

The MIT Sloan School of Management Management Consulting Club

Case Book and Interview Guide

October 2001

The MIT Sloan School of Management Management Consulting Club

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Introduction

Dear Club Member,

Welcome to your first step in a rewarding career as a management consultant: the interview process. Your fellow club members produce the Case Book and Interview Guide to give you a head start as you work through the long process of getting that dream job offer.

MIT Sloan is arguably the most successful business school in the world for training management consultants and, just as importantly, placing them with firms.

Just consider these facts:

- Nearly 40% of MIT Sloan students go into the consulting profession on leaving Sloan.
- The median base starting salary for MIT Sloan students entering consulting in 1999 was \$95,000 and the median total compensation \$140,000.

This status will be maintained partly by the standard of <u>interactive preparation</u>. We recommend you use this casebook and other resources to <u>practice</u>, <u>practice</u>, <u>and practice again</u>. The consulting club will provide further help through its Buddy system, the Case Preparation Workshop program, and other case workshops.

Please let us know your comments on the content of this book so that we could make it even better next year. A questionnaire will be posted on Sloan Space. We look forward to hearing your suggestions!

Finally, thanks to all the students who contributed and produced the casebook. It could not have been done without you.

Good Luck!

Your club officers, Jamshed Cooper Petia Koutev Theresa Lagos Kamal Narang Jimmy Zhang



Chapter 1: How to Use the Case Book and Interview Guide

As you can see from the table of contents, the Case Book and Interview Guide is composed of eight chapters. These are our recommendations on how to use this book:

- Read chapter two, ETIQUETTE AND THE INTERVIEW PROCESS and chapter three, THE PERSONAL INTERVIEW first. This will give you an idea of what the interview process is like.
- Look over chapters four and five, TYPICAL PERSONAL INTERVIEW QUESTIONS and THE CASE QUESTION next. This will give you a deep understanding of what your interviewers will be looking for.
- Now read chapter six, CONSULTING FRAMEWORKS AND TOOLS. Much of this material will be familiar to you. It is the sort of stuff you are paying lots of money to learn at Sloan.
- Then...
 - **PRACTICE** (we will say this more than once in this book)! Link up with at least two classmates. One plays the interviewer, one plays the interviewee, and one observes. Run through an actual 30-minute interview. Include some personal questions at the start. In short, **role play an interview**, keeping the tone as serious as you expect to find the real situation.
- Try to practice with <u>different people</u> to get used to different styles of interviewing, hear more feedback, and to observe what works and what doesn't.
- Finally, attend Case Preparation Workshops to learn from the experts. Use your Buddy as another source of insight. Second year Buddies are more than happy to practice cases with you!



Chapter 2: Etiquette and the Interview Process

Your performance in this area affects not only you, but also the reputation of MIT Sloan, its students, and its alumni. Please keep the following in mind...

Your professionalism says a lot about you and MIT Sloan. Any lack of professionalism will have an even greater and more lasting effect! Here are the rules of interviewing: **Don't break the rules!**

- Follow through on your commitments. Don't leave corporate presentations early! If you must, sit by the door and be discrete. If you sign up for an interview or a company dinner go. If you must cancel, do so well in advance so someone else can have your spot.
- **Be early.** A 9:00 a.m. interview means you should be in with your interviewer at 9:00, not taking off your coat and signing in. If they are running late and this impacts your schedule, be gracious and work with the coordinator to remedy the situation. Getting agitated won't help.
- **Be prepared.** Employers are very sensitive to people who come in and try to "wing it". This reflects poorly on both you and MIT Sloan. So if you aren't genuinely interested, don't take the spot from someone who might really want it.
- Celebrate discretely. Once you get a job offer, you will have the urge to go singing through the streets. Just remember, many of your friends are still looking and for them the disappointment is mounting.
- Collaborate rather than compete. By helping one another out, we will all be prepared to do our best. This will encourage more companies to recruit at Sloan and for those already here, to hire greater numbers of students.





Chapter 3: The Personal Interview

You may be tempted to just practice case interview questions and "wing it" through the personal portions. Don't make this mistake! Your interviewer is just as interested in how you "fit" the firm as how fast you can chug through that industry analysis case. So here are some pointers gleaned from various interviewing books and Sloanies' experiences. Disclaimer: Some of this may be common sense, but a little reminder never hurts!

Format

The "typical" consulting interview for a summer internship consists of two rounds. The first round is a screening round. You will normally interview with two consultants from the firm, one consultant for each interview. If you do well, you will be invited back, often the next day, for a second round of interviews. In the second round, you may have two or three interviews with different consultants. These consultants will usually be from your desired office or specialty.

The process is a little different for permanent positions. You will usually have three rounds rather than two. The third round will probably be at your desired office.

Each interview lasts from a half hour to 45 minutes. The first half of your screening round interviews will usually be the "personal interview" portion. You will usually receive a case question after 15 minutes of personal questions.

Prior to any case question, expect five minutes of chitchat. Yes, this is part of the personal interview!

What is the purpose of the personal interview questions? Well, the firm wants to know why you want to be a consultant and why you want to join their firm. They are also trying to assess your "fit" with the firm and test whether you have researched their firm appropriately to make an informed decision if they make you an offer. The bottom line: If you don't impress your interviewer in the personal portion, your performance on the case questions will not matter!

Preparation

The key to performing well in the personal interview portion is preparation. <u>Don't</u> make the mistake of only practicing cases with your friends and Management Consulting Club buddy, or even worse, reading



this case book on your own and "winging it." You need to anticipate the questions your interviewer will ask and have a story that incorporates your skills and ties them to your desire and qualifications to be a management consultant with the firm you are pursuing. And don't forget that the "personal interview" extends throughout the recruiting process!

There are three key points to remember for a successful personal interview.

- Know Yourself
- Know the Firm
- Listen Well

As you go through the interview process, you will receive tough questions that probe not only your intentions and intellect, but also your psyche and personality. Your delivery is as important as what you say. The only way to show poise and grace while answering these tough questions is practice over an extended period of time!

Know Yourself

You need to create a story line for yourself. Describe how your life has developed such that a job with firm X is the next logical step in reaching your goals. Be able to walk through the details of your resume and fill in the details. For instance, why did you make the moves you have? What have been the most significant decisions you have made? Where were the challenges and where were the triumphs? This is also your chance to set yourself apart. Give the interviewer something to remember you by – tell an interesting story, talk about a unique skill or talent, etc. One way to do this is to incorporate words that will provoke curiosity into your resume. Given the recent survey on employers' perceptions of Sloan students, you should be prepared to emphasize teamwork, communication skills and business savvy.

The CDO offers many sessions where you learn to match your personal assets and strengths to the career you are considering. You will also learn to mitigate weaknesses in your skills or background. Take advantage of these sessions, as they will help you learn the self-insight that is required to answer your interviewer's questions honestly and persuasively.

Also, be aware of the recruiters' perceptions that they have even before meeting you for the interview. Try to break the negative reputation and re-enforce the positive. Below we have included the study conducted by CDO where recruiters were asked what do they think about Sloan students.

First, the positive recruiter perception of Sloan

- Sloanies are super smart academically and quantitatively excellent
- Sloanies are approachable and helpful

Good, just do not let them think that you cannot aggressively go after a job or develop new business. Also, show them creative thinking not only number crunching ability.



Now the negative impressions:

- Some recruiters believe Sloanies are not team oriented
- ➤ Sloanies have less business savvy than other MBA's
- ➤ Sloanies lack etiquette
- ➤ Sloanies are not the best in interpersonal and communication skills
- ➤ Sloanies solve too many problems on paper
- Sloanies often demonstrate depth vs. breadth in interviews
- Sloanies are not strong in selling themselves in interviews
- Finally, some recruiters believe that Sloanies are under-prepared for their interviews

Now that you are aware of these stereotypes, you may work on them to improve your chances of getting the job. Make a strong effort to cite examples of teamwork. Be on time for your interview and properly dressed, remember that an interviewer is checking whether he/she can put you in front of a client. To demonstrate breadth of the case analysis, skim the surface of the most salient issues and then go into detail when prompted by the interviewer. To summarize, leverage these myths by showing that in addition to being a smart, helpful, numbers person, you are also a creative, thoughtful, well-mannered, personable, and savvy business student ready to sell ideas to clients that will positively impact their bottom line.

Know the Firm

What does the firm pride itself on? What makes them unique? If a firm prides itself on being a thought leader, show how you have been a thought leader or why being part of a firm that leads the industry is important to you. You must also know the basics about a company such as where they have offices and how they are structured. If you are unclear about any of these areas – ask! You do, however, want to show some initial understanding and then ask for clarification. For example, ask, "I understand that your firm is structured around 5 industry practice groups. Could you please elaborate on how this structure works in respect to a typical client engagement?"

You can learn about the consulting firms by attending their recruiting and MCC-sponsored presentations. Use these opportunities to ask the consultants smart questions. If you are interested in a firm, be sure to call the recruiting manager or a consultant you have spoken with and get more information about the work and culture. And don't forget that your best resource may be your classmates who worked at the firm prior to MIT Sloan. As you learn more about the firm, you are also building a network of people who can help you decide which firm is right for you. Keep a running list of contacts and people in your network.

Don't be shy about asking smart questions. Remember, most people are honored when they are asked about their opinions and experiences!



Keep in mind that the purpose of questions is two-fold. First and most importantly, the right questions will help you make the right decisions about where you want to work. Second, you want to articulate why you are interviewing with this firm and why you fit in with the company and their culture.

To get you started, the following are a list of questions may help your evaluation process. They are useful to know, but you may come across as not having done your homework if you ask them during an interview. The information is readily available from company websites, presentations, and recruiting paraphernalia:

- Is the firm (office) structured by industry (or functional) group, or are most consultants generalists?
- What is the firm's business focus? Strategy? Re-engineering? Operations? I.T.? Some combination?
- What are the firm's client types? Fortune 100, Fortune 500, middle market, start-ups?
- How does the firm fit into/affect my career goals in the short-term and the long run? Both inside and outside the firm?
- What is the firm's ownership structure? Independent, corporate subsidiary?
- Lifestyle? Number of days in/out of office, hours/week, travel?
- What are the financial package/fringe benefits?
- What percentage of summer-hires receives full-time offers? What percentage accepts?
- How fast has the firm growth been over the past few years? What are the implications of that growth (or lack of growth)?

The following are possible topics that you may want to tailor specific questions around. Remember, over-generalized and generic questions (such as 'What is the culture of the firm?") are unlikely to get you other than the textbook answer and will not gain you points with your interviewer. Instead, tailor your question to a specific aspect of the firm.

- How does the firm staff for engagements? Regionally, nationally, internationally? In reality, is staffing a somewhat self-managed process?
- What are the entry-level position responsibilities? Case leadership responsibilities? How many engagements is a consultant on at a time?
- What is the career progression path and timeline for the firm?
- What is the nature of the firm's training and development? How is staffing balanced to incorporate the needs of the firm, the needs of the client, and the personal development needs of the firm's consultants?
- What is the engagement design? Team size, client involvement, engagement length, team hierarchy and make-up? Instead of asking questions about the average (the typical interviewer response is 'it depends on the case') ask about a specific case the interviewer is currently working on to get a 'flavor' for what it might be like.
- What are people like? Homogenous, diverse, individualistic?
- What is the culture of the firm? Entrepreneurial, structured, client focus, empirical/analytical? Up or out?
- Describe a typical week at the office?



- Do you see the focus of the firm shifting in the future? (applicable to niche consulting firms)
- Do you have a mentoring program?
- Does your firm do pro bono work? Could you please describe the work?
- How does the firm spread knowledge internally, especially among geographically dispersed offices?

Listen Well

This is <u>SO</u> important. Insights and clues are all around you. Even before your interview begins, you should try to pick up any information you can. Many companies will have consultants in the waiting room to greet you. Ask them why they joined the company and what they like most about it. Go to the company presentations and take notes. What are the buzzwords they use to describe themselves and the people they hire? Remember a few highlights from the corporate presentation. You very likely may be asked what you thought about the presentation. In the interview, pay attention to your interviewer. What makes them look interested? What do they ask you to elaborate on? If you are weak in one response ("Did you receive any academic awards in college?" - "Uh, no."), listen for a chance to show your skills in another way.

Finally, **PRACTICE**, **PRACTICE**, **PRACTICE**! Find a partner and interview one another.

The Physical Factors of Interviewing

What to take to the Interview

Some interviewers will have a pad of paper and a pen for you to take notes during the case portion of the interview. But don't bet your future on it! In the past, people have brought a leather folder with a pad of paper inside and, of course, a pen. Don't forget a few extra copies of your resume.

Answering the Question

Roger Cameron, a recruiter for companies that pursue MBA-level talent, suggests a four-step process to use when answering your interviewer's questions:¹

- 1. Listen. Actively and eagerly listen to each word the interviewer says. Show signs of listening by nodding your head and moving your eyes. Make eye contact but don't make your interviewer uncomfortable by staring him or her down. Look away every 5 to 7 seconds. Don't try to "butt in" and answer the interviewer's question before he or she is finished.
- **2. Reflect.** Take a moment to think about the question and how you will answer. A few seconds of silent thought and a well-delivered answer are much better than a rambling, quick response.
- 3. Organize your answer in your mind.
- 4. **Deliver** your answer.

¹ Much of the information in these sections is from Roger Cameron's books, <u>PCS to Corporate America: From Military Tactics to Corporate Interviewing Strategy</u> and <u>Your Career Fast Track Starts in College</u>, and the book <u>Power Interviews: Job-Winning Tactics from Fortune 500 Recruiters</u> by Neil Yeager and Lee Hough. See the end of this Case Book for information on obtaining these enlightening tomes.



How do I show my High Energy Level?

As a consultant you will work long hours and be expected to show boundless energy around your co-workers, and especially your clients. If you can't show a high energy level in the interview, your interviewer may doubt your ability to keep up with the fast pace of the consulting life. Here's some ways to explicitly show that you are a high-energy person:

- 1. Your Walk. Show a sense of urgency when you are called into the interviewing room. In fact, always maintain a lively pace no matter where you are. You never know who is watching you.
- 2. Your Handshake. Look the person in the eye and smile. Your handshake should be firm and full into the hand. Step into the handshake as you offer your hand. Energy should flow from you to the person you are shaking hands. This goes for men and women.
- **3. Your Voice.** Show enthusiasm as you speak. Modulate the tone, pitch, and speed of your voice.
- **4. Your Posture.** Don't sit on the front edge of the chair or couch. Sit back in the chair so you can lean forward when you want to emphasize a point. Don't be stiff but don't slouch.

Be sure to practice and evaluate yourself on these physical factors of interviewing when you practice with your MCC buddy and classmates!

"Any questions for me?"

As time runs out your interviewer will likely ask if you have any questions. This is your opportunity to demonstrate your knowledge and curiosity about the firm. Always have three or four relevant questions prepared before you go into any interview!

Closing the Interview

As the interview winds down you need to close the interview. <u>Be personal, sincere and upbeat.</u> Express what impresses you about the firm and state that you look forward to a follow-on interview or to receiving an offer from the firm. Ask for the job!

Ask when you can expect a phone call with the results of the interview so you can be home to receive it. This way, you will be able to ask for feedback about your performance in the interview process. Keep in mind that the greeting and recruiting staff outside your interview room may provide this information to you after your interview. Never ask, "So how did I do?" during the interview or the walk back to the hotel lobby!

Rescuing a Poor Interview

What if you feel your interview didn't go well and you didn't get out information about yourself that is crucial to your getting the job? If you're getting positive feedback that you will be invited



back for a second round or an offer, don't do anything! Ask your smart questions and close the interview.

However, if you're getting a negative reaction from your interviewer <u>and</u> if strong positive factors in your background were not brought out by the interviewer's questions, you might want to say something like, "I do have some questions for you. However, before I ask them, I think there are some things I need to tell you about myself that I have not yet shared with you today."

Be positive and do not remind your interviewer of a negative issue that came up in the interview. This is a <u>last ditch</u> technique to rescue a poor interview, so be smart and <u>very selective</u> in using it!

After the Interview

Thank-You notes

Send thank-you notes to all your interviewers the <u>same day</u> as your interview! Your interviewers spend a lot of their precious time and effort to travel to visit you and you should express your sincere appreciation. The sooner your thank-you note arrives, the more likely your interviewer will remember you. You may even want to consider faxing thank-you letters in addition to mailing them.

Don't thank your interviewer for the time they spent interviewing you. Instead, focus on how much you enjoyed the time spent with them learning about the firm and mention a specific topic from your conversation.

Don't ask questions in your letter that require a response from your interviewer. You want to motivate him or her to send you to the next round or give you an offer.

You can hand write your notes if your handwriting is neat. If not, use a computer. You can differentiate yourself by using colored notepaper and envelopes. Be unique and professional.

Getting Feedback

Whether you get the job or not, you want to get feedback about your performance throughout the interview process. This includes asking what specific factors or issues differentiated those who made it to the next round from those who did not. When possible, be home when the interviewer calls with the results and ask for specific feedback that will help you in future interviews. If you cannot be home for the phone call, call the interviewer or recruiting manager and ask for a phone appointment to discuss your performance. Most interviewers and firms are happy to help you and give you feedback, even if you didn't get the job!



Chapter 4: Typical Personal Interview Questions

Here's a list of common questions you'll receive in the interview, and some advice on how to frame your answers!

The following questions are typical of the personal or resume interview. They allow the interviewer not only to ask questions about your resume, but also to evaluate your ability to speak concisely and clearly. When you practice these questions with your friends, remember to structure each answer and limit the length. The longest personal interview you will have will be 30 minutes or less, so taking all of that time to talk about your favorite class at Sloan is probably not a good idea. Get feedback from your practice partners and ask them what they think your strengths and weaknesses are. The interviewer will be speaking to many people in a matter of hours, so try to think of three distinguishing aspects of yourself that you want the interviewer to remember.

Be sure to read the Wall Street Journal, especially during the interview season. In addition to the following questions, don't forget that <u>any</u> detail on your resume, no matter how small, is fair game.

Be prepared for these!

Be prepared to answer all of the following questions. Good approaches to answering these questions can be found in materials from the MIT Sloan Career Development Office and in Neil Yeager and Lee Hough's book, <u>Power Interviews: Job-Winning Tactics from Fortune 500 Recruiters</u>. These are some sample questions:

- Tell me about yourself.
- Why do you think you would make a good consultant?
- How would you describe yourself? How would your close friends describe you?
- What does leadership mean to you?
- What have you done that demonstrates your ability to lead?
- What have you done outside of MIT Sloan that demonstrates you work well in a team environment?
- Why did you choose MIT Sloan? Why business school? What have you learned?



- What has been your best experience at MIT Sloan? Your most frustrating?
- What has been your favorite class? Your least favorite? Why?
- Have you been satisfied with your grades?
- What accomplishment(s) makes you the most proud? Why?
- What book(s) have you read recently? Tell me about it (them).
- What magazines do you read?
- Why do you want to be a consultant?
- Where do you see yourself in 3 years? 5 years? 10 years?
- What is the most important thing not on your resume?
- What are your geographic/industry preferences?
- Tell me about a professional situation in which you impacted your peers.
- Are you a "details" or a "big picture" person? Why?
- Have you ever had to compromise your ethics? When and how?
- What are your criteria for selecting a firm? How would you choose from multiple offers?
- Why do you want to work at our firm? Why us instead of another consulting firm?
- What do you think it takes to make a good consultant?
- Describe an experience where you failed. What did you learn from this?
- What are your greatest strengths and weaknesses?
- What is your GPA? Your GMAT score? Your SAT's (this was really asked a few times!)? Be ready to explain if it's below average.
- Describe a situation in the past where you had to analyze and solve a problem.
- Are you competitive?
- Why should we hire you?
- Where else are you applying and why?
- What is your concentration at MIT Sloan?
- What do you do for fun at MIT Sloan?
- How will you know when you have become a success?
- Describe the best/worst manager you have ever worked for.
- If you were offered the job right now, would you take it?
- Why should I bother reading your resume?
- What makes you a more interesting candidate than anyone else I interviewed today?



Do you have any questions you would like to ask me?

This last question is important. Be ready to ask two or three intelligent questions that will show your interest and preparation and provide you with any information you feel you need. Don't ask something that is obvious in the brochure or web page or was stated clearly at the presentation. Do ask questions that specifically were not answered in either forum to demonstrate that you paid attention to both sources of information. A few types of good questions to ask your interviewer:

- 1. Industry questions (What is the future of consulting? Etc.)
- 2. Firm specific questions to show you have done your homework (firm strategy or focus)
- 3. Background of interviewer
- 4. Career path at the firm

Possible approaches to tough questions

Roger Cameron's books, <u>PCS</u> to Corporate America: From Military Tactics to Corporate Interviewing <u>Strategy</u> and <u>Your Fast Track Starts in College</u>, and Neil Yeager and Lee Hough's book, <u>Power Interviews: Job-Winning Tactics from Fortune 500 Recruiters</u> are great resources to consult when designing your answers to these important questions.

"Tell me about yourself."

Your interview usually starts with this very open-ended question. To keep you from rambling about your first dog or your first girlfriend or boyfriend, Roger Cameron suggests a framework that shows your goals and accomplishments.

The logic behind this framework is that the interviewer wants to know that you have directed your life to its present state, not taken the path of least resistance. Are you goal oriented? Can you make things happen? By describing yourself in terms of your wants, goals, and objectives and your resulting accomplishments, you tell the story of your life and leave no doubt that you led it!

Here's an example I would use for myself:

"I grew up in Toledo and was always fascinated by flight. While in high school, my goal was to attend the Air Force Academy so I could fly. This required that I excel in sports and academics. I worked hard at these goals and was accepted to the academy. I wanted to understand flight so I chose to major in aeronautical engineering, where I was the top graduate in propulsion engineering. I still wanted to fly after graduation but could not attend pilot training due to my eyesight, so I applied for and was accepted into navigator flight training. My goal was to finish at the top of my class so I would have my choice of assignment, and I did. I wanted to be where the action was so I volunteered for the Special Operations Forces rather than accept the standard fighter jet assignment. Against significant odds, I persuaded my future commander to accept me into his organization, where I was the youngest officer for



many years. I spent four years prior to MIT Sloan flying combat and special missions in Bosnia, Haiti, Iraq and other countries."

Using the goal/accomplishment framework shows that you are in charge of your life and provides a great basis for follow-on questions from your interviewer!

"Why ...?" Questions

These questions probe your ability to reason and come to a quality conclusion. Your interviewer may also use these questions to test for consistency in your responses. Roger Cameron suggests the best approach to any "Why?" question is to form a comparison between the positives and negatives of the options you had when making your choices.

For example, if the interviewer were to ask me, "Why did you choose the Special Operations Forces over flying fighter jets?", I would say:

"The pro of flying fighters is that it is obviously a sexy business. But there are some cons to it. You spend most of your time practicing things that you will never have the opportunity to do and you rarely travel outside the United States. The Special Operations Forces gave me the opportunity to fly very important missions, even during peace-time, and to live for long periods of time in many countries."

Know your resume cold and be prepared to follow up any information you reveal in your conversation with your interviewer. When preparing for your interview, ask "Why?" about all facts on your resume and any major events in your life or the story you have built around your experiences.

"Tell me about a significant accomplishment."

The interviewer wants to know that you were able to break a significant and complex goal down into parts, deal effectively with ambiguity, work well with others to accomplish the goal, and bring the work to a successful conclusion that had an impact on the mission of your employer. Here are the steps to take when answering this question:

- **1. What is the accomplishment?** State the accomplishment <u>immediately</u>. Don't make your interviewer guess.
- 2. What is the significance of it? You're interviewer probably doesn't have a clue about what you used to do. Succinctly describe why your accomplishment was important to the goals of your employer.
- 3. Tell the interviewer how you accomplished it. How did you break down the problem and lead your team in solving it? What did you learn about yourself? Here's where you show the qualities that will make you a great consultant!



"What is your greatest strength and weakness?"

Neil Yeager and Lee Hough suggest in their book, <u>Power Interviews: Job-Winning Tactics from Fortune 500 Recruiters</u>, a three-step process to answering this question:

- 1. Clearly identify your greatest strength.
- 2. Identify a weakness that could also be perceived as a strength. You confront the danger of being perceived as insincere by your interviewer if you are too coy with your answer. So don't say things like, "I tend to work too hard." If you don't want to chance it, state a weakness that you can fix and show how you are making progress addressing it. Whatever you do, don't cough up a list of weaknesses for your interviewer to choose from!
- 3. Point to the benefit of your strength and weakness to the firm. Your interviewer will not be impressed if your greatest strength has no relevance to being a great consultant. Likewise, you're also sunk if your greatest weakness is that you dislike long hours, traveling, or working with people.

Chapter 5: The Case Question

The friendly banter about your illustrious accomplishments is over and the interviewer says, "So, our client is a major manufacturer of toilets in Liechtenstein..." Beads of sweat drip from your forehead, stinging your eyes as you struggle to follow the facts your interviewer is giving. You fear your interviewer can hear your heart pounding through your chest as the room begins to slowly spin. Maybe you should have gone to law school after all...

The case question is simply a word problem based on a real consulting situation. The purpose of the case question is not to see if your deodorant works. The interviewer is just assessing you on several areas that are important for a good consultant:

- 1. How do you analyze the problem? Do you develop a framework to organize your thoughts and answers to the case question? Or do you randomly jump from one idea to another without any logical flow?
- 2. How comfortable or uncomfortable are you with ambiguity?
- 3. What additional details do you ask for? Can you differentiate important information from extraneous information? Do you use the "80/20 rule"?
- 4. Can you stick with a line of thinking and follow it through to a conclusion, or do you apply the "shotgun approach" to problem solving?
- 5. Are you concerned with finding an actionable answer? How can you get the information you need? Can you narrow down the options for the client?

Remember that your analysis must result in a recommendation to the imaginary client!

Format

The case interview question usually follows 15 minutes of personal interview questions in a half-hour interview. Some firms devote the first interview in a round to personal questions and the second interview to case questions. Others may do only five or 10 minutes of personal interviewing during both interviews and focus on the case during the majority of the interview.



Preparation

Practice makes perfect! Attend the MCC case interview workshops sponsored by firms that recruit at MIT Sloan. <u>Start practicing</u> with your MCC buddy and classmates <u>before finals in December</u>, and really work on it in January. Waiting until the January IAP to start practicing is a **bad** idea because many second year MBAs take the month off to travel!

The Bottom Line: You can't cram for consulting interviews!

Types of Cases

There are many ways to present the different types of cases you may encounter during your interviews. Here is a possible breakdown proposed by the Accenture case interview guide. We will get into more details in the following pages of the book.

"The Great Unknown"	"The Parade of Facts"	"The Back of the Envelope" (Market Sizing)	Brain Teaser
Provides very little information	Provides a significant amount of detail – some unnecessary	Provides little information, but asks a key question	A question out of the blue!
Tests candidate's ability to probe for additional details	Tests candidate's ability to distill key issues	Tests a candidate's analytical abilities	Tests candidate's creative thinking when faced with an unusual problem
Requires structuring framework based on new facts	Requires depth of analysis based on relevant facts	Requires logical thought process and ease with numbers	Requires "out of the box" thinking.

The "Great Unknown" and "Back of the Envelope" cases are the most common types of cases. However, regardless of the type, be sure you have a solid understanding of the facts and what is being asked of you before you begin to "crack" the case.

"The Great Unknown" Cases

One of the most common types of case interviews poses the situation in one or two sentences, leaving you with little information or structure on which to build. These cases are used often because they test your ability to discover necessary facts by posing the right questions and being able to develop analytical frameworks to solve the problem.



Potential Methodology

Case description:

Listen carefully and determine the central business problem that is being asked.

Problem Understanding

Pause for a moment and consider the central problem. What additional facts do you need to fully clarify this problem? What are the crucial pieces of information that would allow you to develop a framework around this problem? Write those questions out and ask the interviewer. Be prepared to go several layers deeper into the issue as the interviewer's answers may lead to additional questions.

Problem Decomposition

Identify and prioritize root causes of the problem by breaking the problem down into its component parts. An issue tree is a valuable tool to ensure that decomposition is exhaustive and that the subcomponents are linked together in a logical manner.

Hypothesis and Framework Development

Describe to the interviewer what some of the potential issues / hypotheses could be. Then choose a framework that will structure your thinking and guide you through testing the issues / hypotheses.

Hypothesis Testing:

Using the framework selected, explore the issues / hypotheses initially laid out. Describe the factors in each section of the framework that are relevant to the central problem. Also list out analysis to test the hypotheses in each section of the framework. By asking additional questions, you may still yield more information about the case from the interviewer.

Case Summary:

Review your initial / hypotheses in light of your structured analyses and suggest possible recommendations for the client.

Interview Example:

The client, a leading manufacturer of prefabricated kitchen furnishings, has been steadily losing market share over the last two years.

The senior executive team would like you to help them understand why and what they can do to improve their market standing.

Potential Methodology:

1. Problem Understanding

Has the size of the market changed in the last two years?



Has the competitive structure of the industry changed? Mergers and Acquisitions? New Entrants? Are there any new products or new technologies that are gaining market share? How are we currently positioned? (low cost, high quality, etc.) ? What is our competitive advantage?

2. Structure Analysis

Determine the framework that is best suited for this case

Based on information received from asking questions, explore the different possibilities of why the company may be losing market share (e.g., high cost structure relative to competition, substitute products threaten our market, etc.)

3. Develop Recommendations

Discuss how the company could reverse the loss of market share (e.g., new market positioning, cost reduction programs, vertical integration strategy, etc.)

"The Parade of Facts" Cases

These cases are relatively rare because of the amount of time necessary to present the case description, but can also be one of the more challenging types of questions. You will be given more information than you need in the case description, and one of your key tasks is determining which are relevant to the client's business problem.

Consultants are often faced with a deluge of details, and the ability to sort out the crux of a problem is a key skill for which firms are looking.

While most of our process steps are similar to the "The Great Unknown", how we understand the central issue and probe for insight differs.

Potential Methodology

Pause for a moment and consider the central problem. Which of these facts are totally irrelevant? Eliminate them for now. Which facts are definitely related to the problem? Ask questions about facts that appear relevant. Probe for additional facts that the interviewer may have.

Interview example

Client is a leading food company that wants to develop a fresh prepared meal business. Trend among consumers is toward fresher food with no artificial preservatives or coloring. Consumers are currently purchasing \$5.0 billion of frozen meals – trend is toward more upscale products.

A fresh meal plate combing a protein, vegetable and starch is delicately arranged in a sealed plastic dome package. Nitrogen gas flushing is used to extend shelf life.

Product is currently in limited consumer test at \$5.50 to \$8.50 per meal. Shelf life of product is 14 days – product will spoil in 21 days potentially causing food poisoning.



Client wants to know if they can make money in this business

Client wants to know if the market is big – how will they keep competition out

Client wants a consultant to assist in building business case

Potential Methodology

Key problem: Profitability of Business and Size of Market

1. Problem understanding

Ask about consumer test. What prices are consumers responding to? Are there any items spoiling on the shelf?

What is the competitive structure of this market currently?

What are the components of the company's cost structure?

2. Structure Analysis

What is the break-even point for the firm?

Determine Gross Margin per Unit

Determine Fixed Costs

Divide to find break-even

Estimate the size of the market (a case within a case)

Determine the market share they will need to break-even

3. Develop Recommendations

Discuss the competitive structure of the market. Can the firm realistically achieve the break-even market share?

"The Back of the Envelope" Cases (Market Sizing)

"The Back of the Envelope" questions are very different from other types of cases in that they are primarily numerically driven. You will be asked to estimate the number of some everyday item in society. The interviewer is not looking for a random guess, but rather a structured thought process to get to a numerical answer. These types of questions not only test your comfort level with numbers, but also force you to create your own framework to develop a numerical answer. There are often several different ways to approach these problems, and all of them are correct as long as they are internally consistent and holistically structured to arrive at a logical answer.



Problem Understanding

Rather than asking probing questions, take a moment to think about the steps you would need to take to get to an answer. What assumptions will you have to make along the way?

Framework Development and Numerical Analysis

Walk the interviewer step-by-step through your framework, calculating the numbers for him as you go. You will need to begin with some assumptions about the population (of people, objects, etc.) and will need to make other assumptions at certain points throughout the case. Don't be afraid to make too many assumptions, but be certain that they are needed and that you can explain why you are making that assumption. Often, you will hit a "dead end" in your thinking. If you find yourself in a situation where you don't know how to proceed, you should back up several steps in your analysis (make sure you communicate this to the interviewer) and pursue an alternative path.

Interview Example

Estimate the total number of dry cleaners in Philadelphia

Potential Methodology

Assume there are two million people in Philadelphia

Estimate the size of market by segmenting the population

Assume the population consists of 25% adult men, 25% adult women, and 50% children

Assume children have no dry cleaning and only 25% of adults use dry cleaning

Estimate the average number of "units" of clothing each man and woman brings weekly to the cleaners. For this case, assume that 3 shirts / blouses and one suit are brought to the cleaners each week.

Thus the total size of the market (per week) is one million units of clothing (1 million people x 25% x 4 units per person)

Estimate the average number of units a dry cleaner can handle per week

Assume that the average dry cleaner has two workers who typically handle 20-30 customers (or 80-120 units of clothing) per hour

If the average dry cleaner is open eight hours a day, 5 days / week, they typically handle 3200 – 4800 units per week (80 – 120 units x 8 hours x 5 days)

Divide the total market size by the average units handled per dry cleaner to find the total number of dry cleaners



There are between 208 and 312 dry cleaners in Philadelphia

Practice Cases: sample cases

"The Great Unknown"

A major furniture retailer has experienced declining profits for four quarters, yet that same time period, it has experienced a 25% growth in sales and has opened many stores. Why are profits declining?

A fast food company is thinking about putting a franchise in an airport. They hire you to see if they should do so.

A bread division of a large food company is facing increasing competition in its market and wants to know if it should exit the market.

A car company is interested in developing a new car. What marketing related issues should it consider before doing so?

What factors influence the revenue potential of a new pharmaceutical product?

Citibank is considering purchasing another credit card company. If the acquisition is made, Citibank will gain access to 100,000 new cardholders. What is the estimated value of this acquisition?

A commercial bank is re-evaluating the number of branches it operates, and whether they should increase the number of branches or close some down. How would you suggest they go about it?

A large conglomerate company is facing declining profits in its railroad company division and is considering shutting it down. You have been hired to determine if this is the right course of action and identify potential alternatives.

New York City has hired you to determine what optimal route or what destination taxi drivers should go to when they do not have a customer.

"The Back of the Envelope"

How much money could Continental Airlines save by giving customers ½ a can instead of a whole can of Sprite?

What is the estimated value of a taxi medallion in New York City?

Discuss what is wrong with the following statistic: the Volvo is the safest car on the road because a recent study has shown that Volvos have the fewest number of accident deaths per mile driven.

Estimate the change in the price of oil in the year 2003 from today's price. Will it increase or will it decrease?

Estimate the number of attendees for a free concert for U2 in Central Park in New York City.



Case Interview Tips

General Tips

- **Be enthusiastic** and excited about the interview, the firm, and the prospect of becoming a consultant!
- **Be fun!** The interviewer is silently giving you the "plane ride to Tokyo test." That is, would they enjoy sitting next to you for a 24-hour airplane trip.
- **Be positive!** Don't talk about yourself negatively you must exude confidence, but not arrogance.

Case Tips

Follow these steps and you won't go wrong!

- 1. **Take notes.** When the interviewer indicates that she will be giving you a case, ask if she minds if you take notes if not, get your pen and paper ready!
- 2. **Listen carefully** to the objective of the case and note the case facts given. Remember to write the question down!
- 3. **Think.** After the scenario has been set, you must determine two things:
 - Have you been given all the needed information to see the big picture?
 - Is all the information given relevant to the case solution?

To do this, take a minute or two to go over your notes and write down a few guidelines for your ensuing discussion.

- 1. **Ask and clarify.** If you are unclear about any of the terms used, or information presented, ask for clarification.
- 2. Frame it. Now, you must decide on a framework and communicate to the interviewer how you intend to proceed. The framework serves as your guide to work through and present the answer to your case. You should begin by setting forth a hypothesis as to the final solution (i.e., "I believe the reason profits are low are due to higher costs than the competition.").
- 3. **Test your hypothesis.** Begin validating your hypothesis by looking at the most significant issues first (in the above example, the key issues would be the various elements of cost and how they compare to the competition). As you continue to ask questions, be ready to respond to any hints or attempts to steer you in another direction



by the interviewer. Work through each of the issues set forth in the framework(s) you have chosen.

- 4. **Summarize**. Once you think you have arrived at a solution (or the interviewer asks you to wrap up), briefly summarize your analysis and give the next steps you would take to develop a recommendation for the client.
- 5. **Ask what really happened!** If time allows, ask your interviewer what the firm did. Don't be alarmed, however, if the firm did something very different from your recommendation. The interviewer is primarily looking for problem solving skills and business savvy. Many times the case has been simplified or altered for interviewing purposes.
- 6. **Write it up!** Finally, and most importantly, write up your cases as soon as you get home! This way, when the MCC asks you to submit cases for next year's case book, you'll be all set to go! (We are NOT joking! The best way to get good cases for you and your colleagues to prepare with for next year's recruiting is for everyone to write up their cases ASAP!)



Chapter 6: Consulting Frameworks and Tools

Your interviewer is more interested in how you organize your questions and your thought processes than in whether you get the "right" answer, so memorize these important frameworks!

The table on next page is an abstract from the interview guide Accenture provides students every year. It gives you a list of business issues and possible frameworks you can use to address them. However you should keep in mind that there is no "absolute" solution to a case study question, so you should be able to shift seamlessly from one framework to another and respond quickly to the interviewer's suggestions.

Following the table, you will find more details on the frameworks.



Typical business issues and related frameworks

BUSINESS ISSUES	POTENTIAL FRAMEWORK	
Profitability (in general operations related question)	Profitability — Revenues — Volume Price Fixed Variable	
Market Expansion (in general strategy related question)	Products- Current New New Market Product Penetration Expansion Markets Diversification Development	
Opportunity Assessment: Always "think internal and external factors"		
- Product (e.g. new product launch) - Business Unit	Product Life Cycle curve Core competencies Value Chain	
- Overall market	- Porter's Five Forces Potential Entrants Suppliers Industry Competition Buyers Substitutes	
	- BCG matrix	
- Assess valuation / maximization Competitive Analysis	Net Present Value 3C's (Customer, Company, Competition) SWOT (Strengths, Weaknesses, Opportunities, Threats)	
Marketing Strategy	4P's (Product, Price, Promotion, Place)	

Profitability Analysis

This framework should be used for questions on profits, operations, or new business opportunities.

General Questions: What are the sources of profit? Are there multiple profit streams? Multiple revenue streams? If so, analyze each separately. Focus on sales mix and sales force incentives.

Profit = Total Revenues - Total Cost

Total Revenues = Price*Quantity

General Principle: Increase revenue by increasing price and/or quantity.

How much can we raise **price**?

- Does the firm have market power?
- What is the demand elasticity?
- Is the product differentiated? Are there additional goods and services that we can charge a premium for?
- Are there substitutes?
- How is our product mix priced?

How can we increase quantity?

- Sell products to new customers
- Increase market share
- Increase market growth
- 4Ps (Price, Product, Promotion, Placement)
- Sell new products to current customers

Total Costs = Fixed Costs + Variable Costs

General Principle: Understand cost structure of firm and try to reduce major costs. What are the main cost drivers? What costs are fixed? Variable? How have our costs changed over time? What are competitors' cost structures?

Common costs include:

- Materials
- Labor (wages & benefits)
- SG&A
- Overhead (rent, PP&L)
- Depreciation
- Capital costs
- R&D

Common cost reduction techniques:

- Improve utilization of equipment
- Outsource manufacturing
- Consolidate purchasing
- Relocate to lower cost areas
- Partner with distribution companies (e.g., Federal Express)
- Strategic use of IT



Market expansion and Opportunities Assessment

- Market expansion matrix
- BCG Matrix
- Choosing a strategy
- Industry analysis: Porter's five forces
- Internal External factors
- Acquisition analysis
- Value Chain Analysis
- Product Life Cycle

Market Expansion Matrix

Product

		Current	INew
	NT	Market	Product
<i>Marke</i> t	New	Penetration	Expansion
Market	<i>C</i> ,	Market	Diversification
	Current	Development	

BCG Matrix

High	Star	5
Growth Rate Low	Cash Cow	Dog
	High	Low

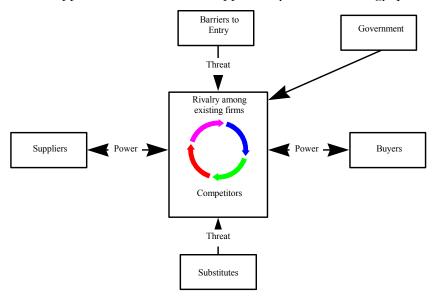
Relative Market Share (RMS)

Framework for Low cost vs. Niche player

Strategy	Low Cost	Differentiation
Required Capabilities	Requires large and dedicated manufacturing facilities. Lean overhead.	1 1
Typical Markets	Commodity, low-growth markets belong to this category, and in general, markets where products present no differentiation and little brand awareness.	In these markets, customers make their purchasing decisions following non-price factors like quality, delivery, features, etc.
Market Timing	Markets are mature or declining	Markets can be emergent, growing or declining
Examples	Grain, gold, paper, floppy disks, transportation	Breakfast cereal, formal attire, wine

Porter's 5 Forces - Industry Analysis

This framework is applicable to new business opportunity and firm strategy questions.



Barriers to Entry increase with:

- Economies of scale
- Proprietary product differences
- Brand recognition
- High switching costs for the customer
- Capital requirements
- Difficulty to access distribution channels
- Absolute cost advantage of incumbents
 - ⇒ Learning curve advantages
 - ⇒ Access to necessary inputs
 - ⇒ Proprietary low-cost product design
- Government regulation, restrictions on entry
- Expected retaliation

Buyer Power increases with:

- Bargaining leverage
- Buyer concentration, Small number of buyers
- Low buyer switching costs
- Buyer information
- Buyer ability to integrate backward
- Availability of substitute products
- High price elasticity
- Low product differentiation
- High brand recognition of buyers products
- Low impact on buyer's product quality.
- Decision makers' incentives

Rivalry increases with:

- Industry growth
- High Fixed costs + low variable costs
- High value added
- Intermittent overcapacity
- Low product differentiation
- Low brand recognition.
- Low switching costs.
- Number of competitors.
- Corporate stakes.
- High fixed costs or highly specialized assets.
- High barriers to exit.

Supplier Power increases with:

- Differentiation of inputs
- Importance of supplier's product/service in cost
- Structure of industry.
- Lower Switching costs of suppliers
- Higher impact of inputs on cost or differentiation
- Lower Number of substitute inputs
- Higher threat of forward integration.
- Lower importance of volume to suppliers
- Lower Supplier concentration

Threat of substitute increases with:

- Relative performance of substitutes.
- Lower switching costs.
- Higher buyer propensity to substitute.



Internal-External Factors

This framework is especially applicable to new market and company strategy questions.

The question you are looking to answer is whether the firm strategy aligns internal factors with external environmental considerations.

Internal Considerations

- Core competencies of the firm
- Company mission and goals (consider its objectives for employees, the community, the environment, technology, etc.)
- Company organizational structure
- Firm resources (labor, technology, internal systems)

Environmental Factors

- Industry trends (including a five forces analysis)
- Constraints (government regulations, laws, union/labor agreements, societal pressures, etc.)
- Competitor activities (plans for expansion, financial strength, etc.)



Acquisition Analysis

This framework is particularly helpful when one has to decide whether to enter a new market by acquisition.

First, analyze the industry to see if it is a good business to be in general (Porter's 5 Forces analysis is a helpful tool). Address the following questions:

- (1) Market size and dynamics (capacity, distribution, market saturation, rate of market growth)
- (2) Sustainability of profits
- (3) Competitive position and likely competitive response. Cost structures
- (4) Product differentiation and standards. Substitutes.
- (5) Price dynamics.

Second, consider whether this business is a good one <u>for your firm</u> due to core competencies and synergies. See if the core competency required of the new business is similar to the ones developed by the company in its existing businesses. Questions to ask:

- (1) Revenue synergies with or cannibalization with existing products.
- (2) Distribution costs and ease of access to distribution channels.
- (3) Cost of capital, given the risk of the investment
- (4) Potential economies of scale and learning curve issues, particularly with respect to competition
- (5) Cost synergies
- (6) Increase on complexity costs
- (7) Alternative uses of investment.

If no core competency is shared and no synergies exist between the two businesses, the firm will have no competitive advantage over the average firm and probably should not enter the business. If synergies do exist, make sure that they outweigh the increased complexity costs.

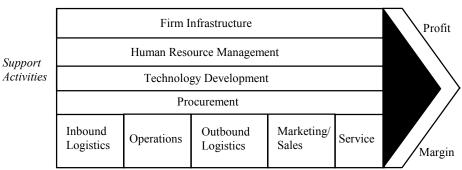
Value Chain Analysis

Use the value chain to:

- 1. Identify components of costs.
- 2. Identify components of profits.
- 3. Relate activities and core competencies.

Porter's typical value chain:

The Value Chain



Primary Activities

Definition of Activities in the Value Chain:

PRIMARY ACTIVITIES

Inbound Logistics

Receiving, storing, materials handling, warehousing, inventory control, vehicle scheduling and returns to suppliers.

Operations

Transforming inputs into final product form (e.g. machining, packaging, assembly, equipment maintenance, testing, printing and facility operations).

Outbound Logistics

Distributing the finished product (e.g. finished goods warehousing, material handling, delivery vehicle operation, order processing and scheduling).

Marketing and Sales

Induce and facilitate buyer to purchase the product (e.g. advertising, sales force, quoting, channel election, channel relations and pricing).

Service

Maintain or enhance value of product after sale (e.g. installation, repair, training, parts supply, and product adjustment).

SUPPORT ACTIVITIES

Procurement

Purchasing of raw materials, supplies, and other consumable items as well as assets.

Technology Development

Know-how, procedures, and technological inputs needed in every value chain activity.

Human Resources Management

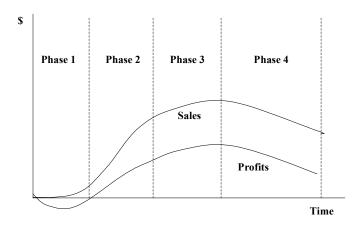
Selection, promotion, placement, appraisal, rewards, management development and labor/employee relations.

Firm Infrastructure

General management, planning, finance, accounting, legal, government affairs, and quality management.



Product Life Cycle Curve



Phase 1

On this phase, the focus should be on R&D and engineering. You should refer to product definition and need generation with little or no competition.

Phase 2

This phase should emphasize marketing. The challenge is now to manage rapid growth while maintaining quality. You should expect new entrants

Phase 3

This phase focuses on manufacturing and cost. Prices fall and competition intensifies.

Phase 4

High cost and low share competitors exit. This phase focuses on being low-cost or niche player.

Competitive analysis: The 3 C's - Customer, Company, Competition

This is a basic framework but is very useful. It is especially applicable to business strategy and new market opportunity questions.

Customer

Economic value to the customer:

Individual

- Who is the customer?
- Perceptions
- Loyalty
- Volume
- Switching costs
- Profitability of customer
- Preference
- Purchase Behavior
- Usage

Market

- Size
- Growth
- Segmentation
- Shares
- Maturity
- > Trends

Product

- Price
- Differentiation
- Life Cycle
- Technology
- Substitutes

Company

Economics

- Costs
- Profitability
- Capacity to develop product
- Capacity to produce product
- > Break-even analysis
- Experience curve
- > Financials
- > Channels
- Organization/structure
- Intangibles

Fit

- Strategy and vision
- Strengths/weaknesses
- Culture
- Resources
- Organizational Structure
- Brand equity
- > Core competencies

Competition

Industry analysis (5 forces)

- Size, # of competitors, market shares
- > Competitors' responses
- Current strategy
- Strategic value of product and commitment to product
- Corporate goals
- Capabilities
- Economies of scale/scope
- Cost structure
- Experience curve
- Resources: financial, channels, organization, intangibles (brand loyalty, culture)
- Relative product positioning
- Substitutes
- Expected response to competitive moves



Marketing strategy: the 4 P's

Apply this framework to marketing and new product development questions.

Product

- I. Must fit within positioning decision and market segmentation (e.g. high end, low end; consumer, industry)
- II. Differentiated good vs. commodity
- III. Features and capabilities
- IV. Reliability, quality, brand name, reputation
- V. Packaging, size
- VI. Service, warranties
- VII. Future strategy for the product

Placement (Distribution)

- Channel (decision based on product specifics, level of control desired and margins desired)
- II. Coverage tradeoff between coverage levels and costs
- III. Inventory levels, turnover, carrying costs
- IV. Transportation alternatives, efficiencies, costs

Promotion

- I. The Buying Process:
 - A. Consumer awareness for the product
 - B. Interest for the product
 - C. Trial
 - D. Repurchase
 - E. Loyalty
- II. Select sales method: Pull (advertising...) or Push (discount to distributor...)
- III. 5 categories of promotional efforts:
 - A. Advertising: medium, reach (share of target market reached) and frequency (number of times reached).
 - B. Personal Selling: when direct contact with buyer is needed.





- C. Sales Promotion: Incentives to consumer, sales force and channel members.
 - ⇒ Consumer incentives: coupons, refunds, samples, premiums, and contests.
 - ⇒ Trading force incentives: Sales contest, Point of purchase displays, spiffs (payments to dealers), trade shows, franchise reputation, in-store demonstrations.
- D. Public Relations and Publicity.
- E. Direct sales.

Price

- I. Considers both retail price and discounts.
- II. What strategy? MC=MR? Skim (high price, make profits now)? Penetrate (low price, gain market share)?
- III. Seek volume or profits?
- IV. Perceived value, cost-plus-margin pricing?
- V. How does price relate to the market, size, product life cycle, and competition?
- VI. Economic incentives to channel (commissions, margin).
- VII. Establishes barriers to entry.



Chapter 7: Basic Financial, Accounting and Economic Concepts

There are some fundamental financial, accounting, economic, and logic concepts that you may potentially encounter during your case interview. A basic understanding of them will help you to more quickly and confidently address certain issues in cases and will allow you to better focus on the "bigger picture" rather than the details.

Financial Concepts

Fixed, Variable, Sunk, Marginal, and Opportunity Costs

Case questions based on firm profitability will most likely require an understanding of the firm's different underlying cost structures - Fixed, Variable and Sunk Costs. These costs types together define the cost structure of the firm. Understanding issues such as: which of these costs are the main drivers and which have changed over time, will help you to better understand the firm's profitability.

Fixed Costs are generally costs that do not vary with the firm's level of output or production – a fixed cost must be paid even if there is no output. These costs are incurred by the firm on a recurring basis but are generally recoverable if the firm is shut down. Examples of fixed costs are: Rent, Plant Maintenance, Overhead, Insurance, and possibly a small number of fixed employees (CEO).

Variable Costs are generally costs that do vary with the firm's level of output or production. These costs may change based on the increase or decrease of a firm's output. Examples of Variable costs are: Wages, salaries.

Total Costs = Fixed Costs + Variable Costs

The total costs of a firm are comprised of all Fixed and Variable costs.

In general, which costs are fixed versus variable depend on the time horizon that is being considered. In the short run (a couple of months), most costs are considered fixed since the firm is typically obligated to pay for purchased materials and cannot easily layoff workers. However, over the long run (a couple of years), many costs become variable – a firm can decide to purchase less raw material, reduce or increase its workforce and possibly sell some of its capital.

Therefore, when firms are making short run decisions, it is only relevant to consider Variable costs, since Fixed costs cannot be easily adjusted. However, in the long run, almost all costs may be considered variable and should be considered in the firm's decision-making process.

Sunk Costs are expenditures that have been made and cannot be recovered. Since sunk costs cannot be recovered, they should not be considered when making future economic decisions for the firm. Examples of sunk costs are: Advertising, licensing fees, equipment that was purchased for one use and cannot be converted for another use.

Marginal Cost is the incremental cost of producing an additional unit of output. Because fixed cost does not change as the firm's level of output changes, marginal costs is equal to the increase in variable costs or the increase in total cost that results from an extra unit of output.

In general, when firms are making short run decisions, another important concept is **Opportunity Cost**. Opportunity cost is the cost associated with opportunities that are foregone by not putting the firm's resources to their highest-value use. For example, a firm that owns a building faces the opportunity cost of the income it could obtain by renting the building. This foregone rent is the opportunity cost of utilizing the office space and should be considered as part of the economic cost of doing business.

Break Even Analysis

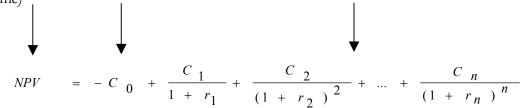
Break Even is a financial analysis that is commonly performed when assessing the necessary revenue / cost balance a firm must achieve in order to "break even" or cover its costs (i.e. when a firm's total revenue equals its total costs). This is useful to determine the minimum revenue a company must achieve in order to cover (or pay for) its total costs. At break even, a firm is not making a profit but simply covering its costs.

At Break Even: Total Revenue = Total Costs (Price * Quantity Sold) = (Fixed Costs + Variable Costs)

NPV (Net Present Value)

When deciding whether to undertake a proposed capital investment (i.e. buying new equipment, opening a new plant, investing in a new project), managers may use the "net present value" of these investments as a critical factor in their decision making process. The NPV of a project is the present value of the series of cash flows (or income) generated by the investment, minus the cost of the initial investment. *Only investments with a positive NPV should be considered*.

Net Present Value = Initial Investment Cost - Present Value of Investment's Future Cash Flows (Income)



Where:



 C_0 = The cost of the Initial Investment

 C_1 , C_2 , C_n = Cash flows (or income) expected from investment in years 1, 2, ... up to year n.

r = Discount Rate (interest rate)

The Present value of the Investment is the series cash flows (or income) expected from the investment, discounted at an interest rate (the interest rate used is called the Discount Rate which is the estimated expected return from an investment of a similar risk type).

Example: Find the NPV of a Project that requires an initial Investment of \$1M with annual revenue forecasts of \$100K, \$200K, \$300K, and \$400K for the next four years. Assume a discount rate of 8%.

Year 0 (Initial Investment)	Year 1	Year 2	Year 3	Year 4
NPV = -\$1M + (1.08)	\$100K + (1.08)^	\$200K + 2 (1.08)^	\$300K + (1.08)^	<u>\$400K</u> 4
NPV = -\$1M +	\$92,593 +	\$171,468 +	\$238,150 +	\$294,012
NPV = -\$203,777				

Since the NPV of this Project is negative (-\$203,777) the manager should *not consider* it.

CAPM (Capital Asset Pricing Model)

In the above NPV example, a given or assumed discount rate was used. However, the discount rate may vary for different project types, and it is necessary to determine an appropriate rate when making NPV calculations. An incorrect discount rate may skew the NPV of a project and could make a truly profitable project look unprofitable and vice-versa. The CAPM attempts to calculate an appropriate discount rate based on values of the rate of return of risk free assets, the current market rate of return, and the relative risk (or Beta (β)) of the project compared to that of the market as a whole.

Beta (β) – Beta is a measurement of the risk of an investment compared to the risk of the market as a whole. The value of Beta may take on positive, negative and 0 values.

 β >1: An investment with a β greater than 1 indicates that it has more risk than the market – it is very sensitive to and will amplify the overall movements of the market. Example: For an investment with a β = 1.29, a 1% increase in the market means a 1.29% increase in the investment value.

 $0 < \beta < 1$: An investment with a β between 0 and 1 indicates that it will tend to move in the same direction as the market, but not as far – the asset is not as sensitive to market movements. Example: For an investment with a $\beta = .75$, a 1% increase in the market means a .75% increase in the investment value.

β=0: The investment is not correlated with the market. "Risk-free" assets have β of 0.



Negative Betas take on similar meanings, as do positive Betas except for the fact that they act in the inverse manner. Example: For a project with β = -1, a 1% increase in the market equates to a 1% decrease in the investment value.

After an appropriate Beta has been determined for an Investment, CAPM can then be used to determine the appropriate Discount Rate, r:

CAPM:
$$r = r_f + \beta(r_m - r_f)$$

Where:

r = Discount rate

 r_f = Risk-free rate of return - Return Rate that can be received with a risk-free investment like U.S Treasury Bills

r_m = Market rate of return - Return Rate that can be received by investing in a diversified portfolio (S&P 500)

 β = Beta of the Investment

Accounting Concepts

Financial Statements

Occasionally, cases will require you to show an understanding of basic accounting tools. You may be presented with small portions or sections of a company's financial statement and asked to make assessments of the company's situation. There are four basic financial statements that you may encounter:

- 1. The Balance Sheet
- **2.** The Income Statement
- **3.** The Statement of Retained Earnings
- **4.** The Statement of Cash Flows

The Balance Sheet

The Balance Sheet depicts the financial condition of a business at a given point in time. It lists the *Assets, Liabilities, and Stockholders' Equity* and represents a statement of the basic accounting equation:

Assets = Liabilities + Stockholder's Equity

Assets – These are the resources that have been acquired by a company and have future economic benefit – i.e. resources the company can uses to operate its business through additional purchasing power, cash, or the ability to generate revenues.



Liabilities – These represent the debts of the company – the claims that creditors have on the company's resources.

The comparison of Assets and Liabilities often provide an indication about the company's ability to meet obligations.

Stockholders' Equity – This represents the net worth of a company, which (according to the basic accounting equation listed above) equals the Assets that the company owns minus the debts they owe to creditors. Equity is also the claim that investors have on a company's resources. Equity holders in a company own common stocks that have been issued by the company. The Equity section represents the investment made by the equity holders of the company and is a measure of the assets that would remain for the equity holders after all liabilities have been paid. Stockholders' Equity has two components: Contributed Capital – a measure of the assets that have been contributed to a company by its owners; Retained Earnings – a measure of the assets that have been generated through a company's operating activities but not paid out to the stockholders in the form of dividends.

Companies can obtain resources to operate their businesses through both investors (Equity) and creditors (Liabilities). For resources acquired through creditors, the company promises to repay creditors over a specified period of time. However, for resources acquired through investors, the company does not promise to repay investors over a specified period of time, but promises a return on their investment that's contingent on a certain level of operating performance. Because of this inherent uncertainty, an equity holder's investment is not guaranteed and is more risky than a creditor's investment.

Current vs. Non Current: Assets and Liabilities are divided into Current and Non-Current classifications based on their liquidity (i.e. – how easily the item may converted to a cash equivalent).

Current Assets are those that are expected to be realized or converted into cash in the near future, usually one year. They are grouped into a separate category since they are considered to be highly liquid. The amount of highly liquid assets held by a company can indicate the company's ability to meet its debt payments. Long-Term Assets are acquired by companies to provide benefits for periods usually extending beyond one year.

Current Liabilities are obligations expected to be paid (or services expected to be performed) with the use of Current Assets. Long Term Liabilities are obligations expected to require payment over a period of time beyond the current year.

The following is a listing of the Balance Sheet listing the (Current and Non Current) Assets, Liabilities, and Shareholder's Equity of a fictitious company.

Company ABC Balance Sheet December 31	<u>1, 20001</u>		
Assets			
Current			#2 00
Cash			\$200 \$150
Short-Term Investments	#2 E0		\$150
Accounts Receivable (A/R)	\$350		Ф2.4F
Less: Uncollectibles	<u>\$5</u>		\$345
Inventory Proprid Evropess			\$600 \$100
Prepaid Expenses Total Current Assets			\$100 \$1.415
Non-Current			<i>\$1,415</i>
Long-Term Investments			
Long-Term Notes Receivable			\$1,000
Land			\$500
Securities			\$2,500
Total Long-Term Investments			<i>\$4,000</i>
Property, Plant, and Equipment (PP&E)			φ 1,000
Property			\$6,000
Plant			\$4,000
Tant			Ψ 1 , 000
Less: Accumulated Depreciation	\$1,100		\$2,900
Equipment Equipment	\$3,500		Ψ2,200
Less: Accumulated Depreciation	\$900		\$2,600
Total PP&E	<u> </u>		<i>\$11,500</i>
Intangible Assets			<i>711,000</i>
Goodwill			\$800
Patent			\$200
Trademark			\$700
Total Intangible Assets			\$1,700
Total Assets			<i>\$18,615</i>
<u>Liabilities</u>			
Current Liabilities			
Accounts Payable (A/P)			\$250
Wages Payable			\$25
Interest Payable			\$155
Short-Term Notes Payable			\$75
Income Taxes Payable			\$60
Current Maturities on Long-Term Debts			\$ 75
Deferred Revenue			\$75
Other Payables			<u>\$100</u>
Total Current Liabilities			\$740
Non-Current			
Long-Term Notes Payable			\$1,500
Bonds Payable			\$3,500
Mortgage Payable			\$1,940
Total Long-Term Liabilities			<i>\$6,940</i>
Total Liabilities			<i>\$7,680</i>
Stockholder's Equity			
Contributed Capital			\$9,550
Retained Earnings			\$1,385
Total Stockholders' Equity		<i>\$10,935</i>	_ _
Total Liabilities and Stockholders' Equity			\$18,615

^{* *} Notice that Total Assets = Total Liabilities + Stockholders' Equity



The Income Statement

The Income Statement measures a firm's operating performance over a particular period – the activities associated with the acquisition and sales of the company's inventories or services. The Income Statement consists of three sections:

- 1. Operating Revenues
- 2. Operating Expenses
- 3. Other Revenues and Expenses

The net amount of these three numbers gives a number called *Net Income or Loss* (or Net Earnings, Profits). Net Income is a common and useful measure of operating performance.

Operating Revenues – These are sources of income that normally arise from the sale of goods and services produced by the company. (Sales refer to selling a company's products or inventories; Fees Earned or Service Revenue refers to selling a company's services). Income or Revenue may also be realized from selling an existing piece of capital equipment – these revenue sources are considered "gain of sales". Gains represent sources of income from incidental transactions. The ability to generate Operating Revenue is often viewed as an important key to success for a company.

Operating Expenses – These represent the costs incurred by a company to generate the (operating) revenues earned (over a specified period of time). Examples of operating expenses include Cost of Goods Sold (COGS)* and expenses related to wages, rent, selling, depreciation and amortization. A company's ability to controlling expenses is frequently used to evaluate its success. An expense that is outside of a company's normal operation is considered a loss and is treated as one-time expenses. *COGS represents the original cost of the inventory items that are sold to generate sales revenue.

Other Revenues and Expenses - This category usually contains revenues and expenses that are not central to a company's operations – the dollar amount of this category is typically small. Other revenues include interest on bank accounts, rent collected from excess warehouse space and gains from assets that are sold for more than their expense. Other expenses typically include interest on outstanding loans and losses recognized when assets other than inventory are sold for amounts less than their original cost.

Net Income (Gain or Loss) – The total Revenue less total Expenses earned over a specified period of time equals the Net Income. A positive Net Income represents a profit, while a negative value represents a loss.

The following is an example of an Income statement for a fictitious company:

Company ABC Income Statement for the Year ending December 31, 2001

Operating Revenue

Total Operating Revenue	\$5,000
Fees Earned	\$1,000
Sales	\$4,000

Operating Expenses

Cost of Goods Sold	\$1,500
Wage Expense	\$1,000
Rent Expense	\$295
Selling Expense	\$300
Depreciation Expense	\$500
Amortization Expense	\$300
Total Operating Expenses	\$3,895

Other Revenues and Expenses

Net Other Revenue and Expense	(\$20)
Other Expense	\$ 900
Other Revenue	\$880

Net Income \$1,085

The Statement of Retained Earnings

The Statement of Retained Earnings describes the activity in the Retained Earnings account over a specified period of time. The balance in the Retained Earnings account consists of past Net Income amounts (earnings) that have been retained in the business (i.e. – not paid out in the form of dividends).

Companies retain profits to finance operations and capital expenditures and to pay off debts. The remaining profits are often returned to the shareholders in the form of dividends. When a company declares dividends, this information is reflected in the Statement of Retained Earnings. The Statement of Retained Earnings provides information about what management is doing with the earnings and the company's dividend policy - specifically how dividends compare to reported profits.

The following is an example of a Statement of Retained Earnings for a fictitious company.

Company ABC Statement of Retained Earnings for the Year Ended December 31, 2001

Beginning Retained Earnings balance (December 31, 2000)	\$500
Plus: Net Income	\$1,085
Less: Dividends	(\$200)
Ending Retained Earnings balance (December 31, 2001)	\$1.385



The Statement of Cash Flows

The Statement of Cash Flows is a summary of the activity (cash inflows and outflows) in a company's cash account over a period of time. This statement is divided into three major categories:

- 1. Operating Activities
- 2. Investing Activities
- 3. Financing Activities

The transactions summarized within each of these categories either increased or decreased cash during the specified time period – with the net result representing change in the company's overall cash balance.

Operating Activities – Cash flows from operating activities include cash inflows and outflows associated with the acquisition and sale of a company's products and services. (These values don't necessarily agree with those in the Income Statement since the Statement of Cash Flows records only *cash* inflows whereas the Income Statement consists of revenue and expense which reflect more general asset and liability inflows and outflows).

Investing Activities - Cash flows from investing activities include cash inflows and outflows associated with the purchase and sale of a company's non-current assets (Property, Plant and Equipment, long-term security investments etc.). Net cash flow from investing is usually negative since (as companies grow) they typically purchase more long-term assets than they sell.

Financing Activities - Cash flows from financing activities include cash inflows and outflows associated with a company's two sources of outside capital: liabilities and contributed capital. Cash proceeds from and payments on short and long-term liabilities are reflected in this section.

The following is a sample Statement of Cash Flows for a fictitious company.

Company ABC Statement of Cash Flow for the Year ended December 31, 2001

Operating Activities

	#4.000
Cash collections from sales	\$4, 800
Cash collections from rent	\$800
Cash collections from interest	\$10
Cash provided by operating activities	<i>\$5,610</i>
Cash paid to suppliers	\$(1,800)
Cash paid to employees	\$(1,050)
Cash paid for rent	\$(290)
Cash paid for selling activities	\$(300)
Cash paid for interest and taxes	<u>\$(700)</u>
Cash paid for operating activities	\$(4.140)
Net Cash Increase (Decrease) for	\$1,470
Operating Activities	



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Purchase of Investment Securities	\$(100)
Purchase of Property	\$(4,500)
Proceeds from sale of investment securities	\$500
Net Cash Increase (Decrease) for	\$(4,100)
Investing Activities	

Financing Activities

Proceeds from issuing equity	\$3,000
Principal payments on short-term notes	\$(100)
Principal payments on long-term debts	\$(50)
Cash dividends to stockholders	\$(100)
Net Cash Increase (Decrease) for	\$2,750
Financino Activities	

Increase (decrease) in Cash Balance \$120
Beginning Cash Balance (Dec. 31, 2000) \$100
Ending Cash Balance (Dec. 31, 2001) \$220

Financial Ratios

Once you have become familiar with the elements of the above financial statements, there is a set of commonly used financial ratios that you may calculate to evaluate different financial characteristics of a company. The ratios listed below are representative of those that are commonly used – however it is important to note that others (such as financial analysts) can and do adjust them to fit their needs. It is not necessary to have all of these ratios memorized, but an understanding of the more common ones is important.

Profitability Ratios	Description	Ratio
Return on Equity	Compares the profits generated by a company to the investment made by company's stockholders.	Net Income Average Stockholders' Equity
Return on Assets	Compares the returns to both stockholders (net income) and creditors (interest expense) to total assets.	Net Income + [Interest Expense(1-Tax Rate)] Average Total Assets
Operating Profit	Provides an indication of a company's ability to efficiently run its operations.	Operating Revenues – Operating Expenses
Return on Sales; Profit Margin (Operating Margin)	Provides an indication of a company's ability to generate and market profitable products and control its costs.	Net Income + [Interest Expense(1-Tax Rate)] Net Sales
Gross Profit		Sales Revenue – Cost of Goods Sold
Gross Margin	Measures the extent to which the selling price of sold inventory	<u>Gross Profit</u> Sales
Leverage Ratios		



Capital Leverage	Measures the extent to which a firm relies on	Average Total Assets
Structure	borrowing (liabilities).	Average Stockholders' Equity
Debt / Equity Ratio	Compares liabilities to stockholder's equity	Average Liabilities Average Stockholders' Equity
Long Term Debt Ratio	Measures the importance of long-term debt as a source financing.	<u>Long Term Debt</u> Total Assets
Solvency Ratios		
Current ratio	Measures the solvency (ability to meet debts as they come due) in the sense that current assets can be used to cover current liabilities.	<u>Current Assets</u> Current Liabilities
Quick ratio	Similar to Current Ratio but a more stringent test of solvency since current assets that aren't immediately convertible to cash are excluded from the numerator.	Cash + Marketable Securities + A/R Current Liabilities *A/R = Accounts Receivable
Accounts Payable Turnover	Indicates the number of times during a year the accounts payable is paid off. Dividing the ratio by 365 indicates the number of days that A/P remain outstanding. This is a measure of the extent to which the company is using its suppliers as a source of financing.	<u>Cost of Goods Sold</u> Average Accounts Payable
Asset Turnover Ratios		
Inventory Turnover	Measures the speed with which Inventories move through operations	Cost of Goods Sold Average Inventory
Fixed Asset Turnover	Measures the speed with which fixed assets are used up.	<u>Sales</u> Average Fixed Assets
Total Asset Turnover	Measures the speed with which all assets are used up in operations.	<u>Sales</u> Average Total Assets
Market Ratios		
Earnings per Share (EPS)	Measures profitability relative to the number of common shares outstanding.	Net Income Average Number of Common Shares Outstanding
Price/Earnings (P/E Ratio)	By relating a company's stock price to its earnings, reflects the stock market's confidence that current earnings will lead to cash flow in the future.	<u>Market Price per Share</u> Earnings per Share
Dividend Yield	Relates the dividends paid on a stock to its market price.	<u>Dividends per Share</u> Market price per Share
Annual Return on Investment (ROI)	Provides a measure of the pretax performance of an investment in a share of common stock.	Market Price ₁ –Market Price ₀ + Dividends Market Price ₀



Micro and Macroeconomic Concepts

Be prepared to draw some supply and demand curves to explain your logic. This should be no problem if you were awake during your core microeconomics course! Here is a short refresher anyway.

Microeconomic Concepts

Market Structure

The type of market will determine the playing field for your client. Refer to your microeconomics textbook for more detail.

Perfect Competition

Without any product differentiation, a firm will be a price taker. A competitive firm's demand curve is horizontal and its elasticity of demand is infinite.

$$MR = MC = P$$

Monopoly

While such firms have significant control over prices, monopolies are also faced with downward sloping demand curves implying that an increase in price will result in a lower sale volume. Monopolistic profit maximization is governed by the relationship

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

where E_d is the elasticity of demand. Note that if the demand is highly elastic then there is little advantage to having monopoly power since MR = MC = Price, i.e., the same as that of a price-taking competitive firm. Even if demand is inelastic, monopolistic firms must be careful in their pricing so that the market does not become too attractive, thus inducing new market entry and competition. Hence, consider the characteristics of the monopoly and the barriers to entry.

Oligopoly

This occurs in highly concentrated industries where significant entry barriers exist. Firms have marginal control over prices and must consider rival firms' behavior to determine the best policy. Resist the urge to cut prices; your competition will likely match your price cut and you'll both lose. Bring game theory into play.



Issues to Address

- Market Structure: Identify the underlying market structure and develop the analysis accordingly
- E_d: What is the elasticity of demand? Consider what the market will bear and substitution effects.
- Competitors: Consider competitor reactions to price changes
- Time: Consider the long-term and dynamic effects of pricing decision. In the short run, demand may be inelastic while it is typically more elastic in the long run (remember gasoline in econ class?).
- Price Discrimination: Consider methods to enhance and support price discrimination
- Brand Integrity: Be careful not to price too low, as doing so could compromise the reputation of the brand
- Pricing Tactics: Consider using tactics such as creating "loss leaders" or "traffic builders".

Other Important Concepts

- Double marginalization
- Transfer pricing

Macroeconomic Concepts

Refresh your memory about these economic terms:

Inflation

PPI and CPI

Stagflation

Money Supply

GDP

Economic Leading Indicators and Lagging Indicators

Fiscal Policy vs. Monetary Policy



Chapter 8: Practice Cases and Solutions

Brain Teasers

Consulting Case Interview Question

Case No.: BRAIN1
Firm: Mitchell Madison

Type of Case:

X Brain Teaser (Why are manhole covers round?)

Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]

You step into an elevator on the ground floor and there are 30 floors above you. Another person steps into the elevator with you.

The Question(s):

- 1. What is the probability that the other person in the elevator will get out on the same floor as you?
- 2. Assume two people stepped into the elevator with you. What is the probability that both are getting out on the same floor as you.

Suggested Solution

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic:

1. p = 1/30

2. p = 1/30 * 1/30 = 1/900

Case No.: BRAIN2

Firm: McKinsey and Company

Type of Case:

Brain Teaser (Why are manhole covers round?)

Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]

1.5 chickens lay 1.5 eggs in 1.5 days.

The Question(s):

How many eggs do 4 chickens lay in 9 days?

Suggested Solution

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic:

24 eggs.

Here is how I arrived at the solution:

If 1.5 chickens lay 1.5 eggs in 1.5 days, and now the 4 chickens have 9 days, then the present 4 chickens have 6 times as much time to lay eggs. Since 4 chickens would lay 4 eggs in the base case, we multiply 4 by this factor of 6, and get 24.

(9/1.5=6; 6*4=24)



Case No.: BRAIN3
Firm: Mitchell Madison

Type of Case:

X Brain Teaser (Why are manhole covers round?)

Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]

There is a large cube made of many smaller sugar cubes that are sitting in the sun. Each side of the cube is made up of a 10×10 surface of the smaller cubes.

The Question(s):

How many sugar cubes are exposed to the sun?

Suggested Solution

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic:

If 5 sides are exposed to the sun, you can imagine an inner cube size 8x8x9, which is not exposed to the sun. It means that 576 cubes are not under the sun. There are total of 10x10x10 small cubs in the big cube, therefore 1,000 - 576 = 424 cubes are exposed to the sun.

Case No.: BRAIN4		
Firm:		
Type of Case:		
	Brain Teaser	(Why are manhole covers round?)

Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]

You are given two-hour glasses - one measures 7 minutes and the other measures 4 minutes.

The Question(s):

How would you use the two-hour glasses to measure a continuous time period of 9 minutes? (Time limit to derive answer is 10 minutes.)

Suggested Solution

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

Let's name the 7-min and 4-min hourglasses as I and II respectively. The steps are:

- Turn over both glasses simultaneously.
- When II expires, turn II over (4 minutes).
- When I expires, turn I over (7 minutes).
- When II expires, turn I over (8 minutes).

When I expires, you have 9 minutes!



Case No.: BRAIN5

Firm:

Type of Case:

X Brain Teaser (Why are manhole covers round?)

Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]

There're 8 balls with same size and look. One is lighter than others.

The Question(s):

How do you find the lighter ball using a balance to weigh just twice?

Suggested Solution

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

Pick up any 6 balls, weigh 3 and 3 each side.

If one side is lighter take two of the three balls and weigh them. (You're supposed to solve this quiz within 10 seconds.)

Case No.: BRAIN6			
Firm:			
Type of Case:			
	Brain Teaser	(Why are manhole covers roll	und?)

Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]

There are 3 doors: A, B and C. Behind one of them, there's gold. First, you pick one door. For example, you pick door A. Then the game host will open one of the other two doors that does not have gold, for example, door B. Now you have a chance to change your mind, to pick door C. Or you can stick to your first choice of door A.

The Question(s):

Would you change your choice?

(It is said that this quiz first appeared in TIME magazine, and many readers had replied with wrong answers, including one certain MIT math professor. It's not a hard problem, but is NOT so intuitive, either.)

Suggested Solution

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

Yes, you should change your choice!

The probability that you will win the gold if you stick to your initial choice is 1/3. The probability to win if you change your choice is 2/3. This is because the only case that you will lose if you change your choice is that you initially picked up the CORRECT door that has the probability of 1/3.



Market Sizing

Consulting Case Interview Question

Case No.: MARKET1 Firm: Gemini Type of Case:		201/040	round(2)
X	Brain Teaser (Why are manhole of Market Sizing (How attractive is to		
<u></u>	Operations (Our client's profits ar		
	Declining Profits	_	Other
	Marketing Problems		
<u>X</u>	Strategy (Should our client enter	the bee	
	New Product IntroductionX New Market	-	Competitive Response Response to Changing Environ.
	Merger or Acquisition	-	Other
	Other	-	
	interviewer: [Please relate the facts the facts the facts the facts the case can be adequately the facts t		viewer gave to set up the question/problem. ood!]
	pank in the U.S. There has been not are considering pursuing growth	_	wth over the last couple of years in the seas in emerging markets.
The Question(s):			
	e to evaluate whether or not you s al size of the auto loan market in I		•
	Suggested So	lutic	on
Desired Framework: [Check all that apply.]		
	Cost-Revenue and Profitability		The 4 P's of Marketing
	The 3 C's		Value Chain Analysis
	Porter's 5 Forces		Microeconomic Analysis
	Internal-External Factors	_X	Other_Market Sizing
	er - Important questions asked, a and logic: [Walk us through how you al		
± •	ot into any other details concerning		directed to do a market sizing within structure that I had set up originally.
	ould look at the current market si then analyze the economic and pe		•



- 2. I would then determine if the regulations in the given country would prevent us from doing the kinds of things that we need to do to earn a profit.
- 3. I then would analyze the demographic profile of the potential customers in the market (wealth, % who use banks, etc.).
- 4. I would then look at what banks are already in the market, is it a competitive situation? Finally I would look at what the relative cost would be to enter a given market.
- 5. In addition I would analyze what the operating costs would be (labor rates, etc.).

A market sizing was nestled within this case: I was instructed to estimate the annual size of the auto loan market in Mexico (Mexico was on my resume).

- Originally, I started down the population path; I assumed a population of roughly 75M people and attempted to determine who was buying cars. Once I started to try to estimate this I realized that this might not be the best path.
- 1. I reversed course and decided a better way to approach this might be to start with the number of car dealerships. I estimated that there would be about 50 car dealerships in each major metropolitan region. With roughly 10 major metropolitan regions (I named most of them) that would be 500 car dealerships nationwide.
- 2. I estimated that each car dealership would sell 5 cars a day, resulting in 2,500 cars sold per day. With 300 sales days/year we have 750,000 cars/yr.
- 3. Estimate \$10,000 per car, less 10% down payment, less 10% of the people who don't get auto loans (pay in cash) resulting in \$6.075B. Of this number, the interest payments would be 20% (higher than the US for obvious reasons!) resulting in a market size of \$1.215B.

Wrap-up / Recommendations for client: [Sum it all up!]

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:



Case No.: MARKET2
Firm: Type of Case:
Brain Teaser (Why are manhole covers round?)
X Market Sizing (How attractive is the market for fire trucks?)
Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]
Your client is an international manufacturer of electronic equipment for industrial customers. The R&D department has developed a new product a device that could replace all energy costs (electric, gas, etc.) using solar technology. The estimated price to the customer would be \$5,000/house, with a pay back in 2 to 3 years. The R & D department says the estimated investment is \$100 million.
The Question(s):
What is the potential market in the US? How would you estimate the percent of market to install the device?
The Solution
Desired Framework: [Check all that apply.]
Cost-Revenue and Profitability The 4 P's of Marketing
The 3 C's Value Chain Analysis
Porter's 5 Forces Microeconomic Analysis
Internal-External Factors Other
Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]
(1) hypothesis: residential market. There are 50 million houses in the US = potential market size. NPV analysis looks good: estimating a 10% margin on the product, 50*500 = \$25 B!!! This looks even too good to be true. (2) we should run a market survey
Further facts by interviewer: A survey shows 30% of homeowners are interested. How do we test this?
Recommendations: 1) pre-order. This is risky since this would be expensive and would require a small sample (big confidence error) 2) look at similar energy saving devices (new refrigerators, showerheads, etc.) see what is the percentage of people who actually bought it after showing interest.
The student was then told that people don't buy energy saving devices. They would rather spend their money some other way. Market therefore is small and the project was stopped.



Wrap-up / Recommendations for client and additional information: [Sum it all up!]

The potential market is too small. Right now, we should advise the client not to invest. These kinds of products require an important word of mouth and the company must be ready either to spend a lot on advertising or to have a long payback period. The other solution is to spend more on R&D to decrease the investment and the price billed to the customer.



Fir	se No.: MARKET3 m: pe of Case: Brain Teaser (Why are manhole covers round?) X Market Sizing (How attractive is the market for fire trucks?)
Ini	tial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]
	ar client makes pumps for fire trucks and wants to know if they should expand manufacturing pacity.
Th	e Question(s):
Wl	nat is the market for fire trucks in the US?
	The Solution
De	sired Framework: [Check all that apply.] Cost-Revenue and Profitability The 4 P's of Marketing Value Chain Analysis Porter's 5 Forces Internal-External Factors Other
Ou	tline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]
1.	I started by assuming that 10,000 people are served by each fire station and that there are two trucks per station. Therefore, one fire truck serves 5,000 people.
2.	Since there are currently 250 million people in the U.S. (I used easy, round numbers), there is a current stock of 50,000 fire trucks in the U.S. (250,000,000 \div 5,000 = 50,000)
3.	I then assumed that fire trucks have a useful life of 25 years. So in any one year 2,000 fire trucks need to be replaced. $(50,000 \div 25 = 2,000)$
4.	I then added in the new fire trucks needed to serve the needs of a growing population. I assumed the U.S. population grows 1% annually, or by 2.5 million people per year. Therefore, 500 new fire trucks are needed each year in addition to the 2,000 replacement trucks.

Wrap-up / Recommendations for client and additional information: [Sum it all up!]

The total market is 2,500 fire trucks per year.

 $(2,500,000 \div 5,000 = 500)$

We then discussed whether the pump company should make commodity pumps for everyone (not a good idea, because they have a small shop and have specialized in fire truck pumps). I suggested that the pump company could expand into fire hose fitting or perhaps even hoses because these things fit their marketing channel and expertise.



Additional information that might be useful to your fellow Sloanies:

The interviewer corrected me when I tried to use 275 million people for the U.S. population. Keep the numbers **real simple** when you do these types of problems!

Operations

Consulting Case Interview Question

Case No.: OPS1 Firm: AT Kearney
Type of Case: Brain Teaser (Why are manhole covers round?) Market Sizing (How attractive is the market for fire trucks?) X Operations (Our client's profits are down. Why?) Declining Profits Other
X Marketing Problems Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem.
Provide sufficient information so the case can be adequately understood!]
Your client is a major OEM auto manufacturer in the US. They are extremely vertically integrated, and the client has a large number of nameplates that it fears are cannibalizing their own products.
The Question(s):
What do you propose they do?
Suggested Solution
Desired Framework: [Check all that apply.]
Cost-Revenue and Profitability X The 4 P's of Marketing
X The 3 C's Value Chain Analysis
Porter's 5 Forces Microeconomic Analysis
Internal-External Factors Other
Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]
I proposed that we look at three things: 1) the <i>competitive</i> landscape in each of the segments, 2) the <i>customer</i> segments and how our vehicles are positioned in these segments, 3) our <i>cost</i> position, and whether or not it can be improved through a portfolio rationalization.
1) Competitive landscape Q: "How competitive is each segment? Are we competing against ourselves in some segments?" A: "Yes; competition is intense in each segment. Our individual products compete against our own products and those of our competitors. However, the relative competition differs for each segment."
[As a follow-on comment, I added that I would want to further analyze the segments, in order to determine what the competition is and how these vehicles are positioned. This could lead to



information regarding which segments we would want to target.]

2). Customer segments and product positioning

The first piece of analysis that I did for the customer segments and product positioning was to draw a number of 2 X 2 matrices with a number of different attributes (speed, price, fuel efficiency, safety, etc.). Once I did this, I hypothesized that there were *more than one product in each of the segments*. I highlighted this as a serious problem. I mentioned that this might have happened because through the evolution of the company, and that it may have been a combination of a number of formerly independent brands. The main problem with this is that the consumer may be having tremendous difficulty in differentiating the brands. I theorized that therefore some automobile models might still be around because they always have been, without much thought about optimizing the portfolio to maximize company profits. Once I analyzed this, I proposed two ways to eliminate models that overlapped within the same segments:

-kill one of the models/brands, leaving behind the more profitable brand -keep both models/brands, but invest in advertising and product improvements such that consumers would be able to differentiate the two and thus place the second vehicle into a different segment

I mentioned that this second option might be difficult, as there is significant inertia in changing people's minds about a brand that has been a certain type of vehicle for a very long time. I suggested that perhaps the best way to do this would be to keep the most profitable vehicles in each segment that we are in, and eliminate duplicate brands.

3) Costs

The consolidation of models could lead to significant cost savings, as fewer number of models (with greater volume of each) will lead to greater scale efficiencies in purchasing, production, engineering, advertising, etc.

Wrap-up / Recommendations for client: [Sum it all up!]

Get rid of competing models in the same segment in order to better serve customer segments, reduce costs and reduce competition.

Desired Answer / Blinding Insights / Twists and Turns (if any):

The use of matrices was a hit!



Firm: Mitchell Madison	
Type of Case:	
Brain Teaser (Why are manhole covers re Market Sizing (How attractive is the mark X Operations (Our client's profits are down. X Declining Profits Marketing Problems	ret for fire trucks?)
Initial Facts offered by interviewer: [Please relate the facts the interviewer Provide sufficient information so the case can be adequately understoon	
You are a new consultant and your managing partner has just go CEO of a hospital is concerned about: 1. declining profits, 2. falling revenues, and 3. rising costs at her hospital.	iven you the following task: The
The Question(s):	
The partner of your firm wants YOU to prepare the proposal the retain your firm's consulting services. Your managing partner is issues and you have ten minutes to query him for information to another client engagement. How would you structure this probask of him?	s the resident expert on healthcare perfore he departs to London for
Suggested Solution	n
Desired Framework: [Check all that apply.] _X Cost-Revenue and Profitability	The 4 P's of Marketing
Porter's 5 Forces	Value Chain Analysis Microeconomic Analysis Other
Porter's 5 Forces	Value Chain Analysis Microeconomic Analysis Other al information divulged,



General:

Q: "How long has the hospital been experiencing profitability problems?"

A: "Five years."

1) Costs:

Q: "There are fixed and variable costs. What is the proportion of each for the hospital?"

A: "30% Fixed Costs (FC) and 70% Variable Costs (VC)."

Q: "What are the key components of FC and how have FC changed over the past five years?"

A: "Buildings and Equipment are the main components of FC; FC have been constant over the past five years."

Q: "What are key components of VC and how have they been changing over the past five years?"

A: "Staff and Direct Patient VC's are the key components; staff salaries represent 50% of total costs (TC) while direct patient VC's represent 20% of TC. Patient costs have been constant with inflation for the past five years while staff costs have increased 10% during the same period.

Q: "What do you mean by "Direct Patient VCs?"

A: "Medications and supplies needed to provide patient care."

Q: "Do you know what factors have been causing staff costs to rise?"

A: "Hiring has been increasing and new hires are more expensive. Due to the increased use of technology in patient care, which requires more skill and specialized training, we have to pay new hires higher salaries."

[My conclusion: staffing cost per patient is rising.]

Q: "What happens to the old (less skilled) hires? Has the hospital laid them off?"

A: "No."

[My conclusion: old hires just stay on doing less productive work and the hospital divides all of the work to be done over the total workforce, so productivity per worker is lower. Also, the number of paid staff per patient is increasing.]

Q: "Do salaries of the old hires increase with tenure, despite their lack of specialized training?"

A: "Yes."

[My conclusion: staffing salaries (and hence costs) are rising for two reasons: one is for the genuine need for more skilled labor, the second is because salary is being increased for tenured, unproductive employees.]

2) Revenues:

Q: "What is happening to price?"

A: "It has been steady for the past five years."



Q: "How can revenues be declining if patient days (volume) and price have been steady? Are there other revenue components I have not considered?"

A: "No. The price billed has remained steady but the actual price we receive has been declining every year."

Q: "Why has price received been declining? Who is not paying, or specifically, what is the customer mix?

A: "Customer mix and the amount of price paid for each segment is as follows:"

Customer Type	Private Individuals	Indigent Poor	HMO's	Govt. (Medicare, CHAMPUS, etc.)
Percent-of-Price-Paid	100%	0%	70%	60%

Q: "What is the proportion of each customer type and how has that proportion shifted over the past five years?"

A: "Here are the shifts:"

Customer Type	Private Individuals	Indigent Poor	HMO's	Govt. (Medicare, CHAMPUS, etc.)
Percent of Price Paid	100%	0%	70%	60%
Proportion of Customer	20%	10%	35%	35%
Base 5 Yrs Ago				
Proportion of Customer	10%	10%	40%	40%
Base Today				

[My conclusion: customer mix has been shifting away from full paying customers and toward HMOs and Government programs, that pay a lower percentage of billed price. This is causing an effective decline in price even though the hospital's billed price has remained constant.]

Q: "Can we somehow modify this mix in our favor?"

A: "The hospital does deny care to patients under HMOs with the lowest reimbursement rates; we send those patients to other hospitals. We also ask some patients to subsidize their own care, or we double bill, to both their Medicare and HMO providers, for example. But HMOs are catching on and finding ways around this strategy."

At this point I began making some recommendations about pricing or customer strategies to improve revenues. The interviewer reminded me that point of the case was to develop a proposal, not to solve the problem. So, I shifted to summarizing my key points:

Wrap-up / Recommendations for client: [Sum it all up!]

My summary points are as follows:

• Assume that the trend toward more HMO patients and fewer full-paying patients is a given, and beyond our control for now.



- Then, one goal is to make more rational revenue estimates based on actual price received rather than price billed. This will let the hospital budget against expected rather than desired revenues. These changes will help the hospital project more realistic profit margins.
- Another key issue is to adjust cost structure by 1) laying off unproductive employees (using separation and/or early retirement incentives) and 2) getting greater productivity out of our higher skilled, more costly staff. This will help boost profit margins.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Remember what developing a proposal entails; it is not cracking the case, but finding the major issues and developing some preliminary hypotheses.



Case No.: OPS3 Firm: BCG Type of Case:	
Brain Teaser (Why are manhole covers	round?)
Market Sizing (How attractive is the man	•
X Operations (Our client's profits are down	
X Declining Profits X Marketing Problems	Other
ividing i Toblettis	
Initial Facts offered by interviewer: [Please relate the facts the interv Provide sufficient information so the case can be adequately understood	
The client is a high tech company that manufactures crystal gift is growing at 3% a year yet the client is experiencing declining	•
The Question(s):	
Why is market share declining? What can we do about it?	
Suggested Solution	on
Desired Framework: [Check all that apply.]	
	The 4 P's of Marketing
	Value Chain Analysis
	Microeconomic Analysis
	Other
Outline of Your Answer - Important questions asked, addition assumptions, and logic: [Walk us through how you arrived at	
I started with the 3 C's: Company (Cost) Q: "What is the cost structure for the crystal? Is it more expert A: Yes. The client's crystal giftware costs much more than context Each piece is unique. The competitors' is all machine-made. A difference between hand- and machine-made, but a layperson of scale when the handmade crystal is mass-produced.	mpetitors' because it is handmade. person who knows crystal can tell the
I switched to the 2nd "C": Customer Q: "Who buys handmade crystal? What do the customers like A: There are 3 types of customers: Individualists - Our customers. They want a unique pro Aspirers - They buy crystal giftware for its brand name Pragmatists - They shop for price and function.	oduct.

I now wanted to see where the crystal is sold so I told the interviewer that I wanted to look more deeply into how the crystal is sold. Switch to 4 P's: Place



Q: "Where is our client's crystal sold? Where do Individualists shop?"

A: The client sells the crystal in 3 places:

Department Stores - Growing in volume but decreasing in share Own Stores - Stagnant sales

Mail-Order Catalog - Stagnant Sales

Individualists do not shop for handmade crystal in Department Stores! They desire the exclusivity of the brand and the art.

This was a major insight. The client changed strategy a few years back: To increase volume they started selling in department stores. Problems with this strategy were:

- 1. The client's crystal was much more expensive, yet was placed on store shelves next to cheaper but not visibly different competitor crystal,
- 2. Individualists don't shop in department stores, and
- 3. Department store sales people were incapable of selling it to others types of customers.

Wrap-up / Recommendations for client: [Sum it all up!]

I recommended that the client:

- 1. Withdraw the product from department stores and concentrate on own stores.
- 2. Since the aspirers are a very small but specific demographic group, I suggested a database marketing initiative to target them through mailings to either come to the store or order from the catalog.

Desired Answer / Blinding Insights / Twists and Turns (if any):

This is what the consultants recommended!

The key was to ask about the product and how it differed from competitors' products, and ask how the customers differed. This leads you to the Placement problem!

Additional information that might be useful to your fellow Sloanies:



Case No.: OPS4			
Firm: Renaissance So	lutions		
Type of Case:	Brain Teaser (Why are manhole	covers roun	nd2)
	Market Sizing (How attractive is		
X	Operations (Our client's profits a		
	X Declining Profits		Other
	Marketing Problems		
<u> X</u>	Strategy (Should our client enter	the beer bro	ewing industry? If so, how?)
	New Product Introduction		Competitive Response
	New Market		Response to Changing Environ.
	Merger or Acquisition		Other
<u>X</u>	Other Team dynamics/client rel	ations	
	by interviewer: [Please relate the facts the information so the case can be adequately		r gave to set up the question/problem.
address the following	The senior partner wants you to g client problem: your client is VP	of Custom	er Service and her objectives are
to decrease costs, inc	rease revenues, and improve custo	iller reteilti	O11.
The Question(s):			
How would you appr	roach this problem and how would	l you organ	ize your team?
	Suggested Se	olution	
Desired Framework:	[Check all that apply]		
	Cost-Revenue and Profitability	The	e 4 P's of Marketing
	The 3 C's		ue Chain Analysis
	Porter's 5 Forces		roeconomic Analysis
	_ Internal-External Factors	X Oth	•
	ver - Important questions asked, a , and logic: [Walk us through how you a		<u> </u>
I asked the following	clarification questions:		
Q: "Do you want me A: "Either- it does n	to address team issues or problen ot matter."	n approach	first?"
-	ypes of telecommunications servic some local and wireless; it also pla	-	



Q: "Can I select/recruit my team?"

A: "No. Your team has already been selected for you."

I first tackled the problem approach, and then turned to the team issues.

1) Problem Approach:

First, I would meet with the VP at the client to gain more information on the client's:

- Profitability and revenues over the last few years
- Key cost drivers of business for
- Customer retention rates over last few years
- Key client contacts and content experts, with whom my team will be partnering

Using this information, as well as industry or competitive analyses for profitability, revenues, costs and customer retention, I would generate hypotheses as to how the company could reduce its costs, increase revenues and improve customer retention.

Next, I would focus on the following more specific issues related to customer service:

- Determine why the client's Customer Service Center is losing customers; for example, organize focus groups and/or telephone surveys with those customers that have recently terminated their business with the client, in order to identify key performance issues that caused them to leave.
- Determine what existing customers value most about customer service. Survey current
 customers to identify the products and services they value highly, and determine the
 relative importance of each. Then determine how the client's Customer Service
 Center compares or performs for each of these criteria (e.g. create a relative
 importance-performance matrix).
- Focus on improving key performance drivers in order to improve customer service. In particular, focus on those performance criteria weighted as most important by customers, and then those criteria where this firm ranks lowest (in other words, go for "quick hits").
- Identify the main customer service problems and feedback loops with other parts of the firms (e.g., sales representatives do not receive timely information on new product offerings, so need to establish better communication links between sales and marketing departments).
- Integrate systems and IT to "enable" or streamline key business processes. Goal should be to reduce costs and to enhance service.

2) Team Organization:

I would organize my team around the key objectives outlined above:

- Divide the work based on the objectives outlined above.
- Identify the following:
 - 1. Skill sets/experience/backgrounds of team members.
 - 2. Individual preferences for specific projects/work streams.
 - 3. Best fit between skill sets, individual preferences and work to be done.
- Forge relationship between my consultant team and the client team members.



- Identify the following with the joint consultant-client team:
 - -cross linkages between work processes,
 - (i.e., how teams will interact, what roles are),
 - -establish joint work plan,
 - -identify key deliverables and appropriate deadlines

Wrap-up / Recommendations for client: [Sum it all up!]

Identify the high-impact drivers of revenues, costs and customer retention.

Develop strategies for the client to improve these performance drivers.

Dedicate significant effort to the team's effectiveness through careful planning and execution of client and consultant team tasks, processes and communications.

Desired Answer / Blinding Insights / Twists and Turns (if any):

This case was testing not only my problem-solving abilities, but also my team and leadership abilities. It is important to think both strategically and organizationally/tactically.

Case No.: OPS 5		
Firm: Mercer		
Type of Case:		
<u> </u>	Operations (Our client's profits are down.	Why?)
	Declining Profits Marketing Problems	Other

Initial Facts offered by interviewer: [This is a very long case initially!]

The client is a \$1B European company with 10 manufacturing sites throughout Europe. One of its measures of performance is "return on net asset", and right now the company would like to increase this measure from 17% to 22%. Its various products include thermostats, room controls, switches for microcomputers, and other piece parts for assembly. The channels that the company uses are the following:

- wholesalers (i.e., local mom and pops for do-it-yourself home projects)
- outlets (who sell to contractors)
- construction companies (used mostly for hotels and restaurants)
- OEM's (including switches)
- manufacturing companies (used for control processes, refineries)

The Question(s):

How should the client increase its "return on net asset" by 5%, from 17% to 22%?

Suggested Solution			
Desired Framework:	[Check all that apply.]		
	Cost-Revenue and Profitability		The 4 P's of Marketing
	The 3 C's		Value Chain Analysis
_	Porter's 5 Forces		Microeconomic Analysis
<u> </u>	Internal-External Factors		Other

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

I started with a market overview, then moved to the product line, and then the three C's: Market Overview Q: "What does the market look like?"

A: Every family of products that the client offers is its own market, but nevertheless, each is experiencing average growth; they are relatively mature markets. The client has two primary competitors.

I switched to the company's product line:



Q: "Tell me more about the product line. How are they different from the competition? Is the range of products appropriate for the market? Are all of them profitable? Is the product range too broad, or too narrow?"

A: The products do not differ very much from the competition. Some products are more advanced than others; but they are all high-quality products. The mix seems to be appropriate- we make margins on all of our products, and the range seems to be what the market wants. However, what does differentiate the client from its competitors is the client's service- it focuses on quick delivery. The client guarantees that orders arrive within 24-48 hours.

I now wanted to find out more about the quick delivery:

Q: "How is the quick delivery operation administered? Where are the facilities for delivery vs. production?"

A: The client's ten production facilities are in Germany, Scotland, France and Switzerland. Anyone of these manufacturing plants delivers all over Europe. (The client just recently focused its plant operations to achieve economies of scale.) When products are manufactured, they are delivered to local affiliates, which store the inventory at sites closer to the customers. This allows the client to offer quick delivery despite highly variable demand. Unfortunately, even after the recent focusing of plant operations, the company has not seen an increase in market share. Assume for now that the client cannot achieve additional profits by further consolidating its production facilities.

I switched back to my original structure of the three C's: company/cost

Q: "What are the costs associated with providing the quick delivery?"

A: The operating costs are actually not a big impact on the client's cost structure. What is important, though, is the cost of holding stock at the local affiliates: the working capital tied up at these sites is estimated at \$300 million.

Next I moved to competition:

Q: "Did competitors provide these services? How did their costs compare?"

A: "We don't have exact information on the competition; the client believes that it is spending more than others due to this working capital issue."

I finally arrived at customers:

Q: "What are the customer needs and preferences? How highly do they value the quick delivery?" A: Through a targeted analysis, the client determined that customers were willing to give up time on delivery-- the most important thing to them was consistency of delivery, rather than speed alone. Customers are willing to wait more like a week or so if they know it is going to arrive on time.

Aaah! The client was providing an expensive service that was not highly valued by the customer. Problems with this strategy were:

- 1. Working capital/inventory that was tied up was very costly
- 2. Competitors did not have this cost

Wrap-up / Recommendations for client: [Sum it all up!]

I recommended that the client:

- 1. Change its delivery policy to 7 to 10 days instead of 2-3
- 2. Centralize delivery by reducing the number of local stock affiliates
- 3. Reduce costs associated with working capital levels



Desired Answer / Blinding Insights / Twists and Turns (if any):

This is basically what the client ended up doing, as per the consultant's recommendations.

It turned out that the client saved about \$200 million in working capital. The company saved 10% of total assets by reducing its stock sites from 10 to 5.

Additional information that might be useful to your fellow Sloanies:

Note that you should not get caught up with the original measure of an increase of 5% on "return on net assets"; I dug into the issue of the quick delivery/costs, as opposed to doing a detailed quantitative analysis.



Case No.: OPS6 Firm: Type of Case:	
Brain Teaser (Why are manhole of Market Sizing (How attractive is the X Operations (Our client's profits are X Declining Profits X Marketing Problems	he market for fire trucks?)
Initial Facts offered by interviewer:	
You are consulting to an investment management boution minimum of \$1,000,000. This money will be invested by stocks and bonds such that the portfolio created is in line they charged for portfolio management was 1 basis points.	y the client's personal portfolio manager in the with the client's personal goals. The price
The Question(s):	
The firm recently benchmarked other boutiques and for competition. What should the investment management	± *
Suggested So	lution
Desired Framework: [Check all that apply.]	
X Cost-Revenue and Profitability	The 4 P's of Marketing
The 3 C's	Value Chain Analysis
Porter's 5 Forces	Microeconomic Analysis
Internal-External Factors	Other
Outline of Your Answer - Important questions asked, as assumptions, and logic: [Walk us through how you ar	
It is OK to know nothing about investment management, go ahead and way through and get stuck along the way!) Q: "What is a basis point?" A: One basis point = 1/100% of the invested amount.	ask relevant questions (its not a good idea, to BS your
Q: "How do boutiques compete?" A: Level of service, performance, some on price.	
The basic profitability equation is helpful here: Price * Volume — Costs = Profit	
I structured my questions around this equation.	
Q: "How does our client's level of service, performance	and price stack up versus the competition?"



A: Our service and performance is comparable to the competition, but their price is was lower than the competition.

Q: "How do our costs compare to the competition?"

A: The key components of the cost structure are real estate, technology costs, and salaries; they are all in line with the competition.

Q: "What is our investment base relative to the competition?"

A: The investment base is comparable to other boutiques, but magnitudes smaller than the big investment firms.

Q: "What would it take to increase our investment base?"

A: You could probably marginally increase your investment base without much investment, but to significantly increase it you would have to invest significantly (hire experienced portfolio managers away from big firms, increase advertising, etc.)

Wrap-up / Recommendations for client:

After exploring all of the angles of the profitability equation, I concluded that raising our price (at least to competitive levels) would positively affect our bottom line. I learned that a price increase would not negatively impact our investment base.



Case No.: OPS7 Firm:	
Type of Case:	
Brain Teaser (Why are manhole cov	•
Market Sizing (How attractive is the	, , , , , , , , , , , , , , , , , , ,
X Operations (Our client's profits are d X Declining Profits	Own. wny?) Other
X Marketing Problems	Oulei
Initial Facts offered by interviewer: [Please relate the facts the interview of the case can be adequately under	
A chemical company's profits have been falling recently.	
The Question(s):	
How would you advise the company to improve profits?	
The Solution	1
Desired Framework: [Check all that apply.]	
X Cost-Revenue and Profitability	The 4 P's of Marketing
X The 3 C's	Value Chain Analysis
Porter's 5 Forces	Microeconomic Analysis
Internal-External Factors	Other
Outline of Your Answer - Important questions asked, addi assumptions, and logic: [Walk us through how you arrive	
I started with a cost-revenue framework. Q: "You mentioned that profits have been falling. Have out A: No. Our costs have been constant.	ur costs increased lately?"
Okay. Costs seemed to be a dead end. Let's switch to revenues. Q: "If there have been no changes in our costs lately, then decline in revenues. Does our company sell just one products. Multiple products. We sell generics and specialty drugs.	act or do we sell multiple products?"
Q: "And have we noticed a decline in revenues on both line A: Our competitors have cut prices on similar generics. W losing customers.	
Q: "Are we still profitable on the generics?" A: No. Our prices are below our costs on the generics. We economies of scale to match our competitors. As a result,	, ,



Q: "Are we profitable on the specialty drugs?"

A: Yes. Specialty drugs are highly profitable. Economies of scale are less important in driving down the costs of specialty drugs.

Wrap-up / Recommendations for client: [Sum it all up!]

I recommend that the client:

- 1. End production of the generic drugs.
- 2. Reorient or close the unprofitable generic-drug factories.
- 3. Concentrate efforts on profitable specialty markets, where economies of scale are not a factor. Reorient sales force; enhance distribution efforts for specialty drugs. Modify sales incentives to encourage sales of specialty drugs.

Desired Answer / Blinding Insights / Twists and Turns (if any):

The key was that the specialty drugs were profitable, while the generics were not. Therefore, stop producing the generics and focus on the specialty drugs.

Additional information that might be useful to your fellow Sloanies:



Case No.: OPS8 Firm:	
Type of Case: Brain Teaser (Why are manhole co	overs round?)
Market Sizing (How attractive is the	
X Operations (Our client's profits are	•
Declining Profits	X Other
Marketing Problems	
Initial Facts offered by interviewer: [Please relate the facts the Provide sufficient information so the case can be adequately un	
A Canadian timber company has hired you. The compantimber products (e.g., plywood, paper). They have been recompetitors and do not understand this phenomenon. Yes	naking more profits than their direct
The Question(s):	
Why have they been making extraordinary profits?	
The Solution	on
Desired Framework: [Check all that apply.]	
X Cost-Revenue and Profitability	The 4 P's of Marketing
X The 3 C's	X Value Chain Analysis
Porter's 5 Forces	Microeconomic Analysis
Internal-External Factors	Other
Outline of Your Answer - Important questions asked, ade assumptions, and logic: [Walk us through how you arrive	
I started with a profitability framework. Q: "You say our client in making more profits. Are we al A: Yes.	so making higher margins?"
If our margins are higher, then, for each item sold, our average price average total costs are lower than those of our competitors. Q: "In that case, let's focus on prices. How high are our propertions?" A: What do you think?	
Q: "Timber products are commodity goods. I assume, the of our competitors?" A: That's a fair assumption.	en, that our prices are comparable to those
Let's shift to costs.	



Q: "Moving over to the cost side, how do our costs compare to those of our competitors?" A: Our costs are lower.

Q: "Let's explore variable costs. Are our labor costs the same?"

A: The hourly rate that workers are paid is comparable throughout the industry. Assume that labor skills are comparable, as well.

Q: "And raw material costs?"

A: In Canada, the timber companies own their own natural resources (forests). Let's assume that the costs of growing and cutting down any given tree are comparable throughout the industry.

Q: "How do our transportation costs compare?"

A: There is not much of a transportation difference between the forests, the mills, and the point of sales.

Q: "Let's look at fixed costs..."

A: "Assume that we use the same equipment as our competitors."

Q: "From what you've said, it seems like the cost of processing any given tree would be the same for us as they would be for our competitors. Is that correct?"

A: That's a fair assessment.

Pull back and look at the big picture.

Q: "If our prices on finished goods are the same, and our processing costs per tree are comparable, then the only way we could be making superior profits would be if our output per tree were higher than that of our competitors. Is that the case?"

A: Yes. On average, our timber company has thicker trees in their forests than their competitors. They can get a higher yield for the same amount of processing time, meaning a lower processing cost per unit.

Wrap-up / Recommendations for client: [Sum it all up!]

Based on what you've said, then, our client seems to be experiencing above average profits because it enjoys a lower processing cost per unit. The next question it might explore is whether that is a sustainable competitive advantage.

Desired Answer / Blinding Insights / Twists and Turns (if any):

The timber industry produces commodity goods. You may want to think about the steps in the value chain and analyze differences between competitors at each step.

Obviously, the difference in yield per tree is the "blinding insight" for this case. This case is harder than most, not because it is particularly difficult, but rather, because you figuring out that the "blinding insight" is really a hit-or-miss proposition.

Additional information that might be useful to your fellow Sloanies:



Case No.: OPS9 Firm:		
Type of Case:		
	Brain Teaser (Why are manhole co	vers round?)
	Market Sizing (How attractive is the	e market for fire trucks?)
, 	Operations (Our client's profits are	down. Why?)
<u> </u>	Declining Profits Marketing Problems	_ Other

Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]

A bank has a loan-issuing operation that requires the following steps:

- The loan application is generated at a branch office.
- A complete applicant background check is performed at the branch office.
- The application and background check are sent to a loan processing office.
- The background check is updated and verified (this takes much less time than original check).
- The loan is either approved or denied.

The bank is considering getting rid of the first background check and only relying on the loan processor's check to speed the process. If the loan processor does the whole check with the proposed new software system, the check takes one additional hour per application at the processor's office.

- The average profit margin for a "good" loan (i.e., loans which are repaid) is \$0.20 per dollar loaned.
- The average marginal loss for a "bad" loan (i.e., loans which are not repaid) is \$0.50 per dollar loaned.
- 50% of the applicants pass the first background check.
- 90% pass the second background check.

The Question(s):

Should the bank implement the revised system?

The Solution Desired Framework: [Check all that apply.] X Cost-Revenue and Profitability The 4 P's of Marketing The 3 C's Value Chain Analysis

Microeconomic Analysis

Other

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

Q: "What I would like to do is calculate the annual profits of the original system and compare those to the annual profits of the proposed systems. With that in mind, how many loan applications are filled out per year..."

What followed were a series of questions designed to help calculate the annual profits of the two systems. For the sake of brevity, the actual questions have been left out. The following facts, however, were revealed:

General

1. Number of loan applicants is only 1,000 per year

Porter's 5 Forces

Internal-External Factors

- 2. Average value per loan is \$10,000
- 3. Given: Average profit margin for a "good" loan: \$0.20 per dollar loaned
- 4. Given: Average marginal loss for a "bad" loan: \$0.50 per dollar loaned

Original system

- 1. Default rate under the original system: 10%
- 2. Processing costs under the original system: \$100/application
- 3. Given: Acceptance rate under the original system: 45%
 - 50% of the applicants pass the first background check
 - 90% pass the second background check

Proposed system

- 1. Default rate under the proposed system: 5% (estimated)
- 2. Processing costs under the proposed system: \$60/hour
- 3. Processing time per application under the proposed system: 1 hr
- 4. Expected acceptance rate under the proposed system: 40%
- 5. Additional costs for the new program: \$50/application

Based on the information provided, the following profit calculations could be made.

Original System:

- Revenues:
 - 1. Dollars loaned: 1000 applications * 45% loans per application * \$10,000 per loan = \$4,500,000
 - 2. Revenues per dollar loaned: [90% Good * \$0.20 10% Bad * \$0.50] = \$0.13
 - 3. Total revenues: \$4,500,000 * 0.13 = \$585,000



- Costs: \$100 processing fee per application * 1000 applications = \$100,000 Profit: \$585,000 \$100,000 = \$485,000 Proposed System:
- Revenues:
- 1. Dollars loaned: 1000 applications * 40% loans per application * \$10,000 per loan = \$4,000,000
- 2. Revenues per dollar loaned: [95% Good * \$0.20 5% Bad * \$0.50] = \$0.165
- 3. Total revenues: \$4,000,000 * 0.165 = \$660,000
- Costs:
- 1. Processing fee: \$60/hour * 1 hr/application * 1000 applications = \$60,000
- 2. Additional costs: \$50/application * 1000 applications = \$50,000
- 3. Total costs: \$110,000
- Profit: \$660,000 \$110,000 = \$550,000

Wrap-up / Recommendations for client: [Sum it all up!]

At first glance, it seems that the bank should progress with the new system. There are additional costs, however, that the bank should consider, such as costs associated with retraining employees, system installation costs, and so on. That said, there might be additional benefits, as well. For example, a faster loan processing speed may help the bank get more business.

Desired Answer / Blinding Insights / Twists and Turns (if any):

This case obviously tests your analytical skills. Do not attempt to answer this question without working through the calculations on a piece of paper. If your math skills are poor, this strategy could easily backfire, making you look stupid. This case is relatively straightforward, but make sure that you have all the information necessary to develop an answer.

Additional information that might be useful to your fellow Sloanies:

Case No.: OPS10	
Firm: Bain & Co Type of Case:	
Brain Teaser (Why are manhole of Market Sizing (How attractive is the X Operations (Our client's profits are X Declining Profits X Marketing Problems	he market for fire trucks?)
Initial Facts offered by interviewer: [Please relate the facts the Provide sufficient information so the case can be adequately under the case can be adequated by the case can be adequated b	
The client is a major department store chain. Sales have been	declining in the last months.
The Question(s):	
You have a couple of weeks to come up with a hypothesis. H would you do to understand the root causes of flat sales in a s	
The Soluti	on
Desired Framework: [Check all that apply.] X Cost-Revenue and Profitability X The 3 C's Porter's 5 Forces Internal-External Factors	X The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
Outline of Your Answer - Important questions asked, as assumptions, and logic: [Walk us through how you arrived at you	dditional information divulged, our answer in detail.]
Assuming that you have a limited period of time to assess comprehensive market analysis, or benchmarking exercise be hands-on.	ž ,
Sales can be defined as # of customers per day * sales per each of the factors depends on.	er customer. The next step is to analyze what
 Number of customers per day (Stand in front of the shop and count the people getting) This depends on several factors: location of the stores and therefore number of peop number of walk-ins, which is driven by attractivenes store's name, effectiveness of advertisement and procompetition in the area. proportion of visitors who actually buy something. 	ole passing by; as of the show window, reputation of the omotion campaigns, hours of operation,



- time it takes to make a purchase,
- marketing capabilities of sales people (how efficient they are in helping a customer to find what she wants or convince her that this is exactly what she wants),
- breadth of available product mix,
- match between the available price range and purchasing power of the store's dominant customer base.

The next step is to compare present performance with the past and understand which factors could have changed in the last month and thus affect sales. Among those are, for example, change in advertising and promotion policies, increased competition in the area, rotation in the sales personnel (new employees with little experience), change in the product mix or price range.

2) Sales per customer

If this number has changed, then you should analyze in depth why each customer buys fewer items or cheaper items. This can lead again to poor customer service or a wrong distribution of the goods inside the shop. At the same time decline in sales can be driven by macroeconomic factors such as general economic downturn.

Wrap-up / Recommendations for client: [Sum it all up!]

Perform the above analysis, and, once the root cause has been identified, move into a deeper analysis.



Case No.: OPS11
Firm: Andersen Consulting
Type of Case: Brain Teaser (Why are manhole covers round?)
Market Sizing (How attractive is the market for fire trucks?)
X Operations (Our client's profits are down. Why?)
Declining ProfitsX Other (declining sales)
Marketing Problems
Initial Facts offered by interviewer: [Please relate the facts the interviewer gave to set up the question/problem. Provide sufficient information so the case can be adequately understood!]
The client is a \$5B UK food retailer with a network of 900 stores, 10,000 sq. feet each. The client is experiencing a decline in sales and market share, which shrank from 45% to 35%.
The Question(s):
Why sales are declining and what can we do about it?
The Solution
Desired Framework: [Check all that apply.]
Cost-Revenue and Profitability X The 4 P's of Marketing
X The 3 C's Value Chain Analysis
Porter's 5 Forces Microeconomic Analysis
Internal-External Factors Other
<u> </u>
Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]
I started with the 1st "C": Company (Products, Costs)
Q: What are the product lines, their profitability, and changes over the last year? How do these products compare to the competitors? What is the cost structure, how has it changed and how it
compares to the competitors? What is the cost structure, now has it changed and now it
A: The client is a low-cost provider, selling simple food products, which are similar to the
competitors'. The profitability has not changed much across product lines, but sales across them
dropped. The cost structure is the same as competitors'. Cost is not an issue.
I switched to the 2 nd "C": Customer
Q: Who are the customers? What is the customer mix and how has it changed over the last year? A: The customers are price-sensitive people; 75% - low income, 25% - moderate income. Over the
last year we lost customers in both categories, but mostly in low income.
I switched to the 3 rd "C": Competitors
Q: How many competitors are in the market? What has changed over the last year?

A: There were two main competitors - a year ago, a third competitor came in.

Q: Since the customers are price-sensitive, I assume there is a difference in price of products that this competitor is offering. Is that a fair assumption?

A: Yes. The competitor offers private labels, which are cheaper than the brand name products that the client sells.

Q: Has the client considered introducing the private labels?

A: No, that would make a good recommendation.

Q: Are there any other differences between the client and the competitor? Do the stores look the same? Are they located in the same areas?

A: The stores looked differently. The client has warehouse style stores with the top shelves used for inventory. The competitors' stores look warmer and cozier with all shelves displaying different products. The competitor has fewer stores, but they are located in the same areas as the client's.

Q: Has the client considered redesigning the stores?

A: No, that would make another good recommendation.

Q: Are the client's stores equally profitable?

A: No. Some stores are more profitable than others are.

Q: What are the reasons for the difference? Are there any common trends among stores with low profitability and high profitability?

A: At this point the client does not know why there is a difference.

I recommended studying the reasons for the difference and if it's not possible to turn unprofitable stores around, close them and concentrate the resources on profitable ones.

Q: How does the client promote the stores? What are the most effective marketing techniques?

A: Client uses all kinds of promotions, but does not track how effective they are.

I recommended conducting customer survey and developing tracking system to concentrate on promotions that are most effective and eliminate the ineffective ones.

Wrap-up / Recommendations for client: [Sum it all up!]

- 1) Introduce private labels, which are cheaper than the brand name products.
- 2) Start with redesigning one store as pilot to assess increase in sales. Redesign others if the benefits outweigh costs.



- 3) Conduct a study evaluating the reasons for low profitability and possibly closing unprofitable stores. Study the costs to streamline business operations and pass savings to the customers.
- 4) Evaluate promotional activities, concentrate on the most effective, and eliminate ineffective.

Blinding insight

Profitability of 900 stores is different. It's not a coincidence that the competitor has fewer stores.



	No.: OPS12	
Firm: Type	of Case:	
- 7 -	Brain Teaser (Why are manhol	e covers round?)
	Market Sizing (How attractive is	
	Operations (Our client's profits	· ·
	Declining Profits Marketing Problems	Other
	<u>—</u>	
	I Facts offered by interviewer: [Please relate the fac on/problem. Provide sufficient information so the case can be a	
	s case the client of yours is a pharmacy retail chain. It are declining, although the market for this service is g	
The C	Question(s):	
	are asked to identify reasons for poor performance an ovements.	nd recommend steps for profitability
	The Solutio	on
Dosir	red Framework: [Check all that apply.]	
Desii	Cost-Revenue and	The 4 P's of Marketing
	Profitability	-
	The 3 C's	_ Value Chain Analysis
	Porter's 5 Forces	Microeconomic Analysis
	Internal-External Factors	Other
	ne of Your Answer - Important questions asked mptions, and logic: [Walk us through how you arrived a	
	oach: analyze reasons for sales decline, and then proceed n	
decrea	2 4 2	ins vost unarysis vo tuoning rousons for profits
Reve	nue side	
The f	following questions should be answered to under	estand why sales are declining.
>	Do fewer customers visit the pharmacy or the	y spend less per purchase?
>	Has the product mix changed in the past?	
>	How price sensitive are the customers?	
>	Is there an opportunity for segmentation?	
>	What has been happening with the pricing stra	ategy in the past?



- ➤ How consistent is performance across the stores within the chain? Are there "best performers" against whom we can benchmark and whose practices should be implemented in other stores as well?
- Has the number of competitors increased in the past? What are their pricing strategies?

Cost side

Decrease in sales is certainly one of the reasons for worsened profitability. To complete the picture, the costs have to be analyzed as well.

- ➤ Have our costs increased in the past?
- ➤ What cost components have caused this growth?
- ➤ How do different stores compare with each other in cost management?
- ➤ How do we perform relative to competition?

Wrap-up / Recommendations for client: [Sum it all up!]

In this case the key finding would be that there are opportunities for customers' segmentation: there are essential drugs that people use through the whole life and other items. It turns out that people are very price sensitive for the first category and less so for the second. Therefore the pharmacy should be pricing the first category very low to attract customers, but charge higher prices for other products.



Case No.: OPS13 Firm:		
Type of Case:		
		manhole covers round?)
	9 1	tractive is the market for fire trucks?) 's profits are down. Why?)
	Declining Profits	Other
	Marketing Problem	
	ed by interviewer: [Please relayide sufficient information so the case	ate the facts the interviewer gave to set up the se can be adequately understood!]
Our client is a mathree years.	nufacturer of specialty label	s. They have been losing money for the last
The Question(s):		
There are two que company stay in t	, ,	uickly improve profitability; (2) should the
	The S	olution
Dosirod Framowo	ork: [Check all that apply.]	
Desired Framewo	Cost-Revenue and	The 4 P's of Marketing
	Profitability	The 41 3 of Marketing
	The 3 C's	Value Chain Analysis
	Porter's 5 Forces	Microeconomic Analysis
	Internal-External Factors	Other
	nswer - Important question d logic: [Walk us through how you	s asked, additional information divulged, u arrived at your answer in detail.]
Let us start with p	profitability improvement.	
1. Let us look at r Revenue = numb	fitability means that either re	
What are the major (fixed).	,	abels? They are labor (variable) and artwork rage and have been constant over time.
- Fixed costs: sig	gnificant, therefore there are	significant economies of scale in this business.



Let us now understand whether this is a good industry to be in the long run. One of the approaches here can be to understand current industry structure and the trends.

Current structure:

Rivalry

The client company is the largest player in the market; other competitors are primarily "mom and pop" producers.

Customers

High-end cosmetic companies prepared to pay premium for the client's color matching ability.

Barriers to entry:

Low, competition may increase in the future.

Next issues to consider:

- is it a growing industry;
- how is competition likely to evolve;
- what capabilities are required to compete in the future and does the client company possess them;
- are substitutes likely to evolve (other materials, other technology);
- how powerful and concentrated are our suppliers;
- how high are the exit costs.

Wrap-up / Recommendations for client: [Sum it all up!]

The costs will be brought down if sales go up because of economies of scale.



Case No.: OPS14	
Firm:	
Type of Case:	novoro round?)
Brain Teaser <i>(Why are manhole o</i> Market Sizing <i>(How attractive is ti</i>	
X Operations (Our client's profits an	
Declining Profits	X Other (operations efficiency)
Marketing Problems	——— Care (operations smallers)
Initial Facts offered by interviewer: [Please relate the facts to Provide sufficient information so the case can be adequately to	
You are working for a bank that is facing problems with customers are complaining about long waits on the photoseparate accounts requiring multiple calls, etc. The custo at each individual branch.	ne, being transferred to multiple branches,
The Question(s):	
How customer service can be improved?	
The Soluti	on
Desired Framework: [Check all that apply.]	
Cost-Revenue and Profitability	The 4 P's of Marketing
The 3 C's	X Value Chain Analysis
Porter's 5 Forces	Microeconomic Analysis
Internal-External Factors	Other
Outline of Your Answer - Important questions asked, a assumptions, and logic: [Walk us through how you arrived at you	_
Start with diagnosis of the current operations: how each about, why did this mistake happen.	call is handled, what customers complain
Do benchmark analysis across the branches within the c Do the same analysis but benchmarking against the com- service. Benchmark against other industries, which are conducting	peting banks: how do they handle customer
Wrap-up / Recommendations for client: [Sum it all up!]	
The state of the s	



Case No.: OPS15	
Firm: McKinsey	
Type of Case:	
Brain Teaser (Why are manhole co	
Market Sizing (How attractive is the	e market for fire trucks?)
X Operations (Pricing)	011 (" " ")
Declining Profits	Other (operations efficiency)
Marketing Problems	
Initial Facts offered by interviewer: [Please, relate the facts the Provide sufficient information so the case can be adequately un	
Our client is a used car dealership whose business has be located in a low to middle-income area and in the past ha willing to pay 100% of the cost up-front or can achieve be client is considering offering loans to customers that the To be eligible for a loan customers must undergo a compaccurate). The credit check rates potential car buyers on a 0% chance of paying off the loan and 100 corresponds Each loan only lasts 1 year in which payments are made in 1 year's time. Buyers ultimately fall into two categories those that default. The Question(s): What should be the cutoff level where we decide to give	ve only sold cars to customers who are ank financing. In order to boost sales, our dealership itself will finance. elete credit check (which we assume to be a scale of 0 to 100, where 0 corresponds to to a 100% chance of paying the loan in full. monthly and the entire loan will be paid off s, those that pay off the loan entirely, and
What issues might cause you to alter this cutoff-level?	
The Solution	on
Desired Framework: [Check all that apply.]	
X Cost-Revenue and Profitability	The 4 P's of Marketing
The 3 C's	Value Chain Analysis
Porter's 5 Forces	Microeconomic Analysis
Internal-External Factors	Other
Additional Information for the Interviewer (not to be told	to interviewee unless asked)
Average cost of car to dealership: \$6,000 Average price of car sold to customer: \$7,000 Minimum down payment for all customers: \$1,000 Average loan defaulter makes three months of payments	_
Outline of Your Answer - Important questions asked, ad assumptions, and logic: [Walk us through how you arrived at you	



I did not really use a framework because this was more of a question of establishing where the breakeven marks would lie. I did all calculations on the average.

What is the average cost of each car and how much does our client sell them for?

The dealership's average cost per car is \$6,000. We sell them for an average of \$7,000.

What is the minimum down payment? Do all customers default at an amount relative to their credit report (i.e. a potential buyer with an 80 credit rating will pay the down-payment and 80% of the remaining loan)? How much to we make on the loans?

The minimum down payment is \$1,000 regardless of credit rating. The average default is after three months. Assume we make nothing on the loans; they are only used to entice in additional customers.

At this point, I stated to crank through some of the math.

We make only a profit margin of only \$1,000 on each car.

For this to be worthwhile we must make more on additional cars sold and paid for in full than what we lose in loan defaulters.

Average cost of car: \$6,000

Average defaulter pays: -\$1,000 (down-payment)

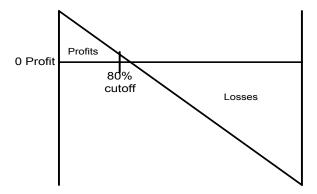
-\$1,500 (1/4 of total loan of \$6,000)

Total loss to the dealership for a default: \$3,500

This means that we need to have 4 good loans for every 1 loan to turn a profit/not lose money.

If 4/5 of loans must be good, then a credit rating of 80 should be our cutoff.

At this point I drew the following graph for the interviewer to illustrate my point and to discuss other issues to consider:



I would probably be tempted to raise the cutoff above 80, at least in the beginning. This is for two reasons- (1) We are not sure how successful our client will be with this process, so it would be better to start more conservatively and if successful, ramp up the operation.

(2) At the 80 cutoff we are working very hard for diminishing profits, where at the 90 cutoff the potential rewards are much higher.

Alternatives and other possible issues to consider:

- Another possible solution would be to lower the cutoff level for higher risk loans but raise the minimum down payment required. This would change our risk profile.
- Look at the cash flow situation of the client. If a few unexpected bad loans in a row would bankrupt our client, then we may want to raise the cutoff.
- Examine expected economic conditions looking forward. If we sense that the economy will be poor in the future, we also may want to increase the cutoff point.
- The use of warranties or add-ons, paid at the time of purchase, that force customers to pay more up-front would also allow us to lower the cutoff levels. For example, it we allow a customer to purchase a two-year warranty for \$1,000 that is paid for in full at the time of purchase, it reduces our overall risk exposure.



Strategy

Consulting Case Interview Question

	so, how?) New Product Introduction New Market Merger or Acquisition	enter the beer brewing industry? If Competitive Response Response to Changing Environ. Other
Initial Facts offer	ed by interviewer:	
The client is a Ca recently decided		ches. The research concerning the cost
recently decided to and vendors of cl The Question(s): How would you	to install ATM's in all of its branchoice has all been done. analyze the benefits from the AT	The research concerning the cost TM's, and what data would you need?
recently decided to and vendors of cl The Question(s): How would you	to install ATM's in all of its branchoice has all been done. analyze the benefits from the AT	TM's, and what data would you need?
recently decided to and vendors of classics. The Question(s): How would you Concentrate on the concentrate on the concentrate of the concentrate	to install ATM's in all of its branchoice has all been done. analyze the benefits from the AThe main issues.	TM's, and what data would you need?

I did a

The first C: company/cost

Q: "Are there cost savings associated with the use of ATM's? I assume that some of the tellers could be replaced, and possibly some of the branches consolidated. ATM's could allow some transactions to be processed more efficiently."



A: "Yes- 30% of tellers were redundant, and there is room for substantial savings by laying them off (salaries and benefits)."

Next I moved to competitors:

Q: "Are the competitors doing the same thing?"

A: "Yes. Three of the client's largest competitors have installed them in the last 2 days."

I finished the three C's with customers:

Q: "Do customers want the service? How do they value it? Also, does the bank see this as a way to get new customers or simply to keep existing customers?"

A: "In a recent survey, the bank determined that 20% of its current customers would never use an ATM, another 50% might use them, and the remaining 30% are so fed up that the bank does not have ATM's that they are about to leave the bank as customers."

I closed my analysis with a discussion of technology issues:

Q: "By using the technology, could related information be used to offer new products (i.e., creating a data base, market segmentation)? Are there new trends in the industry using ATM's to offer new products?"

A: "This is something the client would need to look into."

Wrap-up / Recommendations for client:

I summarized by saying that:

The bank had to act fast, given that its competitors are all quickly installing ATM's, and that some customers are about to pack up and leave. I highlighted the need to respond to both competitors AND customers.

I noted that it was also important to look at the segments of customers: were some of the longest-standing, high net-worth customers the ones who were about to leave? If so, then the issue is all the more time sensitive. In other words, beware of the different types of customers you have, and value those that are the most valuable.

There are real cost saving opportunities associated with the decision, too, as discussed above.

The bank could make use of the space left by laying off some tellers to produce additional revenues. New products, such as credit cards or investment related services, could be offered, or even less traditional banking items such as food/refreshments.

Desired Answer / Blinding Insights / Twists and Turns (if any):

The interviewer said that these were all central issues to the case. She mentioned as an aside that the bank had problems initially, because customers who originally said that they might use the ATM's ended up being very technology averse, and in fact did not like to use the ATM's. This meant that they needed to be encouraged to use them (advertisements, promotions, etc.)

Additional information that might be useful to your fellow Sloanies:



This was a good example of thinking outside of the box: the interviewer really liked my idea of putting in a refreshment stand in the bank (and it is actually being done by some California banks that are selling café lattes in the bank!).

Case No.: STRAT2		
Firm: Braxton Associates		
Type of Case:		
X Strateg	y (Should our client enter the	beer brewing industry? If so, how?)
	New Product Introduction	X Competitive Response
X	New Market	Response to Changing
		Environ.
	Merger or Acquisition	Other
Other		

Initial Facts offered by interviewer:

(There was a 1.5 page written case that I had to read. These case facts are just some of the notes I scribbled while reading it.)

GNC is a natural products manufacturer and supplier. Up until 1986, it was a discount provider of natural products such as vitamin, mineral and herbal supplements. Due to increasing price pressure from a variety of sources (grocery stores, drugstores, convenience stores, mass merchandisers/mail order houses, and independent suppliers), it decided in 1986 to move out of the discount segment and to become a specialty provider charging premium prices. In 1987, franchisers comprised 47% of outlets. Now, in 1994, the company has plans to expand the number of outlets by 25% in order to fuel growth. Today, the product line is as follows:

- Vitamin and mineral supplements (40% of sales)
- Sports, performance-enhancing food products (28%)
- Herbal supplements (10% of sales, but projected to grow 24% over the next three years)

In 1976, GNC was manufacturing none of its products, but by 1986, was manufacturing 65% of its product line. They see manufacturing as a key component of their success and future growth, because they have very cost-effective facilities. Notably, its manufacturing facility was at almost full capacity and the herbal supplements facility was operating at full capacity by 1994. Production (for herbals) recently expanded to 24-hours per day, seven days per week, in order to meet demand for GNC's supplements which used a unique gel cap packaging. GNC also has a significant R&D/new product development capability, and launched 113 new products in 1993.

The Question(s):

You are an outside director on GNC's board. At a recent board meeting, the CEO displayed a slide containing only this information: "2-year plan: Increase revenues 40% (20%/yr)." What additional information would you want to know, and what questions would you ask of the CEO?



Suggested Solution

Desired Framework:	[Check all that apply.]		
	Cost-Revenue and Profitability		The 4 P's of Marketing
	The 3 C's		Value Chain Analysis
	Porter's 5 Forces		Microeconomic
			Analysis
	Internal-External		Other
	Factors		
	wer - Important question gic: [Walk us through how yo		cional information divulged, nswer in detail.]
	g a particular frameworl ch the interviewer answ		th the following list of questions are the CEO:
Q: "Is this a sustaina A: "Only a two-year	ble growth level?" plan, so sustainability is	not really an iss	sue."
growth level is greated A: "Assume the follow there will be no charment."	er than its earnings/CFs owing: 1) all expansion v	can support?" vill be paid for u and 3) growth w	e over the next two years if this using cash from operations, 2) vill be realized via franchise
A: "GNC is bi-coast		h in sales is flat.	oes it plan to expand?" So, GNC needs to increase penetrating the mid-west and
full capacity (and bey A: "Assume GNC w to its current plant (e	yond full capacity for ou ill be able to expand cap e.g. no time lag for new es not yet operating 24-	r fastest growing acity by 1) additional construction to	iven that we are already at almost ag product)?" ing more and better equipment come on line) and 2) increasing So, manufacturing capacity is not
A: "Direct competiti		nd-pop stores w	d/or south?" while indirect competition will s a significant competitor for the
markets on the coast A: "Assume the dem	s? How would the marl	keting mix be d ces are close end	ough, and that no changes in



Q: "Where are GNC's manufacturing facilities located and how will GNC's transportation/ shipping costs change as they enter new markets?"

A: "Assume no major changes in costs."

After I suggested these questions, the interviewer asked me some additional questions:

The Additional Question(s):

1) "What are some of the pros and cons of company owned stores versus franchises?"

My solution was the following:

Cons of Franchises:

- Managing agency problems in some franchise outlets.
- Identifying and recruiting franchise owners with the "right" attitude and values for selling your product (e.g. Anita Roddick and the Body Shop).

Solutions: Benchmark ideal qualities and best practices among current franchisees; recruit against those criteria and create formal training for new franchisers.

Pros of Franchises:

- Profit motivation of the franchisees creates alignment of goals in non-transient locations.
 That is, desire for profits motivates franchisees to take good care of products, make appealing displays, and keep the place clean, etc.
- Less costly way to expand than making capital investments in many new company-owned stores.
- Shared risk GNC does not need to shoulder all of the risk in expanding because franchisee
 puts up some money and assumes much responsibility for operations and success of new
 store.
- 2) "What are the issues to consider in having mom-and-pop stores as your key competitor?"
 - mom-and-pops
 - have good access to local markets.
 - have loyal customers.
 - have deep knowledge about individual customer preferences.
 - are small, fragmented, dispersed, and have less total capital backing than larger firms.
- 3) "How can GNC get more growth out of its existing stores?"
 - Identify high margin products; rearrange floor display to give best access to those products.
 - Offer promos such as coupons for high margin products to grow demand for them.
 - Change sales help/staffing mix to give more/less customer service (more help for better service and thus more sales; less help to reduce labor costs. [However, excluding companyowned stores, labor costs are the franchisee's problem, and don't really impact GNC's margin on products supplied to the franchisee; so push for more sales help.]



- Longer or different hours to match customer-shopping schedules.
- Start a catalogue. Distribute via stores, Internet and/or mailing; this won't necessarily increase per store margins, but will increase overall product sales, which benefits GNC.

Wrap-up / Recommendations for client:

The key was to ask the right questions rather than to come up with an answer using a specific framework.

Case No.: STR. Firm:	AT3	
Type of Case:		
J.	Brain Teaser (Why are manhole co	
	Market Sizing (How attractive is th	
	Operations (Our client's profits are	
	Declining Profits Marketing Problems	Other
	X Strategy (Should our client enter the	ne heer hrewing industry? If so, how?)
		Competitive Response
	New Market	Response to Changing
		Environ.
	Merger or Acquisition	X Other
	Other	
	fered by interviewer:) has a web site that is basically set up just
for users to loo museum's reve	ok at. The head of the museum feels that	
The Question(s	s):	
What do you re	ecommend to the head of the museum?	
	Suggested So	lution
Desired Frame	work: [Check all that apply.]	
	Cost-Revenue and Profitability	The 4 P's of Marketing
	The 3 C's	Value Chain Analysis
	Porter's 5 Forces	Microeconomic Analysis
	Internal-External Factors	X Other
	r Answer - Important questions asked, acotions, and logic: [Walk us through how you arr	
that I would on	question asked how to increase revenues ally focus on revenues, and therefore I wou to this for their summer project).	(as opposed to profits), I started out saying ald not address costs (but suggested that
of gene revenue in existi	rating revenue. The logic behind this is the	ting products and services (i.e., an increase



I started out by first asking how the museum generates revenue currently:

Q: "How does the museum generate revenue currently?"

A: "Currently, the museum earns revenues from membership fees, entrance fees, catalog sales, and corporate sponsorship of blockbuster shows. Blockbuster shows are major art exhibitions that are sponsored by companies when the collections come to town. For example, a blockbuster show might be called the "US AIR" presentation of Monet's Garden at Giverny."

I then suggested that the museum do the following to use the web site to increase the revenue generated by these existing forms:

- Offer online catalog ordering via the web site. Currently, they do these sales of museum memorabilia and other gifts through the traditional gift shop at the museum and through mail-order catalogues. The web's easy access would allow customers who have never visited the museum to see and maybe order the gifts on-line. The museum could set it up such that a consumer could place an order, supply the credit card number, and the item could be sent out right away to whatever address the consumer wanted. The museum could negotiate a deal with Fed Ex to handle the deliveries. Of course we would have to actively educate the consumer as to the security of ordering through the web site, because there may be resistance in the market to giving out a credit card number on-line. The museum could guarantee security and back any fraud that might negatively affect our customers. The client could even advertise a little on the web site about what great gifts these souvenirs make. The special benefits include:
- more cost effective, since less overhead costs involved and fewer mistakes during order (because consumers enter the information directly)
- more convenient for customers, because they do not have to be in the store or have a catalog handy
- better service for customers, since gifts are ordered directly with faster turnaround
- Advertise the museum's regular and special events. In general, use the web site to advertise the museum's collections and services by providing photos and other information about art at the museum. Utilize this powerful and interactive form of communication! Provide a complete description of what the services include for current members. Use hotlinks from corporate sponsor company web pages (i.e., link from US AIR's home page), local and national tourist web pages (i.e., www.boston.com), and other sources to bring new customers to the web pages. The goal here is to increase membership and entrance fees simply by advertising through the web.
- Provide an opportunity for customers to join the museum as members conveniently and directly on web.

This is to boost revenues from membership services through the convenience of the web, as opposed to having to be in the museum, or to call during office hours to join.

I then suggested the following new ways for the museum to generate revenue:



- -Form chat groups about art and other interests of our members. Members pay an annual fee for unlimited access to the museum and special events; we could add special services and features on our web site for these dues-paying members as an attempt to increase membership.
- -Offer advertising spots on our web site for relevant and appropriate products for art lovers. Naturally we would screen advertisers so that we weren't advertising Bud Light and Marlboros on our web site.

Wrap-up / Recommendations for client:

As stated above, use the web site to enhance revenues from existing forms, including catalog sales and membership/entrance fees. Also, use the web and its powerful capabilities to offer new services, such as chat groups, and online advertising spots for companies.

Desired Answer / Blinding Insights / Twists and Turns (if any):

The key was to come up with creative solutions for the museum to generate revenue. There was not a lot of material or detail to probe for in the form of questions. It was important to have some type of structure, rather than to list ideas, but it was even more essential to be creative.



Case No.: STRAT4 Firm: BCG					
Type of Case:					
	Brain Teaser (Why are manhole covers round?)				
	Market Sizing (How attractive is the market for fire trucks?) Operations (Our client's profits are down. Why?)				
	Declining Profits Other				
	Marketing				
	Problems		0.11		
	rategy(Should our clien , how?)	t enter the beer b	'ewing industry'? If		
	New Product		Competitive		
	Introduction		Response		
	New Market		Response to Changing Environ.		
	Merger or Acquisition		Other		
	Acquisition				
Initial Facts offered by in	terviewer:				
Your client is a pharmace severe asthma. It is essen faster, and can treat sever drug is seen as a breakthr	tially the same as what it e cases that are not prop	s in the market to perly treated with	today's medicine. The		
The Question(s):					
How should they price th	e drug?				
7 1	O				
	Suggested	Solution			
Desired Framework: [Ch	eck all that apply.]				
	ost-Revenue and ofitability	Th	e 4 P's of Marketing		
	ne 3 C's	Va	llue Chain Analysis		
Po	orter's 5 Forces		croeconomic		
	tornal External		alysis		
	ternal-External actors	Ot	her		
	101010				
Outline of Your Answer - assumptions, and logic:					



The first question I asked was a general one:

Q: "Why are they launching this drug in Canada and not the US?"

A: There was no real answer to this, but in the end I determined that the key issue the location issue was that in Canada the government essentially runs the medical system.

The next question I had was driving at understanding the pricing system for today's drug, as this would be a relevant benchmark for pricing our new drug:

Q: "How much does today's asthma drug go for?"

A: "It is priced at about \$5."

Then I inquired about the COST of the new drug compared to the older one:

Q: "How do the costs of manufacturing and selling the new drug compare to the current one?"

A: "They are essentially the same."

I hypothesized that I would need to determine the incremental value of this improved drug to determine how much more than the \$5 drug I could charge, and then to determine the optimal price of the drug to maximize profits.

I then asked the following questions, to drive at the factors that were important in determining this incremental value:

Q: "How price elastic are the Canadian customers?"

A: "The Government actually pays for these drugs for the elderly and poor, while insurance pays for drugs for other citizens."

I conclude that the price elasticity of the consumers themselves is not crucial here; rather, it is essential to determine how much the Government values this better drug. When I say this, I am asked to estimate how to calculate this incremental value to the Government. I propose the following:

Determining the actual costs of increased hospital and doctor visits of citizens who come back time after time when the old medicine is not effective. These visits would be eliminated with the new drug.

Determining the cost of "pain and suffering" of citizens who feel the affects of severe asthma. This is difficult to quantify, but I estimate that the Government would put a significant value on this if data were shown to them about this suffering.

Wrap-up / Recommendations for client:

In the end, the Government is crucial here, because they in effect set the price. Therefore it is up to our company to quantify the difference between this new drug and the old one. Obviously the drug company would need to investigate this and put together a convincing story. Nevertheless, I proposed that \$30 or so would be reasonable, based on the information that we know right now.

Desired Answer / Blinding Insights / Twists and Turns (if any):



Remember the importance of regulation/other external factors and of identifying the decision maker/purchaser vs. consumer of a good; a new and improved product is not everything!

Case No.: STRAT5		
Firm: AT Kearney		
Type of Case:		
	Brain Teaser (Why are manhole co	vers round?)
	Market Sizing (How attractive is the	
	Operations (Our client's profits are	
	Declining Profits	Other
V	Marketing Problems	a basa basa ing industria (2 lf as absau (2))
<u>X</u>		e beer brewing industry? If so, how?)
	X New Market	Competitive ResponseX Response to Changing
	A New Warket	Environ.
	Merger or Acquisition	Other
	Other	
		·
Initial Facts offered by	interviewer:	
Our client is a utilities	provider, offering gas and electric s	ervices to New Jersey and some
surrounding areas.	provider, oriening gas and electric s	critices to fivew jersey and some
surrounding areas.		
The Question(s):		
With recent deregulation	on our client is considering getting	into telecommunications. Should the
client do it?	on, our enem is considering getting	into terecommunications. Should the
CHCIII do It.		
	Suggested Soli	ution
	Suggested Soli	ution
Desired Framework: [ution
Desired Framework: [Check all that apply.]	
		The 4 P's of Marketing
	Check all that apply.] Cost-Revenue and Profitability	
	Check all that apply.] Cost-Revenue and Profitability The 4 C's	The 4 P's of Marketing Value Chain Analysis
<u>X</u>	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
Outline of Your Answe	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, add	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
<u>X</u>	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, add	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
Outline of Your Answe	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, add	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
Outline of Your Answer	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic:	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged,
Outline of Your Answer assumptions, and logi	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, add ic:	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth),
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic: ne was a basic analysis of the telecoralysis: our competitors, our competitors.	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth), encies and how they would apply to this
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic: ne was a basic analysis of the telecoralysis: our competitors, our competitors.	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth),
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and market, the cost of plants.	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, add ic: ne was a basic analysis of the teleconalysis: our competitors, our competitying in this market, and finally, the	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth), encies and how they would apply to this different customers and their needs.
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and market, the cost of play. Q: "What is the market.	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic: the was a basic analysis of the teleconalysis: our competitors, our competitying in this market, and finally, the entitle tike today, in terms of size and ground the state of the size and ground t	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth), encies and how they would apply to this different customers and their needs.
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and market, the cost of play Q: "What is the market A: "[As I had expected]	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic: ne was a basic analysis of the teleconalysis: our competitors, our competitying in this market, and finally, the state tike today, in terms of size and growing this market is huge and growing to	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth), encies and how they would apply to this different customers and their needs. owth?" every rapidly. With convergence everyone
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and market, the cost of play Q: "What is the market A: "[As I had expected]	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic: the was a basic analysis of the teleconalysis: our competitors, our competitying in this market, and finally, the entitle tike today, in terms of size and ground the state of the size and ground t	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth), encies and how they would apply to this different customers and their needs. owth?" every rapidly. With convergence everyone
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and market, the cost of play Q: "What is the market A: "[As I had expected wants to compete in the cost of	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic: the was a basic analysis of the teleconalysis: our competitors, our competitoring in this market, and finally, the extinct the teleconalysis in the market is huge and growing with the market is huge and growing with industry, but no one really known.	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth), encies and how they would apply to this different customers and their needs. owth?" every rapidly. With convergence everyone
Outline of Your Answer assumptions, and logical My approach to this or and then a four C's and market, the cost of play Q: "What is the market A: "[As I had expected wants to compete in the I then went to the 4 C."	Check all that apply.] Cost-Revenue and Profitability The 4 C's Porter's 5 Forces Internal-External Factors er - Important questions asked, addic: the was a basic analysis of the teleconalysis: our competitors, our competitoring in this market, and finally, the extinct the teleconalysis in the market is huge and growing with the market is huge and growing with industry, but no one really known.	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other ditional information divulged, mmunications market (size and growth), encies and how they would apply to this different customers and their needs. owth?" every rapidly. With convergence everyone



A: "What would you think it would look like?"

I note that this is certainly a global market and we are currently only a regional player, which will certainly affect our strategies if we plan to enter this market. This becomes apparent as we analyze the competition. The big players: AT&T, MCI, Sprint, the 6 Regional Bell Operating Companies are all either global or becoming global. I also note the emergence of non-traditional players in this market: satellite providers who are attempting to provide all of these services wire free. Although I recognize their presence, I note that it will probably be some time before this becomes a cost effective option for most customers. I at this point hypothesize that we may not have the resources to go head to head against the big boys, but there may be a profitable niche.

I switched to the 2nd "C": Competencies (competitive advantage)

Q: "What are our core competencies, that would provide the client with a competitive advantage?" (Before asking this, however, I noted that we already have wires (electricity) running to the houses in our regions and thus have an infrastructure advantage that we should be able to leverage. In addition, we have significant contact with our market and thus have some consumer knowledge that global players may not have.)

A: "There may be another advantage for our client. Another important player in the value chain is the CAPS (some type of access providers), and these small companies are the link between the global players (AT&T, etc.) and the local market. Our client might have the capability to bypass the CAPS in our region because they can provide the same services that the CAPS do."

[I also propose some other potential alternatives: we could be a lender to some of these CAPS, as they are small players who often do not have access to capital. We could also potentially have joint ventures with some CAPS.]

I switched to the 3rd "C": Customers

My analysis of the customers points to some potentially profitable niches for our client. I confirm that there are two distinctly different segments of customers in this market. There are the business customers and the residential customers, each with very different needs. I confirm that business customers would be more profitable (less price elastic) than residential customers. I also note that there are a number of different services that telecommunications companies provide: cable, local phone service, long distance phone service, internet access, etc., and that the demand for these services would differ for each of the two customer segments.

Finally, I switched to the 4th "C": Cost

From a cost perspective, I note that the cost of becoming a global player, and investing in the necessary infrastructure will probably not be a profitable endeavor. The industry is highly capital-intensive, and this would put us at a large disadvantage relative to larger, global players.

Wrap-up / Recommendations for client:

I recommended the following:



Although more rigorous analysis needs to be performed, at first glance it seems that if our client avoids going head-to-head with the big, global players, they could potentially leverage its internal capabilities in order to compete in a profitable niche in this large, rapidly growing market.

Case No.: STRAT6 Firm: BCG Type of Case:					
Type of Case.	Brain Teaser (Why are manhole covers round?) Market Sizing (How attractive is the market for fire trucks?)				
	Operations (Our client's pro Declining Profits Marketing Problems		y?) Other		
	Strategy (Should our client so, how?)	enter the beer brev	wing industry? If		
_ _ _	New Product Introduction New Market Merger or	 	Competitive Response Response to Changing Environ. Other		
	Acquisition				
Initial Facts offered by	interviewer:				
They are a monopoly pand gas meters at each	company who provides electorovider. They send out ser residence. Currently, 200 s its own water company.	vice men monthly	y to read both the electric		
The Question(s):					
	e for your client to contract charge the water companies	0			
	Suggested S	olution			
Desired Framework: [Check all that apply.]				
	Cost-Revenue and Profitability	The	4 P's of Marketing		
	The 3 C's Porter's 5 Forces		e Chain Analysis oeconomic veis		
_	Internal-External Factors		er		
	er - Important questions asl ic: [Walk us through how you arriv				

I did not follow a particular formal structure, but I basically wanted to find out about two issues: 1) costs involved in reading the water meters, both from the perspective of the water companies and the utility, 2) revenues that could be charged by the utility to the water companies. If the utility could



provide the service to the water companies at some type of cost advantage, then I think that there would be some money to be made for the utility.

On the cost side, I asked the following basic question:

Q: "Would it be simple for our servicemen to do this on their routes? How much incremental time would it take to do this service?"

A: "It would take very little extra time, as the water meters were right next to the other two meters."

I next asked more about how the meters were currently read, to learn more about the costs involved:

Q: "How are the water meters read by the utility vs. the water companies?"

A: "The utility has fancy hand-held computers to record the readings, while the water companies only use paper and pen."

[Once I learned this, I hypothesized that it might be beneficial for the utility to contract the new business, in order to amortize the cost of these machines over additional meters. Additionally, the labor costs could be much lower and accuracy increased through the use of the hand-held machines, which would benefit the water companies.]

I then further investigated the cost of doing this service:

Q: "What are the additional costs involved in reading the water meters?"

A: "In addition to trucks and fuel, the only really significant cost was labor of the servicemen. The utility pays its workers \$20/hr, while the water companies only paid their servicemen \$7/hr."

[I highlighted this as a major concern, in that it may not be cheaper for us to do it given this wage differential.]

Continuing with the issue,

Q: "Why the large difference- Are either of the labor forces unionized?"

A: "The utility employees are unionized but the water company workers at not."

In order to pursue some of the cost savings:

Q: "Could the water companies save significant dollars by reducing the number of trucks as a result of not having to read the meters?"

A: "The client could not eliminate the number of trucks, as they would still be needed to serve all of these houses for other types of service anyway. They could save on fuel costs, but this would be fairly marginal."

Wrap-up / Recommendations for client:

As the interviewer pushed me, I decided to determine that it was not a wise endeavor, due to the wage differential. I concluded that the utility had too high a cost structure to provide the services more cheaply, and therefore to be able to charge for the service.

However, I did not have time to explore the revenue side, in terms of how much we could charge the water companies for this service. I imagine that we could only charge them a bit less than the \$7 an hour that they were paying their workers now in order to make it an attractive option. But in



addition to considering the substantial labor wage differential, we must also look at what revenue we could generate by doing this service. It may result in profits, since the utility service workers are "already right there now" [reading other meters], in which case I would recommend that the client contract the business.

Firm: Gemini	
Type of Case:	
	e manhole covers round?)
<u>—</u>	tractive is the market for fire trucks?)
	i's profits are down. Why?)
Declining Profi	
Marketing Pro	
	client enter the beer brewing industry? If so, how?)
	ntroduction Competitive Response
X New Market	Response to Changing
	Environ.
Merger or Acq	uisition Other
Other	
Initial Facts offered by interviewer:	
You are working for Gemini and you need to	sell a project to a large (top 20) property and casualty
company.	
The Question(s):	
The Question(s).	
What issues do you highlight, and what do yo	ou propose?
Sugge	ested Solution
Sugge	ested Solution
	ested Solution
Desired Framework: [Check all that apply.]	
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro	ofitability The 4 P's of Marketing
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's	ofitability The 4 P's of Marketing Value Chain Analysis
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question	ofitability The 4 P's of Marketing
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor	ofitability The 4 P's of Marketing
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question	ofitability The 4 P's of Marketing
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throw	ofitability The 4 P's of Marketing
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throughter the company of the com	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other as asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client:
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throughtout the case I outlined two main areas that I The first would be to address potential ways	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other has asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client: to grow the current business. The second major area
Desired Framework: [Check all that apply.] X Cost-Revenue and Protection The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throughtout the state of the state	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other as asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client:
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throughtout the case I outlined two main areas that I The first would be to address potential ways	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other has asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client: to grow the current business. The second major area
Desired Framework: [Check all that apply.] X Cost-Revenue and Pro The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throughtout the first would be to address potential ways was profitability, how profitable is the firm recour position.	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other has asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client: to grow the current business. The second major area
Desired Framework: [Check all that apply.] X Cost-Revenue and Protection The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throutous the first would be to address potential ways was profitability, how profitable is the firm recour position. Growth:	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other has asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client: to grow the current business. The second major area elative to the industry and what can we do to improve
Desired Framework: [Check all that apply.] X Cost-Revenue and Protection The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throughtout the first would be to address potential ways was profitability, how profitable is the firm recour position. Growth: Q: "What market segments is the insurance of the first would be to address potential ways was profitability, how profitable is the firm recour position.	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other The asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client: to grow the current business. The second major area elative to the industry and what can we do to improve company in?"
Desired Framework: [Check all that apply.] X Cost-Revenue and Protection The 3 C's Porter's 5 Forces Internal-External Factor Outline of Your Answer - Important question assumptions, and logic: [Walk us throughtout the first would be to address potential ways was profitability, how profitable is the firm recour position. Growth: Q: "What market segments is the insurance of the first would be to address potential ways was profitability, how profitable is the firm recour position.	ofitability The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis ors Other has asked, additional information divulged, gh how you arrived at your answer in detail.] would propose to study for this prospective client: to grow the current business. The second major area elative to the industry and what can we do to improve



Q: "What is the growth rate in our home and auto markets?"

A: I also discover that the home insurance market is growing at around 5% while the auto insurance market is relatively flat. Upon inquiry, it is unclear how other domestic insurance markets are (fire, life, etc.) growing.

Given this information, I proposed three potential avenues of growth that would be worthy of a nice consulting study.

- 1. The first is to penetrate the domestic insurance market further than we have to date. Of course we would need to perform detailed analysis of these markets to determine their ultimate size and growth as well as their profitability. I also found out that for the markets that we are in (auto and home insurance), we have penetrated all regions, and in order to grow within these markets we would have to steal share from entrenched competitors.
- 2. Secondly, I propose that we could grow by entering the commercial insurance side. This looks promising, as the margins are known to be slightly higher. However, we would have to carefully analyze our situation to see if we were capable of becoming a significant player in this market.
- 3. The third growth avenue that I recommended was to perhaps get into other markets completely (an out of box solution). This could make sense if we found that other markets could be more profitable, and we had some sort of core competencies that we could leverage in other markets.

Profitability:

The second area of discussion was on the profitability side. Perhaps there is a problem here that we can apply our consulting expertise to.

Q: "What is our client's profitability relative to others?"

A: I discover some details on our firm's profitability. The first thing is that the profitability metric is called a 'combined ratio' that is composed of net premiums less losses less expenses. Our ratio is 104 while the industry average is 106.5 and break-even is 100. Clearly this is an issue that we should highlight and address in order to uncover what's behind our lower than average profitability.

Q: "What is our profitability over the last 5 years?"

A: Profitability has been: 104, 106, 103, and 104 - consistently below the industry average. In order to attack this profitability problem I pursued price, volume, and cost questions. Upon inquiry I realize that our pricing and volume are not the problem. Clearly we have a cost problem. In this industry there are two major components of costs: the loss ratio and the operating expenses.

Q: "How does our loss ratio compare to the industry?"

A: I discovered that ours was 69 while the average was only 60. Therefore our customers were placing more claims than average. I stated a hypothesis regarding the fact that perhaps the make-up of our customers is more "accident prone" than average and this may be what is driving our loss ratio. The next issue is our operating expenses.



- Q: "How do our operating expenses compare?"
- A: Upon inquiry I discover that the sales component is the most significant one of our operating cost structure. I find that there are three different types of sales techniques:
- 1. Independent sales agents who have a fixed cost of 30 cents/policy, a commission rate of 5-8 basis points and a hit rate of 40%,
- 2. Captive agents who have a fixed cost of 60 cents/policy and 1-2 basis points with a hit rate 40%,
- 3. Direct Mail with a fixed cost of 10 cents/policy and 3-4 basis points and a hit rate of 20%.
 - 4. Although I did not get into these numbers too much, I hypothesized that we were not using the most cost efficient sales channels, and we could do a nice consulting study to optimize this.

Wrap-up / Recommendations for client:

In the end I made my three growth proposals, and suggested a screening process to stay away from "accident prone" customers. Also needed to optimize our use of the different methods of selling policies.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:



Case No.: STRAT7				
Firm: McKinsey				
Type of Case:				
	Brain Teaser (Why are manhole covers round?)			
	Market Sizing (How attract	tive is the mark	ket for fire trucks?)	
	Operations (Our client's profits are down. Why?)			
<u></u> .	Declining Profits Other			
	Marketing			
	Problems			
	Strategy (Should our clien so, how?)	t enter the bee	r brewing industry? If	
	New Product		Competitive	
	Introduction		Response	
	New Market		Response to	
			Changing Environ.	
	Merger or		Other	
	Acquisition			
	·			
Initial Facts offered by	interviewer:			
Your client is a large in market.	nternational soft drink bott	ler. The clien	t wants to enter the Indian	
The Question(s):				
. ,	in doing this, and should	rou do it2		
What are the concerns	in doing this, and should	you do it:		
	Suggested	Solution		
Desired Framework:				
Desired Framework: [Check all that apply.]			
	Cost-Revenue and		The 4 P's of Marketing	
	Profitability			
<u></u>	The 3 C's		Value Chain Analysis	
	Porter's 5 Forces		Microeconomic	
<u></u>			Analysis	
	Internal-External		Other	
<u></u>	Factors			
				
	er - Important questions asic: [Walk us through how you ari			
	- ,	-	-	
O: "What are the prof	at margins in the soft drinl	z industry?"		
	0	•	the soft drink industry (30%).	
			of Western commercialism in	
, -	•		me towards focusing on the	
economics. In the end	l you should only do it if it	is profitable t	to do so.	



Q: "What are the up front costs? What is the selling and distribution system? What is the account structure? Can we get access to all of the channels or do we need to partner with someone who has a distribution network set up already?"

A: We discussed up-front cost to enter the market in terms of infrastructure of plants, bottling lines, warehouses, delivery trucks and coolers. An analysis of the cost structure resulted in a reasonable operating cost structure but the level of investment required to become a significant player might be prohibitive, despite the attractive 30% operating margins of soft drinks.

Another "C": Customers

Q: "What is customer demand like?"

A: An analysis of the customer led to the discovery that there probably was a latent consumer demand for cold drinks especially in the summer, highlighting the importance of visi-coolers (i.e., refrigerators with glass doors so the consumer can see the product). In addition the seasonality seemed too severe and would force our bottling costs way up in the winter, with idle capacity sitting around.

Wrap-up / Recommendations for client:

Do not enter the market due to high initial costs and high seasonality of consumer demand.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:



Case No.: STRAT8					
Firm: McKinsey					
Type of Case:	D : T (44)		10)		
	Brain Teaser (Why are manhole covers round?)				
	Market Sizing (How attractive is the market for fire trucks?)				
	Operations (Our client's profits are down. Why?)				
	Declining Profits Marketing	<u>—</u>	Other		
	Problems				
	Strategy (Should our cli	ient enter the beer	brewing industry? If		
	so, how?)		Composition		
	New Product Introduction		Competitive		
	New Market		Response		
	New Market		Response to Changing Environ.		
	Morgor or		Other		
	Merger or Acquisition		Other		
	Acquisition				
Initial Facts offered by	y interviewer:				
domestic market. The Question(s):	eat to John's monopoly		er cable TV services to the		
	Suggeste	d Solution			
Desired Framework:	[Check all that apply.]				
	Cost-Revenue and	-	The 4 P's of Marketing		
	Profitability		The 41 3 of Marketing		
	The 3 C's		Value Chain Analysis		
	Porter's 5 Forces		Microeconomic		
	1 01101 3 3 1 01003		Analysis		
	Internal-External		Other		
	Factors	`	Juici		
	. 46.6.6				
Outline of Your Answ assumptions, and log	er - Important questions ic:	asked, additiona	ıl information divulged,		
Upon inquiry you find	l that it would cost Hugh	nes \$5B to get this	s satellite in the air and		
operational. You also	find out that it will offer	r 200 channels wh	nereas TCI only offers 50. I		
nad a tough time putti	ing a structure to this on	e. In the end, afte	er asking a few questions, I		

determined that we needed to estimate the revenues and costs for Hughes to see if this was a



credible threat or not.

Price:

I assumed that on average, current cable bills are \$35/month. In order to be a credible threat Hughes needs to be able to provide service at a price of around \$35 (could be a little higher because of additional channel offerings).

Quantity:

On the quantity side I estimated the number of customers that the satellite TV offering could reach. I start with 100M households, estimate that 60% of those are in the market for cable services (combination of income levels and need for cable service to get any reception, which differs significantly by region) I find out that TCI has 40M customers across the country. I assume that all of these households could potentially be in the market for satellite service (if it was priced right).

Initial Costs and Amortization:

The initial \$5B cost needs to be amortized over the useful life of the satellite. Upon inquiry, I discover that in general a satellite could last for 7-10 years. However, due to the rapid evolution of technology, the actual useful life of 1 particular satellite would be 5 years. This means that \$1B needs to be amortized each year over the customer base of the satellite TV services.

Fixed Costs:

If you estimate that Hughes can penetrate 50% of TCI's existing market (20M) than the fixed costs would be \$50/year. In addition to this cost, you have to cover the costs of sales and service as well as attaining rights to cable programming.

Variable Costs:

An additional cost that needs to be amortized is the cost of the satellite dish for the consumer. It's useful to mention that you could also opt to lease dishes to consumers to get around this big up front cost for the consumer. I discovered that the combined operating costs would, if you choose the leasing of the dish method (like today's consumers lease the cable box, and it gets rolled into the monthly bill of \$35), be low enough to make this a credible threat to TCI!

Wrap-up / Recommendations for client:

The threat from Hughes is credible! Some suggestions that I had for John and TCI to address this were:

- 1. Attempt to provide their own satellite service,
- 2. Buy out the Hughes offering,
- 3. Improve (increase) the program offerings to your current customers to close the gap on what the satellite would offer, or
- 4. Try to develop exclusive agreements with certain programming to lock out the satellite offering.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:



Case No.: STRAT9				
Firm: Marakon				
Type of Case:				
	Brain Teaser (Why are manhole covers round?)			
	Market Sizing (How attractive is the market for fire trucks?)			
	Operations (Our client's profits are down. Why?)			
	Declining Profits Other			
	Marketing			
	Problems			
	Strategy (Should our client	enter the beer brewing industry? If		
	so, how?)	3 ,		
	New Product	Competitive		
	Introduction	Response		
	New Market	Response to		
		Changing Environ.		
	Merger or	Other: Advertising		
	Acquisition	outer. Advertising		
Initial Facts offered b	-			
Your client is a major	distilled spirits manufacture	r with a number of major brands.		
The Question(s):				
• •	C.1 : 1 .: 1 1 .	1)		
	s of their advertising budget g budget would be needed to	o follow through on your strategy?		
	Suggested S	Solution		
Desired Framework:	[Check all that apply.]			
	Cost-Revenue and	The 4 P's of Marketing		
	Profitability	The 41 3 of Marketing		
	The 3 C's	Value Chain Analysis		
	Porter's 5 Forces	Microeconomic		
	1 orter 3 3 1 orces	Analysis		
	Internal-External	Other		
	Factors	Ott101		
	1 401010			
	er - Important questions as jic: [Walk us through how you arrive	ked, additional information divulged, red at your answer in detail.]		
addressed the focus q		oblem into 2 distinct parts: I first the budget issue. I used a basic 3 C's sing strategy should be.		
Customers: The first	thing that they need to do	is determine what their target segment is.		
	ment is the client in?"			

A: I discovered that they were competing in the premium scotch segment. Once they determine this segment, they can do a detailed analysis of the demographics of this segment.

For arguments sake I assumed that the scotch was Johnnie Walker Black and the target market was affluent males age 30+. Then they would need to do analysis of advertising media to determine how to reach this segment, i.e., print-ads in selected magazines, billboards, sponsorship of sporting events (golf).

Once they had data on what media effectively reaches their target segment, they would decide exactly what mix of media to use, and the specifics of the campaign to address the qualities that they wanted to associate with their brand (status, taste, distinguished, etc.). Market research could benefit the client in terms of determining what qualities they wanted to stress in their ad campaigns.

Competitors: After I completed the analysis of the potential customers, I looked at the competition

Q: "Who is the competition and where are we in relation to them?"

A: I found out that we were the #3 brand with a little less than 20 share, the #1 brand had a little higher than 20 and the #2 brand was a little lower than #2. The cost of advertising was not something I got too deeply into. I just noted that advertising was a significant portion of the cost structure of premium scotch brands (over 25% of sales).

Another point to note is that because of the high margins on this product, the more volume that a brand sold, the more resources the company would have to invest in advertising. There is a certain minimum scale that is required to be able to profitably advertise in this market.

Competitors: How is advertising related to market share?

Q: "How much do the competitors advertise?"

A: The third issue that I addressed was what the competition was doing. I learned that last year, the #1 player had spent a lot of \$ on advertising and increased share, while the #2 player spent nothing and lost share. We spent a little more than nothing and increased share a little. The distant #4 brand also spent nothing on advertising.

Wrap-up / Recommendations for client:

Based on this information, I hypothesized that there was a pretty positive correlation of ad spending and volume increases. Once I outlined what the focus of the advertising strategy should be, I addressed the budget issue.

I proposed three alternatives to determining our budget for next year:

- 1. The first was to match the #1 competitor to attempt to keep pace.
- 2. The second was to increase ours a little relative to our historical (last year) spending.
- 3. A third way would be to do a detailed cost analysis of our proposed strategy, and actually quantify what it would cost to have the number of ads and sponsorships in the types of media that we determined would satisfy our strategy.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:



Case No.: STRAT10				
Firm: Marakon				
Type of Case:	Drain Tagger (Mby ora my	anholo covera rou	und2)	
	Brain Teaser (Why are manhole covers round?)			
	Market Sizing (How attractive is the market for fire trucks?) Operations (Our client's profits are down. Why?)			
	Declining Profits	ionis are down. v	Other	
	Marketing		Other	
	Problems			
	Strategy (Should our clien	t enter the beer b	rewing industry? If	
	so, how?)		newing industry: In	
	New Product		Competitive	
	Introduction		Response	
	New Market		Response to	
			Changing Environ.	
	Merger or	<u> </u>	Other	
	Acquisition			
Initial Facts offered by	y interviewer:			
3 ·	equired First USA bank. B USA only provided credit dit card department.	1	0	
The Question(s):				
You are on the integra	ation team, what are your c	oncerns?		
	Suggested	Solution		
Desired Framework:	[Check all that apply.]			
	Cost-Revenue and	TI	ne 4 P's of Marketing	
	Profitability	''	ie + 1 3 01 Marketing	
	The 3 C's		alue Chain Analysis	
	Porter's 5 Forces		icroeconomic	
	1 Office 3 of Offices		nalysis	
	Internal-External		ther:Cultural	
	Factors)P)	
			/	
	er - Important questions as ic: [Walk us through how you ar			
I did not have a com-	io atmatano for this are	than Thatad the - 1	roviganca I would be	
	ic structure for this one, ra			
	hen dug into each one. I st			
	One had definitely decided		A to run their credit card	
department; there would be no discussion about this.				



Cultural and Organizational Issues:

Q: "How alike are Bank One's and First USA's cultures and organizations?"

A: The first set of issues that I outlined was related to the organizations themselves. This is basically the cultural lens that we all know and love from OP. I explored the different cultures and found that there would be no major problems merging the two.

Cost and Efficiency Issues:

Q: "Are there opportunities for costs savings with this acquisition?"

A: The next set of issues was cost related. I wanted to maximize cost savings of merging the two credit card departments. I explored what kind of cost savings could be attained: headcount reduction, shutting down duplicate facilities, increased scale.

There are some scales efficiencies in credit card service, but both companies already had the critical mass to optimize this dimension. First USA did have some more efficient processes that would ultimately drive down Bank One's operating cost structure of servicing credit cards.

Customers:

Q: "How alike are the fee structures of the two companies?"

A: The next set of issues I addressed were the compatibility of the two credit cards and the specs and rates that each company provided for its own customers. This is relevant in merging the two, because if the services and low rates provided by the two are not the same (which clearly, they would not be), then the least common denominator would be a factor here.

The point is that if one set of customers is expecting no annual fee and a 12% APR then they will not accept anything worse than this, they would simply change cards. Other attributes such as customer service would also have to be managed to please all of the customers. The revenue effects of integrating the two would have to be analyzed.

Wrap-up / Recommendations for client:

In the end these three issues: organizational, cost savings, and merging fee structures and services of the two cards were the only ones that I had time to address.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:



Case No.: STRAT11 Firm: Marakon			
Type of Case: ————————————————————————————————————	Brain Teaser (Why are managed Market Sizing (How attract Operations (Our client's properties) Declining Profits	tive is the market t	for fire trucks?)
_	Marketing Problems Strategy (Should our clien so, how?)	t enter the beer br	
	New Product Introduction New Market	<u> </u>	Competitive Response Response to Changing Environ. Other
	Merger or Acquisition		Other
Initial Facts offered by	/ interviewer:		
	veloped an anti depressant erience marketing drugs.	drug and wants t	to get it to the market.
The Question(s):			
What do you suggest?			
	Suggested	Solution	
Desired Framework:	[Check all that apply.]		
_	Cost-Revenue and Profitability	The	e 4 P's of Marketing
_	The 3 C's Porter's 5 Forces	—— Mic	lue Chain Analysis croeconomic alysis
	Internal-External Factors	Oth	ner
	er - Important questions as ic: [Walk us through how you arr		

The first thing that I did was outline the options that our client had:

I detailed three different ways they could do so, and pointed out that they should choose the option that would be the most profitable for them. The three ways would be to:

- 1. Sell it directly themselves,
- 2. License the technology to someone else and receive royalties, or
- 3. Co-market the product with someone else.



The 3 C's: Competitors - As I analyzed which option would be best, I used the 3 C's to tackle some key issues.

Q: "What are the competitors doing?"

A: I discovered that there were 2 significant competitors who made of 100% of the market. One drug had the same efficacy as our drug with roughly the same level of side effects. The other drug had the same efficacy with fewer side effects. Naturally the second drug was priced a little higher. I flagged this issue as being relevant because there is already a product in the market with better attributes than ours. This would certainly mean that our product afforded us no real competitive advantage, and we would just be a me-too product.

Q: "What is the market size and growth rate?"

A: It is pretty big and growing at greater than 20% compounded annually.

Q: "Can the manufacturing capacities of the other manufacturers meet this demand?"

A: No. This leads to the hypothesis that the client's drug could still be profitable in this market, even if it is a me-too drug, as capacities of the other companies to provide the drug were limited.

The 3 C's: Cost - The next topic that I covered was the cost of marketing the product.

Q: "What are the marketing costs for the drug?"

A: I found that once the drug was ready to go, the sales component of the cost structure was over 70% while the manufacturing was only 10%. Given that we do not have a sales infrastructure in place, and it would require significant investment to establish and train one, I am starting to lean away from the "market the product ourselves" option.

The 3 C's: Customers

Q: "Who needs this drug?"

A: My analysis of the customers revealed that currently the demographics of the market are such that the price of this type of drug is not a major issue (wealthy people take these drugs). These people are willing to pay a premium to avoid side effects; so wealthy people will buy the competitor's drug that has fewer side effects.

However, the growth of the market will be driven by the fact that people who are not wealthy will begin taking this type of drug. Therefore we are not locked out completely by the competitor's better, higher priced drug.

Wrap-up / Recommendations for client:

In the end, I recommend that our client not market the drug themselves (too much investment required), but they should go forward in pursuit of a co-marketing agreement with someone who does have the sales infrastructure in place as this looks like it could be a profitable opportunity.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:



Case No.: STRAT12					
Firm: Type of Case:					
——————————————————————————————————————	Brain Teaser (Why are manhole covers round?) Market Sizing (How attractive is the market for fire trucks?) Operations (Our client's profits are down. Why?)				
_ _ _	Declining Profits Marketing Problems Strategy (Should our clier		Other		
	so, how?)				
_	New Product Introduction New Market		Competitive Response Response to		
_	Merger or Acquisition	<u> </u>	Changing Environ. Other		
Initial Facts offered by interviewer: Your client is a \$5 billion computer maintenance company with 25,000 staff worldwide. 80% of their current business is in servicing mainframes and the other 20% in servicing network servers. While the server segment has been growing at 25% per year for the past 3 years, the mainframe segment has been declining at about 9% per year for the past 3 years. The operating margins for the mainframe segment is 20% while that for the server segment is 8%. Your client is thinking of entering the PC segment because it has been growing at 40% per year. However, the operating margins in this segment are only 1%. The Question(s): Should your client enter the PC segment? (Follow-up question: Given your answer above, what should your client's operational					
structure be?)					
Suggested Solution					
Desired Framework: [Check all that apply.]					
<u>—</u>	Cost-Revenue and Profitability The 3 C's Porter's 5 Forces	 Val	e 4 P's of Marketing lue Chain Analysis croeconomic alysis		
<u> </u>	Internal-External Factors		ner		



Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

I started with the 3 C's: Company (Cost)

Q: "How does my client's cost structure stack up against potential competitors?"

A: Your client's cost structure is higher than potential competitors because they employ highly qualified technicians, who are capable of servicing mainframes, servers and PCs.

Q: "What value-added does my client offer that might justify a price premium?" A: The client guarantees a 4-hour turnaround, and has a great reputation.

C #2: Customer

Q: "Who are potential customers, and what level of service would they expect?" A: Customers would likely be individuals or small companies who cannot afford long-term computer maintenance contracts.

C #3: Competition

Q: "What would be the nature of competition, both current and potential?"
A: There are a large number of small competitors, as well as a handful of well-heeled companies.

Questions for operational structure follow-up question:

Q: "What is the current operational structure?"

A: In each country, there's a centralized 24-hour hotline for customers to call in for servicing and the technicians are dispersed throughout the country in vans. Once a service request is received by the call center, the nearest available technician to the customer is dispatched.

Q: "Can all technicians service all types of computers?" A: Yes, every technician is trained to service all types.

Wrap-up / Recommendations for client:

I recommended that the company not enter the PC segment because:

- My client does not have competitive advantage in this segment. Basically a commodity business that any computer literate high school kid can enter. Would have thousands of competitors.
- My client's cost structure is too high to cost effectively compete in this segment. One could argue that the client could employ high school kids for the PC segment but there's always the company's reputation to consider.
- Customers would likely be value conscious and wouldn't go for 'branded' servicing.

I also recommended a change in the operational structure:

The new operational structure should be more decentralized, i.e., number of call centers should be appropriately matched to the number of customers in each country, and there should be 2 types of technicians - one type can service both mainframes and servers while the second can only service servers. This will:



- Reduce the operating cost because a smaller number of highly paid mainframe technicians are required.
- Increase the technician utilization rate (currently at 50%) because each call center is now keeping track of fewer vans. This is especially important for a big country like the US.
- Enable each call center to be closer to the customers and better anticipate their needs.



Case No.: STRA	AT13					
Firm:						
Type of Case:						
	Brain Teaser (Why are manhole co	_ Brain Teaser (Why are manhole covers round?)				
	Market Sizing (How attractive is th	e market for fire trucks?)				
	Operations (Our client's profits are	down. Why?)				
	Declining Profits	Other				
	Marketing Problems					
	X Strategy (Should our client enter the	ne beer brewing industry? If so, how?)				
	New Product Introduction	Competitive Response				
	New Market	X Response to Changing Environ.				
	Merger or Acquisition	Other				
	Other					
ourchased by or						
What should the	Suggested Sol	lution				
Desired Framev	vork: [Check all that apply.]					
	Cost-Revenue and Profitability	The 4 P's of Marketing				
	The 3 C's	Value Chain Analysis				
	Porter's 5 Forces	Microeconomic Analysis				
	Internal-External Factors	Other				
	Answer - Important questions asked, adtions, and logic: [Walk us through how you arm					
Some hypothese	es:					
 relationship 	problem: the client might be able to tell u	us about them.				
 change in ac 	tivity after the acquisition, access to same	e services with another company abroad				
_	*	em and pay less (need for an NPV analysis,				
and a study	about the pricing strategy of our client; mails monopolistic situation).					
	1 /					

• our client's client might be unhappy with the service provided (easy to test, by interviews). In this case, it is important to understand if the big clients have the same pricing and the same level of services as the small ones.

Some critical information needed to be asked to the interviewer here:

- How did the client achieve to have a monopoly? Is it a national or monopoly? (the company that purchased our client's client may have access to other services)
- How much would it cost to build its own system (to be able to answer when is it worth having its own system... A way to show that you know how to deal with numbers!!)
- Did the client do a good job with selling quotes or were some clients unhappy about the service provided?

What the interviewee found out from his analysis:

- 1) improving technology will move cost frontier inward.
- 2) consolidation in industry will create more large clients that might make their own systems.
- 3) client might now sell his or her own system and we would have competition.

Wrap-up / Recommendations for client: [Sum it all up!]

Our client would be better off by changing its pricing; its market power is decreasing as consolidation in the industry is increasing.

Try to be more aggressive with small clients with whom we still have a pricing advantage.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:

Be careful to always clarify the question. Here the "political move" does not mean anything if you don't define it.

Case No.: STRA Firm:	T14				
Type of Case:					
	Brain Teaser (Why are manhole covers round?)				
	Market Sizing (How attractive is the market for fire trucks?)				
	Operations (Our client's profits are down. Why?)				
	Declining Profits	Other			
	Marketing Problems				
		the beer brewing industry? If so, how?)			
	New Product Introduction	Competitive Response			
	New Market	X Response to Changing Environ.			
	Merger or Acquisition Other	Otner			
	Other				
the carrier (wires	Electric Company is facing competition) business will be separate from the genting electricity will soon be able to sell				
The Question(s)	:				
What should the	company do?				
	Suggested Se	olution			
Dosirod Framow	ork: [Check all that apply.]				
Desired I famew		The 4 D'e of Marketing			
	Cost-Revenue and Profitability	The 4 P's of Marketing			
	X The 3 C's	Value Chain Analysis			
	Porter's 5 Forces	Microeconomic Analysis			
	Internal-External Factors	Other			
	Answer - Important questions asked, a ions, and logic: [Walk us through how you a				
Competition: hi	gh fixed costs, and low marginal cost b	ousiness (like airlines and telephone).			
Consequences:					
• Incer	ntives to produce a lot in order to amo	rtize the initial investments:			
 Incentives to produce a lot in order to amortize the initial investments; High barriers to exit, which causes increase in competition intensity; 					
 However, it takes 7 year to build a power plant, creating huge barriers to entry; 					
	economies of scale and learning curve layers.	e will give a competitive advantage to existing			



Therefore, after deregulation, we can forecast few new entrants, industry consolidation (the biggest players buy out the smallest), but incentive to production increase and overcapacity.

Customer: 2 kinds: individuals and corporations. Right now, the level of services offered in this industry is not very differentiated by customer type (pricing, flexibility, maintenance).

You also have to talk about the definition of market boundaries hers: customers may be loyal and/or they may not have so much choice for their electric company in their geographic location. This means that a good strategy might be to choose an area with small potential competition (Dakota...) for the electric company. New England might not be the best.

Another issue is price sensitivity. Electricity is a COMMODITY and customers should be very sensitive to prices.

Company: The interviewee found out that the customers were not satisfied with the level of service of our client; that the client is not a low cost competitor.

Wrap-up / Recommendations for client: [Sum it all up!]

Potential overcapacity, customer sensitivity to prices, incentives to decrease prices to marginal cost. ⇒

Additionally, our client is not excellent and does not differentiate among its competitors. Because it is small and regionally located, no chances to benefit from economies of scale...

The best way now is to find a way out. Our client will probably get a good price for the wires and the power plants.

Desired Answer / Blinding Insights / Twists and Turns (if any):

Additional information that might be useful to your fellow Sloanies:

Always keep in mind that getting out of the business is OK to mention if you explore the other solutions and found that they were not viable!



Case No.: STRAT15 Firm:		
Type of Case:		
	Strategy (Should our client enter X New Product Introduction New Market Merger or Acquisition Other	Response to Changing Environ.
Initial Facts offered by	<i>i</i> nterviewer:	
several years. Over the		periencing decline in sales over the last veloping new technology in plastics. The ent.
The Question(s):		
	inue development of plastic or re	main in the aluminum industry?
onound the chefit conti	inde development of plastic of re	main in the arthment industry.
	Suggested Se	olution
Desired Framework:	[Check all that apply.]	
	Cost-Revenue and Profitability	The 4 P's of Marketing
	The 3 C's	Value Chain Analysis
X X	The 3 C's Porter's 5 Forces Internal-External Factors	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis X Other
Outline of Your Answe	er - Important questions asked, a and logic: [Walk us through how you a	additional information divulged,
aluminum in the long profitable player in the An additional consider businesses be run toge	term? And second, does the client e plastic industry? ration is what is to become of the other without adding significant co	cractive industry and is it more attractive than at company have capabilities to become a client's aluminum business? Can the two omplexity costs? Is there any sizeable synergy ot, can the aluminum business be sold for the

Let us consider the first question.

Explore the reason for decline in aluminum market. Is plastic replacing aluminum? What about cannibalization of existing aluminum products?

What are the likely actions of competitors? High rivalry in declining aluminum industry will lead to price wars and declining profits.



Plastic market:

Does plastic offer significant benefits to customers? Are their needs satisfied by plastic? What is the cost of entry into the plastic market? Minimum efficient scale for plastic is 10% of the volume of the aluminum market.

Are there any other substitutes to aluminum and plastic?

Desired Answer / Blinding Insights / Twists and Turns (if any):

No specific answer was required for this case. The key issues were:

- potential cannibalism
- high rivalry in a declining industry (aluminum) that will lead to price war and declining profits

Case No.: STRAT16 Firm: Type of Case:	
	Response to Changing Environ. Other
Initial Facts offered by interviewer:	
A client company has patented a cholesterol meter, wh patients who have a history of high cholesterol, and are medication.	e
The Question(s):	
How should they introduce this new product?	
Suggested S	olution
Desired Framework: [Check all that apply.]	
Cost-Revenue and Profitability X The 3 C's Porter's 5 Forces Internal-External Factors	X The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
Outline of Your Answer - Important questions asked, assumptions, and logic: [Walk us through how you	
A problem of new product introduction is best approa To start with, however, it is important to understand w therefore your marketing strategy should be. The market:	hat market you will be working in and what
- who are your customers and what is their purchasin	g pattern;
how big is the potential market;who are your competitors and what are their strateg	ios:
 who are your competitors and what are their strateg what are our strong and weak points comparing to t 	
 what are our strong and weak points comparing to what are our costs of manufacturing the new produ 	
- what are the future market trends?	
Your marketing strategy should be then based on those - Place	e facts:



- Price
- Promotion

Desired Answer / Blinding Insights / Twists and Turns (if any):

In this case consumers' purchasing pattern will be quite unusual in the sense that product decision and pricing decision are separated: neither decision makers (doctors) nor consumers are paying for the product. Usually insurance companies pay for it.

Case No.: STRAT17 Firm:	
Type of Case:	
X Strategy (Should our client enter the New Product Introduction New Market X Merger or Acquisition Other	Competitive Response Response to Changing Environ.
Initial Facts offered by interviewer:	
A client owns a large bank with many branches and wants \$100 M in losses, he hopes to find a new business to acqui (losses carry forward).	
The Question(s):	
Recommend an acquisition candidate.	
Suggested Solu	ution
Decired Frameworks (Check all that apply)	
Desired Framework: [Check all that apply.]	
Cost-Revenue and Profitability	The 4 P's of Marketing
X The 3 C's X Porter's 5 Forces	Value Chain Analysis
Internal-External Factors	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other
Outline of Your Answer - Important questions asked, add assumptions, and logic: [Walk us through how you arrived at your	litional information divulged,
Two stepped approach. Step 1 - he needs to find a well performing company in an attraction	ctive industry that will meet his financial
objectives.	,
The new company's net income within the next 15 years sibanking business.	hould be sufficient to cover losses of the
Long-term attractiveness is important, because once the loable to sell this new business at a good price (if he so desir	
The industry is important so that the current bank capabilic customer research, geographical spread, etc.)	ities can be leveraged (expertise in
ince there are significant requirements to the new business's profitability, most start-ups are not	

Desired Answer / Blinding Insights / Twists and Turns (if any):



viable alternatives.

Step 2 - understand if the banking business has sufficient capabilities (management and other) to run a diversified company so that cost of complexity does not exceed the benefits of diversification.

Case No.: STRAT18			
Firm: McKinsey			
Type of Case:			
St	rategy		
— —	New Product Introduction New Market		Competitive Response Response to Changing Environ.
<u> </u>	Merger or Acquisition	<u> </u>	Other

Initial Facts offered by interviewer:

A major chemical producer has hired our consulting firm to evaluate another large player in the chemicals industry as a possible merger candidate. Both our client and the other company are bulk commodity chemical producers. Our consulting firm's main job is to analyze the future prospects of the target company's main product line: a bulk chemical that is used in the production of plastics.

Initial data has revealed the following facts:

- Production of this chemical has been declining slowly for several years
- Prices have declined rapidly
- There are 8 major producers of this chemical with market share divided the following way: the largest producer has a 30% share, the second largest has a 20% share, and our target company has a 15% share. The rest is divided among the remaining 5 competitors.
- Profitability in the industry is relatively low. The two largest competitors earn small returns, our target company is breaking even, and the remaining competitors are operating at a small loss.
- The largest competitor has just announced plans to substantially increase capacity.

The Question(s):

Our consulting firm has to analyze the target company's future prospects in the product line. As manager of this case assignment, what information do you need to know and how would you structure the analysis to determine if this merger is a good idea?

NOTE: At this stage in the project, our consulting firm is not in a position to make a recommendation, but is more interested in gathering the *appropriate* data. (This is different from most consulting case interviews in which the purpose is to come to a recommendation).

Suggested Solution		
Desired Framework: [Check all that apply.]		
Cost-Revenue and Profitability The 3 C's X Porter's 5 Forces Internal-External Factors	The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other	

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

This is an industry analysis case in which Porter's Five Forces might be useful, but it is really an exercise in how to uncover the underlying drivers of the facts given in the case. In general, the interviewer was more interested to see if I could ask the right data collection questions.

A satisfactory response would include addressing the following issues:

- What buyers/markets make final use of this chemical? What is the nature of the growth and profitability of these end markets? *The chemical was used primarily in the automotive related industries.*
- How much production capacity exists in the industry compared to the demand today? To the estimated demand in the future? *Much more capacity than necessary*.
- What is the current capacity utilization in the industry? Of our target firm? Both the industry and our target firm are operating at approximately 70% capacity.
- What is the relative cost position or our target company compared to the rest of the competitors? Our target company has a reasonably good position compared to the rest of the industry in terms of size, age and efficiency of equipment, and financing.

A good response would also include addressing the following issues:

- Are there additional niche or value-added uses for this chemical or its by-products that are as-yet untapped? *Nothing really significant*.
- How rational or volatile is pricing between firms? The industry players often engage in price cuts to temporarily increase market share, but usually suffer falling profitability as a result.
- Are entry or exit costs prohibitive? Has the number of competitors or their market share changed significantly in recent years? Entry is expensive due to the unique fixed costs of producing this chemical, but competitors have been in this industry for a long time and many plants are fully depreciated, making exit inexpensive. Market share has not changed significantly in recent years.
- How diversified is this company and does this product represent a significant source of revenue? *It is a significant source of revenue but most competitive producers are adequately diversified.*

An outstanding answer would also include the following issues:

• Is this industry or product regulated in any way that affects cost, pricing, or profitability? Environmental and pollution regulation apply in the normal way to the chemical production process, but nothing out of the ordinary.



- Are there operational improvements that the target company could make to enable it to be more efficient or other management expertise that our client's company could bring into the merger? Yes, on both accounts.
- Do we know the reason for the largest competitor announcing capacity increases? Are they trying to introduce a credible threat to deter future entry or expedite exit from the industry? We are not sure but it could be possible.
- Are there scale economies in production or distribution? Yes, economies of scale exist in marketing and transport, but are much smaller in production.
- Are there other synergies between our client's company and the target company such as product mix, cross-selling opportunities, raw material purchase, etc? *Not significant at this point.*

There are countless paths that the analysis could flow down but these are some of the most obvious to consider.

Case No.: STRAT19		
Firm:		
Гуре of Case:		
X Strate	egy	
	New Product Introduction	Competitive Response
	New Market	Response to Changing
		Environ.
X	Merger or Acquisition	Other
Othe	•	

Initial Facts offered by interviewer:

A British company has hired our consulting firm to evaluate its recent diversification into a new market. The firm has been a producer of car batteries in the domestic market for thirty years and is currently the quality leader throughout the United Kingdom. A few years ago, the product line was expanded to provide batteries for forklifts and other motorized loading trucks. The initial entry into this market was successful, but since then, sales have decreased steadily every year.

Our consulting firm has been able to dig up the following background information:

- The client entered the forklift battery business to utilize the company's excess capacity during periods of inactivity.
- This industry is very mature and annual growth rates have been very small over the past few years.
- Competitors in the industry include:
- 4 domestic producers (experiencing decreasing market share)
- 1 French producer (experiencing stagnant share)
- 1 Spanish producer (experiencing increasing market share)
- The Spanish firm offers low priced but inferior quality batteries
- The client's forklift batteries are sold to industrial dealers by captive salesmen.
- Free maintenance service is a part of every sale.
- Purchases of automobile batteries in the consumer market are highly seasonal.
- Larger customers are sophisticated in their buying practices, focusing decisions on both quality
 and price. Smaller customers are less sophisticated and make purchase decisions based solely on
 price.
- The client's management style could be defined as 'old school,' with the original owner/founder still in charge.

The Question(s):

What recommendations would you have for this company?



Suggested Solution

Desired Framework:	[Check all that apply.]		
	Cost-Revenue and Profitability		The 4 P's of Marketing
<u>—</u>	The 3 C's Porter's 5 Forces	<u> </u>	Value Chain Analysis Microeconomic
	Internal-External		Analysis Other
	Factors		

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

The Spanish product is inferior in quality and may offer buyers a worse deal in the long run, but is targeted to smaller dealers who buy only on the basis of price. Service is not a problem for these smaller dealers who do not know much about preventive maintenance, so the product appears a better deal.

Issues addressed:

- Market Segmentation: Differences between large vs. small customers size, needs, buying behavior
- Product/Service Bundling: How do different segments want to but our services according to their needs (stand-alone or bundled?)? What is better for us?
- Customer Profitability: How can we best profit in each segment?
- Competitor Analysis: What do competitors offer? What segments do they serve? Do they have flexibility with respect to cost, product functionality, and price?

Option 1: Establish an Off-Brand

- 1. An off-brand would allow the firm to develop a product better positioned in the forklift battery business (perhaps of lesser quality but more price competitive), while maintaining its product quality image in the automobile industry.
- 2. Cost savings with an off-brand could come from:
 - Redesign of product using cheaper materials or a different manufacturing process.
 - Offer the free maintenance service as an option, not a guarantee quoted as part of price in the low-end segment. Keep product and service bundled in high-end segment.
- Eliminate the sales force and sell factory-direct to industry dealers or use brokered distribution.
- 3. Sell the current product at a cheaper price with a strategy to promote market share instead of current profits.

Option 2: Focus Sales and Marketing Efforts to Educate the Consumer Market



- 1. Develop and promote product positioning. Offer warranties, long-run cost-savings estimates, etc. to send quality signals that competitors cannot match. Communicate 'true cost' of buying low-priced batteries and try to change consumer-buying behavior.
- 2. Leverage strength of quality leadership position in automotive markets.
- 3. Focus only on high-end of forklift battery market and target larger dealers. Set higher prices to signal quality and extract highest level of consumer surplus. Refocusing of resources would need to be evaluated in terms of dedicated assets and return on investment.

Option 3: Exit the Forklift Battery Business

- 1. If competing in this industry means lowering quality standards may be putting core automotive business at risk.
- 2. May be able to find other opportunities that better fit with company's strengths and image.
 - Forward integration into end products industrial loaders and equipment, golf carts, etc.
 - Backward integration into chemicals, plastics, etc.

Option 4: Do Nothing

- 1. Wait to see how market reacts to product over a longer period of time or to minor marketing changes
- 2. Difficult to sell this strategy to owner given investment in expensive consulting advice, although this may in fact be the most logical approach.



Case No.: STRAT20		
Firm: Deloitte Consulting	2	
Type of Case:		
Str	ategy	
_	New Product Introduction New Market	 Competitive Response Response to Changing Environ.
_	Merger or Acquisition	 Other

Initial Facts offered by interviewer:

The client is a leading beer manufacturer that has been experiencing stagnant sales in an increasingly competitive industry, so is trying to evaluate growth opportunities. The following are the key problems and issues that brought the client to your firm:

- A high level executive at the client has noticed a steady and substantial increase in the consumption of bottled water products
- Believing that the assets required to product bottled water are very similar to that of beer, the
 client wants to recommended to the CEO that they begin production of bottled water
 products. He has asked your firm to help build the case for why they should enter the
 Bottled Water market to achieve their sales and profit goals.

Additional Data Provided Up-Front

Client is facing increased competition from microbreweries, and has already explored ways to penetrate the international market; however, this alone will not enable them to meet their current five-year sales and profit goals.

The Question(s):

How do your develop the business case? What recommendations would you have for this company?

Suggested Solution

Desired Framework: [Check all that apply.]

Χ	Cost-Revenue and Profitability		The 4 P's of Marketing
Χ	The 3 C's	X	Value Chain Analysis
	Porter's 5 Forces		Microeconomic Analysis
Χ	Internal-External Factors		Other

Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]

The boxes in this framework are organized by category. Each box contains questions for that category; the answers to those questions are listed as subordinate bullets.

MARKET POTENTIAL	FEASIBILITY	PROFITABILITY
 What is the expected growth rate for bottled water? After 3 years of 30% growth, the bottle water market has flattened, with future annual growth expected to be <10% Recent industry analysis suggests that current manufacturing capacity among the major water producers will not satisfy basic domestic demand 	 How does the new product fit with our current line of business? Client employs a focused manufacturing strategy – each plant produces a few specific product lines 	 How do distribution channels of competitors compare to those of the client? Can the client use their current distributor network? Very different - client sells primarily to distributors who sell to restaurants and liquor stores; competition sells to distributors who sell to grocery/mass merch. outlets and offices/homes
 What is the competitive environment of the bottled water market like and how does that compare with the beer market? Beer market is highly fragmented with many regional brands There are 3 major water producers who sell nationally 	What will be market acceptance of beer producer in bottled water market?	• Are there alternative strategies to entering the bottled water industry (i.e. outsourcing, contracting)?



MARKET POTENTIAL	FEASIBILITY	PROFITABILITY
Who is our target market for the bottled water? How large is the market? How does that compare with beer? Are they compatible?	 What are the key success factors/core competencies for a Bottled Water manufacturer relative to Beer Brewer? For Beer, regional brand strength and distribution coverage For Water, low bottling costs, national brand name recognition and distribution coverage 	What is impact on beer market share due to loss of production capacity for water? Are there seasonal/cyclical impacts?
	 What capital investments are required? (Interviewee should not assume client is correct in his assumption) Capital investment requirements for packaging beer vs. water are different: plastic bottles/jugs/coolers vs. aluminum cans/glass bottles and kegs 	What is profitability of bottled water line? (EVA, RONA, contribution margin?) How does this align with overall (executive) performance objectives?
	What are the regulatory/labeling requirements? Do they differ substantially from our current product line?	
	Does client have marketing/sales force infrastructure and capabilities to operate/run bottled water business successfully?	

Other questions that may be asked:

- How would you go about estimating the annual market potential/sales of the bottled water market?
- If your recommendation were counter to your client's belief, how would you go about communicating your recommendation to him/her?
- What if you learned that there was going to be a new entrant in the Bottled Water market? What analysis would you focus on to determine if you should change your recommendation?

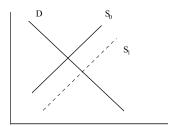
Other Cases

Consulting Case Interview Question

	Allen - Engineering/Manufacturing Group (EMG)
Type of Ca	se: X Other Microeconomics
Initial Fact	s offered by interviewer:
Your client world.	is a shipbuilder who builds tankers. Presently, there are a total of three tankers in the
The Quest	on(s):
The client	wants to know if he should build a tanker. What would you advise him?
	Suggested Solution
Desired Fr	amework: [Check all that apply.]
	Cost-Revenue and Profitability The 4 P's of Marketing Value Chain Analysis Porter's 5 Forces Internal-External Factors The 4 P's of Marketing Value Chain Analysis Other
	Your Answer - Important questions asked, additional information divulged, sumptions, and logic: [Walk us through how you arrived at your answer in detail.]
This is a st	upply and demand issue. Specifically, I wanted to know:
1.	What would happen to price if (world) supply of tankers increased 25%?
2.	Are there other producers or is our client a monopoly producer? If there were other producers, what would be their likely response if our client were to undertake this project?
3.	How much demand is out there?



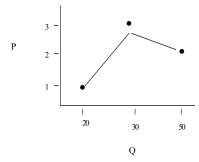
I began by drawing a basic supply and demand diagram:



Before I addressed questions 2 and 3 (above), the interviewer stated he wanted me to construct a supply curve from actual data and gave me the following:

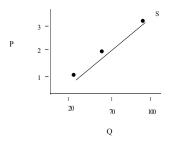
Tanker	MC	Capacity
	(\$/k ton capacity	(K tons)
1	.02	50
2	.03	30
3	.01	20

I initially (wrongly) plotted the three points using MC as price and capacity as quantity:



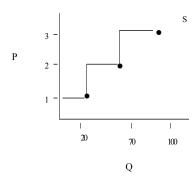
The interviewer gave me a clue and told me to plot the points using cumulative quantity to derive the shape of the curve:

MC	Capacity
.01	0-20
.02	20-70
.03	70-100



From the plot, I inferred a straight-line supply curve (as drawn here).

The interviewer asked me to draw the actual, incremental supply curve implied by the data (this is actually a step function rather than a straight line):



Our client's decision to produce depends on the amount of demand and the marginal cost of producing a fourth tanker.

Q: "What is demand?"

A: "Demand is at 70 k tons."

Conclusion:

MC at 70k tons is 2 cents per k ton.

Wrap-up / Recommendations for client:

I recommended that the client:

- build, if the client can produce a tanker at a marginal cost of no more than 2 cents per k ton
- otherwise, don't build

Desired Answer / Blinding Insights / Twists and Turns (if any):

Remember the importance of getting your pencil to paper and to draw some graphs!



	Case No.: OTHER2 Firm: McKinsey, BCG, Booz Allen & Hamilton Type of Case:			
	X Other Microeconomics			
	Initial Facts offered by interviewer:			
	There is a tin mining cartel consisting of Country A, B, C, and D. Every year the four governments get together to decide how much to produce according to demand forecasts, and allocate the production quota evenly among them. Now, Country A is thinking about withdrawing from the cartel.			
	The Question(s):			
	Country A comes to you for advice. What will you tell them?			
Suggested Solution				
	Desired Framework: [Check all that apply.]			
	Cost-Revenue and Profitability The 3 C's Porter's 5 Forces Internal-External Factors The 4 P's of Marketing Value Chain Analysis Microeconomic Analysis Other			
	Outline of Your Answer - Important questions asked, additional information divulged, assumptions, and logic: [Walk us through how you arrived at your answer in detail.]			
	I need to determine if it is more profitable for country A to mine according to the guidelines of the cartel, or on their own.			
	Q: "What are the relative production costs of each of the countries?" A: Countries A and B have a 10% cost advantage over countries C & D. (Alternatively, you may be asked how you would find out the production costs of each country)			
	Q: "What volume does each country produce and sell, historically?" A: Last year, Country A and B both produced twice as much as countries C&D (you may see that the countries C&D).			

A: Last year, Country A and B both produced twice as much as countries C&D (you may get actual numbers, but very often you will get broad generalizations like these.)

Q: "What is the demand curve facing the producers?"

A: A basic downward sloping demand curve (drawn as such on a piece of paper).

I wanted to derive the price implied by the supply and demand curves. The KEY to this question is to derive the world supply curve. The basic concept is from ECON 101: supply curve is the sum of MC curve of all producers. Here we only have four producers. Based



on what I found out from my questions, I know that the supply curve will be a step function and can compare the price with A's marginal cost. Based on A's cost position on that supply curve, I can decide whether A will be better off producing on their own.

Wrap-up / Recommendations for client:

I recommended that country A go it alone, based on their favorable cost position, and the fact that the remaining countries did not have enough volume to "open the flood-gates" in an attempt to punish me for leaving the cartel.

Desired Answer / Blinding Insights / Twists and Turns (if any):

My answer was right on, but I did not mention the possibility of non-cartel producers who could fill the world supply.

Additional information that might be useful to your fellow Sloanies:



Case No.: OTHER3			
Firm:			
Type of Case:			
	 Brain Teaser (Why are manhole covers round?) Market Sizing (How attractive is the market for fire trucks?) Operations (Our client's profits are down. Why?) 		
Operations (Our client's profits a			
Declining Profits	Other		
Marketing Problems			
Strategy (Should our client enter the beer brewing industry? If so, how?)			
New Product Introduction	Competitive Response		
New Market	Response to Changing Environ.		
Merger or Acquisition	Other		
X Other Consolidation			
Initial Facts offered by interviewer:			
The VP of Procurement of a large diversified of purchasing efforts. Each business unit currently departments.	1 ,		
The Question(s):			
What are the considerations of consolidation?			
Suggested So	olution		
Desired Francescales (Cheek all that apply)			
Desired Framework: [Check all that apply.]	The 4 Die of Manhatian		
Cost-Revenue and Profitability	The 4 P's of Marketing		
The 3 C's	Value Chain Analysis		
Porter's 5 Forces	Microeconomic Analysis		
Internal-External Factors	X Other		
Outline of Your Answer - Important questions assumptions, and logic:	asked, additional information divulged,		
This is a tough one to use a framework for, I be what benefits there would be in consolidation, a	•		
Q: "In this diversified company, how much syn purchasing, i.e., how much of the same types of A: Although each division orders specific mater divisions.	f products do each division purchase?"		
Q: "How does purchasing work today?" A: Each division has their own purchasing department, each of the 13 divisions' central warehouses.	and materials are purchased and delivered to		



Q: "Where are these warehouses located geographically?"

A: They are all in the U.S., with 9 on the East Coast, 1 in Texas, 1 in Chicago, and 2 in California.

Wrap-up / Recommendations for client:

I recommend that the client consolidate the purchasing department if the benefits outweigh the costs:

Benefits:

- Economies of scale from larger purchasing quantities
- Reduction in number of buyers, managers
- Closing of some East Coast warehouses (there can't be a need to have 9!)
- Reduction in administrative costs (billing info, secretarial support, etc.)
- Buyers may be able to establish closer relationships with vendors (we now order bigger quantities) and become more knowledgeable about products they are purchasing.

Costs:

- Making the materials purchased uniform may be a problem for some divisions, i.e., order products with features that division 1 and 2 need but not that divisions 6 and 7 need features that might make the materials more expensive than they would otherwise be if divisions 6 and 7 bought them on their own.
- Distribution costs may be prohibitive, if warehouses were closed.

Overall, I anticipate the benefits would outweigh the costs, but would have to perform the analysis to determine what recommendation I would make.





Chapter 9: Sources for More Help

There is no shortcut to good research prior to your interviews, but some sources are better than others. Here's where the good stuff is!

Your first resource to check should always be the MIT Sloan MCC web site at:

http://web.mit.edu/sloan-mcc/mcc_home.html

If you find any useful sites that are not on the MCC site or any other great sources of information, please e-mail us.

About the Consulting Industry

1. MIT Sloan MCC Web Site.

Your first place to check for various links!

2. <u>"So, You Want To Be a Management Consultant"</u> by Wet Feet Press. See the MCC web site for a link to their site, but call 800-926-4JOB to order. \$15 each for MIT Sloan students.

The best guide to management consulting out there! Short but sweet.

Note: Check out Wet Feet's web site to browse titles but **order by phone**. You need to tell them you are from MIT Sloan to get the \$10 discount from the normal price.

3. "The Witch Doctors: Making Sense of the Management Gurus" by John Micklethwait and Adrian Wooldridge. ISBN 0-8129-2833-4. \$25.

This is a great history of management consulting and will give you lots to talk about with your interviewer!

4. <u>Consultants News</u> (industry newspaper)

You may want to check this out to keep current on the industry. It's in the CDO.

Researching Consulting Firms

1. Wet Feet Press Company Insiders. See the MCC web site for a link to their site, but call 800-926-4JOB to order. \$15 each for MIT Sloan students.

At last count, Wet Feet Press has profiled over 15 top firms. These insiders are about 40 pages long and have nearly everything you need to know to ask smart questions during the interview. And they keep these guides very current.

Note: Check out Wet Feet's web site to browse titles but **order by phone**. You need to tell them you are from MIT Sloan to get the \$10 discount from the normal price.

2. Firm Web Sites.

Check out the MCC web site for links to all the firms that recruit at MIT Sloan, and many that do not (...yet).

3. <u>HBS Cases.</u> Go to the MCC web site for links to HBS Publishing. Cases are \$5 each.

HBS publishing has found a way to make money off consulting firms by profiling them in their cases. If you are really motivated, check out the HBS publishing web site. There are cases on McKinsey, Bain, Booz-Allen Hamilton, and others.

Personal Interviewing

1. "Power Interviews: Job-Winning Tactics from Fortune 500 Recruiters" by Neil Yeager and Lee Hough. ISBN 0-471-52114-0. \$14.95.

A great guide on how to answer the tough questions!

 "PCS to Corporate America: From Military Tactics to Corporate Interviewing Strategy" or "Your Career Fast Track Starts in College" by Roger Cameron. ISBN 0-9623216-5-6. Call 800-444-9832 to order by mail. \$15.

Even though the first book is oriented toward former military officers and the second book is oriented toward undergraduate college students, these books are **by far the best guides** on how to interview with top companies. They cover all the things you never think about when interviewing, but should. Very no-nonsense material and a quick read. Don't buy both books, because the meat of the two books is basically the same.

Case Interviews

1. "Ace Your Case" by Wet Feet Press. See the MCC web site for a link to their site, but call 800-926-4JOB to order. \$15 each for MIT Sloan students.

This book contains nearly 70 pages of cases and frameworks. Perhaps a little redundant since you are using the MCC book, but a little more practice never hurts. They also have released a sequel with more cases. (No, they do not pay us to say nice things about them...)

Note: Check out Wet Feet's web site to browse titles but **order by phone**. You need to tell them you are from MIT Sloan to get the \$10 discount from the normal price.



Appendix: Recent Cases Provided by Consulting Firms

Many thanks to:





Bain & Company

The Boston Consulting Group

Booz | Allen | Hamilton



Marakon Associates