MasterTheCase.com

Top Consulting Interview Prep

Ross School of Business

Consulting Club Interview Casebook

2009-2010 Recruiting Season

The Case List

1. Acme Gas
2. Airport Parking
3. Computer Software & Service
4. Credit Card Debt Recovery
5. Defense Contractor
6. Electric Battery Manufacturer
7. Euro Beer
8. European Postal Service
9. Eye Glasses
10. Grocery
11. New Airline Routes
12. Online Bill Pay
13. Opera House
14. Optical Fiber
15. Pay Phone Company Acquisition
16. Pirates
17. Power Plants
18. Public School District
19. Ricks American Cafe
20. Roadrunner Railways
21. Telecom
22. TNT Funds

Acme Gas (1 of 9)

McKinsey, Round 1

Problem statement narrative	Guidance for interviewer
Our client is ACME Gas, a national distributor of Liquid Natural Gas to people's homes and businesses. The CEO is curious about the rise of alternative vehicle fuels to gasoline and diesel. He is thinking of entering the retail market for Liquid Natural Gas (LNG) filling stations. He is asking for our help in deciding if ACME Gas should do this. So, to begin with tell me what you expect the retail fuel industry to look like?	Use this question to assess the candidate's business sense. Candidates can list a variety of aspects. Good candidates will explain why for each aspect listed. If they don't, push them to. See sample response on next page

Acme Gas (2 of 9)
McKinsey, Round 1

Sample Response	

Sample Response

- Oligopoly of several major extraction firms that own retail outlets
- High number of retail outlets
- Small profit margins
  - No product differentiation
  - Price sensitive customers—may be only reason for choosing station
- Price is largely set by suppliers
- No substitutes readily available to consumer
  - Requires complete engine change
- Should see stable growth with economy
- Customers are made up of
  - Trucking industry
  - Personally owned vehicles
  - Farm and commercial use implements, i.e. tractors or bulldozers

Acme Gas (3 of 8)

McKinsey, Round 1

Additional Question	Guidance for interviewer
What areas would you explore to determine whether to enter the market for liquid natural gas?	Candidates should create a well-structured approach to look at both revenue and cost. Force candidates to dive 2 – 3 levels deep in the structure, to ensure that the structure is relevant to the problem at hand and not a common framework (e.g., 4 Ps, Porter's 5 forces); candidates should identify the buckets and provide a brief rationale for each. If candidate does not dive deep into costs, judges should ask what cost areas would be explored as it is important for next steps.

Acme Gas (4 of 9)

McKinsey, Round 1

Sample Response		
	• Size of Market • Define the market • Assess total market size • Isolate addressable market • Identify growth and relevant trends • Competition • How many firms are in the potential market • Likely reaction to entry • Likely reaction if no entry • Customer needs • Segment Customers • Isolate drivers of purchase behavior • Define gaps in customer needs • Barriers to entry • Product differentiation • Switching costs • Brand loyalty • Access to distribution and customers • Legal aspects of moving to serve this market	• Financial implications • Potential revenue from addressable market • Set up and ongoing costs • Timeline to breaking even on investment • Company capabilities • What is our current technical ability to meet this need (pumps, tanks, space, knowledge) • Are we currently aligned with this market in terms of serving same customers • Can we make the required investment to enter?

Acme Gas (5 of 9)

McKinsey, Round 1

Additional Question	Guidance for interviewer
Question 1: How would you estimate the total markets size for LNG retail vehicle fuel in 2012? **Question 2: Now let's define the annual market size for each customer segment in 2012 and evaluate if this is an attractive market to continue looking.**	**Candidate should walk through the approach for calculating overall market size prior to sharing the exhibit.** **Total Market Size in Revenue = Vehicles * Tank size in Gallons * Fill Frequency * Price per Gallon** **Next, ask the second question and provide the following information (and Exhibit 1) upon request:** • **Number of vehicles in US 2008: 100 Million** • **Projected growth in vehicles: 20% over four years** • **Current number of LNG cars: 1% of total** • **Estimated price for LNG per Gallon in 2012: $2.00**

Acme Gas (6 of 9)

McKinsey, Round 1

Customer Segment by Vehicle Type (2012 projections)	# of Vehicles in Segment (%)	Tank Size (Gallons)	Filling Frequency (Fills/Week)
Commercial Trucks	25%	100	3
Privately Owned Vehicles	67%	20	2
Farm and Industrial Use	8%	30	1

Number of vehicles in US 2008: 100 Million
Projected growth in vehicles: 20% over four years
Current number of LNG cars: 1% of total
Estimated price for LNG per Gallon in 2012: $2.00
Congress has mandated that 10% of vehicles be retrofitted to accommodate LNG by 2012

Acme Gas (7 of 9)

McKinsey, Round 1

Market size calculations…	**Number of vehicles in 2012 = 120% of 100M = 120M** **Number of vehicles that'll be retrofitted for LNG as per Congress mandate = 10% of 120M = 12M** **Total Market Size in Revenue = Vehicles * Tank size in Gallons * Fill Frequency * Price per Gallon** **Annual revenue per segment:** **Commercial Trucks: 25% of 12M * 100 * 3 * 2 = $93.6B** **Privately Owned Vehicles: 67% of 12M * 20 * 2 * 2 = $33.28B** **Farm and Industrial Use: 8% of 12M * 30 * 1 * 2 = $3.12B** **Total annual revenue: $130B**

A strong interviewer will note that this is an attractive market, but costs have to be considered…	• **Initial Investment**
	    • **Land**
	    • **Equipment investment**
	    • **Construction costs**
	    • **Permits, if any**
	• **Operating Costs**
	    • **Labor**
	    • **Facilities**
	    • **Utilities**
	    • **Costs of goods sold (fuel and food/drink)**

Acme Gas (8 of 9)

McKinsey, Round 1

Assume initial of \$15B and required payback of 5 years. Can client achieve this benchmark?	**Information provided upon request:** Expected market share: 20% Net Profit Margin: 10% **Calculations:** Net profit per year = 10% of 20% of \$130 Billion = \$2.6 Billion Total profit over five years (ignore discounting) = \$ 2.6 Billion X 5 = \$13 Billion Hence, the client cannot achieve this benchmark.

A strong candidate would infer the "so what?" i.e., what should the client do to achieve their payback goal?	**Increase revenues** • Increase price of fuel • Sell more goods (convenience stores) • Sell more services (LNG specific vehicle service) • Sell other fuels • Carwashes and other services • Sign volume deals with businesses and municipalities to increase market share • Change location mix for stations to better target	**Decrease Costs:** •Partner with existing stations to decrease investment—sell via license •Franchise the format to distribute investment burden •Lease land instead of purchase

Acme Gas (9 of 9)

McKinsey, Round 1

CEO of ACME Gas is about to enter the room for a quick update on the project; what would you tell him?	Recommendation: ACME Gas should enter the market for retail LNG filling stations. •Growing market has increasing government support and is currently not served •ACME has the capability to serve this need •ACME must make strong steps to minimize costs of both investment and operation in this capital-intensive business. We can help with this key issue. Possible Risks: Drastic decreases in cost of substitutes, disruptive technology, and amendment to government goals/legislation Next steps: Refine the marketing plan of the client to best achieve market dominance

Airport Parking (1 of 4)

McKinsey, Round 1

Problem statement narrative

Our client is a provider of parking services in major metro areas around the United States. The CEO recently was driving to the DTW airport and noticed a rise in private providers of parking. She thought to herself, should we enter this space? She has asked you to help her think about this and wants to brainstorm with you.

Guidance for interviewer

The candidate should present a structure and walk through some ideas. This is a brainstorm so numbers are not necessary at this point.

Airport Parking (2 of 4)

McKinsey, Round 1

Candidate should touch upon the following elements in the structure…	• **Market Size (we will come back to this)**
	  • Existing customer base
	  • Industry growth
	• **Competition**
	  • Existing parking structures (local at airport)
	  • Other offsite parking
	  • Public transit (train, taxis, shuttles, etc)
	• **Existing Capability**
	  • What are the differences between running urban parking lots from those at an airport?
	    • Busing/ shuttle system to drive customers to and from the airport
	    • Is customer service a major factor?
	• **Revenue**
	  • Number of spaces sold
	  • Add on services (car wash, newspaper sales, etc.)
	  • Pricing (consider probing about unique pricing – frequent park programs, packages, etc.)
	• **Costs**
	  • Land (rent or own)
	  • Labor (bus drivers, ticket attendants, maintenance and security)
	  • Insurance
	  • Promotion (e.g. coupons)
	  • Fuel

Airport Parking (3 of 4)
McKinsey, Round 1

Candidate should have mentioned market size in the framework.

Ask the candidate to estimate the market size for say O'Hare in Chicago …

Provide the following facts as the right questions are asked but do not give them away freely:

• Flights/day	2600
• Average passengers/flight	80
• % of fliers that drive to the airport and hence need to park at the airport	20%
• Average parking stay	3 days
• Average price/day for parking	$10

Solution:

- Total Passengers/Yr = 2600 X 80 X 360 = Approx. 75M
- Divide by 2 to avoid double counting departing and arriving passengers = 37.5M

- Airport parking market size
  - Passengers/Yr = 20% of 37.5M = 7.5M
  - Parking Days/Yr = 7.5M X 3 = 22.5M
  - $/Yr = 22.5M X $10 = 225M

Airport Parking (4 of 4)

McKinsey, Round 1

Brainstorm possible threats to the attractiveness of this opportunity…	• Decline in airline travel growth caused by • Higher fuel prices • Security concerns (e.g. terrorism) • Substitutes (high speed rail network) • Alternative travel to the airport such • New public transit • Improved ride sharing possibly the result of social networking • Number of competitors and their response to client's entry into the market
Possible summary	There is about $225 million of parking business at O'Hare airport, one example of a major metropolitan airport. If we are able to take advantage of our knowledge gained from urban parking, this large, and probably growing, market could present a real opportunity for our growth. We need to look carefully at the competitive landscape and the economics at each airport location and evaluate local competition and costs. From today's analysis, this appears an opportunity to explore further.

Computer Software & Service (1 of 3)

RCC Original

Problem statement narrative

The client is Private Equity organization who owns a small computer software and services business . This business primarily serves local, municipal and county governments with a software solution that manages payment transactions and schedules within these small/medium sized government institutions.

There are three lines of business:

-Software Sales (i.e. the right to use the software)

-Software Support (i.e. existing customers who pay ongoing fees for upgrades and problem solving)

-Electronic Services (i.e. a transaction business for existing software customers to process)

The client is wants a turnaround on its investment and is looking TRIPLE yearly profits from this firm in 3 years, and has enlisted your help.

Guidance for interviewer and information provided upon request

REVENUE INFORMATION:

Total Company Revenues: $10M /yr

-Software Sales – 10%

-Software Support – 80%

-Electronic Services – 10%

COST INFORMATION

-Software Development: $3M/yr
-General Overhead: $2M/ yr
-Sales Force: $300k / yr
-Account Management Staff: $560k/yr

OTHER INFORMATION

-Primary Sales Territory is Midwest USA
-Fragmented market place
-Client is a small player
-Long Sales Cycle: 2 years to turn a prospect into a sale

Computer Software & Service (2 of 3)

RCC Original

Solution Structure

Student Should calculate yearly profit, and final target, then evaluate the various ways to get there. Methods include:

- **Grow into new business**
- **Grow by Acquisition**
- **Grow existing business**

Calculate total current profit: $4.24 M
Goal: Need to find new profits of $8.48M

Evaluate Options:

1) **Grow By Acquisition: Not a good option – as the smallest player in the market with strong profit margins, this organization is more an acquisition target than a potential acquirer**

2) **Grow into New Business: Push the student here. What new businesses? What are the risks and potential upsides to this? Probably not a good idea, but worth discussing.**

3) **Grow Existing Business: Evaluate the existing business profitability by business unit**

Cost Structure By Business Unit (if asked for)

<u>New Software Sales:</u>
Each salesman gets paid $200k (including all benefits) plus $100k for bonus for each new software sale.

<u>Software Support / Electronic Services:</u>
Each account manager can service up to 5 customers and manages all relations with a customer including both Support and Electronic Services .

<u>A customer must pay for support to get e-services</u>

Revenue Structure By Business Unit (if asked for)

<u>New Software Sales:</u>
Each sale averages $1M per sale

<u>Software Support</u>
Existing customers pay $250,000 /yr for support

<u>Electronic Services:</u>
Company makes $2 per online transaction
Each customer averages 100k transactions per year

Computer Software & Service (3 of 3)

RCC Original

Calculate Profit by Business Unit

Software Sales
Revenues: only 1 new customer/yr = total $1M
Costs: 200k + 100k = $300k
Total Profit: $700K per sale
To grow,
1) Push for more sales per salesman (difficult with county governments!)
2) Add new salespersons (need approx 12 new salesmen to reach target)

Maintenance
Currently 32 customers ($8M / 250k)
Total 7 maintenance personnel = $80k/yr per staff member ($560k / 7)
Profit per customer: $250k – 16k = $234k
To grow,
1) Offer services to OTHER people's sales clients (difficult in this business)
2) Acquire new customers from sales (but profits don't hit until the 3rd year (due to 2 year sales cycle)

Electronic Services
Currently only 5 customers.
100k transactions per customer, $2 per transaction, $1M total sales
No costs, so profit per new customer: $500k
To grow,
Convert existing software customers to E-Services (~17 new customers)

Conclusion/Recommendations

Sample
The fastest way to grow profits is to convert existing clients to the e-services business. There is an opportunity of 27 new clients, and to reach the goal of tripling overall profits, client should convert 17 of them.

Next level Analysis
Sales personnel are currently only incentivized to make new sales. There should be an financial incentive (by sales personnel or support personnel) to convert existing customers to new clients.

Credit Card Debt Recovery (1 of 3)

Opera Solutions, Round 1

Problem statement narrative

You are a consultant for a credit card company that is trying to reduce sizable losses from customers with bad debt.

- INITIAL FACTS
  - The company's in-house agents call these customers, with the goal of reaching a settlement with the customers for them to pay a percentage of their balance
- PROBLEM
  - How should the credit card company go about evaluating this process and ultimately recovering the maximum amount from these delinquent customers?
- NOTE TO THE INTERVIEWER
  - Objective is to guide the candidate to consider how to segment customers and then estimate the debt that can be recovered based on those segments

Guidance for interviewer and information provided upon request

<u>Criteria for identifying "delinquent" customers:</u>

- Those who have not paid their bills in 1-6 months are contacted by the credit card company
- After 6 months, the customers are contacted by a collection agent, who collects a certain percent of any money recovered.

<u>The current negotiation process:</u>

- The in-house agents usually offer that customers can pay 70% of their balance without incurring any extra finance charges; they must submit requests for less than 70% to a supervisor
- The supervisor has a 30% floor (cannot go below this), and he usually offers 30%
- 30% of all settlements are approved by the supervisor

<u>Volume:</u>

- $600M is the total balance of those who are targeted for settlements, from 120K customers
- 42% of this total balance is currently recovered through these settlements
- The client does not yet have any data on the percentage of customers <u>by segment</u> that sign up for settlements

Credit Card Debt Recovery (2 of 3)

Opera Solutions, Round 1

Key issues that the candidate should identify during brainstorming:

- **No customer segmentation**
  - **Customers should be segmented, and then given different offers depending on which segment they are in**
- **Little, if any, negotiation before the case is passed onto a supervisor**
  - **Intermediate offers should be provided before the case is passed on to the supervisor**

Example of a candidate calculation:

Segments	# of customers in each segment (assumption of even spread)	Total balance (assumption of even spread)	% of customers that sign up (assumption)	Avg. % that can be recovered; i.e., the terms of the offer provided by the company (assumption)	Calculation
1-3 months past due	60K	$300M	70%	Pay 50% of balance	$300M x 70% x 50% = $105M recovered (est.)
3+ months past due	60K	$300M	40%	Pay 30% of balance	$300M x 40% x 30% = $36M recovered (est.)

Current state: $600M x 42% = $252M that is currently being recovered

New state: $105M + $36M = $141M estimated to be recovered

Therefore, based on these assumptions, the current method of recovery is more financially desirable

Note to interviewer:
This is just a part of a sample calculation. The candidate can also consider debt recovered by collection agents, terms of settlements offered by supervisors, etc.

Credit Card Debt Recovery (3 of 3)

Opera Solutions, Round 1

Candidate should articulate sound reasoning . . .	The candidate will need to state and explain the assumptions he or she is using. There is no right answer for this case, but the candidate must explain the reasoning for the chosen segmentation and the logic behind the assumptions.
	
	In our example:
	• Segmentation is based on how long payment is past due is because the client is less likely to recover payments from the customers that are long past due
	• Assumptions:
	    • Total balance is evenly spread across customers and across segments
	    • 70% of customers 1-3 months past due will accept a settlement, and 40% of customers 3+ months past due will accept (harder to contact these customers)
	    • The client will need to offer a more attractive settlement to customers 3+ months past due, because they are the least likely to pay any of their debt

A solid interviewee will recognize the following:	• The recommendation that the candidate provides will be highly dependent on the assumptions that he or she makes • Candidate should provide creative suggestions (if not, interviewer should prompt for these) for how the client can arrive at accurate assumptions • Candidate should also discuss the implications of other issues, such as providing intermediate offers (not calculated in our example) and terms of agreement with collection agencies

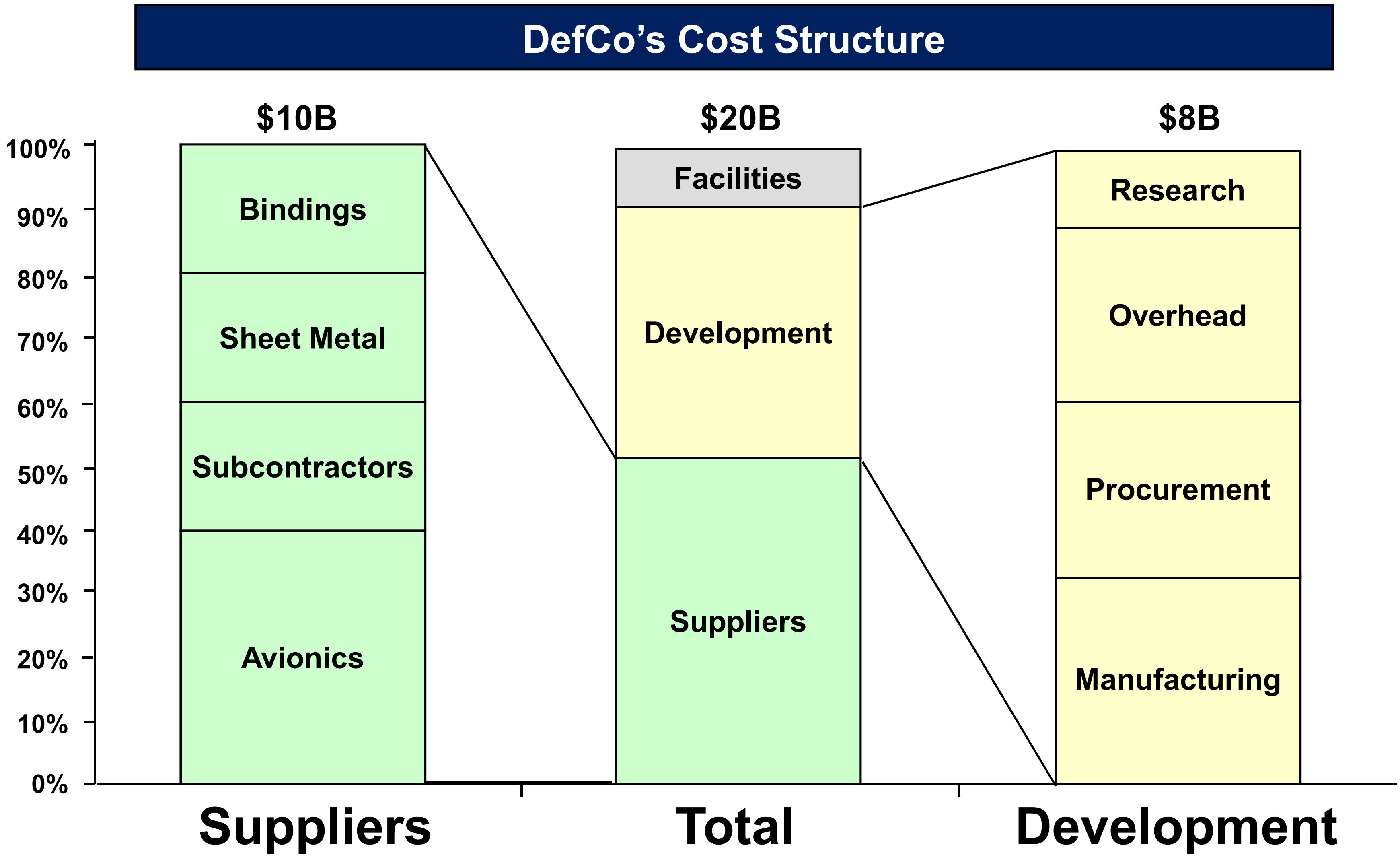
Defense Contractor (1 of 4)

Bain, Round 1

Problem statement narrative	Guidance for interviewer and information provided upon request
The client is a $20B defense contractor, DefCo, that manufactures fighter planes and attack helicopters for the U.S. government. DefCo's sales have been steadily growing over the past few years, but their profit margins have not been improving. DefCo is looking to improve their profit margins by $500M in the short-term only and they have contacted us to see if that is possible. If it is possible, DefCo would also like to know how.	DefCo's sales growth driven by recent acquisitions DefCo's product mix is determined by the government and cannot be changed. Information on the competitors is highly confidential and we do not have access to it. $500M is the opportunity cost our client would pass up by focusing on our improvements rather than other ventures (of which we have no information on). Each government project typically lasts 10+ years Contracts with suppliers are usually on a year-to-year basis

Defense Contractor (2 of 4)

Bain, Round 1



Defense Contractor (3 of 4)

Bain, Round 1

1 of 3 Avionics Suppliers

	Display	Communications	Radar
Project A			
Number of Units	2200	1100	1700
Price per Unit	$100,000	$220,000	$119,000
Project B			
Number of Units	1400	800	1400
Price per Unit	$105,000	$265,000	$119,000
Project C			
Number of Units	700	400	800
Price per Unit	$110,000	$275,000	$120,000
Project D			
Number of Units	500	100	500
Price per Unit	$112,000	$280,000	$120,000
Total	$500M	$592M	$525M

Defense Contractor (4 of 4)

Bain, Round 1

Other information to provide, if asked

Cost Structure

- Subcontractors' contracts negotiated by government (we have no control over them)
- Avionics is complex, while sheet metals and bindings are commodities but buying can also be consolidated
- Development and facilities cannot be changed

Candidate should calculate implications of consolidating avionics purchases

	Display		Communications		
# units	4800		2400		
Price	$100K		$220K		
Total	$480M		$528M		
Previous	$500M		$592M		
Savings	$20M	+	$64M	=	$84M

Then apply to overall cost structure

Avionics Savings	$84M
# Avionics Suppliers	3
Total Avionics Savings	$252M
Total Suppliers (consolidating) / Avionics	$8M / $4M
Total Supplier Savings	$504M

A solid interviewer will include all insights uncovered in recommendation

Can save $500M+ in the short-term

Consolidate purchases from suppliers

Offer longer-term contracts with suppliers

And also identify risks and provide steps to move forward

Sheet metals and bindings are commodities so margins are likely lower

Longer-term contracts will make us less flexible to technology improvements

Develop central purchasing department and forecast potential technology improvements

Electric Battery Manufacturer (1 of 5)

Booz Operations, Round 1

Problem statement narrative	Guidance for interviewer and information provided upon request[1]
The client is an electric battery manufacturer based in China and is thinking to make electric cars to sell. The CEO thinks that he can capture world market and be a majority player. Should they launch this car? If yes, what strategy should they use to launch this car?	Company is world leader in Lithium batteries and had great success with cell phones. Using same technology they have developed a bigger battery that can be used very cost effectively for an electric car. The client has already bought a plant in China to make these cars. The plant cost \$5M and will need additional \$1M to retrofit for electric car production. The total variable cost for each electric car is \$7,000. The plant currently has capacity to produce 1000 cars per annum To expand capacity, it will need similar investments for every 1000 car capacity. The company wants to launch the car worldwide. It has no other partners in any country as of now. The company wants minimum profit of \$2000 per car. Similar category gas car sells from \$16,000 to \$20,000 across world.

Electric Battery Manufacturer (2 of 5)

Booz Operations, Round 1

Candidate should calculate the cost per car and decide on pricing	**Fixed Cost:** $5M/ 1K cars = $5K per car **Variable Cost:** = $8K per car **Total Cost:** = $13K per car
Then price it with $2,000 margin	**Cost is $13K per car. Client wants minimum profit margin of $2K. Hence minimum price per car is $15K; which is competitive price as compared to similar category gas cars ($16K to $18K). Hence the company can launch this car.**
A solid interview will address other issues	• **No industry experience** • **Does the car provide better value to the owner?** • **Other electric cars around the world** • **Total Cost of ownership of electric vehicle vs. gasoline vehicle; maybe it can be priced higher as electricity is cheaper than gasoline for miles driven per dollar.**
And , then quickly jump to the launch strategy	• **Segment the markets based on geography: the US, Europe, BRIC and rest of world** • **Analyze each markets strengths and weaknesses from the perspective of the client** ***Note to Interviewer: Ask the candidate what factors he/she would consider while evaluating the geographic markets. For sample response, look at column headers of Exhibit 1. Show this exhibit on request*** • **Draw a 2X2 matrix and place the above four regions in that matrix** • **Make launch recommendations based on 2x2 matrix**

Electric Battery Manufacturer (3 of 5, Exhibit 1)

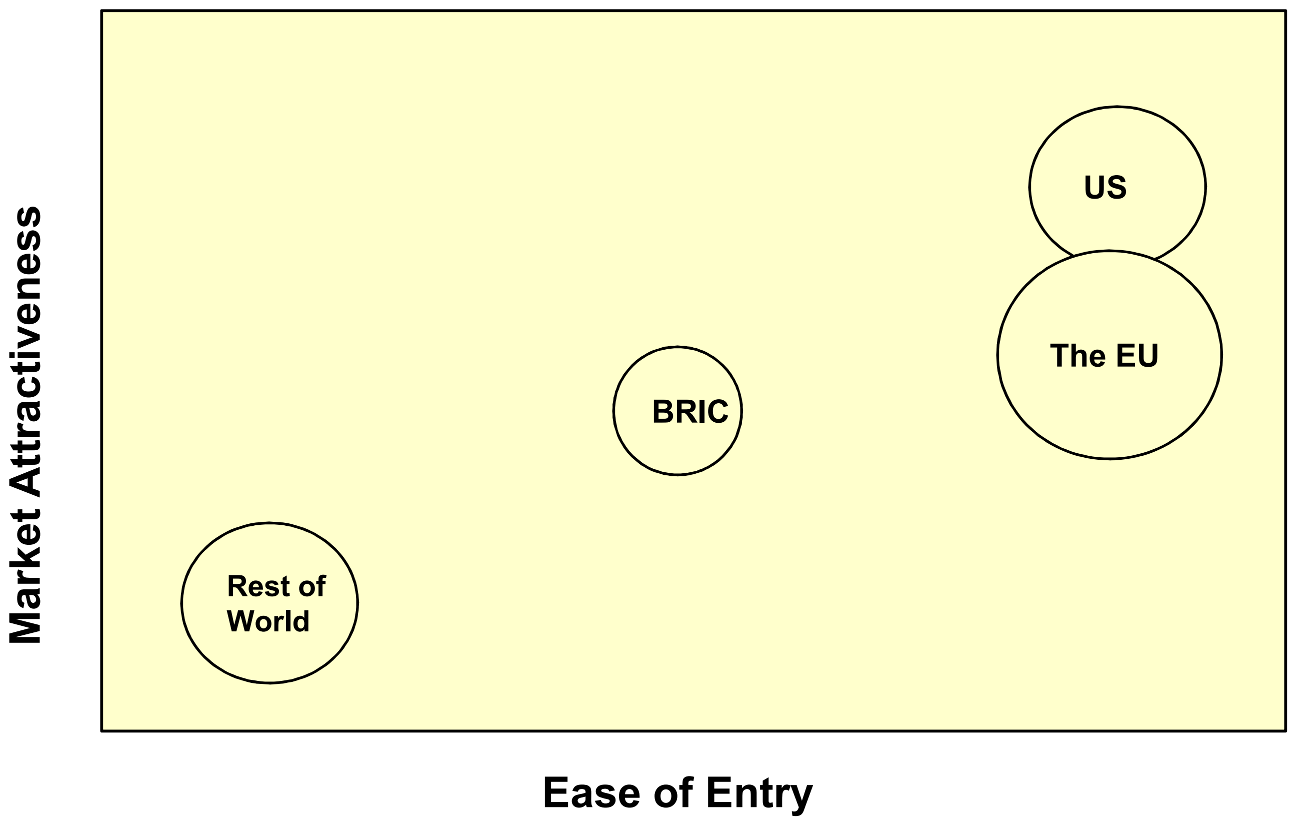
Booz Operations, Round 1

	Market size (cars/yr) & growth rate	Competition	Regulation	Ease of entry	Infra-structure
US	10M, 1%	More than 10 players; 4 players with majority share; No significant competition in battery segment	Strict emission requirement; Govt. gives monetary incentives	No import duties; 100% foreign investment allowed	Electricity available 24X7
EU	19M, 1%	More than 20 players; 8 players with majority share; No significant competition in battery segment	Strict emission requirements; No incentives from Govt.	Almost no import duties; 100% foreign investment allowed	Electricity available 24X7
BRIC	2M, 10%	Highly fragmented across different segments; smaller vehicles with less power; no competition in battery segment	No subsidies or incentives from Govt.	India and Russia do not allow 100% foreign ownership; steep import duties unless partial manufacturing is done in the country	Electricity not guaranteed 24x7; power cuts common
ROW	10M, 6% evolving market	Highly fragmented; variable policies; people buy lower priced smaller cars	No subsidies or incentives from Govt.	High import duties in some regions	Electricity supply erratic

Electric Battery Manufacturer (4 of 5)

Booz Operations, Round 1

Candidate should be able to come up with the following 2X2 matrix



Electric Battery Manufacturer (5 of 5)

Booz Operations, Round 1

Sample Recommendations	**The client should launch the vehicle as it is cost competitive and provides superior value to customers on miles driven per dollar spent on fuel.** **It should launch by exporting to the US market and the EU market in the short term.** **As the infrastructure develops in BRIC cluster, it may want to explore joint-venture or green-field investment in this region in the long-term**

Euro Beer (1 of 5)

AT Kearny China, Round 1

Problem statement narrative

Our client is a European beer company. They sell high-end beer in the Western European market. The client has seen their profitability in decline for the last 2 years.

The client's CEO wants to ask us the following questions:
- What is causing the decline in profitability?
- What should we do about it?

Guidance for interviewer

This is a role-play case. The interviewee should imagine that he is interviewing various executives within the company to obtain relevant information.

Before asking a question, the candidate should specify which person in the corporate he wishes to talk to. Questions should be appropriate and relevant to the interviewee's roles and responsibilities. Also the consultant should try to obtain all information from each interviewee in a single meeting (avoid going back-and-forth between executives).

Euro Beer (2 of 5)

AT Kearny China, Round 1

CFO/ Controller/ Finance Director

- Revenue was down 10% while operating income down 40%
- Our cost was up by 60%, of which 50% is attributable to variable cost and 10% attributable to the amortization of plant expansion project
- We are in the high-end market, therefore our operating margin was 70% historically.

Guidance for interviewer

The candidate should be able to identify , quantify and prioritize the sources of profit decline.

	Past	Now	Impact
Revenue	100	90	-10
Cost	30	48	
VC		50%	-15
FC		10%	-3
Operating Income	70	42	-28

Euro Beer (3 of 5)
AT Kearny China, Round 1

Sales Director

- We are in the high-end beer segment
- It is a mature marker with a CAGR of 3%
- Our market share have shrunk from 70% to 60%
- There are 2-3 competitors in the market, they are gaining market share at our expense
- Our pricing strategy has not changed in the period
- Sales channels include 1) retail chains and 2) bars
- The loss in market share basically comes from bars in remote areas. They have complained about handling (broken bottles) and on-time delivery.

Director of Logistics

- We currently contract a independent truck fleet to deliver our beers to the customers

Guidance for interviewer

The candidate should be able to identify the reason of decreased sales and propose possible solutions:

- Change to more reliable transport contractor or means of transportation
- Change the packaging material (plastic, wood barrel, metal can)

Euro Beer (4 of 5)
AT Kearny China, Round 1

Director of Operations/Procurement

- The increase in variable cost is because of raw material P
- We have an exclusive supplier for P. They experienced spike in their raw material price and passed that cost onto us
- We are most concerned with two things in the supplier relationship 1)quality and 2)on-time delivery, that's why we went into an exclusive deal with the supplier. We have enjoyed very stable and pleasant relationship
- There are other suppliers of P in the market place but we are uncertain about their quality

Guidance for interviewer

The candidate should be able to identify the reason of increased cost and propose possible solutions:

- Contract new suppliers to reduce supplier power and reduce the cost of material P
- Use quality certification systems (i.e.. ISO) and/or send a taskforce to work closely with new suppliers to assure stable quality during transition.

Euro Beer (5 of 5)
AT Kearny China, Round 1

Suggested Solution

This is a typical profitability problem. The candidate should provide a clear framework upfront.

The candidate should be able to identify and provide solution for the following issues:

1.Spike in the price of material P

- **Contract new suppliers to reduce supplier power and reduce the cost of material P.**
- **Use quality certification systems or work closely with new suppliers to assure stable quality.**

2.Drop in sales from bars in remote areas

- **Change to more reliable transport contractor or means of transportation**
- **Change the packaging material (plastic, wood barrel, metal can)**

Conclusion:

While there is nothing we can do about the 10% amortization of new plant capacity, the consultant should be able to suggest ways to monetize this new capacity, such as entering the Eastern Europe market.

Additionally, the consultant should be able to request interviews and ask questions in a clear, effective and professional manner.

- **Get as much information as you should from each interview**
- **Ask the RIGHT question to the RIGHT people.**

European Postal Service (1 of 8)

McKinsey Germany, Round 2

Problem statement narrative

Imagine you are consulting the CEO of a European postal service company. He is wondering what future trends to expect for his business and his industry and how he should position his company.

What would you tell him?

Guidance for interviewer and information provided upon request

This case was given by a partner with extensive industry knowledge. It is a brainstorming case.

We are not talking about a specific company, but generally about a postal service provider operating in Europe. Generally speaking a US provider faces similar issues.

Very specifically to Europe is the fact that previously existing national regulations have been lifted. Any provider can now operate in almost every market or will be able in the future. Direct competitors are usually parcel services like UPS or service providers entering from other countries.

The CEO is interested in the big picture of the market and does not care for detail analysis of a specific issue.

European Postal Service (2 of 8)

McKinsey Germany, Round 2

Case Outline	Although this is a McKinsey case, a good candidate would drive through the first four steps on its own. The interviewer is looking for a high level approach. The last two steps need to be initiated by the interviewer to guide the discussion appropriately.

Candidate Framework

Framework could include:
- Understand current Business
- Threats (Revenue/Cost issues)
  - e.g. Internet, fuel, wages
- Opportunities
  - New products
  - New markets in other countries (organic/M&A)
- Or just classic industry framework

"Understand Business"

Tell the candidate to start brainstorming about the business.

Help grouping and focus the case on traditional business for a postal service provider.

"Identify Issues/Threats"

Let the candidate identify all potential issues with the business.

Opportunities

Let the candidate identify potential opportunities in the traditional business model.

Although many ways are possible, let the candidate reason for some and then push towards value chain integration.

Value chain

Let the candidate develop his idea of the value chain for Business Letters, Marketing and Newspapers/Magazines.

Service Example

Let the candidate show his business judgment (no detail numbers required) whether it makes sense for the provider to deliver magazines/newspapers on Sundays

European Postal Service (3 of 8)
McKinsey Germany, Round 2

In a first step the candidate must try to understand the business of a typical postal service provider	**Questions the interviewer should ask:** What would you think the business looks like? Which products/services is such a company offering? What falls into this product category? What else would you expect?
A good candidate will address most of the points. The interviewer should help the candidate to group his/her ideas into the defined categories to facilitate further work	***Case Focus***Traditional Business: Letters and Packages •First Class Letters •Marketing mail •Newspapers and magazines •Packages Freight and Forwarding •Ocean freight, air freight, industrial projects •Overland freight with full and partial loads using trains and trucks Supply Chain Management •Complete logistics for retail/industry clients including additional services Financial Services •Many postal service providers traditionally offer retail banking services and money transfers

European Postal Service (4 of 8)
McKinsey Germany, Round 2

Next the candidate should identify risks/threats to the existing traditional business	**Questions the interviewer should ask:** What problems do you see with the existing business? Do you think the traditional business has a future? How is it threatened? What do you think makes most of the volume: Private or Business customers? What would be a big business client?
A good candidate will address most of the points.	**Letters, related services , franking, philately** - Traditional letters are decreasing year after year - Private business plays only a minor role - Big customers like banks/telecoms/government start providing information electronically **Marketing mail** - Internet/E-mail marketing more and more replaces traditional advertising brochures **Newspapers and magazines** -Editions for newspapers and magazines are decreasing, publishers go out of business **Packages** -No negative trends

European Postal Service (5 of 8)
McKinsey Germany, Round 2

Next the candidate should identify opportunities for the existing traditional business	**Questions the interviewer should ask:** **What opportunities do you see?**

A good candidate will address most of the points.	**Traditional Business**
	•Business Letters, Marketing, Newspapers/Magazines
	    •Customers might outsource shipping (new customers – e.g. newspapers)
	    •Customers might outsource printing (new product)
	•Packages:
	    •Increased internet shopping and increased business deliveries drive up volume
	    •Offer pick-up stations, self-service etc.
	    •Consider groceries shipping
	
	•General
	    •Cross border M&A or organic growth to use economies of scale
	        •*** This is a particularly interesting option since there is consolidation potential in the industry, however this is not the focus of the case***
	    •Cost savings could include overhauled fleet, reorganization of distribution etc. ***Not relevant for the rest of the case***

European Postal Service (6 of 8)

McKinsey Germany, Round 2

Next the candidate should identify risks/threats to the existing traditional business	Questions the interviewer should ask: What problems do you see with the existing business? Do you think the traditional business has a future? How is it threatened? What do you think makes most of the volume: Private or Business customers? How do you think the value chain for marketing material looks like?

	Operating a business (e.g. retail)	Deciding to Promote a product/service	Designing Promotion Materials	Printing Promotion Materials	Shipping Promotion Materials
Interviewer guidance for each area (do not read verbatim)	A retailer like BestBuy/Target who needs to promote	Identifying items to promote, selecting target group	Layout etc. of the materials	Printing of marketing materials	Ship marketing materials
Remark	In general the value chain for newspapers/magazines or business letters looks similar. There might be less integration opportunity. Some of the European postal service providers have become the largest printers in their country.				
Possible candidate recommendation	Currently the client is focusing only on shipping the materials. However it should be attractive to integrate other parts of the value chain. Printing is very promising, since this would yield large economies of scale. Possible is also to offer services to design materials and provide data to the client to help him identify demographics/target groups.				

European Postal Service (7 of 8)

McKinsey Germany, Round 2

Additional Question

Given the high competition in the publishing market, a publisher of magazines has approached the client to distribute his magazines on Sunday instead of Monday. The publisher hopes to increase its subscriber base since he thinks more people would have time to actually read his product.

Our postal service client has previously not been operating on Sundays. Do you think it would be a good idea to enhance his operation to Sundays?

Guidance for interviewer and information provided upon request[1]

The candidate should show his business judgment

Things to consider (let the candidate brainstorm and identify them)

Additional revenues through distribution of more magazines (how many percent? – e.g. 10% for this publisher, only a low number is reasonable).
Potentially increase prices possible for other products due to lower runtime.

Additional costs
Most of the costs for the service provider are fixed on a given workday. It is not so much relevant how many letters a postal service worker delivers in any given street – its much more important that he needs to go there at all.

Final Answer:
The client would increase its costs significantly (up to 16% since he would now operate 7 instead of 6 days).
His revenues would only increase minimally (e.g. 10% for one of its customers).

European Postal Service (8 of 8)

McKinsey Germany, Round 2

Final Recommendation	**Client CEO should consider the following options:** **•Backward integration in the value chain** **•Consider M&A of other postal service providers**
Risks	**•Other European service providers might act first in M&A and obtain an advantage** **•Still existing regulation and “government organization culture” at potential targets might make integration difficult**
Next Steps	**•Evaluate other European Markets to identify targets** **•Create business case for a printing service offering**

Eye Glasses (1 of 4)
BCG, Round 1

Problem statement narrative	Guidance for interviewer and information provided upon request[1]
The client is an eyeglass (lens) manufacturer from Japan. They are a well known brand in Japan and are contemplating entering the U.S. market. They've hired BCG to help them decide if entering the U.S. market is a good idea.	-They currently have operations and sales in Asia, Europe and Canada. - They make the thinnest lens that is also anti-reflective. This is patented. - Their criteria for entering markets is if they can capture 2% of the market within the first five years and be profitable.

Eye Glasses (2 of 4)
BCG, Round 1

Eye Glasses Market

Somewhere in the student's framework, they should ask about what the U.S. market is like or try to size the U.S. market. You can provide the following information to help them do this:

-The U.S. market has one player owning 40% of the market, two others that each own 20%, and the rest is fragmented amongst 10 players

Ask the student what next?
They should recognize that 20% of the market is very fragmented and that this = opportunity. They should focus on penetrating this 20% and should see that logically getting 2% in 5 years is feasible.

A good student will try and inquire about how people buy glasses in the U.S. and you will share with them that that (unlike Japan) they are <u>not loyal to a brand</u>, but rather the place where they go to buy their contacts or glasses.

A good student will then ask about distribution channels.

Distribution Channels

The student should brainstorm channels and you should guide them to the following data:

- Eye care/doctor distribution = 50% of market
- Mass merchandisers (like Wal-Mart) = 20% of the market
- Retail (like lens crafters) = 20% of the market
- Other = 10% of the market

Ask the student what they think of this and if they have any thoughts on which distribution channels the client could focus on?

Good answers will recognize that the client has a special lens and you'd want to go to the channel in which people are buying that lens and that mass merchandisers may have long standing relationships or contracts that make penetration for a new company difficult.

In general, guide the student to focus on Eye care because it's here that people buy special lenses most often and the client would also like to focus where most of the volume is. Dismiss other saying there isn't enough info available on this channel.

Eye Glasses (3 of 4)
BCG, Round 1

Volume

Once the student focuses on the two channels, they should ask what the volume going through Eye care is.
-Tell them its 80MM pairs (this means 160MM lenses).

They should next consider how much of this can the client capture. They should ask about the different products being sold in this channel:

- 50% of total volume is single vision lenses
- 25% of total volume is a “buy and try” lenses
- 25% of total volume is progressive lenses

The client has products in single vision and progressive lenses. They don’t make “buy and try” lens types (so student should see that the total market size is now 75% of 80MM pairs or 75% of 160MM lens).

The student should now check for profitability…

Profitability

Information on costs and revenues:

- They sell single vision for $25/pair
- They sell progressive for $100/pair

Ask student to brainstorm costs. The cost information you have is:

-Variable:
    -single vision: $12.50/pair
    -progressive vision $50/pair

-Fixed: can be allocated to single vision at 25% of variable and to progressive as 30% of variable

-Ignore all other fixed costs right now

Eye Glasses (4 of 4)
BCG, Round 1

Now ask HOW they would go about penetrating the U.S. market broadly? What would they look at to actually execute upon this?

Student should see that the company goals on profitability and market share can be met.

A good answer will look @ the following dimensions:

Focus on Distribution:
- focus on eye care and retail for reasons discussed (mass merchandisers may be locked into contracts and in eye care/retail you will get more specialty consumers who will be interested in the client's special product)
- pursue benefits they could provide to the channel, maybe they can deliver with better speed or provide better terms (something that their competitors in the market aren't doing)

Marketing:
- focus on channel, not on end consumer. End consumer doesn't care about brand (unlike client's home country and other Asian markets)

Price:
- ensure price is competitive

Summary

Student recommendation should include:

1) Answer: Yes, you can enter U.S. market and reach your goals…

- We looked at market, and 20% is fragmented, you can get 2% of that by specifically focusing on eye care (which is majority of market)
- Looked at costs/revenues and profitability is there

2) Next Steps: Build Distribution, Hire Sales People

3) Risks: Brand name doesn't go a long way and this one of the assets you have. Basis of competition in the U.S. is different than in Japan and what the client is used to.

Grocery Sales (1 of 3)

Opera Solutions, Round 2

Problem statement narrative

You are a consultant for a national grocery business that manufactures and delivers frozen pizza and ready-to-eat meals.

INITIAL FACTS

- Customers place their orders through a website or over the phone; these phone calls are all handled by one call center in the U.S.
- There are 400 distribution centers throughout the U.S.
- It generally takes 2-3 days for orders to arrive once they have been placed through the website or call center
- Annual revenue is $1.8 billion
- This company has been facing declining sales over the past two years

QUESTIONS NEEDING ANSWERS

What should be done to improve sales?

Guidance for interviewer and information provided upon request

- Most of the sales come from the following geographical areas: Midwest, rural California and rural Texas.
    - These regions are targeted because residents in these areas do not have easy access to grocery chains
    - The company is not considering expanding to other regions
- Customer spend is consistent across the three geographical regions
- The company has 450 products, with prices ranging from $6 - $20
- The decline in sales is uniform across all products
- Prices are about 45% of what customers would pay in a typical brick-and-mortar grocery store
- This company does not have a loyalty/rewards program

Grocery Sales (2 of 3)

Opera Solutions, Round 2

Candidate should ask for information on customer segmentation/spending:

Segment	# of Customers	Avg. Order Size	# of Purchases Per Year
1	1 M	$50	12
2	800 K	$50	20
3	500 K	$25	10
4	200 K	$30	5
5	2 M	$30	2

Candidate should perform the following calculation:

Segment	# of Customers	Avg. Order Size	# of Purchases Per Year	Spend Per Year
1	1 M	$50	12	$600 M
2	800 K	$50	20	$800 M
3	500 K	$25	10	$125 M
4	200 K	$30	5	$30 M
5	2 M	$30	2	$120 M

Grocery Sales (3 of 3)

Opera Solutions, Round 2

Candidate should identify which segments to target and why . . .

- Focus on increasing number of purchases and order size in segments 4 and 5. Reasoning: Most potential for growth
- Focus on increasing number of purchases and order size in segment 3. Reasoning: Lowest average order size and only a moderate number of purchases per year

And articulate ways to increase spend based on segment data . . .

- Increase customer spend per purchase
  - Discounts / coupons, Loyalty program
  - Customer service (follow-up calls)
  - Cross selling (provide suggestions for similar products during checkout)
- To increase number of purchases per year, perform customer needs assessment to determine reasons for customers making infrequent purchases
- Increase number of customers
  - Highlight core competencies through marketing/advertising (low price, fast delivery)
  - Referral program
  - Determine customer preferences: speed of delivery, taste, product mix, etc.

A solid interviewee will recognize the following:

- Large percentage of potential customers in rural areas may not be reachable if they do not have access to the Internet. Consider creative ways to get around this issue
  - Door-to-door sales, state fairs, etc.
  - Suggestions above could be costly; ensure that financing is available for these projects
- Acknowledge differences in implementation for call center and website

New Airline Routes (1 of 4)

BCG, Round 2

Problem statement narrative

In the 1960s, PanAm had a monopoly on routes within the United States from the West Coast to the East Coast. These routes originated from three points on the West Coast – Seattle, San Francisco, and Los Angeles, with terminating points in NYC, Washington, and Atlanta. (See Exhibit 1)

The airline was presented with the option to introduce a stopover point in Kansas City (see Exhibit 2).

1. Why would the airline want to do this?

Guidance for interviewer and information provided upon request

This first question requires the candidate to assess all the potential reasons for wanting to stop in Kansas City. A sample of responses could be:

- Using different planes (shorter range) – *the same plane is used on all routes.*
- Picking up additional passengers – *no additional passengers are picked up from KC*
- Picking up additional cargo – *no additional cargo*
- Attempting to open up a new hub – *No need; KC is a small market*
- Load factors are low; attempting to consolidate new routes – *Yes, load factors are low.* Press the candidate on why load factor is important (used as a utilization factor for scheduling and purchasing aircraft, also increases revenue per aircraft)

All of the above answers are acceptable, but load factor is the critical area. The candidate should specifically ask for load factor amount (currently at 50 percent).

New Airline Routes (2 of 4)

BCG, Round 2

Additional questions for candidate

Provide candidate with Exhibit 2 and have him/her explain the new route network he/she would utilize.

- If the load factor is 50 percent on all of PanAm's routes from west to east, what will be their new load factor from KC to the East Coast if they now stop in Kansas City?
- What if the load factor was 80 percent?
- At which point does the load factor become irrelevant (i.e., consolidation of a/c will not be economically beneficial)?
- Based on the above calculations, what does this suggest about PanAm's decision?
- What recommendations would you make to management?

Solution guide

The candidate should realize that, at 50 percent load factors, planes can be consolidated.

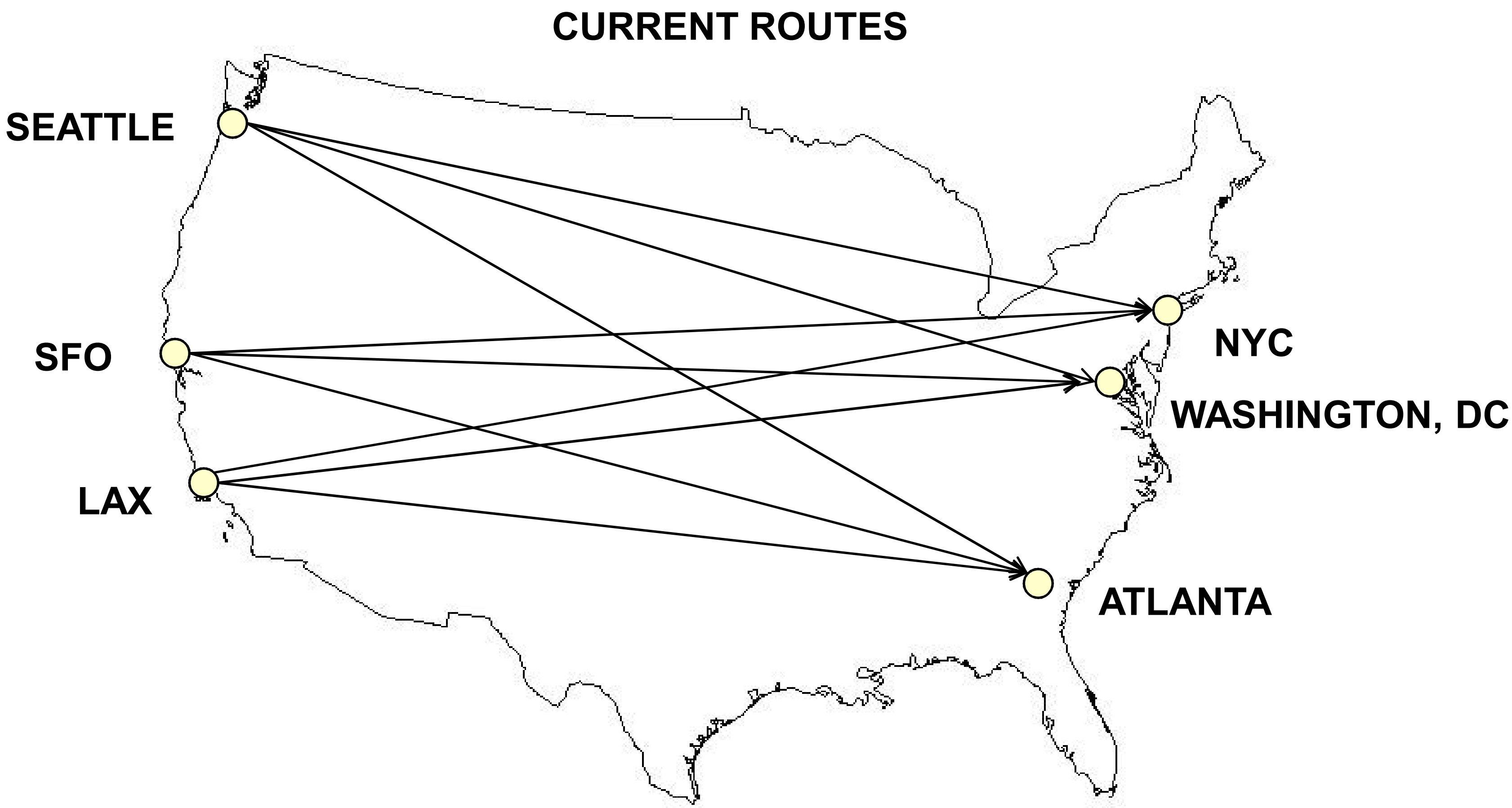
A shortcut the candidate should use: examine all three routes from ONE city and extrapolate.

- Assuming 100 seats per plane (but can be used for any number of seats), and equal distribution, the new load factor will be 75%.
- Applying the same approach, the candidate should discover that the load factor is still 80 percent.
- Once the loads of aircraft exceed the capacity of two planes (or 66.7%), then three planes will be needed per KC-east coast route.

Above a certain load factor, the benefit is moot.
Several factors should be considered:
Will load factors increase on west coast-east coast routes beyond 66.7%?
Are additional opportunities for KC expansion available?

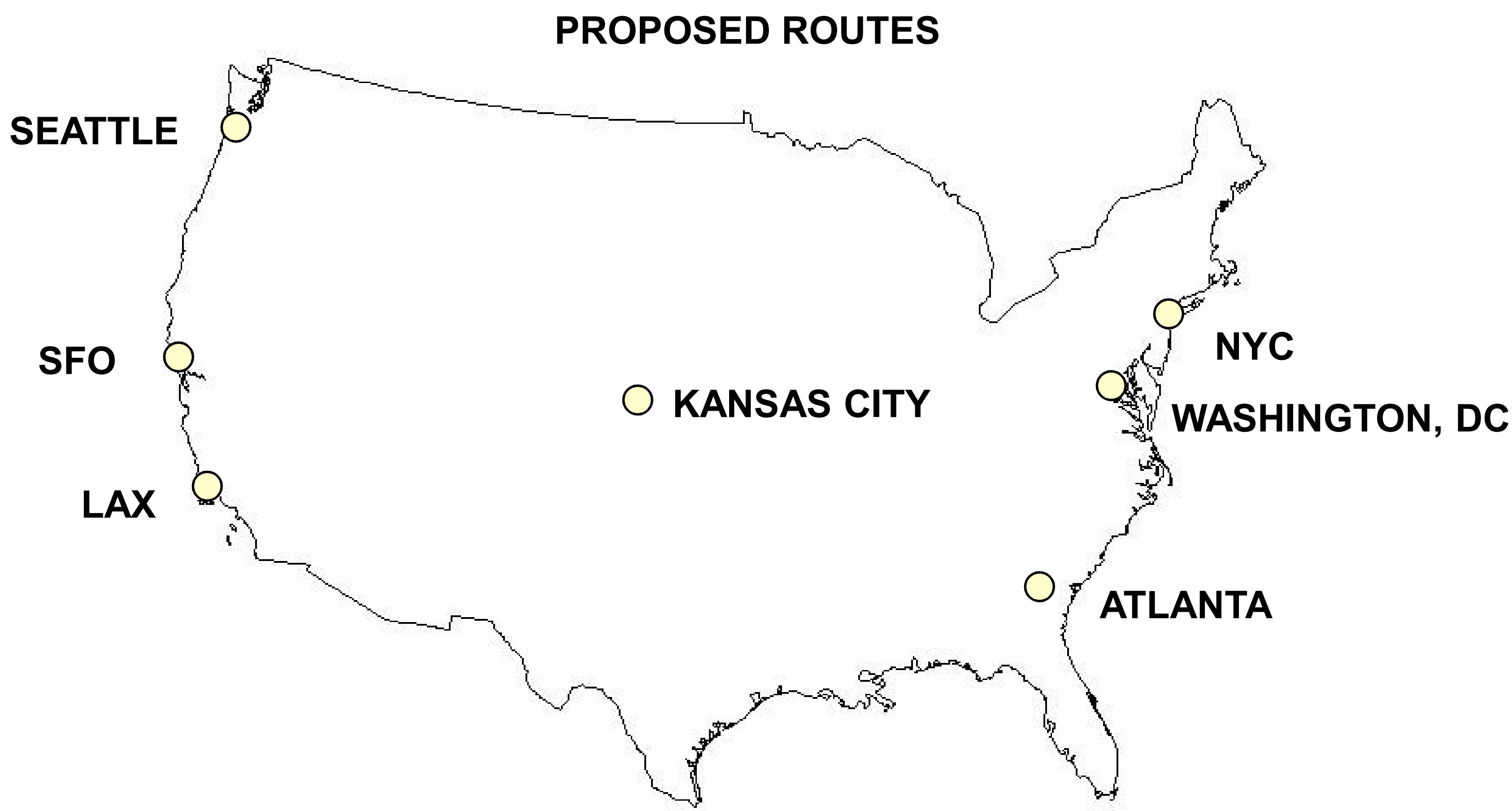
New Airline Routes (3 of 4, Exhibit 1)

BCG, Round 2



New Airline Routes (4 of 4, Exhibit 2)

BCG, Round 2



Online Bill Pay (1 of 4)

McKinsey, Round 1

Problem statement narrative

The client makes money every time someone pays a bill through their online banking account. They earn $0.50/Online Bill Pay and $1.00/Online Check (where a physical check is sent to someone).

We know that 70% of People have online banking, but only a small portion of this group actually pays a bill through their online bank account.

They've come to McKinsey to help them figure out how they can increase the # of people using this feature.

Guidance for interviewer and information provided upon request

-The client is not a bank, but rather a third party who manages this process for the bank and earns the state amount/transaction

-The bank pays the transaction fee

-Core benefit to the bank is customer retention (e.g. those that use online bill pay are more likely to stay with the bank for many years)

Online Bill Pay (2 of 4)

McKinsey, Round 1

Structuring the Question	**The structure developed can take multiple forms because the question is quite open ended.** One possible structure could include: 1. Market and Customers: understand the larger market and trends (what drives consumer behavior, competitive landscape (both other banks and "substitutes" e.g. other online or non-online bill paying benefits) 2. Customers with Online Bank Accounts (buckets within structure would address increasing usage of online bill pay) 3. Customers without Online Bank Accounts (buckets within structure would address how to get these customers signed up online)
Question #1	**Focus the candidate on CUSTOMERS. Ask what barriers there might be for customers without online bank accounts?** Answers can include: 1. Perception that it is too difficult or complex to use / e.g. elderly population 2. Lack of internet access 3. Loyalty to other online payment programs or auto debit 4. Lack of a bank account 5. Language challenges (population used to internet but customized websites, relevant for growing Hispanic population) 6. Fear of security ***(A strong candidate will list at least 4 of these).***

Online Bill Pay (3 of 4)

McKinsey, Round 1

Question #2	**Why might someone with an Online Bank Account not use the bill pay function?** Answers can include: 1. Lack of awareness 2. Habit or loyalty to other online bill pay programs 3. Don't pay any bills online – fear of security 4. Time required to input company names and information into banking account system (so that one can even pay the bills) is extensive 5. Bank with multiple institutions and like the flexibility of changing which bank they pay from (e.g. if I write checks I can switch checking accounts every month if I want or if I pay my credit card at amex.com I can store all my accounts there and select which one I want to pay from) 6. Language issues ***(A strong candidate will list at least 4 of these).***

Additional Data on Growth of Bill Pay	**5 YEARS AGO:** **-50% of the Population had Online Banking** **-10% of the Population paid Online Bills Occasionally** **-5% of the Population were Active Online Bill Payers**	**TODAY:** **-70% of the Population have Online Banking** **-20% of the Population pay Online Bills Occasionally** **-7% of the Population are Active Online Bill Payers**

Question #3	**Ask the student what they notice about the data. Should recognize that:** 1. Total people with online banking growing 2. Those using online bill pay occasionally has doubled 3. Those becoming active bill payers growing at slower rate ***Should extrapolate that while we are getting more people to pay occasionally, we are getting less to convert into active users. This is bad news for the client.***

Online Bill Pay (4 of 4)

McKinsey, Round 1

Question #4	**Ask Candidate why this could be happening?** Answers can include: 1. Decline in customer service or user experience 2. Increased loyalty to other online payment systems 3. 5 years ago those engaging in any online bill pay were "early adopters" at cutting edge, and tech savvy, more likely to convert at a higher rate, but this isn't sustainable. ***(A strong candidate will list at least 2 of these).***
Question #5	**Let Candidate know it is clear that the Value Proposition needs to be improved. How?** Answers can include: 1. Sending out reminders for bills 2. Offering financing for bill payment 3. Bundling all bills together with a "one click" payment system 4. Offering incentives to use online bill pay 5. Offering recommendations on better products once you see what the customer is paying each month in bills ***(A strong candidate will list at least 3 of these).***
Final Recommendation	Answers can very but can include: First focus on those with online banking, but not using online bill pay regularly. 1. Work on improving the value proposition and user experience so that those occasionally paying bills become active bill payers 2. Then work on converting all with online banking to online bill payers (must do step 1 above first because if this link is not improved first those converted from online bankers to occasional online bill payers will never become active) 3. Figure out how to get more people into online banking – aim for 100% of those with bank accounts to have online bank accounts

Opera House (1 of 4)

McKinsey, Round 1

Problem statement narrative

Our client, an Opera house located in a large metropolitan city, has been struggling with declining profitability recently. They've hired McKinsey to help them understand the source of declining profits and provide recommendations on how to turn the situation around.

Guidance for interviewer and information provided upon request

-Opera house only does opera performances

-Opera house does 6 unique performances (repeated for a few weeks each) throughout the year

-Opera house has been around for 50+ years

-Customers are typically 45+ years old, highly educated , coming in from suburbs

<u>Substitutes</u>

-If they ask this question turn it around on them. Ask what they think substitutes would be? Push them to list at least 4 things. Then say "That sounds about right, unfortunately I don't have any information in this area"

Opera House (2 of 4)
McKinsey, Round 1

At this point, the Candidate should have developed a framework including the following buckets. The information can be given in any order.

Products & Prices	-Single show tickets: Night shows priced at $100, Sunday matinee priced at $70 -Club member ticket (all 6 shows of the year): Night package for $480, Matinee packaged for $300 -Group discounts (10 or more single shows): Night tickets for $80, Matinee tickets for $60 *Night shows are Thursday, Friday & Saturday. *Memberships are for single nights (i.e. Wednesday night membership)
Traffic/Volume	Thursday nights: average of 300 customers Friday nights: average of 450 customers Saturday nights: average of 450 customers Sunday matinee: average of 500 customers *Capacity is 500 seats
Costs	When the student asks about costs, force them to state what they think the core costs of an opera house should be. They should name things like: Fixed (Management / Utilities / Rent or Mortgage / Marketing) Variable (Talent / Labor / Costumes / Equipment & Lights) Tell them that the client has done some calculations that attribute fixed and variable costs on a per show basis. They feel good about this figure as a proxy for the real costs of running each show – this figure is $30,000.

Opera House (3 of 4)

McKinsey, Round 1

The student should do calculations to see if there are any unprofitable days. But they can't do that without knowing what the mix of tickets is in each event. Tell them on average you see the following mix regardless of day of the week.

Ticket Mix & Profit/Day Calculations	**Single ticket: 70%, Group ticket: 10% , Club members: 20%** **-Thursday = 100*(.7*300) + 80*(.3*300) = $28,200** **-Friday = $42,300** **-Saturday = $42,300** **-Sunday = $33,500** **The student should quickly see that Thursday nights are unprofitable. Next they should move on to question #2 – What do we do about it now?** **Before they start brainstorming ideas, interject with a few facts:** **- The client doesn't want to let go of Thursday nights (and we shouldn't because it still brings in revenue, we should fix it)** **- The client thinks the most opportunity is in the club tickets because it brings traffic to multiple shows at once so we've decided to focus here, "How do we raise club ticket sales?"**
Ideas to Raise Ticket Sales	**Let the student brainstorm ways to raise club ticket sales, then stop them and say:** ***"An idea the client has is to allow customers to sign up for the club membership after viewing one show via a single ticket. The idea is to attract more people after they've had a good experience."*** (the client will give the customer their retroactive discount for the show they've already seen if they sign up, but ignore this for purposes of the case). ***"The client has asked us to tell them what % of Thursday single ticket purchases they would need to convert to increase Thursday night traffic enough to break even?"***

Opera House (4 of 4)

McKinsey, Round 1

Solution	**The student should then solve for break even point first:** **→Money needed to break even = $30,000 - ~$28,000 = ~$2,000** **Then they should find how many tickets it would take to break even:** **→Each club ticket is worth $80 in revenue, so $2,000/80 = ~ 25 tickets** **The student should then find what % of the traffic that day is** **→25/300 = About 8 or 9% (ok answer)** **Prompt the student to wrap up…**
Conclusion	**<u>Answer</u>:** **- Opera house is losing money/declining profitability because they don't generate enough traffic on their Thursday nights. In fact they are losing money on Thursdays. Sunday is also not very profitable, but does still generate profit for the client.** **- The opera house can consider several strategies to turn this situation around. Possible ideas:** **<u>Discounting</u>: discount tickets to maximize volume** **<u>Expand customer base</u>: target local people who can make it on a Saturday night or professionals coming for a "treat after work"** **<u>Reduce variable costs</u>: reduce staff or use only a portion of theater** **<u>Bundle tickets</u>: Provide incentives for those buying Saturday tickets to one show to also pick up Thursday night tickets to another show through bundling** **<u>Add or expand concessions</u>: To further grow revenue** **Risks/Next Steps: (answers can vary, but should be logical)**

Optical Fibers (1 of 5)

BCG, Round 2

Problem statement narrative	Guidance for interviewer and information provided upon request
The client is a fiber optical manufacturer. (Fiber optics are wires that transmit data) The CEO of this fiber optical firm is new and is trying to assess the firm's business situation. At a surface levels, she knows the firm is experiencing a 50% decline in revenues, but has hired BCG to dig further. She has 3 specific questions: -Why is the firm experiencing this revenue decline? -When will the firm rebound? -How does the firm relate to its competition?	- Data types transmitted over these wires are internet, TV, phone, etc. . - The client specifically sells these wires to big firms like AT&T and Sprint and they put them underground and use them to transmit data over long distances.

Optical Fibers (2 of 5)

BCG, Round 2

Student should tackle each one of the three questions in this order:

1. Why is the firm experiencing this revenue decline?	**The answer to this question is qualitative in nature. The industry as a whole is suffering because 4 years ago more optical fibers were put in the ground then their was demand for. Each fiber optical cable can support about 1 tera bit of information, and the demand per second (unit of time we'll use) is less than 1 tera bit per hour.**
2. When will the firm rebound?	**The student should be looking for data that will help them see when the market or demand for these cables will come back.** **When prompted, the interviewer will reveal:** **-Candidate should use the market of fibers between D.C. and NY as representative of the world for the purposes of this case** **-There are 1000 fibers between these two cities and the peak of demand is 100 terabits/sec.** **-Every year the peak demand doubles. Use time zero of demand as 100 terabits, year 1 as 200 and so on.**
Candidate should determine that:	**Demand will exceed capacity in year 4 so somewhere between year 3 and year 4, there fore more cables will have to be installed and the company can rebound. This is sufficient for this part of the case (don't need to get into how much of that market they can capture, etc.)**

Optical Fibers (3 of 5)
BCG, Round 2

3. How does the firm relate to its competition?	Ask the candidate what they would look at to compare this firm to the competition. Don't let them go until they've exhausted most of the things on the list below. First have them list all things, then give them information on the firm as it relates to each category on their list.

Category	Information on Firm
Price	Commodity good - same price as everyone else
Product Quality	Not relevant to customers, commodity market
Manufacturing Capacity	Largest capacity, most idle capacity
Cost Structure	Lowest cost structure/best profits
Share of Market	#1 in market, have scale benefits
Customer Base	Sell to the major companies in market like AT&T and Sprint
Geographic Footprint/Distribution	Same as competitors
Cash/Assets (Balance Sheet)	Lot of cash on hand, no debt

Candidate should identify that:	Some of these are things you would always look at, but some of them are important to this case. For example, capacity matters because the firm with idle capacity will be able to grab the new business when the market picks up again. Also the firm with cash on hand and no debt will be able to get through tough times when the market is slow.

Optical Fibers (4 of 5)
BCG, Round 2

After answering the 3 initial questions:	Tell the candidate that he/she's done a good job getting through the 3 questions put forth, but you still have one more. Someone on the CEO's team wants to get a quick sense of the firm's variable and fixed costs. This is an ad hoc question they want a *quick* answer on.
Provide this data:	Two months of data: <u>Month 1</u> Produce 3MM km of fiber Costs are $50MM <u>Month 2</u> Produce 2MM km of fiber Costs are $40MM
Candidate should determine that:	1MM km fiber costs $10MM (difference between Month 1 & 2 costs) Thus fixed costs are $20MM per month

Optical Fibers (5 of 5)
BCG, Round 2

Lastly:	**Tell the candidate that the CEO has a couple minutes between meetings and is looking for a quick summary and recommendation. They should use this opportunity to update on questions 1, 2 and 3 (not the variable/fixed question).**

Candidate should respond with:	**1) Your revenues have declined because the industry as a whole has declined. The current fiber optic supply exceeds demand.** **2) The market demand will bounce back in 3 years** **3) You're in a great position to capture the new demand (excess capacity, largest player, stellar customer base) and weather the market slow down (have cash on hand, no debt.)** **Student can also offer next steps or risks, but this is not critical.**

Pay Phone Company Acquisition (1 of 2)

BCG, Round 2

Problem statement narrative

A private equity firm has approached BCG about their views of an acquisition of a pay phone business. How would you advise the PE firm?

Guidance for interviewer and information provided upon request

- Pay phones are located throughout the US in all metropolitan areas
- There are 1 million installed pay phones
- The average pay phone produces $75 in revenue. There is great variation in the revenue by phone.
- The use of payphones has been declining 3-5% per year over the last several years. It is 2008 (i.e. cell phone penetration in the US is nearly 100%).
- Gross margin is about 1/3 of revenue
- Costs are 60% fixed, 40% variable
- There are no potential synergies between this potential acquisition and other holdings of the PE firm

Suggested Solution and Structure

Private equity firms make their money by improving the performance of the business (i.e. profitability/cash flow) and then making an exit. Therefore, the way to think about this question is whether there is an opportunity to increase profitability and eventually exit. A structure need not be more than cost and revenue. A strong candidate can also recognize the possibility of synergies with other businesses and that reversing the decline in usage is very unlikely.

Revenue: How could you increase revenue?

1) Increase usage;
2) Raise rates;
3) Utilize the space- advertising is 80% of the pay phone revenue in Manhattan

Costs: Major costs are repairs, maintenance, collection of money, line costs, etc. There is not too much opportunity for improvement here.

Pay Phone Company Acquisition (2 of 2)

BCG, Round 2

Analytics & Summary

1. Based on your suggestion, we decide to shut down half of the existing lines. How should we determine what lines to close?
2. Let's assume that we close 50% of the lines, choosing at random (i.e. not selecting those that are losing money first). What is the effect on our profitability per month?
3. How would advise the CEO?

Solution guide

1. Close the lines that are losing money and don't seem to offer enhanced revenue potential (such as advertising) that would make them profitable.
2. We will no longer be profitable and will lose \$2.5 mn per month.

	Today		After Cuts	
Lines (mn)	1	given	0.5	
Revenue ($75 per line)	75	given	37.5	
Gross Margin	0.67	given		
Total Cost	50	2/3 of Rev		
Fixed Cost (.6 * 50)	30.0	.6 * Cost	30.0	stays constant
Variable Cost	20.0	.4 * Cost	10	reduced by half b/c of line reduction
Profit (mn)	25		(2.5)	

3. While the Pay Phone business offers significant opportunity to increase profitability by closing lackluster lines, I would be cautious about investing. Pay phones are a shrinking and increasingly obsolete business and therefore increasing or finding an equivalent exit multiple will likely be difficult.

Pirates (1 of 10)

McKinsey Format, Round 1

Problem statement narrative	Guidance for interviewer and information provided upon request
Our client is the captain of a well-established Pirate ship in the Caribbean Sea who has recently noticed declining booty reserves (aka cash). He's realizing that his ship's current operations are not meeting his requirements for a lavish lifestyle and is considering options for generating additional booty. He's asked you to accomplish two important tasks: •First, he wants to assess some of the reasons why his booty reserves are declining; and •Second, he needs to understand what he needs to do to replenish his booty reserve. So, the first question: why would booty reserves be declining?	

Pirates (2 of 10)
McKinsey Format, Round 1

Sample Response…	The ship isn't as profitable with its plundering; this could be due to declining revenues or increasing costs:
	
	• Revenue: Booty decreases could come from:
	    • Fewer amounts of ships to plunder
	        • Pirates have taken out all the potential ships
	        • Changes in the market have caused merchants to transition to other modes of transport
	        • Increased safeguards against piracy
	    • Less revenue per plunder
	        • Ships are carrying less plunder,
	        • Value of plunder (gold, etc.) is declining
	        • Other pirates have stolen from ships we're attacking (latecomer)
	        • Less intimidating "yarr"
	
	• Cost increases could be due to the following:
	    • Operating costs of ships could be increasing
	        • Several explanations – labor, food, maintenance, cannonballs, pirate hats, parrots, etc.
	    • Less efficient workers on boat
	    • The captain is living a more lavish lifestyle
	    • Mutiny
	    • Debt payments are due on equipment

Pirates (3 of 10)
McKinsey Format, Round 1

Additional questions for candidate

We've done an assessment of the ship's booty and have found the following breakdown of revenues. *(Show Exhibit 1).* What do you make of this?

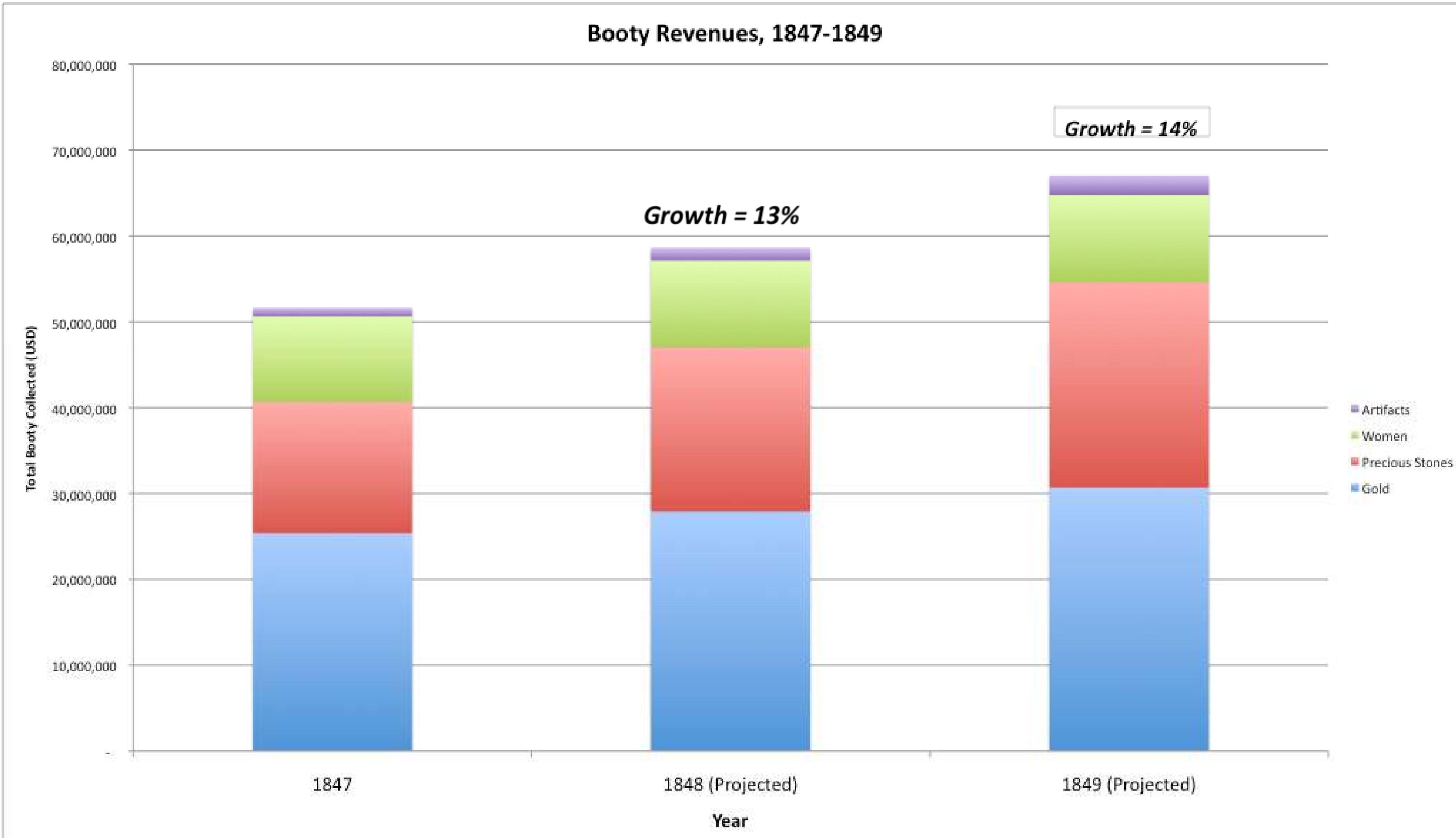
Solution guide

Revenues are increasing. However, it should also be noted that revenues are flat for the amount received in the women category.

We have noticed that most of the areas of growth are relatively steady, but that the market size women is increasing with population.

Exhibit 2 should be given, showing the revenues from each category.

Pirates (4 of 10, Exhibit 1)
McKinsey Format, Round 1



Pirates (5 of 10, Exhibit 2)
McKinsey Format, Round 1

REVENUES

	1847	1848	1849
Gold	25,370,000	27,907,000	30,697,700
Precious Stones	15,300,000	19,125,000	23,906,250
Women	10,000,000	10,100,000	10,201,000
Artifacts	1,000,000	1,500,000	2,250,000
total	51,670,000	58,632,000	67,054,950

Pirates (6 of 10)

McKinsey Format, Round 1

Additional questions for candidate

We have determined that, in order to increase revenues at the scale necessary, growth in the revenues gained from women need to increase at the pace of all other revenues. With this information in mind, calculate:

- ***The required incremental revenues in the sale of women to meet this goal; and***
- ***The new Growth rates for the ship in 1848 and 1849 given these new sales numbers for women.***

Solution guide (See Next Page)

Pirates (7 of 10)
McKinsey Format, Round 1

Solution guide for Previous Page:

Growth of all other sectors from 1847-1848 is as follows:
(58,632,000 - 10,100,000) - (51,670,000 - 10,000,000) / (51,670,000 - 10,000,000) = 14.1%

Therefore, in order to meet this increase, the revenues from women must increase to (10,000,000 * 1.141) = 11,410,000 or incrementally by 11,410,000-10,100,000 = 1,310,000

New growth rate will be ((58,632,000 + 1,310,000) – 51,670,000) / 51,670,000 = 16.0%.

For 1848 to 1849, candidate should recognize that the growth should be included from the previous calculation

Growth of other sectors from 1848 to 1849 is as follows:
[(67,054,950 - 10,201,000) - (58,632,000 + 1,310,000 - 11,410,000)] / (58,632,000 + 1,310,000 - 11,410,000) = 17.1%

In order to meet this increase, revenues from women must increase from 11,410,000 (calculated in previous year) to (11,410,000 * 1.171) = 13,361,110, or incrementally by 13,361,110 - 10,201,000 = 3,160,110

New growth rate will be [(67,054,950 + 3,160,110) – (58,632,000 +1 ,310,000)] / (58,632,000 + 1,310,000) = 17.1%

Pirates (8 of 10)

McKinsey Format, Round 1

Additional questions for candidate

The captain has broken out his costs by successful and unsuccessful plunders. He has determined that, on average, he spent 50,000 per successful plunder and 70,000 per unsuccessful plunder, respectively, in 1847. We also found that his average revenue per successful plunder was 500,000. His plunders are successful 40 percent of the time.

What is the expected value per plunder?

Solution guide

Expected value of a "successful" plunder is:

(500,000 – 50,000) * 40% - (70,000) * 60% = 138,000.

Pirates (9 of 10)

McKinsey Format, Round 1

Additional questions for candidate

We have determined that, recently, he may be faced with an increased cost of 100,000 per unsuccessful plunder.

Given this information, what percentage increase of successful plunders must he undertake in order to increase the expected value per plunder to 150,000?

Solution guide

The candidate will now need to solve for the % of successful plunders and will need to use the following equation:

150,000 = (500,000 - 50,000) * (100% - x%) – (100,000) * (x%)

Solving for x suggests that 46% of plunders will need to be successful in order to increase profitability.

Pirates (10 of 10)

McKinsey Format, Round 1

Additional questions for candidate	Solution guide
What would you suggest given the analysis and your findings?	The captain may need to increase his ship's abilities which would involve some costs, but you may also suggest we examine more lucrative opportunities (such as shipping goods and services, targeted plundering, expanding to new markets, etc.)

Power Plants (1 of 2)

McKinsey, Round 2

Problem statement narrative

The client is the CEO of a power company that does the following things related to power: generation, distribution, links regions with grids, buys energy wholesale and re-sells it, retails energy by selling it directly to consumers. Lately, the client has experienced a profitability decline (about $100MM less than target) in its core business of generating power and has hired McKinsey to diagnose the problem.

Guidance for interviewer and information provided upon request

Company generates several types of energy: coal, natural gas, wind, nuclear and solar.

This case focuses on coal power generation

Revenue Data:

- 10 power plants, each with capacity of 4.5MM mega watt hours per year and are running at 80% of capacity
- They sell each mega watt for $40

Costs Data:

- Coal related costs: $10/mega watt hour
- Fixed costs allocated across current capacity: $5/mega watt hour

Power Plants (2 of 2)

McKinsey, Round 2

Candidate should identify capacity utilization as a possible issue for profitability…	• Ask: If the client increased capacity utilization to 90% what impact would it have on profit? • At 80%, Revenue: 10 plants X 4.5 MM plant capacity X 80% utilization X \$40/MWh = \$1440M Variable cost: 10 plants X 4.5 MM plant capacity X 80% utilization X \$10/MWh = \$360M Fixed cost: Annual MWh produced X \$5/MWh = \$180M Profit = 1440 – 360 – 180 = \$900M • Similarly, at 90% capacity utilization, profits would increase by \$135M
Candidate should identify possible reasons for low utilization…	• Ask: Client would like to pursue the strategy of increasing utilization and feels that it will get them back to their previous profitable state. Brainstorm reasons why the plant has only operated at 80% capacity to date? • A structured answer could include: Demand, Supply issues (equipment unavailable, technical staff unavailable, location/environment limits, lack of inputs), Company issues (capacity/bottleneck in operations or untrained staff)
Summary	• Under -utilized capacity is one of the causes for reduced profitability. • Recommendation: Increase capacity utilization. • Next steps: Need to understand WHY plant operating under capacity. It could be several things (list ideas brainstormed), but need to understand further.

Public School District (1 of 7)

McKinsey, Round 1

Problem statement narrative

The client has been struggling with declining funding from the Ohio state government for the last 4 years. Federal funds are practically non existent. Each year the school plans a budget, but when it receives its state funding amount – the amount always falls short of the budget they've developed.

They want to find a way to systemically cut costs without hindering the learning of their students.

Guidance for interviewer and information provided upon request

~100 schools

A semi urban district close to a major Ohio district

No private donors or funders

Public School District (2 of 7)
McKinsey, Round 1

Allow candidate to develop their own framework, then:	**Ask the candidate where they'd like to start once they've developed their framework. A strong framework should touch on the big picture/current state (funding rec'd, target for cost cutting, etc), but focus on the client's cost structure grouping types of costs together, and also give high level consideration to the feasibility of certain cost reductions (e.g. union negotiations, publicity impacts, etc)**

Upon request reveal:	**<u>Budget, funding and cost target:</u> The client has been receiving $1.2 billion in annual funding from the state government the past three years, while they have been building a budget for $1.35-$1.4 billion. Therefore they would like to cut between $150 and $200M from their annual budget.** **<u>Changes:</u> No major changes to cost structure over the last four years** **<u>Fixed costs:</u> The student should have named specific fixed costs. Provide information where possible.** **<u>Labor:</u> Management staff (including benefits): $50M. Teachers: $80,000 each with a total of 4,000 across the district. Principals and school leaders at $100,000 with a total of 2,000 across the district** **<u>Equipment:</u> $500,000 per school (100 schools)** **<u>Building upkeep /support staff:</u> $500,000 per school** **<u>Variable costs:</u> Per student spending of $8,000 each; about 100,000 students**

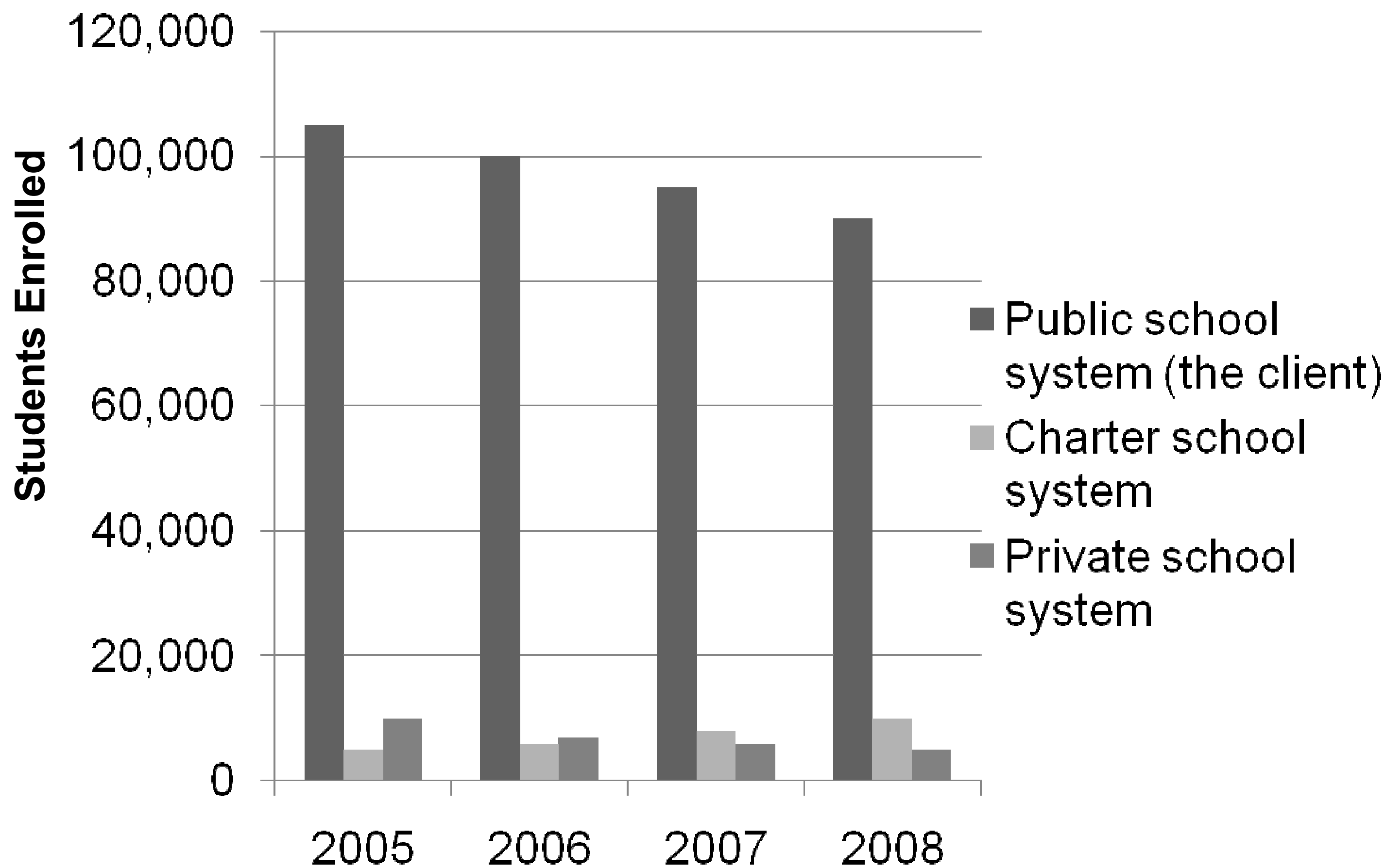
Public School District (3 of 7)

McKinsey, Round 1

After discussing costs inform the candidate that:	***"we have some interesting data on the students coming to our schools"*** **and show them exhibit 1.** **Ask them what they see from this data.**
Candidate should note that:	**The population of school age children attending the public school system is going down, while charter school system is gaining population.**
Next, inform the candidate that:	***"I've got the data from this bar chart in a table too"*** **and give Exhibit 2 to them.** **Ask them what they see again.**
Candidate should note that:	**The candidate should see that the total number of students in the area is declining. The population is shrinking and people are moving out of the Ohio town.** **If the candidate doesn't get it on their own, ask them what they think when putting the two pieces of information together? They should see that the whole "market" for students is shrinking as is their "share". If the student doesn't return to costs, ask them what they think the implication for costs should be? The candidate should see that as students decrease over the last four years, costs should also be decreasing, not just variable, but perhaps there are less teachers needed, etc.** **The student should ask "Have there costs declined proportionally? The answer is no.**

Public School District (4 of 7)
McKinsey, Round 1

Exhibit 1:



Public School District (5 of 7)

McKinsey, Round 1

Exhibit 2:

	Public school system (the client)	Charter school system	Private school system
2005	105,000	5,000	10,000
2006	100,000	6,000	7,000
2007	95,000	8,000	6,000
2008	90,000	10,000	5,000

Public School District (6 of 7)

McKinsey, Round 1

Ask the candidate:	**Where do the greatest cost cutting opportunities lie?**
Candidate should note that:	**They should see opportunity in teachers, school staff and then in the actual # of schools (equipment and upkeep).** **Teachers: The district strives for a ratio of 1 teacher to 30 students** **Schools: The district strives for 1,500 students per school** **Principal and school leaders: The district bases this off of the # of teachers and looks for a proportion of 2 teachers to 1 school leader** **Opportunity to cost cut** **90,000 students/30 = 3,000 teachers (cut 1,000 teachers) = save $80M** **90,000 students/1,500 = 60 schools (close 40 schools) = save $40M in equipment/building upkeep/support** **3,000 teachers/2 = 1,500 school leaders (cut 500) = save $50M** **TOTAL SAVINGS = $170M (TARGET MET)** **The student may consider some shut down or other transition costs or feasibility to the new plan and want to take them into account. Listen and comment on them as good considerations and a holistic view, but not necessary at this point**

Public School District (7 of 7)

McKinsey, Round 1

Candidate should wrap-up with:	**Solution** Opportunity to systematically cut costs lies in aligning current downward student population trend with cost structure. - Specifically save $80M by adjusting teacher ratio - Specifically save $40M through shutting down 40 schools - Specifically save $50M through adjusting principal and school leader ratio **Next Steps (can include)** - Continue to watch and forecast student population declines - Understand why public school losing share and learn from other systems to improve quality of education - Build transition plan for shut down of schools and lay offs (consider hiring PR experts to help manage transition) **Risks (can include)** -PR backlash for closing schools and laying off teachers -Union push back

Ricks American Café (1 of 7)

RCC Original

Problem statement narrative

It has come to your attention that the historic Rick's American Café is up for sale. Should you purchase it?

Guidance for interviewer and information provided upon request

Rationale for Purchasing:

1. Profit potential
2. You may assume you are like every other sketchy collegiate club owner – you enjoy lurking around students

Other notable facts provided upon request:

- There is another Rick's in East Lansing, but it is not a franchise; you are buying the rights to the brand name in Ann Arbor.
- Assume the bar serves only college students – both undergraduate and graduate (no local population)
- Rick's is a 21 year old and over establishment

Ricks American Café (2 of 7)

RCC Original

Initial Market Sizing Question

Before we jump into profitability, let's do a quick market sizing estimation. What do you think is the total weekly student demand in Ann Arbor for bar visits?

Information provided upon request:

- **There are 40,000 students at the U of M –**
  - **26,000 are graduate students**
  - **15,000 are undergraduate students**
- **Again, only students demand, do not account for the local population**

Potential Answer:

I will assume 30% of the undergrads are over 21, and 100% of the graduate students are. That's 7,800 undergrads, of whom I would think 60% go out on a regular basis, or 4,680 undergrads. I think the graduate students go out less, so I'd say only 40% or 6,000, of them go out regularly. On average, each bar-going student will go out twice a week. That puts the number of weekly bar visits in Ann Arbor at about 21,360.

Ricks American Café (3 of 7)
RCC Original

Profitability Analysis - Revenue

Now let's return to the profitability analysis. What is Rick's annual revenue?

Information provided upon request:

- Avg. male drink purchase/night: 6 drinks
- Avg. female drink purchase/night: 2 drinks
- Avg. drink price: $5
- Cover charge (only on Thurs – Sat): $5
- Weeks open per year: 38 (due to the summer months, etc.)
- Percentage male clientele: 60%
- Percentage female clientele: 40%
- Nightly demand Mon – Wed: 150
- Nightly demand Thurs – Sat: 1,000

So what is the total revenue for Mon-Wed?

ANS: (150)(.6)($5)(6) + (150)(.4)($5)(2) = $3,300 * 3 nights = $9,900

And for Thurs – Sat?

ANS: (1000)(.6)($5)($5)(6) + (1000)(.4) ($5)($5)(2) = $110,000 * 3 nights = $330,000

Which makes the annual revenue?

ANS: ($330,000 + $9,900)(38 weeks) = $12,916,200 (student may round total weekly revenue to $340,000)

Ricks American Café (4 of 7)
RCC Original

Profitability Analysis - Costs

What does Rick's annual cost structure look like?

(Student should brainstorm various costs. Monthly data should be provided, and the student should annualize everything.)

Information provided upon request:

Costs	***Monthly***	***Annual***
Insurance	$75,000	$900,000
Rent (Monthly)	$400,000	$4,800,000
Maintenance	$150,000	$1,800,000
Alcohol	$225,000	$2,700,000
Labor	$150,000	$1,800,000
Total Costs =	***$1,000,000***	***$12,000,000***

Purchase Price (lump sum) = $7,000,000

1. If student does not ask if Rick's is a franchise during initial discussion, provide this figure after some prodding. Note that this is a large number as the infamous Rick's brand is nearly priceless.

Ricks American Café (5 of 7)

RCC Original

Profitability Analysis - Perpetuity

Ok, good. So now we have both annual revenue and annual costs. Let's assume that you absolutely love Ann Arbor and that you are investing for the long run. What do you think of this investment?

(Note: Student should realize that this is an NPV question given the lump sum purchase price and annual profitability numbers. If they only provide annual profitability, ask for the NPV.)

Information provided upon request:
Cost of capital: 10%

Calculations:

Total Annual Revenue =	$12,916,200
Total Annual Costs =	$12,000,000
Total Annual Profit =	$916,200

Perpetuity = $916,200/.1 =	$9,162,000
Purchase Price =	$7,000,000
NPV =	$2,162,000 => Positive NPV. Buy it!

Ricks American Café (6 of 7)

RCC Original

Qualitative Analysis (Time Permitting)

How would you bring in additional revenue or increase profitability?

(Creativity is encouraged. Use the McKinsey "what else" to provoke additional responses.)

Examples:

- **Smooth Demand - From Monday through Wednesday we have low demand. We could better tap into the huge undergrad population and have an under-21 night with bands and other events, and charge a minimal cover charge. Or, many of the undergrad student clubs have events that require a stage, so we could market ourselves to them and require that they purchase a minimum amount of sodas, on top of a small rental fee for an earlier time slot, say 4-6pm.**
- **Consider renegotiating fixed-cost contracts**
- **Experiment with raising cover charge and drink prices; do a sensitivity analysis to find true WTP**
- **Sell t-shirts and other Rick's American Café branded products**
- **Host more live bands to compete with some of the venues on the west side of town that have bands play on a regular basis, but that are farther away from the students.**
- **A new trend in group fitness classes is pole dancing, so installing a few poles at Rick's would of course go over well with the current nightclub-going demographic, and could bring in additional revenue on other days. I would market this as "learn to pole dance the Rick's way" and have fitness instructors teach Sunday – Wednesday.**

For each of these possibilities, I would determine the incremental profits (for example, having fitness classes may cost more insurance) and make sure the proposed course of action wasn't stretching our managerial skills and capacity.

Ricks American Café (7 of 7)
RCC Original

Recommendation	• Purchase Rick's - it is a positive NPV project that will yield ~$2MM over the life of the asset.
A solid interview will address other potential risks…	• Weak demand Mon – Thurs • Student taste in night-life is transient • Very large initial investment • May be difficult to exit the investment
And suggest the next steps prior to investing…	Research bids for comparable properties to avoid the "winners curse" during auction Negotiate fixed cost contracts Perform primary research on ways to smooth demand

Roadrunner Railways (1 of 7)

McKinsey, Round 1

Company Background	Our client is Roadrunner Railways. They are a large railway company that ships freight throughout the United States. Roadrunner is facing declining profitability and the CEO has approached us for guidance.

Question #1: To begin, tell me what you expect this industry to look like?

Small profit margins
• Little product differentiation
• Price sensitive customers (businesses)

Price competition: benefits to scale:
• Economies of scale throughout value chain (manufacturing, marketing, sales, etc.)

Oligopoly with a few large firms

Should see stable growth with economy

Substitutes such as trucks, boats, planes

Question #2: What areas would you explore to identify reasons for the declining profits? (Candidate should create well-structured approach to look at Revenue & Cost. Force Candidate to dig 2-3 levels)

<u>Revenue</u>
• Changes in customer demand / operation bases
• Customers switching to other freight transport methods (trucks, shipping, etc.)
• Competition offering better prices or contracts
• New entrants who are leaner / more efficient and not burdened with legacy costs

<u>Cost</u>
• Raw materials (Fuel)
• Maintenance (Spare Parts, Frequency of Repairs)
• Labor (Train Crew, Maintenance Crew, Office Workers)
• Sales and Marketing (Freight Contracts requires Relationship Management)
• Management overhead

Roadrunner Railways (2 of 7)

McKinsey, Round 1

Show Candidate Exhibit A	Based on this Exhibit, what areas would you explore?

Answer:

Candidate should be able to do basic mental math normalize Roadrunner costs to industry average percentages.

Candidate should then identify Sales & Marketing as an area for further exploration.

	Roadrunner (% Total Cost)	Speedy Gonzales (% Total Cost)	Coyote (% Total Cost)	Flash (% Total Cost)
Finance	7%	8%	10%	10%
Operations	48%	50%	52%	55%
Sales & Marketing	23%	10%	12%	15%
HR	6%	7%	8%	6%
IT	13%	20%	14%	12%
Other	4%	5%	4%	2%

Ask for Primary Sales/Marketing Cost Buckets

-Labor
-Advertising
-Travel Expenses

How Could Roadrunner Reduce Labor Costs?

-Outsource vs. Insource
-Increase Accounts/Employee (then Reduce # Employees)
-Relocate Sales/Marketing force to area where labor is less expensive
-Use less costly workforce (e.g. College Grads)

Roadrunner Railways (3 of 7)

McKinsey, Round 1

Currently the Sales & Marketing Department is outsourced to a firm that has centers across the country; and Roadrunner pays for the allocated employees (called "Marketing Consultants"). Roadrunner did a comparative analysis within the industry, and obtained the following labor stats.

 # Employees:
-Outsource = 1,860
-In-House (Central Location) = 620
Cost Per Employee
-Outsource = $80K
-In-House = $120K

Why might In-House Marketing/Sales require fewer employees?	-Less employee turnover -Increases specialization on Roadrunner-specific products/services -Proximity to other functions -Increased opportunities for performance management
What Can You Infer from this Data?	Candidate should either compare % Change or Total Cost. Either way, candidate should identify In-House as the less expensive option. % Change : -Employees (-67%) -Cost per Employee (50%) Total Cost : -Outsource (1860 x $80 = $148,800K = $148.8M) -In-House (620 x $120 = $74,400K = $74.4M)
What would you recommend?	Sales and Marketing department moved In-House due to cost savings.

Roadrunner Railways (4 of 7)

McKinsey, Round 1

You've now dramatically rearranged the sales force, what are potential repercussions? i.e. What additional factors need to be taken into consideration?
Note: Judge the candidate's ability to brainstorm ideas. Following is a list of possible factors that should be considered. Push them to mention the last point as it is important for the next steps.

-The cost of making such a transition (hiring new employees, obtaining office space, training, telecommunications, etc.)
-Revenue and client loss during the transition period
-Impact on relationships that the Marketing Consultants had built
-Customers may be dissatisfied that their sales person no longer visits them and only calls on the phone.
-If sales and marketing reps cannot visit the site, they may lose key insights into the customer's business that cannot be gleaned over the phone.
-Fewer employees in-house might not be able to have as many touch points with the various clients, so if that is important to the customers it could lead to loss of customers and revenue (critical)

Show Candidate Exhibit B

You mentioned revenue loss as a concern in the previous question, let's explore that further. Roadrunner did some predictive modeling of account retention and growth under two scenarios: (1) Maintaining outsourced sales and marketing and (2) Moving sales and marketing in-house.

QUESTION: Calculate change in revenue if Sales/Marketing is moved In-House.

Total Revenue	Revenue expected to be retained in-house	Projected Revenue (Outsource)	Projected Revenue (In-house)	Change in Revenue (immediate)	Change in projected revenue
1,200	900 = 1,200 x 75%	1,320 = 1,200 x 110%	972 = 900 x 108%	(300)	(348)
1,000	950 = 1,000 x 95%	1,080 = 1,000 x 108%	1,140 = 950 x 120%	(50)	60
550	550 = 550 x 100%	583 = 550 x 106%	688 = 550 x 125%	-	105

Roadrunner Railways (5 of 7)

McKinsey, Round 1

What are your general observations of the data?	-Revenues for all segments will decrease in the immediate future from moving operations in-house -Growth for Medium and Small segments is higher with in-house operations, while that of the Large segment is lower than with outsourced functions
What might be some reasons that the growth of the various segments is affected differently by having operations outsourced? *What are the implications?*	A strong candidate will realize that the "Marketing Consultants" focused most of their efforts on the large segment, possibly due to the larger commissions these contracts entailed. Shifting operations in-house will increase the contact with small and medium segments, while decreasing that with the large segment. Answer: Based on these observations, there should be a reorganization of the workforce in the Sales & Marketing Department. Move the Sales & Marketing force that is responsible for Medium and Small customers in-house, but continue to outsource the function for Large companies.
Final Recommendation	Roadrunner should reorganize the workforce in the Sales and Marketing department as a first step towards increasing profitability. Specifically move the function in-house for the small and medium segments, and leave the large segment outsourced as it is now. -Currently, Roadrunner's Sales & Marketing expenses are much higher than industry benchmarks. -Moving operations in-house (Small & Medium) would reduce costs and increase revenue. -Functionality for the Large segment should remain outsourced. Further analysis should be performed to more accurately gauge the cost of the transition and its impact on operations, specifically focusing on potential integration issues, contract breakage fees with outsourcing firm, ability to smoothly transition client relationships, and potential of the local labor pool.

Roadrunner Railways (6 of 7)

McKinsey, Round 1

<u>Exhibit A</u>

	Roadrunner (in $M)	Speedy Gonzales (% Total Cost)	Coyote (% Total Cost)	Flash (% Total Cost)
Finance	140	8%	10%	10%
Operations	950	50%	52%	55%
Sales & Mktg	450	10%	12%	15%
HR	120	7%	8%	6%
IT	260	20%	14%	12%
Other	80	5%	4%	2%
	2,000	100%	100%	100%

Roadrunner Railways (7 of 7)

McKinsey, Round 1

Exhibit B

	Total Revenue (in $M)	# Accounts
Large	1,200	40
Medium	1,000	50
Small	550	75

Scenario #1 - Outsource

	% Expected account retention (over 1yr)	% Expected Account Growth (over 1yr)
Large	100%	10%
Medium	100%	8%
Small	100%	6%

Scenario #2 – In-House

	% Expected account retention (over 1 yr)	% Expected Account Growth (over 1 yr)
Large	75%	8%
Medium	95%	20%
Small	100%	25%

Telecom (1 of 3)
BCG, Round 2

Problem statement narrative

The client is a telecom manufacturer. Specifically they make the phones and supporting wiring/systems that support offices telephone systems.

The client's net margin is at 5-6% while that of competition is 12-13%, the CEO has hired BCG to see if this can be fixed.

They segment their customers into two groups:

PBX which is customers who have 30+ employees, and KEY which is customers who have 3-30 employees.

Guidance for interviewer and information provided upon request[(1)]

-There are 3-4 major players in PBX, the client is #1.

-Key is more commodity driven. There are 14-15 players, the client is somewhere in the top.

-PBX more profitable ~15% margin

Review the students framework and guide them to focus on costs. This is a margin problem and the client would like to look internally at its cost structure. They should also focus on Keys segment since we know PBX is at 15% margin.

If they breakdown into variable and fixed costs, ask them to brainstorm around different types of costs.

Within fixed costs ask them what they could do to trim back?
Within variable costs, guide them to focus on the variable sales costs (costs required to sell units).

Guide them to look at sales channels and then give them <u>Exhibit A</u>.

Telecom (2 of 3)

BCG, Round 2

Further Questions	Once student looks @ slide they should see that the client should exit direct sales. Ask the student how the client should exit direct sales? How would they think about this? The student should ask: -Is it realistic to migrate all sales/revenue from direct sales to the indirect sales channel? -Are there any benefits to doing direct sales? - Indirect sales is heavily saturated by competition. Are there any other channels that could be low cost the client could pursue? The answer is internet. - The client has feels that doing direct sales with Keys customers is good for relationship building and leads to higher retention. When the Keys customers convert/grow into PBX customers this is good, since PBX is more profitable
Summary	Answer: Think problem can be fixed if we trim back on direct sales to key customers. We should segment key customers into high and low potential and only do direct sales for high potential ones. For low potential we should move them to internet sales. Next Steps: Develop segmenting process, explore and develop internet sales channel.

Telecom (3 of 3)
BCG, Round 2

Exhibit A

Channel	% of Costs	% of Revenue	Comments
Direct sales	65%		Sell directly to customer, client installs systems etc
Indirect sales		80%	Sell to a company like Office Max who then sells to end consumer

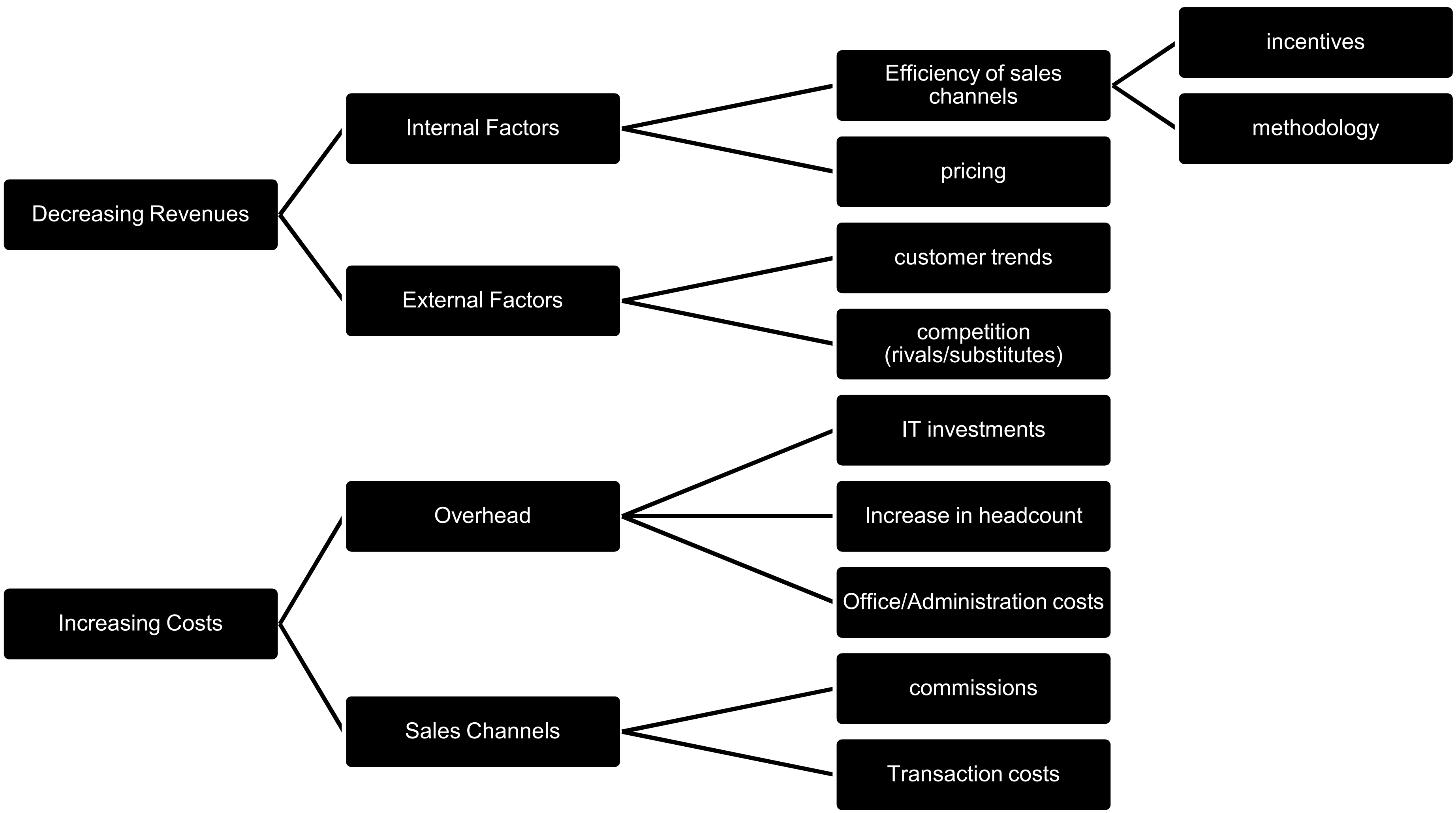
TNT Funds (1 of 6)
McKinsey, Round 2

Problem statement narrative	Guidance for interviewer and information provided upon request
Our client is TNT Funds, a small asset management firm. TNT Funds manages investments in mutual funds from wealthy individuals. Their account portfolio varies in the average account balance and in the range of financial assets invested. TNT Funds' revenues derive from a fixed annual management fee for their accounts. TNT Funds is owned by a parent company, an insurance company. The firm has 2 main sales channels – an online platform, by which clients can buy and sell mutual funds, and direct sales through agents of the parent company. TNT Funds reported losses during the last 2 yrs and its future projections are not bright either. They have hired McKinsey to determine why they are not profitable and what they can do to turn around their current position?	Candidate should layout a structure

TNT Funds (2 of 6)

McKinsey, Round 2

Suggested Case Structure



TNT Funds (3 of 6)

McKinsey, Round 2

After the big picture structure, ask the candidate:	**Ok. Now, TNT Funds would like to generate more revenue to balance their fixed overhead costs. By how much should they aim to increase the average account balance of their clients in order to achieve a 10% profit margin?** **Consider the following data:** **Current average account balance is $5K** **Total fixed costs are $35M** **Total funds managed are $5B** **Variable cost is $20 per account managed** **Management fee (revenue) is 1%**
Candidate should determine that:	**First, calculate the total cost per account:** **Total # of accounts is 5B/5K = 1M** **Allocated fixed cost is 35M/1M = $35 per account** **Total cost per account = variable + fixed = 20 + 35 = $55** **For a 10% margin, revenue per account will need to be 55/0.9 ~ $61** **For a $61 revenue from a 1% management fee, average account balance should be 100 * 61 = $6100** **That would require average account balance to grow by $1100 which is growth of 22%**

TNT Funds (4 of 6)

McKinsey, Round 2

Next ask the candidate:	**In the mutual fund industry, most firms operate only one sales channel – either indirect (call center, online) or direct (agents). Why would you think that is the case?**
Example answer:	**I believe companies tend to focus on one channel for 2 main reasons:** **Customer focus: the 2 channels address different segments. High amount investors require personalized service, whereas small investors require quick access to their invested funds and should be ok with standard service.** **Company: the 2 channels require a different set of capabilities from the company. The indirect channel should be followed by an efficient operation or a good IT infrastructure (high fixed costs, low marginal), whereas the direct channel would require deep understanding of mutual funds (low fixed costs, high management costs).**

TNT Funds (5 of 6)

McKinsey, Round 2

Next ask the candidate:

Now, let's assume TNT was to focus on the direct sales channel to grow their customer base. What % of the insurance clients they will need to capture in 5 yrs, if they wanted to manage 1% of the mutual funds industry volume?

When asked, reveal:
-Total number of insurance customers is 4M and will remain as is
-Mutual funds industry volume is $1 Trillion and will grow at 10% CAGR
-Average balance of insurance customers account in 5 yrs will be $10K

Solution:

First, calculate the volume of the mutual funds industry in 5 yrs (with 10% CAGR):

Current	Year 1	Year 2	Year 3	Year 4	Year 5
1 TR	1.1 TR	1.21 TR	1.33 TR	1.46 TR	1.61 TR

1% of this volume will be 1%* 1.61TR ~ $16 Billion (that's the target volume)

# of customers needed to reach target volume is: 16 B/ 10K = 1.6 M

1.6 M is 40% of the total number of insurance customers (4M)

TNT Funds (6 of 6)

McKinsey, Round 2

Lastly:	Based on our discussion, what would recommend the CEO of TNT Funds?

Example Answer:	TNT Funds should recover from its poor profitability by focusing on the direct sales channel and divesting the indirect efforts. The reasons are: 1- Through the direct channel they could leverage the parent company customer base and focus on high $ investors 2- By focusing on one channel they could eliminate some of the fixed costs associated with the indirect operations (a small company like them will have difficulties amortizing those costs by achieving scale) One the crucial next steps should be training the sales agents of the parent company to make sure that they can serve the high-end customers well. Furthermore, TNT Funds needs to verify that the sales agents are incentivized properly

MasterTheCase.com

Top Consulting Interview Prep