Columbia Business School

CASE BOOK 2008

MANAGEMENT CONSULTING ASSOCIATION

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Introduction and Acknowledgements

Included in this casebook are 19 cases contributed by students based on their interviews in 2007 and 2008. These cases demonstrate the best written cases and were selected to represent the diversity of firms that hire on the Columbia campus and the diversity of the cases those firms use in their interviews.

This casebook does not include a generic section on "frameworks" that you could use for solving these cases or case strategies. Please refer to *Case in Point* or other casebooks available from MCA site to fulfill this need.

Please remember also that a case interview is an *interview*. Remember this as you give a case and as you practice a case interview. Evaluations should not only be based on the content of this book but also on other interview criteria as well: body language, eye contact, presentation, and so forth.

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Good luck!

Nayoung Yu, '09
MCA, VP of Publications

Case 1: Suncare Products

BACKGROUND

Firm: Booz Allen
Round: 2008 Summer, First Round
Content: Qualitative

CASE QUESTION

Booz Allen was recently hired to work with the newly appointed VP of International Business at a small-to-mid-sized CPG company. The company, SunCo, has 95% of its sales in the US. It has 3 product lines, and the majority of its sales and the focus of this case are on its sun care products, like sun tan lotion).

SunCo was recently acquired by a large CPG conglomerate that has a broad international presence mainly selling batteries and shaving related products. The new parent, ParentCo, wants to double international sales in the sun care product division by 2010.

Currently SunCo's international sales are seemingly random, with no real vision or strategy behind it. Distribution is in diverse markets.

We were hired to help our client in determining how best to approach this growth prospect.

INTERVIEWER BRIEFING

Recommended approach: The dialogue outlined below mimics how the interview went, and generally reflects the approach Booz took with the client. There are 4 key sections to the case:

1) Up front structure in approaching the problem (3 C's)
2) New data on the market is given – structure a recommended strategy for pursuing specific market opportunities.
3) Discuss items pertaining to a go-to-market strategy (4 P's)
4) Discuss benefits and challenges of using parent company resources to distribute.

Key facts:
Below are fact's given in section 2 on the international markets for sun products.

- Market sizes / growth rates:
    - US Market: $5B, 3-4% growth
    - EU (Europe): $3B, 6% growth
    - APAC (Asia/Pacific): $1B, 12% growth

- LATAM (Latin America and South America): $1B, 12% growth

- Additional company info:
  - SunCo has 2 sun care brands (60 SKU's each) that are number 2 & 3 in US market, combining to be larger than #1
  - SunCo has 1% market share in EU
  - LATAM is SunCo's largest international market, and SunCo has 30% share in Mexico, Chile, and Argentina
  - APAC: SunCo is #1 in Australia, sporadic distribution otherwise

- Customer preferences / competition: top 5 players own 80% share in all markets
  - US: Customers generally buy distinct sun care brands, for example Coppertone is #1 brand
  - EU: Loreal, Nivea are market leaders; customers prefer cosmetic brands for sun care
  - APAC: SunCo currently sells in South Korea, China, India (minimally), customers are fair-skinned and prefer it for beauty benefit
  - LATAM: Similar to US customers using it more functionally

<u>EXAMPLE DIALOGUE</u>

Interviewer: *If you were tasked with this project, how would you begin to approach solving the problem of doubling international sales for SunCo?*

(Note: interviewee should answer with a structured response, like the 3 C's example shown below)

Interviewee: Well, I would want to structure the approach to look at the different customers and markets for each international opportunities, the competitors in each market, and the relative strengths and weaknesses of SunCo and ParentCo in each market. Drilling down further, I would want to look at:

<u>Markets and Customers:</u>

- Overall market dynamics: size, growth, customer segments, geographies (maybe those Parent operates in)
- Customer specifics: demographics, needs & preferences, current product usage / brands

<u>Competitors:</u>

- Other companies in each market, respective market shares & growth, product differentiation & branding
- Overlay competitor market share and products with each region

<u>Company:</u>

- Think both along the lines of SunCo & what ParentCo can add given its broader scope
- What markets both operate in, existing distribution capabilities, capability & capital available for SunCo expansion

Interviewer: *That's good. Let me tell you that ParentCo wants any growth to be self funding so no large capital expenditures. Next let's look at three different potential regions.*

EU (Europe) is a $3B overall market with, 6% growth. APAC (Asia/Pacific): is a $1B market with 12% growth, and LATAM (Latin America and South America) is a $1B market with 12% growth.

SunCo has 2 sun care brands (60 SKU's each) that are number 2 & 3 in US market, combining to be larger than #1. SunCo has 1% market share in EU. LATAM is SunCo's largest international market, and SunCo has 30% share in Mexico, Chile, and Argentina. In Asia/Pacific SunCo is #1 in Australia, but sporadic distribution otherwise.

Interviewee: Well based on this information, it seems that from a growth perspective APAC & LATAM are the most attractive, but EU is the larger market overall. I'd also like to understand whether our 30% shares in Mexico, Chile & Argentina make up a large enough portion of the market such that 12% annual growth with steady market share could make up the 50M in sales we want.

Interviewer: *That's a good observation. We have done that analysis and know that it will get us part of the way but not fully. What else would you need to know?*

Interviewee: Can you tell me a bit more about the competition and the customer preferences in each of these regions so that I can recommend a more targeted geographical preference?

Interviewer: *Sure. First, note that in all regions the top 5 players have 80% market share so it's very concentrated competition.*

In the US, customers generally buy distinct sun care brands, for example Coppertone is #1 brand.

In Europe, Loreal and Nivea are market leaders. European customers prefer cosmetic brands for sun care.

In Asia Pacific, SunCo currently sells minimally in South Korea, China, India, in places where customers are fair-skinned and prefer sun care products for beauty benefits.

Latin America/South American customers are similar to US customers using sun care more functionally.

Which region do you think we should target?

(Interviewee should know make a well-structured recommendation that discusses pros/cons of each region and recommend one of the regions.)

Interviewee: At this point it looks like Latin America and South America are the most attractive markets to expand in given the customer preferences being similar to the US and the market growth. This of course is assuming Mexico, Chile, and Argentina don't make up most of the market.

Interviewer: *(interjects) Do you think there are other sizeable markets in that region that we haven't mentioned?*

Interviewee: I assume Brazil is a sizeable market and perhaps Puerto Rico?

Interviewer: *Very good. What about the other markets?*

Interviewee: Well, APAC might be good to target given the strong growth prospects, however given that we have little share in most markets it may be tough to gain entry. W would also have to re-brand our products to match consumer preferences. Additionally, Europe is not a good target either given our low share and the mis-match with our brand/product and the customer preferences in the region.

Interviewer: *Very good. We've now decided that Latin America would be the best region to target and have identified some priority countries for launch including Brazil, Puerto Rico and Colombia. Thinking about Brazil specifically, what would you want to think about in your go-to-market strategy?*

Interviewee: First I would want to think about <u>pricing</u> and how to price. We could do it similar to competitors, via cost-plus, or use a willingness to pay method. I assume here we'd be more likely to price relative to competition.

Next I would want to think about product <u>placement</u>. What distribution centers (beach shops, grocery stores, etc.) are currently used? Additionally, what can of shelf placement and in-store displays are available?

Third thinking about the <u>product</u> itself, do we want to launch with one or both brands, how many of the 120 SKU's do we target, and will we need to change labels to local languages (Portuguese)?

Finally, <u>promotion</u>. How do we want to send out the marketing message about our product? I assume since we don't want to spend much, localized target marketing would be best, for example signs on a beach or point-of-sale marketing.

Interviewer: *Those are all very relevant points. There is however 1 point you may have missed relative to launching in a new country.*

Interviewee: Perhaps there are country regulations we need to abide by, especially since we are talking about a chemically based product, maybe we need government approval? Also what about tax structure and tariffs, we need to make sure those don't eat our margins.

Interviewer: *Good. Last question. Thinking about the economics of distribution let me tell you a bit about how SunCo has been working in some countries, e.g. Mexico.*

After manufacture, SunCo sells a case of product to distributors for $100. The distributor then owns the rest of the value chain and takes on warehousing, selling with a proprietary sales force, and manages billing and payments with retailers. They then mark-up the case to retailers by 45-50% to, say $150. What would be the benefit of taking this distribution in-house?

Interviewee: Well first of all, I assume that ParentCo has much of these capabilities already in house so we can leverage those.

Interviewer: *That's correct. Actually ParentCo's distribution is well established in these international markets and they distribute to the most local levels such as corner grocery stores.*

Interviewee: Perfect. So I would assume that we can reduce overall warehousing costs by sharing space with the existing products from ParentCo. Also, what about the sales force in ParentCo? Could they take on the sun products or would we need to hire additional sales agents?

Interviewer: *That's a good observation, actually when ParentCo acquired the shaving product company, the sales force learned to sell this very distinct product from batteries, thus we can assume they can take on sun products to the same customer set with ease.*

Interviewee: Perfect, so then we can see synergies with all components we were outsourcing previously, including billings and payments. We may even be able to cut the margin to retailers and mark-up only 30-40% which in turn can spur more demand and keep our operating margins constant.

Interviewer: *That's a good observation. In fact retailers are smart and know we would be reducing costs through this and demand lowered prices, though they may reap the benefit and not pass it on to the customer.*

Excellent observations. Well done.

Case 2: New York to Boston Buses

BACKGROUND

Firm: L.E.K.
Round: 2008 Summer, First Round
Content: Quantitative

CASE QUESTION

Our client is a transportation company, operating buses daily from New York City to Boston. They operate with buses leaving every hour from 7AM – 10PM, inclusive (meaning buses leave at 7AM and 10PM and all other hours in between), from both locations.

There are 3 questions that you should answer for this case:

1) What is the minimum # of buses the company needs to operate?
2) What are some ways the company can increase profits?
3) How would you value the company?

INTERVIEWER BRIEFING

Recommended approach: This is an analytical case asking the candidate three specific questions to answer in succession. Below is a rough outline for solving each question.

1) The interviewee should realize that a bus leaves the first shift from NY & BOS at 7AM and will be able to make the return trip at 11. This pattern repeats and you only need 8 buses total.
2) The interviewer was looking for brainstorming potential solutions here. Interviewee should give a list of recommendations to increase profits.
3) In valuing the company, the interviewer is looking for the broad approach, not the actual number. Interviewee should first walk through a P&L then the method for a FCF valuation.

Key facts:
Facts that are disclosed during the course of the case

- It takes 4 hrs to make the trip NY to BOS (assume the bus can leave right away to make the return)
- 1-way ticket costs $15 (no round trip packages)
- 40 seats per bus, operating at capacity

EXAMPLE DIALOGUE

Interviewer: *How would you approach figuring out the number of busses required?*

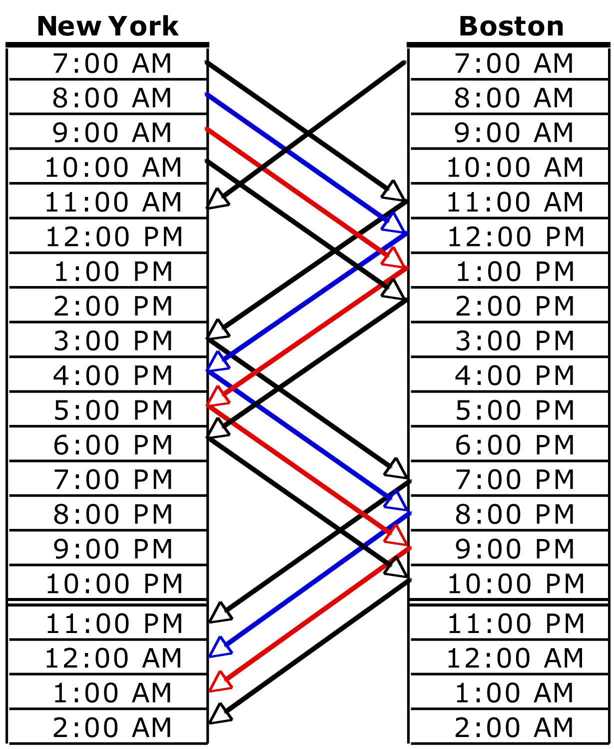
Interviewee: First I would need to know how long the trip takes between NY & Boston. I believe it takes roughly 3-4 hours, is this correct?

Interviewer: *Yes, you can assume 4 hours.*

Interviewee: What about the time it takes to unload and load passengers and refuel before making the return trip?

Interviewer: *Lets assume that's negligible.*

Interviewee: OK. So assuming the first bus leaves NY at 7am, it can return from BOS at 11am, leave NY at 3PM, and so on. I've drawn a diagram to help outline how this would work. We need 4 buses from each location leaving at 7, 8, 9, and 10am. The 11am bus in each location will be the next trip for the 7am bus that arrives there. Thus we need 8 buses total.



Interviewer: *Good. So now can you brainstorm some ways to increase profits for this bus company?*

Interviewee: Yes, but first I want to know a few additional points about the company. Are we currently operating at capacity? Additionally what is the competition like?

Interviewer: *Yes, assume all buses are 100% filled. Additionally we are in a highly competitive market and raising prices would be unwise.*

Interviewee: OK. So in brainstorming ways to raise profits, I want to think about ways to increase revenues, reduce costs, or both. First with revenues, we can possibly add additional services such as selling snacks or magazines on the buses or in the terminal. We could also add more departures to the schedule, however I'm not sure people would be interested in taking buses that arrive later than 2AM. Finally we can think about an acquisition to boost profits. Potentially with an acquisition we might be in a better position to increase prices because we'll have more pricing power.

Interviewer: *That's all very good. What about the cost side?*

Interviewee: Well first with the acquisition case I mentioned before we have potential to reduce overall costs given operational synergies such as equipment, repairs, and cost of other services we offer. Besides that, we can look at our buses and potentially upgrade our fleet to more fuel-efficient vehicles, or vehicles that will have a longer useful life or require fewer repairs. We would have to do cost-benefit analysis on such options. Also I would want to review other cost areas such as marketing, labor, and so forth, to see whether we can reduce those.

Interviewer: *That's good. Now before you tell me how to value the company, starting with revenues can you walk through the major components of the P&L starting with revenues?*

Interviewee: Sure, after revenues would be all gross costs including fixed & variable costs. Subtracting these costs would give you EBITDA. Now we can use this metric to value the company via comparable multiples if we know of any other recent transactions with bus companies. However, I assume this isn't common so we will need to proceed further and value the company using free cash flows.

Interviewer: *Very good observation. How do you get to free cash flows from EBITDA?*

Interviewee: Well, first we need to Net Income. We subtract out any depreciation and amortization to get EBIT. Finally we apply the company's tax rate to get NI. Now assuming there is no interest expense, we can use NI to get to FCF. If there is interest expense we need to get Net Operating Profit after tax which removes the tax effected interest expense from NI.

(*interviewer can interject and ask what would make up D & A – depreciation on buildings and buses, amortization on other potential acquired intangibles like goodwill)*

Interviewer: *Very good. Let's assume no interest expense here and start with Net Income.*

Interviewee: OK, so FCF = Net Income - ∆NFA - ∆Net Working Investment. The first term, change in net fixed assets is Capital Expenditures (e.g. new buses or real estate we purchased) minus Depreciation (on any PP&E). The other term represents working current assets (Necessary cash, A/R, Inventory, other current assets) – Automatic Sources (Accts payable, anything accrued, other non-interest bearing liabilities).

Interviewer: *Excellent. Thank you.*

Case 3: Airline Promotion

BACKGROUND

Firm: Seabury Group
Round: 2008, Full-Time, First
Content: qualitative and quantitative

CASE QUESTION

Our client is a major airline with flights to and from the United States. The CEO has hired Seabury Group to evaluate a promotional campaign for one of its routes, both in terms of the economics and risks involved. The promotion aims to offer full fare passengers a complimentary ticket for one child (under 14) on the same flight. Should they implement this promotion?

INTERVIEWER BRIEFING

Recommended approach: This is a typical Bain case (given by a former Bain consultant), involving the airline industry. This was definitively a real case scenario, and the interviewer had clearly had that experience before. Take the time to structure your thoughts and discuss the case.

The interviewer was expecting the interviewee to structure a framework, which would look at the big picture that any MBA should have in mind about the airline industry. A strong candidate would have to arrive into final numbers as well as in a final conclusion. Some important elements were:

- Contribution margin (breaking down fixed and variable costs)
- Consumer behavior
- Market segmentation

In this case, the interviewee focuses only on the full-fare passengers. The numbers would be different if the interviewee focuses on both sets of fares. For simplicity, try to make the interviewee focus on the full fares.

Key facts:

- Seats available: 1,500,000/year
- Seats sold: 1,000,000/year
- Customer segmentation: Business (50%) and Leisure (50%) passengers
- Only two types of tickets:
    - Full fare ($300 one way)
    - Discount fare ($100 one way)

- Of Business passengers 100,000 fly discount, 400,000 fly full fare
- Marginal cost of $10
- Percentages of children are given in the case

EXAMPLE DIALOGUE

Interviewee: (Summarize the case and work on a framework). This case requires us to estimate the financial impact of this promotion – revenue, cost and profit – as well as the risks involved. We want to anticipate any legal or governmental issue and competition response, and evaluate internal constrains, consumer behavior and market demand.

Interviewer: *OK. I have some data available if you need. How would you go about estimating the economics of this promotion?*

Interviewee: I will start this analysis by looking at Profit = Revenue – Cost. I will break down Revenue and Costs respectively as Price * Volume and Fixed Cost + Variable Cost. Let me start with Revenues. Although we could estimate the size of the market for this route (to calculate for Volume), it might be more reasonable to look at the current information the company has about this route. What is the current sales load factor of our client's route?

Interviewer: *Our client offers 1,500,000 seats per year, of which only 1,000,000 are usually sold (passengers that have actually flown during the year).*

Interviewee: This represents a 66% load factor. In terms of pricing, how many different fares does our client sell? I can think of First Class, Business, Economy, and Discounted.

Interviewer: *Our client only has two different price points, Full fare and Discount. Full fare is $300 one way and Discount is $100 one way. Discount fare is usually sold al least 3 weeks in advance of the departure date.*

Interviewee: Do we know the share of each?

Interviewer: *Fair enough. 40% of the customers travel with discount tickets.*

Interviewee: So I am assuming 400,000 passengers were discount and 600,000 were full fares. Let me estimate the total revenue.

400,000 discount passengers * $100 fare + 600,000 full-fare passengers * $300 fare
= $ 220,000,000

Interviewer: *Perfect. What would the contribution margin be?*

Interviewee: As I said before, I will break down costs in Fixed and Variable. Aircraft leasing, crew, maintenance and airport staff are some of the fixed costs. Variable costs are actually marginal, such as meals and ticketing. Fuel would be primarily fixed but would also change according to the number of passengers.

Interviewer: *What about if I told you that we outsource luggage handling?*

Interviewee: Then it would become a variable cost.

Interviewer: *Right. We ran some calculations and found out that the variable cost is $10.*

Interviewee: So we should then segment the customer base to estimate the economics of the promotion. Before I start doing so, let me discuss the possible outcomes of this promotion:

- Some of the current passengers might end up bringing their children for free, without generating any additional revenue.
- Business passengers might get upset with the increase in the number of children on board.
- Competition might start a price war.
- Loss of revenue because current paying passengers (children) might get to travel for free.
- Customers might get used to the promotion (consumer behavior) which would negatively impact the company in the case of a fare increase or cancellation of this promotion.

Interviewer: *Very good points. How would you go about segmenting the customer base then?*

Interviewee: I guess we could break it in business and leisure travelers.

Interviewer: *That is correct. Out of the discount tickets, 100,000 are business travelers. Out of the full fare, 400,000 are business travelers.*

Interviewee: So basically on the other end of the 500,000 business travelers, we have 500,000 leisure travelers. We should also estimate the number of passengers that would bring kids along. I believe we should only focus on full fare passengers because with a fare of $300, even with an additional passenger for free the price would still be higher then purchasing two discount tickets.

Interviewer: *Good point. We ran a marketing research and found out that out of the business travelers, only 10% would bring children. Out of the leisure passengers, on* *average 50% of them have children but only 50% of those with children are currently traveling with children.*

Interviewee: Most likely will face the following scenario:

- We will lose 50,000 paying passengers (current full-fare child leisure paying passengers who would be flying for free with parents = 200,000 * 50% * 50%)
- 50,000 new passengers flying for free (leisure passengers = 200,000 * 50% * (1-50%))
- 40,000 new passengers flying for free (full-fare business passengers = 400,000 * 10%)

What do we know about new passengers that will be attracted by this promotion?

Interviewer: *The research shows 150,000 new customers attracted by this campaign.*

Interviewee: This is equal to an additional 300,000 passengers (150,000 paying customers along with their children). Let's see the total impact on margin:

- Total demand: 1,000,000 (existing) + 50,000 + 40,000 + 300,000 (new) = 1,390,000, this is still below total capacity of 1,500,000 passengers/year.
- Losing contributed income: 50,000 * ($300 - $10) = $14,500,000 in contribution margin.
- Additional cost from non-revenue passengers: (50,000 + 40,000 + 150,000) * $10 = $2,400,000
- Additional revenue from new passengers: 150,000 * 290 = $43,500,000
- Net additional margin = $43,500,000 – $14,500,000 – $2,400,000 = $26,600,000

Interviewer: *Are you sure this is your final number?*

Interviewee: Absolutely not. As I previously said, we should expect to lose some business passengers which won't be satisfied with the increase in the number of children on-board.

Interviewer: *Our research shows that 50,000 business passengers won't fly with our client anymore because of that.*

Interviewee: This represents a loss of 50,000 * 290 of contribution margin or $14,500,000. But still, our initial $26,600,000 - $14,500,000 = $12,100,000.

Interviewer: *You are right. Before we analyze whether there are other costs that you haven't considered, what could our client do to minimize this loss of business passengers?*

Interviewee: Our client could try to create different lines for boarding, different check-in lines and keep children seated in the back of the airplane.

Interviewer: *I like your idea of different lines for boarding. Any other cost to be considered?*

Interviewee: We discussed the $12,100,000 of contribution margin, but we did not discuss overheads and sales expenses.

Interviewer: *Actually this promotion will cost our client $3,000,000 per year.*

Interviewee: This leaves $9,100,000 as a net result of this promotion.

Interviewer: *What is your conclusion?*

Interviewee: I would recommend the promotion.

Case 4: Mobile Retail Strategy

BACKGROUND

Firm: Bain & Company
Round: 2008, Full-Time, Second
Content: Quantitative

CASE QUESTION

Our client is a cell phone operator in the Midwest of the United States, and the CEO has hired Bain & Company to advise him on his strategy for the next five years. You are one of the consultants in this project, and you will be responsible for the sales effectiveness strategy. Basically, he wants to focus the company's investments in the most effective and profitable channels. The company currently has three direct sales channels: own retail stores, in-bound (responsive) call center, and an outbound (proactive) call center. Based on the economics of each channel, what do you advise him to focus on?

INTERVIEWER BRIEFING

Recommended approach: The interviewer was expecting a basic knowledge of the industry as well as the three channels, and the case requires the interviewee to focus on the calculations. Customer Lifetime Value is a major framework to be used to approach this case. Also, the interviewee has to drive the questions and collect – in a structured manner – all the numbers needed to solve the case. It is important to ask the appropriate questions as well as state the reasoning behind each question. Some important elements were:

- Discuss customer service vis-à-vis sales
- Understand the mix of variable and fixed costs

Key facts:

	In-bound C-Center	Out-bound C-Center	Owned Retail
Success rate per channel	10%	50%	50%
Traffic per channel	10 millions	1 million	1 million
Average revenue per channel	$40	$50	$85
Fixed / Variable cost	50/50	25/75	80/20
Total cost per channel	$1 million	$1 million	$10 millions
Customer service time	50%	0%	0%

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EXAMPLE DIALOGUE

Interviewee: (Summarize the case and work on a framework). I want to understand the customers (size of the market, customer segmentation and consumer behavior), the competition and key figures of each channel (acquisition rate, sales volume, success rate, fixed cost, variable cost and traffic).

Interviewer: *Very good. Our client does not have insight about customer segmentation in each of the channels though.*

Interviewee: Right. Let us see which figures the client has available. Do we know traffic in each channel?

Interviewer: *We do. In-bound call center and retails are accessed respectively by 10 millions and 1 million customers. The out-bound call-center accesses 1 million customers.*

Interviewee: I would imagine some of these customers are also demanding customer services, right?

Interviewer: *You are right for the in-bound call center, which also serves as a customer service channel in a proportion of 50-50 (sales – customer service). However, our client believes that every customer visiting a retail store generates revenue, and the out-bound call center only focuses on sales.*

Interviewee: What about success rate per channel?

Interviewer*: In-bound call center, out-bound call-center and retail have respectively 10%, 50% and 50% success rates.*

Interviewee: In looking at lifetime customer value, do we know the churn for each channel?

Interviewer: *Actually we don't. But our client believes it is the same across all segments.*

Interviewee: What about revenues per channel?

Interviewer: *Sales generated by in-bound call center, out-bound call-center and retail generate respectively $40, $50 and $85 in revenue on average per customer.*

Interviewee: Perfect, we already have enough data for sales. What about cost? Do we know either total cost or cost per "call" for each channel?

Interviewer: *Our client has provided us with cost broken down by channel. In-bound call center, out-bound call-center and retail generate respectively $1 million, $1 million and $10 millions in costs.*

Interviewee: Do we know how much is fixed vs variable cost?

Interviewer: *We do know the current percentages. Out of total costs, fixed cost for in-bound call center, out-bound call-center and retail generate are respectively 50%, 25% and 80%.*

Interviewee: Fair enough. This is what we've got:

	In-bound C-Center	Out-bound C-Center	Owned Retail
Success rate per channel	10%	50%	50%
Traffic per channel	20,000,000	1,000,000	1,000,000
Customer service portion	50%	0%	0%
Average revenue per channel	$40	$50	$85
Revenues	10% * (20M * 50%) * $40 =	50% * 1M * $50 =	50% * 1M * $85 =
	$40,000,000	$25,000,000	$42,500,000
Revenue per new customer	$40M / (20M * 50%) =	$25M / 1M =	$85M / 1M =
	$4	$25	$42.50
Total cost per channel	$1,000,000	$1,000,000	$10,000,000
% fixed cost	50%	25%	80%
Variable costs	500,000	750,000	2,000,000
Variable costs per relevant traffic	$500K / (20M * 50%) =	$750K / 1M =	$2M / 1M =
	0.05	0.75	2.00

The average revenue per new customer generated by retail stores is the highest while in-bound call-center generates the lowest.

Also, although the total cost per new customer generated by out-bound call center is the lowest, the variable cost for the in-bound call center is actually the lowest. Additionally, the out-bound cost center's revenue is the lowest. This means that the out-bound call center generates a lower contribution margin, as its fixed cost is proportionally the lowest portion. Thus, out-bound call center's total cost could increase most should our client decide to invest more in this channel versus other channels -- retail stores with a 80%

fixed cost and in-bound call center with 50%. Because of the high fixed costs, out-bound cost centers are a higher risk.

Interviewer: *Very well. What is your recommendation then?*

Interviewee: I would advise our client to focus its investments in the in-bound call center. The relevant variable cost for this channel is low, but so is the revenue for new customers. The client should examine the causes for the low revenue with an eye towards generating more revenue from customers through this channel.

Interviewer: *Excellent. Thanks.*

Case 5: Real Estate Agency

BACKGROUND

Firm: Bain & Company
Round: 2008, Full-Time, First
Content: Qualitative and Quantitative

CASE QUESTION

Our client is a real estate agency based out of Los Angeles. It focuses on managing and renting apartments for short-term contracts and temporary leases: our client rents the entire apartment building for 5 to 10 years, furnishes the apartments and rent each of them to its clients for a short period of time. Its clients are usually corporations (that rent apartments for expatriates or temporary transfers) and people from the entertainment industry. The company currently has $750M in revenues but only $12M in EBITDA. Bain was hired to help them increase the EBITDA to $34M. What are the possible recommendations?

INTERVIEWER BRIEFING

Recommended approach: This is an interesting case, and the interviewer said that she was at that time working with this client. Take the time to structure your thoughts and discuss the case.

Besides the framework, the interviewer was expecting a different set of recommendations. Some important elements to be discussed were:

- Opportunities for outsourcing
- Economies of scale
- Customer segmentation
- Cost structure (variable vs. fixed)

Key facts:

- Fully-owned maintenance and cleaning services are charging 20% premium over market
- Client does not own properties, they are all long-term leasing contracts
- Decentralized procurement
- There is no price discipline

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EXAMPLE DIALOGUE

Interviewee: (Summarize the case and work on a profit framework). I want to understand all sources of revenue as well as costs, and figure out room for cost reduction or revenue optimization. I will analyze opportunities for expanding the business as well. I will start with Revenues. I am assuming the biggest revenue source is the rental revenues, right? What do we know about the customer demand?

Interviewer: *I can tell you that our client has 95% of occupancy rate.*

Interviewee: This is very impressive; I do not believe there is room to increase this rate because of the maintenance and turnover lead time. The client seems to have a very efficient sales force, thus volume cannot be increased. What about pricing?

Interviewer: *This is something I actually looked at. Regardless who the client is, there is no price differentiation at all. Also, at different times throughout the day, a client might be given different prices.*

Interviewee: Here we already see something to work on. The client should most likely implement a pricing schema which would allow price differentiation. Certainty some of the customers are less price sensitive. Also, our client does not seem to have a robust CRM or standardized processes. The client should perhaps implement systems and review processes which would improve its operation and offer pricing discipline.

Interviewer: *Right. Anything else to consider?*

Interviewee: Do we have market share data? I want to analyze the competitive landscape and see room for additional revenue streams.

Interviewer: *Yes we do. Our client's 20 major competitors have all together the same market share of our client.*

Interviewee: Which means our client is the largest player in this industry.

Interviewer: Yes it is, and for now it is not considering diversifying the business. Thus let's focus on costs. *What are the major cost elements?*

Interviewee: The major fixed costs would be rent expenses and real estate taxes. Overhead and marketing expenses are also fixed. Operating staffing is primarily fixed, and so is furnishing. Other than that, there are only variable costs, such as:

- Maintenance services
- cleaning services
- utilities
- sales

Interviewee: Let me start analyzing the rental costs, which is most likely the major cost element. What do you know about this cost category?

Interviewer: *Well, I was also very interested to know more about rental costs. This is what I found out. Rental contracts are managed locally by each of the client's 45 regional offices. They argue that the close relationship with landlords offers them more flexibility with contracts, eg. not paying rent during the summer months (low season).*

Interviewee: Although it could indeed be true, I would imagine economies of scale are huge in the real estate industry. There are very big real estate owners in this country. The client should think of centralizing rent negotiation for the major markets and perhaps keep some of the local markets with some autonomy. By doing so, our client could also consolidate and reduce overhead expenses.

Interviewer: *By doing so we estimated a $5-10M savings per annum.*

Interviewee: What do we know about the maintenance and cleaning costs? Is it outsourced or internal resources?

Interviewer: *This is also interesting. Our client has fully-owned maintenance company and cleaning services company. They are both high-end and offer great services.*

Interviewee: Do we know costs for equivalent services in the market? I would assume there is limited scale in the internal business and the company could save by contracting external services.

Interviewer: *We do. As I said, the current services are high-end, so our client could save 20% of a $60M budget by outsourcing these services.*

Interviewee: Perhaps the client should spin off this business and then require lower costs. There is room for $12M savings.

Interviewer: *Anything else?*

Interviewee: Unless the client wants to expand into other businesses, we have already accomplished enough. We have already identified opportunities to generate the additional $24M in EBITDA.

Interviewer: *What are your recommendations?*

Interviewee: I would recommend a set of actions:

- Spinning off the maintenance and cleaning service businesses will most likely generate an additional $12M in EBITDA;
- Designing a pricing differentiation schema would allow our client to extract a higher margin from some of its customers;
- Implementing CRM and new systems will generate cost savings; and
- Centralizing procurement with major real estate owners will generate cost savings in renting expenses

Case 6: Busy Internet

BACKGROUND

Firm: Good Morning Africa
Round: 2008 Summer Internship, First
Content: Qualitative

CASE QUESTION

Our client is Busy Internet, the largest Internet Cafè in Ghana.

Busy Internet also offers:

- *a business incubator service*
- *ISP, Internet Service Provider (Broadband, dial-up, satellite, and radio connection)*
- *Copy Center*
- *Conference Room*
- *Office renting*

Busy Internet is experiencing a decline in profit and it has hired GMA to asses the problems, give recommendations and assist them trough the implementation process.

INTERVIEWER BRIEFING

Recommended approach: The purpose of this case is to asses the candidates' analysis skills and his abilities of gathering information through appropriate questions. A good understanding of the Ghanaian business climate is important but not a must. A good structure to answering the case is necessary. The interviewee should suggest a possible framework and a solution but he/she should have a clue about the major problems of implementing changes in a non-traditional business environment.

Gathering information in Ghana is extremely difficult, and managers tend to flood consultants with information. Therefore a good structure, the ability to prioritize and navigate trough useless or cloudy/ambiguous information is important. For these reasons, *the interviewer can give upfront useless information and hide the important ones*.

Since Ghana best practices are still to be polished, it is important that the interviewee display a certain degree of flexibility and adaptability while asking questions. The use of inflated and difficult terms should also be avoided.

EXAMPLE DIALOGUE

Interviewer: *So how would you analyze this case?*

Interviewee: It really looks like an interesting and complex case. May I have a second to structure my analysis?

Interviewer: *Sure*

Interviewee: Ok, so these are the base steps of my structure.

1. First I want to know more about the products, it looks like Busy has a very diverse **product mix**. So I want to know more about the service Busy is selling to his client, they can have different profit margins.

2. Since profit is **Revenues** – **Costs**, I want to analyze these 2 elements separately.

3. Finally I want to analyze the **market's trend** for each of these products.

Interviewer: *Sounds great, let's start with the product mix. Busy sells a big variety of different services to its clients, but we can group the major sources of revenues in 3 different products:*

- *Copy center*
- *Cyber Café*
- *ISP*

Interviewee: Ok, let's analyze these 3 divisions separately

Interviewer: *Ok. What's next?*

Interviewee: What we do know about the costs for these 3 divisions? Have they increased lately?

Interviewer: *Ghana experiences black outs, and in order to maintain the service Busy must use a very expensive power Ggnerator. Apart from that, the 3 product lines have not experienced any increase in cost*

Interviewee: What we do know about the revenues for these 3 divisions?

Interviewer: *The copy center is experiencing a decrease in revenues; the same can be said for the cyber café while the ISP is slowly growing.*

Interviewee: That is interesting. Do we know any information about the global markets for all these products? Are these markets growing in Ghana? Are they fragmented?

Interviewer: *Ok, here is some information:*

- *Copy center: it's a growing market, many new small players are entering the market making lots of money*
- *Cyber Café: internet cafés are not doing very well in Ghana. Many cafés are closing as more Ghanaians are enjoying connection at home*
- *ISP: it's a growing market, technology is improving and it is now possible to reach many customers via radio*

Interviewee: Thank you. What do we know about the competitors?

Interviewer: *Good question. There are new entrants in the Cybercafé market, a new Internet Café which is stealing clients from Busy Internet Café. Competitors in the ISP are minor players with the addition of Ghana Telecom, the government sponsored Internet Service Provider.*

Interviewee: What is our value proposition to our customers? Similarly, how is the competition targeting our customers?

Interviewer: *Busy Internet customers are elite customers, prices at Busy are very expensive (the highest in Accra), and cusomters expect high quality. Not many competitors can target the same segment of customers. We can say that there is only one big competitor which can offer similar quality compared to Busy Cyber café.*

Interviewee: The scenario now looks clearer. Our revenues for the café are declining for a decrease in volume and not in price. Why is Busy loosing clients in the café?

Interviewer: *Good questions. How would you look for that?*

Interviewee: My idea would be to ask the clients. Conduct quality survey; supervise customer behaviors, assessing employees' performances.

Interviewer: *It looks like clients are gradually moving to another café since customer care and service quality is better. Also PCs in the café at Busy are getting old and many of them are not working properly, decreasing actual capacity and customer loyalty*

Interviewee: I have another question, I am still not sure why our revenues in the copy center are decreasing while the market and demand for copy center is growing. Is that connected with the decrease in traffic of the internet café?

Interviewer: *It could be. What other possibilities would you investigate?*

Interviewee: there are many possible issues

- Quality, our printers are not competitive
- Customer service, our workforce is not trained
- Efficiency, probably our printers and copy machine are getting old and they break more frequently decreasing volume and customer loyalty
- Capacity, Busy has probably not set up the right sufficient capacity to meet the growing demand for copy center services

Interviewer: *Good points, they all make sense. Estelle Akofio-Sowah, the managing director of Busy Internet, has just reached us to ask for the executive summary of your analysis. What should we tell her?*

Interviewee: It looks like the decrease in profit is due primarily to decrease in revenues and in volumes.

	Revenues	Cost	market	Busy Position
Copy center	declining	stable	growing	average player
Cyber Café	declining	stable	declining	major player
ISP	growing	stable	growing	major player

Busy must concentrate its investment in the copy center, since it is a growing market. The Cyber Cafè is a declining business in a shrinking market, but Busy should keep the Cyber Cafè and use it to cross sell other products like ISP and copy center services. Busy should invest heavily in customer care, training, performance incentives, technology improvement in order to perk up services and increase cafe customers' loyalty.

ISP is growing. Busy Internet should leverage its client portfolio and its economy of scale to anticipate and satisfy client expectations.

[*Optional questions on implementation*] *Interviewer:* *Estelle looks impressed of your analysis. But she also looks skeptical on some of the points you have just mentioned. She thinks that there are no major problems on the technology side as well as the customer care. Investments on these areas are expensive and additional funds from shareholders have to be motivated.*

- *How would you try to convince her that these changes are vital?*
- *What approach do you think could convince her?*
- *What about the other managers involved in these change? What do you expect will be the major issues in implementing change at BusyInternet?*

- *How can these changes be sustainable and long-lasting?*
- *Why do you think Ghanaians resist changes and like their status-quo?*

[These questions are like "bonus questions" and are meant to be asked only to these candidates that developed a very good understanding of the economic/problem solving side of the case and are ready to give suggestions also on the implementation/leadership side.

Rather than asking about previous leadership experiences in which the candidates demonstrated motivation, persuasion and other interpersonal skills, this case offers the opportunity to "bring the interviewee to Ghana" for 20 minutes and assess his economic and interpersonal skills on a real African situation. The last part of the case can be easily changed on a role-play interview so to give a more realistic taste to the discussion.]

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Case7: Ducati

BACKGROUND

Firm: Arthur D. Little
Round: 2007 Full-Time, First Round
Content: Qualitative

CASE QUESTION

Our client is Ducati, a leader Italian producer of motorcycles. They produce high-end motorbikes which they sell globally. They have 150 stores, 50 stores are *single brand* (they only sell Ducati) and the remaining 100 store are *multi brand* (they sell between 3 and 8 different brands of motorbikes). Multi-brand stores have similar sales and income figures, while single brand stores are either huge success or on the verge of bankruptcy. (A single brand store in Italy did so badly that the owner killed himself after bankruptcy.)

They hired ADL because they want to identify the major reasons of this diversity and find a way to decrease the number of underperforming single brand store.

INTERVIEWER BRIEFING

Recommended approach: A rock star interviewee will list the major possible differences between single-brand (SB) and multi-brand (MB) store and then will ask question in order to focus on the most important. After identifying the most important differences the candidate should suggest any reasonable recommendation to identify opportunities for SB store.

Key facts:
The main factors are cross-selling and customer brand recognition

- Brand recognition
    - Ducati has not yet established customer loyalties in most of the countries where it sells; in US for example there is not yet customer captivity for Ducati bikers (*Ducatisti*)
- Cross-selling
    - Ducati does not risk loosing a loyal customer when they shop at a MB stores
    - There are several loyal customers who discovered Ducati trough MB store and then remained loyal
    - The best SB store can be found near competitor stores or in region where MB stores are present, especially near MB stores selling several brands (7 or 8)

EXAMPLE DIALOGUE

Interviewer: *So, tell me how would you structure this problem?*

Interviewee: Our client asked us to identify the main reasons for such a disparity between SB and MB stores and give a suggestion once they found key issues.

It is an interesting and complex case. May I take a second to structure a proper analysis?

Interviewer: *Sure.*

Interviewee: Ok, these are the aspects I want to analyze:

- *Geography*: Are underperforming SB located in particular areas (urban/suburban) or countries (EU/USA/ASIA)?
- *Customers*: Did Ducati target the right customers in each area they are positioning a new SB?
- *Managers*: Is the Ducati relationship with SB managers different from MB managers?
- *Stores*: Is there any major difference between SB and MB stores in terms client mix?

Interviewer: *The distribution of underperforming SB stores is uniform among cities, suburban areas and different countries.*

Ducati has a clear value proposition and the customers' analysis is well structured. Ducati treat MB and SB store managers in the same way. Once a new store manager (either SB or MB) decides to open a new store, he or she asks Ducati to supply its motorbikes; Ducati decides to accept or not this new distributor considering strategic/location factors. No further consideration is made based on the nature of the store (MB versus SB).

Your fourth point is the most important one. What do you think is the major difference between MB and SB? How do you imagine these two kinds of stores?

Interviewee: Let me think a little bit. I think that the major differences between MS and SB stores are:

- *Size*: SB are smaller than MB
- *Customers*: SB attracts mostly Ducati enthusiast or curious customers, while MS attract every kind of customers who are thinking about buying a new motorbike
- *Managers and Operations*: a SB manager is most likely an enthusiast Ducati user but not necessary a good seller, while a MB manager is most likely to be an experienced manager and seller

- *Traffic*: obviously MB stores attract way more customers than SB. Most likely, the more brands they sell the bigger is the traffic

Interviewer: *Very good. These are main differences. We initially thought from ice creams, high-end motorbike sales are uncorrelated from store traffic. Evidence showed the opposite. Surprisingly, we have noticed that SB store with higher traffic are most likely to perform better. Do you think you can analyze the possible reasons?*

Interviewee: Yes. I think is probably a problem of brand recognition. Most likely potential loyal customers in some regions are not aware of the experience of riding a Ducati. Probably they have never seen one.

Interviewer: *That is possible. How would you identify one or more indicators to analyze SB stores traffic without actually visit them?*

Interviewee: I would look to the SB stores located in area where enthusiasm for motor bikes is higher. I think that the best way is to look at competitors and MB stores' locations. May I ask whether or not there is any geographic correlation between the distribution of performing SB stores and MB stores? Are they in the same areas? Are top SB stores located near competitors?

Interviewer: *I think we are close to the solution of problem. Yes, you are right. We have analyzed the distribution of the best SB stores and they are localized close to competitors or MB stores. We have also noticed that the bigger the MB store the higher is the performance of SB store. What can you infer from that?*

Interviewee: I think that cross-selling and traffic are the best way to increase brand recognition and eventually SB performances.

Interviewer: *That makes sense. So, what would you suggest to Ducati CEO?*

Interviewee: I would suggest to localize all the areas in which there is a major distribution of MB and competitors stores. Ducati should invest in creating new SB stores and showrooms in these areas so to leverage the brand recognition created by the MB stores and increase sales.

Interviewer: *Very good. We appreciate your analysis.*

Case 8: Cinema Firenze

BACKGROUND

Firm: Bain & Co.
Round: 2008 Summer Internship, First Round
Content: Qualitative and Quantitative

CASE QUESTION

Our client is a major Italian conglomerate that owns a Movie Theatre chain with several theatres in Rome and Milan. The CEO is planning to expand the chain in Florence and has found an interesting theatre in the center of Florence that would sell its activity for € 2M. "Cinema Firenze" has only one room that holds 400 seats and is open 50 weeks per year, running 4 shows in mid-week and 5 during the weekend.

The CEO hired Bain & Co. to understand if they should go through with the acquisition.

INTERVIEWER BRIEFING

Recommended approach: An ideal candidate will list and make reasonable assumptions over the main revenue and cost streams. An ideal candidate will also drive the analysis with various assumptions. He or she should also understand what possible synergies might be exploited.

EXAMPLE DIALOGUE

Interviewer: *So, tell me how would you approach this decision?*

Interviewee: May I ask you why the client wants to buy this new theater in Florence? I guess that our client wants to acquire this movie theater in Florence so to increase the overall profits of its business, but they may be other important reasons for this decision.

Interviewer: *Of course, there are other important aspects to consider such as the brand image, geographic expansion, etc. but for now let's stick with the profitability analysis.*

Interviewee: Thanks. In order to estimate the value of the investment I need to estimate the annual cash flow and the trends. Since profits are revenues minus cost, my first breakdown of the problem is the analysis of sales and cost.

Interviewer: *Ok. Let's start with the revenue side of the equations. What do you think are the major source of revenues of this Cinema?*

Interviewee: The major sources of revenues are tickets sales and concessions. The movie theater can also make money advertising before films.

Interviewer: *Perfect, first let's concentrate now on ticket sales. How much do you think that is?*

Interviewee: Revenues from tickets sales can be calculated from the average price time estimated number of tickets sold per year.

Interviewer: *What information do you need to calculate that?*

Interviewee: I need to know the average ticket price and the numbers of clients per year.

Interviewer: *Correct. For the sake of simplicity let's assume that the average ticket price is € 7. Now, how would you calculate the number of tickets sol per year?*

Interviewee: In order to calculate the tickets sold every year we need to know how many shows we have in one year, the average utilization and the capacity of the cinema. In order to make our approach more accurate I intended to analyze separately weekend utilization from weekday utilization. I will estimate both.

Interviewer: *Ok, how would you calculate this average utilization?*

Interviewee: Assuming that we have:

	Shows/day	Days	Number of show	Utilization
Weekday	4	5	20	20%
Weekend	5	2	10	35%
Weighted Average Utilization			25%	

The utilization is the weighted average of weekday and weekend utilization.
Weighted average utilization = (20%*20 + 35%*10)/(20+10) = 25%

Interviewer: *How would you verify if this estimated utilization is correct?*

Interviewee: I would compare it with one of our client's theatres.

Interviewer: *Ok, consider that the most successful movie theatre in Rome, "L'Adriano," has an average of 30% utilization over the year.*

Interviewee: Then I'd say that and estimated 25% utilization for a famous theatre in Florence is plausible.

That gives an average ticket sale of 100 tickets per show. There are 30 shows per week, 50 weeks/year, 100 tickets, which makes a total of 150K tickets per year.

With €7.00 per ticket we have a total annual revenue of approximately €1M from tickets sales. [Actual is €1,050,000].

Interviewer: *Ok, let's now calculate the revenues from advertising. Please make assumptions.*

Interviewee: I would say the revenues from ads are proportional to traffic/sales. Let's assume € 3 per ticket sold, which gives € 450,000.

Interviewer: *That's fair. What about concessions?*

Interviewee: I assume the concession stand will sell to 40% of customers, € 3/sale, so it's going to be: 60,000 customers x € 3 = € 180,000/year. Do we know the margin on those purchases?

Interviewer: *It's very high, assume 90%.*

Interviewee: So net profits from the concession stand are 90% of 180,000 = € 162,000. Summing it all up, total revenues are 1,050,000 + 450,000 + 162,000 = € 1,662,000.

Interviewer: *I'll give you some info for the cost side of the equations:*

- *8 people working for an average annual salary of € 50,000*
- *Operating expenses € 125,000*
- *Film fee: 50% of ticket sales*
- *Rent: € 40/m^2 per month, total area 1,000 m^2*

Interviewee: So costs per year are:

- Personnel: 8 times €50,000 = € 400,000
- Operating expenses: € 125,000
- Fees. 50% of €1,050,000 = € 525,000
- Rent: €1,000 x 40 x 12 months = € 480,000

Total costs. € 1,530,000

Profit before taxes = €1,662,000 – €1,530,000 = €132,000
Assuming 40% in taxes, net income is about € 79,200

Interviewer: *Correct. Is it a good business?*

Interviewee: 2M for a yearly profit of 80k/year is not a fair price.
With an interest rate of 10%, we need at least 200k/year of cash flow. I would strongly advise against this acquisition.

Interviewer: *But how do you know it's not a good business? What's the percentage over sales?*

Interviewee: It's about 4.5%, but I wouldn't acquire the business for 2M, which was our primary question. Anyhow, we own several movie theatres; we should compare our results with these numbers we just found to understand if it's a solid business in itself.

Interviewer: *Exactly, that is the point. The CEO is aware that 4.5% is a low figure, but he is a very stubborn person and says he wants to acquire this theatre anyway. What's the course of action?*

Interviewee: Well, if the CEO is set to buy anyway, he should:

- Bargain over the price
- Understand possible synergies that might increase profitability

Interviewer: *Right, I'd suggest haggling too, and how would you make this business more profitable?*

Interviewee: Profit is revenues (volume and price) minus costs. Off the top of my head, we could invest to increase the volume of purchases, with a marketing campaign, devising partnerships with local shops to publicize their product in exchange of increased visibility for our shows, understanding if we're airing the right movies for the local clientele, lowering prices to drive business for unpopular show times…

Interviewer: *Ok, all good ideas, and what on the costs side?*

Interviewee: If we acquired this business, we could bargain the fees as a Movie Theatre Chain rather than a single interlocutor and could leverage our increased bargaining power against film distributors.

Interviewer: *That is correct. Thanks.*

Case 9: Thief

BACKGROUND

Firm: Booz Allen
Round: 2007 Full-Time, First Round
Content: Quantitative

CASE QUESTION

It's noon, a thief has to decide which store is convenient for him to rob: a bakery, a flower shop or a luxury chandelier store. Which one should he choose, what factors should he consider?

INTERVIEWER BRIEFING

Recommended approach: The interviewee should immediately focus on cash-on-hand and sales/day because the robber cannot re-sell goods. The thief should which shop has more cash, which is probably the one with more sales and less use of credit cards and checks. Good candidates should be able to do this with both methods.

Key facts:
The most important factors are

- Cash delivery:
  - All three shops deliver the cash to the bank every night
  - There are no differences in the alarm systems for the shops, this case is about cash-flow and not about thieving techniques
- Forms of payment:
  - Bakery clients only pay with cash and don't use credit card
  - Flower shop clients pay using *either* credit card or cash
  - Chandelier buyers pay *only* using credit card or check
- The three stores are family owned:
  - The three families have the same life style, and probably have the same net incomes from their business

EXAMPLE DIALOGUE

Interviewer: *So, if you were this thief what would you do?*

Interviewee: Honestly, I have never thought about this problem. Can I take a second to understand they key aspects of the question?

Interviewer: *Sure, take your time. The police are not around*

Interviewee: Can the robber resell the items he steals?

Interviewer: *No.*

Interviewee: Then, I think the thief should robber the shop with more cash on hand

Interviewer: *That is probably true, how would you estimate the cash on hand for each shop?*

Interviewee: The cash comes from the customers of the shop who paid cash and not using credit card.

Interviewer: *Ok, so what would you do?*

Interviewee: I want first to analyze the sales s for each store and than I will estimate the percentage of customers paying cash

Interviewer: *That sounds like a good starting point.*

Interviewee: Sales are volume * price. Do we have any information about number of customers for the three stores? What about the average prices?

Interviewer: *We know this:*

Shop	Traffic	Price
Chandelier store:	2 customers /day	$500 average price
Flower shop:	16 customers/ day	$15-$25 average price
Bakery:	2 assistants, 10 customers/hour/assistant, opens at 6am	$1 per item

Interviewee: Perfect. Let's calculate the number of customers for each shop. Assuming that the stores have been open for half day so far, and that the distribution of customers is uniform during the day, we can say that:

Chandeliers store: 1 customer
Flower shop: 8 customers
Bakery: 10 customers/hour/assist * 6 hours * 2 assistants = 120 customers

With these assumptions we can finally calculate revenues:

Shop	Traffic	Price	Revenues
Chandelier store:	1 customer	$500 average price	$500

Flower shop:	8 customers	$20 average price	$160
Bakery:	120 customers	$1 per item	$120

Interviewer: *That sounds reasonable. So should he rob the chandelier store?*

Interviewee: Most likely not. The chandelier store sells expensive products and probably 100% of the customers don't pay with cash. I would exclude the chandelier store also because there is too much risk that with only one expected customer nothing has been sold so far.

Interviewer: *What about the other two stores?*

Interviewee: I assume that all the bakery customers pay by cash. Some of the flower store customers pay by cash and the reaming would likely use debit or credit card. Is that correct?

Interviewer*: Yes, that is correct. What percentage of customers of the florist should use cash so that it would be more convenient to robber the florist?*

Interviewee: Since the bakery has $120, we need at least $120/$160 = 75% of the florist customers paying by cash.

Interviewer*: Do you think this is possible?*

Interviewee: No, I would rather think that the percentage is 50%-50%. If I were the thief I will visit the bakery.

Interviewer*: Very good. I want you to analyze the same problem from a different perspective. Let's assume that the thief knows neither the number of customers in the shops nor the average prices. How could he estimate the cash on hand of each store?*

Interviewee: What information the shoplifter has? Does he know the income of the owners of the store?

Interviewer*: Let's assume that all the three stores are family owned. The three families have the same life style and most presumably have the same net income from the stores. Where the shoplifter should go?*

Interviewee: Since the three families have the same income, we can assume that the bakery has more sales.

Interviewer*: Why?*

Interviewee: Because profit margins are much lower for bakery stores than for luxury chandeliers stores and flower stores.

If we assume that all three family earns, for example, $3,000/month and that margins are:

Shop	Income/month	Margins	Sales/month
Chandelier store:	$3,000	50%	$6,000
Fleur shop:	$3,000	20%	$15,000
Bakery:	$3,000	2%	$150,000

Since the shoplifter cares about sales and cash-on-hand, under these assumptions, I would still visit the bakery.

Interviewer: *Very good.*

Case 10: Grocery Save Grocery Chain

BACKGROUND

Firm: McKinsey
Round: 2008 Summer, First
Content: Qualitative and Quantitative

CASE QUESTION

Our client is Grocery Save grocery chain. They have about 200 grocery stores. They are a full-range store including groceries, pet food, clothing etc. Some stores include banks, dry cleaners, and post offices. A few others include child care, flower shops and catering. They were doing very well for the last several years but from the last 2 years their market share growth is down. Their margins have been falling. Their average sales per store has been decreasing. Walmart has opened 4 super centers which contain 75% of the same collection of items. They plan to open even more stores.

How do we reverse the decline in store sales? How do we successfully compete with Walmart?

INTERVIEWER BRIEFING

Recommended approach: Unlike other cases, do not give the interviewee time to come up with a framework. Instead pose the first question immediately

Key facts:
Facts that are disclosed during the course of the case. To be given if asked

- Fact one
  15% have banks, dry cleaners and post offices; whereas, 5% have child care, flower shops, and catering. The remaining are regular stores.

EXAMPLE DIALOGUE

Interviewer: *What are the reasons for the decline of average sales/store?*

Interviewee: It could be several reasons:

- Targeting the wrong segment
- Incorrect Location (too many competitors nearby)
- Inadequate marketing

- Pricing
- Customer Service inadequate
- Convenience
- Owned vs. franchise – take a look at franchise contracts to ensure that they are motivated to push sales.
- Economy
- We have just 5% having all services. Maybe competitors have a 1 stop shop with flower, child care, dry clean etc..
- Some stores may be more profitable than the others but some others are less profitable bringing the average down.

Interviewer: *We have undertaken a survey among consumers which has showed that the consumers perceive our prices to be 20% greater than that of Wal-Mart. In addition, even though our prices are similar to our nearest competitor, the customers perceive our prices to be greater than them as well.*

What actions can the marketing manager take to change the customer's perception of prices?

Interviewee: Does each shop have the ability to change prices or is it centrally governed for all 200 stores?

Interviewer : *Each store has the ability to set their own prices.*

Interviewee: Some actions:
- Direct to consumer marketing
- Discounts
- Bringing down prices of some products which are significantly higher than our competitor
- Increasing services
- Loyalty program
- Checking prices of affiliated services like dry cleaning etc.. Maybe high prices there has created the pricy image
- Franchise vs owned check for incentives

Interviewer: *The store decides that they need to bring down the prices of the fastest selling 6000 items by 15%. How much would it cost the company?*

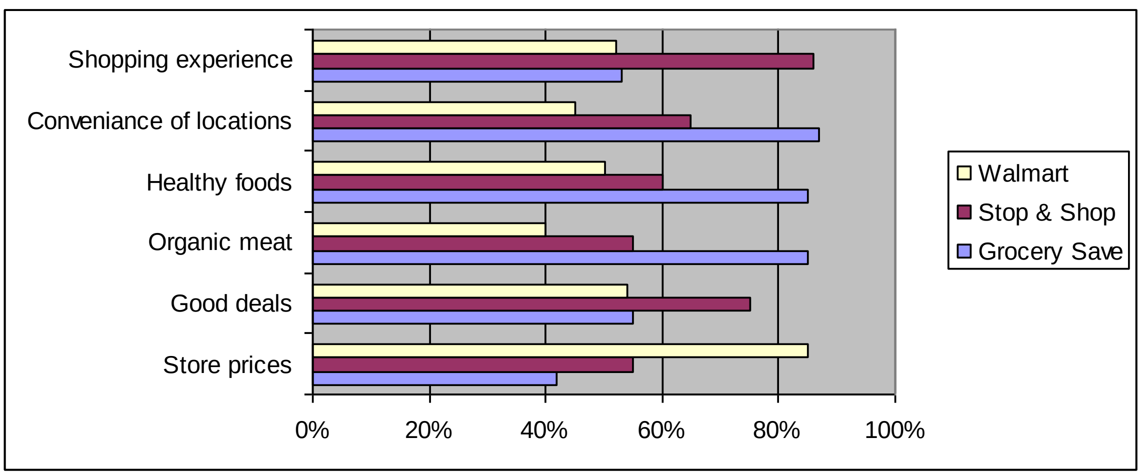
Average sales per store	*40M*
Fastest 6000 items	*24%*
Next 15000 items	*42%*
Number of stores	*200*
Super stores	*120*
Stores over 15000 sq feet	*108*

Interviewee:

Solution

Average sales per store	40M
Fastest 6000	24%
Sales of fastest 6000	9.6M
Assume	10M
Impact on profit (15% X10M)	1.5M
Total impact (200 storesX1.5)	300M

Interviewer: *We have the results of our recent market research. The client is eager to have us analyze the data. Could you let us know the implications of this data for our strategy?*



Interviewee: This market research shows that we are doing well in convenience aspect and healthy foods and organic meat, but we don't have a good shopping experience and our store prices are perceived to be high.

Interviewer: *Good. The CEO just walked in and would like to give him the next steps.*

Interviewee: You came to us with a question of what we should do to successfully compete with Walmart and reverse the decline in our revenues. We looked at the various factors that may affect the average sales/store. We also conducted market research to show where we could improve. Based on the market research, I would recommend the following:

- Improve the shopping experience
- Focus on marketing our competitive advantage – convenience of locations, healthy foods and organic meat
- Work on improving consumers perception of our prices.

Case 11: R & D Productivity

BACKGROUND

Firm: BCG
Round: 2008 Summer, Second
Content: Qualitative

CASE QUESTION

Our client is the head of the R & D department of a pharmaceutical company. He wants us to advise him on how to improve the productivity in the R & D department

INTERVIEWER BRIEFING

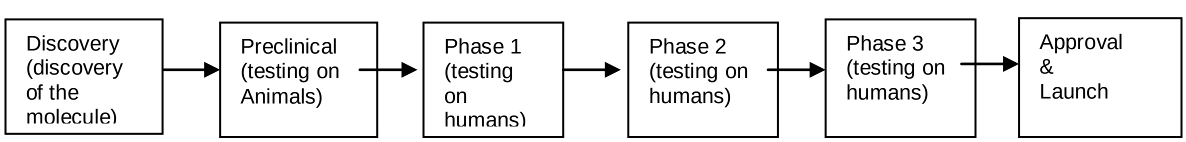
Recommended approach: Explain a good structure to answering the case. Suggest a possible framework and a solution.

Key facts:
Facts that are disclosed during the course of the case:

- There are basically several steps leading from the discovery of the molecule to the launch.
- It normally takes about 10 years to discover a drug and get it approved.
- The drugs are usually patent protected

EXAMPLE DIALOGUE

Interviewer: *There are basically several steps leading from the discovery of the molecule to the launch. It normally takes about 10 years to discover a drug and get it approved.*



How would you measure the productivity of the R & D department?

Interviewee: I would look at the success of the R & D department in terms of the drugs discovered.

Interviewer: *If you had to measure the productivity in terms of a formula that you could present to the shareholders, what would that be?*

Interviewee: The formula would look like this:

$$\frac{\text{NPV of future cashflows of successful drugs} - \text{R \& D cost of all drugs}}{\text{R\&D cost of all drugs}}$$

Interviewer: *What are the big drivers to increase the productivity ?*

Interviewe: Let's look at each aspect of the formula that we have written

NPV of future cashflows .
The big drivers of the NPV of the future cashflows are as follows:

- Quality of the compound
  Quality of the compound is the most important factor that influences the cash flows. Say Lipitor for instance – it's the highest quality compound that's out there in the market and its capturing record revenues year after year. Its important to ensure that sufficient tests have been done during the test phase to ensure that there are no side effects to the drugs.
- Length of research
  As it takes around 10 years to discover the drug, reducing the length of time taken will increase the patent time thus maximizing our return
- Marketing & Sales promotion efforts
  While this aspect is beyond the hands of our client, its an important element of the future cashflows. The sales and marketing team are responsible to build awareness and demand for the product.

R & D cost of all drugs
The 2nd part of the formula is the cost of the producing drugs. Its important to minimize the cost of research to have the maximum productivity. That can be done in the following manner:

- Strict controls and parameters at each stage of the development
  No drug which has a likelihood of failing the stage should be passed to the next stage. This ensures that costs of failure are kept to the minimum. If the controls are not strict, then a lot more money would be spent on patient testing and the drugs end up getting rejected in the later stages. This not only wastes money but also valuable time which could have been spent on another drug.
- Quality scientists
  In order to control the costs of R & D and make it more productive, we need high quality scientists.
- Acquire compounds developed successfully upto certain stages
  Due to the length of time a complete in-house discovery takes, it might be worthwhile to explore outside and either acquire or obtain partnerships with

other companies for promising drugs. This diversifies the risk as well as may yield a good return

Interviewer: *Any other ways to increase productivity? What about the R & D organization?*

Interviewee: We need to keep the scientists sufficiently motivated as it's a very long process before their drug is successful. We need to ensure that they do not move organizations quickly leading to loss of critical talent.

Interviewer*:* *What is the biggest challenge that the R & D head faces today?*

Interviewee: The biggest challenge the R & D head faces today is on evaluation of scientist teams. What kind of measurable metrics to set and how to evaluate the scientist against it.

Interviewer*:* *What is the biggest mistake that an R & D head could make?*

Interviewee: The biggest mistake an R & D head could make is to measure the scientists based on the number of drugs they pass from one stage to the next. This will motivate them to pass certain drugs which maybe borderline or even not fit to be passed to the next stage. This increases the R & D costs significantly and as mentioned before wastes time that could have been spent on other products.

Their incentive structure should be based on compliance, how strictly they have adhered to the guidelines. Any product that fails at a later stage and where the cause can be directly attributed to a prior stage should impact their performance.

Interviewer: *Excellent! Lets summarize and recommend*

Interviewee: We have seen the different stages of drug discovery and know that it takes 10 years to discover a drug. We have also looked at the drivers of productivity which are mainly the future cashflows from successful drugs and R & D investment in all drugs. In order to increase the productivity I would recommend that we take steps to

- Shorten the length of research so that we get maximum patent protection time to maximize our returns.
- Establish strict guidelines at each stage of the process to ensure that failures are discovered more quickly
- Change the incentive structure of the scientists so that the metrics for evaluating them is compliance driven and not based on the number of drugs passed to the next stage.

Case 12: Post–Merger Integration

BACKGROUND

Firm: Deloitte, Human Capital
Round: 2008 Summer, Second
Content: Qualitative

CASE QUESTION

An American company and a German Company have recently merged. They need your assistance to on the human capital side to make sure that the merger is successful.

INTERVIEWER BRIEFING

Recommended approach: Case structure is really important. Make sure they touch on all points highlighted below and explain why each point is important.

- Project Plan
- Leadership Alignment
- Organization Re-design
- Talent retention
- Communication
- Culture
- Synergies

EXAMPLE DIALOGUE

Interviewer: *What are the elements that we should focus on?*

Interviewee: Well, I think we should look at the following:

- Project Plan
- Leadership Alignment
- Organization Re-design
- Talent retention
- Communication
- Culture
- Synergies

Interviewer: *Great. Let's go through each item individually. What are the elements of a project plan?*

Interviewee: The project plan would have

- a list of prioritized business needs,
- ideas on how those actions would be completed
- set timelines and milestones.

***Interviewer** : Good. Now, let's turn to leadership alignment. Why is it important to align the leadership?*

Interviewee: A successful merger cannot depend on momentum coming just from the very top. It has to come from many levels in the organization. To ensure this we need to work with the leadership to identify key stake holders.

***Interviewer** : How would you go about aligning the leadership?*

Interviewee:
– You will have merger teams on either side who are working on the integration this should include key influencers and stakeholders
– Get buy-in from key influencers and stakeholders throughout the organization
– Include these teams in your plans and incorporate their inputs, get their perspective into the project plan. This will give them a sense of ownership. And help in keeping the momentum going leading to a successful integration
– Be clear to these teams that
  - The merger is going to happen
  - identify what are the ways the merger is going to affect them
  - what are the conflicts they may face
  - what kind of resources do then need
  - what are the critical things that they are working on that might affect the merger.

***Interviewer:** Good. Now what about organizational design?*

Interviewee: There is an overall business strategy that's driving the change in the first place. We need to create an effective organization that matches the broad business strategy so that the business objectives can be achieved.

– **The main incentive here is to create a new organization** or reorganize so that it is aligned with the business strategy **that is driving the change in the first place**
– Identify the requirements of the new organization and compare it to the inventory of existing capabilities
– Take inputs from all levels to do this
– Identify the talent base that you have available, their competency and find the top performers
– If there are gaps, if necessary recruit from outside

Interviewer: *Good. Now, let's look at the challenges. Why is talent management important?*

Interviewee: There is an insecure environment. Talented people are highly marketable. Don't give them a chance to consider leaving. Convince them that they will be valued in the new organization.

Interviewer: *How could we do that?*

Interviewee: Look look at 2 aspects – one is talent retention during the transition and other is talent management for the new entity.

<u>Transition</u>

– When there is change/merger/reorganization, there's always uncertainty
– The most talented people are the ones most likely to leave for other, more secure places
– To prevent this you should reach out early to them and make sure that you explain the change to them
– Work with HR to implement retention strategies focused on your top employees.

<u>Post-Merger Talent management</u>

– Common performance management systems – what metrics to evaluate, how do u do annual reviews, is there mid term reviews etc…
– Harmonize compensation plans, benefit plans, pension plans
– Create global talent management programs – how do you reward high performers, mentoring programs, rotation etc…

Interviewer: *Good. Now, what can you tell me about communication?*

Interviewee: Communication is key to ensure morale and productivity remain high. There are 2 different types of communication: internal and external.

<u>Internal Communication</u>

– Times of transition create all sorts of rumors through the organization
– These rumors can worsen the problem of talent retention and cultural clash
– Best way to tackle this is to **communicate early and communicate often**
– Keep communicating the progress of the reorganization, the reason for it, the final objective and how the transition is coming along
– If necessary, repeat the same message over and over even if there is nothing new to report
– And make room for 2-way communication **so top leadership is aware of the rumors and emotions floating around at the lower levels** and can address them squarely

– Remember that any empty communication space will be occupied by rumor and speculation, so don't allow it.

<u>External Communication</u>

– Present unified face to the external world
– Keep our business partners, our customers, our suppliers apprised of the developments
– Have press conferences
– Press releases
– Interviews
– Public event sponsorship

Interviewer: *Good. Now, what can you tell me about the culture?*

Interviewee: Culture is deep rooted and there is no way to change them quickly. Its something that happens over time.

a. Culture is the most difficult challenge to manage – it's usually very deep-rooted and intangible, so don't try to change it overnight
b. Focus on areas where cultural fit is most important, such as the areas in which the two merged entities directly communicate
c. In these areas, try and build a new culture by creating a new brand or identity for the merged entity
d. Highlight the importance of cultural issues to business value so that you get buy-in from management.

Interviewer: *Great. Now what can you tell me about cost synergies?*

Interviewee: There may be cost synergies that we need to look into which may involve lay-offs which could be another challenge that the organization will face.

[NOTE The interviewee must not to insist that we need to cut people etc.. this is a human capital case and not cost reduction. He must be sensitive to the issue.]

Interviewer: *Good. What other decisions are there to make?*

Interviewee: I would also think of the following?

1. Which companies processes to adopt
2. Build a shared services platform
3. Enterprise wide HR system
4. New IT system
5. Harmonize compensation plans, benefit plans, pension plans
6. Create global talent management programs

Case 13: Ice Cream Manufacturer

BACKGROUND

Firm: BCG
Round: 2008 Summer, Second Round
Content: Qualitative and Quantitative

CASE QUESTION

The client is an ice cream manufacturer. They are the European market leader with a share of 31% of the ice cream market. The client is concerned because its sales are more seasonal than those of competitors, even though overall profits are excellent. Note that 90% of his costs are fixed.

INTERVIEWER BRIEFING

Recommended approach: A good possible framework is to look at:

- Company
    - Product mix (characteristics, seasonality, how perishable it is, etc.)
    - Operations (is the manufacturing capacity used continuously or seasonally throughout the year, can we use the capacity to produce less seasonal products than ice creams)
- Customer
    - Segments, trends, characteristics in terms of seasonality
- Competitors
    - How do they differ from the client with regards to the two previous points (Company and Customer)

It is important that the candidate recognizes that there are two ways to reduce seasonality here:

- Modify the seasonality of sales themselves
- Modify the production or the products to come to a less seasonal use of capacity.

Key facts:
Facts that are disclosed during the course of the case

- Products
    - Ice creams, sorbets

- Very perishable products (by nature and regulation)
  - Very extensive to store
- Operations
  - Production follows seasonal sales pattern (too expensive to store)
  - The production line could be used to produce other types of items.
- 3 main types of Customers
  - Ice cream stores (highly seasonal)
  - Retail / supermarkets (moderately seasonal)
  - Restaurants (almost not seasonal)

- Market situation

Channel	Market split	Client market share on this channel	Contribution to its overall market share
Retail / Supermarket	40%	40%	16%
Restaurants	30%	10%	3%
Ice cream stores	30%	40%	12%
Total	100%		31%

<u>EXAMPLE DIALOGUE</u>

Interviewer: *How would you go about approaching this problem?*

Interviewee: [Interviewee should come up with a framework. See briefing above.]

Interviewer: *Good points. Where do you want to start?*

Interviewee: Let's talk about the operations first. The demand for ice cream is by nature seasonal. Does the client currently produce ice cream continuously or seasonally throughout the year?

Interviewer: *There are peaks in production to match demand. Why do you ask?*

Interviewee: Considering that 90% of the current costs are fixed, it might be less expensive to smooth production over the year. The capacity would not need to be as high since there would not be peaks anymore, therefore the fixed costs would be reduced. However, this would involve storage of ice cream during the months of low demand.

Interviewer: *This is an interesting thought. However, our ice cream is too perishable to be stored for more than 2 weeks.*

Interviewee: Maybe we could modify our products by adding preservatives and stabilizers.

Interviewer: *Not a bad idea. However, regulations prevent us from doing this.*

Interviewee: Ok. It seems that production of our ice cream will remain seasonal then. To maximize the use of capacity and reduce our fixed costs burden, could the plants be used to manufacture other types of products during non-peaks periods?

Interviewer: *This would be a possibility, but we have not explored it in details. What else would you need to know?*

Interviewee: We discussed the possibility to reduce the seasonality of operations. Now, I would like to talk about reducing the seasonality of sales. Who are our current customers?

Interviewer: *Who do you think they might be?*

Interviewee: As a customer, I can buy ice cream at supermarkets, ice cream stores/chains, restaurants. Do we sell to all of these channels?

Interviewer: *Yes, they are all our customers. Which do you think has the most seasonal demand?*

Interviewee: Ice cream stores would definitely be the most seasonal. Supermarkets would be less seasonal because people still eat ice cream at home during winter watching TV, even though they buy less than during summer. Finally, I would say that restaurants are the least seasonal because they always have ice creams on their menu and add it with apple pies, chocolat tarts, etc. Does it seem reasonable?

Interviewer: *It makes sense.*

Interviewee: How do we split our sales to these channels? And how does it compare to our competitors?

Interviewer: *Let me give you the following data. We miss some client information here. Could you please calculate what's left for me?*

Channel	**Market split**	**Client market share of this channel**	**Contribution to its overall market share**
Retail / Supermarket	40%	40%	16%
Restaurants	30%	**?**	**?**
Ice cream stores	30%	40%	12%

Interviewee: You mentioned initially that the total market share of the client is 31%. Since retail/supermarket and ice cream stores contribute to 16% and 12%, restaurants must contribute to (31-(16+12)=) 3%. Therfore, the client's market share on restaurants must be 10%. (30%/3%=10%)

Interviewer: *Based on everything we discussed, what would you recommend the client do to address its seasonality concern?*

Interviewee: Firstly, I would recommend targeting more strongly the restaurants, as their demand is less seasonal and the client is relatively weakly positioned there compared to competitors. Secondly, I would recommend looking at products we could manufacture in the current plants during non-peak times of the year, so as to optimize the use of the fixed cost capacities.

Interviewer: *Thank you.*

Columbia Business School

Case 14: Mayor of Youtown

BACKGROUND

Firm: McKinsey
Round: 2007 Full-Time, First
Content: Qualitative and Quantitative

CASE QUESTION

Your client is a mayor of Youtown, population 500,000. Recently the town has experienced a population decline which has negatively impacted the economy. When the mayor ran for election his political platform was based on economic growth so this is an issue that is of great concern for him. He has hired McKinsey to understand what he can do to revitalize the town?

INTERVIEWER BRIEFING

Recommended approach: There's no real framework to use here. The key is to be structured throughout, to prioritize your thoughts, and to be sure to be able to understand the interdependencies of the population growth and unemployment rate.

Key facts:

- Population 500,000
- Unemployment rate 8%
- Population growth of 5%
- Ave company employs 500 people

EXAMPLE DIALOGUE

Interviewer: *First question is, What could cause a declining population?*

Interviewee: Well, the most obvious reason would be jobs or employment. But, it could also be quality of life issues directly related to city services, like crime, schools, roads, and so forth. It could also be quality of life issues related to other issues, like culture. Finally, it could be cost of living issues for the residents.

Interviewer: *Great. Let's say the mayor has done some preliminary research and the reason people are leaving is because of lack of employment opportunities. What reasons can you think of for why companies are leaving Youtown?*

Interviewee: I think one reason would be financial. Perhaps the tax rates in Youtown are too high, or property costs are too high, or labor costs are too high. Another reason would be around talent. It might be that the companies can't find the kind of skilled labor pool they need. A third reason could be around location – it could be that as commerce changes Youtown is no longer in a convenient location for companies to conduct their business.

***Interviewer:** Ok, so how can the mayor drive business growth and create opportunities to increase population?*

Interviewee: Well, first, let's approach the business growth. The mayor could identify what all the problems are that companies have and define strategies to address them. For example, if companies are leaving because of financial issues then the mayor can consider lowering the tax rate or give tax incentives or offer property tax benefits. He can also perhaps offer labor subsidies to entice companies to come back to Youtown. If the reason is around talent, then the mayor can implement a training program to give the labor pool the skills needed to be attractive to potential employers. If location is an issue for companies, the mayor can consider implementing a transportation subsidy or offer transportation services to help them conduct their business.

On the second issue of creating opportunities for population growth, I would think about it in terms of cost of living and quality of life. On the cost of living side, the mayor can consider reducing tax rates, property tax rates, and other issues that make the cost of living more expensive in Youtown. On the quality of life side, the mayor can address issues like transportation (making it easier to get around), improving the environment, creating more outdoor recreation spaces, creating more cultural attractions. Also, the mayor can also create a promotional campaign to attract more people to the city.

***Interviewer:** Shifting gears, how many employers would the mayor need to attract in order to increase population growth by 5% and decrease unemployment by 3%?*

Interviewee: Ok, well, the current population is 500,000. What is the current unemployment rate and how many employees does one company employ?

***Interviewer:** One company employs 500 people and the current unemployment rate is 8%.*

Interviewee: And the unemployment rate affects only people who can be employed?

***Interviewer:** Yes.*

Interviewee: So the current population is 500,000 and assuming the average life span is 80 years, we can segment the population like this: 0-20, 20-40-40-60, 60-80. I'll make the assumption that the working age population is from 20-60. Assuming an even distribution then we have 250,000 of employable people.

Interviewer: *Let's say it's 300,000.*

Interviewee: Ok, so currently the unemployment rate is 8% which means that there are 24,000 unemployed people. We want to reduce that to 5% of the new population. The new population would be 1.05x the current population. I'll assume that the growth is evenly distributed across all age segments so I can apply the 5% growth to the working segment. So 300,000 x 1.05 = 315,000 people. The new unemployment rate would be 5% of this new number which is 315,000 x .05 = 15,750 unemployed people. So the people who need to be employed is the difference which is 24,000 – 15,750 = ~ 8,000.

Now, the additional 15,000 people from the population growth also need to be employed so it's 8,000 + 15,000 = 23,000. You mentioned that each company employs 500 people so 23,000/500 = 46. The town will need 46 new companies to accommodate the 3% decrease in unemployment and 5% increase in population.

Interviewer: *Good. So what can the mayor do to attract businesses to the town?*

Interviewee: The mayor can consider lowering the tax rate or give tax incentives or offer property tax benefits. He can also perhaps offer labor subsidies to entice companies to come back to Youtown. If the reason is around talent, then the mayor can implement a training program to give the labor pool the skills needed to be attractive to potential employers. If location is an issue for companies, the mayor can consider implementing a transportation subsidy or offer transportation services to help them conduct their business.

Interviewer: *Let's say that I am the mayor and you have to summarize your recommendation what would you say?*

Interviewee: (Summarize the case and give the recommendation)

Case 15: Low Cost Airline

BACKGROUND

Firm: Bain
Round: 2008 Summer, First
Content: Quantitative and Qualitive

CASE QUESTION

Our client is a private equity firm focused on the transportation industry. They are looking at investing in a start-up low cost airline carrier focused on the route from New York to London. Specifically they are looking to play on JetBlue's presence at JFK and Easyjets presence in Stansted. Currently there are only large players in the market, no low cost carriers for that route. The question is, should they invest?

INTERVIEWER BRIEFING

Recommended approach: Explain a good structure to answering the case. Suggest a possible framework and a solution.

Key facts:
Facts that are disclosed during the course of the case

- Numbers of planes
    - 40 flights between New York and London
    - 300 seats per flight
    - Flights are 90% full
- Market segmentation
    - 70% of passengers are price sensitive.
    - Sub-fact two
- Costs to airline per ticket (same for entire market)
    - Planes - $180
    - Fuel - $180
    - Labor - $60
    - Other - $60
- Competitor ticket price - $450
- Start-up is in negotiations to procure a plane and has already negotiated space in terminals in JFK and Stansted.

EXAMPLE DIALOGUE

Interviewer: *How would you go about answering this?*

Interviewee: To answer this question I would look at several factors. First I would look at the potential for revenue. I would try to size the market and understand if there is a sizable enough market for a new player, and I would examine the price of competitors to understand if given the current market size what level of revenue can we expect. Next I would look at the costs of this endeavor and determine whether at ths revenue level this business is profitable.

Interviewer: *Good, let's start with sizing the market. How would you go about this?*

Interviewee: I would look at all current flights between New York and London and look at the breakdown of business versus economy class tickets sold.

Interviewer: *How many flights do you think fly between New York and London per day?*

Interviewee: Well, there are about four US carriers and another two or three British carriers and I would guess that they each fly about eight or nine flights per day. So, somewhere between 48 and 54.

Interviewer: *Well, that's close. Let's say that there are about 40 flights per day.*

Interviewee: Then I would look at the number of seats per plan and the percentage of those seats that are full.

Interviewer: *Good, let's say that on average a plane can carry 300 people and is 90% full.*

Interviewee: So, if there are 40 flights with 300 people per flight and 90% full, we have a market of 40 x 300 x .9 or 10,800 about 11,000.

Interviewer: *Good, now as you mentioned earlier, what % of passengers do you think are price sensitive vs. not price sensitive?*

Interviewee: I would guess that the majority of passengers are price sensitive, so I would say around 70/30.

Interviewer: *OK, so what is your total potential market?*

Interviewee: Well, we are looking at 70% or 11,000 or 7,700.

Interviewer: *Good, now let's move to costs. What costs would need to be considered?*

Interviewee: There are many costs such as planes, fuel, terminal space within JFK and Stansted as well as labor including everything from pilots to administrative staff, marketing and then various other costs such as food and or amenities aboard the planes.

Interviewer: *Let's say that their costs are as follows calculate on a per ticket basis: plane cost $180, fuel costs $180, labor costs $60, and all other costs are $60.*

Interviewee: Thus the total cost per ticket to this airline is 180 + 180 + 60 + 60 or $480. Do we know what the current airlines charge for their tickets?

Interviewer: *Yes, they charge $450 per ticket.*

Interviewee: And do we know what their costs look like?

Interviewer: *You can assume that the $480 per ticket is the same for the entire market's costs per ticket.*

Interviewee: So the competitors are selling their tickets at a loss.

Interviewer: *That is correct, what might be some reasons for this?*

Interviewee: The competitors probably have a very diversified system of routes and can thus afford to lose money on their route from New York to London if they make is up on shorter routes. They may also have a large disparity in the rates they charge both using business class as well as last minute or peak time reservations to make up for their losses on other routes.

Interviewer: *So, if this carrier could reduce their costs to $350 would you recommend that they enter the market?*

Interviewee: Well, if they enter the market and undercut the major players, their competitors would simply reduce their rates and it would become a price war. And, since their competitors are more diversified and have established brand, they will probably fare better under such circumstances.

Interviewer: *What would you tell our client?*

Interviewee: Well, especially since our client is a private equity firm and is looking to get in and get out of projects, I would recommend against investing in this market. The returns are small if any, and with such high start up costs it is a very risky venture.

Case 16: The Amazing Golf Ball

BACKGROUND

Firm: Bain
Round: 2007 Full-Time, Second
Content: Qualitative and quantitative

CASE QUESTION

You are an inventor who's most recent creation is a new type of golf ball. The golf ball is indestructible and is not possible to lose. What should the price of the golf ball be?

INTERVIEWER BRIEFING

Key facts:

- N/A – you are required to generate all assumptions on your own.
- At some point the interviewer may want to say the following:
  - Don't worry about the time value of money
  - The golf ball costs $200 to produce with no R&D or fixed costs

EXAMPLE DIALOGUE

Interviewer: *How would you approach this question?.*

Interviewee: I think that in thinking about how to price this golf ball we need to consider two things, the cost to produce the golf ball and how much the average customer would save over his lifetime by using it.

Interviewer: *Why are those two items relevant?*

Interviewee: Well, we need to price the golf ball above cost (fixed, variable, and R&D costs) so that we make money on the ball. But we can't price the ball above the amount that a customer is going to save on other types of golf balls if he uses ours.

Interviewer: *OK, I agree with that.*

Interviewee: Am I correct to assume that I am to build up assumptions?

Interviewer: *That is correct.*

Interviewee: OK, lets start with the market size in terms of people.

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I'm going to assume that there are 300 million people in the United States.

Interviewer*: That's a reasonable assumption.*

Interviewee: When I was growing up, half of my family played golf. But that's a bit more than average, so let's say that one-fifth of the US population plays golf. That means that 60 million people in the US play golf.

Interviewer*: I'm having trouble seeing how that relates to how we price the ball.*

Interviewee: You're right, I wanted to generate a market size just to get a sense of how much money we could one day make. Let me get back to the price of the ball.

I'm going to assume each golfer plays golf 2 times a month and uses 3 ball every time he plays. That means that each golfer uses 72 balls a year. Let's just round down to 70.

Let's also assume that a golfer plays golf his whole life but on average picks it up when he is 35. And let's assume that the average life span is 70 years old. That means the average golfer plays for 35 years. If he uses 70 balls a year, he uses 2,450 balls over the course of his life. Let's just round that to 2,500.

Now we need to come up with how much an average golf ball costs. I want to say that a pack of 3 costs $5.

Interviewer*: Let's just call it $2 a ball.*

Interviewee: OK, at $2 a ball that means the average golfer spends $5,000 over the course of his life. But we have to discount that to account for the time value of money.

Interviewer*: Let's not worry about that for the moment.*

Interviewee: Great. So $5,000 would be the most you could charge. The least you could charge would be the cost of the ball. How much does it cost to produce the ball?

Interviewer*: $200 a ball.*

Interviewee: OK. Are there any fixed costs? Also, how much have we invested in the ball to develop that?

Interviewer*: I think those are excellent points, but let's not worry about that right now.*

Interviewee: OK, then I would say we should price the ball between $200 and $5,000.

Interviewer*: I want you to tell me exactly where we should price the ball.*

Interviewee: Well, if the customer is perfectly rational, then anyone less than 35 is willing to pay up to $5,000. But there will be some golfers older than 35, which means they will have fewer years of play and be willing to pay less. Plus, $5,000 is an awful lot for a ball and some people don't know for sure that they will play golf for their whole life. We'd have to do some market research to come up with the correct price, but I think somewhere around $2,000 would be appropriate.

***Interviewer**: That seems like a lot.*

Interviewee: It is a lot, but the price of the ball is well below how much the average golfer would spend on balls.

***Interviewer**: What would you do for older golfers?*

Interviewee: I think that maybe you could offer the ball at a discount, something like movie discounts for seniors, etc.

***Interviewer**: But what about a 15-year-old who doesn't have enough money to buy a ball?*

Interviewee: Well, I suppose you could discount it for him, too.

***Interviewer**: But by how much? You're selling a cheap ball to a kid who's going to play for more than 50 years!*

Interviewee: You're right. Well, what if you arrange for financing for the ball.

***Interviewer**: This is intriguing, tell me more.*

Interviewee: Well, it's a bit like a student loan, where you would arrange financing so that the 15-year-old only has to pay a small amount up front and then pays for the rest over time, with principle and interest payments.

***Interviewer**: I like that idea. What's the problem in terms of the market for this ball?*

Interviewee: Well, the funny thing about this ball is, let's suppose you sell one to every golfer in the world. Because the ball never wears out, you have no new market except for the population growth rate. And that's only for incremental growth, because when someone dies they can pass it on to someone else.

***Interviewer**: You're right. And when we told this to the potential investors, they didn't like that at all. They didn't like that they'd put in money now for a business that won't have a market after a year or so. What would you say to them?*

Interviewee: I'd say, look, you have the opportunity to invest in a company that is going to sell $2,000 golf balls to 60 million people overnight, and the balls only cost $200 to make. That's a huge revenue generation opportunity. You could get your return out after a year and go invest in something else.

Interviewer*: Totally correct. They'd be crazy to pass that opportunity up. Nice job.*

Case 17: RLS Drug

BACKGROUND

Firm: A.T. Kearney
Round: 2007 Part-Time, First
Content: Qualitative and quantitative

CASE QUESTION

Our client is a US Pharmaceutical company that has an existing, FDA approved drug for Parkinson's that has been on the market for several years. One of the side effects for Parkinson's is RLS or Restless Legs Syndrome. This existing drug is often used to treat patients with RLS. The client wants to understand whether it would be profitable to roll out a drug specifically targeting RLS and has asked AT Kearney to evaluate this.

INTERVIEWER BRIEFING

I first structured my thoughts on paper. I divided the sheet of paper into two sections – Costs and Benefits.

Costs:

- FDA approval process
- Manufacturing Costs
- Marketing Costs.

Benefits:

- Market Size
- Competition
- Our Market Share
- Pricing – Economic Value to the Customer (EVC), Cost +, and Competitive Pricing.

EXAMPLE DIALOGUE

Interviewer: *How do you want to structure this?*

Interviewee: (see briefing above).

Interviewer: *What i**nformation do you want?.***

Interviewee: Let's start with the cost side. Do we have any information on that?

Interviewer: *Well, we know that the Client is already on phase 2 of the drug trial. They have feedback on the drug – it has great efficacy and very low side effects. They estimate that the drug can be rolled out in one year. Other than this information, I do not have any cost numbers and costs are not important.*

Interviewee: So, I let's look at the benefits. Do we know anything about competition?

Interviewer: *This is an emerging market with no official competition, though like our existing drug, there are other general Parkinson's drugs that are being used to treat RLS. In the Parkinson's drug competitive spectrum, however, we are positioned in the following way*

	Client - #1 in market share	Company #2 in market share	Companies #3 - #10 in market share
Market Share	30%	25%	45%

Interviewee: Given that we have existing competition, what about any emerging competition on the horizon?

Interviewer: *The Client is expecting new competition in 2009/2010 and that this competition will have a drug for RLS that has the double the efficacy of the client's drug.* ***Can you size up the market for this new RLS drug so we can better assess the benefits before delving further into the competition?***

Interviewee: The size of the US population is 300 Million. Do we know what percentage of the population has RLS?

Interviewer: *13%.*

Interviewee: Then, let's say the total market is roughly 400 K people. But how many people with RLS seek treatment?

Interviewer: *Only about 30% knew or sought treatment for RLS.*

Interviewee: That leaves us with a market size of 120 K people. Now let's get a dollar amount for the market size. Do already have an established price and dosage for the RLS medication?

Interviewer: *The RLS medication had to be taken twice a day and that each pill was 2$.*

Interviewee: Then the revenue per day is 120 K * 4$ = 480 K per day.

Interviewer: *Can you calculate this annually?*

Interviewee: Well, there are 365 days in a year . . .

Interviewer*: Stop. As with most medication, the patient does not take the medication every day of the year but would take it about half of the year, those days when they felt the symptoms were particularly strong.*

Interviewee: Well, then it would be 150 days, so we get $72 annually.

Interviewer*: What about the marketing plan for this drug?*

Interviewee: Well, let's look at all of the participants and their interests:

Client - - - > Health Care provider - - - > Physician - - - > Pharmacist - - - > Patient

The client = manufacturing and marketing – their interest is profit

Health Care Provider = will determine whether the EVC is substantial and the price low enough to authorize the physicians to prescribe the durg – their interest is low costs

Physician = will prescribe according to EVC – their interest is efficacy

Pharmacist = no impact on the drug other than middle man

Patient = depending on whether informed or not, may or may not ask for the drug, often trust the Physician with re to efficacy, listens to the Health Care provider with re to price

Given those participants, the best marketing approach would be to target the Physician because the price at 2$ a dose, 2 times a day was already pretty low and would probably appease the Health Care Provider. Also, since this is the only FDA approved drug of its kind, the Physician could encourage the Health Care Provider to accept this on their list

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of approved drugs. Marketing approaches to reach the Physician could include: Publications, Free Samples and Bundled products (with the other Parkinson's drug).

Interviewer: *How should we advise the Client to price the drug if they ae questioning their 2$ a dose price?*

Interviewee: We could take three approaches to pricing the drug

1. Competition based pricing – in this case as there is no direct competition, we would look at the prices of the substitutes for the client's new drug - the drugs that were currently used to treat RLS despite not being FDA approved for that use.
2. Economic Value to the Customer based pricing – in this case the value of this drug to the customer is that it is designed specifically for RLS and therefore can be used more accurately to treat RLS than the other substitute drugs – I estimated the EVC price to high given this background
3. Cost plus pricing – in other words how much the drug costs to manufacture – plus the client may want to pad number to try and make back the R&D costs put into developing this drug

Interviewer: *Good. Thanks.*

Case 18: Liquor Company

BACKGROUND

Firm: BCG
Round: 2007 Summer, Second
Content: Mainly qualitative

CASE QUESTION

Our client is a multi-billion dollar liquor distributor. It has hired a consultant to determine why its whisky brand is not growing.

INTERVIEWER BRIEFING

The key to this case is to understand the customer preferences are shifting away from the medium range into either the high end or the low end. The high end provides the 70% male segment with the refined taste and distinguished image and taste that they are attracted to. The low end provides the 30% "bar crowd" a cheap whisky to imbibe. The rise in price has driven many of the customers away and the company needs to reconsider its pricing strategy and branding strategy.

Competition and Market Share

Market Segment	High	Medium	Low
Growth this year	14%	-6%	8%
Competitors	10 total (5 new)	2 total (including client)	4 total

Our client is in the medium segment

Customer segmentation and trends

Our client's customers are as follows (give all this information at once):

70%	30%
Male 40-55 years Like taste, brand Usually enjoys a drink after work Into the tradition and brand Drink whisky straight or on the rocks	Younger males and females 21-35 Bar and club crowd Drink mixed

Product

- Our client has increased the price from $11 to $12
- Competitors in the medium range are priced at $11
- Distillers have changed the ingredients to save $0.25/bottle on COGS but have not changed the taste.

EXAMPLE DIALOGUE

Interviewer: *How would you approach this case?*

Interviewee: Well, I'd start externally: What has happened with the competition and the customers? In terms of the competition, I would look at changes in market share, any new competition, the segmentation, and market growth. Regarding segmentation, I would also look at the customers, what do they want? Finally, I would look internally and look at our product, marketing, and pricing.

Interviewer: *Great. Where do you want to start?*

Interviewee: Well, what do we know about the market? How is it broken up?

Interviewer: *Well there is a high, medium and low end of the market? The high end has 10 competitors, the medium end has 2 including the client, and the low end has 4.*

Interviewee: Okay, and how is each market growing?

Interviewer: The high end is growing at 14%, the low end is growing at 8%, and the medium range is contracting at 6%.

Interviewee: Well, I can see a problem already. We're in a segment of the market that's contracting. Has share changed or have there been any new products introduced?

Interviewer: *No.*

Interviewee: Then, let's look at customers. What do we know about our whiskey drinkers?

Interviewer: Our client basically has two types of drinkers:

70%	30%
Male 40-55 years Like taste, brand Usually enjoys a drink after work Into the tradition and brand Drink whisky straight or on the rocks	Younger males and females 21-35 Bar and club crowd Drink mixed

Interviewee: That's interesting. We must be rather traditional brand if we have such an older following. Let's turn internally. What do we know about our product? Have we changed price, marketing, or the product recently?

Interviewer: *Our marketing has been consistent. The distillers recently changed ingredients to save 0.25$ per bottle, but that hasn't effected the taste. Also, we have recently risen in price from $11 to $12.*

Interviewee: That's interesting. What is our competition priced at?

Interviewer: *The competition at the mid-range part of the market is at $11.*

Interviewee: Well, that's interesting. Do we know if this price change affected the younger crowd?

Interviewer: *What do you think?*

Interviewee: I would assume this would affect them because they drink our product mixed, and there's probably little discernable difference to them. They probably have less brand loyalty as well.

Interviewee: *Good. Now what would you recommend to our client?*

Interviewee: Well, it seems that we've learned a few things:

- Younger, bar crowd customers are price sensitive
- But 70% of our customers have great brand loyalty and would like migrate to the higher end market
- The 30% bar crowd are moving to the lower end market because they drink whiskey mixed
- The client should try to enter the higher premium market to recapture their customers and grow market share
- Client could also consider entering the low end market with a brand extension

Case 19: Houston Police Department

BACKGROUND

Firm: Katzenbach Partners LLC
Round: 2007 Full-Time, First
Content: Qualitative and quantitative

CASE QUESTION

Our Client is the Houston Police Department. They have hired us to determine how many Police Officers they will need next year.

INTERVIEWER BRIEFING

Recommended approach: The case should be structured in four parts, each focused on one question. Interviewer should start giving out the first question and should pass on to the second question only after the interviewee has finished addressing the first question. For questions 1, 2 and 4, the interviewer should request the ideas to be put in groups. The fours steps of the case are as follow:

1) What things you should analyze in order to help our client estimate the number of police officers needed next year? Please organize your ideas in different groups

2) Where would you find the information to analyze the issues just mentioned? What sources of information would you search?

3) Quantitative analysis

4) What would you recommend the PD do to improve its efficiency?

Key facts:
(Not to be given until the third question)

- <u>City Population:</u> 2 million in 2000, grew 20% between 2000 and 2007, expected to be 2.5 million in 2008
- <u>City Area:</u> 4200 squared miles in 2000, 4400 in 2007 and expected to grow 80 sq miles by 2008
- <u>Officer per 100,000 inhabitants:</u> 220 in 2000; 200 in 2007
- <u>Benchmark officers per 100,000 inhabitants:</u> 240 (for Los Angeles)

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EXAMPLE DIALOGUE

Interviewer: *So how would you start approaching the problem? What are things you would analyze to determine how many officers the Police Department will need?*

Interviewee: Ok, I will start by analyzing the area of the city and the population. I would also like to have more information on the current crime rate, the types of jobs the policemen are performing, the hours per week they work, holidays they have. In addition I would look at the quantity of Police Offices there are in the city, if there are any special occasions in which they need more resources/

Interviewer: *Those are great ideas. Could you put them in different groups so we are sure we don't forget anything?*

Interviewee: Sure, so I will have three groups:

Geography and other statistical information	Labor information	Other specific information
• Area of the city • Population • Crime rate • Number of Police Offices	• Hours per week • Days off • Holidays • Job types (such as administrative, traffic control, crime prevention, etc)	• Special events planned • Contingency events

Interviewer: *Good, is there any other thing you consider important in order to assess the number of police officers needed?*

Interviewee: Yes, we should do some benchmark analysis with other cities similar to Houston. That will actually be another group of our analysis:

Benchmark Analysis
• What is the crime rate in other cities? • How many police officers do they have? • What type of jobs they perform? • How has the number of police officers evolved? during the past years • How has the crime rate change during the past years?

Interviewer*: Excellent, I think we are ready to move on to another question: What sources of information would you consider in order to analyze the ideas you just mentioned? Please link each item with where will you find that information.*

Interviewee: Ok,

1) Geography and other statistical information
- Area of the city → Local government and PD statistics
- Population → Local government and PD statistics
- Crime rate → PD statistics
- Number of Police Offices → PD statistics

At the PD I will ask the Administrative Chief

2) Labor information
- Hours per week
- Days off
- Holidays
- Job types

→ Our source will be the head of HR or Staffer of each department.

3) Special events:
- Special events planned
- Contingency events

→ Again here we need to have inside information from someone with a High rank (chief of P for example)

4) Benchmark Analysis

All this information could be obtained from other Police Department at other cities. They should be collaborative as they are not competition.

In all cases we should conduct interviews with the people mentioned in order to obtain the information needed for our analysis. In addition we could interview some people living in the city to obtain their perception of the Police Department of Houston and their perception of the city's security.

Interviewer*: Ok, let's move on. We actually were able to obtain some information that you wanted to analyze. In year 2000 the population of the city was 2 million inhabitants, in 2007 (seven years later) grew by 20% (total in the seven years) and it is expected to be 2,500,000 in 2008. Area of the city was 4200 squared miles in 2000, 4400 in 2007 and is estimated to grow 80 squared miles by 2008. Finally Officers per 100,000 inhabitants were 220 in 2000 and 200 in 2007. What are your initial thoughts in these figures?*

Interviewee: It is obvious that the number of officers has grown less than the population of the city.

***Interviewer**: Yes, can you calculate the number of officers?*

Interviewee: Sure,

	2000	2007	2008
Population	2,000,000	2,400,000	2,500,000
Area	4200	4400	4480
Officers per 100,000 inhabitants	220	200 ???	
Number of officers	4,400	4,800	

***Interviewer**: Perfect, now, using as benchmark Los Angeles… they have 240 officers per 100,000 inhabitants. How many police officers would that ration gives us?*

Interviewee: 6000

***Interviewer**: Yes, what do you think of this number?*

Interviewee: I think it is actually too high. We would be increasing our force by 25% in only one year, when the population has been growing only 1% per year. In addition, may be LA has added many officers in order to decrease their crime rate that was actually very high. Another reason could be that LA is a city with a large geographic area and people may be more spread out than in Houston.

***Interviewer**: You are right, it is too much. What would your estimate be then?*

Interviewee: I would use the ratio they had in 2000 (220 officers per 100,000 inhabitants). That will give me a total of 5280 officers.

***Interviewer**: OK, now let's imagine the Police Department doesn't have the resources to increase the number of police officers it currently has. What ideas would you give the PD in order to increase their efficiency and improve their service?*

Interviewee: I would divide my ideas in three groups: Operations, citizen work and focus

Operations	Citizens work	Focus
- analyze procedures - assess work load for each division - rebuild teams if necessary	- train and education population in working with the police in making the city more secure - organize seminars in the neighborhoods to assess needs	- analyze crime rate in different neighborhood in order to focus and maximize resources - assess city needs and focus resources in priority issues

Interviewer*: Any other idea?*

Interviewee: Yes, they should also focus on training their staff in order to make them more efficient. They should assess strengths and weaknesses of the officers for each job. Finally, they should analyze current technology and determine possible improvements in administrative issues that could be solved with investment in IT.

Interviewer*: Perfect, thank you.*

THIS IS THE LAST PAGE
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