https://e-journal.upr.ac.id/index.php/jmso
P-ISSN: 2685-4724 | E-ISSN: 2798-9577

AI Service Quality and Brand Image in Shaping Gen Z's Purchase Intention on Traveloka: The Mediating Role of Customer Engagement

Dandi Karepsina[1]|Yandri Samuel Augusteyn[2]|Sardina Sobeukum[3]

[1,2] Department of Management, Faculty of Economics and Business, Universitas Airlangga, Indonesia
[3] Department of Accounting, Faculty of Economics and Business, Universitas Merdeka, Indonesia
Corresponding: yandri.samuel.augusteyn-2024@feb.unair.ac.id

Abstract

Objective – This study aims to analyze the influence of AI Service Quality and Brand Image on Generation Z's Purchase Intention on the Traveloka platform, with Customer Engagement as the mediating variable.

Design/Methodology/Approach – The study employs a quantitative approach using an explanatory method. Data were collected via an online questionnaire administered to 370 Generation Z respondents in Surabaya using purposive sampling. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) via the SmartPLS 4 software.

Findings – The results indicate that AI Service Quality does not have a direct effect on Purchase Intention but exerts a very strong influence on Customer Engagement. Brand Image was found to have a significant effect on both Purchase Intention and Customer Engagement. Furthermore, Customer Engagement has a significant positive effect on Purchase Intention and acts as a full mediator in the relationship between AI Service Quality and Purchase Intention, as well as a partial mediator in the relationship between Brand Image and Purchase Intention.

Implications – These findings confirm that the effectiveness of AI is determined not only by technical capabilities but also by its ability to foster emotional engagement. Practically, companies need to integrate technological quality with a relational approach to enhance user loyalty and purchase intention.

Keywords: AI Service Quality, Brand Image, Customer Engagement, Purchase Intention.

Jurnal Manajemen Sains dan Organisasi
Vol. 7, No.1, April 2026
pp. 69 – 83
FEB UPR Publishing
2685-4724

INTRODUCTION

The global market is currently undergoing fundamental changes due to the rapid advancement of digitalization. However, the phenomenon of AI-driven digitalization has also raised concerns stemming from increasing consumer expectations regarding technological performance and corporate responsiveness (Wang et al., 2026). When technology fails to provide an intuitive experience, Generation Z tends to exhibit higher levels of dissatisfaction compared to previous generations (Maheshwari & Samantaray, 2026), which can ultimately have a direct negative impact on Traveloka customers' purchase intention.

As the market leader in online travel agencies (OTAs) (Trifania, 2024), Traveloka must continue to adapt to shifts in consumer behavior through AI, such as chatbots and responsive personalized recommendation systems (Azdel et al., 2024; Halim & Pramesti, 2025). However, the implementation of AI faces challenges in maintaining consistent service quality and meeting users' emotional expectations (Chen et al., 2023). Beyond technology, Brand Image is a crucial element for Generation Z, who choose brands based on their self-perception (Nugroho et al., 2022). Overly rigid AI integration risks diminishing the humanistic aspect (Bengio et al., 2024). Therefore, Traveloka must maintain the warmth of brand personification to avoid being trapped as an anonymous transactional platform (Irwan et al., 2024), despite the expansion of service automation.

The relationship between AI-based service quality and brand image on purchase intention remains inconsistent in the literature. This situation underscores the importance of customer engagement as a mediating variable capable of bridging service attributes with consumer psychological processes (Prentice et al., 2020). Many companies still assume that AI sophistication automatically enhances purchase intention (Chiengkul et al., 2025). Empirical findings indicate that without meaningful engagement, technological sophistication does not always translate into actual consumption intent (Li et al., 2024). Most previous research has focused on technical dimensions through the Information System Success Model approach (Ngo et al., 2025), with limited attention to affective aspects and user experience. On the other hand, there is disagreement regarding AI's ability to build brand authenticity without the presence of sufficient human empathy (Mohamed & Unsalan, 2025) . This indicates that AI's effectiveness depends not only on technical performance but also on its ability to build emotional connections with consumers (Wang et al., 2025).

To explain this phenomenon, this study adopts Affordance Theory, which views AI features not merely as technical tools, but as means that create opportunities for deeper interaction and engagement between consumers and brands (Norman, 1999; Yatawara et al., 2025). This approach allows AI to be understood as a medium capable of transforming functional perceptions into emotional bonds through interactive user experiences. This requires platforms to not only offer efficiency but also provide service experiences that are emotionally relevant and adaptive to users' lifestyles (Herawati et al., 2025).

The integration of technological quality and brand perception plays a crucial role in building customer engagement. In this context, responsive AI Service Quality is capable of creating intuitive interactions (Guerra-Tamez et al., 2024; Halim & Pramesti, 2025). On the other hand, a brand image aligned with lifestyle mitigates the rigid impression of automation (Nugroho et al., 2022; Magano et al., 2025). Through the perspective of Affordance theory (Norman, 1999), this interaction forms a psychological mechanism via Customer Engagement that links service experiences with behavioral responses such as purchase intention and purchase (Prentice et al., 2020; Park & Ahn, 2024; Chiengkul et al., 2025). Using the S-O-R (Eroglu et al., 2003), this study aims to examine the influence

of AI service quality and brand image on purchase intention through the mediation of customer engagement among Generation Z users of Traveloka in Surabaya (Adriel et al., 2024).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Affordance Theory

Affordance Theory views technology not merely as a passive object, but as a provider of opportunities for interaction between users and the system (Norman, 1999). In the context of digital services, affordance encompasses the functional and relational capabilities offered by AI features (Yatawara et al., 2025). Through this perspective, the quality of AI services at Traveloka serves as a stimulus that provides opportunities for consumers to engage actively, ultimately transforming technical interactions into emotional value and consumption behavior (Guerra-Tamez et al., 2024).

S-O-R Framework Theory

The S-O-R framework explains that the external environment (Stimulus) influences an individual's internal state (Organism), which then triggers specific behavior (Response) (Eroglu et al., 2003). In this study, AI Service Quality and Brand Image are positioned as Stimuli that trigger Customer Engagement as a psychological state (Organism). The Response is ultimately Purchase Intention (Adriel et al., 2024). Purchase intention reflects consumers' tendency to buy a product in the future (Chiengkul et al., 2025), resulting from a positive evaluation of the brand's quality and service (Li et al., 2024). This integration allows for a more comprehensive understanding of how technical service attributes and brand perceptions work synergistically to drive Generation Z's purchase intention.

Hypothesis Development

AI Service Quality and Purchase Intention

AI Service Quality (AISQ) is defined as customers' perceptions of the excellence, efficiency, and quality of artificial intelligence-based services, encompassing the system, information, and service dimensions (Wang et al., 2026). Within the Information System Success Model (ISSM) framework, these dimensions serve to reduce cognitive barriers and enhance the user experience through responsiveness, personalization, and proactive solutions relevant to the needs of Generation Z (Halim & Pramesti, 2025; Maheshwari & Samantaray, 2026).

Setiawan et al. (2025) emphasize that service quality is a crucial factor in the digital ecosystem that directly influences consumers' evaluation of a platform. The quality of AI-powered service systems and technologies has been shown to significantly influence user satisfaction, attitudes, and acceptance across all stages of the customer journey, ultimately having a strong impact on purchase intention (Shi et al., 2025; Ngo et al., 2025). At Traveloka, providing accurate information and personalized recommendations through AI will mitigate perceived risks, thereby effectively increasing user trust and purchase intention.

H1: AI Service Quality has a positive and significant effect on Purchase Intention.

Brand Image and Purchase Intention

Brand image represents the set of perceptions consumers hold about a brand (Tahir et al., 2024). In the era of automation, a strong brand image serves as a guarantee of quality and a differentiator in a competitive market, as well as reinforcing personal identity that drives purchase intention (Dwijaya et al., 2025). For digital consumers, a trusted brand can eliminate the perception of risk associated with Traveloka (Magano et al., 2025). Within the Stimulus-Organism-Response (S-O-R) framework, brand image functions as an external stimulus that influences consumer behavioral

responses. Research shows that a strong brand image significantly influences purchase intention and consumer preferences for a product compared to its competitors (Liang et al., 2024; Ali & Naushad, 2023).

H2: Brand Image has a positive and significant effect on Purchase Intention.

Customer Engagement and Purchase Intention

Customer engagement is the psychological manifestation of repeated interactions between consumers and brands, encompassing cognitive, affective, and behavioral aspects (Prentice et al., 2020). In the OTA ecosystem, engagement is not merely a transactional activity but an emotional connection formed when users feel they are gaining added value from AI services and feel aligned with the brand image presented (Maduku et al., 2024). Furthermore, consumer engagement reflects a deeper relationship than mere transactions (Rachmad & MM, 2024). Previous studies have shown that customer engagement significantly increases purchase intention , particularly in interactive online shopping environments (Yuni et al., 2024; Misara et al., 2025; Zheng et al., 2022)

H3: Customer Engagement has a positive and significant impact on Purchase Intention.

AI Service Quality and Customer Engagement

AI service quality not only influences cognitive perceptions but also contributes to the formation of customer engagement. Based on affordance theory, AI technology offers users the opportunity to interact with the platform more easily and deeply between the user and the system. Research shows that high AI service quality can increase customer engagement through improved perceived quality and user satisfaction (Widjaja et al., 2025; Y. Chen et al., 2022).

H4: AI Service Quality has a positive and significant effect on Customer Engagement.

Brand Image and Customer Engagement

Brand image plays a role in shaping customer engagement. Within the S-O-R framework, brand image influences consumers' internal states, which in turn drive active engagement with the brand. Studies show that a positive brand image can increase consumer engagement and strengthen long-term relationships between consumers and brands (Ali et al., 2025; Ibrahim et al., 2025).

H5: Brand Image has a positive and significant effect on Customer Engagement.

The Mediating Role of Customer Engagement

Within the S-O-R framework, Customer Engagement serves as a mediating variable linking the stimuli of AI Service Quality and Brand Image with the response of Purchase Intention. Research shows that customer engagement plays a crucial role as a mediator in transforming technology quality and behavioral intention (Ibrahim et al., 2025) . When AI effectively meets user needs, it increases customer engagement, which in turn drives purchase intention. Trust and engagement mechanisms play a crucial role in bridging the influence of technological features on consumers' final decisions (Muna & Dewi, 2024). A strong brand image fosters emotional attachment that drives sustained interaction (Shammout et al., 2025), and increases the likelihood of purchase (Kumar et al., 2024). Thus, customer engagement serves as the primary mediating mechanism that transforms technical stimuli and brand perceptions into behavioral responses. This confirms that without psychological attachment (Gioia et al., 2023), the quality of AI services and brand image will not optimally drive purchase intention among Generation Z users of Traveloka in Surabaya (Hasim & Nazri, 2025).

H6: Customer Engagement acts as a mediator of the effect of AI Service Quality on Purchase Intention.

H7: Customer Engagement acts as a mediator of the effect of Brand Image on Purchase Intention.

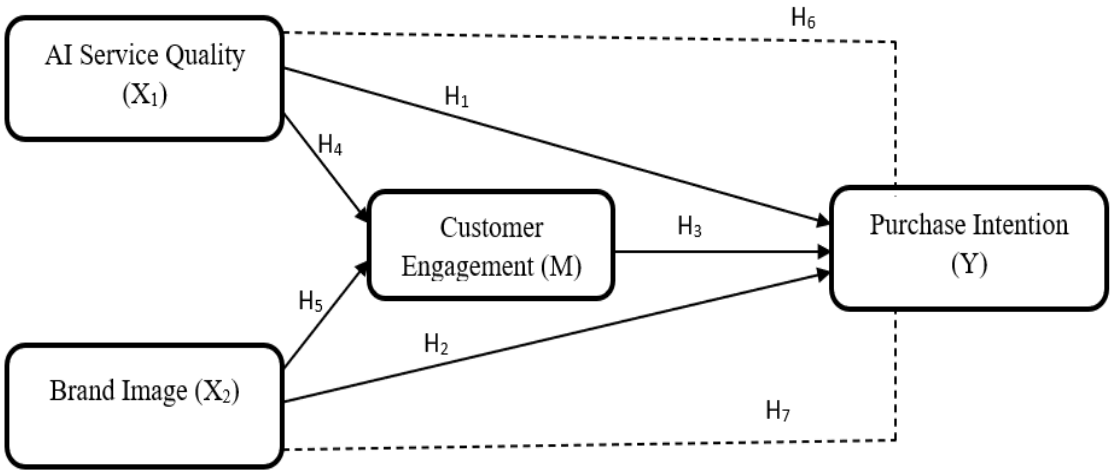

Figure 1. Conceptual Framework

METHODS

This study employs a quantitative approach using an explanatory causal method to examine the relationships among variables (Skinner et al., 2026). This design was chosen to enable the objective measurement of latent constructs and the testing of hypotheses through structured statistical analysis (Cheung et al., 2024). The study population focuses on Generation Z in Surabaya who have experience interacting with artificial intelligence features on the Traveloka platform (Dragolea et al., 2023). Additionally, the sampling technique employed non-probability sampling with a purposive sampling approach (Stratton, 2023), to ensure respondents possess relevant characteristics, namely having used AI-based chatbot services or recommendation systems (Mabaso & Ontong, 2025).

The sample size was set at 370 respondents to ensure model stability and adequate statistical power in testing the model (Hair Jr et al., 2021). This sample size was validated using G*Power 3.1.9.7 software (Faul et al., 2009). Calculations were performed using F-tests with the assumptions of a moderate effect size (f^2= 0.15), a significance level (α = 0.05), and a statistical power of 0.80 (Cohen, 2013) . The results of the analysis indicate that the minimum required sample size is 107 respondents; thus, the 370 respondents in this study meet the criteria, with a sample size exceeding the recommended minimum threshold to ensure the stability of parameter estimates in the PLS-SEM model (Hair Jr et al., 2021). Primary data were collected via an online questionnaire using the Google Forms platform with a five-point Likert scale to accurately capture respondents' perceptions (McLeod, 2023).

The research instrument utilized indicators adapted from the latest literature, as presented in Table 1, to ensure content validity and relevance to the context of automated service technology within the digital ecosystem. AI Service Quality (AISQ) is operationalized through the conceptual frameworks Gummerus et al. (2026) and Guo et al. (2026), with a focus on the empathetic response dimension to evaluate the affective aspects of the system, attentive interaction to measure the sharpness of artificial intelligence's attention to the details of user requests, and exploratory value to assess the technology's ability to drive the discovery of new and personalized travel solutions.

Brand Image (BI) is based on studies byand Fatma (2023), Suparno et al.(2023), and Ali et al.(2025), which capture perceptual dimensions through indicators such as brand reputation to assess platform credibility, brand personality to measure the brand's modernity, and brand value, which represents Traveloka's competitive advantages in the eyes of consumers. This approach

ensures that brand image is not merely viewed as a visual identity but as an accumulation of values perceived by users. Additionally, the mediating role of the Customer Engagement (CE) variable is broken down into the cognitive processing dimension to measure mental attention, affection to capture emotional comfort, and activation to indicate the level of user interaction activity within the app, as developed by Hollebeek et al. (2022) and Ngo et al.(2025). This measurement is designed to bridge the transition from technological stimuli to deeper psychological engagement.

Purchase Intention (PI) is measured using transactional intention, which reflects actual purchase plans, referential intention, which describes the willingness to recommend the service to one's social circle, and preferential intention, which reflects the tendency to prioritize Traveloka as the primary choice in consumption decision-making, in accordance with the references (Belanche et al. 2024) and (Park and Ahn, 2024). All of these indicators are systematically integrated to capture the phenomenon of the transition from digital service quality to the formation of actual purchase intent among Generation Z in the city of Surabaya.

Table 1. Operational Definitions of Variables

Variable	Definition	Variable Indicators	Source
AI Service Quality (X1)	AI service quality refers to customers' perception of the excellence of the interaction process and the solutions delivered by intelligent autonomous agents.	- Empathetic Response - Attentive Interaction - Exploratory Value	(Gummerus et al., 2026; Guo et al., 2026)
Brand Image (X2)	Brand Image is a set of subjective perceptions and impressions formed in consumers' minds regarding a brand's identity and credibility as a result of evaluating the values it offers.	- Brand Reputation - Brand Personality - Brand Value	(Khan & Fatma, 2023; Suparno et al., 2023; Ali et al., 2025)
Customer Engagement (M)	Customer Engagement refers to the cognitive, emotional, and behavioral activities of customers centered on specific interactions with a brand.	- Cognitive Processing - Affection - Activation	(Hollebeek et al., 2022; Ngo et al., 2025)
Purchase Intention (Y)	Purchase Intention is the customer's subjective probability of making a future transaction following an interaction with automated service technology.	- Transactional Intention - Referential Intention - Preferential Intention	(Belanche et al., 2024; Park & Ahn, 2024)

Source: Concept developed in this research, 2026

Data analysis was conducted using the Partial Least Squares Structural Equation Modeling method with the assistance of SmartPLS-4 software(Hair Jr et al., 2014). The analysis process comprised two main stages: evaluation of the measurement model to test construct validity and reliability (Lambert & Newman, 2023), and evaluation of the structural model through assessment of the R^2, f^2, and Q^2 values as indicators of the model's predictive power (Singh et al., 2023). Hypothesis testing and mediation analysis were conducted using a bootstrapping procedure with

5,000 samples (He et al., 2024), to determine the significance of direct and indirect effects based on t-statistic values above 1.96 and p-values below 0.05 (Hair Jr et al., 2021).

RESULTS AND DISCUSSION

Result

The demographic data collected in this study provides an empirical context regarding the characteristics of Generation Z in Surabaya regarding their use of digital travel services on the Traveloka app. Table 2 shows that respondents were predominantly female (58.1%) and in the 22–25 age group (48.1%). This composition is highly relevant, reflecting a phase in individuals' lives where they begin to achieve financial independence, along with more structured travel needs and high standards. In terms of employment, the majority of respondents were students and employees (87%), indicating a fairly widespread level of digital literacy. This situation implies significantly higher expectations regarding the quality of AI-based services. Additionally, the frequency of Traveloka usage is dominated by the 3–5 times per year category (55.4%), indicating that most respondents have fairly frequent usage experience. This reinforces the validity of the respondents' assessments, which are based on actual and repeated interactions with the OTA platform.

The data distribution in this study was examined using descriptive statistics of latent variables to ensure data quality before structural equation modeling. The results in Table 3 indicate that all variables have a mean of 0.000 and a standard deviation of 1.000, as a result of the standardization process within the PLS-SEM algorithm. Furthermore, an evaluation of the data distribution based on skewness values ranging from -0.173 to -0.408 and excess kurtosis ranging from -0.574 to -1.029 indicates that the data do not exhibit extreme distribution deviations. These values remain within acceptable tolerance limits, so the data distribution can be categorized as near-normal. Furthermore, the negative skewness values indicate that the majority of respondents gave relatively high ratings for AI-based service quality, Traveloka's brand image, customer engagement levels, and very strong purchase intent. Thus, the data in this study is deemed suitable for use in further analysis.

Table 2. Demographic Characteristics of Respondents

Category	Subcategory	Frequency (*n*)	Percentage (*%*)
Gender	Male	155	41.9
	Female	215	58.1
Age	18–21 years	142	38.4
	22–25 years	178	48.1
	26–28 years	50	13.5
Employment	Students	198	53.5
	Employees	124	33.5
	Entrepreneurs/Others	48	13.0
Frequency of Use	1–2 times a year	110	29.7
Traveloka	3–5 times a year	205	55.4
	> 5 times a year	55	14.9
Total		370	100%

Table 3. Descriptive Statistics

Variable	Mean	Min	Max	Std. Dev	Skewness	Kurtosis
AI Service Quality (X1)	0.000	-1.704	1.366	1.000	-0.205	-1,029
Brand Image (X2)	0.000	-2.234	1.257	1,000	-0.339	-0.751
Customer Engagement (M)	0.000	-1.792	1.408	1.000	-0.173	-0.999
Purchase Intention (Y)	0.000	-2.559	1.265	1.000	-0.408	-0.574

Table 4. Outer Model (Validity & Reliability)

Construct	Indicator	Loading	VIF	α	CR (rho_c)	AVE
AI Service Quality (X1)	AIQS1	0.846	1.728	0.813	0.889	0.728
	AIQS2	0.854	1.885			
	AIQS3	0.859	1.775			
Brand Image (X2)	BI1	0.702	1.273	0.700	0.825	0.614
	BI2	0.746	1.449			
	BI3	0.890	1.432			
Customer Engagement (M)	CE1	0.748	1.394	0.749	0.856	0.665
	CE2	0.861	1.670			
	CE3	0.833	1.533			
Purchase Intention (Y)	PI1	0.755	1.278	0.710	0.837	0.632
	PI2	0.843	1.486			
	PI3	0.785	1.488			

Note: Loading > 0.70; VIF < 5; α dan CR > 0.70; AVE > 0.50.

In this study, the initial stage of analysis involved evaluating the measurement model to ensure the validity and reliability of the research instruments. In Table 4, all indicators showed factor loadings exceeding the 0.70 threshold, confirming that each manifest variable was able to explain its latent construct significantly and clearly. Convergent validity was further supported by Average Variance Extracted (AVE) values exceeding 0.50 for all variables, ranging from 0.614 to 0.728. In addition, the construct reliability evaluation showed excellent internal consistency, marked by Cronbach's Alpha and Composite Reliability (CR) values consistently above 0.70. Specifically, the AI Service Quality (X1) construct had the highest reliability with a CR value of 0.889. Furthermore, the collinearity test at the indicator level showed Variance Inflation Factor (VIF) values ranging from 1.273 to 1.885. Since all VIF values were below 3.0, the model was deemed free of multicollinearity issues among indicators and met the criteria for structural equation modeling.

Table 5. Discriminant Validity (HTMT)

Construct	X1	X2	M	Y
AI Service Quality (X1)	-			
Brand Image (X2)	0.536	-		
Customer Engagement (M)	0.220	0.637	-	
Purchase Intention (Y)	0.221	0.102	0.254	-

Table 6. Results of Inner Model Evaluation & Model Fit

Endogenous Variables	R-Square	Adjusted R-Square	Fit Index	Value	Description
Customer Engagement (M)	0.837	0.826	SRMR	0.070	Good
Purchase Intention (Y)	0.672	0.663	NFI	0.814	Fair

In this study, discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT) to ensure that each construct was empirically distinct from the others in the model. Table 5 shows that all HTMT values were below the 0.90 threshold, indicating that all constructs exhibited good discriminant validity and were statistically unique.

The predictive power and model fit were analyzed through structural equation modeling. Table 6 shows that the Customer Engagement variable has an R^2 value of 0.837 and the Purchase Intention variable has an R^2 value of 0.672. These values indicate that the model has a strong ability to explain the variance of the endogenous variables. Furthermore, the overall validity of the model is also supported by the results of the model fit evaluation. The Standardized Root Mean Square Residual (SRMR) value of 0.070 is below the threshold of 0.08, which indicates a good level of model fit. Additionally, the Normed Fit Index (NFI) value of 0.814 indicates that the model has an acceptable level of fit. Thus, the structural model in this study is deemed suitable for use in hypothesis testing.

Table 7. Results of Direct Hypothesis Testing

Hypotheses	Path	Coefficient (β)	t-Statistic	p-Value	f^2	Decision
H1	AI Service Quality → Purchase Intention	-0.260	1.405	0.160	0.005	Rejected
H2	Brand Image → Purchase Intention	-0.196	3.484	0.000	0.030	Accepted
H3	Customer Engagement → Purchase Intention	0.535	2.795	0.005	0.019	Accepted
H4	AI Service Quality → Customer Engagement	0.926	89.456	0.000	10,951	Accepted
H5	Brand Image → Customer Engagement	0.088	4,864	0.000	0.099	Accepted

Note: β = path coefficient; significant at $p < 0.05$; t-criterion > 1.96; f^2: small (0.02), moderate (0.15), large (0.35).

Table 8. Results of the Mediation Hypothesis Test

Hypothesis	Path	Coefficient (β)	t-Statistic	p-Value	Decision
H6	AI Service Quality → Customer Engagement → Purchase Intention	0.495	2.793	0.005	Accepted
H7	Brand Image → Customer Engagement → Purchase Intention	0.047	2.306	0.021	Accepted

Note: Significant mediation effect at $p < 0.05$ ($t > 1.96$)

Direct hypothesis testing was conducted to evaluate the relationships among the latent variables in the structural model. The results of the analysis in Table 7 show that AI Service Quality does not have a significant direct effect on purchase intention ($\beta = -0.260$; $p > 0.05$), so H1 is not supported. This finding indicates that the technological sophistication of the Traveloka platform does

not directly drive purchase intention in the absence of an intermediary mechanism. Conversely, Brand Image was found to have a significant influence on purchase intention (β = -0.196; p < 0.05) and customer engagement (β = 0.088; p < 0.05), thus supporting H2 and H5. Additionally, Customer Engagement also showed a significant positive influence on purchase intention (β = 0.535; p < 0.05), thus supporting H3. The most notable finding in this study is the very strong influence of AI Service Quality on Customer Engagement (β = 0.926; p < 0.001), with an effect size (f^2) of 10.951. This indicates that AI-based service quality is the primary determinant in shaping user engagement on the Traveloka platform.

In this study, an indirect effect analysis was conducted to test the mediating role of Customer Engagement in the research model. The results presented in Table 8 indicate that both proposed mediation hypotheses are statistically supported. Specifically, Customer Engagement was found to mediate the relationship between AI Service Quality and purchase intention (β = 0.495; p < 0.05). This finding indicates that there is full mediation by AI-based service quality, which does not directly drive purchase intention but rather through the formation of customer engagement as an intermediary psychological mechanism. Additionally, Customer Engagement was also found to mediate the relationship between Brand Image and purchase intention (β = 0.047; p < 0.05). These findings suggest that brand image not only influences purchase intention directly but also indirectly through increased customer engagement, particularly among Generation Z users of Traveloka in the city of Surabaya.

Discussion

The AISQ Paradox: Efficiency vs. Transaction Conversion

The research findings reveal a gap between technical capabilities and user behavioral responses. Although AI Service Quality (AISQ) has a dominant influence on Customer Engagement (f^2 = 10.951), this variable fails to directly trigger purchase intention (H_1 rejected). Based on Affordance Theory (Norman, 1999), for Generation Z, AI quality has shifted from a differentiating factor to a minimum functional standard (Azdel et al., 2024). AI sophistication is perceived as impersonal, mechanistic interaction; thus, the efficiency of smart technology requires psychological conversion mechanisms to overcome transactional barriers (Guerra-Tamez et al., 2024; Magano et al., 2025).

Customer Engagement as a Full Mediator

A key finding of this study is the confirmation of Customer Engagement as a full mediator between AISQ and Purchase Intention. Within the S-O-R framework (Eroglu et al., 2003), AISQ functions as a strong stimulus but fails to generate a behavioral response without customer engagement acting as the organism variable. These findings challenge the assumption that technological automation automatically boosts sales (Ngo et al., 2025). The effectiveness of AI heavily depends on its ability to build relational engagement (Prentice et al., 2020) . Without psychological engagement, AI's precise capabilities fail to translate into actual purchase intention. This validates that customer engagement is an essential psychological gateway that mitigates the rigid impression of automated services (Park & Ahn, 2024; Chiengkul et al., 2025).

The Synergy of Brand Image in Humanizing Service

Unlike AISQ, Brand Image has a direct influence on purchase intention. Brand identity provides social validation that cannot be replaced by AI algorithms. However, the mediating role of Customer Engagement indicates that the influence of brand image reaches an optimal point when it is able to escalate user engagement (Magano et al., 2025) . The synergy between the technical

precision of AI and a strong brand image creates a service experience that is not only efficient but also emotionally relevant to users in a competitive market such as Surabaya.

CONCLUSION

This study concludes that artificial intelligence capabilities do not have a deterministic effect on purchase intention among Generation Z in Surabaya; rather, they require a psychological transformation mechanism mediated by customer engagement. Empirical test results indicate that AI Service Quality does not have a significant direct effect on Purchase Intention ($p = 0.160$), thus H1 is rejected. These findings provide an important contribution to understanding the behavior of digital natives, where AI service quality has shifted from a competitive advantage to a minimum functional standard that is no longer capable of spontaneously triggering transactional responses. However, AI Service Quality proved to be a fundamental driver in shaping user engagement, as indicated by a t-statistic value of 89.456 and a massive effect size (f^2) of 10.951.

Theoretical Contribution

This study successfully demonstrated the role of Customer Engagement as a full mediator in the relationship between AI Service Quality and Purchase Intention. Based on the Stimulus-Organism-Response (S-O-R) framework, AI service quality acts as a stimulus that must be converted into relational energy and emotional engagement before it can lead to behavioral responses. Conversely, Brand Image was found to have a significant direct effect on Purchase Intention ($p = 0.000$), confirming that brand identity serves as a pillar of trust that provides a human touch within an automation ecosystem that tends to feel impersonal to consumers.

Managerial Implications

The findings of this study offer several strategic implications for Traveloka's management in optimizing AI-based services. First, management needs to reorient its AI development strategy by shifting the focus from mere operational efficiency toward building relational connections. Given that AI services have no direct influence on purchase intention, virtual assistant features and recommendation systems should not be designed solely for transaction speed but must be capable of fostering personalized dialogue. This strategy aims to enhance users' psychological engagement as a primary prerequisite before they enter the purchase decision stage. Consequently, investing in proactive AI technology with high personalization capabilities becomes an absolute priority due to its role as a key mechanism in creating relational energy with consumers.

Traveloka needs to reform its success metrics for smart features by prioritizing customer engagement as a key performance indicator. Platform managers are advised to place greater emphasis on metrics of active interaction and the depth of emotional engagement rather than merely the volume of instant transactions. Furthermore, in an effort to maintain Gen Z loyalty, the company must also ensure that humanistic values remain integrated into its brand image amid widespread service automation. Management needs to ensure that a warm brand persona remains reflected in every digital interaction, so that AI technology is not perceived as a rigid system, but rather as a trusted travel assistant aligned with the social validation sought by users. Traveloka can leverage AI algorithms to provide service recommendations that are more relevant to the social identity and community dynamics in Surabaya.

Limitations and Future Research

Several limitations should be noted. This study focuses on Generation Z respondents in Surabaya, so the findings may not necessarily be generalizable to other demographic groups, such as Generation Y or Baby Boomers, who have different characteristics. Furthermore, this study is

limited to a single travel platform, so consumer behavior dynamics in other industries may potentially exhibit different patterns. Thus, these limitations open opportunities for future research to expand the scope of analysis, either through cross-generational comparative studies or across industry platforms. Such an approach is expected to provide a more comprehensive understanding of variations in consumer behavior regarding the adoption of smart technologies. Furthermore, the integration of additional variables, such as digital trust, can enrich the analysis in explaining the mechanisms of long-term consumption behavior in the context of artificial intelligence-based services.

REFERENCES

Adriel, K., Sudarman, M. B., Smith, B., & Mustikasari, F. (2024). The effect of social customer relationships management on customer loyalty in indonesia'S e-commerce. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, *9*(3), 1.

Ali, I., & Naushad, M. (2023). Examining the influence of social media marketing on purchase intention: The mediating role of brand image. *Innovative Marketing*, *19*(4), 145.

Ali, L., Ali, F., Alotaibi, S., & others. (2025). Beyond the hype: Evaluating the impact of generative AI on brand authenticity, image, and consumer behavior in the restaurant industry. *International Journal of Hospitality Management*, *131*, 104318.

Azdel, A. A., Awang, K. W., Yusof, R. N. R., & Hanafiah, M. H. (2024). Navigating the digital travel landscape: understanding the role of technology readiness in OTAs acceptance and usage for hotel bookings. *Asia Pacific Journal of Marketing and Logistics*, *36*(6), 1393–1408.

Belanche, D., Belk, R. W., Casaló, L. V, & Flavián, C. (2024). The dark side of artificial intelligence in services. *The Service Industries Journal*, *44*(3–4), 149–172.

Bengio, Y., Hinton, G., Yao, A., Song, D., Abbeel, P., Darrell, T., Harari, Y. N., Zhang, Y.-Q., Xue, L., Shalev-Shwartz, S., & others. (2024). Managing extreme AI risks amid rapid progress. *Science*, *384*(6698), 842–845.

Chen, Q., Lu, Y., Gong, Y., & Xiong, J. (2023). Can AI chatbots help retain customers? Impact of AI service quality on customer loyalty. *Internet Research*, *33*(6), 2205–2243.

Chen, Y., Prentice, C., Weaven, S., & Hisao, A. (2022). The influence of customer trust and artificial intelligence on customer engagement and loyalty--The case of the home-sharing industry. *Frontiers in Psychology*, *13*, 912339.

Cheung, G. W., Cooper, H. D., Rebecca, T., & Wang, L. C. (2024). Reporting reliability , convergent and discriminant and best - practice recommendations. In *Asia Pacific Journal of Management* (Vol. 41, Issue 2). Springer US. https://doi.org/10.1007/s10490-023-09871-y

Chiengkul, W., Kumjorn, P., Tantipanichkul, T., & Suphan, K. (2025). Engaging with AI in tourism: a key to enhancing smart experiences and emotional bonds. *Asia-Pacific Journal of Business Administration*, *17*(5), 1421–1440.

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. routledge.

Dragolea, L.-L., Butnaru, G. I., Kot, S., Zamfir, C. G., Nuctua, A.-C., Nuctua, F.-M., Cristea, D. S., & Stefani, M. (2023). Determining factors in shaping the sustainable behavior of the generation Z consumer. *Frontiers in Environmental Science*, *11*, 1096183.

Dwijaya, Wahyu/Sudirman, H. A. (2025). https://e-journal.upr.ac.id/index.php/jmso. *Jurnal Manajemen Sains Dan Organisasi*, *6*(1), 148–160. https://e-journal.upr.ac.id/index.php/jmso/article/view/15456

Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2003). Empirical testing of a model of online store

atmospherics and shopper responses. *Psychology & Marketing*, *20* (2), 139–150.

F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, *26*(2), 106–121.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41* (4), 1149–1160.

Gioia, M. C., Cerasa, A., Muggeo, V. M. R., Tonin, P., Cajiao, J., Aloi, A., Martino, I., Tenuta, F., Costabile, A., & Craig, F. (2023). The relationship between maternal-fetus attachment and perceived parental bonds in pregnant women: Considering a possible mediating role of psychological distress. *Frontiers in Psychology*, *13*, 1095030.

Guerra-Tamez, C. R., Kraul Flores, K., Serna-Mendiburu, G. M., Chavelas Robles, D., & Ibarra Cortés, J. (2024). Decoding Gen Z: AI's influence on brand trust and purchasing behavior. *Frontiers in Artificial Intelligence*, *7*, 1323512.

Gummerus, J. K., O'Loughlin, D. M., Kelleher, C., & von Koskull, C. (2026). All is not well: value codestruction and consumer illbeing in service systems. *European Journal of Marketing*, *60* (3), 753–775.

Guo, J., Yang, X., Wang, S., & Jiang, T. (2026). Feeling human, acting machine: The influence of artificial empathy on customer engagement behaviour in service recovery. *International Journal of Human-Computer Studies*, 103794.

Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer Nature.

Halim, D. K., & Pramesti, D. S. (2025). The Future and Research Directions of Tourism and Hospitality Marketing in Indonesia. *Handbook of Tourism and Hospitality Marketing in Indonesia*, 1215–1249.

Hasim, M. A., & Nazri, S. N. A. M. (2025). The role of mobile application design, branding, AI-driven personalization, and social commerce integration on purchase intention among generation Z: the mediating role of mobile app marketing. *PaperASIA*, *41*(1b), 317–329.

He, Y., Song, P. X. K., & Xu, G. (2024). Adaptive bootstrap tests for composite null hypotheses in the mediation pathway analysis. *Journal of the Royal Statistical Society Series B: Statistical Methodology*, *86*(2), 411–434.

Herawati, A. R., Pradana, A. E., & Shahira, N. (2025). Integrating artificial intelligence (AI) into sustainable tourism management in Indonesia and the impact on customer experience: a literature review. *International Conference on Medical Imaging, Electronic Imaging, Information Technologies, and Sensors (MIEITS 2025)*, *13631*, 24–35.

Hollebeek, L. D., Sharma, T. G., Pandey, R., Sanyal, P., & Clark, M. K. (2022). Fifteen years of customer engagement research: a bibliometric and network analysis. *Journal of Product & Brand Management*, *31* (2), 293–309.

Ibrahim, A. A., Ahmad, S. Z., Abu Bakar, A. R., & El-Adly, M. (2025). Social media marketing's impact on brand equity and loyalty in higher education: customer engagement's role. *Journal of International Education in Business*, *18* (4), 527–546.

Irwan, A., Hendijani, R. B., & others. (2024). Revolutionizing ease, personal, and reliable travel experience. *Eduvest-Journal of Universal Studies*, *4* (8), 6665–6683.

Khan, I., & Fatma, M. (2023). Understanding the influence of CPE on Brand Image and brand commitment: the mediating role of brand identification. *Sustainability*, *15* (3), 2291.

Kumar, A., Salo, J., & Bezawada, R. (2024). The effects of buy now, pay later (BNPL) on customers' online purchase behavior. *Journal of Retailing*, *100*(4), 602–617.

Lambert, L. S., & Newman, D. A. (2023) . Construct development and validation in three practical steps: Recommendations for reviewers, editors, and authors. *Organizational Research Methods*, *26*(4), 574–607.

Li, X., Zhang, J., & Yang, J. (2024). The effect of computer self-efficacy on the behavioral intention to use translation technologies among college students: Mediating role of learning motivation and cognitive engagement. *Acta Psychologica*, *246*, 104259.

Liang, S.-Z., Xu, J.-L., & Huang, E. (2024). Comprehensive analysis of the effect of social influence and brand image on purchase intention. *Sage Open*, *14* (1), 21582440231218772.

Mabaso, C., & Ontong, A. (2025). Advancing economic growth through human capital development in the era of the Fourth Industrial Revolution. *SA Journal of Human Resource Management*, *23*, 3080.

Maduku, D. K., Rana, N. P., Mpinganjira, M., Thusi, P., Mkhize, N. H.-B., & Ledikwe, A. (2024). Do AI-powered digital assistants influence customer emotions, engagement and loyalty? An empirical investigation. *Asia Pacific Journal of Marketing and Logistics*, *36*(11), 2849–2868.

Magano, J., Quintela, J. A., & Banerjee, N. (2025). Driving consumer engagement through AI chatbot experience: The Mediating role of satisfaction across generational cohorts and gender in travel tourism. *Sustainability*, *17*(17), 7673.

Maheshwari, H., & Samantaray, A. K. (2026). Beyond instinct: the influence of artificial intelligence on investment decision-making among gen Z investors in emerging markets. *International Journal of Accounting \& Information Management*, *34*(1), 174–192.

McLeod, S. (2023). Likert scale questionnaire: Examples & analysis. *Simply Psychology*, *31*.

Misara, R., Verma, D., & Mishra, S. (2025). Gamification and personality: Exploring the impact on consumer engagement and purchase intention. *Entertainment Computing*, 101038.

Mohamed, Z. A., & Ünsalan, M. (2025). Does AI marketing efforts affect brand loyalty of Gen Z consumers? Mediating role of brand image and brand experience. *Cogent Business & Management*, *12*(1), 2542428.

Muna, N., & Putu Sulistya Dewi, N. L. (2024). the Role of Consumer Trust Mediates the Influence of Live Streaming on Purchasing Decisions for N'Pure Products on Tiktok Shop. *Jurnal Manajemen Sains Dan Organisasi*, *5*(3), 181–195. https://doi.org/10.52300/jmso.v5i3.17771

Ngo, T. T. A., Phan, T. Y. N., Nguyen, T. K., Le, N. B. T., Nguyen, N. T. A., & Le, T. T. D. (2025). Understanding continuance intention toward the use of AI chatbots in customer service among generation Z in Vietnam. *Acta Psychologica*, *259*, 105468.

Norman, D. A. (1999). Affordance, conventions, and design. *Interactions*, *6*(3), 38–43.

Nugroho, H. Y. S. H., Nurfatriani, F., Indrajaya, Y., Yuwati, T. W., Ekawati, S., Salminah, M., Gunawan, H., Subarudi, S., Sallata, M. K., Allo, M. K., & others. (2022). Mainstreaming ecosystem services from Indonesia's remaining forests. *Sustainability*, *14*(19), 12124.

Park, J., & Ahn, S. (2024). Traditional vs. AI-generated brand personalities: Impact on brand preference and purchase intention. *Journal of Retailing and Consumer Services*, *81*, 104009.

Prentice, C., Weaven, S., & Wong, I. A. (2020). Linking AI quality performance and customer engagement: The moderating effect of AI preference. *International Journal of Hospitality Management*, *90*, 102629.

Rachmad, Y. E., & MM, D. (2024). *Integration Of Theories In The Evolution Of Consumer Engagement*. Yoesoep Edhie Rachmad Publication.

Setiawan, Andre . Meitiana. Kristinae, V. (2025). https://e-journal.upr.ac.id/index.php/jmso P-ISSN: 2685-4724 | E-ISSN: 2798-9577. *Jurnal Manajemen Sains Dan Organisasi*, *6*, *No 1*, 1–13. https://doi.org/10.52300/jmso.v6i1.19383

Shammout, E., Meqdadi, O., Shammout, A. B., & Alshaketheep, K. (2025). Sustainable Marketing's Impact on Purchase Intentions: The Roles of Brand Image, Trust, and Customer Engagement. *Journal of Logistics, Informatics and Service Science*, *12* (6), 31–44.

Shi, W., Li, L., Zhang, Z., Li, M., & Li, J. (2025). Research on driving factors of consumer purchase intention of artificial intelligence creative products based on user behavior. *Scientific Reports*, *15*(1), 17400.

Singh, S., Bala, R., & Sharma, P. (2023). Exploring the nexus between procrastination and entrepreneurial intentions: a predictive PLS-SEM approach. *International Journal of Entrepreneurship and Small Business*, *49*(2), 216–227.

Skinner, E., Dancis, J., & others. (2026). Descriptive and explanatory designs. *Human Development-Revision*.

Stratton, S. J. (2023). Population sampling: Probability and non-probability techniques. *Prehospital and Disaster Medicine*, *38*(2), 147–148.

Suparno, D., Tjahjawulan, I., Martodiryo, S., Anshary, A. H., Indrariani, E. A., Suwondo, T., & others. (2023). *The influence of financial literacy, digital literacy, digital marketing, brand image and word of mouth on the z generation's interest in Islamic banks*.

Tahir, A. H., Adnan, M., & Saeed, Z. (2024). The impact of brand image on customer satisfaction and brand loyalty: A systematic literature review. *Heliyon*, *10*(16).

Trifania, D. (2024). *The Influence Of Utilitarian Value, Hedonic Value, and Online Trust On Purchase Intention Of Airline Ticket Online Via Traveloka (Case Study: Traveloka Users In Padang)*. Universitas Andalas.

Wang, K., Kong, H., Xiao, H., Bu, N., & Qiu, X. (2026). From novelty to necessity: evolving consumer expectations and experiences in human-technology interactions. *Journal of Hospitality Marketing \& Management*, *35*(1), 96–119.

Wang, Y., Jin, Z.-J., Jin, C.-H., & Kan, C. (2025). Building customer loyalty through emotional connection: How service provider rapport drives sustainable business. *Sustainability*, *17*(6), 2396.

Widjaja, C. A., Yatalana, E. O., Nathanael, E. G., Pagardin, M., & Anisa, N. (2025). Beyond Entertainment: How AI, Perceived Value, and Service Quality Drive Customer Engagement and Customer Loyalty in Video Streaming Platform. *2025 International Conference on Information Management and Technology (ICIMTech)*, 366–371.

Yatawara, K. M. B., Sampath, T., Kalupahana, P. L., Rathnayake, S. O., Jayasuriya, N., & Rathnayake, N. (2025). Bridging the chatbot connection: the role of AI-driven chatbot affordances in e-commerce purchase intentions. *International Journal of Sociology and Social Policy*, 1–21.

Yuni, N., Hary Firmansyah, & Depy Muhamad Pauzy. (2024). Live Streaming Influencer and Product Content As Determinants of Purchase Interest Shopee Consumers in Tasimalaya City. *Jurnal Manajemen Sains Dan Organisasi*, *5* (3), 228–233. https://doi.org/10.52300/jmso.v5i3.18619

Zheng, R., Li, Z., & Na, S. (2022). How customer engagement in the live-streaming affects purchase intention and customer acquisition, E-tailer's perspective. *Journal of Retailing and Consumer Services*, *68*, 103015.