The Path of Effects from Customer Value and Satisfaction to Customer Lifetime Value – Evidence from Banking Industry in Taiwan

Abstract

The purpose of this study is to test a structural equation model which aims to explore the extent to which customer lifetime value (CLV) is impacted by customer perceptions of value, satisfaction, and loyalty. A series of examinations revealed that (1) customer value (CV) impacts customer satisfaction and loyalty directly and positively; (2) customer satisfaction is directly and positively related to customer loyalty; (3) the link between customer loyalty and CLV is positive and direct; (4) the positive and significant between CV and CLV can be mediated by customer satisfaction and loyalty. Therefore, banks should enhance the improvement of CV to meet their customers’ needs and wants. It is expected that organisations can utilise this research model as a diagnostic tool to identify areas where specific improvements are needed and to ascertain aspects of the firm’s customer relationship management practice that require work so to conduct customer relationship management (CRM) more effectively.

Keywords: customer relationship management, customer value, customer lifetime value
Introduction

Customer value is the heart of marketing (Kotler and Armstrong, 2004; Woodruff, 1997) and the core theme of CRM (Boulding et al., 2005). Indeed, the role of marketing is “to assist the firm to create value for its customers that is superior to competition” (Tzokas and Saren, 1999, p. 53). In the customer-centered era, delivering superior customer value is the source of competitive advantage (Coltman, 2007; Eggert and Ulaga, 2002; Payne and Holt, 2001; Slater and Narver, 2000) and a strategic weapon in attracting and retaining customers to achieve profitable growth (La and Kandampully, 2004; Wang et al., 2004). Customer value is viewed as an important driver of CRM performance for the following two reasons. First, long-term relationships are built on the creation and delivery of superior customer value on a sustained basis (Christopher et al., 1991; Gummesson, 2002; Morgan and Hunt, 1994; Parvatiyar and Sheth, 2001). Second, CRM should focus on reorienting the firm’s operations and processes towards the creation and delivery of superior customer value that competitors cannot match (Cravens and Piercy, 2009; Coltman, 2007; Kotler and Armstrong, 2004; Reimann et al., 2010). This focuses our interest and attention on how CV can be deemed as a trigger to enhance the performance of CRM. This study took Y bank as a research subject, which is a comprehensive bank in Taiwan, to explore the extent to which CLV is impacted by customer perceptions of value, satisfaction, and loyalty.

Conceptual Framework

The proposed structural equations model is depicted in Figure 1. Four constructs have been integrated into research model and these linkages deal with four hypotheses. Hypotheses (H₁, H₂) identify the impacts of customer value on customer satisfaction and loyalty respectively. Hypothesis H₃ shows the influences of customer satisfaction on customer loyalty. Hypothesis H₄ makes the connection between customer loyalty and CLV. Customer value was included in the model as an important driver of CRM performance. This notion is based on the perspective that the firms focus on their best CRM practice to systematically and effectively manage their customers for maximizing customer value than does their competition. This perspective is in line with Boulding et al. (2005), Kotler and Armstrong (2004), and Tzokas and Saren (1999) who argued that customer value is the core theme of CRM and marketing. Superior customer value enables firms to achieve a positional advantage, which in turn leads to better outcomes of CRM.

Research Hypotheses

The relationship between customer value, satisfaction, and loyalty

A number of studies have provided empirical evidences that customer value has a positive effect on satisfaction (Andreassen and Lindestad, 1998; Cronin et al., 2000; Eggert and Ulaga, 2002; Fornell et al., 1996; Hellier et al., 2003; McDougall and Levesque, 2000; Patterson and Spreng, 1997; Storbacka et al., 1994; Ulaga and Eggert, 2006; Wang et al., 2004). As
Hallowell’s (1996) empirical study in the context of retail-banking showed, “the service management literature argues that customer satisfaction is the result of a customer's perception of the value received in a transaction or relationship” (p. 29). Customer value is an antecedent to customer satisfaction and behavioural outcomes (Ulaga and Eggert, 2006), and has been recognized as being positively associated with customer satisfaction (Athanassopoulos, 2000). When the customer receive benefit greater than the cost (i.e., receiving added value) after the purchase, they become more satisfied, which in turn affects subsequent customer value expectations and overall customer satisfaction (Hellier et al., 2003; Woodruff, 1997). Storbacka et al.’s (1994) relationship profitability model in the context of financial services sector, stated that by improving customer value, customers’ satisfaction is improved. Patterson and Spreng’s (1997) empirical study, in the business-to-business services context in Australian, supported that customer value has a directly strong and significant impact on satisfaction and repeat purchase intentions. Wang et al.’s (2004) finding from security firms in Chinese also showed that customer value has a positive effect on customer satisfaction. As Ravald and Gronroos (1996) noted, by adding more value to the core product or service, firms can improve customer satisfaction so that the bonds of relationship are strengthened and thereby customer loyalty achieved. Another support proposed by McDougall and Levesque (2000) also indicated that customer value was a significant determinant of customer satisfaction and should be recognized as a contributing factor to satisfaction. Strongly positive and highly significant impact of customer value on satisfaction does exist (Eggert and Ulaga, 2002). Therefore, the following hypothesis will be investigated.

\[ H_1 : \text{Customer value has a direct and positive effect on customer satisfaction} \]

Many studies have indicated that customer value has a significantly positive influence on loyalty (Andreassen and Lindestad, 1998; Butz and Goodstein, 1996; Bolton, 1998; Cronin et al., 2000; Eggert and Ulaga, 2002; Ham, 2003; Lindgreen and Wynstra, 2005; McDougall and Levesque, 2000; Patterson and Spreng, 1997; Wang et al., 2004). Reichheld and Teal (1996) stated that “the key to customer loyalty is the creation of customer value.” Customers who are satisfied with a firm’s products or services that offer them value, remain loyal to that firm and place their future purchase with that firm (Lindgreen and Wynstra, 2005). Butz and Goodstein (1996) found that superior customer value creation and delivery can help firms to build close emotional links with targeted customers. Patterson and Spreng (1997) provided empirical evidence, in a business-to-business services context, that a strong and significant impact between customer value and repeat purchase intentions exists. Another support was proposed by Sheth and Parvtiyar (1995), who stated that developing customer value among partnering activities could create a greater bonding between customers and marketers. Thus, customers will be more committed to firms when bonding enhanced the relationships. In short, customers may stay loyal to a firm if they feel that they are receiving greater value than they
would get from the competitors (Bolton and Drew, 1991). Therefore, the following hypothesis will be investigated.

**H2 : Customer value has a direct and positive effect on customer loyalty**

The relationship between customer satisfaction and customer loyalty

Several empirical studies have demonstrated a strong positive linkage between customer satisfaction and loyalty (Athanassopoulos et al., 2001; Andreassen and Lindestad, 1998; Anderson et al., 1994; Ball et al., 2004; Cronin and Taylor, 1992; Fornell, 1992; Fornell et al., 1996; Grønholdt et al., 2000; Hallowell, 1996; Hellier et al., 2003; Ham, 2003; Joo and Sohn, 2006; Kristensen et al., 2001; Reichheld and Sasser, 1990; Selnes, 1993; Ulaga and Eggert, 2006; Woo and Ennew, 2004). Fornell’s (1992) empirical study, in the context of more than 30 industries, found a strong correlation between satisfaction and loyalty. Later, Fornell et al.’s (1996) research in the American customer satisfaction index also provides additional empirical support for the positive satisfaction-loyalty relationship. Cronin and Taylor (1992) examined four industries (i.e., banking, pest control, dry cleaning, and fast food) and found a significant impact of satisfaction on loyalty. Selnes’s (1993) empirical study across four different firms (i.e., life insurance, telephone service, business school, and salmon feed supplier) indicated that a satisfied customer will show a strong tendency to be loyal and repeat the purchases of products or services. Ham (2003) investigated four higher educational institutes in American and his research provided empirical evidence that a significant positive relationship between customer satisfaction and loyalty exists. Eggert and Ulaga’s (2002) empirical evidence, in a cross-sectional survey purchasing managers in Germany, showed that customer satisfaction has a strongly positive and highly significant impact on loyalty. Leverin and Liljander’s (2006) empirical study, in the context of banks, also demonstrated that customer satisfaction with a bank relationship is a good basis for loyalty. Even though the link between customer satisfaction and loyalty is not so straightforward and thus challenged, customer satisfaction as a strong predictor for loyalty is widely accepted among researchers (Doyle, 2006; Grønholdt et al., 2000; Kotler and Armstrong, 2004; Prus and Brandt, 1995; Slater and Narver, 2000; Ulaga and Eggert, 2006). Therefore, the following hypothesis will be investigated.

**H3 : Customer satisfaction has a direct and positive effect on customer loyalty**

The relationship between customer loyalty and CLV

Numerous studies have shown positive links between customer loyalty and firm profits in marketing (Anderson et al., 1994; Athanassopoulos, 2000; Hallowell, 1996; Garbarino and Johnson, 1999; Gupta and Lehmann, 2003; Reichheld and Teal, 1996; Reichheld et al., 2000; Roig et al., 2006). As a customer’s relationship with firm lengthens, profits rise (Reichheld
and Sasser, 1990). Reichheld (1996) concluded that there are some underlying reasons why retained customers are more profitable: (1) customer acquisition costs may be high, so customers may not become profitable unless they are retained for one or more years, (2) there will be a stream of profits from the customer in each year after acquisition costs are covered, (3) customers buy more over time, so revenues go up; companies become more efficient at serving them, so costs go down, (4) retained and satisfied customers may refer other potential customers, and (5) the relationship has a value to the customer too, so that retained customers tend to become less price-sensitive (p. 39). Loyalty leads the customers to increase their volume of business with the firm and subsequent profits for the firm (Roig et al., 2006) as a larger proportion of the long-term customers than of the short-term customers reveal high profits (Reinartz and Kumar, 2000). As Reichheld and Sasser (1990) stated, reducing defections by 5% boots profit 25% to 85%, which means that a relatively small increase in customer loyalty will drive relatively large increase in firm profits (p. 110). Baldauf et al. (2003) emphasized that high level of loyalty should substantially enhance sales, and higher sales are expected to increase profitability. Reichheld and Teal’s (1996) empirical study showed that a 5% increase in customer retention can have a 30% to 95% effect on customer net present value and a similar effect on firm’s profitability. Another support was proposed by Gupta and Lehmann (2003) who estimated a less dramatic increase of 22% to 37% in CLV or revenue, for a 5% increase in customer retention. Therefore, based on the literature review above, the following hypothesis is proposed.

\[ \text{H}_4: \text{Customer loyalty has a direct and positive effect on customer lifetime value} \]

**Research Methodology**

The self-administered questionnaires, along with the letter explaining the purpose of the survey and instructions for completing it, were distributed to relational customers of selected bank at seven major cities in Taiwan. The questionnaires were given to relational customers through the front desk staff at each participating branch. To identify “relational customers”, this paper applied the definition that “relational customers” are general public, who have individual business with a particular bank. The individual business includes synthetic saving account, fixed saving account more than three years, house mortgage, mutual fund, and one of direct debt accounts for water, electricity and gas costs. A total of 720 questionnaires were distributed and 259 copies were returned. Reducing 19 invalid questionnaires, 240 copies were valid with a valid return rate of 33.34%.

**Discussion**

Table 1 illustrates that Cronbach’s alaph (\( \alpha \)), composite reliability (CR), and average variance extracted (AVE) indicate acceptable levels for the reliability of constructs (i.e., \( \alpha > .70 \), CR > .60 and AVE > .50). This means that items evaluating all constructs have consistency and
stability. As for validity, convergent validity is supported as all factor loadings for items are greater than 0.50 and are statistically significant. Convergent validity is also supported by AVE being more than .50. Furthermore, the fit of the model using goodness-of-fit indices has confirmed construct validity. Discriminant validity is achieved as each factor in each measurement model is empirically distinguishable (correlations between factors<.85). Therefore, the validity of this study is well accepted.

Based on the results obtained from structural equation model analysis, Goodness-of-fit indices demonstrate that the model fits the data adequately, though the chi-square is significant ($\chi^2 = 230.13$, df = 115, P = .000). This chi-square estimate rejecting valid models in large sample size is commonly accepted (Bagozzi and Yi, 1988). To exclude this interference, this study employs the ratio between $\chi^2$/df (Chi-square) and df (degree of freedom) to be the indicators of goodness-of-fit of the model. The $\chi^2$/df = 2.001, GFI is .904, AGFI = .857, NFI = .954, CFI = .976, TLI = .968, and RSMEA = .065. It represents a good goodness-of-fit as all the values are within the acceptable range. The path diagram is illustrated in Figure 1.

As illustrated in Table 2, H1 is supported since there is a significant relationship between CV and customer satisfaction (path coefficient = .832, p<0.01). H2 is supported since the link between CV and customer loyalty is positive and significant (path coefficient = .394, p<0.01). It is found that H3 is supported since the link between customer satisfaction and customer loyalty is positive and statistically significant (path coefficient = .511, p<0.05). H4 is supported since there is a significantly positive relationship between customer loyalty and CLV (path coefficient = .997, p<0.05). CV is indirectly connected to CLV via customer satisfaction and loyalty.

**Conclusion**

The empirical findings show that customer value is an important driver of CRM performance (i.e., customer satisfaction, loyalty, and CLV). Banks should seek to integrate their CRM resources that support the enhancement of customer value to increase the contribution of CLV. It is expected that organisations can utilise this research model as a diagnostic tool to identify areas where specific improvements are needed and to ascertain aspects of the firm’s CRM practice that require work so to conduct its CRM more effectively. Data obtained from the mail survey provided merely a snapshot of customers of private bank Y in Taiwan. As such, additional follow-up research, to consolidate the issues encountered in this study, is undoubtedly an opportunity to be pursued. The issues of CV and the indicators of CRM performance are complicated and multifaceted. This study does not include all possible variables, so sequential researchers can incorporate more elements into examination in hopes of strengthening the understanding of this field.
References


Appendix

Table 1 Measurement Model Evaluation

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Standardized Loading</th>
<th>Cronbach’s Alpha (α)</th>
<th>Composite Reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
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Figure 1 Structural equation model
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<th>Parameter estimation</th>
<th>t-value</th>
<th>Result</th>
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<td>Customer value → customer satisfaction</td>
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<td>Customer value → customer loyalty</td>
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