The Theoretical Underpinnings of Customer Asset Management: A Framework and Propositions for Future Research

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Most research in customer asset management has focused on specific aspects of the value of the customer to the company. The purpose of this article is to propose an integrated framework, called CUSAMS (customer asset management of services), that enables service organizations (1) to make a comprehensive assessment of the value of their customer assets and (2) to understand the influence of marketing instruments on them. The foundation of the CUSAMS framework is a careful specification of key customer behaviors that reflect the length, depth, and breadth of the customer–service organization relationship: duration, usage, and cross-buying. This framework is the starting point for a set of propositions regarding how marketing instruments influence customer behavior within the relationship, thereby influencing the value of the customer asset. The framework and propositions provide the impetus for a research agenda that identifies critical issues in customer asset management.

Keywords: *customer asset management; customer equity; services; customer behavior; retention; service usage; cross-buying; loyalty; relationship marketing*

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Marketing scientists and practitioners are increasingly interested in managing customer relationships, customer equity, or the "customer asset" (Gupta and Lehmann 2003; Hogan, Lemon, and Rust 2002). Service organizations now recognize the value of current customers and seek to increase revenues and profits through targeted marketing expenditures. To do so, they need an in-depth understanding of the underlying sources of value derived from current customers and how to increase the revenue streams to enhance firm performance (e.g., Hogan, Lehmann, et al. 2002; Zeithaml 2000).

In the past decade, marketers have primarily focused on customer retention as a critical source of customer value (Grant and Schlesinger 1995). For example, Reichheld and Sasser (1990) argued that acquiring new customers is typically more costly than keeping current customers and that long-tenure customers are more profitable. This argument has stimulated marketers' long-standing interest in the antecedents of customer loyalty (Crosby and Stephens 1987; Dick and Basu 1994) and purchase intentions (e.g., Anderson and Sullivan 1993). It has also stimulated the development of strategic models that balance an organization's investments in customer acquisition and retention (e.g., Blattberg and Deighton 1996).

Recently, marketers have broadened the scope of their research by focusing on customer lifetime value (CLV), which is defined as the net present value of *all* earnings (i.e., revenues less costs) from an individual customer (e.g., Berger and Nasr 1998; Dwyer 1989; Gupta, Lehmann, and Stuart 2001; Rust, Zeithaml, and Lemon 2000). However, a close examination of these studies shows that CLV is often operationalized by considering retention as the only relevant source of CLV (e.g., Gupta et al. 2001; Kamakura, Mittal, de Rosa, and Mazzon 2002).[1] Many studies have ignored the contribution of other customer behaviors, such as service usage and cross-buying, to business performance (e.g., Blattberg, Getz, and Thomas 2001). In a notable exception, database marketers have incorporated additional sources of value into their calculation of CLV (Hughes 1996; Wayland and Cole 1997). Many such studies focus on predicting the future CLV of customers, rather than predicting the underlying sources of value (i.e., customer purchase behaviors). Although some studies report success, recent empirical analyses (using rigorous out-of-sample assessments of predictive accuracy) suggest that CLV predictions are often insufficiently accurate to provide effective guidance regarding marketing expenditures (Malthouse and Blattberg 2002).

Inattention to underlying sources of customer value can have substantial ramifications for the business performance of service organizations (Johnson and Selnes 2004). For example, telecommunications companies derive important revenues from the number of phone minutes called per customer (i.e., usage), as demonstrated by dramatic shifts in customer usage patterns under deregulation in the United States. They also obtain additional revenue (and sometimes higher margins) from customers' cross-buying additional services, such as call-waiting, caller ID, or digital subscriber line (DSL). To the extent that telecommunications marketers focus on customer retention and ignore these additional value sources, they may undervalue some customer relationships.

If we consider the value of the customer base to be derived from multiple customer behaviors, we are faced with two challenges. First, the direction and size of the effects of a marketing instrument are likely to differ for each customer behavior, complicating any assessment of its influence on customer lifetime value. Second, the outcome of a particular investment intended to increase customer value is likely to differ across customers and across industries (e.g., Mittal and Kamakura 2001), so that it is difficult to derive generalizable principles regarding customer asset management. These challenges have typically been ignored in the relationship marketing and customer loyalty literature, but they are very important when service organizations attempt to manage their customer assets.

The goal of this article is to describe a comprehensive framework that provides insight into the behavioral sources of CLV for service organizations and the marketing instruments that influence them. The article begins by briefly reviewing prior research concerning CLV and customer asset management. Then, we develop propositions about how customer perceptions and marketing instruments influence different aspects of customer behavior and thereby CLV. We will also discuss how these effects differ across service industries with different characteristics. Last, we discuss the implications of our work for practitioners and provide an agenda for research on customer asset management.

LINKING MARKETING ACTIVITIES TO CUSTOMER LIFETIME VALUE

Marketers have encountered three major obstacles to investigating how marketing activities are related to CLV. First, causal relationships between marketing activities, customer behavior, and CLV are complex. For example, researchers have attacked theoretical issues relevant to understanding the relationship between customer satisfaction and loyalty (Dick and Basu 1994; Oliver 1999; Wind 1970). Yet, empirical work suggests that the theoretical relationships between CLV and its antecedents are difficult to represent in conventional—typically linear—models (Anderson and Mittal 2000). Second, a commonly used method in this area is to link marketing activities to self-reported purchase behavior. However, the predictive validity of self-reported behavior is not always high (Morwitz, Steckel, and Gupta 1997). Furthermore, reliance on self-reports may lead to overestimation of correlations between marketing activities, perceptions of these activities (i.e., satisfaction) and behavior due to common-method variance problems and carryover and backfire effects (Bickart 1993). Third, very few organizations were able to undertake the extensive data collection effort, *at the individual customer level*, necessary to estimate these causal relationships. There are, however, a few studies that have estimated these causal relationships (Kamakura et al. 2002; Loveman 1998). Fourth, researchers are faced with a variety of technical challenges in estimating these statistical relationships if they rely on highly aggregate cross-sectional data (Anderson, Fornell, and Lehmann 1994; Mittal and Kamakura 2001; Mulhern 1999). As companies have only recently adopted sophisticated technologies (i.e., customer relationship management systems) to capture individual customer behavior that are sources of CLV (Verhoef, Spring, Hoekstra, and Leeflang 2003), the marketing discipline has only recently started to uncover customer asset management guidelines (Johnson and Selnes 2004; Kalwani and Narayandas 1995).

Customer Behavior in Service Industries

In service industries, the length, depth, and breadth of the customer-firm relationship are reflected in different purchase behaviors (Verhoef 2001). First, the *length* or duration of a relationship corresponds to customer retention (or defection), defined as the probability that a customer continues (or ends) the relationship with the organization.[2] Second, the *depth* of a relationship is reflected in the frequency of service usage over time. It is also reflected in customers' decisions to upgrade and purchase premium (higher margin) products instead of low-cost variants. (Loyal customers are sometimes assumed to be willing to pay higher prices [cf. Reichheld 1996a, 1996b], but in some markets loyal customers pay lower prices due to quantity discounts.) Third, the *breadth* of a relationship is reflected in cross-buying or "add-on" buying; that is, the number of additional (different) products or services purchased from a company over time (Blattberg et al. 2001). For example, a customer might enter a relationship with a financial service provider by opening a checking account—and subsequently purchase a certificate of deposit. In addition to purchase behavior, CLV is influenced by nonpurchase behaviors that are more difficult to observe and predict, such as word-of-mouth behavior and the provision of new product ideas (Bettencourt 1997). As there has been recent and extensive discussion of how nonpurchase behaviors may influence customer behaviors and overall CLV (Anderson 1998; Brown, Johnson, and Reingen 1987; Hogan, Lemon, and Libai 2002, 2003; Verhoef, Franses, and Hoekstra 2002; Wangenheim and Bayón 2002), we do not discuss them here.

Models of Customer Behavior in Service Industries

The length of the customer-firm relationship has received considerable attention from marketers (e.g., Schmittlein, Morrison, and Colombo 1987; Schmittlein and Peterson 1995). For services, models of the duration of individual customer-firm relationships have shown that the effect of customer satisfaction changes over time, and discrepancies between customer expectations and current service performance play an important role (Bolton 1998; Bolton, Lemon, and Bramlett 2002; Kumar 2002). Reinartz and Kumar (2003) have shown positive effects of direct mailings and loyalty programs on duration, while Thomas (2001) considered the impact of acquisition channels on retention in the airline industry. Recent research confirms that customers with higher satisfaction levels and better price perceptions have higher service usage levels (e.g., Bolton and Lemon 1999). There is also some evidence that a loyalty program can stimulate service usage (e.g., Bolton, Kannan, and Bramlett 2000). In contrast, the effect of satisfaction and price fairness on customers' cross-buying is reported to be very modest (e.g., Verhoef, Franses, and Hoekstra 2001). Furthermore, *changes* in satisfaction levels—rather than absolute satisfaction levels—influence cross-buying (e.g., Verhoef, Franses, and Donkers 2002).

As this brief review demonstrates, there are few general guidelines regarding customer asset management for services. Researchers have studied few antecedents in a limited number of studies. While satisfaction and price fairness have received considerable attention, marketing activities—such as loyalty programs, direct marketing activities, channel of acquisition, and advertising—have been almost ignored. Moreover, little is known about the differential influence of marketing activities on purchase behaviors reflecting the length, depth, and breadth of a customer relationship. Thus, there is a need for comprehensive models of customers' service purchase behavior that replicate and extend current work; that is, studying additional marketing instruments, assessing how their effects differ across different customer behaviors, and investigating the moderating effects of service industry characteristics.

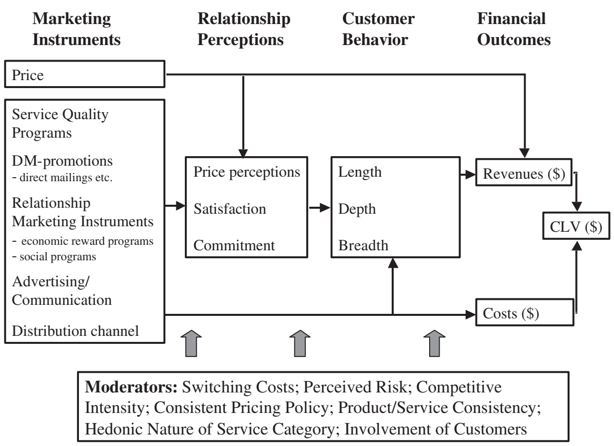
A CONCEPTUAL FRAMEWORK FOR CUSTOMER ASSET MANAGEMENT

To begin to understand the differential effects of a service organization's marketing instruments on customer behavior and ultimately on CLV, we propose a framework for *Cus*tomer *A*sset *M*anagement of *S*ervices: "CUSAMS," illustrated in Figure 1. The CUSAMS framework is a conceptual model of how marketing instruments influence purchase behaviors that reflect the length, depth, and breadth of customer-service provider relationships and thereby influence CLV. It can be considered a more granular, theory-based analog to the managerially oriented service-profit chain (Anderson and Mittal 2000; Heskett, Jones, Loveman, Sasser, and Schlesinger 1994; Kamakura et al. 2002; Rucci, Kirn, and Quinn 1998).

Marketing Instruments

In the CUSAMS framework, service organizations invest in a diverse array of marketing activities designed to stimulate customer behavior and thereby influence the financial outcomes of the relationship. We consider the following six categories of marketing instruments: *price*, *service quality programs*, *direct marketing promotions*, *relationship marketing instruments* (e.g., reward programs), *advertising/communications*, and *distribution channels*. Each of these six categories of marketing instruments differentially affects relationship duration, service usage, and cross-buying of services. They generate revenues (via their effect on individual customer behaviors), and they engender fixed and variable costs. As an added complexity, price influences demand as well as directly influences contribution margin.

FIGURE 1
Overview of CUSAMS Framework



NOTE: CUSAMS = Customer Asset Management of Services; DM = direct marketing; CLV = customer lifetime value.

Customer Perceptions and Assessments of Services

In the CUSAMS framework, we posit that marketing instruments influence customers' perception, and their assessments of the relationship, thereby influencing behavior. Prior research suggests that satisfaction and commitment can influence customer behavior (Garbarino and Johnson 1999), mediating (or moderating) the effects of marketing instruments on customer behavior (Ahluwalia, Unnava, and Burnkrant 2001; Chauduri and Holbrook 2001; Jap and Ganesan 2000).[3] Hence, we focus on *price perceptions*, *satisfaction*, and *commitment* (Bhattacharya and Bolton 2000; Bolton and Lemon 1999; Crosby, Evans, and Cowles 1990; Dwyer, Schurr, and Oh 1987).

Satisfaction is a customer's cumulative evaluation of the purchase and consumption experience (Anderson et al. 1994), whereas commitment is a customer's enduring desire to maintain a valued relationship with a supplier (Moorman, Zaltman, and Desphandé 1993). However, satisfaction is a retrospective assessment, whereas commitment entails conation, that is, an inclination to act. By noting this distinction, it becomes evident that the two constructs offer complementary perspectives, looking backward and forward in time, respectively. Researchers studying satisfaction and commitment recognize that exchange relationships entail the exchange of economic and social resources (cf. Bagozzi 1979), so both constructs are believed to have cognitive and affective dimensions (Gundlach, Achrol, and Mentzer 1995; Oliver 1997:319; Peterson 1995). For this reason, the extent to which a service organization provides hedonic and/or utilitarian experiences will moderate the effects of marketing instruments on customer behavior.

Customer Behaviors, Financial Outcomes, and Moderating Effects

We examine the effects of the aforementioned marketing instruments and relationship perceptions on three aspects of customer behavior that are related to the value of the customer asset: relationship *length*, *depth*, and *breadth*. As noted above, relationship length refers to the duration of the relationship and customer retention, relationship depth refers to the deepening of the customer's relationship with the firm through increased usage or upgrading, and relationship breadth refers to the expansion of the customer relationship with the firm through cross-buying. These customer behaviors are related to *CLV* through the *revenues* they generate for the firm. The marketing instruments are related to CLV through the *costs* that they require the firm to incur to produce the desired customer behaviors. As we will discuss in some depth below, we believe these relationships are moderated by characteristics of the firm, the industry, and the customer base.

Additional Influences on the Customer Asset

Cross-functional investments and external conditions. Although not pictured in Figure 1, the CUSAMS framework may be extended to accommodate investments in cross-functional areas (e.g., human resources or technology) that influence individual customer perceptions and behavior. This extension is particularly useful for understanding the role of service quality improvement programs (Simester, Hauser, Wernerfelt, and Rust 2000). In addition, external context effects can moderate the effects of marketing activities, such as the nature and extent of competition, economic or regulatory conditions, or changes in the external environment.

Dynamic relationships between purchase behaviors. There are dynamic relationships between purchase behaviors that, due to their complexity, are not illustrated in Figure 1. First, current purchase behavior depends on past purchase behavior. This feature explains the common use of reach frequency monetary value (RFM) segmentation methods within database marketing (e.g., Roberts and Berger 1999). For example, a customer's current cross-buying behavior may depend on the number of services he or she has already purchased. A recent rigorous assessment of the accuracy of out-of-sample predictions for four data sets shows that variability in CLV is primarily explained by past earnings, accounting for 75 percent of the explainable variation (Malthouse and Blattberg 2002).

Second, current purchase behaviors may be simultaneously determined as well as share some of the same antecedents. Surprisingly, although expected relationship length is often used to calculate CLV, Reinartz and Kumar (2000) found that relationship length has a small correlation with future CLV in some contexts (p. 88). However, Malthouse and Blattberg (2002) found that frequency of purchase is a good predictor of CLV, whereas acquisition of information is not a good predictor.[4] Taken together, these findings suggest that the length of the customer-firm relationship does not influence service usage and cross-buying, but that the customer's service usage may influence the length of his or her relationship and his or her cross-buying behavior. These simultaneous relationships may be nonlinear. For example, customers who have already purchased many different offerings from the service organization will be less likely to engage in additional cross-buying—suggesting diminishing marginal returns to additional sales efforts across services.

Third, certain service attributes or marketing instruments—such as price or quality—may become more (or less) important as the duration of the relationship lengthens (Boulding, Kalra, and Staelin 1999; Mittal and Katrichis 2000; Mittal, Kumar, and Tsiros 1999). These dynamics can have a profound influence on customer behavior that the firm must recognize in allocating marketing expenditures over time. For example, reliability of service may become increasingly important as the age of the customer-firm relationship increases (Lemon and Bolton 2002), with ripple effects on customers' service usage and cross-buying.

PROPOSITIONS

This section develops a set of propositions regarding the effects of marketing instruments on the length, depth, and breadth of the customer relationship. For each marketing instrument, we summarize prior research, develop new propositions, and identify theoretical (and sometimes counterintuitive) relationships that might be addressed in future research. Since some progress has been made in understanding customer-company relationships, we state predictions (rather than established findings) in the form of testable propositions.

The Influence of Price Perceptions

In contrast with traditional approaches to understanding price and demand (e.g., Tellis 1986), studies of the effect of price on customer behavior for service organizations do not focus solely on actual prices. They also study price perceptions, such as price fairness or payment equity (e.g., Bolton and Lemon 1999; Rust et al. 2000). In these studies, higher absolute prices lead to lower perceptions of price fairness, but price fairness is also affected by competitors' pricing policies. Since the influence of actual price on service purchases has been widely documented in economics (e.g., Einhorn 1994; Goldman, Leland, and Sibley 1984; Ng and Weisser 1974), we will focus on the effect of price perceptions on customer behavior. Customers can have price perceptions of their currently consumed services by the focal supplier, which we refer to as current price perceptions. They can also have perceptions of not currently consumed services sold by the focal supplier. Besides price perceptions of the focal supplier, the customer may also have price perceptions of currently consumed services for competitors, which we refer to as competitive price perceptions. In the same fashion as for the focal supplier, the price perceptions may also be formed of not currently consumed services at a competitor. In our proposition, we will focus on the price perceptions of currently consumed services at both the focal supplier and a competitor.

Price perceptions and relationship length. Higher levels of customer price perceptions (i.e., higher levels of price fairness) should lead to longer customer-firm relationships, but there is little empirical support for this notion. Reference price theory provides a plausible explanation, namely, that perceptions of price changes, rather than price levels, influence the duration of firm relationships (Kalyanaram and Winer 1995). First, negative changes in price perceptions over time (e.g., price fairness decreases) are likely to have a larger influence than positive changes (Tversky and Kahneman 1991). For example, financial service companies have frequently observed that when insurance premiums are increased, there is an increase in defection rates. Second, changes in price must exceed a certain threshold to have an effect on customers' evaluations and decisions (Galanter 1990; Monroe 1990). Third, differences between the price perception of the service provider and its competitors can lead to regret (Tsiros and Mittal 2000). For example, in a study of customers' credit card usage, positive price perceptions relative to competitors have a large effect on customer retention, and negative price perceptions relative to competitors have a small effect (Bolton et al. 2000). On the basis of these observations, we propose the following:

> *Proposition 1_{price}*: Increases (decreases) in perceptions of price fairness will have a positive (negative) influence on relationship length, where increases (vis-à-vis the customer's price threshold) will have a smaller absolute effect on relationship length than decreases.

Price and relationship depth. Although price and demand are inversely related for most goods, there are subtle nuances to the effect of price within customers' relationships with service organizations. Price plays an important role in the acquisition of new customers. In contrast, after the relationship has been established, the role of price tends to become less prominent, and experiential aspects of the relationship, such as service quality, become more important (cf. Kordupleski, Rust, and Zahorik 1993; Reichheld and Sasser 1990; Rust and Zahorik 1993; Rust, Zahorik, and Keiningham 1995). In general, price perceptions will have a positive influence on service usage, but it is important to distinguish between fixed (e.g., subscription fees), variable rate (e.g., usage-based), and semi-variable pricing policies (Bolton and Lemon 1999). When customers pay a fixed price, an increase in service usage implicitly creates a lower unit price and (thus) an increase in price fairness and satisfaction. Therefore, we propose the following:

Proposition 2$_{price}$: Variable-rate pricing policies will reduce the customer's usage of a service relative to fixed subscription fee policies. The size of the reduction depends on the actual prices for both the variable-rate pricing and fixed-rate pricing.

Combination pricing plans are too complex for treatment here (see Goldman et al. 1984; Gourville 1998; Gourville and Soman 1998; Ng and Weisser 1974; Rappoport and Taylor 1997).[5] We note, however, that when companies offer customers a choice between fixed- and variable-rate pricing plans, customers will self-select toward the most favorable pricing policy based on their usage patterns.

Price and relationship breadth. A key feature of cross-buying, in comparison with other purchase behaviors, is that the customer's current consumption experiences are not necessarily relevant to the new purchase. Customers can add services to their portfolio that have little, if any, connection with the currently consumed services. The addition of a new service is likely to require more elaborate search and decision-making processes than repeat purchases, including changes in usage. Consequently, the influence of competitive prices (rather than prior price perceptions) is likely to be larger for cross-buying than for relationship length or service usage.

Price perceptions for an added service are usually based on the customer's knowledge of the prices of services purchased from the same organization in the past. We expect a positive effect of price perceptions on customers' cross-buying of services when the service organization has a consistent pricing policy, but no effect otherwise. By consistent pricing policy, we mean that the service organization offers a similar value proposition across all products (i.e., constant ratio of benefits to costs). Accentuating the role of price consistency, customers with positive price perceptions may have a greater tendency to seek low prices, thereby exhibiting lower cross-buying probabilities (Verhoef et al. 2001). On the basis of these observations, we propose the following:

Proposition 3$_{price}$: Customers' price perceptions of currently consumed services will have a stronger effect on their cross-buying for service organizations with a consistent pricing policy than for service organizations that do not use a consistent pricing policy.

Synthesis. Price is usually the marketing instrument best understood by marketers, due to the strong foundation provided by classical economics and the development of a rich marketing literature concerning subjective perceptions of price and reference price effects. Nevertheless, the preceding discussion indicates that the effects of price are very different for the three customer behaviors under consideration, so that the overall effects of price on CLV are not straightforward. For example, fixed- versus variable-rate pricing is a critical issue for service usage, whereas the comparison of price perceptions across both services sold by the same company and services sold by competing companies is critical for the cross-buying of services. Furthermore, price directly influences revenue streams through contribution margin. Hence, any analysis of the effects of a price change on CLV will require a detailed analysis of revenue streams. Overall, we propose the following:

Proposition 4$_{price}$: Current perceptions of the firm's prices will have a smaller effect on cross-buying, in terms of explained variance, than on relationship length or service usage.

Proposition 5$_{price}$: Current perceptions of competitors' prices will have a larger effect on cross-buying, in terms of explained variance, than on relationship length or service usage.

The Influence of Customer Satisfaction

In our model, service quality programs positively influence customer satisfaction and commitment and (thereby) purchase behavior (cf. Simester et al. 2000; Zeithaml 2000; Zeithaml, Berry, and Parasuraman 1996). For example, Danaher and Rust (1996) found that overall service quality is positively associated with cellular service usage rates. We begin by discussing the role of satisfaction on each purchase behavior and then turn to commitment.

Satisfaction and relationship length. Marketers typically assume that satisfied customers are more loyal, and this assumption has been confirmed in a meta-analysis of purchase intentions studies (Szymanski and Henard 2001). However, conceptual and empirical work has established that the effect of satisfaction on customer loyalty is complex and nonlinear (Oliver 1999). Bolton (1998) reported a positive effect of satisfaction on relationship length that is enhanced by relationship age for telecommunications company customers. Mittal and Kamakura (2001) found that customer demographics, such as age and gender, moderate the effect of satisfaction on relationship length. Bolton (1998) also investigated the effect of new information regarding the quality of the service provider and found that it accounts for substantial explained variance in relationship length. Hence, marketers should examine changes in customer satisfaction over time due to customer "touches" (i.e., customer or firm-initiated encounters) as well as perceptions of competitors (e.g., Bowman and Narayandas 2001).

Negative discrepancies between a customer's satisfaction with a service provider and its competitor (i.e., competitor performs better than company) influence customer retention, whereas positive discrepancies do not (Bolton et al. 2000; Kumar 2002). In other words, extant research indicates that outperforming competition does not seem to influence customer retention. However, relationship length has typically been studied in industries with high switching costs, so this finding may not generalize to other contexts. In summary,

> *Proposition* 1_{sat}: Increases in customer satisfaction over time will positively influence relationship length, where the effects of changes will be asymmetric: negative changes in satisfaction will have a larger effect than positive changes.

Satisfaction and relationship depth. A positive link between satisfaction and usage has been documented by Bolton and Lemon (1999). The underlying rationale for this link is that higher satisfaction scores reflect a higher utility of the provided service (see also Ram and Jung 1991). Fixed subscription fees will tend to reinforce satisfactory experiences because customers are encouraged to use the service more often. Moreover, customers gain more experience with the service. As a consequence, the effect of satisfaction is likely to be larger for services with fixed subscription fees. Yet, the effect of satisfaction on relationship depth may be limited when service usage cannot be easily expanded (e.g., hair cutting).

Satisfaction and relationship breadth. If a company's service is reliable—that is, the company performs a promised service dependably and accurately—customers should be more willing to purchase additional services (Anderson, Fornell, and Rust 1997; Berry, Parasuraman, and Zeithaml 1994; Zeithaml et al. 1996). Yet, as noted earlier, a customer's experience with a particular service will not necessarily transfer to additional services offered by the same organization. For example, Verhoef et al. (2001) found that satisfaction does not influence cross-buying for a financial services firm. However, if customers perceive a company's service offerings to be similar (in terms of attributes or benefits), their cumulative satisfaction should positively affect cross-buying. Similarity among offerings is analogous to the notion of "fit" in the brand extension literature (Aaker and Keller 1990). If customers perceive that a company's service offerings are dissimilar, brand name or supplier affiliation might be more important.

> *Proposition* 2_{sat}: Customer satisfaction will have a positive (no) influence on cross-buying for organizations with a high (low) similarity among the offered services.

Synthesis. Satisfaction with prior service experiences undoubtedly has an important effect on customers' purchase behavior. However, the question of whether improvements in satisfaction are likely to "pay off" by increasing CLV will be context dependent. For example, the nature of the organization's pricing policy and the depth of the customer's decision processes moderate the effect of satisfaction on customer behavior. Furthermore, satisfaction is likely to play a much stronger role in influencing the length of a customer-firm relationship, compared with its influence on customers' service usage or cross-buying of additional services.

> *Proposition* 3_{sat}: Customer satisfaction will have a smaller effect on cross-buying, in terms of explained variance, than on relationship length and service usage.

The Influence of Commitment

We distinguish two types of commitment: affective and calculative commitment. Affective commitment is the desire to maintain a relationship and is based on feelings of loyalty and affiliation (Gundlach et al. 1995). Calculative commitment is based more on rational motives, focusing on termination or switching costs (e.g., Geyskens, Steenkamp, Scheer, and Kumar 1996). Since Morgan and Hunt (1994) first argued that commitment was important in understanding customer-company relationships, many researchers have reported that commitment positively influences customer purchase intentions or behavioral loyalty (DeWulf, Odekerken-Schröder, and Iacobucci 2001; Garbarino and Johnson 1999). Moreover, Sheth and Parvatiyar (1995) have provided conceptual arguments for why committed customers are less likely to patronize other companies. However, other studies claim that the effect of commitment is exaggerated or even nonexistent (Gruen, Summers, and Acito 2000). Given this debate, we continue with a discussion of the effect of commitment on distinct purchase behaviors.

Commitment and relationship length. Prior research suggests that there may be a positive relationship between commitment and relationship duration. Verhoef (2003) reported a positive effect of commitment on customer retention and, as noted above, several studies found a positive relationship between commitment and customer loyalty. Therefore, we expect to find positive effects of both affective and calculative commitment on relationship length.

Influence of commitment on relationship depth. It appears that little or no research has investigated the effect of commitment on service usage. Hypothesizing the effects of commitment on service usage is not straightforward. For example, will affectively committed customers of a cellular phone supplier be more likely to use the phone service more often than someone with low affective commitment? Although committed customers may prefer the supplier over other suppliers, this may not translate into higher usage levels. We believe that usage behavior is mainly driven by the utility provided by the usage of the service. Therefore, we propose the following:

Proposition 1$_{\text{comt}}$: Affective commitment will have no influence on service usage.

Calculative commitment—derived from economic motives—is likely to be more important than affective commitment in influencing service usage, as consumers consider costs and benefits of the service. However, research has not established whether calculative commitment will completely mediate the effects of price and price perceptions on customer behavior. For example, will customers with higher levels of commitment be more likely to use an entertainment service—after controlling for the effects of price and price perceptions? Prior research has found that brand-loyal customers are willing to pay higher prices for their preferred brands (e.g., Aaker 1990). By analogy, we predict that customers with high commitment levels may be willing to pay a price premium for services. Given that the direct effects of price and price perceptions on customer behavior are powerful and well understood, it seems unlikely that calculative commitment will completely mediate them. We propose the following:

Proposition 2$_{\text{comt}}$: Calculative commitment will partially mediate the effect of price and price perceptions on service usage.

Influence of commitment on relationship breadth. Cross-buying broadens the customer's relationship with the firm. Customers have the option to buy both from the focal firm and/or from its competitors. If a customer is affectively committed to a supplier (cf. Morgan and Hunt 1994), they are likely to buy additional services from the focal service organization versus other suppliers. This idea is also supported by Verhoef (2001), who reported a positive effect of commitment on cross-buying of financial services. Since calculative commitment is based on economic aspects of the connection between the customer and the firm, a customer with calculative commitment will not necessarily purchase additional services from the focal firm (ceteris paribus). Thus, we propose no effect of calculative commitment on cross-buying, consistent with Verhoef, Franses, and Hoekstra (2002). We propose the following:

Proposition 3$_{\text{comt}}$: Affective commitment will positively influence cross-buying, whereas calculative commitment will have no influence on cross-buying.

Synthesis. Our discussion reveals that commitment has a (generally) positive effect on customer purchase behavior and (consequently) CLV. However, we believe that this effect may differ across markets due to the multidimensional nature of commitment. In particular, the role of affective commitment should be especially strong in service industries that provide hedonic experiences. In these markets, both customers and firms are able to give an affective loading to the customer-firm relationship (e.g., Batra and Ahtola 1991; Sloot, Verhoef, and Franses 2002). Thus, we propose the following:

Proposition 4$_{\text{comt}}$: The effect of commitment (especially affective commitment) on relationship length and cross-buying will be stronger for service organizations providing hedonic experiences than those providing utilitarian experiences.

Note the differences between our propositions regarding satisfaction and commitment. Whereas satisfaction is likely to play a strong role in influencing the length of a customer-firm relationship (and possibly service usage), we posit that calculative commitment will influence customers' service usage, and affective commitment will influence cross-buying of additional services.

The Influence of Direct Marketing Promotions

Direct marketing (DM) encompasses all targeted communications (as opposed to mass communications) between the seller and the customer. The DM literature distinguishes between marketing communications that directly stimulate product or service sales and those that focus on the maintenance and development of customer relationships (McDonald 1998). We begin by focusing on promotions that directly stimulate sales, such as direct mail, coupons, and telemarketing, which we call *DM promotions*. The effect of DM promotions on customers' perceptions of the relationship (as opposed to aggregate sales) has received modest attention (DeWulf et al. 2001). DM promotions often focus on economic benefits (e.g., pricing discounts), so it is possible that they encourage positive price perceptions and calculative commitment. Alternatively, targeting the customer with many DM promotions (e.g., "junk mail") may lead to negative emotional responses and less (affectively) committed customers, leading some marketers to advocate permission-based marketing (Godin and Peppers 1999).

DM promotions and relationship length. Since DM promotions focus on creating (or accelerating) sales, we do not expect that such promotions *directly* influence relationship length. There might even be a negative effect, due to shorter interpurchase intervals. However, direct marketing may positively affect the depth or breadth of the customer-company relationship, ultimately leading to lower defection rates. We propose that the effect of DM promotions on relationship length operates *indirectly*, that is, it is mediated by the breadth of the relationship. Thus,

Proposition 1_{prom}: The positive influence of DM promotions on the length of the customer's relationship with the service organization is mediated by relationship breadth.

DM promotions and relationship depth. DM promotions accelerate purchases, but their long-run effect on service usage is uncertain.[6] In fact, there may be a "dark side" to the long-term use of DM promotions—arising from customer irritation and increased price sensitivity—that has received little attention from marketing academics or practitioners. On the basis of this observation, we speculate that DM promotions could have a negative effect on long-run service usage, mediated by commitment. However, we believe that usage levels are primarily driven by current experiences with the service (Bolton and Lemon 1999), rather than DM promotions. Therefore, we propose the following:

Proposition 2_{prom}: Although the short-run influence of DM promotions on service usage may be positive, DM promotions will have a negative influence on service usage in the long run.

DM promotions and relationship breadth. DM promotions are often used to sell additional services, thereby increasing relationship breadth. They typically target customers with high response probabilities, as predicted by statistical techniques (such as chi-squared automatic interaction detection, or CHAID). DM promotions are often extensively tested to identify the most effective wording, letter design, and so forth (Roberts and Berger 1999). Prior research shows that effective DM promotions positively influence cross-buying (Verhoef et al. 2001).

Synthesis. Our discussion reveals that DM promotions will have a stronger effect on cross-buying, compared with relationship length or service usage. With respect to the differential effect of these instruments on our three customer behavior dimensions, we propose the following:

Proposition 3_{prom}: DM promotions will have a smaller effect on relationship length and service usage, in terms of explained variance, than on cross-buying.

The Influence of Relationship Marketing Instruments

Relationship marketing (RM) instruments are loyalty and affinity programs that focus on developing customers' relationships with a firm (i.e., extending beyond short-term DM promotions). They can be classified based on whether they provide economic gains (e.g., free services, economic rewards) or social benefits to the customer (Bhattacharya and Bolton 2000; Dabholkar, Johnston, and Cathey 1994). Using this classification, we distinguish between two categories of RM instruments: *economic reward programs* and *social programs*. Since Dowling and Uncles (1997) distinguished between RM instruments providing immediate versus delayed rewards (i.e., frequent flyer programs), we also consider the time horizon of RM instruments.

There are few empirical studies of the effect of RM instruments on customer behavior. McAlexander, Schouten, and Koenig (2002) have shown that social programs positively influence customers' affective evaluations. We contend that economic reward programs should affect their economic evaluations of the relationship (economic satisfaction, calculative commitment) as well as price perceptions. Programs that offer price reductions dependent on the customers' behavior—for example, based on the customers' service usage levels or number of different services purchased—will primarily affect price perceptions and calculative commitment.

RM instruments and relationship length. Economic reward programs increase the customers' perceived value for the relationship by providing delayed rewards, such as free products, so it is likely that a reward program will increase relationship length. Empirical support for this notion is provided by Bolton et al. (2000); Leenheer, Bijmolt, van Heerde, and Smidts (2002); and Verhoef (2003). Service organizations tend to target customers with certain characteristics, so that members of reward programs are likely to be characterized by longer relationships independent of their membership in the program—confounding the RM instruments effect. This puzzle can be solved using models that account for the endogenous nature of the reward program (see Madalla 1983; Villas-Boas and Winer 1999), but it has not yet been addressed in empirical work. Given the challenges of accurately predicting CLV, it is unlikely that service organizations accurately target their rewards programs solely at customers with long relationships (Malthouse and Blattberg 2002). Hence, current research can be interpreted as supporting the notion of a positive effect of reward programs on relationship length. However, we note that this effect is likely to be overestimated when statistical techniques do not account for the endogenous nature of these programs.

Social programs provide intangible benefits that will positively influence customers' affective evaluations of a relationship and thereby increase relationship length. They can be very effective for service organizations that provide a hedonic experience, such as adventure travel, or in markets where customers are highly involved, such as sports (Bhattacharya and Bolton 2000; McWilliam 2000; Muniz and O'Guinn 2001). An unresolved question is whether social programs directly influence relationship length or whether their effect is mediated by satisfaction and/or commitment (e.g., McAlexander et al. 2000). Since social programs focus on the customers' experiences with the company and its services, we believe their effects are mediated by both noneconomic satisfaction and affective commitment. Like reward programs, endogeneity poses a challenge to establishing an indirect or direct link between social programs and the length of a customer's relationship with a service organization. Since the effect of economic rewards programs has already been established, our propositions address social programs.

Proposition 1_{rel}: The positive effect of social reward programs on relationship length is mediated by satisfaction and commitment.

RM instruments and relationship depth. A primary objective of loyalty programs is to enhance relationship depth (with customer retention a secondary objective). For example, airline loyalty programs provide many additional economic and social benefits for customers who reach a specific threshold of usage within a given time frame. Although there is considerable anecdotal evidence that loyalty programs strengthen social bonds between customers and service providers, little academic research has examined whether these programs ultimately increase usage. Some researchers argue that loyalty programs, such as frequent buyer programs, simply provide economic gains (i.e., volume discounts) that stimulate purchases in the short run (Sharp and Sharp 1997). It is our contention that the effect of social programs will be more enduring. Do relationship programs really increase usage, willingness to pay price premiums, or encourage customers to upgrade? If so, how? As a first step toward identifying these issues, we propose the following:

Proposition 2_{rel}: Economic reward programs will positively influence service usage levels in the short term, but not in the long term.

Proposition 3_{rel}: Social programs will have a small influence on service usage levels in the short term (compared with economic benefits) but will also have an influence in the long run.

RM instruments and relationship breadth. Economic reward programs offer attractive propositions to customers, such as price reductions, that depend on the number of services purchased. Hence, customers are likely to purchase additional services from the service organization—implying a direct effect of price and price perceptions. Social programs may also influence cross-buying, but the effect is likely to be smaller and indirect; that is, mediated by customer satisfaction and commitment. For example, Saturn picnics and Harley-Davidson events stimulate cross-buying by enhancing customers' retrospective evaluations of their experiences and stimulating their relational intentions.

Proposition 4_{rel}: The effect of social programs on customers' cross-buying will be mediated by satisfaction with prior experiences and commitment to the service organization.

Synthesis. The above discussion highlights the importance of distinguishing between economic and social benefits derived from RM instruments. Social benefits are likely to have powerful long-run effects for service organizations that deliver hedonic experiences (arts organizations, amusement parks) or serve highly involved customers (universities, medical services, hospitality services). This effect should be similar for relationship length, service usage, and cross-buying. Summarizing this observation:

Proposition 5_{rel}: Social programs will be more effective in influencing customer behaviors for service organizations offering hedonic experiences or serving highly involved customers.

The Influence of Advertising and Communications

Marketing communications that focus on creating brand awareness and favorable brand associations are usually associated with mass markets for frequently purchased products, rather than one-to-one marketing of customized services (e.g., Hoekstra, Leeflang, and Wittink 1999). The customer asset management literature recognizes that marketing communications create brand awareness, favorable brand associations, and brand preference—potentially increasing customer value (Ambler et al. 2002). For example, Rust et al. (2000) proposed that brand equity influences customer retention and switching behavior, and thereby CLV. Their empirical work shows that the effect of brand name on switching is very small for airline and rental car services.

Service marketers have long recognized that brand name and corporate image are quality signals for services that are primarily intangible and experiential, such as financial services or electronic retail services (Davis, Buchanan-Oliver, and Brodie 2000). However, there is little empirical work at the intersection of brand equity and services marketing (Berry 2000). Below, we focus on the effects of brand advertising (i.e., communication of non-price information).

Advertising and relationship length. Advertising plays an important role in the acquisition of new customers, but it may also affect the behavior of existing customers—especially early in the relationship. By creating favorable brand associations and brand preference, advertising will strengthen the relationship between the customer and the firm (Ambler et al. 2002; Keller 1993). We do not believe that advertising will operate through satisfaction (which is an evaluation of prior purchase and consumption experiences). As customers gain experience with an organization over time, the effect of advertising will decrease. As the relationship lengthens, we believe that customers will primarily base their behavior on their prior experiences in the relationship (Verhoef, Franses, and Hoekstra 2002). Thus, the effect of advertising on commitment will become smaller as relationship age increases.

Proposition 1_{adv}: The positive influence of brand advertising on relationship length is mediated by commitment, where the influence of brand advertising on commitment is smaller for customers with longer relationships.

Advertising and relationship depth. We have previously argued that service usage is mainly driven by the experiences with the service. Thus, advertising that focuses on service usage (e.g., service education, reminding customers to use discretionary services) is likely to influence service usage, whereas traditional brand advertising may not have a direct effect. It is difficult to make predictions regarding effects of advertising due to the nature of the advertising message. However, advertising as "market power" (versus "information") theory suggests that brand advertising may be associated with less (more) price sensitivity and higher (lower) retail price levels (Albion and Farris 1982; Kaul and Wittink 1995; Neslin, Powell, and Stone 1995). Thus,

Proposition 2_{adv}: Brand advertising will moderate the effect of price perceptions on service usage.

Advertising and relationship breadth. The effect of advertising on cross-buying is unclear. Cross-buying typically appears in later phases in the relationship, when customers primarily base their behavior on their service experiences. However, advertising can create awareness of new products and services among existing customers (e.g., new products available from retailers). The intersection between the effects of advertising-based brand equity and experience-based perceptions of service quality is a fruitful domain for future research.

Synthesis. The role of communications in shaping customer relationships with service firms has been under-researched, and we believe it is an important gap in the literature. Our discussion suggests that the effect of advertising on customer behavior will be mediated by commitment and that it will primarily affect relationship length, rather than service usage or cross-buying.

The Influence of Distribution Channels

Although marketers have focused considerable attention on distribution channel choice (e.g., Darian 1987), they have almost completely ignored the effect of distribution channels on customer relationships. Companies often use different channels to acquire customers than to maintain customer relationships. Keane and Wang (1995) showed that the value of an individual customer depends on the acquisition channel due to different retention rates in different acquisition channels. These differences arise because each channel has its own characteristics and mechanisms to attract and retain specific customer groups. In the CUSAMS framework, we distinguish between five acquisition channels: personal selling, mass media (e.g., radio, television), direct marketing channels (e.g., direct mail and telemarketing), Internet, and retail outlets. We note that the efficacy of each channel is likely to vary between product and service categories.

Distribution channels and relationship length. In *personal selling*, the establishment of intimate customer relationships is facilitated by the personal communication between the customer and the sales representative, in which social exchange processes are important. As a result, retention rates are likely to be higher among customers acquired via this channel. *In mass media*, direct response commercials are used to acquire customers (e.g., Tellis, Chandy, and Thaivanich 2000; Verhoef, Hoekstra, and van Aalst 2000). Commercials often contain brand-related information and product/price-related information, so that customer purchase behavior is driven by brand preference rather than price. Thus, this channel might also lead to higher retention rates. In contrast, *DM* acquisition methods usually emphasize attractive prices, but price-sensitive customers may switch service providers frequently. This feature suggests that customers acquired using DM channels probably have lower retention rates.

When *retailers* acquire customers, channel partners must assess whether the customer is loyal to the retailer or the purchased brand (i.e., manufacturer). Out-of-stock studies usually reveal higher store loyalty than brand loyalty (e.g., Campo, Gijsbrechts, and Nisol 2000). However, this relationship seems to be context dependent. Within the insurance industry, customers are often more loyal to the middleman than to the insurance supplier. Thus, loyalty of customers acquired by channel partners depends heavily on the relationship between the channel partner and the service organization. Little is known about how customer acquisition over the *Internet* influences customer loyalty. The Internet may reduce customer loyalty due to increasing market transparency (e.g., Sinha 2000). On the other hand, Reichheld and Schefter (2000) argued that the Web is very "sticky" when the correct technologies are used. If customers who are acquired via the Internet are subsequently served on the Internet, lock-in effects may cause higher loyalty.[7]

In summary, there are compelling reasons to predict that the nature of the acquisition channel (personal selling, mass media, direct marketing, retailer, or Internet) will influence the length of the customer's relationship with the service organization, but the relative magnitudes of the effects of the acquisition channels are unknown. However, there are two underlying principles to consider. First, acquisition channels focusing heavily on price (instead of brand image and service quality) will have higher defection rates. Second, acquisition channels with more opportunities to create economic or social bonds between the customer and the service organization will have lower defection rates. Hence, to guide future research, we propose the following:

Proposition 1_{chan}: Customers acquired through channels with a focus on price information, such as DM channels, will have shorter relationships with the service organization.

Proposition 2_{chan}: Customers acquired through channels with more (less) opportunities to create economic or social relationships, such as personal selling or retailing channels, will have longer (shorter) relationships with the service organization.

Distribution channels and relationship depth. Similar principles are likely to hold when service organizations use channels to maintain and develop customer relationships. Channels that create and build economic and social bonds, thereby increasing perceived service quality and value, will enhance customer satisfaction and (thus) positively influence service usage. We note that given our proposition about no effect of commitment on service usage (Proposition 2_{com}), the social bonds created by a channel do not influence service usage. Thus, the influence of the channel on service usage is only due to possible higher satisfaction levels.

Proposition 3_{chan}: Customers who are served through channels that create stronger (weaker) social and/or economic bonds will have higher (lower) levels of satisfaction and higher (lower) levels of service usage.

Distribution channels and relationship breadth. We consider two reasons why the distribution channel may influence relationship breadth. First, knowledge and intimacy with the customer are important to the creation of relationship breadth. Service organizations without personal connections to customers may attempt to simulate intimacy by creating and analyzing large databases to gain insight into customers' needs, and using this information to customize services, to train employees, and so forth. Second, channel characteristics may impede or facilitate the selling of some services (Campo, Gijsbrechts, and Nisol 2000; Hogan, Lemon, and Rust 2002). For example, simple services, such as car insurance, can be successfully offered through direct channels. Car insurance is frequently sold via telephone, and mortgages are sold over the Internet. However, complex financial services, such as brokerage services, are offered in a retail setting—with some remote maintenance of the relationship. These observations suggest the following:

Proposition 4_{chan}: Customers who are served through channels that create stronger (weaker) social and/or economic bonds will have higher (lower) levels of satisfaction and commitment, and higher (lower) levels of cross-buying.

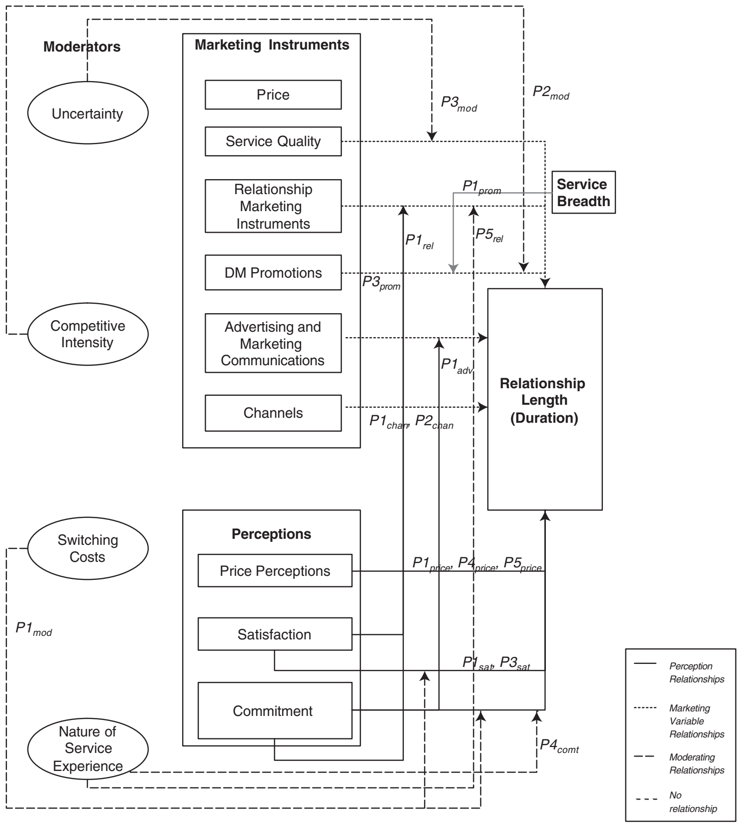
Synthesis. There is remarkably little research in this area regarding channels, despite the importance of multiple channels to service organizations and the increasing importance of electronic channels. We believe that this topic will become a priority for services marketing academics and practitioners. Our propositions focused on the effects of the acquisition channel on relationship length and how service organizations' decisions to serve customers via certain channels may influence customer evaluations. However, the nature of the acquisition or maintenance channel may moderate the effects of other marketing instruments (e.g., price).

The Moderating Influence of Service Industry Characteristics

We have already identified firm-specific and customer-specific moderators: pricing consistency across the service organization's product line, service reliability, customer involvement, and the hedonic nature of the service experience. We now briefly discuss three service industry characteristics that may moderate the effects of marketing instruments on customer relationships: switching costs, competitive intensity, and uncertainty regarding service quality.

Switching costs. Switching barriers can have a significant influence on customer behavior (e.g., Dick and Basu

FIGURE 2
Illustrated Propositions for Relationship Length



NOTE: DM = direct marketing.

1994)—potentially operating through calculative commitment. These barriers arise from a number of sources, such as transaction costs, costs of learning to buy from a new supplier, and uncertainty of the quality of other suppliers (Klemperer 1995). In markets with high barriers, customers may continue to purchase from their current supplier even when they are dissatisfied (Jones, Mothersbaugh, and Beatty 2001). As a result, the ultimate influence of marketing instruments on a customer's purchase behavior will be small.

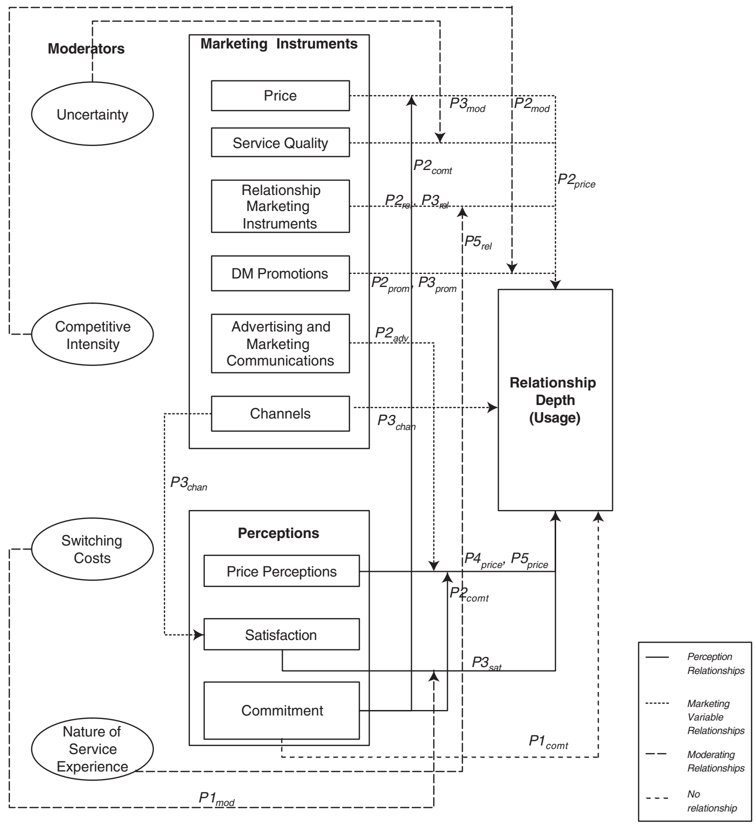
> *Proposition* 1_{mod}: Switching costs will decrease (increase) the magnitude of the effect of customer satisfaction (commitment) on the length of the customer-company relationship, his or her service usage levels, and cross-buying.

Competitive intensity. In highly competitive markets, customers are more likely to be targeted by competitors' marketing instruments—so they will be more keenly aware of the value of services offered by competing service organizations. For example, studies of the effects of sales promotions (e.g., newspaper features) report that extensive use of promotions may lead to higher price sensitivity (Bolton 1989; Mela, Gupta, and Lehmann 1997). If DM promotions operate in the same way, customers who are targeted with many DM promotions will become more price-sensitive. Therefore, we would expect DM promotions aimed at increasing a customer's duration, usage, or cross-buying to be less effective for the customer's current service supplier.

> *Proposition* 2_{mod}: DM promotions designed to increase the length of a customer's relationship with a service organization, service usage levels, and/or cross-buying will be less effective in highly competitive markets than in less competitive markets.

Perceived risk or uncertainty about quality. Customers' perceived risk is considered to be the probability of any loss (that can be avoided by excluding the alternative) multiplied by the importance of that loss. It can include financial risk, performance risk, physical risk, and convenience risk (Bhattacharya and Bolton 2000; Srinivasan

FIGURE 3
Illustrated Propositions for Relationship Depth



NOTE: DM = direct marketing.

and Ratchford 1991). Service industries with high perceived risk have more opportunities to build customer relationships (Bhattacharya and Bolton 2000; Sheth and Parvatiyar 1995:258). If firms adopt a relational strategy in these markets, the effect of marketing instruments on customer behavior should be stronger. Since quality is a primary determinant of customer assessments and behavior regarding services (Zeithaml et al. 1996), we focus on performance risk, that is, uncertainty regarding quality over time. Rust, Inman, Jia, and Zahorik (1999) have shown that reduction in uncertainty regarding quality over time can increase the customer's likelihood of choosing a product. Thus, we propose the following:

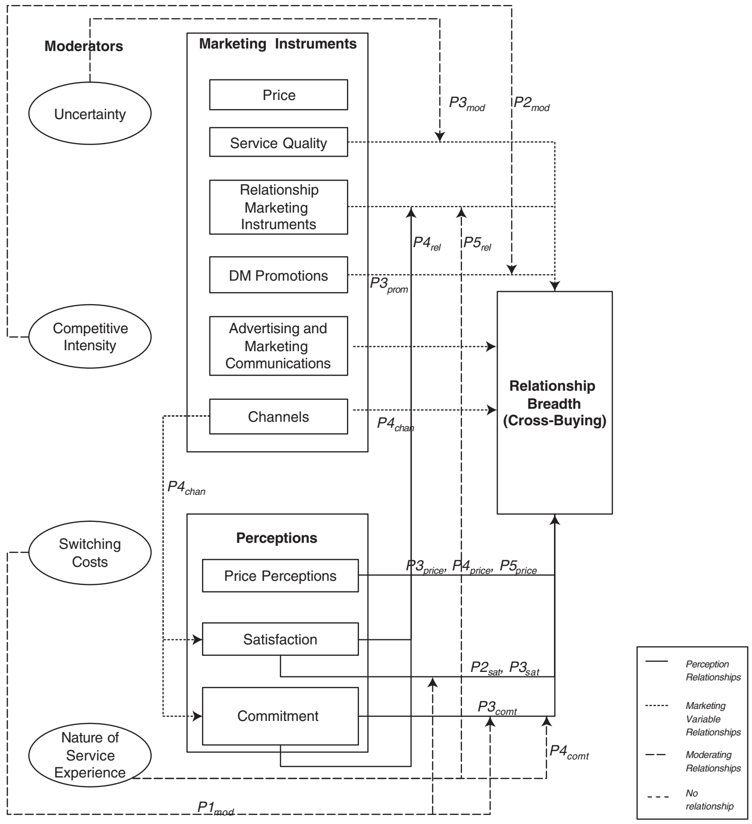
Proposition 3_{mod}: Marketing instruments designed to increase the length of a customer's relationship with a service organization, service usage levels, and/or cross-buying will be more effective in markets with high performance risk perceptions (i.e., uncertainty) than in markets with low performance risk perceptions.

Summary

Prior research provides a solid foundation for developing an in-depth understanding of customer asset management in services. To date, researchers have been particularly interested in the effects of price and customer satisfaction—as opposed to relationship marketing instruments or distribution channels—on relationship length, breadth, and depth. Relationship length has received more attention than relationship breadth or depth. In the CUSAMS framework, we have built on current knowledge and outlined a series of research propositions that can move us toward a more comprehensive understanding of the effects of marketing instruments and customer perceptions on the value of a customer to the firm.

In Figures 2, 3, and 4, we illustrate the propositions described above. To integrate the propositions from a customer behavior point of view, we display the propositions in terms of each customer behavior. Figure 2 illustrates the relationships between the propositions for relationship length (duration). Figure 3 shows the propositions for rela-

FIGURE 4
Illustrated Propositions for Relationship Breadth



NOTE: DM = direct marketing.

tionship depth (usage). Figure 4 illustrates the propositions for relationship breadth (cross-buying). The web of relationships is very complex. We believe that the effects of marketing instruments on customer purchase behavior are frequently mediated by customer satisfaction and commitment. Equally important, the direction and size of the effects of a marketing instrument will vary depending on the moderating effects of market characteristics. Moreover, marketing instruments will have different effects for different market segments. Overall, we hope that the CUSAMS framework will enhance our understanding of these relationships and encourage research in these areas.

CONCLUDING REMARKS

The CUSAMS framework enables service organizations to assess the complete value of their "customer assets" and to understand the influence of marketing instruments on them. Its foundation is a careful specification of key customer behaviors that reflect the length, breadth, and depth of the customer–service provider relationship: duration, usage, cross-buying, and customer word of mouth. Using the framework, we have developed a set of propositions regarding how marketing instruments influence customer behavior within the relationship and thereby influence customer value. It is important to recognize that in our quest for breadth, our discussion of the antecedents of each element of the framework has been brief. However, the CUSAMS framework builds on already developed theory regarding customer judgments and behaviors, as well as their antecedents. We believe that the framework provides a structure for further research regarding customer asset management and that there is still much research to be done in this growing field.

One intriguing question is whether the CUSAMS framework can also be used in nonservice industries. We believe that it is particularly useful for service organizations for three reasons. First, many service organizations (e.g., airlines, hotels, telecommunications, and financial services) have better data describing individual customers than nonservice organizations because they initiated customer-centric marketing approaches and customer relationship management (CRM) systems. Second, the behavioral components (length, depth, and breadth) of customer relationships are directly applicable in service industries. For example, the revenues of firms that continuously provide services under contractual arrangements (e.g., insurance, cellular telephone service, system support services) are directly tied to relationship length. Third, the important role that price perceptions, satisfaction, and commitment play in maintaining and enhancing customer relationships has long been acknowledged in service industries.

However, it is our contention that the general ideas behind the framework may be applicable in other industries, with some noteworthy differences. First, many nonservice organizations do not observe actual customer behavior because they sell through distributors or retailers. This feature makes it difficult to obtain the data required to operationalize the CUSAMS framework. Second, the behavioral components relevant to the customer-firm relationship may be different in nonservice industries—especially in industries that are transaction-focused relationships or that are characterized by relationships with long purchase cycles (e.g., consumer durables). For example, customer retention may be important for a car manufacturer, but car usage is likely to be less important. Instead, usage of company-owned dealer services might be important. Third, the role of perceptions, satisfaction, and commitment as mediating variables may be less important in nonservice industries. Instead, customers may be directly influenced by marketing instruments such as DM promotions. For example, the direct effect of sales promotions on brand choice is large for groceries sold in supermarkets (Blattberg and Neslin 1990). The remainder of this section provides recommendations about how the CUSAMS framework can be useful to managers and researchers.

Managerial Implications

The benefits of a comprehensive framework for customer asset management in service organizations are twofold. First, it enables managers to conduct a systematic investigation of how they can influence customer relationships, by considering how marketing actions influence different customer behaviors or revenue sources. For example, in applying the CUSAMS framework to a financial services organization, we discovered that its loyalty program was effective in increasing cross-buying of this organization's services, but it had a relatively small effect on customer retention. Furthermore, the company discovered that the costs of the loyalty program (i.e., premium reductions and operation costs) far exceeded the monetary benefits. Managers used this information, plus their qualitative assessment of the risks of quitting the loyalty program, to make a decision about how much to spend in supporting the loyalty program. Second, the CUSAMS framework provides a common metric to compare the consequences of resource allocation decisions regarding diverse actions that a service organization might undertake. For example, the aforementioned financial services organization could compare the effect of a loyalty program with the effect of a new service quality initiative—by examining their impact on business performance.

There are challenges to implementing a customer asset management framework that focuses on customer behavior. First, the service firm must collect longitudinal data on customer purchase behavior, marketing activities, and service operations over time. Second, sophisticated analytic skills are needed to construct customer behavior models, due to their complexity. (In contrast, the financial calculations can usually be embedded in spreadsheets so that managers can evaluate alternative scenarios and conduct sensitivity analyses.) Third, it can be very difficult to develop an explicit model of the effects of competition. Instead, a customer's behavior is usually modeled as a function of marketing activities and other experiences associated with the service organization he or she currently patronizes (see Rust, Lemon, and Zeithaml 2001, for an exception).

Implications for Researchers

Emergence of dynamic models. We believe that the marketing discipline is in the midst of a shift from a managerial focus on allocating resources to customers who are currently loyal (i.e., a reactive strategy) to a focus on allocating resources to customers to create, maintain, and enhance loyal behaviors (i.e., a proactive strategy). By understanding the dynamic effects of marketing activities and service operations over time on different customer behaviors, the marketing discipline comes closer to developing a comprehensive approach to assessing how marketing instruments influence the value of the customer asset. For example, Johnson and Selnes's (2004) recent modeling efforts show a counterintuitive result, namely, that a key to increasing CLV, aggregated across the firm's customers, lies in acquiring new customers (who initially have weaker relationships to the firm) to build the long-term value of the customer portfolio.

The emergence of dynamic models of customer behavior is also changing our understanding of how marketing activities operate within the context of the service provider-customer relationship. For example, Heilman, Bowman, and Wright (2000) studied how brand preferences and responses to marketing activity evolve over consumers' lifetimes by estimating a logit-mixture model with time-varying parameters. They found that customers become less sensitive to price over their lifetime of purchasing baby products. Recently, Hogan and Hibbard (2002) have begun to examine the customer asset using an option value framework, incorporating uncertainty and risk into dynamic models of CLV.

The critical role of context effects. We can illustrate how *market context* plays a powerful role in moderating the effectiveness of marketing activities on the value of the customer base in the following way. When we applied the CUSAMS framework within a systems support organization, managers debated about the profitability of improvements in service operations. Our analyses showed that such improvements are particularly profitable for this organization because they increase customer retention, service usage, and cross-buying. The organization discovered that it was more profitable to increase the value proposition of their services than to discount prices (stimulating new customer acquisition). For this organization, investments in improving service operations increase the value of the customer base more than other investments because these improvements are leveraged by the size of the customer base.

Compare this example with the financial services example described earlier. In the financial services market, the benefits of the company's loyalty program were offset by similar programs offered by the competition—so the revenues derived from the program did not exceed its costs. The competitive structure of the financial services market dictates that the company match—but not exceed—competitors' loyalty programs. In contrast, in the support services market, the value of the customer base is primarily determined by customer repatronage behavior. Hence, marketing activities that simultaneously increase retention, service usage, and cross-buying have the greatest "payoff" in terms of CLV. By looking across different market conditions, we can better understand the role of marketing activities and customer behaviors—and ascertain which marketing activities and customer behaviors are important to a particular service organization. Furthermore, we observe that the moderating effects of market context are vitally important; it is not possible to generalize about the magnitude of the effectiveness of marketing activities across industries.

Future Research

As we seek to understand the value of a customer as a strategic asset of the service organization, there is a need for additional research in six areas, in addition to formally testing the propositions outlined above.

1. Understanding dynamic effects and interactions. Although we have considered some of the ways in which individual marketing activities may affect distinct aspects of customer behavior differently, there is yet much work to be done to understand how these customer behaviors interact. Future research should examine the manner in which relationship depth, breadth, and length influence one another over time. In addition, prior research (e.g., Rust et al. 2000) suggests that firms should think about "key drivers" of customer behaviors (e.g., value drivers, relationship drivers, and brand drivers). Understanding how distinct drivers in the firms affect each customer behavior differently (and dynamically) is an important area for future research.

2. Empirical studies and meta-analyses. Managers and practitioners also need empirical studies to understand the effects of specific marketing activities on revenue sources that link to customer value (Szymanski and Henard 2001). Our understanding of these relationships is growing. However, many studies have focused on a single industry or a limited number of marketing factors. Moreover, studies sometimes rely on self-report measures, rather than studying actual customer behavior.

3. Understanding competitive effects. Additional research is needed to understand how competitors influence customer lifetime value. Since customers may have relationships with multiple service organizations in the same industry, "share of customer" models may be useful in understanding how customer behavior responds to competitors' marketing actions (Keiningham, Perkins-Munn, and Evans 2003). Alternatively, Bolton et al. (2003) argued that general relationship constructs such as share of customer, satisfaction, and commitment (measured at the organization level, such as through key informant self-reports) may not explain firm behavior as well as specific, experience-based constructs measured at the contract or product level. Ultimately, as service organizations build a strong understanding of customers' utility functions at a given point in time and seek to meet the customers' needs better than competitors, service organizations must not lose sight of new opportunities for differentiation and success in the marketplace.

4. In-depth analysis of individual companies. We believe that case studies examining the processes service organizations undergo to implement customer asset management systems would also be valuable. Many service organizations have had CRM systems in place for several years (Ferguson 2001), so the time is ripe for service organizations to take the next step to developing usable customer asset management tools. For example, Venkatesan and Kumar (2003) recently completed an exhaustive evaluation of one company's CRM initiatives, including an assessment of alternative metrics to guide resource allocation.

5. Further understanding of the CLV metric. Although CLV has become a popular metric within the academic literature, its use is very limited in business contexts (Verhoef et al. 2003). There may be several reasons for this. First, although the concept of CLV is easy to understand, the implementation of CLV in business practice essentially calls for a longer-term perspective in marketing decision-making. Firms may be reluctant to change their short-term focus because they do not know whether this will really lead to an increased business performance. Consequently, studies are needed to show whether using CLV as a decision-making metric increases profitability in the long run. Second, models to calculate CLV are often formulated at the aggregated customer level. A few attempts have been made to predict CLV for individual customers (Donkers, Verhoef, and de Jong 2003; Malthouse and Blattberg 2003). However, more research is needed on predicting CLV.

6. Developing the theory of the customer asset. Finally, research is needed to understand what it really means to consider the customer as an asset of the company. Certainly, if it is an asset, its properties are different from the properties of conventional assets, such as capital equipment. If the customer is an asset, what does that mean for researchers and managers? Future research in this area could examine the following. How do customer perceptions such as satisfaction, commitment, and trust influence the value of the customer asset? Do customer assets "behave" like other assets? Do customer assets appreciate or depreciate? Should financial and accounting theories of assets and asset management apply to the customer as well?

Final Thoughts

Overall, the idea of the customer as an asset of the firm has been gaining momentum during the past several years. However, little research has sought to integrate research in this area. It is our hope that the CUSAMS framework and associated propositions will provide such an integration of existing research and a springboard for future research in the area of customer asset management.

ACKNOWLEDGMENTS

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NOTES

1. Rust, Lemon, and Zeithaml (2001) rightly observed that these models are used to evaluate the financial return from a particular class of marketing expenditures (e.g., advertising, direct mailings, or sales promotion) rather than to compare alternative marketing strategies (i.e., different classes of marketing expenditures). Their model is a notable exception to this observation.

2. Kamakura, Mittal, de Rosa, and Mazzon (2002) used a broader definition of relationship length by considering relationship length as a latent construct comprising three outcomes: relationship age, share of wallet, and number of transactions. However, most researchers measure relationship length by retention or relationship duration, which can be observed over time (e.g., Bolton 1998; Verhoef 2003). We follow this approach because we wish to distinguish between different customer behaviors.

3. Corporate image and trust are also reported to influence customer-firm relationships in service industries (e.g., Andreassen and Lindenstad 1998), but we know much less about how these constructs mediate the effects of marketing instruments on customer purchase behavior. Hence, we focus here on price perceptions, satisfaction, and commitment, recognizing their cognitive and affective dimensions, leaving other constructs for future research.

4. Demographics (or firmographics) and lifestyle variables are often not good predictors, so we do not discuss them further.

5. It is sufficient to observe that companies with high fixed subscription fees may induce customers to have high usage rates, because they will enhance the cost-benefit ratio of the service, whereas companies with high variable rates may induce customers to limit their usage. In the combination of a fee subscription and variable rate policy, both mechanisms may be at work. We also note that in order to make higher usage rates more attractive, service organizations often use usage reward programs.

6. Loyalty or affinity programs, which reward usage, are not considered to be direct marketing promotions.

7. However, such channels often have higher costs, which could result in lower profits. Some researchers argue the Internet channel is an exception to the rule that higher benefits are associated with higher costs (Reichheld and Schefter 2000).

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