

INFLUENCE AI DRIVEN MARKETING TO CUSTOMER RETENTION AND CUSTOMER LOYALTY THROUGH EMOTIONAL CONNECTION (STUDY OF LALAMOVE USERS IN JAVA, INDONESIA)

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Abstract

This study aims to analyze the influence of AI-driven marketing to customer retention and customer loyalty with emotional connection as a mediating variable. The study employs a quantitative method, analyzed through Partial Least Squares Structural Equation Modeling (PLS-SEM). The research sample consisted of 385 respondents who used Lalamove services in Java Island, selected using purposive sampling. The results of the study show that AI-driven marketing has a significant impact on customer retention and customer loyalty, as well as on emotional connection. Furthermore, emotional connection has been proven to have a significant influence on customer retention and customer loyalty, while mediating the relationship between AI-driven marketing and both variables. However, the mediation that occurs is partial because of the direct influence of AI-driven marketing remains significant. This finding confirms that the implementation of AI-driven marketing can increase customer retention and loyalty, both directly and through strengthening emotional connections. The practical implication is that Lalamove can strengthen its business strategy by optimizing AI-based personalization while building emotional engagement with customers in Java.

Keywords: AI-driven Marketing; Customer Retention; Customer Loyalty; Emotional Connection

INTRODUCTION

Indonesia's digital economy is experiencing substantial growth, largely driven by e-commerce. This is evidenced by the rise of e-commerce consumers, placing Indonesia among the top globally. Amidst this competition, a rivalry is brewing between two major technology companies: Gojek, which offers the GoSend service, and Grab, which provides the GrabExpress service. While data shows that GoSend maintains its position as the industry leader, GrabExpress continues to be a formidable and assertive competitor. Competition has expanded beyond price and speed; it now includes a more sophisticated emphasis on cultivating customer loyalty. In contrast, major apps like Gojek (GoSend) and Grab (GrabExpress) dominate the small package and document delivery sector. Conversely, the major entities are not adequately meeting the demands of more specialized markets, including the transportation of medium- to large-sized items. Lalamove has emerged as a significant competitor in this sector through several techniques.

As a player with a strategic focus on providing a more diverse fleet, including trucks, vans, pickup trucks, and motorcycles, Lalamove serves a wide range of clients, including MSMEs requiring goods distribution, business-to-business logistics, and individuals relocating. Despite being a leader in this field, Lalamove still faces many challenges. Data shows that Lalamove's overall market share is smaller than that of the giants of e-commerce, only about 2% among e-commerce sellers. According to a survey (Populix, 2023), Lalamove cannot rely solely on the operational profitability of its fleet. To compete effectively and grow its loyal customer base, it needs to employ more sophisticated user retention techniques. In this scenario, Lalamove cannot rely solely on the operational capabilities of its fleet. It must employ more effective strategies to retain clients to compete and retain loyal customers.

AI-powered marketing is emerging as a strategic asset. AI enables Lalamove to analyze clients' recurring delivery habits, optimize vehicle type suggestions, provide clear price estimates for complex routes, and tailor offers. The question is no longer whether Lalamove is using AI, but how it can provide a long-term advantage. Despite this, Lalamove demonstrated strong revenue and profitability growth from 2022 to 2024, with operating margins and PBT improving significantly.

Financial data shows that Lalamove has experienced consistent revenue growth in the last three years. Revenue increased from US\$1,035,786,000 in 2022 to US\$1,334,213,000 in 2023, and rose again to US\$1,592,966,000 in 2024. In terms of profitability, operating profit experienced a significant jump from only US\$2,629,000 in 2022 to US\$322,292,000 in 2023, and increased again to US\$419,699,000 in 2024. However, in terms of profit before

tax, the company still recorded a loss in 2022 of US\$ (47,152,000). This situation changed drastically in 2023 with a profit of US\$979,385,000, although in 2024 it decreased to US\$429,946,000. At the total comprehensive income level, Lalamove still suffered a loss in 2022 of US\$92,971,000. In 2023, the company managed to record a large profit of US\$965,071,000, although this decreased again to US\$414,474,000 in 2024. Overall, Lalamove managed to emerge from a loss-making condition in 2022 to high profitability in 2023, and despite the decline in 2024, the company's financial performance remained positive. This is certainly inseparable from the development of AI in the business world.

AI-driven marketing allows businesses to personalize real-time, more accurate customer behavior analysis, and automation of consumer interactions. These methods have been demonstrated worldwide to improve customer engagement and experience (Massoudi, Agha, & Zamoum, 2025). Many businesses in the e-commerce, retail, and digital services industries are using AI to increase customer satisfaction, loyalty, and retention.

In Indonesia, the use of AI in marketing continues to grow, particularly in logistics and delivery services. Businesses like Lalamove are now using AI to speed up order processing, automate delivery routes, and control personalized promotions based on user preferences. Lalamove is a logistics app on-demand which enables fast and flexible delivery of goods for individuals and businesses. This platform uses various AI-based technologies, such as chatbot customer service, automated scheduling, vehicle fleet recommendations based on delivery needs, and data-based delivery time estimation machine learning. Customer loyalty and retention are crucial for business continuity amidst high market competition and a broad customer base.

Based on public data, Lalamove Indonesia has more than 1.4 million active users with a growth of more than 600% since its launch in 2018. The company has also partnered with more than 230,000 drivers and 20,000 business partners, mostly from the MSME sector. Lalamove's service coverage reaches major cities in Indonesia such as Jakarta, Bandung, Surabaya, Semarang, and Yogyakarta. This platform relies on artificial intelligence technology to manage delivery scheduling, fleet determination, delivery time estimation, and customer service interactions based chatbot. In 2024, Lalamove recorded a 38% growth in four-wheeled vehicle deliveries, as well as launching new services.' Lalamove's Ride to serve passenger mobility. With its AI-dependent service characteristics and the highly competitive digital logistics market, Lalamove is the perfect context to test the influence model. AI-driven marketing to customer retention and loyalty through emotional connection. This research also contributes to expanding the literature on the application of AI marketing in the digital logistics sector in emerging markets like Indonesia.

Research by Al-Aqrabawi (2024) shows that the use of AI-driven consumer insights significantly reduces the level of churn customers and increases customer lifetime value (CLV), indicating a direct positive influence of AI on customer retention. This is reinforced by the findings of Verma, et al. (2025) in their study entitled "Redefining Customer Connections: AI-Powered Marketing Strategies and Their Measurable Outcomes", which resulted in an increase in customer retention rates from 75% to 93% using AI implementations at companies like Netflix, Amazon, and Coca-Cola. However, most of these studies are sector-specific and have not comprehensively examined the psychological factors that might mediate this effect.

However, research conducted by Subramanian, et al. (2025) showed that although AI-supported personalization strategies are able to improve customer engagement indicators, their effectiveness in driving sustainable customer retention still requires further refinement. Research related to the use of AI-supported personalization strategies still requires further refinement. Chatbot AI in the context of e-commerce revealed that AI-facilitated interactions have a positive impact on increasing customer retention. However, the effectiveness of these interactions depends heavily on the quality and depth of personalization provided in each customer experience (Bhatnagar, et al., 2025). However, these findings cannot be conclusively interpreted as indicating that AI-based marketing strategies generally have a negative impact on customer loyalty.

The success of technology in influencing customer retention and loyalty cannot be measured solely from functional or utilitarian aspects. One important dimension that is beginning to receive attention in modern marketing research is emotional attachment or emotional connection. Emotional connection refers to the emotional closeness customers feel towards a brand that can create long-term loyalty. Emotional connection is a psychological dimension that explains the emotional attachment between customers and brands, and has been shown to influence repeat purchase decisions and customer loyalty (Thomson, MacInnis, & Park, 2005).

In terms of customer loyalty, a study by Kant, et al., (2025) found that emotional attachment between customers and brands plays a partial mediator role in bridging the influence of AI-based marketing on brand loyalty. This means that AI can indirectly drive loyalty by building emotional closeness as an intermediary.

Several studies have shown that customers with strong emotional ties to a brand are more likely to retain and recommend that brand. However, a shortcoming of previous research is the lack of integration between AI's role as a catalyst for emotional connections and the resulting consumer behavior. Furthermore, research examining the mediating role of emotional connections between AI-based marketing and customer retention is limited and absent from the existing literature. Similarly, while numerous studies have addressed consumer loyalty in general, there is a lack of research examining how AI fosters emotional bonds that subsequently influence customer loyalty, either directly or indirectly.

Although various previous studies have highlighted the positive influence of AI-driven marketing to customer retention and customer loyalty, and its importance in mediating this variable, there are still significant research gaps. First, there has not been much research that comprehensively examines the role of mediation. emotional

connection in the relationship between AI-driven marketing and customer retention and customer loyalty. Second, most of the previous research was conducted in the sector of e-commerce, hospitality, or consumer products, while research in the context of logistics services on-demand, like Lalamove, is still very limited. Third, there has been no study that specifically examines user behavior in Indonesia as a developing market, where the dynamics of digitalization and AI adoption are very fast but perceptions are still low emotional connection can be very different from developed countries.

Thus, this research is expected to fill the gap in the literature by empirically testing the relationship model. AI-driven marketing to customer retention and customer loyalty through emotional connection in the context of application-based logistics services in Indonesia.

METHOD

This research employs an explanatory approach with a quantitative approach and employs a survey method as the data collection technique. The population in this study is all Lalamove app users on Java who have used the service at least twice in the past six months. However, the exact number of Lalamove users on Java is unknown. The sampling technique used was purposive sampling, which is a non-probabilistic technique in which samples are selected intentionally based on criteria relevant to the research objectives (Sekaran & Bougie, 2016). The minimum sample size is determined based on recommendations (Agresti & Finlay, 2009), namely based on the sample size calculation formula from a large population, assuming a confidence level (confidence level) by 95% and margin of error of 5%. Thus, the sample size used in this study was 385 respondents (rounded). Data collection techniques in this study were questionnaires, interviews, and literature studies. Data sources in this study consisted of primary and secondary data. The data processing technique that the researcher will use in this study is software Smart PLS (Partial Least Square). In order to capture demographic variables, including gender, age, domicile, occupations, income and service usage frequency. Table 1 provides a detailed overview of the respondent's demographic characteristics.

Table 1. Respondent's Demographic Characteristics

Demographic Characteristics	Frequency (N)	Percentage (%)
Gender		
Male	132	34,29%
Female	253	65,71%
Age		
17-20	5	1,3%
21-25	134	34,81%
26-30	221	57,4%
31-35	23	5,97%
>35	2	0,52%
Domicile		
West Java	123	31,95%
DKI Jakarta	121	31,43%
East Java	111	28,83%
Central Java	23	5,97%
D.I.Y Yogyakarta	7	1,82%
Occupations		
Civil Servants	49	12,73%
Private Employee	220	57,14%
Students	23	5,97%
Professional (Doctor/Accountant/Lawyer/etc)	15	3,90%
Military/Police	2	0,52%
Entrepreneur/Self Employed	76	19,74%
Income		
≤ IDR 2,000,000	11	2,86%
IDR 2,000,001 to 4,000,000	60	15,58%
IDR 4,000,001 to 6,000,000	193	50,13%
IDR 6,000,001 to 8,000,000	81	21,04%
> 8,000,000	40	10,39%
Service Usage Frequency		
2 times	64	16,62%
3 times	132	34,29%
4 times	93	24,16%
5 times	57	14,81%

Demographic Characteristics	Frequency (N)	Percentage (%)
6 time or more	39	10.13%

The total number of respondents in this study was 385 individuals. Based on domicile, the majority came from West Java (31.95%), followed closely by DKI Jakarta (31.43%) and East Java (28.83%), while smaller proportions were from Central Java (5.97%) and D.I.Y Yogyakarta (1.82%). In terms of age, most respondents were relatively young, dominated by the 26–30 years old group (57.4%), followed by those aged 21–25 years (34.81%), while other age groups accounted for only a small percentage. Regarding occupation, the largest proportion of respondents were private employees (57.14%), followed by entrepreneurs or self-employed individuals (19.74%), and civil servants (12.73%). A smaller share consisted of students (5.97%), professionals such as doctors, accountants, or lawyers (3.90%), and military or police officers (0.52%). In terms of income, most respondents earned between Rp 4,000,001–Rp 6,000,000 (50.13%), followed by Rp 6,000,001–Rp 8,000,000 (21.04%), while fewer respondents earned less than Rp 2,000,000 (2.86%) or more than Rp 8,000,000 (10.39%). As for service usage, the frequency varied, with the largest group using the service three times (34.29%), followed by four times (24.16%), and two times (16.62%). Smaller groups reported using the service five times (14.81%) or six times and above (10.13%). These demographics suggest that the respondents are predominantly young working adults, employed in the private sector, with middle-range income, and mainly concentrated in West Java, DKI Jakarta, and East Java.

3. RESULT

3.1 Outer Model Analysis

Outer model analysis in Partial Least Square (PLS) is part of the measurement model that connects latent variables with their indicators.

Convergent Validity

Table 2. Test Results Outer Loading

	AI-driven Marketing	Customer Loyalty	Customer Retention	Emotional Connection
M1				0.789
M2				0.818
M3				0.790
X1.1	0.803			
X1.2	0.788			
X1.3	0.764			
X2.1	0.740			
X2.2	0.739			
X2.3	0.737			
X3.1	0.804			
X3.2	0.788			
X3.3	0.747			
X3.4	0.736			
X4.1	0.788			
X4.2	0.799			
X4.3	0.769			
X4.4	0.715			
X5.1	0.715			
X5.2	0.732			
X5.3	0.703			
X5.4	0.708			
Y1.1			0.785	
Y1.2			0.757	
Y1.3			0.830	
Y1.4			0.767	
Y1.5			0.800	
Y1.6			0.832	
Y2.1		0.787		
Y2.2		0.807		
Y2.3		0.765		
Y2.4		0.766		

Source: SmartPLS Output (2025)

Based on the results of the convergent validity analysis, all indicators used in this study, from X1.1 to Y2.4, were declared valid. This is because the value outer loading. All indicators met the established criteria, exceeding the threshold of 0.7, indicating a strong and consistent correlation between each indicator and its respective latent variables: AI-driven Marketing, Emotional Connection, Customer Retention, and Customer Loyalty. Therefore, it can be concluded that this research instrument has sufficient validity to measure the constructs studied.

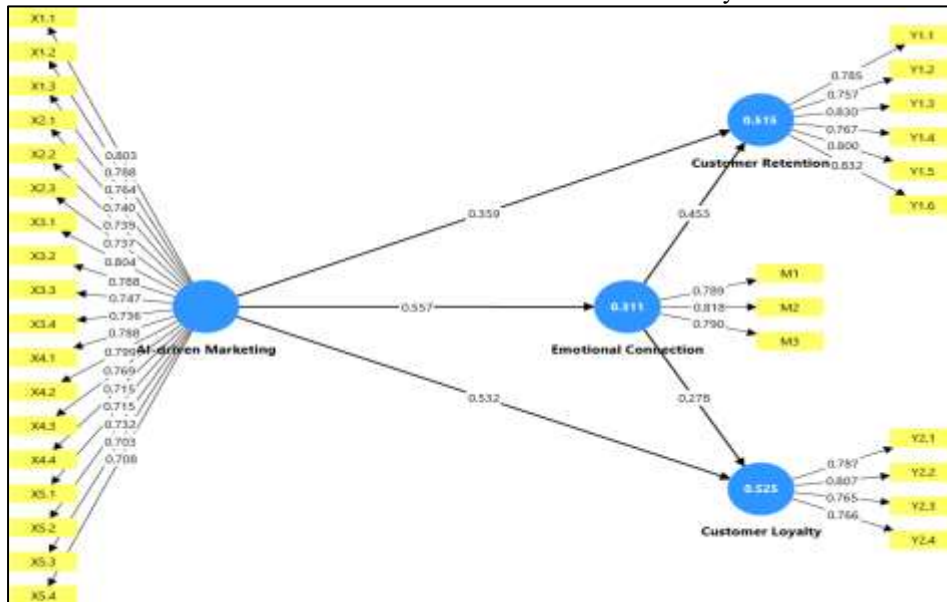


Figure 1. Outer Model

Then, convergent validity testing can also be done by comparing the values Average Variance Extracted (AVE) is a coefficient used to assess how much of the variance of indicators can be explained by the latent construct that measures it. AVE reflects the ability of the latent construct to explain the average variance of its indicators, thus becoming one of the main measures in evaluating convergent validity. The recommended AVE value is at least 0.50.

Table 3. Test Results AVE

Variables	Average Variance Extracted (AVE)
AI-driven Marketing	0,570
Emotional Connection	0,638
Customer Loyalty	0,611
Customer Retention	0,634

Source: SmartPLS Output, (2025)

Based on the results of convergent validity testing, the Average Variance Extracted (AVE) value for the AI-driven Marketing variable was 0.570, Emotional Connection was 0.638, Customer Loyalty was 0.611, and Customer Retention was 0.634. All AVE values are above the minimum threshold of 0.50. This indicates that each construct is able to explain its indicators well, indicating that the relationship between the latent construct and its measuring indicators is quite strong and consistent, and successfully meets the convergent validity criteria.

Discriminant Validity

Discriminant validity is considered fulfilled if the indicator loading value for the original construct is higher than the loading for other constructs.

Table 4. Test Results Cross Loading

Indicator	AI-driven Marketing	Customer Loyalty	Customer Retention	Emotional Connection
M1	0,488	0,481	0,463	0,789
M2	0,436	0,431	0,571	0,818
M3	0,412	0,465	0,531	0,790
X1.1	0,803	0,573	0,516	0,510
X1.2	0,788	0,514	0,434	0,410
X1.3	0,764	0,558	0,507	0,495
X2.1	0,740	0,491	0,366	0,366
X2.2	0,739	0,543	0,451	0,362

Indicator	AI-driven Marketing	Customer Loyalty	Customer Retention	Emotional Connection
X2.3	0,737	0,540	0,492	0,461
X3.1	0,804	0,589	0,492	0,440
X3.2	0,788	0,588	0,496	0,478
X3.3	0,747	0,387	0,376	0,327
X3.4	0,736	0,485	0,450	0,374
X4.1	0,788	0,491	0,463	0,415
X4.2	0,799	0,568	0,528	0,496
X4.3	0,769	0,601	0,475	0,396
X4.4	0,715	0,507	0,418	0,389
X5.1	0,715	0,484	0,497	0,400
X5.2	0,732	0,468	0,440	0,436
X5.3	0,703	0,433	0,420	0,396
X5.4	0,708	0,436	0,425	0,355
Y1.1	0,402	0,402	0,785	0,536
Y1.2	0,488	0,525	0,757	0,497
Y1.3	0,510	0,482	0,830	0,510
Y1.4	0,585	0,511	0,767	0,485
Y1.5	0,429	0,430	0,800	0,540
Y1.6	0,493	0,522	0,832	0,550
Y2.1	0,529	0,787	0,432	0,406
Y2.2	0,575	0,807	0,452	0,454
Y2.3	0,530	0,765	0,490	0,464
Y2.4	0,511	0,766	0,513	0,470

Source: SmartPLS Output, (2025)

The findings of the discriminant validity assessment using the cross-loading approach indicate that each indicator shows the largest correlation with its respective measured construct compared to other constructs. Indicator M1 has the largest loading value of 0.789 on the emotional Connection construct. Indicators X1. 1, X3. 1, and X4. 2 show the largest loading on the AI-based Marketing component, with values of 0.803, 0.804, and 0.799, respectively. Indicators Y1. 3 and Y1. 6 show the same trend, showing the largest loading on Customer Retention with values of 0.830 and 0.832, respectively, while Y2. 1 and Y2. 2 show significant loadings on Customer Loyalty with values of 0.787 and 0.807. Consequently, the comprehensive indicators consistently reflect their original constructs, indicating that each construct in the model can be experimentally distinguished from each other.

Composite Reliability

Reliability testing aims to assess the internal consistency of indicators in representing a latent construct.

Table 5. Test Results Composite Reliability

Variables	Composite reliability (rho_a)	Composite reliability (rho_c)
AI-driven Marketing	0,957	0,960
Emotional Connection	0,717	0,841
Customer Loyalty	0,788	0,862
Customer Retention	0,885	0,912

Source: SmartPLS Output, (2025)

Based on the test results, all variables in this study have a Composite Reliability (rho_c) value above 0.70, which indicates that the items in each construct are able to explain the latent variables reliably and consistently.

Table 6. Cronbach's Alpha Test Results

Variables	Cronbach's Alpha
AI-driven Marketing	0,955
Emotional Connection	0,717

Customer Loyalty	0,787
Customer Retention	0,884

Source: SmartPLS Output, (2025)

The table above shows that all variables in this study have values above 0.70, indicating that each construct has a good level of internal consistency. Therefore, all variables can be declared reliable and suitable for use in further analysis in this study.

Analysis Inner Model

Inner model includes the relationship between latent variables measured by indicators and how these latent variables influence each other in the context of the model being built. The purpose of the analysis inner model to test hypotheses regarding the relationship between variables, as well as to understand how constructs interact in the research model.

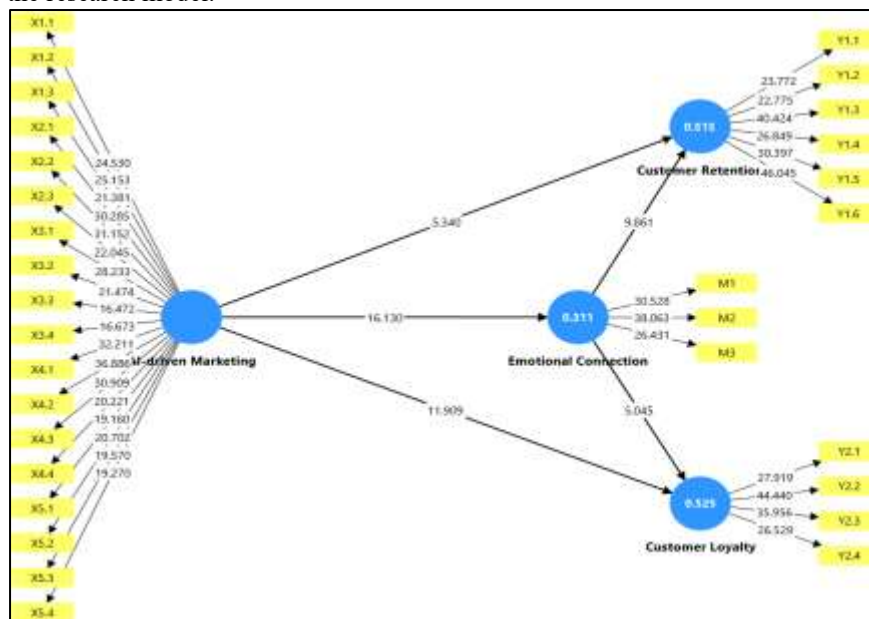


Figure 2. Inner Model

Goodness of Fit (GOF) Testing

R-Square is a statistical indicator used to assess how much an independent variable can explain the variation in the dependent variable in a structural model. R-Square values range from 0 to 1, with higher values indicating a greater proportion of the variance in the dependent variable that can be explained by the combination of independent variables in the model.

Table 7. R-square Test Results

Variables	R Square	R Square Adjusted
Customer Loyalty	0,525	0,522
Customer Retention	0,515	0,512
Emotional Connection	0,311	0,309

Source: SmartPLS Output, (2025)

Based on the test results, it was obtained that the R Square value for the variable Customer Loyalty of 0.525 and for the variable Customer Retention of 0.515. This shows that 52.5% of the variation in the construct Customer Loyalty can be explained by the independent variables in the model, while the remaining 47.5% is explained by other factors outside the model. Similarly, 51.5% of the variation in the construct Customer Retention can be explained by exogenous constructs in the model, and the remaining 48.5% is influenced by other factors not observed in this study. Meanwhile, the R Square value for the variable Emotional Connection of 0.311, which means 31.1% variation in the construct Emotional Connection can be explained by other constructs in the model, and the remaining 68.9% is caused by variables outside the research model.

Path Coefficient

This test was conducted to analyze the influence of each variable or equation in this study. The value analyzed was the T-statistic, which was compared to 1.96.

Table 8. Test Results Path Coefficient

No	Hypothesis	Relationship between variables	Original Sample (O)	T Statistics	P Values	Decision
1	H1	AI-driven Marketing → Customer Retention	0,532	11,909	0,000	Accepted
2	H2	AI-driven Marketing → Customer Loyalty	0,359	5,34	0,000	Accepted
3	H3	AI-driven Marketing → Emotional Connection	0,557	16,13	0,000	Accepted
4	H4	Emotional Connection → Customer Retention	0,278	5,045	0,000	Accepted
5	H5	Emotional Connection → Customer Loyalty	0,453	9,861	0,000	Accepted

Source: SmartPLS Output, (2025)

Based on the test results, it can be seen that the influence categories of each equation are:

1. AI-driven Marketing has a significant influence on Customer Retention, the influence of AI-driven Marketing on Customer Retention has a significant value. Original Sample 0,532, T Statistic 11,909 > 1.96, and P Value 0.000 < 0.05. Therefore, hypothesis H1 is accepted, meaning that AI-driven Marketing has a significant effect on Customer Retention.
2. AI-driven Marketing has a significant impact on Customer Loyalty. The influence of AI-driven Marketing on Customer Loyalty has value Original Sample 0,359, T Statistic 5,340 > 1.96, and P Value 0.000 < 0.05. Therefore, hypothesis H2 is accepted, meaning that AI-driven Marketing has a significant effect on Customer Loyalty.
3. AI-driven Marketing has a significant impact on Emotional Connection. The influence of AI-driven Marketing on Emotional Connection has value Original Sample 0,557, T Statistic 16,130 > 1.96, and P Value 0.000 < 0.05. Therefore, hypothesis H3 is accepted, meaning that AI-driven Marketing has a significant effect on Emotional Connection.
4. Emotional Connection has a significant influence on Customer Retention. The influence of Emotional Connection on Customer Retention has value Original Sample 0,278, T Statistic 5.045 > 1.96, and P Value 0.000 < 0.05. Therefore, hypothesis H4 is accepted, meaning that Emotional Connection has a significant effect on Customer Retention.
5. Emotional Connection has a significant influence on Customer Loyalty. The influence of Emotional Connection on Customer Loyalty has value Original Sample 0,453, T Statistic 9,861 > 1.96, and P Value 0.000 < 0.05. Therefore, hypothesis H5 is accepted, meaning that Emotional Connection has a significant effect on Customer Loyalty.

Indirect Effect

The results of testing the hypothesis of the influence of AI-driven Marketing variables on Customer Retention and Customer Loyalty indirectly through Emotional Connection as a mediator are shown in the Table 9.

Table 9. Results of Indirect Effect Testing

No	Hypothesis	Relationship between variables	Original Sample (O)	T Statistics	P Values	Decision
1	H6	AI-driven Marketing → Emotional Connection → Customer Retention	0,155	4,686	0,000	Accepted
2	H7	AI-driven Marketing → Emotional Connection → Customer Loyalty	0,253	8,143	0,000	Accepted

Source: SmartPLS Output, (2025)

AI-driven Marketing has a significant impact on Customer Retention through Emotional Connection. Influence AI-driven Marketing to Customer Retention through Emotional Connection have value Original Sample 0,155, T Statistic 4.686 > 1.96, and P Value 0.000 < 0.05. Therefore, hypothesis H6 is accepted, meaning Emotional Connection significantly mediates the influence of AI-driven Marketing to Customer Retention.

AI-driven Marketing has a significant impact on Customer Loyalty through Emotional Connection. The Impact of AI-driven Marketing on Customer Loyalty through Emotional Connection has value Original Sample 0,253, T

Statistic 8,143 > 1.96, and P Value 0.000 < 0.05. Therefore, hypothesis H7 is accepted, meaning Emotional Connection significantly mediates the influence of AI-driven Marketing to Customer Loyalty.

DISCUSSION

The Influence of AI-driven Marketing on Customer Retention

The results of the study show that AI-driven Marketing has a significant impact on Customer Retention. The results of this study are in accordance with Stimulus-Organism-Response (SOR) Theory, where AI-driven Marketing acts as a stimulus that triggers emotional and rational responses in users (organism), then produces retention behavior (response). This finding can also be explained by the Expectancy-Disconfirmation Theory (EDT), because AI-based services can meet and even exceed user expectations, thereby increasing satisfaction and encouraging retention. From the perspective of Social Exchange Theory, users value benefits such as personalization and accessibility as outweighing potential costs, so they are motivated to stick around.

This suggests that integrating AI into marketing strategies improves customer retention through personalized interactions, timely information, accessibility, and service experiences aligned with consumer preferences. This conclusion aligns with several previous studies; for example, Oh et al. (2025) found that the use of AI in marketing, particularly personalization, positively impacts customer retention among Asian e-commerce consumers, particularly on the Lazada platform. Rajput et al (2024) demonstrated that AI-driven personalization in e-commerce and social media improves customer satisfaction, engagement, and retention. Similarly, Al-Aqrabawi (2024) and Verma et al (2025) highlighted AI's ability to reduce churn and achieve significant quantitative improvements in retention rates. In addition, Bhatnagar et al. (2025) and Bajrami et al (2025) emphasized that AI chatbots and content marketing not only increase customer retention but also transform marketing strategies toward digital, data-driven approaches.

However, there is also research that provides a different perspective. Subramanian et al (2025) found that in the retail and e-commerce sectors, AI personalization delivers stronger results for customer retention than any other sector. These findings indicate that the effectiveness of AI-driven marketing on retention may vary depending on the industry context. Ojiaku et al (2023) focus on the quality of technical services as a factor influencing customer retention, without considering the role of AI-based marketing technology or customer emotional attachment. This highlights the existence research gap, namely the need to expand the study towards the role of AI-driven marketing in increasing customer retention.

The Influence of AI-driven Marketing to Customer Loyalty

The results of the study show that AI-driven marketing has a significant impact on customer Loyalty. The results of this study strengthen Theory, where the stimulus in the form of AI personalization elicits an internal response (positive emotions, engagement) that leads to user loyalty. AI-driven Marketing, like interaction and customization, emotional attachment, while accessibility and information provide added value that increases reuse intention, word of mouth, cross-use intention, and self-perceived loyalty. This supports the theory of Relationship Marketing and Relationship Quality, where trust, commitment, and satisfaction are the main drivers of long-term loyalty. In addition, in accordance with Social Exchange Theory, users who perceive increased value through AI experiences are more likely to reciprocate with loyal behaviors such as reuse and recommendations. AI-driven Marketing not only drives retention but also strengthens Lalamove user loyalty.

This result is in line with a number of previous studies, including Alsadoun & Alnasser (2025) who found that AI chatbot marketing significantly improves customer satisfaction in online shopping in Saudi Arabia, which ultimately impacts customer loyalty. Massoudi et al (2025) show that AI-driven marketing has a significant impact on customer loyalty, with perceived value as a mediator. Yang & Wang (2025) confirm that AI service quality is able to improve brand loyalty significantly in respondents in China. Mustikasari et al (2025) stated that AI plays an important role in creating an immersive brand, so able to push long-term loyalty. Similarly, Sahne & Daronkola (2025) confirmed that AI adoption increases customer loyalty in the luxury fashion industry, and Li & Hingoro (2025) demonstrated that AI-based personalization enhances engagement and loyalty, particularly for high-involvement products. Beyari (2025) also showed a strong positive relationship between AI and customer loyalty in e-commerce, while Singh & Singh (2024) highlighted the significant influence of AI-driven marketing on loyalty. Cheng & Jiang (2020) further noted that high-quality chatbots contribute directly to improving customer loyalty.

At the same time, the findings of Kanojia et al (2024) highlight that long-term loyalty is not solely determined by AI technology, but also by contextual factors such as ethics, transparency, and the emotional value delivered by the brand. This underscores the importance for companies to ensure that AI implementation aligns not only with technical excellence but also with customers' emotional needs and trust. Overall, this study supports the majority of prior research, which demonstrates that AI-driven marketing enhances customer loyalty.

The Influence of AI-Driven Marketing on Emotional Connection

The results of the study show that AI-driven marketing has a significant impact on Emotional Connection. Responsive AI-based interactions, relevant entertainment, and personalization (customization) contributed greatly to building affection, passion, dan connection (indicator Emotional Connection). This supports Emotional Attachment Theory, where customer emotional attachment is formed through ongoing affection, connection, and passion. This finding also strengthens the Technology Acceptance Model (TAM), where perceived usefulness and

perceived ease of use from AI drives user acceptance, which ultimately increases emotional bond with the Lalamove brand.

This study confirms that the implementation of AI-based marketing strategies not only influences the rational dimensions of customers, such as satisfaction and loyalty, but also engages the emotional sphere by fostering a connection between users and brands. Consistent with previous research, Li & Hingoro (2025) demonstrated that AI-based personalization significantly enhances customer emotions. This personalization fosters relevant, emotionally resonant experiences and facilitates deeper connections with consumers. Kant et al. (2025) asserted that AI-enhanced marketing positively impacts customer emotional relationships, as this technology strengthens feelings of attachment through more personalized and adaptive interactions.

However, there are different results from previous research. Prentice & Nguyen (2020) stated that although AI can improve engagement and loyalty, AI tends to be less effective in building emotional connections compared to human interactions. According to them, AI is not fully capable of matching the warmth, empathy, and emotional touch typically present in human-based services. The results of this study confirm the findings of most previous studies that AI-driven marketing plays a role in building emotional connection with customers through personalization and adaptive interactions (Nguyen, Pham, Chovancová, & Duc Hoang, 2023). However, the differences in findings from Prentice & Nguyen (2020) indicate the role of AI in the emotional aspect still has limitations.

The Influence of Emotional Connection on Customer Retention

The results of the study show that Emotional Connection has a significant impact on Customer Retention. This is in line with the theory of Relationship Marketing, which emphasizes the importance of trust, commitment, and satisfaction in building long-term relationships. In other words, the stronger a customer's emotional bond with Lalamove, the greater the company's chances of retaining its user base in the long term. Social Exchange Theory also supports this, because when users feel they are receiving high emotional value, they tend to reciprocate by staying. Emotional Attachment confirms connection and affection formed with a brand can extend user relationships and increase retention.

The stronger the emotional bond a customer has with a brand, the more likely they are to remain loyal and not switch to competitors. This finding validates the importance of marketing techniques that foster emotional intimacy with clients. However, research findings differ. Luo et al (2019) show that although emotional connection acts as a mediator between relationship benefits and customer attachment, its direct impact on customer retention is insignificant. Boakye et al (2023) also found that emotional connection does not moderate the relationship between relationship satisfaction and customer behavioral intentions in faith-based organizations, so emotional connections alone may not be the primary determining factor in maintaining customer retention.

The findings of this study support the majority of previous studies that emotional connections have a real impact on customer retention, confirming that building emotional connections can strengthen loyalty while reducing the likelihood of customers switching to competitors. However, there are conflicting results from research Luo et al (2019) and Boakye et al (2023) confirm that role emotional connection is always dominant, so companies should not only rely on emotional bonds, but also integrate them with other factors such as service quality, digital innovation, and functional value provided to users.

The Influence of Emotional Connection on Customer Loyalty

The results of the study show that Emotional Connection has a significant impact on Customer Loyalty. The results of this study are in line with Emotional Attachment Theory, which states that customers with emotional ties (affection, connection, passion) will show strong loyalty. Furthermore, Relationship Quality Theory, which asserts that customer emotional attachment drives continued loyalty. Thus, Emotional Connection is an important key for Lalamove in keeping customers loyal even though there are many alternative services on the market.

This means that the stronger a customer's emotional attachment to a brand, the higher their level of loyalty. Emotional connection not only drives immediate gratification but also creates long-term bonds that keep customers choosing that brand even when faced with various competitive alternatives. The results of this study strengthen empirical evidence that emotional connection plays an important role in building customer loyalty. With emotional connection, customers don't just buy a product or service, but also feel a personal bond with the brand. This is key to building long-term loyalty, especially in an increasingly competitive marketplace.

The Influence of Emotional Connection on Customer Loyalty

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This means that the stronger the emotional attachment of a customer to a brand, the higher their loyalty level. Emotional connectedness not only encourages momentary gratification, but also creates long-term bonds that keep customers choosing the brand despite being faced with various alternatives from competitors. The results of this study strengthen empirical evidence that emotional connection plays an important role in building customer loyalty. With emotional connection, customers not only buy products or services, but also feel a personal bond with the brand. This is key in forming long-term loyalty, especially in an increasingly competitive market.

This finding is consistent with previous studies: Fatmawati et al. (2024) found that emotional attachment improves satisfaction and loyalty across industries, Hasibuan et al. (2025) showed that emotional branding explains 68% of customer loyalty in West Java, and Tijjani et al. (2023) confirmed the positive effect of emotional connection on loyalty. Thus, Emotional Connection is a key factor for Lalamove to build lasting loyalty in a highly competitive market.

The Influence of AI-Driven Marketing on Customer Retention Through Emotional Connection

The results of the study show that AI-driven marketing has a significant impact on Customer Retention through Emotional Connection. The results of this study are in accordance with the SOR Theory, where AI-driven Marketing as a stimulus to influence emotional connection (organism), which ultimately strengthens customer retention (response). This finding can also be explained by EDT, that AI experiences that meet expectations elicit emotional satisfaction that strengthens retention. Social Exchange Theory, the emotional value that AI offers adds to the user's benefit, thus encouraging reciprocity in the form of retention. Thus, emotional connection acts as an important mediator that strengthens the direct influence pathway of AI on customer retention.

This indicates that Emotional Connection act as a significant mediator in the relationship between AI-based marketing strategies and user retention efforts. Theoretically, this can be explained that AI-driven Marketing able to increase customer retention not only through functional aspects (affection, passion, and connection), but also by creating a deeper emotional experience for users. When users experience personalized service tailored to their needs, an emotional connection is formed and becomes a driving factor for long-term loyalty and retention.

Consistent with previous studies, Mitra & Paul (2025) emphasized that AI-driven personalization enhances emotional attachment by providing experiences tailored to individual preferences, ultimately fostering customer retention. Similarly, Cachero-Martínez & Vázquez-Casielles (2021) found that emotional connection mediates the benefits of relationship marketing on customer engagement, which in turn improves retention. Ngo et al. (2024) further demonstrated that emotional marketing strategies, particularly when combined with digital innovation, significantly strengthen customer loyalty and retention. These findings are also in line with Li & Hingoro (2025), who argued that AI-based personalization creates emotional resonance that reinforces customer-brand relationships.

The Influence of AI-Driven Marketing on Customer Loyalty Through Emotional Connection

The results of the study show that AI-driven marketing has a significant impact on customer Loyalty through Emotional Connection. The results of this study are consistent with SOR Theory, where AI-driven Marketing(stimulus) creates an emotional connection (organism), which then influences loyalty (response). Emotional Attachment Theory explains that AI-driven personalization can form affection, connection, dan passion encourages long-term loyalty. This finding strengthens Social Exchange Theory and Emotional Attachment Theory, where customers who perceive emotional value will respond with loyal behavior. Emotional Connection is a partial mediator that strengthens the direct influence of AI-driven Marketing on Customer Loyalty.

These findings demonstrate that emotional connection serves as a significant mediator in enhancing the impact of AI-based marketing on consumer loyalty. Theoretically, these findings suggest that consumer loyalty is not only shaped by the functional satisfaction or rational benefits provided by AI-based marketing but is also significantly influenced by the marketing strategy's capacity to generate pleasurable emotional experiences. When customers perceive value through personalization, digital empathy, or relatable interactions, they are more likely to develop emotional attachment and loyalty to the service. Consistent with previous research, Kant et al (2025) found that emotional connection partially mediates the relationship between AI-driven marketing and brand loyalty, which underlines the important role of emotions in increasing loyalty. Fatmawati et al (2024) show that emotional attachment has a positive influence on customer satisfaction and loyalty in various sectors, which strengthens the findings of this study. Hasibuan et al (2025) added that emotional branding can explain up to 68% of the variation in customer loyalty, emphasizing that the emotional dimension is the main foundation in building loyalty.

The mediation formed in this research is partial (partial mediation). This is shown by the results that the direct influence of AI-driven Marketing to Customer Retention (H1) and Customer Loyalty(H2) proved to be significant, as well as an indirect influence through Emotional Connection is also significant. This means, Emotional Connection plays a role in strengthening, but not completely replacing the direct influence of AI-driven Marketing on the two dependent variables.

These findings suggest that AI-driven marketing strategies have two equally important pathways of influence: a direct pathway that substantially increases retention and loyalty, and an indirect pathway that magnifies these effects through emotional connections. Consequently, for business and marketing professionals, fostering emotional connections is not merely a complement but a reinforcing element capable of maximizing the efficacy of AI-driven marketing. Together, these results underscore the need to optimize the direct use of AI to ensure sustainable customer relationships without relying exclusively on emotional engagement.

CONCLUSION

Based on the analysis, this study concludes that AI-driven marketing has a significant impact on customer retention, loyalty, and emotional connection among Lalamove users. AI-based marketing strategies have been proven to provide personalized, efficient, and relevant experiences, thus encouraging users to stay and increasing their loyalty to the brand. Furthermore, emotional connection has been shown to play a significant role as a

connecting factor, where a strong emotional attachment can strengthen customer retention and loyalty. The mediation that occurs is partial, because AI-driven marketing not only influences retention and loyalty indirectly through emotional connection, but also has a direct influence. Thus, the application of AI in Lalamove marketing not only improves the functional user experience but also builds emotional bonds that are key to maintaining and increasing customer loyalty.

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