Customer profitability analysis

Topic Gateway Series No. 55

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Definition and concept

Customer Profitability Analysis (CPA) is the:

'Analysis of the revenue streams and service costs associated with specific customers or customer groups.'

CIMA Official Terminology 2005

Kotler (1997) defines a profitable customer as:

'A person, household or company that, over time, yields a revenue stream that exceeds by an acceptable amount the company's cost stream of attracting, selling and servicing that customer.'

The CIMA definition does not provide any guidance as to when the analysis of customer profitability should be undertaken. Good practice suggests that this analysis is undertaken over the lifetime of customers, so that a Customer Lifetime Value (CLV) can be obtained. This is calculated on the basis that the profitability of customers can vary significantly over the life of their relationship to a company.

Context

In the current syllabus, students will learn about and may be examined on Customer Profitability Analysis (CPA) in P6 Management Accounting, Business Strategy.

Related concepts

Activity based costing; attribute costing; customer lifetime value (CLV); customer value.

Overview

CPA is an important management accounting tool based on the recognition that each customer is different. Therefore each dollar of revenue or each dollar of cost generated by the customer does not contribute equally to a company's profitability. CPA's value lies in its ability to improve strategic decision making.

In their book *Killer customers: tell the good from the bad and crush your competitors*, Selden and Colvin estimate that the top 20% of customers (by profitability) generate more than 120% of an organisation's profits. Meanwhile, the bottom 20% generate losses equalling more than 100% of profits.

CPA can be used to work out which customers comprise the top 20% (and the bottom 2%). It can also be used to help companies to understand:

- how dependent they are on the most profitable customers
- what proportion of resources are used for different customers
- the full cost of servicing a customer including advertising, service and returns
- which customers are targeted by competitors.

Application

Customer profitability analysis - approach

The general approach to CPA is based on segmenting the customer base to determine the revenues and costs attributable to each segment. This is often combined with an activity-based costing (ABC) approach. Once the profitable and non-profitable segments are identified, profitable segments are maximised while non-profitable segments are reduced or eliminated.

Each of the key steps in this process is outlined below.

Step 1 – Customer segmentation

The basis for customer segmentation will differ across companies and across industries. Currently, there are two basic approaches to customer segmentation:

1. Demographic segmentation based on observable characteristics such as geographic area, customer age, sex and income level.
2. Psychographic segmentation based on customer needs and behaviour such as customer values, attitudes and interests.

Source: Sarvary and Elberse, (2006)

Step 2 – Revenue attributable to each segment

Once segments have been identified, the annual revenue is calculated per segment, how this is done will depend on the products or services offered by the company. Adjustments to the price paid by the customer for a product or service, such as discounts, service fees or product enhancement fees, must be included to determine the true amount of revenue generated by each customer and the aggregated amount calculated for the customer segment.

Step 3 – Use ABC to determine the cost attributable to each segment

The annual cost is calculated per segment. This will involve both directly attributable product or service costs and also customer costs, including allocation of overheads, marketing, sales and distribution costs. It is these customer costs which are often hidden, such as quality control and inspection costs, order picking, order fulfilment and customer ordering costs. ABC is an effective way to assign both types of costs to customers.

You can learn or familiarise yourself with ABC by referring to the topic gateway on this subject. It is available from: **http://digbig.com/4xxep**
[Accessed 24 November 2008]

Step 4 – Analyse the profitable versus the less profitable or unprofitable customer segments

The profitable customer segments will be those whose annual revenues exceed annual costs. As the profitability of customer segments is likely to vary from year to year, a more accurate analysis could involve calculating profitability over the lifetime of each customer segment, as noted below.

Step 5 – Develop strategies to maximise profits from profitable customers and reduce or eliminate less profitable or non-profitable customers

For profitable customer segments, this step involves detailed planning around the development of long term customer relationships for increased revenues, and hence profitability such as customer retention and loyalty programmes.

To address the least profitable or non-profitable customer groups, two main actions are used [Botten, N. 2007].

1. Elimination – ceasing to supply these customers. This can be done by no longer marketing to these customers, changing the product or service so that it is no longer suitable, or raising prices.

2. Re-engineering – turning the least profitable or non-profitable customer groups into profitable ones by either increasing revenue or decreasing costs attributable to these groups, or both. Examples include charging additional fees for services or using differential prices, according to customer segment.

Step 6 – Review the impact of the new strategies on the performance of the customer segments

The implementation of any new strategy, for example, changes in pricing, cost reduction or customer service, should be reviewed after an appropriate period to determine the impact on customer profitability.

Customer Lifetime Value (CLV)

This is the value generated by a customer over the lifetime of a customer's relationship to a company. This concept recognises that the annual profitability of a customer group will vary from year to year. To calculate the CLV, companies need to make judgements about the duration of the company's relationship with the customer. This includes the likelihood, frequency and amount of expected purchases over the lifetime of the customer.

To determine the present value of these future income streams, a discount rate (usually the company's cost of capital) is used. CLV estimates are particularly useful to:

- companies with large variations in purchasing patterns by customers
- companies with high customer acquisition costs
- companies with high customer retention costs.

For more information on how calculate CLV, please refer to the management accounting guideline, *Managing Customer Value*. This is available from:
www.cimaglobal.com/mags
[Accessed 24 November 2008]

Source: Epstein, M.J. and Yuthas, K. (2007)

Advantages of CPA

- Improved profitability by eliminating non-profitable customers and maximising sales or services to profitable customers.
- An understanding of the true costs of each customer segment, including taking into account non-production costs when determining profitability. Non-production costs can sometimes be more significant than production costs.

- It provides a method of identifying customer groups who are of lifetime value to the company, and who are worth retaining or protecting.
- Improved strategic decision making by providing useful information for customer related decisions, including pricing, discounting and marketing decisions.

Disadvantages of CPA

- Companies may not have the data capture systems to produce an accurate estimation of customer segmental revenues and costs.
- There may be practical difficulties in calculating costs attributable to each segment. Implementing ABC is often challenging for many companies.
- CPA may overlook the combinations of products or services purchased by customers. Customer profitability depends on the mix of products or services bought. The danger is that the analysis will be used on specific underperforming products or services, and will overlook the impact of sales of other products to the customer.
- Annual profitability may not be representative of lifetime value. The costs of attracting and retaining a customer should be compared with the lifetime earnings and not just with the customer's annual earnings. For example, Taco Bell sells tacos at less than $1 each. However, the firm has estimated that a loyal repeat customer generates up to $11,000 over their lifetime [Kotler, 1997].

Many of these disadvantages have been overcome due to recent developments in this area.

Key developments

1. Advances in information technology

This has allowed companies to improve the quality and quantity of information concerning customer profitability, including information on revenue, costs, retention and lifetime value. Many companies have sophisticated customer profitability models and customer databases. These can be designed for any type of business and to accommodate different customer characteristics.

Data can be aggregated by size of customer, size of order, service complexity, post sale service requirements, location or other factors. Information technology can provide detailed information and analysis on individual customers or groups of customers.

2. Managing customer value

Analysing customer profitability has evolved into managing the overall value of customers. CPA now includes analysing customer lifetime value and impact, as well as managing profitability through analysis of customer segments and margins. Customer lifetime value looks at the profitability of the customer over their lifetime.

Customers have an impact on other customers, company employees and other groups through their transactions and communications. For example, they can refer other customers to company offerings.

Case studies

An insurance company, A-Insure Limited, decided to use CPA to identify profitable and non-profitable customers after it grew concerned about the poor financial performance of one of its policy options. A-Insure collected customer data through original policy proposal forms which were stored electronically in a customer database. It was able to conduct a complex cross correlation between known cost drivers and the demographic and other characteristics of policy holders. The cost drivers were:

- commission payments to financial advisers who sold the policy
- early surrender of the policy by the policy holder
- changing of bank details and consequent chasing of missed premiums
- responding to customer queries.

The analysis identified that the policy was unprofitable when sold to recently retired clients but was profitable when sold to other client segments. Recently retired customers had more time to review and consider changes to their insurance policies and to make queries. In response, the company reduced agents' commissions on the policies according to the age of the policyholder to discourage them from selling to the non-profitable client segment.

Most companies have a customer database that can be mined for information to identify customer segments. If companies do not have the software to perform detailed CPA, specialist software can be purchased from many business software vendors.

Example adapted from Botten, N (2006)

Further case studies, particularly those extending CPA to managing customer value, can be found in:

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