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9. Practice Cases

Gas Retail Case

Introduction

Do you know anything about the liberalization of the energy markets in Europe? If not, let me reassure you: you don't need to know anything.
Let's discuss the challenges on the natural gas market after market liberalization.

Client

Your client is the major operator (monopolist) in one of the largest European gas market.

His business includes two major activities:

- Gas sales to households and firms (gas bought from large producers in Russia, Norway, Algeria…)
- Gas transportation from the national border, where it is delivered by the producer, to the end consumers. This implies the existence of a large ensemble of infrastructures: transportation network, distributions networks, storage equipment, methane terminals…

Situation

Concretely, the market's deregulation means

- The end of the monopoly for the gas sales; the arrival of new competitors
- The preservation of the monopoly on transportation, but under the surveillance of an independent authority that guarantees equal access to all competitors

Your client is at the head of the purchases/sales department. He is in the following situation:

- Today, its market share is 100%
- At a certain point in the next years the market will at once be opened to competition (which is a simplified way of putting it since in reality there will be stages)

Client's question

About the gas sale activity that will be opened to competition

⇨ What will be the level of competitive intensity at opening?
⇨ What actors are likely to become my competitors?

Question	Tested dimension	Possible/expected answer
What do you think, how many and what type of competitors is likely to enter the market?	Structure	This is a complex strategic issues, depends on: Market attractiveness (Market growth, Profitability/margin, Risks) Entry barriers (gas availability, brand) What are the rules of the game/key success factors (access to suppliers, customer intimacy, cost advantages, branding …) How are other players positioned to enter the market? What are their competitive advantages thanks to synergies with other activities (electricity, services …)
Let us focus on the gas retail sale activity's attractiveness and ask the question in relationship with three dimensions • Natural gas market's growth potential • Activity's profitability • The risks associated with this activity		
Let us start with the market's growth potential What are the market's growth levers?	Structure	Differentiate between • Firms/households Identification of key levers by client type • Households: network penetration, share of gas vs. other energies; consumption of gas/household (climate, isolation …) • Firms: as households, and industry growth, productivity, competitiveness with other energy forms
Knowing the market's main growth levers for the firms segment and for the household segment, do you think that the market will strongly grow, stagnate, or decrease?	Judgement	Firms: decrease, in industries that consume a lot of gas (general prize and risk issues) Households: rise of penetration (network extension) but consumption will decrease due to global warming and better built houses
Conclusion on market growth	Synthesis So what	Weak or inexistent growth A new entrant will have to take clients from the major actor
Gas sale profitability Can you imagine, what is a gas retailer's cost structure (turnover = 100)?	Synthesis Structure	Energy/cost of goods (gas) Infrastructure cost Sales and marketing (commercial)

Here is a simplified cost structure (in %) Gas 50 Infrastructures 40 commercial costs 7 margin 3	Judgement	
What cost advantage can a new entrant expect to build for each cost? Let us put ourselves in the shoes of a household client whose yearly gas invoice amounts to € 500. What is the prize reduction potential for a new entrant? Can you give a rough estimate?	Judgement Rigor	Small opportunity of differentiation through costs • Gas sourced at comparable prices • Infrastructure prices identical for all competitors • Marketing: new entrants have to invest rather more • New entrants not expected to have a productivity lever • And have only a small pricing lever, let us check If you assume you can reduce commercial/marketing costs by 33% (500 x 7% x 33% = 11,55) and you allow a 50% lower margin (500 x 3% x 50% = 7,5), then a new competitor can reduce the gas prize around € 15–20/year (11,55+7,5=19). This might allow him to compete with the established client. Marketing costs can be reduced when new entrant is already established in other energy markets and benefits from scale and known brand name.
What can we conclude on a new entrant's margin level?	Synthesis	Margin will necessarily have to be weak or inexistent to attract clients and draw away from established player
Let us now consider the risks borne by our retailer. In order to simplify, let us focus on what is called the climatic risk. The sales volumes will vary a lot depending on the year, whether the winter is cold or not. During a « warm » year, let's suppose • that the heating volumes decrease by 10%, • that the cost of supply/gas are totally variable, • that the commercial costs are totally fixed • that the infrastructure costs are partly flexible, at 70%, What will be our gas retailer's margin?	Structure Rigor	I am basing my analysis on the sales and cost structure of a normal year (T.O.=100) Then I calculate the value of each cost block for a warm year, also the margin nd compare to the margin in a normal year. Cold vs warm Sales.: 100 vs 90 (-10%) ____________________ Gas : 50 vs 45 (-10%) Inf : 40 vs 38,8 (30% of 40 is variable, makes 12, 10% reduction makes 1,2) Commercial : 7 stay 7 Total cost: 97 vs 90,8

		Margin : 3 vs -0,8 In a warm year, it is more expensive to sell gas, so it is a high risk business.
What can we deduce from this risk calculation?	Judgement	The climatic risk is too high to justify the small margin in a normal year.
Your first meeting with your client is tomorrow morning. What can you tell him/her to answer his/her question based on the analyses that we have just done together? Finally, it looks like our major actor does not have to worry; the gas retailer activity's attractiveness is so weak that one would have to be stupid to venture in it at its opening! But why would it be a big mistake to tell our client not to worry? In fact there is a bias in our reasoning from the start. What is it? Are there other levers that would enable an actor to enter the gas market in a profitable way?	Synthesis Creativity Judgement Creativity	Market is not attractive => weak threat We are not working on the right strategic segment: the gas retail sale segment in not independent from the electricity sale and services, from the moment that monopoly disappears => we have been influenced by the client's historical view. We have looked at the gas market stand alone. But we need to take into account that the rules of the games might change and that other energy providers might enter the market. Those providers might offer additional products to the gas client • Electricity • Oil • Services, other products By offering other energy products or services and products, there can be synergies with the gas supplying • Channel diffusion/delivery costs • Margins from other services can cover production risk (b) But also commercialization costs synergies • Client back offices would combine gas and electricity sales • Brand and client acquisition
Who could other new players in the gas market be?	Judgement	Potential new players that bring additional value to the client could be • Major electricity firms • Major oil producers • Major retailers For the electricity firms, synergies would be mainly based

		on commercialization cost synergies, also for retailers. For the oil producers, there are synergies on the supply side.
What can we finally say to our client?	Judgement	The threat is real, the firm's traditional strategic vision must be questioned due to the emergence of the new market conditions and rules of the game. Examples of dangerous actors: 1. Large power firms 2. Oil producers if they don't have more profitable investments to make 3. A partnership between a large European energy player and a large retailer

Oil Tanker Case

BACKGROUND & QUESTION

My grandfather has just died and left me an oil tanker. I need a valuation for tax purposes, and I have hired you to tell me what it's worth. For your information:

There are 3 types of tankers in the world: small, medium, and large

- Within these three classes, each tanker is identical to every other
- I have just inherited a medium tanker

TO BE GIVEN AS A RESPONSE TO STUDENT INQUIRIES:

- **Supply-side information**

	small	**medium**	**large**
Number	100	100	100
Capacity	1 unit	2 units	4 units
Number of Trips/Year	1	1	1
Operating Cost	$50,000/trip	$75,000/trip	$100,000/trip

- **Demand-side information**
  - **Scenario I:** fixed demand for 500 units of capacity per year (transport costs are a negligible part of total oil-cost structure, and demand is completely inelastic for purposes of this analysis)
  - **Scenario II:** fixed demand for 650 units of capacity per year (*note: change demand-side scenario to this only if student correctly determines value of tanker under first scenario and if time permits)*
- **The market is highly fragmented and therefore competitive**
- **The discount rate is 10%**

SOLUTION

Because the market is competitive, the market price will be the lowest price sufficient to cause enough capacity to enter the industry to serve the fixed demand, and the marginal unit will earn revenue just sufficient to cover its costs.

Clearly, the large tankers have the lowest cost structure, followed by the medium tankers and finally the small tankers. The large tankers can supply 400 units of oil transportation services, the medium tankers 200 units, and the small tankers 100 units.

If demand is fixed at 500 units, then medium tankers will be the marginal capacity, and we can say directly that the market-clearing price will be just sufficient to cover the costs of operating such tankers. So my tanker has no value (or, alternatively, scrap value only).

For completeness, the market-clearing price will be $37,500 per unit. Large tankers, all of which will be employed, will earn profits of $50,000 per year and be worth $500,000. Half of medium tankers will be employed at rates that just cover their costs, while the other half sit idle. Finally, small tankers will not have costs low enough to enter the market and will also be worth zero or scrap value only.

If demand is instead fixed at 650 units, the small tankers will be the marginal capacity and medium tankers will earn profits and have positive value. The equilibrium price will now rise to $50,000 per unit. Medium tankers will earn $25,000 per year and be worth $250,000; large tankers will earn $100,000 per year and be worth $1,000,000.

DISCUSSION

This case is a business problem that at its core is a relatively simple problem in microeconomics.

Students need not get all the way to a numerical answer for the value of the tanker, and few should be expected to give both answers depending on demand assumptions. Nevertheless, students should first demonstrate a good conceptual framework for determining the tanker's value, and be reasonably creative about asking for the right kind of data to get at least part way to the solution.

Note that both the revenue and cost side of the problem need to be understood in order to reach a valuation.

Video Game Case

BACKGROUND

The CEO of a large, diversified entertainment corporation has asked a team to examine the operations of a subsidiary of his corporation that manufactures video games. Specifically, he needs to know if he should approve a $200 million capital request for tripling the division's capacity.

QUESTION

You are a member of the team assigned to this project. Assume you and I are at the first team meeting. What are the critical issues we should plan to examine to determine if the industry is an attractive one for the CEO to continue to invest and why?

To be given as a response to student inquiries:

The following information may be given if requested by the candidates, though the candidate should focus on identifying issues, not on obtaining more information.

Market share

- Division is 3rd largest manufacturer of hardware in industry (10 percent market share)
- Top two producers have 40 and 35 percent market share.
- Remainder is divided by small producers.
- Division sell to broad range of consumers

Sales

- Division sales have increased rapidly over last year from a relatively small base.
- Current estimate is annual sales of 500,000 units
- Current estimate of industry hardware sales is 5,000,000 units annually.
- Industry growth has been strong though over last few months.
- Sales growth has slowed.
- Divisions current sales price for the basic unit is $45 per unit
- Division remains less than 20 percent company sales
- Top two competitors also develop, manufacture and sell software/games though division sells only licensed software
- Industry growth of software continues to increase

Cost

- Division estimates current cost is $30 fully loaded. Requested expansion should reduce the cost by 5 to 7 percent and triple production of the hardware unit
- Top two competitors are estimated to have a 10 to 15 percent cost advantage currently
- Main costs are assembly components and labour

Current

- Division estimates much of initial target market (young families) has now purchased the video game hardware
- No large new user segments have been identified

Distribution

- Primarily outlets of distribution are top and electronics stores

Profitability

- Division currently exceeds corporate return requirements, however, margins have recently been falling

Product

- Hardware standards have been established by the industry leaders
- Product features are constantly developed (e.g., new type of remote joy stick), to appeal to segments of the market

SOLUTION: MINIMUM REQUIREMENTS

The following issues would need to be covered for candidate to have done an acceptable job:

1) What is future market potential? Candidate needs to question the continuation of overall industry growth. She/he might ask about the saturation of markets, competitive products (home computers), and declining "per capita" usage.

2) What is the competitive outlook? Should at least recognize the need to examine competitive dynamics. Issue areas might include: concentration of market shares; control of retail channels; and R&D capabilities (rate of new product introductions, etc.).

3) What will be the price/volume relationships in the future? Issues of prices need to be considered

SOLUTION: BETTER/OUTSTANDING ANSWERS

No bounds on creativity, but better answers would address:

Market Potential

- Recognize that there is a relationship between market penetration and growth in new users which, when combined, yields an industry volume estimate
- Address the shifting mix of product purchases, in this case from hardware (player unit) to software
- Seek to look at buyer behavior in key buyer segments, i.e., "fad" potential of product

Software

- Recognize technology standards are set by industry leaders. In this situation, the division as a secondary player will have to follow these standards.
- Recognize that different distribution needs may exist for different products (in this case, hardware versus software)

Price/Volume Relationships

- Discuss the effect capacity additions can have on overall industry price/volume relationships and on industry price levels

Company Ability to Compete

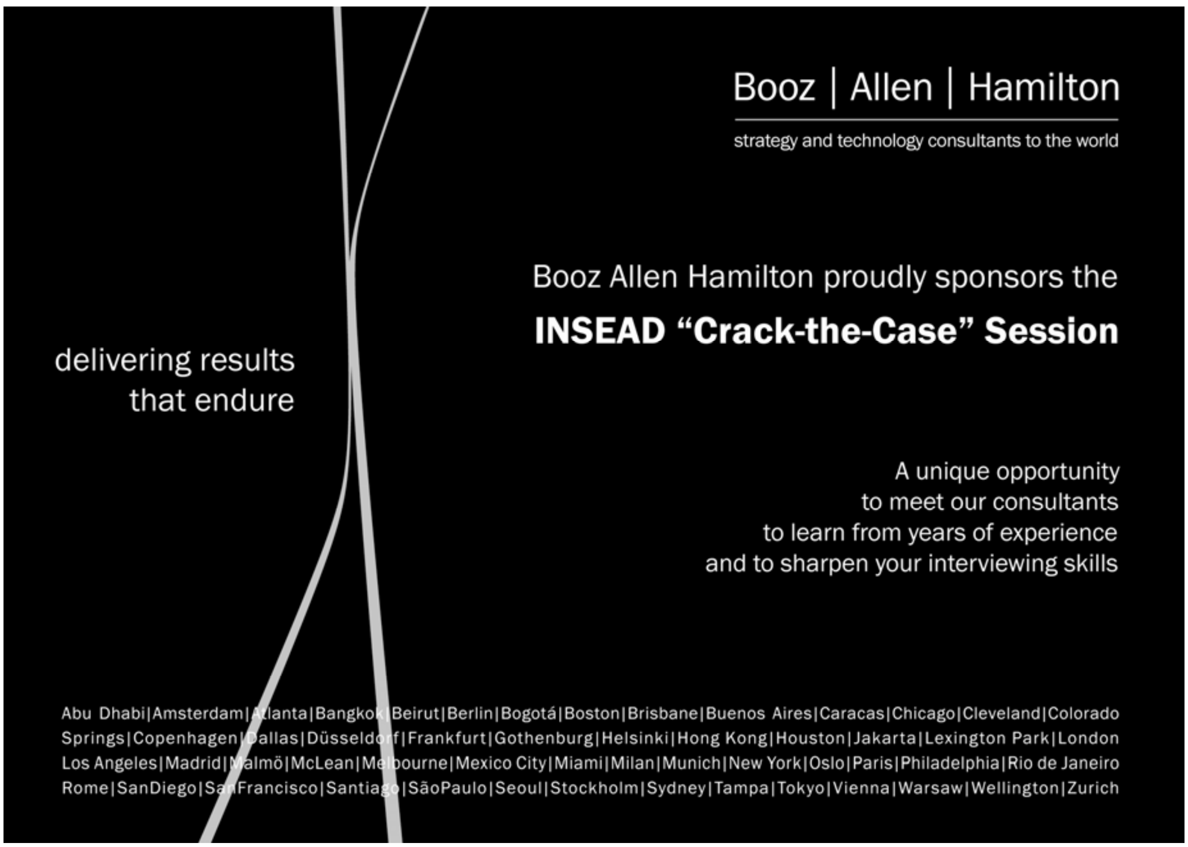
- Should ask what the capacity expansion is designed to do
- Explore the cost position of the client division relative to that of other competitors
- Seek to understand reasons for poor profit performance of division

DISCUSSION

The primary issue of the case is to determine if the industry is attractive and, especially, if our client's position in that industry is sustainable. The candidate should identify issues which are necessary for assessing both the industry and our client's position, but should not be expected to solve the problem.

If the candidate begins to discuss too deeply a specific issue, before having covered the key issues overall, he or she will probably be brought back to discuss the industry more broadly by questions such as "what other issues must be examined?"

If the candidate is discussing issues which seem irrelevant to the attractiveness of the industry, he or she may be asked "how will that analysis help to assess the attractiveness of the industry or our client's position?"



Petro Company Case

The Petro Company

Candidate's Brief

Your Brief

- You are a new consultant working for Marakon. You have been assigned to a case team working for our client "The Petro Company" in its oil exploration and production business
- You have received some information from the client about the oil exploration and production industry and some details about the client's performance. You have been asked to prepare for a discussion on the business based on the key insights that can be drawn from the material and the next steps you think should be taken to progress some of these insights
- In 15 minutes from now you will discuss these insights with your case team manager. To this effect, please prepare:
  - An overview of the business
  - A prioritised list of key issues facing the client, if any exist
  - A list of alternatives to address these issues
- The meeting is expected to take about 25 minutes

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About the industry

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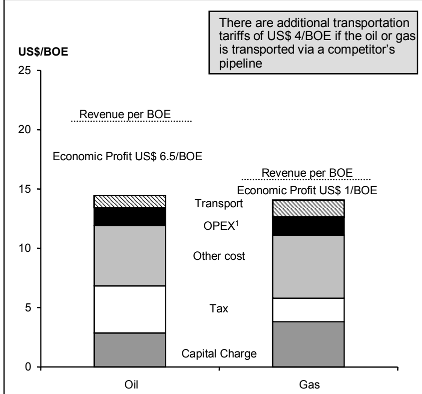
The Industry

About the industry ...

- The standard for volume is BOE (Barrel of Oil Equivalent). A volume of oil, which equals 1 BOE, and a volume of gas, which equals 1 BOE, have the same energy content
- Oil and gas can be transported via pipelines owned by the company and via those owned by competitors
- A pipeline transports either oil or gas, not both simultaneously
- The forecast oil price of US$20/bbl has been revised downwards to only US$10/bbl for 2000 and beyond

2000 average cost structure for oil and gas, if the oil/gas is transported via company's own pipes



1. Operating Expenditure (OPEX) includes maintenance costs

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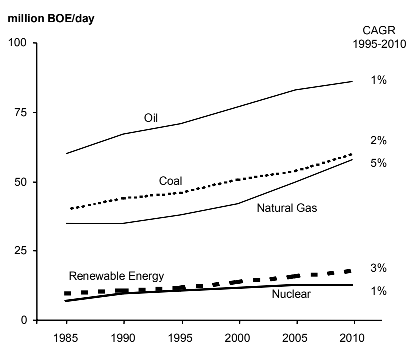
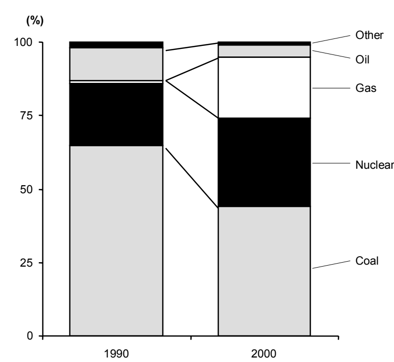
The Industry

Actual and forecast world energy demand



Fuel supply for UK electricity generation in 2000



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About Our Client

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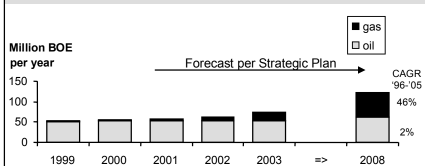
The Petro Company

Background

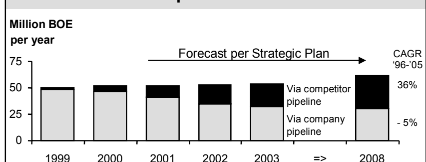
Background of the Petro Company

- The Petro Company has made a strategic decision to significantly increase its gas production as
  - Gas is environmentally friendly thus improving the public image of the company, and
  - Gas is a growing market
- The Petro Company transports its produced volume solely through pipelines because other transportation methods are either more expensive or impossible to use due to weather constraints
- Currently, Petro-Company does not own any gas pipelines and the government has refused permission to lay new ones as half-empty competitor gas pipelines are nearby
- Nevertheless, Petro-company will get Government permission to lay its own oil pipelines

Petro-Company's actual and forecast production volumes for oil and gas



Petro-Company's actual and forecast transportation of oil



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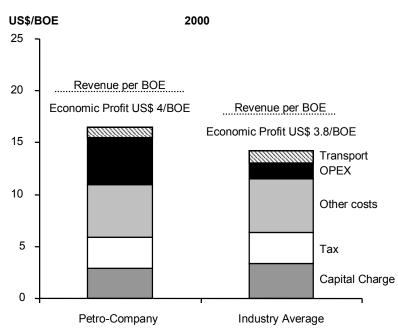
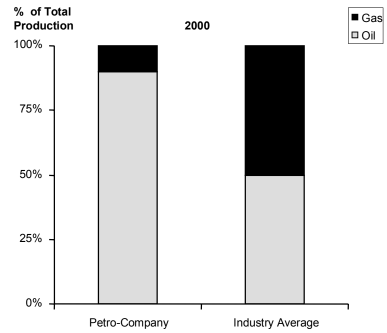
The Petro Company

Petro-Company versus Competitors

Average cost structure of Petro-Company and the Industry Average for products transported via company's own pipes



Comparison of dependence on oil versus gas



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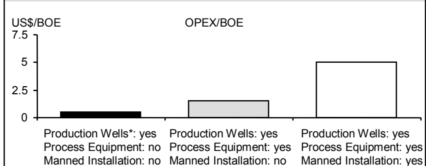
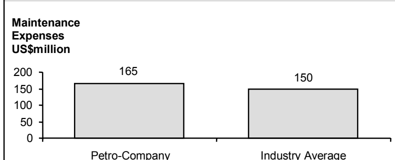
Petro-Company versus Competitors

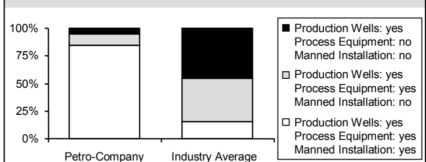
2000 average industry OPEX for three types of production installations



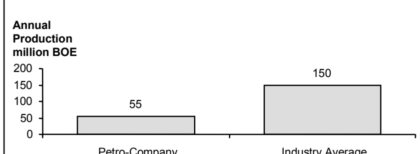
2000 total maintenance expenses for Petro-Company and the Industry Average



2000 usage of the types of production installation by Petro-Company and the Industry Average



2000 total annual production for Petro-Company and the Industry Average



* Production wells are the holes in the ground through which the oil and/or the gas flows to the surface

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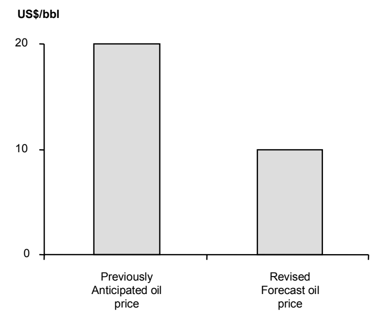
Financial Performance of Petro-Company

Financial performance before the latest revision of the oil price forecast

	1998	1999	2000	2001 F
Oil Price (US$/BOE)	17.5	18	20.9	20
Volume (Million BOE/yr)	49.3	52.4	55.7	58.2
(US$ million)				
Revenue	**863**	**932**	**1,145**	**1,131**
OPEX	94	131	185	255
Other costs	297	313	329	347
Operating Profit	**471**	**489**	**630**	**530**
Interest paid	42	49	56	64
Profit before Tax	**429**	**440**	**574**	**466**
Tax	148	155	164	170
Profit after Tax	**281**	**285**	**410**	**296**
Capital Charge	141	148	157	162
Economic Profit	**140**	**136**	**253**	**134**

Revised forecast ...



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Marakon Associates

Recruiting

The Petro Company

Interviewer Notes

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The Petro-Company

Introduction: Insights

Market Economics

- Gas production is increasing, but is only profitable if the gas is transported through company's own pipelines
- The oil price is forecasted to reduce from the currently expected US$20/bbl to US$10/bbl, reducing the profitability of the oil and gas industry to unattractive (gas price/BOE is about 70% of that of oil)

Petro-Company

Financial Performance

- As a company, Petro-Company generated positive economic profits and will do so at US$20/bbl
- At US$20/bbl, oil production is EP positive, but gas production is EP negative as Petro-Company has to transport its gas through competitor pipelines and, hence, pays an additional US$4/BOE
- At the expected US$10/bbl, Petro-Company generates negative economic profits (and will not be able to pay interest on its debt)

Competitive Position

- Petro-Company has a relative cost disadvantage as its OPEX is much higher than the competition (due to expensive platforms and high maintenance costs)

Participation Strategy

- Petro-Company currently produces about 90% oil and 10% gas, but its strategy is to drastically increase its gas production (wrong strategy as gas production is unprofitable for Petro-Company)

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The Petro-Company

Key Issues: 1 and 2

Issue 1: Increasing gas production leads to unprofitable growth

- Petro-Company wants to increase its gas production, which is not a good idea as they have to transport the gas via competitor's pipelines, incurring an additional US$4/BOE, thus making
  it unattractive

Solution:

- As Petro-Company is not allowed to lay its own gas pipelines, the solution is
  - either to reduce cost:
    - cheaper platforms (e.g., build cheap new ones in future and/or convert existing ones if economically feasible), and
    - reduce OPEX
  - or wait until gas prices increase
    - either do not develop gas fields,
    - or re-inject gas if produced simultaneously with oil (if that can be done economically)

- **Issue 2: Value destruction at expected oil price of US$10/bbl**
- At US$10/bbl, Petro-Company destroys value (and does not generate sufficient operating profit to pay the interest on its debt)

Solution:

- Even reduction of maintenance cost to competitor levels and use of cheaper platforms will not result in a positive EP. Hence, Petro-Company should only stay in this business if further cost reductions are possible and the oil price is expected to increase for the long term. (When reducing maintenance cost to competitor levels, the interest on debt can be paid, see numerical exercise)

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The Petro-Company

Key Issues: 3 and 4

Issue 3: Current relative cost position

- Petro-Company has high maintenance cost (US$3/BOE vs. an industry average of US$1/BOE)
- Petro-Company has high OPEX, as it has many of the most expense platforms (manned installations with processing equipment)

Solution:

- Reduce maintenance to competitor levels
  - Company practices in the Oil/Gas industry vary widely: less frequent servicing of equipment, simultaneous maintenance of equipment to reduce oil/gas production down-time, less frequent painting of the platform, etc.
- Convert existing manned platforms into unmanned platforms (if this can be done economically), in the future only build cheap platforms

Issue 4: Future relative cost position deteriorates rapidly

- Oil transportation costs are increasing rapidly as more and more oil is transported via competitor pipelines, incurring the additional US$4/BOE

Solution:

- Petro-Company is allowed to lay additional oil pipelines (as opposed to gas pipelines), so it should do so

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The Petro-Company

Example of numerical exercise

How much value will Petro-Company destroy each year if oil prices go down to US$10/bbl?:

- At US$20/bbl, total revenue is $1,132 million and operating profit US$530 million
- At US$10/bbl, revenue will half to US$566 million and operating profit will be negative at US$530million - US$566 million = minus US$ 36 million. After paying interest of US$64 million, PBT equals minus US$100 million and PAT is minus US$67 million
- EP equals minus US$67 million minus capital charge of US$162 million equals minus $229 million

Could Petro-Company pay interest on its debt if it reduced maintenance costs to industry levels? Is it profitable?

- Petro-Company can reduce maintenance costs: it pays US$165 million for 55 million BOE or US$3/BOE, while the competitors pay US$150million for 150million BOE, or US$1/BOE
- If Petro-Company reduces maintenance to US$1/BOE, it saves US$110million. At US$10/bbl for oil, operating profit will increase from minus US$36 million to US$74million (i.e., -US$36million + US$110 million). EP is still negative, but interest can be paid

If, in addition to reducing maintenance costs, Petro-Company were able to decrease OPEX to industry levels, would it generate an economic profit? How economically profitable would it be?

- Petro-Company can reduce OPEX even further. It pays approximately US$3.5/BOE compared with US$1.5/BOE for the competitors (see LHS, p7). Hence, it can reduce cost a further US1/BOE than when only reducing maintenance costs
- Petro-Company will save another US$55million and operating profit will increase to US$138million i.e., US$74million + US$55million=US$138million. After paying interest of US$64million, PBT is US$74million and PAT is (approximately US$50million). Subtracting a capital charge of US$160million will still leave a negative EP of minus US$100million

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Jet Fighter manufacturing case

STEP 1: ACTIVELY LISTEN TO THE CASE

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

STEP 2: ESTABLISH UNDERSTANDING OF THE CASE

Let me first clarify the question. The client manufactures a $20 million jet and, because of competitive forces, has to reduce its cost by 5 percent. Is BCG's role also to verify the purchasing department's estimate?

No, you can assume that the purchasing estimate is correct. BCG's role is to find the cost savings to meet that estimate.

Could I take a few minutes to think about the case?

Sure, please do so.

STEP 3: SET UP THE FRAMEWORK

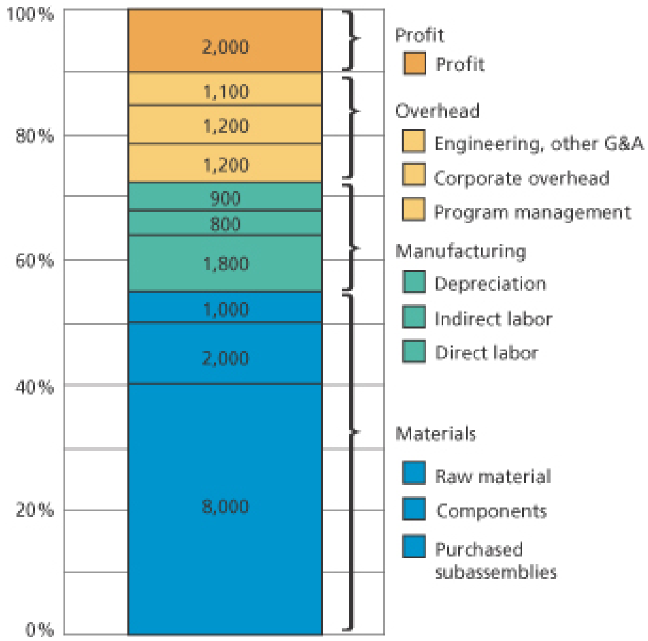
First, I would like to understand the cost structure of the jet to see what we should look at first. Next, I would like to look at major factors driving the costs we are targeting. Finally, I would like to explore potential ideas to reduce cost.

That sounds like a very logical approach. Let's proceed.

STEP 4: EVALUATE THE CASE USING THE FRAMEWORK

Because the time for the interview is limited, I think we should try to identify those areas most responsible for the cost of the jet.

Time is limited on real projects as well, so I think that would be a good idea! You have the following cost information for the jet. How would you interpret it?



The major cost driver for the jet appears to be purchased materials. Within manufacturing, direct labor is a fairly large component of cost, as are program management and corporate overhead within overhead. I think we would want to concentrate most on materials, however, since that's where most of the costs can be found.

That sounds like a good place to start. Where would you look within materials?

I see that materials are broken down into purchased subassemblies, components, and raw materials. I understand what raw materials would be, but what would be the difference between components and subassemblies?

A subassembly functions on its own. An example is the pilot night vision system. A component is a smaller part, such as a part of the engine.

I know that governmental agencies often have very strict guidelines about purchasing that could affect the cost of materials.

For the sake of this case, you can assume that the British Ministry of Defense, MOD, allows "commercial off-the-shelf" purchases, which means that the client is free to purchase from whomever it wants, as long as it can ensure that the parts meet MOD quality guidelines.

I see that purchased subassemblies comprise more than 70 percent of materials. How many suppliers are there for these subassemblies?

There are seven suppliers of major subassemblies that go into the fighter jet.

That seems like a relatively small number. Are there more suppliers that are qualified to do this type of work?

The manufacture of these parts requires a substantial investment in R&D, engineering, and infrastructure. It would be very costly for new suppliers to make the required investment, particularly if the client is trying to reduce the price it pays to the subassembly manufacturers.

Since there are only a few subassembly suppliers, and the investment hurdle would preclude bringing in competing manufacturers, it would be difficult to reduce the price paid. Perhaps we should look elsewhere for savings.

But remember, if your client loses the contract, it will lose its customer unless it is teamed with the competing bidder. Even then, if the competitor is underbidding your client, there will be even less room for it to profit.

Perhaps it would have an incentive to reduce its costs in order to maintain the contract. Are the majority of its costs in materials as well?

How could you find that out?

I would want to interview the purchasing and engineering personnel of the different subcontractors in order to understand their cost structures. If we had a better understanding of their economics, our client might be able to reduce cost across the board, allowing it to compete more effectively for the contract without killing everyone's margins.

Let's say that purchased materials average approximately 70 percent of the price paid to most of the manufacturers.

If the cost of subassemblies represents 40 percent of the jet cost and 70 percent of that is purchased materials, total purchased materials would be approximately 28 percent of the cost for subassemblies. Purchases of raw materials and components represent another 15 percent, for a total of around 43 percent of the cost of the jet. If our client could reduce the cost of raw materials by 20 percent, it could reduce the cost of the jet by more than 8 percent, more than enough to offset the 5 percent reduction it would need to win the contract.

That sounds reasonable, but 20 percent is a very lofty goal. How would you go about doing that?

First, I would look at the number of suppliers. Are there a large number of suppliers to the subassembly manufacturers?

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

Well, that sounds like a large number of suppliers. Of course, they could be providing very specialized materials to the subassembly manufacturers. Are these suppliers providing customized or more commodity products?

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

That sounds promising, but I would need to know whether these commodities are interchangeable, so that our client could concentrate spending with fewer suppliers. Are there many commonalities among the parts used by the different subassembly manufacturers? We could talk to their engineers and look at the designs and bills of material to determine how much overlap there is.

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

It seems safe to assume that the client would need more commonality to be successful in concentrating its purchasing and reducing costs. Do the engineers believe that the percentage of overlap could be increased if the designs were modified?

They believe they could increase that percentage substantially, particularly with basic materials such as screws and sheet metal, but also in other more customized areas.

That's great news, but we would still need to know whether the subcontractors are using the same suppliers. We could analyze the number of suppliers for each of the areas of overlap.

Good suggestion. Although there are some common suppliers, the analysis indicates that the subassembly manufacturers tend to use different suppliers.

STEP 5: SUMMARIZE AND MAKE RECOMMENDATIONS

Our client needs to reduce costs by 5 percent. The largest area of opportunity appears to be in purchased materials, the majority of which comprise subassemblies manufactured by seven subcontractors. By looking at its purchases in total, the client can target approximately 40 percent of costs.

To achieve the 5 percent cost reduction, it would need to reduce costs by 15 to 20 percent. It could try to do that by increasing commonality in the design of the subassemblies and components and by shifting volume to a smaller number of suppliers.

Considering that the majority of the raw materials and components are purchased commodities, do you think the 15-20 percent cost reduction is achievable?

Well, I know that typically have lower margins than more customized products. I suspect it may be challenging to hit the client's savings target by focusing only on these purchases. But since raw materials and components represent about 40 percent of costs and there is an opportunity to concentrate purchasing, I think we should start here.

Where else could you look for savings?

If I look back at the cost data on the jet, direct labor is another large cost component. As a contingency, we could look into that area as well. I've read that other companies use outsourcing to lower their manufacturing costs-perhaps our client could do the same. For example, it might want to increase its use of purchased subassemblies and reduce the amount of direct manufacturing it does. Of course this would work only if it could drive direct labor costs below the offsetting cost of these subassemblies. The client will be working closely with the subassembly suppliers to implement its purchasing initiative. This may give it an opportunity to explore the suppliers' capabilities at the same time.

That's an interesting suggestion. How would you recommend the company pursue both of the initiatives you have discussed?

I would look first to combine purchases across the subassembly suppliers with our client's purchases. I suspect that the client and the subassembly suppliers will need to share a great deal of information, including engineering drawings and specifications, with potential suppliers of the raw materials and components.
The Internet could prove to be a very effective medium for forming a single "virtual" purchasing department to consolidate both the flow of information and purchase orders across the companies. Our client might also want to use a bidding system for those materials that are true commodities

.
Next, I would turn to the engineering departments and form cross-company teams to look for areas in which to increase commonality of design. At the same time, those teams could explore opportunities to use more purchased subassemblies and decrease the client's direct labor costs.

That sounds great, and is very similar to a project we did. I would caution you, however, to examine the upfront costs involved in your recommendations, both for the redesign and for the implementation of the purchasing system, before going ahead.

Discount retailer Case

STEP 1: ACTIVELY LISTEN TO THE CASE

Your client is the largest discount retailer in Canada, with 500 stores spread throughout the country. Let's call it CanadaCo. For several years running, CanadaCo has surpassed the second-largest Canadian retailer (300 stores) in both relative market share and profitability. However, the largest discount retailer in the United States, USCo, has just bought out CanadaCo's competition and is planning to convert all 300 stores to USCo stores. The CEO of CanadaCo is quite perturbed by this turn of events, and asks you the following questions: Should I be worried? How should I react? How would you advise the CEO?

STEP 2: ESTABLISH AN UNDERSTANDING OF THE CASE

So, the client, CanadaCo, is facing competition in Canada from a U.S. competitor. Our task is to evaluate the extent of the threat and advise the client on a strategy. Before I can advise the CEO I need some more information about the situation. First of all, I'm not sure I understand what a discount retailer is!

A discount retailer sells a large variety of consumer goods at discounted prices, generally carrying everything from housewares and appliances to clothing. Kmart, Woolworth, and Wal-Mart are prime examples in the U.S.

STEP 3: SET UP THE FRAMEWORK

Oh, I see. Then I think it makes sense to structure the problem this way: First, let's understand the competition in the Canadian market and how CanadaCo has become the market leader. Then let's look at the U.S. to understand how USCo has achieved its position. At the end, we can merge the two discussions to understand whether USCo's strength in the U.S. is transferable to the Canadian market.

That sounds fine. Let's start, then, with the Canadian discount retail market. What would you like to know?

STEP 4: EVALUATE THE CASE USING THE FRAMEWORK

Are CanadaCo's 500 stores close to the competition's 300 stores, or do they serve different geographic areas?

The stores are located in similar geographic regions. In fact, you might even see a CanadaCo store on one corner, and the competition on the very next corner.

Do CanadaCo and the competition sell a similar product mix?

Yes. CanadaCo's stores tend to have a wider variety of brand names, but by and large, the product mix is similar.

Are CanadaCo's prices significantly lower than the competition's?

No. For certain items CanadaCo is less expensive, and for others the competition is less expensive, but the average price level is similar.

Is CanadaCo more profitable just because it has more stores, or does it have higher profits per store?

It actually has higher profits than the competition on a per-store basis.

Well, higher profits could be the result of lower costs or higher revenues. Are the higher per-store profits due to lower costs than the competition's or the result of higher per-store sales?

CanadaCo's cost structure isn't any lower than the competition's. Its higher per-store profits are due to higher per-store sales.

Is that because it has bigger stores?

No. CanadaCo's average store size is approximately the same as that of the competition.

If they're selling similar products at similar prices in similarly-sized stores in similar locations, why are CanadaCo's per-store sales higher than the competition's?

It's your job to figure that out!

Is CanadaCo better managed than the competition?

I don't know that CanadaCo as a company is necessarily better managed, but I can tell you that its management model for individual stores is significantly different.

How so?

The competitor's stores are centrally owned by the company, while CanadaCo uses a franchise model in which each individual store is owned and managed by a franchisee who has invested in the store and retains part of the profit.

In that case, I would guess that the CanadaCo stores are probably better managed, since the individual storeowners have a greater incentive to maximize profit.

You are exactly right. It turns out that CanadaCo's higher sales are due primarily to a significantly higher level of customer service. The stores are cleaner, more attractive, better stocked, and so on. The company discovered this through a series of customer surveys last year. I think you've sufficiently covered the Canadian market-let's move now to a discussion of the U.S. market.

How many stores does USCo own in the U.S? How many does the 2nd largest discount retailer own?

USCo owns 4,000 stores and the second-largest competitor owns approximately 1,000 stores.

Are USCo stores bigger than those of the typical discount retailer in the U.S.?

Yes. USCo stores average 200,000 square feet, whereas the typical discount retail store is approximately 100,000 square feet.

Those numbers suggest that USCo should be selling roughly eight times the volume of the nearest U.S. competitor!

Close. USCo's sales are approximately $5 billion, whereas the nearest competitor sells about $1 billion worth of merchandise.

I would think that sales of that size give USCo significant clout with suppliers. Does it have a lower cost of goods than the competition?

In fact, its cost of goods is approximately 15 percent less than that of the competition.

So it probably has lower prices.

Right again. Its prices are on average about ten percent lower than those of the competition.

So it seems that USCo has been so successful primarily because it has lower prices than its competitors.

That's partly right. Its success probably also has something to do with a larger selection of products, given the larger average store size.

How did USCo get so much bigger than the competition?

It started by building superstores in rural markets served mainly by mom-and-pop stores and small discount retailers. USCo bet that people would be willing to buy from it, and it was right. As it grew and developed more clout with suppliers, it began to buy out other discount retailers and convert their stores to the USCo format.

So whenever USCo buys out a competing store, it also physically expands it?

Not necessarily. Sometimes it does, but when I said it converts it to the USCo format, I meant that it carries the same brands at prices that are on average ten percent lower than the competition's.

What criteria does USCo use in deciding whether it should physically expand a store it's just bought out?

It depends on a lot of factors, such as the size of the existing store, local market competition, local real estate costs, and so on, but I don't think we need to go into that here.

Well, I thought it might be relevant in terms of predicting what it will do with the 300 stores that it bought in Canada.

Let's just assume that it doesn't plan to expand the Canadian stores beyond their current size.

OK. I think I've learned enough about USCo. I'd like to ask a few questions about USCo's ability to succeed in the Canadian market. Does USCo have a strong brand name in Canada?

No. Although members of the Canadian business community are certainly familiar with the company because of its U.S. success, the Canadian consumer is basically unaware of USCo's existence.

Does CanadaCo carry products similar to USCo's, or does the Canadian consumer expect different products and brands than the U.S. discount retail consumer?

The two companies carry similar products, although the CanadaCo stores lean more heavily toward Canadian suppliers.

How much volume does CanadaCo actually sell?

About $750 million worth of goods annually.

Is there any reason to think that the costs of doing business for USCo will be higher in the Canadian market?

Can you be more specific?

I mean, for example, are labor or leasing costs higher in Canada than in the U.S.?

Canada does have significantly higher labor costs, and I'm not sure about the costs of leasing space. What are you driving at?

I was thinking that if there were a higher cost of doing business in Canada, perhaps USCo would have to charge higher prices than it does in the U.S. to cover its costs.

That's probably true, but remember, CanadaCo must also cope with the same high labor costs. Can you think of additional costs incurred by USCo's Canadian operations that would not be incurred by CanadaCo?

USCo might incur higher distribution costs than CanadaCo because it will have to ship product from its U.S. warehouses up to Canada.

You are partially right. CanadaCo has the advantage in distribution costs, since its network spans less geographic area and it gets more products from Canadian suppliers. However, since CanadaCo continues to get a good deal of product from the U.S., the actual advantage to CanadaCo is not great-only about two percent of overall costs.

All this suggests that USCo will be able to retain a significant price advantage over CanadaCo's stores: if not ten percent, then at least seven to eight percent.

I would agree with that conclusion.

STEP 5: SUMMARIZE AND MAKE RECOMMENDATIONS

I would tell the CEO the following: In the near term, you might be safe. Your stores have a much stronger brand name in Canada than USCo's, and they seem to be well managed. However, as consumers get used to seeing prices that are consistently seven to eight percent less at USCo, they will realize that shopping at USCo means significant savings over the course of the year. Although some consumers will remain loyal out of habit or because of your high level of service, it is reasonable to expect the discount shopper to shop where prices are lowest. Moreover, over time your brand-name advantage will erode as USCo becomes more familiar to Canadian consumers. You certainly have to worry about losing significant share to USCo stores in the long term. You should probably do something about it now, before it's too late.

Can you suggest possible strategies for CanadaCo?

Maybe it can find ways to cut costs and make the organization more efficient, so it can keep prices low even if its cost of goods is higher.

Anything else?

It might consider instituting something like a frequent shopper program, where consumers accumulate points that entitle them to future discounts on merchandise.

What might be a potential problem with that?

Well, it might not be that cost-effective, since it would be rewarding a significant number of shoppers who would have continued to shop there anyway.

Any other suggestions?

CanadaCo might want to prepare a marketing or advertising campaign that highlights its high level of service. It might even institute a CanadaCo Service Guarantee that surpasses any guarantees offered by USCo.

Assuming the only way to keep customers is through competitive pricing, is there anything CanadaCo can do to appear competitive to the consumer?

It might want to consider offering fewer product lines, so that it can consolidate its buying power and negotiate prices with suppliers that are competitive with USCo's. It might lose some customers who want the variety of products that USCo has, but it may be able to retain the customer who is buying a limited array of items and is just looking for the best price.

All of your suggestions are interesting, and you would want to analyze the advantages and disadvantages of each in more detail before making any recommendations to the CEO.

Medical Software industry Case

STEP 1: ACTIVELY LISTEN TO THE CASE

Your client is GenCo, a large, international, diversified company with a health care division that produces a wide variety of medical instruments and related services. Five years ago, it expanded into the health care software industry by purchasing MedCount, which markets administrative systems to large U.S. hospitals. These systems are designed primarily for back-office functions; they are not designed for managing patients or providing other physician and technical support. Since it was purchased, the software division has failed to deliver the growth needed to justify the multiple GenCo paid for it. GenCo feels it has already squeezed margins as much as possible, and now is looking for new sales opportunities. MedCount turned to BCG to help identify potential ways to increase revenues. How would you approach this problem?

STEP 2: ESTABLISH YOUR UNDERSTANDING OF THE CASE

First, let me make sure I understand the problem. The parent company produces medical devices and services, but before the acquisition was not involved in health care software. The company it purchased, MedCount, sells only administrative systems software to large hospitals. It is now looking for opportunities to increase revenues.

That is correct.

Could I take a moment to jot down a few thoughts?

Sure, that would be fine.

STEP 3: SET UP THE FRAMEWORK

I would suggest using the following framework: First, I'd want to understand the market size and growth rates for MedCount's market and related software markets. Next, I would like to explore the competition and their market shares. Third, I would like to examine customer requirements and then, given those external conditions, look at the division's capabilities to understand how well prepared it is to meet the needs of the marketplace.

That sounds fine. So what do you want to know about the market?

STEP 4: EVALUATE THE CASE USING THE FRAMEWORK

Well, the first hurdle would be to identify the markets the company would be interested in. Besides administration systems, what other types of medical software systems do large hospitals purchase?

There are many software systems, but for the sake of time, the team focused on three primary markets: administration systems, patient administration, and physician support systems.

What do those systems do?

Patient administration includes systems like admissions and tracking. Physician support systems are more specialized, for individual physician procedures.

I would like to know how large each market is and how fast each is growing. I would use secondary sources such as press releases, analyst reports, and published market studies, to obtain this information.

Great! That is what we did during the market study. Our information revealed the following market sizes and growth rates.

	Administration	Patient administration	Physician support
Market size ($M)	1,500	1,000	1,200
Growth rate	5%	5%	12%

From a size and growth perspective, physician support systems looks like a very attractive market. I'd like to know a little about the customers themselves. The client is currently targeting large hospitals. Approximately what percentage of the market do they represent?

We were unable to get an exact breakdown, but we know that these hospitals make up the vast majority of the total medical software market.

That would make sense, since the more sophisticated procedures at a hospital might necessitate more advanced software solutions. I know that there have been a lot of changes in the industry as a result of managed care. I don't know much about the industry, so I would want to look at market studies and press clippings to get a better sense of the hospital market in general and any technology or software trends more specifically.

Okay. Let's say that you did that and were presented with this summary of market trends:

- Consolidation in the industry, with three to four large hospital networks dominating 45 percent of the market
- Cost controls instituted, particularly as these large hospital networks acquire smaller hospitals (centralization of functions being a key cost issue)
- Many hospitals seeking to consolidate their vendor base
- With regard to technology, many hospitals upgrading their older systems

If hospitals are consolidating vendors, perhaps our client has an advantage in being part of a larger medical company. Maybe the client could also gain some advantages by expanding into other software segments. Are the people responsible for purchasing software at the hospital the same for all three segments?

Like all things, it differs by hospital, but the larger hospital networks, have tried to consolidate their purchasing not only within but also across hospitals.

Is the decision maker for medical software the same as for medical instrumentation and devices?

In some cases, the head of purchasing influences both decisions, but the person who makes the final choice is different. Software decisions are usually made by the hospital IT function, and those for instrumentation by the medical staff.

I think I have a pretty good understanding of the market for now. Let's look at competition next. We could identify all the competitors and build up the market shares using a combination of public data and estimates.

Well, let's assume that you don't have an infinite amount of time to look at all the competitors. You can only look at the top five competitors in each market. You are given the following data:

Administration Systems	**Sales ($M)**	**Growth (%)**
MedCount	700	4%
HCS Software Systems	100	7%
Morningside Software	80	3%
Admin Systems Solutions	70	2%
HTI Software	50	15%

Patient Administration	Sales ($M)	Growth (%)
HTI	300	5%
Registration Software Solutions	240	4%
Signup Software	60	3%
HCS Software Systems	30	16%
Patient Software	20	-1%

Physician Support	Sales ($M)	Growth (%)
HCS Software Systems	150	16%
Physician Support Systems	100	11%
Medical Technology Inc	25	18%
HTI	20	32%
MedSys	5	15%

Very interesting. The first thing I would note from the data is that the market concentrations are very different. In administrative systems, the top five competitors control 66 percent of the market and in patient administration, they control 65 percent. But in the physician support market, they control only 25 percent.

I would want to know what gross margins look like in each of these markets as well. I might turn to analyst reports and look at competitors' financial statements to deduce whether they are making money in each market

Gross margins vary, of course, but the analyst reports have margins of 25 to 30 percent for administrative systems and for patient administration. For physician support, the margins tend to be higher, more like 45 to 50 percent.

I see that two competitors, HTI and HCS Software Systems, have very large revenue growth in all three sectors, although they each dominate one. I would want to look at their financials, annual reports, and press releases to find out a bit more about their strategy in each of these areas.

You'd find that they recently entered these noncore markets. Why might they have done that?

Perhaps, like our client, each had a strong position in its own segment, HTI in patient administration and HCS Software Systems in physician support. Maybe they too decided to branch out into the other segments to find additional growth.

That is a very good hypothesis. Let's say there is evidence in the sources you consult that supports your assertion.

Well, if that were true, these two companies could be a threat not only in the other two segments, but also in our client's segment, administrative systems. It looks as if the client is slowly losing market share in its segment, since it is growing more slowly than its market.

Good observation.

The market and competitor trends could also suggest that the client may want to enter these other markets. In particular, the physician support market looks attractive, given it has high growth and lack of a dominant competitor. The higher gross margins may provide attractive returns on the necessary investment in software development. However, the patient administration market may also be attractive. Although it is more concentrated and offers lower margins than physician support, the client may be able to enter this segment with a smaller up-front investment. Given the trend toward upgrading existing computer systems, it may be *important for MedCount to have a product offering in each of the three market segments. That should not be too difficult, since the company is already in the software industry.*

Perhaps, but you should think a little more closely about these types of software. Are all software systems alike?

Well, let me think about that for a moment. I suspect patient administration would have relatively low entry barriers. From your earlier description, these systems appear to be pretty basic, dealing primarily with admissions and patient tracking However, the entry barriers in physician support might be higher, since these systems are more complex and there are probably multiple systems for the various physician procedures. I guess it would be harder to get into those types of systems.

That would make sense.

Since the company might want to go into only some of the segments, I would want to know how important it is to have products in all three segments. Do we know if the competitors are marketing their products as a bundle?

How might you find that out?

Since it would be difficult to talk to a competitor directly, I would probably target a competitor's customer, particularly one that just converted from our client's software.

Let's say you get an interview with a customer that recently switched to HTI. You discover that the competitor was offering it a better pricing deal and service for software products in all three segments.

How were MedCount's software and service perceived in relation to those of competitors?

The customer thought that its administrative systems were adequate, "the old standby," but not stellar.

Were there any other key reasons it switched from MedCount's system?

When it decided to upgrade its systems, it tried to contact MedCount, but could never get a representative to describe its options.

Interesting. How did HTI perform?

The HTI representative had heard that the company was considering switching software vendors and provided a sales representative to pitch HTI's administrative product the next day.

It definitely sounds as if there was a problem with the sales function and that customer relations need to be improved, particularly for the larger hospital chains. There also seems to be an advantage from both a marketing and sales perspective in having multiple software products. I would want to confirm those views by doing further interviews.

Let's say further interviews support those assumptions.

Since we have already looked at the external conditions, I would like to move on to the client itself. I'd like to know more about its marketing and selling organization as well as its software development skills.

So far, we know that our client offers administrative software and that there may be a problem with sales and marketing. Could you tell me a little about the marketing department?

The marketing department is organized regionally. Teams are assigned to hospitals within each state or geographic region, such as New England.

That could explain some of the problems with MedCount's marketing and sales. If hospital purchasing is centralized, the marketing organization may be outdated. Does the company have any teams dedicated to the four or five biggest hospital networks?

No, there are no dedicated teams. They talked about doing that for a while, but it conflicted with the regional structure it had in place.

With regard to software, does the company feel it has any strengths or weaknesses?

It feels that their administrative product is very strong ("best of breed") and is the dominant technology. Also, the product is modular in design, which allows for easier upgrades. Although the company has never branched out into other market segments, the software developers believe that certain modules could be used to build the foundation for other administrative software programs. The company feels customer support is also an area in which it excels.

STEP 5: SUMMARIZE AND MAKE RECOMMENDATIONS

Let's start with our client's market. The client dominates the administrative software market, which is fairly large but growing slowly, and the company appears to be slowly losing market share. Patient administration is also growing relatively slowly. Both markets are relatively concentrated and appear to offer lower margins than physician support. The physician support market is large and less concentrated, and could potentially provide higher margins, but would require a larger investment. The hospital market itself is becoming more concentrated and is pushing to consolidate vendors. The purchasing agent is often the same for the three types of software.

Looking at our client's competitors, two, HTI and HCS Software Systems, appear to be particularly threatening. Each has a dominant position in one segment and is branching out into other areas. They appear to be marketing their products and services as a bundle and are using service as a key point of differentiation.

The client offers only one type of system and appears to have some weaknesses in its marketing organization, particularly in marketing to the larger hospital networks, which offer the most promising market opportunities.

How would you recommend proceeding?

The first priority should be to fix the marketing organization, particularly for the large hospital networks. MedCount will have trouble expanding into new markets if it can't defend its current position and shore up its existing customer relationships. There should be a team dedicated to each of the major chains. The client should also look at improving customer tracking so that it is clear when its customers are going to upgrade. There should also be clear contacts so that the customer can easily keep in touch with MedCount.

Next, I would recommend that the client explore entering the other market segments by leveraging its dominant position in administrative systems. At first glance, patient administration does not appear to be very attractive, with slow growth, low margins, and large, dominant competitors. There appears to be some advantage, however, in having products across the product range. I would recommend that we interview some of MedCount's existing customers to better understand their needs and future IT requirements. If the customer base is interested in one software provider for both back-office administration and patient administration functions, this segment looks promising.

If the client does decide to enter this market, it should look at the lowest-cost method of entry, either developing a product internally or acquiring a competitor. The modular design of its existing administrative software suggests internal development of the patient administration product may be the way to go, but we would need a more thorough comparison of the internal development and acquisition options, including both cost and time to market. I think that physician support offers our client an exciting growth opportunity, given its high margins, high growth, and fragmented competition. I would definitely think about an acquisition strategy, since the client may lack the technical capabilities to enter this specialized market. I would recommend going for one of the larger companies, as that would give the client a stronger position. Smaller companies would probably not offer an important enough position in the market. More research would be needed, however, for us to better understand the intricacies of the market and each potential acquisition.

Those are very interesting conclusions. Thank you.

Mobile telephony Case

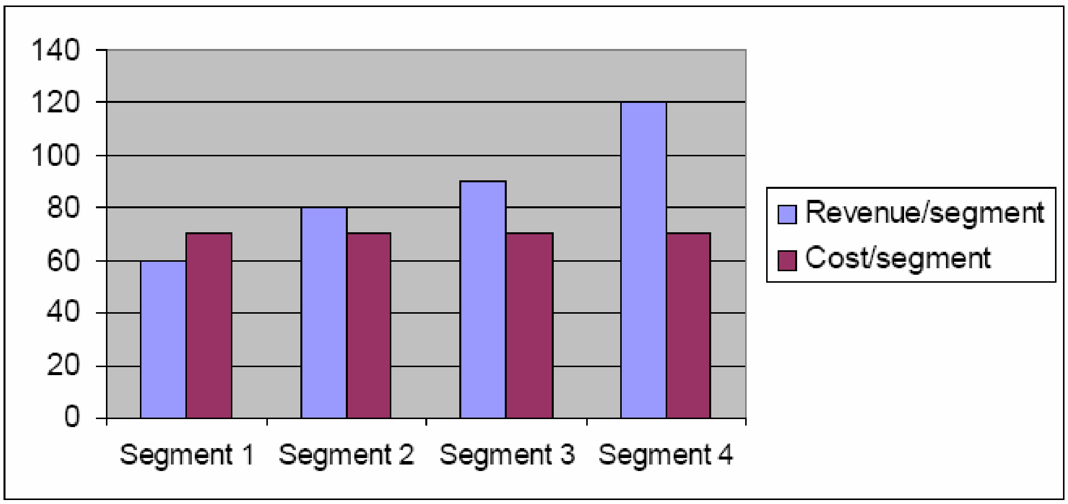
Our client is a telecom company active in mobile telephony. They would like to know how they should estimate the value of their client's network.

Do we have our own network or do we use third party services?

They use third party services for accounting and sales services.

What is the average retention period for my customers?

The average retention period of a client is 3 years. This means that most of the clients in my portfolio are either in their first, their second, or their third year of contract with the company.



Verbalization of data

Marketing taste: the clients can be divided into several segments. Each segment can be characterized by a particular offer (i.e. only local calls, international plan,…). We will have to look at the lifetime value of clients in each segment.

Financial taste: value of portfolio = NPV (sum of discounted cash flows per segment)
In order to obtain the CF, we must determine which are the costs and revenue streams in this industry.

Revenue streams = fixed revenue (connection fee = fixed amount, if there is any) and variable revenue (cost/minute). Thanks to the average retention rate, we can determine the lifetime value of a customer (how much total revenue shall I get from him over the average 3 years).

Costs = mainly fixed costs (network and network maintenance, HQ, marketing)
However, many traditional fixed costs can be transformed into variable costs by externalizing the tasks to a third party:
- Accounting services (variable = cost/invoice issued or processed)
- Sales (call center services – variable = number of calls)

Moreover, some costs are one shot (sales and marketing costs faced to acquire a client) while the other costs are recurrent (and will repeat themselves every year).

Finally, I'll take the total cost over 3 years (same reference as for the revenue).

For each segment, lifetime value = # of customers in the segment * (3 years revenue – 3 years costs). Note that I have to discount revenues/costs in years 2 and 3.

Apart from this they would like to know
- One segment is not profitable, what should they do?
- In which other industries does the concept of lifetime value of customers typically apply?

As it turns out, the unprofitable segment is composed of pre-paid calling cards that are typically bought buy younger customers. These customers will usually transform the segment into more profitable segments as they grow older. Therefore, this offer must at least partly be considered as a marketing effort to acquire and win the loyalty of customers.

There are a lot of other industries where the concept applies (car manufacturing …anything that implies loyalty games), but the most striking one is the financial services industry (banks and credit card companies)

Could you summarize your approach?

For each segment, I can calculate the lifetime value of my customers. The value of my portfolio is the sum of the values of each of these segments.

Fast Food Case

(c) <u>QUESTION AND BACKGROUND INFORMATION:</u>

A client calls you to complain that the fast food restaurant that he bought has been steadily losing money for the last 6 months.

How would you advice this client?

(d) <u>INFORMATION TO BE GIVEN AS A RESPONSE TO STUDENT INQUIRIES:</u>

- Profits have declined.
- Revenues have decreased.
- Number of customer has decreased

(e) <u>SOLUTION:</u>

Ask the student for reasons why the amount of customers can have decreased.

<u>Some suggested answers</u>:

External Factors

- New competition
- Change of customer taste
- Change in business environment

Internal Factors

- Quality problems
- Change in pricing

Explain that the main reason that the amount of customers has come down is the opening of a new restaurant in the neighbourhood. Apparently this new restaurant must be doing something good, since it has a big impact on your clients' business.

How would you assess this new restaurant's value proposition?

<u>Some suggested answers:</u>

- Visit the place
- Conduct interviews with customer who visited the place
- Do research on their marketing activities

Could you give some examples of factors to which you would pay attention in comparing the value proposition of this new restaurant with your client's?

Some suggested answers:

- Types of food that are served
- Quality differences
- Price differences
- Do they offer healthier options and more variety?
- How is the service? Cleanliness?

They serve chicken dinners and appear to offer a completely different experience. I expect that in this way you can gather enough information about the actual proposition which is made by both restaurants. However in the restaurant business a big factor in the business is the perception customers have of the restaurant they visit.

How would you set up an experiment to compare the perception clients have of the different restaurants?

Suggested answer:

I would pay some customers to go to each restaurant and rate the food and experience. I would also determine how many of the customers are former burger customers but are exclusively chicken customers, versus how many visit both, and how many are completely new to the chicken place but would not visit the burger restaurant.

How would you process the data you have acquired and how would that translate into an actionable plan?

Suggested answer:

Armed with the data on what customers' value, I would then create a set of options to evaluate. There are likely a number of areas that need improvement including new menu options, improved facility layout, better taste/quality. Which will drive most traffic back into the restaurant fastest? Which give the largest return on investment? After analyzing the alternatives based on the chosen criteria, I would prioritize them and develop an action plan to include timing and responsibilities.

[At this point, the case could go in several directions from leadership and project management issues, to brand marketing and promotion, to financial decisions about whether to close the facility.]

Toy Manufacturer Case

Your client is the third largest toy manufacturer in Europe and has come to you because their sales have been stagnant or even declining during the last few years. Sales had been rising before. Why are sales like this? How can the client improve the situation? Which elements would you like to analyze?

INFORMATION TO BE GIVEN AS A RESPONSE TO STUDENT INQUIRIES:

- Company is selling traditional toys
- Company segments their market into: pre-school (0-6 years, girls toys and boys toys)
- Highest volume products are: plastic toys, dolls and vehicles + action figures
- Industry growth has been flat
- Profit margin is ten to fifteen percent
- Production takes place in Asia
- Company has subsidiaries in main European markets, responsible for sales in these markets. The sales force visits the distributors of the toys, which are mainly supermarkets and department stores on the one hand and dedicated toy shops on the other hand.
- Brand image of client is good.

QUESTIONS TO ASK THE STUDENT:

Suppose you are in a meeting with this client and the question arises as to how large the toy market really is in Belgium? How would you determine this?

Suggested answer:

Let's say that we consider mainly (for this client) the market of 0-14 year old children. There are 10 million people in Belgium, which translates into about 3 million households if you take an average of 3 people per household. Not all households have children, and some have more than one, and so I guessed that there would be about 0.5 child on average in this age category per household, so 1.5 million children.

Then I looked at the gifts they receive and started to enumerate important occasions children at that age get presents from their parents: birthday, Christmas, beginning and end of school, and maybe one more occasion, which gives 5 in total. Then I said that each time the parents would spend 50 Euros on average. So this means that each child receives toys for an amount of about 250 Euros per year. I then multiplied the 250 Euro with the 1.5 million children to find my estimate for the toy market in Belgium of about 375 million Euros.

What would you think could be a reason of the stagnant sales of the client?

Suggested answer:

The first one that comes to mind is that the client is not strong in the electronic game business, which has been the fastest growing segment over the last decade in the toy industry. The client should consider one of three options: either grow their electronics business themselves, or buy a company that already is specialized in electronic games, or else form a partnership with such a firm.

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