University of Michigan Business School

Case Book 1

Includes:
Cases for interviews for graduating students

2001-2002

Michigan Consulting Club

University of Michigan Business School

A Word of Thanks !

This casebook is the result of many hours of hard work put in by students of the University of Michigan Business School. In the first year of their MBA program, a year that is difficult because of academic and career search pressures, they devoted several hours to interview second year MBA students in order to gather real cases that were administered during interviews for full-time consulting positions. In addition, they rewrote the cases in a user-friendly format. The consulting club and the class of 2002 (members of the Michigan Consulting Club) would like to thank all the people who contributed to the MBA2 Case Book.

Thank You,
Vishal Seth
(Executive Vice President)

Introduction

Overview

On behalf of the 2001-2002 Consulting Club, we would like to welcome you to your second year at the University of Michigan Business School.

We believe that the consulting industry offers unparalleled opportunities and rewards for intelligent and creative professionals. Perhaps more than any profession, consulting offers individuals the opportunity to choose from any number of rewarding areas of expertise while working in a team-based environment. As the business world transforms itself to meet the needs of the new millennium, consultants will be needed more than ever to provide expertise and guidance to industry leaders with the difficult decisions that they face.

Maximizing Your Return

This book is an attempt to provide second-year students, returning from the summer, different types of cases from various consulting firms. It is an attempt to help kick-start the case interview preparation for full-time consulting jobs. The book has real cases that were given to second-year University of Michigan Business School students last year. They were collected via an interview process between first- and second-year students. The consulting club appreciates the efforts of everyone who helped put this book together.

We would also like to point out what this guide should not be used for. This guide is not a substitute for the hours of practice needed to learn how to "crack a case." Being able to nail a case interview comes through practice and perseverance. While we hope that this guide will shave several hours off the process, there is no substitution for having a few actual practice cases under your belt. Therefore, we would encourage you to seek out other MBAs to practice with and use the career counselors in the Office of Career Development.

We should also note that recruiting is a multifaceted process. While the interview stage is perhaps the most critical of all components, you should not neglect the other steps in the process. To maximize your chances of landing your "dream job," you should thoroughly research the firms that you are interested in, send cover letters to those firms and make follow up calls with their representatives. Remember that the interview comes near the end of the recruiting process, not the beginning.

Through the recruiting process you will interact with a number of outstanding consultants, develop lasting bonds with your peers, and learn a great deal about yourself. As much as we would all like to skip recruiting and get right to the offer, most second-year students find that there is tremendous value in the process. As with most things in life, your attitude will make you or break you. The decision to approach recruiting as a personal challenge, rather than a tedious chore, is perhaps the most crucial step in your preparation.

Take the time now to read this book, then sit down and determine your plan of action. Identify the areas on which you personally need to focus the most. Remember that you are interviewing for positions that require sharp analytical skills and true business savvy -- use these distinctive traits to strategize your career launch!

With all of that said, please take a deep breath, relax and get ready to show the world what a University of Michigan MBA student can do!

We, the Officers of the Consulting Club, wish you the best of luck in the upcoming academic year, your job search and in your future career.

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Practice Business Case 1
Company: BCG

1. Our client, AEM Inc, is an agricultural equipment manufacturer, with 4 product lines, facing declining sales. We have been brought in to examine the cause and recommend initiatives to improve their profitability.

✓ *Interview Hot Tips: This is a profitability case*

There are two broad drivers contributing to declining sales for AEM – decreasing unit sales, decreasing unit price, or a combination of both of these drivers. To proceed, we would examine the macro and micro perspectives to understand the reasons for declining sales. For the micro perspective, we would need to understand details of AEM's business. For the macro perspective, we would want to study the changes in the industry over the last few years due to new competitors, emerging technology, changes in consumer demands, and other factors.

Firstly, we study AEM and its sales trends across the 4 product lines.

⇒ *The sales trends for AEM across its product lines are detailed in this exhibit.*

	Sales			Sales %	Gross Margin
Product Lines	**1995**	**1996**	**1997**	**1997**	**1997**
Direct Combines	$ 289 m	$ 267 m	$ 235 m	67%	43%
Tractortronics	$ 73 m	$ 71 m	$ 65 m	19%	21%
Crossmaries	$ 25 m	$ 28 m	$ 34 m	10%	17%
Hewittrangers	$ 15 m	$ 15 m	$ 16 m	5%	19%
Total	**$ 402 m**	**$ 381 m**	**$ 350 m**		

⇒ *Also, AEM has been facing declining market share in a mature, slow growth industry.*

	Sales		
Market Players	**1995**	**1996**	**1997**
AEM	49%	47%	45%
John Drill	36%	39%	42%
Cagen Thomas	3%	3%	4%
Others	12%	11%	9%

The exhibits on sales trends and market shares over the last 3 years indicates that we have been losing sales steadily for the Direct Combines and Tractortronics product lines which are significant contributors to AEM's top-line and bottom-line. The question that leads from here is – what is causing sales of the Direct Combines product line to decline – new technology, new competitors, change in consumer demands, change in distribution channels or any other cause.

The industry has seen an emergence of a new technology in Direct Combines with John Drill leading the initiative. This has been the primary driver for change in consumer demands. We should not worry about Tractortronics since is a declining marketplace and its products are being replaced by Direct Combines.

The last statement above is a strong hint from the interviewer to ignore Tractortronics in our further analysis, and focus the discussion on the Direct Combines product line. This emergence of the new technology explains John Drill's increased market presence – we can now see that this new technology in Direct Combines may be a primary driver for the market share shift. The next step is to study the impact of this technology on the industry and AEM – is the technology here to stay, how mature is this technology, how sustainable is the advantage due to this technology and what are its switching costs for AEM. This will help us establish if the technology is worth adapting for AEM. If it is worth adapting, we need to address how would we implement this technology change for AEM's products – in terms of switching costs, new product development, marketing and promotion initiatives, and other issues. If the technology is not worth adapting or cannot be adopted (due to patent reasons, for example), then we can examine discontinuing the Direct Combines product line over time.

This technology helps significantly reduce maintenance costs and maintenance related downtime of agricultural equipment by enhancements to the engines and drive-train. Given our interviews with AEM's engineers and marketing managers, as well as industry analysts, we understand that this technology is becoming a market standard and will be here to stay.

We recommend that AEM introduce the new technology in its Direct Combines range of products. Given that this product line is an important source of revenue and we see existing sales from this product line, we should introduce products with this new technology and plan on a new product introduction strategy. We would need to examine how AEM would go about implementing this recommendation.

How would you go about implementing this recommendation?

This would lead the discussion towards product development, manufacturing switching costs, product launch and marketing related issues. A number of issues would need to be covered. Firstly, should this technology be included in existing product lines or should new products be introduced with this technology. This decision would be driven by demand for existing product lines and costs associated with either decision. Secondly, in terms of obtaining this technology, we can examine either developing it in-house or acquiring a smaller company that has this technology. Finally, if we have adequate data, we can do some quick "back-of-the-envelope" calculations to work out market-share trends and break-even analysis.

Practice Business Case 2
Company: McKinsey

2. Our client, Meditrek, Inc., is a medical devices company and they have just invented a product for non-invasive surgical procedures. Their question to us is: should they introduce this product in the market?

✓ *Interview Hot Tips: This is a market entry case*

Our discussion should revolve around two threads – firstly, [redacted] for this product and secondly, what is our client's [redacted] The discussion would extend not only to a "yes or no" decision for entering the market, but evaluating options for either entering the marketplace as against valuing the technology for sale to potential buyers.

We require some background details on the technology, our client, and the market. For the technology, we need to understand the impact of this technology in the medical world and if it is here to stay. For the client, we would need to look at our client's core competence and its competitive advantage in the marketplace. Finally, we would need to understand the marketplace's potential and growth.

How would you go about establishing if this technology is here to stay?

We would establish this by speaking with market analysts, surgeons, medical providers, and insurance companies (payers) to understand if this technology would provide a sustainable business model for our client. This would include understanding the size of the market, its growth potential and the factors that drive competitive advantage in this marketplace.

The market size for this technology is $500 million in the United States, and the market is expected to grow at 35% for the next 10-15 years. For our discussion, let us focus only on the US market.

This certainly looks like a large market. Our next step would be t[redacted].

At this point in time, Meditrek faces only one major competitor GSC in this market, with sales of about $250 million annually, and very strong R&D and marketing capabilities. Do you believe new competitors will be attracted to this marketplace in the future?

New competitors would be attracted to this marketplace if the technology is widely adopted in the marketplace, entry barriers are low and the market opportunity presents high margins.

The technology looks promising – it cuts surgery costs and post-surgery recovery times, and is expected to be widely accepted in the marketplace. The technology is not patented, the development timeframes for this technology is about 6 months, and we are expecting gross margins of about 60% to 70% for the major players. We do not have any information if any other player is looking at this technology at this point in time.

Given the low entry barriers, high margins and available market space, we can expect new competitors to enter the market.

How much market-share do you think Meditrek can acquire?

We are looking at GSC, the market leader, with 50% of this market and a potential threat of new competitors in the short term. Given our time-to-market lead of 6 months over potential newer entrants, we can conservatively estimate to acquire about half of the remaining market – about 25% market share in 4 to 6 months – by our early presence in this marketplace. This leads us to revenues of about $125 million annually. From a revenue standpoint, this marketplace looks attractive. Now, we would need to examine what our costs would be if we were to enter the marketplace.

There is one constraint, however. This rapidly evolving technology would require an annual recurring R&D investment of about $100 million for Meditrek.

From the cost standpoint, this does not look viable since we estimated earlier that our annual revenues would be in the range of $125 million. Hence, this does not look like a viable business for Meditrek, and we would recommend that they do not enter this business.

The alternate option would be to sell this technology to a third-party by performing a valuation on this technology and examining the market for potential buyers.

Practice Business Case 3
Company: McKinsey

3. In the Air-planes (brainteaser) - On a recent flight, I began to wonder how many planes were over the U.S. at any given time? How would you estimate that number?

- ✓ *Interview Hot Tip: This is an estimation case, which requires making logical assumptions and doing the math to make a reasonable guess. Responding to hints provided by the interviewer, remaining calm with a difficult problem, and having fun with the process is more important than the final number.*

Ok, well, I suppose there are only two places for planes to be, either in the air or on the ground. So the first thing we need to know is the total number of planes that fly out of the U.S. Do we have that number?

We don't know the number of planes in total, but we do know that Northwest Airlines has 15% of the market and that they have 300 planes.

Since they have 15% of the market or 300 planes, we could roughly estimate that there are 2000 total planes.

Sounds good. Now what?

Well, we need to figure out how many of them are in the air. I would assume the average fight takes 1.5 hours, since there are many more short flights than long flights. Then I would say the average turnaround time on the ground is 30 minutes. Thus the average time between flights is 2 hours. If we ignore the planes in maintenance, at any given time, 75% of the planes will be in the air (1.5/2), and 25% will be on the ground. So, out of 2000 planes, 1500 are in the air.

Good, does that account for all the planes in the air over the U.S.?

No. We also have to account for private planes, cargo carriers like Fed Ex, and military planes. [redacted], I would estimate that 80% of the planes in the air are commercial passenger planes. This means there are about 375-500 more planes (other than passenger planes) in the air, which brings us back to about 2000 in the air at any given time.

How confident are you in that number?

Based on the available information and given my assumptions, I am very confident.

- ✓ *Interview Hot Tip:* ***Other things to consider in a superior answer.***

What time of the day are we calculating this for?

If we are calculating how many planes flying in the course of a day, we should take into account the downtime at night
What day of the week/ year is it – do airlines ground some of their planes at off-peak times or lease capacity during peak-times?
What about International flights arriving to and leaving from the country?

Interview Hot Tips:

- ✓ *Be prepared for your interviewer to question your assumptions, particularly the numbers.*
- ✓ *If your numbers at the end of the case seem unrealistic check that you didn't make an order of magnitude error.*
- ✓ *Then check any dubious assumptions.*

Practice Business Case 4
Company: Deloitte Consulting

4. Your client is a manufacturer of engine parts like carburetors, etc. There are three major players in the industry and all are publicly traded. Lately, your client has noticed that their competitor profit margins are going up, while theirs are remaining constant. They have asked you to discover why this is happening.

- ✓ *Interview Hot Tip: This is a fact-finding case. The candidate is given a rough outline of the problem and must dig around for information that will help them solve the problem. The case is looking less for the "answer" than to see whether the candidate pursues the information in a logical manner. The interviewer will avoid giving the interviewee too many hints and instead encourage them to continue probing with good questions.*

What is our client's market share and how has it changed in the recent past?

The market share of all three competitors is approximately the same and has remained constant.

How does our client's selling price compare with that of competitors and how have the prices changed in the recent past?

It is a competitive industry so we charge similar prices to those of our competitors and industry prices have remained constant.

Have our fixed costs changed in the recent past?

As far as fixed costs are concerned, there have been no changes to costs in SGA (Selling, General, Administration), no changes to industry marketing costs, and no changes in labor or union related costs.

What about the variable costs?

Which ones?

Tell me about the raw material costs.

There have been no changes in raw material costs.

What about manufacturing costs?

Manufacturing costs have not changed for the client's firm, but have for the competitor's firm. Which manufacturing costs do you think could have changed?

Practice Business Case 4
Company: Deloitte Consulting

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Maintenance, downtime and other costs related to inefficient operation of a machine like longer throughput time, which results in higher variable costs such as labor, electricity etc.

Good! Why do you think our client did not reduce manufacturing costs too?

They probably have old machines.

Excellent! The average equipment lasts 25 years. Our client has not replaced major equipment since 1980.

What about the competitors?

Our client's competitors have recently replaced equipment with newer, more efficient machines.

Oh, so they have probably cut costs through increased efficiency, lower maintenance charges and reduced labor charges. Now that we know why the competitors are getting better margins, we can evaluate whether it would be cost effective to replace our machines earlier than planned.

You are correct.

Practice Business Case 5
Company: NA

5. Business School Dean - You are outgoing UMBS Dean Joe White. You are interviewing new deans and thinking about the kinds of candidates you want to replace you. What issues would you want them to by aware of?

✓ *Interview Hot Tip: This is a multi-part case, which challenges candidates to think strategically about what kinds of things a CEO or in this case a business school dean might need to be concerned with. The interviewer should look for evidence of top-down thinking. The candidate should be able to look at a large number of issues and identify which ones would be a priority for the dean of a business school. The interviewer will look out for the small minded issues or complaining by the candidate.*

I would like the potential dean to consider some of the following issues:

- Fundraising issues, building the endowment.
- Attracting and keeping top academic talent to the faculty.
- Updating and maintaining the physical plant.
- Updating or maintaining the technology infrastructure.
- Student satisfaction levels and curriculum requirements.
- School administration issues and organization structure.
- Overall school strategic objectives and direction.

Good. You have now been placed on the Dean's Committee. Pick one of the issues you talked about that you believe to be a priority and talk about how you would recommend framing the issue.

I would like the potential dean to explore the following issue:

- Student satisfaction levels and curriculum requirements (because this directly impacts the school's ranking and therefore, the quality of students that are attracted to the school, which in turn effects the school's competitive position among recruiting firms).
    - Student satisfaction levels - Are the students happy with the following:
        - Faculty
        - Career services
        - Staff
        - Facilities (student lounge, computer labs, library etc.)
        - Academic competency of their peers
        - Interpersonal interaction with their peers
    - Curriculum requirements – I would like the potential dean to explore the following:
        - Is the recommended core course satisfactory?
        - Are the electives meeting students' requirements?

- Are the faculty members competent?

After exploring the above, I would expect the potential dean to recommend solutions to fix problems such as – "An inefficient bidding system for firm interviews".

Ok. Going one step further. You have been asked to head up a committee to create the change you just talked about. How would you go about setting up a timeline and project plan? What are some the actual steps you would take to make this change?

✓ *Interview Hot Tip: The interviewer is now looking to see if the candidate can get out of the strategic clouds and get their hands around an actual strategy. The more specific the plan, the better. Don't just repeat what you have already said, but talk about action steps, time- tables, and the structure of the team.*

Practice Business Case 6
Company: Diamond Cluster

6. e-Shopping Mall - Your client is the owner of a brick and mortar shopping mall in an affluent suburban neighborhood. The mall is anchored by Nieman Marcus, Nordstrom's and Macy's and has been highly successful. The owner has noticed a disturbing trend where teens are beginning to spend less time in the mall and more time online. Responding to this trend, the owner hired a consulting firm to build a site on the Internet. Unfortunately, the site is not generating the kind of traffic he was expecting, or if it is, he can't tell. How should he improve the site to drive more traffic to the mall? How will he measure the results?

- ✓ *Interview Hot Tip: This case requires creativity as well as critical thinking. Rather than use a traditional framework, the candidate should explore a broad range of options and support them with logic and data provided.*

The first place to start is the current design of the website. What features does it already contain?

Good start. The site contains basic mall information, a chat function with occasional celebrity guests, a bulletin board for special announcements and teen discoveries, and a wish list where teens can list what they want, parents can download the list, take it into the appropriate store in the mall to buy it for their kids.

Does the site currently have an e-commerce section where people can buy directly online?

No. Because the site is maintained by the mall, the objective of the site is to specifically drive traffic into the mall stores. The owner does not want to drive traffic to Macys.com or gap.com.

So the issue then is to figure out a way to drive customers into the store from the website.

Yes.

Ok, I would first start with the wish list function on the website. How does a retailer know that a parent is purchasing something off the wish list downloaded from the website?

Currently, they don't know.

So, one option is going to be to connect the two up. You might offer a discount off items purchased from a wish list. If the customer mentions a code or brings in a printed coupon, they receive the discount.

Sounds good. What else could we try?

They might also look at doing special promotions through their celebrity chat room events. By doing "Internet Only" promotion, they might be able to measure shopping volume changes for specific events.

Excellent. Are there any other options you might suggest?

They might look more carefully at their current affiliation with retailers. Perhaps they could earn a percentage of sales from directing customers to other retailers' websites. In this way they can truly behave more like an online mall.

Interesting. I think you have given some great options. The owner will look closely at what you suggested.

- ✓ *Interviewer Hot Tip: The idea behind this case is to not stop at just one answer. There is truly no 'right' answer. The interviewer should ask the candidate to continue to develop innovative ideas that meet the clients need.*

Practice Business Case 7
Company: McKinsey

7. Taco Bell - Taco Bell is thinking of offering French fries. They have done several market studies, conducted focus groups, and surveyed customers about the idea. So far they have concluded that 20% of their customers would purchase French fries and have asked you to determine whether they should go ahead.

- ✓ *Interview Hot Tip - This is a product launch problem. It requires that the candidate first use the information provided to estimate the size of the market and then do a cost benefit analysis to see what the actual profit potential might be. Finally, the candidate must evaluate other factors, which might weigh into the decision.*

Ok, well to evaluate this problem, I want to look at the revenue that might be generated by selling French fries and then look at the cost of producing fries.

Sounds good.

If 20% of customers are willing to purchase, then we need to know the total number of customers.

We know that there are 500 stores and 1000 customers per store per day.

Ok, so there are 500,000 total customers. Since 20% will order fries, then they will sell 100,000 orders of fries per day. Next we need to know the profit per order of fries.

- ✓ *Interview Hot Tip - It may be easier to evaluate the profitability per store, especially if the interviewer throws out weird numbers for the total numbers of stores.*

Well, for simplicity, let's assume that fries sell for $1 and cost $0.10 to produce.

So you have a $.90 profit per order, which means the profit on selling fries would be $90,000/day or multiplied by 350 days for year gives you $31,500,000

What do you think of that number? Are there other factors that you think Taco Bell should consider? (If the candidate wants to pursue more detail, assume fixed costs are $10,000 per store for fryer and variably costs are only potatoes, salt and oil.)

Well, based on that analysis, it seems like a highly profitable business, however I might have some of the following concerns.:
Confidence in 20% figure.
Cannibalize other sales. (What would be the margins on the items that we are cannibalizing?)

Increased volume on other products seems questionable. (Is it likely to be an add on purchase?)

Damage brand image. (this is the Big One in this case. Can the company differentiate itself from its competitors if it offers fries)

- ✓ *Interviewer Hot Tip: In this analysis it is important to realize that from the numbers only, this seems like a great business, however, the intangibles are extremely important. It is important to be able to view the BIG PICTURE.*

Practice Business Case 8
Company: A T Kearney

8. Client is an express package delivery company (like FedEx). They currently operate in Mexico, but only ship internationally. They are considering entering the domestic package market. Should they do it?

- ✓ *Interview Hot Tip: This is an open ended, market-entry case. One option is to use the 4C framework.*

I would like to know the market size and volume. Also, how is the market segmented?

Interviewer superficially addresses these questions and then hinted that we need to look at competitors.

Actually, let's look at the competitors first (back-tracking after listening to interviewer's hint).

There are three main groups; only international shippers, those that do both international and domestic, and local players.

Do you have any information on market shares & volume numbers?

Interviewer showed market & revenue numbers

	International	*Domestic*
Size ($Million)	*300*	*300*
Players:	*5*	*50+*
Typical price	*$17 / package*	*$7/package*

One player had a sizeable market share in both the international and domestic segment. This player was also the main competitor of our client.

What do the customers want in the domestic versus international market (try to understand if there are unmet customer needs).

In the international market, the customer wants performance guarantee and quicker delivery. Domestic shipments are less secured and are not guaranteed. They tend to cost less (big price differential). Also, the domestic market is fragmented.

What are the issues for delivering to the domestic market?

The infrastructure is poor and the deliveries are scattered across the country.

How do competitors execute their business?

Clients own their assets. Domestic competitor are geographically scattered with limited coverage. It is difficult to service the whole country given the state of the infrastructure.

How does closest competitor do it?

Contract with local companies to reach far flung issues.

With $7 costs I suppose the margins are low.

That is correct.

(At this point I tried to figure out the volume but got stopped.)

How do you enter?

The client has to decide whether to own all the infrastructure or subcontract. They cannot compete on costs. It is probably best to use their brand identity and charge a premium.

What do you think you should do about the delivery infrastructure?

Subcontract: it will take quite a while and require a lot of capital to build all the warehouses and hubs.

(End Game - Summarized the case, basically going through all the facts that were collected and justified the choice of entry.)

OK. That's the case.

Optional - They could also buy one of these local players to speed up the entry.

Practice Business Case 9
Company: BCG

9. A regional banking client wants to go into the online brokerage business. What would you advise them to do?

- ✓ *Interview Hot Tips:*
  - *This is an open ended, market-entry case. One option is to use the 4C framework (customers, competitors, cost, capabilities)*
  - *Stay focused on the question. Interviewer gave a lot of extraneous data on several sheets.*
    - i. *First and foremost: Should the client enter the industry?*
    - ii. *Second: How should the client enter?*
  - *In terms of prioritization: Understand the market first!*
    - i. *How does an online brokerage make money?*
    - ii. *What are the relevant segments?*
    - iii. *Are there any unmet needs?*
  - *Then look at the competitors.*
    - i. *Do they cater to certain customer segments?*
    - ii. *What are cost structures?*
    - iii. *What competitive advantages do they possess?*
  - *Wrote the 4Cs on a sheet of paper but only to keep track of own thoughts.*

<u>Customers</u>

Interviewee started with the customers (from the 4 Cs) and wanted to look at their size and segmentation. The interviewer provided data on people with brokerage accounts. He then asked the following question:

What are the revenue streams?

The three main revenue streams would be - commission, spread, and online fees. I'd like to see if I could segment the customers. What are the different customer types and how do they contribute?

There are three types of customers: active day traders, retired, and in between. Day traders are the most profitable. (The interviewee then gives a quick summary of all the information given: online customers and different revenue customers.)

<u>Competitors</u>

What are competitors doing? Is there any differentiation?

What do you think?

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What are the revenue streams?

The three main revenue streams would be - commission, spread, and online fees. I'd like to see if I could segment the customers. What are the different customer types and how do they contribute?

There are three types of customers: active day traders, retired, and in between. Day traders are the most profitable. (The interviewee then gives a quick summary of all the information given: online customers and different revenue customers.)

<u>Competitors</u>

What are competitors doing? Is there any differentiation?

What do you think?

Well, since we are providing trading services, I don't think there would be too much differentiation. Perhaps, some competitors might provide more research capacity.

Any other ways

Advertising for the most part. We can observe from the info that there has been a huge increase in advertising. Moreover there are no real differences in product features. How about differences in cost structures?

What does it mean to you that there is only limited differentiation?

Well, this would imply that demand in this market could be very sensitive to price, which could lead to a low-margin, high-volume kind of environment. In that scenario, the cost structure would be very important.

Interviewer provided all this cost data

Well, we don't have too much information on that. I don't think we would have a cost advantage though. The biggest portion of total operating costs tends to be advertising advertising.

<u>Capabilities</u>

How do customers perceive the client?

How do you find that out?

Surveys.

Well, the customer is quite happy with the bank and view it as reliable. They view it as a convenient, middle of the road regional back. Local bank on the corner. Geography is key driver.

What are the Internal capabilities of the bank to provide these services?

Like any other bank, they have IT, but no web based system.

Hence, if we decide to do this we must partner up for IT. We would have to commit to a new investment in IT infrastructure.

Would there be any synergies that we could realize?

There would be some synergies because the bank already has an existing customer base, and it should be easier to expand the service offering to a given customer base than it would be to go out and seek customers from scratch. I also think that the bank already has a brand because of the advertising from the other divisions, and this would allow us to expand the brand at a relatively lower cost. However, both the brand and customer base are local, and this would not be of tremendous benefit in an Internet based business where the goal is to draw customers from across the country.

Well, we have to wrap up now. What do you think overall?

Summary of Case

- Based on the customer segmentation, there is somewhat of a misfit between the bank's clientele and the profitable online segments.
- In addition the bank has a mostly local presence, so it cannot benefit from synergies on a national scale.
- Moreover, the bank does not have the right capabilities and would need to invest in additional infrastructure

I would therefore recommend the client not to do it. We could explore some kind of a link up where we partnered with an online brokerage and generated some kind of referral fee based on sending customers their way.

✓ Interview Hot Tips: Always try to provide your key points or recommendations in a structured, bullet like fashion.

Practice Business Case 10
Company: BCG

10. Client is a mail order catalog company that has been experiencing declining profit/catalog. Give me five different possible causes.

- ✓ *Interview Hot Tips:*
  - *Try to be focused - I started to give 5 answers. I probably should have been a bit more organized with my answers because I sounded like I just mentioned anything that came to mind. Based on the interviewers background (PhD Economics), I expected an economics related case. As it turned out, the case went into economics later on. I used the MR = MC equation to structure my case at the later stage.*
  - *Prioritize the issues and filter out unneeded information – I started with MC first, since that was easier to estimate. I then moved on towards figuring out the MR equation. I needed information on the demand and the revenue by customer groups.*
  - *Additional information sought – I asked for MC information for catalogues and MR information for customers.*
  - *I use a graph to illustrate the MR-MC lines (they love Price Demand graphs).*

Interviewer drew a chart showing declining profitability/catalogue over the past 4 years.

Can you provide with 5 possible causes for this decline?

I used a clipboard and drew up five bulleted numbers (1-5) and provided the following five possible causes:

Starting to target unprofitable customers
Items in catalog were lower margin
People are not ordering from catalogs
Shipping Costs could be higher
Products are not popular products

It turns out that they are shipping to customers who order less. How should the company determine who to send to and whom not?

In a competitive industry such as mail order catalogues, MR = MC (Know the background of the interviewer, I thought this would be a good place to start). Let's start with the marginal costs. Do you have any information on this?

MC = $2

I will need some information on MR. I would like to rank customers in deciles based on the revenue each provides.

*The interviewer had actually had done a regression and gave the equation of the curve - MR = 50 – 2 * "customer percentile." (Customer percentile: Profit by customers ranked. This was based on the customer database of the client).*

Solving for MC = MR. Gives the percentile. – Answer !

Practice Business Case 11
Company: BCG

11. Client is a yearbook publishing company that is experiencing declining profitability. What should they do?

- ✓ *Interview Hot Tips:*
  - *This is a standard "Profit = Revenues – Costs" case*
  - *Prioritize issues and filter out unneeded information - Started to query the revenue side first. Nothing there. Unit prices constant, revenue flat. Next, explored costs.*
  - *Framework used – "Profit = Revenue – Cost" framework*
  - *Visual Representation - Drew out the manufacturing process and went through each stage to explore the costs.*
  - *Solution hints provided by interviewer*
    - *Cause: Sales force incentives led to a change in order mix.*
    - *Should change manufacturing process to do small batches.*

I would like to explore to the revenue and costs.
Revenue - Could you tell me what happened to the prices?

Prices have stayed constant in real terms.

How about quantity sold?

Pretty much flat.

Then there must be something going on with the . This is publishing so there are high FC. *(Be careful with assumptions in cases)* Did we make any investments or do anything else that could have increased the fixed costs?

No. The client has old machines that are pretty much depreciated.

Because they are old machines could the maintenance costs have increased or is there more downtime?

No

I will then look at the VC: Did the unit labor or raw material costs change significantly?

No

TIP - (It wopuld help if you had sketched out what a cost structure might look like for this type of business to see if there were any key areas you would like to investigate further)

At this point I felt I was at a dead-end. I needed some more information about the client to figure out the problem. Hmmm. Could you explain how the production process works so I can understand the cost structure better?

Set-up costs are very high. It is optimal to do longer runs so to lower costs.

Is it therefore some kind of mix issue. Could you tell something about the changes in demand?

Yes. We have small schools and large schools that use us. The smaller schools are ordering fewer yearbooks while larger schools are ordering larger quantities. We therefore started to do more uneconomic batches.

Why are small schools ordering less?

Well it is certainly not the case that the # of students has changed dramatically at smaller institutions. Can you think of some solutions to increase the order quantity from smaller schools?

What drives sales?

One key driver: having your picture in the yearbook.

Do the schools order all of their yearbooks at one time?

Good questions. Actually they tend to order them at one, but often call us up after and ask if they can order just a few more. We have always provided them as a customer satisfaction compromise.

Have we considered charging a premium for these 'extra' orders.

Well, we haven't in the past, but we could certainly consider doing so

Any other ideas

I guess that we should help schools with advertising to increase yearbook participation/ awareness.

Anything else

Well, this may be a radical proposal, but we could consider trying to shift our customer base more towards large schools. We should look at the trade-offs involved in the new customer acquisition costs versus the improved operating margins.

Good. Time is up!

Practice Business Case 12
Company: Booz Allen & Hamilton

12. Our client is a telecom company active in mobile telephony. They would like to know how they should estimate the value of their client's network.

Additional questions:

(2). One segment is not profitable, what should they do?

(3). In which other industries does the concept of lifetime value of customers typically apply?

- ✓ *Interview Hot Tips:*
  - *Immediate thoughts - This case includes both marketing and financial aspects. I need to find a model that links marketing concepts to financial calculations.*
  - *Prioritize issues and filter out information –*
    - i. *First step: recognize the existence in our clients' portfolio*
    - ii. *Second step*
      Unless exceptional costs are incurred for a particular segment, costs should be the same for every segment.

Question (1):

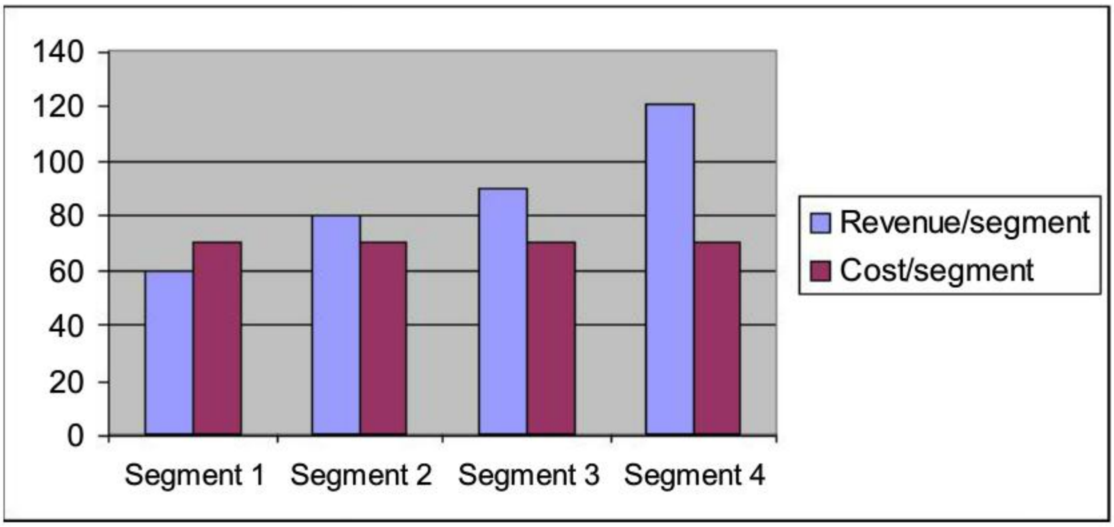
Do we have our own call center or do we use third party services?

They use third party services for accounting and sales services.

What is the average retention period for my customers?

The average retention period of a client is 3 years. This means that most of the clients in my portfolio are either in their first, their second, or their third year of contract with the company.

Visual Representation of data



Verbalization of data

Marketing taste: the clients can be divided into several segments. Each segment can be characterized by a particular offer (i.e. only local calls, international plan,…). We will have to look at the lifetime value of clients in each segment.

Financial taste: value of portfolio = NPV (sum of discounted cash flows per segment) In order to obtain the CF, we must determine which are the costs and revenue streams in this industry.

Revenue streams = fixed revenue (connection fee = fixed amount, if there is any) and variable revenue (cost/minute). Thanks to the average retention rate, we can determine the lifetime value of a customer (how much total revenue shall I get from him over the average 3 years).

Costs = mainly fixed costs (network and network maintenance, HQ, marketing)

However, many traditional fixed costs can be transformed into variable costs by externalizing the tasks to a third party:

- Accounting services (variable = cost/invoice issued or processed)
- Sales (call center services – variable = number of calls)

Moreover, some costs are one shot (sales and marketing costs faced to acquire a client) while the other costs are recurrent (and will repeat themselves every year).

Finally, I'll take the total cost over 3 years (same reference as for the revenue).

For each segment, lifetime value =

# of customers in the segment * (3 years revenue – 3 years costs).

Note that I have to discount revenues/costs in years 2 and 3.

Question (2):

As it turns out, the unprofitable segment is composed of pre-paid calling cards that are typically bought buy younger customers. This customers will usually transform the segment into a more profitable segments as they grow older. Therefore, this offer must at least partly be considered as a marketing effort to acquire and win the loyalty of customers.

Question (3):

There are a lot of other industries where the concept applies (car manufacturing, …anything that implies loyalty games), but the most striking one is the financial services industry (banks and credit card companies)

Summary of Case

For each segment, I can calculate the lifetime value of my customers. The value of my portfolio is the sum of the values of each of these segments.

- ✓ *Interviewer Hot Tips: (Solution given by the interviewer)*
    - o *The lifetime value concept is central in this case.*

Practice Business Case 13
Company: McKinsey

13. Global Multimedia giant is facing margin pressures in their TV Tube Business. Why do you think this is happening?

- ✓ *Interview Hot Tips:*
  - *What immediate thoughts came to your mind (or should have) when you heard the problem statement (based on the type of case, for example – marketing versus cost reduction)? - As soon as the interviewer said, margin pressure I wrote down, declining profits. This led to my hypothesis about competition or cost inefficiencies.*
  - *How did you prioritize the issues and what information did you filter out? With declining profits as my base I moved into dividing the page into the following: Revenues, Costs, Competition, Substitutes, Capacity, Customers.*
  - *While it is easy to say "substitute" first, the logic for this train was it is too easy and this was the reasoning for the division.*

Additional information. After writing down declining profit, I first asked about the business in general and the product.

By prodding about the product I found that the TV tube business has two distinct products, CRT and Digital tubes.

I then identified the revenue generation potential for both the product ranges and the margin on each.

Revenue - 70% from CRT, 30% Digital. Margin - 7 - 10% CRT and Declining, 15% and growing or stable in Digital (see visual)

Then we moved into costs for each of the businesses, there was nothing there. I then asked for technology adoption at the firm, and if older machines were adding to costs. This moved into labor costs and location of existing facilities.

All manufacturing was in the US, hence the logical conclusion to higher costs.

Leading to competition, which was from the Pacific Rim, Korea in particular (hence lower costs). The twist here became when the interviewer told me that the # of customers was going up. Switching costs popped up in my head, which were low? I then asked about the time for which the customer was in the market (35 years), leading to a potential probability of leveraging relationships. No substitutes? (surprised)

Visual Representation of data

Practice Business Case 13
Company: McKinsey

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Visual Representation of data

I used the classic bar chart for this case.

Verbalization of data

It was obvious that the interviewer was aggressive but was very co-operative, making it important to be aggressive in my approach. So all discussions started with a decisive tone leading to conclusive arguments.

Summary of Case

I first went through our entire discussion, then gave my recommendations.

- ✓ *Interviewer Hot Tips: (Solution given by the interviewer) The solutions given by me were the same as given by the interviewer.*
  - *Improve logistics*
  - *Replace older machines*
  - *Grow Digital Machines*
  - *Leverage relationships*
  - *Move production to cheaper labor location*
  - *Acquire or alliance in Korea*

Practice Business Case 14
Company: Diamond Cluster

14. A geographically constrained manufacturing company, very aggressive in new products with sales of $1 billion-dollar is showing slow growth (3%). Although this growth rate is higher than industry average, we are concerned about the slow rate. We would like you to find a solution as to why this is happening.

- ✓ *Interview Hot Tips:*
  - o *What immediate thoughts came to your mind (or should have) when you heard the problem statement ? - As soon as I heard "Geographically Constrained", I wanted to know what that meant.*

What do you mean by " geographically constrained"?

In this case, the product mix is such that 80% of products are growing @ 3% and 20% of the products are growing @ 20-30%. Why do you think this is happening?

Are there too many businesses?

There are ten discrete businesses.

What products are we talking about here?

For simplicity, let us assume widgets

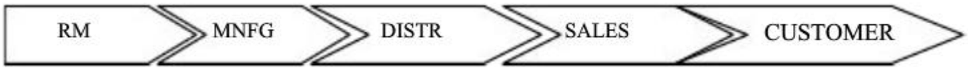
Are there any synergies/ complimentary functions existing between these businesses?

Right now each business has its own Product Development, HR, Accounts, Sales and Marketing, Finance etc.

- ✓ *Interview Hot Tips:*
  - o *How did you prioritize the issues and what information did you filter out?*
    - ▪ *Issues*
      - • *Possibility of finding synergies between the different businesses, thus lowering costs.*
      - • *The biggest benefits would come from synergies in procurement*
  - o *What additional information did you ask for and what information did you get? - How much would costs go down if we converge the operations of each of the business units?*

Visual Representation of Data

If the whole supply chain could be laid out as follows



Convergence:

Operational ⇒ Procurement, Capacity utilization, Distribution

⇓

Product Development, HR, Accounts, Sales and Marketing, Finance etc.

Summary of Case

- It is very clear that the main problem in this case is that the different business units of the company do not coordinate with each other.
- The existence of different product development, procurement, manufacturing and distribution departments suggests that there is a huge opportunity to optimize operations
- Given the fact that one of the main problems faced by this company is that 20-30% growth rate comes from only 20% of the products and the rest 80% of the products are growing only at 3%, coordination of the product development groups is a must. It is very likely that 80% of the products manufactured by the company are those that the market is not ready as yet.

Practice (Mini) Business Case 15
Company: NA

15. CEO of an IT consulting firm on the way to the airport wants to know whether it is a good idea to provide mobile phones to all company employees.

What kind of IT consulting does your firm specialize in?

Software development and programming – also some functional consulting

How big is your firm?

About 3000 employees

Size of management?

About 15% are managers and the rest programmers

It doesn't seem to be a good idea to provide mobile phones to programmers, because the utilization may not be worth the investment. There is little reason for programmers on the job to use cell phones as the nature of job involves more of online transferring of data (if the need arises) and less of real-time information exchange. Moreover for the rest of the employees, I would suggest doing a detailed cost-benefit analysis. Costs should be based on assumptions of attractive corporate rates decided with cellular companies and the average usage expected. Benefits will have to be decided by taking into account expected increase in revenue by providing real-time access to information.

Don't you think you may need some more information before you can jump to that conclusion.

Hum.. let me think about that for a few moments…..

Where do your consultants do most of their work?

They work mostly at the client site.

What kind of resources do they use while at the client site?

They work on computers. Sometimes they use the PC's on the client site, and sometimes they use their own laptops.

Do they mostly exchange voice communication or data?

Mostly data, but they often call into headquarters or one another for help solving tricking technical issues.

I see. Do the client site locations have telephones.

Actually they do, but very often there is only 1 telephone line in a given room, even though 4 or 5 consultants may be sharing that room.

Do the consultants have network connections?

Sometimes they do, though often they are forced to tie up the phone line because they have to dial out to get a connection to transfer data. Well, we've run out of time. What do you think we should provide mobile phones to all of our employees?

Well, based on what you have told me, I would say that there is a definite need for some employees to have cell phones. Instead of purchasing cell phones for all of your employees, you might explore the possibility of providing phones to project teams on as needed basis to keep cost down.

Do you see any problems with that solution?

Well, you would have to set up some sort of system where you track usage by employee just to ensure some accountability. If you could do this, than I think this solution would lead to higher productivity at a minimum cost.

Thank you for your time!

Practice Business Case 16
Company: McKinsey

16. Our client is a Western state-owned postal operator (e.g.: US Postal services) located in country A. The management is worried because a recent benchmarking study has revealed that the cost of running its operations is higher than for similar organizations in other countries. As per this study, it is 50% more expensive to send a standard parcel from location A to location B than it would be in a neighboring country for the same parcel and the same distance. He wants to know why and what he can do about it.

- ✓ *Interview Hot Tips:*
    - o *What immediate thoughts came to your mind (or should have) when you heard the problem statement (based on the type of case, for example – marketing versus cost reduction)?*

In this case, the first obvious trap is that we are not talking about a regular corporation. Being a state-owned institution, the client is obliged to supply the same services to all the citizens of the country. You cannot segment the market or discriminate. Solutions that imply either reducing the level of services or pulling out of some geographical areas are not valid. This constrain is central in the case.

Therefore, considering this company based on the network economies /diseconomies and the traditional methods available to address such issues would be a big mistake.

- ✓ *Interview Hot Tips:*
    - o *How did you prioritize the issues and what information did you filter out?*

In this case, there is no easy framework to apply. The best way to go about it is to try to collect as much information as possible, generate hypotheses and then assess which ones can cause material differences between the client's operating costs and other countries'.

Anyway, you should at least explore the following areas:

- Cost structure
- Comparability of services delivered
- Utilization rate of the network
- Set-up of the operations

- ✓ *Interview Hot Tips:*
    - o *What additional information did you ask for and what information did you get?*

What does the cost structure of the organization look like? What is the relative importance of fixed costs and variable costs? What is included in the variable costs? How does it compare to neighboring countries?

Costs are mainly fixed. Not only the infrastructure, but also the payroll must be considered as a fixed cost because the employees have a governmental agent status and can therefore not be fired as easily as regular employees. An employee costs $25,000 a year.

How are operations set-up?

Pick-up parcels and letters => sort parcels and letters => carry and distribute parcels and letters

Pick-up process:

Twice a day, agents collect the parcels from official mailboxes spread over the country. Clients can also bring their parcels and letters to Post Offices. Once a day, letters and parcels are sent to sorting facilities where they are sorted at night. Note that it takes an agent 12 minutes to empty a mailbox and he empties 40 mailboxes a day on average.

Other countries: only once a day. It takes an agent 10 minutes to empty a mailbox and he empties 50 mailboxes a day on average. The main reason is a different design of the mailboxes.

Sorting process:

Manual sorting: 2000 letters/hour per person. Cost = 25,000 $/person per year.
Sorting machine: 30000 letters/hour – requires 3 persons to operate the machine. Cost of the machine = 2,500,000 $ depreciated over 10 years (linear).

40% of the sorting process is manual.

Other countries: 85% of the process is automated

Distribution:

One agent can distribute 10,000 letters/day

Other countries: 12,500 letters/day

Explanation: other countries are more densely populated (less people/square mile in country A).

Visual representation

	Cost structure	Operations	Other
Country A			
Other countries			

Verbal representation of data

You soon realize that this case is not about cost cutting. The question is to determine why the costs are higher in country A, and is there anything we can do about it under the constrain that we have to offer a "universal service".

Cost/letter processed (simple calculation based on the information received previously).

Is this business a monopoly?

Yes

What is the network utilization rate?

Based on the number of letters collected per mailbox/ post office, the utilization rate of the country A's network is slightly lower than in the other countries (i.e. you need a few more facilities to collect the same number of letters).

Summary of Case

In the end, you realize that there isn't one major reason, but half a dozen minor ones that combine to make the business much more difficult to run efficiently in country A than in the neighboring countries.

- ✓ *Interviewer Hot Tips: (Solution given by the interviewer)*
  - *The sooner you abandon a cost analysis type of framework, the better.*

Practice Business Case 17
Company: Bain & Co.

17. Airbus is deciding whether to produce the super jumbo or not. How much can they sell them for and should they enter or not?

- ✓ *Interview Hot Tips:*
  - *What immediate thoughts came to your mind (or should have) when you heard the problem statement (based on the type of case, for example – marketing versus cost reduction)? - Must first understand market. Do not attack problem immediately.*
  - *How did you prioritize the issues and what information did you filter out? Top down thinking:*
    - *i.* [redacted]
  - *What additional information did you ask for and what information did you get? - Was given an initial sheet with: sunk costs, airliner costs, # of seats on airplane. Later on asked information on the demand, market shares, and capacity utilization.*
  - *Your approach/ framework? - Market, competitors, financial implications*
  - *Visual representation - Financial calculations on a sheet to* [redacted]
  - *Verbal - Presentation was mostly verbal.*
  - *How did you summarize your analysis/case? - Gave summary of the whole case. Recommendation was not go into the super jumbo market based on financial calculations. These calculations showed that Airbus would have to capture 100% of the market for jumbos over the next 20 years to break even. Clearly, this is not feasible given that Boeing will no idly sit by.*

Sheet with info given:

Sunk cost: $100 Billions
Avg. life is 25 yrs.
#seats on Super jumbo: 500-600
# of seats on 747: 400-500
Cost of a traditional jet = $150m
Plus extra information on competitors and assets needed to produce jumbos

Airbus is deciding whether or not to produce the Super jumbo jet. How much can they sell them for and should they enter or not?

I want to figure out overall market, competitor response, and then get into the financials.

That sounds fine.

How many jumbos are bought per year?

50 per year

Is this demand constant or does it fluctuate.

For simplicity assume constant.

Who are the major players.

Boeing and Airbus only

What is the market share?

30 for Boeing, 20 for Airbus

How close are they running to capacity (what might response be) to understand the competitive response?

They are both at 75% capacity

Are these planes only used on long haul flight? *(to figure out pricing)*.

Yes.

Is the demand expected to grow?

Assume constant

I think I got the major things out of the market. Now I want to talk about competitors. Does Boeing have a similar cost structure?

Yes.

Are there long term contracts in place?

Generally yes, but these are somewhat like options.

Does Boeing have anything similar lined up?

No, but they are thinking about stretching the current 747.

Can current production assets be used for something else? Are they fixed or sunk?

Not relevant, so assume no. Costs are sunk.

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50 per year

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Can current production assets be used for something else? Are they fixed or sunk?

Not relevant, so assume no. Costs are sunk.

With a better idea about market/competitor, would like to look at financial side. What are the VC of producing a plane?

Fixed costs are $100 Billion, VC are 150 million.

(At this point I want to estimate the incremental revenue for these airlines from the super Jumbo and based on this figure out what they would pay?)

Assumptions: extra 150 seats, 80% capacity, extra 120 people per flight, assumed two flights per day, avg ticket: international $400. Therefore an extra 100k per day per plane. Assume in place 300 days per year. $30m per year of incremental revenue. Incremental costs: 10 million costs because of Extra fuel + more staff + needed but not much more.

Hence, over lifetime an additional $500M profits. These profits are uncertain and discounting over lifetime. Let's assume we can charge $250M.

We'll make $100M per plane. = 1000 planes need to be sold. This means that for the next 20 years they would need to capture the whole market.

OK, so what should they do?

Summary of Case

Should not go into this market. (Takes interviewer through calculations and market data found) Unless they receive large subsidies and the market grows substantially.

Practice Business Case 18
Company: A. T. Kearney

18. Our client is the CEO of a large European Chemical company. We are assigned to develop a competitive strategy for its business with declining profits. Identify the key areas that we should pursue.

- ✓ *Interview Hot Tips:*
  - o *This is a profitability case*

My hypothesis for such a declining profit situation is that either the revenues or decreasing or the costs are increasing. Before I proceed with this analysis, I would like to know about our clients market share.

Our client is a market leader with about 50% of the market share.

What is the nature of the competitive landscape.

There are two other players in this market and the smaller players are insignificant.

Has the industry environment (i.e. in terms of demand) changed to decrease revenues or new entrants.

Demand has marginally increased and revenues have remained the same and there are no new entrants into this market.

Who are our customers and have their requirements changed.

Large oil and food processing industries and their requirements have remained the same.

I would like to review the cost impact on profitability. Have the costs been increasing.

That is an area of concern we have.

Do we have more details regarding the manufacturing operations i.e. the number of products and the number of plants where these products are manufactured.

These chemical products are manufactured in two plants - Wales and England. The Wales plant manufactures products A,B,C and the England plant manufactures products B,C,D.

Do we have the unit cost information.

The unit cost in England is $.51/unit and $.47/unit.

Do we have the break down in terms of material, labor and OH.

The material cost is 65% of the total cost and the labor is about 25% and the remaining is OH.

It appears that the labor costs are very high. Have we looked at reducing the material cost?

What would you suggest.

I would first look at material wastage, analyze the reasons for this high material costs with our suppliers (is this a premium product) and see if we have a common supplier source for both these plants.

There is absolutely no wastage.

Do we have a common supplier source and also do we have bargaining power with our suppliers to reduce costs.

Our client doesn't have a common source and this is what we have recommended. Our client does have bargaining power with the suppliers. We seem to be running out of time, what other areas would you like to review?

I would look for plant capacity to see if the plants are at capacity.

The plants are at capacity. Are there any other specific issues you can think of?

I would look at improving plant efficiencies in terms of cycle time, adopt JIT principles for better inventory control, implement continuous improvement procedures to reduce indirect costs and leverage economies of scope in the manufacturing process.

We are out of time. Thank you and good luck!

Practice Business Case 19
Company: Bain & Co.

19. Our client is a $10 billion meat processing plant that produces raw meat. Five years ago, this client has acquired a branded pre-packaged prepared meat company (e.g. – producing packed pre-cooked sausage, hot dogs, etc…). The parent company noticed that the branded, pre-packaged division was losing money. What recommendations would you provided them?

- ✓ *Interview Hot Tips: This starts off as a profitability case*

From a macro level, there are several issues we can examine here. Let's start by looking into profitability of this division. Let's look into the revenue drivers and the cost drivers. Can you tell me anything regarding the trend in sales and prices for this division?

The sales have dropped from $250 million to $200 million due to a product rationalization. The prices have remained constant.

Well, has the client rationalized the proper products? How did the client come to these decisions? Were they based on a % of sales or on true profitability such as a measure like EVA? Perhaps we can examine by what instrument/metrics the client rationalized its product base. Another possibility is examining the product mix and compares them to customer preferences and market positioning. How has overall profitability of the division improved from the product rationalization?

This is a good question. It turns out that the client was very successful with the product rationalization. Our brand is a lower end brand and customers are satisfied with the product. The rationalization was very successful – the client was able to cut out the correct products. Profitability for the products went from ($10M) to $40 M. But, overall, the division is still losing money.

So, the cost side of the equation is our next step. How has the cost structure changed for the division?

The costs have remained constant as a percentage of sales since the acquisition.

Costs have remained constant? Well, this could mean that the company is not taking into account the synergies from the merger. Let's examine a series of costs that could be optimized. Let's start with overhead. Have the overhead costs and central functions been merged where necessary? What is the overall divisional structure of the firm?

The management is very lean in this division. There is one marketing executive, one finance executive, one operations, etc… They share legal assistance and some other general functions with the parent company. This is not an area of large costs and not really an area of concern – in fact, costs in this area have slightly decreased.

All right, lets now look at manufacturing costs. How have manufacturing costs changed? Has the firm taken advantage of economies of scale, capacity utilization, and other synergies in manufacturing?

Manufacturing costs have remained constant.

Well, this could be one of the potential problems. Manufacturing costs should decrease as a percent of sales from synergies. Post merger synergies should be realized and manufacturing costs should somewhat decline. Other post merger synergies such as overhead and management costs could also be realized. Economies of scale and capacity utilization should improve from mergers and therefore costs should decrease as a percent of sales. Other issues could be culture fit between the two firms. We'll start with the manufacturing costs remaining constant. Let's take a look at how many plants are in this division and what the capacity utilizations are for these plants.

There is one manufacturing facility with high capacity utilization. Do you think that there are any opportunities to reduce costs within manufacturing?

There is still a possibility of moving the production of the processed meats to each raw meat plant and increasing the vertical integration at each facility. Perhaps we can examine the investment required at each plant and the exiting costs for the existing plant to the benefits of transportation costs and inventory costs.

Suppose this is true and after implementing these changes, we discover that there is a $5 million improvement to the EBITA for a $20 million investment. What would you recommend now? Would you implement these changes?

I would now compare the improvement in earnings to the loss from operations. What is the loss in operations annually?

The operations loss is $10 million per year.

So, this means that the division is still losing $5 million annually plus a $20 million dollar investment. Now, let's look at selling the business. Who are our potential buyers and how much are the willing to pay?

- ✓ *Interview Hot Tips: (don't forget that this is always an option that you should be prepared to bring up if you seem unable to find a path to profitability)*

There are no potential buyers. You cannot sell this business.

Then, we must look at exit costs. Perhaps we should not be in this business. How much would it cost close down the plant? We would want to know the total cost of severance and the value of the assets we currently have.

The cost of exiting is $50M

If we do an NPV calculation on the cash flow improvements, we would see that we would lose almost the same amount by staying in business. You can now make an argument for exiting the business based on core competencies and focusing on core businesses.

Practice Business Case 20
Company: Bain & Co.

20. Our client is a European auto parts manufacturer. The company has been watching their aggregate profit degrade over the last year relative to their competition. Assume that you and I are consultants and will be meeting with the CFO tomorrow to discuss this issue. What information would you like to collect before meeting with the CFO? What information would you want to discuss with the CFO? How would you go about trying to help the company to reverse this problem?

The first thing I would want to pursue is some additional information about the company.

We have collected some preliminary information. Our client is a leading producer of exhaust systems. They sell their exhaust systems to exhaust system repair shops throughout Europe.

Can you tell me a little more about the company's customers, the repair shops, and how they make their purchase decisions?

Our preliminary information shows that the repair shops each have chosen a sole supplier of exhaust systems. The relationships between the repair shops and the exhaust system suppliers have been formed over a long period. Most repair shops will not change suppliers unless a quality issue arises or a supplier decides to raise prices dramatically above the competition. No major repair shops have changed suppliers in the last five years.

I am curious about the competition. Do they each sell a similar product line?

Yes, there are two other major suppliers, each with approximately a third of the market. Our client and their competitors sell three types of exhaust systems. The top of the line exhaust system is a stainless steel sophisticated system followed by mid grade aluminum sophisticated system, and low-grade aluminum basic system.

Have the competition's profits been degrading over the last year as well?

No, the competitions' profits have not declined like our client's. The other two are more profitable in aggregate than our client despite almost exactly the same total revenue.

Does our client have a cost disadvantage?

Actually, no. Each of the three companies has approximately the same variable cost for each type of system. In fact, our client has slightly lower fixed costs than their competitors, which would lead you to think that they should be more profitable overall.

Earlier, you mentioned that the company sells three different exhaust systems. Have we collected any information about the profitability of each type of system?

The stainless steel system, although the most highly priced, is very costly to manufacture and provides the lowest margin per unit. The basic system, although the lowest priced, can be produced at a very low cost and provides the highest margin per unit.

We're just about out of time. Please take a minute to summarize your findings and what subjects you would like to discuss with the CFO tomorrow.

Well, it seems that our client has the same total revenue as their competition. If their aggregate profit were lower, our client's aggregate costs must be higher than the competition. However, as we discussed, our client's per unit variable costs are the same as the competitions' and our client's fixed costs are actually lower. I wonder if the reason their aggregate profit is lower, relative to the competition, stems from a different sales mix. Our client could have the same aggregate revenue but if it was made up of higher priced, low margin stainless steel systems than the other systems relative to the competition their sales would be the same but their overall profit could be lower.

In order to prove this theory, I would want to ask the CFO for his unit sales by product line. By comparing our client's unit sales in each of the three different exhaust systems we could conclude whether or not our client was selling relatively lower margin product than the competition.

Can you think of a way to potentially get an idea of the competitions' sales mix? The competition currently does not break out their sales by product line in publicly available documents.

It may be possible to obtain an industry report from an independent organization that might include a breakdown of the number of each of the three product lines sold last year in aggregate. We could back into the competition's sales mix by deducting our client's units sold in each of the three product lines. This leave the two competitors' units sold in each of the lines. This information, through some simple ratio analysis, could provide the relative comparison for which we are looking.

Very good. I have one last question. Can you think of any reasons that might be driving our client's sales mix to differ from their competition?

There are two main things that come to mind. The first is that the client's repair shops' demand for each product line differs from the demand at the repair shops that the competition serves. The second may stem from an internal problem that our client may have created with their sales staff. If the sales staff is paid a commission based on total revenue sold versus some combination of revenue and profitability then the sales staff may be pushing the highest priced stainless steel system over the others. If this was in fact true, it would help to explain why their profits are lower in aggregate despite the same aggregate cost.

Well done! This case is a real example. The sales incentive problem was exactly the reason the company was less profitable relative to the competition. In an effort to boost revenue, the company had changed their sales incentive plan to be based more heavily on total revenue, ignoring profitability. We helped the client to realize that they were negatively impacting their profit and they changed the compensation structure to take profitability into account.