



Wharton Consulting Casebook 2007 – 2008 Edition

A. Practice Case #1 – Bubble Gum Manufacturer

Question (posed by interviewer):

You are a consultant working for a bubble gum manufacturer. The CEO of the gum manufacturing company is concerned because his company is experiencing declining margin. My questions to you are: (1) the reasons behind declining profitability (2) your suggestions for improving profitability

Interview Guidance (general information to be given if asked):

Sales have been increasing

If asked about cost composition, ask the interviewee to brainstorm potential cost buckets:

- COGS: gum, sugar, flavor, smell, color
- Labor
- SG&A

Raw material cost has not changed (i.e. the unit cost is the same but total cost could be different depending on product composition. ***This is the key to the case so don't give the information about the unit cost to the interviewee too early in the interview. Remember to push the interviewee so that she comes to the conclusion herself***)

Product portfolio – 2 types of products: flavored and flavorless gum

Both products are sold at the same price point.

Composition products:

- Flavored gum raw material: gum, sugar, flavor, color dye
- Flavorless gum raw material: gum, sugar, color dye

Gum, Sugar, and Color Dye raw materials are same in size for each of the two products.

Logical Conclusion:

Profitability has declined because sales of flavored gum have been increasing, which means that raw material consumption is also increasing because flavored gum requires the additional flavor component. This added with the fact that the price of flavored gum is the same as non flavored gum, means that, essentially, costs are now rising while revenues are not. To improve the profits of the company, interviewee should come up with 4-5 suggestions (raising price of flavored gum, sourcing cheaper flavors from other suppliers, negotiate with existing suppliers to reduce the flavor cost, vertical integration of flavor manufacturing company)

Successful Roadmap:

The key focus of this case is in the product mix. Most interviewees may be really confused when they get the info that sales have been rising and cost is constant. First, don't guide them into the product portion right away b/c this is the topic that they should explore themselves. Logical buckets that interviewees should expore are Sales trend, cost trend, cost composition, product mix. The conclusion should be concise as indicated in the logical conclusion section. For the answers to the second question (how to improve profits), great interviewees would present two type of options (short term (easy to implement, quick wins) would be to negotiate with existing suppliers / look for other suppliers, long term (vertical integration)). When discussing price change, you should ask interviewees risk regarding price increase and how they are planning to cope with it. For example, customers may buy less of flavor gums b/c of price increase. However, you can offer value-added product such as low-cal flavor gum & do promotional/marketing efforts to justify price increase.

B. Practice Case #2 – Widget Manufacturer in Brazil

Question (posed by interviewer):

A widget manufacturer in Brazil has a 60% national market share and has a leadership position in South America. However, it only has a 5% international market share. The top 20 clients buy 80% of its products and the manufacturer is concerned with increasing margins and exploiting new sources of revenue. Their CEO has asked you to gather data and brainstorm potential ideas for increasing margins and market share.

Interview Guidance (general information to be given if asked):

Market Information:

- Market is growing at 5%
- No significant competitors in the region
- Greatest threat comes from U.S., Chinese and Indian imports
- Premium pricing for national customers

Company Information:

- Plants are operating at 100% capacity
- Plants can't shift from producing one product to another
- Currently company sells products directly to customers

Interviewee should ask to understand the products and profitability of each. Remind them that the company sells its products in local and international markets. ***Please use **Exhibit A** when asked this question***

Interviewee should ask about the breakdown of international and national markets.

Please give Exhibit B when asked this question

- Ask them to calculate profit margins (should use the unit costs in Exhibit A).
- Assume no freight costs, taxes, etc

Logical Conclusion:

Product A is more profitable nationally while Product B is more profitable internationally. (Please see **Exhibit C**). For national markets, the client should consider reducing prices to gain market share from India, China, and the U.S. to maintain their leadership position. They should also consider developing new products in partnership with local clients and establishing new distribution channels to better serve smaller clients. Internationally, the client should seek support from the government to aid in the export of products. For example, create commercial partnerships at the government level. They should also consider acquiring a company in the markets they would like to enter as well as setting up distribution channels to reach these customers.

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Exhibit A:

| | <u>Units</u> | Average Price | Profit Margin % | Unit Cost |
|-----------|--------------|----------------------|-----------------|------------------|
| Product A | 400 | 9.00 | 50% | 4.50 |
| Product B | 200 | 5.50 | 40% | 3.30 |
| Product C | 100 | 4.00 | 30% | 2.80 |

Exhibit B:

| | Units | National Price | Profit Margin |
|-----------|-------|-----------------------|----------------------|
| Product A | 200 | 10 | |
| Product B | 150 | 5 | |
| Product C | 75 | 4 | |

| | Units | Export Price | Profit Margin |
|-----------|-------|---------------------|----------------------|
| Product A | 200 | 8 | |
| Product B | 50 | 6 | |
| Product C | 25 | 4 | |

Exhibit C: (for use after case or to help interviewee if they get stuck on calculations)

| | Units | National Price | Profit Margin | Unit Costs |
|-----------|-------|-----------------------|----------------------|-------------------|
| Product A | 200 | 10 | 55% | 4.50 |
| Product B | 150 | 5 | 34% | 3.30 |
| Product C | 75 | 4 | 30% | 2.8 |

| | Units | Export Price | Profit Margin | Unit Costs |
|-----------|-------|---------------------|----------------------|-------------------|
| Product A | 200 | 8 | 44% | 4.50 |
| Product B | 50 | 6 | 45% | 3.30 |
| Product C | 25 | 4 | 30% | 2.80 |

Product A is more profitable nationally Product B is more profitable internationally Product C has the same margins for both markets

C. Practice Case #3 – Market Growth Strategy in Retail Banking

Question (posed by interviewer):

A bank based in a developing country in Southeast Asia has hired us to determine how it can grow in the local market, specifically in retail banking. What are the factors you would look at to assess the situation? What is your recommendation for our client?

Interview Guidance (general information to be given if asked):

Competition/Competitive Landscape:

- Market Share by bank and product
 - Client is one of the top three market share leader. Show Exhibit 1 & 2.
 Observation: Client maintained market share in deposits but lost market share in credit cards. Client lost share in auto loans but is doing very well in home loans.
- Product and pricing competitiveness
 - All products are priced competitively at market level
- Brand name and reputation or customer awareness
 - Client has good brand name reputation and recognition
- Branch and ATM prevalence or distribution of branch network
 - Client has wide distribution of branch and ATM network

Macroeconomic Trends:

- Employment rate or population growth
 - Number of people coming into employment age is at an all time high in the coming 5 years
 - Foreign investments are projected for healthy growth with increase investments in Business Process Outsourcing
- Interest rate trend
 - Interest rate has declined dramatically in the last 5 years from over 10% to the current level of 4%
- Disposable income or GDP trend
 - 40% of the population lives at or below poverty line. Another 40% makes less than \$500 per month. Top 15% makes less than \$2,000 per month. Remaining top 5% is the richest population in the country whose lifestyle resembles those of upper-middle class in developed countries.
 - Disposable income and GDP is projected to continue growing at about 11% per annum
- Home/car ownership and real estate development growth
 - Home/car ownership and real estate development is expected to increase in the coming 5 years
- Rural to urban migration
 - Migration rate is stable

Products:

Types of products

- Products include savings, checking, time deposit, credit cards and loans
- Profitability or revenue by product, including consideration of price and volume
 - Most profitable products are credit cards and loans
- Product penetration in population
 - 30% of population has deposit accounts. 6% of population has credit cards.
 1.5% of population has bank loans.

Client Capabilities:

- Sales and marketing
 - Sales efforts are traditional and conservative. Client does not conduct direct marketing activities to sell credit cards. Sales force is stretched and training is lacking.
- Information technology
 - Information on customers is often out-dated
- Research and development/innovation
 - R&D is competitive and client is a market leader in product innovation for a few products

Customers:

- Customer mix by number of bank products purchased/Customer mix by value of customer – measured in terms of average daily balance of deposit account
 - Refer to Exhibit 3. Observation: Majority of customers only purchase one bank product. Large majority of customers also have <100K in average daily balance in their deposit accounts
- Retention or attrition rate
 - Attrition rate is in line with market average

Possible growth drivers: 1. Steal share from competition; 2. Increase retention of current customers; 3. Cross sell current products to current customers; 4. Up sell current products to current customers; 5. Develop new generation of customers

Logical Conclusion:

1. Growth efforts should be concentrated in cross selling more profitable products to current customers since average number of products held by customers is low. 2. Client should adopt more aggressive sales and marketing techniques to gain more market share in credit cards. 3. Client should partner with or market to employers to capture a new generation of bank customers fueled by employment growth, and partner with real estate developers, as well as car dealers, to finance future home and car purchase.

Successful Roadmap:

Candidate should spend most of his time brainstorming all the factors that should be considered to understand the situation. He will locate problems and potential solutions by probing interviewer for information. After all, or most of the information is given, candidate should make his best guess on what the potential recommendations should be for the client. Any logical recommendations supported by information given or any assumption he may make will be accepted. A good candidate should be able to summarize his understanding and make a logical hypothesis on potential recommendations.

| Exhibit 1 | | | | |
|--------------|--------------|-------------|--------------|-------------|
| | Depo | osits | Credit | Cards |
| Products | Market Share | 02-'06 CAGR | Market Share | 02-'06 CAGR |
| Client | 15% | 10.6% | 10% | 2.4% |
| Competitor A | 15% | 8.0% | 17% | 9.8% |
| Competitor B | 15% | 16.0% | 28% | 10.2% |
| Other | 55% | 9.1% | 46% | 6.8% |
| Total Market | 100% | 10.4% | 100% | 7.5% |
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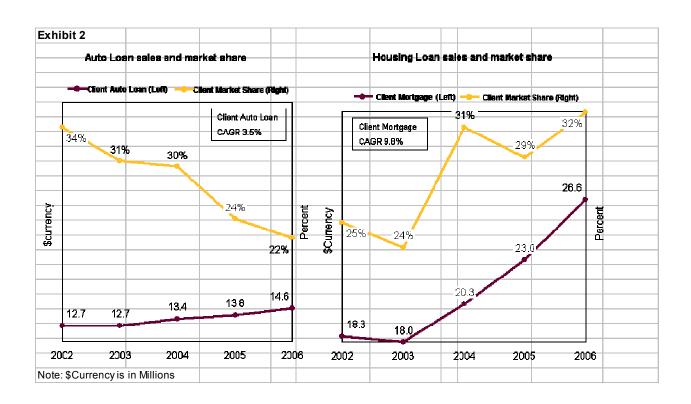
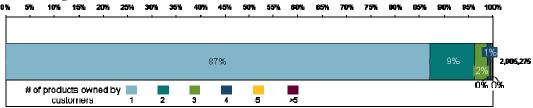
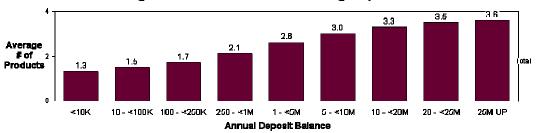


Exhibit 3

Percentage of total number of customers



Average Number of Products Across Avg. Deposit Balance



D. Practice Case #4 – Retirement Homes

Question (posed by interviewer):

Our client is a company that owns and operates retirement homes in US. They just opened a new retirement home in Chicago about a year ago and they have concerns about its profitability. So, we were hired to fix the problem.

Interview Guidance (general information to be given if asked):

Location:

 The new home is located in downtown Chicago and all the previous ones were located in outside of Miami

***Interviewee should ask for the information that is presented in the table step by step and interviewer does not show the table ***

| Revenue elements | OLD (typical) retirement home | NEW |
|-------------------------|-------------------------------|------------|
| Units | 800 | 400 |
| Revenue/unit | \$ 500 | \$ 1000 |
| Total available revenue | \$ 400 000 | \$ 400 000 |
| Vacancy | 20% | 10% |
| Actual revenue | \$ 320 000 | \$ 360 000 |

^{***}after giving interviewee the data above, ask what they think***

Revenues don't pose a problem, (demand is high and price is relatively high). Explore costs

Client owns land in all of the retirement homes. What do you think costs of operating retirement homes should be?

Interviewee should ask for the information that is presented in the table (on the next page) step by step and interviewer does not show the table.

Information to be given if asked (cont'd):

| Costs | OLD (typical) | NEW |
|--------------------------------|-----------------|---------|
| | retirement home | |
| Amenities Total | 48 000 | 54 000 |
| - Fixed component | 24 000 | 30 000 |
| - Variable/month per apartment | 30 | 60 |
| - Total Variable | 24 000 | 24 000 |
| Maintenance Total | 100 000 | 80 000 |
| - Variable/month per apartment | 125 | 200 |
| Utilities Total | 38 400 | 45 000 |
| - Variable/month per apartment | 60 | 125 |
| occupied | | |
| - Apartments occupied | 640 | 360 |
| Medical Facility Total | | 60 000 |
| SG&A Total | 80 000 | 60 000 |
| Total Costs | 266 400 | 299 000 |
| Total Margin | 53 600 | 61 000 |
| Gross margin, % | 16,8% | 16,9% |

Logical Conclusion:

The cost of operating the new retirement home is higher, however it alone tells nothing about the problem our client is facing. Let me go ahead and calculate the margin that is generated in different homes. The new retirement home not only has higher costs, but it also has higher revenues. Consequently, margins generated by each home are pretty consistent and, if anything, the new retirement home generates higher margin in both absolute and relative terms. Having analyzed the performance of the new retirement home and compared it to the performance of a typical retirement home that our client operates, we reached the conclusion that our client has no profitability problem. The new home generates 61 000 margin versus 53 600 in old home or about 17% in both cases. On the other hand, there are some significant differences in cost structure for the new and old retirement homes, so we can study it in more depth and potentially reduce costs in both of them to generate higher margin.

E. Practice Case #5 – R&D Portfolio

Question (posed by interviewer):

You are part of our team working for a Pharmaceutical manufacturer. We've been asked to look at their current R&D portfolio and assess whether they're maximizing their potential with their current projects. My questions to you are: (1) How can you help them decide what information you would need and (2) What components do you think would round out a portfolio for this company?

Interviewer Guidance and Information to be given if asked:

Current staffing needs are at equilibrium and layoffs and hiring are not expected to be necessary

Remember to make them brainstorm. You want them to come up with categories for this company to consider when developing their R&D portfolio. For any questions, make sure you keep them on track with this goal. They should be naming different areas to look at (i.e. investing in current projects versus Investing in creating new business)

Logical Conclusion:

The company should be considering looking at multiple areas of its business such as whether the R&D is for new business or current business, new technologies versus current technologies, spread of projects across your business units, big projects versus small projects, high dollar investment versus low dollar investment, short duration projects versus long duration projects, etc. (There may be a few others but these are the pertinent ones.)

Additional Requests, Attachments, Etc:

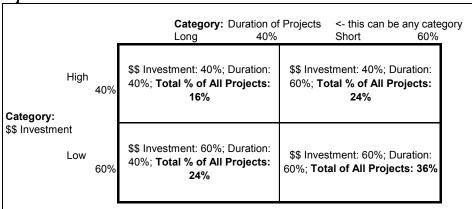
Interviewer - When the interviewee has provided their conclusion for the areas they think the company should be looking at for a successful mix, please ask them to pick two and create a 2x2 diagram for you. Please ask: "If you were to look at these two areas, how would you suggest breaking up the expenditure." ***Please see example attachment for the appropriate 2x2 graph and sample calculations ***

If asked how much the R&D expenditure is annually, answer with \$1M, but this is not relevant to calculations and they can be done using percentages only.

Successful Roadmap:

A successful interview would follow this "logical path:" (1) Develop a small framework from which they follow. Potential framework categories include Revenues and Expenses, Regulatory Environment, Internal Issues, etc; (2) Start asking appropriate questions based on this roadmap. (example: "I would really like to look at the current state of finances for the company. There is the possibility that for expense reasons, they may not be able to heavily invest in a lot of R&D Projects." (3) When prompted, conclusion should be short and sweet. "In my opinion, this pharmaceutical company should really focus on 4 different categories. These are large investment versus short investment, longer projects versus shorter projects, new business versus existing business, and the mix over different business units. These will allow it to maximize its spending investment and reduce their risk by not being overly invested in one area." (4) The 2x2 should follow. It doesn't matter which areas they pick to compare but the math should be easy. If there is a problem with the math, an easy prompt can be given without too many "points" being taken off.

Sample 2x2:



The main points to make sure the interviewee gets correct is that all four boxes together should = 100% and that each of the columns and rows should equal the percentage allocated for that particular category (ie 40% for long term projects or 60% for low \$\$ investment projects)

