BOOZ·ALLEN & HAMILTON

INSIGHTS

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Customer Lifetime Value—Powerful Insights into a Company's Business and Activities

Customer Lifetime Value

Unlocking the full potential of customer lifetime value through selective use of the levers of value creation.

Customer lifetime value is at heart a simple concept. It consists in taking into account the total financial contribution—i.e. revenues minus costs—of a customer over his or her entire lifetime with the company. This concept has relevance to all company levels, from the CEO who deals with the strategy of the company to the customer service representatives who handle inquiries from customers.

This new way of approaching the economics of a company can provide powerful insights into its business and activities. Customer Lifetime Value can be measured at an aggregate level for the whole customer base, to verify and improve on its growth. Alternatively a customer segment approach provides understanding of where the "wells" of value creation and the "pits" of value destruction are. It can even be measured at the individual customer level in order to better align service levels and operational targets to the customer's prospective value.

This concept provides a direct link between the operational goals being pursued daily by managers in every function and the company's financial objectives pursued by top management and the financial

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Overview

In many industries today, customer acquisition is the central focus of managers and investors. In rapidly changing sectors such as telecommunications, internet/ new media and financial services, however, high growth in terms of customer acquisition does not always produce lasting value creation. High acquisition costs due to cutthroat competition, undifferentiated growth including low revenue-generating segments can destroy—as opposed to create—value.

Customer lifetime value is a practical concept which provides insights on the "wells" of value creation and the "pits" of value destruction within a company. It helps align the operational goals of line managers and the financial objectives of shareholders. In fact, customer lifetime value can be directly linked to shareholder value.

In the following pages we will discuss and develop several key ideas and findings from Booz·Allen & Hamilton's work with clients around the globe.

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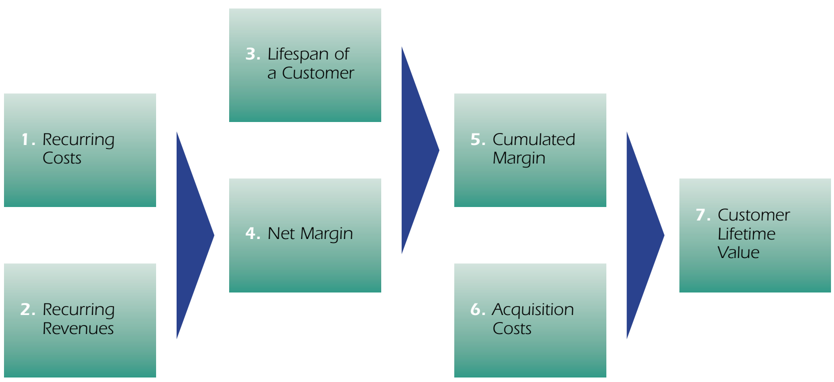
markets. In fact it is directly linked to shareholder value. Through this method, one can measure for example the shareholder value created by a customer loyalty program or a cost reduction effort.

For wireless operators, digital broadcast providers or ISPs—for whom fast growth and declining average revenues per subscriber in most countries pose a value creation vs. growth dilemma—this customer value tool provides a powerful insight into these tensions and their underlying mechanisms.

APPROACH TO MEASURE CUSTOMER LIFETIME VALUE (EXHIBIT 1)



Source: Booz·Allen & Hamilton, 1999

Defining Customer Lifetime Value

Customer lifetime value is defined as the sum of cumulated cash flows—discounted using the Weighted Average Cost of Capital (WACC)—of a customer over his or her entire lifetime with the company.

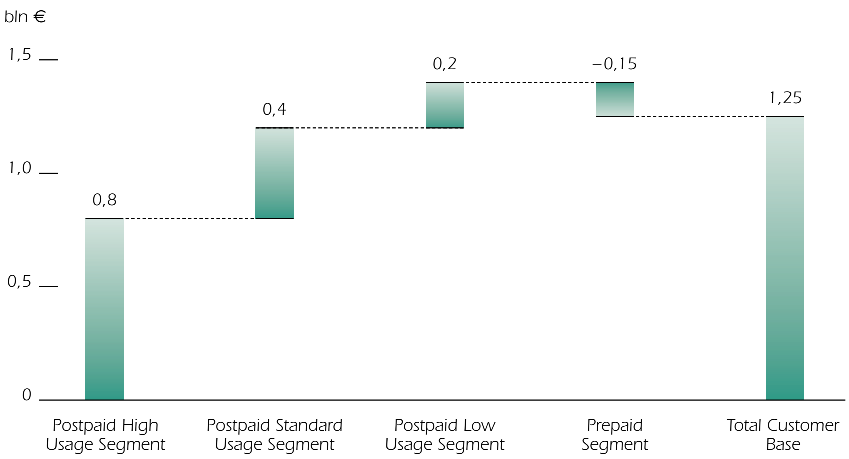
Practically speaking, one first estimates the acquisition costs of a customer and then computes monthly revenues minus the recurring costs of delivering service. This recurring margin is then added to the acquisition costs every month until the customer leaves the service or "churns".

Measuring Customer Lifetime Value

The concept of customer lifetime value is simple but measuring it accurately requires great care. All cash flows must be measured on a very detailed level, and must be allocated precisely to each customer or type of customer. Exhibit 1 provides Booz·Allen & Hamilton's 7 step approach to measure Customer Lifetime Value.

One of the most difficult elements to predict is the service lifetime of each customer. In order to estimate a customer's expected lifetime, one needs a good understanding and a detailed database of customer churn behaviors. A proxy to a customer's expected lifetime (in a similar way as we measure a human being's life expectancy) can be derived from a customer curve based on the churn behaviors of existing and past customers.

MAPPING OF CUSTOMER BASE VALUE—MOBILE OPERATOR (EXHIBIT 2)
ILLUSTRATIVE



Source: Booz·Allen & Hamilton, 1999

Understanding Where the Value Is

A good understanding of the lifetime value of the whole customer base may be interesting, but is clearly not sufficient to give an adequate strategic understanding of how best to manage the business.

The key to understanding this is segmentation. Companies should aim at adopting a simple and operational segmentation that can be readily used by operational managers, and which can discriminate sufficiently by customer value. Thus, one should select segmentation dimensions which are discriminating either on the revenue side (e.g. usage intensity and behavior) or on the cost side (e.g. products purchased, channel used, intensity of customer care usage and service levels).

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Once this is done, we have a complete mapping of the "wells" of value creation and "pits" of value destruction of the business and an understanding of why they are such.

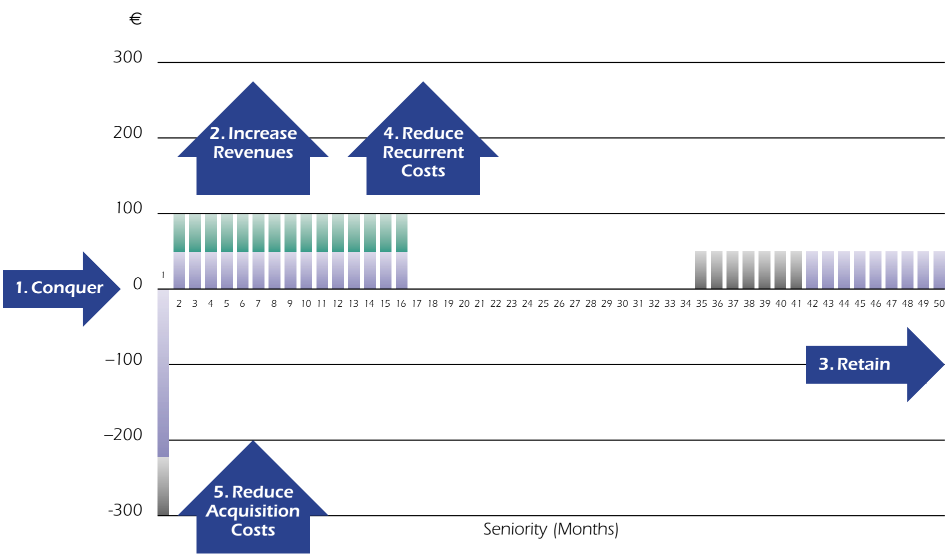
Exhibit 2 provides an example of what such a mapping may look like for a wireless operator. In this example, prepaid and mass market customers have negative customer lifetime values. This is often the case for these types of customers who are attracted to promotions in markets where fierce competition drives up acquisition costs for customers with low margins and low loyalty towards operators. On the other hand, three segments offer positive customer lifetime values helping drive the total value of the customer base to 1.25 billion € for this fictitious operator.

Five Levers of Value Creation

In any business, there are essentially five levers of customer value creation (Exhibit 3).

1. **Conquer:** Acquire new customers with positive customer values or who contribute to spread the fixed costs over a wider base, thus increasing the value of existing customers as well (e.g. by launching a new product)
2. **Increase revenues:** Stimulate the usage of existing customers in order to generate more revenues from them each month (e.g. selling value added services for an operator)
3. **Retain:** Increase the loyalty of customers in order to extend their individual lifetime with the company thus adding more months of margins to the customer value (e.g. through loyalty programs)
4. **Reduce recurring costs:** Improve the efficiency of operations in order to reduce the cost of serving each customer. A typical goal is to align the cost to serve to the value of each customer (e.g. by automating low value added customer care tasks)
5. **Reduce acquisition costs:** Improve the efficiency of distribution or adjust commissions/subsidies in order to reduce acquisition costs (e.g. through streamlining logistics)

FIVE LEVERS OF VALUE CREATION (EXHIBIT 3)
ILLUSTRATION ON CASH FLOWS OF A CUSTOMER



Source: Booz·Allen & Hamilton, 1999

Selective Use of the Levers of Value Creation

These five levers should be used differently for each customer segment in order to optimize the potential of value creation.

> The goal is to understand what the correct mix of the five levers is.

For example, with a high value and high margin customer the levers conquer, increase revenues and retain will be the most appropriate. It is thus important to understand the behavior and profiles of these customers in order to better target them in the market, design new services to increase their usage and find ways to retain them (e.g. by targeted equipment upgrades).

For low value and low margin customers one might look more at ways to reduce both acquisition and recurring costs. Here the focus will be on activities such as better targeting of distribution channels, streamlining of logistics, automation of customer care tasks, etc.

The goal is to understand what the correct mix of use of the five levers for each segment is, in order to optimize the value of customers. We should caution that the obvious approach is not always the best. For example, in a high growth and strongly competitive market with high fixed costs (e.g. the mobile phone or internet business) a strategy of acquiring a large number of negative value customers can actually create value. The more customers are being acquired—even customers with individual negative value—the larger the net margin of the other customers increase due to amortization of fixed costs over a larger customer base.

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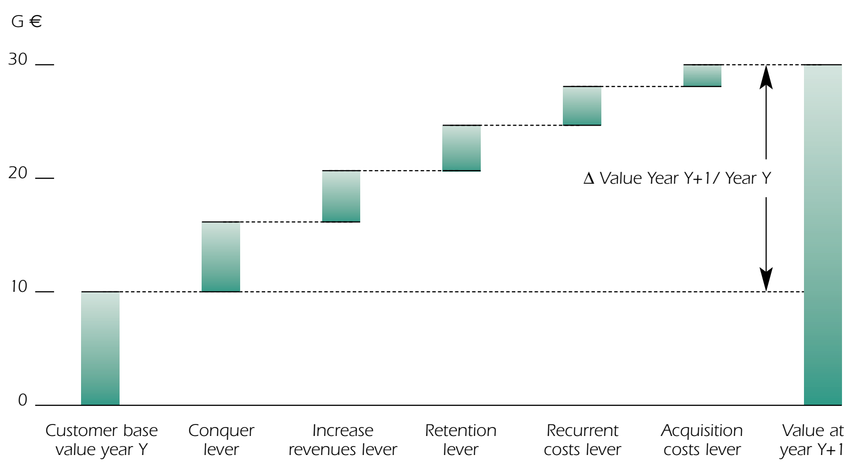
Thus, in certain cases, the value of the business can benefit from an offensive customer acquisition strategy even on low or negative value customers.

In our experience, having worked with businesses to do just this, we have found that a differentiated approach to the use of the five levers of value creation on each customer segment can generate significantly more value than an undifferentiated approach. With the customer lifetime value tool in place one can measure exactly the value creation generated by each lever from one period to the next (Exhibit 4). In fact one can also overlay the levers and segments to obtain a detailed mapping of the value creation priorities for the business.

VALUE CREATION POTENTIAL (EXHIBIT 4)



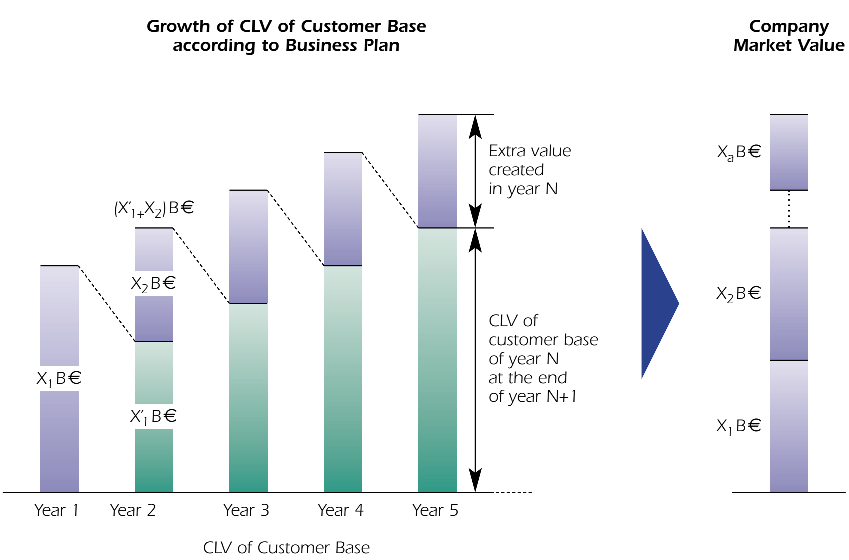
Source: Booz·Allen & Hamilton, 1999

Linking Customer Lifetime Value to Market Value

The real power behind the Customer Lifetime Value concept is that it directly links concrete operational actions to real measurable financial results. Line managers will immediately see the financial impact of their actions, and top management can use this tool as a compass to guide strategy and prioritize the actions of line managers.

In fact customer lifetime value is also directly related to the market value of a company, so shareholders and the financial community will also notice the impact of a customer lifetime value approach.

LINKING CUSTOMER LIFETIME VALUE TO COMPANY MARKET VALUE (EXHIBIT 5)



Source: Booz·Allen & Hamilton, 1999

The market value of a company today is simply the customer lifetime value of the whole customer base, plus the extra customer lifetime value which will be created next year, and the following year, and so on (Exhibit 5). In this way, customer lifetime value captures expectations on the growth of the customer base and of the revenues of the business. The extra customer lifetime value created each year can be measured on each of the five levers year after year based on the hypotheses underlying the business plan of the company.

Interestingly, we can also start from the shareholder value and then compute the underlying hypotheses of customer lifetime value which allows us to reach a given market value. For example, recent acquisition prices in the wireless sector indicate that the market has expectations of revenue growth well beyond that achievable with the current range of services, anticipating successful introduction of data/Internet applications.

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The Booz·Allen & Hamilton Approach

To assist companies in obtaining concrete and measurable results through a customer lifetime value approach, Booz·Allen & Hamilton has developed a proven framework which involves all the relevant operational and functional divisions from the start, progressively moving from strategy to implementation (Exhibit 6).

Strategy

Before acting, we must understand and plan. The first phase of a Customer Lifetime Value program consists in measuring where the value is coming from and defining the strategy to maximize this value.

The first step is to identify all the relevant sources of information and gather the relevant data on customers. This data will include: customer acquisition costs, churn behavior, revenues, products purchased, product production costs, cost to serve.

Once this is complete, the relevant dimensions for the segmentation must be identified. It is crucial at this stage to involve all the relevant functional and operational divisions so that the segmentation will be both relevant and operational. A good theoretical/conceptual segmentation can turn out to be of little use to line managers.

After the segmentation and the mapping of value wells and value pits, a strategic simulation of value creation by a differentiated use of the levers of value creation can be made. This simulation is important for two main reasons:

1 it will help prioritize the planning phase,
2 it will help ensure buy-in from the different participants in the validity of a differentiated approach (very often changing common beliefs).

Key success factors to ensure a good execution of the strategy phase are: a reliable IT system, strong analytic capabilities and involvement of key functional and operational divisions.

> Create strong multi-functional teams which are intimately involved in the day-to-day operations of the business.

Planning

Once the priorities have been set, it is possible to move to the planning phase. This phase is crucial to the success of the whole program. It is here that the handover is given from top management to the day to day line managers.

Planning must be done at a very concrete and operational level. It is therefore important to create strong multi-functional teams who are intimately involved in the day-to-day operations of the business. It is those teams who will ensure the success of the program.

The multi-functional teams will work on plans to achieve value creation results, using the customer value measuring tool to analyse the financial impact of their action plans.

A good example of a customer value creation plan is the alignment of customer care costs and service levels to customer lifetime value. The goal of such a plan should be to segment the customer base according to customer value and to guide customer contacts through appropriate channels according to their value. For example through self care and the automation of low value added tasks for low value customers and high service levels for high value customers.

Other examples of value creation plans can include differentiated loyalty programs (e.g. differentiated handset renewal subsidies for mobile operators), optimizing sales channel management, targeting high value customers through geo-marketing techniques, etc.

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CUSTOMER LIFETIME VALUE CREATION PROGRAM (EXHIBIT 6)

Phase I: Strategy	Phase II: Planning	Phase III: Implementation
▪ Analysis of churn behavior	▪ Creating multi-functional teams	▪ Creating a steering committee to ensure implementation
▪ Gathering financial data	▪ Communicating internally on customer lifetime value creation concepts	▪ Creating one team for each action plan
▪ Customer value lifetime calculation	▪ Agreeing on realistic objectives for value creation	▪ Launching tests and pilot programs
▪ Customer segmentation based on customer lifetime value	▪ Detailing implementation plan: calendar, resources, tools	▪ Measuring results
▪ Strategic simulation, per segment and per level		▪ Adjusting plans according to results obtained

Source: Booz·Allen & Hamilton, 1999

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Key success factors for the planning phase are: project management capabilities, a high level of involvement of key operational staff, and the ability to measure the impact of the action plans on value creation.

Implementation

The implementation phase is the beginning of a continuous virtuous cycle. Implementing the actions and measuring the results will lead to new opportunities, new plans and new implementations with new results, etc.

During this phase the company's executive committee should review on a regular basis the results and progress against the value creation plans.

The execution of the action plans must be the responsibility of the line managers who will report to the executive committee. Typically a team for each lever is headed by one line manager. Each lever head is helped by a "value program office" to evaluate the value impact of their action plans. The program office also coordinates the different action plans and ensures a consistent reporting structure. It is typically composed of resources from Finance and Operations.

Key success factors for implementation are: the ability to manage large operational teams, a precise and efficient measuring and reporting system and above all a high level of involvement from top management.

In summary

Booz·Allen & Hamilton has defined a simple yet powerful tool to understand and manage value in service related industries. We have not only explored the concepts and dealt with the theory, we have also lead these concepts to concrete and measurable conclusions.

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