
1. Drivers of customer equity

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INTRODUCTION

Making Customer Equity Strategic

The ‘service revolution’ has shifted the core of exchange between firms and customers from products to the provision of service (Vargo and Lusch, 2004). Long-term one-to-one customer relationships have come to the fore while customer transactions, the hallmark of a product economy, are being increasingly de-emphasized (Peppers and Rogers, 1993). While firms can’t ignore the need for attracting new customers, the retention of existing customers has become more crucial to long-term profitability. Innovations in information technology further accelerate such structural changes in the economy as true interactivity between firms and customers, customer specific personalization, and real-time adjustments to a firm’s offerings are becoming reality (Rust and Lemon, 2001). Such trends that define today’s economy necessitate the fundamental rethinking of business and strategy around the customer.

The notion that customer assets are becoming more and more important is not new. For example, Procter & Gamble renamed its sales department as ‘Customer Business Development’ more than a decade ago to integrate such thinking into its operations (Sheth and Parvatiyar, 2002). However, the increasing pace of economic and technological change forces firms to move beyond simply recognizing that the customer lies at the heart of business – to evolve into truly customer-centric companies (Rust, Zeithaml, and Lemon, 2000, 2004). This calls for marketing, and potentially the entire firm, to organize and deploy all tangible and intangible assets into maximizing customer equity. Customer equity should lie at the heart of any firm’s philosophy and vision. The decision criterion for all business functions and operations should be whether an action contributes to growing customer equity. In this chapter we lay the groundwork for firms to adapt to become true customer-centered companies by providing an overview of the drivers of customer equity and introducing a method for implementing a customer equity program.

The Three Drivers

In order to evolve into true customer-centered companies, firms need to know the specific drivers of customer equity. Following the framework of Rust et al. (2000), we present value equity, brand equity, and relationship equity as three main drivers of customer equity. We adhere to the definitions of Rust, Zeithaml, and Lemon (2004). Value equity stems from the perceptions of objective value, based on attributes such as the quality, price, and convenience of a good or service. Value equity is created when customers choose a good or service that provides greater value than its cost. Brand equity originates from subjective attributes, such as customers' subjective and intangible assessments of the brand and emotional attachments to the brand. Brand equity helps the differentiation of a product and the formation of positive associations in customers' minds that simplify customer choice. Relationship equity (originally called 'retention equity') is created from customers' intentions to maintain a relationship with a brand, over and above the value customers derive from their objective and subjective assessments of the brand. Strong relationships between a firm and its customers increase long-term profitability through increased repeated purchase. Thus, each driver of customer equity increases customer lifetime value (CLV).

Although all three drivers of customer equity are important, the strength of influence that any one of the drivers exerts on CLV varies across industries (Lemon, Rust, and Zeithaml, 2001). For example, brand equity is important for low-involvement goods such as a toilet paper and soda, where customers do not want to spend too much time on decision-making, and are therefore likely to be influenced heavily by their prior attitudes toward brands (Keller, 1993). However, brand equity is less important in industries where the objective value of a good or service is important, and customers are motivated to process information more carefully. Relationship equity is important in industries such as financial services or airlines, where repeat purchase is important and the evaluation of quality for a good or service is difficult.

The customer equity framework provides solid ground for firms to develop actionable initiatives to maximize CLV given budget constraints. Firms need to explore which driver, or combination of drivers, has the maximum impact on customer equity and CLV. Throughout the chapter we describe each driver of customer equity and its respective sub-drivers in detail, and provide a method for implementing a customer equity program. We conceptualize the sub-drivers as both the means and the ends to achieving customer equity. All of the sub-drivers can correspond to both a marketing program driven by management (e.g., a new ad

campaign to increase brand awareness) and a customer response (e.g., a customer's perception of brand awareness following a new ad campaign). In any case, the sub-drivers of customer equity are measurable in terms of budget or associated expenditures or in terms of customer-measured items (e.g., 'To what degree are you aware of the brand?' on a Likert scale).

VALUE EQUITY

The Nature of Value Equity

Defining the term 'value' is difficult since the value that an individual customer derives from a good or service is based on his or her own underlying needs and perceptions. We adopt the definition put forth by Rust et al. (2000), following Zeithaml (1988). From the customer's perspective, value means one of the following four categories: low price, what the customer wants in a good or service, the quality the customer receives for the price the customer pays, and what the customer receives for what the customer gives up (e.g., time and effort). These categories indicate that some customers concentrate primarily on what they receive from the good or service, whereas others focus mainly on what they give up or sacrifice in return for the good or service. Thus, value can be defined as the consumer's objective assessment of the utility of a good or service based on perceptions of what is given up for what is received (Rust et al., 2000).

Value equity represents the objective appraisal of the utility of a good or service. Value often lies at the core of customers' relationships with a firm (Lemon et al., 2001). The firm's ability to offer goods or services that satisfy customers' needs and meet their expectations is a necessary condition that precedes brand-building and relationship-building strategies in the successful implementation of a customer equity program. Advertising campaigns and loyalty programs can only create synergy with goods and services when customers perceive that the firm's offerings provide value. For example, car manufacturers' extensive investments in TV commercials are ineffective if the quality of their cars does not live up to customers' standards. Membership programs offered by airlines, hotel chains, and retailers also need to be built upon the core value of their goods and services in order to have an effect in increasing CLV.

Drivers of Value Equity

The key sub-drivers of value equity are quality, price, and convenience (Rust et al., 2000). Quality can simply be considered in terms of how well

the customer is served. Quality includes tangible and intangible aspects of a good or service that are under a firm's control. Quality is driven by physical goods, service products, service delivery, and the service environment (Lemon et al., 2001). Firms can enhance value equity by introducing additional variety to their physical goods, by differentiating the features and the benefits of its service products, by improving the service delivery process, or by making its service environment more interesting for the customer. Introducing variety to a product assortment can increase a customer's value by accounting for customer heterogeneity in individual preferences. Although Henry Ford remarked that any customer could buy a Model T 'painted any color that he wants so long as it is black', customers could pick one out of nine body styles that best fitted their preferences. Toyota's mission statement, 'Through our commitment to quality, constant innovation and respect for the planet, we aim to exceed expectations and be rewarded with a smile' emphasizes the best customer experience and dealer support, exemplifying firms' efforts to drive value equity by providing top quality.

The price of a good or service is another important driver of value equity. Firms must exercise caution when adopting pricing strategies. While price discounts may contribute to the growth of value equity, they have the potential to simultaneously deteriorate customers' perceptions of the firm's overall quality and value in the long run. Products purchased on an infrequent basis for which the price-quality relationship is stronger than for frequently purchased items, are more susceptible to such potential negative effects of price promotions (Gerstner, 1985). There are four practical ways that a firm can compete on price. A price discount strategy offers temporary bargains. An everyday low pricing strategy gives customers the image that the firm consistently provides good prices, reducing the likelihood that customers will wait for a price discount to make their next purchase. A complex pricing strategy allows the customer to exercise flexibility in the overall price paid, the timing of payment, or the overall product received for a given period. A firm can also apply a situation-based pricing strategy, which offers different pricing based on business circumstances.

Providing convenience to customers strengthens value equity by reducing customers' search cost, time, and effort. Providing additional physical locations can create a value for customers. Opening an online or mobile website enables customers to access the firm's goods and services conveniently. Gilt City, a high-end website promoting local deals, recently demonstrated the impact of convenient access through mobile channels on value equity. The firm's transactions that were settled through mobile devices doubled within a year to 20 percent of total sales in 2012 (Indvik, 2012). Ease of use

is a particularly important sub-driver for web-based services and software products. Automating routine operations on the firm's website based on customers' behavior and emphasizing the intuitive interface during the process of software development can increase value equity. Availability is another sub-driver of value equity that emphasizes the 'when' more than the 'where' (i.e., location). For example, AT&T's Global Customer Service Center offers 24-hour access, seven days a week, allowing customers to make immediate contact with the firm whenever they want.

When Value Equity Matters Most

Value equity is a crucial driver of customer equity since value precedes customers' relationships with the firm. Under specific circumstances, value equity may be the most important customer equity driver in maximizing CLV (Rust et al., 2000).

First, value equity plays a pivotal role when the customer has the ability to discern differences between competing products. Driving value equity is generally very challenging for firms whose offerings do not provide clearly differentiated benefits, and in markets where little differentiation exists among competing products. In such conditions, firms may need to find other venues of opportunity for outpacing competitors. However, value equity can be built in environments where there are clear differences among competing products, or if a firm can add distinct features to its products.

Second, a firm can employ a value equity strategy when launching innovative goods and services. Customers tend to scrutinize new goods or services, comparing them to existing offerings in deciding whether they provide enough benefits that warrant purchase. Positive signals of quality help lower customers' perceptions of the risk of consuming a new good or service that does not deliver (Kirmani and Rao, 2000), which in turn leads to the growth of value equity.

Third, value equity matters most when customers face complex purchase decisions. Large expenditures or business-to-business purchases, which generally involve a long-term relationship between the buyer and the provider, are examples that involve complex decision-making. Companies that successfully minimize their customer's time and efforts are well equipped to build value equity.

Finally, value equity is important when firms want to rejuvenate mature goods or services. By adding new features or benefits to the goods or services in the maturity stage, firms can vitalize their goods and services, adding extra life to the life cycle. The successful execution of such efforts leads to value equity.

The Future of Value Equity

As the business environment continues to evolve from mass marketing to one-to-one marketing (Peppers and Rogers, 1997) building adhesive customer relationships has been emphasized while cost reduction through customer relationship management has been relatively de-emphasized. Thus, value equity has been receiving less attention.

However, value equity is still the fundamental element that precedes all other drivers in building and maintaining long-term relationships with customers (Rust et al., 2000). Rather than questioning the importance of value equity, the challenge going forward lies in how firms can create value equity in the changing business environment.

Advances in technology and the widespread application of sophisticated customer relationship management tools give firms unprecedented access to more information about their customers. The Internet also enables firms to explore and access more information on their potential customers. With such broad and individualized data, firms may implement value equity strategies by fine-tuning the three levers of quality, price, and convenience. Richards and Jones (2008) provide some examples of how firms can use three levers to drive value equity. First, firms can classify their customers in terms of profitability (Thomas, Reinartz, and Kumar, 2004). Furthermore, technology allows firms to identify the impact of each sub-driver at the individual customer level. Targeting the most profitable customers on a one-to-one basis will open the door to maximizing value equity. Second, access to individual data greatly increases the allocation of costs to individual customers (Rust, Lemon, and Zeithaml, 2001). Price strategies can be implemented with surgical precision. Third, customer relationship management streamlines the firm's information flow in a customer-centric direction (Buttle, 2004), enabling the firm to provide convenient services to customers by building adhesive relationships, improving customer responsiveness, and sharing more information with customers.

Advances in technology are culminating toward firms providing goods and services that are perfectly individualized and change with customer needs (Oliver, Rust, and Varki, 1998). Location-based mobile applications such as Google Now and Google Field Trip provide highly individualized services based on users' current locations and/or their historical Google website activity. For example, Chung, Rust, and Wedel (2009) developed an adaptive personalization system for digital audio-players that enables service providers to dynamically individualize and fine-tune their service based on changing customer needs. Coupled with the changing business environment, value equity will remain a critical component in reshaping the firm to create customer equity.

BRAND EQUITY

The Nature of Brand Equity

Brand equity is defined as the marketing effects uniquely attributable to a brand (Keller, 1993). Brand equity can be considered the added value of a good or service with a brand name in comparison to the same good or service without the specific brand name attached (Aaker, 1991; Ailawadi, Neslin, and Lehmann, 2003). Brand equity can be measured using the customer mindset approach, the product market approach, or the financial market approach, each with its strengths and weaknesses (Keller and Lehmann, 2003). We focus on the customer mindset approach to present the drivers of customer equity from the viewpoint of the customer. From the customer's perspective, brand equity represents the customer's subjective and intangible assessment of the brand beyond an objective value (Rust et al., 2000; Rust, Lemon, and Narayandas, 2005). The value of a brand is ultimately derived from 'what customers have learned, felt, seen, and heard about the brand' (Keller, 2008).

More specifically, a brand adds value to firms by performing three vital roles (Rust et al., 2000). First, it attracts new potential customers through brand awareness and recognition. Second, a brand reminds existing customers of the firm's goods and services. Third, a brand helps customers form emotional ties to the firm, which leads to increased sales and purchase share (Park et al., 2010).

Brand equity has a positive impact on a variety of firm performance metrics. Brand names are positively related to stock prices (Kerin and Sethuraman, 1998; Madden, Fehle, and Fournier, 2006; Mizik and Jacobson, 2008). Brand equity positively impacts customer loyalty (Chaudhuri and Holbrook, 2001), willingness to pay (Park et al., 2010), and firm revenue (Ailawadi et al., 2003). Brand equity also has positive impacts on customer acquisition, retention, and profitability, even after controlling for the influence of firms' marketing activities (Stahl et al., 2012).

Drivers of Brand Equity

Brand awareness, attitudes toward the brand, brand attachment, and corporate ethics are actionable drivers that firms have at their disposal to drive brand equity (Rust et al., 2000, 2005; Park et al., 2010).

Brand equity stems from customers' knowledge about the brand, which consists of brand-related thoughts, feelings, perceptions, images, and experiences (Keller, 2003). Therefore, customers must be aware of the brand to

build strong brand equity. In the absence of sufficient brand awareness, it is highly unlikely that customers will form any attitudes toward the brand or emotional ties with the brand. To increase brand awareness, firms need to deliver a consistent message to customers using an integrated marketing communication mix in the most effective media channels.

Strong brand equity comes from favorable, strong, and unique associations with a brand (Keller, 1993). Therefore, brand equity increases when customers evaluate a brand favorably, with confidence and certainty. Celebrity endorsements, special events, product placement, brand partners, and brand extensions are some examples of firm initiatives that aim to create positive and strong brand attitudes.

Brand attachment, the strength of the bond between the brand and the self (Park et al., 2010), increases brand equity by forming self-brand connections and building brand prominence. Customers are more likely to use their resources to maintain their relationship with a brand when they have formed a cognitive and emotional connection between the self and the brand. Firms need to form brand attachment by gratifying customers' self through aesthetic experiences with the brand, by offering a chance to enrich the self through brand concept, and by providing consistent and reliable performance (Park, MacInnis, and Priester, 2008).

In addition to brand awareness, positive brand attitudes, and brand attachment, brand equity is influenced by customers' perceptions of the firm organization. When considering a relationship with a brand, customers examine whether the values that a brand represents (i.e., in the sense of principles and beliefs, not as in value equity) coincide with their own values. For example, environmentally conscious customers will prefer brands or firms that promote green marketing and eco-friendliness. Firms can express their strong corporate ethics through means such as community sponsorships, donations, environmentally friendly initiatives, the promoting of privacy policies, and the fostering of firm-employee relations.

When Brand Equity Matters Most

Brand equity is most critical under the following circumstances. First, brand equity is important for purchases of low-involvement products. For certain products, such as frequently purchased low-price consumer packaged goods, customers apply routinized decision processes with little consideration. In this case, the role of brand equity is critical, because customers will be easily influenced by brand awareness and emotional attachment to the brand (Rust et al., 2000; Lemon et al., 2001). Brand equity from positive post-purchase experiences influences customers' opinions for their subsequent decisions. Therefore, developing a 'loyalty

loop' is important for creating superior marketing performance (Court et al., 2009).

Second, brand equity is vital when the use of the good or service is publicly visible to others. Customers often regard brands as an extension of the self (Belk, 1988) and use brands as a method for expressing self-identity to others (Berger and Heath, 2007). Therefore, customers are more likely to consider the fit between the brand and the self-concept when their own brand usage or consumption activity is of a public nature.

Third, brand equity matters when customers evaluate a new or unfamiliar product based on their knowledge of pre-existing brands. Brand extension, a strategy of using established brand names to launch new products (Völckner and Sattler, 2006), leverages the brand equity of existing brands to enhance the awareness and positive perception of new products. For example, Arm & Hammer leveraged its brand equity built upon its baking soda, to extend into toothpaste, laundry detergent, the underarm deodorant, and the pet litter deodorizer industry.

Fourth, brand equity is important when experiences of the good or service can be shared with others or passed from one to another. For instance, parents' brand preference of toothpaste or soap can pass down to their children (Rust et al., 2000; Lemon et al., 2001). The sharing of consumption experiences among customers can also lead to positive word-of-mouth effects that increase brand equity. Word-of-mouth and assistance from personal acquaintances are especially effective in driving sales for products that signify a high financial or psychological risk (Gershoff and Johar, 2006). The potential of word-of-mouth in surpassing traditional media channels in effective persuasion (Herr, Kardes, and Kim, 1991; Godes and Mayzlin, 2004), and the proliferation of online reviews, recommendations, and forums for sharing product usage or service experiences provide firms ample opportunity to build brand equity.

Fifth, the role of the brand is important for credence goods (Rust et al., 2000; Lemon et al., 2001). When customers face difficulty in evaluating the quality of a good or service prior to consumption, they need some type of proxy to 'anticipate' quality. Since positive brand associations and brand images can be used as the proxy, brand equity is important in decisions of credence goods such as the choice of lawyers, doctors, and investment consultants.

The Future of Brand Equity

The marketing environment has changed rapidly during the past decade. First, consumers have become increasingly diversified. Second, competition between firms has increased. Third, technology has advanced rapidly.

Fourth, there is a growing interest in environment, community, and social concerns (Keller, 2011).

The diversification of customers and the evolution of their needs over time necessitate the customization of goods and services. In order to increase brand equity firms need to transcend traditional mass customization and relationship marketing and focus on real-time marketing, not only providing customized offerings but also adapting to the changing needs of customers over time (Oliver et al., 1998; Chung et al., 2009).

Technology has allowed firms to greatly diversify the means of communication with customers. Internet technology has enabled interactive communication between firms and customers, and also increased the influence of user-generated contents (Fader and Winer, 2012) on brand equity through new forms of social media such as social networking services, YouTube, and Internet user forums. Customers now contribute to firms' value chains by providing reviews and feedback that firms can capitalize on as sources of ideas, improvements, innovations, and customer knowledge (Kumar et al., 2010). Furthermore, technology facilitates the co-creation of products through venues such as self-design, self-production, and customer participation in the new product development process (Hennig-Thurau et al., 2010; Hoyer et al., 2010). Such customer engagement (Van Doorn et al., 2010; Brodie et al., 2011) often leads to commitment, emotional attachment, self-brand connection, and brand loyalty (Moreau and Herd, 2010; Troye and Supphellen, 2012). Therefore, the integration of new interactive communication channels with traditional one-way communication channels has become an important issue for managing brand equity.

As media coverage of business practices and the speed of information diffusion have increased, customers have become more sensitive to firm activities. As a result, the importance of corporate social responsibility and ethics on brand equity has increased during recent decades. Firms should adopt a long-term view in building and managing their brand equity and prioritize corporate ethics as a key driver of brand equity.

RELATIONSHIP EQUITY

The Nature of Relationship Equity

Providing great value through a strong brand may be insufficient to keep customers 'glued' to a firm and preventing them from switching to competitors' offerings since customers now have the ability to interact directly with companies (Rust, Moorman, and Bhalla, 2010). Firms may need to

provide relational benefits outside their key offering itself, which reward customers for staying with the firm or impose a cost for breaking off from the firm to switch to a competitor.

Relationship equity is defined as ‘the tendency of the customer to stick with the brand, above and beyond the customer’s objective and subjective assessments of the brand’ (Rust et al., 2005, p.25). It represents the strength of the relationship between a firm and its customers, based upon the firm and the customer’s efforts to establish, build, and maintain a relationship. The stronger the relationship equity, customers perceive that they have more to lose from breaking the relationship with the firm. A firm’s retention programs and relationship-building efforts can build relationship equity by conferring tangible (e.g., loyalty program points) and/or intangible benefits to its customers (Rust et al., 2000). Customers can reduce choice by maintaining ongoing relationships (Ganesan, 1994; Kalwani and Narayandas, 1995; Sheth and Parvatiyar, 1995), which lightens the burden of having to make decisions (Gwinner, Gremier, and Bitner, 1998). Relationships can provide emotional benefits such as feelings of familiarity, personal recognition, and social support (Berry, 1995). Firms are also rewarded for building strong relationship equity since customers who perceive themselves as a firm’s valuable customer tend to purchase more and stay with the firm longer (Berry and Parasuraman, 1991). Building relationship equity also increases the likelihood that the most profitable customers return for future purchases (Rust et al., 2000).

Drivers of Relationship Equity

Firm initiatives for strengthening relationship equity should maximize the likelihood of retaining customers and the size of their future purchases while minimizing the likelihood of customers switching to competitors (Rust et al., 2000). The key levers that firms may implement to achieve such objectives are loyalty programs, special recognition and treatment, affinity programs, community-building programs, and knowledge-building programs (Lemon et al., 2001).

Loyalty programs are actions that reward customers’ specific behavior such as frequent purchase with tangible benefits. The loyalty program has become a key element of marketing for many firms such as airlines, liquor stores, supermarket chains, and banks. In order for loyalty programs to be effective, three criteria must be met. First, customers need to earn points frequently enough to accumulate sufficient rewards. Second, the rewards must be perceived as meaningful and worth receiving to customers. Third, the firm’s margins of its goods or services need to be high enough to justify a loyalty program. If these conditions are not met, loyalty programs may

deteriorate into an industry-wide prisoner's dilemma game where firms suffer from being forced to fight loyalty wars and from eroding margins (Rust et al., 2000; Lemon et al., 2001).

Special recognition and treatment are accomplished through recognizing customers for specific behavior with intangible benefits rather than monetary rewards. For example, many airlines grant early boarding to their 'platinum' level members. US Airways' 'Chairman Preferred' customers receive perks such as guaranteed seating and reservations assistance. Whereas customers' perceptions of a reward program may degrade from a firm's relationship-building effort into an alternative form of price discount or rebate over time (thereby leading to value equity rather than relationship equity), special recognition and treatment may become more valuable than monetary awards to a firm's best customers (Rust et al., 2000).

Affinity programs also seek to provide non-monetary benefits by creating strong emotional connections between a firm and its customers. Affinity programs are effective for brands that represent strong lifestyles (Johnson, 1998) that facilitate a link between the customer's relationship with the firm and other important aspects of the customer's life. The GOLF Magazine Rewards Visa Card 'designed with serious golfers in mind' rewards its customers with points toward golf equipment and apparel, preferred tee times, personalized golf balls, and other golf experiences. Affinity programs create a switching cost in the form of customers investing a sense of self into the firm, or into the firm's good or service.

Community-building programs seek to cement relationships by creating a customer community that links like-minded customers. Saturn, General Motors' automobile brand that was discontinued in 2010, fostered customer community through activities such as hosting 'homecoming' celebrations at its Spring Hill plant, attracting crowds of 30 000 and 44 000 to Tennessee in 1994 and 1999 respectively (Rust et al., 2000). Rosenbaum, Ostrom, and Kuntze (2005) find that members of loyalty programs who perceive a sense of community from the brand tend to be more loyal customers than members of programs that rely only on financial incentives without offering this relationship.

Knowledge-building programs seek to create learning relationships or structural bonds between the customer and the firm that provide a disincentive for customers to switch. Firms such as Amazon.com provide suggestions tailored to customers' preferences learned from purchase behavior over time. British Airways tracks customer food and drink choices, saving time for the customer in future interactions while simultaneously increasing the customer's switching costs in terms of having to 'train' competing airlines on their preferences (Lemon et al., 2001).

When Relationship Equity Matters Most

First, relationship equity is crucial when customers associate greater benefits with the firm's loyalty program than the actual monetary value of the benefits they receive. This 'aspiration value' of a loyalty program creates a strong incentive for customers to return to the firm in the future. The frequent flyer program is an example that capitalizes on the difference between the true value (approximately three to four cents per mile) and the customer's aspiration value of a frequent flyer mile – the perception of getting that much closer to a free trip (Rust et al., 2000; Lemon et al., 2001).

Second, relationship equity is critical when the community associated with the good or service is as important as the good or service itself. Customers will often continue to purchase from firms whose goods or services attract a strong community of enthusiasts in order to maintain 'membership' status in the community. For example, members of a HOG (Harley-Davidson Owners Group) are fiercely loyal to the Harley-Davidson brand (Lemon et al., 2001).

Third, relationship equity is critical when firms have the opportunity to create learning relationships with their customers. The learning relationship between the firm and the customer may become as important as the provision of the good or service itself. Collecting, tracking, and utilizing information on customers' purchase behavior reveals their preferences and buying habits, allowing firms to pay personal attention to customers, a benefit that customers can only receive from alternative providers by 'training' the new provider (ibid.).

Finally, relationship equity is critical when customer action is required to discontinue the service. Book clubs, insurance, Internet service providers, and negative-option services require customers to actively stop consuming the goods or services. In such cases, inertia can help customers stay in a relationship, providing firms with a unique opportunity to strengthen the bonds with their customers (Rust et al., 2000; Lemon et al., 2001).

The Future of Relationship Equity

The Internet's potential to be utilized as the 'ultimate customer equity tool' was recognized more than a decade ago (Rust et al., 2000). Information technology enables consumers to directly take care of numerous functions that previously required the firm's input (e.g., automated teller machines [ATMs], automated hotel checkout, mobile banking, and Internet services such as package tracking and online brokerage services) (Meuter et al., 2000). Furthermore, as a platform of customer-to-firm communication,

the Internet will continue to expand the role of customers as co-creators of goods and services, pricing, and distribution (Sheth, Sisodia, and Sharma, 2000). This presents opportunities for firms to strengthen the relationship 'glue' that sticks customers to the firm while reducing the internal costs of serving the customer (Rust and Lemon, 2001).

With technological innovation, firms now have the unprecedented ability to amass and to analyze customer data, and thereby build customer knowledge and strengthen learning relationships. With increased customer knowledge, firms can better implement co-creation marketing (Sheth et al., 2000). Customer co-creation enabled through technology creates not only new opportunities to drive brand equity, but also presents new opportunities for relationship equity. The truly personalized customer experiences from the co-creation of value (Prahalad and Ramaswamy, 2004) provide firms with the potential to add layers of depth to learning relationships. However, technological innovation also raises challenges to firms in driving relationship equity. How will customers' perceptions and expectations of their relationships with firms evolve? Will customers expect full personalization in not only a firm's goods and service offerings, but also in their relationships? Firms may need to optimize each driver of relationship equity building on an individual basis, providing different levels of programs and relational benefits that maximize the probability of retention and future spending for each individual customer. In an era of real-time marketing and segments of one, successfully offering fully personalized goods and services will strengthen the stickiness of customers to the firm, increasing the importance of relationship equity in driving a firm's profitability.

The Internet increases the connectivity not only between a firm and its customers, but also between a firm and its partners, suppliers, and employees. The wealth-creating potential of a firm's relationships with such parties, and the interactions among these parties and customers will become more important. For example, highly motivated employees may engender tighter relationships between the firm and its customers, and between the firm and its partners, who in turn reciprocate by strengthening the relationship with increased loyalty and larger future purchases (Heskett, Sasser, and Schlesinger, 1997; Reichheld, 2001). A broader perspective of relationship equity that incorporates the relationships between a firm and its stakeholders may be necessary to successfully utilize a firm's relational assets in driving value outside of that created by customers (Sawhney and Zabin, 2002).

Customer-to-customer relationships also warrant more attention. As the Internet makes it easier for firms to learn about their customers, customers are better able to learn about firms than ever before. The proliferation of social media facilitates the sharing of knowledge among diverse customer

groups and strengthens the potential for relationships between individual customers. Such customer-to-customer relationships may become more relevant as a reason for staying with a firm. Instead of certain goods and services attracting a strong community, in time customers may demand that all firms engage in more online community-building activities.

RETURN ON MARKETING

Managers are constantly faced with dilemmas such as whether they should improve service quality or decrease price, or whether they should invest in a loyalty program or in increasing advertising. Customer equity can help answer these questions. In this section, we describe a unified and executable strategic framework for trading off marketing strategy options based on the projected financial return of each action. We present the ‘return on marketing’ approach proposed by Rust, Lemon, and Zeithaml (2004). The procedures and equations outlined henceforth are taken directly from their model. We believe this approach provides a solid groundwork for maximizing customer equity by driving value equity, brand equity, relationship equity, or by developing a joint strategy of the three drivers.

Modeling the Chain of Effects

Departing from the methods used in direct marketing/customer relationship management (CRM) models (e.g., Venkatesan and Kumar, 2004; Rust and Verhoef, 2005), acquisition and retention models (Blattberg and Deighton, 1996), and customer-retention-based models (e.g., Rust, Zahorik, and Keiningham, 1995; Bolton, 1998; Gupta, Lehmann, and Stuart, 2004), the return on marketing model is centered on the brand-switching pattern of individual customers (Rust, Lemon, and Zeithaml, 2004).

Rust, Lemon, and Zeithaml’s (2004) return on marketing model uses Markov switching matrices to capture brand-switching patterns. This method examines the chain of effects resulting from how customer equity originates from driver perceptions, that is:

Driver perceptions → *Switching matrix* → *Customer lifetime value* → *Customer equity*

Modeling this chain of effects starts from the utility function. Consider that the utility an individual i derives from buying brand k is the sum of inertia utility from the previous purchase of brand j , and the conjoint

impacts of the customer equity drivers of brand k . Statistically, this utility function can be modeled as:

$$U_{ijk} = \beta_{0k} LAST_{ijk} + X_{ik} \beta_{1k} + \epsilon_{ijk} \tag{1.1}$$

where U_{ijk} is the utility of brand k to individual i , who most recently purchased brand j . The dummy variable $LAST_{ijk}$ equals one if $j = k$ and equals zero otherwise. X_{ik} is a row vector of the drivers. The coefficient β_{0k} corresponds to the coefficient for inertia, and β_{1k} to the coefficients for the drivers.

Based on this utility function, we model the choice of individual i as:

$$P_{ijk^*} = Pr [individual\ i\ chooses\ brand\ k^*,\ given\ that\ brand\ j\ was\ most\ recently\ chosen] = \frac{\exp(U_{ijk^*})}{\sum_k \exp(U_{ijk})} \tag{1.2}$$

The Rust–Lemon–Zeithaml approach specifies a brand-switching matrix to model customer acquisition and retention effects. Assuming that each customer i has an associated $J \times J$ Markov switching matrix M_i is:

$$M_i = \begin{bmatrix} P_{i11} & P_{i12} & \cdots & P_{i1J} \\ P_{i21} & P_{i22} & \cdots & P_{i2J} \\ \vdots & \vdots & \ddots & \vdots \\ P_{iJ1} & P_{iJ2} & \cdots & P_{iJJ} \end{bmatrix} \tag{1.3}$$

where J is the number of brands, and p_{ijk} is the switching probability that customer i will choose brand k in the next purchase conditional on having purchased brand j in the most recent purchase. Therefore, the retention is modeled by the diagonal element while the off-diagonal elements represent acquisition from competing brands. By the same token the off-diagonal elements simultaneously represent customer attrition to competition for brand j . Furthermore, to calculate the purchase probability of a specific brand, we denote a $1 \times J$ row vector A_i with its elements representing the probabilities of purchase for customer i 's current transaction. Multiplying A_i with M_i , we obtain the $1 \times J$ row vector B_{it} , with elements B_{ijt} representing the probability that customer i buys brand j in purchase t :

$$B_{it} = A_i M_i^t \tag{1.4}$$

The lifetime value, CLV_{ij} , of customer i to brand j is:

$$CLV_{ij} = \sum_{t=0}^{T_{ij}} (1 + d_j)^{-t} v_{ijt} \pi_{ijt} B_{ijt} \tag{1.5}$$

where d_j is firm j 's discount rate, f_i is customer i 's average purchase rate per unit time (e.g., three purchases per year), v_{ijt} is customer i 's expected purchase volume in a purchase of brand j in purchase t , and π_{ijt} is the expected contribution margin per unit of firm j from customer i in purchase t . T_{ij} is the number of purchases customer i is expected to make before firm j 's time horizon H_j (e.g., a typical time horizon ranges from three to five years) and B_{ijt} is a firm-specific element of B_{it} . Therefore T_i is the integer part of H_{ij} . Summing up the discounted CLV of all the firm's current and potential customers, we express firm j 's customer equity, CE_j , as:

$$CE_j = \text{mean}_i (CLV_{ij}) \times POP \quad (1.6)$$

where $\text{mean}_i (CLV_{ij})$ is the average lifetime value for firm j 's customers across the sample, and POP is the total number of customers in the market across all brands.

Data for Customer Equity Analysis

The key of the model is to obtain the brand-switching matrix, which depends on customers' perceptions of drivers. Therefore, a firm needs to collect cross-sectional survey data that include customer ratings of each competing brand on each driver.

The first step is to examine the competing and internal environment of a specific company. Typically, researchers outside of the firm should conduct manager interviews and exploratory research to acquire such information. Researchers should extend effort to acquire internal financial information such as the discount rate and relevant time horizon if possible. Based on such information, a firm or researcher can identify competing firms and customer segments, choose drivers that correspond to the current or potential management initiatives, and obtain the size of the market (i.e., the total number of customers across all brands). In addition, the contribution margins for all competitors can be estimated. Any predictable trends in any competitors' contribution margins should be incorporated into the model. Utilizing secondary sources and focus group interviews, additional drivers can be identified, which can then be reviewed with management to ensure that they are managerially actionable items.

Driver items should not be selected based solely on exploratory research with customers (e.g., focus groups). Preserving balance between importance of the driver and implementation of the improvement process is important.

If data on actual purchase behavior is available, it should be combined

with survey data to improve the accuracy of estimation. If a customer database exists, firms have access to panel data on customers' subsequent purchases (i.e., next product purchased). Otherwise, purchase intentions from surveys can be used as a proxy for the probability of each brand being chosen in the next purchase. Since self-reported data may suffer from bias, it is important to calibrate survey responses, which is often performed by matching the aggregate survey responses with the aggregate sales or market share figures. For example, survey responses suggest that the three firms in a market have the following market shares: Alpha 50 percent, Beta 25 percent, and Gamma 25 percent. However, the actual market shares may be: Alpha 40 percent, Beta 30 percent, and Gamma 30 percent. Then the survey responses should be re-weighted accordingly to form a close match to observed aggregate behavior (Rust, Lemon, and Zeithaml, 2004).

Focusing Marketing Efforts

Once survey and longitudinal data on consumer purchase information are collected, the 'chain of effects' outlined previously can be modeled and estimated. Because the drivers of customer equity are likely to be highly multi-collinear, principal components analysis needs to be conducted to reduce the dimensionality of the independent variables. Then a multinomial logit regression can be conducted to evaluate the importance of each driver (ibid.).

After the important drivers and sub-drivers have been identified, they can be projected into an 'importance–performance map' that allows comparisons of performance on the items with key competitors (Rust et al., 2000). To uncover the key areas for improvement, a firm should focus on two elements: (1) understanding which drivers will have the most impact on customer equity for the organization, and (2) understanding where the firm's relative standing is to its competitors on each of the drivers of customer equity identified as most important. The firm can then decide which areas require the most marketing efforts, and determine the strategic direction of whether to invest in a brand strategy, value strategy, relationship strategy, or in a joint strategy.

Projecting Return on Investment

A firm's strategic expenditure to improve a driver needs to be justified by the profitability of such an investment. The impact on customer equity and CLV given the targeted amount of improvement can be projected as discussed in the 'chain-of-effects' section. Considering the cost associated

with improving the drivers, the projected financial impact or ROI (return on investment) can be defined as:

$$ROI = \frac{\text{Change in customer equity} - \text{marketing expenditure}}{\text{marketing expenditure}} \quad (1.7)$$

Operationally, ROI can be simulated by using a simple spreadsheet program or a dedicated software package. The advantage of using a simulator is that the firm can test many possible expenditures, and then choose only the projects warranted by the top ROI figures. Since market dynamics and the competitive environment change continuously, a firm must track customer equity and ROI over time, to capture competitive trends, capitalize on emerging opportunities, overcome potential threats, and evaluate the progress of marketing initiatives designed to maximize customer equity.

Caution should be exercised in selecting the appropriate time horizon and discount rate for projecting ROI. Shorter time horizons or larger discount rates give less credit to future profits and therefore result in a lower ROI. Even so, a shorter time horizon or larger discount rate may be justified if the future is more uncertain (*ibid.*).

Measuring Marketing Effectiveness

The goal of a successful customer management strategy is to develop and implement marketing strategies that result in profitable long-term ROI (e.g., Zeithaml, Berry, and Parasuraman, 1996; Zeithaml, 2000; Berger et al., 2002). Given changes in market dynamics and the competitive landscape, it is necessary to measure and monitor changes in customer equity to evaluate the effectiveness of marketing actions.

A firm should conduct a customer equity analysis at least annually, although it may be useful to survey customers more frequently if the market is particularly turbulent (e.g., really new goods and services) (Rust et al., 2000). This allows the firm to (1) assess the effectiveness of a marketing investment, (2) track changes in customer needs, and (3) track competitive strategies and actions.

If possible, implementing a marketing investment and evaluating the changes in customer equity in a test market relative to a control market in which the marketing program is not implemented may prove effective. Comparing the effectiveness of a marketing investment in the test market and the control market allows firms to gain a strong sense of the impact of a specific marketing intervention in driving customer equity. However,

this approach runs the risk that the firm's competitors will observe the firm's strategy in action during the test, and then formulate responses or retaliation tactics that greatly undermine the effectiveness of the strategy when it is fully implemented.

In summary, the return on marketing approach can be used for two purposes: (1) to project the ROI of a potential customer equity program before making any expenditures to determine whether to implement the program or not (or to project the ROIs of multiple customer equity programs and make a budget allocation decision); (2) to assess the actual ROI that was derived from investing in a particular customer equity program (or particular sub-driver of customer equity).

As a hypothetical illustration, suppose that Amazon wants to make an investment to improve relationship equity. Amazon may subsidize the \$79 annual fee it charges for its Amazon Prime membership program so that customers pay less membership fees. On the other hand, Amazon may consider hosting offline Amazon nights out to encourage community building. Following the steps outlined above, the company can select the project that yields the highest projected ROI. In another hypothetical scenario, the Scott Brand could determine whether its \$35 million TV ad campaign in the first quarter of 2013 was successful in improving the brand image of Scott Paper Towels in a way that is profitable for the company by calculating the ROI from the \$35 million expenditure.

DISCUSSION AND CONCLUSIONS

Focusing Strategy

In today's competitive landscape, customer equity provides a framework and 'roadmap for effective strategy' for firms to fully evolve into customer-centered organizations. At the most basic level, customers stay with a brand because the firm offers better value than competitors, the firm has a stronger brand than competitors, and switching costs are too high. An understanding of the drivers of customer equity allows firms to identify which specific drivers of value equity, brand equity, and relationship equity customers perceive as most important or crucial to a certain industry. Furthermore firms can determine their 'true' competitive standing in the industry. Such an analysis grounded in customer equity provides insight into key opportunities and unforeseen threats, laying the groundwork for firms to strategically focus their resources on the drivers of customer equity with the greatest marketing return on the long-term

profitability of their customer base (Rust, Zeithaml, and Lemon, 2000, 2004).

Competitive Analysis

Before developing specific strategies to drive customer equity, firms need to understand the market in which they do business. Successful implementation of marketing strategies depends on the firm understanding the market, its current performance, and its competitors (Rust et al., 2005).

The first step is to analyze the market at the industry level. Firms need to understand which factors most influence customers' purchase decisions in the specific industry. Firms must first identify which driver of customer equity is most important in its competitive arena and to its customers, then dig deeper to understand which specific sub-driver is most critical given business circumstances.

Once the key drivers of customer equity have been identified, firms should analyze their current performance. Careful monitoring of firm performance and the importance of each driver in building customer equity helps identify areas for future improvement. Firms need to optimize the balance between cultivating strength in important drivers and de-emphasizing less important drivers, given their budget constraints.

After analyzing their own performance, firms need to analyze competition in order to implement their strategies successfully. Understanding key competitors aids in measuring customer equity, because the future behavior of customers depends not only on the firm's behaviors but also on competitors' behaviors (Rust et al., 2000, 2005). Comparing the firm's current performance to that of competitors provides information on which specific areas the firm is competent or incompetent. Analyzing value equity, brand equity, and relationship equity will help identify the strongest competitor that outperforms on the drivers, and the competitor with the largest growth potential that may become the next big player in the industry

Return on Marketing

Marketing managers constantly face decisions that involve trade-offs between competing initiatives, and the need to make their decisions financially accountable. We described a framework for evaluating return on marketing by calculating customer equity, summing up the customer lifetime values of each individual customer (Rust, Lemon, and Zeithaml, 2004). Adopting the return on marketing model, we can model CLV on the basis of the brand-switching matrix, which is useful for capturing both the brand-switching pattern of individual customers and the competitive

effects between firms. The brand-switching approach employs customer surveys to identify the underlying reasons that customers choose to remain loyal to their current brand or to switch to a competitor. Manager interviews and exploratory research is necessary to identify potential drivers that affect customers' utility perception. Then the customer survey can be developed, balancing between the importance of the driver and the feasibility of the improvement process. Using principal components and multinomial logit regression, firms can identify the underlying reasons for customer acquisition or retention. Taking into account the importance of the drivers, the competitive standing of performance on such drivers, and the expenditures for improving performance, firms can identify the key areas of improvement. We encourage firms to examine ROI and measure marketing effectiveness over time. If feasible, firms may also implement a test market or partial roll-out to arrive at a more precise estimate.

Directions for the Future

In the past, the full-fledged implementation of the customer equity framework was limited. Information technology (or lack thereof) and resultant firm infrastructure impeded the realization of real-time marketing on a completely one-to-one basis. Now, firms have access to massive amounts of individual-level customer data. Technology and fundamental shifts in the economy now provide opportunities for firms to fully capitalize on this information to become fully customer-centric. However, the very same forces that enable such, also empower customers to become a firm's partners or co-creators of firm value. As customers, we now have more access to information on the firm, and on the firm's goods and services than ever before. Community among customers is more tightly knit than ever before as virtually all barriers to the flow of communication are eliminated. We see this bi-directional bond between the customer and the firm as a rich, promising area for driving customer equity. A wealth of information on changing consumer preferences and value can be captured on Internet forums and communities. For some time, firms have utilized the Internet and mobile applications for various brand- and community-building activities. We see room for further exploitation. For example, downloadable content such as music can now be fully customized according to user preferences at low cost (Chung et al., 2009). Technology is at a point where mobile applications can uncover user preferences that may not even be fully known by the users themselves. The branding and commercialization of such applications will truly provide customers irreplaceable value, a brand to stay loyal to, and a reason to stay with the brand from the compelling experience of learning, discovering, and sharing preferences.

With such developments, the drivers of customer equity may become inextricably linked. For example, over 650 000 customers acted as beta-testers for Microsoft Windows 2000 in its development phase. This collective R&D effort on behalf of Microsoft's customers (estimated to exceed \$500 million in time, effort, and fees) not only helped to eliminate bugs from the final product, but also provided the customers the opportunity to learn how the software could create value in their own businesses or customer environments (Pralhad and Ramaswamy, 2000). This effort contributed to value equity through the quality improvement of the final product. At the same time, the beta-testers' customer engagement would have led to improvements in brand equity drivers such as commitment and self-brand connection. In addition to increasing value and brand equity, such engagement can also strengthen relationships between customers and the firm by increasing the number of connection points at various stages of value creation (Hoyer et al., 2010).

As the traditional customer role of consumption becomes further blurred by increased participation in the value creation process, the drivers of customer equity may represent a feedback loop. Achieving an improvement in one driver may lead to improvements in another driver. It may even be impossible to achieve an improvement in one driver without achieving an improvement in another. For example, an improvement in brand equity may be impossible to implement without achieving relationship equity, or vice versa. Identifying the greatest sources of synergy in the feedback loop of customer equity may become an important priority in the future.

However, the increased connectivity between customers and the firm also provides challenges to driving customer equity. Firms will need to monitor the abundant information and content that is customer created, which is by definition not under the direct control of the firm. The sheer amount of information may impose costs to the firm in data collection and analysis. Negative word-of-mouth or incorrect information on goods and services may spread like wildfire even before the firm is aware of the existence of a customer problem. Additionally, customers may become more and more concerned with privacy issues as firms' methods of collecting purchase data and precision in uncovering customers' unobserved preferences continue to become more sophisticated.

Regardless, we believe the potential for the customer equity framework in driving firm profitability and, ultimately, fundamental changes in the firm itself, is immense. If anything, we believe that it is not yet utilized enough in business practice. Although the continuous innovations in technology will create challenges to implementing a customer equity program, we believe that the customer equity framework is, and will remain, an

important tool for overcoming these challenges and leading the firm to success.

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