

# Case Interviews

## Chapter Objectives

The case interview is central to the consultancy recruitment process. This chapter aims to help students understand and practise the case interview in order to maximise their chances of being recruited into the consulting industry. Specifically, the chapter will:

- Outline the history, purpose, and background of the case interview.
- Detail the types, structure, and format of a typical case interview.
- Show how the case interview is marked.
- Provide guidance on how to approach, analyse, and answer a case.

The chapter then takes the reader through two practice cases providing guidance at each step and suggesting strategies for successful answers. Next, the chapter provides three further cases for students to undertake. Model solutions to these cases can be found in the Online Resource Centre.

## ■ Introducing the Case Interview

The case interview is the prime method of recruitment into the consulting industry. For decades, consultancies have used the case interview to identify those candidates with the strongest analytical, communication, and problem-solving skills. Whilst the case method is a fairly democratic method of selection, presenting an easily understandable scenario accessible to all, the case interview undoubtedly favours graduates of schools that teach using the case method, such as Harvard, where such cases form the basis of the teaching system.

This chapter aims to create a level playing field for those students unfamiliar with or unpractised in the case interview. In order to maximise your chances of success with these types of questions, practice is key, ideally with a fellow student or tutor who can act out the part of interviewer. Links to other case interviews are given at the end of this chapter and solutions to the cases here are provided in the Online Resource Centre.

### What Is a Case Interview?

A case interview is a method of recruitment where the interviewee is asked to solve a business problem. The “case” is presented by the interviewer, either verbally or textually. Typically, the interviewee then clarifies the problem, requests further information, and presents their solution to the problem (Figure 11.1).

Cases are usually one of three types explained below: estimation, creativity, or business formats. The last is much more common and often incorporates the first two. For this reason most of this chapter will focus on business type cases.

### *Estimation Cases*

These cases test how an interviewee breaks down a problem. They usually require you to make assumptions and utilise basic arithmetic. They might include questions such as:

- What is the weight of a Boeing 747?
- How much oil does BP sell each year?
- What is the Brazilian market for credit cards?
- How many ping-pong balls would fit inside the Empire State Building?

With such questions, you are unlikely to arrive at the “right” answer, but that is virtually irrelevant. The interviewer is interested in how you reach your answer by breaking the problem down logically and making solid assumptions. With these cases, you may be allowed to clarify the problem by asking follow-up questions. Alternatively, the interviewer might simply ask you to make assumptions based on your personal knowledge.

How, then, might you approach the issue of how many ping-pong balls would fit inside the Empire State Building? You might start by guesstimating the dimensions of the ESB:

**I don't know how big the ESB is, but I know it's the biggest building in New York and around twice the size of One Canada Square in Canary Wharf. I've been to Canary Wharf and reckon that building is 200 foot wide and 50 floors high, which, at about 12 feet a floor, gives it a capacity of 24,000,000 cubic feet. Double this to get an approximate ESB size of 48,000,000 cubic feet.**

You might then want to refine your answer a little:

**I will take out room for 50 floors, at two foot high, and 70 desks on each floor, each taking up 30 cubic feet. This gives around 4,100,000 of space which can't be filled, leaving around 43,900,000 cubic feet that can. This can be converted to cubic inches by multiplying by  $12 \times 12 \times 12$ , which gives, roughly, 76bn cubic inches.**

You can then go on:

**If I can assume each ping-pong ball is, say, three cubic inches, you could fit roughly 25bn ping-ping balls in.**

If you were seeking to extend this answer, you might then note to your interviewer that ping-pong balls don't fit together perfectly so you may need to reduce your answer by a certain percentage. Or you might point out the ESB tapers as it goes up and explain how you might restructure the question to take this into account.

The key with estimation cases is to show your interviewer how you are breaking the question down, what assumptions you are making, and what calculations you are undertaking. Your interviewer will usually intervene if you go too far off track with your calculations. You should also show the interviewer that you know how to refine your estimate further given the time. The applicant is sometimes allowed to take notes and use a calculator, but often they are not.

## ***Creativity Cases***

Creativity cases are designed to show that you can think "outside the box". Anecdotal evidence from conversations with recruiters indicates that creativity cases are waning in popularity. As these cases are especially difficult to revise for, this decline is generally beneficial to interviewees. Typical questions might include:

- Name as many uses as you can for a tyre.
- Why are cans of beans cylindrical?
- If a tree falls in the wood and no one hears it, does it make a sound?
- How would you answer this question?
- How many different ways could you tell if the light goes off in a fridge when you close the door?

As with estimation cases, creativity cases aren't concerned with finding the "right" answer. Instead, the purpose here, even with the cans of beans question, is to test how creative you are in generating answers. However, as creativity cases are difficult to practise

for the interviewee and hard to score for the interviewer it is not surprising that they are fading as a meaningful method of recruitment.

### *Business Cases*

The most prevalent form of case is the business case. This usually takes place as an interview, lasting between 30–60 mins. During this time an interviewer tells you (or provides information) about a case and expects you to formulate a response. You will probably be allowed a pen and paper (sometimes a white-board and marker), though rarely a calculator. Most cases will supply a business problem in which you will need to:

- Ask questions to glean more information.
- Make assumptions.
- Produce estimates.
- Make recommendations.

The business case will often require you to make assumptions and estimates as above, but only as part of solving a problem for a business. The problems might concern:

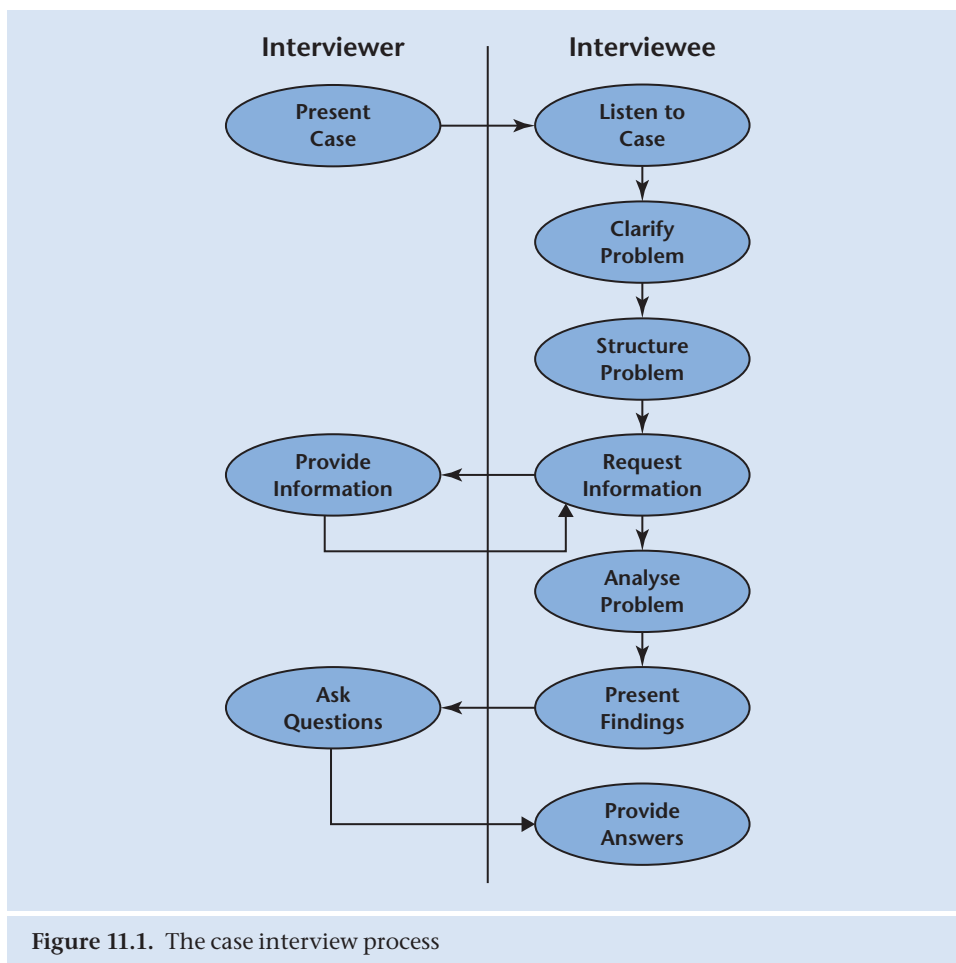
- The value of a product.
- Improving efficiency.
- Addressing new markets.
- Growing a company.
- Starting a new business.
- Tackling competitors.
- Increasing sales.
- Increasing profits.
- Reducing costs.

The case interview relies on the candidate interacting with the interviewer through asking questions and clearly relating their thought processes. In turn, the interviewer will often provide additional information and sometimes (if the case is vague) tell the candidate if they are straying off course.

Cases can range from short, two-sentence questions to several pages. The longest case I have seen was given by EDS to one of my own students which included a presentation, two spreadsheets of financial data, and a three-page case summary. It was, however, provided in advance so the student had a week in which to prepare their thoughts. However, even with short cases, the student is encouraged to ask more questions to help with their analysis. For example, a short case might appear as follows:

**A manufacturer of confectionery has found that their profit margins have reduced by 20 per cent over the last five years. Why is this?**

You would then be expected to raise intelligent questions about the client to aid your analysis. For example, you could ask about the manufacturer's products, competitors,



market, and costs. Your queries should be answered by your interviewer, who would then expect you to perform an analysis (not always quantitative) and provide answers in the form of solutions or recommendations. When seeking methods to generate ideas, students should refer to “Frameworks for Business Analysis” in Chapter 6.

### How Is a Case Interview Marked?

The case interview is *not* aimed at getting the “right” answer, but at showing how the interviewee thinks about business problems and communicates under pressure. The interviewer (or occasionally, someone else in the room from HR) may take notes on your skills and competencies. These vary from practice to practice but may well include:

- Business knowledge

Do you have a good general knowledge of the business area? Do you apply common frameworks to assist your reasoning? Do you consider the problem area comprehensively?

- **Data management**  
Can you perform basic arithmetic quickly? Can you interpret tables, charts, and graphs quickly and accurately? Can you estimate mathematical problems quickly?
- **Problem solving**  
Can you grasp problems under pressure? Can you identify the important information quickly? Do you think logically and clearly? Are your assumptions realistic and reliable? Can you deliver a thorough analysis? Do you ask intelligent questions?
- **Communication**  
Do you listen to instructions? Do you ask questions clearly and coherently? Do you adapt your style to different environments/interviewers? Do you communicate your thoughts well? Are you a confident talker?
- **Dealing with ambiguity**  
Few cases give you all the information. This is intentional. Interviewers will try to confuse you and make things difficult for you. You should be comfortable with not possessing all the information and not knowing all the answers. Keep calm when you don't know what is "right". Interviewers will also look to see if you possess and inspire confidence when giving your answers.
- **Personality**  
Would you fit into the firm's culture? Would you be "safe" in front of a client or might you behave inappropriately? Would the interviewer like to be on a plane with you? Do you keep a sense of humour and proportion under pressure? Do you get angry when criticised? Do you have energy and drive? Are you friendly and interesting?
- **Self-awareness and flexibility**  
Are you aware of your own limitations? Do you learn? Do you listen to advice? Can you change direction when prompted?

## ■ Managing the Case Interview

There are several steps involved in a typical case which are detailed below. Some of these steps may be missed in the case, but it is unlikely that any more will be added.

The key theme of these steps is communication. This entails relating your thoughts clearly and succinctly to your interviewer and explaining why you are approaching the problem in the way you are. This is important because it allows the interviewer to understand how your mind tackles problems. Good communication also means that you are more likely to receive accurate feedback from the interviewer regarding your particular method and approach.

## Listening and Clarifying the Case

When the interviewer presents the case it can initially seem daunting and confusing. It is intended to be. Remember then to take clear and coherent notes that you can refer back to later on. Interviewers prefer you to be slow and methodical rather than fast and messy. If you need to pause for 30 seconds or so to consider the case, then ask them if that's okay, and do so.

At this stage it is a good idea to clarify exactly what is expected of you. As part of this, reiterate your understanding of the case to the interviewer and clarify any areas you are unsure about:

**If I understand you correctly, this company makes sweets and is unsure why its margins have reduced by 20 per cent over the last five years. Does the client just want to know what the problem is or do they also want solutions to the problem?**

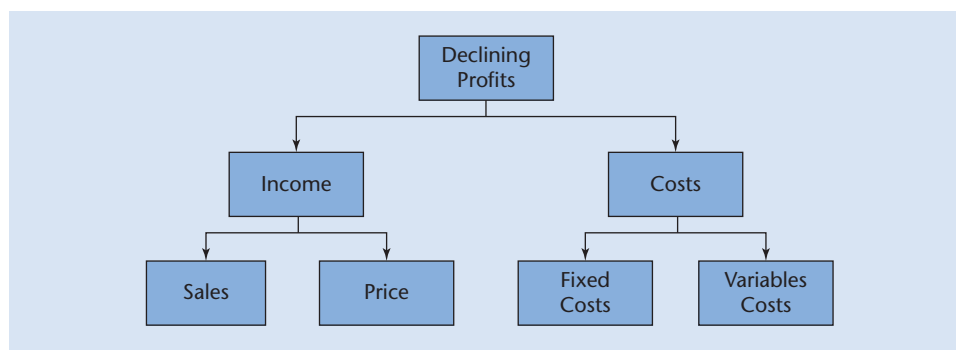
Your interviewer will clarify any questions you have. It is important that you take notes and respond to everything the interviewer says as they will often try to steer you in the right direction.

## Structure the Problem

At this point it is a good idea to explain to your interviewer how you will approach the question. This will give the interviewer a chance to correct you if you're drifting off target and will also help clarify and communicate your thoughts. For example, with the confectionery case, you might say:

**I'm going to try and understand the declining levels of profit in this company by understanding their income, in terms of the price of their products and the quantity they are selling, and their costs, both fixed and variable.**

You should use this structuring for your own analysis and begin writing down ideas that may relate to the case. I find that two things help here. First, many students use visual diagrams, such as mind-maps, issue-trees, or simple pictures, to structure their thoughts. Figure 11.2 shows an example issue-tree for the confectionery case. As more information



**Figure 11.2.** An “issue-tree” for declining profits

becomes available, the tree can be expanded and annotated. This also helps if your mind goes blank in the middle of an interview.

Second, I find it helpful to take a minute to really consider everything I know about the proposed industry. For example, in the confectionery industry, you may recall that consumers are becoming more health conscious, that advertising to children is increasingly restricted, and that ethical/organic companies have gained a growing market share over the last ten years.

These points should help you structure some general questions about the company which you can address to the interviewer. For example, in this case, you might ask:

**Could you give me some general information about the company, such as its market share, its market segmentation, its sales channels, and its sales trends?**

Often an interviewer will prefer you to ask specific questions, such as those in the next section, but it never hurts to ask a general question in the hope that the interviewer will tell you everything they know without you having to ask all the right questions.

## Requesting Specific Information

When tackling a case, you should first be sure what the client wants: what is the key question you need to answer when dealing with the case? You may find that you do not have enough information to answer this question which leaves you with two options:

- **Gathering more information**

You will usually have to request additional information in order to properly tackle the case. In asking questions, you should be prompted by the frameworks you have learned in Chapter 6. For example, the 4Cs, the 4Ps, Porter's Five Forces, or Profit = Income (sales × price) – Costs (fixed and variable). For example:

**I'm going to start with the basic notion that profit is what's left over when costs are subtracted from income. Let's start with income. What are the sales and pricing trends over the last five years?**

Your interviewer will either give you this information if he or she considers it relevant or will tell you if you are on the wrong track. It may be that a different framework is more appropriate to your case. Of course you may realise what framework is actually suitable, so just ask general questions about what the firm does, who its competitors are, and how its sales are doing until you feel you hit on a fruitful area—then explore it! Remember, however, in cases where the interviewer refuses to impart the information you need, you may need to make an assumption.

- **Making assumptions**

Where additional information is not supplied, you may need to make assumptions. An assumption is different from a guess. The interviewer will expect you to base your assumptions on more than a gut feeling and will want to see detailed workings in support of your hypothesis.

For example, you may be told that the confectionery company has 20 per cent market share of chocolate bars in the USA and that this line brings in £5bn a year, but the



interviewer refuses to say what this equates to in sales and pricing. If you find you need this figure, you should be able to perform a quick estimate which assumes that, for example:

**there are 300m Americans. Let's say, on average, they eat three bars a week. This equates to 900m bars a week and let's estimate 50bn a year. 20 per cent of this market would be 10bn bars, which means they retail at around 50 pence each.**

With a more sophisticated analysis, you may need to break the market up into different age groups (for example, teenagers will eat more chocolate than the elderly).

Assumptions can often be graded according to their sophistication. For example, a recent question I read asked for the number of tyres in the UK. With this question, a weak interviewee would simply state their answer. A better one would take the population of the UK, estimate the number of families and the number of cars per family, and multiply this by four. An excellent student would also take into account the typical life of a tyre, the fact that most cars have a spare tyre, that different "segments" of family have different numbers of cars, and that there is a huge business market for tyres.

## Analysing the Problem

Once you have the information you need (or at least, as much as you can get) and have identified any interesting patterns, you can then tackle the case. How you analyse the case will determine what type of problem you have been presented with. However, the interviewer will want to observe both logic in your approach and a general knowledge about business. There are, unfortunately, no perfect formulas for answering cases, but Table 11.1 provides a guide to facing different types of questions.

Most cases you will encounter will be too complex to solve in one go. This usually means that the problem will need to be broken up into smaller parts. For example, your attempt to discover why profitability is declining in the confectionery industry may well include:

- Using assumptions to provide an estimation of the numbers of chocolate consumers in the USA.
- Examining the balance sheets of competitors to identify the most likely threat.
- Analysing markets in different countries to assess whether expansion abroad is recommended.
- Analysing distribution logistics to understand if transport costs can be cut down.

You should keep each sub-problem separate until you need to bring them together to form answers and recommendations.

Remember, if you're stuck, use the 4Cs, the 4Ps, and other models to prompt questions that you can ask.

In addition, your interviewer will assume that you have a good understanding of business generally. They will expect you to know and understand techniques such as leasing, outsourcing, floating, loans, process re-engineering, training, merging, e-business, etc. . . . In other words, you should draw on everything you have learnt from your classes.

Client question	Factors to consider
What price should this product be?	Cost-based pricing? Price-based costing? Value on market demand? You can provide a ratio that is similar to other products. You should consider the competitors products' costs. What is the market segmentation? Who will buy the product? When? Will you offer discounts? Why? How? Price elasticity? Should you use loss leaders or traffic builders? Is price completely created though supply/demand?
How can we reduce costs?	What are the benchmarks of your costs and income? How can costs (fixed and variable) be reduced? Can functions be outsourced? Can some processes be removed? Do you have a lot of inventory? Are you making the best use of your assets? Are you focusing on your key competencies and adding value with everything you do? Can some activities be centralised or automated?
Should we enter a new market?	What is the size of the market (buyers, sales, turnover)? How is the market structured (trends, geography, segmentation, niche vs. mass)? Who are the competitors (see <i>Tackling Competitors</i> below)? What are the gaps in the market? What are the barriers to entry? How will you differentiate? Will you steal market share or grow the market? How loyal are customers? How will you enter (acquire, build, partner)?
What should our strategy be?	What is the industry structure? What determines success in the market (e.g. growth, size, brands, technology etc.)? What are the company's unique advantages? What trends are there in the market? Why are the competition successful? What are the opportunities for vertical (supply-chain) and horizontal (similar products/businesses) integration?
How can we better our competitors?	Is competition rational or based on other things? How many competitors are there? What is their market share? How would they react to another competitor? What are the competitions' strengths? What are your strategic advantages? Can you build a monopoly? What are your unique advantages? How can you build on them?
How can we increase sales?	Have you considered bundling products, encouraging loyalty or repeat purchases? Can new customers be attracted? Advertising? Is the brand effective? Improve channels to market? Position products better? Improve/increase sales outlets? Incentives for sales staff? Can existing products be modified for other markets? What drives a purchase? Acquire a synergistic firm?
How can we increase income?	How can income (sales and price) be increased? Regarding costs, are there opportunities for economies of scale, amalgamating suppliers, cutting labour, or automating, using e-business? Regarding pricing are there opportunities for increasing prices, producing specialist (differentiated) products, targeting market segments better? Price elasticity? Alternative Pricing?
Is this a good investment?	What are the potential costs? Up-front costs? Cash-flow required? What are the potential returns? What are the opportunity costs? Cost of capital? Net Present Value of investment? Risk involved? Can risks be mitigated? What are the benefits? Does it fit with company strategy? Will it impact other business areas (e.g. cannibalisation?).

**Table 11.1.** Factors to consider in case interviews

Sometimes, you will be presented with a huge amount of information (e.g. corporate accounts over ten years) and you will need to sift it quickly for useful information. When this happens you are usually looking for three things:

1. What is the useful information here? In other words, what information can you ignore? For example, on a statement of accounts, are telephone charges really important? Probably not. In fact, in a recent case I looked at which had 550 figures on it, only around 60 of them were worthy of closer attention.
2. What figures might be correlated? For example, in a case where a company has several branches, you might find a correlation between branch size and its economies of scale. If this is the case, it might lead to a recommendation to focus on larger branches. Perhaps profit is related to the seasons of the year, or sales are related to geographical location.
3. What are the unusual figures? If you are pressed for time, focus on what figures stand out as being far too large or too small. This might be anything from a badly performing product to a very volatile market. These figures can provoke additional questions, starting with "why is this happening?"

Very few cases will require complex mathematics. Instead, these cases test your ability to sift the useful information from the irrelevant data.

## Presenting Findings

Your findings should be derived entirely from the facts given to you and the assumptions you have made. You should be able to prioritise the issues you discover and explain how you achieved your conclusions. For example:

**Based on the assumptions I made regarding pricing together with the profit figures you have given me, it seems likely that customers are buying fewer our products. Additionally, it appears, from the analysis which I performed on our pricing structure that some of our products are over-priced compared to the competition.**

You should not be afraid to say that the information you have been given is incomplete and to suggest ways in which this might be rectified. For example:

**However, our competitors' sales are increasing, which indicates that some of our customers may be switching products. We would need to conduct some research to understand whether this is the case or whether these are new customers and not our own.**

When explaining your findings, you should, if useful, draw charts or diagrams to support what you are saying.

## Questions/Recommendations

Often the interviewer will ask you for recommendations after you have presented your analysis. Alternatively, recommendations may be asked for as part of your findings. Either way it is an opportunity to show your understanding of how business works and your creativity in finding solutions.

Many cases require recommendations for improving a situation. In these cases you should not simply list your recommendations but weight them, stating which improvements/recommendations you would undertake first and why. You should also consider the potential costs and implications of each solution, outlining the risks and stating what can be done to mitigate them.

Other cases might have asked for a quantification (an approximate price or some other metric). With these cases, you should not just provide the final figure but revisit your assumptions and explain the key risks and variables. For example, which of your assumptions are the riskiest? Which will have the biggest impact on your figures if it is changed? Why aren't you doing other things?

## Hints and Tricks

There are a number of points that will help improve your performance in a case interview:

- **Follow the money**

When swamped by facts, figures, charts, and balance sheets, it is easy to lose focus. When in doubt, concentrate on the bottom line. Even if you get the logic wrong a healthy obsession with making the client more profitable will never lose you friends in consultancy.

- **Red herrings**

Interviewers will often offer irrelevant information to confuse your analysis. With every piece of information you ask yourself "is this relevant?" This will help you filter the data that are important and relevant. Try to spot "outliers"—data that stand out as unusual or which do not match the rest of the information you've been given.

- **Quicksand**

You have limited time in which to complete the question, so don't get bogged down in one area unless your interviewer encourages you to do so. You are better off asking general questions early on in the interview to give you an overview of the company and its market. Detailed questions can be left until you know exactly where you should be focusing your attentions.

- **Practice**

In terms of developing analysis skills, there is nothing like practise to get ahead of the competition. You should practise as many case interviews as possible and perform numerical problems every day for a month before the interview. In my first ever problem-solving test after university I scored 124, which was not enough to get through to the next round. When I re-applied the following year, I spent a month practising analytical cases prior to the interview and improved my score by 15 per cent, easily enough to advance to the next stage. You should also practise reading graphs, spreadsheets, and figures, so as to quickly understand and analyse any material presented in the interview.

- **Honesty**

Get used to telling the truth. Nothing annoys a case interviewer more than applicants who attempt to bluff the interviewer. They've done this a thousand times and can spot a phoney a mile away. So be honest, be open, and tell them when you're unsure.

- **Calm**

Interviewers will often create additional pressure through aggressive questioning, feigning irritation, or asking provocative questions. They do this in order to see how you might react to a difficult client. Remain calm, polite, and good humoured as much as you can.

## ■ A Good Answer

In summary, a case is a good opportunity to demonstrate both your knowledge of business and your logical thinking. A good answer will:

- Focus on the core problem (don't get distracted).
- Start with general questions (focus on details later).
- Ask intelligent questions (prompted by different frameworks).
- Analyse the relevant data logically (showing you can sift).
- Make justified assumptions (realistic and supported).
- Provide a rigorous and detailed analysis (break down problems into component parts).
- Give detailed recommendations (evidence-based).
- Avoid vague generalisations (no bull!).
- Be confident and enjoy yourself.

## ■ Walk Through Cases

In the vast majority of case interviews, the interviewer will present you with a business problem that requires further investigation. Do not be tempted to jump straight to the answer as most of your marks will be awarded for your methodology.

The cases below are presented in a realistic format. In each case, the interviewer presents a problem. The “answers” provided should not be seen as definitive but as guides to help you define your own solution. Helpful hints are given in boxes. You should not move onto the next section until you have made an attempt at asking the right questions and completing the relevant analysis.

## ■ Case 1: Strategic Change at Mamouthe

### Interviewer: Problem Statement

Your client is the Operations Director of Mamouthe, the largest furniture store chain in France. They have 200 stores nationally. In 2006 they made a profit of £28m on revenues of £200m. The client has, for some time, been the largest retailer in France which has enabled it to generate significant profits. The second largest retailer, Antopey, owns 150 stores and made a profit of £12m.

However, recently, a massive Scandinavian company, Ikron, has taken over Antopey and is planning to change all Antopey's outlets into Ikron stores. The Operations Director wants your advice on the extent of the threat and whether it can be mitigated.

**Note:**

*The interviewer has given a direct clue as to where they want you to go: what are the risks for Mamouthe and how might you mitigate them?*

*Before this, however, you will need to ask some further questions. Don't assume that since you have asked one question, all relevant information has been given to you! What questions might you ask?*

**You: Asking the Right Questions**

The questions you need to ask should focus on what might happen. If you're stuck for ideas, use the 4Cs or a SWOT analysis, but make sure you let the case, not the framework, guide your thinking. The threat will come from any changes that Ikron make to Antopey, so you need to find out how you think Ikron will change Antopey. You can do this by finding out more about Ikron's business in Scandinavia. For example, ask:

- Why is Ikron the biggest furniture store in Scandinavia?
- What strengths does it have?
- What has it done with stores it has taken over in Scandinavia?
- Will its strengths in the Scandinavian market transfer to France?

Additionally, in order to understand how the future plans of Ikron will affect Mamouthe, you need to understand Mamouthe itself, its strengths and weaknesses and its capabilities. For example, ask:

- How does Mamouthe make money?
- How did it get to number one in France?
- What strengths does it have?

**Interviewer: Providing Further Information**

In response to your questions, the interviewer provides you with the following information.

- Why is Ikron the biggest furniture store in Scandinavia?

In the early days Ikron made its name by piling high and selling cheap. This strategy enabled it to capture customers from its competitors. Once this strategy had proven successful, Ikron took over competitor sites. Ikron has over 500 stores in Scandinavia and has cut costs in two ways. First by creating massive economies of scale in the production and distribution of its furniture. Secondly, by hammering down prices by suppliers. Its profits last year were £51m on revenues of £650m.

- What strengths does it have?

Ikron sells a lot of goods very cheaply. It specialises in flat-pack furniture which customers build themselves which again reduces prices further. Its strategy is to undercut the competition and to provide goods at a low cost. It is a fairly "no frills" operation with minimal customer service and few high-quality products.

- What has it done with stores it has taken over?

Ikron has built itself up by taking over competitors' stores and making them more profitable. It tends to replace more expensive lines with cut-price goods. It also has a policy of replacing staff with non-unionised workers and hiring temporary, flexible, and part-time workers (usually students).

- Will the strengths of Ikron transfer to the French market?

Ikron can draw on massive economies of scale and there is no reason to doubt that it will exploit this in the French market. However, it will incur some costs in transporting goods from Scandinavia to France and in converting the Antopey stores. Additionally, as the Ikron brand is virtually unheard of in France, it may take time to build trust among potential consumers.

- How does Mamouthe make money?

Mamouthe sells a wide range of furniture, from beds and sofas to foot-rests and plant pots. Its suppliers manufacture and assemble the goods, which Mamouthe then sells in its stores for a 50 per cent mark-up.

- How did it get to number one in France?

Mamouthe's stores are roughly the same size as the competition and it sells similar products of both the cheaper and the higher-quality variety. It does have more stores than the competition but, as you can see from the figures given in the problem statement, its profit per store is significantly higher. Why is this?

Well, primarily because it sells more than its competitors (not because its costs are lower). This is because of its excellent customer service which comes, in part, from the fact that it is primarily owned by its employees. The store has excellent HR policies which encourage older workers, career progression, and share ownership. Additionally, the manager of each store retains a proportion of the store's profits for their bonus.

- What strengths does it have?

Mamouthe prides itself on excellence of service. The employees are knowledgeable and committed and the stores are well maintained and clean. Additionally, Mamouthe has a strong brand: it was recently voted third in a poll of the best places to work in France and has high customer feedback in terms of quality of service and brand loyalty.

## You: Outlining the Risks and Mitigation

### Risks

There are two key risks that you should have identified. However, these should be more than a simple list—you should provide a qualitative assessment so that the director knows the significance of each risk. If you named the following you are doing well:

#### 1. Cheaper goods

The Ikron takeover, according to their established pattern, would result in the old Antopey stores providing cheaper goods. Eventually, this would have some impact on

Mamouthe's cheaper product lines. However, it may take some time before the brand of Ikron catches on and customers are tempted away.

## 2. Market penetration

The takeover may result in Ikron winning some market share from Mamouthe. Indeed, this may be inevitable given the resources of the larger company.

### *Mitigating the Risks*

What can be done to mitigate these risks? These recommendations are in order of utility. It is likely that those towards the bottom may be counterproductive.

- Remove the cheaper lines and concentrate on the higher ground. This would consolidate the brand reputation for quality.
- Market the "quality" and "customer service" angle of Mamouthe. This should attract customers who are willing to pay higher prices for good service. The "made in France" label should be exploited. A good guarantee for goods would help consolidate this image.
- Cut the cheaper lines where Mamouthe could not compete against the economies of scale provided by Ikron. However, this should only be done on low-margin goods. The Ikron label may still add value to goods which are high margin (e.g. decorations).
- Look for a potential partner to maximise economies of scale and compete more effectively in the cheaper market. However, this may have serious corporate implications.
- Introduce loyalty schemes (note this may have some drawbacks, e.g. rewarding customers who would have remained loyal anyway).
- Cut the prices of goods (although this may decrease profit).

### **Note:**

*It is likely that the interviewer will ask you follow-up questions. For example:*

- *What do you think a loyalty card scheme would cost?*
- *What do you think we would lose by removing our five cheapest lines?*
- *We are thinking of taking over a medium-sized business. What do you think it should be?*

## ■ Case 2: 3G in China

### **Interviewer: Problem Statement**

You have been hired by SinoCall in China to assess whether or not they should bid for a 3G licence in the upcoming government auctions. SinoCall is an existing telecoms operator (like Vodafone or T-Mobile) in China which runs 2G networks on the south-east coast (providing text messages and calls). The 3G licence would allow them to provide customers with new products



such as video, music, and location services throughout the whole of China. The company wants your advice on whether it should bid for a licence, and, if so, how much they should pay.

### Note:

*This is, at heart, a profit question. In simple terms, you need to determine how much income SinoCall could make out of this business proposition and how much its costs would be. The answer would allow you to gauge roughly how much it could afford to pay for the licence.*

## You: Asking the Right Questions

Possible frameworks to guide the questions you ask might include Profit = Income – Costs, the 4Ps, and the 4Cs. You are basically being asked to build a business case to assess the viability of this purchase. Some potential questions are listed below, but you should note that most interviewers will encourage you to make informed guesses as to the answers.

- Costs
  - What are the fixed costs associated with this venture? (You might guess that buildings, staff, the 3G licence, the radio network, and digital content might comprise some of these costs.)
  - What are the variable costs? (Again, you might be asked to guess at these. They could include new mobile phones, marketing costs, and usage costs.) Later, these costs will need to be multiplied by the number of customers SinoCall projects it will capture.
- Market
  - Will the company continue to focus in the south-east or expand to the whole of China?
  - How many competitors are there in the 3G market? How many licences are being sold?
  - What is the potential market? (To show your interviewer that you have a good understanding of markets, you might also ask—or guesstimate—market segmentation, market maturity, and market trends.)
- Income
  - What is the disposable income of different segments?
  - What do customers spend on similar products (e.g. broadband, 2G phone calls, media, and entertainment)?
  - What do similar markets in other countries tell us about the likely income in this area?
  - What prices will the market support?
  - What products will you be able to sell (e.g. music, video, GPS, Roaming, Mobile Broadband)?

- Other
  - How long is the licence for?
  - Can the licence be leased/sold on to other companies?
  - What is the cost of capital for SinoCall?
  - What is the Net Present Value of future income?

There will, of course, be other questions that you can ask, and where the interviewer does not provide answers, you may need to make a guess to have a complete financial projection. It is important to acquire as much relevant information as possible so that you might build a realistic picture of this new opportunity.

### Interviewer: Further Information

China has a population of 2 billion people and SinoCall is the fifth largest operator in the market, with a market share of 14 per cent and a customer base of 14 million people. The average monthly spend per customer is around \$15. Mobile telecommunication services have been developing faster in China than any other country in Asia and year-on-year customer growth for the last five years has averaged around 20 per cent. Average revenue per customer has also increased over this period but is levelling out.

SinoCall is a cash-rich business with reserves of over \$15bn. They have also been offered loans by banks of \$15bn at an attractive interest rate of 5 per cent per year. If successful, SinoCall would offer four new products to customers. These would include:

- Video-calls (mobile calls with which you can see a live video of the person you are calling).
- Sports clips (downloadable video clips of customer's favourite sports).
- Music downloads (downloadable music).
- Place finder (interactive location maps which give directions to where you want to go).
- News clips (hourly news updates in the form of video clips).

The licence that is being bid for is one of four twenty-year licences offered by the Chinese government. The licences cannot be sold on once they have been purchased. Instead they have to be handed back to the government if the operator goes bust or decides not to use them. In other words, the cost is non-refundable. However, the successful bidders are allowed to lease bandwidth to other operators to use, if they wish. The licence would simply be that; operators would also need to build a 3G network infrastructure at a cost of around \$100m per ten million customers. They would also need to purchase (or produce) content to provide to customers and upgrade customers to new 3G mobile phones.

### You: Making a Credible Case

The provided information, together with your estimates, now allows you to formulate a reasonable breakdown of potential income, costs, and profits. You will achieve marks

based upon the sophistication of your analysis. A weak candidate will say something along the lines of:

**there are 2bn people and 4 licences. This gives 500m people per operator which, multiplied by a spend of \$15/month, gives income of \$1.8 trillion. The costs are \$100m × 50 = \$500m. So the profit, and the amount payable for a licence, is \$1.8 trillion—\$500m . . .**

Whilst this person has used the Profit equation, they have done so with little sensitivity. A more sensitive and useful analysis would take the following into account:

- **Market**

It is true that the maximum potential market is 500m people. However, anyone with a basic knowledge of China will know that much of the population is very poor, technologically unsophisticated, and with virtually no disposable income. It is unlikely that the new network will be rolled out to rural areas. Moreover, many customers may be satisfied with 2G and not wish to pay more for additional products. Finally, it should be noted that market penetration is never 100 per cent in year one—more customers may join up each year. All of these factors should be taken into account to produce an estimate of what percentage of potential customers could afford, use, want, and access 3G products. This could be as little as 1 per cent of the potential market, growing to 5 per cent in twenty years.

- **Income**

The spend per customer is based on 2G and in no way reflects what 3G might bring in. It may be preferable to make a guess, by product, based upon what a typical customer might spend on similar products per month (e.g. CDs, Sports, Maps, and TV) and to take a small percentage of this as a guide. You might also note that 3G is often paid through a subscription, and that even in well-developed countries, this is around £35/month (which includes standard 2G products). You might suggest that the 3G premium in China might only be worth around \$5 per month per user.

- **Costs**

Costs not only include the roll out of the network, but also the maintenance and upgrade of that network. Content costs could be guesstimated according to your own knowledge (e.g. the cost of music downloads). In addition, there are numerous other costs which should be taken into account, including sales, marketing, customer service, and all the normal operational costs a company incurs.

An excellent answer will also take into account the cost of capital. This isn't simply the loan that the bank will be giving the licensee: SinoCall would be paying for the licence up front but not receiving any income for perhaps a year or two afterwards (in Europe, the 3G operators took at least three years to get their first handsets on the market).

You should also remember that the point of comparison for this product is not zero income. In other words, if SinoCall simply put their cash in the bank, in twenty years' time, the interest may treble the value of their investment. Any potential profit that you calculate would, in a good answer, be compared against other returns.

## Anything Else?

This is the type of question that many interviewers ask once you have presented a quantitative analysis. They are looking for an awareness of the broader strategic issues that may influence the decision whether to bid or not. Things you might consider are:

- Are there any replacement products that could threaten 3G? For example, some phones are now using WiFi technology to connect and route calls through free (or low-cost) local networks. What about 4G, satellite phones, and other threats?
- What are the implications of not buying the licence? Could a non-licensed SinoCall compete as a mobile operator in a 3G future?
- Are there any legal considerations to consider? China can be an interesting place to do business and the government has considerable executive power.
- Any additional knowledge you can throw in is always worthwhile. For example, in the European auctions, many operators felt they bid too much for the licences and were either forced to write off the costs or were taken over by competitors due to weak balance sheets.

## ■ Practice Cases

These cases are each in two parts. The first part contains a brief statement of the problem which an interviewer would give you. After studying this, you should think about:

- What questions would you ask to obtain the information necessary to answer the problem?
- What structure/approach you would use to answer the question?

## ■ Case One: McDobbles

### Part One

McDobbles is an international fast-food chain specialising in cheap food for eat-in or take-away customers. The chain is run by McDobbles and all of the 20,000 locations are owned solely by McDobbles. The company is listed on the New York Stock Exchange and in 2008 generated profits of \$3bn on revenues of \$11bn. The stores, which employ around 200,000 staff, sell milkshakes, burgers, salads, coffee, chips, desserts, and breakfasts.

McDobbles has two main international competitors who compete with it globally: HamKing and Weakling. Their relative performance over the last five years has shown the two competitors gaining significant market share over McDobbles. McDobbles have asked you to undertake research into their declining profits.

What questions would you ask the interviewer?

	2003	2004	2005	2006	2007	2008
<b>McDobbles</b>	4.4	4.1	4	3.8	3.3	3
<b>HamKing</b>	2.2	2.4	2.6	2.8	3	3
<b>Weakling</b>	1.4	1.6	1.4	1.8	2.1	2.3

**Table 11.2.** World fast-food profit (bn)

## Part Two

After you ask your questions, the interviewer gives you the information in Table 11.2.

You are also given excerpts from two interviews with directors:

### Director of Sales

... Despite the competition in the US, we'd done well in expanding our restaurants until the year 2000 in other parts of the world. In the 1980s and 1990s, the big area for expansion was Europe, as this area became saturated, we began to look to developing countries which we are still expanding in. However, the profit margins in developing countries are usually smaller than the EU or the US because people tend to prefer traditional food and don't necessarily have the disposable income available. Despite what people said in the press, our customers didn't really like our healthy options, and if they came into our stores, even if they were looking for something healthy, would usually end up getting a burger and fries anyway. We're probably reaching the limit on the number of stores that the market can sustain now. We're also a little concerned by new forms of fast food. You're getting increasing numbers of alternative stores which do bagels, sushi, soups and the like, as the market gets more diverse and specialised. This said, our food is a lot cheaper. We've tended to go for the pile 'em high, sell 'em cheap option. The press complain about us sometimes, but we do offer a completely safe, tasty meal for under five dollars and how many other people do that? We find that if we put our prices up the customers go away, they're very price sensitive. We do try to keep our menus localised but I think too much diversification may hit our core product and our brand. We are, after all, an American company ...

### Director of Finance

... well, we're going to need to do something because at this rate we'll lose our number one slot. Our profits have been declining year on year for some time and, to some extent, that's the difficulty you have when you're at the top: the competition have the luxury of trying new things. I don't know if we've perhaps become a little bureaucratic and are a bit too slow at taking decisions and breaking out of the mould. Maybe we need a new sales director. I don't know. I guess you're more interested in the financial side of things anyway. There's not much room for manoeuvre, that's the trouble. Our labour costs, for example, are pretty much as low as we can pay given things like the minimum wage, labour laws, and national insurance. The same is true of building costs: there are so many health and safety laws now

	2003	2004	2005	2006	2007	2008
<b>McDobbles</b>	10.6	10.6	10.7	11.1	10.8	11
<b>HamKing</b>	6.3	6.7	6.9	7.3	7.8	7.9
<b>Weakling</b>	4	4.2	4.4	4.8	5.4	5.8

**Table 11.3.** World fast-food income (bn)

associated with the infrastructure of food sales that it's all become quite expensive over the years. Insurance has gone up, as have distribution costs of raw materials because the price of fuel has been so high. I've got a good team on top of these fixed costs who are quite good at hammering down prices wherever they can.

Given the information you have been provided with here, what do you think the main problem is at McDobbles?

In brief, what types of solutions might you consider exploring?

### Part Three

The interviewer tells you that you have been asked to head a small team looking at potential cost saving measures in the McDobbles restaurants. They have asked you to take a closer look at the cost savings involved with certain ideas that the team has generated.

1. Instead of customers helping themselves to condiments such as mustard, sauce, salt, and vinegar, which are currently provided in squeezable containers at the tables, McDobbles are considering putting small plastic sachets behind the counter for staff to hand out. They believe this will encourage customers to use a smaller quantity of each condiment.
2. In the toilets, customers currently take paper towels to dry their hands. A member of the team believes that hand air-dryers may save money.
3. Customers currently help themselves to napkins/serviettes with their meal. They often simply grab a handful. A team member has seen a machine for sale that dispenses one napkin when a customer pulls a lever. They believe this will encourage customers to take fewer napkins.

Using assumptions, estimate the potential cost savings (or increases) for each idea for McDobbles worldwide. Detail both your assumptions and your calculations.

What issues or challenges might you need to consider before implementing any of the solutions?

## ■ Case Two: The Olympics

### Part One

CPC, an international broadcasting company, is thinking about bidding for the rights to broadcast the 2012 Olympics on television. CPC have asked your consultancy, Xantox, to

advise them on the bid. They want to know how much the licence is worth to them with a view to providing an upper limit to their bid (i.e. the most they should pay for it).

What questions would you ask the interviewer?

## Part Two

After asking your questions, the interviewer has given you the following information:

### • Company

CPC is a large international broadcasting company which broadcasts on digital channels in Europe, the USA, and South America. CPC is a privately owned company with solid and consistent financial performance. Their turnover last year was £1.7bn and their profits amounted to £749m. The company has employees in each country that it broadcasts in. The employees are unionised but worker–manager relations are good.

CPC broadcasts eighty channels which are a mix of own brand content (e.g. news, weather), commentated sports (e.g. football, boxing, motor-racing), and third party content (e.g. sitcoms, soap operas, films). Several channels are purchased by CPC from other companies (e.g. BBC News) and several are dedicated to different themes (e.g. history, sport, entertainment). There are four sports channels which CPC has complete freedom over.

	Total profit	Europe	S. America	USA
CPC	£749m	Yes	Yes	Yes
SKY	£889m	Yes	Yes	Yes
Virgin	£412m	Yes	No	Yes
Sander	£452m	Yes	Yes	No
BoxTV	£122m	Yes	Yes	No
Foxy	£188m	No	Yes	Yes
NBBC	£955m	No	Yes	Yes
Atalos	£514m	No	No	Yes

Table 11.4. Profits and presence of CPC competitors

### • Business models

CPC makes money in three ways. First it sells television subscription packages to households (basic, medium, premium). These cost £10, £25, and £40 per month (in Europe, the USA, and S. America are discounted 10 per cent, 20 per cent, and 50 per cent respectively). The higher subscriptions get premium channels. For an extra £5 per month this service can also be bundled with a high-speed internet connection, also provided by CPC.

Second, CPC offers pay-per-view for important events such as high-profile boxing or football matches. This enables customers on the two cheapest packages to buy one-off access to important events. Customers on the £40 package have all these events included in their subscription package.

Finally, advertising. Advertising revenue depends on how many people are watching a programme. The rate card is £250,000 for each 20-second commercial at prime time (6 p.m.–10 p.m. GMT) and £100,000 for each 20-second commercial at all other times. Contractual regulations demand that a maximum of 10 minutes per hour is devoted to adverts.

In order to receive CPC, the customer requires a set-top box which decodes and presents the channels. Each box costs CPC around £30 to manufacture and install. The customer is not charged for this.

- **Market**

In total, CPC broadcast in thirty-one countries with a total population of 490 million. The average disposable income of each customer varies greatly from region to region with the USA being highest, followed by Europe and S. America.

- **The licence**

The Olympic Committee sells the following licences: USA, Europe, S. America, Canada, India, China, Japan, Africa, Australasia, S. America. The auctions will be held in 2010. There is an auction for each geographical area. Bidders can bid for one or more licences. The licence provides each successful bidder with the rights to broadcast live and recorded material from the Olympics on television. They may sell the material on to other companies to broadcast on television but not for “live” usage. Non-licensed companies cannot broadcast Olympic material unless it has been bought directly from a licence holder.

There will be two successful bidders in each geographical area. The bidding is a closed-envelope bid. This means that bidders make one bid to the Olympic Committee. They do not know what anyone else bids.

- **Competition**

There are different competitors from CPC in different countries. All the competitors are the same type of business as CPC (i.e. broadcasting television). Last year, the competitors made profits as shown in Table 11.4.

- **Costs**

There are many costs associated with CPC's potential involvement in the Olympics. The operational costs for the production and distribution of the Olympics, which include acquiring and using filming and editing equipment, hiring key staff (including hosts), advertising, management, etc., are estimated at around £62m.

- **The product**

The Olympics lasts for 28 days (from 9 a.m.–10 p.m. GMT) and is being held in London. In addition, there is an opening and closing ceremony, each lasting for three hours.

What advice would you give to CPC?

## Final Question

The client wants to know if there are any further avenues or issues they should consider before starting the bidding process. What are your thoughts on this?



## ■ Case Three: Market Share at Netcom

### Part One

Your client is NetCom, a software provider of “back-office” systems (primarily payroll and HR) for the emergency services (police, fire brigade, and ambulance). Similar to most ERP providers NetCom focuses on managing employee information and ensuring that the employees are paid each month.

Despite cutting their operating and supplier costs down to a minimum, NetCom have noticed that whilst their sales are not declining, their market share and profitability is diminishing. They are not retaining their share of what they believe is an expanding market. The CEO of the company has asked you for your advice on how to increase their profits.

What questions would you ask the interviewer?

### Part Two

In response to your questions, the interviewer provides you with the following information, and a set of tables.

- **What other software is bought by the clients?**

The Emergency Services tend to buy two additional types of software:

1. Geographical Location Systems (GLS): these use GPS technology to provide specific support for officers. For example, they might alert nearby teams to an accident, help locating an incident, monitor the location of a unit, or track the movements of a suspect.
2. Client Record Systems (CRS): these systems are used to manage the information provided by the general public calling the emergency services. For the police, they manage the information in the National Criminal Records Database (such as fingerprint identification, reporting software, and data-mining), for the fire service, they manage the records of locations with their fire-safety and history records. For the ambulance service, the systems manage the records of patients and locations that have used the service.

- **Who does the buying and how has this changed?**

There has been increasing pressure in recent years for the emergency services to work together and achieve economies of scale with their purchasing. Increasingly they are being amalgamated into five regional districts where most of the purchasing occurs. Purchasing for all software systems tends now to be undertaken by the same committee/vendor selection department, although the final decision is taken by different people. There are now likely to be fewer but larger purchases.

The other big trend has seen supplier services competitively tendered (i.e. different suppliers bid to provide the services in a competition). This has driven down costs

Company	Share (%)	Sales (£m)	Growth (%)
NetCom Ltd	49	300	3%
Xantax Ltd	8	50	10%
Minime Ltd	3	20	12%
Pretam Ltd	5	30	20%

**Table 11.5.** Back-office market for emergency services (top four)

for the police and put pressure on the profits of suppliers. However, security concerns mean that suppliers require (expensive) Government Security Certification (which NetCom possesses). More and more services are upgrading their software to competitors' products.

- **What is the market for this kind of software?**

Table 11.5 provides a breakdown of the market share in the back-office systems for the emergency services.

- This market is growing at around 4 per cent a year (averaged over four years).
- The profit margins for this market are around 20 per cent.

Tables 11.6 and 11.7 provide a breakdown of the market for Geographical Location Systems (GLS) and Client Record Systems (CRS) for the emergency services. NetCom do not have a presence in either market.

- The GLS market is growing at around 18 per cent a year (averaged over four years).
- The profit margins for this market are around 20 per cent.
- The CRS market is declining at around 2 per cent a year (averaged over four years).
- The profit margins for this market are around 35 per cent.

Company	Share (%)	Sales (£m)	Growth (%)
ICIM Ltd	35	100	20%
Xantax Ltd	23	50	10%
Powerdata Ltd	7	40	16%
Minime Ltd	35	40	30%

**Table 11.6.** GLS market for emergency services (top four)

Company	Share (%)	Sales (£m)	Growth (%)
ChopChop Ltd	20	75	5%
Xantax Ltd	10	50	-2%
Minime Ltd	8	20	-8%
Rankin Ltd	8	75	0%

**Table 11.7.** CRS market for emergency services (top four)

By talking to some customers the following things were noticed about NetCom's products:

- They are seen as quite cheap and basic, without the bells and whistles of other competitors' products. They are the Ford Escort rather than the Porsche or the Rolls Royce of the sector. Other competitors have add-on products and better functionality.
- NetCom is hampered by bad after-sales services. Its training and support services for clients are perceived as weak compared to the competition. Several clients complain that it is difficult to get through on the telephone when things go wrong and that the implementation is often left incomplete.

• **How are the products sold?**

Sales teams are organised by UK regions (i.e. South-West, North-East, etc.). Each team takes responsibility for targeting the emergency services within its territory.

What advice would you give to NetCom?

## ■ Chapter Summary

The case interview is the most prevalent recruitment tool of the consulting industry. In this chapter, we have:

- Explained what the case interview is and why consultancies use it.
- Shown how to tackle the case interview by deconstructing problems.
- Walked through a number of case interviews and given tips on how to answer them.
- Provided three realistic case interviews for you to tackle alone. Suggested answers to these are provided in the Online Resource Centre.

Success with cases rests on logically analysing business problems and communicating your thinking clearly to the interviewer. The more you practise this, the better you will become. Good luck!

### Further Reading

Becoming effective at case interviews has very little to do with natural skills and much to do with preparation and practise. This means not just practising cases, but also practising your mental arithmetic and your other problem-solving skills.

There are a number of free guides on case interviews available on the internet. Most of these include different cases that can be practised. Several consultancies offer business-case advice and practice tests on their recruitment websites. To find good cases and examples provided by consultancies, it is worth exploring the websites of Bain & Co, McKinsey, AT Kearney, Accenture, and Boston Consulting Group.

There are also a number of organisations that offer free, or cheap, access to cases. These include the following:

- Kellogg Consulting Club: Get off my case
- Johnson School Consulting Club: Big Red Consulting Book
- Marshall Management Consulting Club: Practice Case Workbook

It is also worth looking at the websites of Vault, Wetfeet, and Top-Consultant. New sites appear so quickly it is always worth simply typing “case interview” and “consulting” into a search engine and seeing what comes up.