Case

SyPhone (CLV)

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1. Before beginning any case, students should familiarize themselves with the model being used. Marketing Engineering for Excel comes with tutorials that demonstrate the capability of each model. The tutorial can be found under each model within the ME►XL menu after starting Excel. These tutorials are designed to work with our OfficeStar examples which are located in the My Marketing Engineering directory, usually installed in My Documents during software installation.
2. The data required for this case is located in the **My Marketing Engineering** directory (usually located within My Documents):

   SyPhone Data (CLV).xls

Introduction

SyPhone[1] is a cell phone company that sells cell phone contracts to small to medium-sized companies, usually to equip their sales representatives and managers with cell capabilities. A typical contract covers 5 to 500 cell phones and includes phone equipment, support, service, maintenance, and unlimited phone calls for $80 to $100 per month per user.

SyPhone finds itself in a highly competitive B2B market, one in which major service providers compete alongside several large resellers. The customer base is very sensitive to price, but only if service quality is high. Typically, a substantial barrier stands against customers switching to competitors, because such a switch would involve changing equipment and retraining users. However, customer switching is a possibility when contracts are about to expire. SyPhone needs to understand the profitability of its customers before generating a renewal bid for them. For new customers, SyPhone also needs to understand their potential profitability before offering them a contract.

Historically, SyPhone has offered various discount rates to prospective customers. According to the company database, it appears that those customers who obtained the largest discounts are the least profitable in the short-term (as expected), but they have a somewhat lower churn rate. These customers tend to stay with the company longer and do not switch as much to competitors as do other customers.

These case data may be used to explore whether offering large discounts is really profitable for the company in the long term or whether it is simply

[1] The case describes a real situation using hypothetical data and a fictitious company.

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shooting itself in the foot. The case also involves an analysis of the appropriate discount factors to apply to future revenue.

Understanding the data

The SyPhone case study uses the standard Customer Lifetime Value template (for more information, please refer to the CLV tutorial).

SyPhone customers may be grouped into two segments:

- **Large accounts** represent contracts that cover between 100 and 500 cell phones. A contract of 500 cell phones is pretty large for a small company like SyPhone; a large account covers about 150 cell phones on average.
- **Small accounts** represent contracts that cover between 5 and 100 cell phones. A small account covers about 20 cell phones on average.

When negotiating contracts, some customers receive bigger discounts than others. For simplicity, they may be grouped into two subgroups:

- **No rebate customers** pay $100 per month per user. This price includes phone equipment, support, service, maintenance, and unlimited calling.
- **Rebate customers** pay about $80 per month per user for the same service.

The Excel spreadsheet that contains the data you will need to evaluate the SyPhone situation and develop appropriate recommendations follows:

Microsoft Excel - SyPhone Data (CLV).xls

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Segment Description

Segment labels and number of customers currently in each segment.

Gross margins relate to current period, while marketing costs are anticipated expenses for next perio

Segments / Segment description	Number of customers	Gross margins	Marketing costs, next period	Revenues	Costs of service
Large accounts	500	$63,000	$5,000	$180,000	$117,000
Large accounts, rebate	2000	$36,000	$4,000	$144,000	$108,000
Small accounts	5000	$10,800	$1,500	$24,000	$13,200
Small accounts, rebate	7500	$7,200	$1,000	$19,200	$12,000
Lost customers	0	$0	$0	$0	$0

Transition Matrix

Transition probabilities of customers from one segment to another across periods.

Each line sums up to 100%.

The very last segment represents customers who are assumed to be lost forever.

Last period / Next period	Large accounts	Large accounts, rebate	Small accounts	Small accounts, rebate	Lost customers
Large accounts	55%	10%			35%
Large accounts, rebate		75%			25%
Small accounts			58%	2%	40%
Small accounts, rebate				70%	30%
Lost customers	0%	0%	0%	0%	100%

SyPhone (CLV)

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Segment description

The four segments (large and small accounts, with or without rebates) are listed in the first column of the segment description table. The remaining columns are as described next:

- **Number of customers** represents the size of each segment. SyPhone currently has 15,000 active contracts, 2,500 of them with 100 or more cell phones per contract. Note that 80% of the large accounts have benefited from substantial rebates, whereas only 60% of the smaller accounts received such discounts, which is common practice (i.e., large accounts have more negotiating power, and they use it more wisely).
- **Gross margins** represent revenues less costs, per year per customer. For a large account, offering a rebate of 20% diminishes gross margins by more than 40%.
- **Marketing costs** include any expense not related to serving the customer per se, such as visits by sales representatives, year-end gifts, thank you notes, and so forth.
- **Revenues** are computed as follows: #Phones × 12 (months) × Fee. For instance, a large account has 150 cells phones per contract (on average). With no rebate ($100/cell phone), such an account totals 150 × 12 × $100 = $180,000 in revenues per year.
- **Costs of service** are computed similarly: #Phones × 12 (months) × Costs. However, in this case, costs vary slightly per segment. Large customers that pay a higher price expect top-notch service and high quality maintenance, which in turns increases the costs of their service. Costs of service range between $65 and $50 per cell phone per month.

Transition matrix

The transition matrix summarizes how customers evolve over time, according to the company. Typically, a customer may:

- **Stay active** and remain in the same segment it was in a year ago.
- **Stay active but renegotiate** the contract. In other words, the customer keeps the same phone provider but renegotiates the price and receives greater discounts. This evolution creates a very powerful tool for an existing customer (e.g., “Reduce the price for next year, or we will shop around”). Generally, customers who have already received large discounts are not able to renegotiate an even greater discount.
- **Stop the contract** and become a “lost customer.” The churn rate is defined as the proportion of customers who are lost every year. A churn rate of 30% means that the company loses 30% of its customers every year.

Note a few tendencies in the data:

- ✓ Large accounts tend to renegotiate their contracts more often than smaller accounts. Because of their economic importance, they have more negotiating power and use this power wisely to get better prices over time.
- ✓ Customers who have received discounts tend to indicate lower churn rates.
- ✓ Small accounts tend to have higher churn rates than large accounts. The more cell phones a customer has installed, the more difficult it is for that customer to change service providers; the change in equipment, voice mail, and the like could create a lot of chaos when

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there are 200 users in a company compared with when there are 15 users. In addition, large accounts tend to stay slightly longer with their provider than smaller accounts (which translates into a lower churn rate).

Questions

Using the "ME ▸ XL/Customer Lifetime Value/Run Analysis" option in the menu, and a **discount factor of 10%**, answer the following questions:



Question 1. What is the lifetime value of a typical customer in each of the four segments, in current dollar values? Compare these figures to the "Gross margin" figures in the original spreadsheet. What can you learn from this comparison?



Question 2. Of the 15,000 customers SyPhone has today, how many will still be SyPhone customers in five years? What is the overall churn rate after five years? Answer the same questions, segment per segment.

Top management has decided that a 10% discount factor is way too small. The environment is highly competitive and rapidly evolving, with new technologies emerging on a regular basis. In such environments, current technologies can become obsolete rapidly. To reflect the uncertainty associated with future revenues, the top management of SyPhone has asked you to rerun the analysis with a **discount factor of 35%**.



Question 3. With a discount factor of 35%, reconsider Question 1. What changes do you notice, in both absolute and relative terms? In terms of customer value, what is the consequence of focusing on the short term?

Finally, the sales manager of SyPhone, Nadia Morel, has the following concern: Although she is comfortable that the lifetime value you have computed takes into account the revenues and costs of a customer *once that customer has been acquired*, she feels strongly that you have overlooked many other factors, such as the costs of acquiring an account (e.g., sales representatives, advertising, trade shows, promotions) and the fixed costs incurred once an account is acquired (e.g., setting up and configuring the server and material, managing the transition).

Here are some figures Morel suggests:

- ✓ Pre-sales costs are about $7,000 for a large prospective account and $1,500 for a small prospective account. These figures include such costs as sales representative efforts and promotions, which are incurred in the process of trying to acquire a new account, whether successful or not.
- ✓ 20% of the proposals to large accounts translate into signing a new customer. When a large discount is offered, this ratio goes up to 35%. For small accounts, the win rates are 25% (without rebate) and 40% (with rebate).
- ✓ The fixed costs associated with winning a new customer are important. It costs about $20,000 for SyPhone to set up a large account. These

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are one-time, internal costs and are not billed to the client, but they will be recouped over the years. To set up a smaller account costs much less, about $3,000.



Question 4. Build an Excel spreadsheet to estimate how much a *prospective* customer is worth, depending on whether that customer is offered a rebate. What do you learn from the updated spreadsheet? Explain the logic behind your findings and conclusions. On the basis of these results, what sales and marketing strategies would you recommend for SyPhone?

Hint: Suppose you have 100 prospective customers in each of the four segments. Compute how much it will cost to manage the pre-sale process, how many customers will be won, and the fixed costs associated with these new customers. Finally, include the lifetime values you computed previously (use the 35% discount factor figures). Divide the final figure by 100 to compute how much a prospective customer is worth.

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