MANAGEMENT CONSULTING CLUB
OF BOSTON COLLEGE

Management Consulting Club of Boston College
Guide to Case Interviews
Fall 2008

Edited by Alex Arnow

This guide contains sample case questions from a variety of sources. We recommend that you contact the company with which you are interviewing to learn more about what cases they use. We also recommend you check out our website for links and more information.

Estimation problem from LEK:

The Problem:
Please estimate how many checking accounts there are in the United States?

Potential clarifying questions:
Which checking accounts – Personal? Business/Institution? Both?
For the purposes of this case let's assume both.

Approach:
Assumptions:

- Assume 300 million people in the U.S
- 80% or 240 million are over the age of 18
- Let's make an assumption that all married couples have only a joint account and 50% of those over 18 are married
- Every single person over 18 has one account and no one under 18 does
- That 60% of the population is in the workforce.
- 30% of those in the workforce are self-employed and 70% are employed by a firm.
- The average firm (excluding those that are self-employed) has 10 workers, there is only one account per firm and those who are self-employed have one business account as well

Calculations:

- Personal accounts: 240 million people over 18
    - 50% are unmarried and have one account = 120 million accounts
    - 50% are married and share one account = 60 million accounts
- Business Self-Employed: 180 million people are in the workforce, of which, 30% are self-employed = 54 million accounts
- Business Employed by Firm: 180 million people are in the workforce, of which 70% are employed by firm with an average of 10 people per firm = 126 million divided by 10 people per firm = 12.6 million accounts

Conclusion: Therefore our approach yields an estimate of ~ 250 million checking accounts in the U.S.

Profitability analysis adapted from Deloitte:

The Problem:
You are consulting for the manager of a division of a large consumer products company. Her division, Paper Co., produces paper products in three forms: toilet tissue, paper plates/cups, and stationery (writing paper, note pads, decorative envelopes, blank cards, etc). This division has sales of $825 million per year. The entire company has sales of over $35 billion. Stationery products represent $118 million in sales per year. While toilet tissue and paper plates/cups are profitable, stationery products are only breaking even in good quarters and losing money in bad quarters. She has received a proposal from upper management to sell the stationery business and she wants us to help her determine if she should sell it, or if not, what she should do to make it profitable. What do you suggest she do?

Suggested Frameworks:
Explore the following in more detail
1. The product mix and production process
2. The industry environment and competitive landscape
3. The customer base and consumer profile

Interviewer Notes:

- One plant in California produces all of the paper products, toilet tissue, paper plates/cups and stationery.
- It would be difficult to find another use for the plant without a major conversion.
- The market leaders produce pure stationery products using only cellulose, which is derived from plant fibers. The cellulose is made by cutting down trees and then grinding up trees and dumping the wood pulp in acid.
- Your client's product uses a more elaborate process to produce recyclable stationery paper. In addition to the wood pulp in acid, the client's product uses special fiber pellets. The wood pulp in acid is the same cost as the competitors, but the other items necessary for creating recyclable materials cost about twice as much.
- Actually, the company does not have a real preference for which type of paper is produced. The recyclable goods niche was at one time perceived to be an attractive market, but the high costs of production have limited our profitability in that space.
- Stationery is a $15 billion dollar industry nationwide. There are two large players that have 40% and 25% of the market, respectively. Your client's market share, 12%, makes her third in the industry.
- The best available information indicates that the two market leaders are profitable. The two market leaders are able to fund more advertising and promotions, such as coupons, than your client.
- The market for stationery products is essentially mothers with children, young adults, and college and graduate students.

- Brand name is very important in this market, as in paper towels and paper plates/paper cups. However, this market is also very price sensitive; as you noted earlier, it is very responsive to coupons and other price promotions. Additionally, because this market is so responsive to price all branded products tend to sell in the same price range. Paper Co. is no exception, and their stationery products are priced much like their competitors' products.

Conclusions:

1. Sell the stationery business. This would, however, affect the toilet tissue and paper plates/cups businesses, as there are both manufacturing and advertising synergies. Also, it would be difficult to get a good price for the stationery business as it is currently not very profitable.
2. Sell Paper Co. This may be more feasible, as the buyer could capture the synergies, however the large consumer company would lose valuable revenue from the toilet tissue and paper cups/plates divisions.
3. Keep the stationery paper business and rework the ingredients and recycling process. This could potentially entail eliminating or replacing the unique fiber pellets which are driving higher costs.

Market Analysis case adapted from Deloitte:

The Problem:
Your client, VCR Magicians, is the manufacturer of video cassette recorders (VCRs). VCR Magicians offers a full range of VCR options using the most sophisticated and quality-driven manufacturing techniques.

There are several issues VCR Magicians is currently facing that they would like our help to address. Although the firm's sales representative turnover rate has been increasing, the remaining representatives claim that sales are at record high levels this year. In the past, VCR Magicians targeted two consumer groups - older, middle income and middle-aged, middle income individuals. Recently, your client has been losing middle-aged target market customers. VCR Magicians has traditionally managed its relationship with retailers well. However, the firm has recently lost several major accounts due to retailers' inability to move VCR Magicians' products.

VCR Magicians has hired you to figure out why they have been experiencing an alarmingly poor sales year

Suggested Frameworks:

1. Look at the implications of the increasing sales representative turnover rate and retailers' inability to sell VCR Magicians' products.
2. Once you explore the implications of these issues, you can begin to develop solutions that aim to correct the company's poor sales.

Interviewer Notes:

- Currently there are only 2-5 other major players in the industry, a steep decline from several years ago. This has directly contributed to VCR Magicians' growth in market share from a steady 32%, the second largest in the industry, to a 44% share.
- The VCR industry is a mature market, having existed for quite some time now. Associates understand that they have limited opportunities for career progression and commissions in a market stunted from further growth. So it sales force attrition is not necessarily a cause for diminishing sales, but more of a signal of a declining industry due to other factors such as diminishing consumer interest.
- As DVDs and DVD players are becoming more prevalent with technology improvements, VCRs are becoming obsolete. Declining interest is more of an issue with the middle-aged target market than with the older target market, because the baby boomers have historically been more interested in purchasing more technologically advanced, "trendy" electronic equipment than the older generation, which generally has more traditionalist preferences.

Conclusions:

Because of this growing inclination toward DVD players in the middle-aged market, VCR Magicians has two main options:

1. Focus on its older, loyal customer base, which is less likely to switch to the new technology
2. In the long run, expand its technology capabilities to become a provider of DVD players and dual DVD/VCR players.

Business Strategy Case adapted from Deloitte:

The Problem:
PetCo, a leading pet food manufacturer, has experienced a loss of market share and a downturn in top line revenue over the past 5 years. PetCo's primary channel of distribution is veterinarians who recommend the brand to their customers and sell directly from their offices. In fact, veterinarians are largely responsible for the launch of the company and the identity of the brand, as they contributed freely to the development of the quality formula that distinguishes PetCo from competitors. PetCo now must make a decision critical to its future. The company has been approached by Wal-Mart and asked to sell its most popular products through Wal-Mart's chain of stores. There is one problem --- Wal-Mart would sell the products at significantly lower prices than could the veterinarians. You have been asked to help PetCo decide whether to pursue this alternative channel of distribution, and if so, how.

Suggested Frameworks:
In establishing a framework for this case, be sure to look at these three factors:
1. The reasons for the downturn in revenue and loss of market share
2. The impact of increased sales volume
3. The importance of PetCo's unique positioning

Interviewer Notes:

- The number of veterinarians distributing PetCo's products has remained constant over the 5 year period in question.
- There are a number of customers who have been purchasing PetCo products from veterinarians that continue to do so; however, an increasing number of customers are more resistant to paying the premium prices attached to PetCo products and instead purchase pet food from discount retailers like Wal-Mart.
- After covering fixed costs the company enjoys a substantial profit off its premium priced goods.
- PetCo products are only sold at veterinarians' offices and consumers generally associate high quality and nutritious value with the pet food. Consumers that are willing to pay premium prices for PetCo products believe that the food is superior to any close substitute on the market. Since these consumers trust that their veterinarians would only recommend the best, they subsequently choose only PetCo products. The brand name is recognized widely and is always aligned with quality.
- While PetCo's current customers value perceived quality, Wal-Mart customers value price. As a result, Wal-Mart customers, who make purchasing decisions based on price, will not place high enough value on quality to pay a premium to obtain it. To cater to this potentially highly profitable customer segment, PetCo must instead compete with other pet food companies in the Wal-Mart domain on price.

Conclusions:

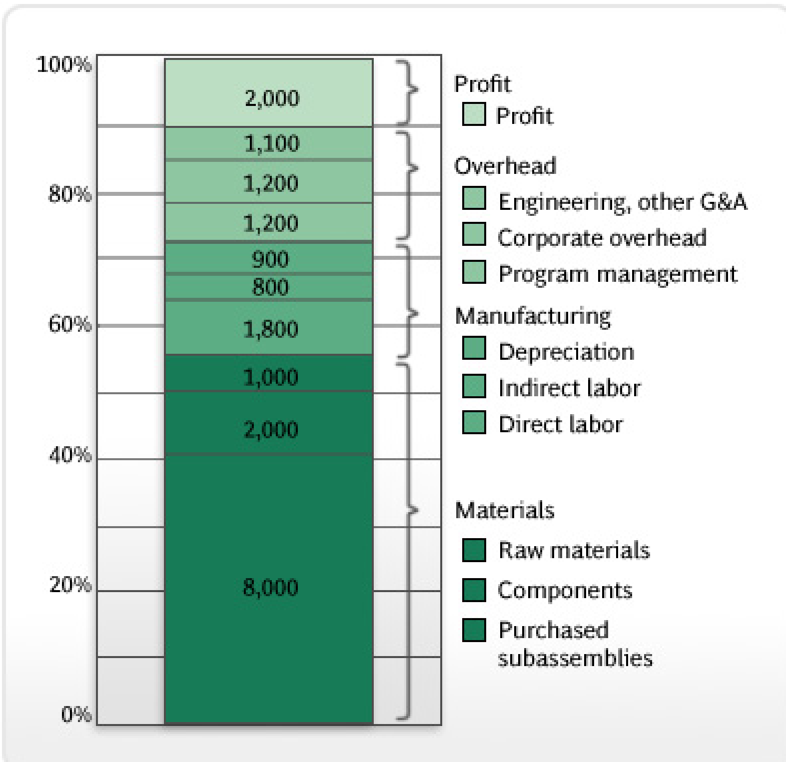
1. Create a new line of products under the PetCo name with cheaper/lower quality inputs – while this may initially draw customers at Wal-Mart, I would not recommend this strategy. I think PetCo would lose nearly its entire veterinarian business as it may damage its brand image through the new offering. PetCo would no longer be associated with its current superior standing in the industry.
2. Create the new product line and sell Wal-Mart the rights to sell the goods generically, under the Wal-Mart name – while I think this strategy would work, I think PetCo is not leveraging one of its core strengths: its brand. So while it will sell more volume with this strategy, I do not think it will reach its potential earnings if it employed a different strategy.
3. Create a new line of products under a new name that is just endorsed by PetCo – this may be the most feasible solution. While the new product line would enjoy benefits being associated with the major brand, it still stands on its own with a new, unique name. Thus, the two offerings will be differentiated and neither should cannibalize the other's sales.

Profitability Case adapted from BCG:

The Problem:

Your client is a U.S. defense contractor that manufactures the Mohawk Light Fighter Jet for the British Royal Air Force. The company has produced the $20 million fighter jet for the past 12 years. The British government has decided to put the contract out to bid, however, and to win the program, the client's purchasing agents have estimated, the company will need to cut its costs by 5 percent. It has asked you to help it reduce costs.

You have this diagram of the costs:



[1]

Suggested Framework:

This is a profitability problem so look at a revenue cost framework. Focus specifically on:

1. The cost structure of the Jet
2. Investigate main factors in pricing
3. Postulate ways to cut costs

Interviewer Notes:

- A subassembly functions on its own. An example is the pilot night vision system. A component is a smaller part, such as a part of the engine. For the sake of this case, you can assume that the British Ministry of Defense, MOD, allows

[1] This diagram has been taken directly from the BCG website. Last Accessed 10/21/2008: http://www.bcg.com/careers/interview_prep/practice_case/practice_increasing_profit.html

"commercial off-the-shelf" purchases, which means that the client is free to purchase from whomever it wants, as long as it can ensure that the parts meet MOD quality guidelines.

- Purchased materials average approximately 70 percent of the price paid to most of the manufacturers.

- The client estimates that there are approximately 125 suppliers of raw materials and components among the manufacturers of the subassemblies and itself.

- About 80 percent of these products are commodities, such as sheet metal and wire harnesses. Even some of the electronics, such as printed wire boards and circuitry, are fairly generic.

- Let's say that you did this and discovered that approximately 30 percent of the cost of raw materials is from similar materials used across the subassembly manufacturers.

Conclusions:
Our client needs to reduce costs by 5 percent. The largest area of opportunity appears to be in purchased materials, the majority of which comprise subassemblies manufactured by seven subcontractors. By looking at its purchases in total, the client can target approximately 40 percent of costs. To achieve the 5 percent cost reduction, it would need to reduce costs by 15 to 20 percent. It could try to do that by increasing commonality in the design of the subassemblies and components and by shifting volume to a smaller number of suppliers.

Raw materials and components typically have lower margins than more customized products. It may be challenging to hit the client's savings target by focusing only on these purchases. But since raw materials and components represent about 40 percent of costs and there is an opportunity to concentrate purchasing.

Direct labor is another large cost component. As a contingency, we could look into that area as well; some companies use outsourcing to lower their manufacturing costs.

For example, it might want to increase its use of purchased subassemblies and reduce the amount of direct manufacturing it does. Of course this would work only if it could drive direct labor costs below the offsetting cost of these subassemblies. The client will be working closely with the subassembly suppliers to implement its purchasing initiative. This may give it an opportunity to explore the suppliers' capabilities at the same time.

Look first to combine purchases across the subassembly suppliers with our client's purchases. I suspect that the client and the subassembly suppliers will need to share a great deal of information, including engineering drawings and specifications, with potential suppliers of the raw materials and components.

The Internet could prove to be a very effective medium for forming a single "virtual" purchasing department to consolidate both the flow of information and purchase orders across the companies. Our client might also want to use a bidding system for those materials that are true commodities.