



Proposed Marketing Strategy Based on Customer Value Using CLV Model (Case Study of Nazione Tech)

Ofi Eka Novyanti

School of Business and Management, Bandung Institute of Technology, Indonesia

ABSTRACT: This research focuses on customer engagement strategies for technology companies to become industry leaders. It emphasizes the importance of leveraging profitable customers through Customer Lifetime Value (CLV) analysis, segmentation and targeted marketing. By analyzing real data from Nazione Tech, the study identified three key factors: current value, potential value, and customer loyalty. Based on this analysis, 57 customers are categorized into high, medium, and low-profit segments, each requiring tailored marketing approaches. The strategies include personalized communication, cross-selling, exceptional customer service for high-profit customers; flexibility, trust-building, and direct assistance for medium-profit customers; and competitive pricing, loyalty programs, and targeted campaigns for low-profit customers. These strategies empower companies to excel in the customer engagement platform market and strengthen their position as technology leaders.

KEYWORDS: Customer Lifetime Value, Customer Segmentation, Customer Values, Customer Churn.

1. INTRODUCTION

The rise in customer engagement platforms is linked to increased internet usage worldwide. As more people go online, companies use various digital tools to address customer inquiries. The number of internet users has grown, reaching 5.1 billion in 2021, indicating a high internet penetration rate. This expansion is driven by the significant amount of time people spend online each day, creating a demand for customer engagement solutions. There are thousands of technology companies globally, with 245 of them specifically focused on communication and customer engagement. These companies aim to increase their market share and revenue by acquiring a larger customer base. However, customer engagement platform companies in Indonesia face challenges in competing globally, as their market share and profits are relatively smaller.

To address these challenges and achieve sustained growth, companies must prioritize customer loyalty and focus on existing customers while attracting new ones. By fostering loyalty, companies can encourage repeat purchases and positive word-of-mouth, which can attract new customers. Nazione Tech, a developing company, aims to become a world-class organization but faces financial challenges. Despite having a user base of 100 million, their revenue is significantly lower than that of leading global companies. To improve their revenue and customer optimization, they plan to deploy a customer lifetime value (CLV) model and customer segmentation. This approach involves identifying the most valuable customers, segmenting them based on their characteristics, and developing targeted marketing strategies accordingly.

2. RELATED WORKS

2.1. The Explanation of CLV

Customer Lifetime Value (CLV) is the aggregate of discounted cumulative cash flows that a customer generates throughout their entire association with a company (Kumar, 2004). The lifetime value of a customer signifies the net worth of the revenues obtained from that customer over the course of their transactions, while considering the acquisition costs related to attracting, selling, and servicing the customer, and factoring in the time value of money (Berger and Nasr, 1998).

Calculating CLV provides insights into the amount that can be invested in customer retention, ensuring that the investment yields a profitable return. As companies have limited resources, it is ideal to invest in customers who generate maximum profit. This can only be achieved by understanding the monetary value generated by each customer throughout their entire relationship with the organization, known as the customer lifetime value. Once the company calculates CLV for its customers, it can allocate resources more efficiently to maximize profitability. Achieving profitability in business requires targeting highly profitable customers, as not all customers contribute equally to profits.



2.2. Calculation Model of Customer Lifetime Value (CLV)

The CLV model is evolving as customer data accessibility improves and the business landscape changes. Recent advancements have led to alternative approaches in modeling CLV, addressing specific requirements and building upon previous studies. One such model developed by Fader et al. (2005) connects RFM variables directly to CLV, establishing a relationship between observed measures and underlying customer traits. The model utilizes iso-value curves to group customers with similar future values but different purchase histories, providing a comprehensive evaluation of CLV for the entire customer base. Factors considered in the model include past purchase behavior, churn probability, and the discount factor for net present value to calculate the expected lifetime value of a customer. The CLV formula is given as:

$$E(CLV) = \int_0^{\infty} E[v(t)] S(t) d(t) \quad (1)$$

where $E[v(t)]$ is the customer's expected value (net cash flow) at time t (if active). While $S(t)$ is the probability of customer's continued activity until time t and $d(t)$ is the discount factor for the present value of money received at time t .

This study utilizes this model for customer segmentation due to several reasons. Firstly, the model allows for the segmentation of customers based on shared foundational values, enabling efficient resource allocation to maximize profitability. Secondly, it categorizes customers using CLV analysis instead of RFM analysis, considering components like current value, potential value, and customer loyalty. Lastly, the model incorporates customer behavior data, making the segmentation process more specific and comprehensive.

2.3. Customer Segmentation Based on Customer Value

Marketers have used various segmentation techniques based on demographic, psychographic, and behavioral variables. This study categorizes customers into four quadrants based on their relationship level (prospect vs. existing customer) and profitability level (high vs. low). Customer segmentation methods using CLV can be classified into three categories:

1. Segmentation based on CLV values,
2. Segmentation based on CLV components (current value, potential value, customer loyalty), and
3. Segmentation using both CLV values and additional information.

The chosen technique for this research is clustering, which aims to group customers into distinct categories. The focus is on using the CLV component method, categorizing customers into low and high probability groups, resulting in eight segments.

2.4. Linking Customer Lifetime Value (CLV) and Future Purchase

Understanding customer characteristics, such as their customer value, is crucial for companies to increase future purchases. Customer value includes current value, potential value, and customer loyalty. Categorizing customer value allows companies to create customized marketing strategies for each category and target customers who do not align with their goals for transfer. This approach is expected to generate high-value customers and boost future purchase rates. Research consistently demonstrates the effectiveness of utilizing customer lifetime value (CLV) and the importance of customer value in driving future profitability.

3. CALCULATING CUSTOMER VALUE

To calculate CLV, data from the customer database, including socio-demographic details and transaction records, is preprocessed to remove incomplete information and outliers. The refined dataset is then used to calculate CLV, considering its components: current value, potential value, and customer loyalty. Based on the CLV results, customers are segmented into high, medium, and low probability groups, forming 13 distinct segments. Each segment undergoes thorough analysis to develop marketing strategies aimed at increasing company revenue. Internal and external assessments support the formulation of robust marketing strategies.

3.1. Data Description

The collected data, including customer profiles and transaction information, is carefully cleaned and irrelevant fields are removed. The dataset used in this study covers a six-month period and consists of 57 records of Small Medium Business (SMB) customers. It includes 21 variables, encompassing socio-demographic details and service transaction records.

3.2. Current Value



The researcher provides a specific definition for the term "current value" as the profit generated by a customer within a defined period (specifically six months), rather than considering it as a cumulative value from previous periods up to the present. The calculation of the current value can be achieved through a straightforward process utilizing the specified data fields.

$$\text{Current Value} = \frac{\text{Average amount asked to pay} - \text{Cumulative amount in arrears}}{\text{Total period of use}} \quad (2)$$

The outcomes of the current value calculation, which represents the profit generated by the company through customer product usage within a specific time frame. To enhance current value, the company should encourage customers to buy more products and extend their subscription durations. The findings indicate a range of current values, with the maximum being 9.6 million and the minimum being 450 thousand. On average, monthly payments amount to approximately 1.3 million. These results suggest that small and medium-sized business customers have a payment capacity below 15 million, which is important for developing pricing-focused marketing strategies to boost revenue.

3.3. Potential Value

The "potential value" of customers in this study refers to the expected profits that can be obtained when customers use additional services provided by a customer engagement platform company. Determining potential value involves assessing the potential value of a product, calculating customer lifetime value, and evaluating net present value. The potential value of a product is estimated by multiplying its probability of success by the potential profit it can generate.

$$\text{Potential Value} = \text{Success Probability} \times \text{Potential Profit} \quad (3)$$

The researcher calculates the potential value of each product that the customer is expected to purchase.

$$\text{Lifetime Value} = \sum (\text{Potential Value of Product } i) \text{ for } i = 1 \text{ to } n \quad (4)$$

The researcher determines the lifetime value of each customer by calculating the combined potential value of multiple products they are expected to purchase. This estimation provides insights into the total value a customer can generate over their lifetime. The researcher then calculates the Net Present Value (NPV) by summing up discounted cash flows over time, considering expected inflows or outflows and adjusting for the time value of money and risk.

$$\text{NPV} = \sum \left(\frac{\text{Cash Flow}}{(1+r)^t} \right) - \text{Initial Investment} \quad (5)$$

After that, the researcher evaluates the net value generated by the customer base, considering the timing and risk of cash flows. A positive NPV indicates profitability, while a negative NPV suggests potential losses. Accurate estimation of future cash flows and selecting an appropriate discount rate are crucial for precise NPV calculations.

The potential value computation considers variables such as inflows, outflows, discount rate, and subscription period, which affect the customer's Net Present Value (NPV). Keeping the discount rate and subscription period constant, the NPV primarily depends on inflows and outflows. The average inflow value is 3.60 million, while the outflow value is 1.05 million, indicating Nazione's ability to generate maximum revenue from customers with minimal investment. This highlights the importance of up-selling and cross-selling tactics in the upcoming marketing strategy, focusing efforts on customers with the highest potential value.

3.4. Customer Loyalty

The formula combines the churn rate with the net present value (NPV) to assess customer loyalty. However, it's important to note that this formula may not be widely recognized or standardized. Other metrics and factors are typically considered in practice for evaluating customer loyalty.

$$\text{Customer Loyalty} = (\text{Churn rate} - 1) \times \text{NPV} \quad (6)$$

Customer loyalty in this study is assessed by calculating the churn rate and subtracting it from 1 to obtain the loyalty percentage. The loyalty percentage is then multiplied by the customer's NPV. The analysis shows that the projected number of product purchases (NPV) has a positive correlation with customer loyalty, while the churn rate has a negative correlation. Customers who make more purchases are more likely to exhibit loyalty, while those with a higher churn rate show lower loyalty. It is advisable to prioritize customers with a higher number of purchases for improved loyalty and NPV.

4. CUSTOMER SEGMENTATION AND MARKETING STRATEGIES

The process of segmentation employed in this study involves dividing the Net Present Value (NPV) into three distinct parts: a range of 10 million to 18 million for the segment with lower profitability, a range of 18.01 million to 30 million for the segment with medium profitability, and a range of 30.1 million to 123 million for the segment with higher profitability.



Subsequently, the researcher conducted a thorough analysis of these three segments, which extended beyond merely examining customers' past purchasing histories. The analysis takes into account various factors related to customers' behavior, including demographic, geographic, and psychological aspects. By considering these factors, the researcher aims to gain comprehensive insights into each segment, enabling a deeper understanding of customer preferences, motivations, and patterns of engagement. This approach allowed for a more nuanced exploration of the distinct characteristics and dynamics within each segment, contributing to a more comprehensive understanding of customer behavior and market potential. Based on the analysis of the segment group, three key observations can be made:

1. High Profitable Customer

The most profitable customers comprise large companies in the healthcare, education, and technology industries. Most of them specialize in customizations and system integration services, and aim to cross-sell complementary solutions and expand their service portfolio. By building relationships with key decision-makers through personalized communication and delivering exceptional customer service during integration, this segment ensures a strong foundation for upselling.

The company can offer maintenance contracts, highlighting ongoing partnerships and expertise, while regular check-ins and follow-up consultations allow for feedback and identify opportunities for additional products and services. Nation can employ a multi-channel marketing approach. Direct sales involve a dedicated team engaging decision-makers through face-to-face meetings, presentations, and customized proposals.

Simultaneously, targeted digital marketing strategies like online advertising, SEO, email marketing, and content creation support the direct sales efforts and engage potential customers. Furthermore, the Nation can actively participate in industry events and tradeshows to showcase products, network, and enhance brand awareness. By leveraging these insights, the Nation can effectively target its market segment, establish valuable connections, and drive cross-selling and upselling opportunities.

SEGMENT	CLV Level	Major Difference	Differentiation Component	Explanation
1	High Profitability Customer	Cross selling with medium integration	<ul style="list-style-type: none"> • Purchases: 2 times • Customer type: 64% existing • Use case: Customer support • Industries: Healthcare (28%), Education (23%), Technology (23%) • Big brand customers: 92%, 7% in management • Location: South Jakarta (57%), Others (43%) • Sales cycle: 5 days 	<ul style="list-style-type: none"> • Large companies within this segment tend to make significant initial purchases due to the complexity of customizations and integration requirements. • However, it is important to note that some of these customers may intend to handle maintenance internally the following year, which could potentially lead to customer churn. • Therefore, managing ongoing customer relationships and addressing maintenance needs proactively becomes crucial to retaining customers in this segment.

Figure I. High Profitability Customer Segment Table

2. Medium Profitable Customer

The buyer segment consists of startup businesses that often go through periods of varying customer volumes which can cause fluctuations in decision making authority within the company. In this case, it would be wise to market the product in such a way that caters to both single decision makers as well as those who may not be able to make decisions independently. To engage with them effectively, companies provide prototypes and success stories from similar industries, encouraging trial purchases for a single project.

By creating educational resources and offering direct assistance through experienced sales representatives and by participating in relevant events, the goal will be to build trust and credibility among potential buyers and to clearly demonstrate how your products will positively impact their operations. SEO is also an important aspect of reaching your target audience without incurring extra costs, allowing small startups to discover your solutions in the future when growth resumes once again.

By using online forums and conducting webinars to further engage with customers on an individual basis, you ensure that all types of buyers feel valued and supported no matter what stage their business might currently be experiencing financially. Ultimately, your aim is to remain flexible enough to adapt to any unique situation while consistently providing top-notch service as circumstances shift dynamically over time.



SEGMENT	Buyer Persona	Objectives	Approaches	Marketing Channel
2	<ul style="list-style-type: none"> This buyer segment consists of new businesses/startups. They have centralized decision-making authority and experience fluctuations in customer volume over time. 	<ul style="list-style-type: none"> Focus on building trust, demonstrating product benefits, and providing excellent customer support. Emphasize education to address concerns and doubts of technology-unfamiliar companies. The goal is to establish credibility and showcase how the products improve efficiency, productivity, and profitability. 	<ul style="list-style-type: none"> Create informative content (blogs, whitepapers, videos) showcasing product advantages and addressing pain points for non-tech manufacturing companies. Participate in relevant events, engage with potential buyers, and demonstrate state system. Conduct webinars and workshops on product demos and industry insights. Assign knowledgeable sales reps to provide personalized assistance, understand requirements, and offer tailored solutions. 	<ul style="list-style-type: none"> Industry conferences and trade shows: Engage with key decision-maker, set up booths and interact directly with potential customers, showcase product demonstrations, build relationships and address concerns, and generate leads and increase revenue. Online Forum: They provide a targeted audience, help establish expertise, and allow direct interaction with customers. SEO: It drives organic traffic without paying for clicks, provides long-term results, targets a relevant audience, and is cost-effective in the long run.

Figure II. Medium Profitability Customer Segment Table

3. Low Profitable Customer

The marketing strategy for MSME businesses focuses on addressing challenges such as window shopping, trial purchases, low customer loyalty, and limited cross-selling and upselling opportunities. To tackle these issues, the strategy includes several objectives and approaches. First, competitive pricing and limited-time promotions are employed to attract cost-conscious customers and incentivize them to make purchases. Implementing a loyalty program with rewards and discounts encouraging repeat business and fostering customer loyalty. Additionally, a referral program with incentives for successful referrals helps expand the customer base through word-of-mouth marketing. Retargeting campaigns are used to remind interested users to make a purchase and drive conversions.

To execute this strategy effectively, various marketing approaches and channels are recommended. Content marketing is employed to attract potential customers by providing valuable and engaging content that builds trust and drives conversions. Website optimization is crucial to improve search engine visibility and enhance user experience. This includes incorporating relevant keywords and providing easy signup options to facilitate customer engagement. Collaborating with local associations and hosting events or webinars can help educate the target audience and gain exposure within the local community. By implementing these strategies, MSME businesses can overcome their challenges and effectively reach and engage their target customers.

SEGMENT	Buyer Persona	Objectives	Approaches	Marketing Channel
3	<ul style="list-style-type: none"> Developed U/MKM businesses. This segment engages in window shopping, trial purchases, and values low prices, resulting in limited cross-selling and upselling opportunities and low customer loyalty. 	<ul style="list-style-type: none"> Offer competitive pricing and limited-time promotions. Implement a loyalty program with rewards and discounts. Create a referral program with incentives for successful referrals. Use retargeting campaigns to remind interested users to make a purchase. 	<ul style="list-style-type: none"> Competitive pricing and time-limited promotions attract cost-conscious customers. Boost conversions by enhancing user experience and optimizing website. Re-engage interested users with targeted ads to drive purchases. 	<ul style="list-style-type: none"> Content Marketing: Content marketing through valuable and engaging content attracts potential customers, builds trust, and drives conversions for early-stage businesses targeting window shoppers. Website optimization: Optimize the website for search engines and user experience. Use relevant keywords and create easy signup options. Local associations: Collaborate with local associations, host events/webinars to educate and gain exposure.

Figure III. Low Profitability Customer Segment Table

5. CONCLUSION

In conclusion, this study has identified three distinct customer segments based on profitability: high, medium, and low. High-profitable customers, consisting mainly of large companies in the healthcare, education, and technology sectors, require personalized communication, exceptional customer service, and a focus on cross-selling and upselling. Direct sales and targeted digital marketing are effective for reaching this segment.

Medium-profitable customers, often startups with fluctuating decision-making authority, require a flexible approach that addresses the needs of individual decision-makers and collective decision-making processes. Building trust, credibility, and providing direct assistance through educational resources and experienced sales representatives are crucial for this segment.

Lastly, low-profitable customers, including MSME businesses, face challenges such as low customer loyalty and limited cross-selling opportunities. Marketing strategies for this segment involve competitive pricing, limited-time promotions, loyalty programs,



content marketing, and collaborations with local associations. By tailoring marketing strategies to each segment, businesses can optimize their efforts and maximize profitability.

6. ACKNOWLEDGEMENTS

This study will inspire the creation of more comprehensive CLV models in the future. These models will consider industry and customer-specific factors such as reactivation potential, attracting/servicing costs, and reasons for customer defection. By incorporating these elements, businesses can better estimate customer lifetime value and make informed decisions to optimize their strategies for growth.

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