



## **UNITED STATES POSTAL SERVICE**

*Type of case: Estimation*

**How many people work for the post office?**

### SOLUTION STRUCTURE

This is a pure estimation case. What matters is the way you get to an answer, not necessarily the answer itself. As the interviewee is working through the problem they should make it abundantly clear what their assumptions are. To test the interviewee, you could always ask, "Why did you make that assumption?" or "What is your reasoning for that assumption?" It can be tackled many ways but here is an example of one way it could be done:

#### Assumptions:

- There are four kinds of employees: drivers, tellers, admin., and sorters. The air transport side is mostly composed of private carriers.
- Of all the zip codes possible (99,999), all are allocated to an area and used. (round to 100,000)
- Every zip code has one post office.
- Every post office serves the same number of entities.
- There is an average of three windows (tellers), three sorters, and four letter carriers attached to each zip code. (10 employees)
- Add on 10% for the admin and intrastate drivers.

Do the math:  $(100,000 \times 10) \times 1.1 = 1,100,000$  people work for the post office

#### In reality:

890,000 people work for the post office. There are 38,000 post offices and 234,000 letter carriers.

## SHORTSTOP TO FIRST

*Type of case: Estimation*

**In professional baseball, how long does it take for a baseball to travel from the shortstop to first base?**

### SOLUTION STRUCTURE

Assumptions:

- The bases are 90 feet apart.
- The distance from shortstop to first base is about 120 feet.
- A major league pitcher can throw about 90-95 mph.
- A major league shortstop can throw about 80 mph.

The key is to be able to convert miles per hour to feet per second.

80mph to feet/hour:

5280 feet/mile:  $(80 \times 5280) = 422,400$  feet/hour

Convert units:

- 60 minutes per hour, 60 seconds per minute = 3600 seconds/hour  $(422,400/3600) = 117$  feet/second
- 120 feet from shortstop to first base, thrown at 117 feet per second =  $(120/117) =$  just over a second (1.02 seconds).

Don't be afraid to round off these large numbers

- 5000 feet/mile  $\times 80 = 400,000$
- 4000 seconds/minute:  $400,000/4000 = 100$  ft/second
- $120/100 =$  just over a second

It's much easier this way. They're not looking to see if you have calculator for a brain, they want to see your logic and ability to convert.

## M&M CASE

*Type of case: Estimation*

**How many M&Ms of each color go into a 3-ounce bag?**

### ADDITIONAL INFORMATION

- 20 M&Ms make up a 3 ounce bag
- There are six colors of M&Ms: yellow, red, green, blue, brown, orange
- They all cost the same to produce
- Research indicates that customers have no preferences of color.
- Color is added on at the end of the mfr process
- They are mixed in the same ratio that they are produced
- Capacity of adding color:
  - 3 tanks hold the 3 primary colors: yellow, red, blue
  - 1 remaining tank used to mix colors to prepare: green, brown, orange
  - Each of the 4 tanks has equal capacity.
  - The 1 mixing tank pulls yellow, red, and blue as needed from the same supply that fills the three primary tanks.
  - They only refill the primary tanks when all three have emptied.
- Tanks are allowed to run out before they refill for batch control purposes
- Proportion to mix brown:  $\frac{2}{3}$  yellow,  $\frac{1}{6}$  red,  $\frac{1}{6}$  blue
- Proportion to mix green:  $\frac{1}{2}$  yellow,  $\frac{1}{2}$  blue
- Proportion to mix orange:  $\frac{1}{2}$  yellow,  $\frac{1}{2}$  red

### SOLUTION STRUCTURE

This case is designed to get you into a manufacturing state of mind. The idea is that you will burn through yellow faster than any other color since it is needed the most. Therefore, there should technically be more red and blue M&Ms in every bag. They will still be produced after the supply of yellow has run out, stopping production of yellow, green, orange, and brown.

## BOOK ON CHINA

Type of case: *Market sizing*

You've made the final round, you walk into a senior consultant's office and he tells you he's been thinking about writing a book on "Business in China" and retiring from the consulting business. He wants to know if it's a good idea and if he'll make enough money to retire.

What will you tell him?

### SOLUTION STRUCTURE

Both questions are driven by the same answer - How much money will the book make for the consultant.

- How big is the market for business books on China?
- How much of the market value does the author actually receive?
- How much does the consultant require in order to retire?

Market for Business Books on China:

- Estimate the number of adults in the United States = 125 million
- Estimate the number interested business books = 20% = 25 million
- Estimate the number interested in books on China = 5% = 1.25 million
- Gut check: Do you really think he can sell over a million copies? No way!
- Re-estimate: 125 million x 10% x 1% = 125,000 copies (more realistic)

How much does the author receive? (Assume \$15 retail)

Value Chain:

- Retailer Cut	\$2.00	
- Marketing Costs	\$3.00	
- Manufacturing Costs	\$3.00	
- Publisher Cut	\$3.50	
- Author	<u>\$1.50</u>	Total Take: 125,000 x \$1.50 = \$188M
- Total	\$15.00	

Can he retire?

Wrap-up by asking if \$188,000 is enough to retire – doubtful.

## REAL-ESTATE DIVESTITURE

*Type of case: Market sizing*

**Your client is a large real estate development company considering buying a piece of real estate in Colorado. How do you go about analyzing the investment?**

### ADDITIONAL INFORMATION

- The property has 5,000 acres of open, undeveloped land.
- The property is 45 minutes from Telluride, a skiing area, a home of a large summer film festival, and a five-star resort and spa. The land has several small hills and abuts a mountain.
- There are 7 horse-riding stables in the area, two of which offer cattle drives, like in *City Slickers*.
- Company currently owns hotels, strip malls, and office buildings nationwide.

### SOLUTION ANALYSIS

You need to determine the highest and best use for the land in order to assess its value. To do this, you should start with the 3Cs:

- Competitors - Analyze other similar plots of land that have been developed with like characteristics – Utah, Montana, even Eastern regions such as New Hampshire.
- What other commercial developments exist in the area? Is there an abundance of any one type—horseback riding stable, fly-fishing camps? Is there enough demand to handle another competitor, or do you need to branch out?
- Customers - Consider existing activities that many people do within the area as this may show what people are interested in doing with the land.
- Segment the potential market: residents, vacationers (summer and winter). Which groups are the largest and which are growing?
- Analyze the unmet needs of each group; can you fulfill them in some way?
- Do you want to try attracting a new group that does not already vacation or reside in the area? (Very expensive and risky)
- Company - What specific skills do you have to improve or manage this land?
- What specific characteristics does the land have that might differentiate it for better or for worse?

Then you need to analyze:

- Financials: How investment fits in portfolio: geographic or product diversification; liquidity risk of the investment; investment time horizon
- Whether any improvements can have multiple uses in case our original idea fails
- If you have the skills to manage the property
- How you intend to ward off potential competitors by creating a unique value proposition.

## PHARMACEUTICAL PRICING

*Type of case: Profitability*

**A pharmaceutical company developed a drug that can cure shortsightedness. It is wondering how much it should price the drug at. What is the upper bound and lower bound price for the drug?**

### ADDITIONAL INFORMATION

- There is a substitute product, laser surgery, but it costs \$1,000 and there is 5% failure rate.
- The pharmaceutical company has a monopoly on the drug for the next 3 years.
- The drug is taken only once and can cure you within one week. It does not have any failure rate.

### SOLUTION ANALYSIS

**Lower bound price** should be price of its substitute such as eyeglasses and contact lenses.

Eyeglasses:

Assumptions:

Duration of wearing eyeglasses is from age 15 to age 45 (from age 45 they have to wear other types of glasses such as bifocals).

People change their eyeglasses once every two or three years.

The average price of eyeglasses is \$200.

Discount it back at 10%.

Price:  $\frac{((45-15)/3)*200}{1.1^n}$  (Example is for eyeglasses replaces every three years. Contact lenses are calculated the same way.)

**Upper bound price** is slightly more expensive than the price of the laser surgery since the company has a monopoly and the drug has a 0% failure rate.



**HAMMERJACK***Type of case: Profitability*

**Hammerjack is a regional chain of "local hardware stores" located in numerous neighborhood strip malls and shopping centers. They had enjoyed excellent performance for the past 15 years but have experienced declining profits in the past two years. They are concerned about their profitability and have hired you to explain their situation and provide recommendations to get them back on track.**

ADDITIONAL INFORMATION

Competitive issues:

Costs:

CGS – no change

Lease of space - no change

SG&amp;A, Overhead - no change

Franchise costs - no change

All other drivers - no change

Revenues:

Overall sales - down

Number of customers - down slightly

Dollar amount of purchase -down heavily

Assumption:

We are losing customers and based on the heavy decrease in dollar amount purchased, we are losing high spending customers. (There must be substantially different customer segments)

Question:

What do we know about our customer segments? A: 3 segments (as follows):

	<u>Maintenance People</u>	<u>Do It Yourself-ers</u>	<u>Contractors</u>
# of visits	1	10	100
\$ spent/visit	\$100	\$1,000	\$10,000
# of people/segment	100 million	10 million	10,000

Assumption:

Hammerjack is losing customers and dollar revenue, there is a strong possibility of increased competition. A: Yes, Home Depot and other huge "warehouse" hardware stores have entered Hammerjack regional locations.

Assumptions about "Warehouse Stores":

Lower prices due to buying power (economies of scale). A: Yes

Provide additional services such as training courses, information, tips. A: Yes

Stealing contractors due to substantially lower costs and DIY's due to price and help. A: Yes

**SOLUTION STRUCTURE**

Analyze drivers of profitability: Profit = Revenue - Costs.

Based on the above information, you can determine which segments are most valuable to Hammerjack.

	<u>Maintenance People</u>	<u>Do It Yourself-ers</u>	<u>Contractors</u>
Total segment worth:	\$10 Billion	\$100 Billion	\$10 Billion

You determine that the "Do It Yourself-ers" are the most important category.

**Issues:**

Maintenance segment is still loyal because they only shop once a year and for a lower dollar amount. We probably can't keep the contractor segment due to price. How do we keep the DIY's?

**Potential Solutions:**

Offer the training courses with an emphasis on the local knowledge of the neighborhood.

Anticipate the products needed by DIY's and offer competitive prices on those items.

Acquire or align with other local chains to gain buying power.

## MAJOR BANK

Type of case: Profitability

Our consulting firm has been retained by a major bank to help improve the profitability of their largest credit card offering. Their card (in the same class as a Visa or MasterCard) provides average returns in comparison to the industry, however, our client believes it can become more profitable. You need to analyze the situation and make recommendations.

### ADDITIONAL INFORMATION

Costs	Revenue
Marketing, SG&A, Personnel (Can't change)	Annual fee - currently \$50 (Could change)
Bad Credit theft etc. (Can't change)	Annual percentage rate - 14% (Could change)
Other costs (Can't change)	Merchant fee = 1.5% (Can't change)

### SOLUTION STRUCTURE

- Opportunity to decrease costs or increase revenues - analyze drivers
- Opportunity to vary the annual percentage rate or the annual fee
- Benchmark competition for opportunities

### Key Issues

Can't affect the cost structure, therefore have to increase revenues

Only revenue variables available are changes to the annual fee and APR

### Competition:

Interviewer tells you it is a very competitive environment—move on.

### Assumption:

Customers use the card differently, there may be different customer segments based on the balance held, how quickly balances are paid off and the “need” for the card

Case Interviewer suggests there are three distinct categories:

Payoff in full every month

Hold small debt for short periods of time

Hold heavy debt for long periods of time (basically pay off the interest) -80% of our revenue

He/she then asks how you would tailor card services to each of these groups:

Recommendations

**Pay In Full Monthly**

charge high monthly fee  
provide numerous services  
(detailed reports, small benefits)

**Hold Small Debt Short Term**

increase the APR slightly  
decrease the annual fee

**Hold Heavy Debt Long Term**

waive the annual fee  
increase their credit limits  
cash back programs, points  
access to cash advance, etc.

Key Issues:

These heavy debt cardholders are the key to our profitability, it is imperative to get them to sign up for the card (no annual fee), use the card (cash back, point systems) and run up debt (automatic credit limit increases).

Note to Case Interviewer:

As soon as the interviewee had identified the key drivers of revenue and cost, the focus of the case was shifted to customer segmentation and tailored services for each segment.

## VIDEO RETAILER

*Type of case: Profitability*

Our client is a major entertainment company on the West Coast. One of their divisions is a leading home retailer. During the late '80's and early '90's this division had a great run-opening 4,000 stores and realizing considerable profits. In the last two years both growth and profit have declined substantially. You have been brought in by the CEO to assess the situation and provide recommendations.

**Background:** Our client's division is not unlike a chain of Blockbuster video stores. The majority of their business is in movie rental with a much smaller portion in sales.

### SOLUTION STRUCTURE

- Start with a simple: (Profit = Revenue – Costs) structure
- Analyze the competitive situation
- Analyze the “substitution” factor – how else are consumers getting movies?

Costs:

Cost of the new movies: *(Actually decreased)*

Overhead: *(No change)*

SG&A: *(No change)*

Leases, other: *(No change)*

Revenues:

# of rentals: *(decreased, traffic down)*

Price of rental: *(No change)*

Sale of rentals: *(decreased)*

Accessories: *(No change)*

Key Learning:

- Costs have actually decreased, but not enough to offset the decreased store traffic.

Competitive Assessment/Substitutes: (List potential causes of decreased traffic)

- New movie stores: *(No real change)*
- New In-home sources – cable on demand: *(Potential for future but no real current affect)*
- Sales of movies for home use and collection: *(Sales have increased dramatically)*

[Once the key issues have been identified, the interviewer describes the changing industry:]

When division was growing, it could buy excess numbers of the new releases to satisfy customer demand. Later, they would send the excess copies to the new stores as part of their “library” of existing tapes. With fewer new stores opening, this is no longer an option-therefore fewer new releases have been ordered.

Recently, the studios have allowed new releases to be sold through warehouse stores (Wal-Mart) at the same time they are made available to the rental retailers. Thus, many of our customers are purchasing rather than renting. In addition, when customers rented a new release, they quite often rented an existing tape from the library (additional lost revenue).

Based on this industry outlook, what would you recommend for the division?

Provide a recap:

- It appears as though the major issue facing the division is a reduction in store traffic for new releases. This is mainly due to the sale of these same releases through alternate channels. How can we regain store traffic or offset the rental losses?

Recommendations: (these are just a few of the potential options)

- Develop new, more convenient locations-kiosks, pick-up/delivery
- Develop pricing/bundling formats combining new releases with existing movies
- Offer “rent to buy” programs – rent the first time, then have option to purchase

## SOAP FLAKE MANUFACTURER

*Type of case: Profitability*

Your client is a manufacturer of soap flakes. The company is located in central New York, where it has resided since its founding almost 100 years ago. Its customers are primarily marketing concerns, not unlike P&G, that brand your client's products. Despite years of steady business and profits, the last three quarters have been below expectations. In fact, the company is losing money, and shareholders are not happy. You have been hired by the CEO to investigate the company's profitability. She is expecting some recommendations.

### ADDITIONAL INFORMATION

- The product is unchanged – no new formulas, sizes, etc. – nothing that would affect sales
- Profit margins are generally steady (but very small! – soap is a commodity, after all)
- The economy is normal – no exogenous variables (i.e., customer out of business, etc. – nothing going on here)
- Recent downsizing reduced labor force by 15%
- Old equipment was recently scrapped – the plant was almost 100 years old!
- New plant equipment – purchased on credit (yes, this results in a new fixed cost, if asked)

### Revenue Drivers

Q: What are the revenue drivers? A: You tell me, you're the consultant – why don't you outline what you think they are.

Q: What has changed? A: Nothing: sales, price, volume, market size, customer base, etc. are all steady.

### Variable Costs

Q: What are the variable costs? A: You tell me, you're the consultant – why don't you outline what you think they are.

Q: What has changed? A: Raw materials unchanged, labor reduced.

### Fixed Costs

Q: What are the fixed costs? A: You tell me, you're the consultant – why don't you outline what you think they are. Reduced labor costs from downsizing means less fixed costs. Loan and

interest payments for equipment > existing profit margins (this is the key). Nothing else has changed, if asked.

### SOLUTION STRUCTURE

- Framework: Profits = Revenues – (FC + VC)
- Examine revenue drivers: What's changed?
- Examine variable costs: What's changed?
- Examine fixed costs: What's changed?
- Summarize analysis
- Provide recommendations

### SOLUTION ANALYSIS

Give up? The company recently purchased plant equipment to replace old plant equipment. The old equipment was paid for but the new equipment gave rise to fixed payments for the loan and interest. These are greater than the profit margins. Hence there is now a loss.



## JAM COMPANY

*Type of case: Profitability*

**Your client is the owner of a Boston jam company. She has identified that her competition is making about \$1MM per year in profit more than she is. The impact of this is that the client is driving an older Acura and the competitor has a new BMW! Help!**

### ADDITIONAL INFORMATION

- Both companies are approximately equal in:
  - Revenue = \$10MM
  - # of jars sold per year
  - Market share = 2%
  - Product mix: 25% strawberry, 75% other
- Locations: client is in Boston, competitor is in a rural area
- Client prides herself on technological savvy. Proud that she has just gone to JIT, the first one in the industry. Client just installed a new, \$1MM computer system to support JIT.
- Client has a very loyal workforce with average time at the company of 15 years. A worker's average pay is 125% of the industry, primarily due to overtime.
- Client has their own transportation fleet (competitor does not): likes the feeling of control
- Product costs: (client)
  - Raw materials:
    - Sugar        10%
    - Fruit        70%
    - Jars         20%
  - Labor and overhead: equal to the raw materials costs
- Competitor purchases fruit only when in season – leading to significant savings. Client does not.
- Competitor produces in large batches and has loads of inventory.
- High changeover costs in jam production process at both the client and the competitor – there are no dedicated lines for different types of fruit.

**SOLUTION ANALYSIS**

This is not a numbers case per se, although interviewee should attempt to ID the key components of the \$1MM extra cost that the client has. The extra costs arise from:

- Changeovers / JIT system
- High overtime
- Buying fruit out of season
- Dedicated fleet

**Recommendations:**

- Move to larger batch size.
- Ditch JIT and produce to forecast to smooth production and overtime.
- Buy fruit in season.
- Consider outsourcing transport.

**Key underlying problem:**

How do you gently tell the client that her \$1MM new computer system is a bad decision and a sunk cost?

**Bonus:**

ID the potential problems with the workforce when your recommendations decrease overtime and affect their pay dramatically.

**LET'S GO!**

*Type of case: Profitability*

**Your client, Let's Go!, is a publisher of travel-related books. Recently, profitability of the firm has been declining. They have hired you to investigate. What factors would you look at? What recommendation can you provide?**

**ADDITIONAL INFORMATION**

- Books cover a wide range of countries. Books are generally about how to travel on the cheap.
- Written by the Let's Go! staff – primarily students (all from the same school) whose travel expenses are reimbursed.
- Target segment is low-cost travelers.
- Nothing about the manufacturing process is relevant.
- Distribution: book stores
- Promotion: word-of-mouth
- Costs
  - Fixed costs have not changed.
  - Variable costs are increasing, particularly labor costs: Why?
  - Other variable costs are unchanged.

**Competition:**

- Many regional players own a small share of the market (very fragmented), especially in the West (college towns).
- There are a few big players, but none that dominate the low-end segment as effectively.

**SOLUTION ANALYSIS**

Students are learning to game the system, and are maximizing the expense reimbursement system (VC increasing). Regional players out west are growing, sapping market share (revenues declining)

**Recommendation:**

- Change the reimbursement formulas: tighten controls, consider a stipend-based system.
- The western market is fragmented: many steps available to increase presence: list and weigh pros and cons.

**DEPARTMENT STORE**

Type of case: *Product Costing / Profitability*  
 Source: *Bain (final round)*

**Our client is a large department store chain. The CEO knows that men’s dress shirts are much less profitable than the rest of his product lines. He believes that if they were evaluated on a fully loaded basis that they would in fact be unprofitable. He is considering taking action to correct this problem.**

**What would you want to know to determine whether or not the CEO is correct?**

**What corrective action would you recommend?**

**Interviewer Instructions:**

Share the information on the table below (share all of it at once, in written form if you like) only when some information in it is requested. Interviewee should ask about SG&A or for detail on other allocated costs and then receive the entire table. If interviewee asks for clarification on the phrase “fully loaded”, respond with “including all costs associated with the product.”

	<b>Men’s Dress Shirts</b>	<b>Men’s Department</b>
Sales	\$1,000	\$5,000
Gross Margin	25%	35%
SG&A	?	\$400
Operating Costs	?	\$300
Inventory	\$150	\$1,000
Square footage allocated to product or department	250	1500

**Additional Information:**

- SG&A includes floor sales staff costs as well as promotional and advertising costs.
- Operating Cost mainly comprises cost of maintaining and stocking inventory.
- The store can be thought of as similar to Nordstrom’s or Macy’s.

**Debrief**

The information in the table was shared (in form of PowerPoint slide) only after a specific request was made for elements of the table.

Goal is to logically allocate costs and then determine appropriate action. Essentially, it is a cost accounting problem. Good deal of leeway given logical arguments in allocating and suggested actions.

Operating Costs - These relate to inventory. Could argue that number of styles/sizes should require more than the department norm. However, inventory as % of sales is 15% as opposed to 20% for the department. Maybe we allocate less instead if we use this metric. Real data is probably more sound approach.

SG&A – Promotions and sales. May argue that shirts are promoted more or less than other items. My preference was that they are not “features” in ads (usually suits and shoes instead).

May consider dress shirts a necessity purchase that drives traffic and thus sales of complementary items (t-shirts, ties). Also, sales time for dress shirts likely less than that of suits and shoes. This leads to a lower percentage allocation of SG&A. CEO should perhaps reassess.

Suggested action should recognize importance of dress shirts in the value proposition for a department store. You cannot afford to not have them in your offering. Also should pick up on complementary relationship among shirts, suits, ties, etc.

Be sure not to deduct inventory as a cost. This is a balance sheet item.

Sales per square foot is an important measure for retailers and should be mentioned. This measure reflects opportunity costs of offering one product on your shelf instead of another.

Recommended actions could include private label, vendor change, move up or down scale, promote more or less, .....

## **REGIONAL TRUCKING COMPANY**

*Type of case: Profitability*

**A regional trucking company has hired you because they are slowly losing money. Why are they losing money and how do you fix the problem?**

### ADDITIONAL INFORMATION

- Located in North Carolina and serving a few large markets (NY, Atlanta, Pittsburgh, Chicago)
- They ship two types of items: specialty furniture and commodity items
- The furniture trucking market:
  - Loyal clients
  - High profit for the trucking company
- The commodity market:
  - No loyalty
  - Losing money to compete – eroding your client's profit margin
- Sales force: located in major markets to drum up business (typically commodity orders)
- Competition is increasing as a few large national trucking companies have entered their market.
- Logistics of delivery
  - Furniture shipments are generally one way, i.e. they don't have any furniture to haul back from their delivery points and must return empty if they want to ship furniture exclusively (way too expensive to run a truck empty)
  - The sales force finds stuff (typically commodity items) to backhaul to utilize the empty truck space
  - They could lease the empty space to a national carrier but they are the competitors and the revenue is lower than their current commodity trucking business

**SOLUTION ANALYSIS**

A typical way to look at this problem is Profit = Revenue – Costs. The revelation that the commodity business is losing money and pulling the profit down appears to be a key piece of information. It leads you towards the idea of either getting rid of the commodity trucking, and running the trucks empty one way, or forming an alliance with a national carrier. The problem is that running the trucks empty is way too expensive, and would cause you to lose even more money, and the revenue from an alliance is lower than the revenue you currently enjoy to truck commodity items around. So what do you do?

A good candidate should ignore the lower revenue. Revenue is not necessarily the issue, what is the potential profit? By going with an alliance the company would be able to substantially reduce their sales force (costs) as they mostly drum up commodity business, which would be unnecessary. The lower revenue is offset by an even larger drop in costs.

## TELEPHONE REPAIR AND SERVICE

*Type of case: Profitability*

**Your client is a telephone company trying to reduce the costs and improve performance in the repair service operation. How do you approach the problem? How would you go about implementing your solution?**

### ADDITIONAL INFORMATION

- The company has 5 regional centers in 5 different cities and a corporate headquarters.
- You have been brought in through a process improvement initiative currently underway at corporate. The regional centers are not aware that their repair service is being examined.

### SOLUTION STRUCTURE

Begin with the 3 C's to get details about your client and the nature of the competition in the industry. Ultimately you can go through a profitability analysis to try and drill down to the root cause of the high costs in repair service. Don't forget to outline a process to follow to implement your solution.

### SOLUTION ANALYSIS

- This is a regulated industry with a unionized labor force that will play a large role in your analysis.
- Generally, the utilities industry has faced very little competition for local service and has thus had almost no need to institute and track performance measures with its management control systems. You will almost certainly have to develop new baselines for measuring performance in the repair service department within the company. Some possible measures could be: time to repair, time to dispatch, customer satisfaction expressed through callback, etc.
- If these baselines are new to the company, your team will need time for these baselines to generate information that can be compared with other "best-of-class" companies in this industry.
- The profitability analysis should touch upon recent capital expenditures, deteriorating infrastructure, high wages, escalating repair materials costs, low productivity in the department; anything that might contribute to high costs in repair service.
- Don't forget the implementation part of this question. Basic ideas here include developing a pilot program to test out your solution and selecting a pilot site, getting buy-in and cooperation at the regional center level, establishing objective measurements to gauge the success of the pilot, and finally, developing and presenting a corporate-wide rollout of the proposed changes.



- Changing the culture of the regional centers is going to be a huge barrier to success in this project. This component is largely the function of the “Change-Management” area of the firm. Issues here might be union wage pressure, job security, changing the demands on the workforce, gaining commitment from informal leaders that can champion your solution.

## INSURANCE COMPANY

*Type of case: Profitability*

**An insurance company has two annuity products: a fixed annuity product and a variable annuity product. These products have a target ROI of 15% but are only earning 5% right now. The fixed annuity product pays the clients a fixed income stream at fixed interest rates. The variable product has returns that vary with the market. The market is doing great and the company is wondering how to improve their returns on these products. How would you go about thinking about this problem? What are some potential areas for improvement?**

### ADDITIONAL INFORMATION

- On the fixed product, the company makes money based on the spread between the fixed income stream they're paying out and the money they're earning on the investment in the market.
- On the variable product, the company earns money through charging fees.
- The company sells 20% of the fixed product and 80% of the variable product.

### SOLUTION STRUCTURE

Start with the 3Cs to understand the risk profile of the company, the nature of the competition it faces, and the customers that buy these instruments. Then move to a profitability analysis to identify where this company is losing money. If you are not familiar with annuity products, you should ask sufficient questions to ensure that you understand how the products make money for the insurance company.

### SOLUTION ANALYSIS

- The obvious answer seems to be that they need to get into higher paying investments to achieve higher market returns. However, keep in mind that they have fixed annuity product they are committed to paying.
- The company could calculate the duration of their liabilities (the fixed stream of cash outflows) to ensure that they have adequate assets to support their liabilities.

- The company could also focus on cutting costs to raise their returns. They have marketing (ads, pamphlets, phone personnel), broker fees, sales personnel, transaction fees. The company does all of this in-house. They could probably outsource and have these services performed more cheaply.
- The fees the company charges for the variable rate product could be compared to the competition. If they are too high, the company may want to lower fees to get a higher volume of customers. If they are too low, they may want to raise rates to be more competitive. Chances are, the existing customers with an annuity probably won't withdraw their funds.
- The mix of products could also be considered. The company only earns a flat fee on the variable product. The amount of return made on the fixed product can vary widely, but has the potential to make a very good return with smart investing. The company should shift marketing and sales efforts to the fixed product.
- Since more and more people are investing in 401K plans and other retirement plans, this could be a potentially large target market for a secure fixed annuity product.

## RAILCO

Type of case: Profitability

Source: Bain-final round

Our client is RailCo a division of Diversco, Diversco is a diversified holding company with numerous businesses. Traditionally, RailCo has been the “Cash Cow” of the portfolio. They are a rail freight company. Sales in 2000 were \$1 Billion and earnings were \$50 million. However, in 2001, the firm swung from a \$50 million profit to a \$50 million loss. Management took aggressive action to correct the problem and assured the Board that this was an anomaly and would not happen again. However, in the first two quarters of 2002, the company has lost \$25 million.

**Why is RailCo. losing money?**

**What should they do?**

### **Case Interviewer Instructions:**

If the candidate drifts into portfolio or synergy questions relating to Diversco, steer them back to RailCo. They can ignore the other firms in Diversco’s portfolio. RailCo is the problem.

### **Additional Information:**

Feel Free to Share in conversation.....

- Railco carries freight over rail to businesses. They are not a passenger railway.
- They own their tracks and do business regionally with little direct rail competition.
- The firm adopted new depreciation policy which lowered depreciation of assets slightly.

Share when asked....

- The shipping industry (this includes rail, trucking, marine, and air) growth rate is projected at 3% for the foreseeable future. Prices are flat in real terms.
- The company negotiated a very competitive contract with labor that took effect late 2001. The negotiated wage rates are lower than the industry average.
- Fuel costs have been stable.
- Company serves two types of customers: direct, larger firms and brokered smaller firms.
- Direct customers number 800. Brokered customers number 5000.
- Brokered customers come to RailCo through an aggregator that organizes smaller freight shipments. They typically take 1.25% as a commission.
- Direct customers account for approximately 80% of RailCos revenues.
- Sales persons don’t know what the problem is, nor do shipping managers.
- Direct customers are shipping less; moving to trucking.
- Very few customers have been lost.
- Shipping revenue for direct customers is down 10%.
- Fixed costs represent 90% of RailCo’s cost structure.
- Slight reduction in variable costs from 2001 to 2002.

**Debrief**

The information in the opening was presented in slide form. Information was shared fairly begrudgingly.

This case is easiest solved as a systematic profitability case. Questions about variable costs (fuel for example) come up dry. Rule them out quickly and ask about fixed costs. Interviewee should know that depreciation (allocated cost of owning tracks, engines, and cars) is a fixed cost and that labor may be effectively a fixed cost (especially if there are contract impediments to layoffs). These have not gone up however. What is up?

Direct shipping revenue is down 10% =  $80\% \times \$1 \text{ Billion} = \$80 \text{ million}$ . Since costs are fixed, almost all of this goes to the bottom line. Swing in profits is \$100 million and you have found 80% of the cause in revenue drop.

Important to pick up that trucking is cause of problem. Keeping Porter Model running in the background is good to pick this up. Industry growth rates show relative health (3% growth) but this includes trucking.

Appears that problem is that competition from trucking is causing revenue drop, which destroys company's ability to cover fixed costs.

Other insights:

- Impact of JIT on rail freight is negative. Have to get smaller loads out quicker, not good for rail.
- Rail probably rarely gets shipment directly to, say, a semiconductor plant. Likely always had to integrate with trucking in old environment to some degree.

**Suggested Actions:**

- Divest
- Partner with or buy trucking firm.
- Partner with competitors to fill return train loads once load is dropped off.
- Sell assets and focus on most profitable lines or customers.
- Other...

## EXISTING AIRLINE ROUTE ACQUISITION

*Type of case: Profitability*

**A major airline is considering acquiring an existing route from Tokyo to NY. How can it determine if the route is a good idea?**

### SOLUTION STRUCTURE

Profitability analysis looks like the best approach. Simply determine if revenue less costs equals a positive profit. Then, analyze the factors that go into revenue and the factors that go into cost to come to a conclusion.

### SOLUTION ANALYSIS

- Occupancy rates and expected prices will determine revenues. Both of these will be determined by expected demand, the competitive environment, and the extent to which our client could win over passengers from competitor routes. Mentioning fare wars and competitor reaction is a good idea. Looking at competitor occupancy rates and fares could be used as a point of research.
- Operating costs will depend on expected fuel costs, incremental costs for landing rights, etc. Most airplanes are fixed costs because they are owned or under long-term leases. However, is there another route that is more profitable that these planes could be dedicated to? It is also very important to estimate the cost of cannibalization of existing Tokyo-LA, LA-NY routes. Will these routes be continued at the same level of operation? And last but not least, it is important to note that losing passengers to cannibalization is better than losing them to competitors.

## CABLE OPERATIONS IN AZ and NM

*Type of case: Profitability*

Two years ago a venture capital company purchased a cable TV system that had access to 3 million households in Arizona and New Mexico. The VC firm was attracted to the extremely large subscriber potential, and the potential for considerable return. Despite their best efforts, they have failed to turn a profit in the past three years. You have been hired to determine if they can turn a profit or if they should sell.

### ADDITIONAL INFORMATION

- The cable system features fiber-optic lines to each street corner, but not yet direct to the home.
- Fixed costs are extremely high due to the distance between cities in the system.
- The debt and maintenance costs are also higher than system in metropolitan areas.
- The current system is only at 43% capacity (# of subscribers) vs. a 63% industry average.
- Low subscription rate (43%) is not attributable to life-style or cable programming. People in the service area actually watch more TV than the national average; the programming offers what they like to watch.
- The cable company covers an even mix of small city urban, suburban and rural areas.
- The population is rising faster than the national average, growth is suburban.
- There are 4 network stations (reaching the whole area), and 9 independent regional broadcast stations. Also, 17 percent of the residents have satellite systems in operation (DirecTV, EchoStar, etc).
- The quality of the reception of local broadcasts: for those in the immediate area, signal is very strong.
- The signal is free, but those subscribing to satellite services pay a monthly fee equal to that of the cable service.
- It takes 10 paying customers per sq. mile to break even, at least 20 potential per sq. mile to even consider entering the market. Although the area averages 20+ residents per sq. mile in rural areas, total actual subscribers is < 10.

SOLUTION STRUCTURE

At a minimum, the answer should:

- Analyze current revenues and cost structures – do revenues > costs?
- Analyze the market potential of the area – is there growth potential?
- Analyze the competitive situation and substitutes – is this product/service a winner?
- Provide recommendations – establish a clear decision rule

COSTS

Fixed costs associated with laying cable

Variable costs of new customers (equipment)

Maintenance of the cable system

Debt associated with fixed costs

Franchise fees to municipalities

REVENUES

Subscribers' monthly fees for basic services

Subscribers' fees for premium channels

Subscribers' fees for other premium services

Advertising fees from commercials

Commissions from shopping channels

SOLUTION ANALYSIS

This is a straight profitability analysis to determine whether or not the VC firm should continue or withdraw. GOOD answers identify a decision rule that includes an analysis of: (1) profitability – whether or not the venture is profitable (2) adequate return – whether or not the return exceeds the VC firm's opportunity costs (3) management expertise – whether or not the client has the managerial skills to make the venture succeed.

High fixed costs are overwhelming the current revenues, and the current subscriber rate is low. Good answers should investigate why and if it can be fixed. Good answers also might identify the insight that distance between customers is important. The rural character of this subscriber area means the sell-rate must be higher since there are fewer potential customers per sq. mile. Outstanding answers might uncover that as the cable TV business evolved, many rural residents already have satellite dish systems that afford multiple channels. What would it take to win these customers over, or why can't they be won over.



**TYPICAL BANK**

*Type of case: Profitability*

**A bank that loans to real estate developers has a lower than industry average return. You are asked to help improve profitability. How would you approach this problem?**

**ADDITIONAL INFORMATION**

- Bank borrows from the Fed at a rate of 6% and lends money at 10%.
- Major source of loss is the loan officers at the rate of \$200,000 each per year.
- Each officer spends the same amount of time on each loan, no matter what the size.
- Variable costs increase with the number of loans.

**SOLUTION ANALYSIS**

The bank is taking too many small loan applications. They should reduce the amount of time on small loans, increase the rate for small loans or exit the small loan business entirely.

What is the breakeven volume of loans each officer must process?

Revenues + spread. Costs are split into variable costs (chargeoffs) and fixed costs (salary).

Given that the spread is  $10\% - 6\% = 4\%$  assume chargeoff is 3% (interviewee may have to estimate).

Therefore at breakeven:

$$4\% (X) = 3\% (X) + \$200,000$$

$X = \$20 \text{ million.} = \text{volume of business each person should handle each year.}$

## **CANADIAN TIMBER COMPANY**

*Type of case: Profitability*

**You have been hired by a Canadian timber company that processes trees from the forest to timber products (boards, etc.). They have been making more profits than their direct competitors and do not understand this phenomenon. You have been hired to find out why.**

### ADDITIONAL INFORMATION

- In Canada, the timber companies own their own natural resources (forests).
- There are many competitors in this industry.
- Timber company prices are the same as their competitors.
- Use same equipment.
- Have the same labor skills.
- Wood is the same quality.
- There is not much of a transportation difference between the forests, the mills, and the point of sales

### SOLUTION ANALYSIS

Think of profit as a cost vs. revenue issue. It turns out that lumber products industry is a commodity industry. So you may want to think about the steps in the processing flow and analyze differences between competitors at each step.

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

**Credit Card Profitability**

Type of case: Profitability  
 Company: McKinsey

Your client is the president of a bank. The credit card product of the bank has been profitable for the last 15 years. However, profits have declined 25% over the last 3 years. Three years ago profit was \$100 million / year. The Current credit card market is saturated.

**Situation:** How to get bank credit card profit back to \$100 million / year?  
 What caused the drop?  
 How do we counteract it?  
 What new products can be offered?

**Question:** How would you structure your investigation and solve the problem?

**Information:**

Product	% of Bank's Product	% of Market products	
Reward Cards	0%		33%
Affinity Cards (Picture)	0%	33%	
Credit Cards*	100%		33%

\* No points and no real rewards

Getting Customers

Regional Focus – Mid Atlantic & NE – believe they understand the risks associated with this customer group  
 1/5 customers acquired through the bank branches – signed up during visit  
 4/5 customers acquired through direct mail

Bank Costs

Cost	% of Bank Costs	Comparison
Marketing & Customer Acquisition	35%	High (10%)
Fixed Cost (processing)	40%	Average
Credit Loss	25%	Low

Cost Per Acquisition (CPA)

Very high – 50% higher than competition  
 Cost per solicitation is average.

**Solution:**

- What caused the drop in profit?
  - Saturation
  - Competition
  - Substitute products
- What products are people using?
  - Segments
  - Access
  - Why
- Where do banks make their money?
  - Revenue
  - Costs

- Risks

Hit rate is low, volume is higher.

**Answer:**

Grow current credit cards in new regions of the country.

Offer points or additional products.

Use information to better target customers to lower CPA.

Should try and quantify these new markets

Can they actually grow revenue by 33% to reach \$100 million?

Is this where their competitive advantage lies?

Should they be in this business?



## BANK LOAN OPERATIONS

*Type of case: Profitability*

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

- loan application generation at branch bank
- complete applicant background check at branch bank
- send application and background check to loan processing office
- update/recheck background check (takes much less time than original check)
- loan is approved or denied

The bank is considering getting rid of the first background check and only relying on the loan processor's check to speed their service for customers. If the loan processor does the whole check with a new software system, the check takes 1 additional hour at the processor's office per application.

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

Should the bank proceed with the new system?

### ADDITIONAL INFORMATION

- Cost of branch bank background check = \$100/loan (eliminate this cost with the proposed system).
- Processor's labor hour costs \$60 (at branch and at processing office).
- Number of loan applicants is only 1,000 per year.
- Average value of loan is \$10,000.
- The proposed processing program has a 40% acceptance rate.
- Additional cost of new program is \$50 per loan applicant.
- The original loan processing system has 10% bad loans.
- The proposed system has 5% bad loans (it is more discriminating).

### SOLUTION STRUCTURE

This case obviously tests your analytical skills. Do not answer the question without paper or calculator to impress the interviewer if your math skills are poor, since this strategy could easily backfire, making you look stupid. This case is straightforward, but make sure that you have all the information necessary to develop an answer.

You should calculate a comparative profit per year for the original and proposed Systems.

Here's an example:

#### Original System:

$(1000 \text{ applications}) \times (0.45 \text{ loans per application}) \times [(90\% \text{ good loans} \times \$0.20 \text{ per dollar for a good loan}) - (10\% \text{ bad loans} \times \$0.50 \text{ per dollar for a bad loan})] \times (\$10,000 \text{ per loan}) = (450 \text{ loans}) \times (\$0.13 \text{ expected per loan dollar}) \times (\$10,000 \text{ per Loans}) = \$585,000 \text{ expected profit}$

But this method costs an additional \$100 per loan application:

$\text{Profit} = \$585,000 - (1000 \text{ applications}) \times (\$100/\text{application}) = \$485,000 \text{ comparative profit}$

#### Proposed System:

$(1000) \times (0.4) \times [(95\% \times \$0.20) - (5\% \times \$0.50)] \times (\$10,000) = \$660,000 \text{ of profits}$

But, there's an additional cost of 1 hour per application at the processing office profit = \$660,000

$- [(\$60/\text{hr}) \times (1 \text{ hr/application}) \times (1000 \text{ application/yr})] = \$600,000$

And there's the cost of the new program:

$\text{Profit} = \$600,000 - (\$50/\text{application}) \times (1,000 \text{ application}) = \$550,000 \text{ of total comparative profit}$

### SOLUTION ANALYSIS

Based on the raw data, the bank should progress with the new system. However, you need to discuss whether the bank can make the change. Mention any retraining and system installation costs that are necessary to change the system, and don't forget to evaluate the cost of the new system itself. Also you may want to mention that a faster loan processing speed may help the bank get more business.

## SUNDAY CIRCULAR

Type of Case: Profitability

Source: Deloitte

### Case Scenario

- Your client is a major mass merchandise retailer in a turnaround situation. To improve profitability and win back Wall Street confidence, the retailer is pursuing significant cost reductions.
- The Advertising department has been charged with reducing Sunday circular advertising costs by \$25 million in 2001. This represents a 10% cost reduction and translates into 5 million circulars per week from a baseline of 50 million.
- The Regional VPs responsible for store sales believe that the distribution of Sunday circulars to individual homes is strongly correlated with sales. They will push back on any cuts in their individual regions.
- The industry standard for coverage (circulation divided by households in a given area) is approximately 65%. However, at this retailer, coverage levels in individual markets and individual zip codes vary widely from this norm.
- Finally, the CFO is one of your executive sponsors and has set expectations for immediate cost reductions, as well as a longer-term sustainable plan to maintain Sunday coverage levels in the future.
- Key Information to Consider
  1. Sunday circulation is purchased at the “market” level for each of 500 US markets. Each market is supported by hundreds of newspapers capable of distributing the Sunday circular. When buying coverage from a newspaper, a retailer typically selects the specific zip codes for which distribution is desired.
  2. You have access to Sunday circulation data for the entire US that identifies the number of circulars delivered by each particular newspaper to each zip code, and the cost of distribution. In addition, you’ve been given population and demographic information for each zip code and market.
  3. Over the past few years, circulation decisions have been driven by those regions and stores that “scream the loudest” for additional circulation.
  4. The retailer has a robust customer database captured from check and credit card data that identifies where customers live and where they shop.

### Key Interview Question(s)

1. How can you address the CFO’s demand for immediate and longer-term cost reductions?
2. How would you identify which 5 million pieces to cut while being cognizant of the impact on sales?

### Possible Recommendations & Key Points/Issues Candidate Should Cover:

- Question 1: “Quick Hits” followed by a rational approach to assigning circulation by market
- Question 2: Overall Approach & Measurement
- Quick Hits-Immediate Savings
  - Measure the productivity of the zip codes. Zip code metrics could include: high coverage, far distance from the store, low sales per households, high advertising expense/sales ratio, low sales/circulation ratio.
  - Create frequency distributions to evaluate the metrics. Eliminate coverage in the most unproductive zip codes, particularly zip codes that are on the tail end of several of these metrics.



- The RVP's will be more likely to agree to cuts in zip codes where sales are already low.
- Longer-Term Coverage Determination Model
  - Prioritize markets based on quantifiable metrics that indicate how valuable/potentially valuable they are to the retailer. Such metrics might include: sales per household, competition indicator, total sales (market size) and market growth.
  - Assign target coverage levels based on this value.
  - Within each market prioritize zip codes based on the value to the retailer.
  - Buy coverage with this prioritization as a guideline.
- Implement a Sales Impact Tracking Mechanism
  - Monitor zip codes/markets where cuts have been made to see how sales are impacted

### Case Wrap-Up

- Quick hits were identified and implemented first to start the ball rolling with savings. This accounted for around 15% of the overall reduction in Sunday circulation.
- The longer-term approach involved a market scoring methodology that would help us assign target coverage levels to each market. With target coverage levels based on sales per household, market potential, and competition, instead of perception, the team was able to identify cuts that were justifiable. Understanding market and zip code priorities helped the team identify the additional 85% savings.
- The team worked with the client and an outside print media-buying vendor, to make specific (which newspaper?, how many copies?) recommendations by zip code and quantify the savings.
- Even though the target coverage levels reduced coverage significantly in some of the largest markets, the client moved forward and made the cuts since the scoring model showed that these markets may not be as valuable as previously thought.
- Sales tracking has just begun. So far the impact of the cuts has been minimal.

## PARCEL DELIVERY

*Type of case: Strategy*

The client is the largest package delivery service in Canada. During the past 30 years, the firm has established a network that allows it to deliver parcels to "every address in Canada". Until last year, competition had been non-existent and profits were very strong. Starting about 15 months ago, a new company began parcel pickup and delivery to three (and only three) Canadian cities - Montreal, Toronto and Vancouver. Although overall parcel traffic has declined by only 10% for our client, profits have declined by almost 30% from last year's number. Outline your hypothesis for the alarming decline in profitability.

Explain what analytical measures you would use to diagnose the problem and where you would gather the data necessary to perform the diagnosis. What approach would you offer to our client for the restoration of reasonable profits and what strategy would you employ to prevent further deterioration of profits?

### ADDITIONAL INFORMATION

- The new entrant has a fleet of older semi-trailer trucks that run between the three cities. Our client has a very new fleet (more efficient) that services all of Canada. The client's fleet mix has been optimized such that efficiency and capacity utilization are high considering the network of locations covered.
- The new entrant charges approximately 50% less than our client for delivery between the three cities that they cover.
- Our client and the new entrant charge by the lb-mile. One pound carried one mile is a lb-mile

### SOLUTION STRUCTURE

Start off with a profitability analysis to pinpoint where the problem lies. Then, use the 3 C's to see what about the market is causing the problem. Finally, take a look at the costs of this industry: does one of these firms have an inherent advantage? Are certain customers better off than others? This is a complex case, so take your time and keep digging.

### SOLUTION ANALYSIS

- The new entrant has initiated service in the three markets where economies of scale are present. Because a large number of packages move between these three cities, larger trucks and efficient distribution centers make such limited service very profitable.
- A more important facet of this case is how the interviewee reaches this conclusion. He/she should use a cost measure like \$/lb-mile to explain that the major city routes have always subsidized delivery to smaller cities and towns.
- Realize also that our delivery to all addresses in Canada is a tremendous advantage to our client. Businesses that ship to customers outside of the major cities cannot afford to lose our service.
- Employ a new pricing strategy that will increase charges for rural delivery. Note that this may invite the new entrant to begin rural delivery.
- Develop long-term contracts with major business clients who use our rural delivery capability. Offer a flat delivery rate only when the business agrees to use our client for rural and city delivery.
- Search for synergies with other companies that also deliver to rural areas (this client actually paired with several grocery/beverage/snack delivery companies in the most rural areas).

## AMERICAN EXPRESS

*Type of case: Strategy*

American Express (Amex) is a consumer services company providing a variety of services to its cardholders. Its primary service is its well-known charge card, that enables “members” (i.e., cardholders) to purchase goods and services from millions of merchants that accept the card. Unlike other credit cards, cardholders are required to pay off their accrued balances each month, and interest is not charged.

Recently, Amex has faced strong competition from new credit cards entering the market. They have considered dropping the \$55 annual fee. What are the economics of such a decision, and should they drop the fee or not?

### SOLUTION STRUCTURE

- Determine how American Express makes money.
- Evaluate the pros and cons of dropping the annual fee.
- Explore options for replacement revenue.
- Make a recommendation.

### Revenue Drivers:

- \$55 x the number of members (could round to \$50 for simpler math).
- Q: How many people have the American Express Card? A: What is your best estimate?
- The number of cardholders is approximately 14 million (you can round to either 10 or 20 to simplify the math).
- No additional revenues from consumers, since balances are paid monthly. (Amex doesn't enforce late fees)
- 1% merchant fees for all transactions from merchants honoring the Amex card.
- Est. annual transactions are \$1,000.00 per cardholder. ( $\$1,000 \times 1\% \times 10\text{mm} = \$100 \text{ million}$ )

### Issues to be addressed:

**If the annual fee is dropped, Amex loses \$55 x number of cardholders.**

Amex would have to generate new or additional revenues to overcome the loss of annual-fee revenue.

Using a conservative estimate, lost revenue will be  $10\text{mm} \times 55 = \$550 \text{ million}$ .

- Q: Will consumer spending increase sufficiently to generate merchant-transaction revenue?

- A: Not likely, since cardholders must still pay-off balances at the end of the month.
- Therefore, must increase number of cardholders to increase merchant-transaction revenue.

Q: Is it possible to sufficiently increase the number of cardholders? A: How would YOU estimate this?

- The average annual transaction revenues are  $\$1,000 \times 1\% = \$10$  per member.
- Therefore, the number of new customers required to overcome the revenue loss would be  $550\text{mm}/10 = 55$  million
- Now, is it possible for Amex to gain 55 million new members this year? Not likely, is it!
- Also possible to raise transaction fees: more revenues, but must address consequences for vendor relations.

Q: Does Amex enforce late fees? A: No, but most credit cards charge \$20 - \$25 for late payments.

#### **Should Amex charge interest and allow card-members to hold a balance?**

- Would the new revenues from interest offset losses from dropping the annual fee? Depends on rate of interest and average balance. Q: What is the average APR and average monthly balance? A: You tell me. (use 15% and \$500)
- If average balance = \$500 at ~10% APR = \$50 per member x 10 million members = \$500 million annually.

#### Recommendations

- Based on economic analysis, don't drop the fee. It is difficult to replace the lost revenue.
- While some options exist (i.e., charging interest on balances) the consequences should be explored.
- Amex could issue an interest-driven credit card under a new brand name (in fact, Amex did so with the Optima card).

#### SOLUTION ANALYSIS

The client specifically inquires about the economics of ending the annual fee. Good answers should focus on this issue, and should provide recommendations based on the analysis. Good answers should explore the issue of rival credit cards entering the market, how their product offering is similar or different from the American Express card, and the strengths and weaknesses of American Express's position. Alternative revenues should be explored. One

option is charging interest and allowing cardholders to hold a balance. Answers should address how this would affect the AMEX brand, i.e., the consequences of becoming a just another ordinary credit card. Another is enforcing late fees, or raising merchant fees. The consequences of these should be addressed also.

Outstanding answers should additionally explore the effects of competition among credit cards for revenues, and recommend how Amex could increase revenues without dropping the \$55 fee. For example, comment on the quality of new members acquired, since competition is forcing many credit card companies to issue cards to riskier consumers.

**STANDARD OIL COMPANY IN 1950***Type of case: Strategy*

The year is 1950. You are Standard Oil Company of New Jersey (now known as ExxonMobil), a company that excels in the refining and marketing of petroleum products. The success of your company depends, in part, on your ability to maintain adequate levels of petroleum supply. Following national energy shortages experienced during WWII, it is clear to your company that securing a source of foreign oil is key to maintaining your supply, and hence your market share. You have been approached, separately, by two other petroleum companies to enter into joint ventures. One company, Gulf, is interested in establishing drilling rights to a large field located in the small Arabian-peninsula nation of Kuwait. They have offered you a large stake in the venture. A second oil company, Royal Dutch/Shell, has offered you an equally large stake in a venture to establish drilling rights to a large field located on the border of Iran and Iraq. You do not have the resources to enter into both ventures. Which one do you choose and why?

**ADDITIONAL INFORMATION**

To some of the interviewee's questions, reply with "Explain how the answer to your question would determine which partner is preferable."

**Some variables and information to consider when comparing Kuwait vs. Iraq**

- Political stability and risk (domestic politics) – both areas, as of 1950, are unstable states. Kuwait's government is currently more stable, but the head of state is very old.
- Political stability and risk (International) -- Kuwait does not have as many border disputes as Iraq, and both have a tradition of working with foreign developers. Kuwait invited developers into the country around 1912.
- Legal/Regulatory environment: Legal risk due to market instability (legal foundation to enforce contracts and protect investments) – both areas have good legal systems, but law is dependent on the stability of the government. Risk is considerable. Few regulations exist in either country.
- Socio-cultural environment – are skilled workers available or will they be imported? In both countries, skilled labor is unavailable. Both countries are in favor of foreign oil development,

but there exist elements against the presence of foreigners, and against perceived economic exploitation.

- Infrastructure (Ability to get product to market) – Both countries have significant access to ports and newly developed pipelines (that cross neighboring country's soil)
- Infrastructure (Ability to extract oil) – This is the most significant cost to you, since the infrastructure does not naturally grow in the desert. Oil does, but you'll have to find it.
- Human Resources and Management Talent – your company has the talent, but lacks experience in the Middle East.
- Other options – can you go it alone? – You need oil, where else would you develop it? The costs and risks are too prohibitive – assume a joint venture/strategic alliance is necessary.

### RDS vs. Gulf

Both have experience in the Middle East. Both companies are comparable in every way, but RDS is much bigger, and has its market focus in Asia and Europe. Gulf is a US company focused in the US and Europe. Both seek a long-term partnership. RDS has experience with joint ventures (in Asia), both good and bad.

### SOLUTION STRUCTURE

Good answers will outline the conditions that make a joint venture workable. There is little information from which to base a rational choice, so the answer matters little. Instead, focus on defining decision rules.

### SOLUTION ANALYSIS

- What are your strategic objectives?
- What are the variables affecting the decision?
- Determine the decision rule for whether to go or not go.
- Examine and compare the offers: which of your objectives are fulfilled or not?
- What are the consequences of joining; what are the consequences of not joining?
- Provide implementation and exit strategies, and other conditional provisions.



## DIRECT MARKETING FIRM

*Type of case: Strategy*

Your client is the premier direct marketing firm in the United States. This firm also owns divisions dealing with software development, marketing research, hotels, car rentals, real estate and related, tax and financial advisory services, and many others. Your client is confident these subsidiaries achieve considerable overall synergy and provide the parent with expanded opportunities for direct marketing. Your client is also confident the business fundamentals are very sound. The problem they face is that their stock price has been seriously affected by a recent accounting scandal. Although the accounting problems have been cleared up, investors are wary.

In its membership business, your client markets memberships in shopping, travel, auto, credit protection, and other personal services. It does so by off-branding its products to banks, credit unions, credit cards, clubs, and many other organizations. Its primary source of revenues in this business is membership fees. Its distribution channels are direct mail, telemarketing, the Internet, and America Online. The Interactive division also operates a number of E-commerce sites that generate memberships, and some advertising dollars. Management has placed a number of important initiatives on hold due to lack of financial resources, and due to a lack of management focus resulting from recent problems.

### ADDITIONAL INFORMATION

- The subsidiaries are recent acquisitions, most within the last two years.
- The company as a whole formed as the result of a merger between two equal firms.
- The business fundamentals are very sound; but investors may not believe the numbers.
- The core business is memberships (selling the auto, travel, shopping, etc, service products).
- The core competency is effectively leveraging subsidiaries and marketing partners for cross-marketing opportunities to sell memberships; these are yet untapped due to diversion of management focus.
- There is competition within sub-categories (i.e., your client competes with AAA for auto clubs services) but little competition at the scale at which the client operates; there are few players in the national market.

- Prices of membership services are stable (recent price increases did not affect membership flow).
- Membership flows (how many people join or quit) have remained constant; memberships are increasing rapidly.

The current situation is such that the individual pieces of the firm are more valuable than the firm as a whole. i.e., the firm is currently undervalued. But this is due to a lack of investor confidence in the numbers produced by the company resulting from the recent problems.

### SOLUTION STRUCTURE

- Determine what drives investor confidence.
- Assess the client's situation with respect to these variables.
- Determine what the client can do to affect these variables and offer options.

#### What drivers affect investor confidence?

- good management team in place – yes, now anyway.
- independent audits to ensure data is accurate – yes, completed.
- prospect for a good return on investment – absolutely, if you believe the numbers.
- therefore earnings that exceed expectations make a good investment – low stock price is a buying opportunity.
- or undervalued assets – particularly the software and interactive divisions.
- market climate in general.

#### What has management done with respect to these drivers; what can management do?

- The chairman resigned, as did several senior executives in the wake of the accounting scandal.
- Independent auditors completed a forensic analysis of the books – the books are now solid.
- The CEO has begun meeting with investors to sell a new strategic plan.
- The New plan involves spinning off the software, interactive, and other profitable divisions to enable the company to focus on key businesses.

This is a tricky case, because there are no obvious actions left out – most of what can be done is being done and being done well (excluding radial steps that make little economic sense).

The key is capital market behavior, not the client. The market (these days) rewards Internet based companies, but has failed to perceive the value in your client's interactive and software

divisions. A spin-off followed by an IPO may result in enough cash to fuel further investments. Action, perhaps, will restore overall investor confidence.

## NABISCO

*Type of case: Strategy*

**Nabisco's Table Spreads operating company was looking to buy the Parkay brand of margarine. No manufacturing equipment or facilities would be included, only the brand name and formulas. From a financial perspective, the deal is a positive NPV project. From a strategic point of view, should Nabisco acquire Parkay (not a financial numbers case)?**

### SOLUTION STRUCTURE

#### 3Cs Analysis

- Competition
  - Understand the competitive marketplace.
  - An oligopoly with Unilever (50% market share) and Nabisco (35% after acquisition)
  - The market is broken into three segments:
    - Health                      Unilever's Promise vs. Nabisco's Fleischmann's
    - Taste                        Unilever's I Can't Believe vs. Nabisco's Parkay (?)
    - Price                         Unilever's Country Crock vs. Nabisco's Blue Bonnet
      - This information should provoke the ideas of portfolio diversity. Why is that good/bad?
    - Retail prices:
      - Fleischmann's = \$1.79/lb.
      - Parkay = 1.29/lb.
      - Blue Bonnet = .89/lb.
- Customers
  - Nothing relevant for this case.
- Company
- Breakdown by brand:
  - Fleischmann's: 50,000,000 lbs annual demand and 40 cents profit margin per lb. Market share declining at 3% per year.
  - Parkay: 150,000,000 lbs annual demand and 30 cents profit margin per lb. Taste category is increasing, but Parkay is currently decreasing. Investment in advertising can help.
    - Blue Bonnet: 300,000,000 lbs demand and 7 cents profit per lb. Market share steady.

**Value Chain: analyze advantages/disadvantages of acquisition**

- Procurement
  - Synergies of buying oil, containers
- Manufacturing
- Nabisco does not have capacity to integrate 150,000,000 of Parkay into their existing plant capacity. What are some options for getting around this problem?
  - Third-party manufacturing is not an option because of tight margins and high transportation costs.
  - Capital expenditures are not feasible because Nabisco has space utilization issues (not enough space in plants to add machines)
  - Solution: use customer price sensitivity to induce shifts in demand among the three segments. What direction would you shift these prices?
    - Blue Bonnet has lowest margin and highest price sensitivity, therefore raise the price to reduce demand.
    - Reduce Parkay's price point to capture some of the lost customers.
    - Maintain Fleischmann's.
- Distribution
  - Current distribution center doesn't have enough capacity to house proper safety stock levels. An addition has to be made costing \$20 million. The payback period is 2.1 years. Is this a worthwhile investment?
    - Best answer: Realize that payback period is not the best measurement of a project's worth. Using NPV or DCF is better.
    - Another answer: 2.1 is an acceptable payback period, realizing that in a mature business, the consistency of cash flows makes it a strong investment.
  - Increased volume will also reduce transportation costs.
- Customers

Retail stores won't react negatively to the price change as their profit margins will also increase.

## **MOBIL: RETAIL SALES OPERATIONS**

*Type of case: Strategy*

**The sales force at Mobil is composed of college graduates, each of whom calls on about twenty stations. What should they talk about with the gas station owners?**

**The structure of the retail gasoline business is as follows:**

- **Mobil owns the gas stations while the station manager/owner owns the business.**
- **Mobil sells gasoline to the station at the wholesale price (DTW) while the station manager/owner sets the street price.**
- **Mobil makes a profit of about 10 cents per gallon.**

### SOLUTION ANALYSIS

*Key Points by Interviewee:*

Product: Gas is a commodity.

Promotion: Done nationally, not this group.

Distribution: Fairly automatic.

Price: Mobil does not set street price. How is street price determined?

*Recommendations:*

Mobil wants the street prices as low as possible (close to DTW), which increases volume.

Question: how does station make a profit?

Answer: Convenience store and auto care are high margin (but low volume). Sales force should help station owner to set up profitable convenience store and use low gas prices to attract volume.

## COOL WHIP

*Type of case: Strategy*

You've been hired by the Kraft Desserts Division Manager to help solve a problem with Cool Whip (the non-dairy dessert topping). Cool Whip has been a cash cow for Kraft. It has an 80% share of market, low production costs and extremely high margins. Sales of Cool Whip have been flat for the past three years despite aggressive sales efforts. The divisional manager believes sales have peaked (80 % share) and is ready to sit back and milk the profits.

Before presenting his recommendation to the company president he hired you to determine if there are:

- Opportunities to increase revenues in the US
- Opportunities to enter a foreign market

### ADDITIONAL INFORMATION

- Cool Whip is 90% air, 10% water and chemicals.
- The manufacturing facility is only running at 70% capacity.
- Cool Whip owns a proprietary technology that allows the product "carry" a very high percentage of air.

### SOLUTION STRUCTURE

- Explore areas to increase product sales in the US
- Explore alternate opportunities for increased revenues in the US
- Analyze the opportunities of entering a foreign market

### SOLUTION ANALYSIS

#### New Product Sales Opportunities

- Offer new flavors (cherry, strawberry, etc.)
- Suggest new uses (Arm & Hammer)
- Offer new packaging (pump, pressurized single serve, etc.)
- Explore new channels (food service, convenience stores, coffee houses, etc.)
- Co-pack with other products (pies, cookies, etc.)

- Other, other, other

The division head tells you these are all great ideas that have been attempted - what else?

Alternate Revenue Generating Opportunities

- Sell or license the “air holding” technology to other industries-Insulation, Styrofoam, building materials, ships etc.
- Utilize the excess capacity to produce generic or private label version of the product

*The division head tells you these are good ideas, what about foreign expansion?*

Issues Involved in Entering a Foreign Market:

- Is there market potential for Cool Whip in foreign markets?
- What are the competitive factors?
- Can we supply product at an appropriate cost structure?
- Do we have any foreign presence to take advantage of?

*How might you determine the answer to these issues?*

Area of Analysis:

- Look for markets with a high incidence of dessert consumption (France)
- Research the existence of competitors or substitutes (ice cream, other toppings)
- Conduct consumer research to determine if consumers would accept/try the product
- Research Kraft’s current manufacturing, distribution marketing capabilities in these markets.

Recommendation:

Invest in addressing these issues and make a recommendation to the president.



## FRANK'S CHEESE

*Type of case: Strategy*

Frank's cheese company has been producing very high quality cheese for distribution and sales in the upper East Coast for over thirty years. Their main competition over these thirty years comes from Joe's cheese company, which also produces very high quality cheese.

These two competitors have had a friendly rivalry over time and each holds about a 30% share of the market. Recently, Frank and Joe have seen their profits drop. Frank blames the decline in profits on increased advertising and promotional spending.

You have just a few minutes to determine if Frank is correct and suggest solutions. How do you proceed?

### SOLUTION STRUCTURE

- Quick check for changes to the costs or revenues
- Analysis of competition, Joe and other
- Analysis of other potential problems

#### Cost Driver Assumptions:

Any changes in: Dairy products (raw materials), production costs, distribution costs, marketing costs, other?

A: No major changes except for an increase in promotional costs (coupons and retail price reductions)

#### Revenue Driver Assumptions:

Q: Any changes in: Price, number of accounts, sales levels, type of cheese sold, quality of cheese?

A: Have taken periodic price reductions; No major changes.

#### Assumptions:

Frank has increased promotional spending and reduced prices, most likely due to an increase in competitive pressure. Have we seen increased competition?

A: Yes, many of our accounts are offering private label cheeses at half our retail price

What do we know about the private label cheese? Quality?, Consumers?

A: Lower quality than Frank's two consumer segments: Those who do a lot of home cooking and use only Frank's or Joe's, and those who just stop in and pick up a block of cheese.

Why have we been discounting? Are we losing our loyal customers?

A: No. We're just under a lot of pressure from the retailer to match prices.

Issues:

Due to competitive pressure from private label, Frank and Joe have taken periodic price reductions. This has hurt their margins and may also cause them to lose their loyal customers (and lose their high-quality brand image).

Recommendations:

Maintain premium price levels for Frank's current line of high quality cheese.

Manufacture a lower cost product under a different brand name to compete with private label brands.

Utilize advertising revenues to communicate the benefit of using high quality cheese.

## ENTERING MARKETS ABROAD

*Type of case: Strategy*

Your client is a consumer packaged goods firm that specializes in dental care, over-the-counter medical care, candy, and personal hygiene products. They are based in the East Coast of the U.S., but have experienced strong growth throughout the U.S., Mexico, and Canada. Bolstered by the confidence in their domestic sales growth and profits, the company recently launched an initiative to enter markets in South America (primarily Brazil, Argentina, and Peru) and Southeast Asia (Hong Kong, Japan, Singapore, and the Philippines). They also sought to expand their presence in Holland and Belgium.

Last year, in South America and Southeast Asia, despite rigorous market analysis showing a strong demand for their products, profits were well below expectations. The company also experienced a host of problems in a variety of areas, including labor unrest, poor logistics, and unmet forecasts. This year, there are no signs of improvement in any areas. In fact, things are looking worse and the company is considering withdrawing from these markets. Meanwhile, everything is great in Europe. They have hired you to determine next steps.

This is a meeting with the CEO of the firm – what do you tell her/him?

### ADDITIONAL INFORMATION

*Note to interviewer:*

Play the role of CEO – be VERY American. The heart of the problem is that the American managers assigned abroad were unprepared to adequately deal with different business environments. This includes language barriers, cultural differences affecting business practices, and managing a diverse multi-national staff. Further, the local company managers hired had tremendous experience in their home countries, but have never worked in the U.S., and know little about your client. This resulted in tensions, misunderstandings, and mismanagement. This is the source of the trouble; the other problems are symptoms. Answer each question the interviewee asks accordingly.

### Company Information

- Excellent supply chain logistics enables this company to compete with P&G, Colgate, etc in US.

- Internal training program enables managers to learn and prepare their system, prior to taking the helm.
- The regional managers were area managers in the US regions, and all performed above expectations in the US; this was the basis for their transfer abroad.
- The country managers are local hires; experience in other local industries, none with this firm.

#### Europe

- Currently operating in 4 European countries (Belgium, Holland, England, and Luxembourg) – only operations outside N. America. (All staff speak English.)
- Original entry completed by buying existing leading brand in Benelux.
- Distribution is typical for similar products (no problems here).

#### Southeast Asia

- Person who runs operations used to run Chicago/Midwest area so skills are solid.
- Hired local people with many years industry experience, none with this firm.
- In Hong Kong, 3 GMs have quit; others threaten to quit.
- Problems with labor (strikes), shipping delays, distribution complications, missing inventory.
- Positioning: products are premium products, lower priced than other products (irrelevant to performance).

#### South America

- Person who runs operations used to run New England area, so skills are solid.
- Hired local people with many years industry experience; none with this firm.
- Problems with labor (strikes), shipping delays, distribution complications, and missing inventory.
- Positioning: products are premium products, lower priced than other products (irrelevant to performance)

### SOLUTION STRUCTURE

Identify the factors that may affect a product launch / new market entry and operations

- External factors – economics (is Europe different?)
- Internal Factors – staff skills & training (what is different in Europe)
- Identify problems: look at (1) product positioning, (2) distribution, (3) target segment needs, (4) promotional activities, (5) personnel

- Determine the source of problems
- Provide recommendations

**SCAN AIR**

*Type of Case: Strategy*

*Company: McKinsey*

**Your Client is** Scan Air, a mid size Scandinavian airline. The airline has 100 aircraft, 22,000 employees worldwide, a strong cash flow and nearly zero debt. The airline focuses on business passengers. The current CEO is leaving. Most flights fly into or out of a single hub in Scandinavia. Most flights have flights connecting in central Europe and N. America with Asia. Scan Air has previously ignored the trend toward global alliances.

**Situation:** Profits are eroding. Scan Air wants to “get in shape quickly.” They want to maintain their previous situation, fend off competition, and decrease their cost base.

**Question 1:** What things do you want to look at?

**Question 2:** Scan Air is currently not engaged in alliances with other airlines and the CEO wants recommendations on what they should consider when determining if they should enter into one.

**Question 3:** Scan Air has entered into negotiations with a potential alliance partner. What will be the major issues you think they will discuss?

**Question 4:** The new CEO wants to announce that Scan Air will achieve a 10% profit margin before tax. What load factor per flight is required to achieve this goal? Is this ratio achievable?

**Question 5:** You are having a team meeting with the CEO. What do you plan to say?

**Information:** *Information to give*

Load factor = # of passengers / # of seats

Average flight = 1000 miles

Seats per plane = 200

Fixed cost per plane per flight = \$20,000

Earn \$0.25 per passenger per flight mile

Cost / mile = \$0.10 per seat (filled or not)

*Information if asked*

Current load factor = 75%

**Answer 1:** Profit = Revenue – Costs  
Revenue = Pricing \* Volume

- Pricing
  - Business Pricing – last minute, frequent flyers, pay higher prices
  - Vacation Pricing – purchased in advance, fly on holidays, price sensitive
- Volume
  - New cities
  - New times
  - Investigate plane utilization and capacity
  - Alliances

Costs = Variable Costs + Fixed Costs

- Fixed Costs
  - Gates
  - Airplanes
  - Maintenance
    - Out source
    - Sell out
    - Rent
- Variable Costs
  - Fuel (Hedge?)
  - Labor
    - Unionized
    - Hiring & Pay differences
  - Ticket booking
  - Food etc.

**Answer 2:** How will an alliance help Scan Air?  
 Improve ability to attract and retain customers  
 Reduce costs  
 Reduce competition, compete better  
 Will partner fit with Scan Air?  
 Image, service, systems

**Answer 3:** How to share revenue  
 How to integrate systems  
 How to split advertising costs, and maintain brand image

**Answer 4:** Costs = Fixed costs + Variable costs  
 Costs = \$20,000 + \$0.10 \* 200 seats \* 1000 miles = \$40,000

Profit margin = (Revenue – Cost) / Revenue  
 10% = (Revenue - \$40,000) / Revenue  
 Revenue = \$44,444

Revenue = revenue per mile \* # mile \* # of passengers  
 # of passengers = Revenue / (revenue per mile \* # mile)  
 # of passengers = \$44,444 / (\$0.25 \* 1000) = 176

Load factor = # of passengers / # of seats = 176 / 200 = 89% ~ 90%

75% → 90% is a 20% increase, and is a difficult number to reach

## NEWSPAPER SUBSIDIARY VALUATION

*Type of case: Strategy*

**A newspaper company (Daily News) in suburban New York has a subsidiary in New York City. The subsidiary is losing a lot of money.**

**What is the value of this subsidiary?**

### ADDITIONAL INFORMATION

Newspaper in suburban NY:

- The newspaper company in suburban NY is very profitable, it has number 1 market share (80% share).

Subsidiary that is losing money in NYC:

- Costs are not increasing.
- Revenues are not decreasing.
- The subsidiary is only two years old. Target segment is lower to middle income families.
- Market share is 10%. Revenue drivers are subscriptions and advertising. The breakdown is 50% / 50%.
- Usually, in a newspaper company, advertising is the major source of revenue. Subscriptions are not that much since the market in NYC is very competitive. It is dominated by lots of other big firms such as the New York Times, etc. Consequently, advertising prices are very competitive and do not generate lots of revenue in the subsidiary. (Big firms do not want to advertise in newspaper that has little market share).

Market condition in NYC:

- Very competitive, very hard to differentiate since there are lots of competitors and excess capacity. This is adversely affecting pricing and profitability in the market.

### SOLUTION ANALYSIS

The financial value of the subsidiary is negative. However, lots of companies in New York City, including the NY Times, are trying to enter suburban areas of NY because they are very profitable. Therefore, this company (Daily News) is trying to enter the NYC market to distract the attention of those companies that try to enter its market, as well as signal that if the NYC newspapers try to grab share in the suburban area, Daily News could do the same thing in NYC. The value of the subsidiary is its strategic value.



## PETROLEUM COMPANY SUPPLIERS

*Type of case: Strategy*

**A large oil and gas company that has operations worldwide is divided into three business segments: upstream, downstream, and chemicals. Upstream involves drilling and extracting oil, downstream is refining the product into gas and selling it at stations, and chemicals is producing petroleum-based products. The upstream business segment is divided into approximately 30 companies worldwide that fall under the parent company's umbrella of businesses. These companies use numerous suppliers and the parent company would like to cut supplier spending and, in particular, the parent company would like to know whether they are using the cheapest suppliers in all cases.**

### ADDITIONAL INFORMATION

- The parent company has upstream companies in four regions: Asia, Europe, the U.S., and Africa
- There are three suppliers that have a presence in all four regions (companies A, B, and C)
- The upstream companies and the top two low cost suppliers in each region are:
  - Asia - 10 upstream companies, 4 suppliers, rankings: A, B
  - Africa - 4 upstream companies, 4 suppliers rankings: A, B
  - Europe - 10 upstream companies, 6 suppliers, rankings: B, C
  - U.S. - 6 upstream companies, 8 suppliers rankings: C, B

### SOLUTION STRUCTURE

A good way of attacking this case is to find out where the parent company has upstream operations geographically and then analyze the suppliers in each region and across the regions. During an actual interview, the case interviewer liked this approach and allowed me to concentrate on one type of supplier in particular, the suppliers of drilling equipment.

Like all other cases, there is no one answer. Instead you should mention several things:

- Look at the strengths of each supplier (do they have specific equipment that gives them an advantage even though they may not be low cost)
- Will the suppliers reduce their prices if the parent company offers a larger volume of business or a sole-sourcing agreement, and do the suppliers have the resources for a larger volume

- If A is chosen as sole supplier to the 10 companies in Asia and C for the 6 in the U.S., can you transfer the cost cutting ideas between the two companies to receive further cost reductions?

## Benjamin Carpet

Type of case: Strategy

Company: McKinsey

**Your client is the family owner of a company that serves residential and commercial markets and operates 5 days/week and 16 hours/day. Answer the following questions:**

**Question 1:** Should Benjamin Carpet Co. purchase the machine? How would you structure your solution?

### Current process

Purchase colored yarn  
Load correct colored yarn onto spools  
Weave carpet with colored yarn  
Back carpet  
Cut, roll, store

### Considering new process

Purchase uncolored yarn  
Load spools  
Weave carpet  
NEW MACHINE (Ink → Dye → Dry)  
Back carpet  
Cut, roll, store

Machine costs \$25M

**Question 2:** What are some of the categories that will effect the calculations?

**Question 3:** Given the following information is the machine worth investing in?

**Question 4:** With the following additional revenue is the venture worth pursuing?

### **Additional Information:**

Currently produce & sell 10mm yards of carpet per year.

Current fully loaded cost \$10/yard

New fully loaded costs

Un-died yarn	-\$0.50 / yard
Inventory	-\$0.50 / yard
Labor	-\$0.25 / yard
Op Cost	<u>\$1.00 / yard</u>
	-\$0.25 / yard

Machine lasts 10 years

New technology allows for the creation of carpet with new textures and patterns.

Two types of new customers:

Current customers pay \$16 / yard

New customers will pay 25% more →  $1.25 * 16 = \$20 / \text{yard}$

Market

High-end	70 million yards / year will capture 5%
Current	10 million yards / year

**Answer 1:**

- Understand all alternatives
  - Only two, buy this machine or don't
- NPV of costs and future cash flows
  - Revenue
    - Additional Volume?
    - Additional Price?
  - Costs
    - Additional Operations
    - Operation Savings
- Access to capital
  - No problem
- Risk to business of changeover
  - Minimal

**Answer 2:**

Investment  
 Labor  
 Yarn (inventory management, waste, lower cost)  
 Utilities  
 Operation Costs (Die, Electricity, Maintenance)

**Answer 3:**

Impact \$10 / yard → \$9.75 / yard  
 10,000,000 yards \* (\$10-9.75 / yard) = \$2,500,000  
 \$2,500,000 \* 10 years = \$25,000,000 with 0% discount rate. With any realistic discount rate generated cash flow will not displace the \$25mm cost.

**Answer 4:**

70 million yards / year * 0.05 * \$20 / yard =	\$ 70 million
10 million yards / year * 0.30 * \$20 / yard =	\$ 60 million
10 million yards / year * 0.70 * \$16 / yard =	<u>\$112 million</u>
New	\$242 million
Old	<u>\$160 million</u>
Additional Sales	\$ 82 million
Fully Loaded Cost	<u>\$ 34 million</u>
Profit	\$ 48 million

Annual profit of \$48 million easily overcomes \$25 million cost and over 10 years will be very profitable.

## BABY BELL DIVERSIFICATION

*Type of case: Strategy*

**A Baby Bell company is interested in diversifying into other areas besides telecommunications. They are considering entering the market for electronic home security systems. Would you recommend that they do so?**

### ADDITIONAL INFORMATION

- The company is a holding company. The company has previously made unsuccessful forays into software and into real estate.
- The home security industry is highly fragmented. The top five players in the industry generate less than 4% of the total industry revenues. This implies that the industry largely consists of small, regional companies.
- 10% of all residences currently own an electronic security system.
- This is in some sense a razor and razor blade sort of business. The economics are:

<u>Item</u>	<u>Retail price</u>	<u>Cost/Margin</u>
Equipment & Installation	\$500-\$1500	0-10% margin
Monthly service	\$20/month	\$5/month

- What strengths/competencies of the Baby Bell company are useful in this market?
  - Installation expertise
  - Operator services
  - Transmission system (phone lines)
- It turns out that the "expensive home" segment of this market is saturated. Growth has been slow in recent years.
- Price sensitivity is unknown in "moderate-priced home" segment.

### SOLUTION STRUCTURE

Use an industry attractiveness framework, such as Porter's Five Forces, to determine whether this is a business you want to be in, or at least to determine what kind of returns you can expect to achieve. Then, use the value chain to look at where value is added in the home security business. Another possibility is a basic 3 C's to analyze the market potential. Finally, once you feel you understand the market, determine if the core competencies of the Baby Bell are likely to match the demands of the home security market. The conclusion is that this business is a reasonably good fit for the company, but that more market research needs to be done to assess the growth and profit potential of each segment of the market.

## GLASS MANUFACTURING UPGRADE

*Type of case: Strategy*

**A producer of glass containers is considering making a \$1 million investment to upgrade some process equipment. Would you recommend that they do so?**

### ADDITIONAL INFORMATION

- This company has only one, albeit large, facility. There are quite a few other glass producers.
- Margins and profits of the entire industry have been eroding for several years.
- There has been and continues to be some cannibalization by plastic and metals. However, glass remains the material of choice for many applications, especially food products.
- The main input material, sand, is inexpensive and plentiful.
- Some of this company's competitors have already made a similar upgrade to their own process equipment

### SOLUTION STRUCTURE

Start with a simple cost/benefit analysis. Look at the potential benefits from upgrading the equipment and compare that to the \$1 million cost. To look at the benefits, consider the Porter Five Forces framework to look at likely returns from the industry. Remember that future cash flows from this investment must be discounted at the company's cost of capital.

### SOLUTION ANALYSIS

- The key insight in this case is to recognize the high competitive intensity in this industry. The profit potential, at least in the short term, appears poor.
- Given the fact that there are too many players and too little profit, some consolidation and/or exit of some companies from the industry appears inevitable. This company must decide whether it is worth it to try to ride out this shakeout.
- At least in the short term, the return on the \$1 million investment will likely not be adequate to justify making it. However, one interesting possible justification for making the investment might be to "dress up" the company in order to sell it

## AUTO PARTS BUSINESS ENTRY

*Type of case: Strategy*

**A specialty ceramic materials firm has decided to enter the automotive parts supply business. They have developed new ceramic engine components that when used in a standard internal combustion engine will increase fuel mileage by 20%, decrease pollution by 30%, and improve longevity by 20%. Your client wants to know how to proceed.**

### ADDITIONAL INFORMATION

There is quite a bit of internal rivalry in the automotive parts business. This has driven profit margins down to a minimum level. Buyer power is quite concentrated with the big three automakers coming first, then the large engine manufacturers, and then possibly the large automotive supply centers. There are very few supply issues as the components for ceramics are easily found. New entrants should not be an issue because the formulation for our product is a mix of patented materials and processes. Substitutes are the traditional steel components. Profitability analysis shows that our components costs \$500 per engine set, while traditional steel components costs \$50 per engine set.

### SOLUTION STRUCTURE

The first place to start is with an industry analysis, perhaps using Porter's 5 Forces to get an understanding of the automotive parts business. From there, look at the new venture's profitability and finally a marketing plan:

- The best place to determine cost benefit is on miles per gallon savings. For example, for a 30-mpg car, the new components will get 36 mpg. The average person drives 12,000 miles per year, which is 400 gallons with the old components and 333 gallons with the ceramics. At \$1.25 per gallon, this is an \$83 dollar a year savings. It will take the average driver over 5 years to save the extra \$450.
- However, the average semi-truck will drive over 100,000 miles per year. At 10 mpg to 12 mpg the annual savings are over \$2,000.

The next step is how to go to market. This company lacks any automotive distribution network or sales force. The company should form a joint venture for distribution with a current automotive parts supply company.

## REGIONAL BANK GROWTH STRATEGY

*Type of Case: Strategy*

*Source: McKinsey*

### Question (posed by the interviewer):

Your client is the CEO of a Regional Bank who is being pressured by the board to obtain profitable growth. Answer the following questions:

**Question 1:** What opportunities does the bank have for profitable growth?

**Question 2:** Focus on Cross selling. What products should be cross sold?

**Question 3:** Is \$5M incremental profit obtainable from cross selling to Investment Accounts?

**Question 4:** What are the risks associated with pursuing the suggested product (choose one)?

### *Information to be given if asked:*

- Bank has presence in four states
- One million commercial customers
- Average balance = \$50,000
- Each account generates revenue of 1% on balance
- Contribution margin = 40%

### **Answer 1:**

- New Services (Credit cards, insurance, ...)
  - Current Customers
  - New Customers
    - Same region
    - New region
- Existing Services
  - Cross sell to Current Customers
  - New Customers
    - Same region
    - New region
- Acquisition
- Partnership
- Other markets
- Different markets (small businesses, ...)



**Answer 2:**

Products	% of Current Customers	Return on Equity	Bank's Strength in Area	Competitive Landscape
Deposit Account	100%	25%	High	Threat from brokers and mutual funds
Loans	50%	15-18%	High	Threat from specialist.
Investment Accounts	7%	12-15%*	Medium	Full service & discount brokers. Banks beginning to gain mkt. share.
Insurance	1%	<5%*	Medium	Agents dominate this market.

\* ROE could increase with larger volume.

I choose to investigate loans then investment Accounts.

**Answer 3:**      $\$50M = (0.01) * (0.40) * (50,000 * X)$   
 $X = 250,000$  new subscribers  
 Total subscribers = 250,000 + 70,000 {7% of 1M} = 320,000  
 $320,000 / 1,000,000 = 32\%$   
 I don't think this is likely.

**Answer 4:**

- Customer
  - Perception
- Business risk of providing the service.
- Competition from other banks to get accounts could lead to lower profit.
  - Lose of entire customer if you convince them services can be bundled
  - Cannibalization of ROE associated with movement of \$ from Deposit Accounts to Investment Accounts.

## CONGLOMERATE ROIC INCREASE

*Type of Case: Strategy*

*Source: McKinsey (2nd round)*

### Question (posed by the interviewer):

**Your client is a 5B dollar conglomerate with 50 plants nationwide. They were formed by acquisition of various small firms over the last 10 years and there are still some integration issues. The CEO would like to increase the ROIC of the firm from 10% to 20% in 3 years. Is it possible and how would you achieve this?**

### *Information to be given if asked:*

#### ROIC Definition

- ROIC is Return on Invested Capital. This can be achieved by growing the profits of the firm and/or by decreasing the invested capital.
- There are firms in the industry that have 20-30% ROIC. Hence the client's target looks achievable.

#### Customers

- Client has 30% customers in Europe, 10% in Asia, 50% in North America and 10% in ROW.
- The client has 2 types of products – Standard (almost a commodity) and Engineered (designed specifically for the client).
- The standard products are getting commoditized, hence have significant price pressure.
- The engineered products have good margins in the 1st year and then the margins decrease in subsequent 3-4 years.
- The client has 30,000 SKUs in their product portfolio.
- The industries that the client serves are as follows:

Industry	% of Revenues	Standard product	Engineered product
Automotive	55%	65%	35%
Electronics	25%	45%	55%
Construction	10%	75%	25%
Others	10%	70%	30%

NOTE: The interviewee should recognize the following by now based on the Customer Information

- Client % revenues from Electronics industry are quite low and that industry has the highest % of Engineered products. The client should focus more closely on that industry.
  - Engineered products offer much higher margins.
- 30,000 SKU seem like a lot, and should address that in the case as well. There will be interdependencies among these products.

Competitive Landscape

- This is a highly fragmented industry with 20,000 competitors.

Investment/Cost

- There are integration issues among the small companies under the client umbrella. The issues pertain to decentralized sourcing, sales staff and back office operations. These should be centralized to decrease cost (economies of scale) and improve coordination.
- The product portfolio needs to be optimized. Evaluate profitability of each product along with its interdependency, i.e. its importance in a product portfolio supplied to important clients. Evaluate profitability of each client as well. Suggest using databases for this analysis.
- Divest assets pertaining to certain non-profitable low volume standard products to decrease capital investment. If these components are still needed for a client portfolio investigate outsourcing their production and having exclusive contracts to maintain quality.
- Evaluate the capacity utilization and supply chain for the 50 plants. Decrease investment if possible.

Solution:

- The client can increase the ROIC from 10% to 20% by the following initiatives:
  - o Optimize product mix while keeping product interdependencies in mind
  - o Sell more engineered products by growing business in electronics industry
  - o Decrease cost by improving the internal integration

## CONSECO

*Type of case: Strategy*

*Company: BCG*

**Description:** All of the data in this case is public domain. Consecro is a company at the financial services industry and more specifically at the business of life and health insurance. During the years 83-98 Consecro was a great performer and lead the S&P 500. Consecro's main growth engine was its successful acquisitions. On average, the company acquired a target every 6 months. During 98, Consecro acquired Green Tree Financials. Surprisingly, the day after the deal was announced Consecro share price dropped 20% and a year after the share was down 50% from its price the day before the announcement. You were hired by the CEO to explain this drop in the share price and to suggest a course of action.

### Additional data:

- Green Tree Financial is a provider of loans for homebuyers.
- Green Tree Financial is charging higher interest rates than Consecro.
- Green Tree deal was much larger than Consecro's previous deals.
- Consecro share price before the acquisition was \$57.7.
- Green Tree Financial share price before the deal was \$29.
- The deal was a fixed equity exchange deal where 0.9165 shares of Consecro were awarded for every share of Green Tree Financial.
- Consecro's market cap before the deal was \$7B.
- Green Tree owned approximately 50% of the company created by the M&A transaction.
- A year after Green Tree needed an additional investment of \$1B.

### Solution Structure:

- Identify the players attributes.
- Identify the exact deal structure.
- Identify misalignments in the deal that might cause the share price drop.
- Try to predict what will happen next and suggest course of action accordingly.

### Solution Analysis:

- Problems with the deal structure:
  - Misalignment in the companies business.
  - The almost 1:1 stock exchange didn't reflect the different market values of the two companies.
  - Consecro's expertise was in smaller and more rapid acquisitions and this acquisition wasn't something they could handle.
- Problems with the acquisition target:
  - From the last bullet in the additional data section it is obvious that Green Tree was at a difficult situation before the acquisition and wasn't a good target for acquisition.



The market adjusted Consecro's share price to reflect these misalignments.

- What to do now (after a year)?
  - Investigate the financial state of Green Tree after a year (it is evident it wasn't good).
  - If Green Tree continues to be in distress suggest dumping it.
- Conclusion

- Green Tree continued to suffer big loses and dragged Consico with it
- After several years Conseco was unlisted from the S&P.
- Additional questions
  - What was Conseco's management thinking?
  - Where was Conseco's board of directors?

## INSURE ME!

*Type of case: Strategy*

*Company: BCG*

**Description:** Insure me is a Global Financial Services company at the insurance business. Recently, the CEO of the company was fired and took with him all of the 10 employees of the company's private funding division, which was his pet project. No one that is left in the company knows what is going on in that division, and there is no reporting system to rely on (the CEO took all of the data with him). How would you go about managing this division?

**Additional data:**

- The company is operating in the US and Europe.
- The company provides car, life and other type of insurance.
- The company is one of the 4 leading players at its market with over \$1B of annual revenues.
- The private funding division is type of a VC.
- We have a data sheet (see appendix) which list 4 of the division's current investment.
- These 4 investments are only around 20% of the number of investments but form 80% of their value.

**Solution Structure:**

- Identify the company's business and core competency.
- Identify the assets under the division management.
- Identify any financial and strategic synergies between the division's assets and the company.
- Analyze ways to leverage the division and its assets moving forward.

**Solution Analysis:**

- As mentioned the company's core competency is in the insurance field.
- As could be observed from the appendix two assets are not complimentary to the company's business.
- From the remaining ones one is forecasted to lose money next year.
- As such there is one company it make sense to keep and the other are not a real asset to the company.

**Recommendations:**

- Keep the company with the strategic fit that makes money and try to sell the others (for a good deal).
- For the one that makes sense try to increase the company's holding in it.
- The company with the fit will serve both to hedge the bets and in order to keep the finger on the pulse of the new market needs.
- As for the division, try to find what would be needed (funds, time, efforts, HR etc.) in order to bring it to an operational mode.
- Find what are the estimated operation costs.
- If it makes sense from the financial aspect you might want to keep this division as it hedge your bets.

<b>Name of company</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Field</b>	High Value commodities insurance	Stadiums renovation	Golf clubs design	Executive insurance
<b>This year's revenue</b>	\$150M	\$300M	\$100M	\$70M
<b>This year's expenses</b>	\$100M	\$280M	\$150M	\$50M
<b>Next year's revenue growth (additional on top of the current)</b>	300%	200%	100%	300%
<b>Next year's expenses growth (additional on top of the current)</b>	500%	200%	150%	400%

**COCA-COLA VS RC COLA***Type of case: Marketing*

The following represents the allocation of each dollar spent to bring a bottle of Coca-Cola to the consumer.

<b>Research and Development</b>	<b>5%</b>
<b>Syrup/Bottling</b>	<b>25%</b>
<b>Distribution</b>	<b>25%</b>
<b>Marketing</b>	<b>24%</b>
<b>Overhead</b>	<b>10%</b>
<b>Profit</b>	<b>10%</b>

Draw a chart with the dollar percentage allocations for RC Cola.

**SOLUTION STRUCTURE***Approach:*

- To make it easier, start with the larger percentages.
- RC doesn't have the economies of scale Coke enjoys, therefore their manufacturing is a higher percentage of costs.
- They do not have as efficient a distribution system (fewer products/ same # of locations), therefore it requires a higher percentage.
- Both of these leave less money available for R&D (look at the lack of new products), marketing and profit.
- Overhead is actually lower because they require fewer front-office people to run the business.

RC Cola:

Research and Development	3%
Syrup/Bottling	35%
Distribution	35%
Marketing	15%
Overhead	7%
Profit	5%



## SOFTWARE DEVELOPMENT FIRM

*Type of case: Marketing*

**Congratulations! The firm of your dreams has just hired you. For your first assignment, your client is a software development company that specializes in spreadsheet add-in products. These products enable spreadsheet users to do complex numerical analysis, run simulations, linear optimization, distribution fit, decision-trees, what-if analysis, and a host of other high-octane mathematical functions.**

**The firm was started by an engineering professor at Cornell University, and has grown to its current size of 37 full-time employees. Tired of programming a mainframe computer to help with his routine but sophisticated calculations, he developed a program for his work. He soon realized the market potential and began this firm to help reach that potential. Now, 14 years later, the product has developed a loyal following, but has yet to break wide open.**

**Current users of the main product lines include professionals in the petroleum industry, financial markets, manufacturing, health care, academia, and others.**

### ADDITIONAL INFORMATION

- Q: How large is the market? A: We don't know. How would YOU figure it out?
- Main substitute is enterprise systems (customized software systems) but these systems are far more expensive.
- There is one competitor, only 3 years old. Key difference: cheaper, less sophisticated products.
- What is the price of the product? Software price is generally irrelevant. End-users are not as price sensitive.
- Company costs are not important. The company is very lean and well managed from a cost perspective.
- Revenues were \$10MM in the last fiscal year, but so what? The company is profitable and growing, just not fast enough.
- Current distribution is through resellers – people call them to order the product (resellers sell a large variety)
- Most software is sold direct to customers who contact the firm. These are current users purchasing up-grades, additional site licenses for co-workers, or people who've seen what the product can do for them.
- Many new leads come from trade shows, direct mail, and print ads in technical journals. These programs are effective but small.
- Q: Who are the users? A: We don't really know, since very little information is kept on buyers.

### Solution Structure

- Determine a mission – what is the purpose of this engagement/case? To help increase product sales for the client.
- Define the problem and analyze why.
- Examine target segment – who uses the product, who isn't but should use the product?
- Analyze the product – who would use it and why? What are the substitutes and competition?
- Examine channels of distribution.

### SOLUTION ANALYSIS

The key issue is the means of selling the product. The current channels of distribution are not adequate to sell the product. Good answers should identify that the product is very complex, difficult to use, but also a very powerful tool for users in specific industries. Therefore, the marketing program must educate end-users. Good answers will explore, then provide recommendations to improve channel performance. Outstanding answers may provide specific recommendations for joint ventures.

Critical insight: How large is the market? Good answers should provide what-if scenarios for various possibilities, i.e., if the key industries have been reached but on a small scale, marketing efforts should focus on finding new users who match current user profiles. But if key industry segments have yet to be identified, perhaps marketing programs should focus on introducing the product to new segments of users.

## GERMAN MARKET EXPANSION

*Type of case: Marketing*

**A large American cutting tool manufacturer who has the dominant market share in the US, but minimal presence in other parts of the world, is considering entering the German market. They believe the German market could be attractive because of the large industrial base. How should they enter?**

### ADDITIONAL INFORMATION

- The cutting tools that this company manufactures are many different types of drill bits that go onto machine tools, and are used in metal working applications - from machine shops to auto manufacturers, and many other industrial applications.
- The business is divided between standard parts, and custom-designed parts for specific applications. The standard pieces are sold through distributors and direct through a sales force, and the custom designed pieces are sold through a direct salesforce. The custom-designed pieces are much more profitable than the standard pieces, and our client is interested in this market.
- (At the time of this case) Germany is a growing market for cutting tools, due to a strong industrial base, especially in heavy industries where there is the possibility to sell many custom designed pieces in large volumes to customers.
- Germany appears attractive because it could provide a foothold to enter the rest of Europe, where again our client has a negligible presence. France and Italy also appear to be attractive markets, and the experience gained in Germany with European manufacturers could help to establish a European name for the company.
- There are about ten competitors in this market, all German, none of which has more than a twenty percent market share. There isn't a lot of movement among the competitors in terms of stealing share from each other. They are all basically growing along with the growth of the market in general.
- Some of the competitors are stronger in the custom designed tools and other competitors are stronger in the standard pieces. All of the competitors have both direct and indirect salesforces.
- Each of the competitors has a very strong relationship with their customers. The loyalty of the customers is so strong that the cutting tool firms send salespeople to customers of competitors every day for years in a row before winning the account. Once a supplier has established a relationship with the customer the supplier can be almost assured of a cash stream over a period of years. This makes the cost of acquisition of new customers extremely high.

### SOLUTION STRUCTURE

This case is adaptable to a few frameworks; you could try using Five Forces, but don't get locked into running through all five. Another approach you could use is to use a hybrid of the 3 C's and 4 P's.

### SOLUTION ANALYSIS

- Because the direct salesforce is the key to winning customers, and the strategic focus of our client, our client could not enter through distributors. On the other hand, they could not hope to enter with their own direct salesforce because of the prohibitively expensive and long customer acquisition process.
- They established a joint venture with a company that had a strong customer base, but did not have superior engineering capabilities to custom design pieces.

## MICROELECTRONIC PLACEMENT LABS (MPL) INC.

*Type of case: Marketing*

**MPL is a seven-year old contract-manufacturing firm located in Ithaca, New York. The founder and President, Shane French, has found a niche in the contract manufacturing space by providing his customers highly customized service, particularly with respect to production schedules and small lot sizes. Contract manufacturing is, for example, placing microelectronics on printed circuit boards (a.k.a. motherboards) for such components as computers, lasers, and electronic items. Currently, customers provide MPL with parts inventory, and MPL performs the assembly. French investigated the field and is considering offering turnkey solutions. That is, providing ready-made boards for clients (based on customer specifications). This would require an investment in inventory, but MPL could command a 20% mark-up on parts alone. This is how many contract manufacturing firms grow revenues. Should MPL offer turnkey solutions?**

### ADDITIONAL INFORMATION

- The competitive environment is very fragmented in the niche portion of the industry.
- MPL has been profitable each year, growing 30% annually.
- MPL has very little debt, and owns all its equipment (\$30,000 bank loan for equipment).
- Customer relationships are critical: MPL has a solid customer base.
- MPL has a customer base of about 10 firms = 90% of its business is from repeat customers.
- Relationships are not steady – client needs vary from time to time, job sizes vary considerably.
- Business is strong but variable; customer demand comes and goes in waves, unpredictable.
- Offering turnkey solutions would not smooth the production cycle.
- MPL specializes in filling niche needs; small lot sizes, unusual delivery schedules.
- MPL is currently not seeking new clients, lacks the capacity to service new clients.
- MPL lacks the resources (skills) to forecast demand.
- There is not enough skilled labor in the area to increase capacity – which is why they're turning customers away.
- Offering turnkey solutions would require an increase in capacity.
- Parts supplies are plentiful; discounts are possible for bulk purchases.

### SOLUTION STRUCTURE

- Determine a decision rule.
- Identify the key factors for consideration.
- Investigate the pros and cons of these factors.
- Make a recommendation.

### SOLUTION ANALYSIS

Good answers should uncover:

- Advantages of turnkey: more \$, more customers.
- Disadvantages: requires greater capacity, would not smooth operational cycle (demand is highly variable), large investment in inventory is financially unfeasible (payback would only occur over time), MPL lacks scale.
- Identify steps to mitigate demand issues.
- Increasing in capacity is a “step” function, not linear.
- Discuss issue of resources (skilled labor).

## SENATOR HARRY REID

*Type of case: Marketing*

**Harry Reid (D-NV) is an incumbent United States Senator from Nevada running for re-election. In 1994, Reid easily won re-election. Despite his seniority and solid record of accomplishments, he is in trouble this November. Why? He's hired you to analyze the situation. His opponent is two-term Republican Congressman John Ensign, from Las Vegas.**

### SOLUTION STRUCTURE

Politics—in a perverse sense—is marketing. This is a marketing case. The 4P's is a good place to start.

- Examine 4 P's
- Discover what is different this election from last election
- Present analysis and recommendations

#### Product and Positioning

Key differences: ideological, age, appeal to voters (i.e., charisma), target base

Reid = well-known and respected, his personality is all business, his record is moderate-liberal

Best known for fighting nuclear power and waste dumps in Nevada, environmentalist

Ensign = young, brash, religious-right conservative, recently divorced, charismatic

No established legislative record, a Newt Gingrich disciple

#### Place

For both candidates, distribution of "product" is promotions.

#### Promotions

Both candidates send constituent mail statewide, campaign mail statewide, and broadcast statewide radio and television commercials, campaign events, debates

#### Price

Not relevant – the price is qualitative for the sides that lose: both sides stand much to gain or lose from electoral victory. Reid enjoys a slight fund-raising edge.

Segmentation

Reid – target segment is traditional Democratic base: elderly voters, environmentalists, minorities, educational community, blue-collar workers, women, urban voters in Las Vegas and Carson City

Ensign – target segment is conservative base: new-right Christians, suburban families, wealthy individuals, anti-government activists, developers, ranchers, miners.

<u>VOTER SEGMENT</u> (not equal 100%)	<u>1994</u>	<u>2000</u>
Population	2.5 million	3.9 million
Nevada Elderly	24%	20%
New Retirees (new arrivals)	16%	24%
Women	52%	51%
Men	48%	49%
Suburban	22%	39%
Urban	49%	40%
Rural	29%	21%
Blue Collar	15%	19%
White Collar	17%	21%
Minority	07%	04%
Democrats	31%	30%
Republicans	32%	35%
Other	37%	35%
Liberal	21%	19%
Conservative	40%	45%



**COCA-COLA ADVERTISING***Type of case: Marketing***Is Coke spending enough on advertising? You have been retained by the CEO to find out.**ADDITIONAL INFORMATION***Coca-Cola***

<i>Area</i>	<i>Position (sales)</i>	<i>Market Share</i>	<i>Ads (Mln)</i>	<i>% of Mktg Budget</i>
United States	1	41%	\$114	50%
Other North America	1	40%	\$58	45%
South America	1	33%	\$20	35%
Southeast Asia	2	20%	\$25	30%
India	2	22%	\$15	30%
Western Europe	2	12%	\$21	25%
Eastern Europe	3	13%	\$19	20%
Africa	2	12%	\$7	13%

***Nearest competitor***

<i>Area</i>	<i>Position (sales)</i>	<i>Market Share</i>	<i>Ads (Mln)</i>	<i>(% of Mktg Budget)</i>
United States	2	31%	\$98	55%
Other North America	2	30%	\$38	55%
South America	2	13%	\$14	25%
Southeast Asia	1	24%	\$35	25%
India	1	37%	\$24	25%
Western Europe	1	20%	\$22	30%
Eastern Europe	1,2	18, 17	\$14, \$13	24%, 30%
Africa	1	22%	\$12	17%

Q: What is the goal?

A: To be leading non-alcoholic "entertainment" beverage in every market.

Q: Is the company satisfied with its current position?

A: Yes, but competition is closing in.

Q: Is there a correlation between ads and market share?

A: You tell me, you are the consultant – how would you figure that out?

Q: Tell me about other promotions

A: Other promotions include price discounts, coupons in some areas, in-store shelf arrangements (very expensive but effective)

### SOLUTION STRUCTURE

What!? The correct answer is “it depends,” but a better answer is to explain what you mean.

- Define a goal or decision rule (i.e., what constitutes “enough”)
- Focus on one geographical area (i.e. market) at a time
- Determine factors to consider
- Analyze each factor to determine if it meets the rule
- Present analysis and make recommendations

### Decision Rule

The extent to which spending more for advertising results in achieving quantifiable goals in terms of market share or sales volume. (In economist-speak, where marginal costs do not exceed marginal profits)

### Factors to consider and analyze in greater depth

- Correlation between ad spending and market share
- Opportunity cost of other spending – how else the goals can be achieved without ads
- Competitive position: direct correlation between spending and competitive position vs. other brands

## SUNTAN LOTIONS

Type of case: Marketing

**Your client is a start-up venture in Southern California. They market a single tanning lotion product to beach-goers from San Diego to Los Angeles. Although sales volume is large, it has not reached anticipated levels. You have been hired to find out why, and what can they do about this problem. This is the company's second summer in business.**

### ADDITIONAL INFORMATION

Answer only if directly asked, or answer "What do you think?" or "Why is that important?"

#### Why start the business?

- They have conducted extensive market research and have found that their product should do quite well.
- There are currently no other products targeting the Hawaiian Cocoa butter segment.
- The product did quite well with consumers in focus groups that were conducted prior to launch.
- These focus groups are representative of the target market, and indicate a real market need for this product.
- The goal was to attain a 5 percent market share – sales at this level would result in profitability.

#### Tell me about their operation

- The operation is three people – partners. They handle marketing (including distribution) and finances. Production is out-sourced to a local manufacturer that is reliable and cheap.

#### Tell me about the market

- The market is quite fragmented, with no dominant player. Coppertone, the leading brand, has a 15% market share.
- There are at least 10 different brands competing in several lotion/oil sub-categories.

#### Tell me about their pricing and positioning

- The target market is people who purchase sun-tanning products at the beach.
- The positioning is Hawaiian cocoa butter. This is a premium product, and is priced in the middle of the high-end.
- Coppertone, a more expensive brand, is the leading seller.

Tell me About Distribution

- The product is sold exclusively at bungalows – proprietor owned and operated walk-up shacks on the beach that typically sell soda, snacks, and basic products to beach goers.
- The product sits on the shelf, and buyers see it and select it. There are no additional shelf promotions.
- One partner drives up and down the beaches refilling stock.
- These bungalows do not charge slotting fees, while drug stores and grocery stores do.
- Their lack of sophistication makes little opportunity to provide incentives to have them push the product.

Tell me about promotions

- Brand awareness was built through sponsorship of beach volleyball tournaments. There are no other promotions.
- All signs, including follow-up market research, indicate this has been successful.

How have they been doing?

- The 5% market share goal was reached, but estimates projected at least 7%.
- They sell out of their product at each location the product is available. In fact, the product sells very well.
- The firm is very profitable, but could be more so if sales attained projected levels.

SOLUTION ANALYSIS

This tests your detective abilities. The answer is small and specific – can you find it? Use the 4 P's, and don't give up so easily. Ask, what are the conditions necessary for high sales? (1) There must be buyers for the product, (2) the price must be right, (3) the product must be available. In this case, the product was not available so people were not buying it. Solution? Make it available. Problem solved. The key to this problem is distribution. Remember that this is a profitable firm. Their problem is not economics, segmentation, competition, price, promotions, or the product – it's distribution. Specifically, it is the delivery schedule of the product. The product sells out at each location, but it is some time before the shelves are re-filled. An easy solution is to re-fill and check the bungalows more frequently. Future considerations may entail a look at promotions and greater distribution, but for now the client is only interested in one problem: meeting projected sales volume.

## Laboratory Testing – Hepatitis C

Type of case: Misc.  
Company: McKinsey

**A hospital is your client. The hospital has the following testing information:**

**Information:** Two types of testing  
                   Specificity  
                             Have false negatives and few false positives.  
                   Sensitivity  
                             Have some false positives but never want false negative  
 Hepatitis C test  
                   In the US / current population  
                             10% has Hepatitis C  
                             90% doesn't have it  
                   Sensitivity test

Has it	Test	Percent
+	+	90%
+	-	10%
-	-	60%
-	+	40%

**Question 1:** If a test result is positive, what is the probability that the patient actually has Hepatitis C?

**Question 2:** Doctors don't want to tell patients that they are only 20% certain so what else can doctors do to increase their certainty?

**Answer 1:** Use Bayes Theorem

Method 1:

	60% - 54%	
	/ (-)	
	90%	
	/ (-) \ (+)	9% / (9%=36%) = 9/45 = <b>20%</b>
/	40% - 36%	
100%		
\	90% - 9%	
\ (+) / (+)		
	10%	
	\ (-)	
	10% - 1%	

Method 2:

	60% - 54%	
	/ (-)	
	55%	
	/ (-) \ (+)	9% / 45% = <b>20%</b>
/	40% - 36%	
100%		
\	90% - 9%	
\ (+) / (+)		
	45%	
	\ (-)	
	10% - 1%	

**Answer 1:** 20%

**Answer 2:** Run multiple tests – expensive  
Look for other related symptoms – good physical  
Take a complete medical history – family history, risk factors

## **ADDITIONAL CASE QUESTIONS**

By now, you are an expert. It's your turn to fill in the solutions; none are provided here. As you will find out in interviews, not all case questions have answers, but all require structured and reasonable logic. Enjoy!

### **LIGHT BEER IN THE UK**

Why is there no light beer in the U.K.?

### **GOLF BALLS IN THE US**

How many golf balls are sold in the U.S.?

### **NBC LOGO**

NBC is considering using its peacock logo on a collection of new products. They have hired you to estimate a value for the logo. How would you go about estimating this value? They do not want you to actually come up with new product ideas, only estimate the logo's value.

### **CONSULTING ENGAGEMENT ROADBLOCK**

You are entering a client engagement as a team manager for your firm. Four consultants have already been working on this engagement for several months. The client's program manager is quitting the firm for "personal reasons" and you will be taking over for her. You sense that she is quitting because of her frustration with her boss, but she will not admit to this. What she does tell you is that she thinks her boss does not believe this project will yield results and has been a "roadblock" to the reengineering process. How should you proceed? Should you alter the teams?

### **GREETING CARD COMPANY**

A greeting card company has four different functional areas along its production chain: idea generation, development, manufacturing, and sales. Idea generation comes up with new ideas for cards and development turns them into designs used by manufacturing. The company has been too slow to get new cards to market. Why?

**OIL & GAS COMPANY**

You are part of the consulting firm's strategy team that develops an approach for the implementation team to follow. You have been hired by an oil and gas company president. His company has three functional areas: upstream, downstream and midstream. Midstream is a misnomer...they actually provide services to the upstream and downstream areas (and don't sit between them in the product flow). The president feels that the midstream area is inept and wants you to find out why.

**BANK'S REAL ESTATE DIVISION**

The real estate credit division of a bank wants to increase their revenues--how can they do this without increasing their risk and without alienating customers?

**LOST IN A SUPERMARKET**

You are trapped in a supermarket and you don't know how long you will be there before someone comes to let you out. Water and air are no problem. How do you determine how many weeks you can survive with the amount of food in the Store?

**GAS STATIONS ON I-95**

What is the number of gas stations between New York City and Miami on I-95?

**ELECTRIC UTILITY CUSTOMERS**

You are an electric utilities company and some of your best customers are leaving. What can you do?

**CHEMICAL INDUSTRY PROFITABILITY**

A chemical company's profits have been falling recently. How would you advise the company to improve profits?



**ELECTRIC UTILITY DEREGULATION**

A New England electric company is facing competition due to deregulation in their industry. Soon, the carrier (wires) business will be separate from the generation (power plant) business. Any company generating electricity will soon be able to sell in their market. What should the company do?

**FAR EAST STRATEGIC OPERATING PLANS**

A multinational oil company has called you in to prepare a five-year strategic plan for its Far East operations. How will you go about preparing it and what actions would you suggest?

**AIRCRAFT PURCHASES**

A major airline wants to purchase aircraft for its Tokyo hub. How many should it purchase?

**AIRLINE INDUSTRY INVESTMENT**

Why do airline companies batter each other over prices despite poor profits? Would you invest in this industry?

**LOSING YOUR NOODLE**

You are the product manager for a noodle product company. You have two major product lines: cup products and block products. Your product lines are losing money. What should you do?

**VALUING ACQUISITIONS**

Our client is considering diversifying into the insurance business. How would you go about valuing an acquisition in the insurance industry?

**STAFF PRODUCTIVITY CONCERNS**

The productivity of the sales & trading staff of an investment bank is much less than that of the competition. How would you go about improving it?