

## Comment

# Customer valuation as a foundation for growth

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### Abstract

Customers differ widely in the long-term value they represent to a company, and the “best” customers are often many times more valuable than the average ones. Cites four customer value components: acquisition cost, revenue stream, cost stream and length of relationship. Argues that by understanding and managing lifetime customer value, a company not only allocates resources to its customers more effectively, but also becomes better able to focus on developing long-term customer relationships. Examines ways to calculate lifetime customer value and use it as the basis for strategy development.

Customers are ultimately the source of all business growth. Yet few companies know what their customers are really worth. If all customers were exactly the same, business would be much simpler. But they are not, and it is not.

In reality, for the vast majority of companies, customers vary widely along a range of attributes, including product preferences, price sensitivity, cost-to-serve, retention rates, responses to marketing and sales tactics, and use of channels. Most important, as a result of these and other factors, customers differ widely in the value they represent to a company.

For most companies, the “best” customers are often many times more valuable than the average, yet most managers make strategic and tactical decisions based on a mythical “average” customer. Very few companies are willing to spend the time to conduct accurate, in-depth customer valuation. Those which do are often astonished at the results.

Take Banc One of Columbus, Ohio. It recently studied its customer base and was amazed to discover that the top 20 per cent of its customers provided all of the bank’s profits, while the remaining 80 per cent actually cost the bank money. Such a wide range in customer value is not unusual. Recent Mercer research in the cellular phone industry, for example, indicates the best customer segments are more than ten times as profitable as the worst segments. Moreover, 20-25 per cent of cellular customers account for 60-80 per cent of industry revenues.

If business strategy had its own Ten Commandments, high on the list would surely be: “Know how much your customers are worth to you”. Many companies do not observe this injunction, and by being blind to the range in customer value among their client base they commit a multitude of sins: they over-invest in customers who are of low value; they under-invest in customers who are of high value; they squander precious resources unnecessarily; and they unknowingly pass up significant opportunities for future growth and profits.

Which is why customer valuation should be the very foundation of any company’s growth strategy. The bottom line is simple: if you do not know how much your customers are

worth to you, you cannot make rational decisions about how to serve them.

### What is a customer worth?

Many companies make good-faith attempts to measure customer value. But by using methods which measure only a portion of a customer's true worth to the company, even they end up making poor or counter-productive decisions based on misleading data.

Some companies measure customer value on a "per transaction" basis. For them, only if a particular transaction is profitable would a customer be worth having. Others measure a customer's value by tallying their transactions over a fixed period (say one year). In either case, by taking an excessively short-term view, these companies may not recognize that a particular group of customers, while appearing to be poor prospects in the short run, may represent tremendous value to a company in the long run.

Likewise, some customers who appear to generate profit on a transaction basis may not be profitable once all costs are allocated properly.

Let us take a hypothetical example. Suppose that when Microsoft came out with Windows 95, analysis revealed that the company earned \$50 net profit per package sold. Furthermore, assume that the average first-time computer user who bought the package spent one hour with a salesperson (\$40 cost per hour), requested two brochures (\$2 cost per brochure), called the Microsoft help-line four times within the first month (\$5 cost per call), and did not buy any more Microsoft products within the next year.

Does Microsoft want this customer? On a per-transaction basis, the answer is "yes" – each sale is worth \$50 to Microsoft. But if we measure the customer's value over a year, the answer is "no" – each first-time owner appears to cost Microsoft \$14 (the \$50 net profit minus \$64 in related costs).

Which answer is correct? Neither. Both fail to take into account the cost to Microsoft of acquiring the customer, and both ignore the potential value of that customer over the life of the customer relationship. The acquisition costs might total \$60 (now making the buyer unattractive on a transaction basis). But further analysis might reveal that once a computer neophyte has learned how to use new operating software (like Windows 95), he

buys an average of \$2,500 of compatible (and very high-margin) Microsoft software over the next five years, making him a very high-value customer worth targeting and nurturing.

As this simple example indicates, there are four basic components to customer value:

- (1) *Acquisition cost*: the amount you have to spend to acquire the customer, including marketing costs (e.g. advertising, promotion) as well as sales expenditures.
- (2) *Revenue stream*: the total revenue the customer generates for you through the purchase of products and services.
- (3) *Cost stream*: the cost to provide these products and services to the customer (including customer service costs).
- (4) *Length of relationship*: how long the customer remains a customer.

Only by taking into account all of these components can a company properly estimate a customer's true profitability, or "value". Once these revenue and cost streams have been estimated, they can be discounted back to the present to get a net present value (NPV) estimate of expected profits over the duration of that customer relationship. We call this amount the "lifetime customer value".

By understanding and managing lifetime customer value, a company not only can more efficiently allocate resources to its customers, it also becomes better able to focus on developing long-term customer relationships. This capability is critical because companies which are able to retain targeted customers longer often experience a significant increase in growth and profitability as a result of lower retention costs, higher sales and higher margins (see Figure 1).

### Performing customer valuation

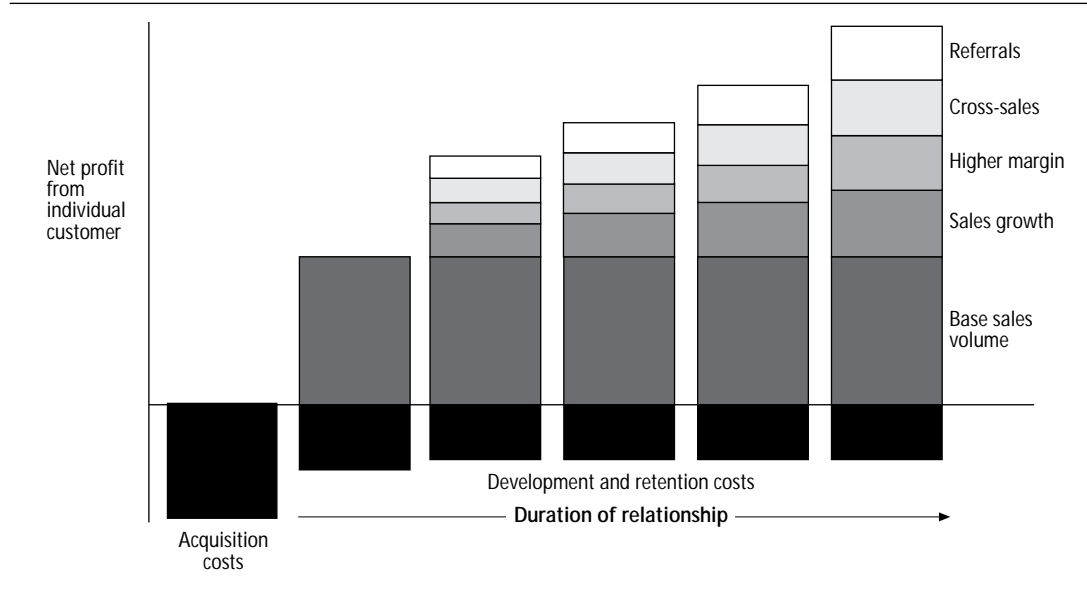
What's the best way to calculate lifetime customer value? There are three essential steps:

- (1) Defining the relevant customer universe.
- (2) Collecting data on the relevant behavioural and economic components of lifetime value.
- (3) Integrating these components into overall measures of value.

#### Defining the universe

The universe ought to include current, former and potential customers. Current customers are the obvious starting point since they

Figure 1 Impact of relationship duration on customer value



generate revenue today. An analysis of their patterns of purchase and usage will be key to estimating future revenue streams. Former customers are relevant since they provide information on the timing and reasons for defection – essential for estimating retention. Potential customers are part of the universe because they are likely to be a major source of future revenue.

The maturity and life stage of the business will determine the relative importance of these different groups. In a mature business, valuation of current customers is most important since most of the future value of customers is likely to come from those who are currently part of the franchise. For a newer business or product line, it is critical to value potential customers since they will make up most of the future customer base.

A wholly new product – one that in itself defines a new product category – presents a different challenge. Here, there are no current or former customers, and because there are no competing products, there is no easily defined set of potential customers to seek out for analysis. In this case, the competitive set must be defined to include substitute products, whether branded or not. A developer of a new interactive game which appealed mainly to children and teenagers recently faced just this situation. To gain information on potential users, the company had to identify people who used competitive alternatives to interactive games, such as books, movies, board games and chat groups – a group that included older as well as younger people.

### Collecting the data

The next step is to gather measures of customer revenue, retention, and cost. The revenue data can normally be derived by examining customer purchases and usage histories over some recent time period. The duration of the customer relationship can be estimated from historical defection rates. A provider of a cellular telephone service, for example, can project the rate of churn for different customer types on the basis of data on the level of usage, type of usage (e.g. business versus personal), geographical location, rate plan and demographics. These rates of churn can then be used to derive the anticipated lifetime of each customer type.

The cost data typically come from several sources, reflecting the cost to produce the good or service and the way in which the customer accesses and uses the product. Ultimately, the cost of the product sold must be elicited from financial records relating to production, distribution, sales, marketing and post-sale servicing. For example, what are the unit costs of manufacturing? What costs (or margins) are associated with sales through particular channels? How much does each hour of post-sale servicing cost?

### Determining overall value

The data can now be analysed to determine a customer's probability of being acquired, expected annual expenditures, and expected duration of purchases, leading to an estimate of overall customer revenue. From this revenue figure, the costs associated with

acquisition, development, and retention of the customer are subtracted for each period of time, resulting in a series of profit flows which can then be discounted to a single NPV.

By combining the customer value measures with information on customer needs and behaviour, a market segmentation can be produced which enables the development of marketing strategies tailored to the most profitable customers. Table I shows an example of such a segmentation, as recently completed by a retail drugstore chain.

### Dealing with a data deficit

In an ideal world, customer value could always be derived from existing historical information. In the real world, though, this is not always possible, for a number of reasons:

- the necessary historical data may not be available;
- current customers may not be representative of future customers;
- historical data may not accurately reflect future market behaviour.

When historical data are unavailable or inadequate, several alternatives are possible. Three of the most practical are surveys, trade-off experiments, and market tests.

### Surveys

Surveys can be used to measure actual buyer behaviour – purchase frequency, volume, price, etc. While surveys rarely provide as detailed an understanding of customers' interactions with a company as do historical transaction records, they have the advantage of providing insight into customers' behaviour with competitors. For example, a bank can

use surveys to determine the “total wallet” available for banking purposes and the percentages of the total being spent at the bank as well as at competing financial institutions. Surveys can also measure anticipated future behaviour. Although the quality of the data will vary depending on the rigour of the research tool.

### Trade-off experiments

While appropriate for some purposes, traditional customer surveys cannot gauge the change in purchase behaviour (and thus customer value) that would occur if product features or prices changed, if new competitors with new offerings entered the market, or if the channels and buying process were to change fundamentally. Gathering this information, which is often essential to predicting the value of customers in a changing marketplace, requires more sophisticated, trade-off experiments. Strategic Choice Analysis (SCA)[1] can be especially powerful for this purpose. In SCA, a realistic future set of product alternatives is designed and presented to a sample of customers. The set may encompass both existing and anticipated products and may include alternative channels for acquiring the products. Customers' responses to the entire set of choices reveal who is likely to purchase which product, at what price. Because it models how competitive markets actually work, SCA enables companies to make systematic comparisons, based on lifetime customer value, of different business strategies – for example, pursuing a small niche of highly profitable customers versus a large market of moderately profitable customers.

Table I Customer value by segment: retail drug example

	Segment A	Segment B	Segment C	Segment D	
Average purchase	\$15	\$10	\$30	£20	} Volume and mix
Gross margin	20%	30%	25%	25%	
Cost-to-serve	15%	20%	20%	26%	
Net margin per purchase	\$0.75	\$1.00	\$1.50	(\$0.20)	
Number of purchases per year	100	200	100	25	Frequency
Annual net margin	\$75	\$200	\$150	(\$5)	
Relationship duration	10 years	5 years	5 years	20 years	Duration
Lifetime value of customer (pre-acquisition cost)	\$460	\$760	\$570	(\$43)	Acquisition costs
Acquisition costs	\$100	\$50	\$70	\$10	
Lifetime value of customer	\$360	\$710	\$500	(\$53)	

### Market tests

As powerful as the experimental trade-off methods are, they are still “laboratory” techniques. Sometimes, they will need to be “reality checked” with market tests which measure actual customer responses to marketing initiatives. For example, in the credit-card industry, offers of alternative interest rates, fees and balance conversion options can be tested directly with customers. By monitoring response rates for various offer packages, companies can determine the overall effectiveness of each package. In addition, analytical models can be used to isolate the predictors of being a responder and the predictors of being a profitable customer. The combination of these factors yields a measure of customer value anchored in actual behaviour.

The choice of methods, whether historical or based on future intentions, will depend on the market situation and the potential pay-back to the business of achieving higher levels of measurement precision. In most cases, some combination of methods will be needed to provide the most comprehensive view of customer value.

### Creating value-based customer segments

As no set of customers is homogeneous, the analysis of the profitability of current, former and potential customers will no doubt result in a range of values. The real power of customer valuation comes in translating the different values into discrete market segments. Creating value-based customer segments allows a company to tailor marketing and sales strategies to the behaviours and needs of those customers who will provide the greatest lifetime value to the company, thus maximizing revenue and profit growth.

Value-based segmentation is already being used successfully in a number of businesses. The consumer banking industry, for example, was one of the first to gear different product and service packages to different value-based customer segments. Consumers who hold a large sum of assets in an account and use multiple banking products are given a wide range of benefits – higher interest rates on deposits, lower rates on loans and credit, a special customer service telephone number, and a host of other perks – while those who use the bank only as a home for their household checking account are not served such an

elaborate feast of services. In fact, banks are actively trying to remove costs of serving these relatively low-value customers through such means as encouraging “teller-less” banking or charging a monthly account maintenance fee.

Airline frequent-flyer programmes are another example of a value-based segmentation strategy. Most carriers now have several levels of frequent-flyer status. The concept is straightforward – fly more miles with our airline and we will give you more rewards. In the annual strategic plans of these airlines, you had better believe there is a specific marketing programme for each frequent flyer level.

How many value-based segments should be created? Remember, the purpose of the segmentation is to allow managers to develop specific strategies for each customer segment. Developing a couple of dozen segments would be impractical. Conversely, creating only two segments – “profitable” and “unprofitable” – would hardly provide an opportunity for customized and differentiated marketing strategies.

A useful approach may be as follows:

- From the range of profitable customers, skim the top first. Create a segment of very profitable customers who generate a highly disproportionate amount of profit. This segment of customers, which is probably quite small, is the elite group which a company should devote many resources to acquiring and retaining because it is the lifeblood of the customer franchise.
- For the remaining group of profitable customers, create two or three segments at appropriate intervals of lifetime value.
- Split the unprofitable customers into two segments: those who are marginally unprofitable (that is, those customers who can potentially become profitable by removing certain service costs or inexpensively generating additional revenue) and those who are hopelessly unprofitable (those customers whom no amount of cost-cutting or revenue enhancement will make profitable).

### Building strategies for value-based segments

While the creation of value-based customer segments provides an insightful “map” of a company’s business potential, the effort would be wasted if management did not use

the segments as the foundation for its growth strategy. Value-based customer segments can be used in refining almost every aspect of a company's strategic plan, including share goals, new product development, brand management, and customer service.

### Share goals

Traditionally, a strategic plan will set market share goals for the entire market for a given product or product line. The problem with this approach is that it does not discriminate between attractive and unattractive customers over the long term. Once value-based customer segments are created, managers can use each segment as the basis for separate share goals. For example, let us say a company determines that its elite customer segment comprises about 10,000 customers. Of these, the company already has a 25 per cent share (2,500 customers). Of the remaining customers in this segment, about one quarter (2,500) are former customers and half (5,000) are new prospects. The strategic plan should set goals for three specific share components of this elite customer segment, for example:

- (1) *Retention* – maintain at least 2,250 of 2,500 current customers.
- (2) *Win-back* – convert at least 750 of 2,500 former customers.
- (3) *Acquisition* – win 1,000 of 5,000 new prospects.

These goals, if achieved, would result in a net increase of 1,500 elite customers, increasing the company's share of that segment from 25-40 per cent. The company's overall profitability would be boosted far more by achieving this 15-point share increase in the most valuable segment than by achieving a similar share increase for the market as a whole.

This example illustrates that the potentially overwhelming task of making a business more profitable can often be made much simpler by focusing share goals on the most valuable customer segments and, within these segments, designing specific strategies for retaining, acquiring, and winning back customers.

### New product development

New product planning should be undertaken with specific value-based customer segments in mind. First, a company should align its current product portfolio with the needs and behaviours of its most valuable customer

segment. Are there any gaps or competitive disadvantages which would hinder retention, win-back, or acquisition efforts directed at this segment? Since their lifetime value is now known, it is easy to determine what level of investment can be profitably applied to filling these gaps. Similarly, for lower-value segments, what new products or services will allow a company to serve these buyers more efficiently?

Once a new product idea is conceived, remember to test the concept only against the segment for which it is intended. This will provide a more accurate prediction of sales and will also be more likely to spawn unique ideas for advertising, distribution, and customer service.

### Brand management

Just as new product strategy should take into account the diverse segments of lifetime customer value, so too should a company's brand, positioning and communications strategy. Armed with information about each value-based segment, managers should ask the following questions:

- What is the most appropriate communications strategy for each customer segment? Does the communications budget reflect the relative value of each segment?
- What are the points of competitive differentiation by segment?
- Should some messages be emphasized more in one segment than another?
- Should specific brands be repositioned or created for specific value-based segments?

Again, since the lifetime value of the customer segments will be known, it will be easy to decide how much investment to make in brand development and communications.

### Customer service

The level of support that a company gives to its customers should depend on their expected lifetime value to the company. As harsh as that sounds, it is critical to managing profitability effectively across all segments. This is not to say that less valuable customers should be ignored or treated rudely in the customer-service process, but that companies must find ways to reduce service costs to customers with razor-thin profit margins and enhance services to those customers whose loss would be a major blow to profitability.

Again, both the commercial banks and airlines have finely tuned their customer service operations to acknowledge the relative value of their customers. If you are an infrequent traveller with a basic cheque account, the chances of ever being greeted by a live voice on the telephone are slim. You will forever be pressing "4" for more options. However, if you are a "platinum" frequent flyer with a lot of assets in your bank, chances are you will be able to rouse a live voice on the third ring just about any time of the day or night.

Of course, there are many other ways that value-based customer segmentation can be used in developing and implementing

strategy. The important point is that a company should know, in concrete terms, the value of its different customer segments, and should use that knowledge in crafting a strategy for acquiring and retaining the most profitable customers and for managing the cost of serving the least profitable customers. To do otherwise is to sacrifice one of the best opportunities for stronger and more profitable growth.

#### Note

- 1 Strategic Choice Analysis and SCA are registered trademarks of Mercer Management Consulting, Inc.

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