

By measuring and improving Customer Lifetime Value, you'll be able to grow your most profitable customers.

# *Nurturing the Right Customers*

**By V. Kumar and Bharath Rajan**

Companies often measure their success by the number of loyal customers they can count. Statements like “I’ve owned six Hondas” or “I always shop at Target” are music to a marketer’s ears. But this devotion doesn’t always translate to the bottom line. Our research has proven that loyal customers *aren’t necessarily profitable* and that the relationship between loyalty and profitability is more complex than is often perceived. In addition, firms regularly use traditional loyalty metrics to measure the value of their customers, and these can lead managers to implement flawed marketing strategies that drain the firm’s resources.

How can companies address this issue? Through something we call Customer Lifetime Value (CLV). When companies adopt a CLV-based approach, they can make consistent decisions over time about which customers and prospects to acquire and retain, which customers and prospects not to reach out to, and the level of resources to be spent on each of the various customer segments.

## CLV: A Forward-Looking Metric

Customer Lifetime Value can be defined as: *“The sum of accumulated cash flows—discounted using the weighted average cost of capital (WACC)—of a customer over his or her entire lifetime with the company.”* Yet most companies have a much shorter horizon for computing CLV. This is because of changes in product life cycle, changes in customer life cycle, and the fact that, for a variety of reasons, 80% of profit can generally be accounted for in three years. Figure 1 shows how to measure CLV.

The CLV framework can be modeled using three main components: contribution margin, marketing cost, and probability of purchase in a given time period. Each of these components will have its own set of drivers/predictors, and each set is estimated simultaneously. The CLV calculation helps companies rank customers on the basis of their contribution to the firm’s profits. This allows a company to treat each person differently based on his or her contribution rather than approaching everyone in a similar fashion.

An analysis of CLV can help companies across all industries answer three important questions they typically face. Let’s take a closer look at each one.

## 1. Which Customers and Future Prospects Should We Retain, Grow, Acquire, or Win Back?

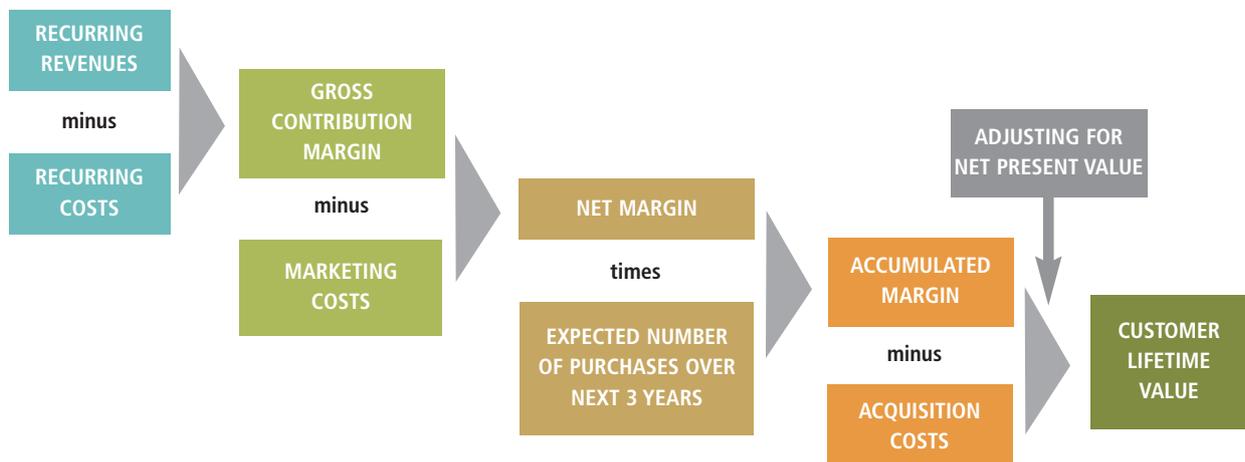
Before your business can answer this question with any certainty, you should first ascertain the following:

### Whom Should We Acquire and Retain?

Every company seeks the answer to this fundamental question. The CLV metric suggests that acquiring and retaining profitable customers should be the guiding principle. When companies pursue this approach, however, they encounter three common pitfalls: They consider customer acquisition and retention rates as principal metrics of marketing performance; they focus too much on the current cost of customer acquisition and retention and not enough on the customer’s long-term value; and they treat acquisition and retention as independent activities and attempt to maximize both rates.

In the first pitfall, the two metrics—rates of customer acquisition and retention—are easy to understand and track, and companies have naturally had a long-standing attraction toward garnering more market share. Though these two metrics may have relevance in a contractual setting, such as in subscriptions to magazines or cable services, in most cases, using acquisition and retention rates as measures of overall performance is misguided and may lead to the problem of diminishing returns. In other words, as acquisition and retention rates increase, the firm’s profits don’t always increase beyond a certain point. Therefore, companies should make decisions to acquire or retain the next customer *only* if the cost of

Figure 1: *Measuring CLV*



**True Friends (high loyalty and high profitability) are satisfied with what the company has to offer, buy steadily and regularly over time, and offer the highest profit potential.**

doing so is less than the value the customer brings to the firm.

In the second pitfall, companies focus too much on short-term profits and not enough on establishing a long-term relationship with the customer. This problem occurs when managers group their customers into one of the following four buckets: those who are both easy to acquire and retain, those who are hard to acquire but easy to retain, those who are easy to acquire but hard to retain, and those who are both hard to acquire and retain. Based on this classification system, guess who the managers will target first? Right: only the low-maintenance easy pickings. This wouldn't be a problem if each set of customers were equally profitable, but that's often not the case.

In the third pitfall, companies treat the acquisition and retention departments independently of one another. The result: The acquisition department tries to gather the most customers possible (often concentrating on loyal customers instead of profitable ones), and the retention department works on retaining *everyone* (often vainly throwing money at the profitable transient/"blow in" customers). In other words, the marketing dollars aren't spent on attracting potentially highly profitable customers who are hard to acquire.

### **How Can We Make Customers Profitably Loyal?**

After selecting the "right" customers to acquire and retain, the next step is to segment them based on profitability and loyalty. Through our research, we've found that such segmentation yields four distinct types:

**True Friends** (high loyalty and high profitability) are

the most valuable customers. They're satisfied with what the company has to offer, buy steadily and regularly over time, and offer the highest profit potential. In managing these true friends, firms should indulge in consistent yet intermittent communication so as not to seem overly aggressive.

**Butterflies** (low loyalty and high profitability) are profitable but transient. They enjoy flitting around to find the best deals, and they avoid building a stable relationship with any single provider. Companies make the classic mistake of continuing to invest in these customers and, in some cases, invest even after they stop purchasing. To manage this type of customer, firms should lock in their profits while they can and find the right moment to sever the relationship.

**Barnacles** (high loyalty and low profitability) are long-term customers, yet they don't generate a satisfactory return on investment because they don't spend enough often enough. But they can become profitable when managed properly. It comes down to this: Do they simply not have the money to spend, or are they buying the same or similar items from a competitor? If cash flow is their problem, then the company should cut back on the efforts it makes to reach these customers—and reduce its losses in the process. On the other hand, if the customer is spending elsewhere, specific up-selling and cross-selling can be done to boost profits. Since Barnacles don't offer high profits, the marketing resources directed to them should be diverted to Butterflies.

**Strangers** (low loyalty and low profitability) have very little fit with the company's products and services;

these customers have no loyalty toward the firm and bring in no profits. The key strategy in managing these customers is to identify them early and refrain from making any major investment in them. When they do come knocking, however, the company's aim should be to extract the maximum profit from every transaction since these customers may not come back again.

### How Can We Realize Revenue Growth from Customers?

The answer to this question lies in multichannel shopping (via walk-in stores, telephone, the Internet, etc.). Since each channel caters to a different set of customers and provides varying levels of services, this approach reduces the overall service cost, thereby increasing profitability. Who are these multichannel shoppers, and how can a firm identify them? We conducted a study in a business-to-business (B2B) format and cited the following drivers:

**Customer characteristics:** Includes the number of different product categories in which a customer has made a purchase, amount of product returns, frequency of Web-based contacts, the customer's tenure with the company, and frequency of purchases. The higher the incidence of these factors, the greater the likelihood of multichannel shopping.

**Supplier-specific characteristics:** Includes the number of different channels used to contact the customer, type of contact channel, and channel mix. Again, the higher the degree of supplier-specific factors, the greater the likelihood of multichannel shopping.

**Customer demographics:** Refers to the number of customer-service employees, the company's annual sales, and its industry category.

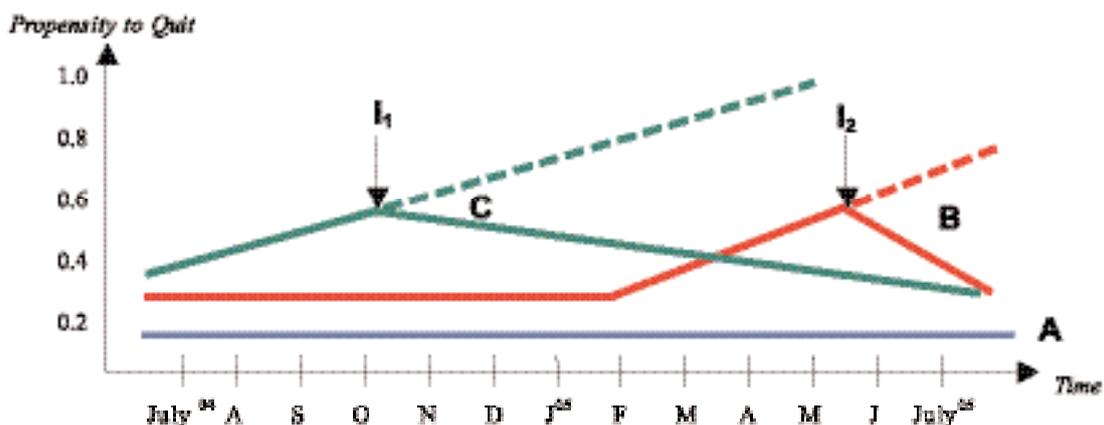
Through research, we've found that as a customer shops across more channels (from one channel to three or more), he or she (1) spends more with the company, (2) spends a higher proportion on the focal firm (rather than with a competitor), (3) has a higher past profitability (which is correlated with future profitability), and (4) is more likely to buy from the company in the future. A successful company will evaluate which customers show the right signs of being potential multichannel shoppers based on the drivers and try to leverage those drivers to encourage multichannel shopping behavior.

But how can a company know which channel a customer is likely to adopt next and when this is likely to happen? Several behavioral and psychological aspects that determine the choice and timing of channel adoption are:

- ◆ The travel cost involved in purchasing and the immediate product availability.
- ◆ The total quantity of items a customer purchases in a single shopping trip, in which product categories, and the level of price discounts.
- ◆ The customer's purchase frequency and the frequency of marketing communications.
- ◆ Customer heterogeneity, which increases the acceptance of new channels and shopping across different channels.

Using test and control groups, we've found in a business-to-consumer (B2C) scenario that adding one more channel resulted in an average net gain of about 80%. After accounting for marketing costs, the increase in revenue translated into a return on investment (ROI) increase of 800%. By knowing how a customer buys, and the number and type of channels he/she buys from, a company can make informed decisions about customer profitability. It can then contact the right customers at

Figure 2: *Proactive Intervention Strategy*



the right time to encourage adopting another channel, thereby increasing revenues.

### **How Can We Retain Customers and Prevent Churn?**

Retaining customers is a crucial function for any organization. Customer attrition impacts a firm in several ways. The most obvious is the loss of revenue from the profitable customers who have defected. Second, the company doesn't get a chance to recoup its initial costs to acquire the customer. The firm also loses the opportunity to up-sell/cross-sell to people who have defected, a potential revenue loss. Finally, there are some lost "social" effects, such as influencing other customers through either positive or negative word of mouth.

Many companies have realized the importance of controlling the churn and have adopted or are in the process of adopting analytic tools to predict and prevent attrition. The key questions that need to be answered before developing this intervention strategy are: (1) How can firms identify the customers who are likely to defect? (2) When are they likely to defect? (3) Should the firm intervene and, if so, when? and (4) How much should firms spend to avoid the attrition of a particular customer?

Most churn models can answer these questions by building a "propensity to quit" model. These models indicate the probability of a customer quitting at a particular point in time. Based on when the customer is likely to leave, firms can provide appropriate intervention strategies that will aid retention. Figure 2 shows the intervention strategies. The dotted lines indicate the propensities to quit of the customers had they *not* been targeted with intervention strategies.

The decision on the channel of intervention and the type of offer through which the intervention is to be made is based on individual customer characteristics. The amount of resources to be spent on each customer is directly linked to the Customer Lifetime Value. If it costs the company \$100 per customer to intervene, it isn't prudent to promote to a customer whose CLV is only \$50. The company should intervene with an offer that costs less than \$50.

We studied the effect of the customer intervention strategy in a telecom firm on test and control groups. Using our strategy, the firm realized a net revenue gain of \$345,000 after accounting for the cost of intervention, and the ROI was close to 860%. This demonstrates that the key to retaining customers is to identify those who are likely to quit and reach them with appropriate messages.

## **2. Which Customers and Future Prospects Should We not Retain, Grow, Acquire, or Win Back?**

Any company that offers a variety of products serving multiple customer segments should want to know how it can measure and understand individual marketing actions that affect purchase behavior. This is achieved in part by identifying those types of customers who *aren't* to be retained, and CLV can help in accomplishing this task.

To analyze this facet of CLV, we considered more than 300,000 customers of an apparel retailer, calculated their individual CLV scores, and obtained a distribution. Based on the results, we segmented the customers into 10 deciles. The customers in the top two deciles constituted high CLV, the ones in segments three through five represented medium CLV, and those in the bottom five deciles represented low CLV. We observed that the top 20% of the customers accounted for 95% of the profits, and the retailer was actually losing money with 30% of them. This is because several customers in low CLV segments have negative CLV scores. Profile analyses on these high and low customers helped us put a face on the CLV scores and thereby allowed the retailer to manage their customers effectively.

We then segmented the customers based on CLV and their current share of wallet (SOW) to develop a two-by-two matrix. (Share of wallet indicates the degree to which a customer meets his or her needs in the category with a particular brand or firm. For instance, if a customer spends \$200 monthly on groceries, and \$150 of her purchases is with Walmart, then Walmart's share of wallet for that customer is 75%.) We suggested that the

Figure 3: *Optimal Resource Allocation Strategy for a B2B Firm*

HIGH CLV	<p><b>BUTTERFLIES</b></p> <p><b>COST REDUCTION (\$):</b> CELL 1            Current Spending: \$1,008            Optimal Spending Limit: \$2,197</p> <p><b>FACE-TO-FACE MEETINGS:</b>            Current Frequency: once every 7 months            Optimal Frequency: once every 5 months</p> <p><b>DIRECT MAIL/TELESALES:</b>            Current Interval: 6 days            Optimal Interval: 2 days</p> <p><b>PROFITS:</b>            Current Profit: \$109,364            Optimal Profit: \$178,092</p>	<p><b>TRUE FRIENDS</b></p> <p><b>COST REDUCTION (\$):</b> CELL 2            Currently Spending: \$1,385            Optimal Spending Limit: \$2,419</p> <p><b>FACE-TO-FACE MEETINGS:</b>            Current Frequency: once every 3 months            Optimal Frequency: once every month</p> <p><b>DIRECT MAIL/TELESALES:</b>            Current Interval: 6 days            Optimal Interval: 5 days</p> <p><b>PROFITS:</b>            Current Profit: \$534,888            Optimal Profit: \$905,224</p>
	<p><b>STRANGERS</b></p> <p><b>COST REDUCTION (\$):</b> CELL 3            Currently Spending: \$819            Optimal Spending Limit: \$433</p> <p><b>FACE-TO-FACE MEETINGS:</b>            Current Frequency: once every 5 months            Optimal Frequency: once every 13 months</p> <p><b>DIRECT MAIL/TELESALES:</b>            Current Interval: 10 days            Optimal Interval: 13 days</p> <p><b>PROFITS:</b>            Current Profit: \$7,435            Optimal Profit: \$12,030</p>	<p><b>BARNACLES</b></p> <p><b>COST REDUCTION (\$):</b> CELL 4            Currently Spending: \$1,291            Optimal Spending Limit: \$612</p> <p><b>FACE-TO-FACE MEETINGS:</b>            Current Frequency: once every 2 months            Optimal Frequency: once every 10 months</p> <p><b>DIRECT MAIL/TELESALES:</b>            Current Interval: 8 days            Optimal Interval: 8 days</p> <p><b>PROFITS:</b>            Current Profit: \$10,913            Optimal Profit: \$28,354</p>
LOW CLV	LOW CURRENT SOW	HIGH CURRENT SOW

retailer spend the minimum on customers with low CLV scores and high current SOW. In the case of customers with high CLV scores and high current SOW, we recommended maintaining the current level of spending. Low CLV and low current SOW customers were encouraged to cross-buy from different product categories and purchase more-expensive products. We found that a 15% increase in cross-purchase of customers in the top two deciles resulted in a 20% increase in their CLV. In other words, future customer profitability increases if the customer purchases in more product categories from the retailer.

In the case of customers with high CLV and low current SOW, all firms—not just this particular clothing retailer—should stimulate interest among customers by cross-selling across different product categories and by promoting higher-margin purchases.

### 3. How Much Should We Spend to Retain, Grow, Acquire, and Win Back Customers?

CLV-based strategies, such as optimal resource allocation for a given buying level and up-selling and cross-selling to retained customers, can help firms ascertain how much they should spend on customer segments in order to strengthen them.

#### Optimal Resource Allocation

Most managers are faced with budgetary constraints when making decisions regarding where, how, and on whom they're going to spend their marketing dollars. It wouldn't be prudent to contact *all* the customers. So what's the solution?

The answer lies in evaluating customers based on their profitability and *not* on how easy it is to acquire and

retain them. The optimal allocation strategy evaluates customers based on their future profitability and recommends appropriate marketing initiatives. Once the decision about whom to contact has been made, the following questions arise:

1. How responsive are these customers to various channels of contact, and what is the optimal contact mix?
2. If a mix of communication strategies is used, how does the firm extract the most from every effort?

Generating the maximum “bang for the buck” depends significantly on factors such as the cost involved in communicating through a particular channel, the customer’s response when contacted through a particular channel, the frequency of communication, the customer contact levels across different channels, and the expected profit level from each customer.

After considering these issues, companies can segment their customers based on their current SOW and CLV. Through this, we can see that low SOW/low CLV customers are of little value, and, to avoid losses, managers should refrain from investing in them. For high CLV/low SOW customers, companies should adopt a conversion strategy and invest in up-selling and cross-selling. Resources should be shifted away from high SOW/low CLV customers to high CLV/low SOW customers. Finally, high SOW/high CLV customers should be the main targets for loyalty programs, and firms should invest heavily in these people to maintain their loyalty and maximize profitability.

When a B2B firm implemented our optimal resource allocation strategy, they unlocked the true potential of their high-value customers and realized 100% more revenue and 70% more profit. Figure 3 provides a comparison between the B2B firm’s original resource allocation strategy and our optimal strategy. As you can see, by carefully monitoring the customers’ purchase frequency, the interpurchase time (the average number of days between two purchases), and the contribution of each type of customer toward profits, managers can tailor their marketing initiatives in order to maximize CLV.

### **Up-selling and Cross-selling**

Companies need to exercise caution when cross-selling. We’ve found that not all profitable customers buy more products and not all customers who buy more products are profitable. The decision to cross-sell should also be evaluated in comparison with up-selling and not-selling decisions.

It’s essential for a company that sells multiple products

to know what product a particular customer is going to buy next. This information helps in developing the message and timing of the customized communication strategy. Firms can achieve this through a purchase sequence model. Ours addresses the following questions:

1. What is the sequence in which a customer is likely to buy multiple products or across multiple product categories?
2. When is the customer expected to buy each product?
3. What is the expected revenue from that customer?

Traditionally, a company estimates the purchase sequence by accounting for product choice and purchase timing *independently*. Using Bayesian estimation, however, we’ve developed an advanced model that accounts for product choice and purchase timing *together*. We discovered this from our research involving 20,000 customers of a high-tech B2B company. Using this model, the B2B firm was able to improve its profits by an average of \$1,600 per customer, representing an increase in ROI of 160%. We also found that the traditional model can accurately predict which products customers will buy, but it performs poorly in predicting the purchase timing.

By linking these CLV-based initiatives with continuous organizational improvement, companies can customize their marketing messages based on the customer’s value to the firm. As such, marketing costs will decrease, and overall profitability will increase. In a nutshell, CLV-based strategies can enable firms to achieve a sustainable competitive advantage and be successful in the marketplace. **SF**

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