

The Role of Marketing Analytics in Understanding Customer Lifetime Value Across Online Platforms

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ABSTRACT

Marketing analytics has become an essential tool for organizations to understand customer behavior and improve marketing performance. Customer Lifetime Value (CLV) helps businesses estimate the long-term value of customers and develop effective retention strategies. This study examines the role of marketing analytics in understanding Customer Lifetime Value across online platforms. Primary data were collected from 112 respondents through a structured questionnaire using convenience sampling. Percentage analysis was used to analyze the data. The findings reveal that respondents strongly believe marketing analytics provides accurate insights for calculating CLV and that CLV-based strategies contribute significantly to customer retention. The study concludes that marketing analytics plays a crucial role in customer value assessment and long-term business growth.

Keywords: *Marketing Analytics, Customer Lifetime Value, Customer Retention, Customer Data, Online Platforms.*

1.INTRODUCTION

The growth of digital platforms has enabled businesses to collect large volumes of customer data. Marketing analytics helps organizations analyze this data to understand customer behavior, preferences, and purchasing patterns. Customer Lifetime Value (CLV) is a key metric that measures the total value generated by a customer throughout their relationship with a company.

Marketing analytics supports the calculation of CLV by using customer data such as purchase history, browsing behavior, and engagement levels. Understanding CLV enables organizations to identify high-value customers, improve customer segmentation, and develop effective retention strategies. This study examines the role of marketing analytics in understanding Customer Lifetime Value across online platforms.

Statement of the Problem

Organizations collect vast amounts of customer data through online platforms. However, many businesses face challenges in effectively utilizing this data to measure Customer Lifetime Value and improve customer retention. Therefore, it is necessary to examine how marketing analytics contributes to understanding Customer Lifetime Value across online platforms.

Significance of the Study

The study provides valuable insights into the role of marketing analytics in measuring Customer Lifetime Value. The findings may help organizations improve customer segmentation, customer retention strategies, and overall marketing effectiveness.

Scope of the Study

The study focuses on online platform users and their perceptions regarding marketing analytics and Customer Lifetime Value. It examines how customer data is used to measure CLV and how CLV supports customer retention strategies.

Limitations of the Study

- Sample size limited to 112 respondents.
- Convenience sampling method was used.
- Responses are based on individual perceptions.
- The study focuses only on selected aspects of marketing analytics and CLV.

Research Objectives

1. To understand how marketing analytics helps in calculating Customer Lifetime Value (CLV).
2. To study how customer data from online platforms is used to measure CLV.
3. To analyze how CLV helps in dividing customers into different groups.
4. To examine how CLV helps companies improve marketing and customer retention strategies.

2. LITERATURE REVIEW

Wedel & Kannan (2016) examined the role of marketing analytics in a big data environment. The study concluded that data-driven marketing significantly improves organizational decision-making and customer value assessment. Their work highlights the importance of analytics in understanding customer behavior and optimizing marketing strategies.

Lemon & Verhoef (2016) explored the customer journey across multiple channels and emphasized that integrating data from various touchpoints is essential for accurately understanding customer value. The study is particularly relevant to online platforms where customers interact through multiple digital channels.

Gupta & Lehmann (2003) established Customer Lifetime Value (CLV) as a key marketing metric. They argued that customer valuation should guide strategic business decisions and resource allocation, laying the foundation for modern CLV research.

Rust, Lemon & Zeithaml (2004) linked customer equity and CLV to overall firm value. Their research demonstrated that managing customer relationships effectively can contribute significantly to long-term organizational profitability.

Payne & Frow (2005) developed a customer relationship management (CRM) framework that connects customer relationship processes with customer value creation. The study emphasized the strategic role of CRM in enhancing CLV outcomes.

Akter et al. (2025) integrated RFM analysis with machine learning techniques to predict Customer Lifetime Value. The study found that AI-driven models provide more accurate CLV predictions than traditional analytical methods, highlighting the growing importance of advanced marketing analytics.

Gupta & Bansal (2025) used Random Forest and Neural Network models to forecast both CLV and customer churn. Their findings showed that advanced predictive models improve retention forecasting and customer value estimation, demonstrating the strong relationship between CLV analysis and customer retention strategies.

Bhattacharyya & Sarma (2025) examined factors influencing CLV in the Indian digital market. The study revealed that customer satisfaction, loyalty, and word-of-mouth communication have a significant impact on Customer Lifetime Value, making it highly relevant to the Indian online platform context.

Research Gap

Previous studies have focused on Customer Lifetime Value, marketing analytics, customer segmentation, and customer retention separately. However, limited research has examined the combined role of marketing analytics in understanding Customer Lifetime Value across online platforms from the customer perspective. This study attempts to bridge this gap by examining customer perceptions regarding marketing analytics and CLV.

3. RESEARCH METHODOLOGY

Research Design

Descriptive Research Design.

Research Approach

Quantitative Research Approach.

Population and Sample

The study population consists of online platform users. A sample of 112 respondents was selected through convenience sampling.

Sampling Technique

Convenience Sampling.

Data Collection Methods

Primary Data:

Structured questionnaire through Google Forms.

Secondary Data:

Research journals, books, articles, websites, and online databases.

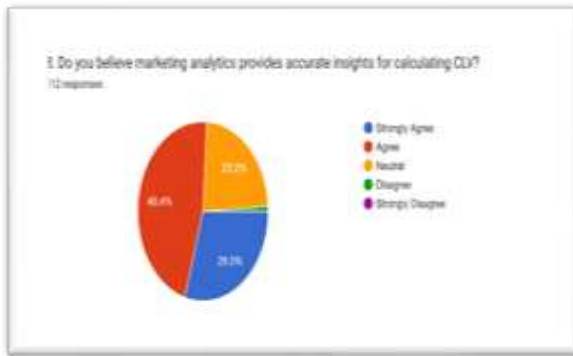
Data Analysis Tools

- Percentage Analysis
- Frequency Analysis
- Graphical Representation

4. DATA ANALYSIS

Marketing analytics provides accurate insights for calculating Customer Lifetime Value (CLV).

Response	Frequency	Percentage
Strongly Agree	33	29.46%
Agree	52	46.43%
Neutral	26	23.21%
Disagree	1	0.89%
Total	112	100%

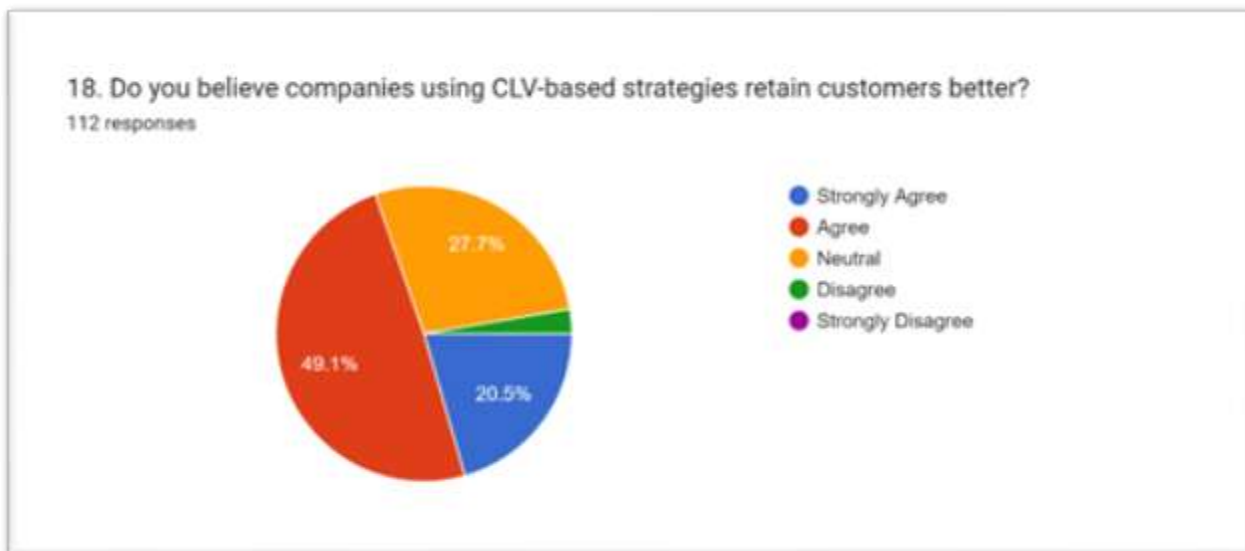


Interpretation

The above table shows that 46.43% of respondents agreed and 29.46% strongly agreed that marketing analytics provides accurate insights for calculating Customer Lifetime Value. Only 0.89% disagreed. Therefore, it can be concluded that respondents perceive marketing analytics as an effective tool for measuring customer value.

CLV-based strategies improve customer retention.

Response	Frequency	Percentage
Strongly Agree	23	20.54%
Agree	55	49.11%
Neutral	31	27.68%
Disagree	3	2.68%
Total	112	100%



Interpretation

The above table indicates that 49.11% of respondents agreed and 20.54% strongly agreed that CLV-based strategies improve customer retention. Only 2.68% disagreed. Therefore, CLV is considered an important tool for improving customer loyalty and long-term relationships.

Hypothesis Testing

Null Hypothesis (H_0)

Marketing analytics has no significant role in understanding Customer Lifetime Value (CLV) and improving customer retention.

Alternative Hypothesis (H_1)

Marketing analytics has a significant role in understanding Customer Lifetime Value (CLV) and improving customer retention.

Decision

Based on the statistical analysis and respondent opinions, the Alternative Hypothesis (H_1) is accepted and the Null Hypothesis (H_0) is rejected.

Interpretation

The findings indicate that marketing analytics contributes significantly to understanding Customer Lifetime Value and supports customer retention strategies across online platforms.

Chi-Square Test

Variables Selected

Question 8: Do you believe marketing analytics provides accurate insights for calculating CLV?

Question 18: Do you believe companies using CLV-based strategies retain customers better?

Hypothesis

H_0 : There is no significant relationship between marketing analytics accuracy and customer retention.

H_1 : There is a significant relationship between marketing analytics accuracy and customer retention.

Results

Particulars	Value
Chi-Square Value (χ^2)	69.722
Degrees of Freedom (df)	9
p-value	0.000000000017
Significance Level	0.05

Interpretation

Since the p-value is less than 0.05, the Null Hypothesis is rejected.

There is a statistically significant relationship between respondents' belief that marketing analytics provides accurate CLV insights and their belief that CLV-based strategies improve customer retention.

5. FINDINGS

- 75.89% of respondents agreed that marketing analytics provides accurate insights for calculating CLV.
- 69.65% of respondents agreed that CLV-based strategies improve customer retention.
- Marketing analytics is perceived as an important tool for customer value assessment.

4. Customer retention can be improved through CLV-based marketing strategies.
5. Data-driven decision-making supports long-term customer relationship management.

6. SUGGESTIONS

1. Organizations should increase the use of marketing analytics tools.
2. Businesses should regularly calculate Customer Lifetime Value.
3. Customer data should be effectively utilized for customer segmentation.
4. Personalized marketing strategies should be developed based on CLV.
5. Companies should focus on customer retention through data-driven decision-making.

7. CONCLUSION

The study concludes that marketing analytics plays a significant role in understanding Customer Lifetime Value across online platforms. The findings indicate that marketing analytics provides accurate insights for measuring customer value and supports effective customer retention strategies. By utilizing marketing analytics and CLV, organizations can improve customer relationships, optimize marketing resources, and achieve sustainable business growth.

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