The Consulting Club Case Book (2007/2008)

Table Of Contents

List of Cases

I. Introduction

Welcome.

In this introduction, I will outline the purpose of this book, the need to use other resources in addition to this one in your preparations, and to wish you all luck in preparing for your interviews.

Purpose – Those of you who are exploring career options within consulting[1] (or indeed other firms that use case interviews e.g., Johnson & Johnson) will find that "Practise, Practise, Practise" is the best preparation. This book should be used in a number of ways.

1. An introduction to the concept of the case interview
2. A theoretical guide (how to address cases, what interviewers are looking for)
3. A source of practice cases to do with friends/colleagues/anyone who will help
4. An insight into the type of answers you might give to a particular case – this is only a guide (there are no right answers)

It is vital to access the range of other resources available to you in this field in addition to this book.

Other resources available through the Consulting Club and Careers Services include:-

- Evening lectures
- Group crack-a-case training sessions
- Company sponsored events
- Mock interviews
- Portal resources such as Vault, other sources of case materials[2]
- Consulting club website

Contact details that might be helpful:
Career Services: 020 7000 7400
careerservice@london.edu
Consulting Club executive – find on Portal

Good luck!

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1 MBAs, EMBA, MIFs, Sloans, Alum and any other current/past student group

2 Find links to these on the portal consulting club discussion threads

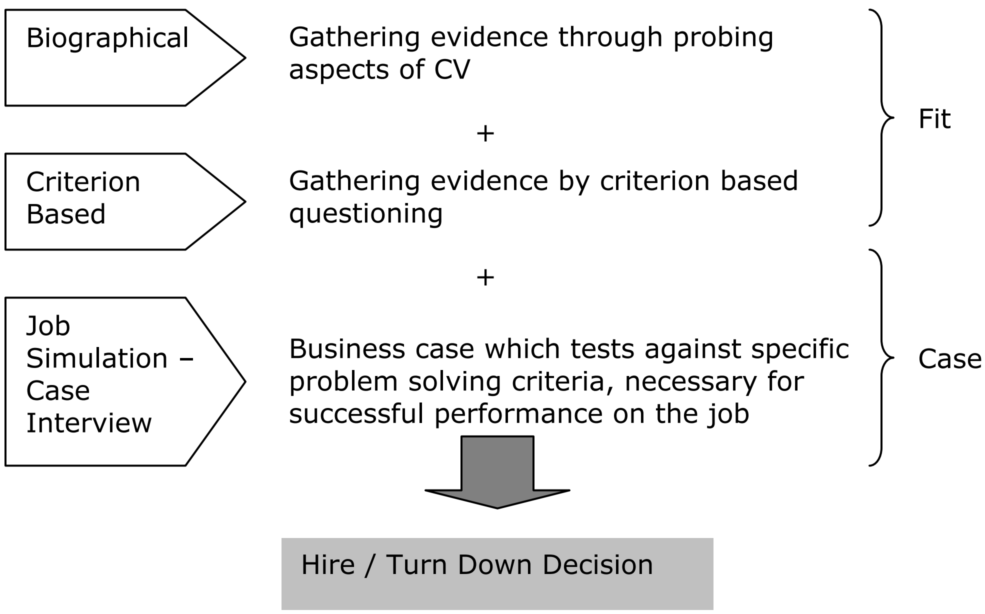
II. The Consulting Interview Process

A. Introduction to the Process

When applying to work with a consulting firm[3], you will have to go through a multi-stage interview process. The majority of firms' interviews follow a similar pattern:

Round 1[4]

The first round will generally consist of two interviews with consultants at the firm you are applying to join, often about 30min – 1 hour each. Case and fit interviews may be separate or combined. First round interviews are often held on the London Business School campus.



Round 2

Round 2 will be conducted along very similar lines to Round 1, but will generally be held at the office to which you are applying. In addition, the interviewers will probably be more senior than those who interviewed you in the first round – Partners as opposed to Associate Consultants or Managers. You will be given two or three business cases and, in addition, your 'fit' will be tested again.

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3 Relevant for applications for both full-time or a summer internship at associate level, as well as those entering as more experienced hires

*4 * McKinsey have an Intermediate Problem Solving Test before the first interview stage, and a group exercise, a role play and an Advanced Problem Solving Test at the final interview stage.*

Very Important: Interviewers in this round will seek to test 'weak spots' based on feedback from the first round (competencies that were not tested, or where performance faltered during Round 1).

Be very self-aware during your first round interviews and afterwards:

- Analyse the points on which you feel you might have let yourself down or under-represented your abilities.
- Spend some time practising answers to questions on these topics
- Some firms provide feedback after the first round – use this to focus further preparation

Understanding and preparing for both the case and the fit components of the consulting interview process greatly improves a candidate's chances of obtaining a position in consulting and also reduces the stress associated with the interviewing process.

Case interviews are dealt with in detail in sections III and IV of this Case Book and Fit interviews are covered in detail in section V.

B. What Firms are Testing for with Case and Fit Interviews

The purpose of both fit and case interviews is to assess the candidates on a number of selection criteria. These do vary from firm to firm but can be broadly grouped into four main 'buckets', all of which are key to performing well in a job in the consulting industry.

Successful candidates will demonstrate:-

- Strong ability on three of the four dimensions (i.e. be 'above the bar' on at least three dimensions)
- Be 'outstanding' or 'truly distinctive' on at least one of the four dimensions.
- Outstanding or truly distinctive is judged as "This candidate would be within the top 25% of consultants currently working in the firm on this dimension".
- If you are above the bar on all four dimensions, but not outstanding in one, you will not get the consulting job.

Note - These are a measure of "raw talent" rather than looking for a specific background*, industry or functional experience in the Associates that they employ. Probably 80% of people joining consulting firms at the Associate (MBA) level are career changers

* Note – for "more experienced hires" (potentially relevant for EMBA/Sloan students), background in terms of industry or functional experience is more relevant. However the underlying recruitment process remains the same, as do the type of criterion being assessed.

Problem Solving
Intellectual Capacity
Analytics / Quants
Creativity
Business Judgement
Comfort with Ambiguity

Personal Impact
People Skills
Presence
Team player
Confidence vs ego
Sense of humour

Leadership
Integrity
Maturity
Inspirational
Willing to take personal risks
Track record (sporting, clubs, school)

Drive / Aspiration
Enthusiasm
Desire to excel
Other interests

Can I send you to a client on day 1?
Can I spend 5 hours on a car/plane with you?

Demonstrating Problem Solving Skills in a Case Interview

A consultant is, above all else, a problem solver – i.e., they are contracted by clients to solve their business problems. Strong problem solving is therefore key to securing a job in the consulting industry.

Your problem solving ability will be primarily through the case interview. Three elements will drive your performance:

- Intrinsic abilities: intellectual capacity, quantitative ability, creativity
- Preparation: time/effort spent learning what is expected of you
- Practice in solving cases.

Intellectual Capacity	▪ Using complex/sophisticated reasoning to address issues within the case ▪ Picking up on hints given by the interviewer during the interview process ▪ Applying new concepts introduced by the interviewer, later during the case
Comfort with Ambiguity	▪ Willingness to attempt to solve the problem ▪ Not – 'I don't know anything about this area/industry' – that's the whole point
Business Judgment	▪ Focusing on where the real problem is (Can they identify the 'big buckets' and 'smell money') ▪ Logical and well-structured approach ▪ Can you identify the key issues and address these in a logical and structured way ▪ Using frameworks only if they are appropriate; not shoehorning the case into the last framework they learned ▪ Clearly summarizing "conclusions so far" at each stage of the case
Creativity	▪ Coming up with alternative ideas or creative suggestions
Ability to Listen and Learn	▪ Thinking about everything discussed so far and its implications for this question, rather than answering each question in isolation

Demonstrating Personal Impact in Case and Fit Interviews

Consulting is about working closely with ***clients***, so an interviewer will be looking for you to demonstrate that you are ***intuitive around people*** – both from your track record and that you interact with him/her in an intuitive and empathetic way during the case and fit interviews.

During the fit interview the interviewer will ask questions about your experience on the various dimensions they want to test

- Are you a team player?
- How have other people you have interacted with in the past viewed you? (work and MBA colleagues, team mates)

Your Personal Impact is assessed during both the case and fit interviews

Example: It is more intuitive in the case interview to say "I'm not familiar with the UK credit card industry. Do you pay off the balance in full each month like we do in Germany?" rather than making a bald assumption such as "I'm going to assume that in the UK you pay the balance on your credit card each month".

Presence	▪ Confidence, composure and grace under pressure vs. ego ▪ Is the candidate comfortable and in control? ▪ Do they remain confident even when they make mistakes? ▪ Do they keep forging ahead?
Teamwork	▪ Do they use new information or feedback on wrong answers to push forward their thinking? ▪ Do they respond to the interviewer's feedback with – "That's interesting, and it must mean that…." rather than getting defensive ▪ Have they demonstrated strong team working in their past jobs and extracurricular activities?
Sense of Humour	▪ Are they enjoyable to interview? ▪ Can I see myself having a laugh with this person when we're stuck in a hotel in the middle of Scotland together?
Presence	▪ Will this person be taken seriously by the client? ▪ Are they someone that other people will listen to?

Demonstrating Leadership in both Case <u>and</u> Fit Interviews

Your Leadership abilities are assessed during both the case and fit interviews, but primarily through exploring your track record as a leader in the fit section, as it is hard to demonstrate real leadership abilities during a case interview.

Integrity	▪ Solving the problem posed ▪ Responding to the questions actually asked (also about active listening) ▪ Not trying to bend the rules
Maturity	▪ Being articulate, persuasive and credible (leaving the interviewer feeling you could be put in front of a client on their first day in the job)
Inspirational	▪ Interviewer will look for the ability to inspire others to follow the candidates and to trust their judgement
Track record	▪ Having more than one good example of where they have occupied a leadership position and can they discuss these leadership roles convincingly and in depth?

Demonstrating Drive/Aspiration in both Case <u>and</u> Fit Interviews:

As mentioned previously, consultancies also use case interviews to demonstrate to the candidate the type of work that they do. Therefore the case study is not just a hurdle to be cleared (e.g., by learning 'crack-a-case methodology') to get the job.

During the case the interviewer will be looking for you to demonstrate that you are enjoying solving the case, that you are enthusiastic and engaged by the business problem and that you are interested in finding out the solution. Most interviewers will give you a case that they have personally worked on or are currently working on, and they will be pleased and react very positively if you show an interest.

Drive/Aspiration will also be tested in the fit interview, by looking at your levels of achievement in your past work and extracurricular activities.

Enthusiasm	▪ Are you enthusiastic about trying to solve the case and wanting to know what the solution was at the end of the interview? ▪ Will you thrive in a consulting environment?
Desire to excel/Results Orientation	▪ Persistence in solving the problem; not giving up ▪ Striving to excel in everything that you take on
Other interests	▪ Demonstrating success in activities outside the work arena

C. The Interview Challenge

The challenge that you face in interviewing is to convey your excellence on all of these dimensions in a 45 minute time period.

Your ability to achieve this goal is a function of three things: innate ability, understanding of what is required of you, and practise and self-awareness. There is little you can do about innate ability, though the very fact that you are a student at London Business School suggests that you have the ability to get a job in consulting. If, however, you know that you are not strong on a number of the skills highlighted in the previous section as being critical to success in consulting, then you might want to consider other career options.

With understanding of what is required of you and practice, you will find that many of the elements listed above come across naturally. If you are a quantitative and/or engaging person, you will come across as so in the interview without thinking about it. You still need to practise, however, since these natural predilections will easily be masked if you enter the interview unprepared or nervous. Practice will also help you identify the areas that don't naturally come across for you in a short interview.

Identify these areas quickly, both by looking at your past performance in interviews and by internalising the feedback given to you from mock interviews at London Business School, and work actively to improve your ability to convey them to an interviewer.

In every interview, you must also maintain significant self-awareness of how you are being (or might be) perceived. Actively manage the image you are conveying. That may seem like a lot to think about while you're also trying to solve a complex case, but it is very important.

III. How to Ace Case Interviews

A. Overview of Case Interviews

Why consultancies use Case Interviews

Many recruiters - consulting companies in particular - will test for a high degree of competence in the area of solving complex, business problems. A management consultant I,s above all, else a problem solver and therefore this is the core skill that consultancies look for when interviewing candidates.

Consultancies use case interviews because cases give them the opportunity to see how a candidate thinks about business problems and tests a candidate's ability to solve these business problems.

The primary purpose of a case interview is, therefore, to test a candidate's problem solving skills in the widest sense, including his/her skills in:

- Structured, logical thinking
- Issue identification
- Analysis
- Creativity
- Insight
- Business judgement
- Numerical ability
- Taking a collaborative approach.

Case interviews also give the candidate some insight into the type of work that consultancies conduct. If you do not enjoy solving problems during a case interview, it may be an indication that, in fact, a career in consulting is not for you.

Types of Case Interview

An interviewer may use any or all of three types of cases during a case interview:

Business Case	▪ You are the CEO of an insurance company. You want to launch an e-commerce business that is synergistic with your current insurance products, but which is not an insurance product. How do you decide what this on-line business should sell and who it should sell to?
Estimation	▪ How many gallons of white house paint are sold in the UK each year? ▪ Estimate the weight of a Boeing 747
Brainteaser	▪ What is the angle between the big and small hands on your watch if the time is a quarter past three? ▪ Why are manhole covers round?

The majority of consulting interviews are **Business Cases** because it is the only case type that really tests the skills that a consultancy is looking for, and also demonstrates the work that a consultant will be required to do once in the job.

In a business case, the interviewer presents a business situation and asks the interviewee to 'solve' it through discussion.

Examples: Firm A's profits have been declining for the past eighteen months. Why has this happened, and what would you recommend to help Firm A improve its performance?
Firm B makes jewellery and is considering expansion into the fashion retailing business. Would you recommend that it does so?
Firm C makes tin cans. It is planning to expand its manufacturing capacity and is debating whether to add to its existing plant or build a new plant. What would you recommend that it does?

Example: Estimate the number of BMW cars in Germany

An interviewer may ask an **Estimation Case** either in addition to or instead of a business case. Generally an estimation case would not be used instead of a business case because it does not test for the required intrinsics in as robust a way as a business case.

An interviewer may throw in a **Brainteaser**, but will virtually never use a brainteaser as the sole case in an interview. The problem with brainteasers is that they are binary – the candidate either 'gets' them or doesn't.

B. Tackling a Case Interview – A Step-by-Step Illustration

1. Business Cases

"How do you eat an elephant?"
"One bite at a time."

It's the same with solving business cases. When you get a case posed in an interview, don't just think, "Oh no, I have to solve this huge problem in one go". Solving a case successfully consists of running through the following four basic steps:

Business Case
– One Step at a Time

Listen & Clarify	Structure	Analyse	Conclude
Ensure complete understanding of business issue: • Listen carefully • Take notes if it helps you • Ask clarifying questions as needed • Take time to evaluate the information given	Develop approach to solve problem: • Structure problem • Identify key issues & prioritise • Formulate an initial hypothesis/ hypotheses • Articulate approach & hypothesis	Request information to test hypothesis: • Ask questions and collect information • Develop, test and refine hypothesis • Iterate • Hone in on the solution • Verbalise your thought process	Synthesise findings into recommendations: • Summarise your findings (not just by recapping your analysis) – draw out key facts • Make a recommendation • Add next steps

Step 1 –
Listen and Clarify:

The interviewer will introduce the case to you by giving:-

- A bit of background, e.g. type of industry, who your client is
- Describing the specific business situation
- Giving you some initial information

Some of this information will be important, other bits will prove to be irrelevant.

In some cases there may be very little information up front, deliberately leaving the question vague to see how you cope with initial ambiguity.

One thing is vital - make sure that you *listen very carefully*. *Take notes*. Make sure that you take a pen and paper with you into the interview. The importance of listening cannot be emphasised enough.

You will create a very bad impression if you need the interviewer to repeat the question or if, through not listening, you have missed the key facts and therefore go on to solve the wrong case or fail to focus on the important issues in the case.

One skill in actively listening is to verbally paraphrase the situation and information back to the interviewer before you begin to tackle the problem to ensure that you have understood the key facts.

Clarifying questions

The interviewer may have used terms that you are not familiar with – ask him/her to explain what those terms mean.

Example: When talking about the insurance industry, the interviewer may use the term 'loss ratio'. If you haven't heard of this term, ask them to explain what it means

Clarifying questions show that you are taking a real interest and demonstrate that you are serious about fully understanding the business problem posed.

If you don't make sure that you understand what the interviewer is asking you to do upfront you are denying yourself the opportunity to perform well in the interview. In general, you should not need to ask more that one or two clarifying questions, and it is fine if you don't have any.

Take time to evaluate the information

It is polite to ask the interviewer if he/ she wouldn't mind if you take a minute to think about the problem.

Example: "Would you mind if I take a few seconds to collect my thoughts?"

There is no right or wrong amount of time to spend thinking about the problem though, generally, you should *spend about a minute*, maybe slightly less than that if you can.

A minute's silence will feel like a long time to both you and the interviewer.

Bear in mind that a large part of the interview is about generating a rapport with your interviewer and the only way you can do this is through a quality, two-way dialogue. Too much silence and lack of eye contact, i.e. staring hard at the paper in your hand as if it will give you the answer, are all negative to creating rapport. However, thinking time is a valuable part of the process – do not neglect it.

Step 2 – Structure:

Your next step should be to 'structure' your answer – i.e., give yourself a coherent structure that you can use to guide your analysis.

- The structure that you use can be one that you have 'made-up', but one that is logical and fits the problem

- It could be a framework that you have been taught at business school, e.g., the three Cs or Porters 5 Forces.
- You may decide that a combination may be the most relevant.

However, it is key to remember that the objective of the exercise is not to 'fit a framework to the problem'[5]. A framework is no more than a tool that you can use to help you organise your thoughts and analysis and ensure that you are exploring all the key issues.

Once you have thought of a good structure:-

- **Communicate** that clearly to the interviewer, so that he/she understands how you are structuring your thoughts
- Break the central issue into a **number of pathways** to addressing the problem, based on the structure/framework that you have developed
- Given that your time is limited it is important to **prioritise** the issues that you investigate in the case.
- The interviewer may have given you a hint early on which might steer you towards a particular path first. Otherwise that might become clear as you progress through the pathways you have laid out.

> **Example:** Business case: Why Company A's profits have been declining for the past two years
> Using the Profit = Revenue – Costs equation is a good structure to start with. Company A's declining profits could be due to loss in revenues (price x volume) or increase in costs (fixed costs + variable costs).

> **Example**: The interviewer might say that a new, aggressive competitor entered the market eighteen months ago, which is a steer that perhaps Company A has been losing market share and hence revenue.

> **Important:** Most consultancies take a '**hypothesis driven approach'** to solving actual business problems. This means that they will come up with a 'straw man' as to what the likely solution to the business problem might be and use this straw man to guide, and prioritise, their analysis.

At the end of the case they may have either proved or disproved their initial hypothesis in coming up with the answer – and each is equally legitimate.

- If you disprove your initial hypothesis, it shows that your analysis was rigorous and succeeded in disproving the 'obvious' straw man. In disproving your initial hypothesis, your

> **Example:** For Company A above, an initial hypothesis might be: "Given that Company A's profits are declining and that you've mentioned an aggressive new entrant has come into the market, I would hypothesise that it is more likely to be a revenue rather than a cost issue, and so I'll start my analysis by looking at revenues first".

5 Trying to shoehorn an inappropriate framework onto a problem

analysis should also have revealed what the true solution to the problem is.
- If you prove your initial hypothesis with your analysis, all well and good.

As you conduct your analysis throughout the case interview, remember to relate your findings back to your initial hypothesis: "This seems to support my initial hypothesis….", "This seems to refute my initial hypothesis", and if you are refuting your initial hypothesis indicate that "Actually, Z is more likely to be where the solution to this problem lies".

Step 3 – Analyse:

The analysis phase should form the bulk of the case interview.

In this phase you will:-
- Ask your interviewer questions
- Collect the information you need to conduct your analysis
- Develop, test and refine your hypothesis
- And hone in on a solution based on the facts

This is an iterative process.

Important: Throughout the analysis phase you must verbalise your thought process to the interviewer so that they can see how you are thinking.

Interpersonal style

Remember the interview is a dialogue between you and the interviewer. In addition to judging your Problem Solving abilities through the business case, they will be judging you on Personal Impact, Drive and Aspiration and Leadership, so you need to work on building a rapport.

Therefore during your case interview you must demonstrate that you are:
- Good with people (clients)
- Convincing in your arguments
- Can take feedback/challenge without becoming defensive
- That you are a good listener, etc.

In meetings with a client you need to have a non-confrontational, collaborative style. Use this as a model for your interactions with the interviewer

Try to ensure that the interviewer enjoys the interview.

Bear in mind that they will probably be seeing twenty or thirty candidates over a two or three day period and interviews can blend into each other for the interviewer. However, if they really enjoy the interview they will remember you very positively.

Questions

There is also a skill to drawing information out of the interviewer. Many interviewers will give candidates who they believe are asking questions in a structured, thoughtful way much more information that they would give to candidates who they believe are just reeling out an unstructured laundry list of questions in the hope that they will be able to piece some kind of analysis together from that laundry list. You must only ask questions that you can justify – and then demonstrate that you are using the answer to that question to further your analysis and push the case forward.

By asking questions and bringing to light new information, you will be able to determine whether your initial hypothesis was valid or not.

If your analysis proves that your initial hypothesis was invalid:

- Systematically follow your structure and progress to the issue with the next highest priority
- Then, based on the new information you receive, develop a new hypothesis as soon as possible.

Example: "Based on what I've learnt from my analysis so far, it appears that actually a reduction in market share and therefore revenue is not responsible for Company A's declining profitability. It appears to be a cost issue. Though we haven't lost any market share due to the increased competition in the market, our COGS have increased as we've tried to increase the quality of our product but maintain the same price to hold on to our market share. To solve the profitability issue, Company A probably needs to look at ways of maintaining the additional quality, whilst reducing COGS, or perhaps saving on costs in other areas if this proves difficult."

Calculations

When doing calculations, explain all of the steps you are taking to the interviewer. This illustrates your thought process and maximises the ability of the interviewer to coach you.

Once again, it is key to continually verbalise your thoughts and analysis to the interviewer.

If you then get the wrong answer at the end of the calculation, the interviewer will be able to see where you went wrong and see whether it was a minor error which they can ignore, or if it was a major error which may indicate you do not have the quantitative skills to be a consultant.

If you conduct your calculations in silence and just reveal the answer at the end, and this answer is then wrong, the interviewer will have no idea as to whether your mistake is major or minor and may just assume the worst.

While asking questions is a fundamental part of the process, you must ask these questions in the context of your structure and the issues you are exploring – rather than just firing off questions randomly or in no particular order.

As you work through the case, it is also a good idea to summarise where you are at various stages – what you have learnt, what this learning means in diagnosing the problem, and which issue you are going to explore next.

Step 4 – Conclude:

Once you feel that you have exhausted all the issues and, consequently, lines of analysis, finish the interview by summarising the situation and providing a recommendation or recommendations.

NB - Try not to just recap the analysis you have just conducted in your summary. Rather, summarise the key things that you learnt as you performed your analysis and how these added together to reach your recommendation.

Example: Company A – "I recommend that Company A looks at ways to reduce their indirect costs to try to reverse the slide in profitability. Given that the industry is characterised by intense competition, it will be difficult to grow their market share or to increase prices."

You may also want to add some next steps or additional considerations, as appropriate, to your conclusions and recommendations.

- This shows that you recognise the limited amount of time and information you had available in getting to your conclusion
- There may be issues you haven't had the time or the information to address properly
- Cases are short - Implying to the interviewer that you have covered every base in a complex business issue in 30 or 40 minutes, might indicate that you are short sighted, naive or perhaps even arrogant

It is much better to make reasonable recommendations – but also to acknowledge that you haven't been able to be completely exhaustive and highlight the areas you'd like to penetrate further (if you had more time).

2. Estimation Cases

An estimation case is usually in the form of something like – "How many gallons of white house paint are sold in the U.K. each year?"

Other examples of estimation cases are:

- How many tube trains are there on the Underground?
- How many golf balls would fit in Canary Wharf tower?
- If a male and a female goat are put on a deserted island that has plenty of food and water on it, what would be the island's goat population after ten years?
- How many wedding dresses are sold in the UK each year?
- How many divorces are there in the US each year?
- How many fire extinguishers are there in London Business School?
- How many coke cans would fit in Buckingham Palace?
- And so it goes on![6]

If you run into one of these cases:

- Make sure that you have clarified, and therefore fully understand, the question.
- Remember the interviewer may deliberately not have given you all the information.
  - Another sensible, perceptive question to ask in this case is whether the paint is internal or external.
    - The paint is actually for external walls only
    - An interviewee may be marked down if they failed to establish that at the start, though they would probably not fail the case on this point alone.
- Break the problem down into logical steps
- Solve each step one at a time.

Clarify: For example, with the house paint case, if you do not come from the U.K you may be unfamiliar with gallons. Ask the interviewer what a gallon is (approx 4.5 lts).

Assumptions –v- additional information

How do you decide whether you should be estimating required information or requesting it from your interviewer. There is no clear answer to this, as it varies from case to case.

Here is an example that expresses the alternatives well, leaving the interviewer the option of providing additional information if it is available. "I know capacity per hour, and in order to determine maximum capacity, I need to know how many hours per day the factory is working. Can you give me this information or should I make an assumption?"

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6 They could be based on anything - this actually makes it very easy to practice estimation cases, because you can come up with a list of at least twenty estimation cases in under five minutes

Sample Solution To The House Paint Question

Step 1 (Homes)

- The population of the UK is about 60 million
  - One quarter of the population live alone – 15 million homes
  - Three quarters live in families of between two and six – I'll assume an average of three people per household – 15 million homes
- Total number of homes in the UK is 30 million

Step 2 (Houses or Flats)

- Some of these are houses, some are flats
  - Every single person I know lives in a flat. However, because I live in central London, I'll assume that is not entirely typical. I'll assume 80% of single people live in flats, 20% in houses. 12 million flats; 3 million houses
  - Assuming the opposite for families is probably fair
- 15 million houses; 15 million flats

Step 3 (Paint Colour)

- Because the UK is a cold country, most houses are not painted white. There are centres where white houses are popular: Devon and Cornwall, some coastal towns, 'chocolate box' villages. But the population in these areas is sparse and mostly houses. I will therefore assume that only 2% of flats are painted white, and 10% of houses.
- 300,000 flats and 1,500,000 houses

Step 4 (Area to be covered/house)

- My house is 1,500 square feet. I'll assume that's average. The height of a wall is about 10 foot, so, in the average house there is (150*10) + (10*10) = 1,600 sq foot of external wall per house, ignoring windows
- The average flat is about a third the size of the average house – 500 sq foot. (50*10) + (10*10) = 600 sq foot of external wall per flat

Step 5 (Total Area to be covered)

- Total external 'white' wall space is (1,600*1,500,000) + (600*300,000) = 3,150 million + 180 million = 3,330,000,000 sq foot

Step 6 (Frequency)

- But an external wall will only be painted once every ten years
- So the total external white wall space to be painted every year is 3,330 million/10 = 333,000,000 sq foot. I've done a lot of painting in my life and, on the side of a gallon, it says that coverage is about 20 sq foot per gallon. But I'd give a wall two coats, therefore coverage is 10 sq foot per gallon

Answer

33,300,000 gallons of white house paint are sold in the UK every year.

- Each step involves making estimations – hence the name estimation case
- However, the estimations are (hopefully) sensible, relevant and are based on sound reasons
- It is legitimate to use any information that the interviewer might have given you and to estimate other facts you need based on your own best judgment
- While you do have some liberty to make guesstimates, your guesstimate is an indication of your common sense
  - o You will not be expected to know exactly how many people live in the UK, but you should have a ball park figure for key, likely statistics
  - o Guesstimating the population of the U.K. at 1 billion people is likely to make a very poor impression.
  - o If you have no idea about the magnitude of what you are guessing at, state that and see if the interviewer offers up some information
- State all your assumptions out loud
- Lead the interviewer through your solution

That said, do not panic, and do not spend an undue amount of time trying to get the answer to be perfect – a good approximation is fine.

Other points to remember	
In addition to solving the case in a sensible way, the interviewer will be looking for you to generate some rapport with them	Saying things like – "Every single person I know lives in a flat. However, because I live in central London, I'll assume that is not entirely typical" – is chatty and gives a little of yourself away. It also serves to illustrate to the interviewer that you are not just pulling your numbers out of the air
Level of detail to use in your answer	This depends on whether the estimation case is given to you as the only case in the interview or as an add-on to a business case. You should adjust the response accordingly
Key statistics and formulae	It will be useful to know some common numbers and formulae to get you through these types of questions

if you are planning to interview in the U.K.:

- Have a general idea of the population of the UK (also for France, Germany, the US, etc.)
- Knowing volume formula of a sphere (like a tennis ball) is also useful, e.g. for something like 'How many tennis balls would fit in Buckingham Palace[7]?'
  - o It is 4/3 * pie * r^3 *(*Similarly, you should know the formulas for the radius and diameter of a circle, information for a rectangular cube such as for a building, etc.)

7 it is probably sufficient to show that you are using the relative volumes to determine how many balls would fit in the building

3. Brainteaser

Brainteasers are not cases in which a technique can be learnt, mainly because a brainteaser can be about virtually anything and posed in any way. However, brainteasers are increasingly rarely used as interviewers seem to be realising that they do not give a good insight into a candidate's ability to 'do the job'. If you get a brainteaser, just try to stay calm and take some time to think about the problem. Also, and very importantly, don't panic if you don't manage to solve the brainteaser. They are binary – you either get the answer or not – and, if you don't, it certainly does not mean that you won't get the job. It will just be one of many data points that the interviewer will use to make a decision.

C. Six Major Types of Business Case

Types of Business Case

In general, there are six main types of business case:

1) Profit improvement
2) Industry analysis
3) Market entry
4) Capacity expansion
5) Acquisition
6) Investment

However, it must be remembered that these six categories are not mutually exclusive or completely exhaustive.

For example, a market entry case might require industry analysis, and an acquisition case may involve evaluating return on investment.

Some cases may not fit neatly into any of the six major business case types, but may incorporate certain elements from one or more of them.

1. Profit Improvement

Profit improvement cases are probably the most common business cases that you will encounter in an interview. They are also arguably one of the easiest as the problem is easily structured through systematically examining each aspect of the profitability relationship: **Profit = Revenue – Costs.**

In this business case the interviewer will typically ask you analyze why a firm's profits have decreased and what a firm could do to reverse this decline and bring itself back to profitability.

Example: "Company A's profits have declined by 30% over the last eighteen months. The CEO would like you to help him/her understand why this profitability decline has happened and what he/she can do to return Company A to profitability."

As mentioned above,
Profits = Revenues - Costs
= [(*Price - Variable costs) x Quantity] - Fixed costs*

Using the expanded form of the equation (in italics) adds an additional degree of depth to your analysis and ensures that you don't neglect the difference between fixed and variable costs during your analysis.

Other valuable profitability formulas that you could incorporate in your analysis include:

Revenues = (Price * Quantity)
Costs = Fixed costs + Variable costs
Break even quantity = FC/(Price - Variable cost)

You should ensure that you are familiar enough with each of these formulae to be able to use them in a case interview situation.

A good way to tackle this kind of case is to use the profitability formula to structure your answer up front – laying this structure out for the interviewer - and then exploring each dimension in detail.

In addition to the formula, you should have a sound understanding of both revenue and cost related issues.

Revenue related issues to consider during your analysis include:

- Factors that impact price:
  - Market power
  - Price elasticity
  - Product differentiation
  - Opportunities for differential pricing of the same product, e.g., airline seats
  - Methods of Pricing: cost plus, matching, market based (think about the pros and cons of each of these)
  - Brand Implications, e.g. strength

- Factors that impact volume:
  - External factors:
    - Competition (share of market, positioning/image, customers, profitability, differentiation, future plans
    - Substitutes/complements
    - Market forces (declining market size, technology, regulation)
    - Customers (needs – latent vs demonstrated, price sensitivity, segmentation – product extension)
  - Internal factors:
    - Distribution channels
    - Manufacturing capacity
    - Logistics/supply chain/inventory management
  - Growth strategies:
    - Sell more existing products to existing customers
    - Sell existing products to new customers
    - Sell new products to existing customers
    - Sell new products to new customers; think of product extensions

> Note: New products do not need to be completely new. A line extension, e.g., Diet Coke, is classed as a new product, so remember line extensions when thinking growth strategies

Cost related issues to consider during your analysis include:

- Fixed versus variable costs
- Short-run versus long-run costs
- Capacity utilization and its impact on total average cost per unit
- Benchmarking costs against industry competitors
- Relative percentage weighting of cost components:
  - Cost of Goods Sold: labour, raw materials, overheads
  - Operating Costs: sales and distribution, marketing, general and administrative, research and development

An analysis of costs will vary with the type of industry being considered. It is very important to demonstrate sound business sense by showing the interviewer that you understand, for the specific industry that you are examining in your case, where the big money buckets are, i.e., that you can 'smell the money.'

> For example, for a pharmaceutical firm, research and development expenses will be the biggest cost buckets. For an airline, fixed costs (i.e., leasing of or depreciation on the planes, fuel costs, landing fees, maintenance costs) are huge. In the case of a firm with multiple products, how the company is allocating their costs between the products and, therefore, their ability to properly understand which products are making a positive contribution and which are not, may be an important issue.

2. Industry Analysis

With an industry analysis case an interviewer will ask you to evaluate the structure and/or desirability of a particular industry.

> **Example:** "Your client is the CEO of Company B, a U.K manufacturer of rolling stock for the railways. He/she would like you to help him/her understand whether the rolling stock industry a good one to be in. Why or why not?"

Porters 5 Forces is a tool to analyse industry attractiveness, but if you are going to use this to structure your answer, ensure that you don't say to the interviewer – 'Oh, an industry analysis case, I'll use Porters 5 Forces.'

Suggested phrasing: 'There are six areas I'd like to look at to determine whether the rolling stock industry is potentially a good one for our client to be in. I'd look at the overall industry structure and market conditions as a whole, then I'd like to look in more detail at customers, competitors, suppliers, threat of substitutes and finally what barriers there are to entry/exit.' You can then analyse each of these in turn.

Issues to consider in industry analysis business cases include:

- What is the **industry's structure** (competitive, oligopoly, monopoly)?
- What are the relevant **market conditions**, e.g. size, growth, profitability, segmentation, technological change, regulatory issues?
- **Competition**: Who are the key players? How concentrated is the industry in terms of competitors? What are the strategic positions of the key competitors in the market? How is market share divided? How differentiated are competitors? What is price competition like? What are competitor's relative cost positions? How vertically or horizontally integrated are competitors?
- **Suppliers**: What is the industry's vertical chain of production? Who are the industry's buyers and suppliers, and how powerful are they? What economies of scale/synergies are there? Are there any alternatives? What are the trends? How stable/continuous is supply?
- **Barriers to Entry/Exit**: How significant are barriers to entry and exit, e.g. economies of scale, learning curve, high fixed costs, and access to distribution channels? How frequent is entry/exit? What is the likely competitive response? How steep is the learning curve? How important is brand equity? Is the industry regulated?
- What current and potential **substitutes** exist for the industry's product/service?
- **Overall**: What factors drive success in the industry, e.g. technological leadership, consumer insight, brand equity? That is, what are the benefit and cost drivers?
- Are there any **trends** that affect the benefit or cost drivers?

Don't forget to summarise, with an overall conclusion, as to whether this is an attractive market to participate in, in terms of likely profitability and growth, and how your earlier analysis supports or explains that view.

3. Market Entry

In a market entry case, the interviewer will ask you to decide whether a company should expand into a new geographic region, a new/related business, or a new customer segment.

> **Example**, 'Company C manufactures and sells costume jewellery in the USA. They are considering expanding their operations to include fashion clothing, still within the USA. Would you recommend that they do so?'

The three C's (customers, competitors and capabilities) is a valid framework to use to solve this case.

> As with the industry attractiveness example, you should not just blurt out to the interviewer that you are going to use the 3Cs framework. Think what you can add to the three Cs to enhance its value.

Another approach that can be useful is to contrast the company's current business model, with an outline of the proposed business model for the new business. A comparison between the two is a good starting point to identify potential synergies and risks of the proposed expansion.

A general approach to market entry cases is to:

Size the market:

- Define the market: product, geography, etc.
    - Evaluate industry structure
    - Assess market size, profitability, and growth by asking how much capacity is in the market
    - Identify relevant trends (regulatory, technological, demographic, etc.)
    - Identify key success factors
    - Evaluate risks

- Understand the competition:
    - Key players
    - Competitive situation (concentration and intensity)
    - Share and positioning
    - Core competencies (strengths and weaknesses) and resources
    - Likely reaction to entry
    - Differentiation
    - Cost structure

- Analyse customer needs:
    - Segmentation (size, profitability, share, growth)
    - Drivers of purchase behaviour (product, price, promotion and place)
    - Power in the market

- Identify Gaps in Customer Needs

- Match between the company's strengths and those needed for the new market:
    - Core competencies
        - Product/service portfolio

        - Differentiation
        - Management
        - Workforce
        - Key skills
        - Resources - can the firm establish a competitive advantage –v- key success factors
    - Potential positioning and price positioning
    - Source of volume - steal share (from whom?) or expand category?
    - Niche or mass strategy?
    - Cost structure - scale –v- scope economies
    - Capital expenditure required
    - Potential returns

- Evaluate Barriers to Entry
    - Customer-related:
        - Product differentiation
        - Brand loyalty
        - Switching costs
        - Access to distribution channels
    - Non-Customer-related:
        - Proprietary technology
        - Economies of scale
        - Capital requirements
        - Experience curve
        - Regulation

- Evaluate Methods of Entry
    - Build, acquire, partner?
    - Quantify investment cost and risk

- Analyse how firm has entered markets in the past, whether it has it been successful or unsuccessful, and why?

Bear in mind this is a very long list, and will not all apply in each case. It is vital, having used this approach to structure your thought processes and initial discussion on the topic, to identify a prioritised list of those areas that seem to be the biggest potential issues/factors in the decision making.

Highlight this prioritised list during a summary of the preceding discussion, in order to build up to a go/no go recommendation. It is perfectly acceptable to say that you need further information in certain areas, but that your initial hypothesis is:
"We should (or should not) explore this business opportunity further".

4. Capacity Expansion

Capacity expansion cases usually revolve around how a firm can optimally increase its output potential.

> **Example:** **"**Your client, the CEO of Company D has decided that he/she needs to expand Company D's manufacturing capacity and is considering either building a new plant in Kuala Lumpur, Malaysia, or increasing the scale of its current plant in Singapore. Which would you recommend that it do?"

A good approach to tackling capacity expansion cases is:

1. Estimate the potential benefit of capacity expansion by quantifying market demand and potential revenue gains
2. Evaluate the means of capacity expansion (existing plant or new plant?). Issues to consider here include availability of desirable location for a new plant, proximity to customers and suppliers, transportation costs, cost and availability of labour, technology, time required to complete expansion, capital costs of new –v- existing plant
3. Market considerations
4. Impact on industry demand & pricing: will expansion create excess capacity in the market?
5. Likely competitive response
6. Cost/Benefit analysis
7. Alternatives: investigate other options to ensure that you have fully analysed the problem; other options could include outsourcing, leasing or acquisition of an existing plant.

As in the earlier cases you need to summarise your analysis, in order to support a go/no go recommendation. It is perfectly acceptable to say that you need further information in certain areas, but that your initial hypothesis is: "We should (or should not) explore this business opportunity further".

5. Acquisition

In acquisition cases, an interviewer will typically ask you to evaluate whether a company should purchase another firm.

Example: "Company E, a manufacturer of engines for sports cars, is considering an acquisition of Company F, which makes sports cars. Would you recommend that it do so?"

Potential Synergies: When approaching acquisition cases, the easiest thing to remember is will 1+1=3?, i.e. will the acquisition add value over and above the value of the two component companies?

- Understand the acquiring company's line of business:
  - Core competencies
  - Cost structure
  - Structure of the industry in which it currently competes

- Assess the rationale for acquisition, e.g. Why is the company considering the acquisition? What potential synergies exist?
  - Acquire resources: increase capacity, increase distribution, broaden product line, improve technology, human capital, brand name, customers (network effect)
  - Decrease Costs: economies of scale, economies of scope (brand, distribution, advertising, sales force, management talent, etc.), climb the learning curve more quickly
  - Other strategic rationales

- Assess the likely response of competitors if the acquisition occurs

- Consider organisational issues
  - Will potential synergies be realized?
  - Might the firm make any changes in advance of the acquisition to be better positioned post-acquisition?
  - Is the firm in a position to perform the integration?

- Determine whether the potential revenue increase/cost decrease exceeds the price of acquisition (NPV analysis)

- Consider alternatives to the acquisition; other targets; organic growth

- If the acquisition is vertical as opposed to lateral (new business) or horizontal (increasing the firms current scale) consider the following:
  - What are the benefits of using the market that is keeping the entities separate?
  - What are the co-ordination costs associated with using the market?
  - How might the firm enhance the benefits of using the market or reduce the co-ordination costs associated with using the market? That is, how might the firm improve its situation without integration?
  - How does ownership add value?

- What organisational issues might be introduced (agency costs) as a result of ownership?

As in the earlier cases, you need to summarise your analysis in order to support go/no go recommendation. It is perfectly acceptable to say that you need further information in certain areas, but that your initial hypothesis is: "We should (or should not) explore this business opportunity further".

> While you may not have enough information to answer many of the questions above, indicating that you understand the importance of these questions is useful, so do bring up a few. They are all questions that you would find critical to answer in coaching a firm through an acquisition to demonstrate that you understand what this type of analysis is likely to focus on.

6. Investment

Investment cases usually take the form of examining the potential purchase of a new business or installation of new infrastructure.

> **Example:** **"**Company G is considering whether or not to purchase and install a new inventory management system. Would you recommend that it do so?"

A general approach to investment cases is:

1. Ensure that you understand the firm and its line of business, and the fundamentals of the industry it competes in

2. Determine why the firm is considering the investment

3. Do financial analysis (NPV analysis)
   - What are the up-front costs of the investment?
   - What are the projected cash inflows and outflows of the investment and how will they occur over time?
   - What are the opportunity costs of the investment upfront and ongoing?
   - What is the firm's cost of capital?
   - What is the investments upside/downside potential (sensitivity analysis)?

4. Other Considerations
   - Effect on competition - if the investment is made or not made, what will the competition do?
   - Does the investment have option value, e.g. follow-on opportunities?
   - Timing: should the investment be made now?
   - Other strategic considerations

5. Alternatives to making the investment.

As in the earlier cases, you need to summarise your analysis in order to support go/no go recommendation. It is perfectly acceptable to say that you need further information in certain areas, but that your initial hypothesis is: "We should (or should not) explore this business opportunity further".

IV. Practice Business Cases

In the following section there are 23 cases written by London Business School students. These have been written based on their consulting experience, and reflect a case that they personally conducted during their time as a consultant. Each case is structured, as much as was possible, as it would be given to you during an interview.

Because the cases are written by different people, they are phrased differently and are of differing levels of complexity. Some are heavily quantitative; others are very light on quantitative questions. This reflects the huge variety of cases that you will encounter while interviewing with consulting companies.

In your interviews, you will get a mixture of cases, some that you can solve relatively easily and some that challenge you to a far greater degree. In addition, what is easy to one candidate may be hard to another depending on their particular strengths.

> As the cases in this book are designed to give you a solid foundation in solving business cases during consulting interviews, this section is not meant to be read straight through. Instead, you should dedicate a significant amount of time to studying each case individually. A good way to use these cases would be for students to give them to one another during case practice.

Note: while formatting does vary slightly from case to case, we have tried to follow the following principles - **bold represents questions to the interviewee,** *italics represent information from the interviewer,* and normal text are the suggested answers and other information that can be disclosed to interviewee.

Case 1 - XYZ Holiday Parks

Introduction

In this case we are going to make an assessment of an acquisition opportunity. A client is considering the acquisition of XYZ Holiday Parks, which runs 4 static caravan (US: "trailer") parks (A, B, C, D). These holiday parks are in coastal locations in Cornwall and Devon and each has a range of facilities including indoor or outdoor swimming pools, tennis courts, mini golf, amusement arcades, bars and restaurants. Caravans are owned by the company and let to holidaymakers – typically British families looking for a cheap holiday – between March and October.
The parks are medium scale with an average of 400 pitches. The sites are well maintained and boast good customer satisfaction levels which has led to 50% of visitors being repeat customers. Caravans come in a range of sizes, sleeping between 4 & 8 people. Caravans cost on average £15,000 but go up to £40,000 and have an average life of 15 years.

Question 1:

What are the key drivers of profit in this business?

A gentle introduction to the case.

Sources of revenue

- Rental income
  - On-site revenues (bars, etc.)
- Key cost items
  - Maintenance / Site running costs
  - Marketing
  - Corporate overhead costs
  - Selling costs (agency fees)
  - Depreciation

Question 2A:

What would you estimate the revenue of this business to be?

Need to recall:

- Size of parks – 400 caravans per park
- Length of season – March to October = 35 weeks

This is testing confidence and ability to manipulate numbers and make sensible assumptions. The candidate should recall information from the introduction and make sensible assumptions for required data points.

Estimates:

- Approximate rental per van – (suggest) £300 per van per week, [but sensible assumptions are equally valid – from £200 - £600 would be acceptable]
- Ancillary revenues – (suggest est.) £50 per person per week.
- Average of 6 people per van
- Utilisation rates. Suggest 80% estimates in the range 60% - 90% sensible.

Calculation:

Revenue = 4 Parks * 400 vans * 35 weeks * (£300 + 6*£50) * 80%
= £30.24mil

Question 2b:

Given EBITDA @ 30% what profit (EBIT) is this company making?

Further required to recall that vans cost £15k and last 15years.

> It would be OK to assume:
> - no material (historic) inflation
> - straight line depreciation
>
> but candidate should mention those assumptions explicitly

EBITDA = 30% * £30mil = £9mil
Depreciation on vans = £15,000 / 15years = £1,000 per van per year
Depreciation = £1.6mil p.a.
EBIT = £9mil - £1.6mil = £8.4mil

What item is missing in this analysis?
Depreciation on other fixed assets, e.g. the swimming pools

Question 2c:

So what range of values would you put on this business?

EBITDA multiple of 4 is appropriate, but sensible ranges would be acceptable

Question 3:

What considerations would you want to make to be comfortable with the acquisition?

Some of the specific details below could be provided by the interviewer if looking for further insights, but the more an interviewee provides, the better:

> This is an opportunity for the candidate to show ability to structure and populate an appropriate framework to assess the competitive landscape and industry dynamics. Porter's 5 Forces is a good framework to apply, but others would be fine, e.g. 3C's.

- Suppliers
  - Caravan manufacturers
  - Developers / builders of facilities on sites
  - Travel Agents (selling the holidays)
- Customers
  - British consumers – it is reasonable (although not necessarily true) to guess that customers are low income families, which are in falling numbers as the population gets richer
  - Growing tendency to take more short breaks, which is benefiting domestic holiday destinations
- Substitutes
  - Alternative holiday options / accommodation
  - Hotels / B&Bs
  - Overseas holidays / package deals (growing with short haul flights, e.g. EasyJet)
- Barriers to entry and exit
  - This market is well protected from new competition since it is very difficult to get planning permission to develop new caravan parks
- Competition
  - Interesting point to cover is what distinguishes this company from competitors, i.e. what sells the company to customers
    - Entertainment
    - Locations
  - There are in the region of 4,000 camping and caravanning sites in the UK, ranging from a field (for tents) with a tap to large scale holiday parks

Question 4:

Analysis shows that the revenue increases follow capital investment in the parks. What does this tell you and how would you choose to run the business?

Here you are again being tested on ability to structure problems and ensure that the structure used is MECE (mutually exclusive, comprehensively exhaustive)

Question suggests that investment leads to one of:
- More customers
- Higher rental rates
- Higher ancillary revenues

Analyse which it is:

If it is greater customer levels:
- Ensure that customers are not coming for other reasons, e.g. marketing of new facilities. You could increase marketing which would drive up volumes without investment
- If driver is genuinely the new facilities, does the marginal increase give a positive payoff? Can this be replicated at other sites?
- Remember that capacity constraints in high season probably mean that the payoff comes from increases in low season demand. Are new facilities appropriate to low season?

If it is higher rental rates:
- Rental rates are controlled by management. What is stopping the management raising rates and can they be increased without the capital investment?

If it is higher ancillary revenues:
- What is the marginal increase in revenue and does it justify the capital expense.
- Is it repeatable at other parks?
- Are you cannibalising other revenue streams?

Question 5:

Most competitors choose an alternative business model whereby the caravans are sold to customers who may use the caravans themselves or sublet to holidaymakers. If you acquired the company you might choose to switch to this business model. How would it affect your business and what would be the benefits and risks?

There are a number of considerations here. This is an opportunity to show creative thought and general business awareness.

- Income streams of alternative model:
  - Sale of caravans on which the firm could charge a commission
  - Ground rental charge to owners
  - Commission charged for letting and managing caravans on behalf of owners
- Benefits:
  - Capital injection and removal of caravans from the balance sheet
  - Potentially higher utilisation rates
- Risks:
  - Full time owners are less likely to spend money in bars and restaurants than holiday makers
  - Significant exposure to cyclicality of market – investing in caravans is like investing in a second home.

Case 2 - Innovation In The Screw Market (New)

Context:

You are a senior consultant and a colleague tells you about this call he received this morning. It was from the CEO of a screw producer who had been a long time client. He said: "Look, you have to come over, we have just developed this new technology, and something tells me we should look at it into more detail".

Since your colleague will be out of town, he ask you to go to the meeting instead.

Question 1:

What would you ask him before he leaves?

The idea is that the candidate asks questions to get the context of the assignment. Three C's would do it. He needs to understand who are the company clients, who are its competitors and any other distinctive features of the company itself.

Context:

The following information must be provided:

The product this company sells is a commodity with global and atomised costumers. Screws are commercialised in a central exchange market.

The global market is dominated by 3 producers and your company is the 3rd largest one.

You meet with the CEO and you find out they have come up with a modification to the production process that reduce production costs by 20%. The modification has already been proved and you can assume there is no implementation risk.

Question 2:

So the CEO asks you "What do you think we should do?"

The idea is to identify that there are basically two things that can be done with this new technology:

- implementing it in the company
- and/or selling the technology to a competitor

> This is a very open question. The candidate needs to introduce a structure for how to approach the problem rather than launch into an implementation plan.

In order to help the candidate to frame the problem, you can ask him how he thinks the company can make money out of this idea?

Question 3:

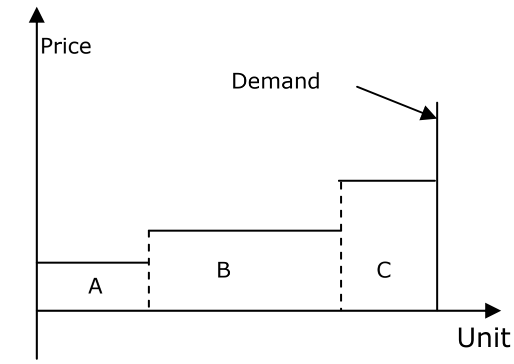
What do you think the demand function for screws looks like?

It is a derived demand where the actual cost of the screws is almost insignificant compared with all the other costs, for example, in construction. So you can assume demand to be inelastic.

Context:

This product is sold in a centralised market (you can dismiss transportation costs in the rest of the analysis). The equilibrium in the market is achieved through the following process. Every producer offers his products at its marginal costs, so the producer with the lowest marginal cost sells his production first. If demand is not satisfied it is then the turn of the producer with the second lowest marginal cost, and so on, until demand is met. The price for all units is the marginal cost of the last unit *sold (so all units are sold at the same price) (see figure 1). In this case, since we have an inelastic demand, you will add up individual production of every firm until you reach the quantity demanded.*

FIGURE 1



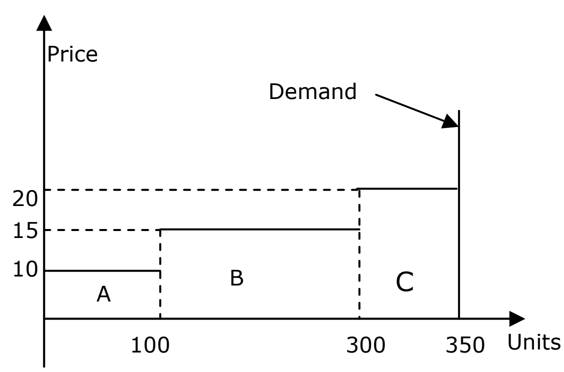
From figure 1, it should be clear that different companies could benefit in different ways if they implement the technology, so potentially there could be more money to make if the client sells the technology to one of its competitors.

QUESTION 4:

You agree with the CEO to meet the following morning with the CFO of the company to get all the necessary information you need to conduct the analysis. What information do you need to ask the CFO?

In order to evaluate the economic merit of the alternatives the company is facing, you need to get an idea of the capacity and marginal costs of your clients and its competitors. This information is presented in figure 2

FIGURE 2



QUESTION 5:

Which of company C competitors do you think would be willing to pay the highest price to get the technology, assuming both can get the same 20% cost reduction?

This is an easy math exercise. Since market price will remain at 20 (marginal cost of company C). The benefit is
Company B: (15-15*80%)*200=600
Company A: (10-10*80%)*100=200

Question 6:

Now, what is the benefit for your client if they implement the technology?

This is a tricky question in the sense that the answer is not obvious.

Despite the 20% cost reduction, company C is still the company with the higher marginal cost, so the benefit for them is zero!

The new marginal cost for company C would be 16 - how is it possible?
Well, economics at work. Although this is a fictitious example, this is what happens with any commodity (take copper) and in the electricity market in many countries.

Question 7:

Now suppose for a minute that the companies can talk freely (no regulatory authority) and that company C can convince its competitors to pay in exchange for not implementing the technology. Would they agree to do that? How much should they be willing to pay together?

If company C implements the technology, the market price will decrease from 20 to 16. This reduction will eat part of the margin company A and B enjoyed previously implying a loss of 4*(300) = 1200 for their total combined production.

Case 3 - Sunco, Financial Services

Industry: Financial services
Region: India
Source: Based on a simplified version of a real consulting engagement

Some case interviewers give very little information in the beginning of the case and want you to probe for information. Some others however give a lot of information to see how you handle such enormous quantities of data. This case belongs to the latter category.

CONTEXT

The year is 2000. The case we are about to discuss today is based on the financial services industry in India. Before I tell you about our client, I am going to give you some information about the industry structure. The industry has 2 sub-segments: Commercial Banks and NBFCs, which stands for Non Banking Finance Companies Both these segments are highly regulated by the banking regulator but the key differences between the two segments are as follows:

Cases will often use some complex sounding acronyms to see how the candidate handles it.

- *Commercial banks are typically national players whereas NBFCs are regional players, the reason being that the former is a scale business*
- *NBFCs are not allowed by the banking regulator to offer an important product called checking accounts (or current accounts as it is called in certain countries) to their customers.*

Before I outline the products, do you know the difference between an asset and a liability product for a bank?

Candidates who are not familiar with the banking industry should not be afraid to ask the difference. This is a test to see if the candidate asks questions or just assumes things, sometimes incorrectly

An asset for a bank is the loans it gives out and a liability for a bank is its borrowings.

The checking account that I referred to is a liability product and the unique feature of this product is that it pays 0% as interest.
This means that commercial banks can borrow from the consumer using this product at a very low cost.
However, it is also a highly transaction intensive product which means that commercial banks incur a huge cost in serving its customers for this product. After a cost benefit analysis, it has been found that this is still a very profitable product for commercial banks.

Our client's name is Sunco and it is India's 2nd largest NBFC. Sunco is a very dominant player in Southern India and practically non-existent in other parts.

It has been recently invited by the banking regulator to convert itself into a commercial bank.

QUESTION 1:

On the one hand, the CEO of Sunco is pleased by this gesture of the regulator, who has never extended such an invitation to anyone in the past. At the same time, he is concerned at what it means for Sunco to convert into a commercial bank. He has given you a 30 minute appointment to brief him on how he should think through this opportunity.

STEP 1 - CLARIFY

In this case the 'Clarify' phase is very important as there is a lot of information given out by the interviewer and he/she will want to see if the interviewee has been able to understand and assimilate all that. One approach is to summarise the above information in about a minute (the candidate should practice that on his/her own – I haven't provided a summary).

Questions that the candidate might ask during the "clarify" stage could be:

Likely Candidate questions	*Additional Information*
Why has the banking regulator invited our client?	▪ In a general sense, to promote competition in the commercial banking industry ▪ The reason our client was specifically invited is because it has been AAA rated for its borrowings consistently for the last 5 years
Have other NBFCs been invited as well?	Yes the top 3 NBFCs, all of who have AAA rating for their borrowings have been invited

STEP 2 - STRUCTURE:

Using the structure laid out for market entry, but tailoring it to the peculiarities of this situation, might be one way to go.

After clarifying the issue at hand, the interviewee should first try and formulate a 'structure' for the discussion. The ultimate decision will boil down to an 'option' of go and no-go for becoming a commercial bank.
It can be helpful to think of this as a market entry problem

STEP 3 - ANALYSE

The overall approach I will use here covers the following items in turn:

- Market structure & competition
- Customers
- Entry Barriers
- Internal capabilities
- Regulatory constraints
- Cultural issues

- Market structure & competition:

The candidate should find out

- o How many players are there in the Commercial banking segment
- o How consolidated is the market (market shares)
- o What has been the past growth rates and expected future growth rates etc.

If the candidate asks some of these relevant questions, the interviewer will provide some/all of the charts shown below. The main purpose of the charts is to see how the candidate reacts to data being thrown at him/her.

QUESTION 2:

Review the following graphs and summarise key messages

Figure 3-1 - Data on Commercial Banks

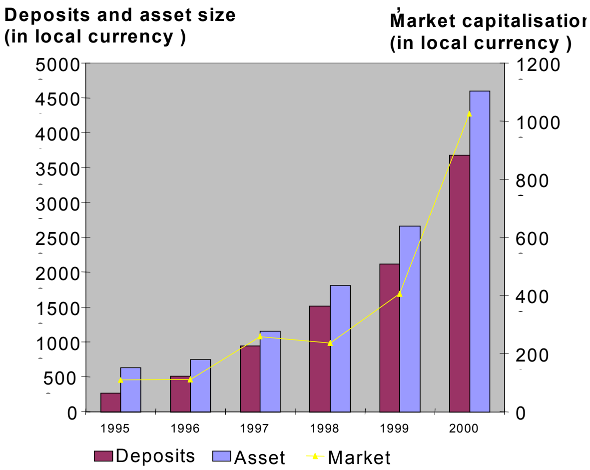


Figure 3-2 - Data on 3 NBFCs

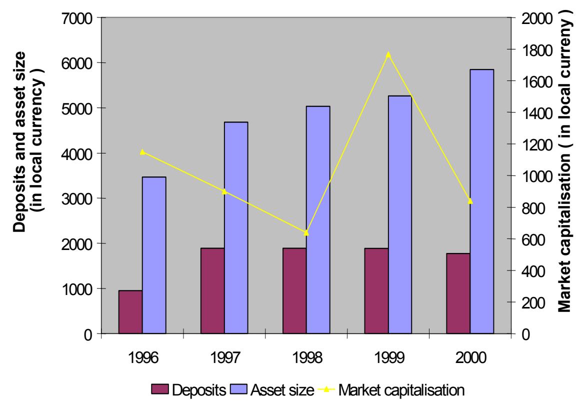
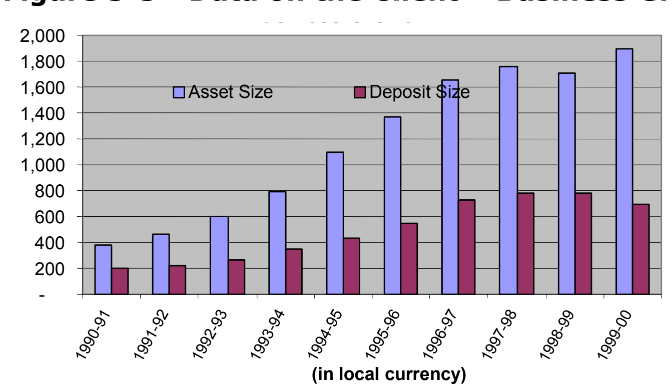


Figure 1: Data on 5 new commercial banks which comprise approximately 1/3rd of the entire commercial banking industry's asset size

Figure 2: Data on 3 leading NBFCs who comprise about 90% of the market

Figure 3-3 - Data on the Client – Business Growth 1990 - 2000



After seeing the graphs, the candidate should ask one or several of the following questions or bring out his/her observations:

Likely Candidate questions	***Additional Information***
The first slide only shows five Commercial Banks. Are there many more?	▪ The Commercial Banking industry has 17 players, of which 12 are government owned and 5 are private sector ▪ We don't have data on the 12 government owned banks but know that they are not doing very well ▪ Slide 1 shows data on the 5 privately owned banks which have been doing very well over the last 5 years as you can see
For both commercial banks and NBFCs, the assets seem to be much more than the liabilities. Where does the balance come from?	▪ That's a very good observation. ▪ The reason for this is that the 5 private sector banks and the NBFCs are not able to borrow as much as they'd like to. ▪ The government banks on the other hand borrow much more than they can lend and therefore lend the extra money they can borrow to the 5 private sector banks and the NBFCs
I notice that this problem is particularly acute for Sunco as its liabilities seem to be reducing over the last 1-2 years whereas its assets are growing.	▪ That's a good observation once again ▪ Sunco would definitely like to borrow more than it presently can ▪ In fact, by becoming a commercial bank, Sunco believes that it can bridge the gap between its assets and liabilities entirely through its own borrowings and stop depending on government banks

QUESTION 3: INVESTMENT REQUIREMENTS

I now want to move to a discussion on the investment considerations. What are the typical investment requirements if Sunco were to become a commercial bank?

Based on your understanding of whatever I have told you so far about the differences between NBFCs and commercial banks, what do you think will be the main investments?

Well, I think the main investments would be in terms of:

- Infrastructure: Since you mentioned earlier that commercial banks are national players, Sunco would need to invest heavily into real estate for building its branch network nationally
- IT systems and back offices: Since becoming a commercial bank would mean offering more transaction intensive products, Sunco may need to invest substantial sums into IT and back offices
- People: Since the current employees would not have the required skill sets in terms of credit skills, customer relationship management skills and transaction processing skills, Sunco would need to both hire new people and re-train its existing people

Question 4: Profitability

Good. I am going to give you some numbers based on what you just told me in terms of investments and we are going to try and work out the profitability of Sunco first as an NBFC and then as a commercial bank.

From the slide 3 above, you will notice that the assets of Sunco is presently at 1900 units of local currency and the liabilities of Sunco is at 700 units of currency. Assume that the assets are lent at an average interest rate of 12%, liabilities are borrowed at an average rate of 6% and the balance amount is borrowed from the government banks at 9%. Assuming that Sunco's fixed costs presently is 30 units of currency per year, work out the profits of Sunco as an NBFC.

The workings are as follows and the profit is 48 units

	Assets Own	Liabilities Own	Liabilities Com Banks	All other fixed costs
Amount	1900	700	1200	
Interest rate	12%	6%	9%	
Total	228	-42	-108	-30
			PROFIT	**48**

Now let's try and work out the profitability for Sunco as a commercial bank. Assume that if Sunco converts into a commercial bank, the following three things will happen:

The assets will double instantaneously at the same lending rate as earlier: Sunco will not have to borrow anything at all from government banks and will be able to meet its entire fund requirements from its own borrowings at the same interest rate as earlier.

There will be additional fixed costs of maintaining the infrastructure per year.

This is a test of the candidate's listening skills as invariably most candidates miss out on the specific question asked and work out the 'total' investments required and not the 'additional' investments?

Assuming that Sunco would like to make the same amount of profits as before, how much can it invest additionally in fixed costs every year?

The computations are as follows and the additional investment is 150 units of currency:

	Assets Own	Liabilities Own	Liabilities Com Banks	All other fixed costs
Amount	3800	3800		
Interest rate	12%	6%		
Total	456	-228		-30
		Additional investment for breakeven		**-150**
			PROFIT	**48**

Now we return to the structure presented initially to analyse this question, and move to customers (which was step 2) after market structure:

The candidate may want to know two things at this stage, firstly, whether the client or we have done a study to find out how much additionally it will actually cost to set up the infrastructure and, secondly, whether financing is available for this. These two aspects are irrelevant from the case point of view but show the candidate's willingness to think on all aspects of a problem

- Customers:
  - Will there be a big difference in the customer profile if Sunco were to convert itself into a commercial bank?

While the profile of the retail customers would be quite similar, the profile of the corporate customers will change quite dramatically because Sunco presently serves corporate customers only in one industry.

- Entry barriers
  - We already discussed this briefly in the beginning, but is there a cost that has to be paid for this licence, and is the regulator going to invite some more players in the future to convert to commercial banks?

There is no cost for the licence and as far as we know the regulator will not extend this invitation to anyone else for a long time to come.

The style of this case has been very much the interviewee asking questions to get information from the interviewer. While that does happen, be alert to clues from the interviewer. In most cases they are looking for you to conjecture possible answers rather than expecting them to be provided

- Internal capabilities that can be leveraged
  - What are the internal capabilities of Sunco that can be leveraged as a commercial bank?

Sunco feels that two of its capabilities can be carried forward: its strong brand name and the credit assessment skills of its credit officers
The interviewee should ask what this term means if not clear: credit assessment is basically assessing if the money being lent by Sunco will be repaid by the borrower. Do you think this is a replicable skill set?

- Well, as for the brand name, you mentioned that Sunco is practically absent in other parts of the country. This means that it will have to build a brand from scratch in these parts.
- As far as credit assessment skills go, it depends on whether the credit officers have skills across multiple industries and regions.

On the latter based on our discussion, we know that Sunco's credit assessment skills are largely because of relationships that credit officers have with the limited number of borrowers in the industry in which Sunco lends to in Southern India.

Well that means that these officers may not have replicable skill sets that will enable them to deal with borrowers from other industries and regions.

- Regulatory constraints
  - In terms of regulatory issues, are there any areas for concern in becoming a commercial bank?

Sunco's COO mentioned yesterday that commercial banks are very closely regulated and that Sunco's people will take a while getting used to the regulator 'breathing down their neck'. Also, as a commercial bank, Sunco will have to pledge some of its capital for meeting various stringent regulatory guidelines. These are complicated issues but you could assume that there is an added cost on account of this.

- What does it mean for Sunco to say 'no' to the regulator at this point?
- By saying 'no' to the regulator's invitation, Sunco risks being in the bad books of the regulator for a long time to come

- Cultural issues
  - Will the people of Sunco be able to cope with the huge expansion of becoming a national player?

That is a good question. The culture in the Northern and Southern parts of India are quite different and the people at Sunco may take a while to adjust to running businesses in Northern India. This may lead to an unprecedented turnover of employees in the short term.

STEP 4 - SUMMARISE

At this point, the Chairman of Sunco enters the room and tells you, "I am aware that you are doing some very important work for us to evaluate our options of converting into a commercial bank. I have a flight to catch in 2 minutes – could you quickly summarise your findings so that I can think about this during my flight?"
The interviewee should crisply try and cover all the points discussed above including the numbers part of the case.

Finally just before leaving, the Chairman throws a last question at you – "I was wondering if there is any other option for me to consider other than simply saying yes or no to the regulator…."
At this point the candidate should evaluate other options which demonstrate practical business judgment such as:

- A merger with another bank (probably one which is strong in Northern India or in products where Sunco is weak)
- A phased growth focusing initially on becoming a regional commercial bank in Southern India
- Buying a few years' time from the regulator before converting

Case 4 - Happy Healthcare UK

Introduction

The government, through the NHS, pays for healthcare in the UK. This includes GP visits and hospital visits. However, many people choose to take out private health insurance to benefit from shorter waiting times, or to be treated by 'better' or more experienced doctors. The NHS dominates healthcare in the UK, with private hospital groups making up about 10% of the market.
Our client is Happy Healthcare, a small private healthcare company based in the UK. They have asked us to advise them on making some of their hospital activities more efficient. Firstly, they would like us to conduct a detailed analysis of the industry in which they operate, and then move onto recommending a course of action for them. Secondly, they would like us to look at the implications of this course of action.
Happy Healthcare own and operate 10 hospitals in the UK (as against over 1000 for the NHS). The hospitals are typically half the size of NHS hospitals and do not include Accident & Emergency (ER). Revenue comes from patients claiming on their own private medical insurance, or paying in cash themselves. In 2005 Happy Healthcare had revenues of £100m (which represents less than 1% share of the hospital market), with an operating profit of £0.5m.

Question 1:

What challenges do you think Happy Healthcare faces in a market like this?

Tip: This is a relatively straightforward question to set the scene and settle you into the case. You will need to structure your answer to this question, as it is an open question, and without an appropriate structure, you will risk missing the key points. A structure such as Porter's 5 forces, which is used to analyse industry attractiveness, can help in this analysis.

Degree of rivalry – High (Low profit margins, and the NHS is a major competitor and a very dominant player in the industry. There are also a large number of private hospital groups targeting exactly the same market as Happy Healthcare)
Supplier power – Medium-high (Doctors are the key scarce resource in this industry. There are generally several options for other suppliers, e.g. medical equipment, etc.)
Buyer power – High (Patients can easily opt for the NHS for free or, as mentioned previously, there are a number of other private hospital groups)
Threat of substitutes – Low (There are no real substitutes for healthcare)
Entry Barriers – Medium (It takes a lot of time, investment and expertise to enter this market if starting from a zero base, but entry will not be difficult for international private healthcare companies who already have the necessary capabilities)

Degree of rivalry:

- How can HH differentiate itself from direct competitors, i.e., other private healthcare groups
- Brand
- Quality of service
- Location
- Procedures offered
- Price, etc.

Once you've laid out this high level structure, you can analyse more deeply each force to highlight specific challenges that Happy Healthcare faces

- How can it differentiate itself from the NHS brand, quality of service, waiting times, location
- How can it react to moves by the NHS, e.g. what if the NHS reduced waiting times significantly, etc.
- How can it increase its currently low profitability?
- How can it grow?
- Expanding its target market, expanding its target demographics, new services, new locations, etc.

Supplier power:
- How can Happy Healthcare attract and retain top quality doctors?

Buyer power:
- This issue is driven largely by Happy Healthcare's performance relative to its competitors on the issues identified in Degree of Rivalry
- How to attract patients (brand, quality of service, waiting times, location, procedures offered, price, deals with individual insurance companies, etc.)

Threat of substitutes:
There are no substitutes with the exception of going overseas for procedures, which is difficult and risky as the quality of the procedures in other countries is hard for UK patients to analyse

Entry Barriers:
Can Happy Healthcare raise entry barriers, e.g. building new hospitals in the next most attractive locations that competitors might choose, or offering a standard of service at a price that is very hard to beat?

QUESTION 2:
The NHS has long waiting lists for many hospital operations, e.g. often over 1 year for something like a hip-replacement operation. They have decided to contract out these operations in bulk to the private sector to help reduce the waiting times. Happy Healthcare is trying to decide whether they should enter into these new contracts.

What factors do they need to consider when making this decision?

This is a slightly tougher question. A good way to structure the answer to this question is to analyse accepting in terms of its advantages and disadvantages to Happy Healthcare:
- Accepting the contract will mean an increase in business:
  - What are the consequences of an increase in business?
    - Do they have enough spare capacity?
    - Should they build more capacity just for these contracts?
      - If so, what if the contracts are not renewed in a few years?
- What would happen if they did not participate:
  - Their competitors would probably take up the remaining work helping them to expand into newer areas, attracting talented doctors etc
  - They may be able to stay more focussed on their core market/customers and focus on increasing profitability

Advantages:

The most obvious advantage is that accepting the contract will increase business volume. The fact that these are bulk contracts means it will be easier to plan for the increase, e.g. scheduling resources, etc., than trying to increase business directly from the patients themselves. Furthermore, as more NHS patients see the superior facilities at Happy Healthcare, they may be tempted to take out private insurance for all their healthcare needs, increasing the size of the private healthcare market.

Disadvantages:

One key disadvantage is that accepting the NHS contracts could increase waiting times at Happy Healthcare's private hospitals, thereby reducing their ability to differentiate from the NHS, which is their unique selling point in the first place. Furthermore, private patients may not appreciate being treated alongside public patients, which could damage the appeal of private healthcare to existing customers.

Another disadvantage is that Happy Healthcare may not have enough resources to undertake all the operations. You should realise that the NHS will not pay as much for these operations as would private insurance companies, as they are a bulk buyer. Consequently, you also need to ask whether Happy Healthcare will turn a profit on these contracts.

QUESTION 3:

Happy Healthcare has decided that it will enter into these NHS contracts. However, it is concerned about capacity. In particular it has asked us to look at its outpatient areas.

Each hospital is generally arranged into 2 major areas:

- 'Inpatient' area for surgery and overnight stays
- 'Outpatient' area for consultations, simple procedures not requiring an overnight stay, physiotherapy and tests, e.g. X-rays, blood tests, etc.

Let's look at capacity first.

Thinking about outpatients in particular, how would you analyse a hospital in terms of capacity?

Given the lead in, you should easily be able to identify that both personnel (doctors, nurses, other clinical personnel like radiographers, physiotherapists, etc.) and equipment (X-Ray machines, MRI scanners, laboratories for blood tests, etc.) are key capacity constraints.

However, you should structure the answer logically rather than just giving a list, for example:

1. First determine a more complete understanding of what activities take place, e.g. by thinking about capacity in terms of the patient's journey – see below for more detail
2. Then try to figure out what resources are required for each activity/stage in that journey
3. You should then note that it is very important to understand the current utilisation levels of each of these resources
4. Consider how easy/difficult it may be to add more capacity at each stage
5. Note that simply driving utilisation rates higher will have an impact, i.e. longer waiting times, possibly worse customer service resulting in damage to the brand, etc.

6. Note that some resources are fixed cost, e.g. equipment and physical space, such as car parks, waiting rooms, etc. and others are variable, e.g. staff
7. Develop hypotheses identifying potential bottlenecks, e.g. doctors, waiting areas, etc. You do not need to come up with the 'right' answer here, just show that you can arrive at a logical hypothesis, which could then be tested

Activities, Resources & Utilisation:

For parts 1, 2 and 3 you could consider the patient journey from when patients enter the hospital to when they leave:

- General enquiries
  - Admin Staff (utilisation very variable and demand driven)
- Appointment booking
  - Admin Staff (utilisation very variable and demand driven)
- Car park
  - Physical space – is there any way of expanding the size of the car park. If yes, what is the cost of land in the target expansion area (utilisation variable, but must satisfy peak demand)?
- Reception
  - Receptionist (utilisation variable, but must always be present)
  - Waiting area – how easy is it to expand the waiting area (utilisation variable, but must satisfy peak demand)?
- Clinical activity:
  - Consultations
    - Receptionist (utilisation variable, but must always be present)
    - Consultant doctors (high utilisation, generally a limited resource)
    - Consultation rooms (utilisation demand driven, but must be enough rooms for peak demand by consultants)
    - Waiting area (utilisation variable, but must satisfy peak demand)
  - Physiotherapy
    - Receptionist (utilisation variable, but must always be present)
    - Physiotherapists (high utilisation, appointments used to smooth peaks and troughs)
    - Physiotherapy rooms (utilisation demand driven, but must be enough rooms for peak demand by Physiotherapists)
    - Waiting area (utilisation variable, but must satisfy peak demand)
  - X-ray dept
    - Receptionist (utilisation variable, but must always be present)
    - Radiologists/Radiographers (high utilisation, appointments used to smooth peaks and troughs)
    - X-ray machines (utilisation demand driven, but must always be present)
    - Space for X-ray machines (fixed utilisation)
    - Other waiting areas (e.g. in X-ray dept, Physiotherapy dept etc)
- Leaving hospital
  - Billing
    - Staff (utilisation variable and demand driven)
    - IT systems (utilisation generally fixed – always on)
  - Debt collection
    - Staff (utilisation variable and demand driven)
    - IT systems (utilisation generally fixed – always on)
  - More general enquiries
    - Staff (utilisation variable and demand driven)

From this analysis it should be clear that the utilisation of almost all resources in the outpatients area is variable. This can lead to peak demand exceeding supply, resulting in queues and potentially lower quality service.
You are not expected to list all items in the patient journey. However, you should view the hospital as a business, i.e. one that requires admin staff, not just doctors and nurses, and realise that private hospitals must collect money at some stage.

Adding capacity:

Happy Healthcare's ability to add capacity depends on the cost and the ease of acquiring the extra capacity.

- General staff for reception and admin functions are relatively cheap and easy to acquire. On the other hand, specialist clinical staff like doctors are both expensive and difficult to find.
- Equipment is expensive but easy to acquire, while extra physical space (waiting rooms, consulting rooms, car parking spaces, etc) could be expensive or cheap depending on the location. Likewise, the ease of acquiring extra space could be easy or difficult depending on planning permission, willingness of others to sell land, etc.

Bottlenecks:

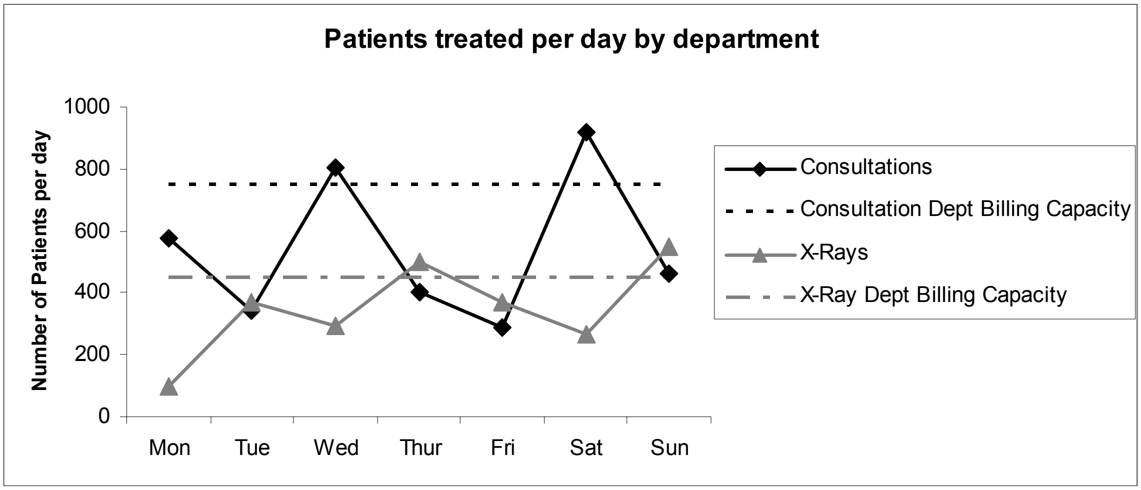
Note that the client is barely profitable (something that you were told in the introduction to this case), so cost would be a major concern for them when looking to add capacity. Therefore, adding resources/capacity is not a trivial decision.
Bottlenecks could include:

- Doctors, or other clinical staff – critical resource with no substitutes, a scarce resource that is difficult and expensive to acquire, high utilisation.
- Waiting areas, or other physical space – required resource, but one which can become over-utilised at the expense of some patients standing.
- Admin staff – required resource, but one which can become over utilised at the expense of increased process times: possibly under-resourced relative to other clinical staffing levels.

Question 4:

Happy Healthcare believes that they will have problems taking on new business in several areas. As a result, the project team has been split into different work groups and you have been asked to look at the billing functions. For private patients, bills have to be prepared for and be completed ready by the time the patient leaves. It is important to prepare the bills as soon as possible, preferably same day, so that the private patients can take the bill home with them to claim against their insurance. If they are not given the bill to take home as they leave, this typically adds 2 weeks to the claim time, even if the bill is posted to them the next day.
Happy Healthcare gives you the following graph. The graph shows patient arrivals per day for a typical week in one of their hospitals, which does a lot of joint replacements. The graph indicates the utilisation of the 2 separate billing departments and their maximum capacity.

What does this graph tell you?



You should be able to identify the following from looking at this graph:

- Both areas exceed capacity on some days
  - This will lead to delays, which are costly
- Both areas appear to have inversely proportional patient demand
  - i.e., a busy day in consultation is a quiet day in X-ray and vice versa
- You may hypothesise a relationship between X-rays and consultations
  - X-ray lag consultations by one day
  - X-rays lead consultations by one/two days

QUESTION 4B:

Does it look like X-rays cause consultations, or do consultations cause X-rays?

You should notice that X-rays consistently lag consultations by one day, but do not lead consistently (sometimes 1 day, sometimes 2). You should also note that there are more patients having consultations than having X-rays. Intuitively one X-ray should not cause more than one consultation the following day, but that a consultation could result in one or more X-rays the following day.

QUESTION 5:

Assume that any NHS contracts will mean a significant (~40%) but flat increase in both consultations and X-rays throughout the week. The NHS contract states that bills must be processed within 48 hours of the procedure. How would you minimise late bill processing using the existing level of resources?

You could take several routes here. However, the key elements to realise are:

- NHS bills will have more flexibility than private bills (i.e. 48 hours to complete as opposed to 24 hours respectively if you are aiming to give private patients their bills when they leave hospital), so you can move NHS bills to 'quiet periods' when there are less private bills to process. Busy days are followed by quieter days facilitating this approach

- Billing is a relatively simple function. Consultation bills and X-ray bills are not that different, making it easy to consolidate them and use one department which would remove the current overcapacity problem
- Other potential solutions:
  - More IT – automate the bills
    - Currently the bills are manually entered into the billing system from printouts given to them by the consultation and X-ray receptionists
    - Link the receptionists' appointment system to the billing system
    - Prepare bills in advance for consultations. This cannot be done for X-rays because we only find out the day before that an X-ray appointment has been booked

QUESTION 6:

Well done! Now we need to find out if we can use your idea to meet the new demand levels.

After considering your suggestion Happy Healthcare think they can now handle 1,200,000 outpatients. Every operation typically involves 1 inpatient visit and 6 outpatient visits (including tests and follow up appointments). Happy Healthcare currently has 1,000,0000 patient visits per year (inpatients and outpatients). They think that total operations may increase by as much as 40% in 10 separate NHS contracts.

If operations did increase by 40%, how many outpatient visits will they have?

1,000,000
40%
400,000
+1,000,000
1,400,000
1/7
200,000
*6
1,200,000

QUESTION 7:

How would you recommend Happy Healthcare proceeds?

Tip: This is the final wrap-up question and you should therefore give your final recommendations, taking into account all the analysis you have conducted and conclusions you have come to during the course of the case.

A good answer would be:
If Happy Healthcare took on all this business they would reach capacity very quickly. This would cause them a lot of problems when demand from private patients fluctuates.

You should realise from the earlier graph that demand is variable. Therefore demand will exceed 100% of capacity on a regular basis, causing delays, poorer service, and potentially increasing costs and damaging their brand.

Your recommendations should contain 2 or 3 ideas, possibly including:

- Monitor capacity levels closely
- Don't take on so much business (e.g. only 5 of the 10 NHS contracts) as it is not worth jeopardising your more lucrative private patient business for the NHS contracts
- Add more capacity (noting that this may take time, and the cost may be prohibitive)
- Conduct a more detailed analysis of the revenue/costs of the NHS contracts to determine if they are worth taking on or not.

Case 5 - Cost Reduction For A Commercial Bank (New)

Situation:

*ABC bank, which has quite a risk-averse culture, is one of the largest regional banks in XYZ area. Its main business is commercial banking, but not investment banking. This bank asked your team (a consulting firm) to help improve the bank's profitability. After analysing current situations, we agreed that **reducing operating cost** (Capital raising cost and interest are not included our scope) is the most important driver to improve profits. The responsibilities of your team are to analyse each cost item, find concrete methods to reduce costs, and help the client to implement the proposed changes*

Question 1

The client would like to divide its operating cost into three categories to make the decision.

- Operating cost items that impact the revenues of the bank when reduced
- Operating cost items that impact security / safety of the bank when reduced
- Operating cost items that have adverse impact when reduced

Can you think of any cost items to each category?

Answer 1. (Problem Solving: Basic business knowledge)

The followings are examples that belong to each category.
Sales level: Advertising cost, sales related software fees, entertainment fee, sales promotion cost
Security / safeness: Security guard cost, ATM maintenance fee, money transportation cost
No side effect: Office rent, cleaning expense, printing cost, software lease fee, mailing cost

Question 2.

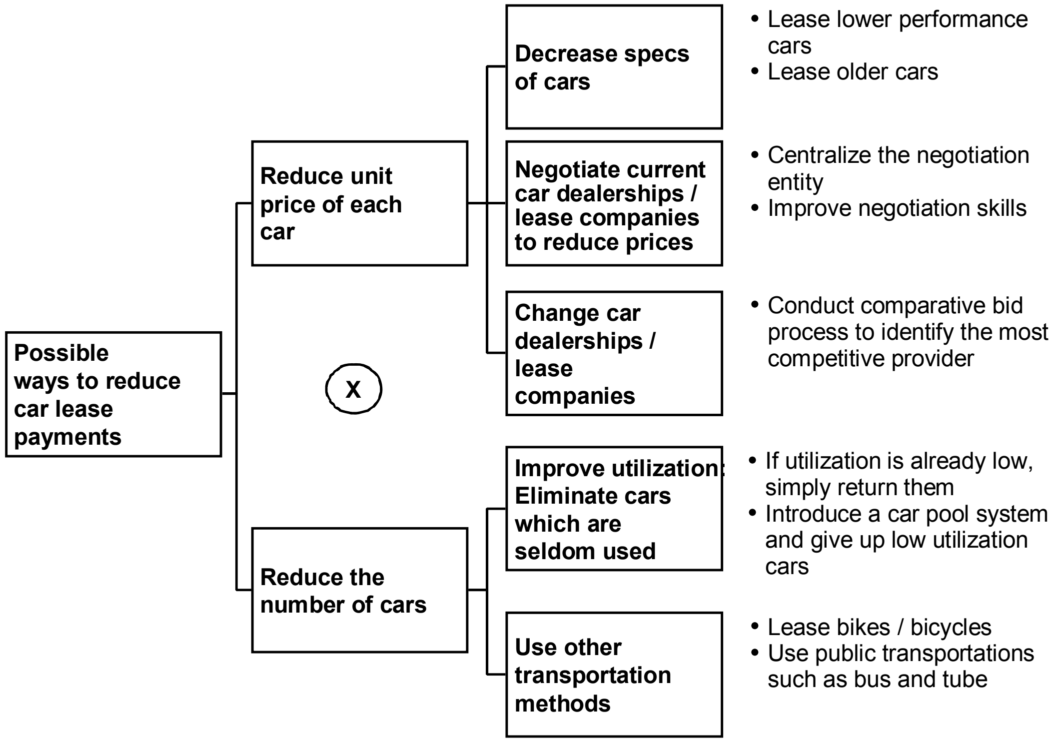
After reviewing all items, your team found that car lease payments were a significant amount and that past cost reduction activities were limited.Most cars are used by the sales team. The sales team use the cars to visit clients.

Assuming that leasing is a cheaper method than purchasing cars, how do you reduce car lease payment? You can ignore fuel, insurance, and maintenance costs in this question

Answer 2. (Problem Solving: structuring, creativity)

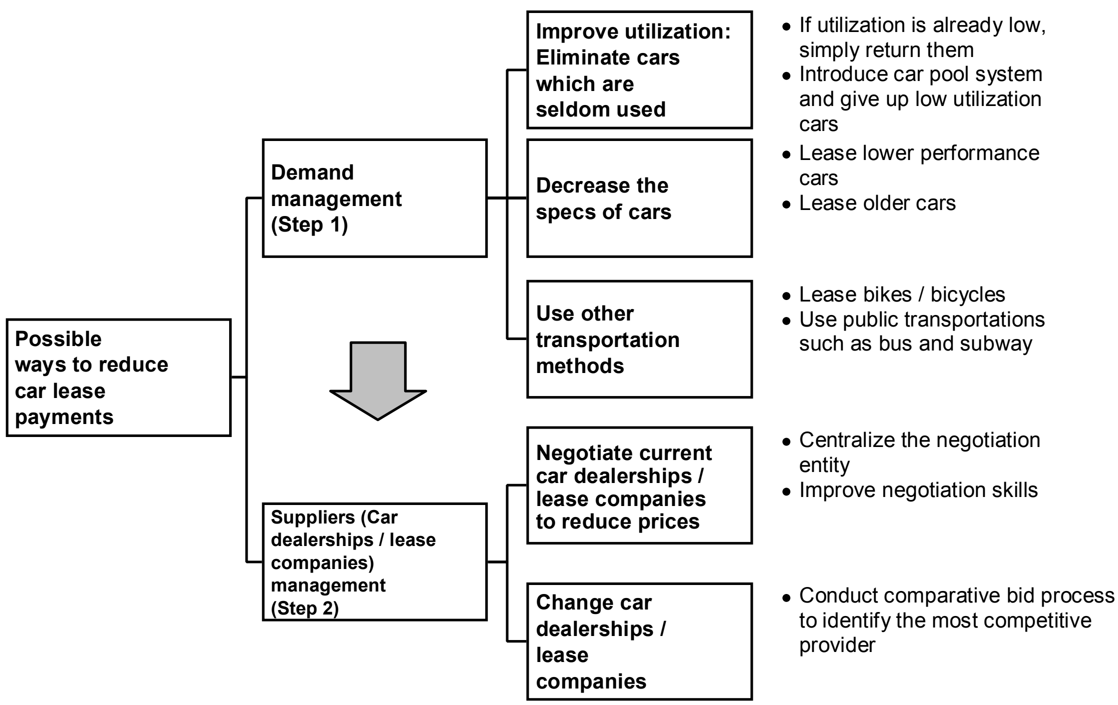
You may consider many ways to reduce costs. However, the most important point of this question is how you structure your solution in order not to miss big buckets. The following are possible structures to answer this question.

Basic framework



Alternative framework -

It is not typical, but can be useful for considering any cost reduction issues

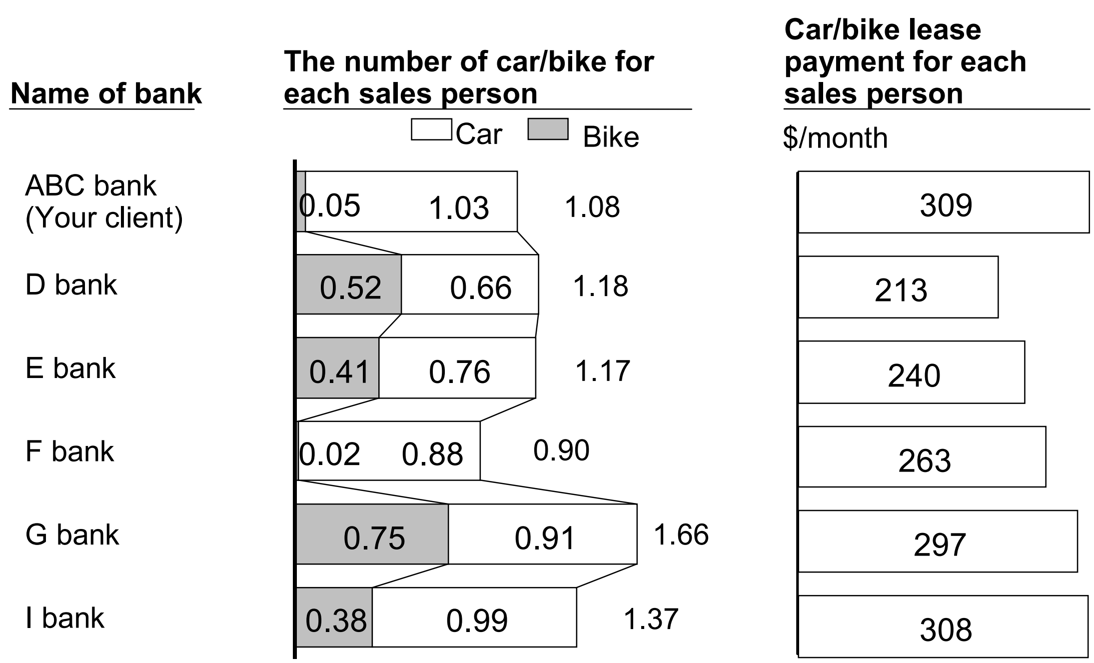


Tip: Regarding option 2, you should always conduct 'demand management' first when you actually engage in this kind of project. If you do not consider the company's demand and start negotiations with suppliers, you cannot change demands afterward since, once you make contracts to suppliers (both car dealership and lease company), you cannot reduce the number of cars to lease.

Tip: Some people might suggest that 'reducing sales force' or 'using emails instead of going to client' are good ways to reduce car lease payment. However, these are not practical answers because the primary objective of the client is not to simply reduce costs but improve profitability. These actions would risk decreasing revenues.

QUESTION 3. (DEMAND MANAGEMENT RELATED QUESTION)

After analysing car lease payments, you found the following facts.
How do you interpret these facts?
If you have an opportunity to meet the client, what recommendations would you make based on these facts?



Answer 3. (Problem Solving: Practical approach, Quantitative comfort)

Based on the above information, you should identify the following points.

- Your client has the highest 'cost per sales person'
- This is probably because almost all sales people use cars whereas a higher proportion of sales people use bikes in other banks.

The next step is how you make recommendations to your client. A straightforward recommendation is to switch from cars to bikes in order to reduce cost.

However, you should not simply recommend that your client needs to increase the number of bikes and reduce the number of cars because you have not explored why your client primarily uses cars.

You should understand these reasons before making your recommendation. Also, even if you find out that your client could increase the number of bikes and reduce the number of cars, you should provide your client with the pros/cons of this change and a possible solution to minimize risk.

Thus, potential recommendations at this stage are:

- Conduct research to understand why your client uses cars primarily
  - External reasons: Weather, possible traffic jams, distance to clients, multiple client visits in 1 day, working in car between meetings is more efficient use of sales team (less travel to and from meetings), etc.
  - Internal reasons: Covered area, riding skills for sales people, etc.
- Figure out pros/cons (especially risks) of switching from cars to bikes
  - Increased possibility of accidents, especially in rainy conditions
  - Capacity to carry large bags
  - Motivation of sales people
  - More journeys to and from office as fewer multiple meeting days
  - Move to only 1 sales person at each client meeting (may reduce sales team costs as well, but might have a revenue reduction impact)

Tip: You should remember that consultants do not simply analyse facts, but stay ahead of problems, solve them proactively, and encourage clients to take actions.

Question 4. (Supplier management related question)

When you investigated the price level of security guards, you found that your client has paid 30% more than the industry average. Therefore, you started to negotiate with the supplier, a private company, which provides security guards to your client.

However, a junior client asked you not to negotiate prices with this supplier. This person's arguments were:

- This supplier is also a customer of the bank. The bank has lent a large amount of money to this company
- If the security company goes bankrupt due to your renegotiations to reduce price, the bank will have a bad debt
- Also, regional banks should encourage the local economy to pick up. Local companies should not go bankrupt due to cost reduction projects of a regional bank

How do you react to this situation?

Provide following data when interviewee asks:

Supplier' s Total sales	*$55M/year*
Supplier' s Cost of sales	*$40M/year*
Supplier' s EBIT	*$7M/year*
Security fee paid by the client	*$3M / year*
Loan amount (long term loan)	*$4M*
Interest rate	*5%)*

Answer 4. (Problem Solving: Quantitative comfort, business judgment)

The following conclusions can be drawn from this information:

- This supplier earns a large amount of money
- It will not go bankrupt even if you renegotiate.
- Assuming that sales to the bank decrease by 33% due to a negotiated price reduction, this supplier would still make $6M EBIT and have the ability to pay the bank's interest as well as the principal of the bank's loan.

Regarding the regional economy, the role of banks is not to purchase products/services at a higher price, but to provide lending so that they become competitive and provide better products/services to the society. If the banks spoil their business partners, the regional economy will not grow in the long term.

Therefore, the appropriate reactions are to share information regarding the supplier with the client and to renegotiate prices with the supplier to the industry average.

Items of Income statement	**Income statement of the supplier (before negotiation)**		**Income statement of the supplier (After negotiation)**
Sales	$55M (3M is from the bank)		$54M (2M is from the bank)
Cost of sales	$40M		$40M
Gross margin	$15M	Assuming that you can achieve 33% price reduction	$14M
Operating costs	$8M		$8M
EBIT (or Operating margin)	$7M		$6M
Interest	$0.2M		$0.2M
Profit before tax	$6.8M		$5.8M

Question 5.

During the project, your team found that your client has spent a considerable amount of money for supporting regional sports and cultural activities. As your client's profit was almost zero, you thought it was important to consider options to reduce these regional contribution costs.

However, the client refused to even consider options as this was the bank's tradition and, historically, management has strongly supported them.

They also said that other regional banks working with other consulting firms achieved cost reductions without revising the bank's policies. How do you react?

Answer 5. (Business judgment, Aspiration)

There is no single right answer. However, this is one perspective.

Consultants consider all options, not just those considered acceptable by the client team members. Hence, although your client has certain policies, you should at least discuss them, consider the costs and benefits of these policies, and find possible alternatives if you believe policies are detrimental.

In this case, it is not appropriate to spend a considerable amount of money to support regional non-business activities without thinking about the meaning of this contribution.

In this specific case, our team continued to discuss this issue with top management client team members. Initially the clients (manager level people) did not agree to discuss policy matters during the project. Finally, they agreed to discuss, but were still very reluctant. However, 6 months after this project, these individuals visited us and said "What you did in this project was absolutely right. Our senior management has now started to rethink the old traditions based on your recommendation. They highly appreciated your recommendation."

Case 6 - Marine Components (New)

Introduction

Your client is an industrial company with annual sales in excess of EUR 2B and around 20,000 employees worldwide. The firm deals mainly in refrigeration and air-conditioning and heating systems. They manufacture applications and components in these areas, and the CEO is looking to expand these capabilities into marine components, i.e. products for commercial cargo ships.

The firm does make marine components – temperature sensors – but not in a major way. The sensors are used to measure temperature in:

- Rooms – as part of alarm and thermostat systems
- Cargo holds – temperature is extremely important in ships that transport items such as liquefied natural gas

Question 1

Is it worthwhile to expand in this non-core market segment?
How would you approach this question?

> This is a classic industry attractiveness question, and both Porter's 5-forces and 3Cs apply.

- Is the marine components industry attractive?
  - Is the market large?
  - Is the market growing?
  - Are existing suppliers making money?
- Can the client use their core capabilities into the marine industry and tilt the playing field in their favour?
  - What are industry dynamics? What do customers value when they purchase components?
- Finally, what would the best method of entry?
  - Make own product development, acquire or partner with a competitor?

Question 2

How would you go about getting information about these factors?

> TIP: This tests the candidate's ability to make the frameworks operational. A good answer would include most of these sources.

- Market reports – Market size, growth, identification and share of both competitors and customers
- Annual and analyst's reports – Customer and competitor size and profitability
- Company interviews – Customers' purchasing criteria, competitor profitability
- General literature search – General information on industry and competitors and customers, especially if key players are privately owned
- Previous consulting experience – Your company may have done previous work in the industry and speaking with colleagues can give you a short-cut to many industry insights
- Mystery shopping – contacting existing providers for quotes/delivery schedules/marketing materials
- Focus group with consumers (end users)

- Clear understanding of route to market dynamics through discussions with potential customers / delivery channels

Question 3

We find that profitability has been declining over the past few years. The industry average EBIT margin has been falling from 11% to 8% over the past three years.
What do you think may have caused this decline?

> This tests the candidates understanding of the components that go into profitability; from the top level of "revenue – costs", down to the components of cost, that are deducted to get to EBIT (i.e. cost of goods sold and Overhead and Administration)

Steps to give the answer:

- Outline the structure (key components of profitability)
- Look first at the revenue side. The key drivers here are volume and price
- Then let's move on to the key buckets of cost which may have shifted
- In each case I will explore the potential market dynamics which might have driven a shift and caused a deterioration. A way of structuring these questions would be to consider structural forces and how these might drive each of the components of profitability

Additional details if probed

- Overall market has grown stable 5-6% and is expected to continue
- Prices are under tremendous pressure
- There are few large customers, i.e. the large shipyards in Asia, and European equipment manufacturers, e.g. the makers of engines and alarm systems
- These customers hold considerable bargaining power and that is causing the prices to fall
- Overhead and Admin costs are stable, growing with inflation at around 2% per year
- Cost of goods sold are increasing, mostly due to increase in raw materials platinum and labour costs. Most of the production is today done in Europe

The additional details should guide the candidate towards the conclusion that volume is not the problem, but the declining profitability is due to price pressure and production cost increases.

Question 4

After conducting initial interviews with key customers, we find out that price, product quality, relationship with suppliers and after-sales-service are the most important purchasing criteria for customers.
Our client has a good reputation for making quality industry components. They already sell world-wide and, therefore, have a broad sales and service network to draw on.
We have the following information on cost.
What does this tell you about our client's performance compared to that of its competitors?

TABLE 1 – COST BREAKDOWN.

EUR 1,000	Before Total		
Revenue		3,000	
Cost of goods sold		1,900	
Labour	700		
Raw materials	1,200		
Gross margin		1,100	36.7%
Overhead and administration		920	
Earnings before interest and tax (EBIT)		180	

The candidate needs to calculate the EBIT margin (assume that depreciation is included in the costs stated). Benchmarked against the industry average of 8%, the candidate should conclude that the client is at an earnings disadvantage.

QUESTION 5

What can the our client do to improve its situation?

The candidate should use the previous information on the industry to come up with possible remedies.

Since there is industry price pressure, raising prices is not an obvious option.

A good answer would methodically cover the cost items in the simplified P&L:

- Overhead and Admin reductions – we have no benchmarks to judge whether the client is leaner than competitors, but that could be a possibility
- Better sourcing of raw materials – perhaps across other group companies that might source similar materials
- Lower labour costs – by moving product to a low cost area

QUESTION 6

At this stage you have performed some production cost benchmarks with similar industries. You establish that companies that have already moved part of the production to China can save about 40% in costs.
How much will the EBIT margin be improved by, and how would it compare with, the industry benchmark if our client moved all production to China?

The candidate must calculate the 'after' EBIT number in order to get to the EBIT margin improvement.

TABLE 2 – IMPROVEMENT IN EBIT MARGIN.

EUR 1,000	Before Total			After Total			Factor
Revenue		3,000			3,000		1.00 x
Cost of goods sold		1,900			1,620		0.85 x
Labour	700			420			0.60 x
Raw materials	1,200			1,200			1.00 x
Gross margin		1,100	36.7%		1,380	46.0%	1.25 x
Overhead and administration		920			920		1.00
Earnings before interest and tax (EBIT)		180	6.0%		460	15.3%	**2.56 x**

This tests the candidate’s recognition that raw materials costs will remain the same in China, but that the savings will pertain mostly to labour costs. If anything extra costs should be added in start-up costs, additional transport, and extensive travelling to manage the outsourcing.

QUESTION 6A

If the candidate gets this really fast, complexity can be stepped up by presenting the following scenario:
After discussing the matter with the client’s operations manager, we arrive at a more moderate scenario, where the labour cost savings are countered by

- 6% increase in raw materials cost – additional transport
- 11% increase in Overhead and Admin costs to cover additional efforts in quality control, flying senior management to China, etc.

How would this change the situation? Would our client still be able to outperform the industry average EBIT?

After (scenario 2)			**Factor**		**Nom.**
	Total				incr.
	3,000		1.00	x	
	1,692		0.89	x	-208
420			**0.60**	x	-280
1,272			**1.06**	x	72
	1,308	43.6%	1.19	x	208
	1,021		**1.11**		101
	287	9.6%	**1.59**	**x**	**107**

QUESTION 7

How would you summarise our preliminary conclusions in one minute to the CEO?

This tests the candidate’s ability to summarize and present a situation, complication and hypothesis solution in a concise manner. A good answer is not more than 2-3 minutes long at most. It doesn’t matter whether the candidate recommends for or against expanding in the business area, as long as he/she can argue why.

- The question we are trying to answer is whether we should expand our business in the marine temperature sensor segment.
- We considered whether the industry is attractive overall, whether our core competencies can be used to create a profitable, sustainable position, and finally the best option for expansion.
- We found that the marine temperature sensor market shows stable growth, at around 5-6% per year
- However existing suppliers experience falling profit margin, mainly due to price pressure and increasing production costs
- Our core competencies within production of quality components are valued in the marine segment, and we will also be able to leverage our global sales and support network
- A move of production to China or another low cost area would create a competitive cost base, and counter the increase in labour production costs
- Based on these preliminary findings, which we will further underpin during the next few weeks, we believe it is attractive to expand the marine temperature sensor business, based on a low cost area production footprint. We have heard indications that supplier relationships are important, which would speak for expanding through acquisition; it would enable a faster expansion than by developing relationships by organic growth

Case 7 - Axeles – Cardiovascular Drug Launch (New)

CONTEXT

Your client, XYZ Pharma is a large pharmaceutical manufacturer in the United States. It has recently launches Axeles, a cardiovascular drug that has proven to be the best of its class amongst its peers in FDA testing. Axeles launched a year ago and, despite its effectiveness, its sales have been considerably short of target and it has a much lower market share than the competitors. In fact, the company as a whole has been losing market share for other products as well but the focus is squarely on Axeles, as the analysts see it as a make-or-break product for the company's dwindling stock. The client has approached you to investigate the issue. The CEO feels if they can crack why Axeles is not doing well, they may be able to understand the issues facing the company as a whole

QUESTION 1:

What would be the possible areas of investigation as far as the issue of Axeles is concerned?

Based on the situation you have described, my initial hypothesis would be that there could be three problem areas

- Awareness – consumers may not be aware of the product
- Pricing – the product may be very expensive
- Distribution – the product may not have adequate distribution in pharmacies

Yes, that's a good starting point. However, at this stage, it might be useful to understand how the American pharmaceutical industry works. Most speciality drugs like cardiovascular drugs are prescription drugs, i.e. they can only be purchased if a doctor prescribes them. Pharmaceutical companies have large sales forces who visit doctors to market products. Also, for the sake of this case, let's assume that most consumers have medical insurance that covers the cost of speciality medicines.

Now, let's go back to your hypothesis and see if you would like to change it

- Well, consumer awareness won't be an issue as doctors are key to the purchase decision.
- However, doctors' awareness may be an issue.
- Also, pricing will not be an issue if consumers are covered by insurance
- However, distribution could still be an issue. If doctors know that the product is not widely available, they may be prescribing another drug that is
- I would like to add another hypothesis: the company may not have a strong enough sales force so their marketing could be weak compared to their peers

Well, all of your hypotheses sound very reasonable. I can give you some information that can help you decide which one to investigate further. In an awareness test done by the company, the drug had comparable awareness –v- its peers. Similarly, for distribution, there is adequate penetration in pharmacies relative to competitors. And, as far as sales force is concerned, this company has 2,000 sales people –v- 1500 for the competitor. Our sales force covers all the cardiovascular doctors in the country – 300,000 of them, but so do the competitor's sales force.

Thanks for that information. It does help me revise my hypothesi: awareness and distribution are probably not significant factors.

Also, this company has more sales people than its next largest competitor so number of sales force is not an issue either.

The ratios would imply each salesperson covers 15 cardio doctors for XYZ but the ratio for the competitor is 1:20. So the quality of interactions for XYZ's sales force should be higher than that of the competitor.

Yes, your logic seems correct. But what then could be a possible explanation for Axeles' low market share. The hypotheses you presented were logical, but they don't seem to apply to this situation. Could there be something we are missing?

I would want to understand how the sales force is structured –v- the competitor. You mentioned that Axeles has 2000 sales people –v- 1500 for the competitor. Do these salespeople exclusively target cardiovascular doctors or do they target doctors of other specialities as well?

Well, XYZ is a company with 20 products and we use the same sales force for all of them as we assign a salesperson to a hospital, where he or she covers all the doctors there. In fact, a better metric might be sales force: all doctors instead of sales force: cardio doctors. So, for XYZ this ratio is 1: 40 but for the competitor it is 1:20.

Right, that is a key difference and it suggests the quality of interactions between XYZ's sales force and the doctors would be weaker than the competitor

That sounds plausible. In what ways would you say it is weaker? (Creativity check)
- Frequency of visits
- Length of each visit
- Depth of information provided
- Ability to answer doctor's technical questions

So what would you suggest we do now?
I would do a small scale test with a few doctors to explore whether my hypothesis of a poor quality sales force interaction is a reason why they don't prescribe Axeles. Then I would conduct a cost-benefit analysis for having a dedicated salesforce for Axeles.

That sounds like a good plan going forward. Thank you for your insights and this conversation.

Case 8 - Candy UK

Background & Introduction

Companies "All Liquorice" (AL) and "Black Delight" (BD) are both in the candy industry in the UK. The candy industry produces chocolate, liquorice and chewing gum. There are 4 players in the market. Besides AL and BD there is Chewin, the leader and most profitable company, and Devotion. The market is competitive and strong consolidation has taken place over the last years. Now the board of All Liquorice wants to acquire Black Delight.

> Note: Before you begin, think about the relevance of your comments. For example, don't overemphasise R&D costs that can be cut out after acquisition. In the candy industry, R&D might not be of much importance. Think about the relevance of your questions. Use your time wisely and constantly ask yourself "So what if I know this piece of information? Is that piece of information going to bring me closer to a conclusion?"

Phase 1: Reasons and issues for an acquisition

Question 1:

Why do you think would they want to acquire Black Delight?

> The candidate should come up with a structure, preferably written down, and show business acumen (link silly candy case with recent newspaper acquisition news) and creativity (come up with more than the first 3 obvious reasons). The candidate is not required to come up with the entire list of reasons, but an acceptable 1st year MBA candidate touches on synergies, market share, product portfolio and preferable defensive reasons.

Note: Speak in general terms, do not go into specifics of the case just yet.

Potential reasons

- Strategic: market position, product portfolio, growth opportunities
- Synergies/ Value creation: cross selling, brand, economies of scale, production, transportation, purchasing, overheads
- Financial: taxes, access to funding (although this point is debatable according to finance theorists)
- Defensive: acquisition by other firm creates unconquerable competitor
- Undervalued: bad management, unfavourable market

Note – a bigger airplane for management is not a valid reason!

Note: make sure you talk in specific terms not power MBA talk:
i.e. if you mention increasing market share[8] as a main reason for an acquisition, understand and be explicit as to why a bigger market share is attractive. What are the underlying dynamics?

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8 Which it might well be

Many candidates confuse market share with size:
- Size allows you to spread out your fixed costs
- Market share allows you to influence market prices

Question 2:
What issues might arise during and after acquisition that could diminish value?

There are several reasons why an acquisition or merger is more than just adding up synergies from Day One. Be clear about these.
Show the capability to quickly change perspectives and look at the issue from another angle.
Do not neglect to mention cultural issues and briefly elaborate on them:
- Competitor reaction
- Customer reaction - small stores might not stock the full combined range
- Consumer reaction – incompatible brand values
- Operational – unforeseen costs of plant closure
- Failure/delays to implement and deliver projected synergies
  - Cultural
  - Time to successful implementation
  - Morale impact of redundancies
  - Management & talent leaving
- Cost of transaction: Fees for lawyers, consultants, investment bankers
- Other: Leakage of information and resulting speculation on market

Phase 2: Valuation

Question 3:
Assuming you are part of the AL team, how would you value Black Delight and how much would you bid?

Structures approach according to the structure used in question 1.
Better candidates discuss that there are several methods for valuation of BD.

Stand alone value plus value of synergies (bottom up approach)
- Stand-alone value through DCF analysis, multiples, market value if public (watch out for incorporation of expectations of the takeover)
- Synergies
  - Revenue synergies
    - A big market share can give you more control over pricing
    - It should also enable increase in volumes as you are the 'market leader' (depending on your pricing strategy)
    - Do not ignore impact of cannibalisation
  - Cost synergies
    - Purchasing
    - Production methods
    - Production capacity optimisation
    - Distribution capacity optimisation
    - Sales team optimisation
    - Marketing cost reduction
    - Overheads

- o Financial synergies

Value estimate based on comparable companies

- Estimate of value through multiples/ comparison with similar companies

UNDERTAKING THE ANALYSIS

After structuring his/ her approach the candidate could ask the interviewer for information.

Depending on the relevance of the questions, the candidate will be provided the information in those tables (competitor P&L, market share by distribution channel AL and BD, production capacity utilisation).

NB do NOT ask for irrelevant information.

Market companies P&L

£ '000	**All Liquorice**	**Black Delight**	**Chewin'**	**Devotion**
Sales	500	200	700	400
Materials	190	85	230	160
Labour	110	55	170	90
Gross Profit	*200*	*60*	*300*	*150*
SG&A	80	23	120	60
Marketing	40	12	70	40
Depreciation	50	15	60	30
Net earnings	*30*	*10*	*50*	*20*
Net earnings/Sales	*6%*	*5%*	*7%*	*5%*
Market cap	*330*	*100*	*600*	180
P/E (Stockprice/earnings)	*11*	*10*	*12*	*9*

Market share per distribution channel AL and BD

	Market size (£ '000)		**AL - marketshare (%)**		**BD - marketshare (%)**	
Product	*Gas stations*	*Supermarkets*	*Gas stations*	*Supermarkets*	*Gas stations*	*Supermarkets*
Chocolate	200	300			25%	
Liquorice	300	260	20%	35%	30%	
Chewing gum	300	550	30%	40%	20%	

Production capacity utilisation

Company	**Plant**	**Chocolate**		**Liquorice**		**Chewing gum**	
		Capacity (£ '000)	Production (£ '000)	Capacity (£ '000)	Production (£ '000)	Capacity (£ '000)	Production (£ '000)
All Liquorice	1			130	110		
All Liquorice	2			100	80		
All Liquorice	3					370	310
Black Delight	1	60	50				
Black Delight	2			80	60		
Black Delight	3			40	30		
Black Delight	4					80	60

Next steps involve quantifying synergies and coming up with a valuation.

- Strong candidates see how to use the numbers and get to a valuation without help. Good candidates recognise what the synergies are and have a feel for how to use the numbers but don't get all the way to the end
- Acceptable candidates get to the end with minimum help
- Too much help needed will cause the candidate to fail the case

These numbers allow one to do a top down valuation based on the performance of comparable companies in the industry and/or a bottom up analysis based on synergies.

The valuation based on performance of comparable companies:
The P&L information shows the 4 companies in the industry
Upon reviewing the table the candidate will see that the size, profitability and P/E are different per company
There is a correlation between size and profitability and P/E
Going back to our acquisition, the candidate will see that a combination of BD and AL will become as big as Chewin, the market leader

Will this allow for the same profitability and P/E?

If the candidate assumes that it will and that the profitability and P/E of Chewin are the result of established synergies and economies of scale, Chewin is a good numerical example of how profitable AL/BD will be after the acquisition.

The table below shows a valuation of the AL/BD for different profitability and P/E.

The current valuation of AL is 330, BD is 100, together 430. For a profitability of 7% and a P/E of 11, AL/BD will be worth 540, or an increase of 110. Thus, being AL, the maximum bid for BD would be 210, but we would, of course, put in a bid that is only so much higher than the current market cap that it will assure AL will win the bid.

In other words, if they are willing to sell for 120, we will pay 120 and not a penny more.

Valuation AL + BD using comparables

		P/E		
	£ '000	*10*	*11*	*12*
Net earnings/ Sales	*5%*	350	385	420
	6%	420	462	504
	7%	490	539	588

THE BOTTOM UP VALUATION

The bottom up valuation is based on the 2 synergies:
- Selling BD chocolate in supermarkets where AL has access
- Closing production facility BD3

The most important opportunity the candidate must derive from the table with the market share information is that there is an opportunity to sell BD's chocolate through AL's distribution channel. AL's supermarket sales force can't sell this product because they don't have it. Now they can.

As a proxy for the expected market share the candidate can choose between the existing market share of the product in BD's distribution channels or the existing market share of AL's products in their distribution channels. This is an important assumption and tests the candidate for business sense. Think about how it works: supermarkets and gas stations don't have all brands on their shelves, but make a selection based on brand, prices and sales rep relationship. This allows for a fine discussion about pull and push marketing strategies. I make the simplified assumption that it is push marketing and therefore opt for a comparison with existing AL market shares in the distribution channels.

So, we have expected extra revenues. But at how much should AL value that? To be able to do so, the candidate must recognise that the valuation in the P&L is based on net earnings. Thus, the candidate must assess how much additional earnings will follow from these additional revenues. This needs another assumption, because marginal cost will be less than marginal revenues and the 5% earnings/ sales will be too low. I make the assumption that fixed SG&A cost will not go up and that fixed SG&A cost is about half of total SG&A. This leads to around 15% earnings/ sales for the new found revenue, or 18% increase in earnings.

There also is a synergy in production, i.e. close production facility BD3. From the production capacity utilisation table, it follows that the production of liquorice in BD 3 and chewing gum in BD4 can be allocated to other factories. For chewing gum this might not be such a reasonable thing because that would require 100% utilisation of plant AL3. That means no room for emergencies, fluctuations or expansion. This is therefore not an alternative. BD3 liquorice can be closed and production can be allocated to at least 2 other factories without getting close to 100% utilisation.

However, how much is this going to be worth for our valuation? To determine this the candidate must refer back to the P&L and make an estimation per cost item on whether that can be scrapped or not. Materials are still needed, depreciation will continue unless we can sell the plant, property and/or equipment, and no marketing can be saved. Maybe a little bit in SG&A, but that is a wild guess, and most importantly, the work force in the plant will be made redundant. I assume the savings in labour cost, therefore, to be the only significant saving. As a proxy, I take an average labour/ revenue ratio and apply that to the revenue in plant BD3 and calculate the result on earnings. See the table below.

After application of the P/E multiple, these two synergies lead to a potential market cap of 355, up from 100!

Note: the two methods lead to different numbers. Does that appear to be correct? What would you do about it in practice?

Valuation BD bottom-up using synergies

Stand alone value		
	Earnings	10
	P/E	10
	Market cap	100
Synergies		
- Commercial synergies: BD choc in supermarkets		
	Market size	300
	Expected Market Share	40%
	Net earnings/ Sales**	15%
	Increase in earnings***	18
- Production synergies: close BD 3		
	Production BD3	30
	Savings due to closure	
	- raw materials	
	- labour****	7.5
	- depreciation	
	Increase in earnings	7.5
New value		
	Total earnings incl. increase	35.5
	P/E	10
	Market cap	355

*assuming no leakage of information
** estimated earnings/ sales (marginal cost less bc fixed SG&A)
*** assuming no extra SG&A, Marketing, Depreciation
**** average labour cost BD around 25% of revenues

Note: to get to an answer the candidate has to make several assumptions. Don't be taken aback when perfect information is not available, but use the information to its fullest and be clear about your assumptions and always test if they are reasonable.

PHASE 3: WRAP-UP

QUESTION 4:

You are now in the elevator with AL's CEO. He is going to meet BD management. What should he tell them?

The candidate is required to provide a structured synthesis of the whole case, wrapping together whatever came up in the case and making a recommendation on how much to bid and why. It is important that, even though the candidate might have been a bit lost throughout the case or the candidate has not come to a complete answer, the candidate shows he or she is capable of (1) keeping track of the main question and providing an answer to that question and (2) getting out of dead ends that he or she has encountered, with energy.

Case 9 - Melody Mobiles (New)

Introduction

This case is about the UK mobile phone industry. The industry is divided into five 'network operators' who own and operate the masts and networks that enable calls to be placed, and a number of 'mobile virtual network operators', or 'MVNOs' who rent network capacity from the network operators. Customers can buy a phone and services from either a network operator or an MVNO. They do so either by signing a monthly contract, which typically includes a fixed number of voice minutes, text messages and other services, or by purchasing a 'pay-as-you-go' phone. Pay-as-you-go requires customers to maintain a credit balance which is reduced as they make calls, send texts and use other services. However, for simplicity, in this case we will talk only about contract deals, and ignore pay-as-you-go phones.

Regardless of the network operator where they purchase their phone, customers can make calls seamlessly to any other network in the country, although they may be charged a premium for doing so.

Our client, Melody Mobiles, is a network operator who is experiencing some difficulties and has asked us to help them.

Question 1

Before we go further, what do you think are Melody Mobiles' main sources of revenue and cost?

There is no one correct structure: any will do as long as it enables you to cover all the right revenues and costs. A good structure might be:

Revenues

There are three potential sources of revenues for a network operator.

A. From mobile phone users

Since we are only dealing with contract customers, the revenue comes in two parts:
- The monthly recurring revenue as agreed in the contract
- Additional revenues when a customer exceeds their fixed allowance of calls, text messages and other services

B. From other network operators and MVNOs

- MVNOs pay to rent network capacity from the network operator
- Calls between networks cause the receiving network to charge the calling network for the connection. This is called "**interconnect**" and is why some networks charge their customers a premium for inter-network calling (as mentioned in the introduction).

C. From marketing deals

Network operators could agree to promote other companies via their mobile content, or on their website. However, these revenues are likely to be insignificant compared to caller, interconnect and MVNO revenues.

Costs

A. Fixed Costs

Maintaining the network incurs very high fixed costs for the operator. You should cover the "standard" fixed costs such as property and salaries, but the network cost is important in subsequent questions.

B. Variable Costs

- From operations
    - The operational costs mirror the revenues received above:
        - There are costs from calls, texts and other services on the 'home' network.
        - However, these costs are essentially negligible.
    - Outbound interconnect costs
- From selling:
    - The selling process incurs costs including a large subsidy on the sale of phones.
    - Some sales costs depend on the sales channel being used:
        - Own stores – property, salaries, training, cost of promotions
        - Website – website design, development and maintenance
        - Third parties – commissions

CONTEXT

OK, let's talk about the technology that Melody Mobiles uses and some of the issues they face.

In the UK, there are two types of network technology, which both cost the same to operate:

- *Type A, which is more mature and requires a cheaper phone*
- *Type B which is a new technology but needs an expensive phone.*

Most network operators have both types of network, but Melody Mobiles has only a Type B network.

Customers appear to be indifferent to the network technologies and are driven primarily by price. The result is that 80% of the population uses a phone on a Type A network and only 20% on a Type B network. However, all network operators penetrate their addressable market equally and, on a monthly basis, a customer on a Type A network spends the same as a customer on a Type B network.

QUESTION 2

What is the relative number of customers subscribing to each network operator? (Note: you can ignore the effect of MVNOs and assume 100% of the population subscribes directly to a network operator.)

Since there are five network operators, and each penetrates its addressable market equally:

	Type A Network	Type B Network
Population	80%	20%
Number of network operators sharing population	4	5
Population with each network operator	20%	4%

Each of Melody Mobiles' competitors therefore covers 20 + 4 = 24% of the population but, since it has only a Type B network, Melody Mobiles covers only 4% of the population.

Therefore Melody Mobiles has only 1/6 as many customers as its competitors.

QUESTION 3

How does the single network and smaller subscriber base affect the revenues and costs of the company?

Since **profit = revenue – cost**, we will examine the effect of the single network and smaller subscriber base on revenues and costs separately.

The single network directly affects only the fixed costs. Since Type A and Type B networks cost the same to operate, the network running costs for Melody Mobiles should be half those of its competitors.

The smaller subscriber base affects both the revenues and costs:

- Revenues
  - We would expect the revenues from customer calls are lower by a factor of six, since customers spend the same on both types of network
  - The interconnect revenues are likely to be higher, since – assuming calls are distributed between networks in proportion to their number of subscribers – Melody Mobiles will receive more calls from external networks than its competitors

- Costs
  - The cost of carrying calls on the network is lower, since fewer people are making or receiving calls. However, as discussed above this cost is negligibly small, anyway
  - The interconnect revenue argument applies equally to costs: interconnect costs are higher

The net effect of the interconnect revenues and costs could be higher or lower but is likely to be close to zero if we assume that incoming and outgoing interconnect are charged at the same rate.

Since the cost of carrying calls on the network is negligible, the dominant effect of the lower subscriber base is a reduction in revenues by a factor of six.

(Note that there are other effects on the revenues and costs such as a lower number of staff required to service a lower number of customers. However, the key points are given above).

The net effect is approximately the same as if revenues had fallen by a factor of six, fixed costs had halved, and variable costs remained unchanged. Overall, profits are lower than the competitors.

Question 4

What would you advise Melody Mobiles to do?

The problems seem to stem from their single network and the resulting lower subscriber base.

There are two options to address this:
- Build and develop a Type A network
- Examine their sales strategy to see if there are ways to increase the subscriber base

Assessing the 1st option:
- Type A networks are an older technology than Melody's existing Type B network
- An investment in a Type A network, which is likely to be extremely expensive, is risky because we would expect people to migrate to a Type B network over time
- We would need to develop a view as to when customers will migrate to a Type B network in order to determine whether an investment in a Type A network is a good idea.

Question 5

Melody Mobiles' CEO agrees that it would be sensible to start by examining the sales strategy and asks you to work with the Sales Director to see what opportunities there are to improve sales.

You are preparing for your first meeting with the Sales Director and have some good questions ready to ask him. What should you bear in mind?

Note - You should realise that you have been sent to the Sales Director by his boss to see how he can do his job better. This does not make him look good and you will need to be sensitive to the fact that he is not likely to be pleased to see you. He is going to need reassurance and he will be keen to justify his performance to date.

Question 6

As it turns out, the Sales Director is newly appointed and is very keen to work with you to figure out how to improve sales. He already has a short-term monthly sales target in mind in order to grow the subscriber base.

Context

He explains that he has some money available for investment in his existing sales channels, but that it is limited. He tells you that Melody Mobiles currently sells phones and contracts through the following channels:

- *Melody Mobiles Stores – there are relatively few of these shops, but they sell only Melody Mobiles contracts and employ Melody Mobiles staff*
- *Partnerships with a range of third party retailers – there are a much larger number of these shops, which sell contracts from a range of network operators and are paid a sales commission*

Melody Mobiles also sells through their own website but, due to some recent technology problems, the Sales Director does not feel the website would be a good investment. You can assume he is right.

The Sales Director asks you to figure out which is currently the best performing channel. What data would you ask for in order to help him?

The net growth via any channel is given by:

$$\text{Monthly sales} \times (1 - \text{churn rate}) \text{ or}$$

$$\text{Total number of stores} \times \text{Sales volume per store} \times \% \text{ sales of Melody Mobiles} \times (1 - \text{churn rate})$$

The key is to recognise that customer loyalty is, at least in part, dependent on the channel where the contract was purchased. This is reflected in churn rates that vary according to the channel.

Question 7

The Sales Director gives you the following information:

Channel	Number of Stores	Monthly average Sales Volume per Store	% Sales of Melody Mobiles	Monthly Churn Rate %
Melody Mobiles Own Stores	20	25	100	2
Partner Retailer A	200	30	20	10
Partner Retailer B	250	20	10	4

Which is the best performing channel at present?

Applying the formula above gives net contributions of:

Channel	Contribution
Melody Mobiles Own Stores	490
Partner Retailer A	1080
Partner Retailer B	480

So Partner A is currently the best performing channel.

Question 8

The Sales Director tells you that he believes his investment could be used to do one of the following things:

- *Improve the monthly sales volume of Melody Mobiles own stores by 20% by employing extra staff*
- *Provide incentives for sales staff at Partner A to increase the proportion of their customer buying Melody Mobiles by 10%*
- *Provide incentives for sales staff at Partner B to improve the quality of Melody Mobiles subscribers and therefore halve the monthly churn to 5%*

Where should the Sales Director invest his money?

Applying the information above, the new data for the channels are:

Channel	Number of Stores	Monthly average Sales Volume per Store	% Sales of Melody Mobiles	Monthly Churn Rate %
Melody Mobiles Own Stores	20	30	100	2
Partner Retailer A	200	30	22	10
Partner Retailer B	250	20	10	2

Which gives contributions of

Channel	Contribution
Melody Mobiles Own Stores	588
Partner Retailer A	1188
Partner Retailer B	490

These are improvements of

Channel	Contribution
Melody Mobiles Own Stores	98
Partner Retailer A	108
Partner Retailer B	10

So on evidence of the numbers, the Sales Director should invest in Partner Retailer A giving a net sales improvement of about 5%.

However, you should also take into account the sustainability of the improvements. Although increasing the share of customers going to Melody Mobiles from Partner A gives the largest immediate payoff, it is likely that competitors will respond by adjusting their own incentive payments to Partner A. This could reduce the share of sales going to Melody Mobiles and, therefore, the benefit of the investment.

Investing in Melody Mobiles' own stores gives only a slightly lower immediate contribution and is likely to be more sustainable over the long term.

Question 9

Like most CEOs, the CEO of Melody Mobiles likes to hang out in lifts, waiting to surprise junior management consultants. Some time later you run into her, and she asks you to summarise the case so far. What do you tell her?

You should give a brief summary of the case so far, and cover the important points:

- Being limited to one network is constraining the size of the customer base in the short term and ensuring the company is the least profitable in the industry
- Over the long term, this situation may ease as Type B networks become more popular
- However, some action should be taken to increase current net sales and, together with the Sales Director, we believe we have found an opportunity to increase net sales by 5%

Case 10 - The Vitamin Store

Context

Our client is a private equity firm who is interested in purchasing "The Vitamin-Store". The Vitamin-Store is a retailer that sells health and nutrition products such as vitamins, minerals, natural medicines, sports supplements, natural herbs, dietary supplements, and nutrition products, i.e, Slim Fast, etc.

Our private equity client has asked us to value the company and wants to know whether or not they should buy it.

What should they consider?

1. Valuation of business, i.e. price
2. Capital structure
3. Expected return to investors, as PE investors require high IRRs

Let's assume that figuring out the capital structure and expected return to investors is something they're good at, and they want us to review valuation. What are the elements they should consider?

1) Market (be sure to explain each of your answers)
   a) Size & Growth. Drivers could include "Why are these growth drivers?":
      i) Demographics, i.e. ageing population, education levels, income levels
      ii) 'Health' trend
      iii) High level of obesity
      iv) New formats
      v) Level of competition
      vi) Availability / Number of stores, i.e. expansion into new markets

   b) Price levels of products sold
      i) Level of competition
      ii) Supply-demand economics

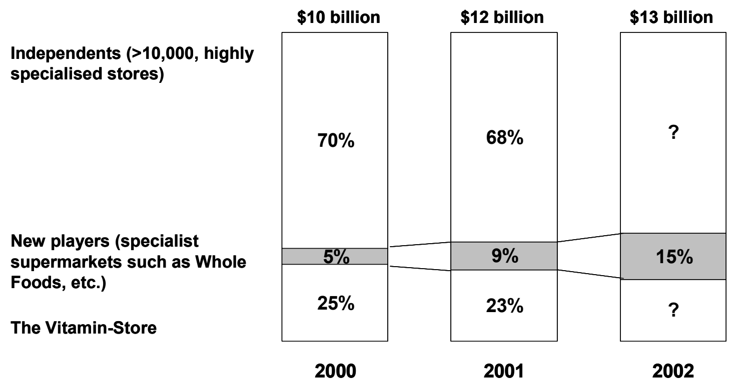
2) Potential market share
   a) Customer segmentation
      i) 'Health-freaks' / hippies
      ii) Sports enthusiasts
      iii) Obese people
      iv) Mainstream

   b) Level of competition:
      i) Market players
         (1) Independents
         (2) Specialists
         (3) Online stores
         (4) Large retailers, i.e. WalMart, Tesco, etc.

      ii) Level of fragmentation

Let's assume that the market looks like the graph at the right. What revenues did the Vitamin-Store have in 2002?

Math calculation: $13 billion * x%
How to get to the x%?

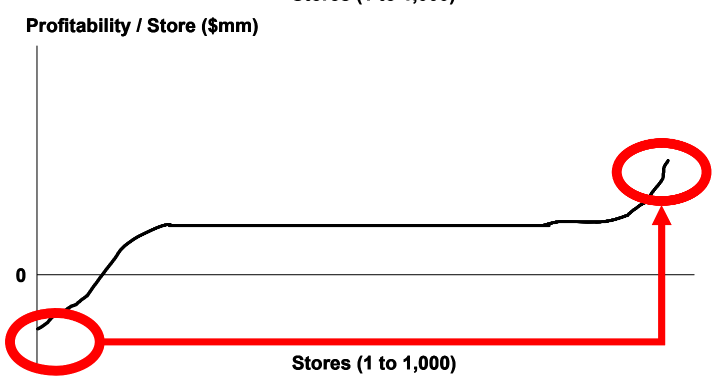


Assumptions one can make:

- Historical trend: then 20% * $13bn=$2.6 billion (most simple, most practical)
- Use % change in market share as base
- Interviewee should note that it seems that as a proportion, Vitamin-Store has lost greater market share, and that one would have expected the independents to have lost greater market share to the new players. What does that say about Vitamin-Store customers?

3) Cost structure – what would The Vitamin-Store's major costs be?
   a) Per product profitability (*profit margins ~40%*)
      i) Market share of The Vitamin-Store is important if it gives it an advantage over others with regard to negotiating power with suppliers
         (1) Who supplies these products? I would imagine big pharma for vitamins/minerals and perhaps the Unilevers, P&Gs of the world for dietary products, i.e., SlimFast. So I would imagine that an independent player might have less of an advantage with suppliers than a leading specialist. However, a large Walmart, Tesco, would have larger benefit with Unilevers, P&G, actually with big pharma as well.
         (2) Why?
         (3) For example, WalMart is one of the world's largest retailers, if not the largest. WMT deals extensively with the large consumer product companies and already be supplying it huge quantities. Furthermore, I also believe that most WMTs have pharmacies, and many big pharmaceutical companies also sell OTC products, so I could assume that WMT also has a good relationship with big pharma; therefore, WMT's cost structure in this case is better than any other player (most probably)
   b) Real estate (real estate / capital leases for retail stores)
      i) Are these on prime location? (*mostly urban*)
      ii) Are we generating enough sales / square foot and profits / square foot (or per store)? How do we compare to the industry?
   c) Staff
      i) Look into sales / employee; employees / store; staffing methods (study traffic patterns in relation to staffing patterns)
      ii) Look in management and staff compensation (incentive-based compensation –v- high base, for example)

d) Distribution (actually only accounts for 3% of sales, so not major)
   i) Do we have a distribution centre? *Yes.* Are we the best at managing a distribution centre? Can we have our suppliers distribute directly to our stores?
e) Working capital management (*doesn't really affect bottom line, but does affect cash and could be reinvested – it's invested capital*): Manage inventory turnover, accounts receivable and payables, manage cash



If the profitability per store is as shown on the left, what would you do?
1. Improve the worst-performing stores and bring them to the level of the highest performing stores (as shown in the 2nd graph)

2. Understand why the bulk of the stores are not performing as the highest performing stores

What would you look into?
- Location? Study traffic levels; area demographics; is this a historical trend, or a one-off?
- High levels of competition driving prices down?
- Product turnover, customer baskets, store layouts: are there specific products that we are not turning over and that we should consider dropping? How do customers make their purchasing decisions? Compare stores.

Let's say that there's nothing we could do about it – what would you do?
Sell or sub-let the store.

The Vitamin-Store is actually not profitable, and the PE firm wants to assess whether it's actually possible to quickly turnaround the company if they buy it. Furthermore, they have been told that it will be an auction based process. They ask us to prepare a 100-day plan to turnaround the company.

Quickly, what are the key items that we should suggest:

These would be parallel activities:
- Product turnover and profitability: drop products that may not be turning over
- Supplier contract negotiations: negotiate better pricing terms with suppliers (big pharma, consumer product companies, etc.)
- Exit non-performing stores (perhaps some real estate that can be sold/sub-let)
- Change management and staff pay packages, based on incentives. Even in stores, part of the compensation could be linked to store profitability

- Conduct customer surveys and understand how customers are segmented. This could actually be conducted prior to purchasing the company together with a marketing & promotional campaign
    - Let's look at customer segmentation: what if The Vitamin-Store increased its market share in the 18-35 age category from 30% to 35%. One in three men between the age of 18 and 35 spends $10 per month on vitamin supplements and the like. What would be the impact on the bottom line?
        - US population: 300 million
        - Men / Women: 50%/50% = 300 million * 50% = 150 million
        - Let's assume that average life expectancy = 75 years
        - We could make assumptions as to the population pyramid, but let's assume that since there are 18 years between 18-35, 15/75 = 20%
        - The 18-35 age category represents 20% *150million = 30 million people
        - Annual expenditures = 30 million * 1/3 = 10 million * $10*12 = $1.2 billion
        - Current market share = 30% * $1.2 billion = $360 million
        - Improved market share = 35%*$1.2 billion = $420 million
        - Profit per year: 40% (as profit margins = 40%) * $360 million = $144 million for the initial year; 40% * $420 million = $168million
        - Net impact on profit = $24 million without considering any tax issues, etc.

	Year 0	Year 1
Market	$1.2 billion	$1.2 billion
Market share	30% = $360 million	35% = $420 million
Profits (40% of revenues)	$144 million	$168 million
Net impact on profitability	$24 million	

Let's assume that Walmart (WMT) is not present in this market for the time being. Two questions:
1. Would WMT be interested in entering this market?
2. Would they be a threat to The Vitamin-Store?

- Yes – WMT would be interested in entering this market:
    - Growing market
    - Fragmented market (independents account for ~ 70% of market)
    - High profit margins
    - Relatively small investment from WMT's perspective → most probably a high return on invested capital
    - Would WMT be a threat to The Vitamin-Store?
    - It depends on who The Vitamin-Store is targeting as customers
    - If they're targeting the mainstream customer, then WMT could be a threat
    - If they're targeting a "higher-income" / baby-boomer set, then they may be able to effectively cater to a specific segment who may not shop at WMT
- What should they do?
    - Survey their current customers and understand who they are. That's not very costly, probably a couple of hundred thousand dollars
    - Review their current store locations
    - Improve positioning via campaigns, better store layouts, etc.

The Elevator-pitch: what would you recommend the private equity principal to do?
Here the interviewee is expected to synthesise the main items reviewed and present a recommendation.
You should also mention that the capital structure and financing structure may have an impact on the overall return the PE firm can expect to obtain.

Case 11 - AluCo

Introduction

AluCo is one of the world's largest aluminium producers. It also makes a wide range of alloys, which combine aluminium and other elements and have specific properties. The company has hired you to look at AluCo Closures, a subsidiary that makes two alloys – the 3-series and the 8-series – which are used to make bottle tops (closures). The 3-series is harder and is used in water and carbonated drinks. The 8-series is softer and sold to spirits companies. AluCo historically has maintained the highest product quality in the industry and the company maintains a 65% market share in both markets.

Question 1:

Can you tell me if you think this is a good business to be in?

Tip: You have just received a lot of information. Before launching into an answer to what appears a relatively straightforward question, it is worth taking some time to gather your thoughts and to clarify anything that is unclear. Be aware that the client is AluCo Closures, not AluCo, and that AluCo Closures makes alloys for bottle tops; it does not make the bottle tops themselves. If in doubt, ask.

There are basically two ways to make money in business: be in an attractive industry and/or have an advantaged position in your industry. To understand whether this is an attractive industry, I would firstly like to know the size of the market and its growth rate, and then I would look at the five forces of pressure within an industry: supplier power, barriers to entry, degree of rivalry in the industry, buyer power and threat of substitutes.

Additional Info

That's a good start. To answer your first question, I can tell you that the market for both alloys is 40,000 tons a year which sell for about 1,000 euros/ton, and that the market grows at 3% a year.

OK. From the information you've given me it seems that the total market is not large.

Moving onto an analysis of the key forces of pressure within an industry I think that I can draw the following conclusions from what you've told me so far:

- Suppliers are not a threat. You have told me that AluCo Closures buys the aluminium for its alloys from AluCo, its parent company. It is therefore safe to assume that it buys the aluminium at a market transfer price and that AluCo has no incentive to squeeze the margins of its own subsidiary.
- There are barriers to entry. Producing alloys involves combining aluminium with other materials and then rolling them into sheets or coils. Such a process requires significant capital investment. A really good answer will point out that capital investment alone does not act as a barrier to entry, but capex in relation

to the size of the market does, i.e. high capital requirements to enter a small market will keep most rational entrants out, which is what is happening here

- Rivalry should not really be a threat since AluCo Closures has such a dominant market position. However, I would like to know how the remaining market share is divided among the rivals, whether the industry is a duopoly or more competitive
- Substitutes are anything that could be used for closures instead of our aluminium alloy. I would assume from my knowledge of bottles - those I've seen in the supermarket - that the main substitutes would be closures made from plastic
- You haven't given me any information about the buyers, so I would also like to ask you who the buyers are, how concentrated they are, whether they have significant power in relation to us and whether they are under price pressure from their customers

Tip: A really good answer would drive through to all of these points since you already have enough information to make these conclusions. Candidates cannot make assumptions about customers/buyers as no information has been given, so they should ensure that they ask the interviewer for this information.

Additional info

AluCo Closure's customers make bottle tops, which they sell to drinks companies like Diageo and Nestlé. The closure industry is fragmented and highly competitive. Companies within the industry face significant price pressure from their own customers.
You are right about the substitutes. The key substitutes are things like PET plastics. These are a threat because PET is lighter, and easier to handle and transport.

To understand the company's position within its industry, I'd like to get a better understanding of its **sources of competitive advantage**.

Since aluminium alloys are essentially a **commodity product**, they are very difficult to differentiate. It is likely therefore that the company has a **cost advantage**, which will stem from **economies of scale**.

The more volume the company produces, the lower its total average costs. Since the company has such a high market share, it probably has a lower cost position than its rivals, which will act as a source of competitive advantage. Furthermore, its high market share gives AluCo Closures the ability to set prices, something that is further reinforced by its high product quality.

So given the existence of barriers to entry, low threats from suppliers and buyers, a small threat from rivals, the company's advantaged cost position and ability to charge a premium, I believe that for AluCo Closures this is a really good business.

Question 2:

That's very good, I agree. Now having said all of this, revenue at the company has been falling and the CEO wants you to investigate what is going on. What sort of things would you want to look at to make your recommendations?

I'd want to first examine the price and volume at AluCo Closures to identify the reason for the decline in revenue. If prices are stable, then the problem is with volumes which could be falling because of a decline in market share or a contraction in the overall market. Since we know that the market is growing at 3%, I'd say the problem lies with a decline in market share.

Question 3:

That's a good hypothesis, and you are right. What might cause a decline in market share?

There are a number of structures you might use here – 3 C's would be one. Another very simple approach is to consider internal and external factors, and then split external into supply side and demand side.

- Internal Factors:
    - To understand why this is happening I'd want to see if there have been any problems within our client in terms of:
    - production quality
    - delivery reliability
- External Factors
    - Supply side:
        - The competition - Have they done anything recently to try to take customers from our client, e.g. aggressive marketing campaign
    - Demand Side:
        - Any changes in our customer base which might cause them to take their business elsewhere
        - Customer needs
        - Willingness to pay

Question 4:

That's a good way to start. I can tell you that there have been no production problems at our clients. However, it appears that over the past few years, our rivals have spent more on R&D than our client. There has also been some consolidation among our customers. Why might that have happened and what is its significance?

Our customers are in a very competitive industry. They have no pricing power over their customers, which are the large multinational drinks companies. They also have to deal with AluCo Closures, which can use its market power to demand price premiums.

Our customers have probably been forced to consolidate to protect their margins. The significance of this consolidation is that it increases our customers' bargaining power over us. Since we have kept prices constant and our rivals' higher R&D spending has improved their product quality, these larger customers have probably defected to our rivals.

The other point about consolidation is that it divides our customers into two distinct groups: large customers and small customers, and these have different needs;

- Large customers are more focused on plant utilization since they want to achieve economies of scale

- Small customers now need to differentiate their products to compete with their larger rivals. However, we have only a single product and service offering and so have probably lost relevance with some of our key accounts

Question 5:

That's a very good analysis. One option that our client has is to give in to its customers' demands for a price discount. However, our client is concerned about the impact this will have on its profits. If we were to cut prices by 5%, how much would we have to increase volumes to maintain the same amount of profits?

> Tip: Most numeracy questions, including this one, require structure more than calculations. In this case the key is to ask for the gross margin, without which you can't work out the answer. In general, if you find yourself doing large calculations then you are probably on the wrong track. In that case, don't panic, take a deep breath, retrace your steps and start again.

In this case the gross margin is 20%.	per unit costs are 80 and profits 20	A 5% decline in price makes it 95
Lets say the original price is 100		Costs remain at 80 and profits are now 15

To make the profits the same, you need to increase volume by one third

So cutting prices to take back market share requires that it sell 33.3% more product simply to keep profits constant. Given its high market share levels, this is unlikely.

Question 6:

What would you recommend to the CEO?

> Tip: Your recommendations must use the information you have uncovered in the case to summarise the analysis undertaken and address the problems that the company is facing.

I have four recommendations:

- First of all I would recommend increasing R&D spending up to our competitors' levels and to try and recover our product advantage
- Secondly I would carry out a study of our customer base to assess the changes going on in the industry and to find out which companies have which needs
- Thirdly, I would develop a differentiated product and service offering to take into consideration the distinct needs of our different customer groups
- Lastly, I would recommend reinforcing our sales and marketing capabilities

<u>Case 12 - Drinking Water Purifier</u>

<u>Introduction</u>

A leading global consumer goods company has come up with a new product for cleaning water to make it fit for drinking. The product is a sachet which contains a powder. The powder is poured into a bucket of water and stirred for 20 minutes. At the end of the process, the silt/dirt that was in the water will settle at the bottom of the bucket and the bacteria in the water will have been cleaned/neutralized. On pouring, the recipient gets World Health Organisation certified drinking water.
The company has launched this product with varying rates of success in many developing countries and now they want to enter India. The company already sells other products in India. The CEO wants to know if they should enter the Indian market with this new product and, if so, how?

> Note: You should recap your understanding of the context with the interviewer, and ask any clarifying questions about the product or the company.

<u>Question 1:</u>

How would you go about structuring your analysis of this problem?

This is a typical market entry question and you should follow a structure similar to the one laid out below to analyze it:

- Size the market
  - Define the market
  - Assess size, profitability and growth
  - Identify relevant trends and regulations
  - Identify key success factors
  - Evaluate Risks

- Analyse Customer needs
  - Segmentation (size, profitability, share, growth)
  - Drivers of purchase behaviour (product, price, promotion, place)
  - Power in the market

- Understand the competition
  - Key players
  - Competitive situation - concentration and intensity
  - Core competencies (strengths/weaknesses) and capabilities
  - Likely reaction to entry
  - Differentiation
  - Cost structure

- Assess company capabilities and analyze how well the company's strengths match the new market needs
  - Core competencies and resources –v- key success factors
  - Potential positioning and pricing
  - Cost structure
  - Profitability returns

- Evaluate barriers to entry

- o Customer related – product differentiation, brand loyalty, switching costs, access to distribution channels
- o Non-customer related – economies of scale, capital requirements, experience curve, regulation

- Evaluate methods of entry
  - o Build, acquire, partner
  - o Quantify investment cost and risk

- Analyze how the firm entered previous markets, and why were they successful or not.

QUESTION 2:

That is a very comprehensive structure. Why don't we start by estimating the market size for the product? We know that 1 sachet can be used to clean 10 litres of water.

Tip: This is a 'typical' estimation question. You should drive the estimation step-by-step, talking the interviewer through each of your steps and asking the interviewer for information where you need it. If you are uncertain about any of the numbers you are estimating, then validate the number and the assumptions you based it on with the interviewer. It is far better to validate a number with them than use a number that is way out and risk coming up with a nonsensical answer at the end of the estimation as a result. Having said that, you must also demonstrate business judgment and confidence, so don't seek reassurance at every step – only if you need it.

You should acknowledge that, given the product can be used to purify 10 litres of water, it will most likely be purchased by households. A good place to start is by estimating the total population of India, and then determining the total number of households.

APPROACH

We will follow a number of steps here:
Estimate the likely market size (in number of households)
Calculate the potential consumption per household (sachets per annum)
Outline other factors that might affect this analysis

Step 1

Population of India = **1 billion people**
Assume an average 5 people in a household (Indian families are generally bigger than Western families)
Total number of households = **200 million**

Next you should realize that not all households will have the “need” for such a product.

A sensible hypothesis is that:
The product will probably be used by households which do not already have access to clean drinking water through basic state-owned infrastructure. These will most likely be households in non-urban areas.
The product will be used by households who do not have the disposable income to purchase easier, less time intensive, alternative sources of purifying water, e.g. filters, bottled water, etc. These will, therefore, be the lower income households.

Given India is a developing country it is fair to assume that a larger percentage of the population will be in non-urban areas. You can use your knowledge of UK (a developed country) where the urban/rural split is probably 70/30. Hence, in India it might be fair to assume that the split is the reverse – Urban/Rural = 30/70.

Based on your hypothesis a), your initial market consists of the rural households = 70% * 200 million = **140 million**

Next, based on your second hypothesis, estimate the income division in the rural areas. Given that the Indian rural economy is mostly agriculture-based and from your knowledge of the high poverty in India, it is also fair to assume that the split between high/low income in rural India is 30/70.

Based on hypothesis b), the initial market size estimate can be improved to
70% * 140 million = 98 million ~ **100 million**.

Hence, you can say that the market for this product will consist of 100 million households in India.

Further refinement might include splitting the regions between urban (major cities), semi-urban (towns and the poorer outskirts of major cities), and rural areas (villages), and make their market size estimations on this basis.

> Note: You should realize that though there is no proper drinking water infrastructure in villages, water from the wells or rivers is probably cleaner than the stagnant water from the tanks in towns and the outskirts of major cities and that, therefore, in rural areas it is probably fair to assume that perhaps a quarter of the households are happy with, and healthy on, their current water source.

Step 2

The next step is for you to calculate the drinking water consumed per household and, hence, the number of sachets used per annum:

- Assume that 1 household consumes 10 litres of water per day based on fact that 1 person consumes 2 litres per day
- Estimation given that in the West we are recommended to drink 1.5 litres of water per day for healthy living, and India is in general a hot country
- Given that 1 sachet can clean 10 litres of water, 1 household uses 1 sachet per day.

Note: Other factors that you might want to consider are that the drinking water consumption will vary with age of members in a household and on the geographical location of the regions (hot/colder). In general, though, it is fair to mention these points but then take average values.

Note: It is vital for this type of "back of the envelope" estimation not to over-complicate the approach. Keep it simple, then add comments about possible further refinements you might want to consider.

Conclusion

That gives a total of 100 million sachets per day, or 36.5 billion sachets per year.

You should summarize that our target market will consist of people who live in semi-rural and rural areas, and have low income such that they cannot buy the expensive substitutes for the product.

QUESTION 3:

Now you have looked at the market and the consumers, let's try to understand the competitive landscape. What could be the competition for the product?

You may not have knowledge about water purifier substitutes in India, but you should use your own experience to identify competition, and then ask the interviewer for any other competing products that you may have missed. A good way to structure your answer to this question is to think about direct and indirect substitutes. Once you have the full list of competing products, you should do a quick assessment of the value to the consumer of each of these competitors based on basic criteria including price, ease of use, quality, accessibility etc.

Direct substitutes (you may not know about this)

- Chemicals distributed by the government to clean water – free, poor quality of water, easily accessible to poor people

Indirect substitutes

- Boiled water – not a perfect substitute as does not get rid of silt/dirt and does not eliminate all bacteria, time consuming, cost attached in terms of electricity, gas or fire wood
- Electronic filters – very expensive, high quality
- Bottled water – relatively expensive, high quality, accessibility may be an issue in rural areas
- Unclean water – probably used most, least expensive, and very real danger to health

A possible hypothesis might be that, given we are targeting the lower income population, the price of the product will need to be lower than that of bottled water and filters. You can make a fair assumption that that 'lower price' is a given, i.e. the consumer goods company realize this and intend to pitch the price below that of bottled water and filters.

You should summarize to say that the product doesn't seem to face strong competition. There are no good quality direct substitutes, and the indirect substitutes are either poor quality or are too expensive for the target segment.

QUESTION 4A:

Next, let's try to understand the revenues and costs associated with the product. From our experience of launching in other developing countries, the average price for the product has been 6.2 US cents. How do you think we should price this product in India?

You should use the information discussed in previous questions to come up with a pricing strategy. Price can be determined on a number of different bases, some of which are better than others:

- Cost plus – cost of the product plus a margin
- Price of direct/indirect substitutes – you should note that all the direct and indirect substitutes discussed before provide different benefits and therefore a different 'value proposition' to the customer. You should assume that the company's aim is to maximize their profit, but that to obtain sizeable market share they need to be priced below the closest, cheapest substitute, i.e., bottled water
- Customer's willingness to pay – this can be determined either by primary market research, or by creative means of estimating the percentage of a typical household's disposable income spent on bottled water, or even the health bill related to waterborne diseases

The price for the company's product should, therefore, be such that it covers the product cost but is less than the price of the closest indirect substitute, i.e. bottled water. Note that purely using cost-plus pricing will not work as is takes no account of competitors' pricing or customers' ability or willingness to pay. However, it is worth mentioning it as an option and any product price does need to pitched above the product cost if the company is going to make a profit.

Given that India is quite representative of other developing countries, we can probably use the average price charged in other countries, as long as that meets the criteria we have mentioned above. Hence, it is fair to recommend that the company set a price of 6.2 US cents for their sachet in India.

QUESTION 4B:

Now, let's look at the costs of the product. From experience of launching in other countries, we know that the fixed cost of setting up a new manufacturing plant/machinery is 100 million dollars, the variable manufacturing cost is 3.5 cents per sachet, and the other variable costs are 20% of the variable manufacturing costs. What do you think the other variable costs are (i.e., the 20%), and how many sachets does the company need to produce to break even?

You should review the value chain post-manufacturing and identify other variable costs. Once the product has been manufactured and packed (assume manufacturing costs includes packaging), then you have to transport the packaged goods from the warehouses to the distribution outlets. In addition to the transportation costs, you will have the sales effort of getting the distributors and the commission paid to the distributors. Hence, to summarize the other variable costs will be:

- Transportation
- Sales

- Commission to distributors

Moving onto the calculation, you should first calculate the total variable costs:
VC = 3.5 + 0.2 * 3.5 = **4.2 cents**
FC = 100 million
To break even,
Price * Quantity = FC + VC * Quantity
Quantity = 100 million dollars / (6.2 – 4.2) cents = **5 billion sachets**

Hence, the company needs approx $1/7^{th}$ (5/36.5) of the market to break even.

Question 5:

What capabilities does the company need to launch successfully in India?

You should note that the financial analysis you conducted in the previous question shows that if the company gets $1/7^{th}$ of the market, the product will break even. You need to assess the company's capabilities across the value chain and determine their match to the key success factors that are necessary to achieve this, or a greater, share of the market:

- Sourcing and production – you should mention that the raw materials for this product seem to be fairly readily available as they already sell it in a number of countries and, hence, can be probably purchased easily. Production can either be done in other countries and the finished goods shipped to India (good initial option while building up the market), or can be done in India. In the first case, the distribution costs will be large, and will not reduce significantly with volume. If production is done in India, the company can either use spare capacity in existing plants for other products, or set up new plants. You should also note that if use existing plants, you will be able to reduce the $100m fixed costs and break even at a lower value
- Sales and Marketing – once production is done, you need to market the product to build awareness and educate the target market about the product. Given this is a health product, it would be sensible to involve the government, NGOs and health clinics in semi-rural and rural areas to develop credibility and educate people to ensure repeat purchase
- Distribution – you should mention that it is very important to select distribution channels that have accessibility to rural areas. You can recommend using existing channels, or identify new retail channels

You should summarize that given the company has existing operations in India, it can leverage its existing production and distribution capabilities. The biggest hurdle will be marketing the product and building awareness, where the company should involve the Government, NGOs and health workers. However, because they already sell this product in other developing countries, you can hypothesise that they have experience in marketing this particular product in developing countries.

Question 6:

What could be the barriers of entry to this product?

You should note that there are two types of barriers to entry:

- Customer related
  - The company will need to break the consumer habit of drinking unclean water. The marketing efforts need to educate the target market by demonstrating the product benefits, involving the government, NGOs and health officers, to ensure repeat purchase.
- Non-customer related
  - Distribution channels should be able to reach the poor infrastructure, rural areas in India.
  - Threat from copy cats who can easily determine the product composition. As a first mover in this market, the company should aim to get the product certified by the government and health agencies to distance its product from future competitors' offerings.

Question 7:

The CEO calls you, and asks you for your final recommendation. Should he enter India and, if so, how?

You should recommend that, based on the analysis you have conducted throughout this case, the company should enter India. This should be the recommendation, unless, during the discussion, you came up with very valid points that would make the entry unfeasible.

Supporting points:

- Market needed to break even is 1/7th of the total size – This seems achievable as there are very few competitors who can meet the needs of the target consumers in semi-rural and rural areas with low income, and the negative health benefits of drinking polluted water are severe (i.e. life threatening)
- The company has an existing presence in India and can use its existing production, distribution and marketing/market knowledge capabilities. This can potentially reduce the fixed costs and mitigate some market entry risks
- Also because of company's existing presence in India and its success in other developing countries, it should easily be able to partner with the Government, NGOs and health workers to create promotions to build awareness of the product and educate the people about health issues related to unclean drinking water

For the implementation, you should recommend using existing production and distribution capabilities, and partnering with the government, NGOs and health workers for marketing the product. You should also be creative and recommend doing a pilot launch in a few areas and use the lessons from this, when expanding into other areas.

Case 13 - Oil & Gas Inspectors (New)

Introduction

You have just been hired by a private equity company to put together an analysis known as a vendor due diligence, in preparation for a planned sale of one of their portfolio companies. The purpose of your assignment is to assess the attractiveness of the target company for potential buyers. The target company provides vendor inspection services primarily in the Oil and Gas Industry. In this capacity, the company inspects capital equipment on behalf of the company running the project (usually oil majors or independents, oil and gas engineering companies) at the point of manufacture to ensure that it meets the project requirements, prior to its being shipped to the final destination.

Question 1:

Following your initial meeting with the company, the case team leader inquires: Why should someone buy this company? How would you go about answering this question? What questions would you ask to start your analysis?

This is a relatively open ended question, and we are looking for two things with your response.

- Do you understand what vendor inspection services are?
- Can you devise a structured way to analyse the company?

On the first point, you are expected to ask some clarifying questions, such as what are vendor inspection services. On the second point, there are number of ways to lay out the analysis, but Porter's Five forces is probably the most obvious and useful, as long as it is accompanied by some more probing questions of the company. You are expected to ask the right questions, but also to use common sense to make some high level conclusions for each of the questions.

- Company – what are their revenues, geographical presence, recent growth; what drives their revenues (capital spending on which types of projects)
- Industry structure / Market conditions – how many competitors are there; what are their market shares; what differentiates the competitor offerings; what is the market size and growth rate; what are the major market drivers
- Suppliers – who are the suppliers. Since it is a service company, the most likely 'suppliers' are the employees. Are they full employees or contract employees?
- Buyers – who are the buyers; how much of the company's volume do they constitute; is there any threat of backward integration
- Substitutes – are there any substitutes; how high are switching costs; what are the price performance characteristics of the substitutes
- Barriers – how difficult is it to get access to inputs; are there economies of scale or scope; is brand identity important; what are the capital requirements

Question 2:

OK, this is a great start, and I think you have identified many of the issues we will need to investigate. I would like to start with the market conditions.

You asked above what drives the company's revenues. They made $200m in revenues in 2005, a banner year for them. Revenues were driven primarily by capital expenditures on oil and gas pipelines as well as exploration and production facilities. As the vendor inspector, they inspect all kit during and following production before it is shipped to the location of installation. In the past few years, such capital expenditures have increased by more than 10% per annum.

We are looking to put together a model to estimate future capital expenditures. My question is, what do you think are the major drivers for capital expenditure in O&G?

Here, they are looking for some creative but reasonable drivers for Oil and Gas expenditure. Even if you are unfamiliar with an industry, you should be able to identify at least a few very general drivers for expenditures.

If the candidate mentions oil price, they will be directed to discuss what drives oil price instead (demand and supply imbalances, real or perceived), and explain why oil price might not be a good modelling input, despite its seeming attractiveness. *Although price is an input for many company's decision making processes, given its volatility, it is a poor modelling input.*

Required responses

- Growing demand for oil and gas as evidenced through projections and through the oil and gas markets
- Replacement of ageing equipment
- Mitigation of terrorism risk through redundancy

Other responses (more likely if the candidate has industry experience)

- Decline rates of existing fields
- Increasingly stringent regulations, which could require more kit or more rigorous inspection of kit
- Growing distance between supply and demand (new fields –v- centres of demand)
- Smaller fields (more kit required per barrel of oil), harder to get to fields (deepwater, Arctic Circle)
- Shift to gas as a primary fuel, which is more pipeline intensive than oil

QUESTION 3.A:

Great, you mentioned a growing demand for oil and gas, which is quite obviously a driver for increased capital expenditures. In addition, the distance between supply and demand plays a role, as transportation capacity, in the form of pipelines, needs to be built ove land. In particular, a pipeline complex is expected to be built to link a major new oil field in Kazakhstan to a port in the Black Sea.

Firstly, what information would you need to estimate the cost of this pipeline?

> This is a pretty straightforward data request / estimation / analysis question. The relevant information should be pretty clear. The answer should be worked out on paper using the information supplied. Make sure you guide the interviewer through your process. Remember to convert meters into kilometers or vice versa before solving

Length of the pipeline	1000 km
Number of pipes required	3
Cost per length of those pipes	1 is $10/m; 1 is $30/m; 1 is $17/m

The answer is $57mm.

QUESTION 3.B:

Now, there is a shortage of pipe, but the project needs to get done on time. Therefore, the lead production company is willing to pay a premium of 30% on the last 30% of pipe for each of the runs. What is the new cost of the pipeline?

Cost = 300,000m * (.3*$10+.3*$30+.3*$17) + 57,000,000 = $62.13mm

QUESTION 4:

In addition to demand, decline rates are another driver for increased investment in exploration and production capacity. Decline is the phenomenon by which a field produces less next year than it produced this year. For example, annual decline rates are in the range of 4 – 12% with an average of about 5%.

If current daily demand and supply are balanced at 80mm barrels, and we have annual growth in demand of 2.5%, what is the required annual growth in barrels per day of output required to meet this demand, assuming a 5% decline rate? What is the new daily output?

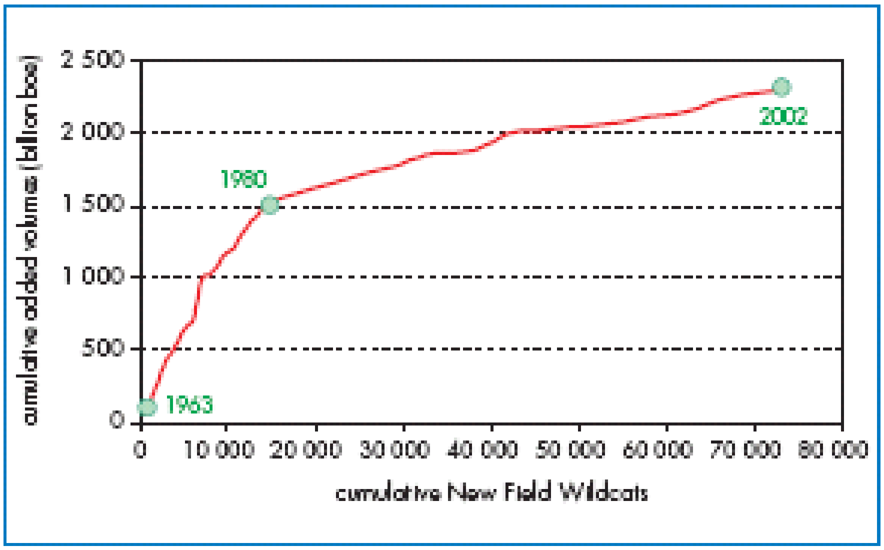
This is a simple question masked as a difficult question. The answer is 7.5% of 80mm barrels or 6mm barrels per day. The new output is 82mm barrels per day. Some candidates might realize the simple addition quite quickly, but others might work it out on paper. In either case, the goal is to get people comfortable with manually computing in the context of a likely unfamiliar situation.

QUESTION 5:

We also discussed the growth of smaller fields as a driver for capital expenditure, as this would drive more kit for each barrel of oil produced. Looking at the graph below, can you please tell me the percentage change in added volume per well drilled between the period 1963-1980 and 1980-2002?

This tests the candidate's ability to read and interpret graphical information.

Figure 3.16: Cumulative Oil and Gas Discoveries and New Wildcat Wells Drilled, 1963-2002



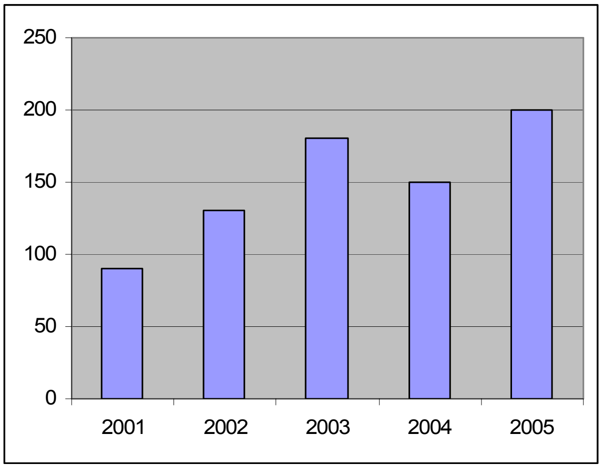
Source: IEA analysis based on IHS Energy database.

1963-80 ➔ 14,000 new wildcats and 1500bn boe added ~ 100mm / wildcat
1980-02 ➔ 58,000 new wildcats and 800bn boe added ~ 14mm / wildcat
% change = (100-14)/100 = 86%

Question 6.a:

Lastly, the following is a graph of annual revenues for the company. Can you please explain what might be going on here.

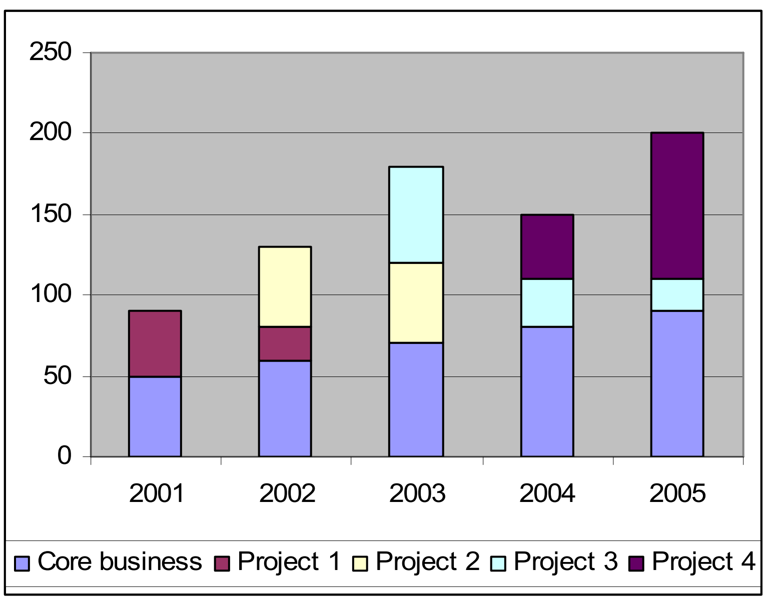
This is another graphical interpretation question, designed to get the candidate to think critically about the nature of the revenues given the fact that oil and gas projects are often sizable and have defined duration.



The graph indicates that revenues over the past five years, though increasing, exhibit considerable volatility. The fact that revenues have increased during the period probably reflects a growth in the market due to increased capital expenditures and increased market presence. The volatility is probably due to sizable new projects and the roll off of sizable old projects.

Question 6.b

OK, I think you are right. Here is another graph of the information, broken into large projects and ongoing business. As you can see, core business seems stable, while the large projects drive most of the volatility. How might the company go about reducing the volatility associated with these large projects, so that it may increase the predictability of profits and thus raise its asking price?



This is another blue-sky question, requiring quite a bit of creativity here. The candidate should think about the nature of these large projects, the clients and the type of work the company performs. The candidate should also consider ways of using its core competency in the oil and gas sector to branch out into related sectors.

Firstly, all large projects have lifecycles, in which the company only plays a small role, the vendor inspection services. Perhaps there are other inspection services into which the company could branch, thus both expanding its piece of the pie, but also stretching the time period over which it works on an individual project.

Secondly, there are likely to be other services the company could perform for the projects during operation, such as ongoing inspections, much like London Business School might have. I would imagine the capabilities are largely the same, and should be something the company considers.

Thirdly, perhaps the client is targeting only the largest global projects. If they targeted more smaller projects, the roll-off of any individual project will have less of an impact.

Finally, the company plays primarily in the oil and gas sector probably through historical accident. However, the nature of the inspection work is probably very similar in other industries, such as mining or petrochemical refining. They might be able to leverage their existing infrastructure and capabilities to expand into these adjacent industries.

Question 7.

Great. Those are all strong recommendations. Now, can you please briefly summarize your findings from this analysis?

The candidate should briefly explain what he/she has found, the implications of the findings, and the overall attractiveness of the company. Further, a strong candidate should make recommendations for the company and for additional analysis.

Case 14 - Scottish Bankers

Introduction

In this situation I am playing the role of a CEO, and you are representing a consulting firm. This was a complex problem experienced by a real client in 2002 and it had many possible solutions. We will explore this problem in several stages, and occasionally I will direct you towards a series of responses that reflects what really occurred.
Background:
Your client is a Large Scottish Retail Bank, which has been operating in a stable market for several years, with low competition. The bank has been experiencing declining profitability over the past few years.

You now have the chance to ask some clarifying questions. Good questions to ask are:

Clarifying Questions	Additional Information
Are their products similar to their competitors?	Yes. They have a very similar product set to their competition
How regulated is the market?	Regulation prevents mergers and takeovers
Do they have much money for investment in new developments/initiatives?	No. Funding for future development is limited

Question 1:

Your client is understandably very interested in reversing this decline in profitability. How could they go about doing this?

Poor Answer: Anything other than Profit = Revenue – Cost (Information has already been given to rule out competition)

Standard Answer: Profit = Revenue – Cost
(common to hear R = P x Q and Cost = FC + VC)

Good Answer: Profit = Revenue – Cost. Therefore we need to increase revenue or decrease costs, or both

Excellent Answer: Profit = Revenue – Cost. Therefore we need to increase revenue or decrease costs or both, in order to help reverse our declining profitability situation.

> Note:
> Standard - This answer simply shows that you know the framework
> Good - This shows that you know the framework, and how it needs to be applied
> Excellent - This shows that you know the framework, know how to apply it, and can link it back to overall issue

QUESTION 2.

What are the top 3 items of income and expenditure?

Note: Some countries do not have fees as a major component of Revenue (e.g. South American countries, Italy), so if you are from one of these countries interviewing in London or another European country make sure that you clarify whether your understanding of the market (most probably derived from your experience in your home country) is applicable in the UK.

Poor Answer: If the interviewee misses the fees component, or does not structure the problem from the first question, or gives up after only listing a few items.

Note: Consulting cases do not generally require a lot of industry specific knowledge in order to solve them and this is true of this case. If you are lost on this question, try looking at a problem from a first person perspective, i.e. I don't really know how this business operates, but when I deal with them/use their service…

Standard Answer:
A list of all of the products that banks sell, e.g. Loans, Credit Cards etc., as well as most of the major cost items.
Note: An accurate answer, but can be improved by taking the next step. In a case like this, always consider what the actual source of income is. Is it the product itself, or a component of the product?

Good Answer:
A list of all of the products that a bank sells, and then how the revenue is derived from them, e.g. Loans, which generate interest for the bank, as well as most of the major cost items.

Excellent Answer:
A list of the major revenue items, and then where they come from
e.g. we earn:

- Interest from loans and credit card
- Fees from Loans, Credit Cards, and Deposits
- Investment Income from the funds deposited with us as well as most of the major cost items.

REVENUES

Key Items	Extra Items
The interest from Borrowing and Lending Money (Margin Spread) or Savings and Loans	Investment Income
Fees*	Ancillary products such as credit cards, insurance etc.

VARIABLE COSTS

Key Items	Extra Items
People (staff)	Expenses
Account Fees (transaction costs etc)	Back Office Expenses

Fixed Costs

Key Items	Extra Items
Branches	Call Centres
Infrastructure Development and Maintenance Cost	Marketing
Staff	

Additional Information

1. *Within the UK most revenue is driven from the Margin Spread and Fees*
2. *It is not possible to cut down on branch or labour costs as most jobs are unionised and protected, and communities protest heavily at branch closures creating a bad image for the bank*
3. *Unfortunately, the margin spread is one of the key competitive differentiators for our industry, and we are unable to change our margin too much without our competitors reacting.*
4. *Therefore, Fees may be worth further investigation*

Question 3a.

What different types of fee revenues do you think there are?

Poor Answer:
Account Fees, Overdraft Fees
Note: This misses several categories of fees.

Standard Answer:
Annual Fees on Loans, Annual Fees on Debit Cards, Transaction Fees on Debit Accounts, Overdraft fees, late fees etc.
Note: This is an unstructured laundry list.

Good Answer:

- Loans have Annual Fees, and Penalty fees,
- Debit Accounts have Annual fees, Transaction Fees, and Penalty fees,
- Credit Cards have annual fees, Transaction fees, Interest Charges and Penalty fees

Note: This answer is good because it covers all of the fees possible using a structured approach, listing the products first and then the fees associated with these products.

Excellent Answer:
There are broadly three types of Fees:

- Transaction fees for using a service
- Annual fees for the maintenance of an Account
- Penalty fees for Overdrafts, being late with payments, etc.

There are also interest charges for some types of accounts. Not all of these fees are applicable for all accounts.
Note: This answer provides a structured, MECE – mutually exclusive, completely exhaustive - approach to answering the question, as well as an accurate summary.

QUESTION 3B.

What do you think would be the key drivers of transaction fees?

Tip: Imagine we are running a regression on a lot of transaction fee revenue data, what might be our independent and dependant variables?

Poor Answer:
Fee Amount OR number of Customers
Note: An answer like this shows that you are not thinking about the problem in a structured way. You need to carry structure through the case – taking the profitability equation (Revenue = Price X Quantity) from question 1 through to this question.

Standard Answer:
Fee Amount and number of Customers
Note: Customers can perform multiple transactions - the solution is not simply about getting more customers.

Good Answer:
Fee Amount and Number of transactions
Note: This answer shows that you have thought about the structure, and what this means in a business context, i.e. in a bank.

Excellent Answer:
Revenue = Price X Quantity, therefore the fee amount, and the number of transactions will be the two main drivers.
Price: It is unlikely that we will be able to increase fees substantially (depending on the elasticity of the good). However we should test this with some sensitivity tests.
Quantity: Anything that can increase the amount of transactions, provided that it is cost effective
Note: This answer shows that you have thought about the structure, and what this means in a business context, have taken it to the next step, tried to consider what this means to our problem, and considered some methods of solving it.

QUESTION 4.

What might be some methods of increasing fee revenue?

Poor Answer:
One or two of the possible answers below, or other sensible answers not listed, usually in an unstructured manner.
Note: This answer shows a low level of creativity.

Standard Answer:
Four or five of the possible answers below, usually in an unstructured manner.
Note: This shows a normal response to the problem for someone who is unfamiliar with the industry. Since this question was designed to test creativity, provided that you have been structured with all of your previous answers, this is a good answer. If you have not been as structured as you could be with previous answers, some good feedback might be to think about the structure of your answers.

Good Answer:
A structured approach to answering the problem, usually with 4-5 of the possible answers, e.g. first, let's find out why they are not using our transactions, then think of some possible ways to increase this.
Note: This demonstrates a normal level of creativity, and that you can communicate new ideas in a logical manner.

Excellent Answer:
A structured approach to answering the problem, usually with 10+ of the possible answers, e.g. first, let's segment our customers and find out why they are not using our transactions, then think of some possible ways to increase this (in categories).
Note: This demonstrates a high level of creativity, and that you can communicate your new ideas in a logical manner. The record for the number of ideas given is 19.

Possible Answers:

Identification
Call or survey our customers to identify why they are not using the services as much as we would like
Model customer demand and attempt to identify why customers are not using our services as much as we would like
Segment the customers by age, wealth, etc., and attempt to see if there is a pattern, or if different customers want different things
Distribution
Increase the number of ATMs available to people
Increase the number of debit cards in the family linked to the one account
Expand the debit card network into other channels, e.g. taxis, supermarkets, gas stations, etc.
Increase internet access for people
Provide a toll-free number to call the call centre
Marketing
Advertise to highlight the services offered by the bank
Create incentive campaigns to encourage use of the cards, e.g. Reward points
Send more flyers into people's letterboxes
Establish Campaigns
Service
Create more services that people want to use
Link the different types of accounts more so that people have a greater incentive to want to use the systems

Question 5.

I have some further information for you.
The bank has 5 million Accounts (Credit Card Customers) with a total deposits (or credit card limits if that is the direction taken earlier) of £10 billion. Normally the Fee Revenue generated from a single Account (Card) in a year is approximately ½ % of the funds deposited (Credit Limit). Of the 5 million Accounts (Cards) there are approximately 1 million dormant accounts. A dormant account is defined one that earns no fee revenue in a year, e.g. it has only used fee free transactions, etc. We

don't really have the data to understand why. Of these, the mean account has approximately £2000 in it. Of the 1 million dormant accounts, the bank has 19,000 'high net worth' Accounts (Credit Card customers) who have on average £100,000 in their accounts. / (£100,000 Credit Card limit)

How much extra revenue can be generated by targeting these 'high net worth' customers?

Answer:

- The average account has £2000 in it
- There are 4 million active accounts with £8 billion deposited, the average fee revenue per account is £10, therefore the bank currently earns £40,000,000
- The bank has £2 billion in delinquent accounts, of which £1,900,000,000 is with 'high net worth customers'
- Therefore the 19000 accounts which hold £1,900,000,000 can earn £9,500,000 for the bank (£500 per account)

Poor Answer:
Getting the question wrong.
Note: This is a relatively easy question, but is uses very large numbers.

Standard Answer:
£9,500,000
Note: You have answered the question correctly, but haven't solved all that there is to solve by failing to drive to address "What does this mean for the business?".

Good Answer:
We are currently earning approximately £40,000,000 in fee revenue, we can earn an additional £9,500,000 from the high Net Worth Customers, which is approximately a 25% increase.
Note: This is a good answer because it solves the question, and thinks about what that means for the business.

Excellent Answer:
We are currently earning approximately £40,000,000 in fee revenue, and we can earn an additional £9,500,000 from the high Net Worth Customers, which is approximately a 25% increase. However, this will not all be profit, as there is probably a variable cost component to transactions, although this does provide an upper bound.
Note: This answer solves the question, thinks about the implications for the business, and also questions whether the result is really valid.

Question 6.

Okay, I am going to bring this to the board as a proposal. What would be your summary?

Poor Answer:
Waffle, poor summary, misses the main points, or forgets about key issues or the £9.5 million
Note: Good Feedback is to take clear notes. (Draw a margin on your notes page, and draw out one word from the answer to each question).

Standard Answer:
A rehash of the main points of the case. Usually repeated in order, e.g. first we looked at this, then this, etc.
Note: Good Feedback – be succinct - Situation, Complication, Resolution.

Good Answer:
A bullet-pointed answer delivered in under 30 seconds mentioning the main issue and the result of the findings, and not a complete restatement of every point in the case.
Note: Good feedback: always think through what the next steps might be.

Excellent Answer:
A bullet pointed answer delivered in under 30 seconds mentioning the main issue and the result of the findings, and not a complete restatement of every point in the case. In addition, the interviewee will mention some of the next steps that need to be taken

ACTUAL RESULT

Generally speaking, interviewers have spent some weeks or months solving the problem they're giving to you in the case interview. Asking the interviewer what happened demonstrates interest and enthusiasm to the interviewer, as well as showing a results focus and hopefully engaging the interviewer's interest in you as well.

This case occurred in 2002 for a Scottish bank. The bank identified this as a problem, and designed a process to call all of these High Net Worth customers. Generally speaking they fell into 3 categories:
1. The person was deceased and the account was tied up in the Estate.
2. The person was perfectly happy with the money where it was, and did not want to move it. In this case, the bank suggested moving it into a long term savings account that cost the bank less money to maintain
3. The person had 'forgotten' about the money, and either withdrew it, utilised it, or the bank was able to sell on some further products to help make use of the money

Overall the project generated several million in revenue for a cost of about 0.2 million.

The only thing that is not really mentioned here is what could be done about the dormant 'low net worth' accounts. Should they be struck off the books? Should these customers be encouraged to leave?

Case 15 - Pharmaceutical Industry

Introduction

Your client is a highly profitable pharmaceutical company that has a world leading position in one therapy area (TA) and is a niche player in a non-related therapy area. The company currently has annual sales growth of 8%, but the CEO has set a target annual growth rate of 12-15% – in other words s/he wants to triple their revenue over next 10 years.

However, their research project pipeline is thin. The research and development organisation is heavily under-spending compared to their budget (they have a budget target of around 16% of revenue, but are not using all the money allocated). Senior management has little insight in how the R&D department operates.

Additional information provided if probed:

A therapy area is a disease area, i.e., oncology, diabetes, respiratory or pain control
They develop and sell prescription drugs only
Their growth target is ambitious but not unrealistic (given the money they have for investments and typical industry development)
Both TAs contribute equal to profit, but the world leading TA generates twice as much revenue as the niche TA

World leading/mature TA	Niche TA
• Traditional core business of company • Mature TA with limited market growth and fairly stable competitive situation • Sold via general practitioners • Portfolio of products, which has IP protection for 6-8 years	• Small unique products, highly profitable, but limited demand (not that many people need it) • Only sold to specialist and hospitals • There is some room for expansion of product to other areas • High growth and very competitive TA

Question 1:

What is the client's key issue/problem?

> Note: This is an open-ended question to test if the interviewee has taken in the information given.

The client's issue is that while they are growing at what sounds like a reasonable rate, they are not meeting the annual revenue growth targets that the CEO has set.

They also have a significant problem in their R&D department. As the pharmaceutical industry is very R&D driven (i.e., R&D is necessary to develop new products and there is usually a significant time lag from initial research to product launch), strong R&D is necessary to produce strong revenue growth. The research pipeline is thin and because R&D is under spending it looks like the pipeline will remain thin, unless changes are made in that department.

In addition, senior management do not have a good understanding of the R&D department, which means that they probably do not understand the underlying drivers of the thin pipeline & the under-spending. I would hypothesise from what you've already told me that the problem in R&D (whatever that problem is) is largely responsible for the lower than desired revenue growth.

Note: It is important to realise from the information that revenue is the concern, not profit. Prescription drugs are a highly regulated area and that regulation is in place to ensure that successful product launches typically generate the desired profit margins, without exploiting customers.

Question 2:

OK, thank you. Now that you've summarised the problem, what initial suggestions do you have for improving their revenue growth and failings in the R&D department?

Because it's a question of revenue, I would like to firstly explore the two levers effecting revenue, which are Price and Quantity (Revenue = price * quantity).

Price:
You have already told me that the market is highly regulated and therefore I would assume that our client does not that have many options to generate significant growth in terms of price.

Quantity:
There are a number of ways in which our client could potentially increase the quantity of the drugs that they sell:

- Firstly they could look to expand into new geographical regions
- They are currently in all markets of interest
- Ok, so if geographical expansion is not an option, they could look at trying to increase their market share in their current markets:

Existing Customers	New Customers
Sell more existing products to existing customers	Sell existing products to new customers

- The client is slowly growing their market share in the world leading TA, but it is unlikely that they can grow significantly more. In the niche area they have unique products with little competition – unless more people need their products, it is unlikely to see growth.
- In that case, their remaining option is to try to increase the overall size of the market, i.e., grow the pie by developing and selling new products to both existing and new customers
- That is correct. New/more products (potentially in new non-related areas) would enable us to grow.

OK, so turning my attention to the failings in the R&D department, you said in your introduction that they have two key problems – firstly, a thin pipeline and under-spending and, secondly, the fact that senior managers do not understand the R&D department, so have probably, historically, been unable to identify the underlying drivers of the under-spending and thin pipeline, and to solve them.

There are a number of reasons they could be under spending:

- Not enough good research projects on which to spend

* Lack of R&D talent
* Lack of motivation/incentives to staff
* Budget control problems

There are a couple of reasons why management has a lack of understanding what is going on:
* Unclear organisational structure
* Lack of useful management control procedures/tools

Question 3:
OK, so what do you think the R&D process would look like?

> Note: Most interviewees will have very little knowledge of the specifics and this question is designed to see if they give a structured response based on the knowledge they might have from other industries and/or experiences as well as to make sure that they have an understanding of the R&D process. The latter is important for subsequent questions.

OK, there are different steps involved in the R&D process and I imagine that each has different characteristics and needs different skill sets:

	Identify need and establish strategic priorities	Creation of Internal or external research program	Research to identify lead candidates	Clinical trials and concept testing	Development for launch and launch	Product maintenance and lifecycle support
Tasks	• Market analysis •Assess trends • Development and extension of current product line to uphold IP protection	• Identification and creation of research program needed • Decide on internal develop-ment or external acquisition	• Research on a portfolio of different possible solutions • Animal testing	• Clinical trails on humans (3 Phases) • 3 main reasons for failure, efficacy, toxicity and commercial viability	• Up scaling of production • Creation of production facilities • Identify critical issues in safety and quality control	• Quality monitoring • Line extensions and identification of new product needs
Characteristics	• Co-operation between marketing, strategic intelligence and R&D department • Close scanning of and contact with academic environment	• Co-operation between R&D and business development/in-licensing department • Project and budget planning	• Innovative and creative environment • Best/smartest people in the field	• Structured and very regulated • Can be outsourced and/or optimized like a manufacturing plant	• Co-operation between production and R&D department • Manufacturing and supply chain optimization	• Co-operation between production and R&D department • Collection of treatment data and interpretation thereof

Question 4:
Given the R&D process you have just identified and some of the skills needed in the different steps, do you have any suggestions for how senior management can help the R&D department improve productivity?

Note: If you previously identified potential problems in the R&D department then you should take these into account. Creating new incentive structures could, for example, help solve a lack of motivation.

The most important issue is, however, to create a transparent and logical division of responsibility for non-related processes and/or TAs. This will allow:

- Optimisation of non-research related processes in centres of excellence (e.g. clinical trials).
- Senior management control - underperforming units, for example, become easier to identify.

Given the 2 clearly distinct TAs this is the most logical split of the research department:

World leading/mature TA	Niche TA
• Fairly stable competitive situation	• Highly competitive and volatile
• Defensive approach/cover all bases	• Opportunistic and entrepreneurial
• World leading scientist in-house	• Significant part of growth will have to be in new areas and thus acquired externally

This not only splits two research units, which have very different culture and few synergies, but also:

- Creates competition between the units, which should lead to better budget utilisation.
- Sets the future growth area (niche TA) free from the shadow of the traditional TA and increases their visibility internally and, more importantly, externally (makes it easier to find partners and attract in-licensing opportunities)

> Note: An excellent candidate will notice that the research process takes 10+ years and that increased productivity needs to be accompanied by external acquisitions/licensing.

QUESTION 5:

We would like to understand the state of our current pipeline. In order to fulfil their growth targets, the CFO would like to have 1 product coming through the R&D process every year. Assuming that the process consists of 4 independent phases, how many targets do we need in each of the 4 phases?

In order to calculate the numbers the interviewee needs to ask for the following information:

- Length of phase
- Success/attrition rates
- If the phases are successive or parallel

The phases are successive and the "model" data are as follows (the data is made up to make the calculation fairly easy: there would normally be more phases, and the success rates would depend on therapy area)

Phase	A	B	C	D
Success rate	30%	67%	40%	50%
Attrition rate	70%	33%	60%	50%
Months in phase	24	18	36	24
Flow target	25.0	7.5	5	2

Stock target	50.0	11.25	15	4

Flow target is the number of projects that needs to flow from one phase to the next phase every year.
Stock target is the number of projects that needs to be in each phase at any given time.

It is easiest to calculate flow and stock starting from the goal of 1 product per year and then work backwards. Example of calculation:

$$1 = Flow_{D \rightarrow Out} * 50\% \;\Rightarrow\; Flow_{D \rightarrow Out} = 2$$

$$Stock_{D} = Flow_{D \rightarrow Out} * Number\;\; of\;\;\; years = 2 * 2 = 4$$

Question 5:

You run into the CFO in the elevator and he asks you how the work is progressing and whether you think will be able to help them reach their revenue goal. What will you tell him?

You should summarize the key findings as to where the problem areas are and how they can be solved. In this, the candidate should take all aspects of the case into considerations should, in particular, note some or all of the following:

- High revenue growth can only be obtained by having more products coming out of the R&D process.
- The R&D process consists of different phases, which can individually be optimised based on their core activities.
- The niche high-growth TA can be given higher visibility and credibility if separated out into an independent unit. The culture is, moreover, likely to be more entrepreneurial and opportunistic than in their traditional strength TA.
- Creating separate units enables internal comparison of productivity and is thus likely to create healthy competition between the units, especially if they make them compete for funds.
- Creating a clear division of responsibility and reporting structures will enable senior management to better set and follow up on strategic goals as well as allocate funds where needed.
- An important observation that would give extra points is that the R&D process takes 10+ years and that they, therefore, will not be able to meet their ten year growth goals by growing the R&D pipeline, so will need to in-license the product to meet these growth targets.

Case 16 - Premier Events (New)

Context

Your client is a small, but fast growing UK company offering the consumer a range of activity based experiences. The CEO is looking to expand the product offering into the corporate rewards market.

Question 1

The CEO would like to know what you think the major issues are.

The interviewee should first clarify exactly what the business model is, as the introduction is very vague. The following sorts of questions should be asked:

Products:	
What is the product range exactly?	The product range consists of a number of different activity days out, such as driving a sports car, hot air ballooning, driving a tank, etc.
What are corporate rewards?	Corporate rewards are schemes that people-intensive companies have to provide as incentives and to reward staff members, such as sales staff.
Marketing	
How do you reach the customers?	The company has a website where products can be purchased. The company advertises through a number of media channels, such as consumer magazines, internet sites, and billboards.
Service Delivery	
How do you provide the day out?	The company has a large number of partnerships with race tracks, flying clubs, etc. The client applies a mark-up to the destination's charge.
Customers	
Who are the target customers?	The customer breakdown is as below: Professional males aged 21 – 40 = 60% Professional females aged 21 – 30 = 10% Other = 30%

Once the interviewee is clear about the business model, they should identify the key issues at stake when such a company enters a new market and how they differ from the core market.

The key issues that should be mentioned include:

- *Customers:*
  - The customers will be companies
  - This implies smaller client numbers, with a higher average spend, and more potential from repeat business

- What sort of companies would be most suitable?
  - What is the size of this new market and what is its likely growth rate?
- *Competition*:
  - What other players operate in the target market?
  - Are there gaps in the competitive landscape?
  - How can the company defend its new market?
- *Capabilities*:
  - Is there sufficient cash available?
  - Can the company cope with the increase in demand?
  - Is the company's sales force capable of selling to a different customer type?

> Having generated a full list, it will then be important to summarise with an hypothesis about which would be the high priority areas to concentrate on (as per the initial question)

QUESTION 2

The CEO feels that there is not much competition in the target market and would like you to size the market. He has identified 100 companies that he feels would be suitable as they have large sales divisions.

The general approach is:
Annual market size = no of sales per year x average spend per sale

There is not sufficient information for the interviewee to answer the question, so additional questions should be asked:

What is the average number of sales staff per company?	*There are 50*
What is the value per individual sale?	*Research has shown that 80% of the customers spend £150 per person per day and 20% of the customers spend £200 per person per day.*
How often do the companies reward their staff?	*There is no data on this available and the CEO would like you to estimate this.*

One way to approach this would be:
I haven't worked in a sales division of a company, but I would imagine that if I was a hotshot sales person I would expect to be rewarded whenever the sales figures are formally announced which, for many big companies, is quarterly.

Furthermore, if this is an incentive scheme, the company will not reward all the sales staff, maybe just the top 50%.

Therefore the size of the opportunity is:

100 companies x 50 people x 50% x 4 times per year = 10000 sales per year
80% of the sales are £150 = 8000 x £150 = £1,200,000
20% of the sales are £200 = 2000 x £200 = £400,000
Therefore total annual market size is approximately £1.6m

QUESTION 3

The CEO is very excited about this as this represents 100% of his current revenues. He would like to know two things. Firstly, will it be possible to reach and serve this market and, secondly, what are the growth prospects?

SUGGESTED APPROACH

The structure that I wish to use to address this question will be compare the current business model to the proposed one and identify synergies and problem areas.

Firstly the current business model

I would consider what steps the company goes through to reach and serve its current customer base and see how that will differ for the proposed customer base. In general I would imagine that the process looks like this:

- Awareness:
    - Advertise to the customer to make them aware of the product
- Route to market:
    - Provide a means for the customer to view and purchase the product
- Delivery:
    - Arrange for and pay the destination to provide the service at the given time
- Service:
    - Ensure that a suitable service is provided

By contrast the proposed business model will differ in the following way:

- Awareness:
    - Less advertising will be needed and more emphasis on direct sales, with sales people visiting and forming relationships with the suitable target company departments.
- Route to market:
    - This will be done primarily by the sales person.
    - However, it is likely that the companies will want to pay after the event rather than the consumers paying before it.
- Delivery:
    - This will be done in the same way as before, except there may be capacity issues at some of the sites, and they may still want to be paid in advance, but this might be negotiable.
    - There may be a significant working capital requirement to run the business.
- Service:
    - The critical issue of this new business is the emphasis on repeat business, so there should be more of a customer service focus:
        - Chaperoning them on their day out
        - Making sure everything runs smoothly
        - Generally trying to ensure that they will want to purchase again

Note – this comparison of the business models has not then extended into an outline of the kinds of risks which should be considered. Review the section on New Market entry to identify potential risks in that area in more detail, especially whether the firm has entered new markets successfully in the past

When addressing the growth issue the interviewee should propose a structure before discussing some of the elements involved. A popular structure to assess growth opportunities is the 2x2 growth matrix:

In order to grow the business there are four main opportunities:

	Current Products	New Products
Current Clients	1. Sell more of the existing products to the existing clients	2. Sell new products to your existing clients
New Clients	4. Sell existing products to new clients	3. Sell new products to new clients

Each element should be discussed in turn, identifying issues such as market saturation, customer need, and risk. Examples are given below:

1. This is really about repeat business; it will ultimately be limited by how often a company will reward its staff. Bear in mind this is a cost for the client, so the focus should be on how these rewards will improve the company's performance.
2. Before a new product is introduced, a customer need should be identified. Hopefully, this information will be available from your sales people who should be having a fair amount of face time with the client. They should be trained to identify new products that the clients would like, i.e., tank driving for male sales forces and spa days for female, etc.
3. The sales force will also be looking for new clients and there should be a balance between serving the existing clients and seeking new ones. When seeking new clients, attractive characteristics from current clients should be identified in new ones, such as people intensive businesses, history of rewarding staff, location to potential days out, etc.
4. This is the riskiest growth method and should probably be addressed only if growth is not being achieved by strategies 1 – 3.

Note – this has covered the growth topic in a fairly dry, academic way. It might be that the interviewer would rather you look at some more tangible suggestions within the overall framework. Be alert to signals from your interviewer: this difference in emphasis can vary from case to case and company to company.
In this case, that might be a reality check on whether the new business being assessed really has that much potential for this company.

Question 4

The CEO is happy with your suggestions and wishes to discuss a company who was serving this market and recently went bankrupt. He would like to know what you think the major risks are for this type of venture.

One approach for this question would be to use the market entry structure outlined in the introduction to provide a clear structure and comprehensive list of potential risks, and then to prioritise the list to identify those most likely to affect this specific venture.

The interviewee should refer back to his previous structure and answers. The main risks include:

- Identify a client need before launching the business. It is possible that companies do not like the perceived risks offered by activity days out. Market research should be conducted first
- Growing businesses are frequently cash-poor and have limited access to cash. A conservative cost study should be conducted with cash forecasts to check that the start-up period can be made to work
- The company does not have a face-to-face sales force. Not only will one be needed, they will need to be hired, trained and paid. A study should be done to evaluate how skilful they would need to be
- The current business is cash positive, with clients paying before the company has to pay its suppliers. Business clients are likely to have more purchasing power. Either use the increased volume to exercise the same power over your suppliers or calculate how much working capital will be needed
- Finally there are significant insurance issues. Companies do not like their staff being injured while driving sports cars round race tracks. Losing a single client will have a large impact on your business!

Question 5

Finally the CEO has to leave for a meeting and would like to know whether you think that this is an attractive opportunity.

This is testing the elevator pitch, so the interviewee should not speak for more than a couple of minutes and present a logical and succinct argument.

You already have a viable consumer business and we have discussed the differences that you will face with the proposed target market. You are potentially able to double your current revenues if you are able to overcome the challenges. The main challenges we have discussed are ensuring there is demand for this service, managing a skilled sales force, increasing the customer service, addressing the working capital issue and checking the safety risks. If we can determine a strategy that will solve these issues, then there is a business opportunity. However, if the business opportunity is there, the competition question will also have to be answered. In short we haven't come up with any show stoppers yet, and there are big questions to be answered.

Case 17 - Russian Tourism Industry

Introduction

Your client is the government of a region in southern Russia. The region includes the country's leading tourist destinations, primarily 'sun and beach' tourism. But the government is unsatisfied with the tourism sector's revenues. They have hired your consulting company to fix this problem, preferably by the next elections in 3 years' time.
Five minutes after flying into the regional capital, you get a call on your mobile phone. The deputy governor wants to meet with you in two hours' time to see how you will approach the problem.
You have three graphs (at the end of this case), which you may look at if you need to when answering any question in this case.

Question 1:

What will you tell him?

> This is clearly a revenue problem and you should use the equation **Revenue = price * volume** to structure your answer to this first question.

"I have been told by the client that the problem is unsatisfactory revenues in the tourism sector. To solve this case, I would take a good look at the key elements of revenue, which are price and volume (Revenue=price * volume). By volume in this context, I mean both the number of tourists visiting the region throughout the year and also the number of 'paying' activities that they engage in while they are there. Therefore, when trying to increase volume, we need to focus our efforts on increasing both of these factors. Price is the amount that a tourist pays for each activity that s/he engages in while visiting the region, e.g. eating at a restaurant, taking the children to a water park, renting a deck chair on the beach. On the aggregate level, this is the average spend per tourist. To increase volume, we can seek to increase the number of tourists and the average number of paid activities per tourist. To increase price, we can either try to get current tourists to pay more for their current activities or try to get them to migrate to higher cost activities."

Question 2:

The meeting is also a chance to gain information from the government. What pieces of information would you ask for?

> To answer this question you need to ask yourself what information you feel you need to begin to build an understanding of 'what is going on' and how to solve the problem. It will be useful to have some historical context and also to try to pinpoint the situation with regard to each 'aspect' of revenue.

"To begin with, I want to understand the historical trends related to revenue. You have told me that you are unsatisfied with tourist revenues, but not exactly what makes you unsatisfied with the revenue from tourism. I would ask for historical information on tourism revenue. I would also ask for data on the number of tourists visiting the region, the average number of activities they engage in, plus the average spend per tourist."

Question 3:

Okay, the deputy governor provides you with a report conducted by a local consultancy (see graphs 1 & 2 at the end of the case). What does this tell you?

The graphs indicate that both the number of tourists (volume) and total revenues from tourism have been increasing over the past three years. As we have identified average spend per tourist – i.e. average revenue per tourist - as our key indicator, we will need to determine if volume of tourists is increasing faster than revenue. This seems to be the case. The number of tourists has increased by around one-third in two years, while the total revenue has only increased by around one-fifth. This indicates that, although more tourists are visiting our region, the average spend is less. There could be a number of reasons for this. For example, the supply of our tourist offering could have increased faster than demand, leading to over-capacity and a reduction in price, or the demographic of our tourists may have changed, leading to us having, for example, more older tourists who do less and therefore spend less, or an increase in tourists from a lower income group.

Question 4:

Okay, so revenue per tourist is declining. Why do you think that is a problem?

> When looking for a structure to answer this question, you should ask yourself what key benefit the region is looking to derive from tourism. This has to be profit (not revenue per se) and, therefore, thinking about the profit equation is a good way to structure this answer. However, in addition to this, you need to remember that your client is the region's government, and consider in your answer how exactly they will derive revenue and, therefore, profit from tourism (given that the hotel, the beach chair, etc, are owned by individuals, not by the government):

To begin with, the region is not maximizing revenue and is therefore not maximizing profit (Profit = Revenue – Costs), and will not accrue all of the wealth possible from tourism. This is especially a problem because capacity – hotel rooms, space on the beaches, room in restaurants – is likely to be limited and, therefore, the region is getting less of a return on its finite resources. For our client specifically, this is a problem because they primarily make money from tourism through taxation as a percentage of consumption, such as VAT on services provided to tourists, payment for communal services used, etc. They are receiving less money, but have a greater number of users, especially for public goods, such as roads, public transport, but also communal services, which pushes up their costs with no associated increase in revenue.

Question 5:

What are the different ways that you can measure capacity in this context?

A good way to answer this question is to think about the tourist's 'journey' from arrival to departure in terms of the activities that they will engage in and then identify where the potential bottlenecks are:

I can think of a number of potential bottlenecks in capacity in the tourism industry. One is in terms of transport. Tourists can arrive in the region by air, land or sea. In terms of air, we will have a fixed capacity in terms of airports' abilities to handle flights. In terms of sea, we would have the same capacity issues for tourists arriving in ports by cruise ship. In terms of land, we have the capacity of our road and railroad system. We may have capacity issues in terms of accommodation, i.e. the number of hotel rooms. There are probably a number of other capacity issues, such as space on beaches and the capacity of communal infrastructure (sewers, water systems, ability to provide electricity, etc.). Finally, if there is seasonality to our tourism flows, we will need to look at the capacity during peak seasons as the bottlenecks will most probably only occur during the peak season. Personally, I would first look at capacity in accommodation because when adding air, sea and land together, the capacity of 'transport' is considerable, so accommodation is a more likely bottleneck. Also, accommodation is not an option – people need somewhere to stay – whereas other activities such as visiting the water park or sitting on a deck chair are 'options' and therefore both less likely to be used by everybody and less of a problem if they are full. Do we have figures for hotel occupancy during peak season?

Question 6:

Yes. The average reported hotel occupancy was 85% in 2004. Hotel occupancy in the region was 90% during peak season. What do these figures tell you?

At the end of the day these figures don't tell you that much unless you have some context to put them in. Therefore a good answer to this question would be to make this clear and then request some more information:

90% sounds fairly high, but on its own doesn't really tell me much. Do we have similar figures for other regions that we can use to judge whether this figure is high or not?

Yes. The region's main competitor – Turkey – had only 65% occupancy rate during the peak season, which was considered a good year.

That's great. If our client's main competitors has 60% hotel occupancy during a good year, then that is a good indication that the region's capacity is getting very stretched. This possibly indicates that our region doesn't have sufficient slack capacity during the peak season.

Interim Summary

Turning point: Now, let us imagine that you have been working on the project for about one week. You have another meeting with the deputy governor. Can you quickly summarize your conclusions about the tourist industry's problems and outline possible solutions?

> With a question like this, the interviewer is not looking for you just to re-hash everything you have talked about so far, verbatim. He/she is looking for you to summarise, conclude and come up with some sensible recommendations:

Though overall revenue from tourism is increasing, the increase in the number of tourists means that the average revenue generated from one tourist is decreasing. This may or may not be a problem for the region but, in order to grow revenue, they will have to either increase the average revenue generated per tourist or increase capacity, at least in terms of accommodation, which we have identified as the key bottleneck, to increasing the volume of tourists. Expanding capacity is likely to be expensive and take time, which we probably don't have time on any significant scale given that our clients want to see improvement before they face election in 2008. Alternatively, the region can seek to attract tourists at non-peak times to take better advantage of existing capacity and this solution would seem to make a lot of sense as it has major cost advantages.
There are two ways to increase average tourist spend. One is to increase the spend of current tourists – either by charging more for their current activities, increasing the average number of their paid activities or by moving them onto more premium activities – or by attracting tourist segments that on average spend more. Given indications of high capacity utilization, I would expect the price level to be rising anyway as resources, such as hotel rooms, become scarcer. The fact that the revenue per tourist is decreasing may indicate that the region is not attracting high spend tourist segments, which may be related to quality issues given high capacity utilization.

CAPACITY PATH:

Question 7:

One of the main destinations is the region's southernmost city, Sochi. The current terminal can process up to 600 arriving passengers per hour. There is a new terminal building that has been started, but abandoned, 90% complete, for bureaucratic reasons. The new building will be able to process 2,000 arriving passengers per hour. Let's assume that 100% of the airports traffic comes from tourists. Should the city continue with the expense to build the new terminal?

> Once you have been given this question you should realise that you need more information from the interviewer to answer it. You should think through carefully the information that you need to ensure that you don't ask for too much information that you don't end up using:

To begin with, I want to look at the capacity utilisation of the current airport terminal. I then would determine future growth in demand in terms of growth in traffic and the number of passengers that must be processed. I would then look at alternatives that would allow capacity to be met, including, but not limited to, opening the partially built new terminal, and make a judgment based on a cost-benefit analysis.

I know that the current terminal can handle 600 passengers per hour, so in order to determine maximum capacity, I need to know how many hours per day it is working. Can you give me this information or should I make an assumption?

This is a nice way to phrase it, indicating that you will proceed independently if preferred, but leaving the way open for more information, if it is available.

ADDITIONAL INFORMATION

The airport is open from 08:00 to 22:00, a total of 14 hours. You can assume for maximum capacity reasons that the maximum number of passengers (600) can be brought in every working hour.

Note: You will 'earn' extra points for realizing that there will be peaks in terms of arrivals during the day.

Ok, great, 14 hours per day. That means that the terminal can process 8,400 arriving passengers per day.

Now we need to gauge current demand and must keep in mind that the terminal must have enough capacity to handle the peak in the tourist seasons. Can you give me information about the number of tourists per year? How many of them visit during the peak month? How many of these will travel to Sochi? And how many of those arriving in Sochi do so by plane?

To give you the information you requested:

- *There are around 7 million tourists per year. August is the peak with 30% of the tourists.*
- *Not all of these tourists will go to Sochi. About 40% will go to Sochi, the others will head to three other destinations.*
- *Not all of the tourists in Sochi will arrive by plane. About 30% will.*

Okay, so that means that currently 252,000 passengers arrive in Sochi via the airport in the peak month of August. That is very close to the airport terminal's month capacity of 260,400 and if we assume future growth in demand, then it is clear that the current terminal does not have enough capacity to meet demand over the longer term."

Airport Capacity	
Capacity of Current Terminal	600
Capacity of New Terminal	2,000
Number of Hours Open	14
Max Capacity of Current Terminal	8,400
Per Month	260,400
Max Capacity of New Terminal	28,000
Per Month	868,000

Demand	
Number of Tourists	7,000,000
% Traveling in August	30%
% Traveling to Sochi	40%
% Arriving by Airplane	30%
# of Tourists in Aug	2,100,000
# of Aug Tourist in Sochi	840,000
# Arriving by Plane	252,000

QUESTION 8:

Current capacity is dangerously close to current demand at peak. So should they build the new terminal?

It is not clear at this point if they should finish the new terminal. The fact that they have already built 90% of the new terminal is sunk cost. The new terminal would greatly increase capacity up to 868,000 passengers per month, but it is not clear at this stage if future demand growth will require so much additional capacity. Other options include running the existing terminal for a longer number of hours every day. Perhaps it would be more cost effective to renovate the existing terminal to handle additional passengers. I would also want to check if there are any other bottlenecks at the airport. It doesn't make sense to increase the capacity to process passengers at the terminal, for example, if the runways cannot allow enough planes to land at one time to economically use the capacity.

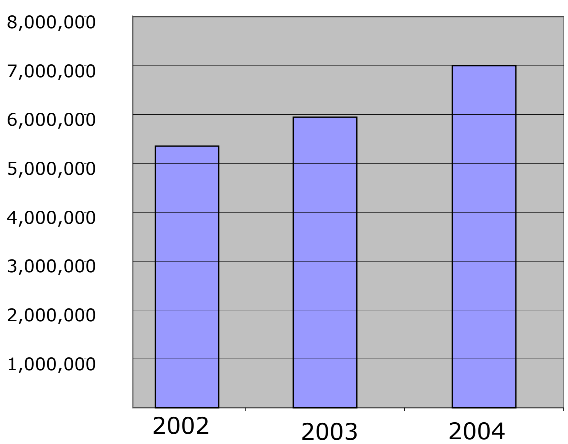
MARKET SEGMENTATION PATH:

QUESTION 9:

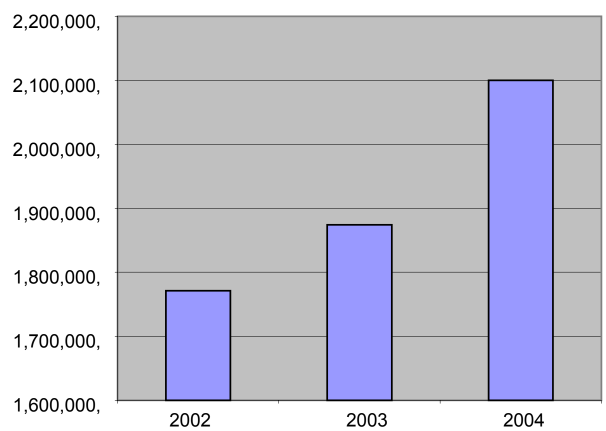
We have determined that increasing the tourism industry's capacity will take longer to implement than the politicians are willing to wait, so we have decided instead to focus on segmenting the market. What kind of segments do you think exist in the tourism market? Which ones do you think are most important in this case?

"There are many possibilities for segmenting tourists. Perhaps the first distinction I would make is between domestic and international tourists. Locals and foreigners are likely to have very different perceptions of, and information on, the region and may also have different behaviours when it comes to tourism. Perhaps similar to segmenting by domestic/foreign, we could segment tourists by distance from our destination. More distant destinations require a different decision-making process than nearer destinations. To continue, we could segment tourists by demographic indicators, such as age, family status, income level, etc. I would suspect that income level may serve as an indication of tourist spend, though this would need to be tested. I would similarly expect tourists in different age groups and different family status to have different behaviours regarding tourism. Behaviour is another way to segment tourists. There are different types of tourism. Perhaps there exists, for example, opportunities to develop winter tourism, ecotourism, extreme tourism, or health/spa tourism in the region and attract the interested market segments. Of course, it would great to segment along the lines of tourist spend, if possible, but we may have to use multiple segments to target specific customer bases. For example, we may find that there are X number of young, high income, singles that prefer extreme tourism and are on average willing to spend Y amount of money.

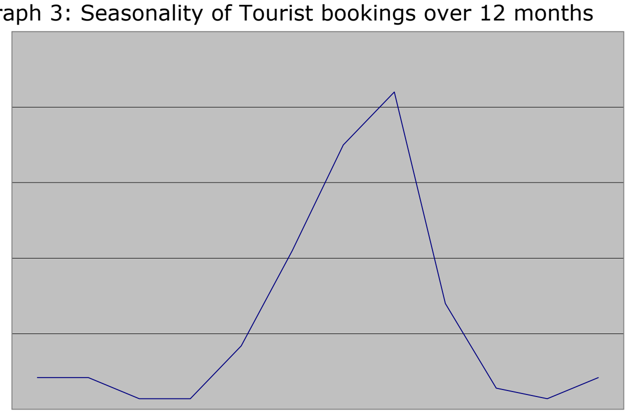
Graph One: Number of Tourists



Graph Two: Total Revenue from Tourism



Graph 3: Seasonality of Tourist bookings over 12 months



Case 18 - Taxation in Malaysia (New)

Introduction

Our client is the federal taxation authority in Malaysia. There is only one taxation authority in Malaysia and all taxes are managed by this national body. The taxation authority raises funds for the federal government by administering approximately 15 national taxes including a value added tax, income tax, corporation tax and payroll tax. The exact number of taxes isn't important for this case.

The CIO of the taxation authority is concerned because she has been unable to keep IT spending under budget for the past 3 years. We are here to help the CIO determine the underlying issue and determine how we can resolve this.

Are you OK with all the information that I have provided so far?

Question 1

How would you go about helping the CIO to identify the cause of this issue?

Let's break this topic down into the main buckets:

- Revenues
  - Has the allocated budget been increasing or decreasing?

- Costs
  - Have the costs been escalating and, if so, which types of costs have been increasing?

To answer the candidate's questions:
The budget has been increasing slightly over the past three years.
However, the key source of the mismatch is on the cost side.

The candidate should get the point that costs are the issue and then proceed to drive the case and think about how to analyse costs.

Question 2

What do you think are the major costs for a CIO in a government department?

There are 2 main buckets of cost:
Staff
Suppliers (hardware/software/vendors)

While there are others, these are the main ones.

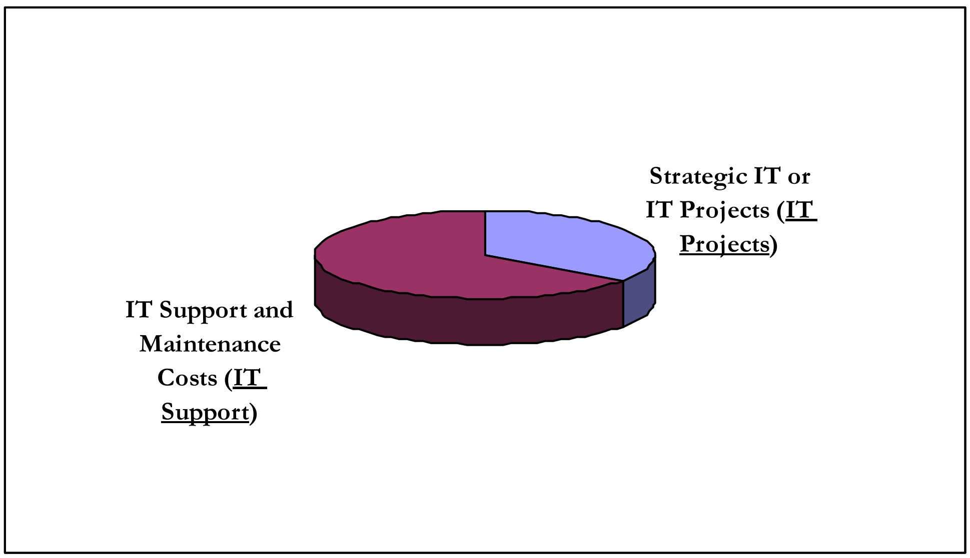
Common errors include items such as costs of goods sold and selling, general administration costs or any other corporate/manufacturing costs.

QUESTION 3

So these areas are the key line items that constitute a CIO's budget. However, let me outline how a CIO thinks about IT budgets.
A CIO thinks of spending in two categories (see figure 1):

- Strategic IT or IT Projects
  - These are costs which are related to the development of new IT systems and processes - for example, a client might develop a new database system as an independent project
- IT Support and Maintenance Costs
  - These are ongoing costs necessary to keep current IT systems running
  - For example, a client has to pay money to maintain certain IT system, desktops, licence fees for software and perform basic software upgrades

FIGURE 1 – IT COST BREAKDOWN



What reasons might there be for a client to invest in either Strategic IT or IT Projects?

A client would invest in Strategic IT to:
- Reduce operational costs:
  - In the IT department
  - Across the organisation
- Increase revenue for the government
  - Detection of fraud
  - Detection and prevention of errors
- Provide intangible benefits through customer/staff satisfaction:
  - More rapid processing
  - Less error rate
  - Less communication overhead

QUESTION 4

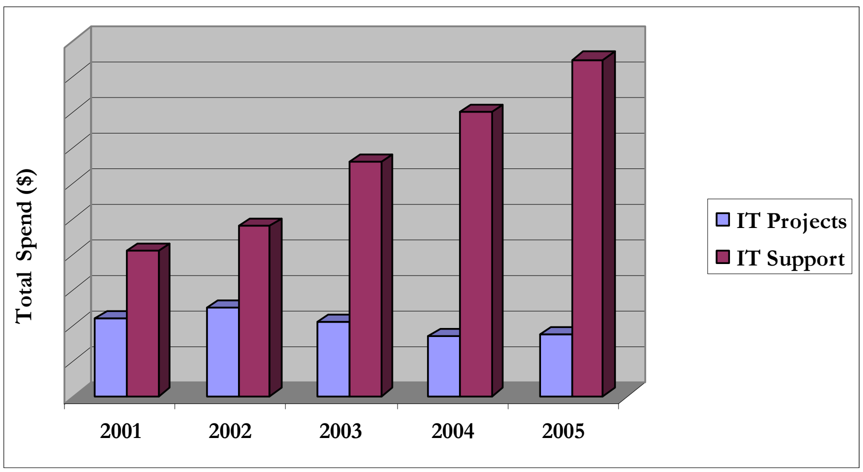
What other external factors or shocks do you thing would drive IT costs for a Government organisation?

Looking for creative answers.

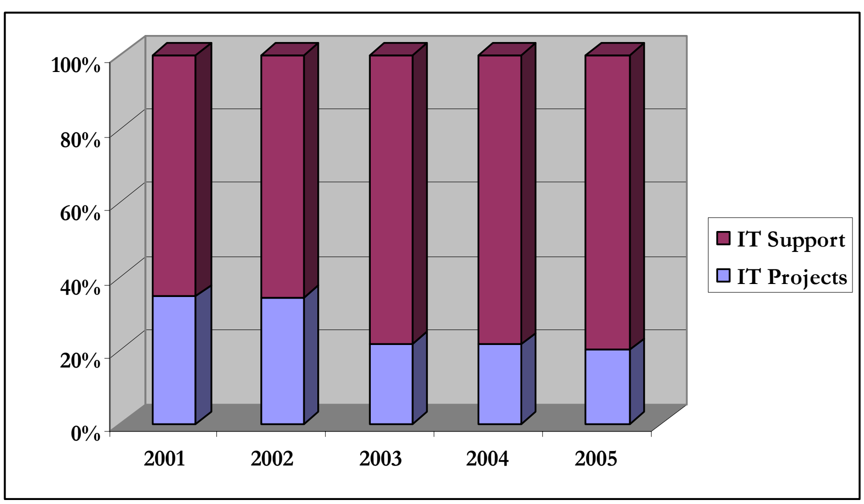
- Legislative changes
- Demographic shifts which impacts the strain on specific systems for specific taxes
- Financial industry innovation which require the development of new systems to manage taxes
- Underlying technological or standards changes
- Customer pull and demand for specific online services

QUESTION 5

Returning to your original question about costs, if I showed you the following historical data on out client's IT budget, what would be your hypothesis as to what is going on:



And:



Suggested response

What has happened is that the overall IT budget has increased due to increasing support costs. These support cost increases have occurred while IT project costs have remained constant.

Hypothesis: One reason for this might be that the client has not made sufficient strategic IT investments and this is resulting in support costs increasing over time.

A lack of strategic IT investment is a dangerous spiral because, when you don't invest in new projects, this drives up maintenance costs over time and reduces available time and budget for strategic IT in future.

Question 6

How would you confirm your hypothesis?

Possible answers include:

- Talking with the CIO and IT managers – determine how they allocate their budget and what their priorities are
- Understanding the type and style of IT projects over the last several years
- Breaking down costs into sub-costs and determining what drives those costs
- Looking at recent investments and comparing these to vendor provided benchmark data or the original planned benefits
- Support Staff hires – are they specific to individual projects?
- Compare IT spending to other government departments

Additional information generated:

Great, you do this analysis and this generates new insights. What has happened at the client it that the IT costs have increased because the client has not made sufficient strategic IT investments to manage the increasing complexity of the tax system over the past 20 years.

As strategic IT programs have been shelved, the costs for IT support are increasing as a result. The Tax Office has become reactive rather than proactive with respect to IT investment.

The lack of investment in IT projects has increased maintenance costs over time and, to correct this, we need to make strategic IT investments to reduce costs in the long-term.

Question 7

How would you determine the best way to reduce IT costs quickly?

Benchmarking against other government departments to determine where investments are made.
Undertake a cost/benefit analysis model for specific projects to determine the potential benefits of those projects.

QUESTION 8

Now we shall consider a single specific Strategic IT investment to assess the benefits. We identify that there are two administrative systems for managing two different taxes. These administrative systems record the personal details of each taxpayer and every taxpayer for that tax has a single record in these systems. The smaller system, system B, requires less support staff, is cheaper per record and costs less to license from the vendor. We can migrate the records from System A to System B and there will be no additional staff or licensing costs for System B.
If it costs $1,000,000 to migrate all the records from system A to system B is this a good solution for the client?

The following data is available:

	System A	System B
Number of records	1,000,000	250,000
Number of support staff	15	20
Staff costs/person/p.a.	50,000	50,000
Vendor licensing cost p.a.	350,000	180,000
Other costs/record/p.a.	0.2	0.05

Number of records – number of customer records in the respective systems (assume that there is no overlap).
Number of support staff – number of dedicated support staff for the system,
Staff costs/person/p.a. – costs for each staff member per year.
Vendor licensing cost p.a. – costs paid to the vendor (a software licence each year).
Other costs/record/ p.a. – costs per record. If we migrate to system B it will cost 15 cents per record/per annum (20 cents to 5 cents) less to manage each record.

APPROACH:

Annualise the costs and calculate the break even:

Staff costs P.A.	750,000	
Data costs savings	150,000	15 cents/record saving
Licensing P.A.	350,000	
Total costs saving	1,250,000	
Break even	0.8	years

The system will return cost savings in 0.8 years.

Question 9

This is fine for a back of the envelope calculation, but what are we forgetting?

This question is testing for creativity:

- Costs involved of reducing workforce (redundancies)
- Additional hardware costs in System B

Question 10

So we think that this specific investment is a good idea. Can you think of any alternatives to making this IT investment?

- Outsourcing – always a good point for IT cases.
- Building a new system that is even cheaper to replace both system A and B.
- Legislative changes or process modification to reduce the need for this administration system of taxes.

Question 11

You bump into the senior client sponsor of the project who is looking for a quick status of the project. What do you tell her?

We have identified a major cause of increase to your cost base – increase in IT support costs due to a lack of strategic investment in IT projects.
As an example, we have identified that we can reduce costs by migrating the data from one system to another system. With a $1m investment we will make cost savings after 0.8 of a year.
We should continue to identify investments that make additional cost savings in order to reduce costs going forward.

Case 19 - Irish Retail Bank

Introduction

Our client is the CEO of an Irish retail bank. He was appointed just 2 months ago. The bank has been suffering a decade of declining profitability. The new CEO has asked us to identify what's been happening to the bank.

Question 1

So that's our first task – to figure out why the bank has been suffering from declining profitability. How would you figure this out?

Answer

This is clearly a profitability issue: Profit = Revenue – Cost. Driving to an early hypothesis is important, and asking appropriate clarifying questions will help you to do that:

- How have revenues performed over the last 10 years?
    - Revenues have grown in line with GDP
- How have the costs behaved over this period?
    - The costs have grown
- Have they grown faster than GDP, at the same rate or slower?
    - Faster

⇨ Costs have been growing faster than revenues – so the issue appears to be with the costs.

Other good clarifying questions to understand the bank's situation, and to rule out any issues with the revenue side, are:

- What is the bank's overall market share and how has it changed over the last 10 years?
    - The bank's market share (revenue and number of customers) has been constant at 50% over the last decade
- How does this compare to competitors?
    - The nearest competitor's market share has also been roughly 50% over the last 10 years
- Has the bank's product portfolio changed over the last decade?
    - Yes – products have become more complex, requiring increased IT capabilities

Before we explore the costs in more detail, what are the revenue sources for a retail bank?

Revenue sources:

- Interest on loans, such as mortgages – more specifically the Net Interest Margin, i.e. the difference between the interest payments offered on deposits and the interest earned on lending
- Interest on credit card accounts
- Fees on transactions – customer transactions, inter-bank transactions
- Inter-bank transfer fees
- Financial advisory services – small business and personal

- Asset allocation/investment, i.e. investment of capital raised through deposits into unit trusts, or other investment facilities other than lending

Ok, so what are the major costs, coming back to your initial thoughts?

Fixed costs:
- IT infrastructure: since it's been mentioned that retail banking has become very IT intensive, this is a major cost. This cost can be further broken down into development and maintenance
- Staff: staff in the branches, and staff in operations and the back office is a major cost
- Lease costs for buildings: this is usually a major cost, as most retail banks are located on expensive high street locations
- Other infrastructure costs: maintaining ATM network
- Admin costs: HQ staff, management and other admin costs

Variable costs:
- Sales and marketing costs
- Transaction costs
- Delinquency costs: cost of bad loans. This cost is only variable if we minimise the number of loans that we give out, which is difficult as it is core to our business, or improve our mechanisms for determining which clients are going to refuse to pay their loans back. Therefore, it is only variable in a very limited sense.

So, in summary, which are the three major costs from this list of costs you've identified?
The candidate should identify that IT, staff and buildings are the three major costs.

I would now like you to analyse each cost in detail. What key questions would you need to ask to enable you to analyse each of them?
The following information is provided when, if asked, when drilling into each cost:
IT
- Have IT costs grown over the last 10 years and, if yes, what has driven this growth?
  - Yes, they have grown significantly, primarily driven by the increased complexity and, therefore, IT-intensity of retail banking products
- How does our IT spending compare to that of our competitors?
  - IT spending has been in line with competitors' spending. Competitor product mix is similar to the clients
- Have the IT projects that we've implemented run over in terms of time and budget, and have any failed?
  - No. All our IT projects have been successful. Very few projects have needed rework.
- Which parts of IT do we keep in-house and which do we outsource?
  - IT development is mainly outsourced, with certain core features kept in-house. IT maintenance is in-house
  - IT spending has been stable for the last 4 years

Staff
- Have staff costs grown over the last 10 years and, if yes, what has driven this growth?
  - Staff costs have grown significantly over the last decade. As products have become more IT-intense, the bank has had to hire new IT-conversant staff for both branches and operations

- Do staff members stay with the bank for a longer or shorter period on average than they did ten years ago?
  - Average tenure has increased
- Do staff get paid more on average than they did 10 years ago (inflation adjusted?)
  - Average inflation adjusted salary has increased
- Are the staff represented by any unions and, if yes, are these unions strong or weak?
  - The majority of staff are represented by a single union, and the power of that union is strong
- Have we been able to re-train staff to use these more complex IT systems?
  - There has been resistance amongst non-IT conversant staff to training and job modification
- What are the labour laws like in Ireland?
  - Labour laws in Ireland make it very difficult to fire employees
- Have there been any major redundancies over the last decade?
  - The bank has not made any employees redundant on a large scale over the last decade

Buildings

- Do we own or lease our buildings (head office and high street branches)?
  - In Ireland, our client has owned all its branch locations for over 20 years (it is an old bank), so building cost is low. The market in Ireland is fairly saturated, so we haven't seen too many new branches open in the last decade

Other

- Are there any other costs that are major and/or that have increased significantly over the past decade?
  - All other costs are minimal, or have remained constant over the last decade

Hint: The candidate needs to figure out that **Staff** is the issue. The bank has been hiring new employees to meet their changing staff needs, i.e., staff who are able to work with the increasingly complex and sophisticated IT systems, but was not able to fire employees who were surplus to requirements in the new IT-intense environment. The root cause is union power and restrictive labour laws.

Question 2

We go to the CEO with this finding, and the CEO suddenly remembers that Parliament announced yesterday that it would loosen labour laws within 2 months to allow staff redeployment. The CEO proposes we look at two operations departments in a pilot study to take advantage of this law change.

	Residential mortgages (RM)	Broker mortgages (BM)
No. of staff	30	30 including 5 salespeople
Average annual salary	€60k	€50k
Total no. of applications processed per annum	80,000	20,000
Other	IT intensive	Fairly manual

Before we get into the calculations, what options are there for generating savings? Once again, it would benefit you if you asked some questions to aid you in your analysis. What questions would you like to ask?

Some clarifying questions are necessary at this stage:

Are the applications similar for each department?	Yes, identical
Can we ignore other aspects of cost?	Yes, we can
What are the relative revenue/application?	Identical in this case
Are both departments operating at capacity?	Yes, they are
Are the residential and broker markets expected to grow. If so, by how much?	Let's assume that they will not grow beyond their current volumes
Are the 5 salespeople critical – do we really need 5?	Yes

Now that you've asked these questions, what options for generating savings would you like to propose?

Options:

Merge RM with BM, new IT process, train all staff, and let go of excess staff
Move BM revenue to RM, eliminate BM and expand RM
Look at outsourcing BM and RM
Increase efficiency of BM by implementing IT and cross-training with RM staff

Question 3

The CEO has reviewed the options that you've given him/her and has decided that he/she would like to move the broker application volume to the residential mortgages department. Outsourcing is too sensitive from an industrial relations perspective at this stage, and cross-training has not worked in the past.
How many additional staff will RM require? What will be the total cost savings?

Again, it is necessary to ask some questions to aid in your analysis:

Can we assume that staffing is application volume dependent?	Yes
Can we assume that the applications are identical, and ignore the costs to modify the RM IT to handle broker applications?	Yes
Can we assume that the staff being transferred from BM will be paid the new salary?	Yes

New staff level:

- The total application volume for RM in the future will be 100,000
- This is a 25% increase over the current volume of 80,000
- Assuming volume dependent staff levels, this implies a 25% increase in back office staff
- Therefore we will need 1.25 * 30 = 37.5, or rounding up, 38 operations staff
- We also need to keep the 5 salespeople
- Therefore, a total of 13 staff will be transferred to RM, and 17 staff will be let go from BM

Cost saving:

- 17 staff @ €50k are being let go => a saving of €850,000
- 13 staff are being given an extra €10k => an extra cost of €130,000
- Therefore, the total saving is €720,000 per year

Question 4

You have to sell this recommendation to the CEO. When you go to present your findings, you discover the CEO is rushing off to a board meeting. You have two minutes to communicate your message.

You should provide a concise recommendation, following the pyramid principle[9]. It should be related to the initial issue of profitability, include the saving. Rambling is not good.

We've looked at the pilot divisions as you suggested. We recommend eliminating the BM division, and rolling broker applications into the RM division. This move will reduce costs by €720k p.a., helping to ease the staffing pressure that profitability has been facing for the last decade. We will have to let go 17 BM operations staff as part of this move. Our recommended next steps are to begin an implementation plan for this move, and to identify other consolidation opportunities within the bank.

9 The Pyramid Principle by Barbara Minto

Case 20 - Baltic Car Rental Market Entry (New)

Introduction

For the sake of the case, the client is assumed to be Hertz, a global car rental company present on the European and North American markets. In Europe, it is present in most EU countries but has not yet entered the Baltic countries.

Hertz has asked us to determine whether or not they should enter the Baltic (Estonia, Latvia and Lithuania being here considered as one market) and, if so, what should their entry strategy be.

Question 1:

In the introductory meeting with Hertz's European director, he asks you how you plan to approach the problem. Give a brief description of the key areas you want to focus on to analyse the problem.

Expected here is an answer along the 3 C's where the candidate focuses on:

- Market
  - Size of the market
  - Growth rate
  - Segmentation
- Competition
  - How many competitors?
  - Respective market shares
  - Differentiation factors
  - Alternative competitors/substitutes
- Consumers
  - Type of consumers: business, tourist, local
  - Segmentation
  - Trend in consumer demand
- Capabilities/Core strengths
  - Brand
  - Corporate agreements/Customer Loyalty program

Any framework suggested is expected to cover the basics: industry & market, competition, customer needs –v- gaps and core strengths/capabilities of firm

Question 2:

Based on the approach presented above, how would you go about conducting the analysis and gathering the information required?

This question is to test the candidate's initiative and if they have thought about whether data is easily available or not. Expected answers would include:

- Buy market and competitive research
- Observation of competitors operations (sampling and then extrapolation)
- Leverage knowledge of other European markets to determine consumer segmentation and trends in consumer demand

Question 3:

Based on the various data gathering methods suggested above, we have some data to help with the market entry analysis. Hertz is looking at a net profit target of at least £200k after the initial 3 years. So, more specifically, what data would you need to determine the equivalent market share Hertz needs to capture in the Baltic to reach the profit target in 3 years.

Data to be provided

Total Size of Car Rental Market in Baltic: £10m
Annual Market Growth: 10%
Net Profit Margin: 5% (in lieu of any details on cost structure)

Calculations:

Market size after 3 years: £12.1m
Each market share percentile equals £6,050 in net profit for Hertz
To reach a target of £200k in net profit, Hertz would need about 30% market share in 3 years.

Question 4:

Knowing the profit target 3 years down the line, what additional information would you want to know to recommend a market entry strategy to Hertz?

- Market
  - Market growth 10% - attractive compared to 2-3% growth in mature markets
  - Business segment expected to increase significantly as well as tourist segment. Local customer segment expected to drop rapidly
- Competition
  - Avis Car Rental: 35% market share – serves primarily international business travellers and tourists
  - Local player: 45% market share – serves a mix of tourists and local customers
  - Other smaller rental companies: 20% market share – primarily local customers
- Consumer
  - Split between business travellers, tourists and local customers
  - Business travellers less price sensitive and attached to customer loyalty programs.
  - Tourists are a heterogeneous group with varying degrees of price sensitivity. Growing segment with increase of low cost airlines servicing Baltic
- Hertz's Core Strengths
  - Strong brand image
  - High customer service and quality levels
  - Global customer loyalty program

Question 6:

Based on market structure and Hertz's profit target, what strategy would you recommend to enter the Baltic market?

Candidates should have caught on that a 30% market share within 3 years is unlikely through organic growth only. Knowing the consolidated state of the market, candidates should recommend the acquisition of the local player.

Arguments for the acquisition:

- This represents an opportunity to get a significant market share (potentially a dominant one) in one go.
  - If candidates mention 45% market share acquired, they should mention the high risk of attrition as current customer base is different from Hertz's targeted customers
- It reduces the number of players in the market and, thereby, changes the nature of competitive intensity, while potentially reducing the risk of a price war
- Buying out an existing player could be seen as a pre-emptive move for future global car rental firms wishing to enter the market

Question 7:

What would be some of the challenges to the integration between Hertz and the local player assuming the local player will be rebranded as a Hertz affiliate?

The expected answer would highlight integration issues around:

- Difference in existing customer base –v- Hertz's targeted customers
- Local customers will move to smaller players as price sensitive and unwilling to pay premium for Hertz
- Business travellers may not be impressed by service quality of local player. This would require investment in staff training to bring service levels up to Hertz standards
- Significant capital investment to bring car fleet up to Hertz's standards
- Difference in reservation and computer systems requiring IT investment and training
- Effort spent on integration might divert focus away from operations, resulting in potential benefit for competitors. They might gain additional market share and grow an even stronger foothold in the growing segments

Case 21 - Postbank (New)

Introduction

In this case we are going to examine the performance of a joint venture between BankCo and PostCo (referred to as PostBank) and make an assessment on the options available to the Board of BankCo.

PostBank is a retail bank that sells price competitive lending, investment and insurance products through the branch distribution network of PostCo.

PostCo is a widely known and trusted company. Just prior to the JV, PostCo's business was undermined by a government decision to shift to the electronic payment of welfare. It did not sell financial services products.

All products are manufactured by BankCo. PostBank does not provide a current account to its customers, a position advocated by PostCo.

Question 1

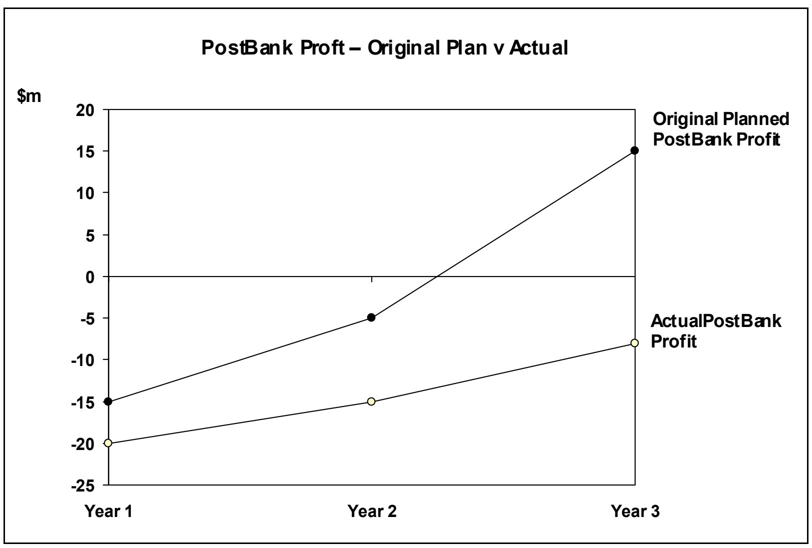


Exhibit 1 shows that profit performance has been much lower than planned. What could explain this performance?

> This question is a good warm-up. Candidates should structure their answer in terms of volume (both sales and attrition), price and cost.

A good answer would identify the following potential causes of lower than expected profitability:

- Volume – Sales
  - Account openings less than planned
  - Unattractive product set
  - Lack of product awareness / insufficient marketing support
  - Inadequately trained or incentivised branch staff
  - Expected balances not met

- o Skew in customer base towards the older and poorer clientele who are over-represented in PostCo's customer base
  - o Original plan too aggressive
  - o Feasible, given that the original plan was put together in a deal environment

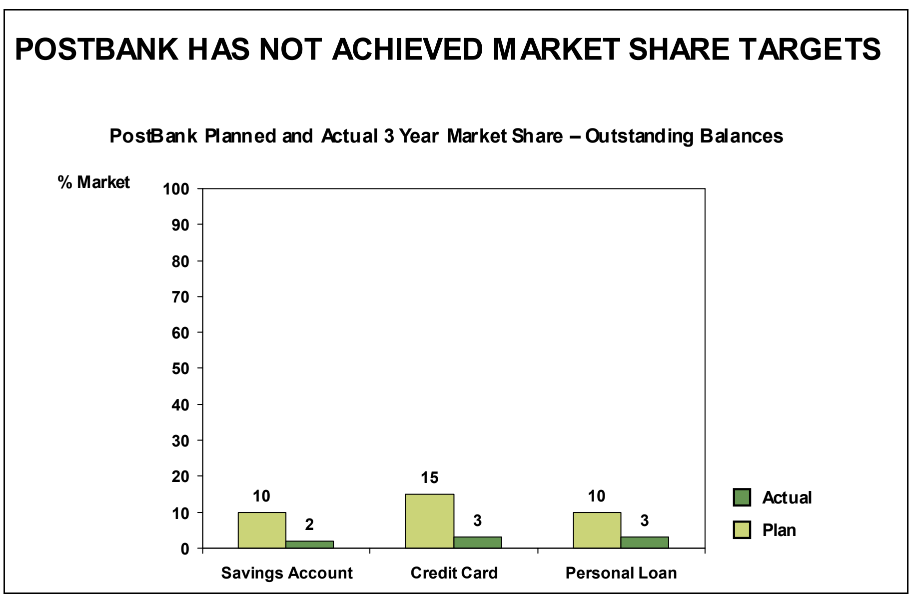
- Volume – Attrition
  - o Account closings higher than planned
  - o Low prices attracting product switchers – lots of hot money
  - o Inadequate service levels within the branch

- Price
  - o Product pricing keener than anticipated
  - o Transparent, concentrated market – high likelihood of price response to introduction of price led offer by incumbents or other entrants

- Cost
  - o Fixed costs spent as planned, but spread over less volume than anticipated
  - o IT, branch network and, to some extent, marketing expenses are largely fixed to sales volume
  - o Potential higher marketing spend than originally anticipated with managers getting nervous in response to lower than planned sales
  - o Complexity of managing through the JV increasing inefficiency

Question 2

Let's stop now and focus on the sales performance. How feasible is the plan given the market share data in exhibit 2?



A good candidate would recognise that there is insufficient information in the exhibit to answer the question properly. A view on market-switching behaviour and/or average product life is necessary. The emphasis is on getting the candidate to recognise the right logic for why numbers may have been high.

For simplicity, assume that product life for savings is 10 years, and for credit cards and personal loans 5 years.

Years	3		
	Savings	**Credit**	**PL**
Product life	10	5	5
Switch per annum	10%	20%	20%
Available market	30%	60%	60%
Plan market share	10%	15%	10%
Plan share / available market	33%	25%	17%
Actual market share	2%	3%	3%
Actual share / available market	7%	5%	5%

Conclusion: the original sales plan may have been optimistic.

QUESTION 3

Now, let's consider in detail some of the operational difficulties that the JV could have faced. Suppose that branch staff is remunerated on a commission basis. What factors should the commission structure consider?

This should be a relatively straightforward question for most, and serves as an introduction to the operational issues of the JV structure.

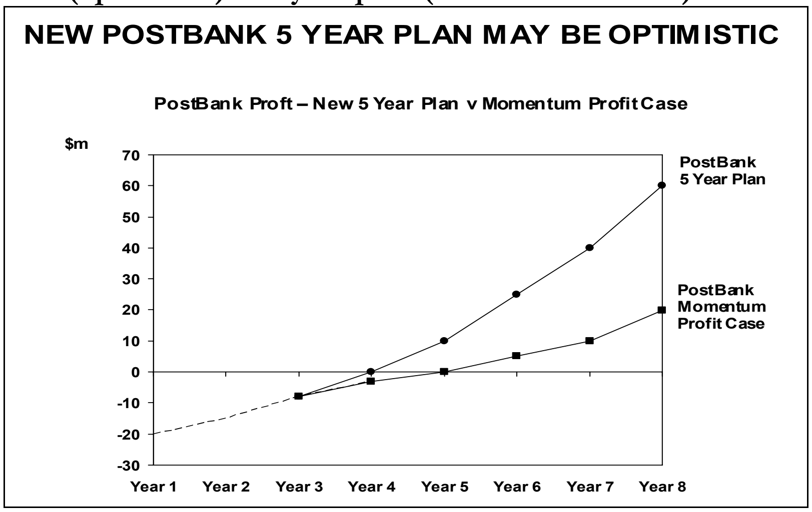
A good answer would identify that the commission structure should trade-off the profitability of the product to the JV and the relative income/hour to the branch staff when compared to other products.

In short, higher commission should be paid for more profitable products and products that take longer to sell/service.

A great answer would also recognise the need to consider the extent of expected cross-sell that can be achieved from the product (higher for savings accounts than personal loans).

QUESTION 4

Under pressure from both shareholders, the management of PostCo put forward a new (optimistic) five year plan (shown in exhibit 3).



However, the Board of BankCo remains unhappy with the JV, and is considering buying out PostCo and acquiring the branch sites. Should they?

This question rounds out the case. It provides an opportunity for the candidate to think critically about the strategic attractiveness and feasibility of the proposed deal. Given that, I anticipate a wide range of answers and approaches.

A good candidate would identify at least the following benefits and risks to the deal

- Benefits
  - Obtain control of branch staff, and allow alignment issues to be addressed
  - Simplifies management structure and allows more rapid initiative implementation
  - Provides opportunity to extend product line to include current account, and position PostBank as a relationship provider with customers

- Risks
  - PostBank may be a structurally unattractive business
  - Low margin due to poor quality customer base and need to compete on price to win market share
  - High cost due to branch infrastructure – something the other price-led offers in the market are not burdened with
  - Venture starts well behind more established, and better resourced, high-street incumbents
  - PostBank brand could be damaged by takeover
  - No longer associated with PostCo
  - Particularly risky if deal triggers union action with branch staff
  - PostCo may not be receptive to negotiations, or may demand too high a price
  - May believe optimistic profit projections of PostBank management
  - Would be asking them to radically change their strategy <u>and</u> sell physical presence
  - Open question on what happens with the rest of PostCo's activities

Case 22 - Performance Chemicals

Introduction

- The client is a $250 million Performance Chemicals division of a $7 billion Specialty Chemicals Company
- The CEO of the parent company has set a 'growth agenda'. He believes that his company can become the fastest growing chemical company in the industry and has set a growth target of 10-15%
- The CEO has asked all division business managers to develop growth strategies to support his agenda
- Performance Chemicals' business manager, like many other managers in the company, does not believe that there is significant untapped potential in the markets served by his unit. The business manager has approached 'ABC Strategy Partners' for advice

Question 1:

Is the Performance Chemicals' business manager's scepticism in the CEO's growth target warranted?

> Hint: Often clients will frame a challenge presented to you based on implicit assumptions that may, or may not, be correct. Your job as a consultant is to ensure that the challenge is correctly/accurately defined, independent of client-bias, so that your problem solving approach is sound. To do this, you must ask appropriate questions to confirm or challenge your client's perspective.

Relevant Questions	Answers
What products does your company make?	Asphalt additive, paper pulp bleaching solution and sodium solution
What market do you serve?	North America
How do you define 'growth'?	Profit growth (Note: it is important to recognize that profit growth is the most relevant metric as it is most aligned with shareholder value)
What is your current growth trend?	3-4% per annum
What is the industry trend?	3-4% per annum
Who are your competitors?	Two major competitors with revenues and products similar to the client and many other much smaller
How intense is competitive rivalry? (Porter's 5-Forces)	High customer power. High supplier power (commodity inputs). High market entry barriers (capital costs). Low risk of market substitutes.

Suggested Response

- The client's scepticism is warranted. Growth will be tough:
    - CEO's growth target is between 2.5-5 times current company and industry growth rate
    - Porter's 5-Forces suggests that market is highly competitive, so taking market share from competitors is unlikely

Extra points you might make

- Client's products are fundamentally commodities (limited differentiation due to standard customer requirements), so the market is highly price sensitive and margins are likely to be low. Increasing profits by increasing price is probably not viable.
- The client's market is fairly consolidated. This means that growth through local market acquisition is likely not practical. There are limited synergies to be gained from scale.

Question 2:

Acknowledging that growth is tough, what are the generic ways is which our client could grow? Of the growth strategies identified, which are most viable?

You have said that growth is defined in terms of growing their profits so, firstly, I would like to analyse the elements of profit to identify whether we could 'grow' profit by improving our performance in any of those areas.
Profit = Revenue (price*volume) – Costs (fixed and variable):

- Increase prices: could we increase prices on our existing products? However, we could potentially look at whether the products be differentiated to merit higher prices
- Increase volumes: is there untapped market demand, i.e., can we grow the size of the market as a whole? Can we increase our share of the existing market?
- Reduce fixed costs: how efficient is the client, i.e. capital equipment capacity utilization, management productivity?
- Reduce variable costs: can better material prices be negotiated with suppliers? Can labour costs be reduced?

Suggested Response

- Based in findings from the first 'Question 1', I know that the customers are highly price sensitive and that they have significant power, so an increase in price is likely to result in drastic sales volume reductions. I also know that the client's products are fundamentally commodities and customers have standard requirements, so there is little room for product differentiation.
- Focusing on cost reduction is likely to be unsustainable given the extent of growth target – 15% cost reductions could potentially be achieved on a one-off basis, but would be difficult to sustain year after year.
- I would therefore conclude that focusing on volume growth is the best way to pursue profit growth.

Extra points you might make

- As the client produces commodities, costs are likely to be competitive. An efficient economy of scale is required to compete in a price sensitive, low margin business.
- Volume growth can be achieved in four ways:

	Current Customers	New Customers
Current Products	Sell more current products to current customers	Sell more current products to new customers
New Products	Sell new products to current customers	Sell new products to new customers

QUESTION 3:

OK, that's great. You have rightly identified that the best way for this company to try to deliver year on year profit growth of 10 – 15% is to increase their volumes, and you have identified four ways that they could do that. What strategies could they follow to achieve more sales of existing products to existing and new customers and how could they sell new products to existing and new customers?

Suggested Response

- Product innovation that can leverage current processes or technical knowledge
- Solution offerings – inventory management, expand product portfolio to become a "one-stop" shop for customers.
- New market entry (Developing economies? Remember, the client currently only serves North America)

Extra points you might make

- Recognise the distinction between strategy and implementation. M&A is not a strategy. It is an approach to implementing a strategy to enter a market or expand a product portfolio. It should be noted that many of the above strategies can be achieved through M&A, partnership, organic investment, etc.

Case 23 - Automotive Industry (New)

BACKGROUND INFORMATION:

Our client is an American automotive manufacturer whose market share has been slowly declining in the past couple of years and, more worryingly, their EBIT is in the red. We are developing an analysis of the competitive landscape as part of our work for the client. More specifically, the idea is to model the business of our client and compare it against their competitors. To do this we will develop the following three models: economic, market and decision making.

This case will focus on the economic and market models. The aim is to understand the differences in economics between our client and its main competitors and the key factors that impact sales of new cars in North America. Competitors are categorised as either other American manufacturers or Japanese/South Korean manufacturers.

QUESTION 1.

We will be building the economic model by developing volume cost curves. What do you think are the main cost factors for a car manufacturer?

ANSWER 1:

This is an easy question to get the candidate starting to think about the problem at hand. The following list contains all the most obvious costs. A good candidate will not only run through a list of costs but will structure them, considering which are fixed and which are variable costs, as well as considering some of the detail shown in parenthesis.

- Variable costs
    - Material costs: raw materials and outsourced pre-assembled components
    - Distribution expenses
    - Warranty expenses
    - Sales incentives and other promotions

- Fixed Costs:
    - Employee wages: basic pay plus benefits, like pension and healthcare, sometimes considered semi-variable, depending on the type of contract - treat it as fixed for this analysis
    - Plant overheads: maintenance, depreciation, electricity, etc.
    - Marketing expenses
    - Research and development expenses
    - Capital investment: new plants, refurbishing plants, decommissioning plants

QUESTION 2.

Which of the above costs do you think will be relevant to actually producing a car (i.e. what are the manufacturing plant costs)?

ANSWER 2:

This is mainly to get the candidate thinking about the next question.

- Employee wages
- Material costs
- Plant overheads
- Plant investment (give credit for this although its actually part of the company's general expenses)

Anything else is not relevant to the actual costs incurred in producing cars.

QUESTION 3:

Our research shows that the average car produced costs our client US$9,000 to build. We know it takes 20 hours per vehicle to build a car and that assemblers earn $35 /hour, but they cost $85 /hour once we include benefits, etc. We also know that a plant can produce cars at a rate of 60 jobs per hour. If we assume that overhead costs per car are $300, what % of a car's assembly cost comes from its materials?

ANSWER 3:

This question is designed to throw some numbers and extra information to the interviewee to see if they can identify useful parts and work comfortably with percentage. It should not take long for them to work on this.

Candidate should state assumption that the cost of producing a car is only made up of: labour, materials and overheads.

1st: Calculate labour cost:	20 hrs x $85 = $1700 per car
2nd: Subtract values known from total cost:	$9,000 - $1700 - $300 = $7,000
3rd: Calculate as a %:	$7,000 / $9,000 ~ 75% (actually 77.77%)

A possible mistake is to use the $35 /hour wage, or to try and do something with the 60 jobs per hour figure.

QUESTION 4:

We have done some research and know that our sharpest competitor takes 5 hours less to assemble each car and their workers cost them only $60 / hour including benefits. However, both material costs and overheads are roughly same. From this information, please estimate the average production cost for a competitor's car. What conclusions can we draw from this?

ANSWER 4:

This question is given so that the candidate starts thinking about competitors and how they differ. It is also a test of attention to detail to see if they can recall the data given them before.

1st: Calculate salary cost:	15 hrs x $60 = $900
2nd: Add to known figures:	$900 + $300 + $7,000 = $8,200

A number of observations should be made

- The labour cost for best competitor is nearly 50% (actual value 53%) of that for our client
- However, the cost of making a car is over 90% (actual value 91%) of that of our client
- We are at a clear competitive disadvantage regarding wage costs

The best candidates will suggest reasons for the difference in wage costs. The reason is that American auto manufacturers have unionised workers, effectively giving them a range of benefits whose cost is carried by the company (the wage cost difference). Japanese & Korean manufacturers instead are not burdened with these costs and can lay off / hire workers as required.

(This is the basis for question 6).

QUESTION 5:

One important consideration for any car manufacturer is the capacity of their production plants and their ability to increase or decrease production. This is also a key consideration for our model as it establishes maximum possible production and costs.

Capacity is given as 'straight through time'. This depends on the line speed, hours worked each shift and number of working days per year. Our client's plants work 250 days a year, on 8 hour shifts and can produce 60 cars per hour. What is the annual capacity?

Note: There is some information missing regarding the amount of shifts they work. The candidate will be marked down if they assume only one shift.

ANSWER 5:

Calculation: 250 x 60 x 8 x 2 = 240,000 cars

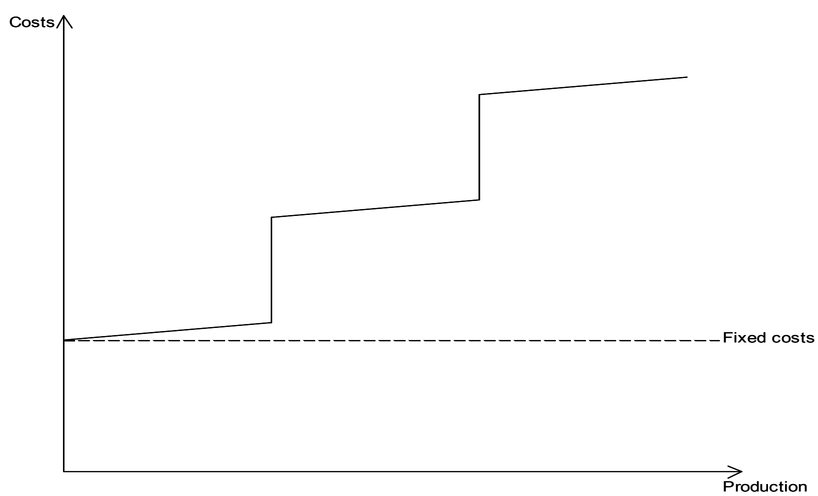
QUESTION 6:
Good. However, any car manufacturer will require some flexibility in their production. How do you think this could be achieved?

ANSWER 6:
Clearly there are four ways in which this can be done, by changing each of the parameters in the above calculation. The options are:

- Increase or decrease the number of shifts per day (1 – 3)
- Keep two shifts but introduce overtime to increase the working day to, say, 10 hours
- Introduce extra working days by opening plant on weekends
- Increase the assembly line speed

QUESTION 7:
Given what you have found so far, how would you plot a volume cost curve for our client?

ANSWER 7:
The interviewee is expected to plot something that resembles the following:



QUESTION 8:
Ok, now let's move to the market model. The aim of this part of the project is to model consumer behaviour so that we can ultimately estimate the number of vehicles our client and each of their competitors should be able to sell. How would you go about creating a model for this?

Answer 8:

This question is very open ended and will require a creative yet analytical approach. Ideally, the candidate will structure their answer to cover the following high level areas:

First, consider causal factors behind new car sales in the US in general, then think of how our client stacks up against the competition. Finally, relate the two.

US car sales in general depend on general trends in the economy and social-political factors:

- Population demographics: number of new people able to drive, average number of children, aging population
- Economic factors: price of fuel, individual wealth, unemployment rates, interest rates (most cars in the US are bought on finance)
- Product launches: the more new cars are launched the more likely it will be that consumers will be willing to upgrade from their existing car
- Promotions from the manufacturers. In the past two years, American manufacturers have been offering 'employee priced' cars for everyone. This has kept sales of US made cars buoyant, although it has a negative effect on income

Second, consider what ats sales of our client's cars in the market.

It might be appropriate to explore if they focus on a specific segment within the car industry as this is a very broad industry and displays very different characteristics for different segments, i.e. SUVs –v- hatchbacks.
If the candidate raises this point, then ask to consider a middle-sized sedan car, such as Toyota Camry, Ford Mondeo, etc.

The following factors will impact sales. All of them compare our client's product with that of the competition.

- Price range within segment relative to other players: are they at the top, bottom?
    - Financing options available
- Product qualities:
    - Perceived reliability and overall quality
    - Dimensional issues: is there enough space to be comfortable?
    - Ride quality and comfort: what do magazine reviews say about the way it drives?
    - Internal equipment levels: what comes as standard and how much do options cost? Is it perceived as good value?
    - Technology of the product: does it lead or lag?
    - Power train options: usually more power over a competing model is looked upon favourably, although fuel economy has become more important over recent years
- Innovation
    - Freshness of model: was it updated recently or will it be changing soon?
- Image
    - Aesthetics: does the car project a particular image, does it blend in, does it appeal to the key demographic?
    - Sports sponsorship
- Dealer pre- and post-sales service
- Customer loyalty to a manufacturer

Finally, to estimate the actual number of sales you would start by looking at historical data. You would then assign a weighting to each of the significant variables above depending on their relevance. Note some variables impact positively and others negatively. For instance, fuel prices will have a negative index as they negatively impact sales when fuel prices go up. Freshness of the model instead will have a positively correlated index as new models significantly increase sales.

Actually determining the values and correlations of the indices is beyond the scope of the interview.

Question 9:

That's some great analysis there. By doing it we have found that our client's key demographic for medium sized sedans are the 'baby boomer' generation. These are people in the 50-70 age range which have some disposable income, value comfort, reliability and traditions, and prefer to purchase from brands they trust. What would you say are three key attributes in a car that would appeal to them?

Answer 9:

The idea here is to observe if the candidate is able to relate new information given within a framework they have just developed. Again, the answer is open and will require demonstrating creativity.

Given the attributes of our key demographic, I expect them to have no children living at home, to have average incomes and to use the car primarily on short to medium trips. They also probably live in suburban areas, change their car for a new one less often than average and require comfort and reliability. So, the key attributes which appeal to them are price, comfort and reliability.

Question 10:

Ok, we've had an overview of the economic and market models. We are about to meet the CEO of the company. Please update him on your most significant findings.

Answer 10:

This is just a quick summary of the key takeaways from the case and should include the following items. It is also helpful to add a comment or two on what can be done regarding the issues.

We have analysed the economics of your company and found out that wage related costs are nearly twice that of the competition. However, other assembly costs are in line with competitors. We also found that the most important consumers for your average sized sedans are baby boomers which value price, comfort and reliability.

V. Fit Interviewing

A. Overview

In addition to your case interviews, you will be given one or more fit interviews during the consulting interview process with each firm. These interviews may either be combined with the case interview (hybrid case and fit) or conducted separately, depending on the firm.

B. The Importance of Fit

While students increasingly understand the importance of preparing for and practicing case interviews, it is a common misunderstanding that fit interviews are less important in the interview process. While it is true that consultancies will spend less time testing fit than case, be under no illusions: a poor performance in the 'fit' interview can destroy your chances of securing a consulting job. So please remember when you are preparing for your interviews that performing well on both is critical to landing the job.

In a fit interview, the interviewer does not need to believe you'd make a great best friend – that's not the point. However, they do need to:

- Respect you
- Want to work with you
- Think that you would fit into the company's culture
- Believe that you'd be a great representative with clients
- Be happy to spend ten hours on a plane with you
- Feel that you are 'above the bar' on key dimensions[10]
    - o Leadership
    - o Personal Impact
    - o Drive/Aspiration.

If the 'fit' aspect of an interview is not working and you don't feel like you're gelling with the interviewer, it is your responsibility, not the interviewer's.

If the interview doesn't seem to be working:

- Try to analyse on the hop what is not working
- Change your behaviour
- Often the interviewer will give you quite strong hints about why you not 'gelling'
    - o If they keep asking you to go into more depth in your answers, make sure that the next answer you give, and all the others after that, are very detailed

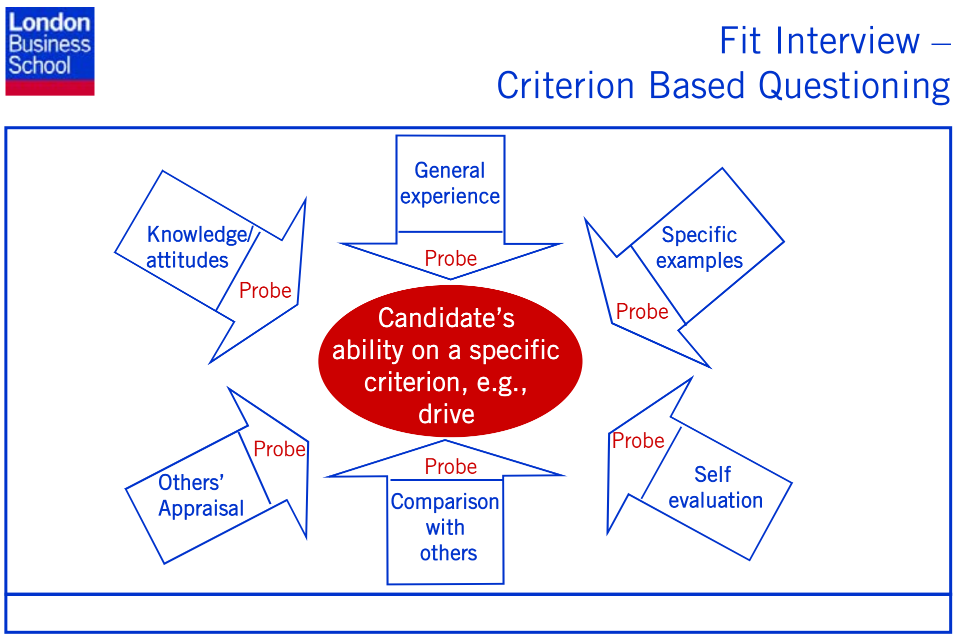
Preparation is vital. Know why you want to work for that company (how is it different?). Understand what they are looking for and be prepared to illustrate your fit with this through anecdotes from your past experience.

10 As discussed at the beginning of this Case Book

Don't expect to 'wing it' in the interview – you would not go into a client meeting unprepared. Why should your interview be different!

C. Criterion Based Questioning

In fit interviews you will be asked about your background, motivations, experiences and capabilities. Many consultancies are reasonably sophisticated in the fit interview and, instead of just ploughing through the biographical aspects of your CV, they will interview you using a technique called criterion based questioning:



In criterion based questioning, the interviewer will explore in detail the candidate's experience and ability on a specific criterion[11], e.g., drive, teamwork, entrepreneurial spirit.

- Problem Solving: criterion - tested mainly through the case
- Personal Impact: criterion - listening/understanding/responding, empathy, influencing, teamwork, confidence –v- ego, sense of humour
- Leadership: criterion – integrity, maturity, willingness to take personal risks, ability to take initiative
- Drive and Aspiration: criterion – enthusiasm, desire to excel, self-development, energy, perseverance

The interviewer will explore these criteria by probing the interviewee in detail on the six different topics highlighted in the slide above, though of course they will probably not run through all six probing questions for each and every criterion they are testing an interviewee on, because of time constraints.

11 Those highlighted at the beginning of this Case Book

An explanation of the six probing questions is as follows:

General Experience:

- The amount of experience a candidate has had overall in using/developing that criterion
- Example - Desire to excel: How important has working hard and being driven been in your career to date?

Specific Examples:

- Specific examples where a candidate displayed that criterion
- Example – Desire to Excel: Describe a previous achievement for which you had to strive?

Self-Evaluation:

- How the candidate assessed his/her ability on that criterion
- Example – Desire to Excel: Could you have done more to make sure you achieved your full potential over the past three years?

Comparison with Others:

- How the candidate compares with others on that criterion
- Example – Desire to Excel: How would you compare your level of drive and aspiration to succeed against the top quartile of your peers at…..?

Appraisal:

- What others think of the candidate on that criterion
- Example – Desire to Excel: How did your manager in X role appraise your desire to excel?

Knowledge/Attitudes:

- How well the candidate understands the need for that criterion in consulting
- Whether the candidate has a good perspective on the attributes necessary for good performance on that criterion
- Example – Desire to Excel: In what circumstances do you think it would it be appropriate to give up on an objective?

To prepare for the fit aspect of your interview:

- Identify:
  - You should go through your CV[12] and experience to date, both professional and personal, and, for each criterion, come up with at least two anecdotes which demonstrate your experience, abilities, etc., on that criterion.

- Prepare:
  - Once you've done this, write an answer to each of the six probing questions for each of your two/three/four/five examples

- Practice:
  - If you can, run your examples and answers by a fellow MBA (preferably someone who has had some consulting experience) and see if your examples and answers are convincing

> Once you get into an interview – a situation which is stressful, and at which you will be required to give well-developed, relevant answers very quickly – you will be grateful for this level of preparation.

12 The achievements database may be a good resource for this

D. Two key 'Why do you want to....?' questions

In addition to testing the above criterion, the interviewer will almost certainly ask you two key questions: "Why you want to go into consulting?", and "Why their particular firm?". Your 'story' is very important in answering these questions. You should very succinctly be able to tell the interviewer why you have made the choices that you have made to date, e.g. choice of college, choice of post college/pre MBA work experience, choice of London Business School over other MBA colleges and, flowing from all this, why you are now seeking a position in consulting and why, in particular, their firm.

This story needs to convey to the interviewer exactly why you are at London Business School and convince him/her that you are serious about a career in consulting and about his/her firm in particular.

Getting the balance right in your answers to these two key questions is important. Remember that most of your interviewers were in your shoes not too long ago, and they will be well aware that most people joining consulting firms from their MBA view it as a reasonably short term, career accelerating move. As such, stating that you have always wanted to be a consultant and that your ultimate aim is to become a Partner in their firm may come across as sycophantic and somewhat less that true.

Conversely, saying that you want to work in consulting for two to three years as a career accelerator may be viewed as uncommitted. It is all about balance!

If you do envision yourself being in consulting long term there is nothing wrong with saying that, but you might want a slightly less emphatic approach than the one above.

If you believe that you won't be in consulting for the long term, be honest about the fact that you <u>may</u> want to look elsewhere after a while. For example: "My ultimate goal is to run my own business in the travel industry, and I think that consulting as a medium term post-MBA career will provide me with great experience to do that in the longer term. Having said that, if I really enjoy consulting, I am very open-minded about making it my long term career."

You will also certainly be asked a question about "Why their firm in particular?". You must be able to articulate a few reasons why that firm is the best fit for you. Read the website, go to the company's presentation, talk to their representatives after the presentation, read the 'Who are the consultants?' presentation on portal, use the Consulting Club discussion threads and talk to Career Services.

However, do not put yourself under undue stress researching little known facts about the firm or trying to come up with genius questions that no-one else will ever have thought of. The interviewer is only trying to assess that your interest in their firm is genuine and that you have good reasons to back up this interest. Keep that in mind when you're preparing answers to this question.

E. Do you have any questions for me?

The fit element that is most common in consulting interviews and is often overlooked by candidates as being a fit question, is the "Do you have any questions for me?" question that most interviewers will pose at the end of their interviews. Your questions communicate your level of interest in their case, their firm, the type of work that they do and also demonstrates - or not! - your ability to ask insightful questions.

Spend time preparing firm specific questions before each interview. Try to make these high calibre questions, not just questions that can be gleaned from a quick scan of the company's website.

And finally, make sure you listen to and show interest in the response and think about asking a follow-up question to demonstrate that interest.

F. A Two-Way Process

Fit interviews are very much two-way conversations between the interviewer and interviewee. You should feel that you are interviewing the firm as much as they are interviewing you. In addition to having insightful questions about the firm, try to analyse the people that you are speaking with when you're interviewing with that firm. If you get the job, you will also need to sit on a ten-hour flight with people similar to your interviewers and work very, very long (often stressful) hours with them. Is that really something you want to do?

'Career Search' is not just about getting a job (any job). It is about getting the right job – even though it may be hard to remember that at times. The recruitment opportunities at London Business School (especially if you are participating in 'on-campus recruitment') are unlike anything else you will experience in your life. You have a whole array of fantastic firms all wanting to hire talented students – all of whom are prepared to come to you and lay out their wares. Make sure that you don't waste that opportunity by not having the confidence to ensure that the firm you end up working for is the one you really want to work for. Getting the job is not the only goal here. The goal is to be happy and professionally satisfied long after you have left London Business School, whether that is in consulting or in another field altogether.

It is also very important to go to interviews having confidence in yourself and your abilities. As I mentioned earlier, students can be too concerned about being career changers – forgetting that 80% of people who go through the consulting selection process are career changers.

Do not feel that you have to apologise for your past career choices. However, as mentioned previously, do have a good story that illustrates a 'train of thought' running through your career decisions.

Also think hard about what you have learnt and how this learning applies to a new career in consulting. There are aspects of almost any job that can relate to consulting. Consulting firms are looking to hire the best people, regardless of background, so remember that and have confidence when you interview.

VI. Conclusion

The London Business School Consulting Club Case Book will prove useful to all London students in finding both summer internships and full-time jobs in consulting.

We would welcome any feedback about the book and how it can be improved to ensure that each future edition builds on the last. Contact either career services (careerservices@london.edu or 0207 000 7400) or speak to Martha Vasquez an MBA 2008 member of the Consulting Club committee.

As I mentioned in the Introduction, please just consider this as one source towards helping you secure your dream consulting job. The Consulting Club in association with Careers Services work very hard each year to provide a range of stimulating and useful events which, if you are serious about going into consulting, you should definitely attend. These include lectures on 'What is management consulting?', 'Who are the consultants?', 'How to get a job in consulting', training sessions run by consulting companies themselves, group crack-a-case training sessions and, very importantly, the mock crack-a-case interviews. Please make the most of all these events and, in addition, take any less formal opportunities to practise with friends and course colleagues.

Good luck!!