The Consulting Club Case Book 2009

With additional cases provided by

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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
careerservices@london.edu
Consulting Club executive – find on Portal

Good luck!
Ilana Berdy Associate Director, Consulting
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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

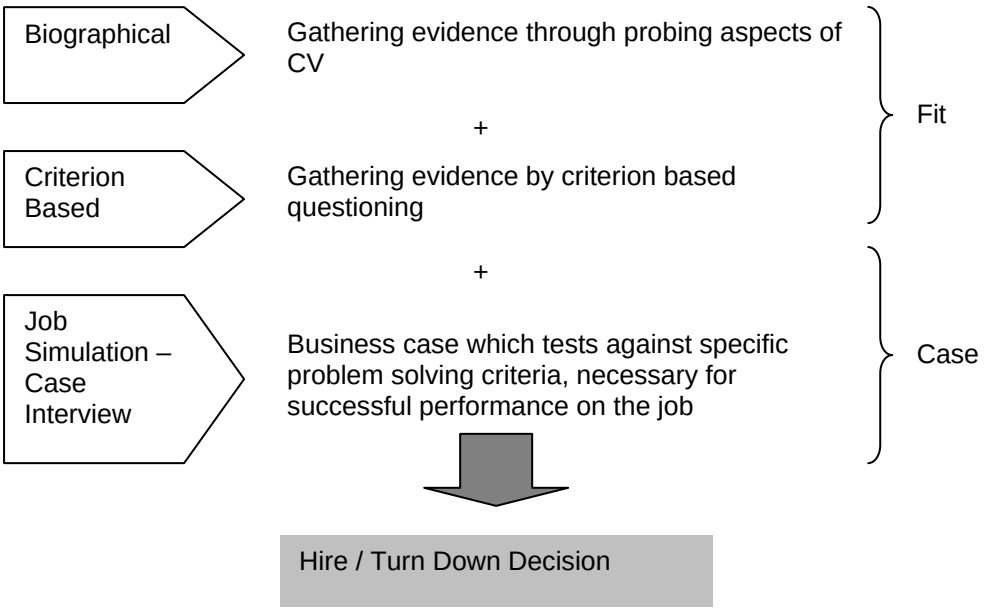
II. The Consulting Interview Process

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.

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 (see overleaf).

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 –v- 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 <u>only</u> if they are appropriate; <u>not</u> 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 <u>this</u> 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)

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".

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

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 and 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 and 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

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

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 is, 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?

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.

> **Example**: Estimate the number of BMW cars in Germany

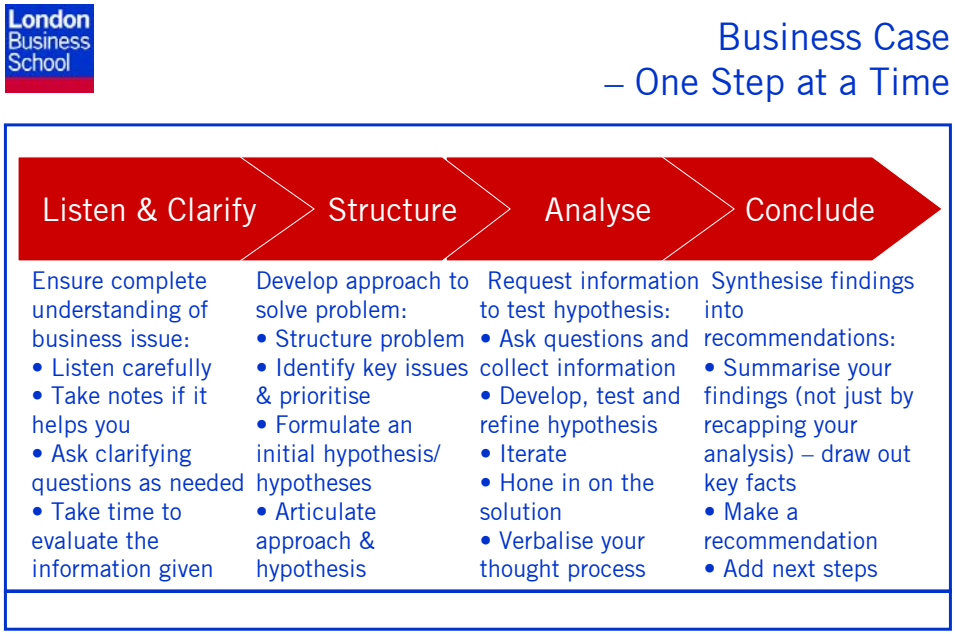
An interviewer may throw in a **Brainteaser**, but will virtually never use a brainteaser as the sole case in an interview. The problem with brainteasers is that they are binary – the candidate either 'gets' them or doesn't.

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

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:



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.

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.

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

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.

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).

- 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: 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.

5 Trying to shoehorn an inappropriate framework onto a problem

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 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.

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".

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.

Try to ensure that the interviewer enjoys the interview.

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

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." Reducing COGS without negatively affecting the quality of the product and losing customers would be difficult. Therefore they should look at other ways to save money through, for example, reducing factory overheads, saving money through supply chain efficiencies, reducing head office costs, and improving marketing spend and sales force efficiency.'

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).

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 at a time

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?”

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 2[(150*10) + (10*10)] = 3,200 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 (assume 50% of flats exterior walls are on building's exterior)

Step 5 (Total Area to be covered)

- Total external 'white' wall space is (3,200*1,500,000) + (600*300,000) = 4,800 million + 180 million = 4,980,000,000 sq foot (round to 5,000 million 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 5,000 million/10 = 500,000,000 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

50 million 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
  - 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
  - Guesstimating the population of the U.K. at 1 billion people is likely to make a very poor impression.
  - 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]?'
- It is 4/3 * pi* 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.)

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.

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

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 analyse 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 coordination 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?

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.

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".

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".

The Sponsor Company Business Cases

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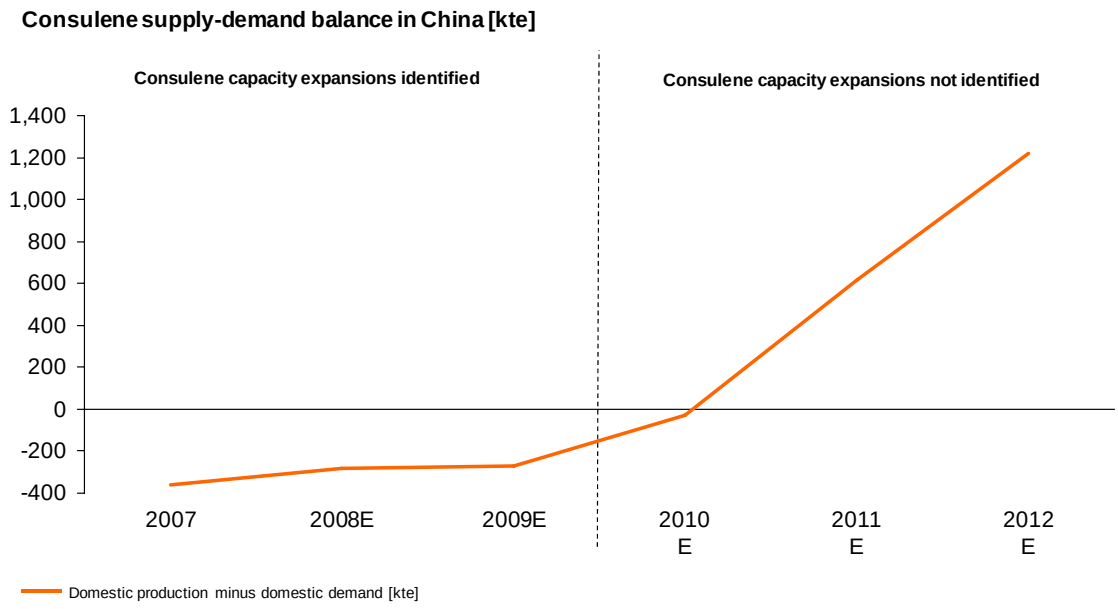
CommodityChem – joint venture (JV) strategy

Your client, CommodityChem, is a global chemicals company manufacturing a commodity chemical Consulene in a number of locations worldwide. Consulene is derived from crude oil. In the Consulene market, there are two market leaders who have a global market share of about 25% each. They have built their leadership position with advanced, patent-protected technology. For this simplified case, only the Asian market is relevant and you are in year 2007.

CommodityChem has long been present in Asian markets. Over the last 15 years, the company has built joint venture (JV) plants in Korea, Taiwan and Singapore. As of 2007, CommodityChem has five plants in Asia – two plants in China to serve the Chinese market and three plants in nearby countries, all of which serve the local markets as well as neighbouring markets including China. All these plants are JVs in which CommodityChem has a majority stake per the table below.

Plant	**CommodityChem stake**	**CommodityChem's Partner with the remaining stake**
China 1	51%	NiHao Inc.!
China 2	51%	NiHao Inc.!
Korea	51%	Chaebol Enterprises
Singapore	70%	SingOil
Taiwan	51%	TaiChem

In recent years China has started to build its own chemicals industry with the aim of becoming more self-sufficient on chemical products in general and Consulene in particular. As illustrated in the chart below, China is currently a net importer of Consulene, but is expected to become a net exporter within approximately another three years. Consulene is used to produce consumer chemicals. Owing to strong demand for Consulene in China and attractive margins, a number of new Chinese players are entering the market both in Central China and the industrial coastal provinces.



Question 1

Do you expect China to build up an industry that can cost-effectively serve the local market competing against Consulene produce from countries such as Singapore, Korea and Taiwan? Why or why not?

Since the issue to explore is whether Chinese plants would be able to produce Consulene more cost-effectively compared with CommodityChem's plants in neighbouring countries, the student should start listing the main cost categories and assess whether a Chinese producer would be advantaged in the identified categories.

Feedstock costs: As noted in the initial part of the case, the underlying feedstock for the product is crude oil. Therefore, China is not in a position to obtain feedstock at a lower cost compared with countries such as Singapore, Taiwan and Korea (scale economies not a factor).

Labour costs: Labour costs are also not a big factor because production for this chemical is not labour-intensive; minor differences in cumulative plant labour costs between countries are not substantial enough to be a competitive advantage.

The student should have brought up these cost elements and concluded, with direction from the interviewer as necessary, that major differences are unlikely on these.

Distribution costs: The other important cost for commodities in general, and chemicals such as Consulene in particular, is distribution/transportation costs. The fact that Chinese plants will be located closer to the majority of customers is a big factor that might help them compete with international plants.

Production costs: Plant technology is an important factor with the potential to offer improved production economics. One would expect newer plants (coming up in China) to be more

efficient and consequently more cost-effective. However, it turns out that new entrants in China do not have access to incumbents' latest technology, which is patent-protected and offers a 10% cost advantage.

Question 2

As a consultant, your mandate on this engagement is to help determine whether the *non-Chinese* Asian (hereafter referred to as *international*) plants of CommodityChem are sustainable on a long-term basis. Other than differences in production economics between various countries, what factors would you consider important in synthesising your advice to CommodityChem?

The student can come up with a range of issues that are relevant in determining the long-term viability of CommodityChem's international plants; a few of the key issues that are worth bringing up and discussing are provided below

(a) **Pricing:** The industry works on long-term agreements between suppliers and consumers. The student should point out that, with Chinese manufacturers increasing capacity, there would be pricing pressure and obtaining favourable long-term supply arrangements would be challenging especially if customers expect the Chinese players to continue adding significant levels of capacity.

(b) **Customers:** If the student does not bring up the issue of customer base, the interviewer should encourage him/her to think about the consumers of the produce from the various plants. Two key questions that are relevant, and students should come up with, are:

(i) What proportion of each international plant's produce is sold to China? Are there alternative customers within the local market (or other markets) that can take more produce if Chinese customers shy away from CommodityChem's international produce?

(ii) Would the local customer base of CommodityChem's international plants be threatened by the addition of capacity in Chinese plants (e.g., plants located on the Chinese coast could deliver to Taiwan, Korea and Japan perhaps more cost-effectively than plants within Taiwan and Korea)?

(c) **Quality:** The new Chinese players may not deliver high-quality product required for some applications. This will, of course, have implications for the long-term sustainability of CommodityChem's international plants.

(d) **Supply reliability:** On-time delivery would be an important factor based on which customers would choose suppliers. Whether or not Chinese producers become reliable players in the market would greatly impact the long-term viability of CommodityChem's international plants.

In addition to the above items, the interviewer could ask whether there are soft factors that may be relevant in assessing whether Chinese plants would be in a position to compete with international produce, e.g., assuming product quality is similar across Chinese and international companies, Chinese customers would, in general, be more comfortable buying from a Chinese company or plant.

Question 3

In light of the expected change in Asian market dynamics wherein China switches from being a major importer to an exporter, what are CommodityChem's strategic options for market participation? What are the pros and cons of each?

Straightaway, the student should identify that the main options are complete exit, partial stake divestment and staying with the status quo in the various plants. For each strategic option, the table below provides some arguments for and against. The student need not necessarily bring up all the points, which are only representative, but the interviewer should use the information below to probe/assess the student's business acumen.

Strategic option for CommodityChem for each international plant	Pros	Cons
Exit JV completely	*- Value realised, say in 2007, when the market demand is buoyant and the extent of Chinese capacity addition is not fully known* *- Increased focus on handling JVs in which stake is retained*	*- Partner becomes a competitor in local and neighbouring markets* *- Loss of business volume and customers, both of which reduce market/supplier power*
Divest stake partially	*- Reduction of business risk in light of changing market dynamics* *- At least partial value realisation in a buoyant market with a positive outlook* *- Monies generated from divestment can be channelled towards other growth opportunities with attractive potential returns*	*- Reduced influence on the JV, especially if stake is reduced to sub-50% levels* *- Reduced profits if the market continues to thrive and pricing is not pressured*
Retain status quo	*- Business volume and current influence on market/JV partners maintained*	*- Continued handling of five JV partners, which may be a strain especially in a downward market cycle* *- Exposure to significant market risk if Chinese producers "get it right"*

Question 4

Which of CommodityChem's international plants would you expect to have the higher margins? Why?

At this stage, the interviewer should release the following data.

Plant	Production [kte]	Captive use [kte]	Domestic sales [kte]	Export volume [kte]
Korea	480	320	120	40
Singapore	420	50	20	350
Taiwan	330	90	280	0 (40 imported into Taiwan)

The candidate should identify that the Korean plant would have the lower margins because of the significant level of captive use (two-thirds of total production volume). This is because of the fact that transfer pricing for captive use would typically deliver lower revenues than sales to (external) customers. Between the Singaporean and Taiwanese plants, it is difficult to say which one will have higher margins. One argument could be that the Singaporean plant would have lower margins because most of the produce is export volume, which implies that transportation costs are borne by CommodityChem (price needs to be competitive relative to local players in export markets).

Question 5
What would your advice to CommodityChem be for the JV strategy for its international plants? How should the company evaluate the strategic options?

The student should immediately identify that the main problem area is the Singapore plant in that it has significant levels of export volume is exposed to the expected capacity addition in China. The student could also raise the view that the combined 400 kte of domestic sales of the Korean and Taiwanese plants could potentially be at risk from lower-cost Chinese producers, but the interviewer should shy away from this (though it is a valid point, only some of the 400 kte sales would be threatened by lower-cost Chinese plants depending on the proximity of such plants to the point of delivery in Korea and Taiwan).

A key question that the student should ask, or be pointed towards if required, is how much of the export volume from each plant goes to China. The interviewer should release the following data at this stage.

Plant	Total export volume [kte]	Exports into China [kte]
Korea	40	15
Singapore	350	210
Taiwan	0	0

Evidently, again the problem child is the Singaporean plant in that it has significant volume (210 kte) that is being exported to China and is therefore threatened. At this stage, the interviewer should encourage the student to explore the various strategic options that are relevant for the Singapore plant stake. There is no right answer but here are some potential options/considerations:

<u>Potential recommendation for Singaporean JV:</u>

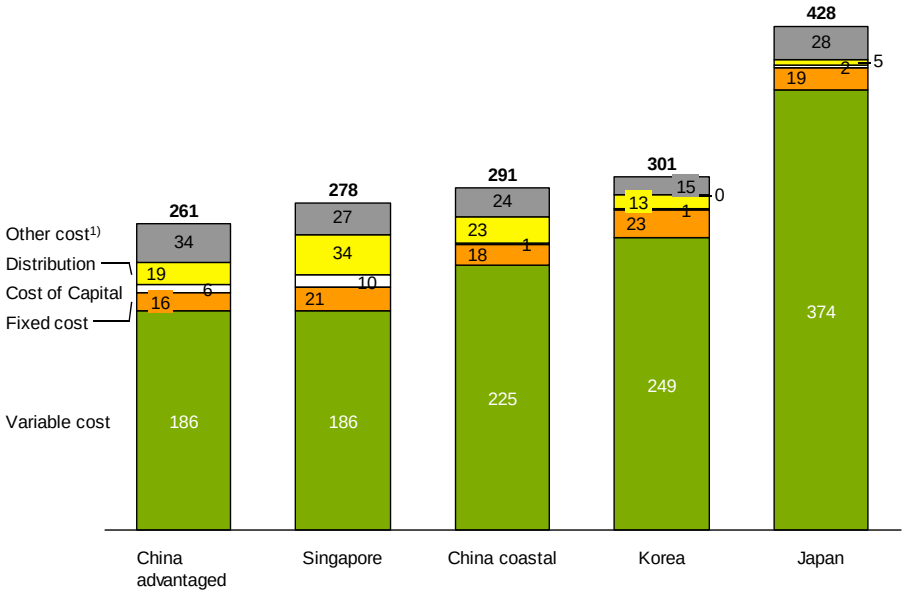
Reduce stake to 50-51% to (partially) realise value in 2007; identify alternative markets for *export-into-China volume* that is likely to be threatened as Chinese plants add capacity.

Whilst completely exiting the JV is feasible, the major disadvantage is that, effectively, a new competitor is created with this move. Particularly if the competitor has feedstock procurement

advantages, CommodityChem would have created a lower-cost player with significant scale in the market.

The student should come up with alternative countries in Asia that can take the large volume in question (markets outside Asia are not an option due to prohibitive transportation costs). Naturally, the two markets that should come up in the student's response are Japan and India.

Japan is a large market and can take much of the Singaporean plant volume in question. The student should point out that Japan is also likely to have higher-cost plants, as a result of which selling lower-cost exports is indeed a realistic option for CommodityChem. The chart below shows the delivered-to costs for chemical Consulene in Japan for plants within Japan and in nearby countries (the interviewer can use the figure to help steer the student towards the point that Japan would have higher-cost plants).



1) Depreciation, ROI minus cost of capital

India, on the other hand, is only now (in 2007) becoming a sizeable market and has no major players serving it at the moment. However, forecast demand growth in India is high and, therefore, there is potential to obtain long-term supply contracts at favourable prices (the student should point out that a growing market is likely to offer the potential of long-term contracts).

<u>Potential recommendation for Korean JV:</u>

Exit JV completely in light of the fact that most of the volume is for captive use and therefore lower margin. (With exit of the JV, it is assumed that demand for captive use is no longer relevant because the plants producing derivatives are also sold.)

<u>Potential recommendation for Taiwanese JV:</u>

Retain status quo in light of the fact that the plant has more demand than it can serve and is therefore in a position to potentially command favourable prices. In fact, the student may highlight that CommodityChem may want to explore capacity addition if demand is expected

to be sustained at levels higher than production capacity. The student may also point out that CommodityChem could explore increasing its stake in the JV, which is not advisable in light of the market uncertainty and potential price erosion if Chinese players flood the market.

Market Sizing Estimate for UK Market Entry

Introduction

In this case, a provider of broadband Internet-enabled PC labs for use in schools in the US is looking to enter the UK market. The company has developed a somewhat innovative business model, whereby secondary schools are provided with up to 15 PCs linked to the Internet via broadband. The PCs come fitted with e-learning software, which is structured and indexed by subject matter and level of education – e.g., GCSEs, Advanced Level, etc. The main source of revenue relates to advertising revenues generated through the display of banner ads on the screen. These ads are displayed when the PCs are in use during the school day. Advertisers in the US include McDonald's and the US Army. The company has developed long-term leasing arrangements with the main hardware suppliers (e.g., Dell, HP, etc.) and is therefore able to offer the kitted out PC lab at no or a very minimal cost to schools.

Question 1

Our first requirement was to determine the extent of the revenue opportunity for the company's proposition in the UK. What are the key inputs and assumptions that we would need to consider in order to determine potential revenues in Year 1?

There are a number of key inputs that interviewees should consider. Good candidates will also show evidence of sound commercial judgement when thinking through any key assumptions. The key inputs or drivers of revenue are as follows:

1. The population of secondary schools that the company would sign up in Year 1. Let's assume that there are 10,000 secondary schools in the UK and in order to keep the maths simple, we will assume that 10% are signed up in Year 1. We also assume that these 1,000 schools are customers from the start of the year.
2. The number of PCs per school. Each school will be fitted with one PC lab, with each lab having 15 PCs.
3. The average daily use of each PC. Let's assume 5 hours per day – equivalent to a typical school day.
4. The number of ads displayed in a day. Here, let's assume that each ad lasts on average, 30 seconds.
5. The price of each ad. Let's assume a rate of £10 CPM (cost per mille) or £10 per 1,000 ads displayed.
6. The number of weeks each year when the school (and therefore the PC lab) is open. Here, let's assume 40 weeks per annum (or 200 days, assuming a 5 day school week).

7. The utilisation rate. Many candidates do not mention this key revenue driver. The case actually relates to a real life situation in 2000, when the Internet was an emerging new media for advertisers. As a result, the company actually struggled to convince advertisers to sign up and was not able to sell all of the available display time. Here, we shall assume a 50% utilisation.

Question 2

Using the above information, what revenues would the company generate in Year 1?

The approach to follow here is as follows:

Average daily PC usage =	5 hours
No. of PCs =	15
Total daily PC usage =	5 x 15 = 75 hours
No. of 30 second slots per 5 hour day per PC =	600
No. of 30 second slots per 5 hour day per PC lab =	600 x 15 = 9,000
No. of 30 second slots per 5 hour day when ads are running (based on 50% utilisation)	
	= 9,000 x 50% = 4,500
No. of 30 second slots <u>per annum</u> when ads are running	
	= 4,500 x 200 days
	= 900,000

(assumes 200 day school week – i.e., 5 day week and 40 week year).

Yearly ad revenue <u>per school</u> at £10 CPM =	900,000 x 0.01
	= £9,000

Total ad revenue in Year 1
= ad revenue per school x no. of schools or £9,000 x 1,000
= £9MM in Year 1.

Question 3

In order to validate our Year 1 revenue estimate, the next stage of this project was to try and determine the size of the advertising market targeting teenagers in the UK. Teenagers were the primary target demographic group (given the focus on secondary schools). This information would be used to determine what proportion of the teenage advertising market would be accounted for by our revenue projection for the company. Given this background, what methodologies could be used to size the teenage advertising market?

Method 1 – Different Media

1. Determine the different types of media used for advertising to teenagers. For example:
   - TV
   - Magazines
   - Radio
   - Newspapers
   - Internet
   - Billboards
   - Other (buses, trains, London Underground, etc)

2. Focusing on the magazine sector, review a sample of teenage magazines (our sample represented ~45% of all teenage magazines in circulation in the UK).
3. Calculate the total revenue generated by ads in these magazines (based on rate cards (which indicate the cost of an ad based on size of ad) obtained from ad agencies). Our research suggested that this was £54MM. A strong candidate would know that rate cards are not entirely helpful as actual rates are almost always at a discount to the rate card. This approach does however provide a good indication.
4. Factor this total revenue figure up based on sample size. This equated to £120MM.
5. Determine the proportion of total teenager advertising found in magazines. For example, how much time do teenagers spend reading magazines, compared to watching TV, surfing the web, etc. We estimated that magazines make up 8-15% of the total media mix.
6. Running the numbers suggests that the total teenage ad market is worth £800MM - £1,500MM

Method 2 – Advertising as a % of Spending

This approach is based around the total amount spent by teenagers in the UK. Key steps are as follows:

1. Determine the number of teenagers in the UK. Teenagers represent ~11% of UK population or ~7MM teenagers.
2. Determine average annual spending by teenager. We considered pocket money, earnings, cash gifts, etc. and reached an average of £4,700.
3. If total teenage spending is £32B, what is the advertising ratio – i.e., the amount spent on advertising by advertisers as a proportion of total spending? Definitely less than 10%. Let's say 5%.
4. Total teenage market is about £1,500MM

The analysis of the teenage advertising market provided a useful sense check of the Year 1 revenue estimate, which at £9MM, represented a relatively small proportion of the overall teenage ad market.

NewCo Petrol Retailer

Introduction

You are an entrepreneur on an island of 50 million people. You feel that there is an opportunity to invest in petrol retailing and plan to open a new petrol station (there are already 1,000 petrol stations on the island).

However, you do not have any meaningful capital and are going to need to raise the investment required so you visit your local banker.

She asks you to estimate what capital you are likely to need in the business.

[If prompted, the interviewer will clarify that no additional information is available to answer the question.]

You have not been given much information with which to form a view of the size of the investment required. Before starting to answer the question, it is worth taking a minute to think through a logical framework to structure your response, and to explain the intended approach to the interviewer at the outset.

The approach set out below starts by determining the potential sales of the new petrol outlet, which in turn depends on the total market size and expected market share. The economics of the business are then mapped out to develop an estimate of the profitability of the business. Using this estimate of its profitability, together with a reasonable assumption for the required rate of return on capital, the amount of capital required from the bank can be calculated.

A strong candidate would receive no further guidance. Where necessary, candidates would be prompted to address each of the following areas in turn to arrive at an estimate of the capital requirement.

Question 1

What is the total market size for petrol retailing?

This can be tackled either at an individual or household level. At an individual level, an assumption would need to be made about how many of the 50m population own cars / drive and therefore purchase petrol. An assumption would also need to be made about their typical annual expenditure, which could be based on assumed miles travelled, typical fuel economy, and typical fuel price.

Alternatively the market size can be tackled at the household level. Here assumptions would need to be made around average number of people per household, proportion of households owning a car, and average petrol expenditure per annum (perhaps based on average mileage per annum and fuel economy).

Additional points that could be mentioned to improve the market size estimate would include factoring any taxation that is applied to fuel before deriving the final value of the market from the perspective of petrol retailers. In additional, the contribution from ancillary revenues, e.g. convenience retail formats on the forecourt could also be considered.

EXAMPLE CALCULATION:

- 20m households on the island (assuming 2.5 people on average per household)
- 80% of households are assumed to own cars
- Average annual mileage of 12k per household
- Annual expenditure of £2160 (12k miles @ 30 miles per gallon = 400 gallons * 4.5 litres per gallon = 1800 litres @ £1.20 per litre)
- Annual revenue net of tax c. £650 (assuming tax take of c. 70%)
- Ancillary revenue of £80
    - c. 40 refuels per annum (assuming average refuel size of c.45 litres per visit)
    - average ancillary spend per visit of £2
- Total market value = c. £12bn (20m x 80% x (£650 + £80)

Question 2

What share of the market might you be able to get?

The market size estimate can be divided by 1,000 to obtain the average revenue per petrol outlet. In practice, however, the prime sites for locating a petrol outlet are likely to have been taken already, and therefore some downward adjustment to reflect this would be required to develop an estimate of the likely revenue for the proposed new development.

EXAMPLE CALCULATION:

- Market size = £12bn
- Average revenue per station = £12m (market size / 1000 stations)
- Potential revenue of proposed investment = £10m per annum (assuming lower revenue from new site locations)

Question 3

What are the economics of the business likely to look like?

Having already estimated the revenue for the site, there are two possible approaches here. One would be to identify the various elements of fixed and variable costs and develop estimates for each of these (e.g. cost of fuel, labour, etc.). The second (simpler and more strategic) approach is to consider typical operating margins for retail businesses, and assume this business would perform in line.

EXAMPLE CALCULATION:

- Illustrative operating margin = 5% (relatively low value added, high variable costs)
- EBIT = £500k (£10m x 5%)

Question 4:

What is the required rate of return?

In market equilibrium, the return achieved on an investment on an incremental petrol station will be just sufficient to meet the market rate of return for this asset class. Having calculated the EBIT for the outlet, this relationship can be used to derive the implied total invested capital that would be necessary to maintain this equilibrium state.

EXAMPLE CALCULATION:

- Assumed (rounded for simplicity) pre-tax required rate of return = 20% (the asset class would require a return above the risk free rate, but is potentially less risky than VC- style investments that typically require a target return of c. 30-40%)
- Investment = £2.5m (= EBIT of £500k / 20%)

Having derived the implied investment amount, it should be sense-checked to ensure it appears reasonable, and prior assumptions revisited where necessary. Strong candidates would consider which assumptions the final result is most sensitive to, and would pay particular attention to the degree of uncertainty around the values attributed to these items.

Roland Berger
Strategy Consultants

PartsStop Limited – performance improvement

Context

Your client, PartsStop Limited (PartsStop), is a leading automotive aftermarket retail and service specialist with a nationwide footprint in a major continental Western European country. You are starting on the engagement at the beginning of year 2008.

In the last four years, the company has increased its branch network by more than 25%, growing from about 480 branches in 2004 to over 600 in 2007. The company has had a dip in profitability over the period 2006-07 and has hired you to perform strategic market analysis to identify underlying market changes. In addition, you have been asked to develop an operational performance improvement blueprint to enhance the company's profitability.

Before throwing open the case for analysis, let me provide you with some market background and company information – the automotive aftermarket consists of the total market for replacement parts (e.g., brakes, exhausts, etc.), accessories (tyres, electronics, optical accessories, etc.) and car chemicals.

There are three main groups of players in the market – Original Equipment Manufacturers (OEMs) who service cars of their own brand especially warranty services for cars that are 2-4 years old, chains and/or franchise networks of aftermarket specialists of which your client is one, and independent mom & pop garages.

Question 1

One of the things your client wants greater clarity on is its market share, which is not transparent due to poor reliability of market research and lack of industry association data. As a result, you have to build a model to size the market. What would be the drivers in your model?

Demand for aftermarket products is mainly driven by:

1. Number of vehicles in operation – has peaked in many developed countries
2. Average spend on replacement parts and accessories per car – this is driven by a number of factors:
    - Average vehicle usage (mileage driven per year)
    - Average age of the vehicle park – the older the car the more is the spend in the aftermarket (influenced by reliability and warranties)
    - Average useful life of vehicle parts
    - Reliability of original parts – increases over the years and offsets age of car park
    - Regulations (such as the mandatory use of winter tyres in certain European countries)

The student should be able to identify that while the number of cars is a given, the other drivers influence the amount spent annually on parts per car.

Question 2

Now that we have the drivers, can you estimate the market size for the automotive aftermarket in a 'typical' Western European country (country W.E.)

The key data that you need is:

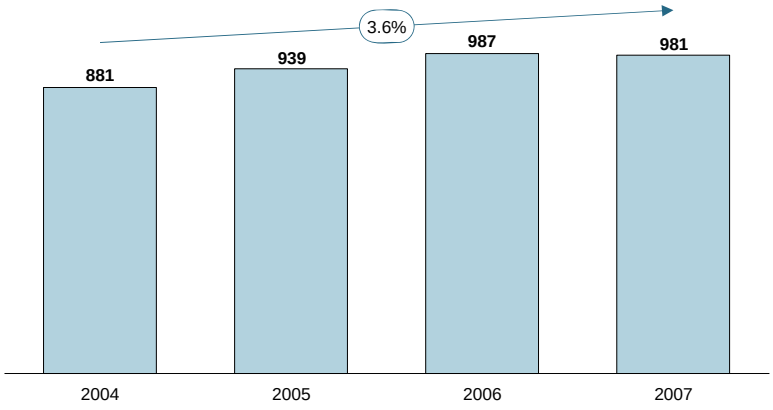
- Number of cars: 0.5 cars per person
- Population: ~ 62m
- Spend on parts per car: ~ EUR 380 per year (only includes parts value and not service/labour, which is estimated to be an additional 35%)
- Additional workshop/service cost (labour): 35%

Market size calculation (to test the student's comfort level with quick arithmetic calculations):

1. Aftermarket Parts value: ((62m * 0.5) * EUR 380) = EUR 11.8bn
2. Total aftermarket value: (EUR 11.8 bn * 1.35) = EUR 15.9bn

Question 3

Provided below is the company's recent sales growth. What do you think about the company's sales performance? Do you think the management should be happy with the development of sales?



To comment on whether sales growth is acceptable, the student may compare the annual growth with GDP growth and/or ask about auto sales/aftermarket growth (as indicators of the strength of the underlying market).

Most students would, quite obviously, point to the stagnant sales over the 2006-07 period. Students who have keenly listened in the context-setting would recall that the number of branches increased significantly over the last four years and would, ideally, ask for data on the branch network growth, which is provided below.

	2004	2005	2006	2007
Number of branches	484	525	573	615

As shown below, sales per branch have been declining since 2004, indicating that the sales growth until 2006 has been "bought" by an ambitious expansion.

	2004	2005	2006	2007
Sales per branch [EUR m]	1.82	1.79	1.72	1.59

Question 4:
What do you think are the underlying causes of the company's declining profitability in 2006-07? The interviewer should share the following:

	Q1 06	Q2 06	Q3 06	Q4 06	Q1 07	Q2 07	Q3 07	Q4 07
Sales [EUR m]	195	254	213	325	206	261	225	290
EBITDA [EUR m]	8	46	19	56	6	31	16	30

Cost data [EUR m]	Q1 06	Q2 06	Q3 06	Q4 06	Q1 07	Q2 07	Q3 07	Q4 07
Cost of material	67	89	71	124	71	94	76	112
Personnel	82	85	84	102	86	97	88	103
Advertising	8	7	5	8	8	8	8	9
Premises	4	4	4	6	4	4	4	4
Rent	19	18	18	18	19	19	20	20
Other	10	11	12	11	12	12	14	13

There is a lot of information in the above-referred table but the key point that the student should identify is the significant quarterly fluctuation after which the interviewer should engage the student on the underlying reasons.

Essentially, the root causes for the decline in profitability are twofold:

1. External (market)
The student should be able to interpret the fluctuations in sales per quarter and deduce that the business is subject to seasonality. Change of spare & wear parts (especially tyres) in country ‘WE’ is very much driven by the winter season; much like a wet race in Formula-1, there is a change to winter tyres in Q4 and a change back to summer tyres in Q2. Other small repairs are usually done at the same instance. Therefore, the other two quarters are relatively weak. This effect is amplified by regulations which mandate the use of winter tyres. The student should come to the conclusion (or should be helped to come to the conclusion) that the main factor for the weak fourth quarter in 2007 was a very warm winter with almost no snowfall.

2. Internal (company)
Based on a a year-on-year comparison of the quarterly periods, the student should be able to identify that:
a) The business is subject to seasonality, and Q2 and Q4 are the strong quarters
b) There is a cost issue as margins were significantly lower in 2007 than in 2006

	Q1 06	Q2 06	Q3 06	Q4 06	Q1 07	Q2 07	Q3 07	Q4 07
EBITDA margin	4%	18%	9%	17%	3%	12%	7%	10%

The increased personnel cost in Q4 is due to temporary workers required to deal with the peak in demand (winter tyre changeover). As the winter simply did not happen in 2007, the increased personnel cost directly hit profits. Also the winter in 2006 was not very strong, which led to low changeovers in Q2 2007

	Q1 06	Q2 06	Q3 06	Q4 06	Q1 07	Q2 07	Q3 07	Q4 07
Personnel	42%	34%	39%	31%	42%	37%	39%	36%

Question 5

Having identified the key reasons for decline in sales and profitability, let us now get into improvement areas. What improvement levers do you think are relevant for sales increase and operational performance improvement in the future?

The key objective of this question is to give the opportunity to the student to come up with ideas and qualitatively identify potential levers to deliver improvements. The idea is only to test the student's business sense and the following are only representative ideas:

Potential improvement levers worth considering include, but are not limited to, the following:

For top-line improvement:

- Extend product/service range to sell more to the customers who visit branches for aftermarket service (e.g., food, video rentals, bicycles in light of increasing sensitivity to fuel prices, etc.)
- Increase share of non-seasonal products to reduce the business's reliance on winter tyre change
- Train staff to improve customer orientation (e.g., better customer service) and thereby increase repeat rates
- Review and improve sales performance of branches; e.g., identify and transfer best practices from the high-performance branches

For bottom-line improvement:

- Reduce direct and indirect personnel expenses (by reducing permanent staffing flexibility – i.e., higher use of temporary workers)
- Slow down/halt branch network expansion
- Review branch network and close selected branches to:
  a) Close grossly unprofitable branches that are difficult to turn around
  b) Reduce cannibalisation effects (which are inevitable in cases such as PartsStop

where the branch network has been increased significantly with the same overall geographic coverage)

- Source in low-cost countries to tackle declining per-product margins

School Travel

Introduction

In this case a UK Private Equity firm is interested in acquiring a school travel company, also based in the UK. This school travel company focuses on Residential Activity Trips in the UK which involves some school teachers bringing groups of UK school students (could be at Primary or Secondary School level) on trips to sites around the UK (typically coastal locations) for between 1 and 5 days. The trips occur during term time on the basis that they satisfy the curriculum either through field trips for Science or Geography and more especially through personal development of the students. The children enjoy numerous fun activities on site such as wall climbing and underground cave orienteering all of which help develop leadership, teamwork and confidence skills. The sites can be defined as fit for purpose with dorm style accommodation while they also provide 3 healthy, but basic, meals a day. (For the basis of this case we are only interested in UK students going to UK sites).

Question 1

The Private Equity Firm have been told by management that their annual £18m revenue represents a ~15% share of the UK market. I would like you to validate this please.

The only way that this can be validated is by estimating the size of the annual market. Any interviewee who fails to recognize this is in difficulty straight away. The market estimation can be done using a basic P*V framework as follows:

1. You first need to estimate the number of school children in the UK – Assume 60m population and life expectancy of 80 years with uniform age distribution. The school life (primary and secondary) is from ages 6-18 so 12 years. Therefore the answer is (12/80)*60m = 9 million people. (*Note the candidate should not just pluck 10-15m out of the air as an answer, the number must be based on logic*)

2. The next key step is to understand if all school children go on these trips. The candidate must ask this question and will then be told that 80% of schools do these trips and when children are offered the opportunity about 80% take it up. Therefore the addressable market is actually 80%*80%*9m = 5.75m.

3. The next step relates to frequency of trips. If the candidate asks this question they should be told that students typically take one trip during primary school and one during secondary school, so 2 over their school life. Therefore the number of children going on an ANNUAL basis is (2/12)*5.75m = 960,000. (*This is where most candidates fail. They automatically assume that all children go every year and fail to appreciate the cohort issue*)

4. The candidate needs to estimate the price of the trip. This is essentially the price per day multiplied by the average number of days. The average number of days/nights is 3 (there was a guide in the introduction). The price per day should be estimated using sensible benchmarks. The candidate should be asked to estimate the cost of accommodation and food and then estimate a price that would incorporate the activities and margin, and be acceptable to parents. Sensible benchmarks here would be hostel prices and canteen prices suggesting £10-15 for accommodation and £15 for food. If the candidate makes sensible assumptions here they should be told to assume a price per night per student of £40. (This part of the case requires the use of common sense and application of sensible benchmarks)

5. Therefore the annual market size equals 960,000*3 (day/nights)*£40 = £115m.

6. This would suggest a market share of (18/115)*100 = ~15%.

Question 2

Who are the consumers, customers and payers in this transaction process and what are the implications of this? (*If there is time pressure, this question can be dropped as it is a stand alone question.)*

The purchase transaction is interesting in that school children are the consumers, the teachers (schools) make the purchase decisions, i.e. they are the customers, but it is the parents who pay. The implication of this purchase process is that the purchase decision is not made by the person who pays resulting in relative price insensitivity which is positive for the industry. (*This could be tricky for people from outside the UK and so candidates can be given help; however they should identify the implications themselves.)*

Question 3

The Private Equity firm believes that the firm profitability is lower than expected. What is the key issue that is contributing to lower than expected profitability?

The candidate should start with the classic framework of:

Profitability = Revenue – Cost

On the revenue side the candidate should highlight price and volume. He should be told that prices are in line with competitors and there have been no sudden price decreases. There is limited scope to increase price significantly. On the volume side, the key metric is child nights which is a function of the number of children and how long they stay, and this has remained relatively constant in recent years.

On the cost side the candidate should identify fixed and variable costs. A strong candidate will understand that property costs (the sites are typically leased) represent the most significant cost item and these are fixed. In addition the staff costs are relatively fixed. Variable costs include food costs and maintenance costs.

The key issue of the case is that this is primarily a fixed cost model and with flat volumes in recent years there may be a *capacity utilisation issue.*

When the candidate mentions this possibility they should be told that average capacity utilisation over the year is 50-55%. The candidate should then be asked to suggest why utilisation is so low, paying attention to all the details that they have been given so far in the case. The candidate is likely to suggest a couple of appropriate reasons such as inability to always fill the dorms due to different schools attending, but there are two key reasons that the best candidates will identify:

1. The trips take place during term time (see introduction) and are organised by schools so the sites are empty during summer and winter holidays as well as midterm breaks.
2. The teachers stay for 1-5 days and in fact they only want to stay between Monday and Fridays so weekends are also empty.

Question 4

Having identified the key reasons for less than expected profitability, could you suggest some ideas that the firm should investigate in order to improve profitability as well as some challenges associated with these ideas. (*This is to test creativity.*)

1. The firm should utilise the assets during the summer holidays by running summer camps. These would be aimed at many of the same children, whose parents may both be working. The key challenge here is from a Sales & Marketing perspective as the sales channel changes slightly and the firm will need to market direct to parents who will make the purchase decision
2. There is potential to utilise the assets during midterm and holiday periods by attracting foreign students on short camps which include both the activities and teaching English as a foreign language
3. There is a possibility of filling the sites during weekends by targeting sports groups, religious groups and groups like scout groups. It might also be possible to target the one day market for music festivals.

It should be noted, in case it is suggested, that the sites are relatively unsuitable for corporate customers on a residential basis as the facilities, such as beds, are not suited to adults.

BCG

THE BOSTON CONSULTING GROUP

Too Many Books: Storage and distribution dilemma

Context

Books Galore is a company in the publishing industry with stable sales, in regards to both volume and value.

Its distribution warehouse, which is used for storage and order preparation, is reaching maximum capacity, resulting in a rapid deterioration in the quality of service.

The Head of Books Galore's distribution subsidiary wishes to build an extension to the distribution warehouse, at a £10m cost, though the project would bring no additional revenues.

The CEO has asked you to determine whether the investment is necessary or whether it can be better used elsewhere

Question 1

Why is the warehouse reaching maximum capacity?

The logical approach would be to determine the drivers of warehouse capacity. It should be assumed that each book or product has a unique allocated place.

That is correct. Each title has a unique 'SKU' – Stock Keeping Unit, which necessarily corresponds to a specific storage location in the warehouse. Storage areas will have their particular SKUs in varying number.

The capacity of the warehouse can therefore be expressed as:

$$\frac{\text{(\# of SKUs) X (Volume per SKU)}}{\text{Capacity of the warehouse}}$$

There are three possible explanations for increasing capacity:

- Increasing number of SKUs (more titles)
- Increasing number of volumes per title (assuming that books are not changing size)
- Decrease in overall capacity (perhaps warehouse is being used for other purposes?)

These three possible explanations indicate causes for the increasing space usage and possible levers to address them:

	Number of SKUs / Titles	Number of volumes / SKU	Overall warehouse capacity
Potential Causes for increased space usage	▪ Many new titles ▪ Old titles not destroyed	▪ Overestimate of potential sales ▪ Longer replenishment cycle	▪ New legislation ▪ Safety issues
Potential levers to increase capacity	▪ Eliminate number of titles stored	▪ Eliminate part of overstock ▪ Reduce initial stock ▪ Reprint on request ▪ Shorten replenishment times	▪ Extend the warehouse **(client's proposed solution)**

The first potential lever – eliminating the number of titles stored - seems like a promising way to start. Has there been a recent increase in the number of new titles stored?

No, but the company acts as service provider of storage and order preparation services for third parties (other publishers). This business represents 50% of the warehouse flows. The warehouse charges these third parties for the delivered services. It might be conceivable to terminate all or part of the third-party business

With this in mind, in makes sense to stop serving some of the third parties to decrease the number of SKUs being stored and increasing the space for the company's own usage.

Question 2

Which criteria would you use to determine which third parties the company should no longer serve?

The objective should be to maximise the positive impact for the warehouse, which depends on the impacts brought about by a publisher's exit:

- Released space
- Suppressed costs
- Lost revenues

We can therefore prioritise the third-party publishers through two simple criteria:

- Space released
- Economic impact

Question 3

How could you assess the impact on the warehouse P&L statement of a particular publisher's exit?

The impact on profit would be the changes in revenue minus the changes in costs.

Let's first proceed with costs – how would you analyse the impact on costs?

Total costs are composed of:

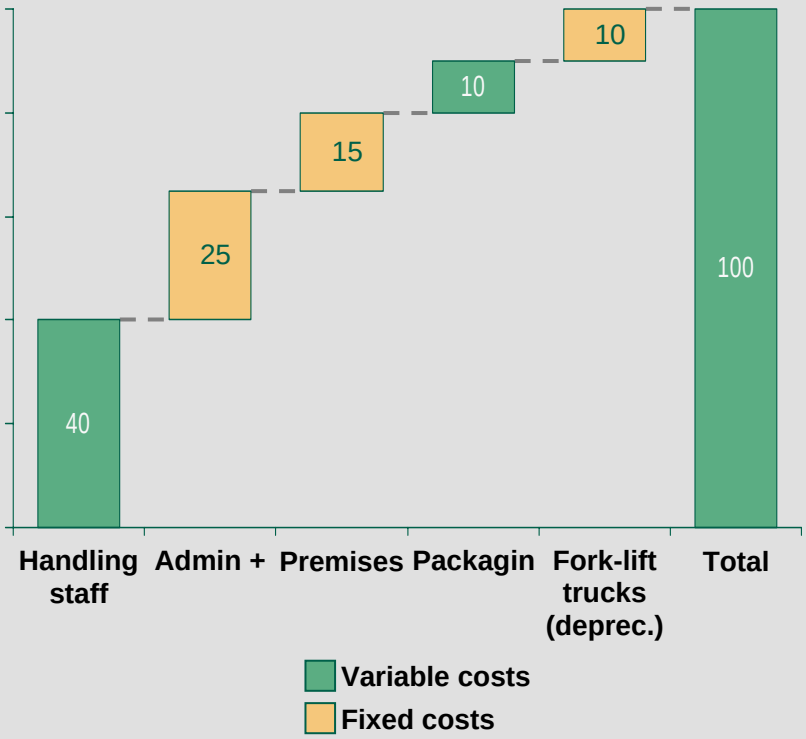
- Fixed costs (independent of the number of publishers)
- Variable costs (decreasing when a publisher leaves)

In this example, fixed costs would be the building itself, sets of shelves and other infrastructure, as well as some of the administrative and IT staff that coordinate operations in the warehouse.

Variable costs would include handling staff and packaging.

I would like to determine how much each of these costs contributes to the overall expense of running the factory.

After investigation, you establish the following cost structure:



Question 4

What are the drivers of our variable costs?

Variable costs are encompassed by handling staff and packaging. In terms of time utilisation, that requires filling title / SKU spots, fetching one or several volumes from these places, and then packing these books for distribution.

Cost drivers for these actions would be:

- Number of movements to be performed = number of times operators have to fetch one or several books of a same type, which means that personnel expenses will vary depending on the number of order "lines"
- Packing - Number of boxes / packages, which corresponds to the number of books (assuming that the size and type of book does not change)

This gives us a good idea of potential areas for cost savings. But what about the impact of decreased number of publishers on revenue?

Question 5

If revenues are based on the price of the book (fixed at 5%), which publishers should be terminated?

Our goal should be to maximise profits through a publisher's exit from the warehouse. Since revenues are a function of the price, two possibilities would be:

- Eliminating publishers with low average price and rotation
- Eliminating publishers which have many references selling in small quantities

We have identified an external publisher that would be a good candidate to reconsider.

Publisher's characteristics:

- 10% of volumes
- 20% of order lines
- Average selling price = that of the warehouse

Current warehouse margin: £5m, which is 25% of sales

Question 6

What would be the impact on the margin of this publisher's exit?

Change in margin will be the change in revenue with the publisher's exit subtract the change in costs

Revenue will decrease by 10%

- Total sales of £20m (£5m / 25%)
- £20m revenues x 10% = £2m lost

Expected revenue would be £18m

Total costs currently £15 (= sales of £20m – margin of £5m)
Current cost breakdown:

- Fixed (50%) = £7.5m
- Personnel (40%) = £6.0m
- Packaging (10%) = £1.5m

Projected cost without publisher:

- Fixed = £7.5m (no change because fixed cost)
- Personnel = £6.0m – 20% = £4.8m
- Packaging = £1.5m – 10% = £1.35m

Total costs without publisher expected to be £13.65m

New margin = expected revenue – expected cost
= £18m - £13.65m
= £4.35m

Margin would thus decrease by £0.65m by eliminating services for that publisher

Question 7

If eliminating that publisher would reduce margins by £0.65m per year, what is our best option - terminating a publisher's contract or building an extension?

To assess which is best, we could compare the potential annual loss of eliminating this publisher with the cost of the investment proposed initially

- Loss: = £0.65m / year
- Investment: £10.0m
- £10m / (£0.65m / year) = 15 year

The proposed extension is the same cost of 15 years of eliminating the publisher in question, assuming everything else remains constant. Thus, it would be better NOT to build the extension.

Yet, giving up a publisher generates sales and margin losses. Are there other conceivable solutions?

Question 8

Are there any opportunities to manage the capacity issue?

Looking back to our initial framework and potential levers to increase capacity, there are several options:

- Ensure old stocks of unused titles / SKUs are destroyed
- Eliminate over-stocks
- Reduce size of initial stocks
- Re-print on request
- Shorten replenishment times

Water Utility Company

Introduction

Industry: Water Services

Region: Europe

Source: Based on a simplified version of a real consulting engagement

Your client is a large water utility company that has a license from the national government to provide water services to homes and businesses in a specific geographic region.

The client is concerned about a source of competition to its local monopoly: when a new housing development is constructed, the developer can choose to obtain water services from either the incumbent water provider (client) or from another company able to build the water / sewerage pipeline infrastructure. When another company supplies water to the new development, it is licensed by the government regulator as an "inset" in the existing licensee's region.

An inset can be served in two ways:

1. The traditional "own supply" inset where a water company relies on its own infrastructure to supply water. These insets may be awarded at border locations where it is economically feasible for water utility companies operating in an adjacent region to provide the water from their own supplies.
2. The recently developed "bulk supply" market where inset competitors can construct their own water supply / sewerage infrastructure between the development and the local water utility's network. In this situation, the inset operator pays the water utility a "bulk" rate to supply water services to the inset, and this rate is determined by the regulator. The inset operator then bills the residents for their water services, which cannot cost more than the level for water services under the local water utility company.

Your client is concerned that growth in the number of domestic inset licenses awarded may pose a threat to its projected growth. The client has asked you to assess the threat presented to its growth by water supply insets.

This represents an opportunity for candidates to demonstrate logical thinking. They should breakdown the question into sub-questions allowing them to gather the information and reach a conclusion

Question 1.1

Identify the total number of new homes being built in the client's region which may be at risk from competition due to insets

- Ask how many new homes are to be built in the client's region in a year
    - Approximately 75,000 new homes are estimated to be built each year in the region
- Ask whether all types of housing developments, i.e. groups of homes built together, are equally likely to be suitable targets for an inset
    - Housing developments have different sizes. It is not economically viable to supply a development of less than 200 homes as an inset, and so by default your client would be servicing these developments as the local water supplier
    - New developments of >200 new homes are economically viable as insets. As such, competition is expected for new housing developments of >200 units
- Prevalence of new developments at risk?
    - Planning data suggest that ~60% of all new homes will be part of a housing development of >200 units
- Calculation of total addressable market in region
  75k new homes built per year x 60% (prevalence of homes in >200 unit developments) = 45k new homes built in developments of >200 homes, at risk of competition

Question 1.2

Calculate the proportion of the client's customer base represented by the new developments at risk from competition

- How many homes are currently in the region? Approximately 3 million homes

- Recall that the following information for calculations has been given or calculated:
    - 75k new homes are built every year in the client's region
    - 45k new homes built in developments of >200 homes
    - Assumption: the revenue from new homes will be the same as that from existing homes
- Calculation
  45k new homes / (3 million existing homes + 75k new homes) = c. 1.5% of client's customer base at risk

Question 1.3

Would the loss of these potential new customers be significant to the client?

- The water industry is a low growth business, with growth for the client mainly coming from the addition of new customers
- On this basis, losing 1.5% per year of growth in the subscriber base would be significant to your client.

Question 2

How credible is the competitive threat?

Question 2.1

If you have a closer look at the types of inset, do either of them pose a greater threat?

- Own Supply Inset
    - Housing developments near the border of the client's licensed region are at risk of own supply insets because of the possibility of water companies from neighbouring regions supplying the developments using their own water
    - 20% of all new developments of >200 units are sufficiently close to the border of the region that it might be economically viable for a competitor to supply an inset with their own water
    - There have been no insets of this type in the client region over the previous 5 years
    - There have been no changes which might suggest that this would pose a greater threat in the future
- Bulk Supply Inset
    - Bulk supply insets could apply to all new developments, >200 units, whether near the regional border or not
    - 1 bulk supply inset has been granted to a competitor in the client region in the past year, and various companies are competing to supply other large developments in the region. There have also been a number of insets granted nationally in the last year, and activity appears to be increasing.

The bulk supply inset market represents the largest business risk to the client, and so all developments with more than 200 homes are at risk. "Own supply" insets do not appear to present a materially increased threat for developments near the border.

Question 2.2

Who would be the main competitors in the bulk supply market?

- What type of companies would be likely to be able to compete best in the inset market?
    - Companies with billing systems (e.g. all utility companies such as gas & electricity, of which there are many in this country)
    - Companies with appropriate construction and marketing skills (again, all utility companies)
    - Companies with experience of providing water services (e.g. water utility firms, of which there are 10 in this country)
    - Companies who already operate insets (of which there are two)

Overall, while there are some barriers to entry in terms of skills required, there are a number of existing inset operators and many utility businesses which could enter the market. As such, there is potentially significant competition in the market to serve insets.

Question 2.3

Who decides which company should supply water services to a housing development, what criteria would they use and how is your client positioned when compared to the competition?

- The land developers and new home builders decide who will supply the water
- Home builders' key criteria to assess potential water suppliers are mainly based on the services they receive from the water provider:
    - Timeliness and quality of service
    - Costs to provide infrastructure to serve the development, which may be subsidised by inset operators if the water bulk price set by the regulator is low
- Your client is considered to provide average customer service and cannot afford to subsidise the infrastructure costs

It looks like your client could use its expertise (as the local water utility provider) to improve customer service to differentiate its offering.

Summary:

- The own supply segment is not likely to be a threat for the client business development.
- There is clear evidence that the competition in the water bulk supply market has been increasing and that potential competitors have the ability to threaten your client's customer base growth assumptions.

Question 3

What would you want to know about the economics of the client and inset providers in order to understand the impact upon the competition to supply housing developments?

- How does a regulated water company make money?
    - In this case the client's profits are limited by the government regulator to a percentage of the assets on the balance sheet. As such, the new development would increase the quantity of assets and so the profits generated. These profits would not be large enough to materially subsidise the costs to the developer
- How would an inset operator make money?
    - Initially, the inset operator makes money from the difference between the cost of the water to the operator (from your client) and the price of the water to the consumer, minus their own costs. The cost of the water is determined by the regulator, and the price to the consumer cannot be greater than the local price level for water services under the local water utility company
    - After a number of years, the profitability of the inset provider will be reviewed by the regulator

Summary: the key issue is, therefore, the price level set by the regulator for the client to supply water to the inset operator. If the price is low, the competitor can afford to materially subsidise the developer's water infrastructure costs and win business, offsetting the cost against future profits. If the bulk supply water price level is set too high, then the competitor is unable to subsidise the infrastructure costs.

Question 4

Can you think of any possible opportunities presented by the ability to win 'insets' in regulated water regions?

- Insets located at the border of the adjacent regions represent a business expansion opportunity. Your client could compete for own supply services and connect cross-border insets to its own water supply
    - It is likely, however, that this is not too attractive given the number of insets that have been awarded historically
- The major opportunity is for the client to apply for bulk supply insets outside its own region
    - While the client may lose insets in its own region, if the government regulator sets low prices for the bulk supply of water to insets (making them profitable), the client can compete to win insets out of its region to compensate for the lack of growth in its region

Summary
Candidate should summarise the main points of the case:

- The inset development business represents both a real competitive threat and a business opportunity There is evidence that competitors are well positioned to win insets in the client's region:
    - There will be a significant number of developments suitable for insets in the client's region
    - Many companies are capable of entering this market
    - An insets has already been awarded in the client's region
- Similarly, the client is likely to be able to win insets outside of their region if the regulated bulk prices make insets profitable.
- The price of bulk water supply set by the government regulator will be a key factor to assess the likelihood of competitors entering the bulk supply market, determining whether or not bulk supply would be profitable.

Whiskey Brand Turnaround

Context

The client has been in business close to 90 years. The original founder started in the whisky business, although, over time, successive leaders expanded the product line so that today, the company is a multi-billion dollar diversified liquor manufacturer, with less than 5% of its sales in .

This expansion strategy made particular sense over the last 20 years, as total U.S. sales have been declining by ~2% per year, and the client's brand has been declining at the same rate.

While the company has enormous passion for the brand (as the founding basis of the company), in recent years they have been paying limited attention to the brand. Last year, however, events caused our client to suddenly pay attention to their brand. While the market declined by 2% again, our client's brand declined by 15%, despite selling 10m bottles.

The client comes to you because they A) want to find a way to grow the brand again; but B) want to do this without lowering the total profits they were taking out from the brand.

Question 1

What is going wrong that has made sales of the client's brand suddenly decline?

To frame the problem, it would be helpful to establish internal vs. external causes for the decline of the brand.

Some of the possible internal reasons for the brands decline include:

- Reduction of marketing spend
- Decline in quality of marketing
- Decline in product quality
- Product availability (production / supply chain issues)

External reasons are also very likely. Some external factors which could hasten the decline of the brand are:

- Negative PR
- New competitor product launch
- Increase of competitor marketing
- Pricing effects

To establish which of these factors is decisive in the decline of the brand, further examination will no doubt be required.

Some members of the board have voiced their concern about our marketing spend vs. competitors, but company marketing spend hasn't changed in the past several years. Perhaps competitor marketing has changed significantly.

Question 2

How could we determine if there has been change in relative marketing spend against major competitors?

First we'll need to gather information on our own marketing spend, so that we have a basis of comparison.

Secondly, we need to determine our competitors' marketing spend, which we could do through several sources:

- Internal interviews
- External benchmarking through competitor company reports
- Count of number of ad pages in magazines
- Interviews of experts within the advertising and marketing industry

Interviews with advertising experts and an examination of competitors' ad pages have shown that while marketing spend hasn't changed significantly, there has been significant change in prices within the industry. The following profitability data was gained from the above investigations:

Brand	Place of sale	Cost to produce	2005 price	2006 price	2007 price
Client	Grocery, Speciality stores	£8.00	£14.75	£14.75	£15.00
Competitor A – Premium	Speciality stores	£8.25	£15.00	£17.00	£19.00
Competitor A – Own brand	Grocery stores	£6.50	Not launched	Not launched	£ 9.00
Competitor B – Premium	Specialty stores	£8.25	£16.00	£17.75	£19.75
Competitor B – Own brand	Grocery Stores	£6.50	Not launched	Not launched	£ 9.75

Question 3

What conclusions can we draw from this client and competitor profitability data?

It appears as though competitors A and B have been slowly increasing their prices on Premium brands, aiming at a segment of consumers who are willing to pay more for their at specialty stores. It is possible that they have succeeded in capturing a more lucrative share of the market

At the same time, they have introduced 'Own Brand' labels for selling in grocery stores that are significantly cheaper than the client brand.

Thus, it seems that competitors have been capturing the lucrative top end while also launching new brands that have captured the low price-end, effectively squeezing the client brand out of the market.

Considering our production costs and the price of Competitor A and Competitor B 'Own Brands', we cannot compete on price in supermarkets. With our strong brand, we must aim to recapture the high end of the market, hence increasing prices.

Question 4

What price should we set and how will it impact profits?

In order to understand the impact of an increase in price on profits, I would need information on the number of bottles sold and some info on the cost structure.

We already know that 10M bottles of our were sold at an average price of £15 per bottle.

Of total costs, 75% was variable costs and 25% fixed costs

Total profit last year was total revenue subtract total costs. Total revenue was 10M X £15 = £150m. Total costs, as seen already was £8 per bottle or £80M in total. Total profit at the current price was therefore £70M in 2007.

First, we need to establish a new price for our re-branded 'premium' . With competitors selling at £19.00 and £19.75 for their premium brands, I'd guess a similarly high amount would be appropriate, say £20 per bottle.

In order to determine how this will affect profits, I'd need more information on price elasticity, to see how a higher price will affect sales.

At an increased price of £20 per bottle, sales would decline from 10M units sold to 8M units sold

At £20 per bottle, 8M units would yield revenue of £160M.

Fixed costs would stay the same as before, which were 25% of £80M, or £20M.

Variable costs would be 8M X 75% of £8, or 8M X £6m = £48M.

Total costs would therefore be £68M, yielding a total profit of £92M. A higher price would therefore position our brand in the higher-end market, decreasing the amount produced but increasing profits by £22M with a higher price.

Question 5

What complications might arise in our attempt to capture this higher-end market?

In the short-term, we need to be aware of how competitors may react to the move, by adjusting their pricing, branding or advertising. Our move could provoke a change in prices amongst competitors that will leave us positioned as before. We should also be aware of possible difficulties in marketing our brand in the premium category as the third mover.

Further complications could arise given that our brand exists across a wide portfolio of products. The price increase of our could negatively impact the customer base for other products, if the customers who stop purchasing our at a higher price develop negative feelings regarding the brand.

In the longer-term, we should examine whether it makes sense to re-invest earnings into the business since it is a declining market. Investments might be most profitably put to use by growing other parts of our business.

V. Consulting Club Business Cases

In the following section there are 22 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 text** represents questions to the interviewee
- text in **shaded panels** represents information from the interviewer
- text in **unshaded panels** represent tips or other comments
- normal text is the suggested answers and other information that can be disclosed to interviewee

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

> 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.

What would you recommend to the CEO?

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

Automotive Industry

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:

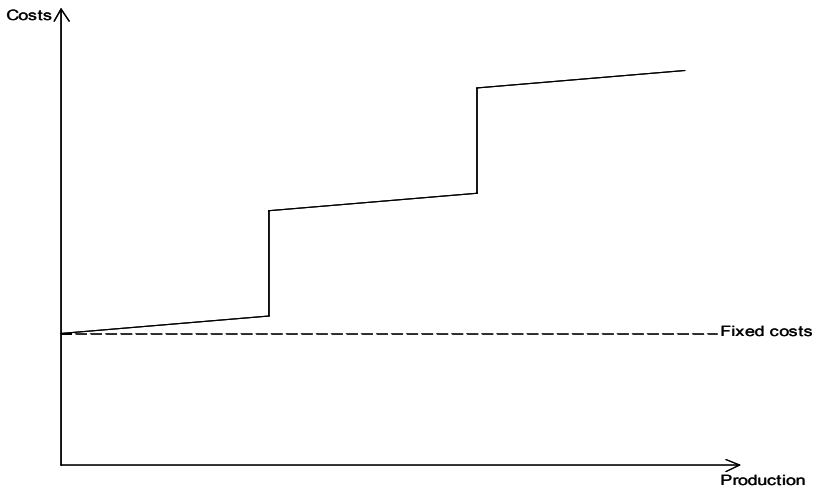
- Increase or decrease the number of shifts per day (1 – 3)
- Keep two shifts but introduce overtime to increase the working day to, say, 10 hours
- Introduce extra working days by opening plant on weekends
- Increase the assembly line speed

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.

Axeles – Cardiovascular Drug Launch

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.

Baltic Car Rental Market Entry

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 programme

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 programmes.
  - 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 programme

Question 6

Based on market structure and Hertz's profit target, what strategy would you recommend them 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

Buildbig Inc.

Introduction

Buildbig Inc. is a commercial real estate development company in the United States, operating mainly in the New York metropolitan area. The company has several branches throughout the tri-state area but has most of its business in New York State. Buildbig is owned by the influential Rockgate family and has been in business for decades. The company engages in land acquisition and commercial property development and construction.

Question 1

The management team recently made some rather unsuccessful investments in an attempt to grow Buildbig's business. The CEO is asking you for advice on their future growth strategy. How would you approach the request made by the Buildbig CEO?

The candidate should show understanding that this is a market expansion problem and explore the market dynamics:

- **Market:** current size, growth, relative growth in comparison to other U.S. States / other markets / GDP, market stability, market regulation
- **Competition:** who are the competitors, how big are they relative to Buildbig, how strong is competition, are there new entrants, what is their relative growth
- **Customers:** who are the customers of Buildbig, have there been any changes in customer composition and size of the customer base
- **Capabilities:** what is Buildbig good at, what are their key strengths relative to other builders: e.g. relationships, sales & marketing, production, finance, supplier management, etc.

Excellent answer: the above plus picking the most relevant answer category and explaining why this category. Any will do, but since the real estate market is very sensitive to the market forces, market size and growth is a good start.

Question 2

The CEO confirms that the company's previous investments were heavily influenced by changes in the market place. Buildbig is still in the same position vs. its competitors as it always was, the customer base has not changed much, and internal capabilities are excellent for the commercial building market. In order to be less vulnerable to the market forces, the CEO would like to know what her options are.

- Expand in current market space
- Expand to adjacent geographical markets
- Expand to adjacent segments / product areas
- Any combination of the above

Excellent answer: candidate assesses what the most interesting options are based on real current developments, and explains why one is more attractive than the other.

Question 3

The CEO is not interested in the first option; there is a lot of competition, there is little available land for commercial exploitation, and it doesn't help reduce risk. Land acquisition depends highly on relationships; therefore she is also not interested in venturing into other regions than the current one. She is very interested in adjacent functional markets such as the residential property development market and asks you to assess the market size in the U.S.

How would you approach the market sizing, and how big do you think it is?

I would start with the population of the US:	300m
Average Household size:	let's assume 3 people per household
So that gives us	100m households
Movers each year:	let's assume 20% of households move each year
3/4 of whom are renters moving to rented accommodation	i.e. 5m buyers each year
Buying a "newbuild" property	let's assume about 20% i.e. 1m new properties each year

Average cost per property will clearly vary significantly by region, size urban vs rural etc

	Let's work with US$300,000
So the total market size is	US$300bn
Of which NY state	let's work with 5% so US$15bn

(NY state has about 6% of the US population, you might want to tweak this up or down based on higher than average density of population, more established property so fewer new builds, vs higher demand for new builds and higher average house prices).

Alternatively, or as a sense check, we could take the builder's perspective:
However this requires more in-depth knowledge and is likely to lead to too many assumptions. e.g. The largest residential property development company in the U.S. is X, their market share is Y% and thus the US market size is X/Y%, reduced to relevant geographic area.

Question 4

As important as market growth is, the CEO has heard some disturbing news about market growth and would like to know - based on historical information – what the direction of the market growth will be in the next ten years. What data do you need to estimate future trends? How would you find this data?

Relevant data and proxies:

- Historical housing prices and volumes
- Drivers for prices and volumes

- GDP growth
- Population growth
- Employment, unemployment
- etc.

Excellent answer: candidate would also point out that in order to be cautious and to sense check the historical data it might be worth looking at forecasts as well.

Data search:

- Search National Statistics Office, State and federal departments
- Contact Housing Builders' Association
- Call experts
- Acquire reports from Gartner, etc.
- Search News databases (Factiva, etc.)
- Search Analyst Reports
- Search Google

Question 5

Based on your analysis, the CEO concludes that the market may look pretty bad now, but that the drivers indicate a substantial rebound in market growth. She is considering entering the market and asks you how to do so. What are her options?

- Expand current business to new market (organic expansion – lower risk but slow)
- Set up joint venture with existing player (can be much faster pay-off but face challenges of making JV successful)
- Acquire an existing market player (risk that purchase price already captures scale of opportunities)

Excellent answer: Elaborate on the options, assess feasibility of expanding current business, and in particular focus on capabilities mentioned earlier (relationships, sales & marketing, production, finance, supplier management, etc.)

Question 6

Buildbig is not keen on spreading out its resources over different market places. The risk is too big that people lose focus. Also, Buildbig does not know much about the residential market and wants to use the expertise of an existing market player to enter. The CEO mentions that she has some excess cash on the balance sheet that she would like to invest in a business that is compatible with her current business. How would you advise her to proceed?

The candidate must show understanding that a framework is needed to evaluate the players in the market. Criteria are:

- Geography (national vs. regional player, active in relevant area, location of headquarter, willingness to relocate)
- Cultural Fit (family company, ownership structure, equal size, management style, strategy, compatible market positioning – don't want to undermine core business)
- Budget (how much is Buildbig's excess cash, are they willing to take on debt / how much are they willing to pay)
- Price (what is the total value of relevant players; **NOTE** postpone valuation to next question)
- Financial health (debt, off balance sheet exposure, unsold properties)

- Growth potential (capacity constraints if relevant)

Excellent answer: create a funnel of criteria that lead to a short list of potential candidates

Question 7

In order to complete the analysis, you need to come up with a competitive price for the various relevant market players; how do you approach this?

1) DCF of each player – this is however far too tedious for this exercise and too time consuming
2) Multiples analysis of comparable deals – this is the best way to proceed, ask for example of comparative multiples analysis. E.g. Price / Earnings, Price / EBIT; explain how you find price (deal value as reported in papers, journals, databases); explain how you find Earnings / EBIT (Annual Report) or for non-listed firms through other secondary sources.

Excellent answer: the candidate analyses the pros and cons of using the various multiples. It is, however, less relevant which one is the 'best'. The candidate takes company growth and return on invested capital into account.

Summary

Based on your research you were able to create a shortlist of 10 companies that the CEO will use to initiate her first talks. The CEO is very pleased with your performance and asks you to give a 1 to 2 minute recap of your methods and findings to the Rockgate family. What will you tell them?

Consource

Introduction

CONSOURCE is a leading outsourcing company for architects in the United Kingdom. CONSOURCE provides documentation services for architects through its operations in Taiwan. The business currently employs 275 people, including expats, local architects, and finance in Taiwan as well as 5 business development personnel in their London office. CONSOURCE has aggressive growth targets. Currently, its revenues are $12 million, of which 80% comes from UK clients and the remainder from its Australian clients.
CONSOURCE provides high quality services to its clients and is now profitable, reducing debts and facing high levels of demand. The business is looking to grow.

Before diving into the case, a good interviewee would ask what services CONSOURCE works on. For example – design, documentation, planning, etc.

In this case, CONSOURCE only delivers documentation services that account for 30% of the overall architect services market.

Question 1

What is CONSOURCE's share of the overall market in the UK?

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 there are two types of architect firms: practices (~600) and individual architects (25,000). A good place to start is to identify these two groups. Then, determine the approximate revenues and approximate the revenues of the firms.

Number of practices in UK:	600
Number of independent architects in UK:	25,000
Average revenue per architect per annum:	50,000
Revenue for independent architects:	25,000 x 50,000 = 1,250,000,000
Approximate number of architects per UK practice:	100
Revenue of architect practices:	600 x 100 x 50,000 = 3,000,000,000
Total Revenues of architects in UK:	$3B + $1.25B = $4.25B

An ideal candidate will point out that CONSOURCE may not have access to all independent architects and practices. However, for this example, we will assume that CONSOURCE has access to the entire market.

CONSOURCE UK Revenues:	80% x $12 million = $9.6 million

CONSOURCE has access to only outsourced services dealing with documentation services

Total market for outsourced services:	40%
Total market for CONSOURCE's services:	$9.6 million / ($4.25B x 40% x 30%) = 2%

Question 2

What is the market structure of this industry?

You should identify that this is a very fragmented market that is dispersed throughout the UK. Furthermore, it should be viewed that not all of the architect's business is from the UK – there is potential for work to be derived from overseas projects.

Question 3

What forces would affect these services?

Candidate should be able to break industry down by services to understand the varying effect of market forces. For example:

- **Residential:** contingent on employment sector / rates, disposable income levels, interest rates in the mortgage sector
- **Commercial:** interest rates, debt markets
- **Institutional** (Healthcare, Educational facilities): government budget / spending

Also, if the candidate can describe any current events that exemplify these, it would be exemplary: Sub prime mortgage market, etc.

Question 4

How can CONSOURCE grow its revenues?

CONSOURCE can provide services in the following manners:

As CONSOURCE is currently profitable, they can increase revenues based on the following equation: Revenues = Price x Volume

New services to existing clients
New services to new clients
Existing services to existing clients
Existing services to new clients

In this example, as this is a fragmented market, architects are quite price sensitive. For example, they can reach for CONSOURCE's competitors (freelance architects, local / smaller architectural firms) – therefore, price must remain the same. However, volume can change.

Prior to entering a new market, CONSOURCE must assess its capacity. By offering new services or servicing new clients, CONSOURCE must have the resources to achieve this means. At present, can 275 employees do additional work?

Excellent answer: A good candidate will raise this 'internal' capabilities issue. However, assume that CONSOURCE is willing to purchase a competitor and easily assimilate them into its organisation to handle new business immediately.

CONSOURCE can contemplate entering new markets outside the UK. The next question will assess how, and through what means

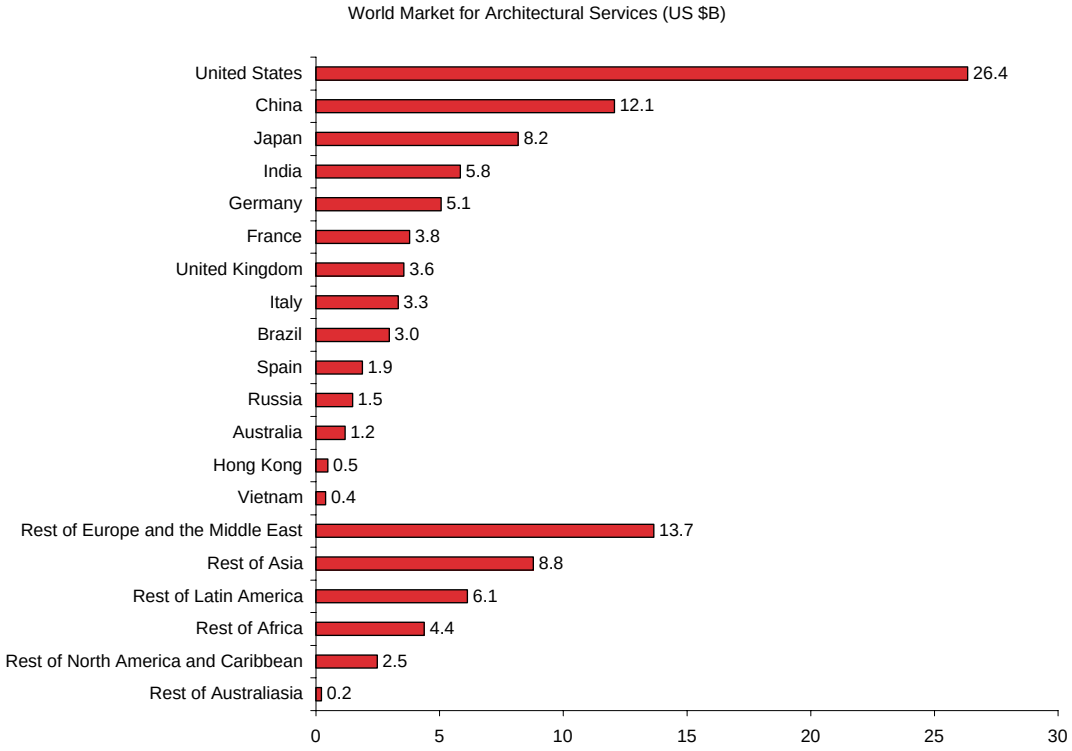
Question 5

Which markets should it consider entering and why? How would you structure this approach?

1. Snapshot of 10 Architecture Service Markets (Real GDP, CAGR)

Country	Size (US$B)	% of Global Market	2006 - 2011	2006 - 2011	2006 - 2011
			CAGR	Real GDP	% Change
United States	26.4	23.5%	5.0%	2.4%	28%
China	12.1	10.7%	6.5%	9.7%	37%
Japan	8.2	7.3%	3.2%	1.7%	17%
India	5.8	5.2%	5.5%	7.8%	31%
Germany	5.1	4.5%	4.0%	1.6%	22%
United Kingdom	3.6	3.2%	4.0%	2.5%	22%
Russia	1.5	1.3%	5.6%	6.0%	32%
Hong Kong	0.5	0.4%	7.5%	5.4%	44%
Ireland	0.2	0.2%	7.4%	4.6%	43%
UAE	0.1	0.1%	4.5%	8.1%	25%

2. World Market for Architectural Services (US)



CONSOURCE must review the CAGR of new markets and compare it with Real GDP to see if growth is likely.

Furthermore, a good candidate will structure based on the following:

- Market
  - Size, share, growth, profitability
  - Regulations
  - Trends
  - Risks
  - Key Success factors
- Customer
  - Is there an unmet need?
  - Drivers to purchase (language barriers, price, product)
- Competition
  - Who are the key players?
  - Does outsourcing exist?
  - Likely reaction?
  - Differentiation?
- Capabilities – can CONSOURCE leverage its capabilities in this market? Example: Pricecompetitive, reach, language barriers

CONSOURCE can enter these markets in one of several ways:
1) Through existing client project base
2) By opening an office in a new market
3) Acquire or JV

Question 6

What would be your recommendations to grow the business over the course of the next 5 years?

This is the candidates' opportunity to summarise the case. In short:

- Highlight the market potential vs CONSOURCE's share
- Highlight the existing industry structure and CONSOURCE's relative success
- Briefly explain which market and why?
- Likely entry into new market and constraints that need to be accounted for (employees, presence, funds)

Additional comments can include the changes in trends, market forces and their impact on selected markets, cycles in the market – risk of increasing capacity too much too soon.

Cost Reduction for a Commercial Bank

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 **no 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

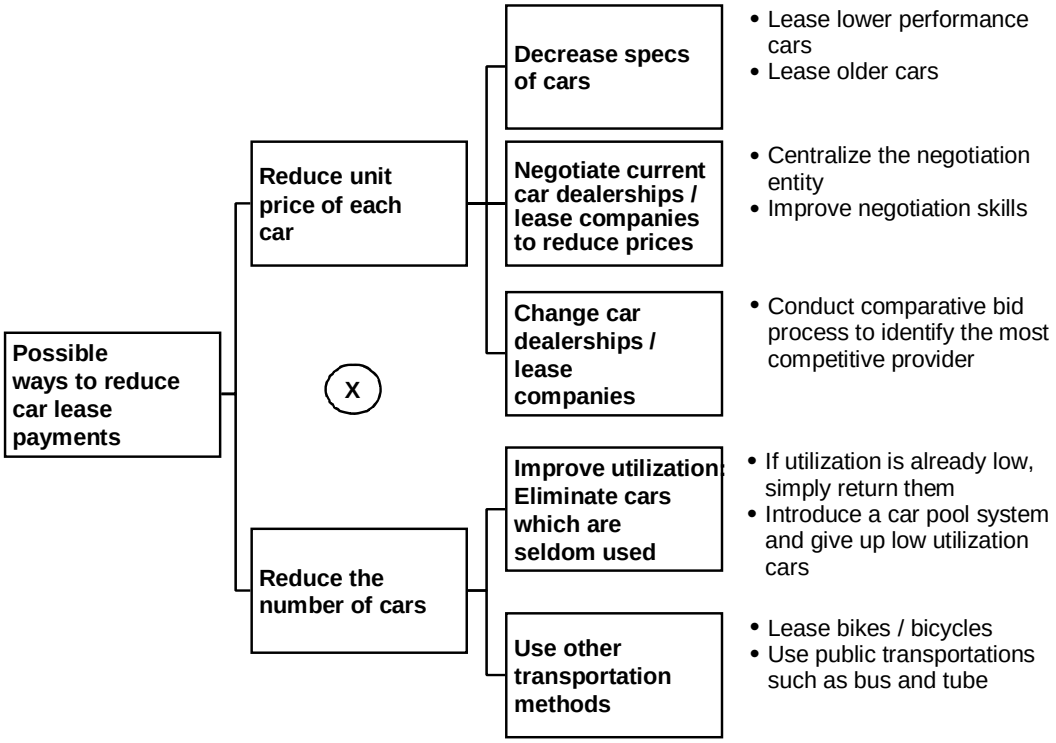
After reviewing all items, your team found that car lease payments were a significant amount and that past cost reduction activities were limited. Most cars are used by the sales team. The sales team use the cars to visit clients.

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)

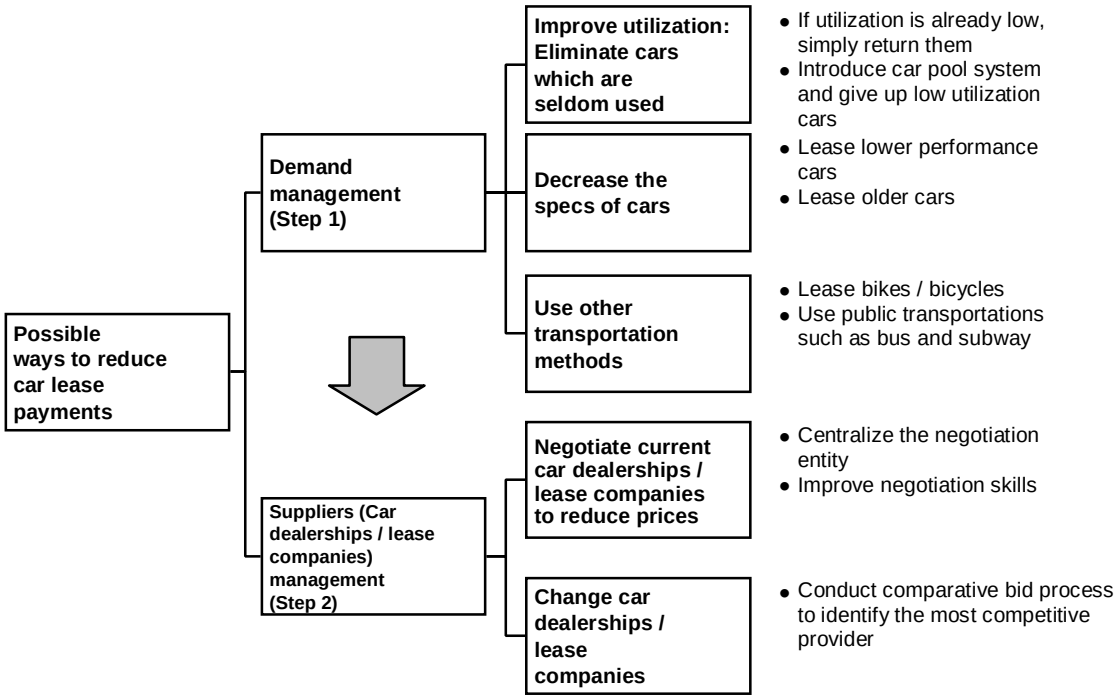
You may consider many ways to reduce costs. However, the most important point of this question is how you structure your solution in order not to miss big buckets. The following are possible structures to answer this question.

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.

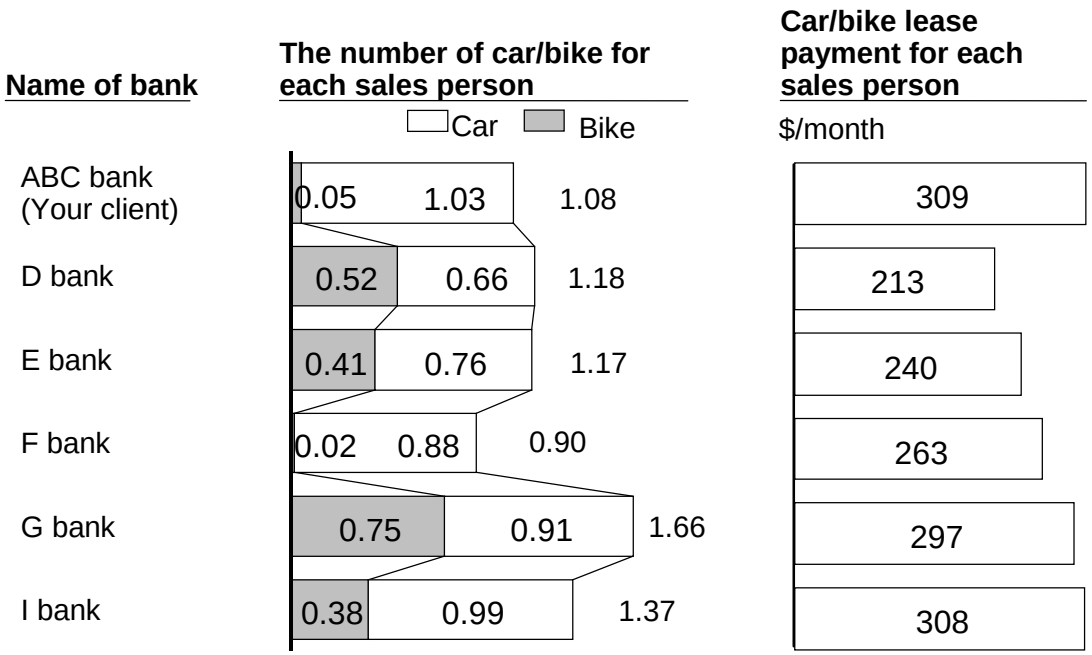
Tip: Some people might suggest that 'reducing sales force' or 'using emails instead of going to client' are good ways to reduce car lease payment. However, these are not practical answers because the primary objective of the client is not to simply reduce costs but improve profitability. These actions 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)	Assuming that you can achieve 33% price reduction	$54M (2M is from the bank)
Cost of sales	$40M		$40M
Gross margin	$15M		$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."

Drinking Water Purifier

Introduction

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/neutralised. 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?

Question 1

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 analyse it:

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

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

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

- Analyse 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:

1. Estimate the likely market size (in number of households)
2. Calculate the potential consumption per household (sachets per annum)
3. 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 summarise 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 summarise 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 summarise 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 1/7th (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 1/7th 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 summarise 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.

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

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.

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

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

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

- Location
- Procedures offered
- Price, etc.
- 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 roomsfor 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.

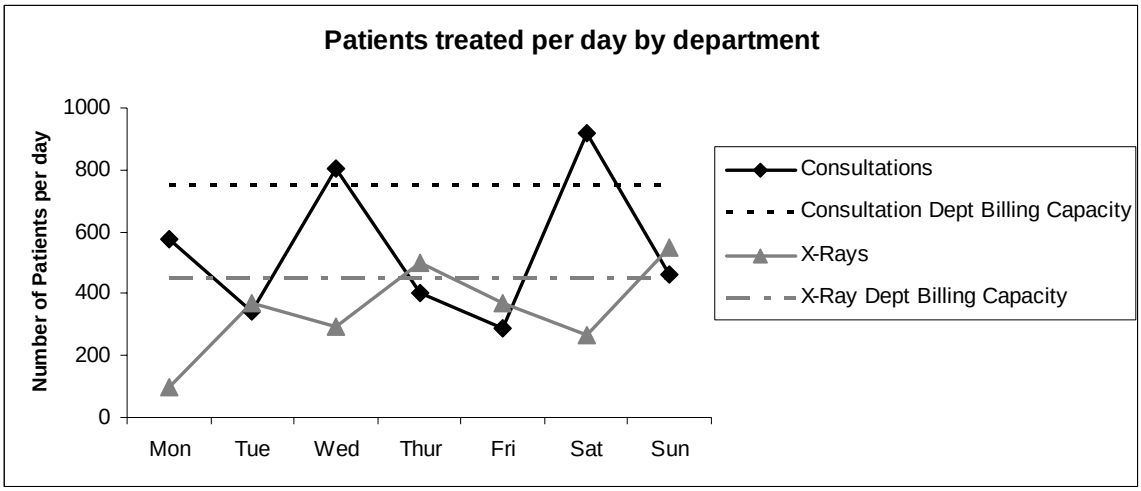
Bottlenecks:

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.



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.

Intelligent Completions

Introduction

Our client wants to invest in an upstream oil & gas equipment and services high-tech start-up.

Question 1

Should he do so and how? I want you to please give me a brief overview of how you would approach the problem.

The interviewee should then ask a few clarifying questions about the client and investment.

The following information would be provided if relevant questions are asked:

Clarifying Questions	Additional Information
What does the client do? Are they a major investor, a holding company, etc.?	Our client is an investment company of UAE's government. They are a holding company and have acquired companies in the past across different industries without any strategy in mind.
What are the objectives of the investment?	The investment should be in the order of billions of dollars, very profitable and growing. The client wants to have a global footprint but above all brings benefits to Middle East.
The oil & gas sector is broad. What sector or company does he have in mind?	He wants to invest in upstream, which refers to exploration and production of oilfields

Note: The interviewee may then ask for some time to structure his/her thoughts

A good answer would be broken down in three parts:

1) A better understanding of the market in terms of indicators
- Size
- Growth
- Profitability
- Key success factors
- Customer segmentation
- Suppliers

2) Research of the competitive structure and business sense of the investment.
- Who are the market participants
- How is the market distributed (what would our client's share of the market be upon entry?)
- Can we have a competitive advantage; otherwise, it would not make business sense to join this market
- Finally, I would like to know what the barriers to entry/exit, substitutes and risks are

3) If the investment make sense financially and strategically? How could they enter?

Market/Customers	Competitors/Business Sense	Investment/Entry
• Indicators: size, growth, profitability, life cycle • Business model/Key success factors • Customers: segmentations, drivers • Suppliers	• Competitors: segmented/consolidated, market share distribution • What is our value proposition? Can we have a competitive advantage? • Barriers to entry/exit • Substitutes • Risks	• Financial success: NPV (capital investment, future cashflows) • Strategic success: benefits to Middle East and synergies across existing portfolio • Entry ways: scratch, JV or acquisition

Question 2a

The client wants to invest in upstream, which refers to exploration and production of oilfields. We did an extensive study of the upstream sector and **intelligent completions** was one of the target sectors, chosen due to its commercial attractiveness, fit with UAE's objectives and ease of success.

Good, the market size in 2003 was $122m and has grown at 42% CAGR. What is the size today?

Note: The student should ask here what "Intelligent Completion" is, or at least clarify that he has the same understanding as the interviewer

Intelligent completions are **products for the oil & gas industry** (downhole sensors and remotely actuated flow control devices that allow access to real-time information and enable fast decision-making). The reasons for installing intelligent completions are to increase production and ultimate recovery, as well as reduce capital and operating expenditure. This is a high R&D, high tech emerging industry in oil & gas.

Assuming a size of $120 million in 2003 and 40% CAGR, the size today would be approximately $476 million.

Question 2b

Good. It is slightly higher: $490m. Do you think it is a good market to be in?

It depends on whether the market will experience similar growth in the future. Do we have any information on future growth or should I look at likely drivers?

Question 2c

How would you find out the future growth for the industry in UAE?

Market reports, or by looking at the evolution of this technology in other more mature markets

Good. Market analysts and industry drivers forecast similar growth within the next few years. By 2010, we foresee a market of $1.35billion. Profitability (EBIT) today is about 25%. Do you think this is a good number?

It sounds really good, though it also depends on the profitability of the market.

The average profitability (EBIT) of the oil & gas industry is 15%.

So intelligent completions has an above average profitability, which makes it more attractive.

Question 3a

Indeed. The market leader is a company called Welldynamics. They hold 51.4% of the global market. This is a JV between Halliburton and an investment company of Shell. We believe our client could acquire a 49% stake in Welldynamics and do a JV with Halliburton. How much will the equity stake cost?

There are different ways to calculate the acquisition cost of a firm (e.g. through a discounted future cashflow analysis or through ratios). I have 2008's revenues of Welldynamics and industry profitability (EBIT); using an appropriate EBIT multiple, I could get the acquisition cost of 49% of the equity.

Summary of relevant information provided so far (note in the case interview it may be assumed that you have caught all this information, rather than that it is neatly provided for you in a table)

Market size in 2003	US$ 122m
Market size in 2007	US$490m (CAGR 42%)
Market Size 2010	US$1.35bn
Current market EBIT margin	25%
Oil and Gas industry EBIT margin	15%
Welldynamics market share	51.4%
Proposed stake in Welldynamics	49%
EBIT multiple for this industry	10*

*note this figure is given in this case. There might be circumstances in which you would need to suggest an appropriate multiple for the valuation so it is worth knowing likely ranges and the factors which might drive these figures up or down.

Good, use 2008's revenues as the company will likely be acquired a year from now

Calculation:
OK, I do not have the 2008 market revenues but they can be derived from the 2007 figures calculated in an earlier question.

2008 market revenue = 1.4 x $490m = $690

2008 revenues of Welldynamics = market size x market share
= $690 million × 50% = $345 million

2008 profit of Welldynamics = revenues x EBIT margin
= $345 million × 25% = $86 million

Cost of Acquisition = equity stake x EBIT x EBIT multiple
= $86 × 50% × 10 = $430 million

While you would not be expected to know the relevant levels of EBIT multiples in different industries, it might be relevant to ask questions at this point which seek to sense check the results versus other activity in this market. You might want to sense check whether the 10 multiple for the industry is comparable with that used in other recent and relevant transactions.

Question 3b

Good. If our client acquired a 49% equity stake in Welldynamics in 2008, when would they recover their investment?

Note: The interviewee should only be asked to write the components of the cashflow analysis rather than do the entire calculations

Using a cashflow analysis and a solve function in excel, I could figure out how long it will take them to recover the investment.

Note: A breakeven calculation does not take into account the time value of money, whereas a cashflow analysis does

(all numbers in millions of $)		2008	2009	2010	2011	2012	2013
Period	0	1	2	3	4	5	6
Real CF	-375	40	56	78	110	154	215
Discount Rate (10%)	1.00	1.10	1.21	1.33	1.46	1.61	1.77
DCF	-375.00	36.36	46.28	58.60	75.13	95.62	121.36
NPV for 6 years	58.36						

The interviewee should be capable of drawing the conclusions below

- Revenues in 2008 of $150 million with 25% profitability yield $38 annual profits. Assume $40 million annual profits
- Up-front investment of $375 million as obtained before
- Assume 10% cost of capital

Question 4

Very good. Finally, how would you go about deciding which stake of the venture to acquire – Halliburton's or Welldynamics?

It depends on what benefits our client and the potential partner the most. Our client would want to partner with a company from whom he can learn and even bring potential benefits to their existing portfolio. Similarly, our partner should benefit the most from our client's capital capabilities. Our client should partner with whom he has the highest potential to create value. Through whom could we maximise synergies?

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[1]. It should be related to the initial issue of profitability, include the saving. Rambling is not good.

1 The Pyramid Principle by Barbara Minto

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.

Japanese Bottled Water Market

Introduction

Our client is a UK based bottled water (natural mineral water) company whose market share has been growing in the past couple of years. The company covers the markets of the UK, France, Germany and other major European countries. The water is sourced and bottled in Scotland.

The Japanese bottled water market used to be small, but in the past 10 years the market has expanded almost 10 times. The client asked us to determine whether or not they should enter the Japanese market and what their entry strategy should be.

Question 1

What are the characteristics of the product (natural mineral water) from the marketing point of view? In other words, what are the major differences from the other soft drink products, such as Soda?

- Difficult to differentiate (water is water)
- Brand image is everything

Question 2

How do you plan to approach the problem? What are the key areas you want to focus on to analyse the problem?

- Competition
  - How many competitors?
    - There are 2 big national brands, which are biggest in Japan, followed by Evian and Volvic.
  - Differentiation factors
  - Substitutes
    - Biggest substitute is bottled tea. Japanese traditionally prefer tea instead of water during meals
    - Another big substitute is tap water, which is good enough for drinking, but isn't always tasty
- Consumers
  - Segmentation – who is likely to buy bottled water? Demographics?
  - Drivers of purchase behaviour
    - Image, brand important to Japanese
    - Need (thirst)
    - Price
  - Consumer trends
    - Bottled water is getting popular as health issues rise in importance
    - Could it be the lack of water fountain driving up bottled water sales?
- Capabilities/Core strengths
  - Brand
  - Distribution channel
    - What is current distribution channel? What is our client good at?
    - What distribution network is required in Japan? Main distribution channels are convenience stores, super markets and vending machines
  - Cost structure
    - Major cost buckets: COGS, freight & border, distribution, marketing and advertising, SG&A

Question 3

When your client enters the Japanese market, what do you think is the most important key success factor? Give only one answer.

Distribution channel: definitely the most important KSF when you enter the existing market. In order to secure the space in convenience stores and vending machines (to make products available in market), you need to tie up with a major Japanese beverage brand.

Question 4

Try to segment the Japanese bottled water market. What criteria do you use?

Some possible areas might be:
Urban vs. Rural (Geography)
Note: In rural areas, people don't usually buy bottled water because tap water is readily available and good/tasty enough

Adults vs. Children (Demography)
Note: Children might prefer other drinks which are sweeter

Household vs. Restaurant

Question 5

Estimate the market size of bottled water in Japan. FYI, in Japan the population is 120 million and the ageing group is bigger than in the UK. The typical price is 200 yen (1 pound) for 1.5 litres.

Market size = # of people drinking water * # bottles/person * price/bottle

Some assumptions:

Urban portion of population = 50%

Only adults buy bottled water

# of adults buying bottled water = ¾

# of bottled drinks/week = 2

Water portion of bottled drinks = 1/3

60 mil (urban population) * 3/4 (adult) * 1/3 (water vs. tea) * 200 yen * 2 bottles/week

= 300 billion yen (1.5 billion GBP)

Note: Actual figures: 350 billion yen in 1995

NewsCorp UK

Introduction

Your client is a newspaper/magazine company in the UK with approximately £2bn revenue. Business is very lucrative, but revenue is expected to decrease slowly in the coming years.

Question 1

Before we proceed further, you have been asked to estimate the total market size for print titles in the UK for weekly and bi-weekly magazines. What is your response?

Let's start by considering how a print title makes money (i.e. how are we defining the market?).

We might consider 2 different revenue streams:

- **Subscription**
- **Advertisement**

In both cases the revenues will be a function of circulation numbers so let's estimate the volumes in this market in terms of circulation.

Estimating circulation volumes:
Population of UK = 70 million
Less 10% at both ends of demographics = 56 million individuals
Assume each one reads one magazine per week, including the free magazines on the tubes etc
= 56 million per week or 56 m* 50 weeks
= 2.8 billion per year.

<u>Using this approach we can then determine:</u>

- **Subscription revenues (based on an average price per issue)**

  Let's say £2 as an average price per issue for about 50% of the circulation with the remainder being free publications to give a market revenue from subscriptions of £2.8bn

- **Advertising revenues**

  These figures will include the free publications, but will vary massively by type of media, socio-economic groups, age groups which make up the target audience, glossy vs newsprint, etc
  An approach might be to estimate about 20 half page spreads per publication and take a typical cost per half page spread in order to derive advertising revenues. We could then sense check this vs the typical balance of income from advertising vs from subscriptions.
  Do you have any further information on this that I should use for developing this side or would you like me to consider some relevant comparisons?

That's a great start and I am happy that you have considered both dimensions in sufficient detail for our purposes at this point.

Here is some additional information that will be relevant for this case.

The company has a strong focus on print titles. They have 20 different print magazines. Each of these magazines have individual editions on the web. Presently, only one web edition is making money.
The company has burnt a lot of money during the tech/internet bubble in 1999/2000 buying internet start-ups.
As a result, many managers are very resistant to invest in any internet activities.
However, M&A activities between media and internet have been increasing. Some managers complain about losing internet presence, others remember the pain.

You have been hired to assist the company determine their response.

Question 2

What should the company do with the internet opportunities? Let's start with considering how you might structure the approach to this question.

Well, when I look at the internet opportunities I would want to consider the following categories. I have outlined a couple of examples in each to give a feel for its scope, but let's structure the approach and then drill down in each case to give it some further granularity.

- Future of media usage
    - Trends
    - Their implication on internet and print media usage
- Internet market
    - How to structure it and how to size it?
    - Where and how companies earn money in the internet?
- Company
    - Analyse resources
        - What are the key competencies of our client?
        - Are these competencies transferable to the internet?
    - Analyse the current 20 web pages. How is it organised?
    - What is the current political landscape (pro/contra internet) within the company?
- Recommendations
    - Have some quick ideas …

Question 3

That's great. Thanks for the overall structure. Now, let's examine the future trends of the media and internet in a little more detail. What could be some possible trends and their respective key drivers?

Overall trend is that traditional media is on the demise while the internet is rising. Possible drivers of these changes in usage patterns include:

Technology
- Digital equipment getting smaller and cheaper
- Smaller screens (blackberry, etc)
- Increase in broadband connectivity

Society
- Individualisation / customisation of content
- Less regulations
- Long tail interest - obscure sports and interest

Consumer expectation

- Life long learning
- Work life balance
- Freelancers

These clearly have an impact on the economics of the internet market:

- How to structure it and how to size it?
    - Electronic commerce (banking, travelling, companies like Amazon, e-bay…)
    - Paid content (music download, gaming,…)
    - Advertisement (search engine, image advertisement, marketing)
    - Services (web hosting …)

In each case it is important to consider where and how companies earn money through the internet? (e.g. how does an internet portal make money?)

Question 4

How would you analyse your client's capabilities?

(Suggested approach would be along the who, what, how framework)

- Who are the clients?
    - Professionals
    - Early adopters of technology
    - Connoisseurs / Fanatics
    - Business expertise in: Marketing, Sales (distribution), Content (Journalism), Sales of Advertising space

- What do they sell?
    - Customer Experience
    - Expert advice

- How do they deliver?
    - Profitable website has forum that allows members to connect with each other.
    - Revenues are primarily from online advertising (90%) and subscriptions (10%).

- Other internal capabilities
    a. Strong reputation among readers.
    b. Attracts high journalistic talent.
    c. Maintains strong links with suppliers and enjoys preferential rates in long term contracts. However, management believes that the preferential rates cannot be sustained for long.
    d. Likewise enjoys profitable relationships with advertisers. Able to command a premium in the print industry advertising rates.
    e. Early adopter of technology in other areas of operations. Fear of technology is strictly limited to creating an online web presence.

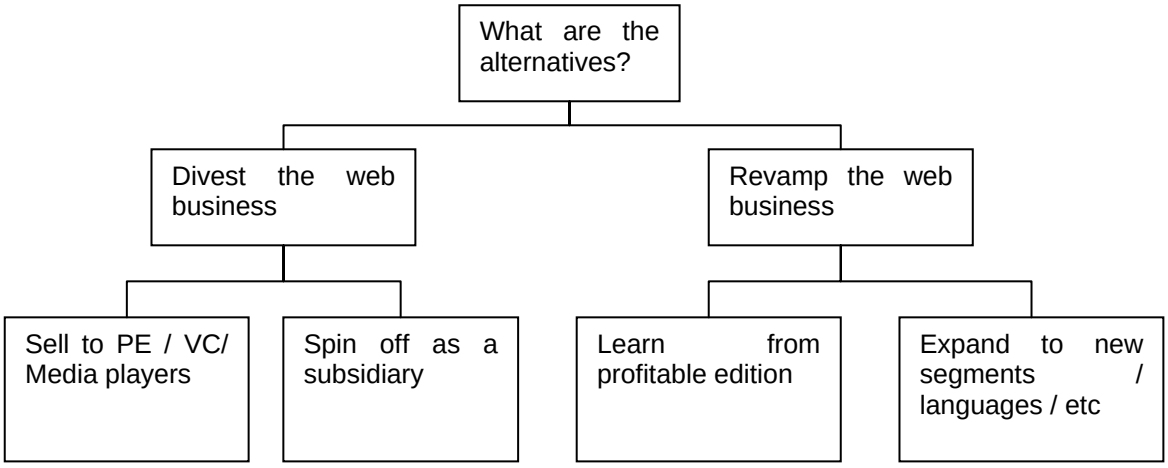
A critical step is to understand its current successes to determine if they can be replicated:

- Analyse the current 20 web pages. How they are organised?
    - Understand revenue models?
    - Understand why 1 publication is profitable, differences to the other 19 pages

Question 5

Can you suggest some solutions for the client?

One possible frame work could be



An excellent answer would also mention:
In addition to this framework and comparing the different alternatives, it is also valuable for clients to explore some possible quick win, possibly as a way of funding other longer term alternatives. Some of these might include:
Expand profitable publication
Bundle all 20 publications
How to increase audience? Partnering with general interest portal?

Summary
As you leave late in the evening, you run into the client CEO in the hallway. He asks for a quick update. What would you say to him in one minute?

Oil & Gas Inspectors

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 overland. 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 kilometres 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.

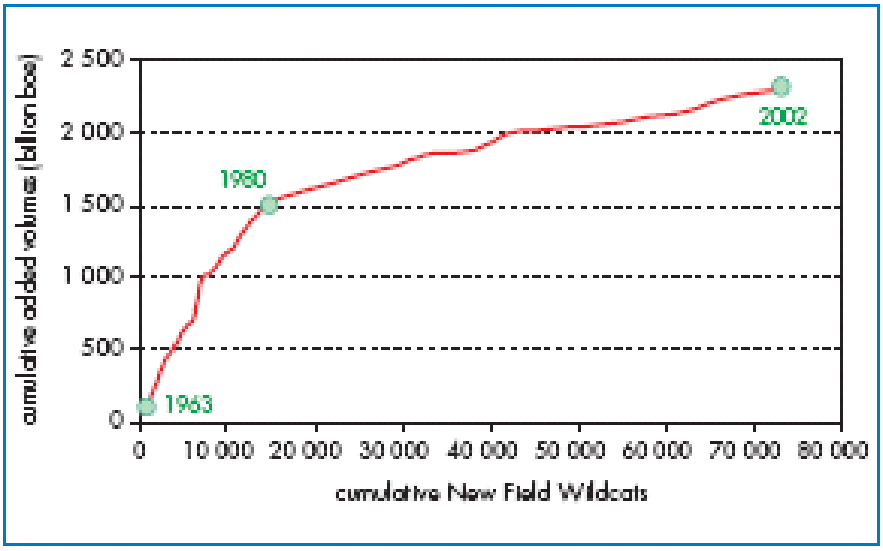
Question 5

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



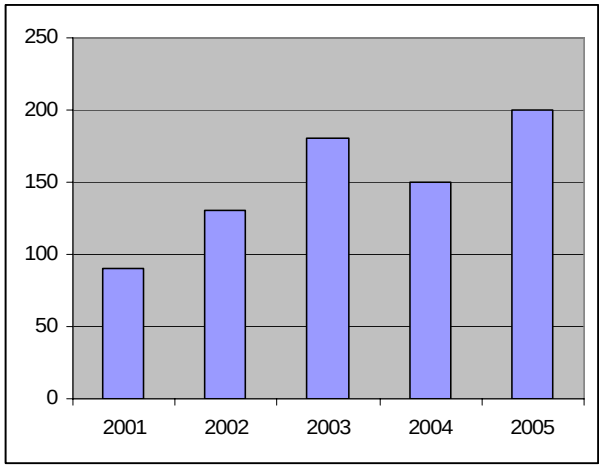
Source: IEA analysis based on IHS Energy database.

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.

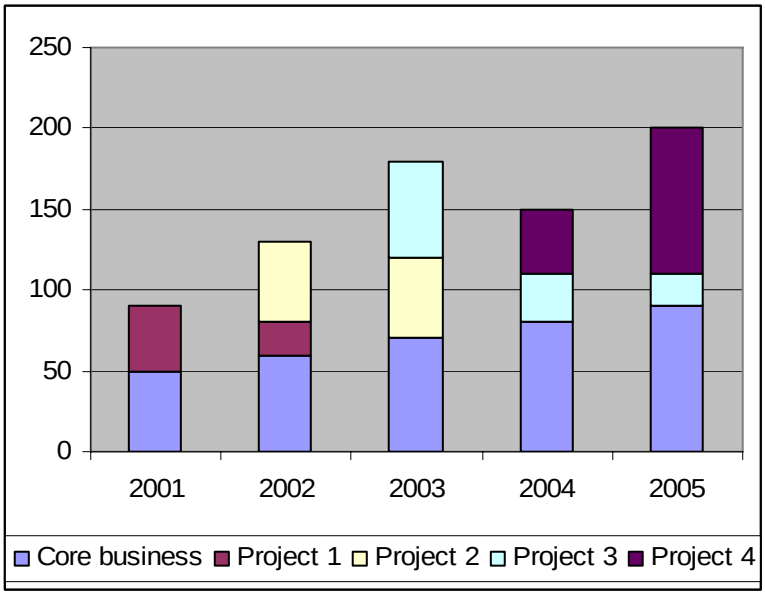
This is another graphical interpretation question, designed to get the candidate to think critically about the nature of the revenues given the fact that oil and gas projects are often sizable and have defined duration.



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 summarise 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.

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:

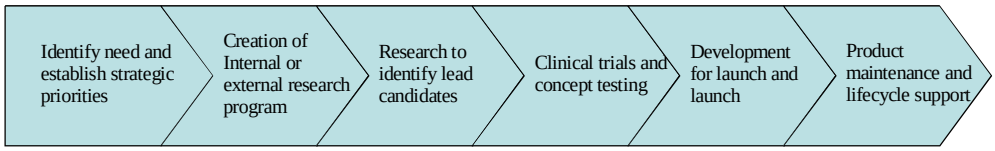
- Unclear organisational structure
- Lack of useful management control procedures/tools

Question 3

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, so what do you think the R&D process would look like?

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



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 • Defensive approach/cover all bases • World leading scientist in-house	• Highly competitive and volatile • Opportunistic and entrepreneurial • 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:

$$1 = Flow_{D \to Out} * 50\% \;\; \Rightarrow \;\; Flow_{D \to Out} = 2$$

$$Stock_D = Flow_{D \to Out} * Number \;\; of \;\; years = 2 * 2 = 4$$

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 summarise 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.

Postbank

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

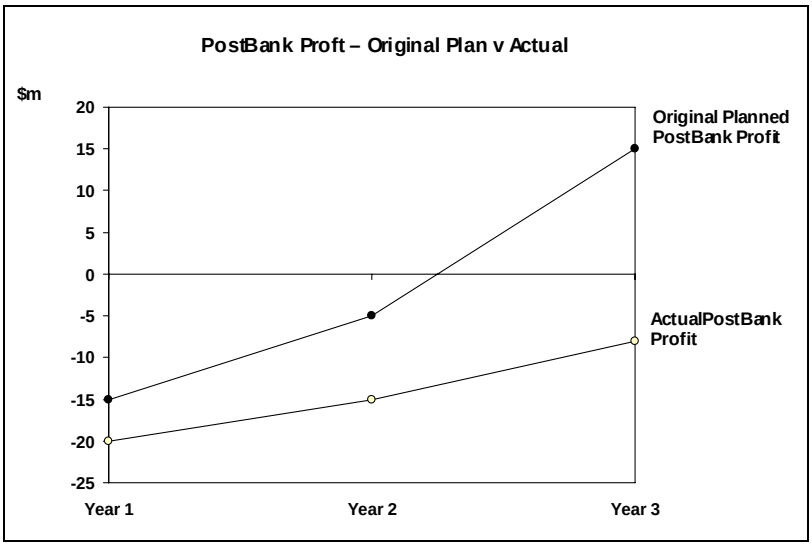


Exhibit 1 shows that profit performance has been much lower than planned. What could explain this performance?

A good answer would identify the following potential causes of lower than expected profitability:

This question is a good warm-up. Candidates should structure their answer in terms of volume (both sales and attrition), price and cost.

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
- Skew in customer base towards the older and poorer clientele who are over-represented in PostCo's customer base

- Original plan too aggressive
- Feasible, given that the original plan was put together in a deal environment

Volume – Attrition

- Account closings higher than planned
- Low prices attracting product switchers – lots of hot money
- Inadequate service levels within the branch

Price

- Product pricing keener than anticipated
- Transparent, concentrated market – high likelihood of price response to introduction of price led offer by incumbents or other entrants

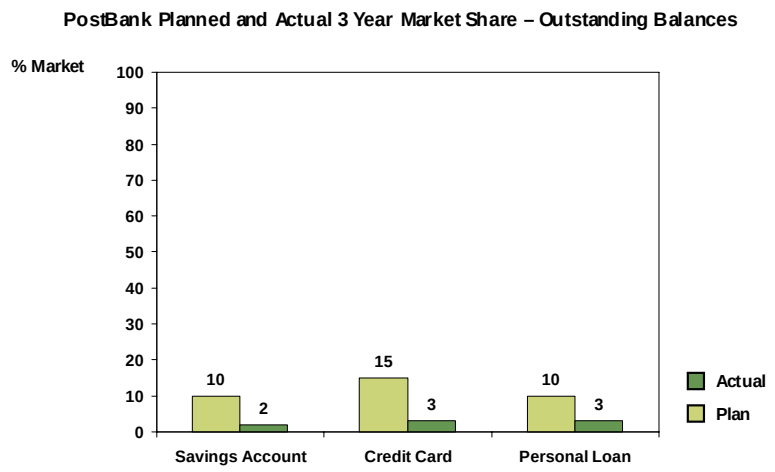
Cost

- Fixed costs spent as planned, but spread over less volume than anticipated
- IT, branch network and, to some extent, marketing expenses are largely fixed to sales volume
- Potential higher marketing spend than originally anticipated with managers getting nervous in response to lower than planned sales
- 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?

POSTBANK HAS NOT ACHIEVED MARKET SHARE TARGETS



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.

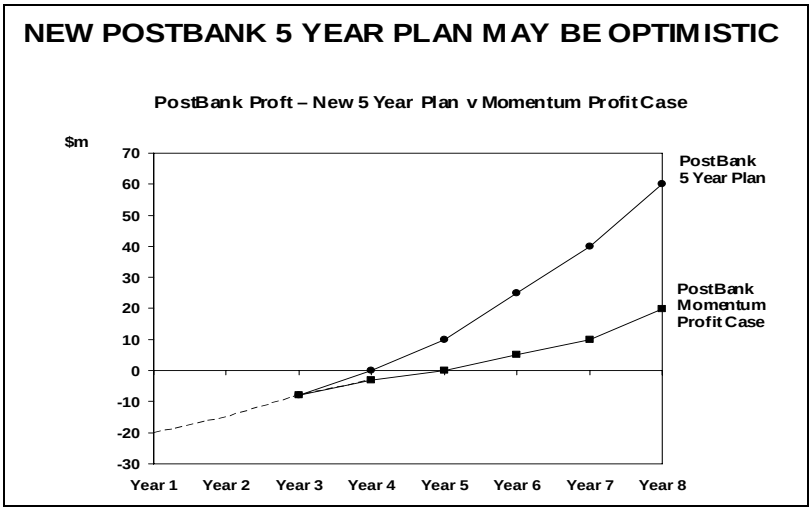
A good answer would identify that the commission structure should trade-off the profitability of the product to the JV and the relative income/hour to the branch staff when compared to other products.

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

Premier Events

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.

“Sports Nuts”

Introduction

Our client is a Private Equity company that invests in UK-based mid-size companies. They are considering the acquisition of a British company, Sport Nuts, which operates in the sports-nutrition space. They have asked us to help them assess this opportunity, but time is limited and they would like to have a decision as to whether to acquire or not within a matter of hours. The two main questions that need answering are:
Is it a good industry to be in?
Within this space, is Sport Nuts the right company to invest in?

Question 1

Given today’s time constraints, we are going to focus in this interview only on the <u>first question</u>. What approach would you suggest to find out if sports-nutrition is a good industry to be in?

Interviewee should clarify the problem and seek more information on the industry:

Could you explain to me what the definition of sports-nutrition products is?

Sports-nutrition products are protein-based bars, shakes or pills that are used to increase sports performance and build muscle. This is a very new market in the UK. It started only 3 or 4 years ago with bodybuilders. Since then it has spread to athletes and now we are seeing a trend towards casual gym users who use it to help maintain muscle tone and body shape.

The interviewee could then ask for any other clarification, eventually repeat the main question and take a few minutes to structure the answer.

In order to assess how attractive the UK sports-nutrition industry is, I would suggest analysing the following aspects:

Market: size, growth rates, history, projections, saturation rates

Customers: segmentation, consumer behaviour, motivation

Value chain: industry structure (who has the bargaining power?)

Financials: Margins of companies in this industry

Externalities: disruptive macro trends, change in legislation, possible entrance of big companies from the food industry

We are trying to establish the market attractiveness, therefore an analysis based on Porter’s 5 forces would be perfectly acceptable. However, adding the idea of market size and potential growth would be very important, given the context – recent trend that has captured the attention of a Private Equity firm.

Question 2

This seems reasonable to me. Shall we start with an assessment of the market?

OK. I would first like to understand the market size. Do we know the size of the UK sports-nutrition market?

If you had to find out this market size (imagine that you are in the shoes of the consultant, in a real case situation), what would you do?

I can think of two options: primary and secondary research.
I would start with secondary research: industry reports and analyst reports. If we have the budget for that, I would probably buy an industry report (e.g. Mintel, Datamonitor) and check the websites of associations in the sports-nutrition space. Alternatively, if there are only a few players and their revenues are published, I could do a bottom-up calculation of the market size: I would add up the revenues of those companies.
If the secondary research is not successful (the information is not available, or not reliable), I could also do some primary research: call experts, associations.
As a last alternative, I could try to estimate the size of the market with a top-down calculation But I should first understand the customer base in order to be able to do that.

> Very good. Actually, we have bought an industry report, and the UK sports-nutrition market for 2008 (estimate) is 100m GBP.

Thanks. You mentioned before that this is a new industry. Do we have information about historical data and projections for the future of the UK sports-nutrition market?

> We know that the market has been growing very rapidly and is predicted to continue growing, but we don't know for how long.

In fact, it would be really interesting to find out the full potential of the market. How could we try to predict what is going to happen in this market?

We could consider the possible drivers for this market, or look at a comparable market that is more mature (a market with the same dynamics). For example, if we assume that sport nutrition products reflect the health consciousness of the people, we could try to forecast this, maybe using some published market research. Alternatively, we could look at somewhere like the US, where in general consumer goods developments are ahead of the UK, and try to get the penetration curve of sports-nutrition products there.

> Looking at the US seems a very practicable idea to me. The market size for the US sports-nutrition market is available: 5bn GBP (we express it in GBP for simplicity). We can also assume that the US is now a mature market and therefore has reached its full potential.

Can we assume that the penetration rate of these products and the average expenditure will be the same at maturity?

What would be your guess on that?

I would assume that in the US, people are more health conscious and therefore go to the gym more often. Regarding the average expenditure of sports-nutrition products, I guess it would be similar in the US now and in the UK at maturity.

Good. Then let's assume that the average expenditure in the US now and in the UK at saturation is the same.

Let's also assume that in the US:
only 33% of the population goes to gym and of that, only 50% consume sports-nutrition products.

For the UK, we believe that at saturation:
only 15% of the population will go to the gym and of that, 50% will consume sports-nutrition products.

Question 3

Using those assumptions, could you now please calculate the full potential of the UK sports-nutrition market?

I will first calculate the average expenditure per year in the US today:

Average Expenditure per consumer = Market size / Number of consumers
= 5,000 (million GBP) / (33% x 50% x US population)
= 5,000m / (0.33 x 0.5 x 300m)
= 100 GBP / person

Let's do a quick sanity check: if a person goes to the gym twice a week and consumes one shake each time… Assuming a price of 1 GBP/shake, we obtain an average expenditure of:

52 weeks x 2 x 1 GBP = about 100 GBP/person.

Therefore the value we obtained before looks quite reasonable. (If the interviewee is wildly off the mark at this point, direct them towards a reasonable sense check)

Now I will calculate the full potential of the UK market:

Full UK Market Potential = Average Expenditure in US x Number of consumers
= 100 GBP/person x 60 million persons x 0.15 x 0.5
= 450 million GBP

So, according to my calculations, the UK sports-nutrition market could reach a size of 450m GBP (4.5 times the current size). Now I understand why the Private Equity firm is looking at this industry.

Question 4

That's absolutely right. Now, ideally we would continue analysing all the points that you mentioned in your initial structure. However, given the time constraint, we won't be able to do it. Instead, imagine you have the possibility of calling 3 experts in the sports-nutrition space and ask them 3 specific questions. What would you ask them? (You can take a few minutes to think about it and you can assume that we are comfortable with the assumptions that we took previously.)

The interviewee should go back to his initial structure and prioritise. He should then be able to formulate the questions clearly. It is important to check the high level thinking of the candidate. The questions should cover the main factors that could limit the growth of the potential market established previously. It is also important that the candidate does not start talking about the specific company that the PE wants to acquire, since we are only analysing the industry as a whole.
Possible questions:

Are you aware of any upcoming legislation concerning the sports-nutrition sector in the UK?
In your opinion, who will profit most from the growth of the UK sports-nutrition industry?
How will the distribution channels be affected by this huge expansion?
How likely is it that large established US players in the market will expand to the UK?
What are the latest innovations in the US in the sports-nutrition market?
Do you think that the UK market's evolution will follow a similar timescale as the US markets did?

Thank you very much for your analysis.

A very good candidate may have completed this case within the allotted time, so if time still remains, the interviewer can ask the candidate to talk about the other question mentioned at the start:

Question
What factors would you expect your client to look at when considering whether Sport Nuts is the right business to invest in within this market?

Possible answers include:

The quality of the management team
Financial measures relative to their competitors (cash flows, profitability, debt coverage, etc)
Capital structure and opportunities for restructuring to improve post-tax returns
Supplier and customer relationships
Opportunities to sell off part of the business
Likely return on investment and timescale for exiting the business
Operational efficiency and areas for cutting costs

The candidate should not just provide a 'shopping list' of factors to look at – there should be some structure applied, such as looking at the various elements along the value chain.

Taxation in Malaysia

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.

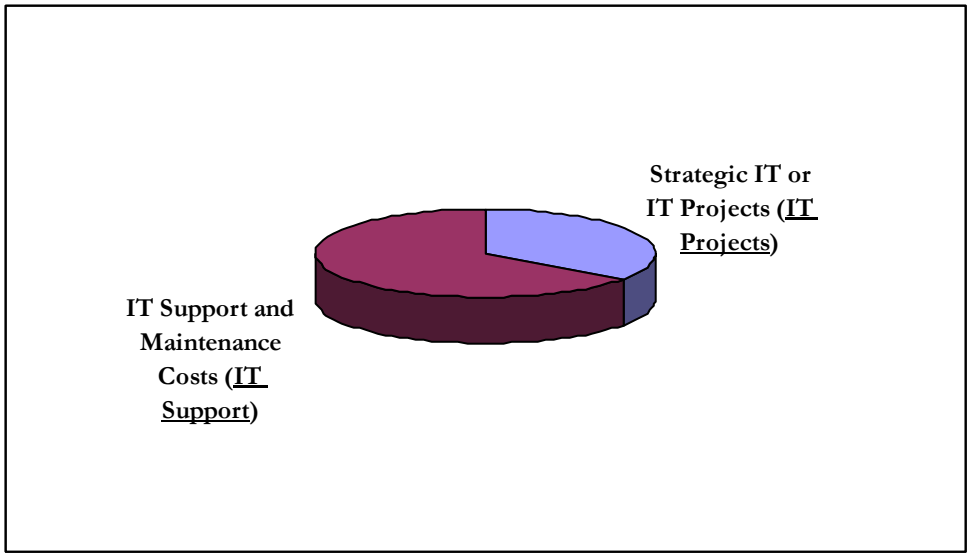
Question 3

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

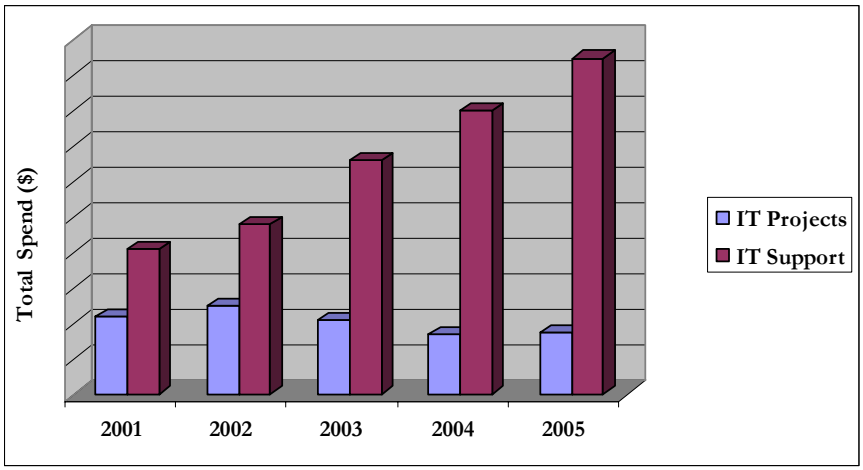
What other external factors or shocks do you thing would drive IT costs for a Government organisation?

Looking for creative answers.

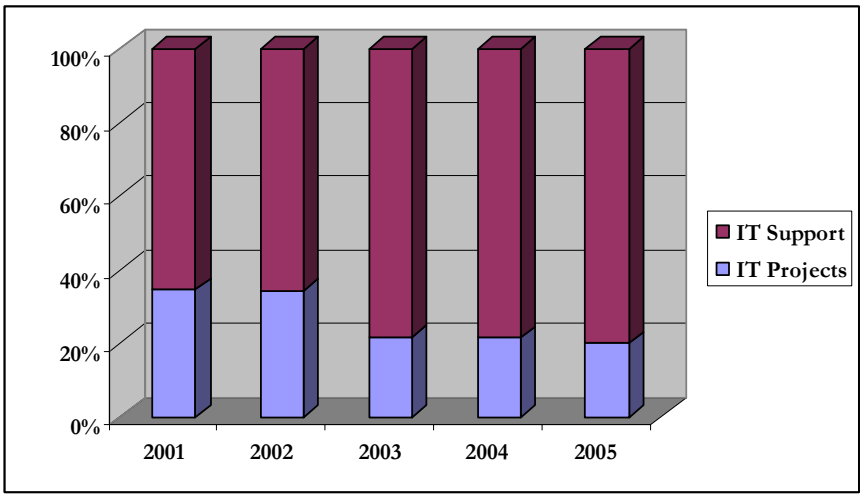
- Legislative changes
- Demographic shifts which impacts the strain on specific systems for specific taxes
- Financial industry innovation which require the development of new systems to manage taxes
- Underlying technological or standards changes
- Customer pull and demand for specific online services

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 programmes 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.

Urban Fitness

Introduction

Founded in the early 1980s, Urban Fitness is an international chain of fitness clubs headquartered in Boston, USA. It was one of the earliest entrants into the Chinese market when the first Urban Fitness gym opened in Shanghai in 1992. Over a 15 year period, it has grown into a dominant player in this fast growing market. However, since last year, the company has been unable to gain market share and is experiencing a steady decline in profit.

Question 1

How would you go about giving recommendations to the Urban Fitness management team on reversing its declining profit?

This is a typical declining profit question. The interviewer gives a hint that the root cause might lie in competition, but you should consider a comprehensive structure such as the three Cs (Company, Customers, and Competition). The student should certainly ask a number of clarification questions, such as:

- What has been the market share evolution for the past 5 years?
- Who are the major players in the professional fitness club market in China and how have their market shares been changing in recent years?
- You also need to understand how revenue and costs are made up – what are the different components of revenue/costs?
- What is the percentage of fixed revenue vs. variable revenue? Fixed costs vs. variable costs?

The interviewer explains the following (or less, depending on the questions asked):
The competition landscape is represented by a small number of relatively large rivals (international brands) and a long tail of small local players. Urban Fitness made about 60% of its revenues from membership fees. The other 40% came from add-on sales at the clubs, including drinks and snacks sold at the bar, sports clothing, fitness equipment and a percentage of the fees charged by the personal trainers. Urban Fitness has invested in a very high quality of fitness machines. It has two major competitors – Ultimate Sports and Good Health. Ultimate Sports is the best quality competitor, but it is smaller and its brand is less well established. Good Health has grown rapidly, and membership fees are very low; they make more money on other services such as beauty and health advisory.

At this point, the student should have your structure laid out and have enough information to understand the situation.

Question 2

You have collected important information about the market and competitors. Can you lay out some hypotheses with regards to what is going on in the Chinese fitness club market?

What the interviewer is trying to test here is your critical ability in building different, but plausible, hypotheses in a holistic and "MECE" (mutually exclusive and collectively exhaustive) fashion. It's best if you can draw in front of the interviewer a matrix or issue tree so he/she can see clearly that you are not missing any possible explanation.

Some examples of reasonable answers, based on two branches (either the competitors are in the same or different markets), could be:

Hypothesis 1: Urban Fitness and the other clubs compete in the **same market** which is experiencing a slowdown.
This is perhaps unlikely in China being such a young market with large population and potential customer base, but including this as one of the hypotheses shows the thoroughness of your analysis. Talk about factors such as changing market conditions having an impact on club locations, change in consumers' habits, etc.

Hypothesis 1.2: Urban Fitness and the other clubs compete in the **same market** but their offerings have different degrees of attractiveness to customers.

Hypothesis 1.3: Urban Fitness and the other clubs compete in the **same market** but they enjoy significantly different levels of operational efficiency.
You might want to explore how competitors generate revenue or incur costs. For example, Ultimate Sports and Good Health may directly employ the trainers and therefore experience higher revenue and higher costs, as well as potentially higher operating profits than Urban Fitness.

Hypothesis 2: Urban Fitness and some other competitors operate in **different markets**.

> Tip:
> Remember you have asked questions around "Company" and "Competitor" but nothing about "Customer" yet. Ask "What is the typical customer profile of Urban Fitness?" "Who are the major customer segments that Urban Fitness targets?"

> The interviewer tells you that Urban Fitness operates within the market for 'serious' fitness and accordingly targets customers interested in vigorous workouts; whereas Good Health and the like operate in a newly born market, which is springing at the intersection between fitness and wellbeing. These competitors target a heterogeneous customer base made of women and men not just interested in doing exercise to stay fit but also to wind down, socialise and/or lose weight.

Bingo! Based on your experience of retail market and customer profiling, you can reason that the key challenge faced by Urban Fitness is targeting a less attractive customer segment. The Urban Fitness value proposition suits the sports enthusiast: a well defined, profitable customer group but with limited growth potential and/or close to saturation. This limits the number of clients per club and, as a consequence, the overall performance and profitability.

In comparison, Good Health offers fitness and/or socialising-minded customers a range of fitness, health and beauty services. The latter two categories require minimal capital investment and generate higher profit margins. Logically, Urban Fitness' offering does not

appeal to this growing group of customers and this can explain its inability to grow profit and market share.

Question 3

How can you test these hypotheses?

> Tip:
> You don't have to actually test all those hypotheses since there is no way for you to get hold of any relevant data or evidence during the interview. The interviewer merely wants to see that, given time and resource, you have a set of approaches and processes to do the validation.

In order to test the hypothesis, I would want to look into the following areas:

Market. For example, key purchase drivers, behaviour of customers and customer segments, distribution and geographic location of customers. Possible data sources could include a market research report based on potential and actual customer interviews and secondary market data.

Competition. For example, competitors' strategy, resources and competencies, key success factors of their business models and benchmark Urban Fitness versus these factors. It's appreciated if you briefly mention some of the frameworks and tools but don't go into too much detail as if you were lecturing! Some tools mentioned could be Value Chain, Value Line and so on.

Financials. For example, drivers of revenue and costs and how they relate to business performance.

Question 4

Which hypothesis most likely to be true?

In real consulting settings, consultants do occasionally need to make educated guesses. The important thing here is not to give any answer just based on your gut feeling; instead, try to employ any of the tools you have just mentioned and do a quick back-of-the-envelope analysis to show that you can handle pressure and ambiguous situations.

For example, comparing the Value Chains (i.e. the value-adding activities of a company) of Urban Fitness and Good Health highlights considerable differences in emphasis and range of services offered.

Urban Fitness targets young professionals and sports enthusiasts who enjoy vigorous workouts to stay fit. They are likely to visit the gym several times a week and for several hours. This homogeneous customer group fully appreciates the value of the all-inclusive membership formula. Good Health targets customers (adult women and men who aim to meet people, lose weight and relax) who have different perceptions of value and are unlikely to be satisfied with Urban Fitness' offering.

Now you can be quite confident to say that hypothesis 2 is most likely to be true.

Question 5

What strategic options should Urban Fitness consider and why?

Since you have already established the central issues being declining profitability and stagnant market share, your recommendation must be able to solve those issues. First of all, you should

point out the root causes: the lower profitability is driven by both a lower average number of customers per club and lower average spending per member; the stagnant market share is driven by the limited growth potential of the target customer.
Some possible recommendations are:

Option A: Focus on the core customer group. This option aims at further penetrating the market for fitness and gaining higher profitability through greater focus on target customers, more articulated value proposition and rigorous cost control.

Option B: Re-engineer the offering. This option is riskier but potentially more rewarding. It would allow Urban Fitness to enter the larger, growing and more lucrative 'wellness & fitness' market.

However, it is dangerous to start throwing random introductions of ideas at the interviewer unless the question is specifically targeting creativity or out of the box thinking.

A structure like a 2x2 matrix might guide the students though the process:

	Current Customer Segment	New Customer Segment
Current Product Offerings		
New Product Offerings		

	Current Customer Segment	New Customer Segment
Current Geographies		
New Geographies		

	Current Geographies	New Geographies
Current Product Offerings		
New Product Offerings		

At this point, your interviewer should be quite happy with you and the time is up. However, if you present yourself as an outstanding candidate and there is time remaining, the interviewer may ask you to conclude with a summary of other considerations for Urban Fitness in implementing the recommendation above.

Question 6
What are some factors to take into consideration if Urban Fitness wants to implement the recommendation?

Anything sensible, but focus on important commercial issues rather than theoretical model-based factors:

Structural Challenges/Risks

- What is the motivation to engage in a radical business transformation process?
- Is the management ready to change and develop new competencies?

- Would you consider hiring new managers from non-traditional industries such as wellness or entertainment?
- How risk averse is the organisation? Are they willing to bet the firm against the potential upside of the revised market positioning?

Financial Risk

- Does Urban Fitness own or have access to the financial resources needed to embark on a new venture?
- What level of return on investment is considered acceptable?

Competitors

- What are the competitors' expected reactions?
- What is the market's future potential?
- How would you do it? (Joint Venture, Acquisition, etc)

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

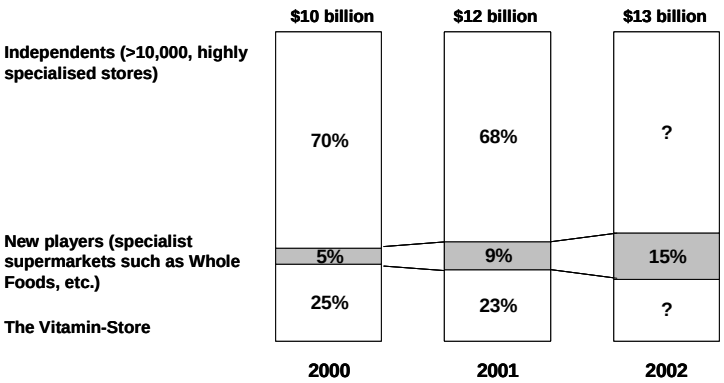
Let's assume that figuring out the capital structure and expected return to investors is something they're good at, and they want us to review valuation. What are the elements they should consider?

- Market (be sure to explain each of your answers)
  - Size & Growth. Drivers could include "Why are these growth drivers?":
    - Demographics, i.e. ageing population, education levels, income levels
    - 'Health' trend
    - High level of obesity
    - New formats
    - Level of competition
    - Availability / Number of stores, i.e. expansion into new markets
  - Price levels of products sold
    - Level of competition
    - Supply-demand economics
- Potential market share
  - Customer segmentation
    - 'Health-freaks' / hippies
    - Sports enthusiasts
    - Obese people
    - Mainstream
  - Level of competition:
    - Market players

- Independents
- Specialists
- Online stores
- Large retailers, i.e. WalMart, Tesco, etc.

▪ 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?



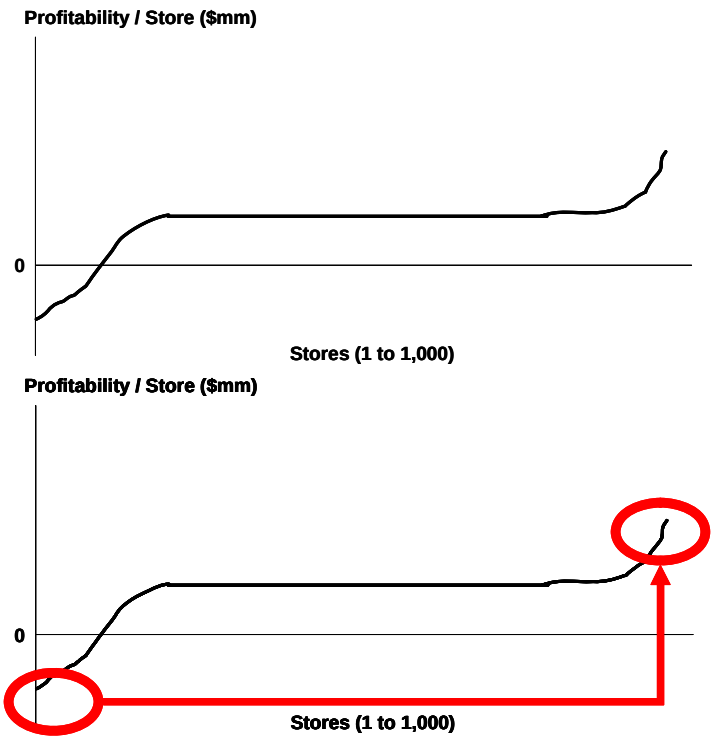
Math calculation: $13 billion * x%
How to get to the x%?

•

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?
- Cost structure – what would The Vitamin-Store's major costs be?
    - Per product profitability (*profit margins ~40%*)
    - Market share of The Vitamin-Store is important if it gives it an advantage over others with regard to negotiating power with suppliers
    - 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.
    - Why?
    - For example, WalMart is one of the world's largest retailers, if not the largest. WMT deals extensively with the large consumer product companies andalready 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)
- Real estate (real estate / capital leases for retail stores)
    - Are these on prime location? (*mostly urban*)
    - Are we generating enough sales / square foot and profits / square foot (or per store)? How do we compare to the industry?
- Staff
    - Look into sales / employee; employees / store; staffing methods (study traffic patterns in relation to staffing patterns)

- Look in management and staff compensation (incentive-based compensation –v- high base, for example)
- Distribution (actually only accounts for 3% of sales, so not major)
  - 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?
- 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.

VI. Fit Interviewing

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.

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[1]
  - Leadership
  - Personal Impact
  - 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'
  - 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

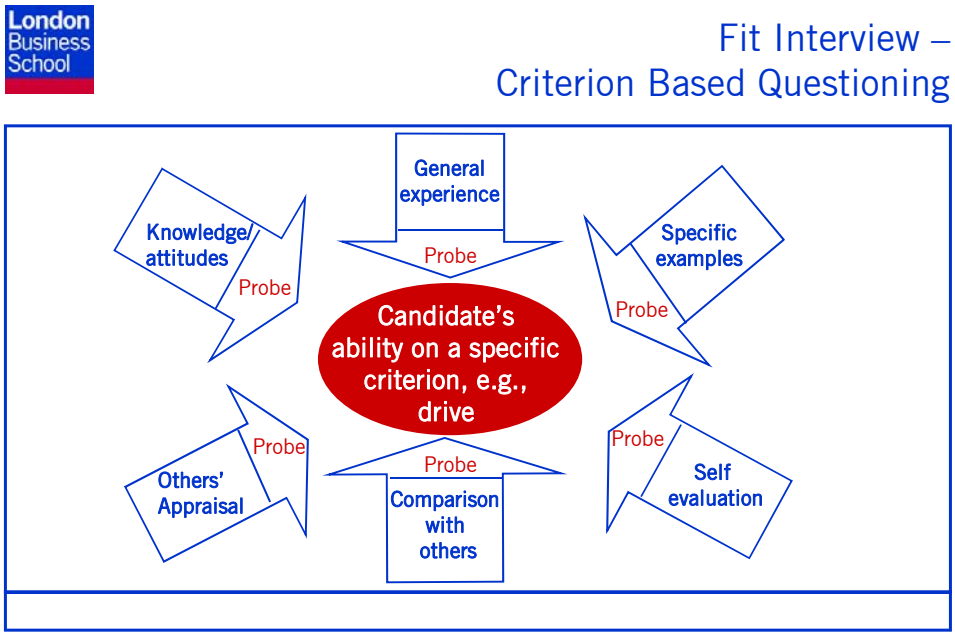
1 As discussed at the beginning of this Case Book

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.

Don't expect to 'wing it' in the interview – you would not go into a client meeting unprepared. Why should your interview be different!

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[2], 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

2 Those highlighted at the beginning of this Case Book

- 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.

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[3] 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.

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.

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3 The achievements database may be a good resource for this

If you believe that you won't be in consulting for the long term, be honest about the fact that you may 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.

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.

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.

VII. 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 020 7000 7400) or speak to Sandra Immelman an MBA 2009 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!!

Name of cases	Industry	Profit improvement	Industry Analysis	Market Entry	Capacity Extension	Acquisition/Private Equity	Investment	Market Sizing/Expansion	Page No
Company cases									
CommodityChem	Chemicals	o	x	x					33
Market Sizing Estimate for UK Market	Education			x				x	40
NewCo Petrol Retailer	Retail			x			x		43
PartsStop Limited	Automative	x						o	46
School Travel	Education	o				x		o	51
Too many books: Storage and distribution dilemma	Stock Management	o			x				54
Water Utility Company	Utilities			o				x	59
Whiskey Brand Turnaround	FMCG	x						o	65
Student Cases									
AluCo	Steel	o	x						70
Automative Industry	Automative	x							74
Axeles - Cardiovascular Drug Launch	Pharmaceutical	o	x						80
Baltic Car Rental Market Entry	Rental Cars			x					83
Buildbig	Real Estate							x	86
Consource	Outsourcing	x							90
Cost Reduction for a Commercial Bank	Banking	x							95
Drinking Water Purifier	FMCG			x					101
Happy Health Care UK	Healthcare		x	x	x				108
Intelligent Completions	Oil & Gas						x	x	116
Irish Retail Bank	Banking	x							121
Japanese Bottled Water	FMCG			x					127
Newscorp	Publishing		x						129
Oil & Gas Inspectors	Oil & Gas					o			133
Pharmaceutical Industry	Pharmaceutical	x							139
Postbank	Banking	x				o			144
Premier Events	Leisure			x					148
Sport-Nutrition	FMCG		o			x			153
Taxation in Malaysia	Public	x							157
Urban Fitness	Leisure	x							163
The Vitamin Store	Retail					o			168

Key to cases:
x = primary type
o = secondary type