An Empirical Analysis to Design Enhanced Customer Lifetime Value Based on Customer Loyalty: Evidences from Iranian Banking Sector

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Abstract

The more a marketing paradigm evolves, the more long-term relationship with customers gains its importance. Also, the move towards a customer-centred approach to marketing, coupled with the increasing availability of customer transaction data, has led to an interest in understanding and estimating customer lifetime value (CLV). There are several researches about the CLV formulas and calculating relations. But the effect of the CLV on the other departments of the organization and especially the effect of the CLV on the key parameters for organization’s profitability such as customer loyalty and satisfaction had little attention. This research is about these shortcomings and covers another essential element for organizational sustainable profitability, customer loyalty. The main purpose of this research is to demonstrate the effect of customer loyalty on the customer lifetime value. For this purpose one of the biggest parts of service sector in Iran is selected and the data from this sector are gathered and analyzed. Banking sector is the biggest body of Iranian service sector of economy. By means of a valid questionnaire, data were gathered from banking sector and after analyzing the hypotheses, results show that the high customer loyalty strongly affects on the enhanced customer lifetime value. In the final section of this paper, both applied and theoretical recommendations will be provided.

Keywords:
Customer loyalty, Customer lifetime value, Customer relationship management, Banking sector.

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Introduction

The more a marketing paradigm evolves, the more long-term relationship with customers gains its importance. CRM, a recent marketing paradigm, pursues long-term relationships with profitable customers. It can be a starting point of relationship management to understand and measure the true value of customers, since marketing management as a whole is to be deployed toward the targeted customers and profitable customers, to foster customers’ full profit potential. Corporate success depends on an organization’s ability to build and maintain loyal and valued customer relationships. Therefore, it is essential to build refined strategies for customers based on their value (Kim et al., 2006). Companies are becoming increasingly aware of the many potential benefits provided by CRM. Some potential benefits of CRM are as follows: (1) Increased customer retention and loyalty, (2) higher customer profitability, (3) creation value for the customer, (4) customization of products and services, (5) lower process, higher quality products and services (Jutla, Craig, & Bodorik, 2001; Stone, Woodcock, & Wilson, 1996). When evaluating customer profitability, marketers are often reminded of the 80/20 rule (80% of the profits are produced by top 20% of profitable customers and 80% of the costs are produced by top 20% of unprofitable customers) (Duboff, 1992; Gloy, Akridge, & Preckel, 1997).

The core parts of CRM activities are understanding customers’ profitability and retaining profitable customers (Hawkes, 2000). To cultivate the full profit potentials of customers, many companies already try to measure and use customer value in their management activities (Gloy, Akridge, & Preckel, 1997). Therefore, many firms are needed to assess their customers’ value and build strategies to retain profitable customers.

Therefore, over the past decade, Customer Relationship Management (CRM) has become a leading strategy in highly competitive business environments. Companies increasingly derive revenue from the creation and enhancement of long-term relationships with their customers (Coussement & Van den Poel, 2008). This move towards a customer-centric approach to marketing, coupled with the increasing availability of customer-transaction data, has led to an interest in estimating and understanding Customer
Lifetime Value (CLV). CLV is viewed as the present value of the future cash flows associated with a customer (Pfeifer et al., 2005). Knowing the CLV of individual customers enables the decision maker to improve the customer segmentation and marketing resource allocation efforts (Kim & Lee, 2007; Kumar et al., 2006) and this in turn will lead to higher retention rates and profits for the firm (Hawkes, 2000).

On the other hand, Satisfaction and loyalty of customers are important factors having effect on managerial thoughts in 1990’s. Notably, to understand, satisfy and forecast needs of customers were considered most important competitive advantages for companies (Vilares & Coelho, 2003).

Nowadays, in competitive economy there is no warranty for business companies to survive. Loyal customers can be of great help to companies to survive and improve. Therefore, companies need to concentrate on loyalty of customers and enjoy customers' loyalty as a main strategy for future. Although many companies have accepted loyalty as a key strategy to survive, they do not seem to understand the meaning and to apply it effectively. Many researchers believe that loyalty antecedents are complex and dynamic, changing and evolving over time (Johnson et al., 2006). There are still a number of important gaps in understanding the loyalty and other relationship marketing constructs (Taylor et al., 2006).

This research aims at developing a new model for determining the position of customer loyalty and customer lifetime value in the new paradigm of marketing, namely relationship marketing. To this purpose, eight factors of customer loyalty have been recognized and based on the research data, final model of the paper that determines the effects of the customer loyalty on the customer lifetime value will be provided.

**Theoretical Background**

**Customer Relationship Management**

Most organizations have perceived the customer relationship management (CRM) concept as a technological solution for problems in individual areas, accompanied by a great deal of uncoordinated initiatives. Nevertheless, CRM must be conceived as a strategy, due to its human, technological, and processes implications, at the time an organization decides to implement it (Mendoza et al., 2006). Within the present business environment,
characterized by an increasingly aggressive competence, the battle to win customers is stronger every day. Companies that enter to compete in a new market weaken the already existing and solid ones, due to the new ways of doing and conceiving businesses. One of the factors that have driven all these changes is the constant change and the evolution of technology. Because of this reality, the CRM concept has evolved in such a way that nowadays, it must be viewed as a strategy to maintain a long-term relationship with the customers (Mendoza et al., 2006).

Central to the idea of CRM is the assumption that customers differ in their needs and the value they generate for the firm, and that the way customers are managed should reflect these differences. CRM is, therefore, not about offering every single customer the best possible service, but about treating customers differently depending on their CLV. Such appropriate treatment can have many faces, starting with offering loyalty programs to retain the most profitable customers (Shugan, 2005), through to the abandonment of unprofitable customer relationships (Haenlein et al., 2006).

**Intuitive Appeal:** Because in theory it allows companies to know exactly how much each customer is worth in currency terms, and therefore, exactly how much a marketing department should be willing to spend to acquire each customer. In reality, however, it is often difficult to make such calculations due to the complexity of the calculations and lack of reliable input data, or both.

**Calculation of CLV:** It depends on the nature of the customer relationship for example; Companies with a monthly billing cycle, such as retail banks can count on a reasonably reliable stream of recurring revenue from each customer.

**Customer Lifetime Value**

Customer lifetime value has been studied under the name of LTV, customer value, customer equity and customer profitability. The concept is defined as the sum of the revenues gained from company’s customers over the lifetime of transactions after deduction of the total cost of attracting, selling and servicing customers, taking into account the time value of money (Hwang et al., 2004). The basic formula for calculating CLV for customer $i$ at time $t$ for a finite time horizon $T$ (Berger & Nasr, 1998) is:
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\[
CLV_{i,t} = \sum_{i=0}^{T} \frac{\text{profit}_{i,t}}{(1 + d)^t}, \quad CLV = \sum_{i=0}^{T} \frac{\text{Revenue}_{i,t}}{(1 + d)^t} - \sum_{i=0}^{T} \frac{\text{Cost}_{i,t}}{(1 + d)^t}
\]

Theoretically, CLV models should estimate the value of a customer over the entire customer’s lifetime. However, in practice, most researchers use a finite time horizon of three or four years (Donkers et al., 2007; Rust et al., 2000, Beniot & Poel, 2009). Three to four years is a good estimate for the horizon over which the current business environment would not substantially change and even then, there is significant uncertainty in predicting customer behaviour (Venkatesan et al., 2007). Moreover, some research considers an even shorter time horizon (Hwang et al., 2004).

CLV has been analyzed in a substantial number of different domains, varying from econometric models to computer science techniques. However, the key questions are usually very similar: “What are the drivers of CLV?”, “Which customers are the most valuable ones in future?”, “How to address the top customers?” etc. Several authors give an overview of the variety of modeling procedures that were used in search for answers to the key questions (Berger & Nasr, 1998; Donkers et al., 2007; Gupta et al., 2006; Venkatesan & Kumar, 2004). In general, one can distinguish two broad classes of models in the current contractual setting. First, a large group of models focuses on the choices customers face when buying an additional service or product. A customer’s lifetime value is then seen as the sum of the distinct contributions per service or product. This approach is appealing because of the natural way in which the CLV prediction is built up. In the first stage, an estimation is made on the probability of a customer buying a given product or service. The second stage is then to combine these probabilities with the margins associated with the product or service into an aggregate prediction of a customer’s lifetime value. This approach also, has the advantage of providing more insight into the factors that drive customer value. The main drawbacks are the amount of modeling required and the often poorer predictions. Examples of this approach are found in Venkatesan and Kumar (2004) and Hwang et al. (2004). The second large group of models does not follow the two-stage method, but focuses directly on relationship length and total profits. Since the individual-level choice modeling is left aside, the process of producing CLV estimates is much more straightforward and prediction accuracy is higher (Verhoef & Donkers, 2001). As such, this approach turns the
disadvantages of the first approach into benefits. However, due to aggregation, insight into the factors that drive consumer profitability is limited compared to the choice-based approach.

**Customer Loyalty**

Customer loyalty can be classified as brand loyalty, service loyalty, and store loyalty (Dick & Basu, 1994). In the literature, customer loyalty is commonly distinguished in three approaches: (1) behavioural, (2) attitudinal, and (3) combined attitude and behavioural loyalty approach (Li, 2011). Engaging in loyal relationship between individual consumers and their product/service provides is beneficial for both parties (Forouzandeh & Ahmadi, 2010). Through loyal relationships, consumers can receive higher level of their preferred service or products from their providers. Also, the market paradigm shift from mass marketing-centric to customer-centric marketing stimulates firms to adapt customized service. The customer-centric marketing encourages firms to seek individual customer’s needs and wants. This trend will ultimately lead to firm’s increasing marketing productivity and market diversity in household and business markets (Sheth et al., 2000).

Considerable discussion exists in the academic literature over the definition and dimensions of loyalty or similar constructs (Forouzandeh & Ahmadi, 2010). Customer loyalty is an important objective for strategic marketing planning and represents an important basis for developing a sustainable competitive advantage (Maydeu-Olivares & Lado, 2003). Some researchers state that a positive relationship exists between loyalty of customers and performance of companies. Customer loyalty leads to increase business value and keeps business costs low as well. Increase in value and saving money mean lower time when companies seek for new customers. Many definitions about loyalty have two points in common; that is, behavioural aspect and attitudinal aspect (Oliver, 1999). Behavioural loyalty is customer’s repeated transaction and researches usually measure this aspect by observational techniques. Attitudinal loyalty has both positive effect on the relationship continuance, and the tendency to continue to remain in the relationship (Morgan and Hunt, 1994). Table 1 described the most important definitions for customer loyalty over the two past decades in the related literature.
Table 1. Definitions of loyalty (Li, 2011)

<table>
<thead>
<tr>
<th>Authors</th>
<th>Loyalty definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Li (2011)</td>
<td>Customer loyalty is commonly distinguished in three approaches: (1) behavioural, (2) attitudinal, and (3) combined attitudinal and behavioural loyalty approach.</td>
</tr>
<tr>
<td>Bennett &amp; Rundle-Thiele (2002)</td>
<td>Loyalty is the consumer’s predisposition towards a brand as a function of psychological processes.</td>
</tr>
<tr>
<td>Brown (1953)</td>
<td>One who tends to repurchase a particular brand because of some real or imaginary superiority attributed to that brand</td>
</tr>
<tr>
<td>Dick &amp; Basu (1994)</td>
<td>Using attitude and behaviour together as loyalty was the strength of the relationship between the relative attitude towards an entity (brand/service/store/vendor) and patronage behaviour</td>
</tr>
<tr>
<td>Grahn (1969)</td>
<td>The probability of buying the same brand now as the one purchased most recently</td>
</tr>
<tr>
<td>Jacoby (1971)</td>
<td>Loyalty was to repeat purchasing based upon cognitive, affective, evaluative, and dispositional factors - the classic primary component of an attitude</td>
</tr>
<tr>
<td>Oliver (1997)</td>
<td>Customer loyalty was a deeply held commitment to re-buy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour</td>
</tr>
<tr>
<td>Zeithaml, Berry, &amp; Parasuraman (1996)</td>
<td>Loyal consumers would have (1) high purchase intention, (2) less price sensitivity, (3) feedback to the firm (internal complaining behaviour), (4) do more business (frequent purchase and no switch)</td>
</tr>
</tbody>
</table>

Satisfaction and loyalty are related but they are clearly distinct (Ball et al., 2004). Satisfaction is one of the most important antecedents of loyalty stated in various researches (Forouzandeh & Ahmadi, 2010). The more satisfied customers are the greater retention rate they have (Fornell, 1992). The relationship between satisfaction and loyalty is almost a proved relation and exists in many famous models such as ECSI (e.g., Deng, Lu, Wei, & Zhang, 2009; Espejel, Fandos, & Flavia’n, 2008; Ball et al., 2004).

Cooperation, Trust and Commitment

Satisfied customers generate the positive word of mouth (Schneider & Bowen, 1999). But satisfaction alone does not ensure continuing customer support. While satisfaction is an important driver, trust, commitment and

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1. Components of the “customer loyalty” in this research have been extracted from: Forouzandeh and Ahmadi, 2010.
cooperation are also likely to influence loyalty (Ranaweera & Prubho, 2003). Morgan and Hunt (1994) identified these two variables as key mediating variables of relationship marketing. Several studies consistently identify commitment and trust as central constructs of relationship marketing (Ulaga & Eggert, 2006).

Trust is logically and experientially a critical variable in relationships, as the marketing literature shows (Moorman et al., 1993). This variable is based on past behaviours but it shapes the future (Walter & Ritter, 2003). Recent researches show that while satisfaction and trust are closely related but they are conceptually different and consequently have different impacts on loyalty. Some researchers argue that trust is stronger emotion than satisfaction so it may have greater impact on loyalty (Hart & Johnson, 1999). Several articles discuss that trust along with commitment is an important antecedent of loyalty (Floh & Treiblmaier, 2006; Ball et al., 2004; Wong & Sohal, 2006).

Commitment is one of the key concepts in relationship marketing. Moorman and colleagues (1993) define commitment as an exchange party’s long-term desire to maintain a valuable ongoing relationship with another. Some literatures recognize trust as a preceding state for commitment development. These researchers believe that building trust among customers has positive influence on customer commitment (Forouzandeh & Ahmadi, 2010). Many studies show that trust influences commitment empirically (Lancastre & Lages, 2006; Walter & Ritter, 2003; Ruyte et al., 2001). Many researches show that relationship commitment motivates buyers to act (Hennig-Thurau & Klee, 1997; Morgan & Hunt, 1994; Moorman et al., 1993). These researchers state that commitment is positively related to the loyalty and it is proved empirically in many researches (Forouzandeh & Ahmadi, 2010).

Service Quality

The concept of service quality is linked to the concepts of perceptions and expectations (Forouzandeh & Ahmadi, 2010). Service quality perceived by the customers is the result of comparing the expectations about the service they are going to receive and their perceptions of the retail banking’s actions (Lapierre et al., 1996). If perceptions exceed expectations, the service provided by the retail banks will be considered excellent; if it only equals the expectations it will be regarded as good or adequate; if it
does not meet them, the service will be classified as bad, poor or deficient (Vazquez et al., 2001).

**Complaint Handling**

Hsu (2008) defines complaint as a conflict between the customer and the organization. Complaint handling is a case of customer interactions. In the ECSI model, satisfaction is antecedent of the complaints handling. According to social exchange theory how the company deals with its customer complaints has great impact on how the customers perceive their relation with the firm. It is a part of the value that companies make for their customers (Forouzan and Ahmadi, 2010). Improper and slow handling of complaints could be perceived by customers as opportunistic behaviour or incompetence and consequently it has negative impact on credibility of the company and thereby on customers’ trust to the company.

Morgan and Hunt (1994) propose this variable as an antecedent of trust. Complaint handling, hereafter referred to as “complaints”, is already validated as an antecedent of loyalty in the ECSI model and it is proposed by Ball et al. (2004) as antecedent of trust in an extension of ECSI model. The relationship between the level of customer complaints and the level of customer loyalty depends on the efficacy of a company’s complaint handling capabilities (Fornell, 1992).

**Image**

The marketing literature’s perspective on reputation generally views it as an aggregation of performances, actions, or images regarding consumer knowledge about a brand, which essentially equates reputation to branding (Forouzan and Ahmadi, 2010). This perspective suggests that reputation is a resource that can be used to generate value. Reputation can be viewed as being the result of a continuous process of credibility transactions, thereby enhancing trust and commitment. The notion of image has been widely used by marketing and behavioural science scholars to refer to people’s perception of a product, store, or corporate entity (Pan & Li, 2011). Some researchers (Gartner, 1996; Pike & Ryan, 2004) argue that there is a third dimension, cognitive image, which reflects the behavioural aspect (i.e., intention to visit) of one’s destination perception. Image of organization in the mind of customers for constructing loyalty is very important. The image of a bank is relying on any marketing activities and achievement of its programs.
Communication

From both theoretical and practical perspectives, it is worth studying what makes marketing communications that introduce new products effectively, especially in banking industry. The marketing communication decision has become far more complicated, because they essentially function in both business and consumer markets. Therefore, an investigation of the marketing communications used to launch products in banking industry may offer interesting and significant insights into various launch-supporting communication behaviours across product categories and services. When marketing communication are related to the customer’s needs and wants, it is positively affecting on bank’s profitability and can gather more liquidity in the market (Forouzandeh & Ahmadi, 2010).

Research Model and Hypotheses

The main contribution of this research is to determine the effects of the customer loyalty and its factors on the customer lifetime value in order to design enhanced CLV for the banking sector. Figure 1 shows the research theoretical model to provide the research contribution.
So, with respect to the research theoretical model, Table 1 will present the hypotheses of the research clearly.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>customer satisfaction affects positively on customer loyalty</td>
</tr>
<tr>
<td>H2</td>
<td>cooperation affects positively on customer loyalty</td>
</tr>
<tr>
<td>H3</td>
<td>trust affects positively on customer loyalty</td>
</tr>
<tr>
<td>H4</td>
<td>commitment affects positively on customer loyalty</td>
</tr>
<tr>
<td>H5</td>
<td>service quality affects positively on customer loyalty</td>
</tr>
<tr>
<td>H6</td>
<td>complaint handling affects positively on customer loyalty</td>
</tr>
<tr>
<td>H7</td>
<td>image of bank affects positively on customer loyalty</td>
</tr>
<tr>
<td>H8</td>
<td>communication affects positively on customer loyalty</td>
</tr>
<tr>
<td>H9</td>
<td>Customer loyalty affects positively on the customer lifetime value (CLV)</td>
</tr>
</tbody>
</table>

**Methodology**

**Research Method**

The method of this research is applied research in goal, and in the viewpoint of data gathering is descriptive-analytic (non-experimental) that is implemented with the case study format. In this study, by using a standard questionnaire, the relationship between identified variables of research will be examined. To achieve this purpose, nine hypotheses have been formed.

**Sampling Method and Characteristics**

Required data were gathered from three big banks in Iran. Customers of these banks in Tehran as statistical population have participated to fill the standard questionnaire of the research. The method of data gathering in this research was probabilistic for each of the three big banks. Since the statistical population of this research, based on the research condition was unlimited, therefore, the unlimited statistical sampling formula was used.

Using the above formula, research sample size was calculated as \( n = 300 \). Based on this calculation, three hundred and fifty questionnaires were distributed among the statistical sample. Finally three hundred questionnaires were appropriate for analysis. Table 3 will show the sample characteristics.
Table 3. Characteristics of the participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Numbers</th>
<th>Percent (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
<td>n = 300</td>
</tr>
<tr>
<td>Male</td>
<td>165</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>135</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 to 25 year</td>
<td>60</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>26 to 35 year</td>
<td>90</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>36 to 45 year</td>
<td>75</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>46 to 55 year</td>
<td>45</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>56 year and more</td>
<td>30</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

Validity and Reliability

Validity and reliability are two necessary features of every measuring material such as questionnaires because these materials should analyze data and provide final conclusions for researchers.

Validity

To sum up, validity means that a measuring material is used to measure the characteristics. In this research to confirm the validity of the research questionnaire, the factor analysis was used. In the questionnaire of this research, there were thirty three questions (except for two descriptive questions) that after the factor analysis, average amounts of all items were above 0.5 and remained in the analysis. Table 4 will show the KMO measure of sampling adequacy for this research, Bartlett’s test of sphericity and so on, which all demonstrate that research is so appropriate and valid.

Table 4. Results of factor analysis test for validity of the research

<table>
<thead>
<tr>
<th>Statistic of the Test</th>
<th>Items of questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMO measure of sampling adequacy</td>
<td>0.755</td>
</tr>
<tr>
<td>Bartlett's test of sphericity</td>
<td>1145.870</td>
</tr>
<tr>
<td>Df</td>
<td>299</td>
</tr>
<tr>
<td>Sig</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Reliability

To verify the reliability in this research, the Cronbach’s alpha was calculated using the following formula:
A questionnaire with thirty-five questions was used for data collection. Two questions were about descriptive statistics and characteristics of respondents and were measured by numerical measures. Others were evaluated by the 5-point Likert scale. Cronbach’s alpha coefficient was used to measure reliability. The average of Cronbach’s alpha for nine basic elements and categories of this research was 0.855 that is more than the acceptable mean alpha. Hence, the questionnaire is reliable. Table 1 shows the results (Cronbach’s alpha is used to test the reliability of the materials used in the research). All these parts bear high reliability ($\alpha > 0.7$).

Since the instrument for gathering data used in this research was unique, the validity of this questionnaire was confirmed by a means of experts' insights and examinations. Finally, the collected data was processed by the statistical software SPSS.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number of items</th>
<th>Cronbach’s alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>3</td>
<td>0.896</td>
</tr>
<tr>
<td>Cooperation</td>
<td>3</td>
<td>0.888</td>
</tr>
<tr>
<td>Trust</td>
<td>3</td>
<td>0.769</td>
</tr>
<tr>
<td>Commitment</td>
<td>4</td>
<td>0.840</td>
</tr>
<tr>
<td>Service Quality</td>
<td>4</td>
<td>0.870</td>
</tr>
<tr>
<td>Complaint Handling</td>
<td>2</td>
<td>0.834</td>
</tr>
<tr>
<td>Image</td>
<td>4</td>
<td>0.877</td>
</tr>
<tr>
<td>Communication</td>
<td>4</td>
<td>0.860</td>
</tr>
<tr>
<td>Customer Lifetime Value (CLV):</td>
<td>6</td>
<td>0.868</td>
</tr>
<tr>
<td>Recency</td>
<td>2</td>
<td>0.898</td>
</tr>
<tr>
<td>Frequency</td>
<td>2</td>
<td>0.824</td>
</tr>
<tr>
<td>Monetary</td>
<td>2</td>
<td>0.882</td>
</tr>
</tbody>
</table>

Sum = 33  Average = 0.855

**RFM Framework**

To identify customer behaviour, the well known method called recency, frequency and monetary (RFM) model is used to represent customer behaviour characteristics (Chan, 2005; Hsieh, 2004). RFM models have been used in direct marketing for more than thirty years. Given the low response rates in this industry (typically 2% or less), these
models were developed to target marketing programs (direct mail) at specific customers with the objective to improve response rates. Prior to these models, companies typically used demographic profiles of customers for targeting purposes (Sohrabi & Khanlari, 2007).

However, the research strongly suggests that past purchases of consumers are better predictors of their future purchase behaviour than demographics (Gupta et al., 2006).

The basic assumption of using the RFM model is that future patterns of consumer trading resemble past and current patterns. The calculated RFM values are summarized to clarify customer behaviour patterns. This study proposes using the following RFM variables (Chan, 2005; Sohrabi & Khanlari, 2007):

- **Recency (R):** the latest purchase amount.
- **Frequency (F):** the total number of purchases during a specific period.
- **Monetary (M):** monetary value spent during one specific period.

In this research we use the qualitative RFM model to determine the quality of the customer’s value for the banking sector. To this purpose, two questions for testing any parameters of RFM model have been used and the average volume of the R, F, and M, finally constructs the CLV of the customers and provides the research model.

![Figure 2: Parameters affecting on the qualitative RFM framework](image)

**Analysis**

In order to measure the model using the gathered data, T-test and $\beta$ coefficient has been applied. Results show that all of the eight variables positively impact on customer loyalty and also customer loyalty affects
positively on the customer lifetime value.

Table 2 will present the results of the T-test of the research model and variables. In this table, the affectability of eight factors recognized in this research as the customer loyalty factors will be tested and analyzed.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Independent Variables (Factors of Customer Loyalty)</th>
<th>Dependent Variable</th>
<th>T-Statistic</th>
<th>d.f</th>
<th>Sig*</th>
<th>mean</th>
<th>Test-Value</th>
<th>Confirm / Reject</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Satisfaction</td>
<td>Customer Loyalty</td>
<td>16.455</td>
<td>299</td>
<td>0.000</td>
<td>1.5692</td>
<td>3</td>
<td>Confirm</td>
</tr>
<tr>
<td>H2</td>
<td>Cooperation</td>
<td>Customer Loyalty</td>
<td>15.660</td>
<td>299</td>
<td>0.000</td>
<td>1.4615</td>
<td>3</td>
<td>Confirm</td>
</tr>
<tr>
<td>H3</td>
<td>Trust</td>
<td>Customer Loyalty</td>
<td>11.947</td>
<td>299</td>
<td>0.000</td>
<td>2.1308</td>
<td>3</td>
<td>Confirm</td>
</tr>
<tr>
<td>H4</td>
<td>Commitment</td>
<td>Customer Loyalty</td>
<td>14.125</td>
<td>299</td>
<td>0.000</td>
<td>2.0615</td>
<td>3</td>
<td>Confirm</td>
</tr>
<tr>
<td>H5</td>
<td>Service Quality</td>
<td>Customer Loyalty</td>
<td>22.910</td>
<td>299</td>
<td>0.000</td>
<td>1.5308</td>
<td>3</td>
<td>Confirm</td>
</tr>
<tr>
<td>H6</td>
<td>Complaint Handling</td>
<td>Customer Loyalty</td>
<td>10.733</td>
<td>299</td>
<td>0.000</td>
<td>1.7000</td>
<td>3</td>
<td>Confirm</td>
</tr>
<tr>
<td>H7</td>
<td>Image</td>
<td>Customer Loyalty</td>
<td>13.504</td>
<td>299</td>
<td>0.000</td>
<td>4.1385</td>
<td>3</td>
<td>Confirm</td>
</tr>
<tr>
<td>H8</td>
<td>Communication</td>
<td>Customer Loyalty</td>
<td>5.674</td>
<td>299</td>
<td>0.000</td>
<td>2.8385</td>
<td>3</td>
<td>Confirm</td>
</tr>
</tbody>
</table>

*α=0.05

Also Table 3 will show the result of T-test for the Hypothesis 9 that analyses the affectability of the customer loyalty on the customer lifetime value by means of gathered data.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Independent Variables (Factors of Customer Loyalty)</th>
<th>Dependent Variable</th>
<th>T-Statistic</th>
<th>d.f</th>
<th>Sig*</th>
<th>mean</th>
<th>Test-Value</th>
<th>Confirm / Reject</th>
</tr>
</thead>
<tbody>
<tr>
<td>H9</td>
<td>Customer Loyalty</td>
<td>Customer Lifetime Value</td>
<td>25.844</td>
<td>299</td>
<td>0.000</td>
<td>2.573</td>
<td>3</td>
<td>Confirm</td>
</tr>
</tbody>
</table>

In this section of the paper, by use of the β coefficient, the positive relationships of the customer loyalty factors and also customer loyalty with customer lifetime value will be tested and presented. Table 8 will show the R and R square and other significant components for the model of this research.
### Table 8. Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical research model</td>
<td>.871*</td>
<td>.759</td>
<td>.750</td>
<td>2.40942</td>
</tr>
<tr>
<td>a. Predictors: (Constant), and all independent variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3 will show the results of these analyses. Results show that this model with the main basic relationships is appropriate and very responsive to the significant and valuable aspects of customers of the banks in relation to the marketing paradigm. In other word, customers will interact with all of the businesses especially banks. This model will describe the behaviours of the customers when they interact with the banks such as loyalty of customers and the amount of the value these customers regard for the banks.

![Figure 3: The β coefficient analysis for the entire model: Final Model](image)

**Concluding Remarks and Recommendations**

The more a marketing paradigm evolves, the more long-term relationship with customers gains its importance. CRM, a recent marketing paradigm,
pursues long-term relationship with profitable customers. It can be a starting point of relationship management to understand and measure the true value of customers since marketing management as a whole is to be deployed toward the targeted customers and profitable customers, to foster customers’ full profit potential. Corporate success depends on an organization’s ability to build and maintain loyal and valued customer relationships. On the other hand, customer loyalty is one of the new variables that is more intentioned and studied in the new paradigm of marketing management. This research investigates the positive role of the customer loyalty on the customer lifetime value for the banking sector customers. In this research eight main factors of the customer loyalty have been investigated and after the validation of these factors and testing the affectability of these factors on the customer loyalty, both the affectability and relationship between CLV and customer loyalty have been investigated.

Results showed that customer loyalty have strongly positive effect on the CLV in the banking sector. Namely, it is shown that if the banks, by means of the loyalty programs, could reach the sustainable relationship with the customers, it is more probable that CLV of the customers for those banks will be upper than others in the market.

Also, upper CLV will lead to more profitable customers and it is needed to manage these customers. Customer profitability management (CPM) is a continuous process to trace and develop a responsive path for obtaining values from customers, as well as creating values for customers, according to changes in industrial conditions. A clear path can guide a firm to make right strategic choices in determining desired marketing outcomes and allocating limited resources to marketing initiatives. Making strategic choices in response to socioeconomic changes from among many possible marketing initiatives is a difficult, yet crucial task for firms. However, an important principle of strategic choice is to select marketing initiatives that can actually rise existing or create new value for customers. Some firms and banks forget this principle and wind up trapped in destructive price wars.

**Limitations and Future Research**

This research tried to demonstrate and clarify the relationship between basic elements of customer loyalty and customer lifetime value. But for deeper insights for the decision makers and also related researchers of the
field, it is very necessary to highlight the exact relationship between every elements of the customer loyalty mentioned in this research with the customer lifetime value as a dependent variable. So, it is recommended to apply several researches to the presented relationships in order to provide much more insights and directions.

Since this research is an applied study, so it is recommended to the future researchers to reveal the significance of the customer loyalty and also customer lifetime value for the marketing strategies, especially for the banking sector. Bankers enthusiastically wanted to know the main role of the customer lifetime value in the marketing strategies to illustrate the strategic planning for the banks and achieve the banks' strategic objectives more effectively and efficiently.
References


