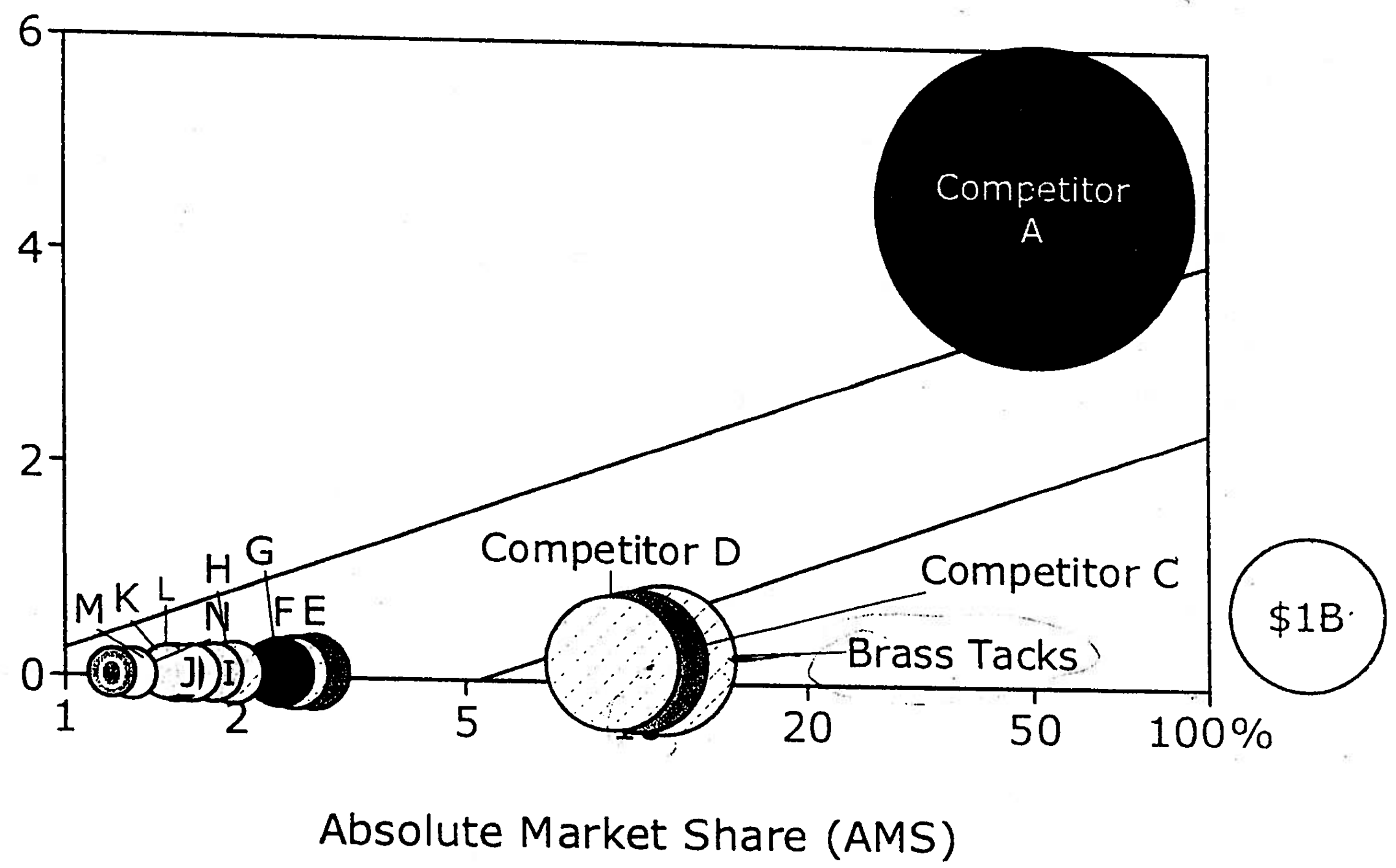


Special thanks to Edwin Van Dusen, Kellogg 2004, This case is based on an old Kellogg case #23

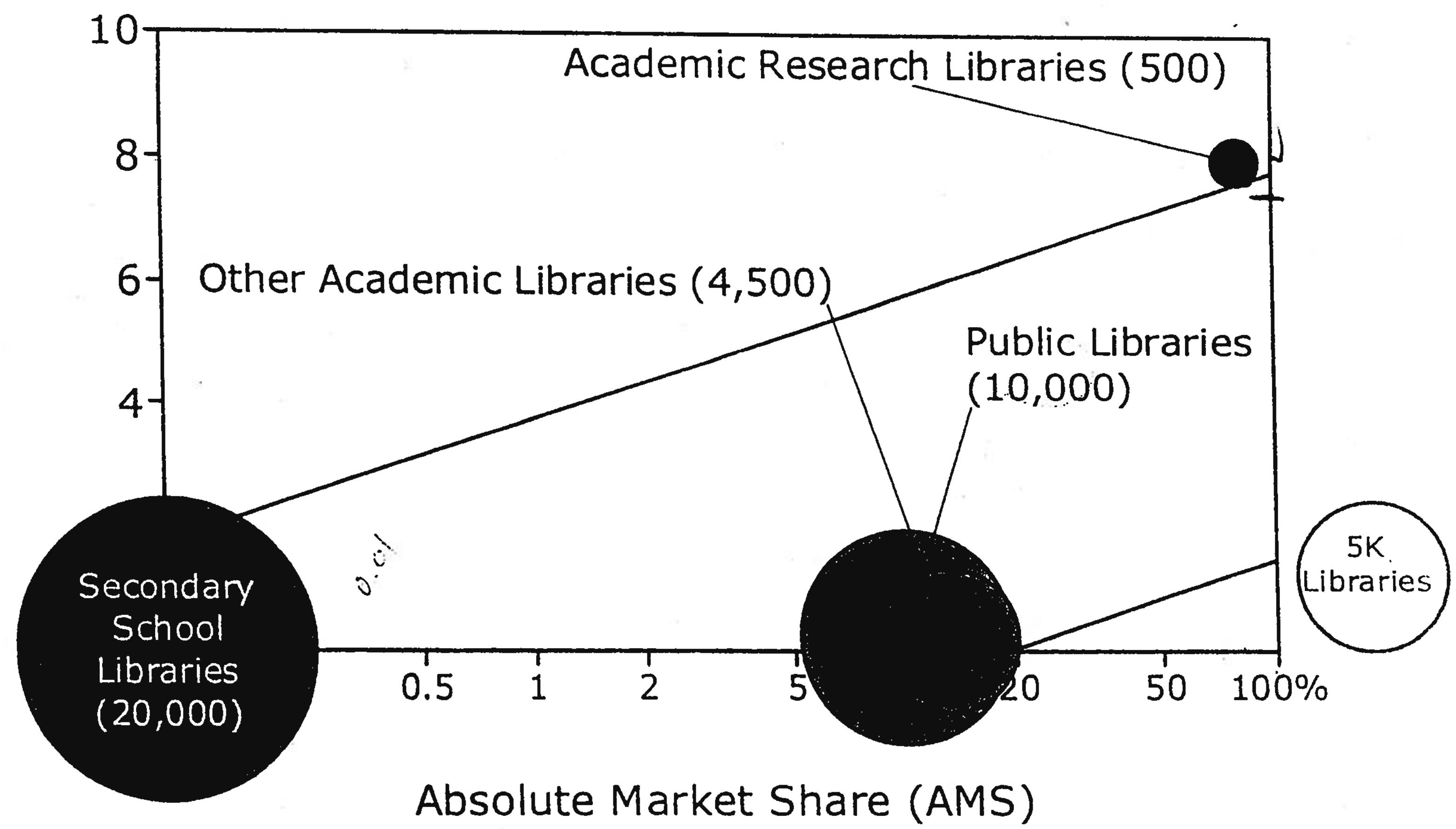
Our client is called Brass Tacks Information Services (BTIS)

- BTIS is a library information services company that provides a computerized article search product on the World Wide Web (WWW).
- The product allows users in a library to locate articles by keyword search.
- The company currently has a weak market share of only 10% of all annual subscription revenues.
- BTIS wants to understand:
  - (1) why it has so small a market share;
  - (2) what could be done to improve the situation; and,
  - (3) where it should focus its resources.

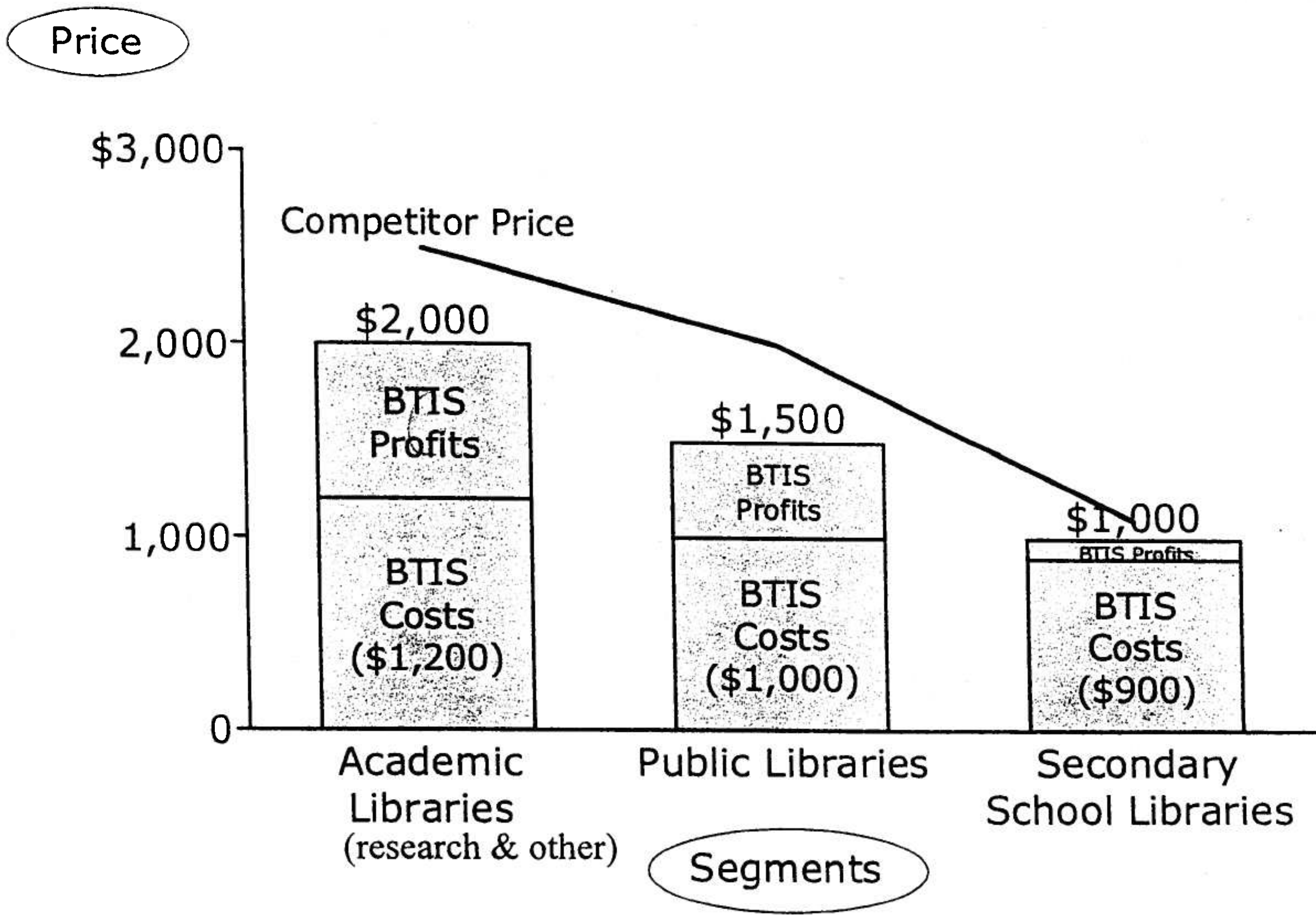
This graph shows the current competitive landscape in the worldwide information services market



..is graph outlines Brass Tacks' m... .et segmentation and client product data



The pricing and profit schedule for each customer segment are shown below

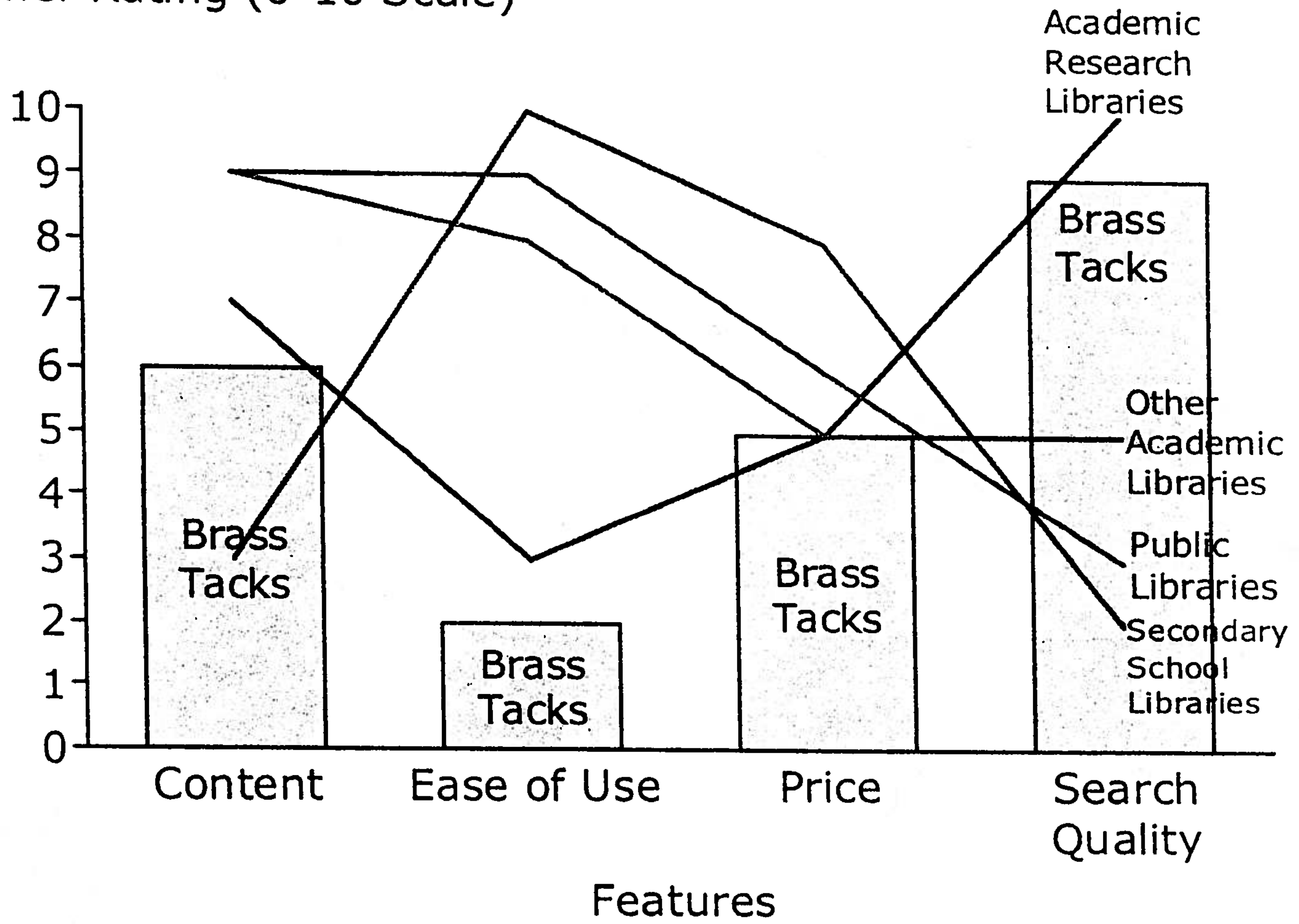


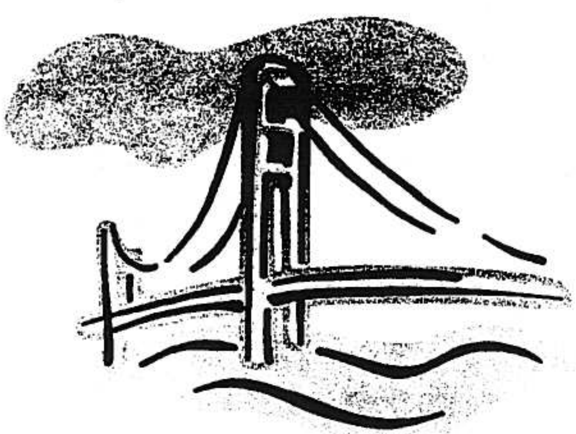
e now need to identify the most potentially profitable segment

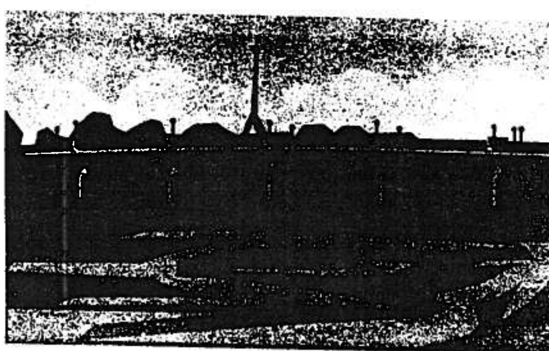
Market	# of Available Units	Profit/Unit	Total Profit
Academic			
Public			
Secondary School			

Competition within the industry focuses on four dimensions, and this table indicates relative feature preferences for each market segment

CHICAGO GSB







The Bridge Case

Co-authored by Eric Lam and Omar Hafez

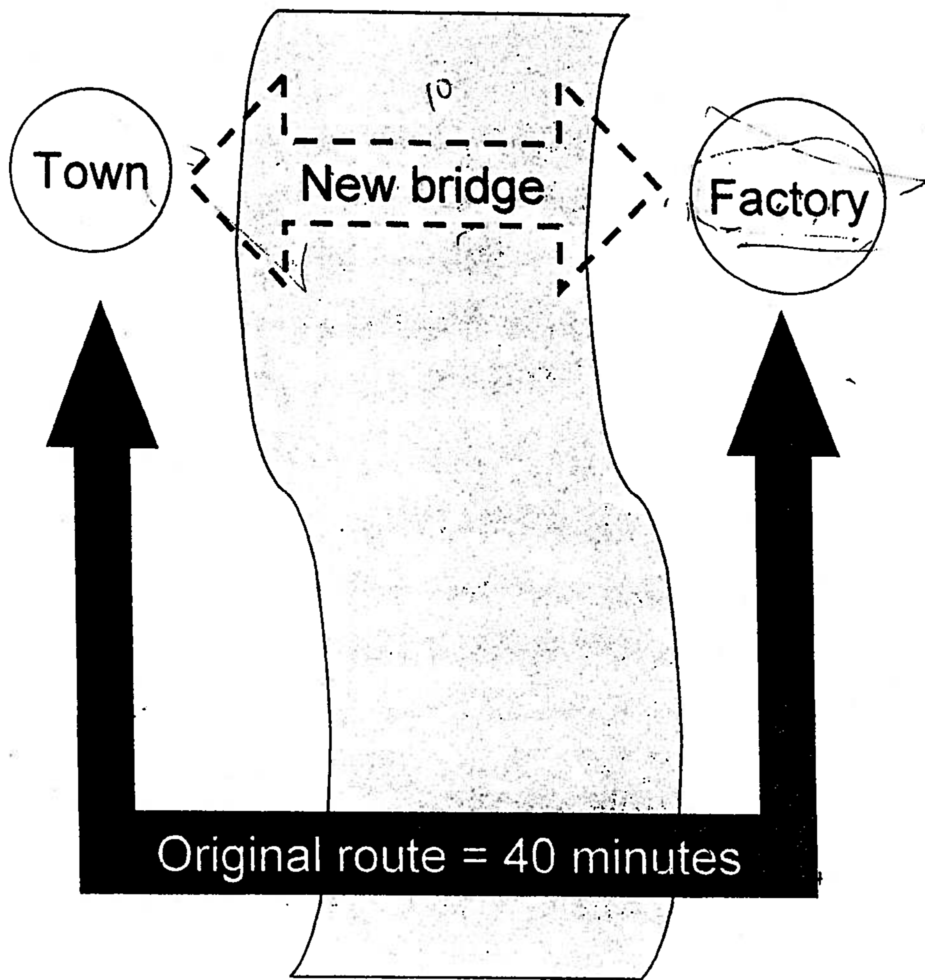
The authors would like to thank all the second years who have taken this case (in some form or the other, in some stage or the other) and provided numerous feedback about it.

Notes to the Interviewer

- The authors believe that this is a *second round case*. Here are some of the reasons:
  - Complexity and multiple layer of issue
  - Use of non-conventional frameworks
  - Somewhat detailed calculations
- More important reasons why this is a second rounder:
  - Instincts (due to ambiguous conclusions) needed to proceed with case and keep case flowing
  - Creativity necessary to really bring the case to another level
- *The aforementioned factors are basis for judging candidate; especially the last two factors (if all of the prior basis are met)*
- The interviewer should feel free to *provide more or withhold information* depending on how the candidate is proceeding through the case.

Only the first slide can be shown to the interviewer.
Boxes at the bottom of the page are notes for interviewers.

The Bridge Case



Information for the candidate

- "I am mayor of a Mexican town and I am planning to build a bridge that would benefit voters and help me win the election next year."
- Original bridge connects the town and the factory, where some of the town people work for $6 an hour.
  - 40 minutes of commute
- Cost = $300M, must be self financed
- ***<u>To build or not to build?</u>***

Suggested Framework (Key Questions)

- Is the bridge going to *win you the election*?
  - How many total voters? What percentage of that uses the bridge?
    - Is the bridge a key issue for voting?
    - Are factory workers already supporters of the mayor?
  - For non-users, will building a bridge help?
    - Job creation? Positively affected? Adversely affected?
- Is it *economical* to build the bridge?
  - NPV analysis *(Revenue – Cost) / Cost of Capital*
    - Can the revenue streams cover the construction costs?
  - Other costs
    - Opportunity benefits / costs of not using the original bridge
    - Environmental

Most candidates will jump straight into the NPV analysis. This is okay, as long as you bring them back to the election piece at the end of the NPV calculations. Great candidates should probe about the voting environment first before jumping into the economics.

Voting – Winning the Election

Information for candidate:

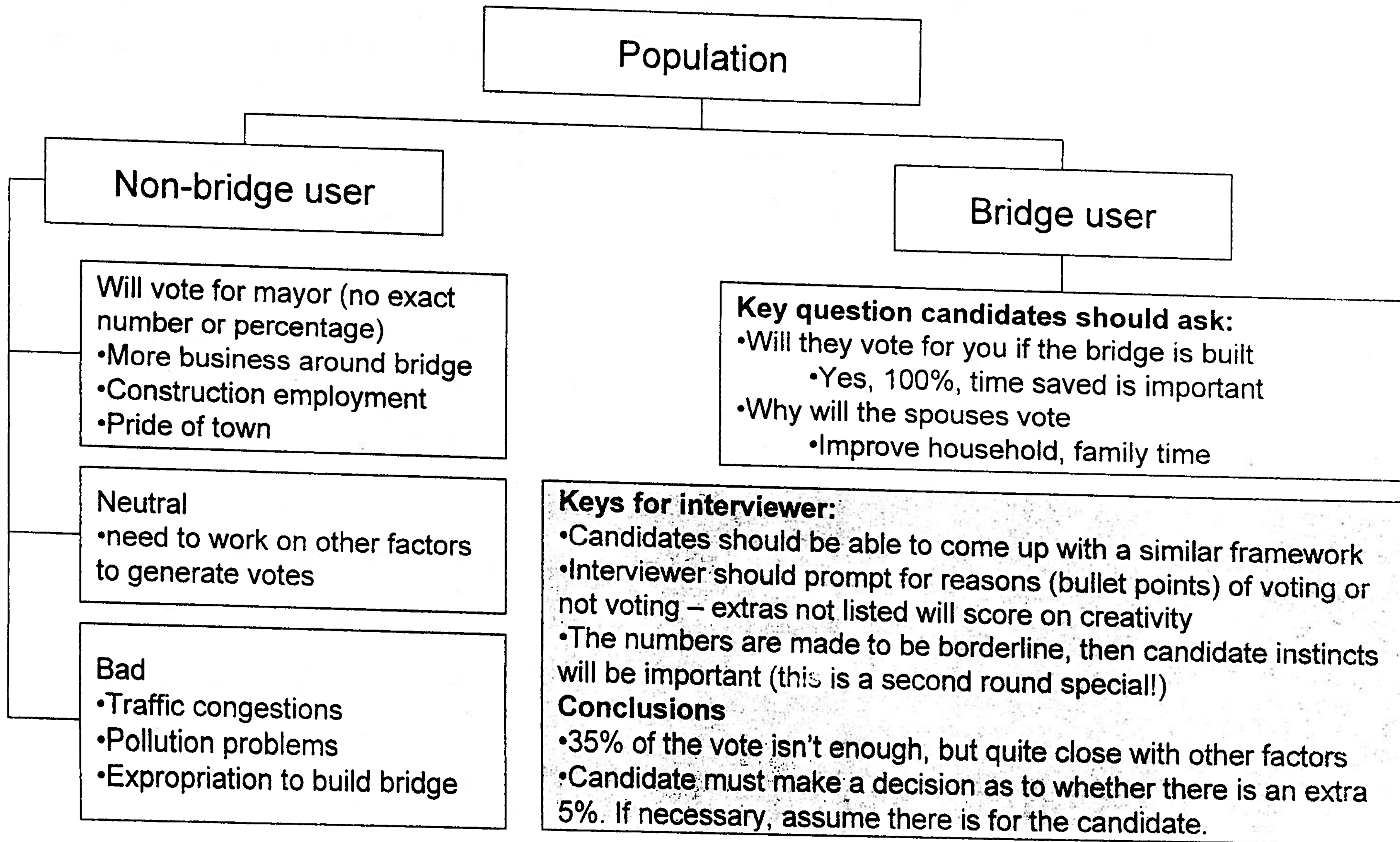
- Election happens in a year
  - Coincide with completion of bridge
  - It is the only issue on the town's mind right now
- Need 40% of votes to win

Information given if asked:

- Eligible voters = 100K
- Factory workers (bridge users) = 25K
  - Spouses of workers = 10K (i.e. total 35% of voters)
- All voters are indifferent (not loyal) to the mayor

Candidate should be able to conclude that the votes needed are close if all factory workers (and spouses) vote for the mayor; candidates should therefore explore whether they will actually vote that way, and how to generate votes for the 5% remaining votes needed for non bridge users.

Breakdown of Votes



Economics

Information for the candidate:

- New bridge reduces commute to 10 minutes (saved 30 minutes)
- Factory workers: 25K @ $6 / hr
- Economic advisor suggested toll of $3
- Cost of capital = 10%

Information given if asked

- Cost = 30K per day
  - Maintained 350 days
- Workers work 250 days a year
- Assume no car pooling or public transit

Key questions for candidates:

- Opportunity costs for users:
  - $3 time value saved per trip
  - Gas, depreciation for car
- Opportunity costs for town
  - maintenance saved
  - environmental
- Penetration with toll of $3
  - Demand curve will be most appropriate
  - 100% is also reasonable (why?)

Calculation

- Recall the NPV formula
- $3 * 2 trips * 25K cars * 250 days = *37.5M*
- $30K * 350 days = *10.5M*

One trick is the different number of days in maintenance (cost) and working (revenue). You may alert them during the calculation. The other trick is to figure out what the penetration will be - a demand curve is hard to come up with.

Calculations

Calculation

- (Revenue – Cost) / Cost of Capital – Investment
- (37.5 – 10.5) / 10% – 300M = 270M – 300M
  - $30M short ($3M per year before discounting; ~$30K per day, ~5K cars per day)

Making up the difference?

- *Subsidy from factory* since it is the biggest benefactor
  - Maybe benefit logistically, better work force, less commute
- Other revenue streams
  - Ads, radio rights, buses, public transportation, naming rights (mayors name, perhaps, for future elections), population growth, more to use bridge (more workers, more destinations, more adjacent towns)
  - Negative revenue streams: ad revenue, business revenue from original route may suffer, leading to smaller tax revenue for city
- Cannot save on costs

The candidate should be able to determine that the bridge cannot be self funded without other sources of revenue. Here the candidate should be creative and list all others who would benefit from the bridge.

Other factors

Risks

- Factory problems
  - could shut down, can relocate, new factory, etc.
- Corruption? Is the construction of the bridge 100% safe?
- Other candidates in election
  - smear the construction of the bridge
- Other modes of transportation
  - Ferries, buses, public transport
- Environment
- A few rich people with riverfront views may be big political donors will oppose the idea

Here is where you can assess the candidate in terms of whether he or she can think outside the traditional frameworks and be creative. A good candidate will question the choice of a bridge, and list out risks associated with building it.

How to Judge

- Good interviewee
  - Considers the effects of the bridge on the election, then proceeds to see if it is viable to build
  - Considers all the “other” factors
  - Will link the mayor’s campaign to the construction of the bridge
- Above average interviewee
  - NPV calculations indicate bridge will (almost) work; proceed to think whether it will influence the election
  - Considers some of the “other” factors
- Average interviewee
  - NPV calculations followed by conclusion
  - No consideration of voting population, outside factors

The primary goal is to help the mayor win the election, not determine if he can build a self financed bridge. Therefore, the interviewee needs to summarize how building the bridge will help the mayor win the election. Because of the complexity, the interviewer should feel free to provide more guidelines.

Name:	Roscoe's Drug Store
Firm:	Bain

A similar case was given during a 2nd round Bain interview – time allotted is 30 min.

Your client is a private, family owned drug store chain in New Jersey. Two years ago, a larger, more commercial drug store entered the market and has rapidly grown. Last year, this competitor out bid your client on several plots of desirable land. Your client believes this is nothing to be concerned about because he has not seen a drop in profits. Nonetheless, he has hired to you to analyze the situation to confirm his belief.

Information to give interviewee *ONLY* if asked:

Client Info-

Products: Over-the-counter drugs & prescriptions, Convenience store items (i.e. snacks, magazines), Cards/gift wrap, Basic household items, Seasonal items (i.e. hats/gloves, sunscreen), Miscellaneous (i.e. stereos, toys, lawn décor), Small tool section (i.e. hammers, nails, drills)

Product Turnover: Miscellaneous items and small tool section do not turn over well. These items are also very bulky.

Prices: Prices are competitive with the market.

Marketing: Client's promotional strategies are similar to competitor

Customers: Most customers are between the ages of 18-50. Client has a good base of repeat customers and actually is on a first name basis with some repeaters. Client has noticed that convenience and available parking are quickly growing more important to customers.

Customer perspective of store: Customers see the client on equal grounds as the new competitor.

Competition: The client owns the largest share and is the market leader. Closest and only main competitor is the new entrant.

Size of Store: Average store is about 10,000 sq feet.

# of Stores: Client has 16 stores in the area.

Revenues: Total sales last year were $500 per square foot.

Costs: *Ask interviewee what costs they think are involved in operating a drug store. Possible answers are:.*

- Cost of goods sold
- Hourly employees
- Fixed costs (i.e. mortgage, manager annual salaries)
- Basic marketing/advertising (i.e. coupons, promotional displays)
- Opportunity costs (appointing the right items to the right shelf space)

Total costs last year $470 per square foot.

Competitor Info-

Products: Same as client except does not carry any miscellaneous items or tools.

Product Turnover: Competitor offers a much larger card/gift wrap and convenience item section. Cards are high margin items that turn over very quickly.

Customer: Same demographic as the client's. Convenience and parking are also growing more important. No information on customer loyalty or repeat business.

Size of Store: Average store is about 6,000 sq feet.

# of Stores: Competitor has 10 stores in the area.

Revenues: Total sales last year were $450 per square foot.

Costs: Total costs last year were $400 pre square foot.

Bidding Info –

Available Funds/Specifics: Money available to bid comes from company's total net income. Both the client and competitor bid at the same time.

What were the lost bids for? - All properties were at busy locations. The client has lost 3 bids to the competitor.

If interviewee does not calculate company profitability on their own, ask them: Do you think the reason why the competitor has been out bidding the client is because the competitor has more available funds? If they do not pick up on the hint, ask them directly.

Total profitability last year for client and competitor is below:

	Client	Competitor
# of stores	16	10
Total sq feet/store	10,000	6,000
Sales/sq foot	$500	$450
Costs/sq foot	$470	$400
Profit/sq foot	$30	$50
Proft margin/sq foot	*6%*	*11%*
Profit/store	$300,000	$300,000
Total Net Income	$4,800,000	$3,000,000

***Key take away from this is the competitor's higher profit margin.*

***Also important to note that since profits – and most likely cash flows – are the same for each firm they should be bidding approximately the same amount. This is because if both firms performed a Net Present Value analysis to determine the value of the land, they would arrive at the same number. This implies that either the client is not bidding enough or the competitor has more cash and is overbidding to gain entrance in the market.

Key Take Aways:

1. The client has larger stores and a larger product mix, but per store profit is equal to the competitor's. The competitor is more efficient.

2. The competitor has a much higher profit margin. This is because it has a narrower, more efficient product mix and offers higher margin items that turn over very quickly (i.e. cards).

3. As the importance of convenience grows for customers, location of the store will become more important. If this trend continues and if the competitor continues to outbid the client in high traffic areas, the competitor will have an advantage.

4. If the client does not change its product mix and continues to ignore the importance of bidding on land, it will eventually see a loss in sales and profits as the competitor grows.

5. The client actually has more total funds to bid on land and has the capabilities to outbid the competitor.

Recommendations:

1. Contrast to what the client believes, he needs to spend the money to win bids on high traffic slots of land. This will hopefully saturate the market as serve as a barrier to entry for the competitor to enter.

2. Client needs to evaluate product mix – should discontinue items that do not turnover quickly and are wasting valuable shelf space (miscellaneous items and tools). Client needs to offer more higher margin, higher turnover items such as cards.

3. Client should also try to reduce overall costs to increase profit margin. Some ideas are:
    a. Reduce store size and look into renting out the unused space
    b. Reduce store size and use unused space to create additional parking, which will help attract more customers (in addition to convenience available parking is growing more important as well)

Considering these recommendations are against the client's belief, ask the interviewee how he/she would present these findings to the client.

Name:	Venture Partners
Firm:	Bain

1. Problem:

Your client is private equity company that is considering acquiring a medical products division, Medbag, which is being divested from VaderCo a larger healthcare firm. Your client wants you to tell them if Medbag is an attractive investment.

2. Background information, give if student asks:

- Your client is a private equity company that specializes in later stage buy-outs. Non-industry specific.
- Question to ask the student: "how would you define an attractive investment?" Don't let this drag on for too long, as we need to move on to the main parts. For the purpose of this case, assume that "attractive investment" means profitable and has potential to increase in value [this was the definition given to me in a Bain case].

3. Questions the student should probe for:

- **What is the reason behind the divestment?** VaderCo has decided to focus exclusively on its larger, more profitable pharmaceutical division and Medbag no longer fit in VaderCo's long term plans.

- **What are MedBag's products?**
  - Medbag makes several low-tech products such as therapeutic water bags, ear syringes and enema devices.
  - They are sold in most pharmacies.
  - They require minimal FDA regulation

- **Who are MedBag's competitors and what are their relative positions in the market?**
  - There are three main players in this field, MedBag, EnDoCo and OmniMed.
  - The student should specifically ask about the market positioning before giving them **SLIDE A.**
  - The takeaway from the slide is that there are three dominant players with equal market share, and that the respective position of the three has not changed over the last 3 years.

- **Are there any differentiating features about the medical products sold by these companies?**
  - These are products are expected to have steady demand (think about why)
  - Customers are price sensitive.
  - MedBag, OmniMed and EnDoCo all make equivalent products and enjoy moderate brand recognition.

- **What are MedBag's revenues?**
  - Give them **SLIDE B** and ask them to comment
  - The takeaway from this slide is that MedBag's revenues are flat at around $20 million. This slide along with SLIDE A should allow the student to determine that the market is mature.

- **What are the dynamics of the overall market:**

- Student should be able to determine that the market is mature and not growing by looking at MedBag's sales growth and market share over time. If they haven't received one of the slides, ask the student how this information could be determined.

- **What are MedBag's profits / what are Medbag's expenses:**
  - No matter which of the two questions the student asks here, ask them to list out possible expenses, then give them **SLIDE C** and have them determine the profits for each year.
  - Takeaways:
    - Company is profitable, with profits of $700,000 per year.
    - Margins are stable
    - Labor and material are largest components
    - Company was able to keep their margins stable despite increases in labor and material expenses.

4. **Analysis (the student should reach this stage in 12-15 minutes):**

At this point, the student should have determined that MedBag is profitable, but still needs to determine if MedBag can increase in value. At this point, there is no reason to think that it will without outside intervention. If you are able to find a way to increase the company's value, then it will become an attractive investment.

If the student is stuck, ask:

- **What are ways you can go about increasing the value of the company?**
  - For this case, the answer is to increase profits
  - Because of the price sensitivity of the customers and the maturity of the market, there is little flexibility in increasing revenues. The student should thus focus on costs.

- **Which costs would you target first?**
  - Should be easy for the student to say labor and material.
  - At this point, if the student hasn't already asked the location of the factory, you should tell him the factory is a union factory located in California.

- **The Private Equity shop is thinking of shutting the factory and relocating it to Mexico. How will this affect expenses?**
  - Labor, rent, shipping (Mexico vs. CA) will definitely be affected, material is unknown.
  - There will be one time charges for shutting down the factory
  - There will be a one time investment expense to set up in Mexico
  - Once the student has listed out these expenses, give them **SLIDE D** and ask them to project profits in 2006, assuming stable revenues.
  - The student should be able to determine that MedBag's profits would slip to $430,000 in the first year after relocating to Mexico, but that the profits would subsequently increase to $3,680,000 in 2007.

5. Conclusion:

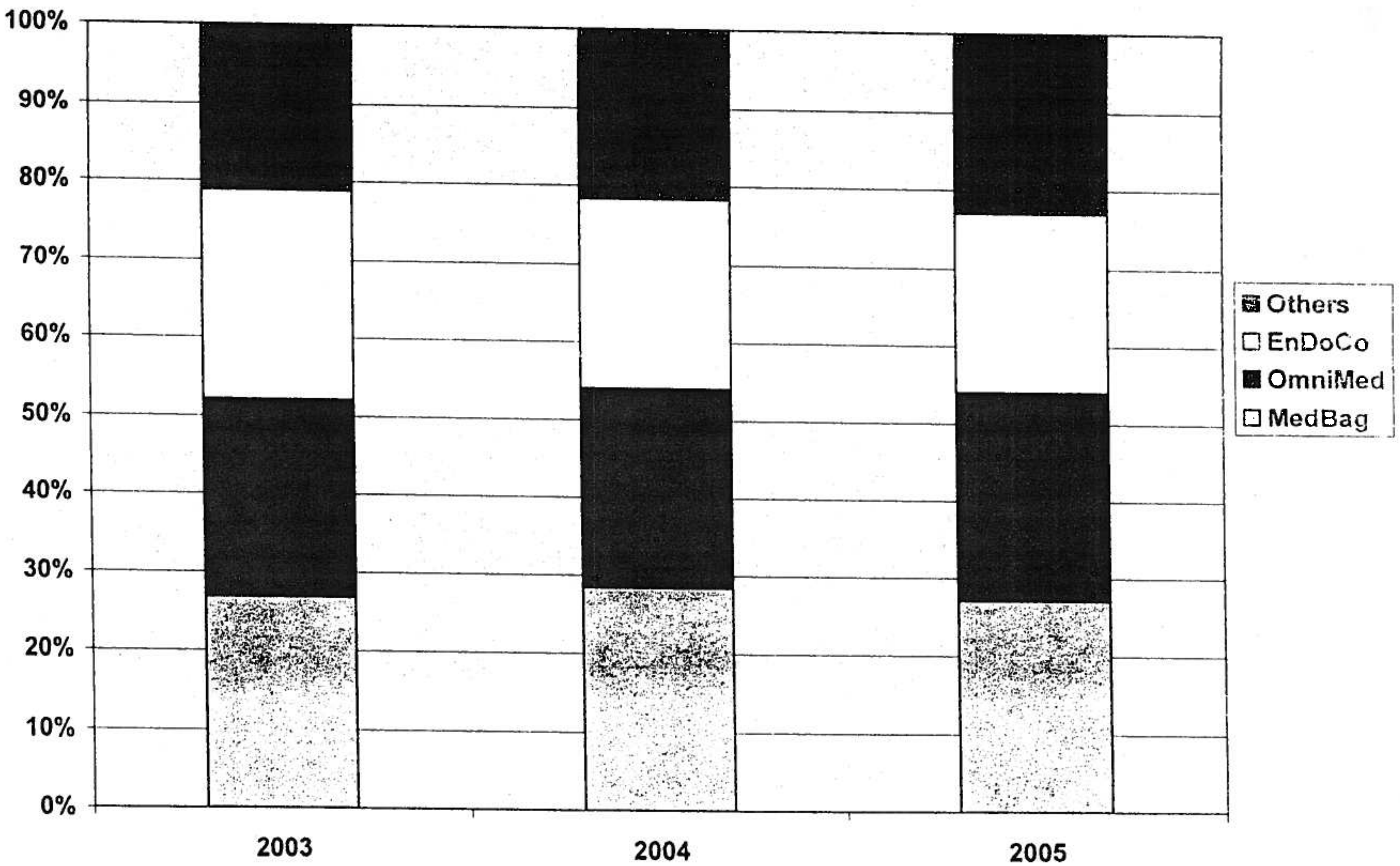
The student should find that the deal is attractive because MedBag is profitable, its revenue stream is expected to be stable for the foreseeable future, and there is an opportunity to reduce costs. Moving the factory from California to Mexico will increase yearly profits from $700K a year to about $3700K a year, thus increasing the value of the company.

6. Bonus:

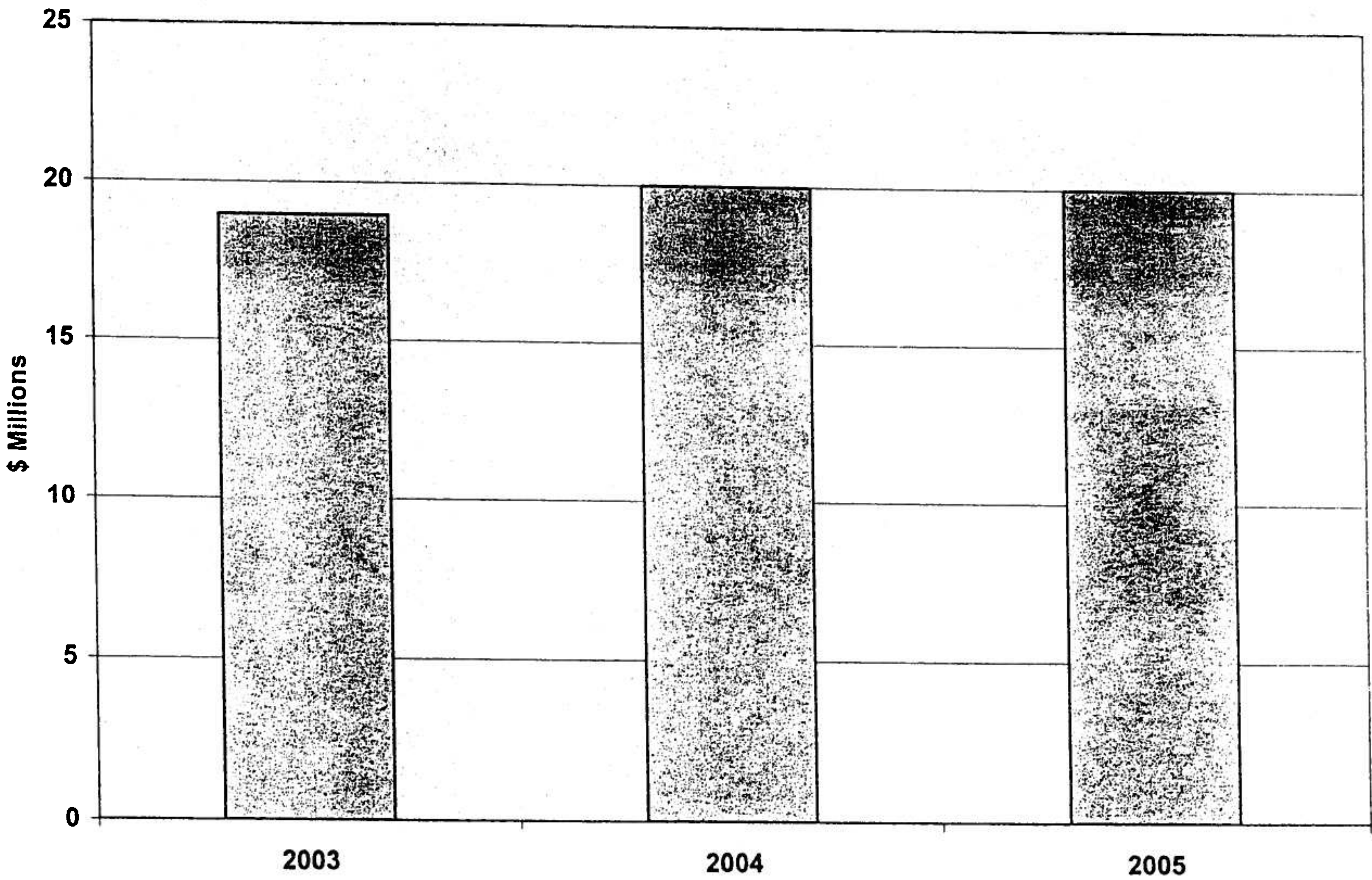
What if, after a year of operating MedBag out of the Mexico factory, the CEO of Medbag comes to you and proposes that with the new margins, Medbag should drop its prices and take over market share. What do you think of this strategy? [Answer: first depends on price elasticity of customer. If price is inelastic, then no way. If price is elastic, then perhaps. The problem is that we have to consider competitor reaction. If a price war follows, then the lower margins are not creating more revenue, and will in fact cause Medbag to loose some of their gained revenue. This will affect the value of the investment.

7. Epilogue:

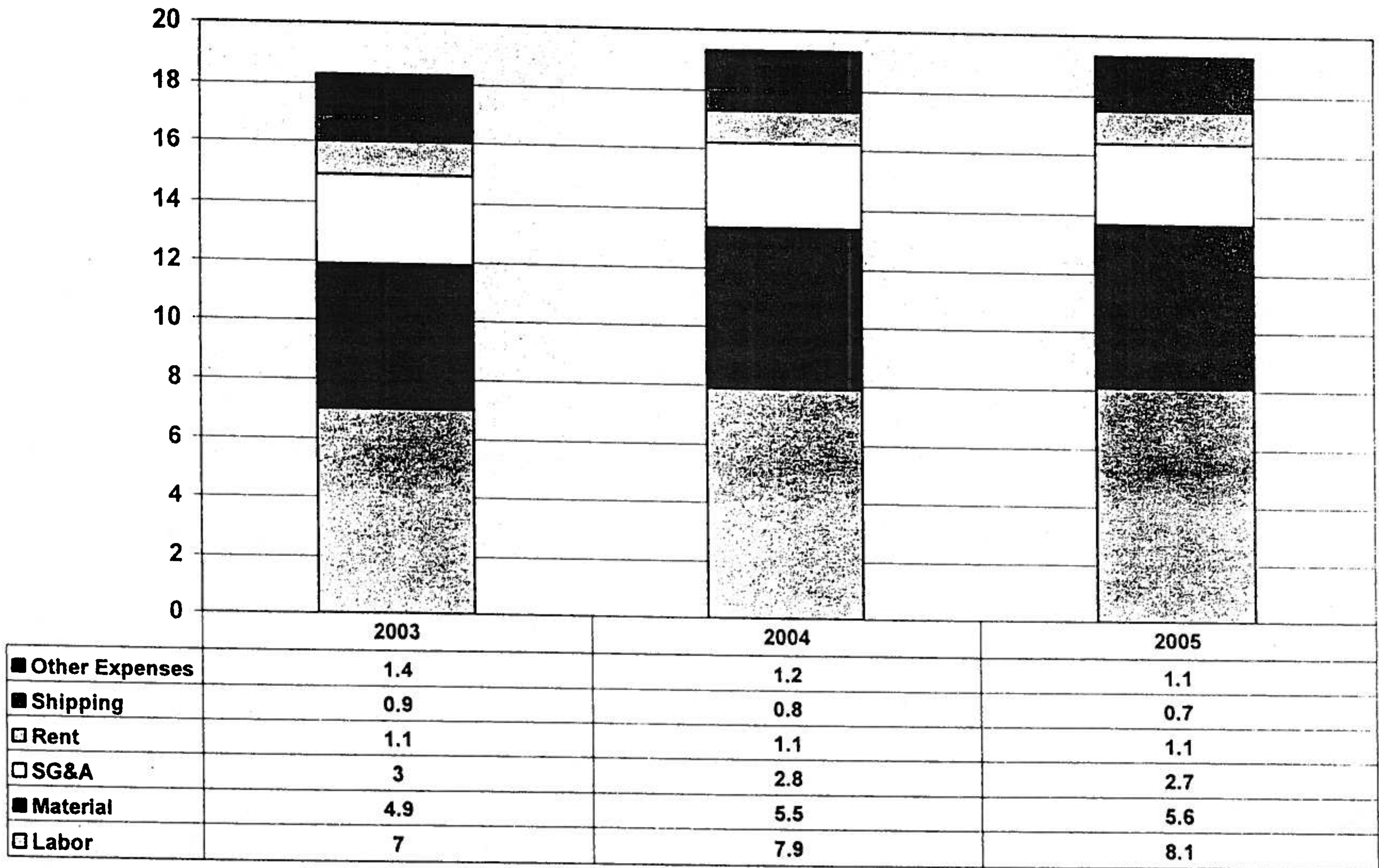
As it turned out, the Private Equity company did not move forward with the acquisition because VaderCo's was unwilling to provide adequate support during the transition period. This was a deal breaker because the Private Equity company predicted that any prolonged disruptions to Medbag's business during the transition period would cost the company significant market share (think about why).



Slide: A



Slide: B



	2003	2004	2005
Other Expenses	1.4	1.2	1.1
Shipping	0.9	0.8	0.7
Rent	1.1	1.1	1.1
SG&A	3	2.8	2.7
Material	4.9	5.5	5.6
Labor	7	7.9	8.1

Slide: C

Expense increase/decrease after relocation:	
Labor	**-30%**
Material	**-10%**
Rent	**-30%**
Shipping	**50%**
Other charges:	
Shutdown Costs	**$1,500,000**
Mexico Setup Costs	**$1,750,000**

Slide: D

Name:	Van Fossen Mountop Ski Resort
Firm Type:	Bain

This is a Bain-style case which presents a case up-front and then asks the interviewee to work out the best solution. The bolded sections should be read to the interviewee.

Mountaintop Ski Resort is a premier ski resort located outside of Cheyenne, Wyoming. Snowboarding has been banned at Mountaintop since 1988 (just when snowboarding was starting to gain popularity) on the grounds that snowboarders represented an "undesirable element" and Mountaintop was better off just catering to skiers. However, as Mountaintop prepares for a new season they ask themselves, as they do every year, if they should lift the ban on snowboarders. This question seems especially relevant this year since Mountaintop's growth has stagnated in the past two years after a decade of robust growth (see Graph A). You and your team have been asked to help Mountaintop determine the best course of action.

A: I would like to understand more about the Ski Resort business in terms of what the customers look for, what Mountaintop offers and its competitive positioning and finally, if possible, do a quantitative comparison of the impact of allowing snowboarders vs. enforcing the ban.

Give this information as it is asked:

CUSTOMERS

- Based on customer surveys the most important things to skiers (ranked from most important to least) are:
  (1) the price of the ticket;
  (2) the amount of time one has to wait in the lift lines; and
  (3) the presence of ancillary amenities like restaurants on the mountain, ski schools for kids, and ski rental shops (see Graph B).

COMPANY

- Mountaintop is undeniably the better mountain for skiing. If the prices were the same and there wasn't the ban on snowboarders, everyone would go to Mountaintop. If Mountaintop reduced the price difference to less than $20, some skiers would want to go to Mountaintop.
- Three years ago Mountaintop upgraded its lifts to high-speed, four-seat lifts (this is the peak of technology). This increased the mountain's capacity from 1500 skiers per day to 2000 skiers per day.
- Based on Mountaintop's strategy it appeals to higher-end customers, mostly from Cheyenne or out-of-town. As such, it is busiest on the weekends where they average about 2000 skiers

(which is the mountain's capacity) per day, but attendance drops to an average of 300 skiers during the week. This is likely due to the fact that this higher-end clientele works during the week and can only ski during the weekend (see Graph C).

COMPETITION

- There is one other ski resort in the Cheyenne area, Shredsville. Shredsville is Mountaintop's only competition (some skiers come in from beyond Cheyenne but we will assume that any actions that Mountaintop takes will neither increase or decrease that out-of-town population which comes to Cheyenne to ski).
- A lift ticket at Mountaintop is $50 while a lift ticket at Shredsville costs $30.
- Shredsville is barely profitable right now. It is unlikely that it would be able to lower the prices of its lift tickets.
- Shredsville has an average of 600 skiers per day for every day of the week. This is likely based on Shredsville having a less-affluent clientele (a bunch of teenagers and twenty-somethings who just want to be ski bums). Additionally, snowboarders tend to be less-affluent and younger people.
- Shredsville is 60% snowboarders.

The first key insight is that skiers really don't mind sharing the mountain with snowboarders; however, they do not want to have a more crowded mountain (reason 1 and graph B). As such, the mere presence of snowboarders would not drive many regular skiers away.

Second, the mountain cannot expand anymore since it already has the fastest lifts available (reason 8). This makes the mountain's maximum capacity 2000 per day. However, it only has 300 skiers on the weekdays so it can grow by increasing the number of people who ski during the week. The key is determining how to increase the number of weekday skiers without hurting the weekend revenue.

Third, a ski resort has relatively large fixed costs. As such the incremental cost of an additional skier is minimal. Anything Mountaintop can do to increase the number of skiers that come during the week would flow straight to the bottom line.

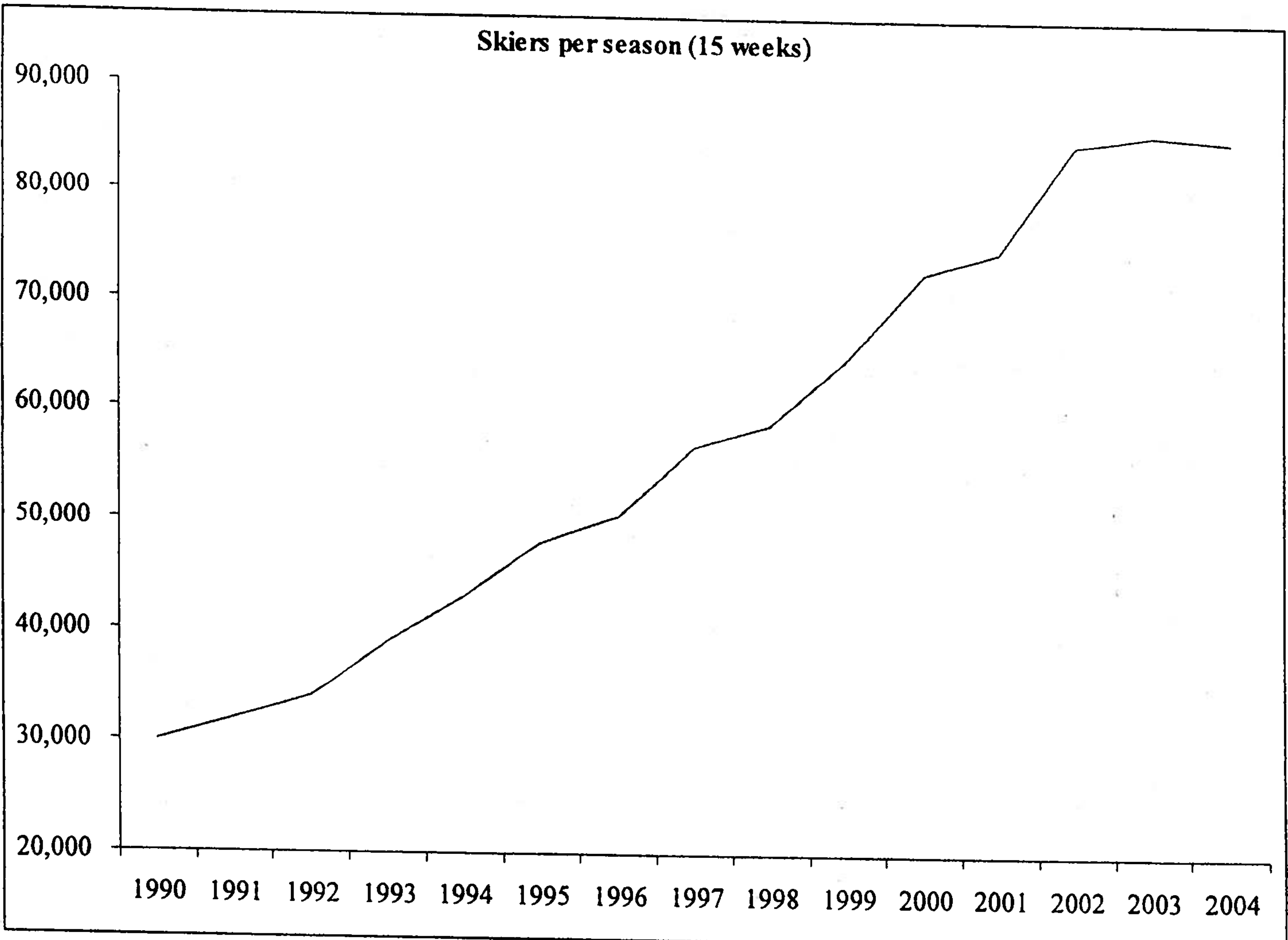
Simply lifting the ban on snowboarders would not have maximum impact. Since Mountaintop costs more, it appeals to the weekend and vacationing skiers (reasons 5 and 9). Plus it is probably pretty reasonable that snowboarding appeals to a younger, less-affluent demographic. There would certainly be some snowboarders who would come over during the week like

vacationers, but not many; most of the snowboarders who would come to Mountaintop during the weekend when it is already at capacity.

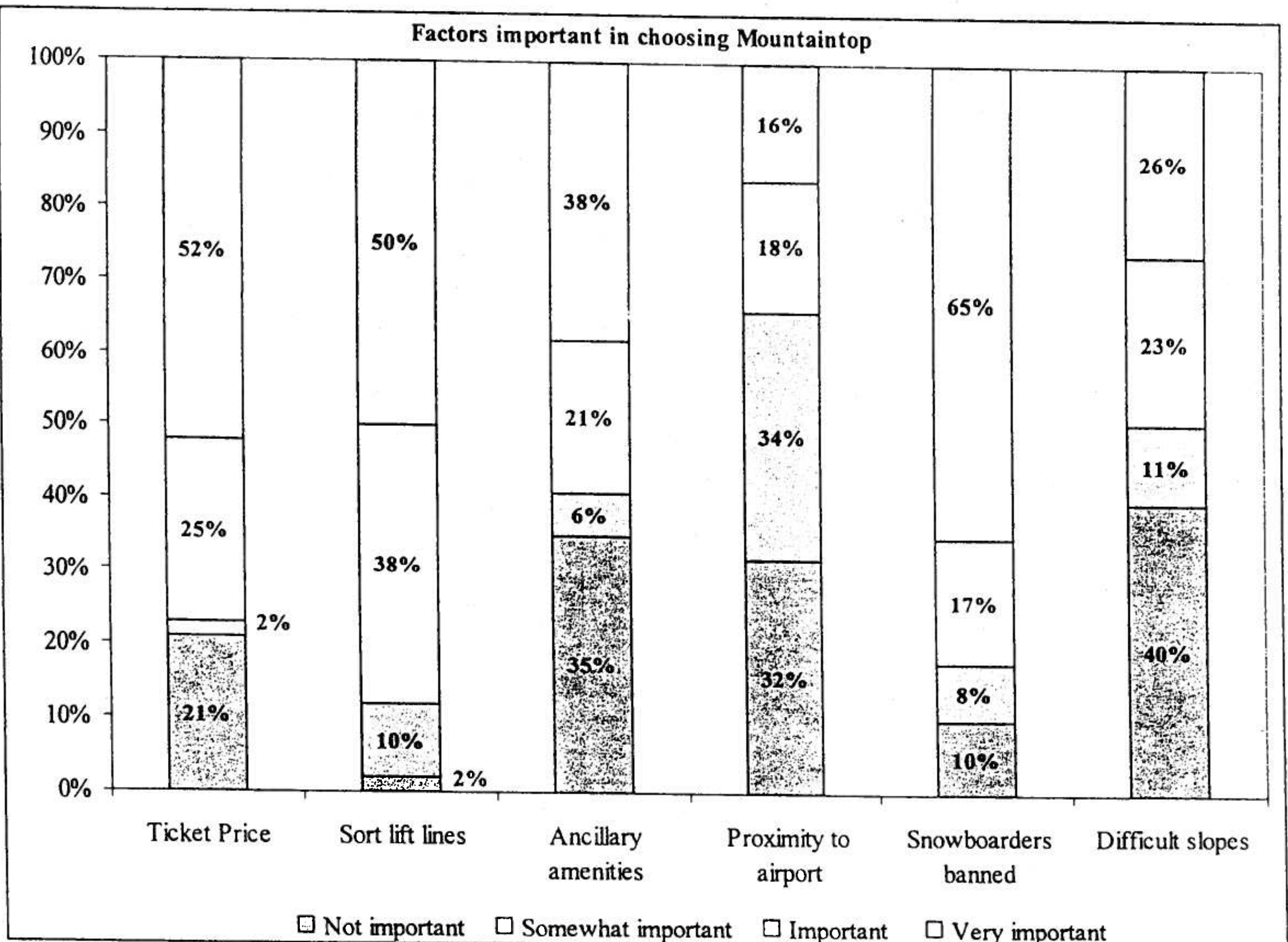
The best solution might be to lift the ban and then have a tiered pricing approach based on the day of the week. The increased demand during the weekend would allow Mountaintop to raise its weekend prices. Simple microeconomics would tell at what price would allow an equilibrium with 2000 skiers.

During the week, Mountaintop could lower its prices to entice both skiers and snowboarders who ski at Shredsville because of the price differential (reason 3 says that Shredsville cannot respond to lower prices at Mountaintop with its own lower prices) to start skiing at Mountaintop. Again microeconomics would tell how many additional skiers Mountaintop would get if it lowered its weekday price by a certain amount. Since the costs will not be affected by these strategies, the break-even analysis will simply be based on revenue—How much can you raise ticket prices on the weekend before you drive skiers away, and how low can you bring the price of tickets during the week so the loss in ticket prices is made up by increased revenue?.

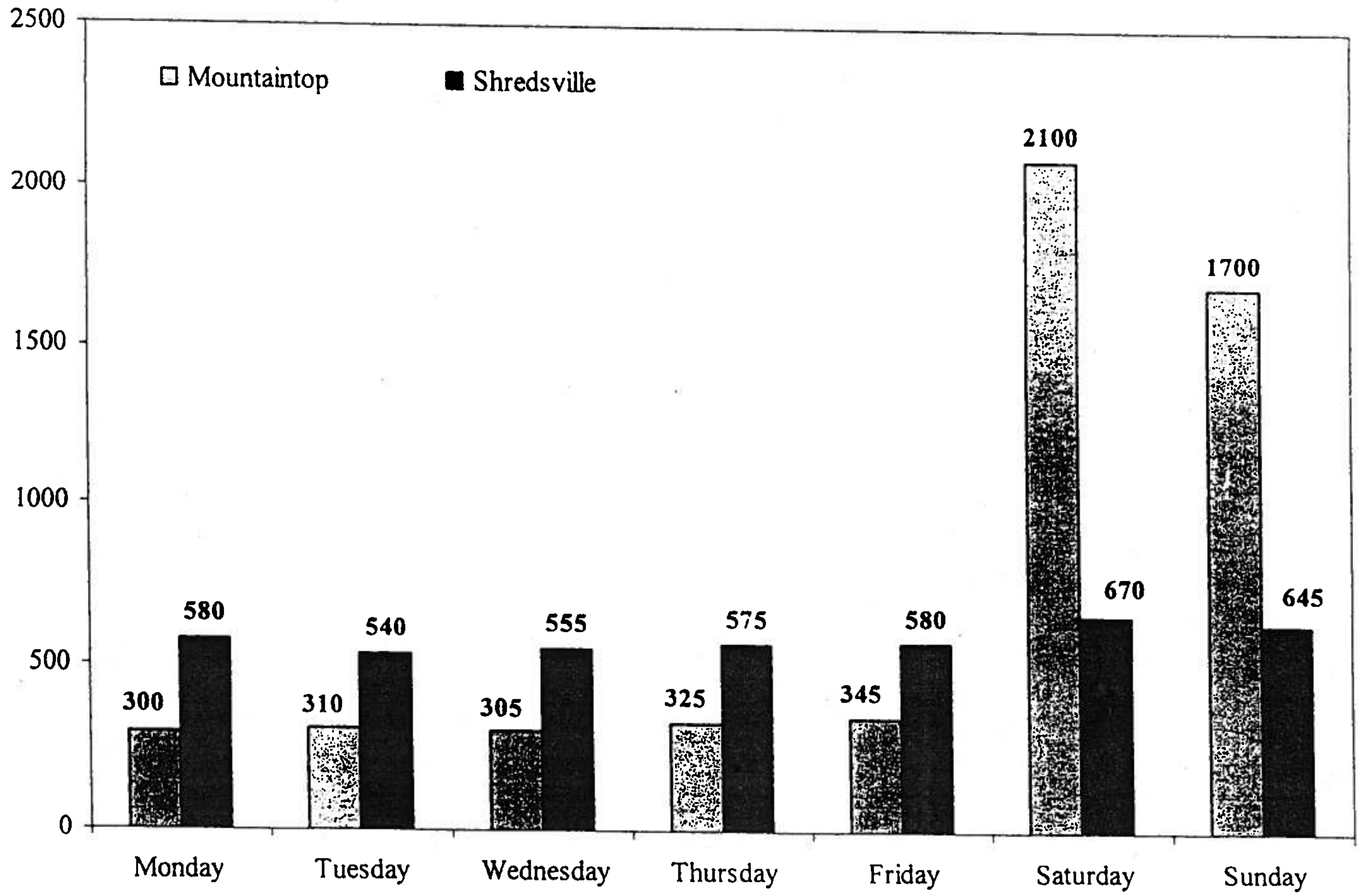
Graph A



Graph B



Graph C


Average skiers per day
Mountaintop
Shredsville
2500
2000
1500
1000
500
0
300
580
310
540
305
555
325
575
345
580
2100
670
1700
645
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday

Name:	Mayfield Village Technology Company
Firm:	BCG

The client is a technology company that provides software to the U.S. Auto Insurance Industry. Several years ago the client developed insurance claims software that is used to log insurance claims on both standard PCs and – more recently – mobile devices customized for claims agents. After creating this software, our client experienced a long sustained period of growth. More recently, however, they have come upon difficult times. More specifically, growth rates have declined substantially.

We have been asked to help the client understand why their growth has slowed and what they need to do to turn things around.

Topic	*Information to share with interviewee should they ask*
Client background information	• Client was first to create this type of software, but it was several years ago • They have multiple products, but are all in the same primary line of business • Client provides technical support for their technology • No recent changes in price or volume • No recent changes to the client's cost structure • Client is profitable. • They have sales in all three customer segments – big, medium, small (more detail in slide 3)
Car Insurance Industry/Customers	• Customers are segmented by size: big insurance firms, medium firms, and small insurance carriers • The big insurance segment consists of six firms that control over 80% of the market. • Medium and small firms serve different niches in the marketplace and these segments are fairly fragmented • Insurance industry is very mature and is growing at approximately the rate of GDP • The amount of spend on insurance claims software grew steadily for many years, but has recently slowed
Competitors	• Three other major competitors for the big firm segment • Many competitors in the remaining segments

Chart to be handed to interviewee

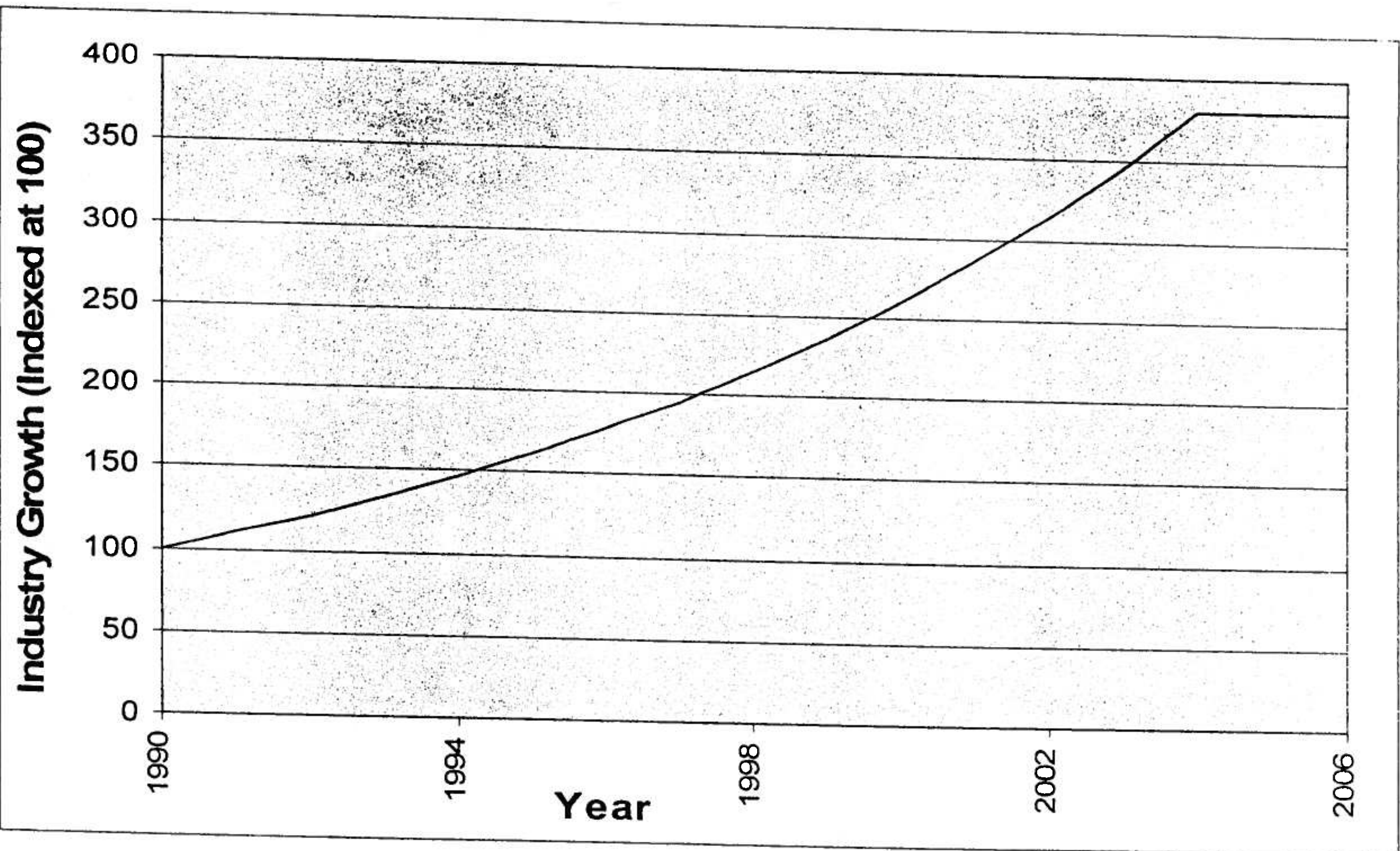


Chart to be handed to interviewee

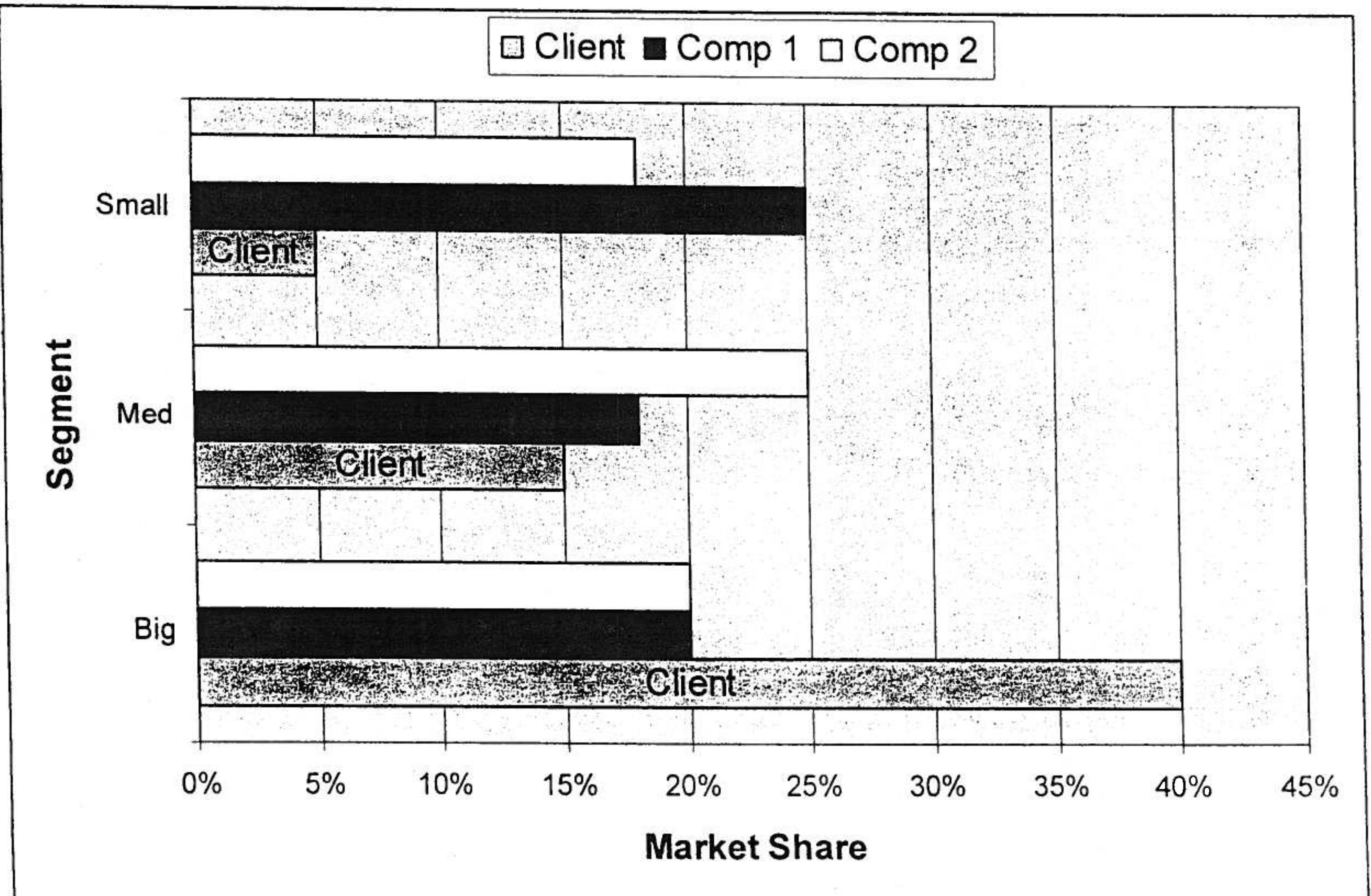


Chart to be handed to interviewee

Avg Customer Per Product			
	High	**Medium**	**Low**
Sales Support	750,000	150,000	75,000
Development Costs	550,000	350,000	200,000
Total Direct Costs	1,300,000	500,000	275,000

Revenue	3,300,000	700,000	265,000
Costs	1,300,000	500,000	275,000
Margin	2,000,000	200,000	(10,000)
Margin %	60.6%	28.6%	-3.8%

Sales Staff	10	2	1

Chart to be handed to interviewee

Avg Customer Per Product			
	High	Medium	Low
Sales Support	750,000	-	-
Development Costs	550,000	350,000	200,000
Total Direct Costs	1,300,000	-	-

Revenue	3,300,000	700,000	265,000
Costs	1,300,000	-	-
Margin	2,000,000	-	-
Margin %	60.6%	-	-

Sales Staff	10	0.5	0

Step 1 – Problem Introduction
The interviewer should read the problem introduction on page 1 of the case to the interviewee. The interviewee may ask a few clarifying questions, but after defining the problem they should create a structure they would like to use as a guide to help the client.

The interviewee should recognize two main points:
1. Client's rate of growth has stagnated
2. The consulting firm has been hired to diagnose the problem and recommend a solution(s)

Step 2 – Framework
Each interviewee will most likely come up with a unique framework. There is no perfect answer as long as the framework is logical and gets to the main points discussed in the case. This case writer's "recommended" framework is:

Client – get a basic understanding of the client's business, the products and services they provide, regions we are concerned with, core competencies, etc...

Industry – understand if this a mature market, what is the rate of growth and is it faster that our client's rate of growth, is the industry fragmented, how many competitors are we directly competing with, etc...

Customers – what are the key customer segments, what do these different segments care about, is one more price sensitive than another, are there different growth rates by segment, which segment(s) is our client successful with

After the interviewee discusses his/her framework, allow him/her to ask questions to reveal some of the relevant information on sheet 1. Do NOT share any of the graphs.

Step 3 – Industry Growth Rate Graph
Before moving on to graph 1 (industry growth rate), push the interviewee to understand that this is a mature category and ask him/her to predict what would happen to growth rates over time. A good answer may mention the product life cycle and that after some period of introduction and rapid growth, the overall rate of growth will slow and then eventually (not yet in this case) decline. After the interviewee tells you what he/she expects the growth rates to be like, hand them graph 1 and discuss.

Step 4 – Market Share by Segment Graph
After discussing the trends in the industry, it is appropriate to dig into the customer segments. Hand the interviewee this graph and discuss. The interviewee should recognize that the client has the leading share in the big firm segment and that their share declines in the other two segments.

Ask the interviewee why they think the client has more success with large firms than small? Do they think that customers in each segment require the same technology? The same service level?

The interviewer should recognize in conversation that large firms probably have more stringent service level requirements than other firms. They may also point out that smaller firms may have unique positions in the market place requiring more complex (or just different) software requirements. It is also possible that the client is the industry benefit leader and can simply not provide the lower costs that smaller firms require.

Step 5 – Avg Customer Per Product Table
Give the interviewee this table and explain that you have run some numbers to help him/her understand the client's financials in each segment. The top section shows direct costs

associated with each client. The sale support costs are a function of the number of sales staff supporting the client (listed at the bottom of the table), but do NOT explain this unless asked. Each sales staff member costs $75K.

Interviewee should recognize that the margin in the high segment is very good, but not nearly as attractive in the other two (even negative in the low segment). Tell the interviewee that the client expects at least a 40% margin on every segment and ask him/her how they could achieve this soon and in which segment. The sales support staff is the only variable cost listed and is therefore the only real option that can be altered in the short-term. The medium segment should be focused on because it will be much easier to get to a 40% margin than the low segment.

Step 6 - Calculations
Hand the interviewee the next table and explain that you have calculated the "best practices" sales support required for the medium and low segments. Ask him/her to perform the calculations for the medium segment.

Avg Customer Per Product			
	High	Medium	Low
Sales Support	750,000	37,500	-
Development Costs	550,000	350,000	200,000
Total Direct Costs	1,300,000	387,500	200,000

Revenue	3,300,000	700,000	265,000
Costs	1,300,000	387,500	200,000
Margin	2,000,000	312,500	65,000
Margin %	60.6%	44.6%	24.5%

Sales Staff	10	0.5	0

Calculations
Medium Segment Sales Support = 0.5 sales staff x 75,000 = $37,500
Total Direct Costs = $350K (development) + $37,500 (new sales support) = $387,500

Margin = 700,000 – 387,500 = 312,500
% = 312,500 / 700,000 = 44.66

Step 7 – Recommendations
After calculations, ask the interviewee for recommendations for the client. An obvious answer is to recommend that the client reduce sales staff to achieve 40% margin in the medium segment. The interviewee may also recognize that a 40% margin in the low segment is not currently achievable and it may be wise to exit this segment altogether.

An even better answer might include that although cost cutting is appropriate at the moment – due to the slow rate of industry growth – earnings growth can only be managed in this manner for so long. The slowed growth in industry sales is most likely permanent and revenue may eventually decline (typical product life cycle). The client should focus on new technologies and/or ways to serve this customer base, or leverage their competitive advantage to enter new lines of business that have more attractive prospects for growth while continuing to harvest their highly profitable claims insurance customers.

Name:	Southern Paper Co.
Firm Type:	BCG

The client, Southern Paper, is a paper products manufacturer that operates several pulp mills in the southern United States. The pulp mills convert timber into wood pulp and then to paper products such as paper towels, napkins, and tissue. Southern currently procures most of its timber from southeastern states which produce huge volumes of timber. However, Southern recently became aware that its chief competitor has begun to import its timber from South America. Southern has asked BCG whether it should begin doing the same.

Case Information:

Notes on Domestic and Foreign Timber:
Domestic and foreign timber are identical from Southern's perspective. Although the timber from South America is harvested from a different type of tree than the domestic timber, both can be used efficiently to produce paper products.

Cost of Domestic Timber:

Monthly timber consumption: 20,000 tons

Average cost of domestic timber: $52/ton

The graph, included on the next page, indicates the monthly price of timber that Southern typically pays. Southern does not have the ability to stock-up on timber during the low-priced months. *(Note: Only present the graph to the candidate if it is specifically requested.)*

Cost of Importing Foreign Timber:
There are two primary costs related to importing timber: 1) contracting a freight ship and 2) purchasing the timber. The actual costs are as follows:

Freight Ship: $175,000

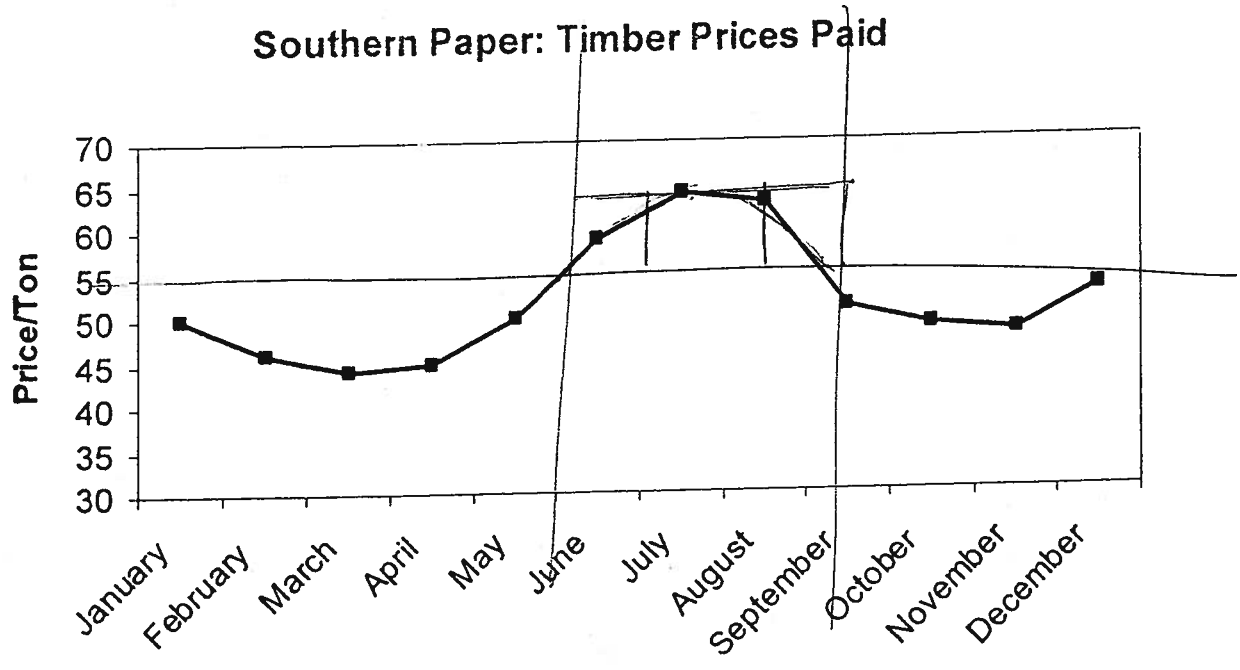
Foreign Timber: $50/ton

The maximum capacity of freight ships is 30,000 tons. The fee for the freight ship is fixed regardless of capacity used.

Foreign Timber may be shipped in bulk and stored to meet demand (i.e. 2 shipments of 30K could be stored for three months of sales > 20K p/month as indicated above)

The price of foreign timber does not fluctuate during the year.

x



Note: Case continues on next page.

Interviewer's Guide

The key learning from this case is the importance of considering the monthly marginal cost of purchasing timber. The correct solution to this case will only be uncovered if the candidate looks beyond the average cost Southern pays to consider the cost each month. Only provide the monthly price information if the candidate specifically requests it, or after the candidate has attempted the problem for a while.

Suggested Solution:

Southern Paper can save about $360,000 by importing timber in the months of June, July and August.

Suggested Steps to Reaching the Solution:

Step 1: Determine why Southern may wish to import timber. Given that the timber is identical from a manufacturing standpoint, the primary consideration is cost.

Step 2: Determine the cost of domestic timber. The average cost is provided as $52 per ton. The important factor is to consider how price fluctuates on a monthly basis. The lowest price is $44/ton in March while the highest price is $64/ton in July.

Step 3: Determine the cost of importing timber. Note that it will be least expensive to import timber if the ship is full. The cost to import 30,000 tons, 1 ship full, of timber is:
= ($50/ton x 30,000 tons) + $175,000 = $1,675,000 = $55.83/ton (about $56/ton)

Step 4: Combining the information in Step 2 and Step 3, the candidate should now determine that Southern could lower its cost of procuring timber by importing it in the months of June, July and August. The candidate should be able to estimate that Southern can save $360,000 (see chart below) by importing timber in these months.

	June	July	August
Cost of Domestic Timber	$ 59	$ 64	$ 63
Cost of Imported Timber	$ 56	$ 56	$ 56
Savings/Ton	$ 3	$ 8	$ 7
Monthly Consumption	20,000	20,000	20,000
Savings	**$ 60,000**	**$ 160,000**	**$ 140,000**

Name:	Where's the party?
Firm Type:	BCG

All instructions are given in italics

Set up: Our client, Let's Party, is a large supplier of gift wrap, ribbons and such materials that sell in large retail stores. Recently, it found that it sold $100m worth of its products at Target while its competitor had sales of $180m during the same period. It has approached our firm to find out why this happened, and what they could do to improve the situation.

The candidate should proceed to ask preliminary information about the company before diving into the framework. However, the case should be driven by the candidate and therefore it is up to him/her to dive into the framework or ask preliminary questions.

Preliminary information:

- Let's Party manufactures three products: gift wrap, ribbons, and gift cards (the tiny ones that are attached to presents, bouquets etc).
- It does not have its own retail stores, and only distributes its products through large format retailers such as Target, Wal-Mart etc. For the purpose of this case, we are only concerned with its sales at Target.
- The products are pretty standardized and do not vary much in their attributes from the competitor's products.
- There are just two large manufacturers with roughly equal market share for these products – Let's Party and its competitor.

The candidate should infer that the prices of the products would be the same since the products are very similar and it is a duopoly. If the candidate asks for prices of the products, first push him/her to conclude that the prices will be the same for both Let's Party and its competitor. If the candidate insists on knowing the prices, give the following information (it is not pertinent to solving the case).

Prices per item

	Ribbon	Gift Wrap	Gift Cards
Let's Party	$1	$1	$1
Competitor	$1	$1	$1

It is also noteworthy that for this case the profit margins are the same.

Profit Margin per item sold

	Ribbon	Gift Wrap	Gift Cards
Let's Party	$0.30	$0.30	$0.50
Competitor	$0.30	$0.30	$0.50

The generic profitability framework will do for the analysis, but obviously, the candidate should stress on the revenue side of the framework. If the candidate is insightful, he/she will come up with following reasons for the cause of lower sales:

1. *Since the price and quality of product is the same, Let's Party is selling fewer items.*
2. *Let's Party might be selling in fewer Target stores.*
3. *The type of Target stores might be different (e.g. urban/rural mix).*
4. *Particular products may be driving the lower sales volume..*
5. *The competitor might have a better sales force team.*
6. *Let's Party and its competitor may be displaying their products differently.*

If asked, the candidate should be given the following information:

	Sales at Target Stores	Number of Target stores
Let's Party	$100m	25
Competitor	$180m	30

The candidate should take away two things from the information:

1. *The total number of stores that Let's Party sells in is fewer than its competitor, and therefore, one reason for the lower sales.*
2. *The average sales per store are lower for Let's Party ($4m per store) vs. their competitor ($6m per store).*

The candidate should now probe for reasons for both the discrepancies. If asked, the candidate should be given the following information:

- IMPORTANT: In any Target store, only one of the two manufacturer's items sold, i.e. the store will either sell Let's Party's products or its competitor's products.
- Target has store managers who take the final decision on which of the two manufacturers to select for their store for a 2 year contract.
- The decisions are based either on previous relationships the store manager has or on conversations that the store manager has with other Target store managers.
- The two party goods manufacturers have similar arrangements to service the Target stores. They have sales representatives who are assigned to each store who, in your client's opinion, are equally effective, have the same incentive structures, and are equally well trained.
- Target store managers usually call other Target store managers to ask about the total revenues that the store made from selling either Let's Party's products, or its competitors products.
- The distributor margins on all products sold are the same as well.

	Ribbon	Gift Wrap	Gift Cards
Let's Party	$0.10	$0.05	$0.15
Competitor	$0.10	$0.05	$0.15

Distributor Margin is defined as the dollars earned by the distributor for every dollar of merchandise sold. (Therefore, for every $1 worth of ribbons sold, Target earns 10 cents).

The candidate should infer from the previous table that even though the distributor margins are the same for both Let's Party and its competitor's products, by virtue of the fact that the competitor's products have higher sales per store, Target makes more dollar revenues by promoting the competitors products.

The clever candidate will now ask for the average sales revenue for each product for Let's Party and its competitor.

The sales by type of product per store are as follows:

	Ribbon	Gift Wrap	Gift Cards	Total
Let's Party	$1.5m	$1.5m	$1m	$4m
Competitor	$2m	$2m	$2m	$6m

The candidate should now infer from using the sales data and the margin data that Target's average revenues for the store selling Let's Party products is much lower than the average revenues for the store selling the competitor's products:

	Ribbon	Gift Wrap	Gift Cards	Total
Let's Party Sales	$1.5m	$1.5m	$1m	$4m
Distributor Margins	$0.10	$0.05	$0.15	
Target's Revenues	$150,000	$75,000	$150,000	**$375,000**
Competitor Sales	$2m	$2m	$2m	$6m
Distributor Margins	$0.10	$0.05	$0.15	
Target's Revenues	$200,000	$100,000	$300,000	**$600,000**

The candidate should infer that over time, because of the higher sale per store, most Target stores will have an incentive to give the contract to the competitor rather than to Let's Party.

At this point, the candidate should start evaluating why the competitor has higher sales per store.

- The types of Target store that are serviced by Let's Party and its competitor are the same (i.e. the proportion of rural/urban stores is the same, the location relative to densely populated neighborhoods is the same, etc).
- Most Targets follow a very standard format, and therefore the location of products is roughly in the same area. All Targets have a "gifts" aisle, and either Let's Party's products or their competitor's products are located in that section (depending on which company the store has a contract with).
- The specific way the product is kept on a shelf is given in "Exhibit: Shelf design".

The candidate should infer from the exhibit that while the layout of the shelf design is different, the total shelf space is the same.

Total shelf space for Let's Party: 6ft x 2/6th of 8ft = 16 sq ft.
Total shelf space for Competitor: 8ft x 3/9th of 6 ft = 16 sq ft.

Therefore, one of the reasons for the difference between the sales of Let's Party and its competitor is in the shelf layout itself. The candidate should be asked to hypothesize why this should be the case.

The candidate should provide possible reasons for this:

1. *Some products are too high to reach for Let's Party products, thus short people, old people, kids, and disabled people are not able to reach for them.*
2. *Some products are placed too low, therefore they are not picked up by old people who find it difficult to bend and look.*
3. *For both high and low placed products, there is visual loss of the products – the line of sight of most people is from the waist level to eye level.*

You should tell the candidate that this is partly the reason for the lower sales reported by Let's Party and that he/she should explore other reasons. The smart candidate will realize that the sales of gift cards as almost half, and that there could be other reasons for this. If asked, provide the following information.

The actual shelf space allocated to the different product types is different. This is shown in "Exhibit: Shelf space detail"

The candidate should note that the total number of shelf space given to gift cards by the competitor is 66% more.
Blocks of shelf space allocated to Gift cards by Let's Party = 6

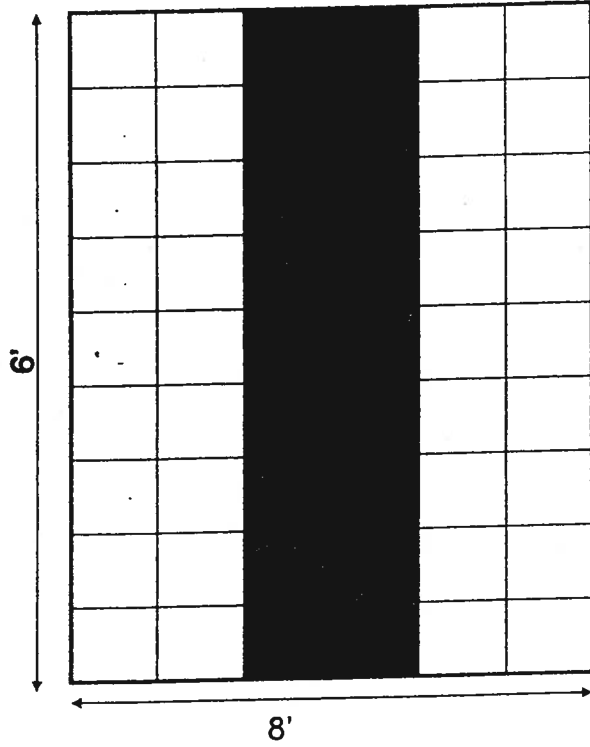
Blocks of shelf space allocated to Gift cards by competitor = 10, which is 66% greater. This is the main reason why the competitor has double sales of gift cards.

The candidate has now solved both the reasons for the lower sales, and should be asked to summarize the findings and come up with creative solutions.

Conclusions:

1. *Let's Party has lower sales per Target store of its products than its competitor because of two reasons:*
    a. *The design of the shelf space is vertical rather than horizontal, and this should be changed.*
    b. *The space given to gift cards (that have higher margins for the distributor) is less than that provided by the competitor. This should be increased, given that the margins are higher for both distributors and the manufacturers.*
2. *As a result of the lower sales per store, Target earns fewer dollars from selling Let's Party's products than its competitor's products. This in turn, influences new store managers to give contracts to the competitor rather than to Let's Party. If Let's Party is able to improve the sales per store, it will be able gain more contracts for new store openings.*

Exhibit: Shelf Design



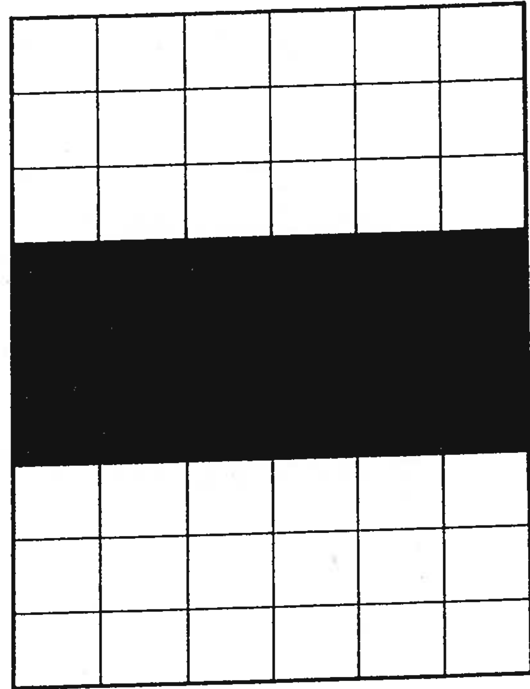
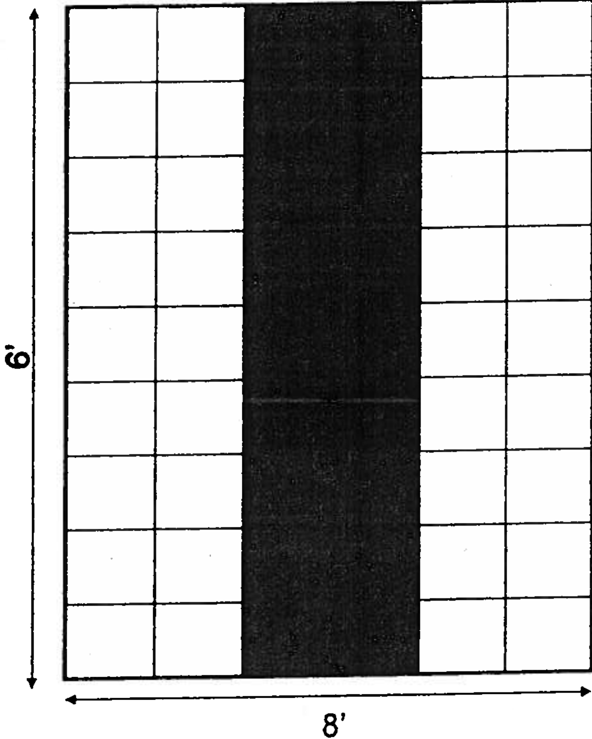


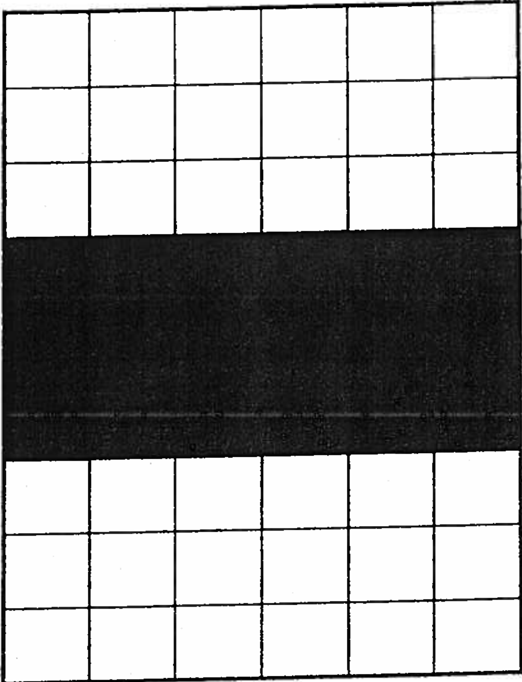
Exhibit: Shelf Space Detail

R: ribbons, W: gift wrap, C: gift cards

Let's Party's shelves at Target



Competitor's shelves at Target



Name:	Cleverage Video Game Co.
Firm Type:	BCG

Case Setup:

A friend approaches you to invest in Cleverage, a software gaming company that he is starting. He is a programmer and has cleverly leveraged his programming skills with his knowledge of the video gaming industry in order to develop a computer game that he says "will sell like hotcakes." He wants you to make an investment of $500K. Your $500K will buy you a 50% stake in the company. (Assume he is taking a 50% stake in equity for his work in developing the game). You consider investing, but have some other investment options that can potentially give you a 50% ROI over the next year with the same risk as this company. Assume this investment is a one-year investment and no money from the company will be reinvested for the following year. Should you invest in your friend's company or in the other investment options that you have?

The purpose of the case is to see how well the candidate can ask the right questions to get important facts of the case and work through relatively simple, but detailed calculations.

Suggested Response:

Profitability Framework: In order to decide which investment to pursue, I'm going to surmise the gaming company's potential profitability for this product over the next year. This projection will involve estimating:

- *Market size in units*
- *Value of the market*
- *Market share achievable*
- *Cost to program, produce game*
- *Total Profitability*

Information to be given on request:

Labor

- **Assume that your friend has recruited two friends from business school that will be handling all the aspects of running the company and marketing the product. They have prior experience in software sales. He is paying each of them $100,000 per year. (The founder is not taking a salary, just his 50% equity stake).**

Competition

- **There are three companies that make similar games. There are six titles in all in this space. Each title currently has an equal share of the market.**

Market Sizing

Candidate should drive a bottom up estimate of market size. To do this, he/she should estimate:

Company's potential share of this market

Volume of products sold per year

In order to get to this number, estimate

Target market size

and then multiply that by the number of games bought per person in that market per year.

That sounds like a reasonable approach. How would you go about getting to those figures?

- *Assuming primary gamer demographic is male, and between the ages 15-35*
- *To figure out how many people fit that category,*
    - *Start with the total US population ~300 million for ease of calculation*
    - *I would assume that the 15-35 age group comprises about a third of the total population, or about 100 million people.*
    - *Males would number half that population, so the market will be 50 million people.*
    - *Of these, I would assume that about 20% are gamers, so that they number about 10 million.*
- *Of these gamers, I would assume only 20% will like this game, which equates to about 2 million people. That's my total market size.*
- *Assume that the number of games purchased by this group per year is only 1. As a result, I would assume 2 million per year in unit sales of this type of product for the rest of the case.*

That's the total market for these types of games. What about for this company?

- *Total market is 2 million*
- *7 possible choices of similar games*
- *Assume equal market share at market saturation, which equals about 14% of unit sale*
- *Since we are only looking at the first year, however, this number is too aggressive. It is more reasonable to assume they can reach 10% of the market now, or sell 200K games.*

(Note: The specific numbers are not as crucial as the thought process of getting to the final number)

Ok, now you have a number for total unit sales. What would you do next?

- *Estimate Revenues and Profits*
- *Estimate the potential revenue from this product per year.*
    - *Price for video games is about $30 to $50*
    - *Estimate that the company can charge $40 dollars per game*
- *Estimate Costs*
    - *Does the company have an idea of what the manufacturing, packaging and shipping costs per unit will be?*

Unfortunately, the company does not yet have that information. How would you estimate it?

- *Since this is not a capital intensive product, I would assume production costs per unit to be about 15% of revenue. That would equal about $6 per unit.*

- *However, I would also want to get a better sense of their distribution costs. Does the company have an estimate of what these may be?*

They do. In their first year, they don't want to develop a direct to consumer channel due to the warehousing/distribution elements involved. Instead, they must sell the software through retail stores, such as Best Buy.

- **The retail stores take 30% margin on the selling price.**
- **There is also a consumer marketing support charge from retailers that comes to 10% of selling price.**
- **This marketing fee covers all costs necessary to market the product.**

Ok, so the fee to retail stores is

- *30% x $40, or $12.*
- *The consumer marketing support charge is another 10% x $40, or $4.*
- *Are there any other variable costs?*

No, these are all of the variable costs.

Are there any fixed costs associated with the company?

No, assume the fixed costs are zero.

Are there any taxes that need to be paid?

Assume there are no taxes.

Conclusions

Calculate the expected profits for the first year

- *Sales of 200,000 units*
- *Contribution margin of $18*
    - *$40 retail price*
    - *Less 30% retailer margin ($12)*
    - *Less 10% marketing support charges ($4)*
    - *Less variable costs of production ($6)*
- *Gross margins = $3.6 million*
- *Less programmer salaries of $200,000*
- *Profit = $3.4 million*
- *My share of this is 50%, or $1.7 million, which is more than three times the initial investment of $500,000*

Based on these metrics, I would make the investment.

Name:	Powershack
Firm Type:	BCG

Case History: Practice case given by BCG consultant. It's more of a 2nd round case, though he used it sometimes in MBA 1st rounds.

Client Engagement:
The client is an owner/operator of electric generation facilities in Texas. We have been asked to help the client evaluate whether they should build a new power plant.

Background:
Because of the power distribution system we consider only the Texas market – Imports and Exports of electricity are not possible.

In the Texas market right now there is an average load factor of 80%. For reliability reasons, the state's power administration targets an average load factor of 75%. Power demand is very volatile with spikes in demand often far exceeding average demand. During the summer these spikes can be very severe especially during daytime from June to September.

There are 2 major types of new power generation possible in Texas:

1. **Coal fired plants – Usually very large, capital intensive. Fuel cost per MiliWatt is often 1/3 that of a Single Cycle gas plant. Electricity generation at coal plants is very slow to ramp up and down.**
2. **Gas fired plants –**
   a. **Single cycle plants burn natural gas, and sometimes as an alternate can burn petroleum. They ramp up and down very quickly, can be installed relatively quickly and cheaply, but are very expensive to run.**
   b. **Combined cycle plants burn gas like single cycle plants, but capture heat exhaust from two turbines to run a third turbine. This makes them much more efficient in terms of gas/unit of electric generation. They are more expensive than single cycle to build but between SC and Coal in terms of operating costs.**

Here's what we want:
Clearly there are economic concerns here, but let's focus on the non-economic factors that will be important in the client's decision.

Topic	*Information to share with interviewee should they ask*
Client background information	• Client is one of many electric power generation companies in Texas and the US • Client can sell 100% of its output on the market or under contracts with local utilities and power marketers • Price of power is determined by the maiket and is unregulated • Client has experience operating mainly natural gas fired turbines
Electric Utility Industry	• Traditionally, power generation, distribution, and load (demand) were vertically integrated under regulated utilities. • Deregulation forced disaggregation of assets creating generation companies and local distribution companies that deliver power to homes and businesses. • Generation companies and distribution companies buy and sell power to each other directly through open market operations or through power marketers (traders) who buy and sell power for a

	profit. • The input (fuel) and output (electricity) markets for generation companies are both commoditized and very mature.
Texas Market	• The total Firm Load (average demand) is 60,000 MW • Total Capacity is 75,000 MW • A new Coal plant would have capacity of 3,000 MW • A new Coal plant would take 5 years to develop and build • A new Simple Cycle Gas plant would generate 1,000 MW • New SC plant would take 3 years to develop and build • A new Combined Cycle Gas facility would generate 2,000 MW • A new CC plant would take 3-5 years to develop and build
Competitors	• Generators receive money for their power under long term contracts or through shorter term marketing arrangements. • Larger (coal, combined cycle gas) plants tend to run continuously and are referred to as "base-line." • Single cycle gas plants tend to run only when peak demand requires extra capacity. As the cost is much higher than base-line plants, these only run when the price of power is high.

Potential Framework:

First – Candidate should recognize that we must ask what type of plant should be built – Coal or Gas. If gas, which type – Combined Cycle or Single Cycle.

It's unlikely that we would want to build a coal plant given company profile, environmental regulations, capital requirement, and time to market, but if the candidate gives good reasons that take these considerations into account, the answer can be flexible.

A list of points that the candidate may come up with is below. The best candidates should bring up several of these AND indicate how the resolution of the question would affect a recommendation.

Competitive Situation

- This is a very mature market with demand growing slowly
- If we build too much capacity, we will push the price of power down
- Not only our actions, but the actions of our competitors affect total supply and thus the ultimate decision

Competitive Responses

- Is time to market important? (maybe not b/c plants last a long time)
- Will our announcement may prevent action of competitor or it may push action
- Can we sell new generation under a long term contract? Do we want to?
- Are there plans/announcements of competitors in the works?
- Alternate responses caused by CC vs. SC decision

Operational Issues

- Proximity to fuel supply (up to $1million/mi to construct pipe)
- Availability of suitable land
- Cost of extending pipeline

- Alternative sources of gas supply
- Know how running and repairing turbines/plants
- Know-how selling and marketing nat gas in Texas
- Connection/proximity to power grid (up to $1Million/mi construction)

Regulatory Issues

- Natural gas turbines are cleaner than coal
- They are VERY loud, making rural areas the only viable options
- Still need permits, studies - from state and local authorities to construct a power plant

Public Relations Issues

- Not In My BackYard (NIMBY)
- Environmental backlash

Alternative Valuation Considerations

- Option value of quick ramp up/down makes plant equivalent to a call option
  - The strike price of the option is the variable cost of fuel/operation
  - The underlying is the price of electricity
  - The value of the option is increases with increased volatility in the market for electricity
  - The value of the option will decrease as generation capacity is added and lower volatility in electricity prices results

After the candidate has put together a framework of considerations, she should synthesize the results of the discussion and make recommendations based on her findings. Remember we're looking for answers to:

Should the client build the plant?

What type of plant should they build?

What are the reasons for this recommendation?

Due to the open-ended nature of the question, we're looking for the candidate to make some educated assumptions to drive to the conclusion. The best answers will be direct clear, justified with reasoning from the discussion and will point out key assumptions that could change the result.

Step 1 – Problem Introduction
The interviewer gives a fair amount of information at the beginning. This is really a case for the interviewee to create a framework, take charge, and structure an unstructured situation.

The interviewee should recognize two main points:

3. The client needs a recommendation to build or not to build
4. If we recommend building, what type of plant should we recommend

Step 2 – Framework
See above for recommended considerations. This case is interesting, because the interviewee can't fall back on the profitability framework.

The interviewer doesn't have answers to many of the questions an interviewee may ask. It's important to direct the interviewee to make assumptions and justify why they are making those assumptions. For example, a non-starter for a gas plant would be unavailability of reasonable gas supply. A good candidate will recognize the importance of this factor, but assume it's possible given the company's profile.

Step 3 – Recommendations
If the candidate does not get to conclusions within 20 minutes, ask her to move on to wrap up the case. Again, we're looking for the ability to put together a structure from nothing, so don't prompt too much for "recommendations."

Step 4 – Feedback
This case is very unstructured. For candidates who have difficulty, it might be useful to walk through a quick 5 forces in addition to a discussion of framework points:

- Buyer/Supplier power – very low
- Substitute risk – low. there may be some risk among types of power generation – ie switching from low cost fuels as capacity tightens to using more high cost fuels, but a very high portion of demand for electricity is difficult to satisfy with other energy sources.
- Entry risk – high. With many competitors, the threat of new capacity being brought online is very high. Just look at what the client is doing.
- Internal rivalry – medium. B/c this is a commodity market, competition could be thought of as high. However, fluctuations in price and demand create high uncertainty in the industry. Along with the regulatory environment, long lead time, high capital cost, and complexity of building new capacity, there can be delays in bringing on new capacity in the industry. During these periods, competition can be more profitable on average for all players.

Name: Rocky Road Signs
Firm Type: BCG

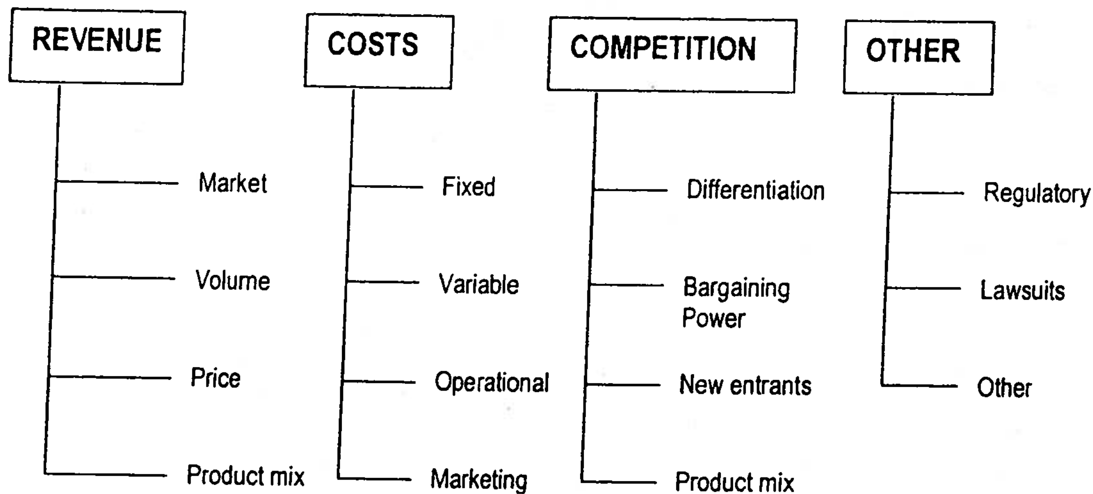
Our client is a company that makes materials for road signs and has been doing well for several years. Over the last few months however, a competitor has entered the market and is offering similar materials at a cheaper price. Our client is seeing their market share erode, and is debating whether they should cut prices as well. What should they do?

SOLUTION

Our client is trying to make a decision about pricing under competitive pressure. In general, the hidden objective of almost any decision for a company is to improve its profit in a sustainable way. For this case, we need to develop a solution that will counter the competitive threat without reducing profits for the company.

STRUCTURE

Following these preliminary thoughts, the candidate must develop a structure to explore important areas. For this case, our areas of exploration must include profit drivers, competition and other extraneous factors. The following diagram represents a possible way to structure our thoughts:



DISCUSSION

Let the candidate drive the discussion and only steer him/her to the competition bucket if absolutely necessary. The candidate must cover most points listed in the structure above in a systemic way, and ask the following:

- What are the profit drivers for our client? (go through REVENUE and COST buckets)
- Have there been any disruptive changes in this market? e.g., new materials?
- What does the competitive environment look like? (ask about product differentiation, bargaining power and entry barriers in this industry)
- Does the competitor have similar profit drivers?
- How is a new competitor able to charge cheaper prices? Is their strategy sustainable?
- Do our client and the competitor sell similar products?
- CRITICAL QUESTION: What is the product mix offered by our client? By the competitor?
- CRITICAL QUESTION: How much revenue does each product in the mix generate?

The interviewer must answer these questions by stating that the competing products are largely undifferentiated and there is little to no marketing expense (road sign materials are sold to the state government). The cost structures are the same across products and are identical for the

competition. Entry barriers are low for these products and there is no significant bargaining power advantage with respect to suppliers or customers for any competitor (or our client).

The critical question here is about product mix – when the candidate asks this question, the interviewer must answer that our client actually makes two kinds of road sign materials – Standard and Colored. The competitor's product competes with the client's **Standard** product. Our client's **Colored** product, as the name suggests, is available in a variety of colors.

Given this clue, the candidate must then investigate the revenue generated by each product type for our client and the competitor. The candidate must also ask about pricing information for each product type. The answer to these questions is provided in the table below: (do not provide pricing information unless asked)

	Client	**Competitor**
Standard	75% of revenue	100% of revenue
Colored	25% of revenue	Not available
Price	$10/unit	$9/unit
Cost	$7/unit	$7/unit

Note: Our client charges the same price/unit and incurs the same cost for both Standard and Colored types.

Given this information, the candidate must ask if the Colored product is sufficiently differentiated in the marketplace. The answer is yes! Further, our client is the only big player for this product type and enjoys significant bargaining power with suppliers of this product type. Also, the demand for the Colored product type is more inelastic than that for the Standard type.

RECOMMENDATION

Following this, the candidate should suggest that we **match** the lower price of our competitor for the Standard product and actually **raise** prices for the Colored product to offset the loss in profits. The candidate should then proactively calculate the new price structure for our client's product mix (if the candidate doesn't do so, then the interviewer must ask to calculate the new prices). Recognizing that the Standard type represents 75% of revenue, a $1 decrease in unit price to match the competitor's price must be followed by a $3 increase in unit price for the Colored type (which represents only 25% of total revenue). This brings the new price of the Standard product type at $9/unit, and that of the Colored product type at $13/unit.

The candidate must then wrap up the discussion by providing an accurate, clear and crisp recommendation.

EXTRA CREDIT

Good candidates will also mention associated risks and further suggestions while delivering their recommendation:

- Given low barriers to entry, the price of the Standard type may continue to drop with competitive pressure. Our client may want to reduce their price below the $9 (say $8) to squeeze margins from the competition even further
- Our client must think of ways to raise barriers to entry by locking in customers with long-term contracts and/or gaining bargaining power over suppliers
- Our client may want to think about diversifying its product mix to create new areas of differentiation

Name:	SH Fashion
Firm Type:	General

Your client is a major fashion magazine that has been offered by its printer a proprietary new process called selective binding that enables publishers to customize the pages included in readers' magazines based on demographic data known about the reader. For example, an ad in Better Homes & Gardens for lawn chemical services could be placed only in those issues going to subscribers who live in houses and not to those living in condominiums or apartments. In this way, advertisers can focus their communications on the demographic segment they are targeting. Would you advise your client to take advantage of this new process and offer selective binding to its advertisers?

Analysis

This is a pretty straightforward cost/benefit analysis. The Magazine would want to consider offering the service to its advertisers if it would be able to enhance its earnings by being able to charge its advertisers a premium for being able to more exactly and efficiently target the demographic segment they want to reach. Of course the increased revenue from the any premium must be able to offset any revenue lost as advertisers stopped targeting. The interviewee could start the analysis by obtaining the following information from the interviewer:

Q: What demographic breakdowns can be made in the magazine's database?
A: The only breakdown possible on your database is between subscribers who make under $50,000 and those who make over $50,000.

Q: What is total readership, the proportion of readers who are subscribers (as opposed to newsstand buyers), and the proportion of subscribers in each demographic category?
A: There are I million readers, 80% of who are subscribers. Twenty-five percent of subscribers make under $50,000, 75% make over $50,000. The same mix applies to the newsstand buyers according to readership audits.

Q: What proportion of the client's advertisers target each demographic category of readers?
A: Most advertisers are selling high-end fashion products, so 75% of them are targeting the high income group.

Q: What is the cost of the selective binding service and what does the magazine charge for its ads?
A: The service is being offered to your client free since the printer wants to promote the service's use by getting a major magazine to start using it. The client charges $50 per thousand per single sided, full-page ad (selective binding can only be offered on full-page ads). Therefore revenue associated with a single inserted page (front and back) in an issue is $100 per thousand.

Q: What does the client's closest direct competitor for advertisers charge for ads and what is their readership like?
A: The client's closest direct competitor has 500,000 readers, 100% of whom are subscribers. Effectively, all of their readers make over $50,000. They charge $70 per thousand for their single sided, full one page ads.

Since the printing cost to the client of selective binding is zero, the client simply needs to evaluate cost on the basis of revenue per thousand gained or lost as their advertiser base uses the service to better target their ads to their desired segment. Presumably, instead of 100% of the advertisers paying the full $50/thousand per page, the 25% of advertisers targeting the lower income segment will choose to advertise only to the 25% of subscribers falling into that segment, and the 75% of the advertisers targeting the high income segment will advertise only to the high income subscribers (75% of subscribers). Assume that all advertisers continue to advertise in 100% of

the newsstand copies. The revenue effect of this change can be calculated by looking at the impact the change would have on average ad rate per thousand on subscription readership:

New ad revenue per page = Old ad revenue per page * [(% low income subscribers * % low income target advertisers) + (% high income subscribers * % high Income advertisers)]

Thus
New ad revenue per page (at the old rate)= $50 * [(25% * 25%)+(75% * 75%)]= $31.25, which is < $50

Now the question is, can ad rates per thousand on the selective binding portion of ads sold be increased sufficiently to increase average revenue per thousand over what it is today? To answer this question, your client's ad rates must be looked at from the perspective of their advertisers. If you consider the advertisers targeting the high income group, their alternative to advertising in your client's magazine is to put their ad dollars toward the 100% high-income readership competitor. The cost per thousand high-income readers with the competitor magazine is:

(Page rate * total readership)/ (portion of readers who are high income) = ($70 * 500,000)/500,000 = $70

Thus $70 is the maximum price per thousand the client can charge its advertisers for selectively bound ads before the advertisers would switch to their competitor. Note that currently, the client is a cheaper buy for these high-income advertisers even though they are paying to reach readers they do not want:
($50 * 1 million)/(600,000 + 150,000) = $66.67

If the client charged $70/thousand for selectively bound ads, average revenue per thousand to the client would be:
$70 * [(25% * 25%) + (75% * 75%)) = $43.75

Therefore, since $43.75 is less than the $50 that advertisers are currently paying, the magazine should not offer advertisers the selective binding service.

Of course, there are other issues which interviewees might want to mention such as the possibility of price discriminating between high and low income advertisers, the potential for and cost of expanding the advertising base using selective binding as a selling tool, etc. However, it is important by the end of the interview to have reached a recommendation regarding the initial question posed by the interviewer. To mention these other possibilities and areas for further investigation is certainly worthwhile, but it is also important not to get too far off track or to complicate the issue so much that a final recommendation is never reached.

Name:	Theo Telecom
Firm Type:	General

Throughout the case, bolded sections are intended to be read to the interviewee except the frameworks section.

Case Set Up:

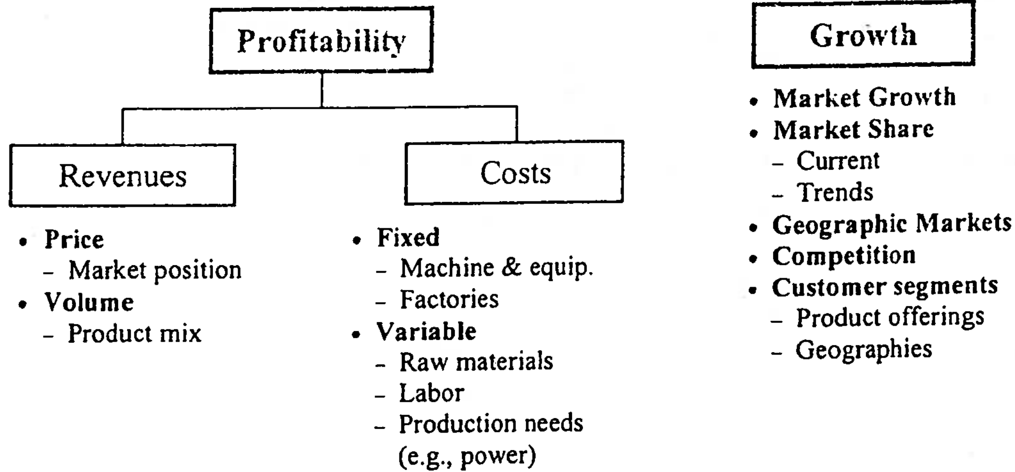
You have just been staffed to a project, and you have a meeting with your project manager to learn about the client and discuss the issues that your team has been hired to address.

Client Background:

Your client is Theo Telecom (TT)—a large, global equipment manufacturer of telecommunications and networking technology. Traditionally, TT has been a major player in mobile technology. Over the past few years, TT has become one of the leading manufacturers of mobile phones in the United States. The President of the Mobile Phone Business of TT (MPB) has hired your firm to address one of the major items on her agenda—growth. Your team has been tasked to create a strategy to improve two key metrics: (1) global market share and (2) profitability.

At this point in the discussion, the interviewee can either take a moment to collect his/her thoughts and outline a framework for the discussion or ask clarifying questions in order to better understand the case components. For those questions that are not addressed below, the interviewer should indicate that "[we] do not have access to that information at this time."

Suggested Framework:



The interviewee's framework should exhibit an understanding of how to analyze the two client issues:

- *Growth*
- *Profitability*

After the interviewee has explained his/her framework, the interviewer should start the conversation with a discussion around ***growth*** *to facilitate discussion. The interviewee should address the different components of the growth discussion by asking questions about the company and industry in order to help form a point of view on growth.*

Growth Discsussion

Data to be given only when the interviewee asks:

- **TT measures market share in number of units rather than dollars**
- **Overall, the mobile phone industry is experiencing worldwide growth, however at various rates in different regions of the world.**
- **Theo Telecom's current market share (Exhibit 1)**
- **Trends in market share over past few years (Exhibit 2)**
- **Mobile phone market growth across various regions (Exhibit 3)**

After the interviewer receives and analyzes the exhibits he/she should articulate the key takeaways from the exhibits

Exhibit 1:

→ The mobile phone market is generally concentrated
→ Mobile International is the dominant player in the industry and TT's main competitor

Exhibit 2:

→ While Theo Telecom has the dominant market position in North America, the largest disparity between TT and Mobile International occurs in emerging markets, such as China and India.
→ The data presented in Exhibit 2 is not sufficient to address the market share growth issue because the figures are shown in percentages, not number of units.

Exhibit 3:

→ The markets are experiencing the following compounded growth rates (approximates):
- North America: ~15%
- Europe: ~20%
- Asia-India: ~60%
- Asia-China: ~40%
- Other: ~20%
- Overall: ~25%

→ India and China are the largest opportunities for growth, especially since TT's current market share in those two markets is 10% (from Exhibit 2).

During the discussion about growth, the interviewee should conclude that there is a large opportunity in India and China and express interest in further exploring growth opportunities in those markets. At this point, the interviewer should acknowledge this observation and shift the conversation to explore potential profitability in the India market by reading the following assumption and asking the following question to the interviewee:

Let's assume that Theo Telecom wants to explore the option to invest in the India market. What are some ways it might consider increasing its presence in India?

A partial list might include:

- *Continuing to import phones*
- *Manufacturing phones in India*
- *Contracting an outside party to manufacture phones in India*

How would you evaluate the option of building a plant in India? (You can indicate to the candidate that the analysis should be incremental.)

<u>Evaluation of Building a Plant in India:</u>

The interviewee should identify the need to explore both revenues and costs in order to best address profitability. A good candidate will go back to the initial framework and begin the exposition from there. After candidate has done this, direct him/her to the cost side:

Let's assume revenues will be the same whether we build a plant or don't. How do we evaluate the decision to build a plant?

This case deals with the trade-off of variable cost savings versus fixed investment. If the interviewee has difficulty in articulating cost considerations, the interviewer should help the candidate construct the profitability framework above. Note, there are other fixed and variable costs possible, but for this case we limit the facts to facilitate discussion.

Give the following data when asked by interviewee

Fixed Costs:

- **Cost of New Plant: $600 million**
- **Expected Life: 10 years**
- **Salvage Value: $0**

Variable Costs:

- **Labor: $0.75 cost improvement from current production in India**
- **Shipping: $2.50 cost improvement**

For the sake of simplicity, the interviewee should approach the profitability analysis on a per unit basis.

The interviewee should complete the following calculations on his/her own:

Expected Indian Market Share
Due to growing market, we might reasonably assume that TT can gain market share to say 15% (reasonable estimates might be between 10-20% based on presence of strong competitor, global relative market shares, growth of Indian market etc.)

Expected Sales Volume (based on expected 15% market share in India in 2006, from Exhibits 2 and 3):
15% × 200 million units = 30 million units

Fixed Costs:
\$600 million depreciated over 10 years = \$60 million in Fixed Costs per year

Annual Fixed Costs per Unit:
\$60 million ÷ 30 million units = <u>\$2 in Fixed Costs per unit</u>

Aggregate Cost Implications of Building New India Plant:
Fixed cost + Changes in Variable Labor and Shipping = Incremental Cost Change per unit
(\$2.00) + \$0.75 + \$2.50 = \$1.25 improvement per unit

The candidate should ask if there are other considerations at this point. Tell him/her to assume that this is all the information available and to make a recommendation. An excellent candidate will summarize his/her findings and recommend that the plant be built. If the candidate does not point out risk factors ask them to do so. A list might look like this:

<u>Risk Factors</u>

- Unit sales estimates may be too high
    - Market share estimates too high
        - Additional entry or aggressive reaction to our entry by incumbents
        - Ability to partner with carriers could affect demand for our phones
    - Market growth estimates may be too high
    - We have no consideration of product mix
- Pricing is still important
    - Incremental cost advantage only works if total average cost is below price
    - Price could be at risk if competitive landscape contentious
- Other risks
    - Regulatory risks
    - Political risks

Wrapping Up:

After the interviewer has addressed the key components to the profitability analysis, the interviewer should read the following to the interviewee:

You have just finished your meeting with your project manager, and he leaves to attend a meeting with the VP of Marketing of the MPB. Within five minutes of your project manager leaving, the President of the MPB stops by your team room and notices that you are the only one in the room.

She introduces herself and says, "I'm on my way to a meeting with Theo Telecom's CEO. Can you give me a thirty-second summary of your initial recommendations?"

Potential Recommendations:

- In order to achieve desired growth, Theo Telecom should invest in emerging markets such as China and India
    - Mobile phone sales CAGR over past two years in China and India is 40% and 60%, respectively
    - Competitors have large market share in these markets; TT needs to keep pace
- In order to improve profitability in India, TT should invest in a new plant in India, which will result in \$1.25 per unit cost improvement

Exhibit 1: Global Market Share for 2005 (in %)

Mobile International	35
Theo Telecom	20
Sebring Technologies	10
Dupay International	10
Others	25

Exhibit 2: Market Share for 2005 by Region (in %)

	Mobile International	Theo Telecom	Sebring Technologies	Dupay International	Others
North America	20	50	15	5	10
Europe	60	20	15	<1	5
Asia-India	70	10	<1	15	5
Asia-China	65	10	10	5	10
Other	40	20	10	15	15

Exhibit 3: Mobile Phone Sales by Region (in millions of units)

	2004	2005	2006E
North America	130	150	175
Europe	100	130	145
Asia-India	80	105	200
Asia-China	95	130	190
Other	105	120	145
Total	550	645	835

Name:	ChiBus Paper Manufacturer
Firm Type:	General

Case Goals

The case intends to test a few consulting case analysis tools – profitability and break-even analysis and also evaluates the candidate on applications of important concepts like cannibalization and feasible penetration analysis.

Instructions to the person who is giving this case:

- The portion of the case that relates to the case commentary or covers instructions for the person who is giving the case has been typed in Italics.
- All the case facts (and related information) have been typed in the regular font.
- In the materials presented below, the terms Company/Firm and Client have been used interchangeably to refer to the ChiBus Paper Co.

Read out to the Candidate:

Your client is **ChiBus Paper Co.,** a paper pulp company that produces high quality paper. The company is owned by two partners S.S. and V.H. The company has done quite well in the past but has seen a decline in profits in the last two years. The two smart owners of the company tried hard to solve the problem internally but failed to do so. As the company can not afford to hire the likes of the big consulting firms, they came to GSB looking for some students who would be interested in helping them out for free. For this purpose they contacted the MCG co-chairs who in turn put you on this assignment.

You have been called to assess the business situation at the ChiBus Paper co. and provide recommendations to improve the situation.

Instructions: At this point, keep the question totally open ended and ask the candidate to start the discussion.

Case Related Information

Customers: The direct customer of the paper manufacturing firm is a paper distributor who in turn supplies this paper to consumer package goods firms. The CPG firms use this paper for labeling their bottled products like Shampoos and Oils.

Competition: There are a few firms producing this kind of paper. Our firm is the market leader in this product category.

Product Category: Our firm produces two types of paper products - Type A and Type B.

Revenue and Costs Data – *Give the Table after the candidate mentions a few of the profitability drivers*

	2004		2005	
(in $K) except Unit data	A	B	A	B
Sales Units (Sheets)	100,000	500,000	80,000	480,000
Sales	400	750	240	600
COGS	300	600	210	492
Margin	**100**	**150**	**30**	**108**
Margin %	**25%**	**20%**	**12.5%**	**18%**
Total Sales	800	1250	480	900
Share	**50%**	**60%**	**50%**	**66.7%**

Provide the Unit Sales, Sales, COGS and Total Sales (given in the table above). Ask the candidate to calculate Margin, Margin% and percentage share data (In Bold).

Analysis

A good candidate should generate the numbers and point out these issues:

1. Overall market (revenues) for both product A and product B is falling
2. This is driven both by Volumes and Prices
3. Clients relative market share is the same (for product A or better product B)
4. *An exceptional candidate would do the additional analysis :*
   Would Calculate the Average prices per sheet –
   Product A - $4 in 2004 and $3 in 2005
   Product B - $1.5 in 2004 and $ 1.25 in 2005

Important points to mention are

1) Product A is higher quality product (as the price is higher) has seen a larger drop in prices.
2) The whole market is seemed to be moving downwards (i.e. lower sales of product A and Product B and lower prices for both).

If the candidate does not come up with the analysis mentioned in point 4, mention it to him/her and explain the industry situation. Please note – According to the data presented above, the costs have also fallen. If the candidate starts talking in detail about costs, please indicate that the main focus of the case is not on costs.

Main conclusion here is that not only the client's revenues but also the total market sales for products A and B have reduced.
A good candidate would now proceed to analyze what is going on at the industry level. Ask the candidate to brainstorm on this (to test his/her breadth of thinking). The following could be the plausible causes –

1) Overall demand for the packaged goods (bottle shampoos, oils etc) has fallen and hence the demand for labels has reduced causing a downward spiraling effect on prices.
   Instructor response - This is not the case, as the industry is actually growing at the normal rate (equal to GDP growth)
2) A substitute labeling material (for e.g. a chemical dye) that gets applied directly on the bottles is being used, therefore paper based stickers and labels are facing lower demands.
   Instructor response - Good reason, but this is also not true. The industry is still using paper based labels.
3) The product package design has changed and as a result most of shampoos and oils are being sold in sachets that do not require labels.
   Instructor response - Nope!

Briefly discuss other points that the candidate comes with. Ask the candidate at this point that if he/she has to go and find out about what is going on in the market, what will he/she do? Where will he/she go? Who will he/she talk to get information on this issue?

This question is to test the general business sense/intuition of the candidate. The candidate can throw in answers like visit the CPG firms, do market research etc. The correct action (from business intuition standpoint) is to go to the company's top distributor and find out what he/she (or rival distributors) is supplying to the CPG firms.

The distributor mentions that there has been a new product launch in the market – Product C. This is new type of paper that is doing very well and is cheaper (half the price of Product B). Most of the CPG manufacturers are looking to cut costs and are placing large orders for this product.

A good candidate would now inquire if our client should get into producing and selling product C. (Please note that a good candidate would not directly jump to this conclusion but ask for the relevant data first)

To evaluate this decision we need to do a break even analysis. The candidate should ask for the following information for:

Revenue:
Price (Per unit) – 75 cents

Costs:
Fixed Costs – New machinery is not required but the firm does need to modify the current machinery to make it suitable for producing 'Type C' product. Modifications costs are equal to $ 5,000.

Variable Costs

1) Material – 10 cents per unit
2) Direct Labor – 1 person can make 100 sheets in 1 day. Wage = $ 5 / hr. Labor works for 5 hrs in a day. This would mean that 100 sheets costs 5X5 = $ 25. Therefore, Labor cost = 25 cent per unit.
3) Overheads - 15 cents per unit

Break even quantity = Fixed Costs / Contribution Margin = 5000/ (.75 - .50)
= 5000/.25 = 20,000 units.

Feasibility
After the candidate has worked out the numbers, ask if he/she thinks this is a feasible strategy. The candidate should ask about the total market size of Product C and the level of competition to determine whether selling 20,000 units is feasible. Provide the following information:

- Total Market size for 'Product C' is 100,000.
- There are no big competitors. The market is fragmented.

Solution
The candidate might jump into calculating a penetration rate of 20%. That answer is not wrong but the candidate is assuming that the company has to recover its investment in 1 year. This is not the best approach. Ideally, the firm should look at a range of multi-period payoffs and calculate the feasibility accordingly. For e.g. -
If the company aims at achieving penetration of 10% per year, it can sell 10,000 in one year and cover costs in 2 years. This seems reasonable as the competition is fragmented and the company has existing distributor channel relationships.

Ask the candidate what other factors should the firm think about before deciding to produce product C – It is important to look at cannibalization effects here. If the candidate does not get to this point, mention cannibalization and ask for his/her opinions on the issue.
A good candidate will point the following points

- Overall market is facing a downward pressure (in pricing) therefore it is important to have low price product.
- If the firm does not sell 'product C' now, it could lose significant market share and revenues (this has already started to happen)

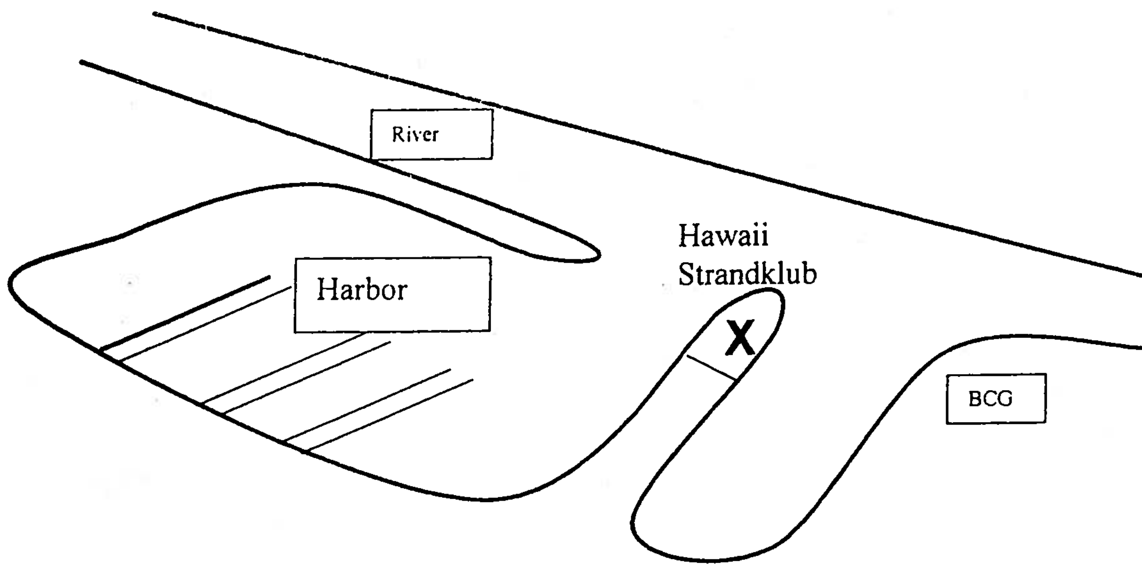
Ask the *candidate about what else can the firm do to mitigate the adverse effects of* ***cannibalization****. The possible answers could be*

- Product differentiation – Give better delivery and after sale service to product A customers
- Target a different industry (preferably high margin) for selling the high quality (Product A) paper sheets as the demand from CPG firms is driving toward the lower end (price) of the market.

Name: Hawaii Beach Club
Firm Type: General

Close to the BCG building in Dusseldorf, there is a small harbor that borders a river. The whole setting is described in the figure below. All along the harbor's shore, there are office buildings, generally headquarters of multinationals.
You and one of your colleagues are interested in a business that exists close to where BCG is situated. It is the Hawai Strandklub. It is a restaurant that serves lunch and dinner. The whole surface available (including office, kitchen, etc.) has 1000 square meters (ca. 10000 square feet). Further to this it has a 1000 square meters (ca. 10000 square feet) of beach, on which it has beach club activity in the summer. Finally, on Saturdays, it has lounge activity in the evening after the dinner part.

You and your friend would like to inquire buying that business. How would you value it?


River
Harbor
Hawaii
Strandklub
X
BCG

Solution:
The key to this case is not to lose oneself in the mass of assumptions and figures that one writes. It is not complicated but demands a lot of organization skills.

1. Recognize that only a certain percentage of the surface is available for dining activity, let say 60%. The surface with tables is then about **600 square meters**.
2. A table has a certain size (say 1 square meter to make it simple). On each of these tables, 4 people will sit. Assuming that the tables are 2m apart, this means a complete 4 people table occupies **9 square meters**. Assume about 65 tables.
3. Recognize that based on the different activities, different sales revenues are possible. Each cell contains some assumptions.
4. On the beach, each person would have an average of 10 square meters. Hence, there are about 100 available spots.
5. For simplicity reasons, assume that there are only two sittings per table for lunch and dinner and only one sitting per spot on the beach. Also assume that the restaurant is open every day of the year (Assume 364 days/year)
6. Assume that the beach is only available for 3 months out of the year and for each of those months there are 30 days/month.
7. Assume there are 52 Saturdays in a year and on average there are 500 people that come to the lounge activity.

Below are the estimated revenues: (note: the interview can approximate some values, but should be relatively close to the actual values)

Activity	Number of days	Occupation rate	People served per year	Average check	Revenue
Lunch	364	80%	364*.8*130*4= 151,424	20 Euro	3,028,480
Dinner	364	50%	364*.5*130*4= 94,640	25 Euro	2,366,000
Beach (3 months)	30*3=90	50%	90*.5*100= 4,500	20 Euro	90,000
Lounge	52		52*500= 26,000	25 Euro	650,000
Total					**6,134,480**

8. Now, calculate cash flows. For this, the interviewer should make up a percentage of sales as cash flows. For example, take 15%. So Free Cash Flow would be 920,172
9. Next, pick a discount rate. Here, the interviewer could ask technical questions, such as how to calculate a WACC, the CAPM model, etc. If one takes 10%, the perpetuity is worth about 9.2 Million Euro.

Optional Question: (if there is still some time)
This building is in the middle of an office space area. Why do you think nobody came up with a building there?

Answer: This restaurant is in the middle of a huge office building area. Anyone could build an office building there. The interview should talk about the opportunity that it could represent. Possible reasons why this has never been done are:

- The office space market is saturated
- A building at this place might not leverage similar cash flows, hence the arbitrage is made by leaving the restaurant
- Nobody came up with the idea

All in all, this opportunity must be calculated to verify whether buying the restaurant, destroying it and then building an office there might not be a good opportunity.

Name:	Eddy's Oil Company
Firm Type:	General

Situation:

A Chinese national oil company is interested to acquire an Argentinean owned oil company in Indonesia. Your company has been engaged to conduct a preliminary investigation if this is a good investment idea to proceed and what key areas to focus going into the due diligence round. You have been given the task of assessing this situation for the client.

Clarifying question about client & environment:

- Government regulated industry. Government awards acreages.
- Client is a low cost producer and has the ability to reduce cost from utilizing own technology and staff.
- Purchaser/client can opt to drop any acreage from portfolio to be bought.

Approach:

Candidate should look at this situation on a broad scale. Use 3C + market assessment approach to try and uncover key issues. This case needs to be driven by the candidate and the information should be given by the interviewer only if it is asked for.

Facts:

Target Acquisition Company:

- 5 concession areas
  - 2 producing acreages
    - Mature acreage/declining production
    - Smaller fields exist that is undeveloped
    - Opportunity exists in upside resources. 2:1 of undeveloped:developed reserves[1].
    - However, production will need to continue for next 10 years to produce all reserves.
    - In one of the two acreages: Seller is majority share holder.
  - 1 non-producing acreage
    - Gas mostly.
    - Majority share holder.
  - 2 exploration acreages
    - Benchmark with adjacent blocks - no potential for oil/gas discovery.
    - Majority share holder.
- Operations staff:

[1] Reserves = oil/gas quantities identified to be produced with existing technology

- Expatriate and local
  - Expatriate staff will want to leave. Expatriates mostly managers and senior professionals.
  - Local staff will stay but mostly in junior staff positions.
  - Expatriate staff is very expensive compared to local and client staff.

➢ Oil price: $20/bbl

Customer:

➢ Local oil refinery.
- Buys oil from target company and exports processed oil to Singapore by shuttle tankers.
- No change to arrangement.

➢ Local gas grid and town exists.
- Demand for gas high since diesel (a substitute for gas) subsidies have been decreased.
- Electricity demand high because of growth in local industries and population growth.
- Potential for additional sales.

Competitor:

➢ None. Exclusive negotiations rights between client and seller.

➢ No preemption by remaining partners.

Government:

➢ Do not want reduction in local content in workforce. Would not accept firing of local staff.

➢ Contract on producing assets expiring in 3 years but production (existing + potential) will continue beyond expiry period.
- Negotiations for concession contract extension needed.

Case insights:

Potential reasons this is a good investment idea:

- Upside potential exist with small undeveloped fields. The ratio of 2:1 of undeveloped vs. developed fields.
- Undeveloped acreage with gas that can be sold to local gas grid/power plant.
- Drop exploration acreages. No prospects based on adjacent areas.

Potential reasons this is a bad investment idea:

- Concessions expiring before all the production is recovered. Production forecasted for 10 years for full value of assets but concession expiring in 3 years. Value lie outside of concession contractual i.e. 7 years of production not legally owned by buyer/client. Outcome with Government negotiations uncertain.
- Negotiate gas sales contract. Tricky given that market is highly regulated and local power producers may not want to pay in U.S. Dollars which exposes the gas seller to local currency fluctuations.
- Challenge in keeping expatriate staff & slowly introducing own/client's staff over time. Technology transfer and handover may not be smooth as expatriate staff may want to leave immediately as they do not see any prospects working for less money! Ask candidate for ideas on how to ensure expatriate staff do not leave immediately after sale transaction. One suggestion is to put in a clause in the Sales Purchase Agreement for the transaction requiring that expatriate staff stay for 6 months to 1 year to ensure transfer of knowledge in return client agrees to pay their salaries and full benefits.

Name:	Hauffman's Paper
Firm Type:	General

Hauffman's Paper is the # 2 paper manufacturer, right now, in the US market. Hauffman's believe that if they increase capacity by 50 tons/year, they can become the #1 player in the market (their goal) in both revenue and volume. The client would like you to advise them whether or not they should increase capacity 50 tons/year

Note: this case is about testing how well the candidate can engage the interviewer in intellectual discussion of key facts/strategic issues. This case assumes that the candidate has made the second round and that the partner doing the interview is more interested in getting to know how the candidate thinks, builds relationships, and communicates then standard first round cases. So while a hard case solution would be nice it is not necessary and not the focus of the case.

Q&A / Relevant Frameworks

- It helps if the candidate can articulate that the decision comes down to whether the benefits outweigh the costs (it is pretty obvious, but it shows that the individual knows what the problem boils down to)
  - Potential benefits:
    - » incremental revenue
    - » increased number of customers: untapped population, steal from competitors, and/or expand the market
    - » better pricing/margins
  - Potential costs
    - » capital investment
    - » marketing/business development
- Customer = newspapers (e.g. Wall Street Journal, New York Times) → note to interviewer: do not volunteer this information, as it is important question the candidate should ask to understand what type of client it is and what they do

- Industry demand is completely flat (i.e. no growth or depletion expected) and is a commodity market, so pricing not a factor
  - As a commodity, all competitors have the exact same price, equal quality, aren't differentiated on service, value-added offerings, reliability, or anything else → only price matters, and any movement by one company triggers a reaction from all competitors

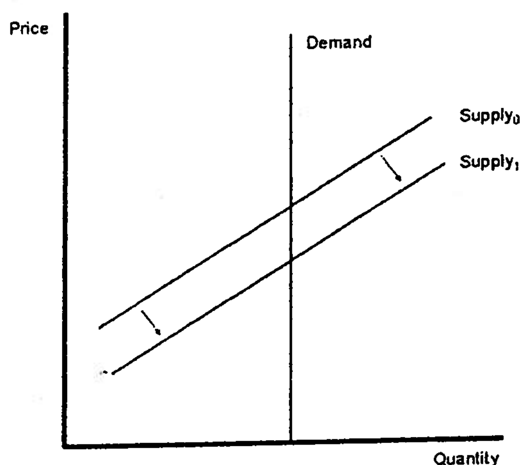
- Capital investment to increase capacity

- Probe candidate about what the considerations might be:
  - » build entirely new plant vs. use existing facility?
  - » cost of new machinery vs. have available machinery
  - » incremental labor costs
  - » maybe per-unit production costs decline through economies of scale, thus increasing net margins?
  - » benefits it might offer other divisions in the company?
  - » other?
- After discussion, have candidate can assume that investment is costless (i.e. have available machinery, factory space, labor, etc.) for the sake of simplicity...obviously, though, this would be an important factor

Analysis

- Competitive snapshot – hand out Appendix A
  - Total industry capacity is 1,050k tons and utilization is 1,020k tons
  - Utilization rate for all competitors is 100%, except for #6 (only 40%)
  - Market clearing price is $60/ton (commodity, so price taker), so candidate can quickly calculate margins if desired or just realize that #6 is only breaking even
  - Can also calculate break-even quantity they would need to obtain or break-even cost of investment for project to be positive NPV

The "Answer"



- If the client adds 50 tons of capacity and pricing remains constant, there may not be any incremental business attained
- Reducing price significantly will destroy significant value in the market (e.g. if lower price to $40/ton, everyone will match and assuming per-unit cost
- If, after increasing capacity, client lowers price to $59/ton, everyone else will also lower their price, while presumably company #6 will drop out of the market b/c they'd be operating at a loss
  - Client would capture all their business (i.e. #6) (i.e. steal share), since everyone else is at capacity
  - This makes sense when you consider the microeconomic framework of supply and demand (inelastic demand, supply curve shifts out, price declines)
  - That would then create 20 tons of capacity, i.e. additional revenue…but 30 tons are then still available
    - » Bonus conclusion would be for candidate to inquire what else can be done with that available capacity
      - In fact, can manufacture gift wrapping paper with the same machine, so that might present a worthwhile opportunity
      - See if at all possible to increase market size
      - Consider non-US customers
      - Other?

- Ask candidate how answer might differ if capacity increase weren't costless
  - Would need to factor in additional costs vs. incremental revenues using discounted cash flow (DCF) analysis

- In summary, candidate should articulate key assumptions about what the core essence of the problem, how client should only undertake project if profitable (shouldn't just strive to be #1 company in market, unless offers some meaningful benefits), competitive landscape of commodity environment, and the chain of events that happens if price is decreased
  - Again, case is more an intellectual discussion of key microeconomic/strategic factors as opposed to "such and such" is the right "answer"

Appendix I:

Company Rank (by market share)	Capacity ('000 tons)	Units sold ('000 tons)	Cost of production (US$)
1	300	300	22
2	250	250	25
3	200	200	20
4	150	150	30
5	100	100	45
6	50	20	60

Name:	Hauffman's Online Travel
Firm Type:	General

Your client is a travel website that currently sells all major travel products – airline tickets, hotel rooms, car rentals, vacation packages, and cruises. Think of Expedia, Travelocity, or Orbitz as a reference.

They are interested in entering a new market where consumers can add additional destination products to their trip, such as airport transfers, show tickets, tours, etc. A consumer will begin booking their trip as normal, and before concluding, will be presented with these additional product options. They are calling this new product a "Trip Ad-On".

Before our client invests in developing this capability, they've asked us to evaluate the market potential of this offering and provide a go/no-go recommendation with associate risks.

This combines profitability and new market entry. The biggest challenge for the candidate is to think about what data he/she needs and how to gather this data. Let the candidate drive the discussion as much as possible in uncovering the necessary data.

Revenue Drivers

The table below gives a complete overview of the product mix breakdown for our client. This data is the first piece of important information. Let the candidate try and ask for this information themselves.

Product	% of Transactions	% of Revenue
Air	60	55
Hotel	20	25
Package (air & hotel)	3	5
Car	15	10
Cruise	2	5
Total per year	10 million	$3 billion

Next, the candidate should recognize that the Trip Ad-On will be sold in combination with the existing products. More specifically, a customer can only purchase a Trip Ad-On together with an air, hotel, package, car, or cruise product. They can never purchase a Trip Ad-On by itself.

The critical estimation the candidate needs to provide is the conversion rate associated with each product. The conversion rate associated with the air product is the number of Trip Ad-Ons purchased with the air product divided by the total number of air product transactions. For

example, if our client made 1000 air transactions and sold 150 Trip Ad-Ons with these air transactions, the conversion rate would be 15%.

Ask the candidate to ballpark conversion rates by product. It is not important that the candidate gets the numbers suggested below; however, it is important that he/she provides some rationale for their estimation. Factors that would be good to consider are:

- Intuition as to what current products are best associated with the new Trip Ad-Ons. A package would be most logical because the customer is looking to buy their entire trip at once, while a cruise would be least logical since the customer will be tied up on the cruise-ship for their entire trip and unlikely to need a Trip Ad-On.
- Available competitive data from annual reports, press releases, or tour operators.
- Other offerings that may be currently sold in the booking path. An example of this would be travel insurance.

Suggested conversion rates by product:

- Air: 5%
- Hotel: 10%
- Package: 20%
- Car: 2%
- Cruise: 1%

Other revenue drivers:

- Market reach: 50%
- It won't be possible to offer Trip Ad-Ons in all markets, so the transaction numbers would have to be cut by a market reach factor. Major markets like New York, Chicago, Las Vegas, etc. would be included, but secondary markets (e.g. Charlotte, Indianapolis, etc) become too fragmented to support Trip Ad-Ons.
- Average retail price of an add-on: $100

Again, not critical that the candidate gets the numbers suggested, but make sure they provide a logical rationale.

Sample Revenue Calculation:

Product	% of Trans	# Trans (MM)	Conv Rate	Trip Ad-Ons
Air	60	6.0	5%	300,000
Hotel	20	2.0	10%	200,000
Package (air & hotel)	3	0.3	20%	60,000
Car	15	1.5	2%	30,000
Cruise	2	0.2	1%	2,000
Total		10.0		592,000

592,000 potential Trip Ad-Ons

x 50% market reach

x $100 retail

= $29.6 million (say $30 million)

Cost drivers

- COGS: 80%

  Note that the client only retains 20% of the total retail price of the Trip Ad-On
- Other variable costs: $10 per transaction

  Potential drivers include: computer hardware (direct variable), credit card fees (direct variable), customer service (allocated), technology staff (allocated), and general overhead (allocated)
- One-time development cost of $3 million

Sample Cost and Profitability Calculation:

Cost = .80*($30 million) + $10*(296,000 transactions) = $27 million

Assume the one-time development costs takes place in Year 1. Also, assume future growth rate is zero and the discount factor is zero (e.g. $30 million in revenue for each year after year 1, which is also the present value).

Profit (year 1) = $30 million - $27 million - $3 million = $0 million

Profit (each subsequent year in present value) = $30 million - $27 million = $3 million

Other Considerations

- Competitive environment

  All our major competitors are currently selling Trip Ad-Ons. Our client is late to the game. Although competitors are publicly traded, it is hard to find specific data related to the performance of their Trip Ad-Ons. But the general feeling is that this has been a good venture for them from a financial perspective.

- Risks
  - Adding an extra step in the booking path and negatively impacting existing products. For example, making the booking path longer by adding Trip Ad-Ons could potentially hurt the client's air product sales. This would be detrimental given the transaction and revenue volume the air product provides.
  - Fulfillment and customer service are new challenges that need to be addressed. How does the client provide the customer with the necessary ticket to gain entry to their Trip Ad-On? Mail is an expensive option that would further eat into their profit margin.
  - If the client does not implement Trip Ad-Ons, will their competitors have a long-term product and strategic advantage?
  - Can the client meet a new product challenge from an organizational standpoint? Do they have the resources to mobilize a dedicated team to take ownership?

- Financial Issues

  In the sample calculations, the profitability is zero in Year 1 and $3 million per year afterwards. Assuming this represents free cash flow, is this a reasonable return given the financial and human resources required? (Note – a good candidate would bring up whether or not the client is meeting its cost of capital).

Recommendation

Make sure the candidate provides a go/no-go recommendation to the client that captures the essence of the discussion. Additionally, they should bring up at least two risks with the decision they are recommending. Whether or not the candidate recommends proceeding with the project is not critical to succeeding with this case.

Name:	Technowiz Semiconductor
Firm Type:	General

TechnoWiz Semiconductors is a leading integrated design and manufacturing (IDM) provider of semiconductor chips to the consumer electronics, telecom and automotive industries. Its devices have been embedded in leading edge cell phones, televisions, DVD players and a host of other consumer electronics products. In the last few years TechnoWiz has been leading the introduction of automotive high-tech electronics including satellite navigation systems, vehicle systems monitoring, climate control and passenger comfort systems, etc.

The recent surge in demand for its products and the wave of new products under development requires additional manufacturing capability. Your firm has been engaged to help the client determine how best to deploy additional capacity in one of its manufacturing facilities – FAB ALPHA23.

How would you begin to analyze the problem?

The candidate should ask some clarification questions about the process:

1) What is the current manufacturing process and what are the key equipment in the process flow?
2) Which equipment are the bottlenecks

Candidate should put down a structure initially addressing the following questions. Possible high level structure could be:

Capacity Constraints:

1) What is the current throughput and how much additional throughput do we need to plan for?
2) Can we increase throughput without new investments (i.e. by improving our operational effectiveness)?
3) Competition capacity (probably acquire a company).

Demand

1) Is it a short burst in demand or is it sustainable. What are the main drivers for this demand
2) What is the market size & growth rate – how much are we planning to capture, i.e. how did we arrive at the new throughput requirements?

Return on Investment

1) Do we want to build the unit in US/India/China. What are the capital requirements and return on investment
2) What is the investment for each additional machine / what is our budget outlay?
3) How will the investment to increase capacity affect our profit margins (economies of scale)

Additional questions that a separates a great candidate from a good one include the following:

1) How soon are we planning to increase production?
2) How long will it take to add new equipment?
3) Are there other constraints such as availability of trained labor we need to factor?
4) Are there any other options – like subcontracting the manufacture of the additional amount?

Based on the questions the candidate asks, the interviewer should provide the following details.

- Semiconductor manufacturing process overview: Appendix A
- Not all devices follow the same manufacturing process. *<Hence the product mix will determine the actual capacity constraints.>*
- Current throughput of the fab is 5000 wafers/ month. The plan is to ramp up by 20% by end of this quarter.

The candidate should note that a quick scan of the process flow indicates more arrows leading to Photolithography (Photo) than any other processing stage.

- At the current levels of utilization,

  Diffusion has 5 machines, each capable of processing 1200 wafers /month

  Etch has 6 machines, each capable of processing 1000 wafers/ month

  Photo has 10 machines, each processing 500 wafers / month.

  All other stages have enough capacity to process 10,000 wafers /month.

  If the candidate has not already pointed this out, the candidate should use the numbers to indicate that the bottleneck for our capacity ramp up is the 'Photo' stage of production, otherwise to confirm it.

- In addition, the following financial data is available:

  1 Photo machine costs $1,200,000. It is depreciated over 5 yrs (straight line)

  Each additional wafer/month adds $45 in revenues and $30 in direct costs

  The candidate should calculate the following:

  - *Additional profitability from the increased throughput, without new equipment: $15*12K = $180K*
  - *With the new equipment annual profitability change is -$60K.*

- *Therefore it does not make sense to invest in a new photo machine for the desired level of output increase*

Ask the candidate at what level of output increase does it make sense.

The candidate should calculate the following:

- *The new equipment purchase at current utilization levels can be justified for a demand increase of 1334 wafers/ month (240k/15*12).*
- *The candidate should ask if it is possible to increase sales to this level* – the answer is no.

Ask the candidate what else the company can do.

The candidate should realize that the maximum throughput data was on the current level of utilization and should ask what the current capacity utilization is.

- All equipment at the fab are running at sub-par utilization. Current equipment utilization levels are as low as 50%.

The candidate should ask why utilization is so low.

- The key causes of under-utilization are shown in Appendix B.

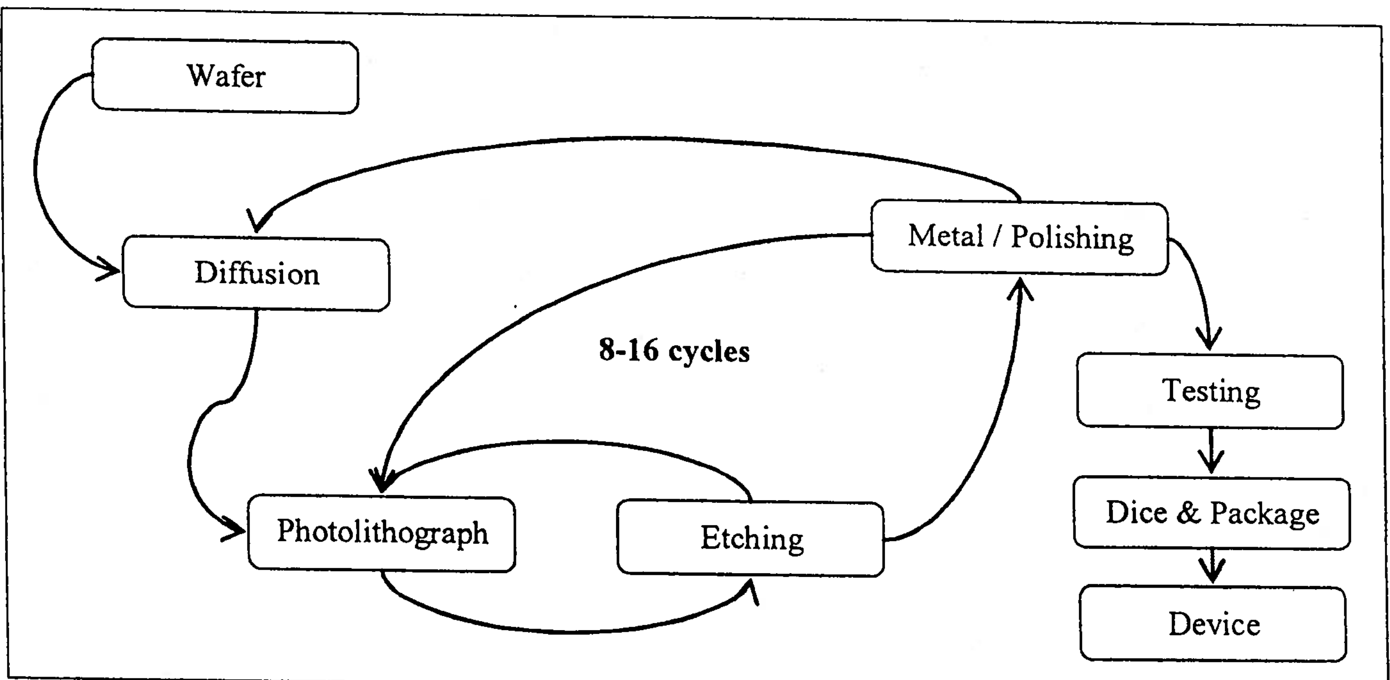
  The candidate should draw the following inferences:

  - *Unplanned maintenance, idle time of operators and other losses account for 28% of the total time. Therefore, through better planning the utilization can be improved.*
  - *While utilization lost to preventative maintenance and speed losses is harder to reduce, the other areas should be easier to improve. Therefore, a 10% improvement in utilization seems quite conservative.*
  - *To increase the throughput from 5000 wafers/month to 6000 wafer/ month on the same set of equipment we need:*

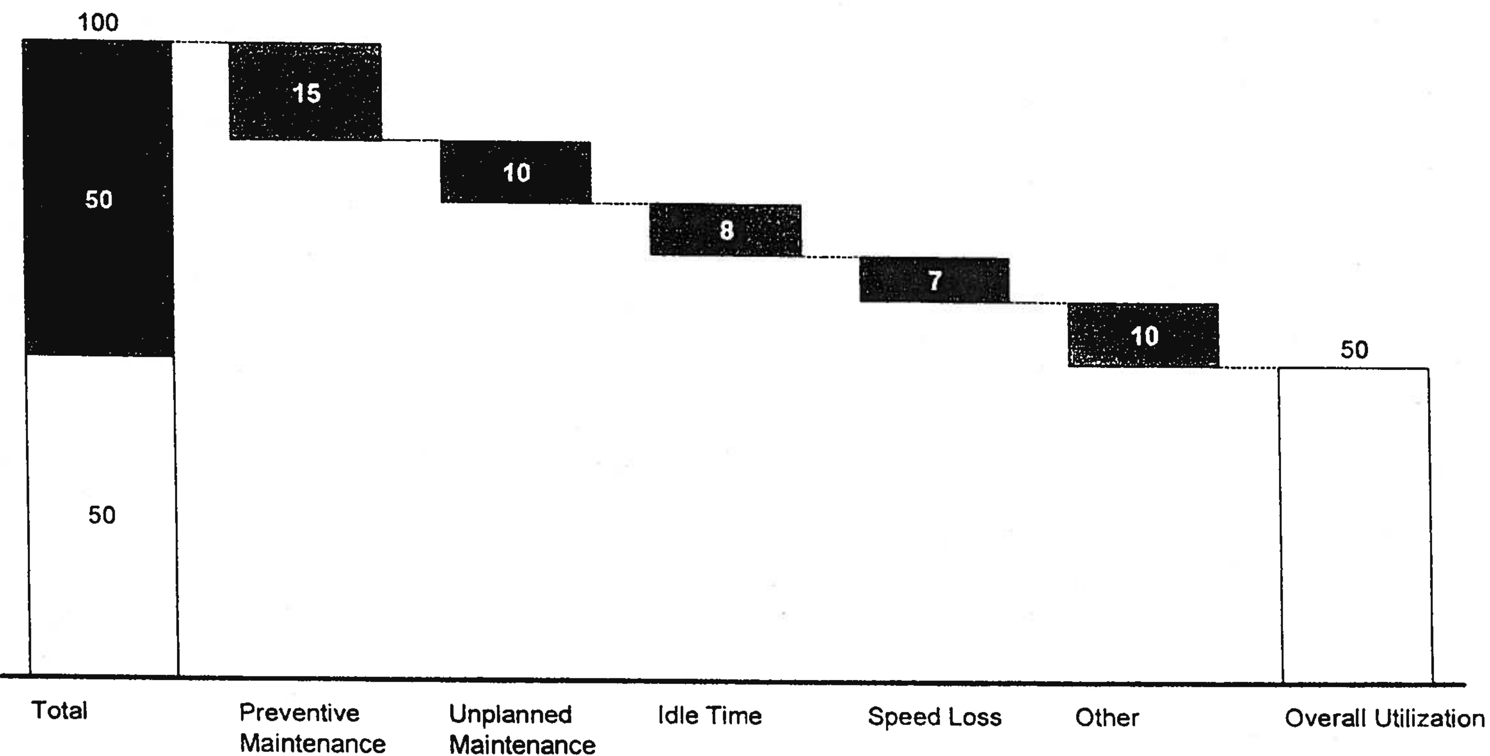
    *[(50% * 6000/5000) – 50%] = 10% improvement in utilization*

Conclusion: Client should invest in improving equipment effectiveness through better planning.

Appendix A: Semiconductor manufacturing process overview



Appendix B: Causes of underutilization



Name:	S&S Pharma
Firm Type:	General

The world's second largest drug manufacturer, Subramanyan-Sanafi, has come up with a new idea for selling its two blockbuster drugs. One of them is for lowering blood pressure (BP) and the other is for lowering cholesterol. The client is experimenting a new drug that is a combination of these two drugs. They think this will generate more revenues in the near term.

The client would like you to help them with the following questions:

- **Is this a good idea?**
- **If so, how should they price the new drug and what is its impact on the client's revenue?**

Client and Product Background: (Good candidates will start this discussion before the interviewer has to lay it out for them)

- The client is an established player in the U.S market (focus of this case)
- Both the drugs under consideration are prescription drugs and the new drug they are thinking of will also be a prescription drug
- No additional cost was incurred in this combination drug and it has already received FDA approval

Q&A Session: Relevant Questions and Data (Wait to see if the student asks for this relevant information before giving it to them)

- Client has 50% share for both the cholesterol and BP drug
- Substitutes: There are no other products like the combination drug in the market
- Competition: One other competitor (50% share for both the cholesterol and BP drug)
- Patent: Available for ~10 years (for both the individual and combination drug)

Give candidate Appendix A.

- Consumers pay a co-pay of $10 per prescription (for 1 month worth of medicines)
- Also currently, 30,000 of the total 90,000 customers for both the client and competitor use both the cholesterol and BP drug

Note: User convenience is a measure of compliance or how often patients consume the drugs properly on time. This is higher for the combo drug as it is only one pill compared to the current two pills. This is expected to cause the patients to take the proper dosage of both the pills more frequently.

Relevant Analysis and Answer Discussion

Pricing for the new combination drug:

Current Scenario:

- Consumers currently pay 2 * $10 = $20 co-pay for a month's prescription of both the drugs
- HMOs currently pay ($40+$30)-($20) = $50 to the client for a month's prescription of both the drugs
- Client receives a total revenue of ($70*30,000) = $2.1M/month (from customers who buy both drugs)

Combo Scenario:

- Since new drug is more effective and convenient than the current two drugs, customers can be charged and are able and willing to pay $15 co-pay for a month's prescription of both the drugs ($15 is less than the current $20 co-pay customers pay for the two separate drugs) – Good candidates will ask if they are changes to pricing for the new drug or even speculate on it. If the candidate does not raise the issue then let them swim around for awhile to see if they come back to it. Eventually, if they don't ask then give it to them.
- HMOs pay for combo drug = $50 for a month's prescription of both the drugs (assuming HMOs do not pay more than before)
- Cannibalization Effect: Assume all 30,000 customers who buy both the drugs will start buying the new combo drug. Lost revenue = ($70-($50+$15))*30,000 = ($150,000/month)

New customers from competition:

- The client could potentially get a reasonable share of the competition's 30,000 customers who use both the drugs (because of benefits of the drug and the reduction in monthly co-pay)
- Let's say they get 50% of competitor's customers: This translates to a revenue of ($50+$15)*15,000 = $975,000/month

Net impact on client's revenue (Short-term):

- Net direct impact is a revenue growth of $825,000 per month
- In the long-term, there is potential to woo more competitor customers.
- The above are strong positives but good candidates will point out that competition may make own combo drug and ask about if they have such a drug in the pipeline (they did but it failed). In any event, the compeition is expected to eventually create a competitor drug. This will cause the advantage to shrink a little bit in the long-term.

Potential Synergies:

- Distribution (Sales force, Doctors, Pharmacies, Hospitals, HMOs): Well established (and the same) network which can be used for the combo drug
- Marketing and advertising: Current programs can be used to push the new combo drug toconsumers (currently, client has a very effective Direct-to-Consumer marketing)

Right approach

- The student should identify the key entities in the industry value chain like doctors, HMOs, hospitals, and the end consumer (bringing in the government and state agencies is a bonus though this is outside the scope of this case)
- The next step will be to identify the feasibility of the idea which should include the key aspects of drug efficacy, side effects, interactions etc
- Finally, the student should try to estimate a price that the market will bear for this product. Here, the co-pay for end customers should be used properly. Also, the student should address the cannibalization effect of introducing this new combination drug (very important) and its impact on overall revenues
- Bonus points: If the student mentions the benefits of increased compliance to the HMOs (because of reduced long-term costs to them) and consequently makes an assumption that they may be willing to pay more than the current $50 for the two drugs together to the client.

Appendix A: Following is the summary of survey of several doctors and HMOs (scale of 1 to 5 with 5 being the best)

	Client's New Combo Drug	Client's Current Portfolio		Competition's Current Portfolio	
		Cholesterol	BP	Cholesterol	BP
Efficacy	5	4	4	3.5	3.5
User Convenience	5	3	3	3	3
Drug Interaction	None	Small	Small	Small	Small
Side Effect/Safety	None	Small	Small	Small	Small
# of Customers	?	40,000	50,000	40,000	50,000
Price to HMOs	?	$40	$30	$40	$30

Name:	Mirroring Division
Firm Type:	General

Our client is the Mirroring division of a glass manufacturer. The glass manufacturer has 3 divisions: Large Surface, Custom Cut and Mirroring. Large Surface produces large surfaces of simple flat glass. Custom Cut cuts the large surfaces in smaller forms. Part of the glass produced by Large Surface or Custom Cut goes to external customers; part of it goes to the other division(s). The Mirroring Division makes custom made mirrors for furniture producers. Mirroring gets the specific glass shapes from Custom Cut, adds the mirror surface through a chemical treatment and finishes them.

3 years ago the Mirroring division was break-even and last year the division made a loss of $6 million. What is happening and how could we solve this?

Note to Case giver: The case is a profitability case, and we are looking for the 3 reasons why the profitability has declined. This case is meant to be very interactive and you need to ask the candidate very often what he thinks is happening. We also want the candidate to come up with these 3 reasons and let him elaborate on them. In the initial structure the candidate should touch upon these.

REVENUES, COSTS AND PROFITS

The candidate should ask for this data. Do not give unless asked. The cost components:

- We assume that there are only 2 major costs: labor and cut glass, and both were 50% of total cost in 2002.
- There was a lot of capacity addition in the cut glass industry and cut glass prices dropped by 30% from 2002 to 2005.
- The client has also been investing in technology and through higher efficiency labor costs have decreased by 20% from 2002 to 2005.

The candidate should ask for this data. Do not give unless asked. The sales & revenue data:

- Sales were $60 million in 2002 and $39 million in 2005
- The company broke-even in 2002 and made a loss of $6 million in 2005
- In volume terms sales were stagnant at 3 million square feet over this period

If you provide the candidate with the profit, sales and selling price, the candidate should be able to come up with the price and the cost per unit. If he doesn't do this, ask him to calculate it.

The candidate should come up with a table like this:

	2002	2005	Change
Sales ($ million)	60	39	-35%
Sales (million square feet)	3	3	0%
Profit ($ million)	0	-6	N.A.
Price ($ / square feet)	20	13	-35%
Total Cost ($ / square feet)	20	15	-25%
Labor ($ / square feet)	10	8	-20%
Cut Glass ($ / square feet)	10	7	-30%

Conclusion: From this we can conclude that prices have fallen by 35% while costs have decreased only by 25% and this is the reason for the losses. We can also conclude that the drop in the cost of glass explains a drop in price of $3/sq ft and the drop in labor costs explains another $2/sq ft. The break-even price should be $15/sq ft. We, therefore, need to analyze why the price dropped more than costs.

COMPETITIVE LANDSCAPE

Important: let the candidate ask the right questions.

Market structure and market share:

- We are operating in a market where there are at least 15 competitors.
- There are 3 big players in the market with each about 20% of the market, the rest are all small shops.
- We are one of the big players.

Competitors detail:

- One of our big competitors is located in just across the border in Mexico.
  - Cost advantage in labor: The labor costs in Mexico are 40% cheaper.
  - With this information, the candidate should do the following calculation and conclude: This is a big deal: labor costs are about $8 /sq foot for us, so this means our competitor can produce the glass at $11.8/sq foot. (7 + 8*(1-40%)).
- The candidate should try to determine if there are any other costs incurred: For being in Mexico they incur extra shipping costs of about $1.20/sq foot.

Conclusion: One of our main competitors has a labor cost advantage of 40% and can produce and transport the glass at $13/sq ft. This might explain another $2/sq ft in price decrease to $13/sq ft. But margins, even for our competitor, are extremely thin – we need to evaluate who our customers are and what their bargaining power is.

CUSTOMERS

Also in this area the candidate should try to find out what is going on, let him ask the questions.

- In 2002 we sold 80% of our products to 5 clients.
- Because of a crisis in the furniture industry, there have been 2 mergers, so that we now supply 80% of our sales to 3 clients.
- These 3 clients make up about 75% of the industry sales.

Conclusion: The bargaining power of our customers has gone up significantly and they squeeze our margins and those of the competitors. We should evaluate if there are other customer segments that we can sell to without significant investments.

WRAP UP

Ask the candidate to summarize the factors that influence the price decrease between 2002 and 2005.

Summary:

- Our price has dropped by 35% which can be explained in part by the fact that costs have gone down by 25%
- A competitor is located in Mexico and has a significant labor cost advantage and is able to price lower than us
- The increased bargaining power of customers, as a result of consolidation in the industry, drives margins down close to 0.

Possible options to be analyzed:

- Further improvement in efficiency
- Moving manufacturing to a proximate low cost location like Mexico
- Lobbying government for support (subsidies, etc) to prevent job losses to Mexico
- Diversifying the customer base
- Consolidation

Name:	Southeast Asia Cargo Airliner
Firm Type:	McKinsey

The interviewer will typically start the case by giving a brief overview of the context, ending with a question that is the problem definition. At the end of the description you will have an opportunity to ask any questions you might have to clarify the information that has been provided to you.

Our client is the CEO of a small cargo airline that serves Singapore and Jakarta. A new airport is opening in another big city, Surabaya, and he is considering adding an additional route from Singapore to Surabaya. He has asked McKinsey to recommend whether he should add the new route or not. He has also asked whether it makes sense to lease another airplane to serve the new route.

It is always good to ask relevant questions that will give you an understanding of the business and its operating environment.

Below is a possible hypothesis-driven structure along with the important questions that should be covered to show how MECE you are (others formats are fine – this is just one suggested approach).

"In order to successfully enter a new market and be profitable, we have to ensure at least these three things:"

The market potential has to be good	***Our service has to be distinct and competitive***	***We have the resources and capabilities to be successful in this market***
– *Singapore – Surabaya market: What is the market size?* – *What is the growth rate/prognosis for the market?* – *How is the market segmented?* – *Are there any legal regulations that will affect our business? Airport/landing fees? Airport capacity?* – *Different country regulations?* – *Economic trends in the two cities and countries?* *Note: remember when we talk about market in this case, it involves both cities (Surabaya and Singapore)*	– *How many competitors are there?* – *Who are they?* – *What is their market share?* – *Do customers also have substitutes available, such as ship/naval cargo, trains?*	– *What is our operational structure?* – *What is the revenue model?* – *What are the major cost factors? – Pilot, airport/landing fees, fuel, labor/maintenance, etc.?* – *Overall Profitability* – *NPV*

Tips: As the candidate finishes each 'bucket' above, it is a good idea to provide a summarizing statement. For example in the first bucket: "Well, based on what we've seen so far, it seems to me that indeed the market potential is strong and attractive.", or "Well, it seems that the market is just okay. We need to look into other data to decide the attractiveness of this venture."

Case Data *– Give this data to candidate after a proper framework has been constructed. This can be a 'data dump' or given in response to specific questions only. If you use a 'data dump' delivery, repeat any reasonable requests for missed data.*

Market data:

- There is a good market potential and growth as the relationship and trade between two countries has been growing very rapidly.
- Both governments are pro-business and maintain minimal regulations on cargo business.
- The current market size is 240 tons of cargos each way per day.
- The cargo delivery market is segmented into two types of cargos:
    - Express cargos – we carry this from customers such as UPS, Fedex, etc. This type of cargo pays $4/kilo.
    - Fillers – these are relatively less important items that can be carried whenever we have space. Usually pays much less, about $.5/kilo. This fillers business, however, is usually unlimited, meaning that we have unlimited orders to transport fillers across routes.

Company Background:

- Current firm operates only one route with one rental 737 plane from Singapore to Jakarta round-trip nightly. The firm is contemplating to add a second route, Singapore – Surabaya.
- The current route only operates nightly due to the limited airport capacity.

Competition:

- We currently hold 5% of the market.
- In this business, customers are usually 'sticky' in that they do not switch carrier easily

Some useful profitability data:

- Opening up the new route will cause our Express Cargo customers to do more business with us, specifically expanding their total orders to us by 25% with all new volume on the new route.
- 1 ton = 1000 kilos (kilograms).
- Each 737 has a capacity of 20 tons one way.
- Rental fee for each 737 is $20,000/day.
- Fuel is $20,000/flight (Singapore Jakarta, or Singapore Surabaya)
- Landing fees are $5,000/landing.
- Pilot fee per flight is $1,000.

The Next Step

After all the questions and data acquired above, it becomes obvious that the next step is to actually do a profitability analysis for current situation v. new route situation:

Current situation:

Revenues:

*Express Cargo: (5%*240 tons/way/day = 12,000 kilos/flight)*$4/kilo*	*= $48,000*	
Fillers: (20,000 kilos – 12,000 kilos)$.5/kilo*	*= $4,000*	
Total revenue per flight	*= $52,000*	
Total revenue per day (round trip)		*= $104,000*

Costs:

737 Rental per day	*= $20,000*	
*Fuel cost per day = 2*$20,000*	*= $40,000*	
*Landing rights per day = 2*$5,000*	*= $10,000*	
*Pilot fee = 2*$1,000*	*= $ 2,000*	
Total cost per day		*= ($72,000)*
Total current profit per day		***= $32,000***

Add a new route:

Additional Revenues:

Revenues:

*Express Cargo: (25%*12,000 kilos/flight)*$4/kilo*	*= $12,000*	
Fillers: (20,000 kilos – 3,000 kilos)$.5/kilo*	*= $ 8,500*	
Total additional revenue per flight	*= $20,500*	
Total revenue per day (round trip)		*= $ 41,000*
Additional costs:		
*Fuel cost per day = 2*$20,000*	*= $40,000*	
*Landing fees per day = 2*$5,000*	*= $10,000*	
*Pilot fee per day = 2*$1,000*	*= $ 2,000*	
Total additional cost per day		*= ($52,000)*
Total additional profit per day		***= (11,000)***

From the profitability analysis above, we can see that adding the route will not generate enough business to cover the additional costs of $52,000. Adding the route will cause us to make $11,000 less in profit (from total of $32,000 down to $21,000).

Will renting an additional plane help to remedy the situation?
Renting an additional plane will change our answer – it will only make it worse. The problem lies not on the cost and capacity (supply) side but on the revenue (demand) side.

Okay, let's talk about the revenue then. One way that we were thinking is to increase the fillers' price. Why do you think the filler cost is so low?

- *First of all, the demand is fairly elastic because of the unimportant nature of those filler.*
- *Secondly, we may have excess supply of a substitute such as sea cargo. We should check the price of the sea cargo. My guess is that the price of sea cargo for the filler is at least equal to us or slightly below.*
- *Thirdly, the marginal cost of adding a ton of filler to a plane that is not full is close to zero whereas the marginal revenue is a direct bottom line impact, making it a very tough business to make money from. I would guess other cargo airlines (even including the passenger airlines) may also have excess capacity, in which they will be happy to take the fillers for a really low price.*

Can you think of other ways to improve profitability then? (creativity question)
The main problem is to generate total additional revenue at least $52,000 (the total additional costs) to break even the new route plan. We may be able to achieve this through several ways:

- *Improve pricing: can we price our express cargo to be slightly lower to generate more volume? Or maybe we can price the Singapore – Surabaya Express Cargo lower? However, we may need to be careful not to enter a price war because of the commodity nature of this business.*
- *Schedule change: is there a possibility to change our schedule to our customers' preference/to get more of their business/from other competitors?*
- *Service differentiation: can we improve/differentiate our service (punctuality, value-add services, superior customer service, marketing programs, etc.) to get more customers?*
- *Some other ways that you think possible and make sense….*

What is your recommendation to the client then? Can you please summarize your findings?

Our profitability analysis shows that entering the Singapore-Surabaya market is not a good idea as it will negatively affect our profit due to higher costs compares to marginal revenue. To be profitable, we need to generate extra revenue greater than $11,000 beyond our projected numbers. Here are some suggestions to get either more Cargo Express business from our existing customers or to acquire new customers from our competitors:

- *Improve pricing*
- *Improve scheduling*
- *Service differentiation*

If improving our revenues is not possible, then we recommend a 'No Go' on this new route.

Name:	Banana Farm
Firm Type:	McKinsey

Context

The interviewer will typically start the case by giving a brief overview of the context, ending with a question that is the problem definition. At the end of the description you will have an opportunity to ask any questions you might have to clarify the information that has been provided to you.

Our client is an owner of a fruit "canning" company. They own plants that package fruits in tin cans and distribute them to grocery stores and other retail food channels. They have the number one share in their market place.

The owner – a long time McKinsey client – has recently inherited a Banana farm on an island in the Caribbean. The client has come to McKinsey for help determining whether he should keep this banana farm and begin selling bananas.

In most McKinsey & Company cases the interviewer will guide you through the case with a series of questions that will allow you to display a full range of problem solving skills. Below is a series of questions and potential answers that were discussed in the case writer's interview.

Question 1: You are working on this project and have scheduled a meeting with an expert on the banana industry. What would you want to learn in this meeting to help you determine whether the client should keep the farm and enter the bananas industry?

Possible structure (others formats are fine – these are just some main points):

Demand:	*Competition*	*Financial Assessment*	*Risks/Constraints*
– *What geography would we sell bananas in?* – *How big is the market for bananas?* – *How fast is the market growing?* – *How is the market segmented?*	– *How many competitors are there?* – *Who are they?* – *What is their market share?* – *What are these firm's competitive advantage?*	– *Based in part on the first two columns, what is a reasonable revenue expectation?* – *What are the startup costs?* – *Operating costs?* – *Overall Profitability* – *NPV*	– *What is the opp. Cost of pursuing this project?* – *How would this project affect the client's organization?* – *Do they have any experience internationally?*

The following information should be shared with the interviewee. It is preferable that they ask questions that allow you to offer this data. If not, some key information should be shared so the interview can progress.

Company Background:
- *Current firm operates only in the U.S.*
- *They have ~$1B in annual revenue and are the share leader.*
- *Approx. 20% operating margin and are growing at slightly faster than industry avg (5%)*
- *Firm has a strong brand in their industry*

Demand:
- *We are only concerned with the U.S. market, which is $2B in size*
- *It is growing at ~2% per year (bonus pts if the interviewee recognizes this mature commodity is probably growing at ~ GDP!)*
- *Banana market could be segmented into regular and organic. Organic is most likely growing at a significantly higher rate than regular, but detailed info is not available. It is also unknown if the inherited farm is (or could be) organic.*

Competition:
- *Three firms in the industry control 90% of the market*
- *The other 10% of the market is highly fragmented*
- *Top 3 firms have strong brands, established relationships with customers and all of the other advantages (cash, resources, etc...) that you would expect in an oligopoly.*

Financial Assessment
- *Candidate should get to here after obtaining other information. Delay this portion of the conversation, however, until next question.*

<u>Question 2</u>: After your mtg with the banana expert, your Engagement Manager asks you to calculate the potential revenues and costs in the industry. How would you do this?

<u>Revenue</u>:
Candidate should recognize that because the market is highly concentrated, it is unrealistic that the client will be able to steal business from any of the Big 3 banana firms. Therefore, the total market size available to them is $200M.

Candidate should estimate the share attainable by the client. Interviewer should ask the interviewee to estimate to see if they come up with a reasonable number. Eventually lead them to 20% of the $200M market.

$200M x 20% = $40M annual revenue

<u>Costs</u>:
The interviewee may ask for cost information. Respond with, "how would you estimate this?" Let the interviewee name a few possible ways and then tell them we could look at the operating margin of other firms in the industry. This number is 10%.

Interviewee should recognize that the client's operating costs should be at least (possibly higher since they are new in the industry) $36M.

$40M x 90% = $36M

<u>Profit</u>:
$40M - $36M = $4M

Other information on startup costs are not available should the interviewer ask. This is a reasonable line of questioning, however.

Strong interview candidates will comment after the calculations on what they imply (good deal, bad deal, etc...). Interviewer should not ask them for this, but should take note if the interviewee's insights are shared.

Question 3: After running the numbers, tell me why this might be a good deal for the client.

This section is more to demonstrate creative thinking and at least make an argument that this is a good idea so that all options are considered. Possible answers are:

1) *Bananas could be organic which would have higher margins*
2) *Canned food brand could be leveraged to sell the product*
3) *Bananas could be canned and sold in the U.S. using current businesses resources. Perhaps they could do this as baby food (canned bananas sound fairly disgusting!)*

Question 4: The following graph has been given to you by a colleague. What are you thoughts?

To be given to interviewee

Cost per banana	Growing	Packaging	Distribution	Selling
Client	$0.02	$0.01	$0.01	$0.02
Competition	$0.01	$0.02	$0.02	$0.01

Interviewee should analyze the chart and point out that the client has an advantage in packaging and distribution. This is because of their existing fruit canning business. Their total cost per banana is the same as the competition, but there may be an opportunity to perform just the packaging and distribution of the bananas and outsource the rest.

Question 5: The client calls and would like an idea of the direction you are heading and what the 2 or 3 most important next steps are.

Interviewee should make a recommendation (open the plant and enter the market, sell it, etc...). The final answer is not as important as the logic, structure, and a pithy presentation. A possible answer is:

"The banana industry is highly concentrated, offers lower margins than your existing business, and is growing at a very slow rate. Because of your strength in packaging and distribution, there may be an opportunity for your firm to outsource the growing and selling of bananas to achieve an acceptable margin. However, if operating the business in this manner proves unfeasible, I recommend selling the plant to another player who can extract more value. The next three things we would like to address are:

1) *Determine feasibility of outsourcing growing and/or selling bananas*
2) *Perform NPV assessment for this alternative*
3) *Identify value the plant can be sold for and compare to other alternatives*

Name:	Car Rental
Firm Type:	McKinsey

This case is more about business feeling than calculation.

The client is a big car rental company (think Hertz, AVIS, etc.), that we call CRC (Car Rental Company). CRC Nordic, based in Stockholm, Sweden, has a industry comparable growth of 4% per year, and is thinking about starting businesses in the 3 Baltic states. For practical purposes, we will focus on Lituania, whose capital city is Talinn.

Question 1: Even before doing any calculation, how could you know whether these countries make any sense and where would you look for that information?

There are many creative ways to find some information, involving mainly 2 parts the 3C Framework. Some are summed up in the table below:

C	Idea	Where or how to look for
Competition	Are there already competitors there?	- Google "Car rental Lituania" - Main competitor's web page - Cars are registered under the company's name locally, and the number of cars is available at the local governmental agencies or statistics - Contact the local Swedish embassy or local Lituania embassy for information about this business - Take a flight there and check the counters at the airport, wander in the parking to count the number of cars. - How many competitors are there already?
Customers	Is Business travel an opportunity?	Microeconomics of the country (known or to be asked for): - labor costs low make it attractive - high level of education of workers - Many companies specialized in machining, dating back from soviet times All in all the country is VERY attractive as low cost country for the Nordic Region
	Is leisure travel an opportunity?	- Travel agencies: breadth of the touristic offer - Local government: tourism statistics

Question 2: Make an analysis of the cost structure of CRC and give me your conclusions. All along the answer to that question, the person can ask you to evaluate these costs in % of total.

Fixed costs:

- Car
- Maintenance
- Human Resources
- IT System
- Advertisement
- Others

Variable costs:
- Some fuel (mainly paid by customers, but some cars must be refueled)
- Papers and documents

Conclusion: Very little variable costs, in a very competitive environment. Furthermore, prices can be easily compared through internet:
- Tight margins
- Fight for market shares
- Underbidding generates a guaranteed price war

Question 3: Suppose that your study showed that there is market potential (the market grows at 9% per year), especially in the segment of business travel. What information would be relevant for you to know how to start the business?

You need more info on the competition. Your previous study of the cost structure showed how this is critical. You know your own company, and the customer side is given in the question, so you have the 3C. As for 4Ps, they are a consequence of the corporate philosophy (prices set pretty much worldwide, for example). So it is the missing piece.

Question 4: There are 3 competitors currently on the market, and they have the following spread. What are your conclusions? What strategy would you apply to start your business there?

Competitor	Status	Start of operations	Market share
AVIS	International	2002	10%
Lituania Car Rental	Local company	1980	35%
Eesti Car	Local company	1985	55%

There is already a direct competitor which entered the market. Yet, we said before that due to high fixed costs levels, market shares are difficult to gain. Hence, starting from scratch would likely be very difficult. This suggests an acquisition of one of the local players is the best solution.

Question 5: Which player to acquire? Why? What would be some difficulties?

The biggest one (Eesti Car).
- Your acquisition would make you bigger than the 2 others combined, making it impossible for your competitor to equate you on the short run, even after a buyout of Lituania car rental.
- The leadership gained in a smaller time period can suggest some kind of competitive advantage, or a more aggressive/efficient business model.

Difficulties:
- Why has AVIS not already bought Eesti?
- If you contact Eesti for a purchase, Eesti could spread the info to AVIS, starting a bid war. Eesti has an incentive to do this
- Price to be determined.

Name:	Floor Heating
Firm Type:	McKinsey

Context

The interviewer will typically start the case by giving a brief overview of the context, ending with a question that is the problem definition. At the end of the description you will have an opportunity to ask any questions you might have to clarify the information that has been provided to you.

Q1) Your client is a Scandinavian Floor-Heating company. It has two products – heating by electric cables and heating by hot water running under the tiles of residential bathrooms. They seemed to have reached saturation in Europe and have approached us to determine how they can grow.

Facts to be given, if asked:

- The client company is based in Sweden.
- The client company serves mainly the residential segment.
- The heating unit is mainly used to heat up the bathroom floor in homes.
- In terms of the client's presence in the value chain, it manufactures the heating product and sells it to distributors throughout Europe. The end-customers are mainly construction companies.
- The present manufacturing plant is almost near capacity.

The student should draw out a framework for various options, both for organic and for inorganic growth. Organic growth would include new products, new markets as well as higher revenue from existing sources. Inorganic growth would include acquisition of companies that could provide strong cash flow or provide synergies. The case-giver should ask the student to brainstorm to come up with as many alternatives as possible.

The case-giver should provide the following facts after the options for growth are discussed:

- The client is looking at new markets as a possible option.
- The client company is not looking at acquisitions or new products.
- The present European market is saturated and so increasing volume would not be possible.
- As the number of products that the company offers is few, changing the product mix would not be possible.
- Neither can the client increase prices, as there are other competitors in the mature European market.

Q2: The client is looking at the North America market as a potential market to enter. They find that the North America market does not have any big players and they hope to capture some of the market, as their products are reasonably competitive to existing product in the North American market. The client asked whether they should enter the North American market. What is the size of the market?

Now the student should try to determine if it is feasible to enter the North American market. To consider the economic feasibility, the student should try to determine the possible revenue. Start with an estimation of the market size.

- USA: 100M households
- Canada: 10M households
- Tell the student to assume 65% of the households in USA need heating. 100% in Canada require heating

The annual population increase in USA and Canada is 1%. Assume that the increase in the number of new houses in North America closely follows that. So the number of new houses built is (100M U.S. Households * 65% Houses need heat * 1%) + 10M Canadian Homes * 1% = 750,000

The heating unit is mainly used to heat up the bathroom floor. One heating unit is used for one bathroom. Assume that there are 1.5 numbers of bathrooms on average for the newly constructed houses. So potential market for the heating units is 750,000 * 1.5 = 1.125M units

Q3: Now that we know the size of the market (in units), how much of this market does the client need to have to have a profitable venture into North America.

Facts to be given to the student:

- The price to the distributors for the hot-water heating unit is $250 while that of the electric heating unit is $300.
- The variable cost of manufacturing and transporting the hot-water heating unit is $150 while that of the electric heating unit is $250.
- The variable costs include manufacturing costs such as raw material, labor, utilities etc.
- The client did a preliminary study and found that the electric heating unit would require major re-engineering to confirm to North-American safety standards and decided to concentrate only on the hot-water heating.

- The fixed cost of creating the hot-water heating product approved in North America is $1,000,000
- Other costs such as marketing costs such as advertisements and promotions are ignored here.

Thus the break-even volume is:

1,000,000 = (250 – 150) * Q => Q = 1,000,000 / (250 – 150) = 10,000 units

This is less than 1% of the total potential market and thus it looks reasonable to enter the North-America market, as the competitors in the market are not strong.

Q4: Now that we understand the market penetration required, we need to determine how the client will fulfill this larger volume if they will be profitable:

Additional facts to be given to the student at this stage:

- The manufacturing plant in Sweden for electric heating unit has a capacity of 20,000 units. It would be possible to acquire another manufacturing plant for $1M.

The minimum number of hot-water heating units that needs to be sold to cover the fixed cost of operating AND the one-time plant investment is:

1,000,000 + 1,000,000 = (250 – 150)*Q

Q = 20,000 Units

Interviewer should realize the following:

- New Qty is still a very small portion of the overall market
- The new qty is 100% capacity of a new plant and it may be unrealistic to operate at this level year-round
- The Year 1 Profitability of the new plant is 0 ($100 Contribution margin * 20K Units) – ($1M Investment + $1M FC)
- Year 2 profitability is up to $1M

Q5: Based on the analysis you just performed what would you tell the client:

Client should offer a structured answer that highlights some of the main findings:

- North America is attractive and the investment required to enter is fairly minimal.
- A new production plant will need to be acquired, but our numbers indicate it will be very profitable (50% margin) within two years
- Future growth in North America may be possible – since we are only entering a capturing a very small portion – but continued incremental investment in production capacity will be required.

Name:	Movie Rental
Firm Type:	McKinsey

Context

The interviewer will typically start the case by giving a brief overview of the context, ending with a question that is the problem definition. At the end of the description you will have an opportunity to ask any questions you might have to clarify the information that has been provided to you.

This case takes place a few years ago, before Netflix. Our client is a venture capital firm. They have an established relationship with McKinsey and would like our advice on a new firm they are considering investing in. The company is a startup in NYC with a plan to offer movie rentals over the internet. The startup plans to allow customers in Manhattan to order movies online and have them delivered within a few hour window to their apartment.

In most McKinsey & Company cases the interviewer will guide you through the case with a series of questions that will allow you to display a full range of problem solving skills. Below is a series of questions and potential answers that were discussed in the case writer's interview.

Question 1: The client has come to us for help in determining whether this is a good investment opportunity. You are working with an engagement manager to evaluate this problem. How would you like to begin/

Possible structure (others formats are fine – these are just some main points):

VC Firm	*Market Assessment*	*Firm Assessment*	*Financial Assessment*
– *What industry does the client typically inveset in?* – *Does their mgmt have experience in this space?* – *What is their time horizon?* – *What is their hurdle rate or ROI?* – *How much capital do they have for investment?*	– *What is the size of the movie rental industry?* – *Is the market growing?* – *Who are the established players and what is their share?* – *How much industry rivalry is there?* – *What are the customer segments?* – *Does a similar product exist in Manhattan?*	– *If market is good, why should they invest in this specific firm?* – *How is the quality of the mgmt?* – *Are their synergies between this firm and VC firm?* – *What will deter "me too" competitors?*	– *Can we reasonably estimate Rev?* – *Costs?* – *What are startup & ongoing costs?* – *Does NPV of future Cash Flow meet hurdle rate?*

In this case, a great deal of information is not available. It is very important that the interviewee demonstrate the importance of understanding the client and what their expectations are. They should also recognize that a VC firm would care about the quality of the firm they are investing in and not just reward them for a good business concept. The candidate should touch on the importance of these topics in their structure and should be probed if they do not mention it. That being said, once they recognize the importance, there is no meaningful information available about the VC or the potential firm.

After some brief discussion on the importance of the main topics above, it is acceptable to inform the interviewee that the rest of the case will focus primarily on the market and performing a financial assessment.

Question 2: As mentioned earlier, this service will only be available to Manhattan residents. We are trying to determine the change in market size from 1998 to 2000? How would you estimate this?

The candidate may approach this a few different ways, but should ultimately realize that the total size of the market is a function of the following:

- *Population of Manhattan*
- *% of the population with internet access (remember this case took place a few yrs ago)*
- *The average number of movies these people rent*
- *The avg price these people pay for a movie rental*

The following data should be shared when asked. Ultimately, it must be given to the candidate so they can perform the appropriate calculations:

Year - 1998:
Population – 10M
People per household – 2
Internet Access – 20%
Avg movie rentals p/household - 6

Year - 2000
Internet access has grown by 10% per year
Avg movie rentals p/household – 4

Answers:

1998 movie rentals =

10M population / 2 people per house hold = 5M households
5M households x 20% internet access = 1M target households
1M target household x 6 movie rentals =
6M movies rentals

2000 movie rentals =

1M target households x 1.21 (1.1^2) = 1.21M target households
1.2M (rounding is okay) households x 4 movie rentals =
4.8M rentals

% Change =

6M Rentals – 4.8M rentals = 1.2M Rentals
1.2M / 6M =
20% Decline

Candidate should not only perform the calculation, but respond with a short reaction to this finding (e.g. wow – surprising. I wonder if this is national trend?). They should also recognize that we've only looked at volume and be curious as to what the change in price has been.

Question 3 : The following graph has been given to you by a colleague. What are you thoughts?

To be given to interviewee

Total Movie Rental Industry Growth

Year	1997	1998	1999	2000
Revenue (000s)	$1,164,000	$1,345,875	$1,556,168	$1,799.319
Volume (000s)	582,000	538,350	497,974	460,626

Interviewee should analyze the chart and point out that the entire industry has seen declining volume, but positive revenue growth. The obvious conclusion is that price has been rising.

In addition pointing out that price has been rising, the candidate should provide their thoughts on whether or not this is sustainable. The interviewer should NOT prompt the candidate for their views, but strong candidates will immediately add their thoughts and interpretation to the data. An example might be: "I see revenue growth has been sustained through higher prices. I wonder if this trend will continue or if consumers will eventually become more elastic and substitute other entertainment options."

Question 4: The client has run some numbers and determined that in order to be profitable they must average over $30 per hour in revenue for each delivery carrier they employee. Based on the following information, will they be profitable:

Avg. deliveries per three hours: 12
Movies per delivery: 2
Avg. price per movie: $4.25

Answer:

12 deliveries x 2 movies = 24 movies per three hours
24 movies x 4.25 = $102
$102 Revenue / 3 hours =
$34 p/hour

Once again, the candidate should react to this finding. Good questions/comments might be: "Where did this data come from? Is it reliable? Are the numbers provided the average of all hours of operation or just peak hours?"

Question 5: Based on our analysis, what would you recommend to the client? Should they invest in this company?

Interviewee should make a recommendation. The final answer is not as important as the logic, structure, and a pithy presentation. A possible answer is:

"This firm appears to have a profitable business concept. Our calculations show that they could be profitable at industry average price points and there may even be an opportunity to charge higher rates if the delivery service is of a high enough quality. That being said, I have several concerns. My three main concerns are:

1. *Price has risen dramatically over the past four years while volume has declined. Consumers will get more price sensitive as prices rise, making future growth challenging.*

2. *There is no evidence of entry barriers for other competitors to try and imitate the firms strategy*

3. *This business has very limited growth potential. Manhattan may be the only city in the U.S. that has the density to support this business model. Therefore, firm revenue growth and ROI for the Venture Capital firm are extremely limited.*

I do not recommend that our client make this investment.

Name:	Vin's Car Insurance
Firm Type:	McKinsey

Question

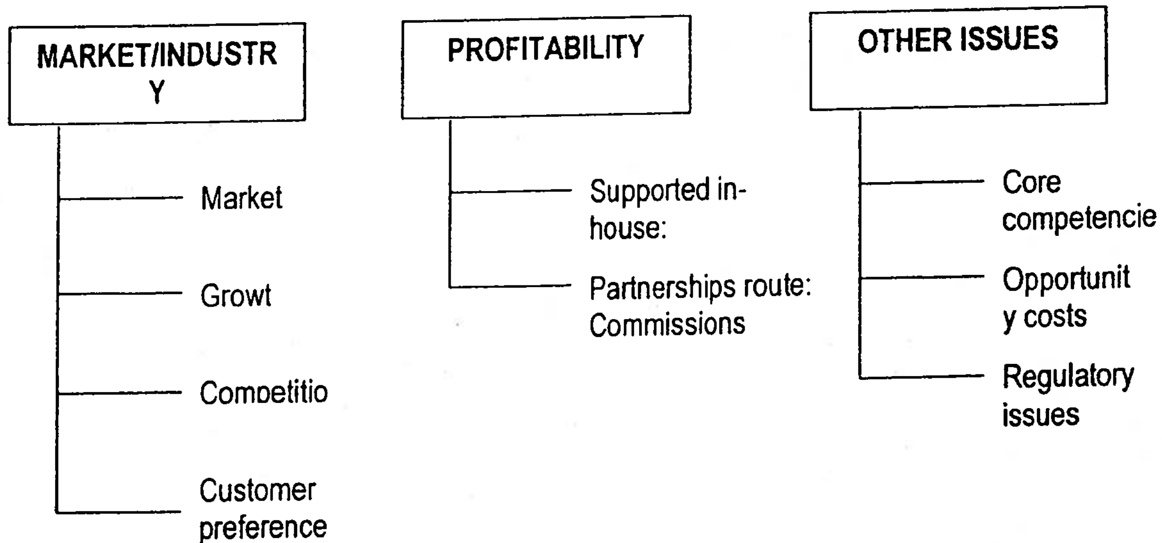
Our client is a major American car manufacturer that operates about 4,000 dealerships throughout the US. Several years ago, recognizing that most customers finance their cars, our client began to offer auto loans at their dealerships. The CEO now has an interesting idea: given that everybody has to buy insurance for their cars, he wants to expand the service mix at his dealerships to include car insurance as well. He wants McKinsey to evaluate the idea and make a go/no-go recommendation.

Solution

This is a question about new product/service introduction. The areas that would be most relevant to explore are market/industry attractiveness, potential profitability, fit with company's core competencies and opportunity costs.

STRUCTURE

Following these preliminary thoughts, the candidate must develop a MECE structure to explore the important areas. The following diagram represents a possible approach (the candidate's structure should cover most of the points mentioned below):



DISCUSSION

After drawing up a structure similar to the one above, the candidate must drive the discussion in a logical manner. Here's a sample opening statement:

> "To determine whether offering auto insurance makes sense for our client, I'd like to investigate 3 buckets: (1) Market attractiveness: Is this something our client should get into given market size, growth and competition? (2) Profitability: Can our client make sustainable profits with this new service? and (3) Other issues like opportunity costs, our client's core competencies and any regulatory issues that we should be aware of".

Market Attractiveness

The candidate should then go down each of the three buckets systemically and cover all the points in the structure above. To determine market size and growth, a good candidate will immediately ask for **customer preferences** and **competitive environment** in this industry. If asked, mention to the candidate that customers care about two things: (1) Price of insurance premium and (2) Safety/reliability of service, and that most customers have a tendency to stay loyal to their insurance providers. Also mention that the industry is highly competitive. If the candidate does not ask about market size and growth, guide him/her by asking "What is your opinion about the attractiveness of the auto insurance market?".

Given these two points, the candidate should realize that insurance premiums are falling year over year for two reasons: (1) Since customers are loyal and value price, insurance companies have to offer better premiums for customers to switch and (2) The industry is highly competitive, thus increasing pricing pressure. At the same time, since growth in the number of policies mirrors growth in the number of drivers (~ population growth of 1 to 2%), the overall market growth may actually be negative or flat at best.

The candidate should now summarize the market attractiveness piece (that the market is very mature and does not appear to be attractive) before moving on to the next bucket.

Profitability

Before beginning the profitability analysis, the candidate should ask whether the client has any expertise in running a business like auto insurance – the answer is none whatsoever. The candidate must immediately suggest that one option for our client is to **partner** with existing insurance companies, and earn a commission for every new customer, rather than running the insurance operations in-house.

The candidate must also discuss the obstacles of making a sale – specifically, customer reluctance to buying add-on services at a dealership and the price competitive nature of the industry. If asked for specific information, tell the candidate that customers need to get at least a 10-15% cut on their premiums to switch to another insurance provider; and that our client can expect 10% commissions for every customer that they sign up.

The candidate should realize that the net profit of this transaction for our client is zero (the commissions they get from the insurance company for the sale is almost the same as the price cut they would need to offer to attract these sales in the first place). The candidate should summarize this point.

At this stage, before the candidate moves any further, ask the candidate to brainstorm about what the auto maker can do to make this work. If the candidate has trouble answering the question, ask specifically: "What does the auto maker know that the insurance company doesn't?"

The candidate should realize that what the auto maker knows best, and exclusively, is information about its cars! The candidate should then suggest a number of ideas including, but not limited to the following alternate incentives for purchasing an insurance policy with a new car (in lieu of reducing price premiums on policies):

- Provide extended warranty on car
- Free auto repair vouchers
- Provide guaranteed loner cars if the car is being repaired
- Free oil changes

However, after mentioning these alternatives, a good candidate will immediately realize (and warn) that there is an **opportunity cost** for providing these services. Had the auto maker sold these services in the open market, they would have made money that they would now lose if they were to just give it away for free. This will complete the discussion on opportunity costs in the

third bucket of the structure. If the candidate does not mention opportunity costs, ask "Is there anything else you'd like to consider?".

At this stage, regardless of whether the candidate has mentioned opportunity costs, thank the candidate for the discussion and mention that the CEO of the auto company has just stepped into the room. Ask the candidate what he/she would tell the CEO.

A good candidate will summarize in a structured format by first making the go/no-go recommendation and then providing three supporting points. Exceptional candidates will also add risks or "so-whats". Here's a sample summary of this case discussion:

"I would tell the CEO that I recommend that they NOT add auto insurance to their service mix for 3 reasons: (1) First, the market is not attractive because price premiums are steadily falling because of customers' price sensitivity and an intensely competitive environment; (2) Second, our client will make zero profits because the price promotions for attracting new customers will effectively eat away commissions from sales; and (3) Third, our client will suffer from significant opportunity costs if it gets into this business".

"Getting into this business will only make sense if our client can mitigate its opportunity costs or create significant network externalities to retain customers in the long-run".

Name:	Metropolis Art Institute
Firm Type:	McKinsey

This is a McKinsey-style case where a scene is set after which a broad question is asked which the interviewer must answer. As the interview progresses, more specific questions will be asked. The bolded statements should be read to the interviewee.

You and your team have taken on a not-for-profit engagement with the Metropolis Art Institute (MAI). The MAI's curator, Joe, has asked for your help to assist him in approaching the Metropolis government for additional funding of $5,000,000 in order to develop new programs.

The MAI was founded eight years ago with much of the funding coming from the Metropolis city government. Since the doors opened, the MAI has established itself as one of the Top 10 institutions of fine art in the world and has become a very popular tourist destination, drawing many visitors to Metropolis. Despite MAI's success, Metropolis, like many other municipal governments, has limited funds and is only willing to offer additional money to MAI if it can show that it has already tangibly enhanced Metropolis. In a meeting with Joe, the mayor said, "The city council will only give the MAI more money if we can see in concrete terms that the money we gave to build the MAI was money well spent." This is what Joe would like your help with. Bear in mind the mayor and all the city council have MBAs with concentrations in economics so they will be able to detect erroneous arguments.

Q: First, what areas might you look at to show the value the MAI has brought to Metropolis?

A: There are many answers to this question. The best answers will organize the benefits in some logical manner. One should also list derivative benefits (benefits which result from a direct benefit). A few examples might be:

Economic benefits

- Money made directly by the museum via admission prices, restaurant, and gift shop
- Money brought into the economy by tourists to ancillary businesses like restaurants, motels, car-rental agencies, etc.
- Enhanced tax revenues due to an enhanced economy resulting from having a more-intelligent citizenry and city with a higher quality of life
- Lower costs on support services like police since due to lower crime rates which result from enhanced local economy.
- The development of secondary industries needed to support the museum like art appraisers and restorers, security agencies, and frame makers.

Non-economic benefits

- A happier citizenry due to the pride derived from having a world-class museum in their city
- A happier citizenry because now there are more options of things in the city to do.
- A better-educated citizenry due to the educational benefits derived from the museum such as lectures and classes hosted by the museum (this will lead to smarter people which will draw better companies and better jobs)
- The city's reputation will be enhanced, allowing for other quality of life enhancements like sporting teams and other economic enhancements like political conventions

Q: One of the areas that Joe would like to look at is the revenue that the MAI has directly contributed to the Metropolis economy. What in particular would you look at?

A: This may blend in with the above answer.

- Direct areas of economic benefit would be admissions prices to the museum, and receipts from the restaurant and gift shop.
- Indirect areas but attributable to MAI's visitors would be revenues from hotels, restaurants, rental-car companies, and gas stations which are used by tourists coming to Metropolis to visit the MAI.
- Other indirect areas would be other tourist destinations that people would visit on the same vacation to Metropolis such as sports arenas, other museums, amusement parks, movie theaters, shopping malls, etc.

Q: Joe would like to estimate some actual economic-impact numbers which he can show to the mayor's office. What information would he need?
Give all this information, but the interviewee should ask for it first:

- Based on some surveying, Joe knows the ticket price for MAI is $5 and the average visitor spends $10 at the restaurant and $15 at the gift shop.
- Further, day tourists will visit the MAI and then leave Metropolis for home.
- Overnight tourists will stay in Metropolis an average of two days, spending $110 on a hotel room per night (two to a room), $50 on meals per person, an $30 per day for rental cars (two to a car), and $40 on other attractions on the day they don't visit the MAI.
- Additionally, of all overnight tourists, 75% cited the MAI has their main reason for visiting Metropolis.

Q: How would you interpret this information and quantify actual economic impact?

A: First off, no revenue should be associated with local visitors since they aren't bringing any additional money to the local economy (they are just taking it from one area of the Metropolis economy and putting it in another).

For day tourists the calculation is 46% of 220,000 which is about 100,000 visitors. If each pays $5 + $10 + $15 or $30 at the museum that amounts to $3,000,000 per year.

For overnight tourists the calculation is more complex.

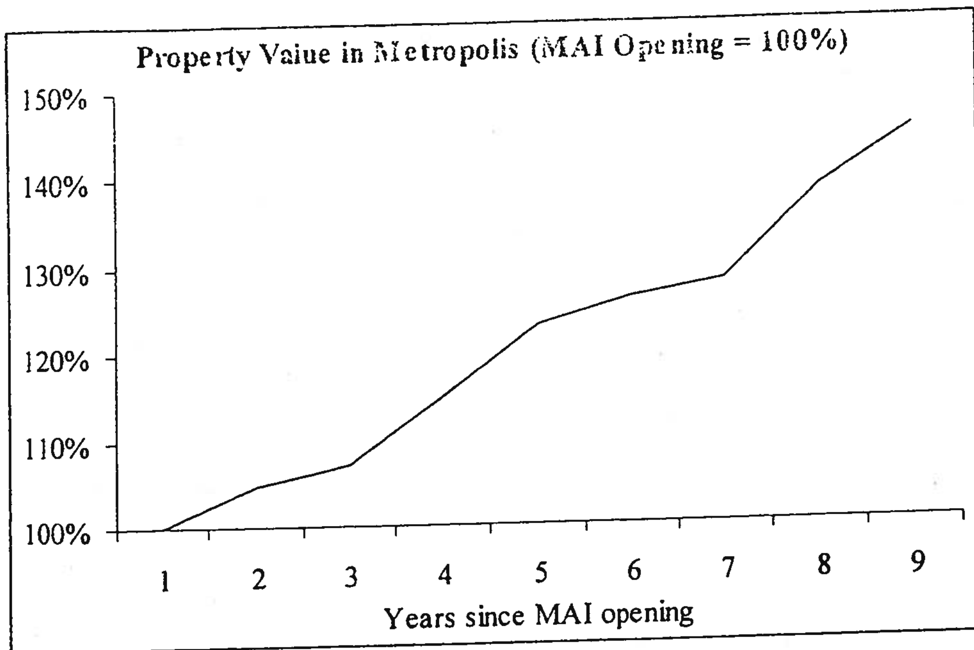
- For direct museum revenues the calculation is similar to the day tourists: 18% times 220,000 which is about 40,000 visitors times $30 at the museum which amounts to $1,200,000.
- Additionally, 75% of the 40,000 visitors would not have come to Metropolis if it weren't for the MAI so the profits from their whole stay should be credited to MAI. This is 75% of 40,000 visitors or 30,000 visitors times $55 (hotel per person) plus $50 (meals) plus $15 (rental car per day) which is $120 per day. 30,000 times $120 times 2 (they stay an average of two days) is $7,200,000.
- Also, on the second day these tourists will stay in Metropolis and spend $40 at other attractions like amusement parks, sporting events, theaters, etc. This adds another 30,000 times $40 or $1,200,000.
- No additional revenue should be added for the 25% of overnight visitors who would be in Metropolis regardless of the MAI because they would spend the money anyway.

All told, the MAI adds $3.0 million plus $1.2million plus $7.2million plus $1.2million or a total of $12.6 million per year.

Q: You had mentioned one of the non-economic benefits as the increase in the quality of life of the citizens of Metropolis. How could you try to demonstrate this to the Metropolis Government?

A: This would be extremely difficult to show. One way could be to do a public survey, but this is unlikely to provide any useful information for us. An alternative could to use property values as a proxy to say that the increase in the quality of life is reflected in the increase in the property values since MAI opened.

Q: Good. Given this graph of property values, what advice would you give Joe?


Property Value in Metropolis (MAI Opening = 100%)
150%
140%
130%
120%
110%
100%
1
2
3
4
5
6
7
8
9
Years since MAI opening

A: The analysis from the previous question showed the economic impact of MAI while this type of analysis tries to get at the non-economic, quality-of-life impacts of MAI. Property values would probably be a good proxy for a lot of those difficult-to-measure characteristics like happiness of citizens, quality of education, and civic pride, and this graph substantiates our hypothesis. The problem is it is difficult to measure how much of the increase in Metropolis' property values are attributable to the MAI rather than other factors like general economic prosperity of the nation or other investments that Metropolis has made to encourage the city's prosperity. This could be solved by using a regression analysis to compare the change in property values of cities with characteristics similar to Metropolis'.

Q: Joe is satisfied that he has a good case to present to the mayor and the city council. However, before that, he would like to have a press release to be printed in the local newspaper making his case for the additional funds. What advice would you give Joe on how to present his case?

A: There are many good answers here, but here is one possible solution. Break the story into three parts:

- Outline where the city was 8 years ago when the city had the original idea to build the MAI.
- Summarize the economic and non-economic benefits that MAI has brought to the city.
- Offer ideas on the types of programs and investments the museum would make with the additional $5,000,000 and how they would benefit the city, both in economic and non-economic terms. Also, it might be good to give some ideas of what the programs could be; this gives you a chance to be creative and show a little of your personality. Some examples might be developing a world-class painting restoration facility where other museums could send their work, providing sculpture workshops for at-risk high school students, and working with archeologists at the local university who are excavating a pre-Roman empire site in Turkey which is believed to contain many wonderful examples of frescos and murals [or some such thing].

Mckinsey
21 South Clarke St
Chicago IL.

Non-Profit Network for Power and Influence

Apna Ghar	Combats domestic violence among South Asians.	www.apnaghar.org
UCAN chicago	Multi-faceted social service agency providing a safe harbor to orphaned, neglected and abused youth, children, and families in Chicago. 138 year old charity that supports over 10,000 children, youth, and families a year.	www.ucanchicago.org
CURE Epilepsy	Epilepsy focused	www.CUREepilepsy.org.
Mercy Home For Boys and Girls	Long-term residential home for troubled and hurting young men and women, ages 11 to 21	http://www.mercyhome.org
Cradles to Crayons	Provides, free of charge, low-income and homeless children from birth to pre-teen the basic essentials they need to be safe, warm, ready to learn, and valued. Also sets a foundation for lasting change through the meaningful, tangible volunteer opportunities we provide to thousands of youth and adults each year.	http://www.cradlestocrayons.org
Horizons for Youth	Provides need-based scholarships, one-on-one mentoring, and enrichment programs for Chicago elementary school students.	www.horizons-for-youth.org

Jobs for Youth Chicago	Jobs For Youth/Chicago helps young men and women from low-income families become a part of the economic mainstream; and, in the process, provides the business community with motivated job-ready workers. Jobs For Youth is a free program for teens and young adults ages 17 to 24.	www.jfychicago.org
Jobs for Youth Chicago	Jobs For Youth/Chicago helps young men and women from low-income families become a part of the economic mainstream; and, in the process, provides the business community with motivated job-ready workers. Jobs For Youth is a free program for teens and young adults ages 17 to 24.	www.jfychicago.org
Jobs for Youth Chicago	Jobs For Youth/Chicago helps young men and women from low-income families become a part of the economic mainstream; and, in the process, provides the business community with motivated job-ready workers. Jobs For Youth is a free program for teens and young adults ages 17 to 24.	www.jfychicago.org
City Year	Chicago is one of the most segregated cities in the United States. Each of Chicago's seventy-seven communities have distinct racial and economic divisions that have compounded the educational disparity that children from low-income households experience. Nearly 86% of children in the Chicago Public School system come from low-income households. Also, of the 318,060 elementary students in Chicago, 56% are at or below the national norms of reading comprehension. Elementary school children deserve intensive, individualized attention if they are to reach grade level. Over the last seven years, City Year Chicago has responded to the increasing need for literacy development for children living in Chicago.	www.cityyear.org
The Chicago Public Education Fund	As a venture capital fund for public education, The Chicago Public Education Fund invests in well-managed, high-impact programs that improve school leadership and student achievement system wide.	www.cpef.org

The Chicago Community Trust	We provide critical charitable resources in the arts, community and economic development, education, health and wellness, hunger and homeless alleviation, legal services; programs for youth, the elderly, and people with disabilities; and services to assure that basic human needs are met for all members of our community. For the fiscal year that ended September 30, 2006, the Trust and our donors awarded $77 million to more than 1,200 not-for-profit organizations. Our giving generally falls into five broad areas: Arts and Culture Basic Human Needs Community Development Education Health	www.cct.org
HACE (pronounced ah-say)	Hispanic Alliance for Career Enhancement. HACE is dedicated to nurturing Latinos at all stages of the career continuum, from high school to college and on to the professional years, as we seek to develop increasing numbers of successful Latino professionals and leaders.	www.HACE-usa.org

MasterTheCase.com

Top Consulting Interview Prep