# Preliminary Study on Project Deliverable, an Innovation Activity for Customer Life Time Value

# Seongmi Kang <sup>1</sup>, Shinjo Eom <sup>2</sup> and Sangchul Kim <sup>3+</sup>

<sup>1</sup> Executive, Public projects division 1, ITM Corporation, Seolleung-ro 747, Gangnam-gu, Seoul 06056, Korea

Article Info Page Number: 497 – 506 Publication Issue: Vol. 71 No. 3 (2022)

#### Abstract

Companies aim to generate long-term profits rather than short-term profits. In a competitive marketing environment, companies recognize customer assets that can predict future behavior of customers as one of their main assets, and continuously measure them for effective customer asset management. The customer lifetime value (CLV) refers to the revenue generated by a customer's purchase of a company's products or services during the total period of their relationship with the company. Therefore, this study intends to analyze how to classify and classify customers in the construction industry based on the construction industry. This study provides basic research on how customer lifetime value can be approached by grafting it into the construction industry. Also, it is judged that it is necessary to verify what differences can be made based on customer types in future research.

research.

Keywords: customer, CLV, construction industry,

#### Article History

Article Received: 12 January 2022 Revised: 25 February 2022

Accepted: 20 April 2022 Publication: 09 June 2022

#### 1. Introduction (Use "Header 1" Style)

Companies aim to generate long-term profits rather than short-term profits (Blattberg, Getz, and Thomas 2001). In a competitive marketing environment, companies recognize customer assets that can predict future behavior of customers as one of their main assets, and continuously measure them for effective customer asset management. After that, we analyze the factors that hinder this and strive to strengthen customer assets.

In line with this trend, several studies that introduce the concept of customer assets and empirically analyze the effects of marketing activities carried out to maximize customer value and build long-term customer relationships on the purchasing behavior of individual

<sup>&</sup>lt;sup>2</sup> Professor, Dept. of Architectural Engineering, Kyungil University, Gyeongsan-Si, Gyongbuk-Do, 38428, Korea

<sup>&</sup>lt;sup>3</sup> Professor, School of Architecture, Hankyong National University, Anseong city, Kyonggi-Do, 17579, South Korea

<sup>&</sup>lt;sup>+</sup> Corresponding author. Tel.: +82-31-670-5277; fax: +82-31-670-5279 *E-mail address*: sckim08@hknu.ac.kr.

customers (Bolton, Lemon, and Verhoef 2004; Kamakura et al. 2002; Reinartz and Kumar 2000; Rust, Lemon, and Zeithaml 2004; Vogel, Evanschitzky and Ramaseshan 2008; Villanueva and Hanssens 2007). They presented a conceptual framework for measuring the effect of customer-based marketing programs on financial performance. Existing conceptual models of customer assets mainly measure customer assets using the concept of customer lifetime value. Measuring customer assets using customer lifetime value (CLV) is one of the useful approaches to measuring a firm's financial performance, but most firms have difficulties in measuring it in practice (Vogel et al. 2008).

In order to obtain useful implications for establishing marketing strategies from the customer asset model, marketers must first understand how the relative influence of customer asset components on customer assets and customer loyalty differs depending on the type of product they handle. Existing customer wealth models mainly focus on what are the main drivers of customer assets and their relative effects on sales or repeat purchase behavior of customers. However, the effect of customer asset components on customer asset construction may differ depending on the product category handled by the company. For example, there may be differences in the relative influence of customer equity drivers on customer asset building for high involvement/sentimental products such as TVs and refrigerators and high involvement/sentimental products such as fashion apparel. What this classification of product types suggests to marketers is that information processing and decision-making processes are different depending on the product, and as a result, more effective marketing tools and drivers of customer asset formation may vary depending on the product. Therefore, it would be useful from a strategic point of view to examine whether the relative effects of customer asset drivers on customer loyalty differ according to product types.

Therefore, this study intends to analyze how to classify and classify customers in the construction industry based on the construction industry. This thesis is mainly composed of two parts. The first part analyzed how customers in the construction industry were composed and how to approach them through the large image of customer classification. And how to approach it by grafting customer lifetime value into the construction industry was analyzed.

#### 2. Literature review

## **2.1.** The concept of customer equity

The concept of customer equity was first proposed by Blattberg and Deighton (1996), who argued that customer equity, like other tangible and intangible assets, is a financial asset that a firm or organization must measure and manage. Rust, Zeithaml and Lemon (2000) proposed a customer asset model that a firm's marketing activities affect customer's brand preference and selection probability, and that the customer's brand selection probability is the basis for determining customer assets. It is argued that assets are formed from value equity, brand equity, and relationship equity. In other words, customer assets are more likely to retain customers when the brand image is well established, the perceived value of the services sold by the company is high, and the relationship between the company and the customer is well formed. According to their proposed customer asset model, customer assets are built through strategic investment and continuous maintenance/strengthening of value assets, brand assets, and related assets (Rust, et al. 2004).

Value equity refers to the objective evaluation of a product's utility or product performance. When selecting a product, customers use the product value formed by the combination of price, quality, and convenience as an important evaluation criterion, and the perception of product value is achieved through objective and rational evaluation. Brand equity is a customer's subjective and emotional evaluation of a brand, and this evaluation is influenced by the customer's experiences and brand associations accumulated through the company's marketing activities. Preceding factors for related assets include loyalty programs, customer loyalty programs, and community building programs (Lemon, Rust, and Zeithaml 2001). These three components of customer assets influence the customer's brand conversion behavior, that is, brand loyalty (Berger 1986; Vaughn 1980; Rust et al. 2000).

### The concept of customer Life time value

Blattberg and Deighton (1996) and Rust, et al. (2004) used the method of converting the customer lifetime value (CLV) of individual customers into present values and adding them all together. Here, customer lifetime value refers to the revenue generated by a customer's purchase of a company's products or services during the total period of their relationship with the company (Rust, et al. 2000). However, their proposed model measures customer loyalty based on the purchase amount and quantity (Vogel, et al. 2008), and the CLV used to measure customer assets is useful to measure a company's financial performance, but it is difficult to measure accurately (Stahl, Matzler, and Hinterhuber 2003).

Although many existing studies predict future purchasing behavior and customer loyalty based on a favorable attitude toward a brand, the correlation between product attitude and future purchase behavior is relatively low, so the use of product attitude as a proxy for customer loyalty It has limitations in explaining/predicting customer loyalty (Smith and Wright 2004; Nacif 2003; Kamakura et al. 2002). Accordingly, this study intends to approach the method of classifying customers and suggest ways to materialize them.

## 3. Framework of CLV

The overall framework for achieving CLV, the main content of this study, is presented as shown in Figure 1. Create a task to be achieved based on the current customer classification, process it, and create a basic form for CLV. After that, verify the contents of the CLV to be actually achieved through key performance indexes (KPIs).

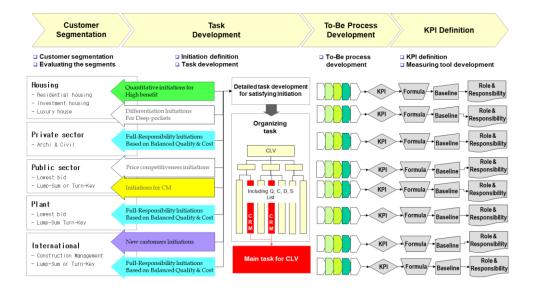


Fig. 1: Framework of CLV approach

# **3.1.** Customer segmentation justification

The reason for customer segmentation justification can be explained in the form of total customer value curve and maintenance curve. The position of the optimal point of customer value increases as the maintenance cost increases, but decreases when a certain limit is exceeded. Therefore, it is because the practical effect is the highest to set the optimum point, which is the highest point, as the company's optimum maintenance point.

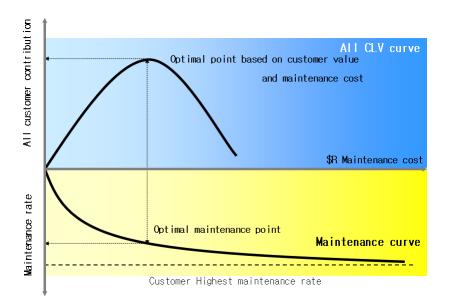


Fig. 2: Customer segmentation curve

## **3.2.** Classification of customer segmentation

In order to achieve customer segmentation, it is necessary to use a strategy that utilizes strategic importance (horizontal axis) and corporate value contribution (vertical axis). If this

is used, a total of four quadrants appear, and the direction that can be pursued is different for each quadrant. The figure below explains the CLV strategy being promoted in each quadrant. For example, in the first quadrant, star actors have a slow reaction rate to customer opinions, so productivity efficiency and collaboration are set as strategic directions.

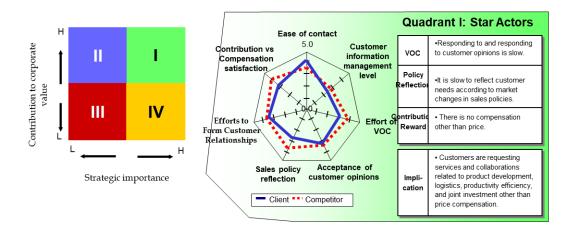


Fig. 3: Definition of dividing each quadrant

In this way, if the strategy for each quadrant is established, the figure is as follows.

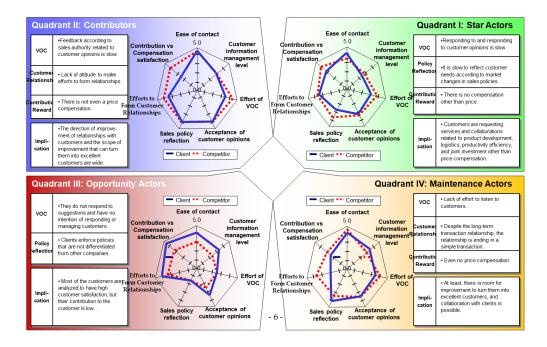


Fig. 4: The example of each quadrant

# 4. The Approach of CLV

The overall framework to access CLV is shown in the figure below.

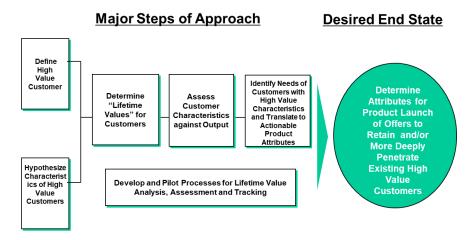


Fig. 5: The main approach method to CLV

Identify high-value customers and analyze their tendencies. It then determines the CLV of those customers. And based on the result payment, we estimate the propensity of customers and induce the behavior of customers by identifying factors that can actually make customers buy the product.

### **4.1.** Customer Life Time Value Definition

High value customer criteria is defined according to the industry and more specifically to company

- by considering various quantitative measures (e.g., NPV of future customer profits)
- by considering qualitative criteria (e.g., strategic significance of the customer); And customer revenue and expense items is defined to be used in the analysis;
- utilizing knowledge of the existing databases and data structures
- develop a methodology for collection of needed data and the calculation of customer lifetime value

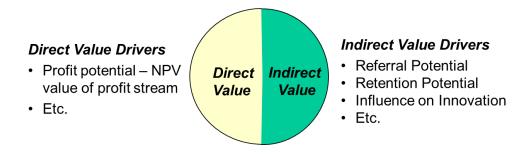


Fig. 6: Customer Lifetime Value Definition

# **4.2.** Hypothesize Characteristics of High Value Customers

Then we started to brainstorm potential characteristics of the potential high value customers, and to collect additional perspective on hypothesized characteristics through interviews with select customers and secondary research.

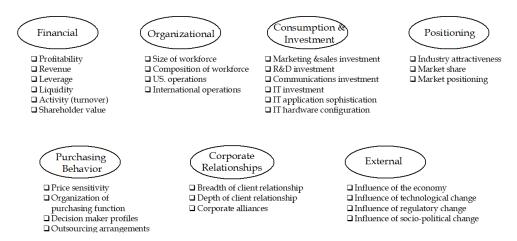


Fig. 7: Customer characteristics likely to be correlated with lifetime value

#### 4.3. Determine "Life Time Value" for Customers

The indirect value for a customer consisted of three measures: the customer's ability to generate referrals for the client, it's retention potential, and the influence it has on client innovation.

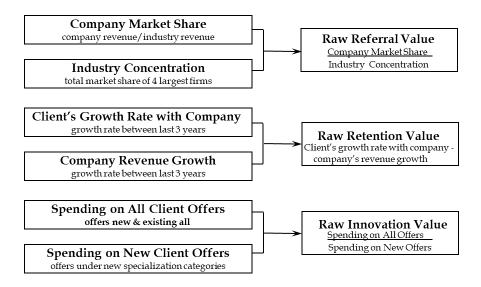


Fig. 8: Determine life time value customer

# **4.4.** Applications to Customer Life Time Value

Based on preliminary analysis the client may have a number of high value customers who are "at risk". Further needs analysis must be performed to understand the nature of the "at risk" customers. Opportunities do exist for the client to further penetrate key high value accounts, who make a substantial amount of purchases from client competitors.

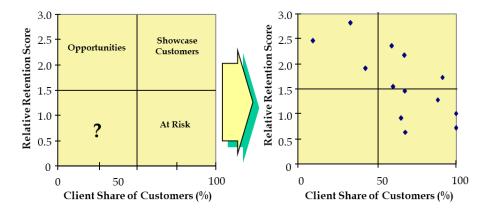


Fig. 9: Customer Retention vs. Client Share of Potential Spending for Sample Customer

# **4.5.** Customer Life Time Value Deliver Strategy and Tactics

The final strategy for applying CLV is shown in the figure below. Decide on customer value first, create a customer portfolio, and establish a detailed strategy for the customer. Then set up tactics that can put the strategy into action.

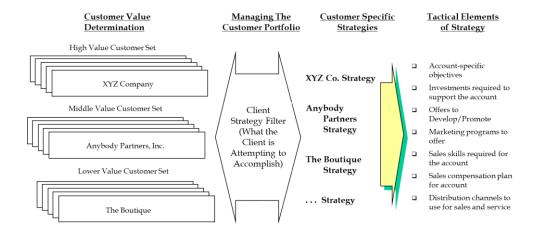


Fig. 10: CLV strategy and tactics

## 5. Conclusion

This study provides basic research on how customer lifetime value can be approached by grafting it into the construction industry. We searched for ways to approach customers based on the three basic elements of customer assets: value assets, brand assets, and related assets, and analyzed customer access techniques in the construction industry as shown in Figure 5. In general, the relative importance of customer asset components on customer loyalty varies depending on product type, and brand equity and value assets are particularly important in building customer loyalty intention and future purchasing behavior. It is the basis for building relationships.

If the products/services provided by the company do not meet customer expectations, the

company's efforts to build brand assets and related assets will be in vain. This study provides useful implications for marketers in the construction industry. The analysis result that value assets are very important to future purchasing behavior means that the customer's expectations, which are formed based on the objective evaluation of the utility of the company's products and services, must be satisfied. Construction industry marketers need to understand how the effects of value components on future purchasing behavior differ according to market segments, and maximize value assets through the correct allocation of marketing resources. Although this study deals with the application of CLV in the construction industry, there is a limitation in that it is limited to basic research. Therefore, in future research, it is judged that it is necessary to verify what differences can be made based on customer types.

## 6. Acknowledgements

This work was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MSIP) (2018R1D1A1B07048848).

#### 7. References

- 1. An N. & Park S. (2021) The Effect of Relational Benefits on Customer Loyalty in Hair Beauty Salon. *Journal of Next generation Convergence Technology Association* v.5 no.4, 637-646.
- 2. Berger, David (1986). Theory into Practice: The FCB Grid. *European Research*, January, pp.30-40.
- 3. Blattberg, Robert C. & John Deighton (1996). Manage Marketing by the Customer Equity Test. *Harvard Business Review*, 74(4), pp. 136-144.
- 4. Blattberg, Robert C., Gary Getz & Jacquelyn S. Thomas (2001). Customer Equity: Building and Managing Relationships as Valuable Assets. *Harvard Business School Press*.
- 5. Bolton, Ruth N., Katherine N. Lemon & Peter Verhoef (2004). The Theoretical Underpinnings of Customer Asset Management: A Framework and Propositions for Future Research. *Journal of the Academy of Marketing Science*, 32(Summer), pp. 271-293.
- 6. Jung, H. (2020). Study on the Correlation between Hospital Medical Service and Customer Satisfaction Service on Intention to Visit in Rural Area. *Journal of Next generation Convergence Technology Association* v.4 no.1, 94-100.
- 7. Kamakura, Wagner A., Vikas Mittal, Fernando de Rosa, & Jose Afonso Mazzon (2002). Assessing the Service Profit Chain. *Marketing Science*, 21(3), pp. 294-317.
- 8. Nacif, Roberta C. (2003). Online Customer Loyalty: Forcasting the Repatronage Behavior of Online Retail Customers. *Wiesbaden, Germany*: Gabler
- 9. Reinartz, Werner J. & V. Kumar (2000). On the Profitability of Long-Life Customers in a Noncontractual Setting: An Empirical Investigation and Implications for Marketing. *Journal of Marketing*, 64(4), pp. 17-35.
- 10. Rust, Roland T., Katherine N. Lemon & Valarie A. Zeithaml (2004). Return on Marketing: Using Customer Equity to Focus Marketing Strategy. *Journal of Marketing*, 68(1), pp. 109-127.

- 11. Rust, Roland T., Valarie A. Zeithaml and Katherine N. Lemon (2000). Driving Customer Equity: How Customer Lifetime Value is Reshaping Corporate Strategy. *The Free Press*.
- 12. Stahl, Heinz K., Kurt Matzler, & Hans H. Hinterhuber (2003). Linking Customer Lifetime Value With Shareholder Value. *Industrial Marketing*, 32(4), pp. 267-279.
- 13. Smith, Rodney E. & William F. Wright (2004). Determinants of Customer Loyalty and Financial Performance. *Journal of Management Accounting Research*, 16(1), pp. 183-205.
- 14. Vaughn, Richard (1980). How Advertising Works: A Planning Model. *Journal of Advertising Research*, 20(5), October, pp. 27-33.
- 15. Villanueva, Julian & Dominique M. Hanssens (2007). Customer Equity: Measurement, Management and Research Opportunities. *Foundations and Trends in Marketing*, 1(1), pp. 1-95.
- 16. Vogel, Verena, Heiner Evanschitzky, & B. Ramaseshan (2008). Customer Equity Drivers and Future Sales. *Journal of Marketing*, 72(6), pp. 98-108.