

Measuring and Managing Customer Lifetime Value

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EXECUTIVE SUMMARY

When a company considers the value of its most important corporate assets, it typically looks to the balance sheet—cash, property, manufacturing plants, equipment, and other capital assets. While many of these hard assets can help a company achieve advantage in the marketplace, none is as valuable as the “softer” asset—the customer.

Ultimately there are only two things that can provide unique, long-term, sustainable advantage in the marketplace—a company’s culture and the relationships it fosters with its customers. Yet ironically, the value of the customer relationship is one of the least measured and most poorly managed assets in business.

The key to acquiring and cultivating long-term, highly profitable customer relationships is in understanding customer lifetime value. Many businesses work frantically to either bring in new customers who will contribute from minimal to no profit, or neglect to understand how to gain maximum value from existing customers. Meanwhile companies armed with a deep understanding of customer lifetime value can

- Quantify and predict profitability for customer segments, business units, products, and services
- Measure and influence the factors that affect customer value over time
- Understand the relative cost and tradeoffs of acquiring, retaining, and growing specific customer segments
- Develop actionable programs to maximize profitability

This white paper offers a definition of customer lifetime value and provides insight for companies to measure and manage their customer relationships to return maximum benefit.

VALUE OF THE CUSTOMER ASSET

Lifetime value analysis begins by understanding customer value drivers, such as the value of individual transactions, the frequency of purchases, and the cost of service. An understanding of these variables can only be gained by leveraging a rich database of customer needs and behavior. To gain this advantage, companies in recent years have been investing heavily in customer relationship management

(CRM) software. To fully realize the benefits of these investments, however, companies must not only understand the data, but also exploit it to actively build and grow customer relationships. Only by doing so can they realize optimum value from the customer asset.

The hardest, most expensive sale a company makes to a customer is the first one. In that first critical transaction, the customer's trust is either won or lost. To understand a customer's lifetime value, many companies analyze the initial cost to acquire a customer versus the profit generated by that first sale. Focusing on this one individual transaction, however, illustrates only near-term profitability; it does not capture the underlying potential lifetime value a customer might represent through long-term relationships and referrals. By understanding the lifetime value of customers, a company can make customer acquisition and management investment decisions based on the long-term positive expected value.

The lifetime value of a customer can be defined as the future financial value the customer supplies to the company minus the cost of acquiring and retaining that customer. Acquisition and retention costs can include the costs of incentive and reward programs and the pricing discounts associated with long-term purchase commitments.

The relatively broad concept of customer value can be divided into two key components. The first component, transaction value, is extrapolated from the customer's historical transaction activity (historical value) and the historical transaction activity of similarly segmented customer groups. The second key component, network value, is the potential value that exists in the customer's network of relationships. This network can be leveraged through referrals and other methods to gain new customers and enter new markets.

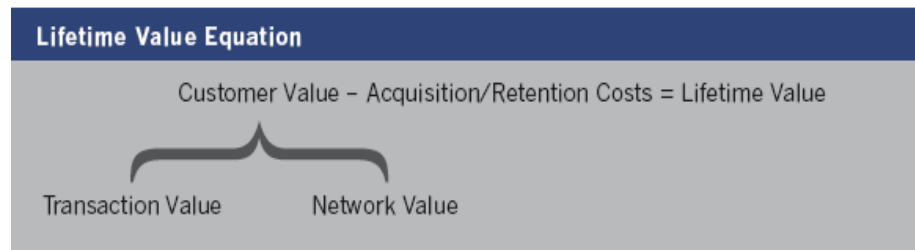


Figure 1: The relatively broad concept of customer value can be divided into two key components: transaction value and network value.

TRANSACTION VALUE

Historical customer behavior is likely the most important customer information a company can leverage to sell additional products and services. Understanding how the customer interacts with channels and consumes products and services today is a key indicator of future transaction activity. Transaction value comprises three key variables: frequency, transaction size, and customer churn rate.

Frequency

Frequency measures how often the customer interacted with the company for products or service offerings. The more frequently a customer has made purchases from the company in the past, the more likely that customer is to purchase again in the future. Also, a frequent customer is typically more profitable for the company because, after the initial purchase, acquisition costs are no longer incurred.

Recency, a subset of frequency, measures how recently the customer purchased a product or service offering. The more recently a customer purchased a product, the more likely that customer is to purchase again. Most companies understand this equation, which is why they send customers catalogs immediately after they make a purchase.

Frequency and recency analysis can be used when designing channel systems, new products, and customer incentive plans. For example, customers who frequently purchase a particular product or suite of products might not need direct sales interaction. These customers might be more inclined to purchase through a dedicated internet or call center presence, thus lowering the cost per transaction further. In addition, customers who frequently purchase the same products can offer key insight into the design of future product offerings to meet their needs or those of other consumers. For durable products, recency and frequency analysis can be combined with average product lifetime assessments to aid in planning and forecasting manufacturing and sales.

Recency analysis can help a company refine the information it gathers from frequency analysis. For example, consider a company that attempts to expand its market penetration by offering new customers an incentive for initial purchases. If that company relies exclusively on a frequency analysis to measure the rate of repeat purchases, it might discover that the rate is flat but acceptable—indicating that the business is running smoothly. By applying recency analysis, however, the company might discover that most repeat purchases come from customers acquired six months earlier and the incentive program is generating little or no repeat business. This additional information would be valuable to marketers in reassessing the incentive target market and the campaign itself. The combination of frequency and recency analysis helps a company to focus more effectively on those customers who are actually contributing to the long-term profitability of the business.

Transaction Size

Average transaction size is a second key indicator of future expected transaction value. Future expected transaction value is what a customer is willing to invest in products or services in exchange for the value the customer assumes the product or service will deliver. Average transaction size also indicates the volume of business that the customer is willing to transact at any time, which indicates current and potential need. Retail brokerages routinely consider transaction size when they segment their customers according to the size of their stock transactions and their assets under management. Typically customers with more assets under management

receive a higher level of service. This level is seen as justified because owners of significant assets also generate higher transaction fees.

Customer Churn Rate

Customer churn rate—the rate at which customers shift to competing providers—is perhaps the greatest cost a company must confront in managing customer value. This issue is of particular importance for commodity-based businesses. For example, retail telecommunications businesses spend a considerable amount to acquire customers of voice and data services. However, these customers often switch plans or programs based on insignificant volume discounts. After they switch to a competing provider, the original provider must invest to reacquire them, and for many telecommunications companies this means offering cash incentives to re-subscribe. While small in comparison to potential future customer value, these incentives can present a significant investment and—if customers continuously “churn” back and forth—a major impact on profit.

Understanding how recently and how frequently customers have made purchases can help a company identify customer churn. If, for example, a customer has not purchased in a long time, it is reasonable to assume that the customer has churned out of the relationship and might be an appropriate target for a win-back campaign. By understanding churn as it relates to frequency and recency, companies can avoid trying to win back customers they have not lost.

Evolving Habits

As customers mature, their buying habits and needs evolve. Their requirements can grow in volume of product purchased, product attribute requirements, and service-level requirements. As customers evolve, their value can grow significantly if it is measured and managed appropriately. Evolving customer needs present tremendous opportunities for cross-selling and up-selling new products, managing product development and upgrades, and managing product lifecycles. This is why most multiproduct and multiservice organizations consider cross-selling and up-selling to be the key to sustained competitive advantage. If such a strategy is managed properly, it can reduce customer churn, because it minimizes the attraction of switching to another company to purchase additional products.

Changes in frequency and transaction size can have a significant impact on profitability. As shown in Figure 2, despite an annual 5 percent customer attrition rate, a company could still increase profit per customer by 21 percent by increasing order frequency and average order size by 10 percent.

| Customer Value Analysis | | | |
|---|----------------|----------------|----------------|
| | Year 1 | Year 2 | Year 3 |
| Customers | 20,000 | 19,000 | 18,050 |
| Customer Attrition Rate | | 5% | 5% |
| Orders/Year | 1.8 | 2.0 | 2.2 |
| Growth in Orders/Year | | 10% | 10% |
| Average Order Size | \$ 2,980 | \$ 3,278 | \$ 3,606 |
| Growth in Average Orders Size | | 10% | 10% |
| Total Revenue | \$ 107,280,000 | \$ 123,318,360 | \$ 141,754,455 |
| Revenue Growth | | 15% | 15% |
| Direct Cost (%) | 70% | 70% | 70% |
| Total Costs | \$ 75,096,000 | \$ 86,322,852 | \$ 99,228,118 |
| Gross Profit | \$ 32,184,000 | \$ 36,995,508 | \$ 42,526,336 |
| Gross Profit Growth | | 15% | 15% |
| Profit/Customer | \$ 1,609 | \$ 1,947 | \$ 2,356 |
| Gross in Profit/Customer | | 21% | 21% |
| <i>Note: Direct cost is assumed to be a constant 70% of revenue</i> | | | |

Figure 2: Changes in frequency and transaction size can significantly affect profitability.

NETWORK VALUE

Beyond the profit and its potential generated by an individual customer, there is also tremendous value in understanding the customer network. For example, a customer might offer high referral value to a previously untapped population of customers. Network value refers to the sum total of value that a company might anticipate from sales to its initial customers, plus sales to all those influenced—directly or indirectly—by that initial base. When considering network value, the company views the market not as a static aggregate of individual entities, but as a dynamically extended and interconnected value potential.

To tap into the existing network value of a customer, suppliers must identify potential opportunities in the network, understand how best to exploit those opportunities, and build relationships to extend further into the network. For example, consider a vendor that supplies its products to one division of General Electric (GE). Given GE's diversified operations, the supplier has a tremendous opportunity to extend its reach across other GE divisions or lines of business by leveraging existing relationships and existing contractual agreements. When a company approaches a large customer in this manner, it greatly increases the likelihood of cross-selling and up-selling.

Or consider the healthcare industry, where medical professionals such as pharmacists and physicians have great influence over formularies and prescription practices. A strategic relationship with one of these market influencers might have a significant impact on sales throughout the network. For example, if a pharmaceutical company gains mind share with a key doctor, researcher, or other

influencer for a particular treatment, the influencer can positively affect doctors' prescription rates, which in turn affects the pharmaceutical company's sales. In this example, the network value would be composed of the potential revenue generated by these additional prescriptions.

A third example of network value is evident in the common practice of universities offering group credit card arrangements to their alumni. A financial services organization that wants to target a large alumni population would, in purchasing a mailing list, gain much more than the accumulated names on the list. The relationship between the university and its alumni could facilitate the sales process by exploiting the already existing value relationship.

ACQUISITION AND RETENTION COSTS

Customer acquisition cost can be calculated by dividing total acquisition expenses by total new customers. These acquisition expenses can vary by customer segment and by product if a company chooses to develop unique and tailored acquisition strategies for specific customer segments. Acquisition costs typically include marketing process and people costs, material and collateral costs, sales and channel resource-related costs, and discount and rebate costs. Customer retention costs are typically composed of the same elements managed over the lifetime of the customer.

Failure to understand and manage acquisition costs can have a dramatic negative impact on managing customer value. The online pet store Pets.com, for example, attempted to acquire new customers by spending millions of dollars on Super Bowl advertisements. In doing so, however, it ignored one of the largest pet owner demographic groups: elderly women, who seldom watch the Super Bowl and seldom order online. So while the Super Bowl campaign was successful at generating brand awareness, it was not a cost-effective means of acquiring the most likely Pets.com customers. Moreover, the cost to acquire each customer, combined with the costs of the free shipping that the company offered, exceeded the average transaction income per customer. Pets.com's failure to measure acquisition costs effectively clearly contributed to the rapid decline of this online venture.

ALIGNING OPERATIONS

To build a customer-centric organization that is focused on maximizing customer lifetime value, companies must align their organization and operations toward this common goal. Many companies identify the need to manage the profitability and lifetime value of customers, but they either build distribution models that only erode profitability or they develop products without customer needs in mind. The key to maximizing customer lifetime value and profitability is in the execution of a properly designed go-to-market strategy comprising three elements: integrated channel systems, marketing and incentive programs, and product design strategies.

Integrating Channels

Executives must be able to balance customer preferences with the cost to provide adequate service. Further, they must be able to coordinate multiple channels in the customer interaction process. For example, companies must consider how the Web might integrate with the call center to provide improved, lower-cost customer service or how the call center might drive productivity in the field sales force. The role of each channel must be clearly defined, measured, and managed accordingly. In addition, each channel must be able to gather customer data from each interaction so that subsequent interactions will be incrementally valuable to the customer and the provider.

Compelling evidence of the impact of an integrated, multichannel strategy can be seen in retail. For example, JCPenney has proved that multichannel integration is an effective strategy to increase profits. In 1999, JCPenney found that internet-only shoppers spent an average of US\$121 per year, retail-only customers spent US\$194 per year, and catalog-only shoppers spent US\$242 per year. Customers who shopped all three channels, however, spent more than US\$1,000 per year, which was four times more than a single-channel shopper. Armed with this knowledge, JCPenney set out to integrate its channels and enable all three channel operations to share customer information. The result: store and catalog profits increased 83 percent in the third quarter of 2003 compared with the year before. The incremental revenue from customers who shop all three sales channels has been a key to JCPenney's success.¹

Incentive Programs

To drive revenue, companies invest heavily in marketing efforts such as branding campaigns and co-marketing agreements with partners. Companies also invest in customer incentive programs such as discounts and acquisition programs. Long-distance telecommunications providers sending incentive checks to retail customers to "buy" business is an example of such an acquisition program. These programs represent significant investments and significant drains on profitability per customer. When armed with in-depth knowledge on revenue per customer, companies can judiciously use these investments to increase profit per customer.

For example, a company that invests the same amount to acquire and retain all customers will still have varying levels of profit per customer. To increase profit per customer, and therefore customer lifetime value, companies must build tiered customer investment programs to match the current and potential return generated by each customer.

Product Design Strategies

Finally, companies must develop product design strategies to meet the needs of customers as well as the distribution channel system. For example, Dell Computer

¹ "How JCPenney Got Its Groove Back," eBusiness IQ, September 18, 2003.

revolutionized the PC industry by allowing customers to configure computer purchases individually through the company's primary distribution channels: the Web and the call center. Dell's product design, manufacturing, and distribution strategies are aligned to maximize customer interaction and profitability. In addition, the customer-centric nature of the business model creates significant brand loyalty, which increases repeat purchases and each customer's lifetime value.

Another example can be seen in a recent initiative by Levi Strauss & Co. to offer customized jeans. In this initiative, Levi Strauss & Co. lets each customer design jeans to meet his or her unique body requirements; the customized product sells for approximately US\$70 a pair. This has allowed Levi Strauss & Co. to increase customer loyalty while gathering useful information on size and attribute preferences.

THE ROLE OF TECHNOLOGY

A key factor in measuring and managing customer lifetime value is having the technology to capture customer interactions across all company touchpoints, establish more insightful customer segmentation schemes, and ultimately facilitate a more effective dialogue and experience for each customer relationship.

CRM technology facilitates data gathering and analysis for customer profiling and planning. This is done in two ways. First, the resources that interact with customers—whether they are call center representatives, field agents, or Web pages—are enabled to gather important customer transaction, preference, and profile data through data capture fields and processes. Second, once the data is captured, analytical engines segment and analyze it to identify trends in customer behavior and preferences. These trends and preferences can be exploited to yield cross-sell and up-sell opportunities and to gain a better understanding of how to serve customers more profitably.

Technology also provides the ability to align and integrate channel resources to meet customer needs. In an expertly deployed CRM solution, each channel has a defined role in the customer interaction process, and all channels are seamlessly integrated to reduce redundant or conflicting activity while maximizing profit and superior customer service. In addition, CRM technology can measure and manage channel resources based on fact-based, real-time reporting.

MANAGEMENT AND PROCESS

Companies often conduct customer lifetime value analyses during one-time, standard customer segmentation exercises. While such exercises might be beneficial at any given time, they do not help companies effectively manage customer lifetime value. To extract true value from customer lifetime value analysis, companies must build a process and culture that continually monitor and manage this critical success factor. For example, Federal Express has seen improvements in marketing effectiveness by focusing on analyzing customer lifetime value. By analyzing

customer purchase behavior over a two-year period, Federal Express has identified four specific groups of customers:

- Stable customers—very high value
- Growing shippers—high value
- Six-month lapsed customers—medium value
- Seasonal shippers—low value

Based on this segmentation, Federal Express learned that stable customers generated nearly three times the lifetime value of the average customer, leading to the development of marketing initiatives focused on retaining customers in this segment. Federal Express also identified seasonal shippers as a segment of the customer base that only ships products on a seasonal basis. As a result, Federal Express has adopted a more seasonal marketing strategy for this segment, to increase the efficiency of its marketing spending and further align its marketing messages with a customer's propensity to purchase shipping services.²

To achieve results through customer lifetime value analysis, senior management must first establish a mandate to monitor customer value and build a customer-centric culture in which management, decision-making, and business strategy are rigorously supported by fact-based analysis. This mandate must include clear definitions of business strategy, customer strategy, and product strategy. Second, processes must be put in place to facilitate customer management. For example, customer-related metrics must be implemented, understood, and standardized across the enterprise to manage customer retention activity and, more importantly, customer acquisition investments. Coca-Cola's Fountain Division for example, analyzes the potential lifetime value of fountain customer agreements when determining potential marketing development fund allocations. By better understanding the potential volume value of individual fountain customers, Coca-Cola manages its marketing investments more intelligently.

CONCLUSION

Measuring and managing customer lifetime value is the key to sustaining a competitive advantage in the marketplace. Companies must invest in robust and integrated technology, in people with the skills required to manage customer relationships effectively, and in process solutions to enable in-depth customer data gathering. Once armed with this data, companies can exploit operational competencies to manage and grow customer value as defined by historical value, anticipated future value, and network value. These values can be assembled to form a customer lifetime value equation that not only helps quantify value, but also aids a company to understand the components that drive it.

² Sellers, Jim, and Arthur Middleton Hughes, "RFP Migration Analysis—A New Approach to a Proven Technique," Database Marketing Institute, March 2003.

Effective customer lifetime value analysis helps companies to make sound customer acquisition and management investments to ensure that every customer is a profitable customer. Proper lifetime value management provides an opportunity to increase profit and return on investment by

- Attracting prospects with the highest potential lifetime value
- Forging stronger, more profitable relationships with existing customers
- Allocating the proper resources to those customers who are most likely to drive revenue and profit growth
- Supporting decisions for acquiring, retaining, growing, and reactivating profitable customers



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