Managing Customer Value

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INTRODUCTION

In today’s rapidly-changing business environment, products and services are increasingly viewed as commodities. New information and communications technologies have made product and process innovations easier to copy. In addition, sophisticated product development methodologies and technologies have dramatically reduced the time it takes to bring a product to market. In many industries, products no longer provide a sustainable source of competitive advantage, and companies are increasingly emphasizing components of the value proposition that extend beyond the product.

Companies now widely recognize that to achieve and sustain competitive advantage, they must become more customer-focused. Many have changed their strategies, structures, and processes, leading to dramatic increases in customer satisfaction. Although these companies may understand much better how to provide value to their customers, they are far less effective in deriving value from these customers. A large and growing body of evidence indicates that most companies have great customer diversity, with some customers being highly profitable to the company and others being enormously unprofitable. The recognition of differences in customer profitability by senior financial managers and the use of available tools are critical.
to a firm’s ability to derive value from its customer investments.

Despite enormous variations in profitability, many companies continue unprofitable relationships with customers, often providing them with products and service levels identical to those received by the most profitable ones. Identifying profitable and unprofitable customers can allow companies to more efficiently allocate resources, maximize profitability, and ultimately increase market capitalization.

So why do managers continue to market to unprofitable customers? In most cases, it is lack of information—companies simply do not know who the unprofitable customers are. They do not have the knowledge and tools that would allow them to differentiate customers on the basis of profitability. Without this information, they are unable to develop strategies to direct marketing or manage costs accordingly.

Even companies highly sophisticated in customer research and management can insufficiently understand customer profitability. MGM Mirage Resorts, for example, had a very advanced system for tracking the gaming activity and profitability of its casino customers. Until recently, however, it was unable to match purchases of rooms, food, and other products with a customer’s gaming revenue and costs to obtain a complete picture of customer profits, even though non-gaming revenue had gradually grown to over half of all MGM’s revenue (Bellin et al., 2006).

Volvo has also discovered the value of customer profitability information. For years, Volvo used a sophisticated method for measuring customer satisfaction for its Swedish customers. Using this data, Volvo has built an extensive database that allows the company to examine relationships between products, services provided, and dimensions of customer satisfaction. As a result of a recent study, Volvo was able to match customer profits with other information in the database, allowing the company to use the satisfaction database to predict the future profitability of its customers. (Johnson and Gustafssen, 2000)

Harrah’s Entertainment has used decision analytics to gather very detailed data on its customers’ activities at its casinos. The data is cut into small segments that identify unique customer groups. Then Harrah’s develops targeted marketing strategies for each segment. This approach may be most responsible for Harrah’s position as the largest gaming company in the world (Johnson 2007).

But not all companies need a state-of-the-art database or analytics technology to improve customer profitability—fortunately, a practical understanding of customer profitability is now easily within reach. Many straightforward and powerful techniques are now available to all companies seeking to better understand and manage the profitability of their customers and segments. Thanks to advances in data management and communications, the information needed to continually sharpen profitability estimates is increasingly available.

In this guideline, we provide a comprehensive approach for measuring and managing customer value. This approach, which is called The Customer Value Management Cycle, is illustrated in Exhibit 1. It is designed to work in a cyclical manner, allowing companies just beginning to measure customer value (as well as those with well-developed profitability models) to gain insights that can help them enhance and sustain effective profitability management strategies.

OBJECTIVES AND TARGET AUDIENCE

This Guideline seeks to provide information useful to managers in a variety of functional areas across a broad range of companies and industries. Although the terms ‘company’, ‘corporation’ and ‘firm’ are used throughout, most of the information in this Guideline is also relevant for other organizations and governmental entities. Although most of these concepts can be used by not-for-profit, governmental, and for-profit entities, most examples come from the for-profit sector. All of these entities share goals of increasing value provided to customers and other organizational stakeholders, while reducing resources required to provide this value.

The overall purpose of this Guideline is to (a) enhance the reader’s ability to understand and analyze customer value, and (b) develop effective and sustainable methodologies and measures for profitability management and organizational success.

The general objectives of this Guideline are:

• to highlight the importance of understanding and responding to differences in the value of customer segments

• to illustrate important customer value concepts and components, including: customer profitability, segmentation, customer costs and margins, loyalty, retention, and customer lifetime value (CLV)
• to outline a comprehensive view of customer value that includes understanding, measuring, and improving customer-related profits across the lifetime of the customer relationship.

Specifically, the Guideline provides a systematic approach for addressing customer value issues that includes: customer segmentation, measuring profitability, estimating customer lifetime value, identifying additional sources of customer value, and managing to enhance customer profitability. It demonstrates how organizations can create more value for and derive increased value from the customer. The target audience for this Guideline encompasses a broad range of professionals who influence or manage customer-related corporate profitability. Professionals who may benefit directly from information presented here include:

• senior and top-level managers, as well as members of the Board of Directors, who seek to increase the market valuation of the firm through more effective customer management
• marketing managers who are responsible for maximizing overall customer value
• financial managers who are responsible for measuring, analyzing, and reporting on customer profitability
• sales and customer relationship managers, who acquire and use profitability information to enhance value provided to select segments
• marketing researchers and product planners, who can use customer knowledge to define problems and needs and identify solutions.

Other groups who may benefit indirectly from this Guideline are:

• other managers who are responsible for gathering and managing relevant information about customers and their activities
• supply chain, production, and other functional managers, who affect and are affected by customer preferences and behavior.

This guideline builds upon the earlier Management Accounting Guideline: Customer Profitability Analysis. Although the current Guideline is intended to function as a stand-alone document, the previous Guideline addressed some topics more thoroughly than is possible here. It (a) discussed how profitability is affected by the relationship between employees and customers, (b) explored the link between customer satisfaction and loyalty, and (c) provided detailed examples of how a number of companies used activity-based-costing information to improve customer value.

This Guideline also has some topics in common with Evaluating the Effectiveness of Internet Marketing, a Guideline that details how companies can define and measure investments in and returns from internet marketing. That Guideline may be a useful source for readers seeking to better understand the processes through which marketing investments generate customer assets,
and the mechanisms for realizing these assets as cash flows.

The approach described here builds upon and complements the previous Guidelines by making several additions to traditional activity-based approaches to customer costing. The Guideline identifies effective customer segmentation as a precursor to a sound ABC analysis, and explores a number of current segmentation approaches.

The analysis in this document incorporates recent developments in ABC, and extends beyond to include customer lifetime value, which expands both the time-frame and the scope of customer profitability analysis. This Guideline adds to lifetime value two other important sources of profitability contributed by customers: market knowledge and stakeholder influence. The profitability elements incorporated in this Guideline provide a more comprehensive picture of customer-provided value. Finally, this Guideline discusses in greater depth how managers can use information about customer value (a) to support a broad range of decisions, and (b) to enhance corporate wealth.

Customer value—the foundation of customer profitability

Before a company can effectively embark on the journey toward improving customer profitability, it must first develop a clear understanding of customer value. The term customer value refers to two distinct concepts: (a) the value the company provides to the customer, through its product and service offerings, brands, and relationships, and (b) the value the customer provides to the company in the form of profit streams, intellectual capital, and other customer assets. Traditionally, these two views have not been well integrated. In some companies, marketing holds a ‘value to the customer’ view while finance holds a ‘value to the company’ view, and the intersection between the two value directions is never explored. Yet, to allocate resources effectively, the two perspectives must be integrated in a manner that balances the value provided to the customer with the benefits received from that customer.

The Customer Value Management Cycle (CVMC) in Exhibit 1 forms the core component of this Guideline and provides a comprehensive approach for integrating these two forms of customer value. It provides companies with a method for differentiating customers (or segments), and determining which provide the greatest value to the firm. In addition, it shows how this knowledge can be used to focus company resources toward providing maximum benefits to these valuable customers.

The Customer Value Management Cycle

Exhibit 1 presents a comprehensive model for measuring and managing customer value—it has five recurring steps. The steps in the cycle are defined briefly below, then discussed in detail in the remainder of this Guideline.

- Manage customer segmentation—to begin the value cycle, customer segments are identified. Initially, companies use traditional segments based on demographics or behaviors. As the profitability cycle matures, customers are segmented based on the profit they contribute to the firm, and how the firm provides value to the segments.
- Measure customer margins—for each identified segment, companies use a variety of techniques such as activity-based costing systems to estimate the costs of serving these customers. Costs include the cost of goods or services as well as other customer-driven costs attributable to segments, such as marketing, R&D, and channel-related costs. Costs in each period under study are compared to revenues, to determine period margins.
- Measure customer lifetime value—companies combine information about margins with projections about the duration and strength of the relationship to estimate customer margins across the lifetime of the relationship. These margins are discounted to the present to calculate the value of the customer.
- Measure customer impact—the customer’s impact on corporate profitability can extend beyond value contributed through the revenue stream it provides. Customer referrals and other behavior that influences the perception and actions of stakeholders can affect value. Additionally, customers can contribute knowledge that allows companies to enhance product and service offerings or improve marketing and other processes.
- Manage for improved customer profitability—armed with an understanding of each segment’s profitability, the firm can decide a) how to best manage each segment to enhance its profitability, b) how to manage other aspects of the firm to serve profitable and desirable segments in the future (including reporting/metrics, incentives, firm structure), and c) how to use knowledge...
about customer profitability as a basis for product, process, and business model innovation. Thus, customer profitability includes customer margins, customer lifetime value, and the additional customer impacts that contribute to corporate long-term value.

**Customer value from the customer’s perspective**

Exhibit 2 shows the basic features of the first definition of customer value—value provided to the customer as viewed from the customer’s perspective. This view of value is often referred to as the firm’s customer’s value proposition. In this model, customer value consists of three components: the value provided by the products and services, the value provided by the brand, and the value provided by the relationship with the firm.

The first and most concrete component is the value provided by the unique set of products and services the company provides to its customers. This component includes attributes of the product or service, such as its functionality and quality, along with attributes relating to the customer’s cost to acquire and use the product. These attributes can be combined in many ways to provide value to the customer. For example, some would say that Intuit provides low prices and convenience, SAP provides integrated, customized enterprise software solutions, and Intel provides high performance fueled by continuous innovation.

The second component is the value provided by the brand. The brand refers to the image and reputational aspects of a company and its products or services. Contributors to the brand include the logos, symbols, slogans, signs, and images associated with a company or its products (e.g., Nike’s famous ‘Swoosh’). These artifacts generate images about (a) the personality of the company or products, (b) the situations in which the brand is used and the people who use it, and (c) the relationship between the company and the customer. These images can provide value to customers in the form of feelings and beliefs such as well-being, security, pride, or competence. Thus, through their knowledge and experience of the brand, customers can receive value from the meaning and perceptions these brand associations generate. (Keller, 2000)

The third component, value provided by the ongoing relationship, complements and builds upon the other two, and is an increasingly important factor in the customer value proposition for many companies. A company’s relationship with a customer extends beyond economic transactions. It also encompasses all forms of interaction during the entire process through which the customer (a) becomes aware of and acquires information about the product, (b) purchases and uses the product, and (c) receives post-sales services from the company. As interaction with the customer
continues, habits are reinforced, and the brand becomes more significant. Customers receive value from ongoing relationships through increased levels of trust, knowledge, and convenience. Companies can add to this value and strengthen the relationship by providing additional benefits such as special perquisites, promotions, or gifts earned through loyalty programs. Developments in communication and information technology are dramatically changing the customer relationship. Companies like Amazon.com use knowledge obtained through customer interaction to provide customers with a customized, information-rich experience that creates a strong and valuable relationship for many of its customers.

Many approaches can assess the customers’ perceptions of value received. Through an analysis and approach called “value innovation”, companies can identify core elements of their value proposition, and then gather information that allows them to compare their performance with their competitors on these elements. For example, Barnes & Noble used this approach to assess customer value. The company determined what attributes customers valued, such as price, knowledgeable staff, and selection of books. They then asked the customer to rate the company based on the relative level of value provided to customers on each dimension. For a current discussion on the concept of value innovation, see Kim and Mauborgne’s (2005) work entitled Blue Ocean Strategy.

Companies like Barnes & Noble can thus combine information about relative value provided, with internal knowledge about organizational capabilities. They use this combined understanding of the attributes customers want and the attributes the company can deliver; to develop strategies that allow them to use their strengths to deliver greater value to customers. Barnes & Noble increased customer value when it shifted its focus away from books and toward creation of a pleasant aesthetic and intellectual experience for its customers. (Kim and Mauborgne, 1999)

**Customer value from the company’s perspective**

Although the first definition of customer value focuses on value companies provide to their customers, the second focuses on the value companies receive from those customers. Put simply, customers that provide revenues that exceed the company’s operating costs and costs of capital add value to the firm. With the exception of companies that service a small number of dissimilar customers or accounts, most companies combine customers with similar attributes or behaviors into customer segments for purposes of analysis. The remainder of this discussion uses the term “customer” to refer either to an individual customer account or to a customer segment. A discussion of customer segmentation practices can be found later in this Guideline.

A customer’s value to the company is derived from three sources: customer margins, lifetime value, and customer impact. A brief introduction to these components is provided as a starting point for improving the management of customer value. Much greater detail is provided through the remainder of the Guideline about an approach for better defining and measuring customer value.

A) **Customer margins** are used by many companies to evaluate the profitability of a customer or segment. Customer margins are usually calculated for one period at a time. The relative profitability of customers is generally evaluated by comparing single-period profits from

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### Exhibit 3: Three Components of Customer Value from the Company’s Perspective

<table>
<thead>
<tr>
<th>Component</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer margins</strong></td>
<td>Profit margins received from particular customers/segments during a single period:</td>
</tr>
<tr>
<td></td>
<td>• Revenue generated by customer purchases, less costs of the products and services purchased</td>
</tr>
<tr>
<td></td>
<td>• Includes marketing, selling, and administrative costs associated with purchases</td>
</tr>
<tr>
<td><strong>Customer lifetime value</strong></td>
<td>Present value of anticipated future profits from customers:</td>
</tr>
<tr>
<td></td>
<td>• Includes recurring revenues and costs as well as other long-term costs and benefits</td>
</tr>
<tr>
<td></td>
<td>• Includes acquisition and retention costs as well as additional benefits from purchases</td>
</tr>
<tr>
<td><strong>Customer impact</strong></td>
<td>Value of customer’s impact on firm beyond value from purchases:</td>
</tr>
<tr>
<td></td>
<td>• Includes customer’s influence on stakeholders through referrals, etc.</td>
</tr>
<tr>
<td></td>
<td>• Includes intellectual capital gained through direct input or historical transactions</td>
</tr>
</tbody>
</table>
forms the core of the lifetime value calculation. To this are added additional costs and benefits associated with long-term customer relationships. The costs to acquire the customer and maintain the relationship over time are often included, as are long-term benefits such as increased sales, higher margins, and lower costs to serve the customer over time.

To estimate lifetime value, companies make judgments about the duration of the company’s relationship with the customer, including likelihood, frequency, and amount of expected additional purchases. This requires assessing the strength of the relationship and the relative attractiveness of competing products and services. In addition, a discount rate (usually defined as the firm’s cost of capital or some other targeted hurdle rate) is used to determine the present value of these future income streams.

Lifetime value estimates are particularly useful to companies with high customer acquisition costs or large variations in purchase patterns and retention rates across customers.

C) The final component of a customer’s value to the company comes from **customer impact**. This component incorporates all sources of customer value that are not included in standard profitability and lifetime value calculations. This is an extension and expansion of the traditional customer lifetime value analysis. The two most important elements of this component are: the value generated by other stakeholders influenced by the customer, and the intellectual capital or knowledge gained through interaction with the customer.

**Commonly, stakeholder influence is not addressed in lifetime value models.** Companies often ignore this critical component of the value of customer referrals. Customers can affect the behavior of other customers and other stakeholders when they share positive or negative information about their experiences with the company, either in person, through letters to publications, complaints, or via online forums. In some cases, a customer’s behavior alone can influence other stakeholders. For example, when a highly influential customer is known to patronize a company, other customers or stakeholders may develop positive impressions that result in profitable interactions. We include these referrals here as customer impact.

Knowledge gained through passive recording of customer purchases, and other interactions such as online search histories and focus groups, can provide the firm with valuable information that can be used to better understand and serve
current and future customers. Additional knowledge can be gathered from customers that actively share information when they participate in loyalty programs, respond to surveys, or post comments in forums. Like other forms of market research, this knowledge can be used for a variety of purposes, such as identifying potential customers, designing service enhancements, or pre-testing product innovations.

Both of these elements contribute to the customer asset base and profitability of the firm, but are difficult to measure. Their measurement requires data that is difficult to capture, and relies on predictions about market conditions and the future behaviors of customers and other stakeholders. Although estimating all three components of customer value can be challenging, it is definitely valuable for most firms. Customer value estimates can and do drive changes that dramatically enhance both the profitability of a company’s customers and the value delivered to those customers.

I. MANAGE CUSTOMER SEGMENTATION

Customer segmentation refers to the process of dividing customers into groups for decision-making purposes. Segments are often determined on the basis of customer similarities, such as personal characteristics, preferences, or behaviors. Segmentation allows the company to provide differential advertising or value propositions to different customer groups.

Companies naturally segment customers in order to better serve their needs. It is also important to note that how the company segments its customers can also significantly affect company profitability. The remainder of this section provides the reader with information on how to effectively analyze and manage the profitability of its customers and segments. To maximize the value of its customers, it is imperative that a company identifies and manages this important element of customer value.

As outlined in Exhibit 1 above, the first step in the customer value management cycle is managing customer segmentation. To understand and effectively manage customer profitability requires identification of relevant customer segments. As the exhibit shows, customers are segmented at the beginning of the cycle. Segments are continually re-defined as the process repeats and customer understanding is refined.

For many companies, segments support marketing activity; for example, customers can be grouped based on marketing-related characteristics such as expected responses to advertisements or expected purchasing behavior. As firms move toward rigorous measurement and analysis of customer profitability, they may refine segments, or create new segmentation structures. Ideally, these structures will accommodate both customer- and company-related aspects of customer value. Such structures enhance the firm’s ability (a) to provide excellent service in areas that matter most to the customer, such as price, support, and product innovation with minimum costs, and (b) to develop strategies to capitalize on profitability differentials.

Segmentation Basics

The appropriate level of segmentation varies according to (a) the purposes for which segmentation structures will be used and (b) cost and profitability variations between customers within segments. At Wachovia Bank, each business unit once had its own segmentation structure. Wachovia integrated these structures by developing an enterprise-wide segmentation structure that included multiple levels of segmentation. The result of their efforts to develop a consistent view of the customer across the enterprise is shown in Exhibit 4. (CAM-I, 2006)

Segmentation depends upon the characteristics of the client base and the homogeneity of the clients. For example, an automotive electronics manufacturer may have a small number of diverse
MANAGING CUSTOMER VALUE

customers and treat each individual customer as a segment. A cleaning service company may have thousands of similar customers that could be divided into residential and corporate customer segments. It could further analyze sub-segments such as size of space being cleaned, frequency of cleaning, and different types of corporate customers. This analysis can lead to (a) a better understanding of both customer needs and profitability, and (b) relevant managerial actions to improve success.

It is also important to include potential customers into the segmentation strategy. As companies make decisions about products and marketing strategies, they focus not only on markets they currently serve, but also on markets they want to serve. Including potential future customers allows a company to predict how well the company can meet the needs of these customers, and how the company can manage them in the manner most profitable to the company over the long term.

Current Approaches to Segmentation

Currently, there are two basic approaches to customer segmentation (Sarvary and Elberse, 2006). One approach segments customers based on their observable characteristics, such as customer demographics like age, geographic area, or income level. This is known as demographic segmentation, and is the most basic form of customer segmentation. Marketers who use demographic information to segment the market generally assume that customers with similar demographic characteristics would share product and service preferences and behaviors. Advertisers often target customers based on demographics for the same reason, or because marketing to demographic segments is relatively uncomplicated. However, for many products and services, demographic characteristics haven’t been useful in predicting customer behavior. The reason—the characteristics are not fully representative of buying behavior, and an alternative approach is more helpful.

The second approach segments customers based on their needs and behaviors. This is known as psychographic segmentation, and builds upon demographic segmentation by including criteria that further categorizes a particular group of customers. Segmentation based on psychographic and lifestyle characteristics includes criteria such as attitudes and interests, values, and social roles.

The psychographics approach outlined above assumes that a customer’s choices and behavior are related to the customer’s habits and routines. Electronics retailer Best Buy has classified its five most profitable groups as affluent professional males, young entertainment enthusiasts, busy moms, families, and small businesses. By identifying its five most profitable segments, Best Buy has been able to tailor its marketing and in-store environments towards these psychographic and lifestyle-related groups (Johnson, 2006).

US-based retailing giant Wal-Mart has also taken this approach, classifying the bulk of its customers into three segments:

a) “brand aspirationals” - low income customers who are obsessed with brand names
b) “price sensitive affluents” – wealthier shoppers who want bargains
c) “value price shoppers” – customers who are focused on the low prices and cannot afford more (Barbaro, 2007)

Despite the success that can be realized by using the psychographic approach to segmentation, some believe that psychographics do not fully predict what customers are likely to purchase in many circumstances (Yankelovich and Meer, 2006). They suggest that useful segments should be based on customer buying behavior, a segmentation approach that has been used for decades. It is widely available as purchase behavior that is increasingly stored in databases, and accessible via analytics packages. This approach to segmentation has the added benefit of integrating the impact of buying behavior with the company’s revenue, allowing the firm to make more informed decisions on how to manage different customer segments.

Customer segmentation based on buying behavior represents the most effective of current segmentation approaches used today. Despite the fact that it goes above and beyond both demographic and psychographics approaches, customer segmentation based on buying behavior exclusively looks at the impact company’s segments have on revenue, and not the full impact that a company’s segments have on overall profit.

A fourth approach to customer segmentation is known as analytic segmentation, which integrates criteria such as cost into the value calculation of a company’s customer segments. In effect, analytic segmentation provides the firm with an even more accurate picture of customer profitability and buying behavior. This, along with psychographic and demographic characteristics, allows companies to more effectively target their most profitable customers. Analytic segmentation attempts to
identify benefits sought by customers by examining product performance expectations, brand perceptions, and satisfaction. Similarly, this approach examines the same variables that segmentation based on buying behavior provides, such as product usage patterns and customer decision processes.

BOC, a UK-based supplier of industrial and medical gases, now part of Linde Group, utilizes this approach of segmentation. The company’s strategy includes identifying the distinct requirements of its customers, such as value placed on service and/or the desire to obtain the lowest price. After identifying its customers’ requirements, BOC is able to adapt its business model to maximize the operating performance from serving the requirements, reducing cost, and increasing customer value from the customer’s perspective (Oliver et al 2003).

This is also true for the planning strategies of the American industrial gas market. Air Products & Chemicals seeks out customers who need high levels of technical assistance for their applications (e.g., liquid nitrogen freezing of hamburgers or oxygen enhancement of blast furnaces) where they can charge a high premium price. They spend few resources competing in the area of low-margin commodities such as argon and oxygen used for welding.

Many variations of these approaches have been developed. For example, Gallardo’s Salsas and Sauces believes that its customers make purchase decisions based on the ‘jobs’ they need to perform rather than product attributes, and successfully segmented its customers on the basis of jobs (Christensen, 2005). Gallardo’s sought to expand in Mexico, and conducted interviews with clients as a basis to explore the jobs their customers were hoping to fill.

Exhibit 5: Gallardo Jobs to Perform

<table>
<thead>
<tr>
<th>Jobs</th>
<th>Market size</th>
<th>Product Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make it easier</td>
<td>35%</td>
<td>Reduce challenge, improve result</td>
</tr>
<tr>
<td>Express my feelings</td>
<td>35%</td>
<td>Engage me, enhance results</td>
</tr>
<tr>
<td>Recognize me</td>
<td>9%</td>
<td>Allow me to improve special dishes</td>
</tr>
<tr>
<td>Prove myself</td>
<td>4%</td>
<td>Ensure a perfect result</td>
</tr>
<tr>
<td>Work smarter</td>
<td>6%</td>
<td>Allow for efficiency</td>
</tr>
<tr>
<td>Phone it in</td>
<td>11%</td>
<td>Provide cooking work for me</td>
</tr>
</tbody>
</table>

Analysis of interview data revealed that women used the salsas and products to accomplish several jobs. Some wanted to reduce the demands of cooking, but wanted to participate in the process and create excellent meals. Others were less concerned about the quality of the outcome, and sought to maximize efficiency. The company used these categories to refine products and services to support these jobs. For example, the company hired a food scientist to create sauces that required more stirring action, creating a creamier, lumpier texture that enhanced the customer’s feelings of expressing care for the family.

Adding Profitability to Segmentation Structures

Developing an optimal segmentation strategy requires a coherent evaluation of customer value, as discussed above: (a) the value received by the customer in the form of product and services, brands, and relationships, and (b) the value received by the company in the form of current profits, lifetime value, and impact. The following exhibits demonstrate the importance of including customer profitability in the firm’s segmentation strategy.

Exhibit 6 categorizes customers based on the value they receive from the company. As discussed above, most segmentation strategies categorize customers using variables relating to how well these customers have been or could be served by the company.

Exhibit 6: Traditional customer categories

| Current customers receiving insufficient value | Category 1 INVEST improve value proposition |
| Current customers receiving high value      | Category 2 RETAIN continue high service     |
| Potential target customers who could receive high value | Category 3 ACQUIRE target these customers |

Following this categorization, the firm would likely take actions similar to those described in the matrix. For categories such as Category 1 that the company is not currently serving effectively, the company could make investments to enhance the value provided to these customers. For example, for this category, the company could invest in desired product or service enhancements, it could
invest in brand-based advertising, or it could invest in loyalty programs to increase the value received by these customers. For customers currently receiving high value, as in Category 2, the company would continue investing resources (a) to maintain and enhance the high levels of value currently provided, and (b) to sustain the company’s relationship with these customers. For categories like Category 3, which include non-customers that the company could potentially serve well, the company is likely to target these categories by developing products and services and engaging in marketing activities to attract these customers.

Although these strategies might be very effective in delivering increased value to customers, they could, at the same time, be disastrous in their effects on the overall company profitability. Without analysis, the company would not know whether the most satisfied and loyal customers generate the most profit for the company In fact, the opposite might be true. For example, customers receiving very high levels of customized service might be draining corporate resources and degrading profits. Each year, the giant online bank ING Direct USA dismisses over 3,500 account holders who incur too many costs for the company through activities such as calling customer service too often. This effectively keeps costs low and allows the company to offer low rates to customers who understand the bank’s minimalist philosophy (McGregor, 2006b).

Exhibit 7 shows the segmentation structure above as it might be enhanced by adding a profitability component to the segmentation strategy. Adding profitability can lead to significant changes in the strategies pursued in serving categories and customers within those categories.

In this example, the company would change its strategy for dealing with unprofitable customers in Category 4, and rather than investing gratuitous resources in satisfying these customers, it would discontinue allocating extra resources to these customers. Identifying unprofitable customers in Category 6 could result in similar actions. The company might target resources only toward those with potential to become profitable customers, and avoid investing resources in attracting unprofitable ones. Category 5 is somewhat more complicated. This group might be subdivided into two categories—one that delivers profits and warrants maintenance of high service levels, and another that is currently unprofitable and warrants a different strategy. For the newly created Category 4 customers, the company might pursue strategies to enhance profitability, such as reducing service or increasing prices. The actions outlined in this exhibit are examples of how company strategy may change after understanding customer profitability.

2. MEASURE CUSTOMER MARGINS

Although almost all companies have carefully-designed processes for assessing the profitability of their products, most are far behind in assessing the profitability of their customers. Management accounting systems are generally designed for companies who focus their efforts on delivering quality products and services. In recent years, however, companies have shifted emphasis away from products and, instead, have focused more heavily on delivering value to customers through products, brands, and relationships. But even in many highly customer-centric businesses, accounting systems are not often designed or implemented to support effective management of customer value.

Exhibit 7: Profitability-oriented customer categories

<table>
<thead>
<tr>
<th>Current customers receiving insufficient value</th>
<th>Insufficient value to company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current customers receiving high value</td>
<td>1 INVEST improve value proposition</td>
</tr>
<tr>
<td>Potential target customers that could receive high value</td>
<td>2 RETAIN continue high service</td>
</tr>
<tr>
<td></td>
<td>3 ACQUIRE target these customers</td>
</tr>
</tbody>
</table>
Nonetheless, understanding the profitability of individual segments and customers is critical to corporate profitability. Exhibit 8, adapted from Epstein (2000) depicts the well-known “whale curve”. To draw this curve, a firm arranges its customers from most to least profitable, and then plots the cumulative profitability of these customers. Many companies that have developed processes to measure profitability for the first time have reported results similar to those shown in the diagram. They find that some customers are highly profitable, some are moderately profitable, and some are unprofitable and actually reduce the total profits available to the company.

The curve shown above shows a portion of customers on the far right as unprofitable, and a larger segment of clients on the left as very or moderately profitable. Some believe that the 80-20 rule can be applied to customers, which suggests that 20% of the customers are responsible for 80% of the profits. However, results for many companies have been far more extreme.

For example, at Toronto-based Royal Bank of Canada, 17% of customers account for 93% of the bank’s profits. All of the remaining customers provide only small levels of profit or generate losses for the company. So, instead of the 80-20 rule that is often used, some have suggested that 20% of the customers are generating 150% of the profits, with the remaining customers adding little or generating losses that draw profits back down to 100%. Thus, the 80-20 rule when applied to customer profitability may be too conservative. (Selden and Colwin, 2003)

Profitability studies like this refer to profit margins calculated with single-period models rather than lifetime value calculations. Single-period differentials are compounded over the lifetime of the customer relationship, resulting in even greater variations between customers. Clearly, to enhance value from its customer base, a company must develop the capacity to measure the profitability of its customers so that it can develop appropriate strategies for effective profit management. In an extensive segmentation survey of its customers, Canada’s Toronto Dominion Bank linked qualities attributed with customer satisfaction to an increase in profitability. They found, for example, that each 1% increase in what is perceived as “comfortable banking” led to a 1.7% increase in customer satisfaction, which in turn led to a .4% increase in the profitability of the branch. Toronto Dominion’s strategy of identifying which elements of service needed further investment, and which ones did not, allowed the bank to increase customer profitability effectively (Campbell, 2006).

The first step in measuring the value provided by customers is to measure customer profit margins. This can be done at three levels of sophistication. At a minimum, companies should capture the relative amounts of revenue attributable to each customer segment. Revenue provides the foundation for profitability and is an important indicator of the current and future interest in and impact of each segment.

Of course, to assess relative profitability, companies must measure profit margins, which require assignment of costs to customers. Today, much available software allows automatic assignment of product costs, and in most companies, information about the relative margins of customers and segments is widely available.

As might be expected, the costs driven by a customer or segment extend far beyond the costs of the products they purchase. Service and
support requirements can vary significantly among customer groups. For example, Kemps LLC, a large full-line dairy headquartered in Minneapolis, found that one of its customers regularly ordered in small quantities and required just-in-time delivery. Other customers regularly over-ordered and returned products. Even when customers like these purchased items and quantities similar to other customers and the revenue stream was similar, the costs to serve them were higher, and the profits they provided were lower than those of comparable customers. (Kaplan and Anderson, 2004) Although the employees responsible for serving customers are often well aware of large differences in the costs and effort required to serve customers, this knowledge is often not supported by management accounting systems, making it difficult to analyze and manage these different customers effectively for increased profitability.

**Assigning non-product costs**

Assigning non-product costs allows measurement of customer profitability through systematically measuring customer-related costs and assigning them to the responsible customers. Many companies that formerly attempted to implement comprehensive non-product costing systems found them to be costly and complicated. However, the system is increasingly supported by standardized modules embedded in enterprise accounting software. One popular way to assign non-product costs is through activity-based costing, or ABC. Other approaches are also commonly used. In addition, simplifying techniques, such as time-based ABC (Kaplan and Anderson, 2004) have been developed to make the popular ABC implementation more accessible and valuable for many firms.

Activity-based customer costing (a) recognizes that costs required to serve customers extend beyond direct costs, and (b) provides a method for identifying and assigning indirect costs to the specific segments or customers responsible for them. Refining the estimates of these costs is an iterative process. Managers should expect to continually improve their estimates and understanding of customer costs as time progresses. Companies can begin calculating customer costs by identifying and categorizing their non-product costs. One way to identify cost categories and the costs they might include follows:

- **Order-level costs** are costs associated with order placement and processing. These costs include order entry, picking inventory, delivery, and billing costs.
- **Customer-level costs** are costs associated with individual customers or segments. They include costs such as acquisition costs, advertising and promotions, selling, sales returns, responding to inquiries, relationship management, and managing receivables.
- **Channel-level costs** are associated with distribution channels. They include fixed locations, delivery equipment, information technology, and marketing costs.
- **Market-level costs** benefit all channels. These costs include general research and development, branding and other general marketing, market research, and other marketing functions.
- **Enterprise-level costs** are high-level organizational costs. They include administrative costs such as administrative salaries, facilities, and financing costs. (O’Guin and Rebischke, 2002)

Certainly, activity-based product costing can also be used to better estimate product costs as well.

**Exhibit 9: Customer profitability based on product costs**

<table>
<thead>
<tr>
<th>Customer</th>
<th>Revenue</th>
<th>Profit</th>
<th>Product costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Detailed guidance on using ABC to calculate both product and customer costs is widely available in cost accounting textbooks and trade publications, but is beyond the scope of this Guideline.

To demonstrate the value and process of assigning customer-related costs, consider a simple example of a company with three customers, A, B, and C. Assuming that each customer purchased $160,000 of products, which cost the company $100,000 to produce, the gross profit of the customers would be identical, at $60,000. Exhibit 9, which will be contrasted with an ABC version of profitability below, depicts the profitability of these customers when only product costs are assigned.

Exhibit 10 illustrates the non-product costs for this company and uses ABC to apportion costs by customer. Each functional cost is then attributed to the activity that drives the cost. For example, the primary activity of the sales function is making sales calls. In this case, the cost for this function was $16,000. During this period, sales personnel made 400 sales calls, resulting in a cost of $40 per call. Costs of other activity units are calculated in a similar manner.

After the cost per activity has been determined, costs can be assigned to customers based on the units of activity for which they are responsible. Exhibit 11 shows the assignment of the non-product costs to the customers based on their usage of the activity.
In Exhibit 12, customer A has the lowest non-product costs because this customer required fewer cost-consuming activities than the other customers. Combining the non-product costs above with the sales data described earlier results in the following allocation of costs:

Assignment of non-product costs to customers changes the profitability picture dramatically. Although the customers were equally profitable in terms of gross profit generated, they now show very different profitability pictures. Exhibit 13 presents a graphical depiction of customer profits.

### Exhibit 12: Profitability of Three Customers

<table>
<thead>
<tr>
<th></th>
<th>Customer A</th>
<th>Customer B</th>
<th>Customer C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$160,000</td>
<td>$160,000</td>
<td>$160,000</td>
</tr>
<tr>
<td>Product costs</td>
<td>(100,000)</td>
<td>(100,000)</td>
<td>(100,000)</td>
</tr>
<tr>
<td>Non-product costs</td>
<td>(38,000)</td>
<td>(49,200)</td>
<td>(62,800)</td>
</tr>
<tr>
<td>Profit</td>
<td>$22,000</td>
<td>$10,800</td>
<td>($2,800)</td>
</tr>
</tbody>
</table>

### Exhibit 13: Customer profitability with assignment of non-product costs

After assigning the full range of customer-driven costs to the customers, managers can begin to develop strategies for improving customer profitability. For example, the data show that customer B had relatively high order-entry and warehouse costs due to the high number of orders placed by this customer. To reduce these costs, the company might encourage Customer B to consolidate orders, or it might establish minimum order quantities. Customer C is currently driving costs that exceed revenue. In response, the company might introduce charges for excess deliveries or service calls, or take other action to reduce demand for these activities. In both cases costs can only be reduced if the resources deployed for these activities no longer performed are eliminated. Additional strategies for improving customer profitability will be discussed later in this Guideline.

If non-product costs are not assigned, the three customers might receive similar revenue-related benefits, such as pricing and discounts, promotions, and pre-sales support. Providing benefits to unprofitable customers can result in returns on marketing investments far lower than might be realized if resources were reallocated to profitable customers.
3. MEASURE CUSTOMER LIFETIME VALUE

“Customer lifetime value” (CLV) introduces a new dimension to understanding the value a customer provides to the company. Margin-based profitability calculations focus on the profits already realized as a result of customer purchases and activity consumption. CLV takes a very different approach. It treats customers as valuable corporate assets. Like other assets, customers produce income flows that are realized in the current period. In addition, these assets can be expected to produce additional income to the company in future periods.

The lifetime value of the customer reflects the present value of all future flows associated with the customer. Companies that use CLV recognize that a customer’s profitability in one period isn’t predictive of profitability in other periods, since revenues and costs can vary significantly over time. Thus, CLV values customers on the basis of their expected future income-generating potential, rather than solely on their past behavior.

Exhibit 14 (Cokins, 2003) provides a diagram of CLV that illustrates several important assumptions underlying lifetime value. In the diagram, the relationship with a customer begins when the company invests money to acquire the customer. Acquiring new customers is usually costly, and results in losses in the first transaction period. Over time, acquisition costs and other early investments in the customer relationship can be recovered as the relationship matures and accumulated profits increase.

After being acquired, the customer begins to generate revenues for the company. As the relationship matures, the customer’s sales volume may grow and the company accumulates profits. This accumulation should accelerate over time for two reasons. First, the cost to serve the customer may represent a decreased proportion of revenues. The customer’s knowledge of the company and its products, together with increasing trust, may lead to reductions in promotion, training, and relationship maintenance costs. Second, as the relationship matures, the customer may be more likely to respond to cross-selling or up-selling initiatives. This increases revenue and, if the products purchased are more profitable, also increases margins.

By expanding the notion of profitability to incorporate profits over the entire lifetime of the customer relationship, marketers have significantly enhanced their ability to effectively manage customers for enhanced profitability. For example, CLV calculations allow the company to differentiate customers who made one-time purchases and show profitability in one period.
only from those who have established a relationship with the company over time and have the potential to generate higher long-run profits. Strategies for using CLV to increase customer value are discussed in a later section.

Many different methods can be used to calculate CLV. These calculations can be made in a way that makes CLV appear complex, but it is not. Simply put, CLV is the present value of profits over the lifetime of the customer or segment. Although the specific formulations vary, CLV calculations all share three essential components: profits, retention rate, and discount rate. In its most simple form, the formula is as follows:

\[
CLV = \sum \left( \text{profit}_t \times \text{retention rate}_t \times \text{discount factor}_t \right)
\]

\(CLV\) is the sum of profits earned in time periods 1 through \(n\), where \(n\) represents the last period the company deems relevant for profitability analysis. Expected customer profits in each period are adjusted to reflect the expected customer retention rate during the period and discounted to the present time period, \(t_0\).

**Profit** \((p)\) is the profit earned during the time period. Profits include gross profit, and take into account lifetime costs and revenues such as acquisition costs and growth in margins over time.

**Retention rate** \((r)\) is the rate at which customers in the segment terminate the relationship with the company and discontinue future purchases. This could also include the net difference between new customer acquisitions and customer exits within the segment. It is important to note that this definition does not take into account the difference in cost between retaining customers and acquiring new ones; a long-time customer who leaves may be worth more than a new acquisition. This concept is illustrated in Exhibit 15.

**Discount factor** \((d)\) is the multiplier used to discount future profits to their present value. The discount factor is based on the company’s hurdle rate—often the after-tax cost of capital. For example, at a 15% discount rate, one dollar received in year 5 is worth $0.50 today.

**CLV profits**

Exhibit 15 (adapted from Braff et al, 2003) provides a pictorial representation of CLV. This graph shows various components of revenues and costs that are commonly incorporated in customer profit calculations used for determining CLV.

Readers will recall from the previous section on customer profitability that standard single-period profitability measures are based on revenues, product costs, and other customer-related costs incurred during the period. In Exhibit 15, these revenues and costs are summed over the lifetime of the customer relationship.

**Exhibit 15: Revenue and Cost Components in CLV**

![Exhibit 15: Revenue and Cost Components in CLV](image-url)
Companies begin incurring costs when they spend money to acquire customers. Acquisition costs are depicted by the first arrow in the diagram. As the customer makes purchases, the acquisition costs are recovered, and the company earns increasing profits from customer sales margins as sales recur over time, as depicted by the second arrow. The third arrow shows the additional costs to serve the customer over time, and includes costs such as ongoing promotional and service costs. In addition to recurring margins from repeat sales, companies can gain additional profits through selling upgraded or new types of products and services to existing customers. The value of cross-selling and up-selling to the organization over time is depicted by the fourth arrow. The last arrow shows retention costs, which include the costs of maintaining the customer relationship over time. Together, all of the costs associated with serving the customer over time are netted against the total margins the company expects to gain through sales to that customer. The result is the CLV. It represents the present value to the firm of a customer’s lifetime stream of profits.

The CLV model thus views the customer as an asset that generates revenues throughout the life of the relationship, and also draws resources as it is acquired, maintained, and, possibly, retired. To calculate the value of this asset using CLV, a company must be able to measure or estimate both the revenues and the costs of each customer or segment. Companies already calculating customer profitability (such as with the ABC approach described above) possess a solid foundation for calculating CLV. Customer profit margins in the current period provide a good starting point for estimating margins in future periods.

Companies that have profitability data covering multiple periods have an even stronger foundation. Companies with historical customer information, such as data stored in customer relationship management systems, can use details from the database to predict future profits. Customer databases often include complete purchase histories for each customer, along with descriptive information about the customer or segment. Some databases also capture information about customer interactions, such as sales calls or service requests, as well as information about the customer’s responses to sales calls and other direct marketing initiatives. This data can be used to predict purchasing patterns of current customers, and to estimate the costs of acquiring and retaining similar customers in the segment.

Netflix is a company that has been using CLV. It identifies five main components of its CLV estimate. They forecast acquisition rate, acquisition cost, retention rate, retention cost, and change in margin per customer over time. Since online subscribers drive Netflix’s revenues, the company is able to include a detailed account of subscriber information in its customer database, allowing it to predict CLV with reasonable accuracy (Gupta and Lehmann, 2005).

Even for companies with extensive customer databases, CLV calculations rely on predictions about future customer behavior that can’t be made using historical data alone. Useful assessments of CLV require the company to estimate how long the relationship with the customer will last, and how customer behavior will change over time. Also included in a useful CLV assessment are assumptions regarding how company behavior needs to change, and the related costs, to better serve customer needs. These estimates and assumptions rely on understanding customer retention and customer loyalty, discussed in the following sections.

Customer retention and customer loyalty are important concepts for companies seeking to effectively measure and manage lifetime value. Estimating the profits a customer or segment will generate in future periods requires the company to understand its relationship with the customer. The value of the customer depends on the duration of the customer’s relationship with the company, as well as the strength of that relationship over time.

Customer retention estimates the length of the customer’s relationship with the company, and is used to estimate the number of periods in which the customer is likely to generate profits for the firm. Customer loyalty, which indicates the strength of that relationship, affects both the revenues that can be expected from the customer over time and the costs required to produce those revenues and serve the customer.

Customer Retention

Customer retention is an important determinant of the lifetime value of a customer. The retention rate, as included in the CLV calculation, refers to the probability that a customer will continue doing business with the company in future relevant periods. Retention is the opposite of churn or exit rate, which is the likelihood that the customer will end the relationship in a given period. For example, a company with 100 customers and a
90% retention rate can expect 90 of these customers to make purchases in the next relevant period, a period that varies between industries and type of assets such as purchases of long-lived assets (e.g.: cars) and periodic purchases such as hotels, cruise or air travel. For example, the next purchase period for customers of a grocery store may be several days, while the next purchase period for new car sales for a particular group of customers will be much longer.

When CLV is used to manage customer relationships, the retention rate for existing customers is used, as described above. Alternatively, when CLV is used to manage a segment, the firm may expand CLV to include the value of current customers as well as the value of customers it expects to acquire over time. For this approach, retention rate can represent the difference between the rate at which existing customers are lost, and the rate at which the old customers return or replacement new customers are acquired.

In many industries, companies are increasingly vulnerable to customer defection, as increased availability of competitor information and reduced transaction costs increase the likelihood that customers will switch; this turned out to be the death knell for many internet start-up companies in the late 90’s, as they spent too lavishly on trying to capture new customers. Because it is widely believed that acquiring a new customer costs up to five times more than keeping an existing customer, companies are renewing their efforts to measure and manage customer retention. Including retention rate in CLV calculations allows a company to see how the value of the customer asset responds to changes in retention. In general, companies that calculate CLV find that small changes in retention can lead to large changes in lifetime value.

### Customer Loyalty

Customer loyalty refers to a customer’s level of satisfaction with the company or brand, as well as that customer’s intention to make future purchases. Understanding the loyalty of customers in a segment is important for CLV calculations. The profit component of CLV is based on estimates of how much customers will purchase in the future, and how much it will cost to serve and retain these customers. As a rule, loyal customers are likely to purchase more and are less costly to serve than disloyal customers. Exhibit 16 shows some of the ways loyal customers contribute increasing profits to the firm over time. (Reichheld and Sasser, 1990)

#### Exhibit 16: Why Customers Are More Profitable Over Time

<table>
<thead>
<tr>
<th>Net impact on Operating Profit</th>
<th>Benefits from production improvements and customer knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Referrals and customer influence</td>
</tr>
<tr>
<td>-</td>
<td>Profit from price premium on custom products</td>
</tr>
<tr>
<td></td>
<td>Reduced costs of serving customer</td>
</tr>
<tr>
<td></td>
<td>Customer retention, loyalty, and share of wallet</td>
</tr>
<tr>
<td></td>
<td>Purchases of standard products</td>
</tr>
</tbody>
</table>

Customer acquisition cost
As depicted here, the company loses money in the first period of the relationship, due to the costs of acquiring the customer, but the customer soon becomes profitable, and profits continue to grow as the relationship matures. Over time, both parties to the relationship gain more knowledge and trust, which can reduce costs and increase benefits for both.

The data in Exhibit 16 is based on profit growth among credit card customers. These customers typically make small purchases at first. Over time, they make higher purchases and maintain higher interest-bearing card balances. As purchase volumes increase, efficiencies reduce the cost of servicing these customers. As the relationship strengthens, customers are more likely to (a) refer other customers, and (b) pay a premium price for the products and services they receive. Customers begin using the product at a moderate level and increase usage as their relationship with the product and company strengthens.

There are many ways to evaluate the loyalty of a customer. One approach uses a single metric: the “net promoter score”. Customers are asked “How likely are you to recommend us?” Customers that provide a strong positive response are “promoters”; those with negative responses are “detractors”. The difference between these groups is used as a measure of loyalty. Some companies have become big believers in this measure. Scott Cook, the founder of the software company Intuit, uses the net promoter score for goal setting and engaging the attention of the organization. And staff at U.S.-based Enterprise Rent-A-Car are supposed to ask every customer returning a vehicle if they would rent from Enterprise again (Meyer and Schwager, 2007). GE has recently required all business units to report the score, and Peter McCabe, the chief quality officer, said “I have little doubt that this will be as big and long-lasting for GE as Six Sigma was” (McGregor, 2006a).

Share of wallet is another single-item measure that can be useful in reflecting customer loyalty. Share of wallet refers to that portion of a customer’s purchases in the category that are made from the company rather than from its competitors. It is common, especially among business customers, to spread purchases across multiple vendors. To the extent that the customer shifts purchases toward a vendor, its overall profits will increase. Share of wallet is thought to be an effective measure of the degree to which a customer is satisfied and prefers a particular vendor over its competitors. Researchers have found that “efforts to improve customers’ share of spending and customer retention can add as much as ten times greater value to a company than focusing on retention alone (Coyles and Gokey, 2002).

In attempting to gain a greater share of wallet from its customers, Amazon.com offers a Visa card that rewards customers with one point (worth a cent) for every dollar spent with the card, resulting in a gift certificate worth $25 once 2,500 points have been accumulated. Customers however receive three points for every dollar spent on purchases from Amazon, giving customers reason to frequent Amazon.com more often than their competitors (Nunes and Dréze, 2006).

In addition to measuring the current level of customer loyalty, some companies try to anticipate changes by identifying and tracking leading indicators. Customers that are satisfied in one period are thought to be more likely to continue and deepen their relationship with a company in future periods. Thus, an increase in customer satisfaction in one period is thought to lead to increases in loyalty in future periods—realized, for example, as an increase in share of wallet. Measures of customer satisfaction are commonly obtained through customer attitude surveys or through customer complaints and returns. By carefully addressing customer complaints, companies can make the necessary changes to improve customer and company profitability.

4. MEASURE CUSTOMER IMPACT

The final component of value provided by the customer is customer impact. Activity-based costing and customer lifetime value have enabled companies to make great advances in understanding and managing the expected profitability of their customers. They can provide excellent estimates of the value that each customer and segment provides to the company through normal purchasing and usage. But even these approaches often fail to capture some potentially significant sources of value customers can provide to the company.
Of course, profits resulting from current or future sales to customers are the most significant source of value for most customer segments. But value can be created (or destroyed) by customers in many other ways that fall outside the reach of CLV and other methods of assessing customer value.

Two critical sources of hidden customer value are discussed here—customer influence and customer knowledge. Customer influence refers to the influence the customer has, either through intentional action or passive behavior, on other customers, on employees, or on other stakeholders of the firm. Customer knowledge refers to the actionable knowledge that can be gained by the company, either through analysis of customer behavior or through direct customer input.

Through their interactions with the product, with the company and with other stakeholders, customers can affect value in numerous ways, ranging from identifying small errors in technical documentation to significantly influencing the image of the brand. Although influence and knowledge contributions will always be difficult to define and measure, even rudimentary estimates of direction and magnitude can be valuable. To ignore such contributions is akin to assigning them a value of $0, which is certainly incorrect, and may rob the company of the opportunity of investigating these increasingly important aspects of customer value.

Over time, companies that think creatively about a full range of sources of customer value gradually improve their understanding of these sources, and their ability to assess and measure them. Embarking on this process opens new avenues for innovation in products and methods, and generates new options for maximizing long-term customer value.

**Customer influence**

The power of customers is greater than ever, and continues to increase due to a variety of factors. For example, in competitive industries where margins are slim, tiny changes in market share can lead to dramatic changes in profitability.

At the same time, rapid advances in information and communications technology have increased options available to customers and reduced switching costs. These technologies also give customers voice, allowing them to make their opinions rapidly and broadly known.

Thus, in addition to their own value-generating behaviors, customers have the capacity to affect corporate profitability by influencing the perceptions and behaviors of others. Whether or not they intend to do so, customers influence other customers, company employees, and other groups, through their transactions and communications.

Customers can influence others by:

- referring other customers to the company’s products
- serving as a role model to legitimize use of the product
- using the product in a manner that affects brand image

The most widely-recognized source of customer influence comes in the form of product referrals. Customers who are satisfied with a product might encourage other customers to try the product, or when dissatisfied, they may dissuade customers from buying it. Word-of-mouth advertising can strongly affect a customer’s intention to use the product. The value of referrals is relatively easy to estimate, and a few of the available CLV models add profit from referrals to other profits to calculate CLV. The value of referrals also highlights the need for implementing mechanisms that follow products through their distribution chains, ensuring that companies effectively obtain the information about their products that customers find important, through relevant feedback.

In each of these examples, customer influence can either positively or negatively affect corporate profitability. As companies consider the importance and management of customer value, they must recognize how much influence their current customers may have on the purchase behavior of others. Thus, just as very satisfied customers can generate substantial referrals and customer value, very dissatisfied customers can influence potential customers to refrain from purchasing.

Customers might also compel others to use the product. Many products have network effects, such that one customer benefits when another uses the product. When a company adopts a supply chain management software package, for example, it might require its own customers to purchase the same package. The customer is better able to share and receive information when the network of users expands.

Satisfied customers can influence others as well. Customer satisfaction has been shown to be strongly linked to employee satisfaction in many companies, and the relationship works in both directions. It is widely recognized that satisfied customers can influence others by:

- referring other customers to the company's products
- serving as a role models to legitimize use of the product
- using the product in a manner that affects brand image

The most widely-recognized source of customer influence comes in the form of product referrals. Customers who are satisfied with a product might encourage other customers to try the product, or when dissatisfied, they may dissuade customers from buying it. Word-of-mouth advertising can strongly affect a customer's intention to use the product. The value of referrals is relatively easy to estimate, and a few of the available CLV models add profit from referrals to other profits to calculate CLV. The value of referrals also highlights the need for implementing mechanisms that follow products through their distribution chains, ensuring that companies effectively obtain the information about their products that customers find important, through relevant feedback.
employees provide superior service, which can improve customer satisfaction. But working with highly satisfied customers also increases employee satisfaction, which can result in reduced turnover and higher productivity (Heskett, Sasser and Schlesinger, 2003).

Another important source of influence is wielded by customers that possess high levels of power or prestige. These customers influence others by serving as expert users, legitimizing the product’s use for other customers. For example, when a small advertising agency is able to secure a contract with a Fortune 500 company, it can benefit greatly from the relationship. Communicating the existence of the new relationship might encourage other potential customers to accept the agency as a legitimate source for advertising service and, as a result, hire it.

Prestigious customers also affect other stakeholders through their influence on the brand’s image. When the brand is associated with these customers, it also becomes more prestigious. Employees, suppliers, investors and others can all be influenced positively as a result of this relationship and the legitimacy and prestige bestowed on the company. A host of consequences, such as increased employee satisfaction, stronger supplier relationships, and reduced cost of investment capital can be influenced by the strengthening of the brand.

Perceptions of the product’s quality and value can similarly be influenced by customers who are perceived to have superior knowledge of the company or its products. For example, knowledge that a brand of toothpaste is preferred by dentists, or that an athletic shoe is used by a sports team, can influence a customer to purchase these products. Searching for and determining the relative value of products is costly; relying on a knowledgeable source to support these decisions can help customers make purchase decisions.

Some customers influence others by serving as a role model. High-profile customers such as celebrity, sports, or political figures can serve this function, as can “influentials”—opinion leaders who influence the thoughts and actions of others. (Keller and Berry, 2003). When customers see these role models using or extolling the virtues of a product, they are more likely to buy it. Other stakeholders can be influenced in the same manner; for example, regulators might respond more favorably to companies with a high-profile as socially concerned corporate citizens.

Customers can also have an impact on other stakeholders through the relationship they form with the company and brand. For example, some customers participate in user groups, discussion forums, and other types of customer communities. Customers who are enthusiastic about the company and its products can influence the perceptions of other users who participate in or become aware of these communities. Participants in these social networking communities can also form strong relationships with each other; and a customer who is appealing to other members can be a source of value and social capital for the company.

Customer knowledge

Customers also contribute value by providing useful information to the company and its stakeholders. For example, some customers actively share their technical knowledge and expertise, providing tips for effective use of the product, and solving problems for other customers. These customers make the product more valuable to others, and can strengthen their relationship with the brand as well. In addition, company representatives who participate in these communities can learn from these interactions, and use this knowledge to solve problems or enhance service for non-participating customers.

Many on-line retailers, such as Amazon.com also provides an example of one approach to obtaining and distributing customer knowledge. Knowledgeable customers post reviews of the millions of products sold over the site. Customers searching for products obtain value from these reviews—they make better product selections and are happier with the products they choose. Amazon.com ensures the quality of these reviews through reviewer ratings, where customers evaluate the content of the reviews. In addition to their influence on other customers (positively or negatively), participating customers provide additional value to themselves and to the company, as they strengthen their relationship with the brand through these efforts. Experience with eBay customer communities suggests that customers who post to or read postings in user discussion groups develop stronger relationships with the company and purchase more over time. Amazon.com also provides an example of the value of passive knowledge contributed by customers. The company captures purchasing behavior of customers and uses it to make recommendations to other customers, which can encourage them to purchase more items than
they originally intended. This information makes frequent customers more valuable, not just for the profit margins they generate, but for the purchasing patterns they contribute to the customer database.

Some companies reward customers for sharing this information, such as when grocery stores reward customers who use club cards. These cards are often intended to encourage repeat business and capture a greater share of wallet for participating customers. However, in addition to any profit margin effects, customers that sign up for these cards provide a source of detailed purchase information. This information can be combined with demographic data about the customer and used for a variety of operational and marketing decisions. For example, knowledge about which items are purchased simultaneously by various customer segments can be used to arrange store layouts or develop effective promotional campaigns such as allowing retailers to promote complementary products, such as milk with cereal, chips and pop, etc. And purchase histories for the same customers can be used to evaluate the success of the outcomes of these campaigns. For this reason, customers who share purchasing history can be more valuable to a company than those who do not.

The histories of highly profitable customers can be particularly valuable. Knowledge of profitable customers’ sales, purchase, and service histories, and how these customers have responded to marketing and sales initiatives, can help companies identify and improve offerings for other profitable customers.

Purchasing behavior can also be useful in predicting problems with a customer segment. Variations in spending patterns can be useful in predicting when a customer is becoming more loyal or dissatisfied. One recent study monitored customer purchasing behavior to identify small changes in customer spending. When companies responded to these changes, they were able to reduce both customer exit and downward migration by up to 30% (Coyles and Gokey, 2002). A company can carefully research the characteristics and behaviors of its highly profitable customers, and use this information to more effectively target and serve similar customers in the future.

Customers need not make regular purchases to provide valuable knowledge. Any time a customer registers on a firm’s website, signs up for a loyalty program, or joins an email list or discussion group, the company gains access to a rich source of information. All of these customers serve as potential test subjects for the company’s marketing experimentation. Customers who enter a store or website can also provide useful information, through their successful and unsuccessful searches and shopping activities.

Knowledge provided by customers is not limited to feedback about products a company has already released. Companies no longer wait passively for customer feedback. Through a practice that has been referred to as “crowdsourcing”, some companies have begun to actively request information from their current and prospective customers. In the past, companies sought to understand customer’s views of their products and problems so the companies’ designers could incorporate the relevant suggestions. Now, however, some companies are going so far as to invite customers to design and share their innovative solutions to those problems.

For example, U.S. clothing manufacturer threadless.com and Canadian-based John Fluevog Shoes have invited customers to design their own products. The best designs make it into production and can be purchased by the designers and other customers (Howe, 2006).

Customers can also provide knowledge relating to other components of product value, such as promotions and pricing. Customers of some companies can choose whether to receive advertising, and which types of advertising they wish to receive. Others can name their own price, providing the company with cues about the relative value of the product to various customer segments.

Although the incremental value of each piece of information about what a customer purchased or how the customer responded to an advertisement may be small, the combined value of this information can be substantial. Recognizing that such information has actionable or latent value provides a basis for decisions on whether and how to capture and use the information. In addition, this allows a company to differentiate customers, both in the value they receive from the company, and in the value they can provide.

Measuring both the influence and knowledge contributions of various customers and segments can therefore provide important information for assessing and managing customer profitability. Customer relationship management systems provide a partial source of information for some
companies. But all companies can benefit from efforts to identify and measure their most important sources of customer influence.

5. MANAGE CUSTOMER PROFITABILITY

Objectives, strategies, and structures

To increase the lifetime value of their customer relationships, companies must increasingly emphasize effective management of customer segments. Some experts have argued that companies should shift from an emphasis on brands toward an emphasis on customer segments. Branding should then be used as one of the tools to create additional value for the customer segment. They argue that to effectively manage customers as assets, a company should “create or strengthen the role of customer segment manager”, and use customer segments, rather than brands, as a basis of resource allocation.

By effectively identifying segments based both on value provided to the segment and the segment’s asset value, a company can develop strategies for effective management that will satisfy customers and generate profits for the company. By combining careful customer margin calculations, customer lifetime value, and customer impact, companies can develop a more complete picture of the value of a customer or segment to the company.

The first step in managing customer profitability is determining the objectives for each segment. Exhibit 6 showed broad strategies that could be pursued for each customer segment based on (a) how well the company is able to serve that customer segment, and (b) how profitable that segment is to the company. Within these broad categories, many options are available for improving segment performance.

The options presented in Exhibit 7 are organized into broad, profitability-oriented customer categories. Managing the customer value proposition provides strategies for improving the product or service value, the brand value, or the relational value provided to the segment. Managing customer profitability includes ways to increase single-period margins, lifetime value, and customer impact. The categories are separated only for analytical purposes. When segments are managed most effectively, companies will target efforts toward customers that are both satisfied and profitable. For this reason, many of the strategies identified below can positively influence multiple components of customer value. Loyalty programs, for example, can provide valuable rewards to customers, and at the same time increase customer retention, which results in increased lifetime value. Thus, in selecting strategies best suited to their own conditions, managers can arrange their efforts so as to benefit both the customers and the bottom line.

Managing customer value

As described earlier in the customer value section, the value received by the customer can be described as being made up of the following three components: value, brand, and relationship. Maintaining a strong value proposition is essential for all aspects of customer value management cycle. The company’s ability to acquire, retain, and develop customers can be improved through more effective management of these components.

The value received by the customer from the product itself is important to manage when there are strong, differentiated competitive products, or when innovative new products have entered the market. To enhance product value, the company must understand the customer’s requirements and priorities, such as quality or convenience, and then change products and services to enhance value in those areas (Rust et al, 2000). Client segmentation by the U.K. industrial and medical gas supplier BOC has accomplished this through their behavioral segmentation approach. BOC has identified customer requirements and adapted its business model accordingly, reducing costs for elements of the transaction the customer doesn’t need or want, and emphasizing elements the customer considers important. As a result, the company has been able to increase customer value (Oliver, 2003).

Companies can also enhance value by reducing the cost to the customer through reducing the time and effort the customer takes to purchase and use the product. In addition, companies can also ensure customer value by evaluating customer perceptions of the product itself, the transaction experience, and the ownership experience. Exhibit 17 displays what some companies have done to gauge the experience of their customers. The knowledge gained by determining what customers value with regard to the product or service permits the companies to tailor their goods or services accordingly, reducing cost and increasing customer value.
MANAGING CUSTOMER VALUE

Exhibit 17: Sample Customer Experience Measures

<table>
<thead>
<tr>
<th>Company</th>
<th>Measures</th>
</tr>
</thead>
</table>
| Air Products (chemical supplier) | Customer loyalty index  
Turnaround time for samples |
| Caterpillar Financial (construction equipment) | Customer satisfaction index  
First-contact resolution  
Time to respond to customer request for quote  
Turn-around time for credit approval decision  
Turn-around time to fund loan |
| Cisco (IT)                     | Dashboard of metrics by call type  
Customer satisfaction  
Customer loyalty  
Value per transaction |
| Harrah's (gaming)              | Customer loyalty  
Customer satisfaction  
Cross-market play  
First-contact resolution  
Consolidated play/Share of gaming budget |
| Land's End (clothing)          | Answer 90% of incoming calls in less than 20 seconds  
First-contact resolution (currently 94%)  
Call abandon rate of less than 1.5% |

Adapted from APQC, p. 45

Brand equity represents the extent to which the company has convinced the customer that the brand fits the customer’s self-image and personality better than that of competitors. Brand equity is important to manage for both low-involvement products that are difficult to evaluate prior to purchase, as well as products whose features and qualities are more obvious. The value a customer receives from the brand can be enhanced through marketing actions such as communication messages and events that (a) reinforce the image to which the customer feels connected, and (b) strengthens the customer’s positive attitudes toward the brand (Rust et al, 2000).

The company can also manage the value the customer receives from its relationship with the company. Relationship value is most important when there is a learning relationship between the customer and the firm, and when the customer community receives value beyond the value of the product itself. Companies can enhance relationship value by (a) supporting customer communities, (b) investing in the learning relationship by collecting and sharing information customers provide, and (c) providing special recognition and treatment to loyal customers (Blattberg et al, 2001). Strategies for managing customer profitability are summarized in Exhibit 18.

Managing customer profit margins

Customer margins over time are among the most important components of managing customer profitability. Thus, improving profit margins on individual transactions is a logical starting point for companies. The easiest area to manage customer profitability for many companies is the gross margin on sales.

Customers that purchase high-margin products, all else being equal, are more profitable than those that purchase low-margin products. Companies can manage product costs through activity-based product costing and a variety of other methods, or they can re-price low-margin products when sales of other products won’t be disproportionately affected. In addition, firms can provide incentives for purchases of higher volumes, which allows some costs to be spread more broadly and the resulting higher margins would flow directly to profit.

When companies understand their non-product costs, they can better evaluate and manage them. Armed with an understanding of the costs of various customer services, such as making a sales call or placing an order, companies can improve processes and increase efficiencies in an attempt to reduce these costs, especially for services customers don’t value highly. Reducing both the costs and quantities of these services can increase customer margins and profitability.
By implementing technology to better serve customers, for example through innovations such as automating loan processing, Caterpillar Financial has been able to process loans more quickly, increasing the number of products that can be managed and sold, drastically reducing Caterpillar’s cost to serve (APQC, 2005).

When the cost of services is largely driven by customer demand for those services, the company can focus its efforts on reducing customer demand. In some cases, it can also institute or increase the fees charged for these services, particularly for unprofitable segments. Alternatively, the company can develop policies that allow differing levels of service and support, depending on volume or customer profitability.

The earlier discussion on measuring customer margins demonstrated the importance of tracing costs to the customers responsible for them. Customers are generally more costly to serve when they order in small quantities, require customized product or delivery, demand extensive pre- or post-sales support, request special promotions or discounts, or require special payment terms or extensions.

When companies understand these customer cost structures, they can make changes to affect cost drivers. For example, a company could implement a minimum order quantity or purchase order amount to reduce the number of orders, thereby reducing the costs associated with taking and filling orders. It could also charge for costly services, for example by implementing a delivery fee for orders below a predetermined dollar amount, or a finance charge for late payments. Another possible change would require product orders below a certain threshold to be purchased via credit card, thus eliminating credit risk and collection costs. It could also align staff compensation with the previously mentioned customer cost structures. In the case of the Brazilian agricultural-chemical maker Syngenta AG, management aligned the incentive plan for its salespeople, giving bonuses based on profit margins. This emphasized earnings rather than volume, and effectively raised Syngenta’s profit margins by four percentage points in 2004 (Badal 2006).

Where customer relationships are strong, companies can negotiate with the customer. Sharing cost information with customers can lead to adjustment in their behavior, resulting in reduced costs to the company while retaining value to the customer. Air Products & Chemicals, a supplier of industrial chemicals and gases, aligned the experience of its customers with its customer segments in an attempt to better monitor and concentrate on what mattered most to its customers. As a result, the company reduced its cost per project by 50% and increased project adoption rates by 70%, shifting its break-even point to four months instead of the four years predicted before implementing the process (APQC, 2005).

Managing Customer Lifetime Value

Customer profit margins in each period during the customer relationship make up the largest share of customer lifetime value for many segments. Strategies for increasing short-term customer profit margins are discussed in the previous section. In addition to normal revenues and costs, companies can enhance the lifetime value of customers by (a) improving customer retention, (b) reducing the costs of acquiring and maintaining customer relationships, and (c) improving customer profitability through expanded purchasing.

Customer retention is a critical component of lifetime value. Many companies fail to recognize the strong link between customer retention and
profitability until they begin to measure and manage customer lifetime value.

Retention can be increased by enhancing the value provided to the customer. This can be accomplished through traditional efforts to improve product-related value, such as by improving the quality and functionality of existing products, or by introducing new and innovative products and services. Branding initiatives also enhance the value provided, and strengthen the customer's association with the company.

More recent efforts at increasing retention have looked to the customer relationship. This aspect of value often receives less attention than others, because its impact on short-term profit margins is not always apparent. The connection between the value of the relationship to the customer and customer retention is, however, readily apparent for many firms, and many initiatives have been implemented by companies seeking to strengthen the customer relationship.

One company recognized the heightened importance of maintaining customer loyalty when competition intensified in its industry. In response, the company instituted a customer satisfaction and loyalty measurement program to promote a customer-focused culture. Through metrics, the program provided the company with a detailed understanding of the drivers of satisfaction and loyalty for each customer segment, enabling the company to design and implement a series of actions and rewards that improved the value proposition (Narayandas, 2001).

When customers defect, or when the company wishes to grow, it must acquire new customers. The cost of acquiring new customers can depend on actions taken by an individual firm, but also heavily depend on economic factors at work in the industry. Companies often expect to acquire and maintain high numbers of customers at a relatively low cost during a product's growth stage. The customers of products that are bought at frequent intervals can be targeted for acquisition by competitor firms. And in industries that are dynamic and innovative, customers are often more likely to switch suppliers frequently.

Whatever the individual circumstances, acquiring new customers is an ongoing concern for all companies, and acquisition costs can be high. It is often stated that acquiring a new customer is five times more costly than retaining an existing one. Thus, the more data available to a company, the better it is able to manage the costs and effectiveness of its acquisition initiatives. Using this data to understand Customer Lifetime Value (CLV) helps companies put the most effort into retaining their most profitable customers.

When customer profitability data is available, companies can target acquisition efforts only toward those segments most likely to be profitable. With information about the purchasing patterns and demographic characteristics of these segments, companies are better able to develop and target offerings to attract more customers in these segments. When data about satisfaction and loyalty is available, the company can focus more directly on acquiring customers that are likely to stay with the firm over a long period, increasing the customer’s lifetime value to the firm. Finally, data can be used to monitor the costs and effectiveness of acquisition-oriented campaigns, which enables the company to continually improve these efforts. This emphasizes the need for companies to understand customer lifetime value, since doing so will allow the firm to put the most effort into retaining their most profitable customers.

Other lifetime costs can be managed in much the same way. Companies can improve the effectiveness and reduce the costs of maintaining customer relationships through targeted strategies, if supported by sufficient data. Relationship maintenance costs, such as discounts required to maintain the relationship, and promotions, which are used to keep purchase volumes up, can also vary across customers and segments. As with acquisition initiatives, companies can utilize customer data to devise maintenance strategies that deliver the highest possible profits at the lowest costs.

Finally, companies can improve the lifetime value of their customers through initiatives that expand the sources of profits received from the customer. In addition to pushing for continual growth in normal customer purchases, companies can increase profitability by seeking out other sources of profits. Over time, a customer’s relationship with a firm becomes more valuable to the customer. In response, customers may be willing to pay a premium for maintaining this relationship. For example, discounts and promotions required to attract new customers may not be necessary for loyal long-term customers, resulting in increased profits on purchase transactions.

Consider, for example, the multi-tiered loyalty or affinity programs such as Silver, Gold, and Platinum levels, where higher tiers yield more benefits (Nunes, 2006). Customers on the verge of
belonging to a higher tier will often spend more to do so. Effective loyalty programs, such as Amex’s Rewards Plus Design Target, have proven to be very effective in retaining customers as well as attracting new ones. In the program, customers are rewarded with airline miles and free hotel rooms, depending on the type of card. Each type of card has been designed to accommodate the numerous segmented groups that American Express has identified from 2002 to 2005, spending grew by over $2,000 per account for individuals, and over $9,000 per account for small business cardholders, increasing the credit company’s charge volume by over $104 billion (Allen et al, 2006).

Loyal customers can also be encouraged to increase their purchases in other ways. Customers that split purchases across multiple companies can be encouraged to devote a greater share of wallet to the company. In addition, these companies can be encouraged to purchase upgraded or additional products.

The Disney Company, for example, found that its loyal customers were spending only a fraction of their vacation budget on Disney products and services. Disney responded by expanding its offerings to include hotels and other services and, as a result, greatly increased the profitability earned from many of its customers.

Affinity or loyalty programs are designed to produce exactly these effects. Customers with high levels of affinity for the company and its brands are more likely than other customers to respond to up-selling and cross-selling efforts. Customer data contributes to further spending when companies can match customers with the most appropriate upgraded products and services. Targeting these efforts toward these segments both reduces the costs and increases the revenue related to these efforts.

Affinity or loyalty programs have become quite common. One very successful example is the “Total Rewards Program,” affinity program used by Harrah’s Entertainment. Members of the program are rewarded with free meals, rooms, and shows according to the amount they spend. In exchange for the rewards, Harrah’s is able to collect extensive data on members’ spending habits. From this data, Harrah’s can identify and maximize the profitability and loyalty of its customers. Today, over 40 million people are members of Harrah’s affinity program, allowing the company to maximize profitability and loyalty from about 80 percent of its customer base (Johnson, 2007). This has turned Harrah’s into one of the most profitable casino companies in the US, netting $535 million in 2006 on revenue of $9.6 billion (Fitch, 2004).

Managing customer impact

The most direct way a company can capture the value of its influential customers is through direct customer referrals. Referrals and other information shared by word-of-mouth influence customer purchase decisions. Word-of-mouth can affect a customer’s awareness, attitudes toward a brand, and purchase choices, especially for personal services decisions such as choosing a physician. Word-of-mouth can contribute to profitability by reducing acquisition and retention costs, and by contributing to loyalty. Because satisfied customers are more likely to make referrals, strategies that increase satisfaction are also likely to increase referrals, and therefore the number of customers. (Lee et al, 2006). On the other hand dissatisfied customers are likely to tell others thus compounding the impact of lack of satisfaction.

As discussed in the Measuring Customer Impact section earlier, prestigious customers or customers that are perceived to have relevant expertise can also influence behavior of others indirectly. Their use of and satisfaction with a brand can influence purchase decisions by others in the same manner as direct referrals. Companies can develop this value source by identifying highly influential customers and targeting them in their acquisition, retention, and loyalty initiatives.

Value can also be derived from the information customers can contribute (intentionally or unintentionally through their ongoing interactions with the company. The value of the customer database is much like the value of other intellectual property. The database may have a direct sales value, or, more likely, this important asset provides value through generating benefits for the company and its stakeholders.

Every interaction with a customer is a potential source of useful information. Companies can tap into this information by developing strategies and systems for identifying and capturing customer data for current or future use. In some cases, customers are willing to provide or allow a company to capture additional information, such as the address of the web site the customer visited immediately prior to or subsequent to visiting the company website. Such information can be valuable for a variety of marketing decisions, and can complement other forms of market research.
The final approach to managing customer influence involves capturing and using customer knowledge. Customers can contribute knowledge through a variety of mechanisms, such as user groups and forums. To maximize the usefulness of this knowledge, the company should identify unmet customer information and service needs, and identify customers that are most likely to contribute ideas that would address them. These customers can be permitted or encouraged to engage in customer communities, and rewarded for their efforts.

Companies can also make direct requests for information from knowledgeable customers. The “crowdsourcing” example noted earlier, in which customers are asked to contribute to problem solutions, is one approach. But companies can also target the most knowledgeable customers and request information directly from them. Sometimes referred to as “collective customer commitment”, initiatives that ask customers to participate in product development allow companies to use customer expertise as a source of problem solutions as well as new ideas. Such efforts provide numerous benefits, such as strengthening customer relationships, reducing service costs, and less costly market-testing of new product ideas. All of these benefits can be sources of significant profit for the companies that effectively manage them.

Perhaps the most important benefits to be derived from customer knowledge relate to their value in product and process innovation. Customer needs and interests continually change, and customers can help organizations keep up with these changes.

Requesting ideas directly from customers can be very useful for driving incremental change, but is not always useful for larger innovations. For major changes, focusing on the jobs to be accomplished or the outcomes of innovation can be a useful way to overcome customer reporting limitations. The "Opportunity Calculation" is one way to overcome this. Customers are provided with a list of desirable outcomes, and asked to rate the importance of the outcome and the customer’s satisfaction with this dimension of the current product. The gap between importance and satisfaction is summed, the total score providing an indication of the opportunity. (Ulwick, 2002)

Companies can also spark innovation by watching how customers use a product rather than asking them. Observers can often identify the gaps between what the product can do and what the customer needs (Leonard, 1997)

The knowledge possessed by customers is so valuable to some companies that they are shifting some research and development away from traditional labs, and investing in what has come to be known as “customer R&D”. Under this approach, the company identifies its core customer segments, then researches these customers to identify how to better create value for these customers while generating additional profits. Once the basic needs of core customers are understood, the company seeks to develop the capability to meet additional needs of these customers and to extend this capability to other segments. It is argued that customer R&D is also perceived as valuable by the market, which rewards customer R&D with higher P/E multiples than traditional R&D, which is viewed as unable to consistently produce future profit growth.

Measurement and reporting

Numerous strategies are available for managing various components of customer value. When a chosen strategy is well-formulated and clearly-articulated, it can lead to dramatic profitability improvements. For this to happen, however, companies must combine strategic goals with a clear and logical system for measuring and reporting the performance of each customer segment. Such a system is instrumental in implementing plans, linking actions to outcomes, and evaluating the effectiveness of strategic choices.

An effective reporting system begins with a central repository of client data, and other data that will be used in executing and monitoring strategic initiatives. The company must determine which data are critical to these initiatives, and then must develop processes for capturing and storing that data.

For a measurement and reporting system directed toward customer value, the company will need to (a) carefully define each component of customer value, and (b) determine the most appropriate measure for each component. Thus, a comprehensive system for managing customer value will have measures for product and service value, brand value, and relationship value, along with measures of customer margins, lifetime value, and customer impact. In addition, the system can measure customer perceptions, attitudes, awareness, satisfaction, and loyalty, and other indicators relating to profitability. Industry and competitor data are also relevant.

Companies that recognize the potential of increased customer value also recognize the need
for relevant data on sales, costs, and customer behaviors. For many companies, however, existing data is insufficient to estimate CLV. The appropriate data, measures, and reports can vary across companies and segments, and over time, as the nature of the value proposition evolves. This might include developing software and related expertise, calculating profitability, developing a reporting plan, and aligning compensation and resource allocation (LoFrumento, 2007).

Often calculations initially rely on rough estimates. But even very rough estimates can prove very informative to managers. In making these estimates, managers often develop a stronger sense of the importance of costs and customer retention to profitability. For example, a difference of a single year in the expected life of the customer can lead to a dramatic change in profits, highlighting the importance of customer retention.

In CLV calculations, as with single-period measures, greater accuracy improves the ability to use this information to support sound managerial decisions. Companies that begin with rough estimates will see increasing value over time, as revenue and costs histories evolve and resulting CLV estimates sharpen.

To translate strategies into action, companies must use the information provided by the profitability analysis to inform and support decisions. Metrics alone are not enough. In addition to gathering and reporting metrics, the company must incorporate them into any incentive or rewards program.

For example, if sales people are rewarded based solely on sales, they may direct their efforts toward the company’s least profitable segments, which are likely to have fewer competitors targeting them. Likewise, rewards based on new customer acquisition or market share might result in attracting customers that switch readily, and therefore are more likely to defect before they become profitable to the firm. Thus, the measurement, management reporting, and rewards must be carefully aligned.

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**CUSTOMER PROFITABILITY: A COMPREHENSIVE EXAMPLE**

In this section, we provide an illustration of how measuring customer profitability can pay off. We apply the Customer Value Management Cycle to a fictitious company that will be called “Sagu Systems”. A brief description of Sagu Systems is as follows:

Sagu is a software company located in Chicago. Its primary product, SaguNetwork, is performance monitoring software for corporate networks. Sagu currently sells SaguNetwork and related consulting services to clients. The market for performance management software is expanding rapidly, and Sagu is pursuing an aggressive growth strategy. In an effort to maintain profitability through the growth period, the board of directors has mandated that Sagu analyze the profitability of its customers.

Sagu works through the Customer Value Management Cycle (repeated from Exhibit 1) in a step-by-step fashion as shown below.

**Step 1: Manage Customer Segmentation**

Sagu begins with an analysis of current customers and their purchasing patterns. The analysis results in three customer segments:

1) In-house support: customers with in-house IT staff capable of supporting the software
2) No in-house support: customers lacking in-house IT staff capable of supporting the software
3) New to software: customers that are first-time users of performance-monitoring software and lack in-house IT staff capable of supporting the software
Basic financial information for the three segments is shown below:

**Revenue and Expenses by Customer Segment (in millions)**

<table>
<thead>
<tr>
<th></th>
<th>In-House Support</th>
<th>No In-House Support</th>
<th>New to Software</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>$60.0</td>
<td>$70.0</td>
<td>$20.0</td>
<td>$150.0</td>
</tr>
<tr>
<td>Consulting</td>
<td>5.0</td>
<td>3.0</td>
<td>1.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Total revenue</td>
<td><strong>65.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>35.0</strong></td>
<td><strong>200.0</strong></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>24.0</td>
<td>40.0</td>
<td>13.0</td>
<td>77.0</td>
</tr>
<tr>
<td>Gross margin</td>
<td>41.0</td>
<td>60.0</td>
<td>22.0</td>
<td>123.0</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>32.5</td>
<td>53.0</td>
<td>17.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Operating income</td>
<td><strong>$8.5</strong></td>
<td><strong>10.0</strong></td>
<td><strong>4.5</strong></td>
<td><strong>$23.0</strong></td>
</tr>
</tbody>
</table>

In the next steps 2, 3, and 4, Sagu will calculate the current and expected future value contributions for each segment. In step 5, Sagu will use the results of this analysis to make changes in the management of customer value in each segment. Finally, Sagu will return to step 1 and begin the cycle again—re-segmenting customers based on profitability-related behaviors.

**Step 2: Measure Customer Margins**

Sagu has historically allocated operating expenses based on total revenue of the segment. However, Sagu realizes that operating costs vary across segments as a result of different customer behaviors within the segments. In particular, sales commission costs are associated with software and consulting sales, and technical support costs are associated with the number of maintenance requests submitted by a customer. Sagu separates these costs from other operating expenses and assigns them to the segments based on the actual commissions awarded and technical requests made by each segment. Results are shown below:

**Operating Expenses Allocated by Customer Behavior (in millions)**

<table>
<thead>
<tr>
<th>Operating Expenses</th>
<th>In-House Support</th>
<th>No In-House Support</th>
<th>New to Software</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales commissions</td>
<td>$4.0</td>
<td>$14.0</td>
<td>$2.0</td>
<td>$20.0</td>
</tr>
<tr>
<td>Technical support</td>
<td>8.0</td>
<td>21.0</td>
<td>11.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Other administrative</td>
<td>16.0</td>
<td>18.7</td>
<td>5.3</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td><strong>$28.0</strong></td>
<td><strong>$53.7</strong></td>
<td><strong>$18.3</strong></td>
<td><strong>$100.0</strong></td>
</tr>
</tbody>
</table>

When segment profits are re-calculated using the new operating expense numbers, results are as follows:

**Revised Revenue and Expenses by Customer Segment (in millions)**

<table>
<thead>
<tr>
<th></th>
<th>In-House Support</th>
<th>No In-House Support</th>
<th>New to Software</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>$60.0</td>
<td>$80.0</td>
<td>$20.0</td>
<td>$160.0</td>
</tr>
<tr>
<td>Consulting</td>
<td>5.0</td>
<td>20.0</td>
<td>15.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Total revenue</td>
<td><strong>65.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>35.0</strong></td>
<td><strong>200.0</strong></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>24.0</td>
<td>40.0</td>
<td>13.0</td>
<td>77.0</td>
</tr>
<tr>
<td>Gross margin</td>
<td>41.0</td>
<td>60.0</td>
<td>22.0</td>
<td>123.0</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>28.0</td>
<td>53.7</td>
<td>18.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Operating income</td>
<td><strong>$13.0</strong></td>
<td><strong>$6.3</strong></td>
<td><strong>$3.7</strong></td>
<td><strong>$23.0</strong></td>
</tr>
</tbody>
</table>
With the reallocation of operating expenses, the company’s $23 million profit has shifted, increasing the profitability of the In-house support segment, and decreasing the profitability of the other two segments.

**Step 3: Measure Customer Lifetime Value**

Armed with information about current profitability, Sagu can begin to assess the long-term value of each customer segment. To do this, Sagu will estimate growth in profits for each segment and change in size of each segment as Sagu loses old customers and adds new ones over time. The table below shows the CLV calculations for each customer segment during the coming six years. CLV shows the value of a segment’s customers to Sagu today, based on the discounted value of anticipated future profits. To calculate CLV, Sagu estimates:

1) Operating income for each segment based on an estimated growth rate applied to current period operating income
2) A retention rate based on the expected difference between customers gained and lost each period
3) A discount factor, which is the NPV of $1 in a future time period at 10% interest

Here, to simplify the example, income growth and retention rates are held constant for the coming six year period. Sagu’s CLV analysis provides a new perspective on the relative value of the three customer segments. The In-House Support segment is expected to grow at a 10% rate, as a result of additions in software users to existing software packages. In addition, the number of clients in this category is expected to grow each year, as the number of new clients entering the segment exceeds the number that exit.

Discounting each year’s anticipated profits back to the present using a 10% rate results in an expected lifetime value for the segment of $73.1 million. The segment is currently the largest, in terms of profitability, and expected to remain that way for the coming six years.

The CLV analysis, however, tells a different story about the relative value of the No In-House

<table>
<thead>
<tr>
<th>Customer Lifetime Value (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In-House Support</strong></td>
</tr>
<tr>
<td>Operating income (5% growth)</td>
</tr>
<tr>
<td>Retention rate</td>
</tr>
<tr>
<td>Discount factor (10%)</td>
</tr>
<tr>
<td>Current value of lifetime profits</td>
</tr>
<tr>
<td>Total CLV</td>
</tr>
<tr>
<td><strong>No In-House Support</strong></td>
</tr>
<tr>
<td>Operating income (5% growth)</td>
</tr>
<tr>
<td>Retention rate</td>
</tr>
<tr>
<td>Discount factor (10%)</td>
</tr>
<tr>
<td>Current value of lifetime profits</td>
</tr>
<tr>
<td>Total CLV</td>
</tr>
<tr>
<td><strong>New to software</strong></td>
</tr>
<tr>
<td>Operating income (20% growth)</td>
</tr>
<tr>
<td>Retention rate</td>
</tr>
<tr>
<td>Discount factor (10%)</td>
</tr>
<tr>
<td>Current value of lifetime profits</td>
</tr>
<tr>
<td>Total CLV</td>
</tr>
</tbody>
</table>
Support and New to Software segments. Using current period profits alone, these segments showed incomes of $6.3 million and $3.7 million respectively. Analyzing profitability over time, however, shows marked differences in the ability of the two segments to generate value for the firm. The No In-House Support segment shows a modest growth rate, at 5% and a loss of market size, due to a low customer retention rate. The New to Software segment shows rapid growth both among clients who have adopted performance management software for the first time, and in the number of net clients entering the segment. Thus, this segment is expected to achieve rapid growth in profits over time.

### Step 4: Measure Customer Impact

To supplement the CLV analysis, Sagu estimates the potential impact of each customer segment. Through this analysis, Sagu realizes that a small number of its large clients in the In-house support segment generate half the revenue of this segment, and virtually all of the customer impact. These loyal clients are very well-known and highly-respected in the software industry, and Sagu estimates that they are responsible for a significant portion of the client growth that contributes to favorable retention rates—both through reputation and through referrals. In addition, these customers are very knowledgeable, and are used as testing sites for new software enhancements and sounding boards for the technical planning personnel.

The estimated benefits in this scenario include: 1) influencing/referring other customers and 2) testing and improving software prior to release. The sum of the discounted values of these benefits is expected to be approximately $7 million, as shown above. For simplicity, assume that calculations for all customers are the same before the impact calculation.

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<table>
<thead>
<tr>
<th>Customer Impact for In-House Customers (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low-Impact In-House Customers</strong></td>
</tr>
<tr>
<td><strong>CLV Calculation</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Operating income (5%)</td>
</tr>
<tr>
<td>$6.5</td>
</tr>
<tr>
<td>Retention rate existing</td>
</tr>
<tr>
<td>110%</td>
</tr>
<tr>
<td>Discount factor (10%)</td>
</tr>
<tr>
<td>0.91</td>
</tr>
<tr>
<td>Current value of lifetime profits</td>
</tr>
<tr>
<td>$6.5</td>
</tr>
<tr>
<td>Total CLV</td>
</tr>
<tr>
<td>$39.1</td>
</tr>
</tbody>
</table>

| **High-Impact In-House Customers**                  |
| **CLV Calculation**                                  |
|                                                      |
| 1 | 2 | 3 | 4 | 5 | 6         |
| Operating income (5%)                               |
| $6.5 | $7.2 | $7.9 | $8.7 | $9.5 | $10.5 |
| Retention rate existing                             |
| 110% | 110% | 110% | 110% | 110% | 110% |
| Discount factor (10%)                               |
| 0.91 | 0.83 | 0.75 | 0.68 | 0.62 | 0.56 |
| Current value of lifetime profits                   |
| $6.5 | $6.5 | $6.5 | $6.5 | $6.5 | $6.5 |
| Total CLV                                           |
| $39.1                                              |

| **Impact Calculation**                               |
|                                                      |
| Value of referrals                                   |
| $1.0 | $0.7 | $0.6 | $0.5 | $0.4 | $0.3 |
| Value of knowledge gained                            |
| 0.8 | 1.2 | 0.9 | 0.8 | 0.8 | 0.8 |
| Discount factor (10%)                                |
| 0.91 | 0.83 | 0.75 | 0.68 | 0.62 | 0.56 |
| Current value of impact                              |
| $1.6 | $1.6 | $1.1 | $0.9 | $0.7 | $0.6 |
| Total Impact                                         |
| $6.6                                              |

**Total value: High-Impact In-House Customers** $45.7
Step 5: Manage Customer Profitability

Sagu has learned a great deal about the profitability of its segments through this analysis, and will use this information to more effectively manage the value of these segments. First, through the Step 2 analysis of customer margins, Sagu has learned that the No In-House Support and New to Software segments have higher operating costs than were apparent under the former cost allocation system. In part, this was the result of high maintenance costs for these clients.

To address this issue, Sagu has decided to change the maintenance agreement it provides to customers. In the future, customers will be provided with a limited number of technical support hours, and will be charged for any support hours above this amount.

Through the CLV analysis in Step 3, Sagu learned that the No In-House Support segment was expected to show profitability losses over time, due to low profitability growth and retention rates over time.

As a result of this analysis, Sagu has conducted interviews with key clients in the segment to determine reasons for the decline. These clients suggested that they needed additional consulting support to help them make the best use of their software. Sagu has increased efforts to inform customers about available consulting services, and anticipates both growth in consulting revenues and increased retention in the segment as a result.

Finally, in Step 5, Sagu analyzed customer impact, and realized that the customers with the greatest impact on both attracting new customers and on gaining valuable knowledge, were a subset of their In-House Customers. This group of clients consists of highly knowledgeable users, who both contribute product and service knowledge to Sagu, and also encourage other clients to adopt the software—either through direct referrals or through reputation.

Through the customer impact analysis, Sagu has recognized the high value of these customers to the firm, and has initiated new policies designed to provide special benefits to these customers. They will receive a discounted rate for adding software seats, which is expected to grow profits more rapidly and strengthen customer loyalty. And they will be invited to sit on a newly-formed user advisory board, which will provide them with some prestige and the opportunity to interact directly with other high-powered users to share insights and strategies with each other and with Sagu.

Repeat: Steps 1 through 5

Sagu has learned a great deal by working through the first round of the customer value management cycle. It will use the knowledge gained through the process as a foundation for continuous improvement in its ability to evaluate customer profitability, and to develop management strategies leading to continual improvements in both the value provided to these customers, and the value delivered by them.

Moving into the next cycle, Sagu plans to re-segment the In-House Support customers into Hi-Impact and Low-Impact segments. In Step 2, the company plans to trace a greater proportion of operating expenses to segments, for more accurate estimates of current operating income. In Step 3, the company plans to gather more detailed analysis of historical rates of both profit growth over time, and of the actual rates at which clients exit the firm. These can be used to develop more accurate predictions of profit growth and retention. In Step 4, the company will begin to more carefully track referrals, through interviews with both Hi-Impact and new clients. In addition, it will ask the R&D department to attach value estimates to software and process improvements suggested by clients. This will allow for more accurate measurement of customer impact over time.

At the same time Sagu gradually improves its capacity to measure, it will also improve its ability to manage profitability. It will carefully monitor the effects of the initiatives introduced in the first round, and make changes to these strategies based both on their effectiveness and on the new information obtained through enhanced measurements in the second round.

CONCLUSION

In 1992, Michael Schrage wrote the following in the Wall Street Journal: “Companies need to be as concerned about the quality of their customers as they are about the quality of their products. The smartest thing most customer service-oriented companies could do is ‘lay off’ about 10% to 15% of their customers.”

This Guideline is focused on improving corporate profitability by focusing more carefully on customer value and its various components, including customer segmentation, customer margins, customer lifetime value, and customer impact. It has defined the elements and measurement, and described some current practices and approaches that companies can use.
to benefit both themselves and their customers. This includes approaches as diverse as identifying cross-selling opportunities, improving segmentation, measuring and managing customer margins, obtaining more value from customer information and referrals, and rewarding customers. By focusing on the profitability of segments and managing customer relationships based on this new information, both customer and corporate profitability can be increased.

Through careful analysis and management of customer value as explained in this Guideline, companies can implement strategies that increase customer value by providing more value to their customers, and deriving more value from their customers. Efforts to implement these strategies must be a more critical role of senior financial managers. Financial managers can provide important guidance to senior corporate and business unit managers, marketing managers, and other functional managers, to improve analysis and decisions for enhancing customer and corporate profitability. The critical nature of marketing expenditures and the retention of profitable customers increase the importance of the financial manager’s contribution to senior management and board discussions concerning allocation of resources, as well as the implementation of these resources throughout the organization.

Furthermore, the strategies outlined in this Guideline can address one of the most critical problems in both non profit and for profit organizations – customer retention. Increasing customer loyalty and customer retention is critical from both the company and customer perspectives, and this Guideline has suggested approaches to improving their measurement and management. These approaches to driving improved customer profitability are critical, and should be implemented in organizations to improve corporate and customer value.

ENDNOTES

3 The authors extend their great appreciation to Michael Friedl, Robert Torok and Ken Witt for providing extensive guidance and motivation for this example.
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