



The Anderson School at UCLA



Management Consulting Association

<http://www.anderson.ucla.edu/zone/mca>

Membership Handbook 1999-2000

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Management Consulting Association Overview

Management Consulting Association (MCA)

The Management Consulting Association (MCA) is an active organization committed to promoting the interests of students considering careers in management consulting. The Association supports and facilitates close interaction among professionals in consulting, Anderson students, faculty, and alumni through numerous career and social events. These activities provide members with a thorough understanding of the management consulting industry and increase awareness among leading consulting firms of the Anderson School at UCLA, one of the nation's premier business schools.

MCA Sponsors 1999-2000

The MCA greatly appreciates the generous sponsorships for the 1999-2000 school year from the following firms:

- **Andersen Consulting***
- **A.T. Kearney**
- **The Boston Consulting Group***
- **Diamond Technology Partners**
- **Ernst & Young**
- **Mitchell Madison Group**
- **PricewaterhouseCoopers***

* Denotes that this sponsor is also an "Education Sponsor" of the MCA for 1999-2000

MCA Leadership 1999-2000

<i>President:</i>	Nathan Cook
<i>Vice President, Internal Affairs:</i>	Jon Estanislao
<i>Vice President, External Affairs:</i>	David Chang
<i>Vice President, Education:</i>	Mathew Chittle
<i>Vice President, FEMBA Affairs:</i>	Peter Yu
<i>Director of Membership:</i>	Diane Aitken
<i>Director of Events and Alumni Relations:</i>	Jon Chun
<i>Director of Case Interview Preparation:</i>	Randy Lowell
<i>FEMBA Co-Directors:</i>	Raul Chiriboga and Tom Pollock
<i>Career Night Directors:</i>	Onnie Bose and Benjie Gaw
<i>Director of Case Book Preparation:</i>	Khoi Nguyen
<i>Director of Case Interview Preparation Events:</i>	Tom Mercer
<i>Directors of Alumni Social Events:</i>	Ann Park and Magdalena Simkova
<i>Directors of Industry Educational Events:</i>	Deborah Chen and Magdalena Simkova
<i>Social Chair:</i>	Shanie Geddes
<i>Webmaster:</i>	Ken Stimeling
<i>Strategic Advisory Group:</i>	Joel Rubenstein, Irina Wolf, Gary Yeung, Shanie Geddes, Randy Lowell, Ann Park, Tom Mercer, Deborah Chen
<i>Strategic Advisory Group Faculty Advisor:</i>	Prof. Kumar Rajaram

MCA Programming 1999-2000

The MCA offers many programs and resources to its members, several of them co-sponsored with other student organizations, such as the Anderson Student Association. While some events change from one year to the next, the following are planned for the 1999-2000 academic year.

Case Interview Preparation Curriculum

The MCA is proud to announce the introduction of a new case preparation curriculum for first year students (and second year FEMBA students), developed in conjunction with our corporate Education Sponsors. The curriculum will be offered twice prior to internship interviews. At the end of the curriculum, consulting firms will conduct mock case interviews to test students' progress.

Case Interview Preparation Materials

The MCA will provide new members with Wetfeet Press guides to aid in their preparation for case interviews. We will also make copies available for existing members, on reserve in the Library. The generous donations of our Education Sponsors assisted in the purchase of these materials for members.

Career Night

The Management Consulting Career Night, sponsored by the Anderson Student Association, is held in the Fall. This event provides an opportunity for representatives from a large number of consulting firms to meet Anderson students in a roundtable format. The event also features a distinguished keynote speaker.

Firm Relations

The MCA makes active efforts to contact consulting firms which do not currently attend events or recruit at Anderson, as well as to strengthen relationships with the many firms that already participate in school activities.

Career Services

The MCA complements the CMC by promoting various career-related activities, such as:

- Workshops presented by firms currently recruiting on campus;
- Case analysis groups led by second-year students and professors; and
- A library of consulting related materials.

The goal of these activities is to prepare students for the rigorous interviewing process.

Alumni Relations

Special events are held for Anderson alumni working in the consulting industry. These events give current students a chance to meet alumni and strengthen alumni ties to the school. Members often seek out recent graduates for candid advice on "life as a consultant" at these events. In addition, many alumni are very open to having students contact them directly. The MCA maintains an alumni database for this purpose.

Social Events

The MCA provides a number of opportunities for members to socialize with each other. While these events vary from year to year, a number of informal events are usually organized.

Mentor Programs

The MCA, in coordination with the ASA, facilitates an informal mentor program to foster communication and career counseling between first and second-year students.

Website (<http://www.anderson.ucla.edu/zone/mca>)

The MCA has one of the most impressive websites available for students interested in careers in consulting. Our website is the central point of communication for students and firms with respect to our schedule, announcements, members' resumes, firm profiles, and additional case preparation resources available to students.

1999 Management Consulting Summer Interns

The following is a partial list of students who spent their summers with management consulting firms. This list is intended to provide students who are interested in consulting with a point of reference if they have questions about working for a specific firm. I'm sure that the students below would be more than happy to discuss their summer experiences with you.

A.T. Kearney

Mark Torchiana

Andersen Consulting

David Chang
Jon Estanislao
Clinton Gott

Bain & Company (Asia)

Lawrence Jen

Booz • Allen & Hamilton

Bing Kongmebhol
Tom Mercer
Alexandre Nascimento (Brazil Office)

The Boston Consulting Group

Annik Shahani

Deloitte Consulting

Larry Haas
Jorge Larios
Steve Pickle
Sherie Yearton

Diamond Technology Partners

Steve Marik Brockman
Lily Chen
Matthew Chittle
Shanie Geddes

Ernst & Young Consulting Practice

Gary K. Yeung

McKinsey & Company

Yotam Ben-Ami (Spain Office)
Ariel Dascal (Brazil Office)
Kristian Freiwald (Spain Office)
Magdalena Simkova (Prague Office)

Mitchell Madison Group

(firm recently merged with U.S. Web/CKS)

Andre Caldeira
Mitch Kossar
Ann Park

PricewaterhouseCoopers

Erin McGraw
Khoi Nguyen

Other Sources for Case Interview Preparation

Last spring, we conducted a survey of our members to determine the best sources for case interview preparation. The survey results yielded the following:

Best Overall Sources

- Wharton Case Interview Guide Vol. 1
- Wharton Case Interview Cards
- Wharton Case Interview Guide Vol. 2
- Wet Feet Press 15 Case Questions
- Mock interviews with consulting firms
- Mock interviews with MCA mentor

Best Sources for Frameworks

- Wharton Case Interview Cards
- Competitive Strategy Book (Porter)
- Wharton Case Interview Guide Vol. 1
- All types of mock interviews (esp. w/ MCA mentors)
- Frameworks presentations by consulting firms

Best Sources for Sample Cases

- Wharton Case Interview Guide Vol. 1
- Wharton Case Interview Guide Vol. 2
- Mock interviews with consulting firms

Availability of Materials On-Line

We will place the MCA Membership Handbook as well as other useful material on-line (both on our web page and on the MBA shared drive). An email will be sent soon to indicate exactly where these materials can be found on-line.

Special Thanks

The people below selflessly sacrificed part of their summer vacations to help develop this new edition of the MCA Membership Handbook. Their help was greatly appreciated.

- **David Chang**
- **Matthew Chittle**
- **Nathan Cook**
- **Tom Mercer**
- **Ann Park**

Management Consulting Association 1999-2000 Calendar

Note: This calendar is tentative and is subject to change. Please refer to the CMC calendar for the most accurate dates for brown bag and evening receptions, and our website for the most up-to-date information on events co-sponsored by the MCA.

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
					1	2
3	4 CSC Healthcare, formerly APM (B) Diamond Technology Partners (R)	5 Boston Consulting Group (R)	6 Sibson & Co. (B) Bain & Co. (R)	7 MCA KICKOFF (12-1pm) – D313 ECG Management Consultants (B) Andersen Consulting (R)	8 <u>WHAT ARE MY OPTIONS?</u> ("WAMO")	9 FEMBA ORG. FAIR
10	11 <i>INDUSTRY OVERVIEW PRESENTATION (12-1pm) – D301</i> A.T. Kearney (R)	12 PwC MOCK INTERVIEWS FOR 2 nd YEARS (12-5pm) – D301 Ernst & Young (R)	13 Towers Perrin (B) Towers Perrin (R)	14 <i>CASE INTRO PRESENTATION, Round 1 (12-1pm) – D313</i> E&Y KL (B) PwC (R) Mitchell Madison (R)	15 <i>"SO YOU WANNA BE A CONSULTANT?" – TOWERS PERRIN</i>	16
17	18 Warner Group (B) SCA Consulting (R)	19 <i>FRAMEWORKS PRESENTATION, Round 1 (12-1pm) – D301</i> PRTM (R)	20 Deloitte Consulting (R)	21 <i>MCA HAPPY HOUR</i>	22	23 WOMEN IN CONSULTING BRUNCH
24	25 Arthur Andersen Consulting (R)	26	27	28 <i>SECOND YEAR PANEL (12-1pm) – D301</i> Diamond Technology Partners (I)	29	30
31						

October

R = Evening Reception; B = Brown Bag (noon); I = Interviews (for full-time positions)

Bold = primary; *italic* = for everyone; plain = other

November

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
	1 IBM Consulting (B) Andersen Consulting (I) CSC Healthcare, formerly APM (I) Sibson & Co. (I)	2 Hay Group (R) Boston Consulting Group (I) Towers Perrin (I) CONSULTING CAREER NIGHT (6-9pm)	3	4 PwC (I)	5 Mitchell Madison (I) <u>FIRST YEAR RESUME REVIEW - A.T. KEARNEY</u>	6
7	8 IBM Consulting (B) Ernst & Young (I) Warner Group (I) KPMG (R)	9 Montgomery & Associates (B) Hamilton HMC/ Kurt Salmon Associates (I)	10 Wilshire Associates (I) <u>SECOND YEAR PANEL (12-1pm) - D310</u>	11 <i>CASE PANEL, Round 1 (12-1pm) - D301</i>	12 A.T. Kearney (I)	13
14	15 SCA Consulting (I) PRTM (I)	16 AMS (R) IBM Consulting (I)	17 AMS (I) E&Y Kenneth Leventhal (I) ECG Management Consultants (I) KPMG (I)	18 Montgomery & Associates (I)	19 Arthur Andersen International (I) Hay Group (I) <u>FIRST YEAR RESUME REVIEW - PwC</u>	20
21	22 Arthur Andersen Consulting (I)	23 <i>CASE INTRO PRESENTATION, Round 2 (12-1pm) - D313</i>	24	25	26	27
28	29	30 <i>FRAMEWORKS PRESENTATION, Round 2 (12-1pm) - D301</i>				

R = Evening Reception; B = Brown Bag (noon); I = Interviews (for full-time positions)
Bold = primarily for 2nd years; Underline = primarily for 1st years; *Italic* = for everyone; plain = other

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
			1 <u>Bain & Co. (R)</u>	2	3	4
5	6 <u>Andersen Consulting (R)</u>	7	8 <u>Boston Consulting Group (R)</u>	9	10 <u>MOCK CASE INTERVIEWS – DIAMOND TECHNOLOGY PARTNERS AND PwC</u>	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

December

R = Evening Reception; B = Brown Bag (noon)
Bold = primarily for 2nd years; Underline = primarily for 1st years; *Italic* = for everyone; plain = other

February

<i>Sun</i>	<i>Mon</i>	<i>Tue</i>	<i>Wed</i>	<i>Thu</i>	<i>Fri</i>	<i>Sat</i>
		1 <u>Boston Consulting Group (SI)</u>	2	3	4 <u>Ernst & Young (SI)</u>	5
6	7 <u>Andersen Consulting (SI)</u> <u>Diamond Technology Partners (SI)</u>	8 <u>Towers Perrin (SI)</u>	9	10 <u>PwC (SI)</u>	11	12
13	14 <u>A.T. Kearney (SI)</u> <u>PRTM (SI)</u>	15	16	17	18 <u>Mitchell Madison (SI)</u> <u>SCA Consulting (SI)</u>	19
20	21	22	23	24	25	26
27	28	29				

R = Evening Reception; B = Brown Bag (noon); SI = Interviews (for summer positions)
Bold = primarily for 2nd years; Underline = primarily for 1st years; *Italic* = for everyone; plain = other

Case Interview Overview

Introduction

This workbook is designed to provide students with the following:

- An introduction to the case method of interviewing
- Methods of preparation for case interviews
- General hints and recommendations for interviewing
- Techniques for structuring messy cases
- Basic definitions of commonly used terminology
- Brief descriptions of commonly used frameworks
- Some real case examples that students have faced in interviews

While many of the common frameworks and models used in tackling cases are contained here, a student's understanding of these models is merely the ante to play in a case interview. The frameworks do not provide solutions. Rather, they provide conceptual structures used to develop a comprehensive line of questioning of the major points of a case. A framework should be:

- M – Mutually
- E – Exclusive
- C – Collectively
- E – Exhaustive

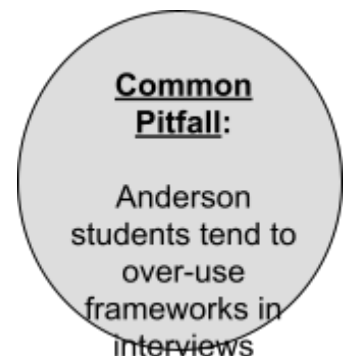
A framework is just that, a framework to give structure to a problem. It is not the be all and end all. Knowing the frameworks backward and forward alone will not land you an offer. However, a logical application of the frameworks to messy and open-ended case questions will help you succeed in this one part of the interview process.

Consulting (and other) firms will expect an MBA student to have a comprehensive understanding of these frameworks, and are likely not interviewing to see which candidate can recall the 4 P's the best. **They are, instead, using a case to gain insight into a student's ability to organize his or her thoughts, pursue a well-reasoned line of inquiry, and assemble theories on possible solutions to the problems presented in a case.** A key idea is that the method is as important, if not more important, than the "answer." In many cases, especially the short type, ("How many street lights are in Los Angeles?"), the method is all that matters. No interviewer would logically expect a candidate to know this answer, but wants to see how logically one would approach this question.

It is

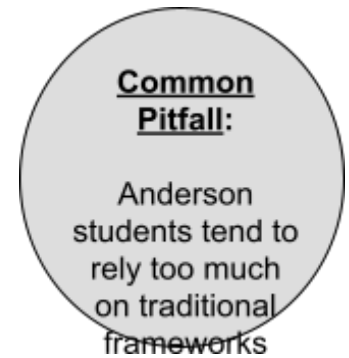
Frameworks: A Blessing and a Bane

It is important to emphasize that although it is important to understand the concepts behind frameworks and use them to structure an analysis of a problem, they should not be over-used. In a way, frameworks are like clichés: the underlying concepts are important, but they probably should not be used outright (e.g., one should not say, "Using Porter's 5 forces..."). Consultants have been exposed to B-school frameworks hundreds of times, and clients are often turned off by B-school jargon. Ideally, then, in a case interview, one should strive to use frameworks in a manner that disguises their use and instead gives the impression



that one is merely conversing with the interviewer in an intelligent and highly structured fashion about a client's problems.

It is also important to emphasize that one should not be reluctant in formulating an ad-hoc framework on the fly. In fact, it may be advantageous to use an ad-hoc framework over a traditional, over-used framework since it shows that one is not merely reciting what one learned in class, that is not forcing a traditional framework on a problem, that one can be creative in analyzing a problem, and that one can think quickly on the fly in attacking a new problem. So, what is an "ad-hoc" framework? An ad-hoc framework is a way of structuring and organizing one's analysis of a problem that uses various concepts and ideas from many different types of frameworks and puts them together in a new, ad-hoc framework (see the *Issue Trees and Master Frameworks* sub-section in the section, **Principles and Frameworks for Case Interviews**). For example, one may determine that a thorough analysis of a problem will require an investigation of the issues associated with People, Processes, and Technology. The overall point is that one should not be reluctant in organizing one's analysis of a problem in a way that makes sense without using any traditional frameworks.



Last, but not least, one should never force a framework on a problem. This is probably the worst thing one could do in an interview. This often happens to students when they encounter messy, unstructured case interview problems and are at a loss as to how to break the problem down (other students react by analyzing the problem in a highly unstructured manner – they make their (valid) points in a seemingly random fashion and jump from topic to topic). It is important in these cases to ask for a few minutes to “organize one's thoughts on the problem” (one should never be shy in taking a few minutes to layout one's framework; in fact, there are few situations in which one should *not* do this). It also helps to use one of “master” frameworks discussed in the *Issue Trees and Master Frameworks* sub-section in the section, **Principles and Frameworks for Case Interviews**. “Master frameworks” are general, over-arching frameworks that can be applied (at least partially) in most situations. Alternatively, one may try building an “Issue Tree” for the specific problem.

In summary, frameworks can be a powerful tool if used correctly, but they may also prove detrimental if used incorrectly. Frameworks are intended to help business people structure their analysis of a problem by laying out the issues they need to consider in a logical and organized fashion. Consulting firms are looking for new employees who will add significant value to their projects. The ability to recite and apply frameworks in a non-creative way is a commodity skill that consulting firms are not interested in. In general, one should strive to exhibit the following in an interview:

- Creativity
- Logical analysis of the problem
- Structured analysis of the problem
- Comprehensive analysis of the problem
- Identification of the overt problem
- Methodical and structured questioning to reveal relevant facts and information
- Hypotheses on the potential root problems
- Supporting data and facts to support or refute hypotheses
- Specific recommendations to resolve the problem

Types of Cases¹

The “Surprise! It’s a Case!” Question:

There are questions where it may seem as if the interviewer is being social and trying to find out about you, but in fact s/he is really trying to assess how you think about things. The tricky thing about these questions is that the interviewers use information about you from your resume or cover letter to design the question. This may lead you to believe that it is a question designed to find out what you are like or what you have accomplished. Other than that, they are not trick at all, because you can design the content of your answer.

Example:

The interviewer will start with something like, “I see here that you have worked in Canada for a couple of years.”

- In a personality/accomplishment question, the interviewer would go on to ask you about your job, e.g. “Give me an example of a time when you worked for Ford in Canada in which you demonstrated your leadership skills.”
- In a case question, the interviewer would be likely to ask a question unrelated to your specific job, e.g. “In the US, we hear a lot about how NAFTA will impact the balance of trade between the US and Mexico, but we do not hear a lot about the Canadian situation. What do you think the ramifications of NAFTA will be for Canada?”

Tips:

“I have no idea” is not a good answer to these questions. You should be up-to-date on many economic/business-related current events so that you are not sitting there stupidly if they ask you a question like this. If you have something unusual on your resume, realize that it is most likely to draw a case question such as this. Try to get more up-to-date on issues that people might bring up related to this subject. For example, on my resume, I have noted that the title of my senior thesis was, “South Africa: The Economic Case Against Disinvestment.” This has been the subject of a case in about half of my interviews – Almost needless to say, I am prepared.

The good news is that your interviewer does not know everything about everything and does not expect you to either. I did not work for Ford in Canada, but I would approach this question by thinking of three important, general points that would be relevant.

For example:

“Well, when I think of the impact NAFTA will have on Canada, I think that there are three important, very different things to consider:

- NAFTA will have almost no effect on goods being sold to the US that were already covered by the Canadian Free Trade Agreement, other than potentially changing the administrative procedures.
- NAFTA will have an effect on goods being sold to the US that were being sold to the US that were not covered by the prior agreement and goods being sold to Mexico. Depending on the type of product, the schedule for tariff reduction, and the amount of fabrication being done in North America, this product may now be less expensive to sell.

¹ Taken largely from Jennifer Midura – Anderson class of 1994

- NAFTA is likely to encourage new sourcing and intermediate materials manufacture in Canada. Since manufacturers will now be able to sell to the US market without a tariff if they source a certain amount of the fabrication costs from Canada, most Canadians hope that this will encourage foreign companies to use Canadian parts and labor to avoid US tariffs. Of course, Canada also has some of its own Ross Perots who do not believe that this will be the case.”

You will probably notice that this is not rocket science. I do not think it has to be. The objective is to show you can think on your feet, analyze a problem carefully, and are intellectually curious enough to have learned something about an important business-related subject.

One other point. Generally, these are not made to take up an entire interview. Therefore, it is usually possible to get away with simply making your three points without providing any further elaboration on your mini-outline.

This is a good example of what I meant by developing a framework for answering a problem. If I had one of these kinds of case questions, I would invariably answer it by giving a very close approximation of the opening line above, and then make three general points. Obviously, you are going to have to improvise on what the three main points are, given the question, so you will have to be creative and thoughtful in your points.

The Numbers Case:

(These cases seem to be becoming less common than they once were). These are cases where you are expected to compute something. They are often used as short interview questions in situations where the interviewer intends to spend some of the time asking you “fit” (personality/accomplishment) questions. In other words, do not expect to spend forty minutes on this.

Examples:

There are a million examples of these questions. Some I have heard include:

- How many gas stations are there in Chicago?
- How much money was loaned in low-income home loans in Los Angeles county last year?
- How many streetlights are there in Los Angeles?
- How many sheep are there in New Zealand?
- How many people ski in America?
- How much does a fully-loaded Concorde weigh on take-off?
- How much money does a class at Anderson donate to the school over the life of the class?

Tips:

Unlike most other cases, you are expected to come up with a numerical answer to these cases. Therefore, my two big tips are: break the problem down (start with population in a country, certain state, area, socioeconomic group, pick a percentage of the population or an allocation base that might be relevant, move on from there) and use EASY, ROUND numbers. I have asked people these questions and they have said things like, “Well, let’s assume that 12% of people in non-snow states ski...” Unless you are really, really good at doing math in your head and want to show off your skill, use easy numbers, because you should not whip out your HP-12C to do these problems.

The interviewer does not expect you to get the exact right answer to these questions. S/he wants to see how you break down a problem into manageable pieces. Therefore, show your thought process clearly. “Well, New Zealand is not a very populous country, so let’s assume that there are about 10 million people in the whole country...”

At the end of these questions, interviewers will often ask you, “Is there anything you would like to change about your answer?” Do not be terrified about this. Instead, consider it your opportunity to fix things if, by choosing the wrong assumption you have estimated that there are 1 million gas stations in Chicago. If your answer clearly way out of the ballpark, acknowledge this and try to make suggestions for assumptions that may have been totally horrendous. We are all human, and sticking by a ridiculous or irrational assumption may make an interviewer see you as such.

Here is an answer to the loans in Los Angeles County question (I have no idea whether this is even close to the actual answer):

“Let’s assume that there are 10 million people in Los Angeles County. Let’s also assume that one fifth of them would qualify as low income. This assumes that in Los Angeles County, one fifth are high income, one fifth low, and three fifths middle. So, we are now reduced to 2 million people. These people are in an average of four person family units, bringing us down to half a million family groups who have to either rent or buy. Since they are low income, I assume that only half of them buy. We are now down to 250,000 family units. I would assume that these units buy a new house, on average, every ten years, leaving only 25,000 family groups in the market last year. Since they are low income, I assume that they cannot finance very much, but Los Angeles is an expensive housing market, so I am assuming \$50,000 on average for each of the family units in the market last year. Total in low income housing loans in Los Angeles County last year: \$1.25 billion.”

The Wide Open Case:

The general idea is to give you something very, very vague to start from and it is up to you to put some structure on the discussion.

Examples:

These are two that I have actually heard of people getting. I’m sure you can think of many more possibilities:

- “Saturn” (that is all the interviewer says and s/he expects you to do all of the talking.)
- “Let’s assume that you are a Korean auto manufacturer. What do you think about?”

Tips:

I believe that these cases require much the same skills as the “Surprise” questions. My game plan would be to lead by using much of the same type of framework as shown in the “Surprise” case. Of course, you will have to be much more careful in developing this framework since you will then actually have to give a broader discussion of each of the topic points. These interviews are usually intended to take up the whole interview period.

The Normal Case:

These questions are also intended to take up an entire interview. They are by far the most usual kind of cases, so spend a considerable amount of time practicing your technique in answering these. One word of encouragement – I do not think anyone ever got out of a case saying, “I really nailed that one!” This idea is that they push you to think harder and better by interacting with you throughout this type of case. This means that sometimes they will

point out things that you did not see. This does not mean that the interview is over, it simply means that they want to see how you might deal with another issue.

Examples:

There are many types of “Normal” cases. Here are some examples of each kind:

Marketing:

- You are a producer of frozen food who is considering entering the diet frozen food market. What are some of the things you would want to know about before you make that decision? Do you enter the market?
- You are a British car manufacturer trying to decide whether to market your new, hot car model in the US, and if so, how to do it. What do you do?

Operations:

- You are called in by a manufacturer of industrial rubber products. This manufacturer and a competitor have split the market for years and both of them have enjoyed substantial profits as a result. All of a sudden, one of the company’s distributors tells them that the competitor has dropped its prices 20%. The industrial rubber products manufacturer wants to know whether you think they should drop their prices, too. What do you think?
- A label-making division of a big conglomerate has been losing money in what seems like a fairly stable market. What is going wrong? What should they do?

Finance:

- A road surfaces manufacturer has been told by the California EPA that they must close their plant in City of Industry (they have 23 others across the country) due to excessive sulfur emissions. What should the company do?
- A cruise company has one Mediterranean ship that is always full. Should they buy another?

Tips²:

Here is where the whole framework concept comes into play. The way these questions work is they give you a situation and immediately ask you a question, or ask you to do something. You should not immediately answer the question. Instead, you are expected to analyze the problem thoroughly by asking intelligent, well-chosen questions about the problem. After a thorough analysis, you can then make informed recommendations.

Mike Cornell (Anderson class of 1993) suggests ALWAYS starting with a question. If asked, the cruise ship question above, Mike would respond with the question, “Why are they considering buying another ship?” before getting into details about capacity, utilization, ability to buy, customer demand, etc.

But... how do you know what questions to ask? How can you try to seem organized and thorough? By using a pre-prepared framework. This may not get you to the analysis and/or recommendations of a lifetime, but it will certainly help you to sound organized, confident, and prepared.

² Taken in part from Harvard Business School African-American Student’s Union Interview Workshop materials - January 27, 1994

For example, a framework of choice for marketing questions is the 3 C's/4 P's. So, with the British car manufacturer question, something like, "That sounds like a really interesting problem. Before I make any recommendations, though, I would like to thoroughly analyze this issue. For example, I am going to need some information about the company itself, the customers, who would be the dealers in this case, the American car-buying public, and the competition." Then I would proceed to probe each of these C's.

So what is the big deal, you are probably asking at this point? First, by having a framework, you are able to retain your composure. This is very important, because the interviewer is testing how you would behave in front of a client. Second, you have shown the interviewer that you know you must analyze a problem before jumping to a conclusion. Third, you have shown the interviewer a broad picture and have not immediately delved into little nitpicky, disorganized questions. Last, you have given yourself something to cling to if things are not going well. This is very important, because things often do not seem like they are.

For example, after giving the above general statement, you say, "So, let's start with the company. Does the company have sufficient production, financial, and management capacity to market this car in the US?" After getting a brush off answer such as "Yeah, yeah, the company is in fine shape." You should probably try to pursue this line of questioning a little further. "Well, what about the Car? What are the benefits that this car provides over the competition?" After getting the brush off "The car's a good car -- Let's not worry about this now," you might conclude that the interviewer wanted to focus on something else.

Rather than simply bumbling around, having established a framework, you can make a graceful segue. "Okay, then, the company seems to be in a good position internally. Let's explore the next issue – the customers. How does the company expect to sell the cars? Does the company intend to establish its own dealership network or use another?" When the interviewer replies, "Well, that's a good question..." you know you have hit one of the areas s/he was particularly interested in and can move on from there.

Avanish Sahai, Anderson class of 1995, described a common method as the "T" method of questioning. You move broadly across the top of the "T" until you make a hit. Then, probe deeper down into an issue (the length of the "T"). When you have exhausted that line of questioning, you bring yourself back to the "T" and either continue across to find more "hits", or use the "T" to summarize where you have been, what you found to be important, and what other issues you might want to look into, given enough time.

Mini-Questions and Resume-Related Cases:

Some other case questions come disguised as normal questions. Again, consulting companies are often looking for analytic ability and your ability to structure an issue and communicate your ideas in a logical fashion.

Open-ended questions:

The purpose here is to get a clear understanding of your personal selling points, gauge your ability to communicate in a structured way, and view your confidence and maturity.

- "Tell me about yourself."
- "Anything else we should know about you?"

Focused Questions:

The purpose here is to find evidence of excellence, a logical career plan, a personal growth plan, and gauge your depth of preparation for the interview.

- “What was your greatest challenge/success?”
- “What are your strengths/weaknesses?”
- “Why did you pick that school/career/major?”
- “Why do you want to work for XYZ Consulting?”
- “What aspirations do you have for yourself?”

Life / Work Experience Cases:

The purpose here is to test your business acumen, logical structuring ability, and leadership ability.

- “Describe your last job/the challenges facing your last industry”
- “Describe a situation where you had to convince others that your view was right”
- “Have you ever had to achieve a goal that required action by individuals beyond just yourself?”

Special Cases:

These might be used to test quantitative skills, comfort with ambiguity, creativity, and poise. Humor may be a good way out of some of these:

- “Why are manhole covers round?”
- “Estimate the weight of a 747”
- “What do you think interest rates will do next?”
- “How would you go about determining the demand for radioactive waste disposal facilities?”

Zinger Cases:

Quick hits to test your business acumen, logical reasoning, and your ability to quickly move to the point with poise.

- “I think the dollar is overvalued. What do you think?”
- “How would you solve the budget deficit?”

General Hints on Tackling a Case

A Method for Approaching Cases

1. Listen to the introduction – Do not think ahead to your answer(s).
2. Ask 1-2 clarifying questions, if necessary – Begin to formulate a hypothesis in your head, and test if they are reasonable. While asking these questions, you buy yourself a few moments to postulate.
3. Do not ask for every piece of data. Some interviewers will try to overload you up front with meaningless data. If you ask for it, you may get it, but later find it irrelevant.
4. Take notes – Some suggest this is a faux pas, others think it is a great idea. Ask the interviewer if you need to take notes. Keep in mind that every real consultant, in real life, will almost without fail takes notes in an interview. If you can keep track of all of the minutia in an hour long client interview, more power to you.
5. Structure the problem – i.e. begin to fit the problem into one of the frameworks.
6. Pick a branch to probe – Develop hypotheses, ask for relevant facts, defend/refine hypotheses based on new information, probe further, and describe implications you see. * Key note: if you find yourself running down a rabbit trail of random issues with no end, stop, think, and go back up to 30,000 feet to see if you are even in the right ballpark. It is better to discover this halfway into the interview and leave yourself some recovery time, than to discover this when your hour is done.
7. Pick a second branch, and so on.
8. Prioritize your responses – Support your arguments with your strongest points first.
9. Put it all together – Try to answer overall questions (the big picture) with a reasonable, actionable conclusion. As Anderson professor Bill Yost says, “What are you going to do Monday a.m.?”
 - Review where you have been, and what you know
 - Clarify what you do not understand, and what, with more time, you would like to know
 - Solidify and tender your recommendation (where appropriate, as sometimes the interviewer cares less about your recommendation, and more about how you get to it).
10. Get feedback. Sometimes this is appropriate, sometimes it is not. If the case was a real example, they may tell you what really happened. Each case is a learning experience, and it might be good to know that you missed the boat completely – next time you will do better. If you go out thinking you hit it, but really missed the boat, next time you will make the same mistakes.

A Method for Structuring a Messy Case for Analysis:

1. Trace out what the organization is trying to do (its raison d’être):
 - Map is product flows through the organization to the customer
 - Map its information flows

- Look at the impact of the operating environment (strategic requirements: technical, marketing, financial) on the above flows.
2. Postulate what the KSF - Key Success Factors - are for this business.
 3. What options are available to provide for the KSF's more effectively? Evaluate the options' pros, cons, and risks. Note, too, the implementation risks.
 4. Select an option. Lay out an implementation plan (Who, What, When, and How). Include how you intend to manage implementation risks.

Questions Relevant to All Cases:

1. Who is the protagonist (maybe a company), you the decision maker, or others, etc.)?
2. What are his/her objectives (implicit/explicit)?
3. What problems, opportunities, and risks does the protagonist face?
4. What decisions must the protagonist make (implicit and explicit)?
5. What evidence do I have to help make the decision? What else do I need?
 - Is the evidence (data) unbiased and reliable?
 - How can it be improved?
6. What alternative courses of action are available?
7. What criteria should be used to judge the alternatives?
8. What action should be taken?
9. How should you convince the interviewer that your approach is best?
10. What did you learn from the case?
11. How does it relate to past experiences and to your own experiences?
12. How can you convince the interviewer into believing you really know what you are doing, despite the analysis you just presented? (Note: It is hoped this will not apply!)

Things NOT to SAY During Your Case Interviews:

1. I need a lot more data.
2. What are you looking for?

3. Is this a marketing (e.g.) case?
4. I can't believe that this is a real case! Are your clients really that stupid?
5. This case has no answer.
6. There is obviously one answer to this case.
7. I don't believe you; you're trying to confuse me.
8. I'd like to concentrate totally on the political implications of this situation.
9. I can't solve this case because I haven't had Strategy (e.g.) yet.
10. This case sounds exactly like what we did in Managerial Economics (e.g.)
11. No, I think that really is important.

Things NOT to DO During Your Case Interviews:

1. Play 20 questions.
2. Force your case into a framework – if it doesn't fit, take a new tack.
3. “Shell Answer Man” – (the answer is obviously...)
4. Wild horses – (and I refuse to change my mind...)
5. Get frustrated.
6. Ramble.
7. Run down a rabbit trail with no direction, and forget the big picture.

General Hints and Recommendations:

- Think first, speak second
 - ⇒ You do not get extra credit for speed.
 - ⇒ Silence is an indication of thought, and ignorance.
- Construct a logical framework that identifies the critical issues of the case and articulate it.
 - ⇒ Your interviewer cannot read your mind. Unless you make your thought process Crystal clear to her or him, you risk appearing unstructured in your logic.
- Prioritize the issues if you can, or ask for the information you need in order to do so.

- ⇒ All branches of a logic tree are not created equal. Do not treat them as if they are.
- Ask questions. Make observations. Then formulate your hypotheses.
- Summarize your conclusions at critical points during the interview.
 - ⇒ Reinforces your logical framework and crystallizes your argument.
 - ⇒ Helps to identify information gaps.
- Look for parallels to industries or issues with which you have had some experience.
 - ⇒ Shows you can think “outside of the box” and demonstrates creativity.
- Be confident
 - ⇒ If you have followed a logical framework, supporting your hypotheses is straightforward.
- Practice cases with each other.
 - ⇒ Thinking through a problem and talking through a problem are not the same thing.
 - ⇒ Do not go in cold. Practice before, not during your interview.
- Be prepared with inquisitive questions.
 - ⇒ Demonstrate that you have thought about the company and the consulting industry.
- Speak about your past experience with emphasis on why you did what you did and what the results were
 - ⇒ What you did is less important than the impetus behind it.
 - ⇒ Think of examples of creativity, thought leadership, and proactive problem solving.

Principles and Frameworks for Case Interviews

Definitions and Commonly Used Principles

The following are general principles, terminology, and concepts that are useful in interviewing for consulting positions. This is by no means a complete list of consultant-speak. In fact, consultant-speak is an endless list of buzz-words, industry phrases, and acronyms that tends to grow as quickly as consultants can add to the list.

Economies of Scale

Economies of scale are said to exist when the average cost (AC) declines as output increased over a range of output. If AC declines as output increases, so must the marginal cost (MC) (the cost of the last incremental unit of output). The relationship between AC and MC can be summarized as follows:

MC	<	AC	= Economies of scale
MC	=	AC	= Constant returns to scale
MC	>	AC	= Diseconomies of scale

The paradigm shape of the cost curve is U-shaped. The generally accepted explanation for this is that AC initially declines because fixed costs are being spread over increasing output and then eventually increase as variable costs increase. The minimum efficient scale (MES) is the minimum level on the average cost curve. Economies of scale are not limited to manufacturing; marketing, R&D, and other functions can realize economies of scale as well.

Economies of Scope

Economies of scope exist if the firm reduces costs by increasing the variety of activities it performs. Whereas economies of scale are usually defined in terms of declining average cost functions, it is more customary to define economies of scope in terms of the relative total cost of producing a variety of goods together in one firm versus separately in two or more firms. Economies of scope may be achieved by leveraging core competencies. For example, it may make economic sense for a manufacturer of tape to get to the business of manufacturing not pads with adhesive backings as there are commonalties in the two businesses as many points along the value chain.

Learning Curve

The learning curve refers to cost advantages that flow from accumulated experience and know-how, often through lower costs, higher quality and more effective pricing and marketing. The magnitude of learning benefits is expressed in terms of a “progress ratio” calculated as the unit cost after doubling cumulative production divided by the previous cost (C_2/C_1). A ratio of less than 1 suggests that some cost savings due to learning is taking place. The median appears to be approximately .80, implying that for the typical firm, a doubling of cumulative output is associated with a 20% reduction in unit cost.

Reengineering

Popularized as Business Process Reengineering (BPR), reengineering refers to breaking down business processes and reinventing them to work more efficiently, cutting out non value-adding steps and enhancing communication. Business processes are often replete with implicit rules which hamper the way in which work should truly be done. Further, processes are often viewed as discrete tasks, a habit that prevents management from making frame-breaking, cohesive change. Reengineering is defined by Michael Hammer and James Champy in Reengineering the Corporation as “the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service, and speed.”

TQM - Total Quality Management

TQM refers to the practice of placing an overriding management objective on improving quality. Whereas TQM is more of a philosophy than a specific strategy, the stated objective is often, “zero defects.” A higher level of quality is linked to increased customer satisfactions and thus leads to the ability to charge a higher price at what is often a lower cost. It is important to ensure that the added benefits from incrementally increasing quality outweighs the added cost associated with the quality improvements effort. TQM was initially limited to the manufacturing sector, but has more recently been applied effectively to service businesses as well.

CSF - Critical Success Factors

Key success factors are those factors which are most critical in determining a firm’s ability to survive and prosper. Attributes of key success factors are the following:

- Management can influence them
- They impact the overall competitive position of the firm in the industry
- They are an interaction of characteristics of an industry and each firm’s strategies

A firm must supply what customers want and survive competition from other firms, therefore, management should ask:

- What do customers want?
- What does the firm need to do to survive competition?

Key success factors are those factors which lead to the answers to the above questions. For example, for wood products, key success factors are owning large forests, and maximizing the yield.

Core Competencies

A concept popularized by Professors Gary Hamel and C.K. Prahalad – core competencies are those competencies which provide a potential access to a wide variety of markets, make a significant contribution to perceived customer benefits of the end product, and are difficult for competitors to imitate. The classic example of a company which has effectively leveraged its core competencies is Honda, which has gained a competitive advantage in numerous product markets through its focus on leveraging its skill at making engines.

Vertical Integration

In some industries, companies find it advantageous to integrate backward (towards their suppliers) or forward (towards their customers). Vertical integration makes the most sense from a management and economic perspective when a company wants greater control of a channel that has a major impact to its product cost or quality, or when the existing relationship involves a high level of asset specificity (assets that are specific to the relationship the company has with its supplier or customer).

JIT - Just in Time Manufacturing

The goal of JIT production is zero inventory with 100% quality. It means that materials arrive at the customer's factory exactly when needed. It calls for a synchronization between supplier and customer productions schedules so that inventory buffers are unnecessary. Effective implementation of JIT should result in reduced inventory and increased quality, productivity, and adaptability to changes.

Fixed versus Variable Costs

Variable Costs (VC): The costs of production (etc.) that vary directly with the quantity (Q) produced: these costs generally include direct materials and direct labor costs.

Semi-Variable Costs: The costs of production that vary with the quantity produced, but not directly (typically, these are discrete costs, such as the cost of adding new production capacity when Q reaches certain levels).

Fixed Costs (FC): The costs of production that do not vary with the Q produced.

Break-even Point

Break-even analysis is a managerial planning technique using fixed costs, variable costs, and the price of a product to determine the minimum units of sales necessary to break even, or to pay the total costs involved. The necessary sales are called the BEQ (break-even quantity). This technique is also useful to make go/no-go decisions regarding the purchase of new equipment, the decision to produce a new

product, or enter a new market. The BEQ is calculated by dividing the FC by the price minus the VC per unit ($P - VC$):

$$BEQ = (FC) / (P - VC)$$

The price minus the variable cost per unit is called the contribution margin. It represents the amount left after the sale of each unit and the paying of the variable costs in that unit that “contributes” to paying the fixed costs. To determine profit, multiply the quantity sold by the contribution margin and subtract the total FC:

$$\text{Profit} = Q (P - VC) - FC$$

NPV - Net Present Value

The NPV is a project’s net contribution to wealth; present value (PV) minus initial investment. The present value is calculated by discounting future cash flows by an appropriate rate (r), usually called the opportunity cost of capital or the hurdle rate. If C_t represents the cash flow at time t , C_t can be negative, as in the initial investment C_0), the NPV is calculated as follows:

$$NPV = C_0 + \frac{C_1}{(1+r)} + \frac{C_2}{(1+r)^2} \dots \frac{C_t}{(1+r)^t}$$

Pareto Principle (aka 80/20 Rule)

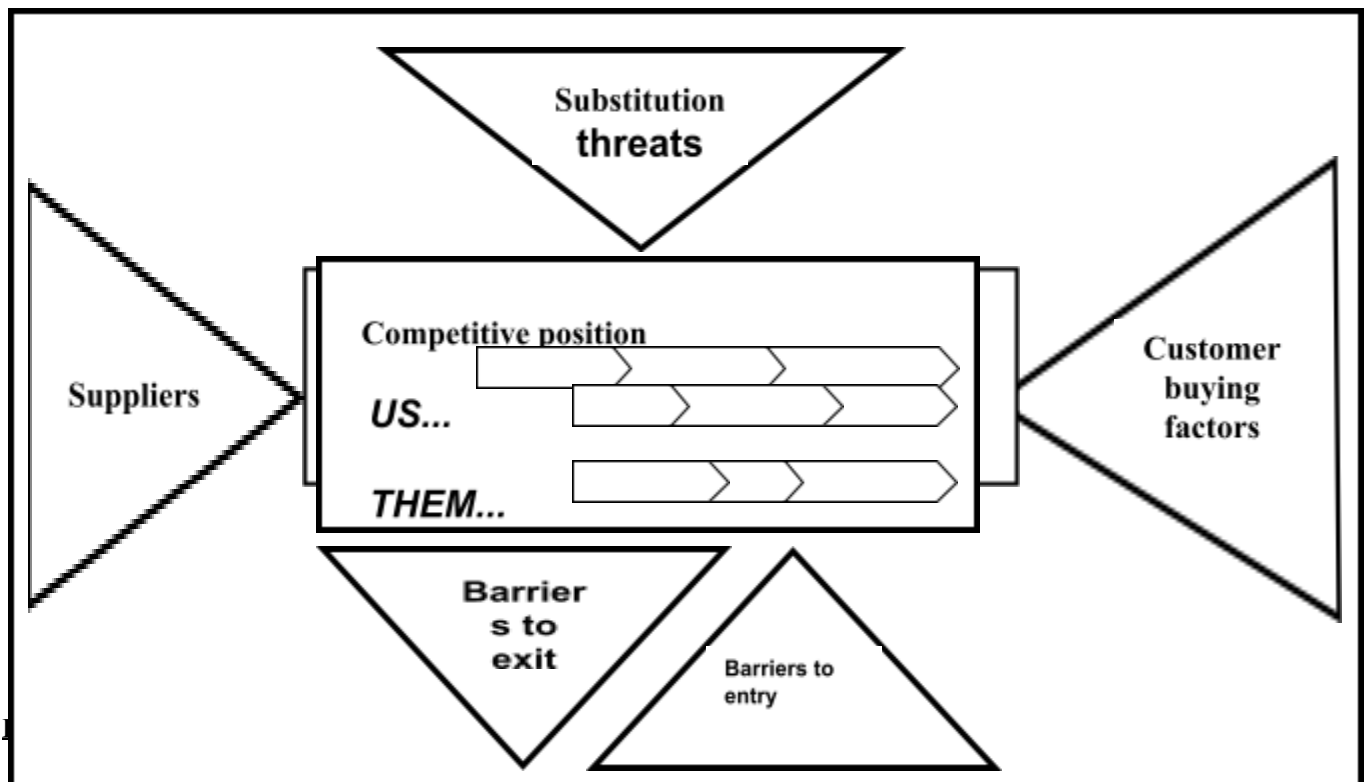
The Pareto principle refers to the situation in which a large amount of the total output comes from a small amount of the total input. This is typified by the “80/20 rule” which states that 80% of the output comes from 20% of the input. Typically, a Pareto analysis is conducted to determine the areas on which management should focus its efforts. For example, 80% of total downtime on a production line is attributed to 2 out of 10 manufacturing steps. Alternatively, 80% of a company’s profits may be generated by 20% of its products.

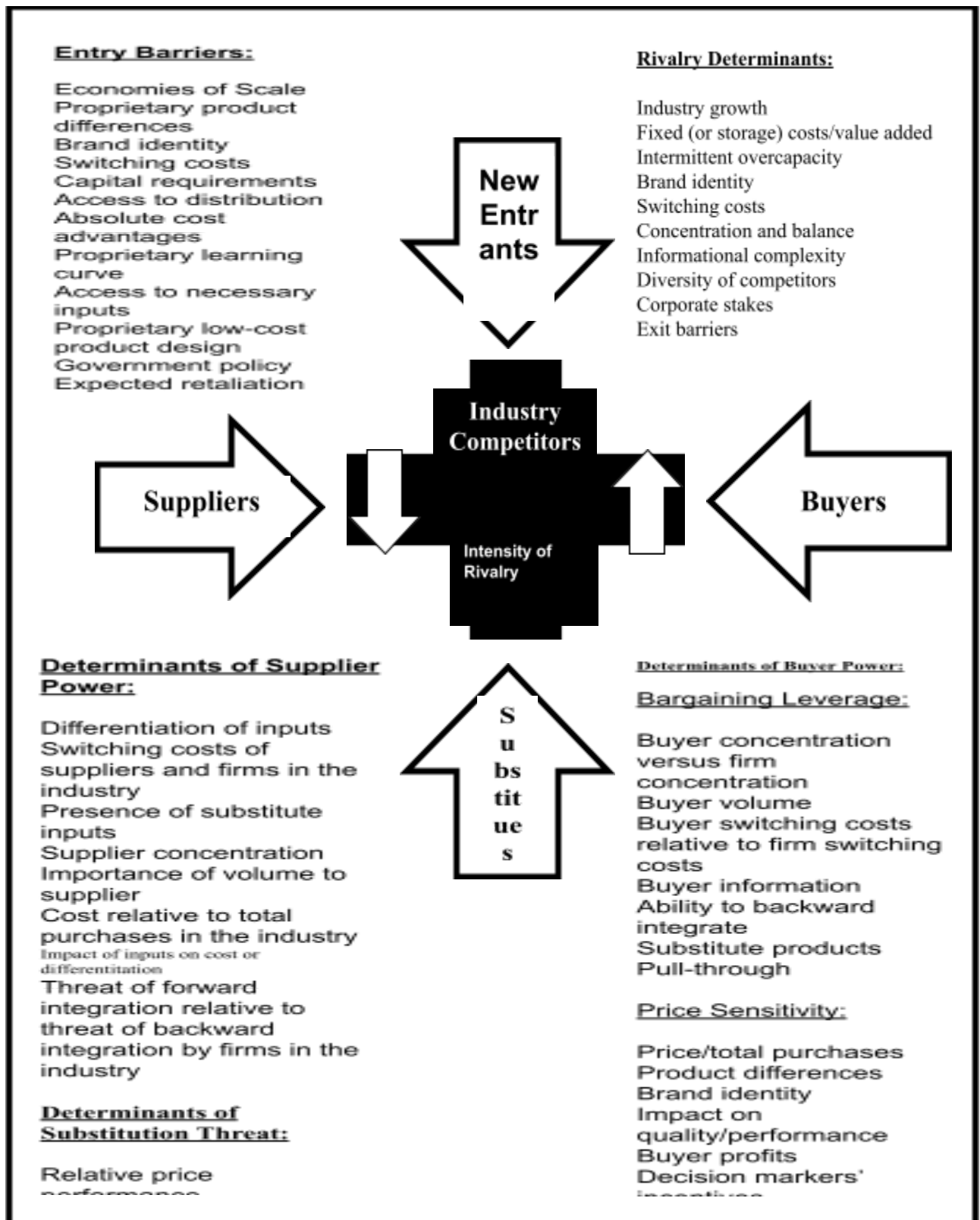
Frameworks for Case Interviews

Financial Statement Basics

<u>Income Statement</u>		<u>BALANCE SHEET</u>
Net Sales		Assets
- Cost of goods sold		Cash
(- Labor		Investments
- Materials		Receivable
- Overhead		Inventories
- Delivery, etc.)		PP & E
= Gross Margin		= Liabilities
- Selling, Gen & Admin exp.		A/Payables
= Operating profit		Long-term debt
- Interest		Other liabilities
= Profit before taxes		Reserves
		+ Shareholder's equity
		- Common Stock
		- Retained Earnings

Porter's Five Forces



Porter (continued)

4 C's of Marketing:

Stands for: C - ustomer
 C - ompetition
 C - ost
 C - apabilities

Intended to ask the critical questions in understanding the core business of an organization, it is really more of a back-of-the-envelope sketch than a detailed analysis. Filling in these categories can be a first, cursory step in understanding a given company or industry. Although this model is unlikely to produce revolutionary insights, it may help in defining a business by breaking it down into the very basics and looking for conflicting elements. It is difficult to use with diversified companies and interests.

3 C's of Marketing:

Stands for: C - ustomer
 C - ompany
 C - ompetitors

4 - P's of Marketing

This model was developed by Kellogg's Philip Kotler. These are the four key dimensions in marketing any product or service. It stands for:

P - roduct
P - rice
P - lacement
P - romotion

Value Disciplines

A set of strategic foci developed by CSC Index consultants called the value disciplines (Harvard Business Review, January-February 1993, pp 84-93). The disciplines are:

- Operational excellence – Provide customers with reliable products or services at competitive prices and delivered with minimal difficulty or inconvenience, with the goal of leading the industry in price and convenience (e.g. Dell Computer).
- Customer intimacy – Segment and target markets precisely, then tailor offerings to match exactly the demands of those niches, combining customer knowledge with operational flexibility to respond quickly to almost any need (e.g. Home Depot).
- Product leadership – Offer customers leading-edge products and services that consistently enhance the customer's use or application of the product, thereby making rivals' goods obsolete (e.g. Nike).

Companies which push the boundaries of one value discipline while meeting industry standards in the other two gain such a lead that competitors find it hard to catch up.

Industry and Competitive Analysis Summary Profile^{viii}

1. Dominant Economic Characteristics of the Industry Environment

- Market growth, geographic scope, industry structure, scale economies, experience curve effects capital requirements, and so on

2. Driving Forces

3. Competition Analysis

- Rivalry among competing sellers (a strong, moderate, or weak force/weapons of competition)
- Threat of potential entry (a strong, or weak force/assessment of entry barriers)
- Competition from substitutes (a strong, moderate, or weak force/why)
- Power of suppliers (a strong, moderate, or weak force/why)
- Power of customers (a strong, moderate, or weak force/why)

4. Competitive Position of Major Companies/Strategic Groups

- Favorably positioned/why
- Unfavorably positioned/why

5. Competitor Analysis

- Strategic approaches/predicted moves of key competitors
- Who to watch and why

6. Key Success Factors

- Factors that are most critical to success within the industry.

7. Industry Prospects and Overall Attractiveness

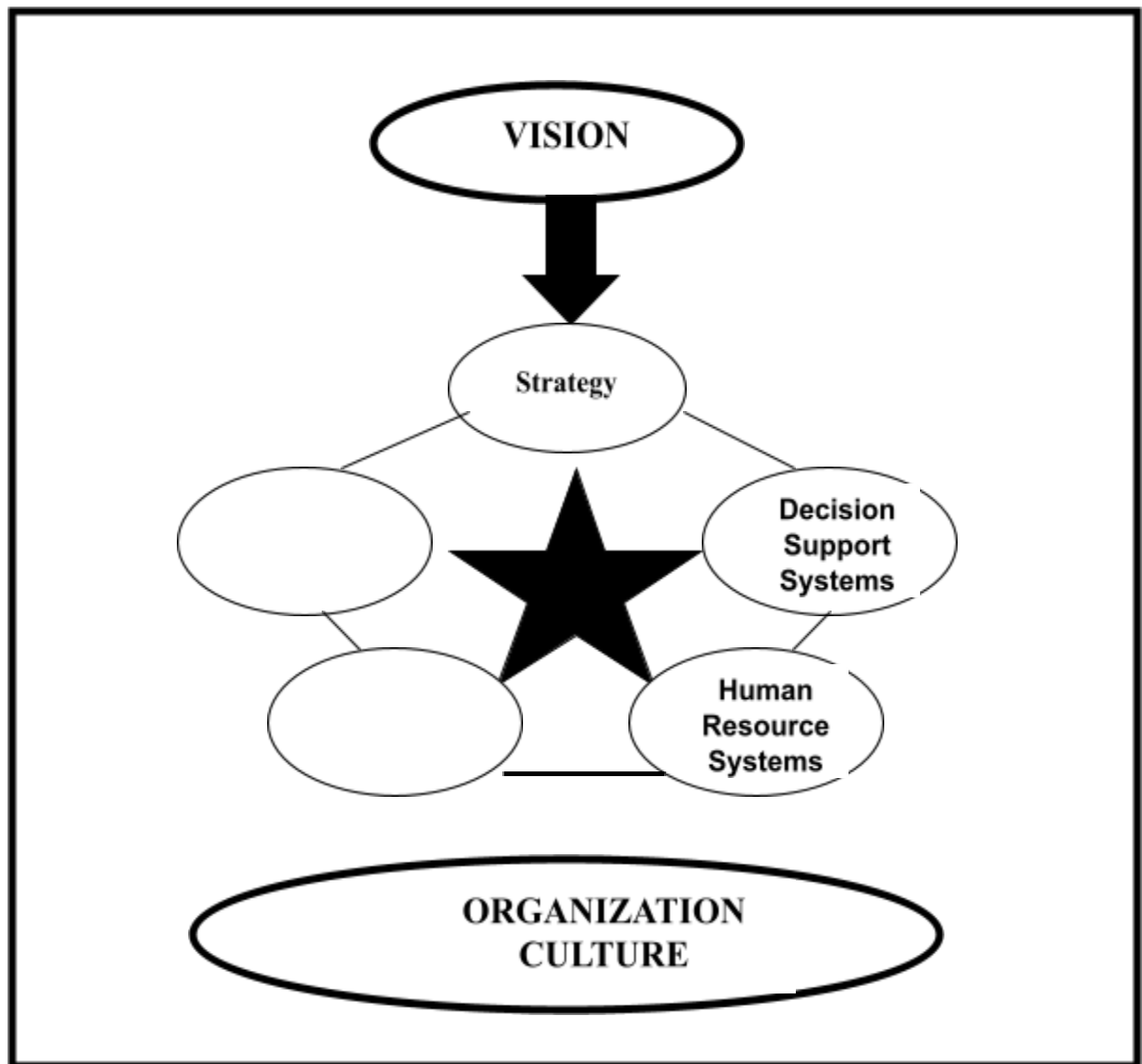
- Factors making the industry attractive
- Factors making an industry unattractive
- Special industry problems
- Profit outlook favorable/unfavorable

“Star” Diagram / Organizational Analysis^{ix}

In doing an organizational analysis, one must consider all seven components of the organizational unit. Vision should define Strategy, Strategy determines Structure and Decision Support Systems that are required to make the organization function. The Reward Systems must reinforce what you are trying to

accomplish strategically and the Human Resources systems must select, recruit and develop the personnel the organization need to accomplish its objectives. Corporate Culture must reinforce all seven components.

Problems arise when these seven components do not reinforce one another. For example, managers will experience difficulty if they are in a decentralized structure while information and planning systems are centralized. When considering change, all seven components must be considered, and if one is changed, it most likely that the other components will have to be changed to be consistent with each other.



BCG's Growth-Share Matrix

MARKET SHARE

The BCG matrix provides a valuable framework that enables us to identify and evaluate the company's products relative to market share an the extent to which the market, as a whole,

**MARKET
GROWTH**

is expanding or contracting. It can also be used to analyze a portfolio of companies held by a single organization by classifying within the matrix each of the held businesses.

“Cash Cow”

Products or businesses may be categorized as follows:

- Star – product with a high market share in a high-growth market; every mother’s prayer.
- Problem Child – (aka “Question Marks”) - product with low market share in a high-growth market; mother is concerned because her child is not growing as anticipated. Another perceptive is that mother shouldn’t be quite so concerned if the child has carved out a solid niche that is impervious to the competition; slow yet consistent growth may not be so bad.
- Cash Cow – product with high market share in a low-growth market. Since the cow is generating milk (i.e. cash), the marketer may elect to “milk the cow dry,” so to speak, thereby accelerating cash flow and, not coincidentally, the product life cycle.
- Dog – product with low market share in a low-growth market. In this sense, “dog” is certainly not “man’s best friend.” Rather, it is analogous to “bomb” (i.e. something that fails miserably) or to “lemon” (i.e. something that is defective or undesirable). So it would seem that one would want to drop the dog from the product line.

Strategic Outsourcing

In general, competencies that are, or will be, strategically important should *not* be outsourced. If the company does not currently own this competency, or is at a competitive disadvantage in performing it, it should reengineer the process to improve it or seek a strategic partner. All other capabilities should be outsourced, unless the company has a competitive advantage in one of these capabilities, in which case it should determine how it can leverage this advantage in a substantive manner.

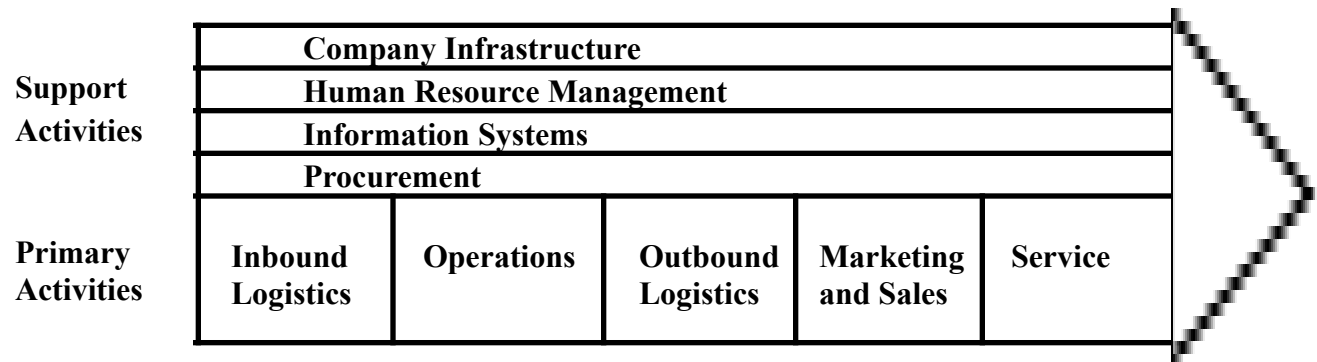
A Framework for Strategic Outsourcing

Strategic Importance	High	II Improve or seek partner	I Keep and leverage
	Low	IV Outsource / Find alternative supplier	III Seek differential advantage
		Low	High
		Company Competitiveness	

Value Chain³

It is important to understand the internal relatedness of the many activities involved in the production of a product or service. Every business unit is a collection of discrete, value-adding, activities ranging from sales to accounting that allow it to compete. Michael Porter calls these value activities. It is at this level, not the company as a whole, that the unit achieves competitive advantage.

VALUE CHAIN



The value activities are grouped into nine categories, as indicated in the exhibit above.

Primary activities create the product or service, deliver and market it, and provide after-sales support.

The categories of primary activities are inbound logistics, operations, outbound logistics, marketing, and sales and service.

Support activities provide the input and infrastructure that allow the primary activities to take place.

The categories are company infrastructure, human resource management, information systems, and procurement.

Value chain analysis is useful in discerning possible synergies among various units of an organizations (e.g. shared procurement), determining which value activities are best outsourced and which are best developed internally, and developing greater insight into the flow of activities in the creation and distribution of a particular product or service (e.g. what value is added to the manufacture and sale of gasoline at each point in the value chain, and by whom?).

Strategic Types (Miles & Snow)

Miles and Snow have divided strategic options into four categories (in contrast to Porter's three Generic Strategies). A company can only pursue one of these strategies at a time, but it is common for a company to shift from one to another as its situation, and its industry, changes.

Defender – Those firms which have a leadership share of the market will often concentrate on staving off the competition, moving to erect as many barriers to entry as possible. They are closely related to Porter’s Low Cost Producers, leveraging their advanced position along the learning curve and their name recognition to maintain a superior market position.

Reactor – Such companies are second-movers, letting the others show them the way to success. They react to the changes in the market and the moves of their competitors and so must maintain flexibility. While this strategy may be profitable in the short run, its long term value is questionable.

Analyzer – Analyzers pick apart the market very carefully looking for niches and demand/supply gaps. Akin to Porter’s Focused competition, these firms are not necessarily innovators, but instead concentrate their efforts in very carefully and narrowly defined efforts.

Prospectors – These are the first-movers and the innovators. This is a high-risk strategic revenue, but those who are successful can change the way the game is played and create competitive advantages.

The “Business System”

Developed by McKinsey as a standard value chain for use in evaluating value adding steps in a business system. The items listed below each are dimensions that must be studied:



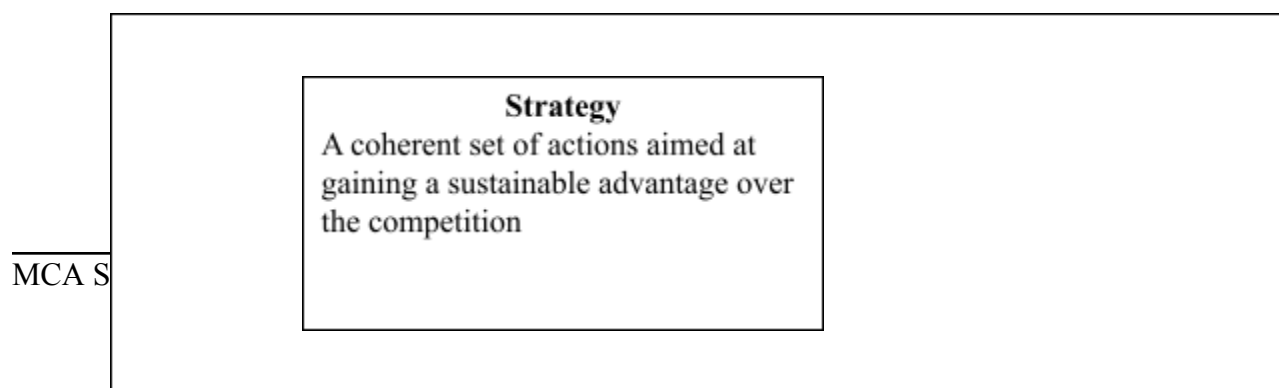
Product Development
Innovation
Responsiveness

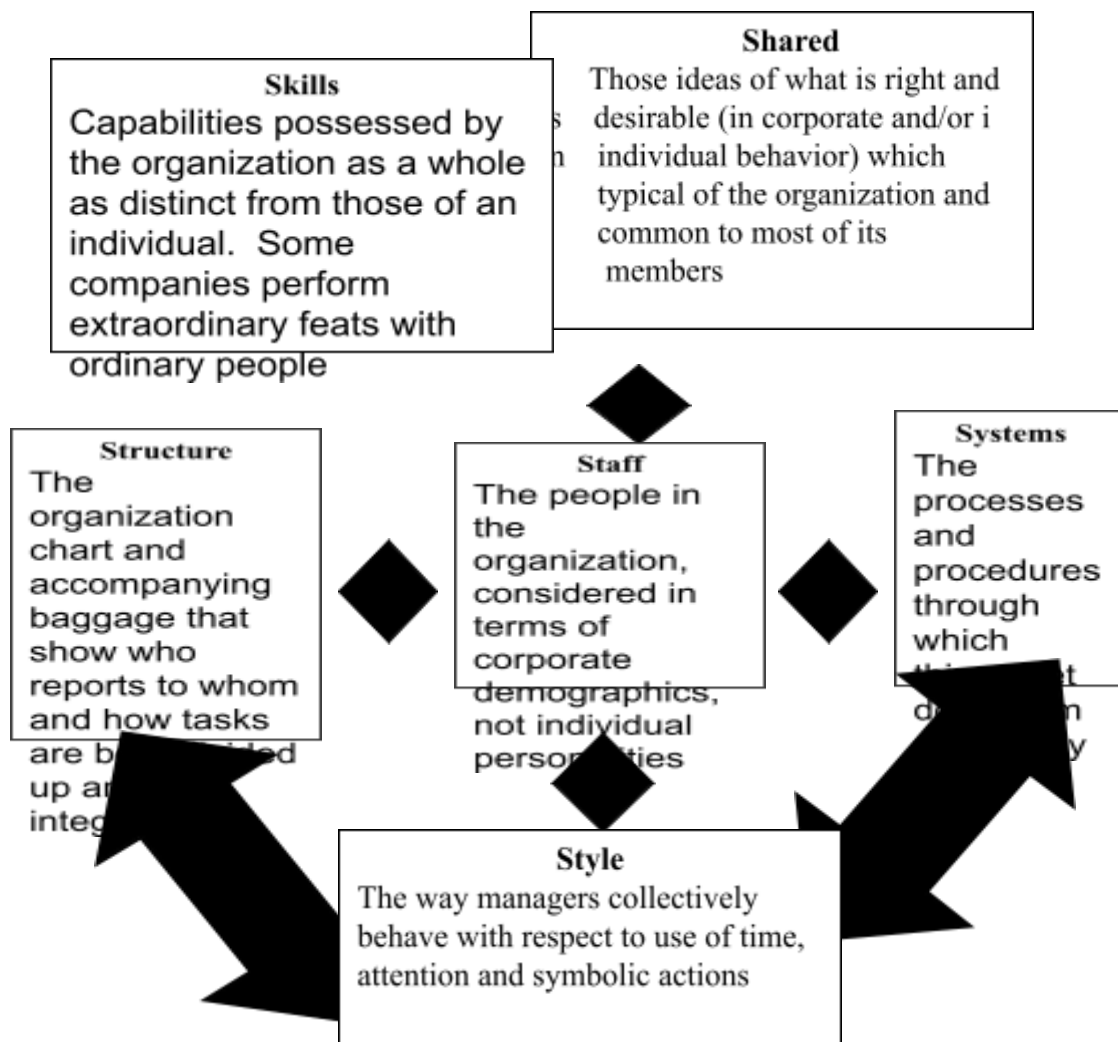
Cost
Quality
Speed
Supply

Pricing
Product
Place
Promotion

Cost
Channel

Elements of the 7-S Framework





Economics Theory

Students should review the basics of economic theory. Many cases, especially the more strategic ones, have a strong backing in basic economics so knowing the fundamentals will give the student a strong base from which to work. Some of the more relevant concepts include:

The Supply Curve

The higher the price or service, the greater the quantity of the item that producers will be willing to make available (i.e. supply). Conversely, the lower the price of a product or service, the smaller the quantity producers will be willing to make available.

The Demand Curve

The lower the price of a product or service, the greater the quantity of the item that consumers will be willing to buy (i.e. demand). Conversely, the higher the price of a product or service, the smaller the quantity consumers will be willing to buy.

Law of Diminishing Marginal Utility

This concept or economic “law” posits that the level of demand or “satisfaction” derived from a product or service diminishes with each additional unit consumed until no further benefit is perceived, within a given time frame.

Law of Diminishing Returns

This concept suggests that although additional units of labor may contribute to increased productivity in absolute numbers, each such additional unit contributes relatively less than the preceding unit to this productivity. Why? Because there are fewer machines, tools, or other inputs per productive worker.

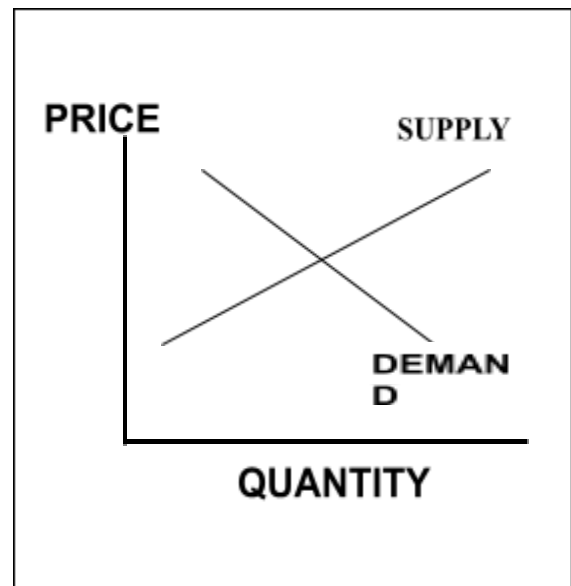
Comparative Advantage

It is in the interest of a nation to import an item from another nation when it cannot produce the item as inexpensively. The concept of comparative advantage goes a step further, contending that it may be to a country’s advantage to import goods from other nations even though they may be able to produce the goods less expensively at home. This is based upon the premise that not producing the item in favor of producing another item which offers better production efficiencies will ultimately benefit both countries (see also economies of scale).

Elasticity of Demand

The degree to which demand for a product or service can be altered by a change in price indicates the extent of the elasticity of such demand. For example, a person who seeks to purchase a particular brand and model of automobile may decide to shop competitively from dealer to dealer for the lowest price.

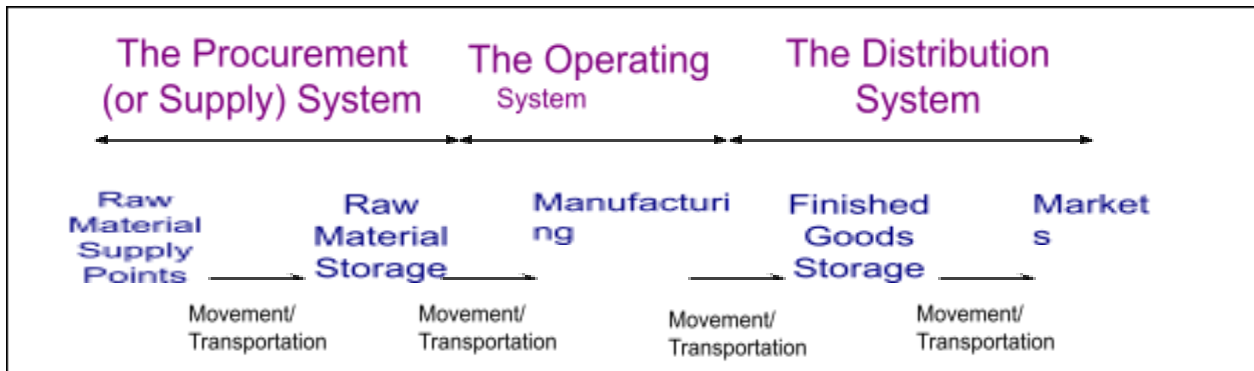
This would characterize demand that is elastic. However, there are circumstances where the level of demand is not altered by a change in price. For example, a person who is diabetic will probably be willing to pay as much money as s/he has to buy insulin, the medication that would sustain that individual’s life. In this case, demand is inelastic.



Supply Chain Management Concepts

What is Supply Chain Management?

“The process of planning, implementing, and controlling the efficient, cost effective flow and storage of raw materials, in-process inventory, finished goods, and related information from point of origin to point of consumption for the purpose of conforming to customer requirements.”



What is the key rationale for studying supply chains and why is it important?

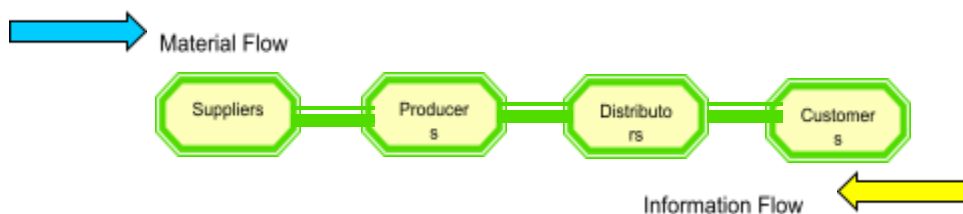
To understand the dynamics and the issues as a result of different business units coming together and finding out how to understand the dynamics of this interaction.

The nature of competition has changed: In the past companies competed. Now, supply chains compete.

- In the past (e.g. 1950s and 60s), problems were solved by vertical integration (buying, owning and operating the pieces of the chain)
- During the 1970s, as global competition intensified, businesses that were too vertically integrated were disadvantaged, leading many to divest.
- Today, companies are trying to get the benefits of the integration, without owning pieces of the supply chain: **THIS IS THE CHALLENGE**: Is this achievable? If so, how and how are the costs and benefits shared among the players within the chain?

Traditional modes of competition such as cost, quality, speed still apply, but they now apply to the **entire chain** rather than just firms.

Material and Information Flows in Supply Chains



- Customers create information that triggers actions and activities in the chain
- Information regarding demand/needs pass thru the supply chain upwards
- When customers reveal demands, not every element of the supply chain has access to this information. So this leads to guessing, forecasting, and errors.

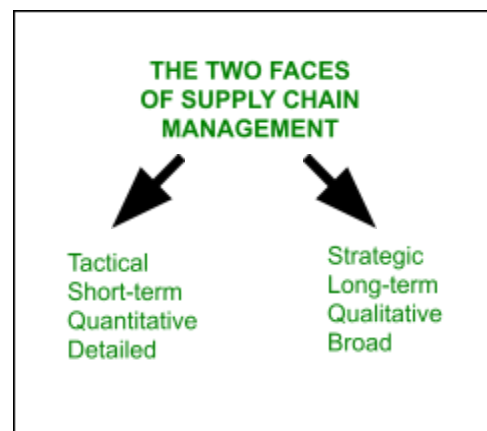
- First Critical Element: How does the customer information propagate up the supply chain?
- Example: A distributor uses customer data and historical information to guess future demand. Producers, however, only see the impressions of distributors, not the end customers' actual demand. It creates a distortion of reality for the producers.
- Material flow: how does this flow change or get distorted and what happens as a result of policies
- Second Critical Element: Supply Chain analysis requires analyzing the process of how the cycle of need identification to need fulfillment is managed.

Activities in Supply Chains

There are various components that come together to manage a supply chain: detailed, operational activities as well as strategic, long-term activities.

Common Supply Chain Activities

- Customer service
- Order processing
- Distributor communication
- Inventory control
- Demand forecasting
- Transportation management
- Warehouse & storage
- Plant & warehouse site selection
- Material handling
- Procurement
- Parts & service support / after sales service
- Salvage & scrap disposal
- Return goods handling



Current Trends in Supply Chains

- Product life cycles are contracting
- Product lines are proliferating
- Balance of power in supply chain is shifting from manufacturers to the trade
- Value added by manufacturing is declining as the cost of materials and distribution climbs
- Companies are restructuring their production facilities on a global basis
- Low cost, high volume data processing and transmission is revolutionizing logistics' control systems
- Movement from Mass Production to Mass Customization

PAST: Mass Production characterized by:

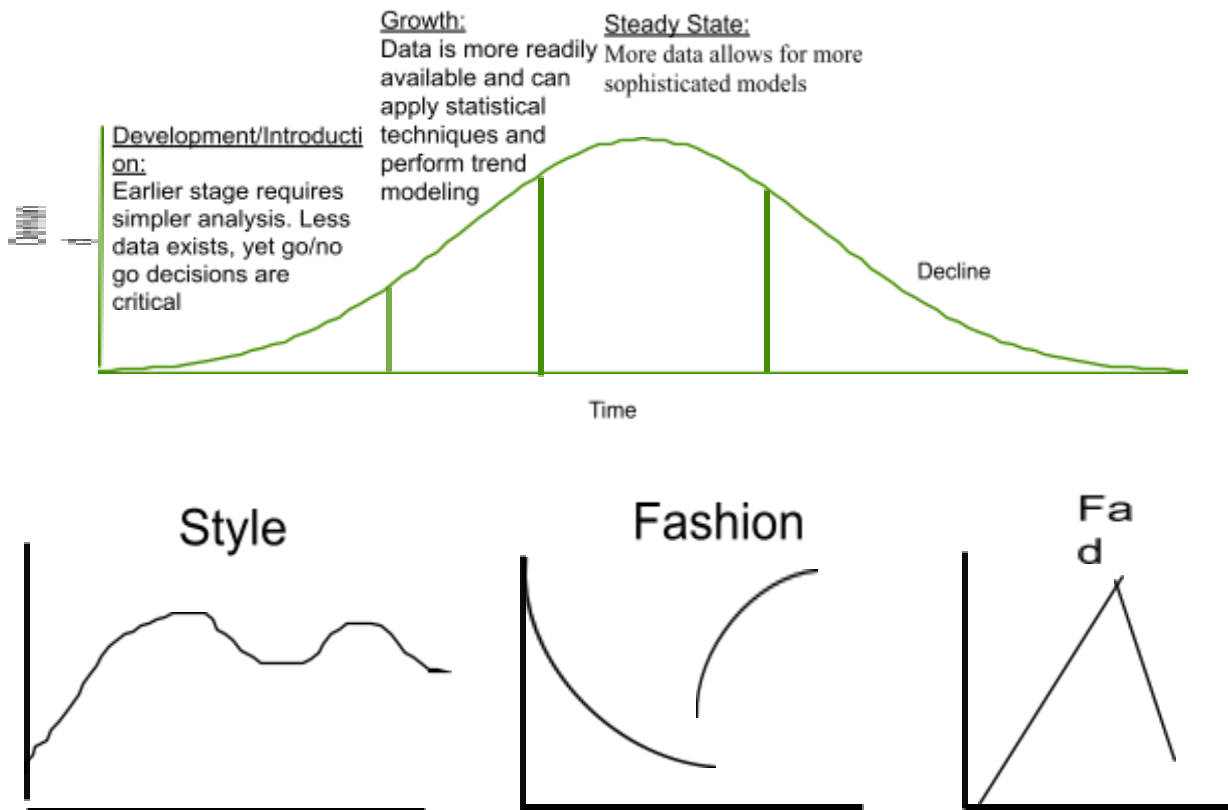
Stable demand
Long product life cycles
Long product development cycles
Mass production processes
Low cost, consistent quality,
standardized product
Homogeneous market

PRESENT: Mass Customization characterized by:

Demand fragmentation
Short product life cycles
Short product development cycles
Mass customization processes
Low cost, high quality, customized product
Heterogeneous market

Demand Forecasting

The most appropriate techniques used depend upon the product life cycle (PLC) stage.



- Supply chain decisions should be based upon the PLC.
- Knowing, for example, if a product is a “fad product”, then the supply chain must be able to satisfy demand with production and distribution processes that can react quickly.
- Firms must match production capacity and supply chain processes to the PLC of their products

Characteristics of Forecasts:

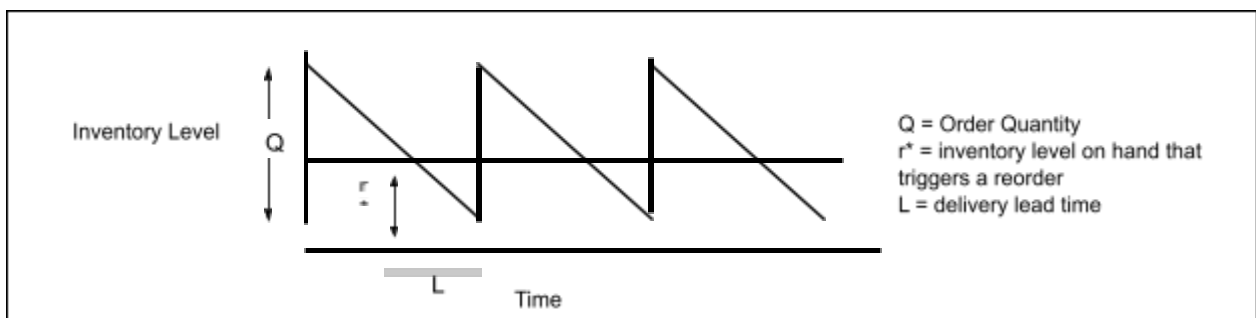
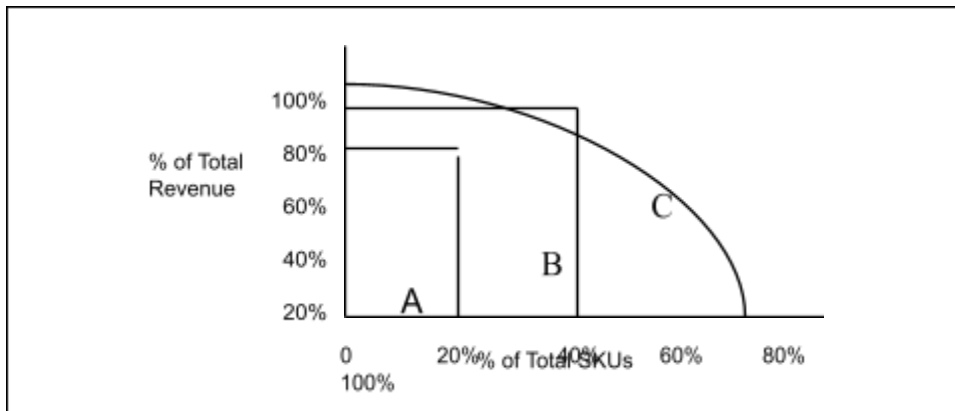
- They are usually *wrong*
- A good forecast is *more than a single number*
- *Aggregate* forecasts are usually more accurate
- The *longer* the forecast horizon, the *less* accurate the forecast will be
- Forecasts should not be used to the exclusion of known information

Some additional thoughts about forecasting

- Classify the items you need to forecast
- If possible, group items and form product families
- Identify the stage of PLC that the product is in
- Always check the forecasting errors
- Use forecast along with expert judgments
- Marketing and operations need to coordinate their forecasting efforts

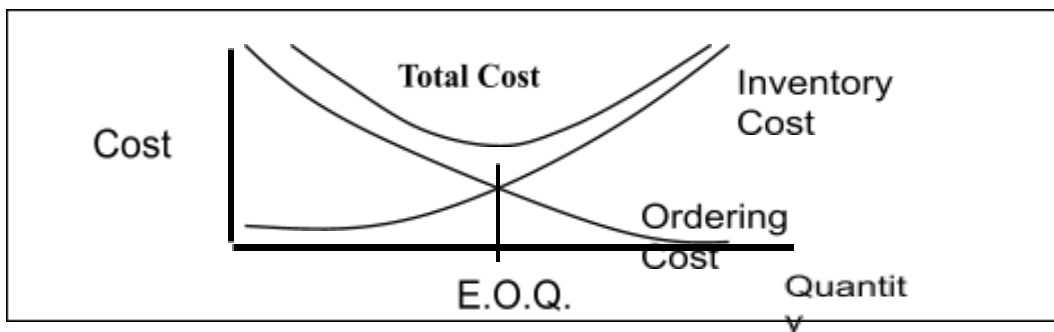
Inventory Management

ABC Classification System and the 80/20 Rule: 20% of the items account for 80% of the demand/revenue:



Economic Order Quantity (EOQ)

The optimal order quantity given tradeoffs between 1) ordering costs, 2) inventory costs, and 3) cost of lost sales.



Where

$$Q = \sqrt{\frac{2DS}{H}}$$

Q = Order Quantity
D = Demand (e.g. units per year)
H = Holding Costs (e.g. cost of holding one unit per year)
S = Ordering Costs

Example:

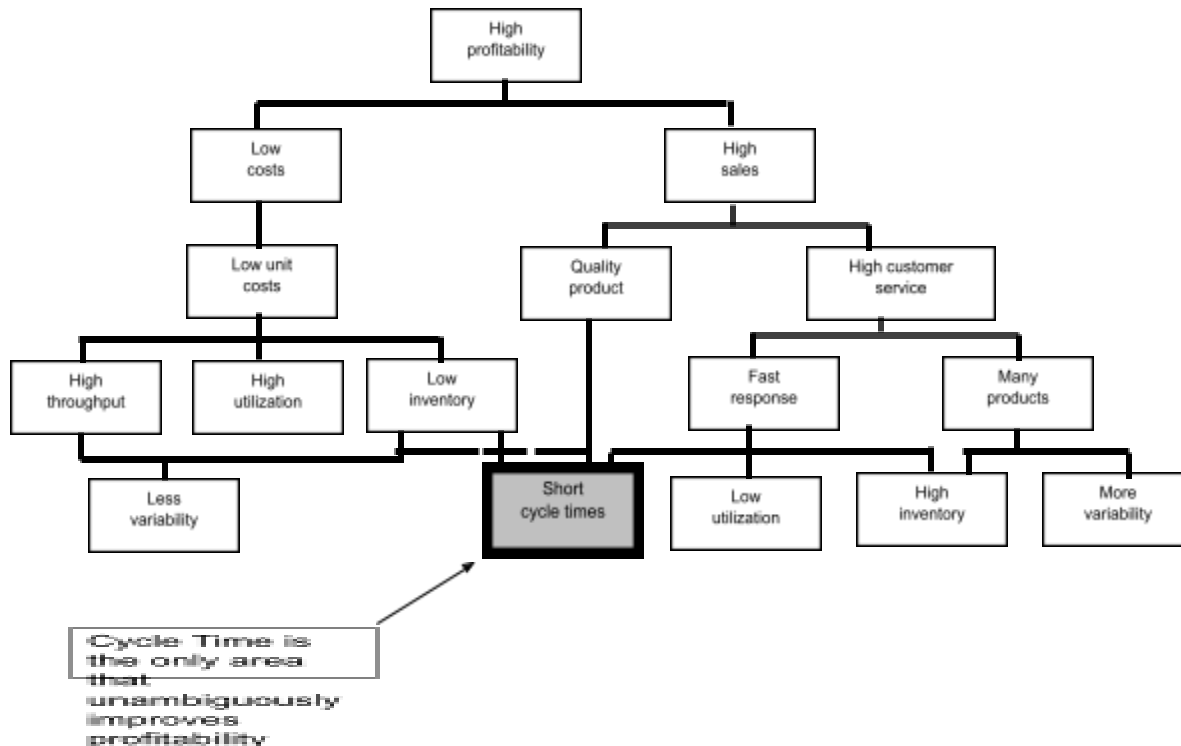
If D= 250 units per year, H= \$20 per year per unit, and S=\$100 per order, then

$$Q = \sqrt{\frac{2(250)(100)}{20}} = 50 \text{ units}$$

Little's Law

In the long run, **Work In Process (WIP) Inventory = Cycle Time * Throughput**

Why is cycle time important for profitability?



Variability causes cycle time to increase, which in turn causes WIP to increase.

Variability causes congestion in product flow

Variability upstream in the supply chain causes larger variability in the chain

To improve supply chain service performance, we need to reduce sources of variability in the system:

Reduced variability > Reduces cycle time > Reduces WIP and Rework while Increases Quality > Increases Profitability

Supply Chain Strategy

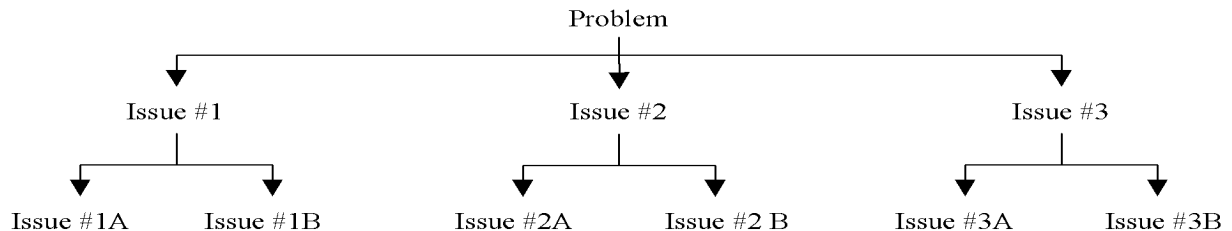
Structure of supply chain must be congruent with the type of business a firm is in...it depends a lot upon the strategy of the company.

EXAMPLES:

- General Electric's vision is to be number one or two in each market that it serves or it will get out of that market.
- Hewlett-Packard envisions serving the scientific community.
- IBM constantly reshapes itself so as to remain an effective competitor.
- Xerox, with its copier patents running out, would no longer have a differentiated product in the market place, so it adopted the strategy to be number one in field service.
- Star Kist Foods adopted a supply-side strategy of buying and packing all the tuna fish that its own fleet and its contracted fleets of fishermen could catch. This would help it be the dominant packer in the tuna business

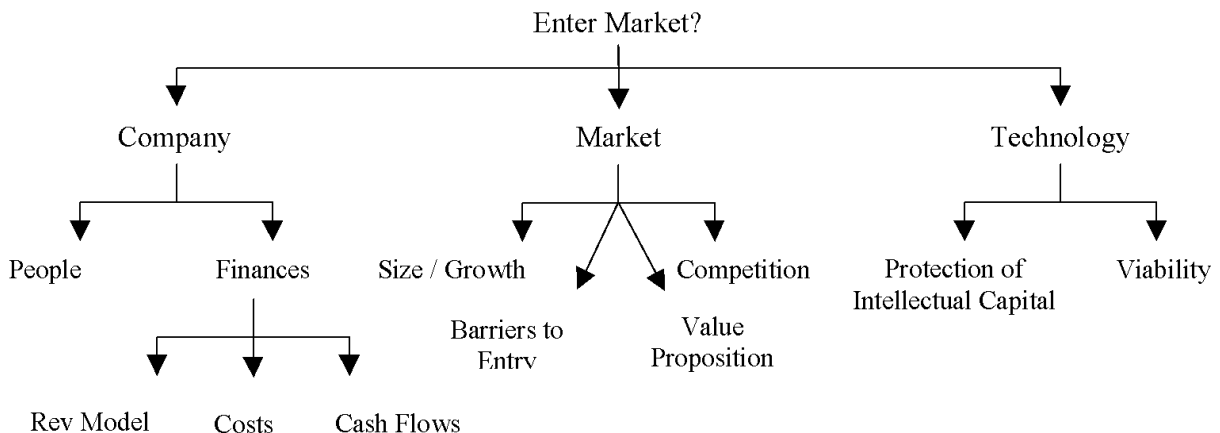
Issue Trees

It is often useful to organize one's case analysis in the form of an issue tree, which is essentially a "top-down" approach to breaking down a problem. In general, an issue tree takes the following form:



It is important to note that all of the sub-issues under its parent issue should be MECE (mutually exclusive, collectively exhaustive). For instance, Issues 1-3 should be MECE as should Issues 1A-1B (there can be overlap and redundancy among the Issues 1A-1B with Issues 2A-2B (or 3A-3B), however). Issue trees are general and can be applied to all cases. They are an excellent means to developing an "ad-hoc" framework. When presenting an issue tree, it is important to present it "top down," that is present all of the high level issues before going into detail on any of them.

Below is a specific example of an issue tree that serves as a framework for determining whether a group of entrepreneurs should form a company that sells virtual reality software for the Internet (i.e., it can be used for Internet video games, 3-D tours of buildings, etc.):



Common Pitfall:

Anderson students tend to dive into details too early w/o first establishing an overall framework

Master Frameworks

Issue trees can also be used to develop a "Master Framework" that ties all of the disparate frameworks together into a structured and organized fashion. Master Frameworks are also useful in structuring a messy case or when you are having trouble breaking down a difficult problem since they are completely general. Two examples of "Master Frameworks" are provided below. However, you are encouraged to develop your own, either by modifying the examples below or by coming up with a new one entirely.

Master Framework I: Internal / External Factors

1. Repeat the question. Make sure you understand and answer it!
2. Determine the client company's goal in the case (why entering market, diversifying, etc.).
3. Segment the market. (Are costs for all products increasing, or just one? Are profits down for all divisions, etc.)
4. Set up a framework and examine issues within that framework (see box below).
5. Summarize and offer recommendations.

EXTERNAL FACTORS	MARKET	• Size and trends (growing, shrinking)? • Segmentation? • How attractive is market? • Can market withstand new entries? • Competitive or Monopolistic • Different from others company is in?	• What are trends in product demand? • Drivers of change (technology, deregulation)? • Is company producing what people want? • Is company getting good feedback from Marketing/sales force?
	CUSTOMERS	• Is there a demand? • Price sensitive/elastic demand? • Have customer preferences changed? • Who are customers? • What are segments? • What are needs? • Premium on price, service, quality, image? • Customers well-educated?	• Potential to vertically, backwards integrate? • Brand loyalty? • Retention of existing customers or acquiring new customers? • Are there substitutes? • What gaps are there in current service?
	COMPETITORS	• Who are they? • Who has high market share/ position? • What is industry concentration? • What is level of competition? • What are competitor reactions to changes? • What are barriers to entry (govt regs, etc.)? Degree of product and price differentiation?	• Potential for new entrants? • Benchmark against competitors. What are their cost structures? • What are competitors strengths/ weaknesses? • Do substitutes exist? • How high is bargaining power with suppliers? • Level of market integration? • Place in learning curve?
INTERNAL FACTORS	COMPANY	• What are costs (fixed and variable)? • What are core competencies or weaknesses? • Who are suppliers? How high is bargaining power with them? • What are manufacturing issues (how much downtime, capacity utilization, etc.)? • Are there inefficiencies (why more setup time than before or competition)? • Can strategic alliances be formed with customers, suppliers (long versus short term contracts)?	• Value chain/operational flow? • Economies of scale? • Where are they on experience curve? • Can you move down learning curve (buy expertise)? • How innovative are they? • What is level of market share, investment, advertising? • Is it cheaper to outsource? • What is financial performance (Metrics like ROA, ROI, IRR, break even time)? • What are our competitive advantages and how can we sustain them?

Master Framework II: 3 C's – Company, Competition, Customer

<i>Company</i>	People / HR	Corporate Culture	Entrepreneurial vs. bureaucratic
		Executive Leadership	Leadership style
	Marketing	Product	Product attributes, technology
		Price	Price elasticity, Economic Value to Cust (EVC), production costs
		Promotions	Push / Pull strategy,
		Place	Channels, costs, channel conflict
	Operations	Supply Chain Mgmt	Supply chain structure, economies of scale/scope, learning curve, alliances, responsiveness, etc
		Value Chain	Source of value creation
	Finance	Revenue Model	Price x Quantity
		Cost Structure	Fixed, variable
		Cash Flows	Product portfolio cash flows (BCG growth / share matrix)
		Financial Ratios	Return on Invested Capital (ROIC), etc.
	Strategy	Corporate Strategy	Low cost, niche, etc.
		Company Mission	To be market leader or technology leader or etc.?
		Core Competencies	Strengths, Weaknesses
<i>Competition</i>	Industry Structure	Barriers to Entry	High or low
		Internal Rivalry	High or low
		Substitutes	Industry substitutes
		Buyer Power	High or low
		Supplier Power	High or low
	Competitor Positioning	Competitor Strengths & Weaknesses	Competitor positioning graph
		Competitor Perceptual Maps	Perceptual maps for competitive products, etc
	Value Proposition	Customer Needs	Reasons for needs
	Demand Drivers	Demand Elasticity	Price-, cross-elasticities
		Purchase Decision Maker	Who is this?
<i>Customer</i>	Customer Segmentation	Psychographic	High achievers, experiencers, etc.
		Demographic	Income, geography, ethnic groups, age, etc.
	Market	Size	U.S., global
		Growth	Best, realistic, worst cases

Example Case Interviews with Detailed Solutions

Example Case Interviews with Detailed Solutions

Case L1: Pricing Strategy for a New Product

(Case from **McKinsey**, **Winter 1999** for a summer associate position, 1st round interview)

Interviewer (opening case question):

Your client is General Electric (GE), and they've just developed a new product: a new light bulb that can last eternally. Your job is to help them go to market by defining their pricing strategy. The new light bulb cost \$1 billion to develop.

YOU:

Are the new light bulbs different from conventional light bulbs in any other way? Are the light bulbs intended to replace regular incandescent light bulbs or fluorescent light bulbs?

Interviewer:

You can assume that the new light bulbs can be used to replace both incandescent and fluorescent light bulbs. You can further assume that the new bulbs are perfect replacements for these types of bulbs (i.e., they are available in two different forms, one that is exactly like any other incandescent bulb, and one that is like any other fluorescent bulb).

YOU:

In order to determine the optimal pricing strategy, we'll need to look at both microeconomic and marketing theory. First, it may be useful to determine the upper and lower limits on the price GE can charge for its new light bulbs. In general, price is bounded by two things: the product's economic value to the customer (EVC) and the company's average cost in producing the product. The EVC sets the upper bound in price since a person will not pay more than the product is worth to her, and the average production cost sets the lower bound since the company can not earn economic profits if the price is below this point (in the short run, however, the company will want to produce as long as price is above *average variable costs* since this yields a positive contribution to fixed costs). The optimal price must fall somewhere within this range.

Interviewer:

How would you determine the lower and upper limits in price?

YOU:

The average total cost of production can be obtained by considering fixed costs for the product (e.g., overhead and administrative costs), plus manufacturing costs, plus distribution costs, plus selling costs, and so on. Of course, the average cost will vary with the level of production. Generally, the average cost function is U-shaped (where the x-axis measures quantity and the y-axis measures average cost).

Note that the average total cost of production is independent of the \$1 billion development costs. This makes sense since this is a sunk cost. The sunk cost does affect the overall return on investment (ROI) and the internal rate of return (IRR) for the project, however.

The EVC can be computed as follows: First, we assume for simplicity that the resale value of the new light bulb is negligible after it has been used for many years (this is akin to any other old household item). We further assume that the average person will be able to use one of the new light bulbs for 50 years before it is discarded (either because it is accidentally broken or because the person dies and his belongings are disposed of). Finally, we assume that a normal light bulb lasts an average of 6 months and costs \$.50.

Now, to compute the EVC we need to determine how much one of the new light bulbs will save a person. Since we assume that the new light bulb has an effective life of 50 years, it will save a person \$1 a year from having to buy two old light bulbs for 50 years. Thus, the EVC is approximately the net present value of a \$1 annuity for 50 years (to be more accurate, we would have to consider the economic value of the time savings from having to buy and replace normal light bulbs, the reduced risk of being electrocuted from not having to frequently changing normal bulbs anymore, and so on. We assume that this is negligible.

At the same time, however, we must also realize that the new, significantly more expensive light bulb may be accidentally broken prematurely (e.g., while moving to a new house), resulting in an economic loss for the customer. The probability of this should be considered in the EVC.).

Interviewer:

Good. Now how would you determine the optimal price?

YOU:

From microeconomics theory we know that the optimal, profit-maximizing price is given by the equation,

$$P = \left(\frac{E_p}{1 + E_p} \right) MC$$

where E_p = price elasticity of demand for the new light bulb, MC = marginal cost of producing the new light bulb

Interviewer:

How would you get the elasticity and MC data that you need to use the optimal price formula?

YOU:

The marginal cost of manufacturing, packaging, distributing and selling the new light bulb can be obtained by performing a cost study of these processes. For instance, the marginal costs associated with manufacturing will include the costs of raw materials, direct labor, and energy. Of course, the marginal cost will vary with the level of production. In general, the marginal cost curve is roughly U-shaped.

The elasticity function is more difficult to obtain. Generally, this is hard to derive in real life, especially for a new product that lacks past sales data. However, GE may be able to estimate the demand and elasticity function for the new light bulb based on its historical sales data of normal light bulbs. Using this data in a regression analysis, it can determine what the key drivers of demand are. For instance, it can perform a regression analysis with sales quantity as the dependent variable and price and bulb lifespan as the independent variables (the exact type of regression model will need to be determined – i.e., logarithmic, linear, exponential, etc.).

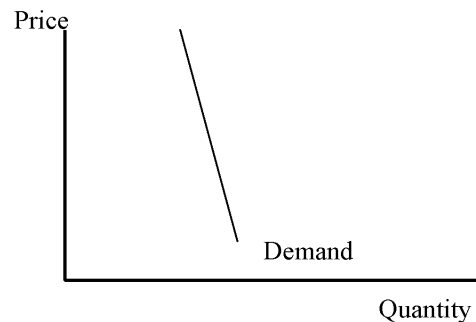
The elasticity function may also be estimated by conducting a survey of potential customers of the new light bulb. In this survey, customers can be asked what quantities they would purchase the new light bulb at different price points. This data can then be used to derive the elasticity function.

Interviewer:

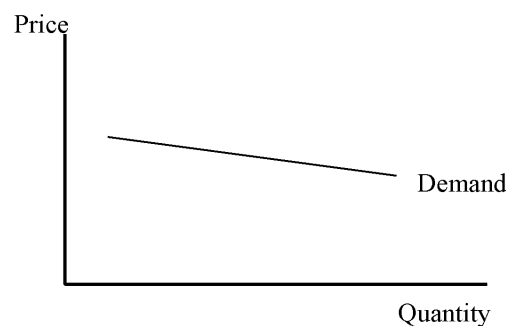
This sounds like a lot of work. Do you really need to do all of this to determine the optimal price?

YOU:

No, you're right. The optimal price can be accurately estimated. We know that at the industry level, demand for light bulbs is highly inelastic since light bulbs have become a necessity and there are few substitutes for them (cross-elasticities are low):



At the same time, however, light bulbs are a commodity. Thus, at the firm level, there is nearly perfect competition for light bulbs, and demand is perfectly elastic for any single firm:



As a result, the optimal pricing strategy for GE is to price its new bulbs slightly below the EVC for the new bulb (which is equivalent to pricing is slightly below the market price for conventional bulbs) since this will provide consumers a savings in using the new bulb (this assumes that the average production cost for the new bulb is below this price level. If it is not, it is not economical for GE to produce and sell the new bulb). If GE were to price its bulbs above its EVC, consumers would have no incentive to purchase it. If it were to price the new bulb at the EVC, the new bulb would offer no advantages to a conventional bulb, and it would just be another commodity bulb. As a result, it would not allow GE to significantly increase sales and profits.

GE needs to consider a few other issues in its pricing strategy. First, it should price its new product low initially to induce trial. Second, severe cannibalization of its conventional bulbs is likely to result. Thus, GE needs to ensure that the sale of its new bulb will offer a higher contribution margin than that from the sale of its conventional bulb. Lastly, GE needs to consider the industry's competitive reaction. Since the industry is a commodity market, $P = MC$, and thus, it is unlikely that competitors can afford to compete by lowering the price of their products. They may, however, attempt to build their brands to make their product less of a commodity.

Interviewer:

How would your analysis be different for GE's business customer segment (i.e., for businesses that use the new bulb to replace fluorescent lights)?

YOU:

In our consumer analysis, we assumed that the economic value due to the time savings from not having to buy and replace new bulbs is negligible (primarily because the opportunity cost is negligible – what is the opportunity cost of saving 2 minutes to pick up light bulbs while at the grocery store or from saving 2 minutes at home installing the bulb?) With business customers, however, this is not the case. The elimination of the need to replace bulbs periodically will save businesses money from having to hire maintenance personnel to do this. Thus, the EVC for businesses will be higher than that for consumers, and GE can charge businesses a higher price.

In addition, we also assumed that the resale value of a new bulb that has been used for many years is negligible for the consumer since, aside from garage sales, it may be difficult for the individual seller to locate a buyer (this is currently changing as a result of the Internet, though. But, then again, how many people would be willing to pay a non-negligible amount of money for an old household item, such as a hammer or an old mirror, both of which can theoretically last a long time like the new GE light bulb?). This is not the case with business customers, however, since the resale market for old business furniture is relatively strong. In addition, it is likely that the expected lifetime of a bulb used in a business environment will be longer than that used in a consumer's home. The reason for this is that bulbs are generally fixtures in the office building even as the occupants in the building change. Thus, the expected lifetime of the new bulb in a corporate office is likely to be about the same as that of the building. These factors will allow GE to charge an even higher price to its business customers.

Interviewer:

Good. I think that's all I wanted to cover with this case. Do you have any question for me about the firm?

YOU:

Yes,...

Case L2: Lodging Company e-Commerce Strategy

(Case from **Diamond Technology Partners, Winter 1999** for a summer associate position)

Interviewer (opening case question):

Client: Our client is a large lodging company with well-known brands. Their strategy has been to maintain and develop their brands. They have about a 10% market share and this makes them one of the larger players

Project: They are concerned with the impact of the Internet. They currently have a web site that allows customers to make reservations at their hotels. They expect to do somewhere between \$0 and \$90 million worth of business through their website next year. They want us to develop an e-commerce strategy that will prevent them from losing business to their competition and help them maintain and develop their brands.

YOU:

The case has at least three levels. The first level can be attacked using the basic three C's framework:

Competition:

Think about who the competitors are in this situation. There are two groups, the traditional competitors - other large lodging companies and new competitors providing travel services on the web. By identifying these two groups you can ask some pointed questions:

What are the traditional competitors doing on the web?

Interviewer:

Most of them are in wait and see mode. Everyone has a web page. Some can make reservations on-line , some cannot.

YOU:

Are there new competitors such as startups that are providing travel-related services?

Interviewer:

Yes, they are still young, but growing fast. They provide many services such as rate comparisons and availability searches across competing providers of travel services.

YOU:

This answer should prompt deeper investigation: What travel offerings are start-ups selling?

Interviewer:

Some are doing hotels, some transportation, some are attempting to combine many services. It is not clear what will happen. These new companies are aggressive and are trying many innovative things that may or may not work.

YOU:

At this point you have some good competitor information that will be useful in levels 2 and 3 of the case, but time is short so it is probably a good idea to move on.

Customers:

It is always good to find out how the clients customers are segmented. This is a basic and very fair 3Cs question to ask. In this case the client is large and has customers across the spectrum. The high level segments are business travelers and vacationers. Business travelers are generally less price sensitive than vacationers.

In this case it is a good idea to dive a little deeper by asking more questions based on the information you uncovered so far:

Which customer segments are currently using the clients web site?

Interviewer:

The web site is currently used primarily by business travelers.

YOU:

What types of customers are using the competitor's web sites?

Interviewer:

For traditional competitors the client thinks that they are similar to their own. For startups, they don't know, they are looking to you for these answers. We do know that some new sites are targeted to vacationers, others to business travelers, some to both.

YOU:

Company/Capabilities:

You already have much of the basic information about the company so you probably don't need to spend much time here gathering more basic information. A good question here would be to better understand the project:

What are the clients objectives for their e-commerce strategy?

Interviewer:

They aren't sure, they are looking to you to help understand what is possible. They are worried about competition and want to build their brands.

YOU:

*It may also be good to understand the financial situation of the company:
How does the balance sheet look, do they have the money to do anything?*

Interviewer:

The finances are sound. The client has the capability to invest but the investment must be justified.

YOU:

At this point you have done a good 3C's analysis. Now comes the hard part, what next? This is level 2 of this case. It is not going to be possible to develop a brilliant and comprehensive e-commerce strategy in 20 minutes so a good tactic for attacking a broad strategy question is to develop a short list of options:

The Client has at least 3 options:

Option 1

Stay the course. Continue to enhance the current web site to make it user friendly, provide some incentives for reserving on line, track customer information to learn more about customers. Hope that strength of brands and customer loyalty will maintain market share and revenues. This option will have the lowest impact but makes our client vulnerable to losing business to innovative startups.

Option 2

Focus on cooperating with winning startups and make sure that their brands get good positioning. This would work best if there are clear winners in web travel services. However, if the client is concerned about brand building, this option may not provide the control they would want. They risk being "commoditized" by sites that focus only on price.

Option 3

Develop a comprehensive travel services website that competes with the startups and meets all of the travel the needs of our client's customers. The client is a leader in the lodging and can leverage experience and brand equity to build a successful Internet business. This strategy is customer focussed and provides the control that the client can use for brand building.

At this point you can further evaluate each option using a cost/benefit or risk/reward framework and follow up with a plan to do additional research and analysis that would allow you to select the right choice for the client. However, it is likely that the interviewer will interrupt and challenge you with questions about an area that they want to examine further. In this case, the interviewer might say:

Interviewer:

OK, those are good options, the client is very excited about option 3, they want to be aggressive and build their own Internet business. However, senior management is concerned about the impact that starting a new business will have on their EPS (earnings per share). What should they do to deal with this problem?

YOU:

Again, listing some options might be a good approach.

They could mitigate the risk by partnering. Potential partners could be airlines or existing startup travel services websites with weak lodging offerings.

They might also look to obtain venture financing to fund part of the business. If they are not concerned with losing control of the new business they could spin it off completely and make a small investment that would not require them to consolidate the financials of the new companies.

Depending on how much time you have, you could continue this line of discussion by asking what options the client might prefer and then further developing those options. However, if time is short it is always a good idea to summarize.

Case L3: New Market Entry – Amusement Park Expansion I

(Case from **The Boston Consulting Group, Winter 1999** for a summer associate position)

Interviewer (opening case question):

Our client is XYZ Corporation (“XYZ”), the owner of a single amusement park. XYZ has been approached by the local government and offered 100 acres of land adjoining the current amusement park for \$10 million. XYZ has engaged us to help them assess whether or not they should purchase the land and/or expand their existing park.

This is intended to be a two part question. Try to push the interviewee towards the qualitative (“strategic”) aspects of the case first. Midway through the interview, focus on the quantitative analysis of the case.

YOU:

The following facts are available only upon request for the strategic analysis:

- XYZ’s park is considered a regional park and does not get national attention;
- This is the only amusement park for a 250 mile radius;
- The average park visitor travels 30 miles to the park;
- Only 1% of park visitors travel more than 100 miles to visit the park;
- Other competing businesses in the area include: go carts, putt putt golf, video game arcades, water skiing and other thrill sports;
- The park’s attendance has been growing at an annual rate of 10% over the past five years;
- The average park visitor is 17 years old;
- 30% of the park visitors are adults (over the age of 18);
- All of the parks vendors (food, video games, and shops) are wholly owned by the XYZ;
- XYZ has the financial wherewithal to acquire the land and develop all 100 acres;
- Annual population growth for the 250 mile radius is expected to remain flat at 3%;
- It can be assumed that XYZ has the internal management expertise to operate a larger park and that enough local employees are available to run the new operations at existing wage rates.

The following is a potential framework that could be used to organize qualitative aspects of your answer:

Market and Competition:

After a careful analysis of the above facts, it appears that an expansion might be feasible, and is worth further consideration. Growth at the amusement park seems to be strong and although competitors exist for pieces of the amusement park’s business, no businesses directly compete with the amusement park for a 250 mile radius. Additionally, it appears that amusement park visitors of this park are generally unwilling to travel outside of the area to go to the next closest amusement park.

It is also safe to assume that amusement parks, in general, have high entry barriers due to the initial capital investment, which might discourage potential new entrants. Along these same lines, the expansion of XYZ’s

existing park might actually serve to discourage new entrants, since XYZ could end up having excess capacity which could give it a competitive advantage due to pricing flexibility.

XYZ's Corporations Capabilities/Limitations

XYZ appears to have the financial wherewithal to expand the park, as well as the internal management to run the expanded operation. Also, given that XYZ owns all of the park's vendors, an expansion could bring in significant revenues in addition to entrance fees.

Interviewer:

About halfway through the interview, move on to the quantitative part of the interview.

YOU:

The following information is available upon request for the quantitative analysis:

- The amusement park averages 70% capacity, and is open year round;
- The capacity for the amusement park is currently 2,000 visitors;
- On 50 days a year, the park fills to capacity, resulting in long ride lines for visitors;
- It is estimated that the excess demand on these 50 days is approximately 600 visitors;
- The average ticket price is \$23 (\$30 for adults and \$20 for kids);
- The average visitor spends \$17 on food, games, and souvenirs;
- The land would cost \$1 million per 20 acres to develop (i.e. add rides, attractions, shops, restaurants, etc.);
- The expansion project would increase the amusement park's capacity by 25%;
- The expected rate of return on the existing business is 12%;
- XYZ has access to funds at its existing weighted average cost of capital;
- The profit margin on XYZ's operations is 20%.

An NPV analysis is very useful in the assessment of this potential project. All of the costs of the project should be considered as well as the annual free cash flow from the project. The costs include the cost of the land, the cost to develop the land, and the marginal costs of running the new operations.

Costs:

<i>Item</i>	<i>Cost</i>
Land	\$10 million (all year 0)
Development Costs	\$5 million (all year 0)
Marginal Costs of Running Operations	80% of Revenues (on-going)

Revenues:

Assuming that historical growth trends continue, and that when the park fills to capacity visitors stop coming, the following is a potential NPV scenario...

On the 50 days that the park experiences excess capacity, 500 additional visitors could be admitted due to the park's expansion. Each visitor is assumed to spend \$23 to enter the park, and \$17 at the vendors, for a total of \$40 per visitor.

$$\text{Annual Revenue} = 50 \text{ days} * 500 \text{ additional visitors} * \$40 \text{ per visitor} = \$1 \text{ million}$$

Assuming that XYZ's incremental profit margin will remain the same for the expanded section of the park, the 20% profit margin can be applied to these revenues to determine the net profit margin.

$$\text{Annual Profit Margin} = \$1 \text{ million} * 20\% = \$200,000$$

Assuming that future capital expenditures match depreciation on the expanded section of the park, annual free cash flows due to the expanded section of the park would equal the annual profit margin of \$200,000. Assuming that the growth is constant at the historical rate of 10%, and that the appropriate discount rate is 12%, the free cash flows can be discounted as a perpetuity.

$$\begin{aligned} \text{NPV of Project} &= -\text{Land and Development Costs} + [\text{Free Cash Flows} / (\text{Discount Rate} - \text{Growth Rate})] \\ &= -\$15 \text{ million} + [\$200,000 / (12\% - 10\%)] = -\$5 \text{ million} \end{aligned}$$

Based on this, it appears that XYZ should not expand its existing amusement park since the project has a negative Net Present Value.

(See Case L4 for an alternate answer)

Case L4: New Market Entry – Amusement Park Expansion II

(Case from **The Boston Consulting Group, Winter 1999** for a summer associate position)

Case Question:

You are a large theme park, the government is selling the land next door. Do you want to buy it? (Same question as Case L3)

Possible Answer:

This is a new New Market Question (disguised)

Framework: Three C with Revenue minus Costs in it

I discussed various uses of the land, but she led me to the question of building a second theme park. Based validity of my answers to the data she gave me:

Competitor: One other local themepark: focused on teenagers and rides, I focused on families. Also compete with other leisure activities:

Customer: Thought about segmenting to another market: no lead there.

Realize 30% local market, 70% national market. National market has small growth, my old park has solid growth. Market is there.

Company: Current theme park has 80% utilization. We also own nearby hotels to get extra revenue, at 70% utilization.

New Venture:

Cost Fixed up-front 800,000,000

Need to estimate revenues:

Interviewer says old park:

35\$ average ticket

15\$ average concession

10\$ merchandise average.

We need to realize that the new theme park may cannibalize or may add value to old theme park through price.

Other key info gleaned during interview:

Land costs 200 million. To build up the area would cost 600 million.

Variable cost per customer is currently \$25. After an expansion, it would be \$40.

Average revenue per customer is \$55. With park addition, average revenue would be \$60.

Six months out of the year, the park sells out. With additional capacity, the park could raise attendance by 30% during this period.

There are twelve million total customers during the year. Eight million during the peak season.

Analysis:

I first tried to determine whether the current demand was sustainable. It was a basic marketing analysis of trying to figure out who the customers were, the key drivers of demand, and whether the theme park could continue to offer a product that met these demands.

Second, I did a an NPV of the project:

Revenues after expansion:

Customers: 12 million + (30% of 8 million) = 14.4 million

Rev/customer: \$60

Revenues: \$864 million per year

Costs:

Fixed costs: \$800 million

Variable cost/customer: \$40

Total variable costs: 576 million

	Revenues	Costs
Y1	\$864 million	1.376 billion
Y2	\$864 million	576 million
Y3	\$864 million	576 million

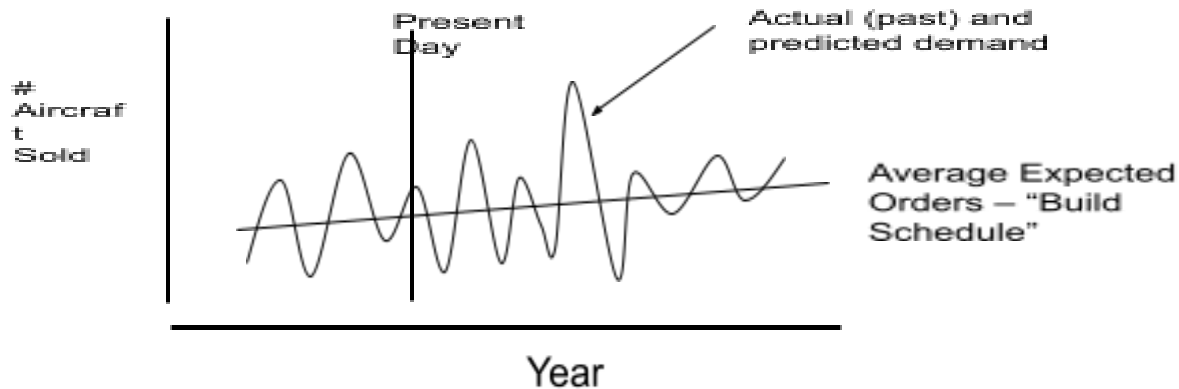
I assumed that this addition would generate revenue for 20 years. Even after discounting, the project has a positive NPV, so the amusement park should purchase the land.

Case L5: Aircraft Manufacturer

(Case from **A.T. Kearney, Winter 1999** for a summer associate position)

Case Question:

In the 1970's, Lockheed Martin manufactured L-1011 wide-body aircraft for commercial airlines. The industry was very cyclical with swings in demand occurring a frequently as every 6 months (see chart below). During the down months, the Lockheed would have to layoff employees and shutter the plants, which created turmoil for the company and the local community. Jet aircraft were normally built to the order specification of the purchasing airline. To alleviate the costs of cyclical swings, Lockheed considered building aircraft to a predetermined schedule based on average expected aircraft sales over the next five years (see below). Do you think this is a good idea? What are the pros and cons of pursuing such a plan?



Possible Solution:

Unlike some other cases, this case doesn't really have a yes/no solution. The important thing on a case like this is to identify the major issues and state your approach for arriving at a solution. The interviewer wants to see if you have a basic understanding of manufacturing business and the costs inherent in running such an operation. On a real problem like this, you would need to model the costs (with a spreadsheet) of the current (build to order) approach and the new approach (build to schedule) and then test the new approach under a range of sensitivities, both positive and negative. Revenues are unlikely to be impacted by this decision, unless having aircraft in inventory would facilitate greater sales.

A good case solution would identify the cost drivers and risks and arrives at an educated guess of the right answer. Let's look at some of the costs and how they would be impacted under a build to schedule plan:

- 1) Inventory or Working Capital Holding Costs – This could be huge under a build to schedule. If demand is not as predicted or the market heads into a cyclical dip, Lockheed could end holding a lot of very expensive (tens of millions of dollars) of inventory that just sits on the books. At a 6-8% risk free rate of return, the inventory holding costs of such expensive assets would add up rapidly.
- 2) Labor Costs – Labor would probably be cheaper under a build to schedule. The company could avoid costly retraining and rehiring of its workforce after layoff. Additionally, the company would have to pay less severance costs due to fewer layoffs. With a more guaranteed production schedule, the company may be able to extract wage concessions from its unions. But, such savings would evaporate if the company were to busily build new aircraft that the market doesn't want.
- 3) Technological Obsolescence – With build to schedule, you run the risk of building aircraft that aren't demanded in the marketplace because they are obsolete. Thus, if a competitor introduces a much better model at the existing price points or a technology change renders current models as inefficient, Lockheed would have to liquidate any existing inventory at fire sale prices.
- 4) Forecasting – A build to schedule plan for such costly goods requires a very accurate forecast of future demand. Can demand really be forecasted with sufficient accuracy?
- 5) Rework Costs – Airlines request specialized configurations of the aircraft to meet their particular needs. If the company pursues build to schedule, they would need to budget rework costs to change pre-built models to the specifications of the purchasing airline. Or, if they only build aircraft partially, how will they handle the production backlog of moving these partially completed aircraft through the remaining production steps?
- 6) Fixed Production Equipment and Facilities – In general, the fixed costs of production equipment and facilities should not change with a change in production approach. Now, if the company amortizes equipment on a per

unit basis (vice yearly), then net income could be affected under the new plan. But, cash flows, the important thing to look at when making business decisions, should not be affected.

- 7) **Variable Materials Costs** – These include materials and components required for building the aircraft. Under a build to schedule plan, Lockheed could probably negotiate lower costs from their suppliers since they would be able to guarantee a steady stream of purchases.
- 8) **Unused capacity** – Under build to schedule, you're likely to have unused production capacity since you currently carry sufficient capacity to meet cyclical demand surges. The analysis should carefully examine the existing production assets to determine if savings could be realized through capacity reduction.

After identifying the variables, the interview would expect you take a guess on the right answer based on your assumptions. It turns out that build to schedule approach is not viable for this company because they cannot predict demand with sufficient accuracy and the capital holding costs are too expensive.

Case L6: New Market Entry – Thermal Imaging Device

(Case from **Booz Allen & Hamilton, Winter 1999** for a summer associate position)

Case Question:

A manufacturer of military equipment has a thermal-imaging device that they would like to market commercially. They have a device in development that will allow firefighters to locate people in burning buildings. The small handheld device can look through thick smoke to identify people behind walls and huddled in closets. It's small LCD screen will provide an image showing the outline of human figures and other features in the room. Should they continue development of this device and market it?

Possible Solution:

While several frameworks would be appropriate, the Marketing 4 P's is a good place to start. You could start out by saying, "First, I would want to analyze the product itself, does it have any competitors and is the product really needed? Next, I would want to understand the company's costs. Military produces are not particularly cost conscious, can they produce this device at a cost that local fire departments can afford? Next, I would want to gain an understanding of how this product would be promoted & marketed. How do companies that provide fire equipment currently reach their target customers? Do the firefighters themselves make the purchase decisions or do they recommend purchases to a city administrator that has the final decision? Next, I would need to look at the distribution. Is fire equipment typically sold through wholesalers or do companies sell direct? If wholesalers are used, do we need to make arrangements with them to get access for our product? Also, can we keep our product affordable after including commissions for sales reps and the wholesaler margins? After an opening roadmap as stated above, it would then be useful to drill down into each area to try to arrive at an answer.

- 1) **Product** – Is a product of this nature really needed (interview with fire departments could reveal this)? Can firefighters really use this product while holding onto axes, hoses, and other things needed to do their job? Competitors?, Product weight and size? Likely competitor response if there are none now.
- 2) **Price** – How do product costs compare to other firefighting products or competitors providing a like product? Is the price within the budgets of fire departments? If a price war erupts with a competitor, can the company maintain sufficient margins to be profitable
- 3) **Promotion** – Need to segment marketplace into city high rise, urban (3 story and lower buildings, apartments), and suburban (single-family homes), etc.? Does the product appeal to all three segments? How do each of these segments purchase fire equipment and who makes the decisions? Are there strong brand names in this category that our company would have to overcome? In case of strong brands, does it make sense to form a partnership with an existing manufacturer of firefighting equipment?

- 4) **Place** – Distribution path, Do only a few suppliers have access to the purchase network. Would you build the product to order or do you envision keeping inventory in the supply chain? Currently, you do not have a sales and service force because you deal with military contracts. Perhaps it would be better to outsource these roles or again, form a partnership with a company that has expertise in these areas.

Based on the answers to these and other questions, you can arrive at a qualified answer. “Something like, based on the information gathered so far, it looks like an attractive opportunity. The competitive environment is light, there is a clear need for the product, and the company can produce the device at an attractive price for local governments. Sales and marketing is a concern, but the company can explore partnerships to attain these capabilities. Of course, I would want to do a more thorough analysis before making a decision for the company to go forward”

Case L7: Decline in Market Share – Manufacturer of Power Transformers

(Case from **The Boston Group** during **Winter 1999** for a summer associate position)

Case Question:

A manufacturer of power transformers has been experiencing a decline in the market share. The client has the biggest market share in the industry, closely followed by number 2 and 3 players. Number 4 and 5 players have been relatively new competitors, been able to gain market share quickly. Our client has been experiencing declining revenues and profits. What should the client do?

Possible Solution 1:

(I used very little frameworks, I had to ask a lot of questions to find out all the info. The interview was very interactive.)

It turns out that there has been no new technology in the industry and our client's prices have been relatively stable. The product is sold mostly to utilities by bidding, and lately, we have not been winning enough bids. Therefore, our competitors must have been able to undercut us on price. The hypothesis then is that they have a lower cost structure but we don't have any info on their cost structure. The product does not differ much in quality.

When our client receives the order, the engineers design the product based on the specifications given. It turns out that engineers spent a lot of time designing the products because they enjoy coming up with innovative ideas. However, they are not necessarily adding value by designing cool power transformers.

The products can be classified into three categories (medium, large, and something - not important), in each of these categories the manufacturing process is somewhat similar.

Therefore:

1. Break down each activity as a percentage of total cost.
2. You will find out that design is really a much bigger percentage of total costs than what it should be.

Recommendations:

1. Engineers need to be explained how their work affects the cost of all subsequent activities, such as assembly, purchasing, etc. They need to design with cost savings in mind, for example, use the same components when necessary instead of carrying huge inventories of every possible component.
2. Share knowledge from one project to another, they shouldn't have to duplicate the design part that applies to every transformer every time.

Possible Solution 2:

Other A: Revenues falling can mean one of three things:

- (1) prices are steady and quantity is falling, or
- (2) quantity is steady and price is falling, or
- (3) both price and quantity are falling.

After a series of questions, I discover that the firm has been losing bids with their customers, utility companies. To discover why, I backed up and considered the market that the firm was operating and found out that they had 4 other competitors bidding on transformer sales. The #2 and #3 competitors were also losing revenues (and market share) while the #4 and #5 competitors were gaining share. The #4 and #5 companies were starting to win more bids from the government because they always came in at the lowest price. Their ability to do this (as I later discovered) was due to an effective integration of their bid, design and manufacturing processes, which lowered their operating expenses and allowed them to come in with lower bid prices yet maintain their margins.

An alternative approach would entail:

- (1) Taking inventory of all real estate holdings
- (2) Determining redundancies by location.
- (3) Combining those facilities where there will still be utilization is under capacity.
- (4) For those facilities where utilization would exceed capacity, determine NPV of staying put, expanding existing facilities, or renting new space.

Case L8: Hospital Profit Improvement Case

(Unknown source)

Situation:

A not-for-profit hospital asked McKinsey to help reduce the \$10 million loss that the organization was experiencing for the last 3 years. If the hospital continued this level of loss for more than 2 more years, then the hospital endowment would be completely gone and the hospital would need to close its doors. Quick action was necessary.

Part I**Problem:**

The chairman of the hospital's board asked you to help develop a plan to quickly return the hospital to a small profit. What framework would you use to help you frame the issues?

Solution:

The best framework for this case is probably the profitability framework (cost/revenue first branch). Try to think through how this structure might apply to a hospital setting.

Part II**Situation:**

The McKinsey team quickly realized that the hospital's loss was due to a new law which basically fixed hospital prices because of the new DRG (diagnosis related groups) hospital payment system in New York State (i.e. price per unit could not be changed).

Problem:

What profitability improvement levers should the team focus on first if the team wants to quickly reduce the hospital's loss? What would you expect to find?

Solution:

A good approach to this issue might discuss the different costs associated with performing the hospital's services and the current capacity vs. demand for the hospital. The correct conclusion is that it is quicker and easier to change the cost structure and capacity of an organization than to change the demand for the hospital's service (remember the price per unit is fixed so the revenue lever remaining is increasing the units of service). As it turned out, the hospital had more capacity than necessary and very high fixed costs. Reducing the capacity and shifting some costs from fixed to variable would help restore the hospital's profit.

A more complete answer would discuss some of the revenue levers even though they may take longer to work. The team could explore some of the marketing issues such as:

- What draws physicians and patients to a hospital and from where do the patients come? (It turns out that most of the patients come from the local communities surrounding a hospital and that focusing efforts on local neighborhoods that are underrepresented by the hospital can increase patient volume.)
- How does the client hospital compare to the competitors along service dimensions that are important to patients and admitting physicians? (The hospital was outstanding at patient care but lacked convenience.)

What are the trends in patient care and how should the hospital change to exploit the opportunities? (Recent trends are toward outpatient services and away from admitting patients for long periods of time. For example, cataract surgery used to be an inpatient procedure requiring a hospital stay of three days or more. In the last few years, most of the cataract procedures performed require no hospital stay. There seems to be an opportunity providing a very convenient outpatient facility to the community.)

Case L9: The Vision Case

(Unknown source)

Situation:

You have worked as a McKinsey associate for two years and have recently become an engagement manager. As you complete your preparation for a progress review, a former client calls you needing immediate help.

The client, a marketing vice-president of a major pharmaceutical firm, is working on a business plan for a new revolutionary product. The client quickly explains that their researchers have developed eyedrops which completely eliminate nearsightedness in 60% of the cases (the cases caused by eye strain rather than irregularly shaped eye lenses) if the drops are used twice a day.

Part I

Problem:

The client has been working on a business plan but is having a difficult time with one piece of information. The client needs a directional estimate of the retail price they should set for the drops so that he can complete the business plan. How would you help the client structure his thinking on the price and what is your back-of-the-envelope estimate on the price that he should use in the business plan?

Solution:

One rough cut pricing analysis would determine the market price for the product that is being replaced...in this case, eyeglasses or contact lenses. For example, if eyeglasses cost \$120 and last on average 2 years, then a two-year supply of drops could be sold for \$120.

A more advanced analysis might determine that eyedrops are simple to use and completely trouble-free so that they should replace the most expensive option including all the costs associated with that option. For example, this may include \$100 per year in optometrist fees, \$180 in contact lenses (\$120 per pair plus on average each user loses on lens in a year), and \$25 in contact lens cleaning solutions and other supplies, for a grand total of \$305. Using this example, the retail price of the one year supply of drops should sell for \$305.

The most advanced issue trees will include the fact that this new product is actually much better than the alternatives, issues of dynamic pricing strategies (e.g. start high and reduce over time to best understand elasticities), and pricing so that marginal revenue equals marginal cost.

Part II

Problem:

After talking through the pricing issue, you agree with the client that the price of the drops should be roughly \$200 per year. Because you have been so helpful, the client wants to discuss one more issue. You look at your watch and determine that you have precisely 10 more minutes before you absolutely must leave for your progress review. The client explains that he needs to complete his baseline business plan within an hour so that he can share it with the management committee later that afternoon. He would like you to help him produce a ballpark estimate of the market for the product. Specifically, what dollar level of sales might he be able to expect per year in the long run in the US market?

Solution:

Because you have already estimated a reasonable price, you must now estimate the number of yearly supplies that the client can expect to sell in the US. One possible organizing structure (with estimates) is:

- | | |
|---|-------------|
| 1. Estimate the number of people in the US | 250 million |
| 2. Estimate the percentage of (1) using corrective eyewear | 20% |
| 3. Estimate the percentage of (2) that are nearsighted | 70% |
| 4. Use the client's figure for the percentage of (3) that can be helped | 60% |

5. Estimate the percentage of people that will adopt the new product 50%
 6. Put it all together: $(250 \text{ million})(.2)(.7)(.6)(.5) =$ 10.5 million people
 7. Multiply by the price per unit $(10.5 \text{ million})(\$200 \text{ per unit}) =$ \$2.1 billion
- NOTE: this assumes a proprietary product with no competition. If a competitor is assumed, market share must also be considered.

Case L10: HMO Profitability Case

(Unknown source)

Background on HMOs:

An HMO is a form of health insurance in which customers pay a fixed monthly fee for coverage which does not change based on the quantity of services provided. Often times, customer do pay a nominal (\$5 or \$10) co-payment when they use the services of the HMO.

In return for this fixed payment arrangement, customer of HMOs must select physicians and hospitals who are on a pre-approved list, as determined by the HMO organization. The HMO organization then contracts with physicians and hospitals to provide services to the customers at an agreed-upon price.

Each party receives value from the type of arrangement:

- Physicians and hospitals get guaranteed business when their customers need service
- Customers get a lower price for their health care
- The HMO organization makes money on the difference between what the customers pay and what the physicians/hospitals charge

Part I

Background:

McKinsey is working for a large insurance client who owns seven HMOs in several different geographic markets throughout the country. (These HMOs are of the type where they contract with physicians/hospitals for their services, rather than having these professionals on their payroll, like the Kaiser HMO model). Six of the seven HMOs are currently profitable, however, on market - Purgatory, TX - is losing over \$4 million per year.

Your client is particularly concerned about their image as a player in HMOs, given upcoming health care reform. They believe it is critical to have profitable HMO operations in every HMO market, and are therefore very worried about Purgatory dragging down earning of their overall HMO operation.

They know that the medical costs of Purgatory are higher than the competition in this market, but have not been able to reduce those costs given the small scale of the operation. Large scale is typically the best way to negotiate lower costs with physicians and hospitals, thereby lowering medical costs, which are the bulk (about 85%) of any HMOs cost base. The remainder of the cost is S, G, & A. Your client is currently one of the smallest players in

the market. Given this dire situation, they have asked McKinsey to help them determine how to handle the Purgatory market.

Question:

What key issues would you want to probe to begin to address the issue of what to do in the Purgatory market? Develop an outline of the areas you would like to learn more about and the specific key questions you would like answered about each area.

Solution:

Since costs cannot be reduced given your client's current scale, you may first want to determine if there are opportunities to generate increased revenue to cover your cost base. To do this you may use a variety of frameworks. One useful framework may be the 4 P's. Using this framework as a guide, you can develop a comprehensive set of questions to better understand the existing revenue improvement opportunity.

- Product – How do your client's product features compare to that of competitors, e.g. hospitals and physicians in the network, types of illnesses covered? Which of these features matter most to the consumer?
- Price – How does your client's pricing compare to that of competitors? If it is higher, do product features support this higher price? How price sensitive is the consumer?
- Promotion – Is your client developing enough demand pull by using advertising and promotion?
- Place – How productive are your client's sales channels versus that of competitors?

Advanced solutions will first clarify the extent of the cost problem. Specifically, if market level prices are below the client's marginal cost - which is indeed the case - selling more product at competitive price levels will only further damage profitability in the short term. In this case, the pricing lever should be the focus of further analysis.

Part II

Background:

More facts about Purgatory – After some fact finding, you discover a number of key issues regarding the Purgatory HMO market and your client's position.

Product:

- All products in the market have comparable features, e.g. contract with same hospitals and physicians, offer similar coverages. Your client is unlikely to be able to develop a product feature that cannot be quickly copied by competitors.

Price:

- HMO consumers are very price sensitive.
- Your client's prices are slightly higher than that of market leaders.

Promotion:

- Your client does very little promotion, however, the effectiveness of spending on promotion has not been proven.

Place:

- There are two ways to sell HMO products – through independent sales agents and a direct salesforce. Your client does not have a direct salesforce. However, a quick calculation has indicated that until the product is profitable on a marginal cost basis, adding a direct salesforce will only exacerbate the current profitability problem short term.

Question:

Given the constant talk regarding healthcare reform, your client is desperate for an early clue as to what you think they should do in Purgatory. Their primary objective is to have profitable HMO operations to report to industry analysts, therefore the losses in Purgatory must be addressed.

In response to their needs, you must develop a hypothesis for what you believe the client should do in this market based on the facts you now have. In addition, you must identify the key questions that must be addressed to confirm or refute your hypotheses. Furthermore, to make them comfortable with how you will proceed, you must give them a sense of the types of analyses you will do to further address your outstanding questions.

Solution:

A potential range of answers exists. The key here is logical support for the selected hypothesis based on the few facts that are available.

The bottom line for relatively small HMOs in markets such as Purgatory is that they are much like any start-up business, expected to consume cash versus to make a profit for a period of time before a significant sale is reached. This is because medical costs – the key component of an HMO's cost – are inversely proportional to scale, e.g. a large HMO can negotiate very low rates with physicians and hospitals because their size provides them with market power. However, to gain membership in an HMO, prices must be competitive. Therefore, in the early years of an HMO, losses should be expected due to the need for market level pricing concurrently with higher than competitive cost.

Case Interview Database

Introduction

The 1999-2000 version of the MCA Case Interview Database represents a cumulative effort of former and current Anderson School students, combining cases from previous years' databases with new questions that were presented to Anderson students during the 1998-1999 school year. The purpose of the database is to familiarize students with the types of questions possible.

In order to provide structure to the database and in an attempt to help students quickly determine relevant frameworks for the questions, we have divided the cases into four distinct subject areas: Investment/Market Entry, Performance, Market Demand/Definition, and Random/Brain Teasers. Definitions for each of the subject areas are provided at the beginning of each section. Obviously questions can fall outside of these four subject areas or encompass several areas; hence we have also included an Other section as the fifth and final section. We have also provided indices to allow students to quickly and easily locate cases given by a particular firm or during a particular quarter.

Finally, the quality and usefulness of this database are dependent on student contribution. You can do your part by writing down questions you encounter during the interview process and e-mailing them to the MCA (care of me, knguyen) shortly after the interview. Your additions will be greatly appreciated by your classmates and Anderson generations to come!

Enjoy.

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Section I – Investment / Market Entry

The following questions involve a client questioning whether or not to make a particular investment or move into a new line of business or market. Frameworks such as Porter’s Five Forces, 3Cs and 4Ps, Supply and Demand, Profitability, Co-opetition, etc. are useful.

Case Questions:

A1) (Same as Case L1) Your client is General Electric (GE), and they’ve just developed a new product: a new light bulb that can last eternally. Your job is to help them go to market by defining their pricing strategy. The new light bulb cost \$1 billion to develop. (McKinsey, Winter 1999, for summer associate position, 1st round)

A2) (Same as Cases L3 and L4) Our client is XYZ Corporation (“XYZ”), the owner of a single amusement park. XYZ has been approached by the local government and offered 100 acres of land adjoining the current amusement park for \$10 million. XYZ has engaged us to help them assess whether or not they should purchase the land and/or expand their existing park.

This is intended to be a two part question. Try to push the interviewee towards the qualitative (“strategic”) aspects of the case first. Midway through the interview, focus on the quantitative analysis of the case. (BCG, Winter 1999, for summer associate position)

A3) (Same as Case L6) A manufacturer of military equipment has a thermal-imaging device that they would like to market commercially. They have a device in development that will allow firefighters to locate people in burning buildings. The small handheld device can look through thick smoke to identify people behind walls and huddled in closets. It’s small LCD screen will provide an image showing the outline of human figures and other features in the room. Should they continue development of this device and market it? (Booz Allen & Hamilton, Winter 1999, for summer associate position)

A4) (Same as Case L9) You have worked as a McKinsey associate for two years and have recently become an engagement manager. As you complete your preparation for a progress review, a former client calls you needing immediate help.

The client, a marketing vice-president of a major pharmaceutical firm, is working on a business plan for a new revolutionary product. The client quickly explains that their researchers have developed eyedrops which completely eliminate nearsightedness in 60% of the cases (the cases caused by eye strain rather than irregularly shaped eye lenses) if the drops are used twice a day. (Unknown source)

A5) You have been asked by the President of a Midwest bank to see if PC-based or online banking is something that his firm should pursue. His bank is in 3 states and he has #2 market share. He is skeptical and does not think that he can generate much profit because his competition does not charge for their services, yet there are fixed costs in setting up such an endeavor. However, he is concerned because the larger east and west coast banks are entering the market and offering online banking. What should he do? (BCG, Winter 1999, for summer associate position)

A6) Your client is a tire manufacturer. How do you market their tires? The product was not any different from competitors, and the company did not have competitive advantages. (Mitchell Madison Group, Winter 1999, for summer associate position)

- A7) Case was based on Bellco. I had to read a two-page case write-up and answer 3 questions. It was an issue of strategic options for a regional telephone company (still under the protection of government regulation) to go pursue investments into video dial tone technology or not, given the continuous entrants into that market. (PricewaterhouseCoopers, unknown date)
- A8) Think of a business that you could start at the Anderson School (i.e., catering to students/faculty at Anderson). Walk me through the analysis of starting that business. (Unknown company, 1999)
- A9) A company is considering purchasing one of two cruise lines. “A” operates in the Mediterranean and has an initial cost of \$25 million, while “B” operates in the Caribbean and has an initial cost of \$50 million. Both lines are profitable, and the company has an ROA of 20%. Which one would you choose? How would you start your analysis? What factors do you need to consider?
- A10) An overseas construction firm wants to expand by establishing a presence in a growing U.S. regional market. What factors should it consider? How should it go about doing this? What factors are critical for its success?
- A11) A large commercial airline is in the process of evaluating the merits of its frequent flyer program. How would you determine the value of this program?
- A12) Situation: You are a new associate at McKinsey and get a call from a partner that is forming a team to help a major book publisher explore strategic opportunities and risks. She asks if you are available for lunch today. If so, she would like to discuss the industry over lunch. You explain to her that you do not have experience in the industry but would enjoy having lunch with her today.
- Problem: You do not want to disappoint the partner, but she has set high expectations for your lunch conversation. How would you structure your thought process for thinking through the strategy of the book publisher? What are your experiences with books which will help you think through the current issues in book publishing? What types of strategies might help the client?
- A13) An Israeli travel agent has been extremely successful. His primary source of revenue is customers who fly to and from the U.S. He manages to fill up over two plane loads on a daily basis. Given his success, he is considering buying an aircraft and flying the U.S.-Tel Aviv route himself. What advice would you give him?
- A14) How would you compare the airline industry with the baby food industry? In which would you invest your own money?
- A15) A turnaround specialist has retained your services to help her evaluate a medium-sized lumber company as a potential acquisition. How would you determine whether the acquisition was worthwhile?
- A16) A corn feed company has eight manufacturing plants located in the Midwest. These plants service the entire United States. Their plant in Ohio is in need of refurbishing. The company has four possible options:
- a. Refurbish the existing plant
 - b. Build a larger plant at the current location
 - c. Build a similar plant at a new location
 - d. Build a larger plant at a new location

Which is the best option for this plant?

- A17) A Baby Bell company is interested in diversifying into other areas besides telecommunications. They are considering entering the market for electronic home security systems. As their consultant, what would you recommend they do?
- A18) A producer of glass containers is considering making a \$1 million investment to upgrade some process equipment. Would you recommend that they do so?
- A19) A large microelectronics company is considering participating in a microchip project that will receive 50% of its funding from the government. The company currently uses millions of dollars worth of microelectronics each year with the cost steadily increasing. Although the company already has a small microchip subsidiary, its capacity is small and technology is relatively old. It is interested in developing application specific integrated circuits (ASICs).

What are the key considerations to making this decision? What factors are important for success in the ASIC business? Should the company get involved and with whom?

- A20) You have been hired by a food processing company that recently introduced a new hot dog to the market. Sales in the first two weeks have far exceeded the marketing department's projections. Your client thinks he may need to add more capacity. What advice would you give him?
- A21) A major airline is considering acquiring an existing route from Tokyo to New York. How can it determine if the route is a good business decision?
- A22) A regional chain of grocery stores currently receives its stock on a decentralized basis; i.e., each store deals directly with the various suppliers. The president of the chain is wondering whether it would be better if they established a centralized warehouse through which all supplies would be delivered and then disbursed by company trucks. What are the key considerations to make in this decision?
- A23) A large health care company has decided it is interested in substantially increasing the size of its operations. Its goal is to double total sales and profits in less than two years. As a consultant brought on to assist them, what would you suggest?
- A24) Aspartame is an artificial sweetener and the key ingredient in Nutra Sweet. For years Nutra Sweet had a monopoly in the artificial sweetener business, but in 1992 it was challenged by the Holland Sugar Company (HSC) in Europe. In 1994, HSC announced that it would compete with Nutra Sweet in the U.S. as well. Coke and Pepsi, the two principal buyers of Aspartame, immediately announced that they would buy from both HSC and Nutra Sweet. HSC took the Cola companies at their word and built an expensive plant in preparation to sell in the U.S. Yet the HSC sales never materialized – Coke and Pepsi both signed multi-year contracts with Nutra-Sweet. Why did they do this? What should HSC have done differently?
- A25) A concrete manufacturer is considering acquiring a small local firm. What factors should be considered?
- A26) A major American airline is considering establishing new routes from Tokyo to several sites in the United States. Would you recommend this action to your client?

Possible Answers – Investment / Market Entry Section:

Case A1 Possible Solutions

Please see solution given in Case L1 in the **Example Case Interviews with Detailed Solutions** section.

Case A2 Possible Solutions

Please see solution given in Cases L3 and L4 in the **Example Case Interviews with Detailed Solutions** section.

Case A3 Possible Solutions

Please see solution given in Case L6 in the **Example Case Interviews with Detailed Solutions** section.

Case A4 Possible Solutions

Please see solution given in Case L9 in the **Example Case Interviews with Detailed Solutions** section.

Case A5 Possible Solutions

Definitely 3 Cs: After a series of questions, I discovered the nature of the customer segment that such a service would target (i.e.: families and individuals with a lot of financial transactions that would be find value with the convenience of at home banking). I had to do a quick market sizing brain teaser (i.e.: 100 mm households, 30% with PCs, 10% use PCs for more than email, games and word processing, ec.) to realize that the products purchased by the few customers who would tend to use online banking provided the majority of the profits for a bank (i.e., sort of like an 80-20 Pareto rule). The fixed costs of launching the project were found to be somewhat small. I ended up recommending that the bank should launch an online banking service because of the need to retain the high profit contribution customers.

Case A6 Possible Solutions

Seemed to be looking for customer segmentation: Price Sensitive and Price Insensitive.

So how do you sell this product to both consumers?

Do you charge the price that the sensitive customer will pay?

But then you're loosing out on the revenue the insensitive customer would have provided.

Option: mail coupons out. the price sensitive customer will look in circulars and use it. the insensitive will not sift through papers. Will go in and pay the full price.

Other ideas:

- Market hard to retailers as many consumers ask for recommendations.
- Educate consumers on the need to change their tire every x miles or months.
- Could add additional services, i.e. someone come to house to change tires, free oil change (must work with retailers to do this)
- Competing with Goodyear who has strong brand equity. Do we do a blimp? Or, like Dunlop, tennis balls?
- Customers will likely not understand any competitive advantage we have
- Pricing will have to be competitive with other tire companies
- Other customer segments: those who only buy Goodyear, those who routinely change tires, those who buy recycled tires
- Would we want to sell to car dealers? Would likely have to have contract with one and that would give them a lot of power over us and we would be dependant on their sales

Other Answer: The tire was on par with competitors and my company was not a big name in the market. They seemed to want me to focus on efficiency of spending advertising dollars. Especially on targeting the right customer segments by utilizing something like car purchasing and demographic data to determine who might be buying replacement tires.

Case A7 Possible Solutions

This was a case with many possible approaches. The key was to identify what were the options available to the company and what information would be needed in order to make a good decision. Porter's 5 Forces is good here. Also mention the role of government and what might happen with deregulation. With any investment, NPV must be determined. Also could pursue joint venture or acquisitions. As long as the argument was reasonable, you could make the argument that it was a viable option (including doing nothing!)

Case A8 Possible Solutions

My idea was to start a company that provided video of Anderson student interviews for recruiters on the web. The interviews would be conducted by a licensed, regulated third-party like an ETS type organization. The interview could consist of resume, fit and case questions which would be video-recorded by the company. The company would put the video on the web, and charge consulting (and other) firms a fixed fee to access the site. The key benefit is that it would eliminate the need for first round interviews. I tried to calculate how much value would accrue to the consulting firms (e.g., 4 interviews at an average billing rate of \$250/hour times 8 hours) to drive my pricing. I also tried to gauge acceptance from the key stakeholders (students, CMC, recruiters)

Case A9 Possible Solutions

Factors/Issues to consider:

- What is the goal/motive for purchase (diversification, extension of existing business line, profit, etc.)?
- What are any potential synergies or core competencies that the company can leverage to this business?
- Are there environmental factors, e.g., political, international, economic such as inflation, exchange rates, tax rates, demand cycles.
- What is each cruise line's useful life? (Assume 10 years.)

Assume all of the above does not significantly impact your analysis and go with the choice that will yield the highest NPV. (Assume tax rate is 60% for “A” and 40% for “B”.)

Choices:

1. Do nothing (NPV=0)
2. Buy “A” (Mediterranean); NPV = PV(Operating Revenues) – PV(Operating Costs)

Components of Operation Revenues

- Passengers
 - 100K per year
 - Avg. fare=\$500 per passenger
- Annual Revenue=\$50M

Components of Operation Costs

- Fuel=\$1M
 - Labor=\$2M
 - Food=\$40.8M
 - Docking=\$.15M
- Annual Cost=\$43.95M
Annual Profit=\$6.05M

3. Buy “B” (Caribbean); NPV = PV(Operating Revenues – PV(Operating Costs)

Components of Operating Revenues

- Passengers
 - 100K per year
 - Avg. fare=\$500/pasenger
- Annual Revenue=\$50M

Components of Operating Costs

- Fuel=\$500K
 - Labor=\$8M
 - Food=\$20.4M
 - Docking=\$.75K
- Annual Cost=\$28.975M
Annual Profit=\$21.025M

RESULTS

	1. Don't Buy	2. Buy “A”	3. Buy “B”
Profits (EBIT)		\$6.05M	\$21.025M
Tax Rate		60%	40%
After Tax Profit		\$2.4M	\$12.6M
PV @20% over 10		\$10M	\$52.8M
Years			
Initial Cost		(\$25M)	(\$50M)
NPV	0	(\$15M)	\$2.8M

Choose “B”

Case A10 Possible Solutions

Before answering this market entry question, the interviewee should set up a basic framework to use as a guide to uncover the relevant issues. The following is an example of one such framework.

Company:

1. What are its motives for entering this market?
2. What are the firm's distinct strengths/core competencies it can leverage to succeed (e.g., proprietary technology, low-cost production, non-unionized labor)?
3. Can it fund diversification through a joint venture, acquisition, or build the operation?
4. Will the company have access to suppliers for inbound and outbound logistics (raw materials for manufacturing and distribution channels of finished goods)? Or will it have to build its own channels?

Market:

1. How attractive is the U.S. market and can it withstand a new entry?
2. What are the reasons for the current growth and is it sustainable?
3. How is the market different from the others the company is in? What are the drivers of success in the U.S. market, e.g., price, quality, delivery, brand equity, or existing relationships?
4. Are there any barriers to entry, e.g., economies of scale or scope, product differentiation, government or legal barriers, retaliation by existing firms, etc.?

Competition:

1. Who are the major competitors in the market? What are their strengths & weaknesses?
2. Are more competitors expected to enter the market? Retaliation by existing firms?
3. What control over suppliers and other resources does the competition have?
4. How does your firm compare to competitors in the US market?

Customers:

1. Do we know who the main customers are, e.g., private real estate developers, end users, or the government?
2. Have customer's preferences changed? Is there strong brand loyalty?
3. What do customer's place a premium on? What is price elasticity?

Case A11 Possible Solutions

- The value of this program is the benefits minus the costs.
- Benefits can be determined by finding out (a) how many clients switch due to frequent flyer incentives and (b) how much do these customers pay for a ticket when they do so. (Ways to determine this additional revenue include marketing research, customer questionnaires, or comparing flight booking trends before the program was offered to the number of bookings during the flyer program.)
- The cost is determined by demand side factors such as most traveled seasons or days of the week, most traveled destinations, demographic characteristics of those who redeem miles, and segmenting the customer base into business and leisure given their different price elasticities.
- The cost is also determined by supply side drivers such as the number of frequent flyer miles given away or the number of miles redeemed. (This information should be readily available to the airline through the ticket coding on the CRS that books airline flights.)
- The cost is also driven by incremental administrative, logistical, in-flight, advertising and promotion costs of the program.
- A good way to calculate the cost would be \$ per frequent flyer passenger mile or mile redeemed.
- You may suggest ways to reduce or limit these costs by improving operations of the program or limiting the window of opportunities during which passengers can redeem miles.

Case A12 Possible Solutions

The first framework that come to mind for thinking through a strategy case is the “Forces at Work” (Porter) framework. The students should be able to think through the elements of the framework based on their experiences:

- Increasing buyer power has been increasing due to the movement away from the corner bookstore toward the large chains (e.g. Barnes and Noble) that give discounts to readers off the publishers price.
- Increasing substitutes caused by video games, videos, cable systems, books on tape, and video on demand.
- Increasing competition between publishers caused by reduced margins (buyer power) and saturated market (increasing substitutes) and proliferation of titles. Also no real branding among publishers (who published the last book that you read?).
- Increasing competition leading to higher advances to well known authors (millions of dollars in many cases).

Advanced answers from students might discuss what can be done to help the industry. For example:

- Become a market leader by announcing new terms and conditions for the large book retailers. If the other major players in the industry follow the lead, the industry may become more profitable as a whole. If not, the client may need to move back to the old terms in the industry.
- Focus on the books or types of books that have an expected positive NPV. The proliferation of books probably has caused many unprofitable titles.
- Forward integrate into bookstores.

Case A13 Possible Solutions

- Find the source of your client’s success. In this case he is attracting customers due to his own promotion and reputation. He will probably continue to do so if he buys his own aircraft.
- Assess your client’s complete understanding of the industry and venture he is considering. He should clarify issues such as hub space availability, international air traffic regulations, and other specifics of the industry.
- Assess your client’s capital resources. Does he have the funds to support this venture?
- Analyze the current state of this segment of the airline market. As a travel agent, he knows the pulse of the consumer fairly well. Is the market in a growth trend? Who are the dominant competitors and what would you anticipate their reaction to be? If the route is very busy, it is probably very lucrative for other airlines.
- Competitor’s reaction: The major operator happens to be El Al which has deep pockets. If your client enters the industry he would probably trigger a price war. If not, other small operators would follow and El Al would begin to lose an important source of profits.
- The only way your client could fight this war would be to differentiate himself from El Al and the other airlines by charging a lower price. However, El Al would match any such move and your client would be forced out of business.
- Seems the best recommendation would be not to enter the market as a small operator.

Case A14 Possible Solutions

- The industries could be compared by going through some version of Porter’s Five Forces or 3 C’s analysis. Consider the following:

Markets to determine current drivers of success or change

Overall profitability trend

Nature of the competition

Control of suppliers and distributors

Existence of substitutes

Customers and how they are segmented and what are their preferences

- Competition in the airline industry is intense.

Fixed costs are high and competitors keep cutting prices which results in low profit margins.

Microeconomic arguments indicate that airlines will keep cutting prices as long as they are covering variable costs. Since fixed costs are high and undoubtedly financed with debt, these companies can end up defaulting on interest payments.

Customers are segmented into price inelastic business travelers and very price sensitive leisure travelers.

Brand equity and loyalty are relatively low.

- On the other hand, the baby food industry is less competitive.

There are only two or three large players who do not indulge in cutthroat pricing; thus, margins are higher than in the airline industry.

Products are well-differentiated with customers being quality conscious and willing to pay a premium for quality.

Brand loyalty is high.

- As an investment decision, the baby food industry is better than the airlines due to higher profit potential.

Case A15 Possible Solutions

- First ask what are her specific motives for acquiring the company? For example, is she looking to sell off pieces of a failing company to competitors who could run it better or is she looking for a well-run, profitable business to run?
- Because most of the company's products are sold to the construction industry, it faces cyclical demand.
- Most of the company's production facilities are fully depreciated and somewhat antiquated.
- Some reduction in the workforce will be necessary to achieve levels of efficiency on par with the best in the industry.
- The company has extensive holdings of forests with a historical ROI for these assets of 16%. However, this is less than the company's cost of capital of 18%. If the company were acquired, some of the acreage of forests could be sold to 1) provide cash to fund capital improvements and 2) improve ROA.
- The potential exists to appease environmentalists and improve operating efficiencies by increasing selectivity in tree cutting and upgrading the process machinery to peel trees more efficiently.
- Conclusion: Ultimately, the decision of whether or not to acquire the company should be based on a conservative assessment of 1) market potential 2) the potential to improve the company's operations, and 3) predicted competitor's reaction. (Perform a market, company, customer, and competitor analysis). Because of the cyclical nature of the industry, it is important to examine the downside and upside scenarios. Sales below projections will be a problem, but sales growth higher than expected may also be a problem if the company is short on working capital and operating at full capacity.

Case A16 Possible Solutions

There are two issues to this decision – plant size and location – which should be considered separately.

Plant Size:

- The first consideration is demand for the product. Corn feed is a commodity product. Pricing on the product is dependent on current corn prices as opposed to the manufacturing process. There are four main competitors. Our company is the second largest. All four competitors have similar manufacturing processes and similar cost structures.

- The proposed larger plant will not give economies of scale not currently present at the existing plant. The capacity utilization is 65%, which is the industry standard. The current customers buy from all four manufacturers in order to guarantee supply. Currently, demand is being met and there are no alternative uses for corn feed.
- Conclusion: The only way to increase demand for corn feed and support a larger plant is through a reduction of the price per ton. This price reduction will be matched by all competitors and reduce the profitability of the industry. Best option is to maintain the current size of the manufacturing plant.

Plant Location:

- Transportation costs and perishability are the main issues with location. The transportation costs for the corn stock, which is a raw material, is much higher than transporting the actual feed. The corn is grown in the Ohio area and the feed is sold to the East Coast.
- The raw material is perishable, whereas the corn feed can be stored for any length of time and is easier to transport. Cost analysis of the transportation cost of feed versus raw materials should be complete. Included in this analysis would be the percentage of spoilage for longer transportation of corn stock.
- Conclusion: The current plant is located close to the corn fields and this is the best location for the plant from the cost/benefit analysis standpoint.

Case A17 Possible Solutions

- In diversification cases such as this, first identify the client's motive for entering the new market, e.g., profits, market share, remove a competitor, etc. In this case, it turns out the client is a holding company and has previously made unsuccessful forays into the software and real estate markets.
- Market: You need to understand the industry that the client is trying to enter.
 - Is it growing or shrinking?
 - Can it withstand new entry?
 - What are the drivers of change?
 - What are the barriers to entry?

It turns out the home security industry is highly fragmented with the top 5 players generating less than 4% of the total industry revenues. This implies that the industry largely consists of small, regional companies.

- 10% of all residences currently own electronic security systems with the markets segmented into 2 groups. It turns out the "expensive home" segment of this market is saturated and growth has been slow the past few years. The "moderately-priced home" segment of the market is insensitive to price.
- Additionally, it would be helpful to know what the drivers of success are with regards to customer demand. Do consumers place a premium on service, cost, durability, etc.?
- Next, what are the costs involved and the profit margin potential? The economics indicate it is a razor/razor blade sort of business:

Item	Retail Price	Margin/Cost
Equipment & Installation	\$500-\$1500	0-10% margin
Monthly Service	\$20/month	\$5/month

- Company: What strengths/competencies of the Baby Bell company can it leverage in this market (e.g., installation expertise, operator services, and transmission systems)?
- Conclusion: The business is a reasonably good fit with the client's company, but they need to do more market research to assess the growth and profit potential in each segment of the market. Other options to explore

include possible joint ventures or acquisition of an existing home security firm with an established reputation and client base.

Case A18 Possible Solutions

Issues to consider with this capital investment case:

- Market: The market presently has many other glass producers, and margins and profits for the entire industry have been eroding for the past couple of years.
- There has been some competition from plastics and metals but glass remains the material of choice for many applications, especially food products.
- The main input/raw material is sand, which is inexpensive and abundant.
- Competitors: Some of your client's competitors have already made a similar upgrade to their own process equipment.
- Company: Does the company presently have enough demand or is it running at a capacity level that justifies the need for this investment in upgraded equipment? It turns out the client has only one, very large facility.
- The key issue in deciding whether or not this is a sound investment is to determine the potential return. Recognize that the industry is highly competitive and that profit potential, at least in the short run, appears poor.
- Given the poor profit potential, the exit of some companies in the industry appears inevitable. The client must decide whether or not it should ride out this stakeout. It seems in the short run, the return on this \$41 M investment will not justify making it. However, if your client is considering selling the company, the cost of this improvement may be worthwhile if it increases the selling value enough.

Case A19 Possible Solutions

- *What is an ASIC, when are they used, and what are they used for?* An ASIC combines the functions of many semiconductor components on one chip, decreasing the size and weight and increasing speed and reliability. Assembly costs are reduced, but development costs are higher.
- *What is the market outlook for the product (ASIC)?* High growth, currently about 15% of integrated circuits are ASICs and this figure is expected to rise to 35% in the next 10 years.
- *Who are the major customers and what are the drivers of their preferences?* Two key customer segments are entertainment electronics and automotive applications.
- *How is the industry structured, how competitive is it?* There are about 150 firms producing ASICs of which only a handful are of any substantial size.
- *Who are the key competitors and what are their main business lines?* There is currently only one producer of ASICs in a similar line of business but this competitor has much more sophisticated production capabilities.
- *Would it be cheaper or is it possible to outsource this production?*
- *Are there already joint ventures or strategic alliances that exist?* Some strong alliances exist in the industry and the possibility of converting old production facilities into ASIC facilities may lead to great over-capacity or market saturation when the next generation of chips takes over.
- *What is the product life cycle of the ASIC?*
- *Are there significant barriers to entry?* What are the expected costs of entry? A state of the art production facility large enough to meet the company's needs would cost around \$250 million. In addition, considerable effort would be required to find the staff with suitable expertise. Also, firms whose core business was semiconductors would have significant technology and R&D advantages.
- *How is the ASIC business different from that of standard integrated circuits with regards to production volumes and fixed and variable cost?* Typical ASIC production volumes are much lower so there exists a

need to find some way to reduce costs. Explore the possibilities of shorter production/design cycles and interchangeable parts.

- *What are your client's current purchasing habits?* Currently purchases nearly all of its microelectronics through one subcontractor who delivers high value.
- *Do potential joint venture partners exist?*

Case A20 Possible Solutions

The following are relevant questions about the product and market you should want to ask your client regarding consumer's buying preferences, competitive break-up, sales and promotions, etc.

- Is your hot dog product significantly different from others on the market? (fat free, cheese filled, etc). In this case, the answer is NO.
- Does your product appeal to a specific market niche that others do not? (kosher, sports fans, specific ethnic recipe, etc). In this case, the answer is NO.
- Is your hotdog product priced significantly lower than other products out there? In this case, the answer is NO.
- Have you been offering grocers and distributors a special introductory price? In this case, the answer is YES.

It appears that the client's initial sales surge has been influenced by one-time buyers attracted to the low price promotion. Follow-up questions might include:

- How often do most grocers re-order hot dogs? In this case, 2 times/week
- Has your client received any re-orders? In this case, the answer is NO.

At this point you should ask your client to re-evaluate his projections. Hot dogs are somewhat of a commodity product that compete primarily on price. There are numerous well-established firms in the industry with no one firm holding a large market share.

Case A21 Possible Solutions

- In basic acquisition or market expansion cases such as this one, ALWAYS clarify what your client's goal or motivation is for this move. Is it market share, profits, diversification, etc.?
- Next, before engaging in any quantitative analysis, identify that your client has the resources, such as necessary capital, personnel, equipment, knowledge of the industry, etc. Obviously, if your client were a small regional carrier such as Southwest, your potential would be different from that of a larger international airline such as TWA. Furthermore, has your client won the rights to hub space in Tokyo airport or is it taking over an airline that already services this market and has an established reputation and customer base?
- Finally, your answer will lie in the results of a simple cost-benefit analysis. Your client should forecast revenues and operating costs.
 - Revenues will be a function of occupancy rates and expected fare prices for that route. Both of these will be determined by expected traveler demand, the competitive environment of this route, and the extent to which your client can win over passengers.
 - Operating cost will depend on expected fuel cost, the incremental costs for landing rights, planes, equipment, etc. It is also important to factor in an estimate of the cannibalization cost this route may have on other existing routes your client may have such as Tokyo-LA and LA-NY. (Keep in mind that losing customers to cannibalization is better than losing them to your competitors.)

Case A22 Possible Solutions

For this case, you need to perform a hard (financial) and soft (impact on organizational effectiveness) analysis of this decision.

- Financial: You need to determine if the savings from bulk purchasing would more than compensate for the cost of:
Building and maintaining the warehouse
Employing additional personnel and trucks
Capital tied up in inventory for the additional period
- Do the stores buy similar products (i.e., do purchasing synergies exist)?
- Will delivery frequency to the stores be better or worse? Consider the costs of stockout and the need for fresh produce.
- Will the stores prefer delivery direct from the supplier or from the warehouse? Consider the time tied up in order processing and the flexibility of delivery times and quantities.
- Have any of your competitors experimented with such operations and were the results successful?
- What impact will this switch have on your alliances/relationships with your suppliers? Will all of your employees support this decision given some potential long-standing relationships with suppliers?
- Will orders still be placed individually with payments done in a centralized office location?

Your solution will depend upon your interpretation of the financial and organizational trade-offs inherent in the two methods of delivery. To propose going to the new method, you need to establish not only that it will cost less, but also that all of the affected players can be persuaded to buy into it.

Case A23 Possible Solutions

You might want to address some of these questions:

- What is the current scope of operations? Does the firm have the resources for this expansion?
- In what area of the health care market does the company deal? What is its current market share in these areas?
- What is the competitive nature of the industry? How does this translate into how much market share the firm must take from its competitors?
- What competitive advantages can the company leverage to aid this growth?
- Are these reasonable/attainable goals given the direction the industry is heading or the overall size of the market?
- What plans have the company already considered? What is the potential for expansion by acquisition or joint ventures and are there suitable targets?

A business can increase profits by increasing sales, increasing prices, and/or decreasing costs. You need to assess how reducing prices and margins will affect sales and profits. Realistically, if the company's margins are consistent with the industry norms, it is unlikely that either increasing prices or cutting costs would be a viable means to doubling sales and profits, particularly if the company is operating in a competitive environment.

This leaves only an increase in sales, which could be achieved by:

- Selling more of the current products to current customers

- Selling new products to current customers
- Selling current products to new customers
- Selling new products to new customers

The feasibility of these options depend on customers' preferences, the firm's current operations and customer base, new promotional efforts and campaigns, etc. In this case, the best bet is to explore increasing sales through acquisition or joint ventures depending on the company's capital resources and suitable targets.

Case A24 Possible Solutions

- Coke and Pepsi had a dependable source of Aspartame at unchanging prices for many years.
- Coke and Pepsi used the two suppliers against each other. The threat of HSC made Nutra Sweet offer multi-year deals to these two buyers at very low prices.
- HSC was shut out because it did not obtain a specific written contract/order from both Coke and Pepsi guaranteeing purchase orders before it built its plant. Now its only hope for survival is to either identify other potential buyers of Aspartame to cover their fixed costs or try to sell off their facility to Nutra Sweet or some other willing buyer. HSC can also entertain the thought of pursuing legal recourse on Pepsi and Coke for damages.

Case A25 Possible Solutions

- What is your client's motive for this acquisition (profits diversification, market share, etc.)?
- What is the current profitability and market share of the acquirer and target firm?
- What is its capacity to fund this acquisition? (Does it have the necessary capital or how will it raise these funds?)
- In what direction is the market moving?
- Who are the customers and end-users of the product? What are their needs and preferences in this market?
- What are the competitive conditions in this market? What will the competitors' reaction be?
- How does this line of business of the target firm differ from that of the acquirer? (Do synergies exist?)
- Are there any barriers to entry in trying to compete in this market once it acquires the firm?
- Will the client have access to raw material suppliers and distribution channels? What is the client's bargaining power going to be like with both parties?

The basic viability of the acquisition also requires consideration of the following issues:

- The number of forthcoming government projects in the area (since they are probably the largest end-users)
- The condition of the target's facilities and the quality of its management
- The drivers of change in this industry including local anti-trust legislation and the competition
- In this case, while cement is a homogenous commodity, the cost of its transportation means that the applicable market is not of a product, but of a product-region. Thus, considerable potential may exist for gaining small-scale monopolistic power through this acquisition.

Case A26 Possible Solutions

- This case is different from the NY-Tokyo airline question because it deals with establishing new routes as opposed to acquiring existing ones.
- As always, determine your client's motive for this business decision. What is your client's ability to fund this decision and how does it fit into his/her overall firm strategy?

- This case requires a complete examination of the customers and the competition. You need to assess if there is a demand for these routes to support your decision and what carriers already exist in these markets and how they are operating.
- Customers consist of both business and leisure travelers. While business travel from Japan to the U.S. has been declining at about 25% over the last year, leisure travel has increased at a faster rate. It is expected that leisure travelers will continue to grow at a faster rate than business travelers do. Currently, about 50% of all Japanese travelers to the U.S. are leisure travelers.
- Examine what the market is like and if this trend is sustainable in the short and long term. Can the market withstand another entrant? Identify any anti-trust or regulatory statutes that would impede the establishment of these routes. What issues need to be considered in the Japanese market/government?
- Look at what competition presently exists in these markets and what competitor reactions will be.
- As it turns out, it is extremely expensive to buy gates at Tokyo's crowded airport. As a result, competition will not only come from other airlines at Tokyo airport, but also from a new airport that is being built in Osaka.
- Furthermore, Osaka is expected to attract a very high percentage of the leisure travelers. It is very inconvenient for leisure travelers to fly out of Tokyo, where the prices tend to be higher. It is estimated that once the Osaka airport is built, leisure travelers at Tokyo could decrease by 25-30%.
- If your client continues with his/her plans to buy gates in Tokyo, s/he will find it difficult to attract the growing number of leisure travelers needed for their new routes to the U.S. It probably makes more sense to buy gates in Osaka instead.
- Another insight is the recognition that Osaka will increase the number of airport gates in Japan. The intense demand for gates in Tokyo will decrease with the greater supply of gates in Osaka. While this does not change the benefits of buying gates in Osaka, it may create new, cheaper opportunities to buy gate space in Tokyo in the future to establish new business traveler routes to the U.S.
- Once you have a good idea of what the demand will be like, analyze the various cost components of this business decision to determine whether or not you will have enough revenue to cover your cost in both the short and long terms and what your margins will be like.

Section II – Performance

The following questions deal with performance issues within a particular company or organization – the interviewee is asked to describe how s/he would go about determining the problem. Although frameworks like Porter's Five Forces and various marketing concepts can be useful, a general knowledge of accounting, finance, organizational design, and operations typically play a stronger role in answering these questions.

Case Questions:

- B1) (Same as Case L5) In the 1970's, Lockheed Martin manufactured L-1011 wide-body aircraft for commercial airlines. The industry was very cyclical with swings in demand occurring a frequently as every 6 months (see chart below). During the down months, the Lockheed would have to layoff employees and shutter the plants, which created turmoil for the company and the local community. Jet aircraft were normally built to the order specification of the purchasing airline. To alleviate the costs of cyclical swings, Lockheed considered building aircraft to a predetermined schedule based on average expected aircraft sales over the next five years (see below). Do you think this is a good idea? What are the pros and cons of pursuing such a plan? The Royal Opera Company has been facing declining profits over the past few years. Why? (A.T. Kearney, Winter 1999, for a summer associate position)
- B2) (Same as Case L7) A manufacturer of power transformers has been experiencing a decline in the market share. The client has the biggest market share in the industry, closely followed by number 2 and 3 players. Number 4 and 5 players have been relatively new competitors, been able to gain market share quickly. Our client has been experiencing declining revenues and profits. What should the client do? (BCG, Winter 1999, for a summer associate position)
- B3) (Same as Case L8) Part I: The chairman of the hospital's board asked you to help develop a plan to quickly return the hospital to a small profit. What framework would you use to help you frame the issues?
- Part II: The McKinsey team quickly realized that the hospital's loss was due to a new law which basically fixed hospital prices because of the new DRG (diagnosis related groups) hospital payment system in New York State (i.e. price per unit could not be changed).
- B4) (Same as Case L10) McKinsey is working for a large insurance client who owns seven HMOs in several different geographic markets throughout the country. (These HMOs are of the type where they contract with physicians/hospitals for their services, rather than having these professionals on their payroll, like the Kaiser HMO model). Six of the seven HMOs are currently profitable, however, on market - Purgatory, TX - is losing over \$4 million per year.

Your client is particularly concerned about their image as a player in HMOs, given upcoming health care reform. They believe it is critical to have profitable HMO operations in every HMO market, and are therefore very worried about Purgatory dragging down earning of their overall HMO operation.

They know that the medical costs of Purgatory are higher than the competition in this market, but have not been able to reduce those costs given the small scale of the operation. Large scale is typically the best way to negotiate lower costs with physicians and hospitals, thereby lowering medical costs, which are the bulk (about 85%) of any HMOs cost base. The remainder of the cost is S, G, & A. Your client is currently one of the smallest players in the market. Given this dire situation, they have asked McKinsey to help them determine how to handle the Purgatory market.

What key issues would you want to probe to begin to address the issue of what to do in the Purgatory market? Develop an outline of the areas you would like to learn more about and the specific key questions you would like answered about each area. (Unknown source)

- B5) Role playing: You are a consultant asked to visit a client and identify the problem by asking questions. Afterwards, we will pretend that you are back at the Deloitte office and reporting to the senior managers regarding what you found and your recommendations.

Case Question: Your client is a manufacturer of plumbing products and is not making money. Why? (Declining Profitability Question) (Deloitte Consulting, Winter 1999, for a summer associate position)

- B6) You have been asked by the CEO of Starman, a heavy construction equipment manufacturer, to help them with some short and long term business issues. The short term goal is to increase profits, which they have seen steadily erode. Their long term goal is to remain a viable player in a competitive industry. Here are some facts that are given to you:

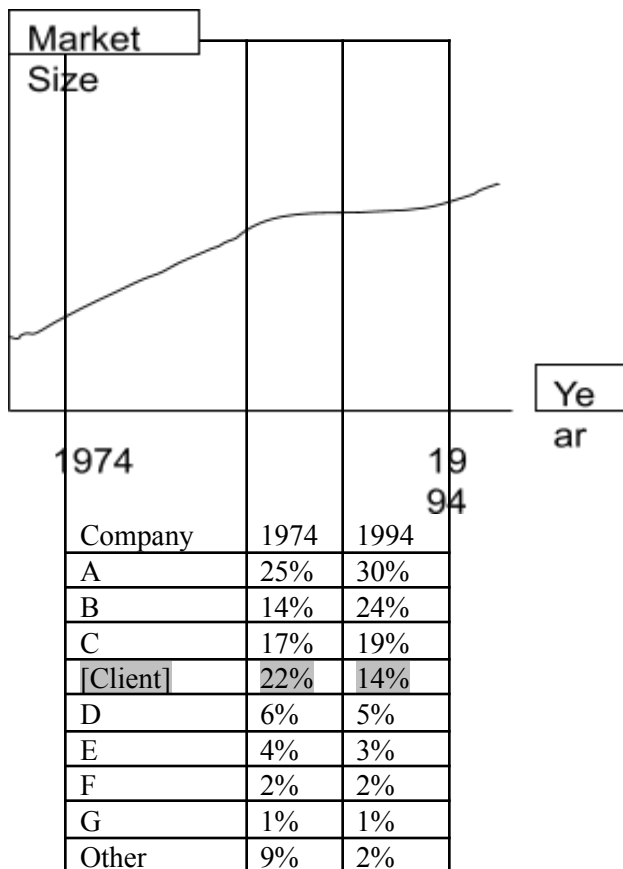
Starman is #1 of 3 of the largest manufacturers in the US. However, the other 2 competitors have grown faster than Starman has in the last 10 years. The industry is \$15 BB and is seeing a CAGR of 7%. Demand for Starman's products has seen steady growth in the last 25 years at about 5-10% per year. Currently, Starman has 12% market share. (Deloitte Consulting, Winter 1999, for summer associate position)

- B7) Two large entertainment (specifically music) conglomerates merge. Each own real estate. Total assets worth 900 million dollars. How does one deal with the real estate function within the new firm (integration). The overarching objective is to save money now! (BCG, Winter 1999, for summer associate position)
- B8) Your client is the CEO of a consumer finance bank that specializes in at-risk credit lending. In other words, lending to consumers who would have difficulty obtaining loans elsewhere. Several years ago the bank diversified into mass marketing credit cards. This division is losing revenue. Why? (BCG, Winter 1999, for summer associate position)
- B9) A Canadian firm had acquired a US firm. They were looking for synergies in software as a decrease in on-time delivery had occurred from 99% to 96%. They also wanted a list of questions for missing information. The firm produced fireplaces. (PricewaterhouseCoopers, Winter 1999, for summer associate position)
- B10) See below (all of the following were given to the same candidate in the first and only round of interviews for Booz Allen & Hamilton)
- 1) Your client is a small paper manufacturer in Georgia that serves a niche. They are happy with their niche, and they don't want to expand. But, demand for paper has increased recently, and their one factory can no longer serve the needs of their niche customers. What options do they have?
 - 2) Your client is an airline. Their maintenance costs are high. Why?
 - 3) If British Aerospace and Lockheed were to merge, give 3 opportunities they have and 3 challenges they face.

(Booz Allen & Hamilton, Winter 1999, for summer associate position)

- B11) See below:

1. (In Japanese Market) A consumer product company (4th market share) has a problem with its leading shampoo brand. Analyze the overall market growth graph and market share ranking data, and give your recommendation.



2. (In Japanese Market) An industrial material company seeks an opportunity for growth. Ask any question that you think is relevant to evaluate its situation, and then give your recommendation. (BCG Tokyo, Winter 1999, for summer associate position, 1st round)
- B12) A global pharmaceutical company has just come off a good year with sales up 25% and profits up 20%. However, the CEO is concerned because competitors have increased their market share and margins have been lagging. (Unknown company, 1999)
- B13) Two entertainment companies have just merged. Please study how the merge will impact on their operations, especially on the cost side. (BCG, Winter 1999, for summer associate position, 1st round)
- B14) Detailed operations case with 2.5 pages of text. Like a mini-version of a full Harvard business school case on operations. Talked about manufacturing operations and supply chain issues and marketing issues such as demand forecasting, product mix/breadth of product lines. This particular case described a manufacturer of fireplace inserts having problems relating manufacturing based on too many SKUs in the product mix, too many conflicting demands placed on the factory (quality vs. lead time vs. cost), too many non-value

added operations in their order fulfillment process and an unclear management hierarchy which made it difficult to make and implement decisions. The ideal answer to this case will also address the HR type issues involved, for example one of the plant foremen was very close to retiring and therefore reluctant to make big changes. (PricewaterhouseCoopers, Consumer and Industrial Products group, Fall 1999, for full-time position, 1st round)

- B15) The Royal Opera Company has been facing declining profits over the past few years. Why?
- B16) Your client is a manufacturer of audiocassettes. They have hired you to find out why they've been experiencing an alarmingly poor sales year. They want you to determine the root of the problem and an approach to solving it.
- B17) You have been called in by a Big 6 accounting firm that is experiencing declining profitability in its auditing operation. What actions would you take to help them improve profitability?
- B18) Your company is a rather successful producer of candy. It originally started as a single product company but over the last few years has diversified its product line. The production process consists of two basic activities: manufacturing and packing. The firm has also expanded its sales through product line extensions. Management is concerned that sales are growing but profits are not increasing at the same rate. What can the company do?
- B19) You have been asked by a diversified manufacturing client to help turn around their steam boiler hose division. This boiler hose division provides boiler hoses for both external customers and the client's boiler division. Background information on the client and industry includes:
- Boiler hoses are sold both with original equipment and as replacements
 - There has been increasing price pressure in the industry
 - The client is third out of 8 industry participants
- How would you structure an analysis aimed at restoring profitability? Where do you expect to be able to save costs?
- B20) This case is about a system software house. Company Z develops customized applications for a large variety of customers in very different industries. Recently, however, top management has found out that the results of Company Z are well below industry averages. You are brought in to diagnose the current situation, identify key issues, and recommend possible solutions to help bring the company to a higher level of profitability.
- B21) Your client, company C, sells maps to schools along with two other major companies. Company A sells its maps at a 10% premium and still maintains the highest market share, while company B follows the same pricing structure as your client and has captured the same market share as your client. What should your client, company C, do to increase its share and profitability?
- B22) You have been hired by a newspaper publisher who has been experiencing declining readership and, as a result, declining profitability. What would you suggest she do?
- B23) Your client manufactures and sells 11 different building products such as concrete, lumber, and bricks, and is profitable but has been losing market share over the past few years. The company is presently second or third in the industry. What information would you need to gather to assess your client's problem and what recommendations would you make? Note: In the real interview, you spend the first 20 minutes acting like you are discussing the problem with your client and then the last 20 minutes back at the office debriefing your manager.

- B24) Your client is in the agricultural equipment business. Their primary product line, farming tractors, is losing money. What questions would you ask of your client to help them solve their profitability problem?
- B25) A pharmaceutical manufacturing company has a problem. While it has what it believes are superior products and good distribution channels, its rivals consistently have a larger market share. For the past two years, the CEO of this company has spent three times the industry average on advertising. There has been blanket coverage on newspaper and television. Market research reveals that consumers show name recognition for most of the advertised products and the campaign is more successful than hoped; yet sales remain slow. You have been hired as a consultant to rectify the situation. How would you approach it?
- B26) A toy manufacturer has hired you because it has received complaints from one of its customers that its products are not moving off the shelves. If you have one week to analyze/assess the problem, what would you do?
- B27) You are a consultant to the CEO of an airplane manufacturer. In the last couple of years you have gone from being number one in market share to number two. In addition, another company has announced that it will be entering the business and is presently tooling up its plan. As a consultant, what are the concerns your client might face, what additional information might you want, and what recommendations would you have?
- B28) You have been hired by a large electronics manufacturing company because it has been getting continual complaints from its customers about late delivery of products. How would you research the problem and what would you recommend?
- B29) A medical equipment manufacturer in the southeastern U.S. has called you because it feels its working capital requirements are much higher than those of its competitors are. As a consultant, how would you help solve your client's problem?
- B30) You are a consultant whose services have been retained by a credit union that serves an army base and a number of rural communities in Montana. This business has been around for a long time. Its profits have been declining and it is losing market share to several new competitors. The credit union has a main office and 5 branches. You are being briefed that day at 9:00 a.m. by the President, who tells you that you will have a meeting with the CEO at 3pm to tell him the things you would look at. The President also tells you that he is planning to quit. What things would you want to know in order to quickly determine the problem areas in the company?
- B31) Eurocos, Inc. produces and sells various cosmetic products in several European countries. The company's different brands are well established in the markets. The various products are quite similar in terms of raw materials and production. The company has been doing very well in the past; however, profits have been shrinking in recent years. The CEO of Eurocos, Inc. thinks of changing his strategy in the industry. He asks you if this is a good idea and what he should do.
- B32) A client produces a range of synthetic materials in varying widths and lengths. Each material is used for packaging but differs in physical properties in terms of costs, weight, flexibility, and general performance. Each material can be coated with any one of four or five types of chemical coating which make the materials more or less impervious to heat, light, water, vapor, etc. All of the machines on which these materials are made are housed in one enormous factory location. Each machine is capable of running any one of the various materials and/or coating combinations. The client does not wish to invest in additional equipment at this time. The client has asked us what combination of products he should run to increase his

plant's profitability. How would you go about determining the optimal mix of potential products on these machines?

- B33) Your client is the largest package delivery service in Canada. During the past 30 years, the firm has established a network that allows it to deliver packages to anywhere in Canada. Until last year, competition had been non-existent and profits were strong. Starting a year ago, a new company began parcel pick-up and delivery to only three cities: Toronto, Montreal, and Vancouver. Although overall volume has declined by only 10% for your client, profits have decreased by an alarming 30%.

Outline your hypothesis for this decline in profitability. Explain what analytic measures you would use to diagnose this problem and where you would gather the necessary data. What suggestions would you recommend to your client to restore profitability and prevent this from happening further?

- B34) You have been hired by a major Colorado ski resort that has been losing profits during the past 2 years. How would you investigate this problem and what would you recommend they do?

Possible Answers – Performance Section:

Case B1 Possible Solutions

Please see solution given in Case L5 in the **Example Case Interviews with Detailed Solutions** section.

Case B2 Possible Solutions

Please see solution given in Case L7 in the **Example Case Interviews with Detailed Solutions** section.

Case B3 Possible Solutions

Please see solution given in Case L8 in the **Example Case Interviews with Detailed Solutions** section.

Case B4 Possible Solutions

Please see solution given in Case L10 in the **Example Case Interviews with Detailed Solutions** section.

Case B5 Possible Solutions

Hard to say of course, but the framework is Revenue minus Costs.

Some information given to me: many competitors, low margin business, but your firm is doing worse,

Looking for:

- the fact there are 3000 products and 200 product lines.
- the fact that in the manufacturing process, it takes a long time to switch from one product line to another
- the fact the finance did a study that 600 products are sold for under cost
- the fact that canceling lines would upset distributors (who are external but exclusive) who want whole lines
- the fact the it critical to understand what is profitable by accounting standards versus hurdle rate standards

Case B6 Possible Solutions

Approach I took:

- I broke it down in terms of short and long term needs. I spent a good 25 minutes gathering information regarding the items affecting profitability (i.e.: revenue and costs) and the positioning of the company to its customers relative to the competition. I also asked questions regarding the value chain and where Starman has relative strengths and weaknesses versus the competition.
- There seemed to be many places one could go with this case (i.e., I discovered that Starman was not as integrated with their suppliers as their competition and that they had operating expenses that drove up their variable costs. As a result, their operating costs were increasing at a greater rate than that of the competition).
- It seemed that there were no right answers, as long as you listened carefully to the "client" and asked intelligent, logical questions that allowed you to structure the problem to identify root causes. From the

problem identification, you could then make some recommendations regarding what additional information is needed and/or what corrective measures might be considered.

Case B7 Possible Solutions

Some points:

Consolidation: pretty basic points on duplicate needs, fixed costs, etc.

Key: Return on assets. Do they have good return on assets and what do they do with them?

His point, the WACOC for a firm is high because it is volatile and but low for lease because it is stable, so in most cases, sell the land and lease long term to use the capital for better use.

Both firms do similar work, one is headquartered in the US and one in the Netherlands are has a presence in many other countries. Local presence is important - start by looking at how to integrate the headquarters.

Options:

- keep both
- close one location and keep another
- close both and get a new one

Issues to consider:

strategy - where is it important for them to have the most presence?

people - where is the management from, are they willing to relocate, what additional costs would relocation result in?

Do NPV analysis of the above 3 options.

Case B8 Possible Solutions

2 answers:

- (1) Their core competency is in lending to at-risk clients, not the mass market. 60% of their profits are derived from 10% of the volume, at-risk customers. They should focus on this market.
- (2) Revenue is made of price and quantity. Price is free and quantity is dependant upon their interest rate level. When you dig deeper, the bank has been losing customers after introductory offers run out. There are no switching cost. Digging deeper, the bank is keeping their interest rate the same, while their competitors are lowering theirs.

Case B9 Possible Solutions

None available.

Case B10 Possible Solutions

None available.

Case B11 Possible Solutions

For question 1, the basic marketing frame work would have helped me most (I did know nothing at that time.)
For question 2, though it was an open-ended question, cost accounting and financial accounting knowledge were most useful.

Case B12 Possible Solutions

Use marketing and cost frameworks.

Case B13 Possible Solutions

Cost structure analysis was useful.

Case B14 Possible Solutions

Frameworks used: Basic financial ratios used in operations like COGS, fixed operating expense ratio, var. manufacturing expense ratio, fixed assets ratio etc. Economic / breakeven analysis, EOQ model from operations.

General Tips: Expect a longish case, part of their tactic in the interview situation is to make you feel under pressure by saying "don't worry about me" after they give you case and then trying to distract you by looking at you at glaring at their watch etc. Idea is to make you feel like there is so much work in front of you that you can't possible get it done in the 20 minutes they have defined for you. Best advice on this is to totally ignore the interviewer once you have clarified the time limit for studying the mini-case and any questions. Then try to read and get your presentation together in less time than what they say you should take (ie, 18 minutes instead of 20).

Case B15 Possible Solutions

- Has there been a drop in attendance? *No, attendance has been fairly constant, and it may have actually increased a little bit.*
- Have revenues declined? *No.*
- I am assuming there has been an increase in costs. Have there been any major changes in the cost drivers? *Well, what do you think are the main costs?*
- Salaries (players and administrative personnel), fixed overhead. *How would you determine where the cost problem is?*
- First, I would want to see if there is a change in the pattern of current vs. past spending. Second, I would want to benchmark the Royal Opera Company with other similar companies. *Actually, the opera company has been trying to meet public demand for variety by putting on more different shows per season.*
- I assume that there is a high fixed-cost with developing an opera rehearsal time, sets, etc. and a relatively lower variable cost with each production? *Yes...what would you suggest?*
- The Royal Opera could cut costs by coordinating with their marketing department and identifying the big demand shows and offer fewer operas per season. They might also maintain their variety by sharing productions with other opera companies. *So, the Royal Opera could send some actors to, say, the Sydney Opera and get some actors in return for several productions.*

- Yes. *But what if the actors don't want to spend a great deal of time on the road? How would you handle that issue?*
- I present the travel as a prestigious opportunity to increase exposure on the international circuit. If necessary, I would divide the company into traveling and permanent groups.

Case B16 Possible Solutions

In a problem like this, you first need to distinguish whether your client is losing sales dollars or volume. Decreasing volume is acceptable if it is sustained by an increase in higher margin segments of the market. Decreasing sales dollars can have a more severe impact on your client's profitability.

Diminishing sales is usually caused by one of a few factors – either the market for the products is shrinking (e.g., due to CD technology) or the particular firm is losing market share as a result of factors such as higher prices, lower quality, better technology by competitors, poor operations or management, less effective marketing, etc.

Case B17 Possible Solutions

- First determine whether the industry itself is in a state of declining profits or if just your client is losing money. If it is just your client, benchmark your client's operations against the competition to see what they are doing more successfully to profit. In this case, the entire industry is in a slump and competition is intense as firms fight to survive.
- Remember profits are revenues minus costs. To improve profitability, your client needs to either increase revenue or reduce costs.
- Increasing revenues would require increasing volume or price.
 - To increase volume, the client's marketing and promotions department must identify the current drivers of success in the industry. What do the customers or potential customers place a premium on (e.g., service, low-price, quality, reputation, etc.)? Determine if your client is providing the type of services the customers. Your client could increase volume by cutting prices but that would require cutting costs in order to sustain profitability.
 - Raising prices would increase revenues but your client would have to differentiate itself significantly or use promotional incentives. It also must consider that competitor reactions will be strong and prompt given the present nature of the industry.
- Reducing costs requires examining the cost structure of the firm. Fixed costs are offices, equipment, and personnel. Variable costs are general consumables, travel, etc. It turns out that the single largest component of costs is personnel. Reducing personnel cost would imply either cutting salaries, cutting staff, or raising staff productivity. The best course of action is probably to try to increase productivity and resort to other alternatives later.
- To increase staff productivity, the client could ask the staff to work longer hours (must provide incentives).
- The client could also review the layers of management in the firm to identify areas of excess waste. For example, the partner-to-associate ratio may be optimized, which may result in increased productivity per labor dollars.

Case B18 Possible Solutions

- This is a cost-revenue exercise – margins are shrinking.

- Determine the revenue structure and critical components of cost (raw material, labor and fixed costs).
- Revenue killers include concentration of retailers, trade brands, retailers demand large introductory discounts for new products, high failure rate of new products.
- Raw materials are commodities with cyclical prices which have fallen in recent years but are expected to rise again (this, as you have guessed, exacerbates the problem).
- Labor and fixed costs per unit have increased at a greater rate in recent years as compared to ten years ago.
- The company's controlling system is still focusing on the manufacturing part of production.
- The cost explosion has been in packaging (Candy is candy; the product line extension is primarily an issue of different packaging).
- Controlling schedules manufacturing (which is rather efficient already) rather than packaging, causes a slack in labor and fixed capital (small batch sizes, high set up times).

Possible Solutions: Reduce product line, introduce controlling/scheduling measures for packaging

Qualifier: Are the company's retailers willing to accept a reduced product line?

Case B19 Possible Solutions

Your first step is to analyze what drives the industry and how companies in the application development business make money. You must examine the relative standing of Company Z with regards to revenues, cost structure, marketing methods, and technological sophistication. By asking the right questions, you soon discover that the problem of Company Z must be driven by internal issues. Indeed, on a project basis, Company Z makes less profits than its competitors. Company Z operates very much like other system software houses; the projects are handled by teams of several software engineers (usually 4). Each team is headed by a Project Manager, usually an engineer who has already accumulated a significant amount of experience. In this industry, business is obtained on the basis of proposals that define the schedule and price of a project. However, Company Z often experiences delays in the delivery of its products, which results in lower profit margins and opportunity costs. You discover that this is the case for two reasons:

- (1) project Managers tend to underestimate the amount of time and resources that are necessary to complete a project, and
- (2) there is very little synergy among the projects; indeed, most successful software houses achieve "economies of scale" by re-using parts of programs for a number of customers. We can think of it as a system of "modules" that can be combined and used in a number of different application programs. These "economies of scale" make every incremental project more profitable. So, why does Company Z not achieve these economies of scale? While Company Z grooms Project Managers just like any other system house, it cannot retain them because of lower than average compensation schemes. As these Project Managers leave the company, they take their knowledge with them. Younger, less experienced engineers lack the experience to make accurate business proposals and to utilize efficiently existing synergies among old and new programs. Company Z's Project Managers are not there long enough to contribute to the company by moving down on the learning curve. This is why, on a project basis, Company Z is less profitable than its rivals. In terms of recommendations, it is necessary to modify the internal reward structure, and better compensate (in whatever fashion is appropriate) Project Managers for the value of their accumulated knowledge within the company.

Case B20 Possible Solutions

The following information should be made available in response to questions asked by the candidate:

Last year's P&L	(% of sales)
Raw material	70%
Labor	20%
Distributed Overhead	10%
SG&A	15%
Profit	-15%

Also, the raw material is a commodity petrochemical and at least two of the other companies in the industry are making moderate profits.

Avoid getting bogged down in the following areas:

- Dropping the product line – this is not possible because hoses are necessary for boiler sales
- Raw material prices – they are the same as everyone else's
- Allocation of overhead – no cash savings and offers little potential
- SG&A: standard industry fee paid for independent installers

Examine the possibilities of:

- Contracting out for the hoses – apparently not possible
- Scale economies – client is big enough to achieve scale production
- Labor costs – wage rates and productivity are average for the industry
- Raw materials purchasing practices – materials are purchased through long term contracts with the price based on the spot market minus a cash discount

More relevant questions:

- How is our product engineering operation wired into the marketplace? – There is little contact between the engineering and marketing organizations.
- What kind of feedback are we receiving from our sales force? – Customers are delighted with our hoses but don't require all the product features.
- Are there other areas in the company where similar problems exist?

The best answers, following a logical progression, should stumble upon the actual answer: the product has been overdesigned, requiring excess raw material.

Case B21 Possible Solutions

Overall issues:

- Is there any product differentiation? No. Even company A's products are similar to your client's.
- Who is the customer? Principals and superintendents of schools.
- Does company A offer any complimentary products? No
- How are customers and orders handled? Salespeople visit customers and if some maps need replacing, an order is placed.
- Is there a difference in the size of sales forces? Yes, company A has a larger one.
- What is the market area (local or national) and how many schools are in the market? Here, the interviewee is asked to estimate the number. Start with population, move to number of people who are "school age" and then estimate the number of schools.

Strategic Issues:

- To increase market share and/or profitability, you need to increase revenues or decrease costs.

- To increase revenues, explore the demand function to see how to increase sales. What drives your customer's preferences? Is there any brand loyalty or are the maps commodity items?
- To take sales and market share away from Company A, consider lowering prices, increasing the sales force, increasing promotional efforts, etc. One solution might be to set-up a toll-free number for customers to call in orders (keep in mind the potential effect on the sales force). Promotional efforts could include sending price schedules to customers stating lower prices compared to competitors.
- Another way to increase revenues is to increase prices, but that would require demonstrating why your product is significantly superior to justify the premium. This is not a good approach given the undifferentiated nature of the product.
- Finally, compare your cost structure to your competitors and explore ways to lower your fixed and variable costs, etc.

Case B22 Possible Solutions

- First, if readership (demand for your product) is declining, you should determine whether your competitors are experiencing the same problem (is it an industry-wide concern or is it particular to the client). In this case, it turns out that all publishers share the same problem and that television is the main culprit.
- To address this issue your client could do two things:
 - Study other markets where television is prevalent but newspaper readership is high (like Japan) and use any knowledge you can gain to promote readership in the U.S. Your client could share costs via newspaper publisher associations.
 - Explore the possibilities of phasing out of the newspaper industry and entering the television industry. This is highly improbable given the high costs of entry but you could explore any competitive advantages you could leverage to that industry and the opportunity of a joint venture with an existing TV company.
- Second, if readership is down in the industry and your client still believes it can be profitable to stay in the industry, you need to utilize the marketing department to accurately determine customer preferences and tailor contents to them. Remember that any differentiation that is imitable will be quickly neutralized by competitors.
- Third, examine your different geographic market segments to see if margins and demand differs greatly. If there are markets that are clearly still prospering, maybe your client could focus target readership efforts to these more profitable areas.
- Fourth, build mechanisms to continually adapt to changing reader tastes. This could be accomplished by market studies, flexible and versatile staffs, etc.
- Fifth, your client could focus on cost reduction as a means of increasing profitability. Possibilities include consolidating operations and/or reengineering them. Consolidation would help in deriving economies of scale whereas re-engineering could identify and eliminate operational inefficiencies. Issues such as low capacity levels, changing input prices, and distribution and labor shift costs should all be explored. Lower cost could also lead to lower prices, which may stimulate demand.

Case B23 Possible Solutions

The following are some of the questions you might want to inquire about.

- What is the present state of the construction material market? Pretty good, the industry follows economic cycles and it is presently in an upswing.
- Who are the company's customers? Two different types of customers, large general contractors and little shops.

- What are the company's strengths or core competencies? The company competes on cost and high quality. It supposedly has a strong sales force and reputation for providing the best quality products.
- If market share is falling, does that mean sales have been falling? I don't know - here is all of our sales data manually entered on paper and stuffed into all these boxes. (This is one of their first hints as to part of the problem. It turns out that none of their sales recording systems and possibly accounting systems in general are automated)
- What is the management and corporate structure like? A new CEO came in a few years ago and presently all 11 divisions are operating as separate business entities. Managers in each business unit are compensated on how profitable they are. (Second hint, your client needs to consolidate its operations.)
- What is the company's present capacity level? Presently have excess capacity.
- If sales are down, what does this outstanding sales force of yours know about how your customer's preferences have changed? It appears there is a trend towards regional superstores that provide a variety of items with one-stop shopping. Your smaller competitors can compete better on this regional basis with better geographic accessibility. It seems your competitors are meeting the customers changing needs but your client is not. The customers complain about poor service – your client is getting lazy and complacent. (Third hint, your marketing people should know the pulse of the customer and it appears they do not.)
- Have your cost increased overtime? I did a value chain analysis and after dragging me out for awhile, they finally conceded that there were no significant changes in either fixed or variable costs.

Conclusion/Recommendations:

- Need to work on their sales and other accounting systems and make them automated and more accurate and efficient. They claim that sales are down yet they may not be able to accurately quantify by how much or in which regions of their market.
- Need to consolidate the companies operations and create greater synergy among the 11 different business units. This way they can leverage each other's skills and have all of the managers' goals aligned. People would also be less myopic in the way they run their divisions and this may resolve some of their capacity problems. Possibly suggest a different compensation policy that rewards all managers if the firm's overall bottom line increases.
- Get marketing people to talk with the customer, suppliers, distributors, etc. to understand the recent trends in consumer preferences. Then get marketing people to coordinate with manufacturing and distribution people to put changes in marketing plan into action.

Case B24 Possible Solutions

- What is your client's market share relative to their competitors? Your client is the market share leader with 40% of the market, with two other major competitors.
- What are the major market share trends in the industry? Five years ago your client had 60% of the market.
- Do all three competitors sell to the same customers? Yes.
- How is your product price relative to your competitors? Your client's product is priced higher than the others are and this has always been the case.
- Does your product differ from your competitors? Your client has a strong reputation of quality in the market and the market has been willing to pay a premium for that reputation because it meant they would last longer and need less maintenance.
- Are sales revenues/quantities down? Yes.
- Is the price down, but costs are the same? No, both price and cost are up.
- Have fixed costs increased? No, variable costs have gone out of sight and the client has no answer as to why material prices have gone up so much.
- Do you manufacture your tractor or assemble it? Primarily assembly operations.
- Have raw materials or labor costs increased for your supplier? No.

- Finished part prices up? Yes. The prices have increased as a result of our product improvement efforts. We've tightened tolerances and improved the durability of our component parts.
- Are your customers willing to pay the price premium it costs to implement these improvements? I don't know, I guess we've assumed that they will. This is the problem. It turns out that prices have been raised to cover the costs of these improvements but customers do not value these improvements unless they are essentially free. Thus, sales are down. The client needs to incorporate a cost/benefit analysis procedure into its improvement process.

Case B25 Possible Solutions

- This is a marketing case. Lead the candidate through analysis of the customer segments. Questions such as who are the primary and secondary customers of your pharmaceutical client.
- The fact is that most pharmaceuticals are purchased by doctors and not by the general public. However, the company's advertising focuses on radio and TV, targeting the general population.
- The company would be better off spending its advertising resources in journals that specifically target medical practitioners, for example.

Case B26 Possible Solutions

The following are some issues/questions to explore.

- Is this problem in all of their customer's stores or just this one in particular? Just in that particular store.
- Are your client's competitors having the same problem moving products in this store? No, it is just your client's product.
- At this point, you should realize that you need to go visit your client's customer store to further research why this product is not moving off the shelves. You should talk to the customer manager and store customers to understand why the product is not moving.
- Upon review, it is clear what the problem is. The toy product that is not moving because it is a Caucasian doll in a predominantly African-American neighborhood store. The reason this product is not moving is due to the fact that the toy company had this product order sent to the wrong store.

What's the next step to get to the root of your client's problem?

- You need to talk with your client and do some partial value chain analysis to identify the process from when a customer places a doll order to how it gets delivered.
- First, talk with the client's sales department to confirm this order was taken for this store. (Be careful on how you phrase your questioning, your client will be sensitive to accusations that they made a mistake). In this case, you discover that the sales department entered the correct order for the store.
- Next, talk with the shipping department to determine why this order was sent to the wrong store. Upon investigation, you discover that this product type was shipped to the wrong store because the shipping department does not have a bar code system for differentiating products.
- One plausible follow-up suggestion would be to work with the systems people to have a product bar coding system implemented.

Case B27 Possible Solutions

As a consultant, you are concerned with three items:

- The state of the airplane manufacturing industry (the market)
- The reason the firm has lost market share
- Methods for preventing the new entrant from stealing market share

- 1) The airplane industry's demand is a function of travel among two classes: business and leisure. Business travel increases as a result of globalization. Leisure travel increases with growth of middle and upper classes. Business travelers are primarily insensitive to price; leisure travelers are very price sensitive. The consultant should ask if there are any regulatory, economic, or other factors that may be drivers of future change in this industry.
- 2) If your client is losing market share, either the industry itself is shrinking (in this case it is not) or your client is losing sales to its competitors. You need to ask why they are losing sales – maybe their costs and/or prices are increasing compared to their competitors. Find out what are the drivers of success in this industry (i.e., what do the customers place a premium on: price, safety, brand equity, quality, etc.?)

Benchmark against existing competitors:

It turns out that the competitor's plane is cheaper to operate because it is more fuel-efficient. The consultant should ask whether the firm is interested in manufacturing more fuel-efficient planes. The answer would depend on the future of oil prices. It may be better to compete on the basis of price, safety and service.

- 3) Methods for preventing the new entrant from stealing market share:
 - Create barriers to entry such as low prices, control of resources, technology patents, locked-up distribution channels
 - Establish long-term contracts or strategic alliances with both customers and suppliers
 - Exploit high concern of purchasers for proven safety track records
 - Threaten to use excess capacity

Case B28 Possible Solutions

- It turns out your client presently does most of its business in the U.S. and Canada with minor international customers.
- Your client has just made a huge capital investment by creating its main manufacturing facility in China and management is forced to stand by this investment decision. China was chosen (vs. the U.S.) because of lower labor costs.
- When you examine their operational process, it turns out most of their processes are machine automated anyway.
- Distribution channels/outbound logistics: It turns out your client transports its finished goods to the U.S. via ship as opposed to air freight or other means. This trip across the Pacific takes a minimum of 5 weeks. (So your client has deliberately added 5 weeks to its lead-time to save on labor cost although most of the operational processes are automated anyway!)
- Solution: Explore other quicker means of getting the product to your customers. With regards to the large plant investment that management is forced to support, you have a few options. Explore new opportunities in the Asian market to take advantage of the plant's proximity. Also, if your client has the funding and is sure of the domestic demand, it should build a smaller plant in the U.S. to react quicker to U.S. customer needs. If your client does not have the financial backing, it should look into the possibility of outsourcing some of the domestic manufacturing processes to independent contractors.
- When you analyze the customer's preferences, it turns out that there is a demand for only about 25 of your client's products in the marketplace. A review of your client's current product line reveals they are producing over 1000 different electronic products.
- All of the additional set-up times, machine run specifications, packaging and distribution of this over-extended product line is extremely costly in the absence of consumer demand.

- Solution: Make sure the manufacturing people are communicating with the marketing department so your client produces what the customer wants or needs. You should recommend that your client significantly scale down its product line.

Case B29 Possible Solutions

- Start off by going through the list of items that may be increasing your client's working capital. (Recall from accounting that working capital is your current assets and includes things such as cash, marketable securities, receivable, and inventory). In this case, you will discover that your client's inventory levels are inordinately high.
- The client's organization is made up of three divisions. The inventory problem can be traced to a division that was acquired by the client two years ago. This division manufactures equipment for arthroscopic surgery, namely capital equipment and blades (something like razors and razor blades, only more expensive).
- It turns out the technology for this equipment has been changing rapidly and the rate of obsolescence of inventory is very high. Earlier sales forecasts had been overly optimistic and the client finds itself loaded with obsolete finished goods inventory.
- As a corrective action, decide on the appropriate level of inventory by adjusting forecasts, getting an idea of manufacturing lead times, and determining customer expectations of order lead times.
- After appropriate levels of inventory are determined, it turns out that the client has 2.5 years of capital equipment inventory that it does NOT need to carry since these items can be quickly manufactured after receiving the order. To help take this finished goods inventory off the books, finished goods could be dismantled and sold. Also, idled manufacturing capacity could be adapted to make other goods if the facilities are flexible enough.

Case B30 Possible Solutions

This question requires that you quickly find out what the important problem areas are for the credit union. Ask good, probing questions and move on if it is apparent that this is not a problem area.

Things to ask and tell the interviewer:

- Was this company profitable before?
- When did profits and market share begin declining?
- If profits are declining, are your costs increasing or is your revenue/demand decreasing or are you experiencing a combination of both?
- Benchmark against how your competitors are doing.
- Find out what factors make them successful, for example, when did they come into the market? Are they doing anything differently that they weren't doing before?
- Are there any new regulations that may have been introduced in the state of Montana that may have changed the way that credit unions must be run?
- How are the various branches performing? (You want to find out whether the whole company is doing poorly or just selected areas.)
- Does your client know who his customers really are and what they place a premium on (service, accessibility, cost, etc.)?

The problems with this company ended up being:

- First, the company had an extremely old cost accounting system that prevented them from knowing what their true costs were.

- Second, operations were a complete mess – in particular, they had high overhead costs with respect to their competition. They need to find ways to cut costs.
- Staffing levels were too high; they also took much longer to process a loan than any other credit union.
- Customer service was a disaster and, as a result, they were losing customers to their competitors.

Case B31 Possible Solutions

- Again, if profits are decreasing, either costs are increasing or revenue/demand is shrinking or a combination of both.
- Market: Industry has many small to medium size companies with few large firms owning several brands. There are many small to medium size brands.
- Eurocos produces all products in all countries and transportation costs are small.
- The structure of the industry is fragmented because there are low entry barriers, high product differentiation, diverse markets and customer needs, and tariffs and customs barriers.
- How can fragmentation be overcome: Create economies of scale to lower costs and move up learning curves. Separate product's commodity aspect from fragmenting aspect.
- Lower costs: consolidate production process to keep manufacturing cost low. This will work because there will be economies of scale in production due to better sourcing, longer runs, and better quality.
- Increase revenue/demand: Keep the marketing and branding decentralized to the different countries where they know the pulse of the consumers in each market. Additionally, have the marketing department communicating with manufacturing to make sure that there is still sufficient demand in separate markets to justify the wide product lines.
- Company will move down the learning curve. Also, company will keep the "fragmented" marketing required in the market. Total inventory will decrease – safety stock at original plant locations can be pooled centrally to further lower costs.

Case B32 Possible Solutions

- Market share: The industry is highly fragmented. A variety of small manufacturers supply similar products to a wide range of customers. Your client estimates she has less than 1 percent of the total market. No competitor has more than 3 percent of the total market.
- Cost: Each product has a different manufacturing cost depending on materials used and the manufacturing process.
- Price: Each product has a different price depending on both the client's manufacturing cost and the market for the product.
- Essentially, if you are examining profit potential you want to find the best product mix of revenues (customer demand) and cost (supply).
- Revenues: Your client's products seem to be commodities given there seems to be no industry leader. Thus, the marketing department should determine what products have the highest customer demand and identify what drives customer preferences: price, quality, etc. It sounds like there is little brand loyalty. Concentrate on the products that will generate the highest revenue.
- Costs: Your costs can fluctuate widely given different set-up and lead times plus the raw material and packaging costs. Determine if there are products that are costly relative to their demand and should be dropped. Explore ways to consolidate operations, run times, etc. for a more flexible process. Ultimately, you want to have a firm idea of the margins on each product. Margins combined with knowledge of consumer preferences should drive the production mix. Also, take into consideration capacity, resource, and other input constraints.

Case B33 Possible Solutions

- The new entrant has a fleet of older trucks that run between the three cities. Your client has a new fleet that services all of Canada. Your client's fleet mix has been optimized such that efficiency and capacity utilization are high considering the network of locations.
- The new entrant charges 50% less than your client for package delivery.
- Your client and the new entrant both charge by the pound-mile. One pound carried one mile is a pound-mile.
- This case is about the cost-benefit analysis of serving the entire market or just its most profitable segments. The new entrant has initiated service in the three markets where economies of scale are present. Due to the higher volume of packages between these cities, larger trucks and efficient distribution centers have made such limited service more profitable.
- How to reach or explain this conclusion: Use historical sales and expense data (or a cost measure such as pound-mile) to show that major city routes have subsidized delivery to smaller cities and towns.
- Compare the margins of customers in different rural and urban locations to see if delivery to these inconvenient locations justifies the additional expense of the service. If not, consider the possibilities of what to do with these customers.
- Explore ways to maintain your urban customer base by either lowering operation costs and thus prices or rewarding loyal city customers with discounts or other promotions.
- Recognize that this delivery service to all of Canada is a source of competitive advantage to your client and those businesses that ship to these areas cannot afford to lose this service.
- Employ strategies to exploit this competitive advantage given the absence of substitutes and the price inelasticity of this segment of the market. Determine a new pricing strategy that will increase charges for rural deliveries. Note that this may invite new entrants if rural delivery becomes very profitable.
- Develop long-term strategic alliances/contracts with customers who use your rural delivery capability. Offer the same flat rate only when a customer agrees to use your client for both rural and city deliveries.
- Search for synergies with other companies that also deliver to rural areas such as grocery, beverage, or snack delivery companies.

Case B34 Possible Solutions

- Examine the overall market situation. Is this an industry wide problem due to two seasons of poor weather conditions, poor consumer economic conditions, substitute vacation trends, etc.? In this case the problem is specific to your client.
- From a microeconomic standpoint, if profits are diminishing, your client's revenue is decreasing or its costs are increasing.
- To examine cost you could start by doing a value chain analysis to determine if any of the cost drivers of each organizational function have changed. Or you could analyze the overall cost structure separating fixed and variable costs. In this case, there have been no significant changes in costs.
- If revenues are decreasing it means that either your prices are falling or demand for your ski resort has been decreasing. In this case prices have not been falling but fewer skiers have been coming to the resort. The next issue is to identify why demand is falling.
- Benchmark against competitors. Through shared industry knowledge and visits to their resorts, it should not be difficult to identify any major changes in their operations (e.g., bigger lifts, faster lines, new trails, etc.).
- Marketing and Promotions department: Talk with these people to see if they know the current pulse of their customer's preferences. How are they appealing to skiers via advertising and promotions? What are the competitors doing differently and more effectively?
- Information sources: Talk with various travel agencies and local ski shops to get a feel for any nuances in consumer's tastes. Explore new advertising and promotional campaigns to restore demand.

Section III – Market Demand and Definition

These are some of the trickier questions. They never have an absolute answer. Our best advice is to start with some questions to help narrow down the market. From there, begin to define a small aspect of the market you are familiar with and work up to a final answer. Remember to keep the math simple but use relatively realistic numbers.

Case Questions:

- C1) Your client has developed a new kind of astro-turf that they claim is far better than any other existing products. You have been hired to estimate demand per year for the next three years in actual number of square feet of astro-turf. After 3 years the client's patent runs out and new competitors will introduce similar products.
- C2) How would you determine whether a location in New York City holds enough banking demand to warrant opening a new branch?
- C3) How would you assess the world demand for knitting machines?

Possible Answers – Market Demand / Definition Section:

Case C1 Possible Solutions

In estimating market demand one methodology is the following: 1) Determine the overall market 2) Segment the market into different components 3) Try to determine the drivers of demand in each segment of the market 4) Review/challenge your assumptions for market demand for each segment.

Overall Market: Could include professional sport teams, college athletics, and high school sports

Segment the Market: Determine which sports would demand the new astro-turf: football baseball, soccer, and lacrosse. Now make assumptions regarding the number of potential customers in each of these sports. Always pick round numbers for easy calculations. (Anytime you make assumptions about the market's potential customer base, you can remind the interviewer that under normal circumstances, you would utilize a host of resource tools such as market research, industry data, sales and promotional feedback, client focus groups, etc.)

<i>Professional Teams:</i>	<i>Number</i>	<i>College Teams:</i>	<i>Number</i>
Baseball	20	Football	
Soccer	15	Div. I schools	100
Lacrosse	12	Div I AA	50
Football	28	Div II	50
		Div III	25
		Soccer (grass more popular)	75
Total	75	Total	300

Assume all fields are the same size and require the same amount of material: 120 yd x 60 yd or 7200 sq ft per field. Multiply 7200 by 375 fields to get the total potential market of 2,700,000 sq yd. Now, speculate on how much of the total market you expect to penetrate each year considering how often stadiums change fields, what the recent trends are with respect to natural grass, etc. Apply these percentages, e.g., 10-20%, to get yearly demands of 270,000-540,000 sq yd.

Case C2 Possible Solutions

- **Company:** Your client needs to assess its motives for opening a new branch: profitability, expansion into new markets, drive out existing competitors, etc. You must examine how or if the new branch would complement your client's existing competitive strengths and business strategy (retail or commercial, high growth or high profitability) and what purpose the branch would serve. If your client is focused on deposits and withdrawals only, an ATM may be sufficient.
- **Market:** Examine the demographics of the area surrounding the prospective branch. Population, business concentration, income levels, etc. should be compared to those of historically successful branches. Is the area too saturated or can it sustain another branch? What is the economic climate of that area – is it a growing business community or are people and companies leaving the area?
- **Customers:** Perform market research to determine the drivers of success in this area. What do potential customers place the highest premium on (e.g., cost, service, accessibility, etc.)? How do these qualities fit into your client's business profile?

- Competition: Anticipate what your competitors' reactions to your client's entry could be. This would depend on the importance of the area to competitors in terms of profits, market share, diversity of business operations, etc. Your client will have to match competitor's incentives to customers and should estimate these costs.

Case C3 Possible Solutions

- One method to look at this is to say the world demand for knitting machines is dependent upon the world demand for cloth. In order to evaluate the world demand for cloth, we need to know how much new cloth (in square meters) is being purchased per year per number of people in the world.
- In order to refine our number, we may segment the world population by level of personal wealth.
- Also consider these three factors in this question: 1) The current level of the ratio of cloth manufactured per year to the number of knitting machines. 2) The average useful life of a knitting machine. 3) The existence of substitutes for knitting machines and their impact on knitting machine demand.

Another way to approach this question is to analyze the world market for knitting machines. This would involve examining the following questions/issues:

- Who is the world market (segmented by country, region, ethnicity, per capita income, etc.)?
- What does historical business data for the knitting industry tell us about world demand? (This information may be found from industry sources, trade journals, government agencies like Dept. of Agriculture and Commerce.)
- Which people/countries make up the consumer demand for knitting machines? (Who are the customers?)
- What companies are the major suppliers of knitting machines?
- What are the drivers of change in this industry? Technology? If so, what new technological advances in equipment have made the knitting machine obsolete and how fast is this development spreading across the world markets?

Section IV – Random / Brain Teasers

Unlike many of the other questions, these actually make good party conversation pieces as well. Some have correct answers and some don't. If an answer comes to you immediately, think a minute more before speaking because there's probably a catch.

Case Questions:

- D1) Why are "manhole" covers round?
- D2) Why is there no light beer in the U.K.?
- D3) How much tea is there in China?
- D4) You own a shopping mall. How many pennies are in it at any given time?
- D5) Your rich uncle has died and left you a piece of prime real estate in downtown Chicago. If you were building apartments on the property, how many stories high would you build?

Possible Answers – Random / Brain Teasers:

Case D1 Possible Solutions

- Roundness facilitates transportation (you can roll them instead of carrying them).
- Round shapes offer the widest opening for the least opening area, reducing metal cost.
- The shape minimizes chances of the covers falling into the holes.

Case D2 Possible Solutions

In examining this type of case, you are essentially trying to figure out the possible reasons that a certain product line does not exist in a foreign market. The following are some issues and questions to explore.

- Is there no domestically brewed beer in the U.K. or is light beer just not sold in the U.K.? If the U.K. does not produce light beer, you should look at the demand for light beer in the U.K. and profitability of brewing light beer in the U.K. If all types of light beer (U.S. included) is not sold in the U.K., then you should explore the reasons why Bud Light and others are not sold there.
- First clarify the primary customers. Where is beer sold (pubs, supermarkets, etc.)? Is light beer sold at these places? In this case, we are just looking at pubs.
- Is there customer demand for light beer? Maybe people do not drink light beer in England and there is not enough demand from expatriates to justify selling it.
- This line of questioning should lead you to the real issue: Do U.S. brewers have access to distribution channels in the U.K. market?
- It turns out that in the U.K., brewers form an oligopoly with most major breweries forward integrated and owning a majority of the pubs. As a result, they have locked out U.S. light beer manufacturers by making the cost of entering the English market too high to be profitable.

Case D3 Possible Solutions

The following is one of many approaches to answering this question. Ask the interviewer if s/he minds if you use pen and paper to assist in your calculation.

- Assume you will give the answer in total number of tea bags in the country.
- Start off by making some assumptions about population, imports versus exports, and tea storage.
- Assume total population of China is 1 billion people.
- Assume maybe that they export half as much as they have in the country at any given time.
- Assume that you are calculating the daily total and that the Chinese keep a weeks worth of tea at any given time (so multiply your total by 7).
- Segment the total population into 3 age groups to calculate total consumption/amount. Say ages 0-20, 20-40, and 40 and above that constitute 400,400, and 200 million people each.
- Now make assumptions as to how many tea bags each group consumes a day, say 1, 3, and 3. This gives you a total daily consumption of 2.2 billion tea bags times 7 days a week plus half that amount for exports for a grand total of 23.1 billion tea bags in China on any given day.
- Finally, your interviewer may ask you which of your assumptions you would challenge or question if you had more time for analysis.

Case D4 Possible Solutions

- First, identify all possible sources of pennies: merchants (both registers and safes), gumball and other machines, public water fountains/wishing wells, banks, and change on people.
- Now make assumptions about each source.
- Merchants and banks: Guess/assume how many stores, size of stores, number of cash register and safes, and how many pennies in each.
- Machines and fountains/wishing wells: assume how many there are and how many pennies are in each.
- People: assume how many are in the mall at any given time and guess how many pennies they each have on themselves.
- Add up the sub-totals to get your answer.

Case D5 Possible Solutions

This case is very similar to Case 7 in the “Other” section, so look at those suggestions also. This is a financing decision case and is all about options, opportunity costs, and net present value. Questions and issues you should raise include:

- Is there an existing building on the property or is it empty land?
- Are there any liens or mortgages on the property?
- Are there any factors that might threaten ownership or development?
- The first decision is whether or not to build at all. It may be that you can make more money by simply keeping the land or by selling the property to someone else who values the property more than you do.
- The second decision is whether to build apartments versus offices, homes, etc.
- You would need to ask if the property is zoned for apartment buildings. Are there limits on how high apartments in this area can be? What is the neighborhood like? Are there condos, apartments or slums?
- Solution: If you are indeed going to build apartment buildings and have freedom to make them as high as you want, then the number of floors is a marginal revenue/marginal cost question. You build an additional floor if its marginal revenue is greater than its marginal cost.

Section V – Other

Case Questions:

- E1) (Same as Case L2) Our client is a large lodging company with well-known brands. Their strategy has been to maintain and develop their brands. They have about a 10% market share and this makes them one of the larger players.

They are concerned with the impact of the Internet. They currently have a web site that allows customers to make reservations at their hotels. They expect to do somewhere between \$0 and \$90 million worth of business through their website next year. They want us to develop an e-commerce strategy that will prevent them from losing business to their competition and help them maintain and develop their brands. (Diamond Technology Partners, Winter 1999, for summer associate position)

- E2) What percent of the world's cars are owned by Americans? (Mitchell Madison Group, Winter 1999, for summer associate position)

- E3) Part I: A has a probability of 1/2, and B has a probability of 1/2, what is the probability of A and B?

Part II: You are a contestant in Let's make a deal. You select door #2. Monty Hall opens door #3 to reveal nothing behind it. Should you stay at door #2, or switch to door #1? (Mitchell Madison Group, Winter 1999, for summer associate position)

- E4) You own a movie theatre. Currently, you price movies at \$8. Now, you want to divide your customers into 2 segments, recent movies and recent movies seen later. You will price these movies at \$10 and \$6. How would you assess the success of this? (Mitchell Madison Group, Winter 1999, for summer associate position)

- E5) You are with the firm for one year, discussing with the partner the compensation package for associates. What do you recommend? (Mitchell Madison Group, Winter 1999, for summer associate position)

- E6) A major USA pulp and paper player buys a competitor in Europe, which produces the same kind of products. These are tissue products, napkins, kitchen towels, etc. The problem is a decrease on ROA.

Other info:

- Business units are divided by country. Every country produces for his own market. They act like kingdoms and have their own specifications for their country products. For example, kitchen towels have small hills to give the sensation of volume (I cannot remember the technical name). Every country has different specifications for those hills. Have you ever noticed that different brands have different hills?, maybe not, unless you are very sensitive.
- Although paper machines are working 98% of the time (they produce big rolls of paper), converting lines (produce retail rolls or napkins) are working 30% of the time. Is there a converting overcapacity?
- Every do not want to change their specifications, because they think that customers will notice the difference.

(Mitchell Madison Group, Winter 1999, for summer associate position)

E7) The California government passed legislation forming a private group to access health insurance for small business owners and their employees. They receive \$500m annually from the government and had a \$5 million subsidized loan that they had been paying back. In four years, their membership grew to 125,000, but the fifth year it only grew to 130,000. The legislation also stated that any insurance company that signs a contract with us must give us comparable rates as to big companies. The company had not incentivized their broker staff appropriately and had tried to sell direct - alienating them further. Brokerage fees also had a complex calculation. Should they become a private, not-for-private company and disassociate with the government? (Mitchell Madison Group, Winter 1999, for summer associate position)

E8) In the 16th century, Francisco Pizzaro with 168 men and 40 horses defeated a town of 80,000 Incas. Characteristics of the Incas:

- they were rich, and they has mastered the art of making gold and handicrafts.
- they had agriculture but no way of storing food for long
- they regarded the king as a god.
- there had recently been civil war among the Incas and the brother of the king had led an uprising against the king.

Draw parallels between this historical incident and modern corporations in terms of strategy, IT, HR, marketing and finance. (PricewaterhouseCoopers, Winter 1999, for summer associate position)

E9) Please calculate the Brazilian market for a new tire producer. Show your calculation. How may tires are sold per year in Brazil. (McKinsey Brazil, Winter 1999, summer associate position, 1st round)

E10) One bank used to provide financial service to big industrial companies. Because of recent economic crisis, those big companies are facing troubles to repay their debts. The bank is looking for new customers, e. g. small or medium sized companies. How can the bank determine the credit of those companies to make loan decisions? (BCG, Winter 1999, for summer associate position, 1st round)

E11) The question is purposely vague – you are asked by CEO of Revlon to estimate how many shades of lipstick the company should carry. You could think in terms of

- Market penetration – Revlon is “mainstream brand”; talk about brand extensions, etc.
- Profit – 20% of products make 80% of profits
- How many lines of shade are physically possible – from brown/dark red to pink to other colors
- Should Revlon think about “seasonal”/faddish colors? Again, brand name erosion.
- What about manufacturing process? At what point are the “color dyes” added? How would each scenario (beginning vs. end) affect production costs of lipstick

Channel – just how much shelf space would Revlon’s retailers devote to its products? Think department store and drug-stores and estimate size of counter.

(PricewaterhouseCoopers (PW at time), Supply Chain Mgmt / Hi-Tech Industry group, Winter 1998, for summer associate position)

E12) Bill Clinton has just fired Hillary as Chief of Health Reforms and has appointed you to fill the position. While in this office, you discover that kidney dialysis is a major portion of public health care expenditures. What analytical techniques would you use to determine if this cost could be reduced?

E13) Why are soda cans cylindrical?

E14) What factors determine the world price of oil?

- E15) An aluminum can manufacturer has discovered a way of improving its manufacturing process. As a result, its manufacturing costs have been reduced from 89 cents to 79 cents. How can your client best exploit this new cost advantage?
- E16) A corn refining company has a high proportion of fixed costs. It has 2 principal buyers, each buying a little over 40% of the product. Should the refining company try to change its customer base? Why or why not?
- E17) A credits and collections department of a medium size utility company has hired you. They have two primary means of receiving customer's payments. The first way is through the mail, which accounts for 90% of their billings. The second way is a collections office located in a community close to downtown. Presently it costs them only \$0.10 per bill through the mail but \$1.20 per bill through the agency they operate downtown.
- They have hired you to help them reduce the cost per bill of the agency. What would you do?
- E18) You inherited a parcel of land along Sunset Blvd. What will you do with it?
- E19) A small multimedia company recently released 2 CD-ROM's late. They lost a lot of money and now need to raise cash quickly for the upcoming Christmas seasons. How would you approach this?
- E20) Your client is the California State government. They are trying to attract Japanese business investors to the state. They want them to open businesses here to increase jobs and improve the economy. How would you market this concept to Japan?
- E21) You have been hired by a consulting company to evaluate the future of the consulting business. How would you approach this?
- E22) A magazine publisher is trying to decide how many magazines she should deliver to each individual distribution outlet in order to maximize profits. She has massive amounts of historical data for sales volumes through these outlets and a well-constructed internal accounting system. How should she go about computing an appropriate amount?
- E23) How many skis were sold in the U.S. last year?
- E24) Estimate the number of bubble gum chewed in a day in the US. Make any assumptions required to solve the problem. State the assumptions and the calculation in your solution.

Possible Answers – Other:

Case E1 Possible Solutions

Please see solution given in Case L2 in the **Example Case Interviews with Detailed Solutions** section.

Case E2 Possible Solutions

The answer is between 30% and 35%. I assumed there are 100 million American households and each household has 2 cars. Therefore, 200 million cars are owned by Americans. I then divided the rest of the world between developed and non-developed nations. There are 1 billion people in developed nations, and I assumed half had cars -> 500 million cars. In the underdeveloped nations, I just guessed 100 million cars. Therefore, the percent of cars owned by Americans is $200/600 = .33$

Case E3 Possible Solutions

Part I:

First ask if it is independent, if so $1/4$,

If A and B are correlated then the answer can be between 0 and $1/2$.

Part II:

You should switch to door #1. Door #1 offers a $2/3$ chance for the prize, while Door #2 offers a $1/3$ chance. It is the same as giving you the choice of Door #2 or both Door #1 and #3. You would select the latter.

Case E4 Possible Solutions

Things to consider in answer: price elasticity of each segment, fact is, for first run theaters, you pretty much have perfect competition, it is a commodity, so you would lose your entire audience. For the second run people, the price would actually be inelastic.

Note, since movies are commodities, most of the money is in the concession, think about total volumes of people in the theater.

Another idea: if you do charge 10 dollars you must differentiate your product, large screen, or something.

One more idea:

- (1) Question whether a third segment should be added (independent films).
- (2) Analyze existing outlets that appeal to these segments.
- (3) Run regressions on results.

Case E5 Possible Solutions

This is tricky since I didn't know if my goal was to raise my salary or benefit the firm.

Some issues discussed:

Competition: other consulting firms, banks, and start ups.

What makes MMG different? Compensate accordingly think about non-pay compensation.

Alternate idea:

- (1) Align Mitchell Madison values with incentives by implementing metrics.
- (2) Perform competitive analysis (McKinsey, BCG, Bain, etc.) and customer analysis (prospective new hires) to determine how to keep new hires.

Case E6 Possible Solutions

The merger has not produced the synergies that were expected. It is reasonable, for example, to have the same kind of hills in all European products, and produce, for example, all kitchen towels in Germany and distribute to all the countries from there. In that case converting machines will work much more than 30% of the time.

This will stop, for example, machines in France. In that case this machine can be sold and ROA increase.

This change is better if the company switches to brand management instead of regional management.

Case E7 Possible Solutions

Interviewer was concerned with the breakeven point of cover

Other issues:

- We have one other competitor who's about 1/3 of our size; their rates are more expensive but they are growing slightly faster (at least in the last year)
- Most insurance companies are excited to go through us but the largest in the market is not
- We have 3% of the insured market but it seems unlikely that we can grow quickly because we have a high penetration in our target market and other small business owners do not have the cash flow—to grow customers we'll likely have to wait until those small businesses become mature
- We have contracts with about 20 insurance companies (about 10-12 per region) but 2-3 are our largest players in each region. This increases their power over us. If we move away from being associated with the government, they can and likely would increase their rates
- The \$500m subsidy is minimal compared to our bottom line
- We'll have to refinance the loan if we move away from the government and pay higher interest but we've been prepaying the loan thus far
- Members can choose insurance from any of the insurance companies that the group associates with, even members within the same business—this is their strongest competitive advantage (CHOICE)
- Clients paid them the pro-rata cost of the insurance, a broker commission, and an administrative fee. The administrative fee was the primary source of revenue.

The interviewer was after two items: a) What is wrong with the company? b) Is the company viable as an independent non-profit company.

Case E8 Possible Solutions

Financing: Getting cash from the Queen of Spain

Human Resources: Recruiting and motivating the soldiers and sailors

Technology: Leveraging diverse technologies from gun-power to navigation

Knowledge transfer: Pizarro learned from Cortes and other adventurers. The Incas did not have a written language, so knowledge transfer was difficult.

Marketing: Playing one Incan faction off against the other faction.

Case E9 Possible Solutions

Use market size framework. First separated in auto and others. Decided to go with auto only, separated in new and reposition market, life cycle and so on.

General Tips: Be interactive. Be creative. Be organized. Do not think a simple frame work is going to save your life.

Case E10 Possible Solutions

Financial ratio analysis was useful.

Case E11 Possible Solutions

Frameworks used: Perhaps 3C-4P's, but no specific framework applicable – one of these estimates questions but I use a number of ways to “triangulate” the answer.

Operations concepts such as bottlenecks, lead time, etc. were also useful.
Taking Ahmadi's Supply Chain class was extremely helpful for this case.

Case E12 Possible Solutions

- Essentially, you would want to see if the high costs are due to greater incidences, the cost of the procedure, or both. You would also want to determine if the costs are higher due to illegal or unscrupulous practices such as embezzlement of funds, payoffs, etc.
- Analyze the proportion of public versus private health expenditures that are applied to kidney dialysis treatment to determine if unscrupulous practitioners are pushing this expensive treatment onto the public health budget.
- Compare the incidence of kidney disorder in this country with other countries. Is ours higher? If so, can public policy or efforts to increase awareness help to reduce it?
- If incidence is indeed higher in the U.S., build a model (regression perhaps) that will somehow determine the factors that have the most causal relationships with kidney treatment. Perhaps those who are typically covered by public funds (the poor, elderly) have a higher incidence of kidney problems. Is there room for any type of preventative program for these groups?
- If the cost of the procedure seems high compared with similar medical procedures, it could be due to professional fees, consumables, or high capital equipment costs. Limiting the amount of government compensation could cut professional fees. Employing new technologies could cut consumables and equipment costs.

Case E13 Possible Solutions

- To allow for easier gripping
- To avoid sharp edges that might cut your hands
- To allow denser packing in dispenser machines
- To provide the maximum volume for the least surface area

Case E14 Possible Solutions

- Consider the influence of the capital markets and how future spot oil prices and speculation in the market impact world oil prices.
- Prices in general economic terms are a function of supply and demand in the market.
- Demand: Explore the factors aside from price that would effect demand such as new technology, import quotas, wars, etc. It turns out that global demand for oil is inelastic meaning that changes in prices have less of an effect on quantity demanded. If this is the case, fluctuations in supply will have a greater impact on the price.
- Supply: Examine the impact of the various regional suppliers and their cost structures (for example, high cost in the U.S., low cost in the Middle East).
- At this point, you may recommend drawing a simple graph. The low cost producers such as Saudi Arabia would be at the lower left end of the supply curve while high cost producers such as the U.S. would be far to the right on the quantity produced x-axis. Thus, we can conclude that Saudi Arabia, assuming that it has the capacity to produce more than it currently is, controls the price of oil. However, its production is limited by OPEC rules. If, however, they use their excess capacity to control price (as in the case of the Persian Gulf War), the pricing power lies in their hands. Oil prices did not skyrocket during the war because Saudi Arabia promised to increase production to a level that eclipsed the global pre-war level.

Case E15 Possible Solutions

- Clearly your client should either drop prices and pass the savings onto customers while increasing demand or keep prices the same and reap additional profits.
- It turns out that your client is the leader in its market with 40% share and supplies directly to major beverage manufacturers. The number two competitor in the market has about 30% of the market and the rest is shared by many small competitors.
- Substitutes: Aluminum cans have a lower priced substitute, steel cans, which have inferior printing and stamping characteristics. Steel cans are used by customers who do not want to pay the premium for aluminum cans.
- If our client drops prices, other competitors will have to follow since this is a commodity market and not following would mean a quick demise. The decrease in price may increase your client's market share marginally, while some smaller competitors will have to start exiting the industry and larger competitors will have to invest in R&D to try to uncover our client's cost advantage.
- Impact on steel can substitutes: Steel can users will start switching to aluminum cans with the lower price thus hurting manufacturers in that market. The resulting growth in the aluminum can market will attract steel can manufacturers to enter. Since some of these manufacturers have deep pockets and strong backing, these new entrants could pose a future threat to your client.
- Conclusion: It is probably best for your client to retain prices and generate extra profits now. The cost advantage and subsequent lowering of prices may help in the future during a price war.

Case E16 Possible Solutions

- First, examine your client's cost structure to find out what components make up these high fixed costs such as plant, equipment, and other capital expenses. Explore ways to decrease fixed costs such as outsourcing, more efficient plant operations, newer and more productive equipment, reducing overhead, etc.
- Next, benchmark these costs against competitors or leaders in the market to try to ascertain why their fixed costs are disproportionately lower than your client's.
- Why does your client have only two major customers? Is this rationale due to a long standing relationship, joint venture, niche market, low overall demand, etc.?
- It turns out that the buyers pay transportation costs and the company has no cost advantages by having only two buyers.
- The company is a price taker.
- Investigate demand and capacity. One way to overcome high fixed costs is with large sales volumes to spread over these fixed costs. Does your client have more demand for its refining services than just these two principal buyers do? If it does have more demand, do your client's facilities have enough capacity to meet the market's demand?
- The key point is that companies with high fixed costs need to always operate at or close to capacity. Having only two buyers gives each buyer a lot of power. It is thus preferable to have many buyers each with a smaller share.

Case E17 Possible Solutions

- First, always clarify if your client is talking about 90% of sales volume or sales revenue. In this case it does not matter.
- Inquire about why it is so critical to keep this costly facility open for such a small percentage of their sales. It turns out your client is very loyal to its customers who prefer to use this walk-up facility.
- Explore what other uses your client can use the facility for to generate revenue to spread out these costs. It turns out there are a couple of video games in the front foyer and there are two big rooms in the back they rent out to local clubs but both really have no potential impact on helping cover costs.
- Is there a cheaper area for this building to be located? It turns out that the answer is no. Your client likes the present location given its proximity to its customers.
- How does your client's competition operate its collection facilities? Do they have similar problems? Is it possible to outsource at a cheaper cost? No, it turns out your client is the only one to have this sort of operation.
- Explore the cost associated with this building. It turns out the facility has long since been paid for and has very little overhead cost. It staffs 5 people all the time. (Hint, is there always enough demand to warrant 5 personnel?) It turns out they are not always that busy and can have fewer shifts throughout the month. This brings the cost per bill down to \$1.00.
- Examine all the functions this office serves. It turns out your client uses this facility to also open customer accounts and as a customer service center. (This is the main issue of the case, your client should be splitting the cost per bill in three because this complex serves three different functions.)
- This gets the cost per bill down to \$0.30 per bill, which is as low as you can get.

Case E18 Possible Solutions

This is a financing decision case and is all about options, opportunity costs, and net present value. Questions and issues you should raise include:

- Is there an existing building on the property or is it empty land??
- Are there any liens or mortgages on the property?
- Are there any factors that might threaten ownership or development?
- Are there limits on how high apartments in this area can be?
- The interviewer may entertain several notions of what to do with the land depending on the direction of the discussion. Assume the land is not in a residential area but instead is located in a business area.
- Assuming that your goal is to try and earn the greatest return on this land, this case turns into a classic NPV problem. Discounting your net cash flows (the difference between your operating revenue and costs), you have essentially four different options in which to earn the highest NPV:
 - 1) Sell the property
 - 2) Build on the land
 - 3) Lease the land
 - 4) Some combination of 1,2, and 3
- With each option, discuss the different methodologies of assessing the value of selling, building, or leasing. Benchmark against existing property values in the area and identify the pros and cons of each option depending on trends in the real estate market.

Case E19 Possible Solutions

Obviously the key here is that cash needs to be raised quickly. Here are some options to explore to raise the sufficient funds:

- Look at the balance sheet. Are there significant account receivables that can be quickly collected? (It turns out there are some but are not due yet, so offer these customers discounts for immediate payment).
- Investigate the option of borrowing cash from banks and other institutions.
- Are there parts of the business, excess inventories, etc. that could be divested?
- Can they get advances from some of their long-standing customers on product orders to be delivered next year?

Case E20 Possible Solutions

For any marketing question, a fail-safe framework is an analysis of the 3Cs:

- Customers: What does California have that Japan needs – look for links in the economy. For which sector(s) would it be cheaper for Japanese manufacturers to build in CA; e.g. computer hardware. Financial considerations: which companies can afford to open new plants or establish operations? They should be exclusively targeted. Also examine companies that already have existing business relationships or investments in California.
- Competitors: What other regions could Japanese businesses go to and are they going there? Why or why not? What other states/countries are trying to attract Japanese investments? What are their tactics, and what will their reaction be to California's bid? What Japanese firms already have strong alliances with other territories? These firms should not be at the top of the target list.
- Company: In this case, the state of California. Any solution should highlight California's competitive advantage. Consult a marketing and advertising firm to identify and promote the most attractive aspects of having a business venture located in California. Illustrate positive economic trends, the fact that Southern California itself generates one of the top ten GNPs in the world. Highlight the climate, access to raw

materials (port of S.F. and L.A.), strong Asian and other cultural consumer base, access to various distribution channels, etc.

Case E21 Possible Solutions

This is a Porter's Five Forces question. In general, any questions that ask for a broad industry analysis can usually be structured around the Five Forces.

- For example, who are the customers? Possibly any firm could use consulting services. Are there market segments? Are some firms using consulting more than others? Identify any changes or current trends in consumer's behavior. What is most important to your potential customers (e.g., cost, quality, service, reputation, etc.)?
- Who are the competitors? Companies may choose to solve problems in-house or use individual experts in particular areas as opposed to hiring consulting teams. What are your competitors' strengths and weaknesses?
- What is the overall industry like? Analyze the threat of new consulting companies (minimal) and industry trends. What are the drivers of success in this industry?
- What are your client's particular core competencies and how can they leverage these to achieve a sustainable competitive advantage? What different types of consulting does the firm engage in? What external factors would affect your client's business (e.g., the economy, regulatory actions, international business growth, etc.)?

Case E22 Possible Solutions

The best way to solve this case is to draw out an analytical framework and fill in the gaps. It should be immediately observed that in economic terms, to maximize profits, you need to set marginal revenues equal to marginal costs (the revenue of one more magazine sold equals the incremental cost of that magazine).

- The marginal revenue for a magazine would be its cover price multiplied by the probability that it will be sold.
- The probability of sale, within an appropriate confidence interval, could be determined from historical data.
- The marginal cost could be determined from the internal accounting data.
- While it is not always possible to calculate these individual increments in a business, another similar method would be to use the data to look at the revenues and costs associated with each distribution outlet.
- Try to assess the demand of each region in sales revenue and then look at the different profit margins for each location. You should be able to identify if it is costing too much to distribute magazines to an outlet that is not generating as much sales as another location with a greater.

Case E23 Possible Solutions

Like cases before, the key here is to carefully walk the interviewer through your assumptions and then come up with a figure. Here is a good approach:

- Assume 250 million people in the U.S.
- Assume 10% of the population actually skis (You may want to support this assumption by anecdotal or other evidence.) That gives you a total skiing population of 25 million.
- There are two important breakdowns among these 25 million – those who own their own skis and those who rent. Probably only 25% own skis (you know this because you are an avid skier, have a lot of friends who ski, etc.) for a total of 6.25 million new skis buyers.
- Estimate how often people buy new skis – say every three years. So of the 6.25 million skis buyers, roughly 2.1 million bought skis last year.

- Those who rent probably ski less frequently than those who own. But ski rental places buy lots of skis. It is hard to estimate the number of skis bought by rental shops but make assumptions as above. *Need to come up with a guess for the number of ski rental shops in the U.S. Then make an assumption for the number of new skis they buy each year, remembering that most rental skis are used.)
- Add this number to your 2.1 million and you have your total of ski units.

Case E24 Possible Solutions

Assumptions:

- Number of people in the US = 250 million.
- 75% of gum is chewed by people ages 8-15.
- 75% of population between 8-15 chews gum.
- 10% of population is between 8-15 (assumes flat population distribution between ages 0 to 70; 10% of population in each age bracket).
- People who chew gum chew an average of two sticks per day.

Number of people between ages 8-15:	$250 \text{ million} \times .1 = 25 \text{ million}$
Portion of people ages 8-15 who chew gum:	$25 \text{ million} \times .75 = 18.75 \text{ million}$
Amount of gum chewed by ages 8-15:	$18.75 \text{ million} \times 2 = 37.5 \text{ million sticks}$
Total gum chewed:	$37.5 / .75 = \text{approx. } 50 \text{ million sticks of gum/day}$