

# MAXIMIZING ROI or Profitability

## Is one better than the other?

Company CFOs are charged with the task of getting the most out of company resources and often set out to maximize the company's return on investment (ROI) in order to achieve this goal. In order to maximize ROI, CFOs must consider various marketing investments, which include the costs required to communicate with the customers or prospects—such as for generating and sending marketing messages through e-mail or direct mail, contacting the customer via telephone, or sending sales representatives to visit the customer or prospect.

The traditional method for calculating ROI, using the ability of the company to generate revenue in any given year in relation to how much it costs to generate that revenue, is not always the best method to achieve an optimum level of firm performance. First, the traditional way of estimating revenue and profit tends to be based only on the short term (e.g., one year). Second, the forecasts of revenue are generated using data at the aggregate level. It may be better to consider information at the customer level,

**By V. Kumar and  
J. Andrew Petersen**

include both customer attitudes and behaviors, and consider a longer time period as parts of the equation to maximize ROI.

Why do this? Because there are no two customers that are alike and the same resources will not produce the same results for each customer. Many businesses are realizing this and are working to implement customer relationship management (CRM) systems to track these individual customers. However, most CRM systems are not customized for each company right out of the box. Companies need to understand that, in order to maximize their own effectiveness, they must customize their methods for getting the most out of this rich customer data they are collecting. The solution to this problem involves the use of marketing intelligence.

### **Marketing Intelligence**

With the ever-increasing ability to store enormous amounts of individual customer information, companies



## Executive Summary

**ROI is usually calculated in isolation by comparing a company's ability to generate revenue in any given year in relation to how much it costs to generate that revenue. However, this is not necessarily an optimal method for measuring and then maximizing ROI. Companies need to consider other factors that drive firm performance when considering ideal investment strategies. Additionally, companies must look at the relationship between profitability and ROI and decide how to manage each metric simultaneously.**

have been able to utilize marketing research as a method of gathering and storing this data. However, data collection and storage is just one of the many steps involved in the entire marketing process. Once a company has obtained the data it desires, that data must be transformed into strategic decisions that will help better maximize ROI.

Marketing intelligence is the process in which companies focus on the customer and industry data they have gathered and use it to generate a strategic marketing advantage. (The customer data revolves around both the attitudinal and behavioral components of the customer.) In business today, having all of the customer level data is not enough. There is a constant need to forecast what the market will bring and generate solid plans to always stay ahead of the competition.

In order to maximize the company's ROI, the managers of the company need to take a closer look at their own customer data and other outside industry data that helps to predict a customer's future value and decide how to manage different customers based on the value they're expected to return to the company. A company needs to leverage this information and develop strategies to maximize its gains from its current and future customers. It then needs a way to measure the customer's value to the firm and to create optimal marketing strategies to retain valued customers and acquire new ones.

### The Need for an Integrated Framework

Companies constantly need to stay ahead of their customers and their competition to maintain the ability to meet customer expectations, improve customer relations, and maximize ROI. Successful companies use marketing intelligence to build models integrating data collected from marketing research activities and data mined from internal customer databases that predict buying behaviors of customers and determine overall effect on ROI.

Initially, the ability to make successful marketing decisions with an end goal of maximizing ROI relies on the company's ability to produce useful measures of customer value. Knowing how much each customer is worth is crucial when a company decides which (if any) marketing communications should be initiated with that customer.

Once a company has predicted the values of all of its customers at the individual level, strategic marketing decisions can be made to achieve maximum ROI. These different strategies involve reaching the right customer at the right time with the right offer. So how does a company develop this model?

Exhibit 1 illustrates a framework for measuring customer values, making strategic decisions, and maximizing ROI. The first step in this process involves gathering and storing attitude and behavior data from their customers.

**Behavioral data.** Recent research has shown that customer behaviors in non-contractual settings significantly help companies predict the future values of each of their customers. The significant variables used in this model can vary based on the type of company, however. For example, a company with many different but related products might be most interested in using variables that look at the ability to cross-sell and up-sell to customers, while a company with highly unrelated products might be more interested in the average time in between purchases of a single product. The main categories of prediction variables include exchange characteristics (e.g., average inter-purchase time, depth of buying), observed heterogeneity or firm demographics (e.g., average income for a customer's geographic area or overall firm size), firm-initiated contacts, and customer-initiated contacts. However, while looking at customer behaviors offers a quality prediction for most customers, it might not be good enough. Combining it with a customer's attitude toward the firm, the brand or the product may add significant power to the predictive capability of the model.

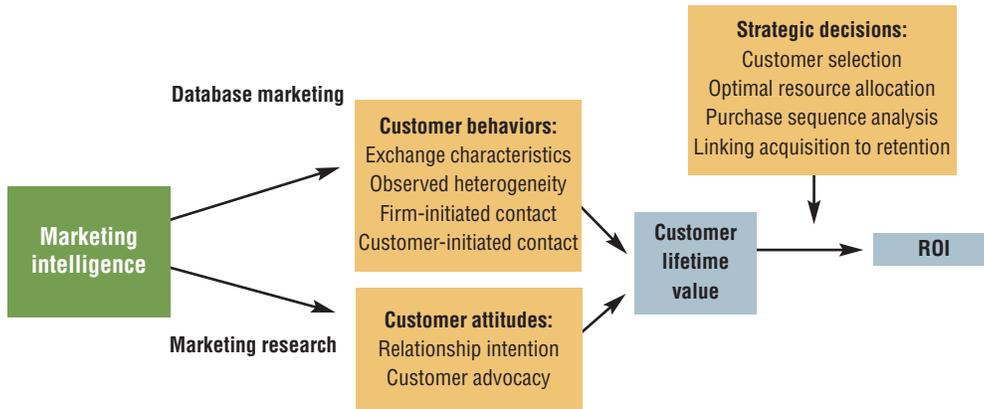
**Attitudinal data.** Additional research has shown that the way a customer thinks about your company, the level of satisfaction the customer has with the company, and the customer's willingness to spread positive word of mouth about your company is a good predictor of their value to the company. However, this measure of satisfaction and word of mouth cannot completely explain a customer's behavior by itself. There may be other barriers that block a customer with positive attitudes from purchasing your products or services (e.g., price, convenience, or contractual obligations). Additional measures of a customer's attitude toward a firm are needed to explain past behavior and predict future behavior. A 2003 article by V. Kumar, T.R. Bohling, and R. N. Ladda shows that knowing a customer's intention to build a relationship with your company can play a large role in their future value to the firm.

Armed with this customer-level attitude and behavior data, a company can now calculate each customer's expected future value to the firm and choose which of its current customers to initiate marketing communications with.

### Customer Selection

Selecting the right customers in your database is the first step to marketing success. But how do you choose which customers are your best customers? Some companies use various scoring methods to rank their customers, such as an RFM score (recency, frequency, and monetary value) or past customer value (PCV), which is net present value of the profit of past customer purchases. However, recent research and several

**Exhibit 1** Integrated framework to maximize ROI



successful implementations have shown that the customer lifetime value (CLV) metric is the best predictor of future customer values.

So why does this method outperform the current methods used by companies today? Unlike most scoring methods that look at past customer behavior to rank customers, the CLV method predicts the future likelihood of customer purchases and the profitability of those purchases. Simply put, the CLV metric is calculated by estimating the future probability of purchase and multiplying it by the discounted future profitability of that customer.

The ability of CLV to better estimate the expected ROI from customers over any other selection methods was shown in a 2003 study of a U.S. catalogue company by W. Reinartz and V. Kumar (“The Impact of Customer Relationship Characteristics on Profitable Lifetime Duration,” *Journal of Marketing*, Vol. 67, No. 1). Selected results of this study are shown in Exhibit 2.

The exhibit shows that, for the same investment amount for the top 30% of customers selected by each method, the lifetime value method gives a significantly better ROI for the company. So now that your company has the ability to select your most profitable customers from your database, how are you going to market to them?

**Optimal Resource Allocation**

Each customer is not interested in receiving the same amount or type of marketing communications, so marketing resources must be optimized across your profitable customers. Additionally, you don’t want to spend more money trying to communicate with a customer when it is unnecessary (or less money when it is necessary). Too much communication has been shown to be costly to generate and causes the customer to react negatively toward the communications. Too little communication with certain customers will leave some profit on the table, as outlined by R. Venkatesan and Kumar in a forthcoming *Journal of Marketing* article, currently titled “A Customer Lifetime Value Framework for Customer Selection and Optimal Resource Allocation Strategy.” Therefore, a company needs to streamline its communication process to fit the

cost constraints of its budget and, at the same time, reach out to those customers who will have the maximum impact on ROI.

A study of best practices implementing an individual CLV marketing strategy in both B2B and B2C settings was conducted by V. Kumar, G. Ramani, and T. Bohling in a 2004 *Journal of Interactive Marketing* article, “Customer Lifetime Value Approaches and Best Practice Applications.” The study includes an analysis of both CLV and share of wallet (SOW) techniques to show how optimizing resources across a small subset of customers

using the CLV method gives a 10% decrease in overall costs and a 6% increase in overall profits. Translating those results to the entire set of customers firm-wide would offer significant benefits in ROI and firm performance.

Within the same article, the authors present another study that looks at how to reallocate resources for customers who are both low and high value and who give both a low and high level of share of investment. For example, the financial services firm analyzed in this study used to meet face to face with each low-value and low-share-of-investment customer an average of once every six months, while the actual optimal number of face to face meetings should be on average once every 12 months. Using the optimal resource strategy, this firm can reduce time spent with less valuable customers and look to emphasize marketing resources on the customers that will actually produce a high ROI.

An additional study presented in the aforementioned Venkatesan and Kumar (2004) article shows that optimizing a business’s communication strategy increased overall profitability by 83% (up to \$44 million from \$24 million) and signifi-

**Exhibit 2** ROI for the top 30% of customers

	ROI (for a 30-month prediction period)	ROI (for an 18-month prediction period)
Lifetime Value*	6.15	3.15
Advanced RFM	3.92	1.38
Past Customer Value	4.34	1.80

\*This Lifetime Value metric is approximated by multiplying the probability the customer is active with the discounted future value of expected cash flows.

**Note:** Two additional cohorts of customers also produced similar results.

(Adapted from Reinartz and Kumar, 2003)

**Exhibit 3** Comparison between years

	Test group	Control group
Profit	12,080 (9,080)	6,912 (6,275)
Marketing spend	2,875 (3,625)	3,655 (3,580)
ROI	4.2 (2.5)	1.9 (1.8)

**Notes:** Last year's numbers are in parentheses. The test group includes customers selected using the purchase sequence model and the control group includes customers selected using the traditional firm contact strategy. The test group and control group firms were selected based on the matched pairs criteria (such as annual revenue, industry, firm size, etc.).

cantly increased ROI. However, it's also important to note that this increase in marketing success required an increase in the amount of money spent on communication, proving that decreasing marketing expenditures is not always a solution to increasing ROI and profitability.

Now that the company knows what types of communication to send, how does it know what products to offer and at what times?

### Purchase Sequence and Timing

Knowing which customers are your best customers and what types of marketing communications to send to them is a

good start. However, customers are going to want different products at different times and contribute different amounts of revenue from other customers. You don't want to initiate contact with them at an inappropriate time for a product they're not going to purchase anyway.

So how does a company answer these questions: In which product category is a customer expected to purchase? At what time is that customer expected to purchase? And what is the expected revenue from that customer?

A 2004 working paper by Kumar, Venkatesan, and Reinartz currently titled "Maximizing ROI: Knowing What to Sell When to Whom" shows that it's not only possible to determine what a customer is going to purchase next using a purchase timing model, but additionally at what time the customer will purchase and how much revenue a customer will contribute. The upside of knowing the purchasing sequence of your customers is twofold. First, marketing costs can be distributed correctly and efficiently among your active customers. Second, the effectiveness of the sales force reaching out to these customers will be greatly improved.

Does this model really work? The authors of this paper tested this theory on data from a B2B supplier. The test group included customers that the sales force were asked to contact based on the recommendation from the purchase sequence model. The control group included customers the sales force would choose to contact using their routine contact strategy. Communication costs involved direct contact to individual customers. Any mass marketing campaign costs were left out

because the cost would just be allocated evenly across all customers. Results of this study can be seen in Exhibit 3.

As this study shows, the purchase sequence model can decrease the cost of communication by predicting purchase timing and sequence of particular products, reduce the number of times you need to contact a customer because you know what products they are likely to buy, increase your company's total profitability, and dramatically increase your ROI. Due to efficient and timely communication patterns, the sales team is left with excess time and resources. Managers must then make decisions about how to allocate those unutilized resources within the firm.

### **Linking Acquisition to Retention**

In the past, many managers spent as much money as needed to retain as many customers as possible. This turns out not to be the optimal scenario. The previously listed marketing strategies show how a company can effectively determine the right amount of money to spend on the best customers. This implies that, once you have reached out to all of your profitable customers, you should not reach out to customers with negative lifetime values. A company needs to remember that each additional negative lifetime value customer that you spend marketing dollars on to retain will negatively affect your profitability and ROI measure.

So, to whom do you market next? The answer involves reaching back into the prospect pool and finding new customers or winning back old customers that will continue to increase your ROI. Now that you have modeled your own customers and predicted their value to your company, you can search for prospects or inactive customers that will have the same attitudes and behaviors as your high-value customers. Then you can use the resources that you had allocated to your unprofitable customers and seek out new customers that will add more value to your firm.

### **The Optimal Strategy?**

Using the framework laid out in this article, your company can build a model to predict what to expect from your profitable customers with the right marketing message at the right time. With the increasing push from shareholders to continually elevate your bottom line, it's important to keep your company ahead of its competition so it can properly leverage its strategic position in the market to maximize its ROI.

One of the strategies a firm might consider when trying to maximize ROI is increasing customer satisfaction across all customers; however, investing in improving customer satisfaction may or may not lead to increased ROI. While an argument could be made for investing in customer satisfaction with

# Sawtooth

## p/u

the expectation that satisfaction leads to loyalty, loyalty leads to revenue, and revenue leads to profitability, there is very little empirical evidence to support this notion. Thus, it is worth pursuing the connection between satisfaction and ROI to assess the contribution that improving satisfaction has on increasing in ROI in the future.

But, is maximizing ROI or profitability the optimal strategy?

First off, it is important to point out that maximizing ROI and maximizing profitability can produce two very different results. As articulated by Tim Ambler in his book *Marketing Metrics* (Prentice Hall, 2003), we also show in a simple example that optimal points of profitability and ROI are not the same.

Now, before your company quickly accepts maximum ROI as an optimal strategy instead of maximum profitability, it is important to realize there can be significant consequences for over or under spending on marketing within your company. In a recently published *Harvard Business Review* article, “Getting the Most Out of All Your Customers,” J.S. Thomas, W. Reinartz, and V. Kumar show that, once all marketing contact strategies were optimized based on maximizing profitability, deviations from those strategies either 25% above or below marketing expenditures on acquisition and retention could have a severe impact on profitability.

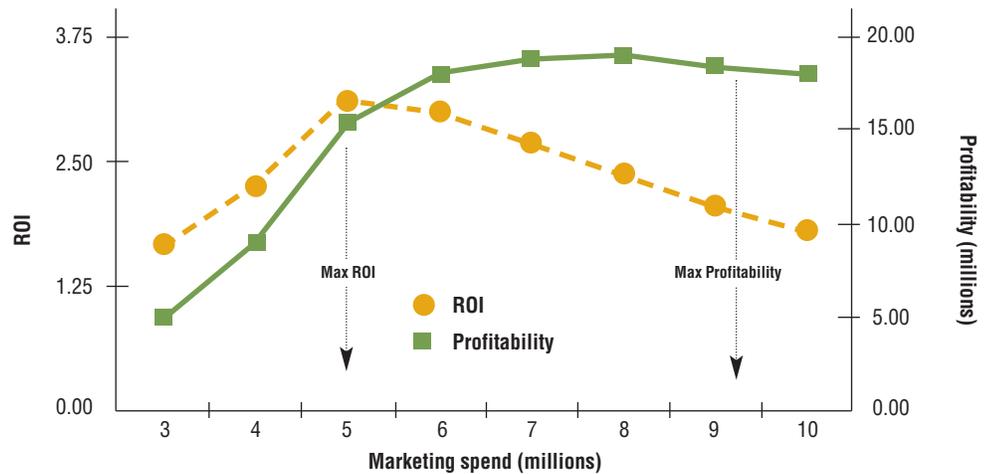
With a full perspective on the ability of individual customer data and CLV measures to accurately predict ROI and profitability, your company can now make more strategic decisions about getting the most out of your customers and resources. While, ROI was built into the framework in Exhibit 1, profitability can easily be put into its place by slightly altering the strategic decisions around the maximum profitability equation.

Managers should be careful before assuming their current system of maximizing ROI is going to be the best way to maximize profitability. In most situations, optimum levels of ROI and profitability are close in relationship to each other, but there can be situations where they are maximized at significantly different locations along the graph in Exhibit 4. We hope that this article has created enough curiosity concerning choices between ROI and profitability and that any future research would add more insights to this debate. ●

#### Additional Reading

Kumar, V., T. R. Bohling, and R. N. Ladda (2003), “Antecedents and Consequences of Relationship Intention: Implications for Transaction and Relationship Marketing,” *Industrial Marketing Management*, 32 (8), 667-676.

**Exhibit 4** ROI vs. profitability



ROI is maximized when the company spends \$5 million on marketing, while profitability is maximized when the company spends \$8 million on marketing.

Marketing Spend	Revenue	ROI	Profitability
3	8	1.67	5.00
4	13	2.25	9.00
5	20.5	3.10	15.50
6	24	3.00	18.00
7	25.8	2.69	18.80
8	27	2.38	19.00
9	27.5	2.06	18.50
10	28	1.80	18.00

Marketing spend, revenue, and profitability data are in millions  
 ROI is calculated by (Revenue – Spend)/Spend  
 Profitability is calculated by Revenue – Spend

Mittal, V. and W. A. Kamakura (2001), “Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Customer Characteristics,” *Journal of Marketing Research*, 38 (1), 131.

Reichheld, F. F. (2003), “The One Number You Need to Grow.” *Harvard Business Review*, 81 (12), 46.

Uncles, M. D., G. R. Dowling, and K. Hammond (2003), “Customer Loyalty and Customer Loyalty Programs,” *The Journal of Consumer Marketing*, 20 (4/5), 294-316.

V. Kumar (VK) is the ING chair professor in marketing and executive director, ING Center for Financial Services, School of Business, University of Connecticut. He may be reached at vk@business.uconn.edu. J. Andrew Petersen is a doctoral student in marketing at the school. He may be reached at apetersen@business.uconn.edu.

Copyright of Marketing Research is the property of American Marketing Association and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.