



Building Customer Loyalty in Indonesian Social Commerce: AI-Driven Personalization, Perceived Financial Value, and Seller Digital Competence Through Customer Experience

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Abstract

The rapid growth of social commerce has transformed consumer purchasing behavior by integrating artificial intelligence (AI), digital interaction, and platform-based shopping experiences. In this environment, customer loyalty is no longer determined only by product quality and price, but also by personalized services, perceived economic benefits, seller capabilities, and overall customer experience. This study aims to examine the influence of AI-driven personalization, perceived financial value, and seller digital competence on customer loyalty, with customer experience as a mediating variable among TikTok Shop users in Indonesia. A quantitative explanatory research design was employed using primary data collected through an online questionnaire. The study involved 300 TikTok Shop users who had completed at least one purchase transaction within the previous six months. Respondents were selected using purposive sampling, and data were analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The results indicate that AI-driven personalization, perceived financial value, and seller digital competence have positive and significant effects on customer experience and customer loyalty. Furthermore, customer experience significantly influences customer loyalty and partially mediates the relationships between the three independent variables and loyalty. Among the predictors, perceived financial value demonstrates the strongest direct effect on customer loyalty, highlighting the importance of economic benefits in digital shopping decisions. The study concludes that sustainable customer loyalty in social commerce is shaped through the integration of intelligent personalization, financial value, seller digital capability, and meaningful customer experiences.

INTRODUCTION

The rapid development of artificial intelligence has transformed the way firms design marketing strategies, deliver customer service, and build long-term relationships with consumers in digital markets. In e-commerce and social commerce, AI is increasingly used to personalize product recommendations, promotional messages, search results, chat-based interactions, and digital service responses (Abdullah, 2025; Edberg, 2025; Kanapathipillai et al., 2024). This transformation is particularly relevant in Indonesia, where digital commerce continues to evolve through the integration of AI-assisted marketing, social media interaction, conversational commerce, and platform-based shopping experiences (Djajanto et al., 2026; Muliansyah & Nurhidayah, 2024; Tiwari & Fahrudin, 2024). In this context, TikTok Shop represents an important social commerce setting because it combines content-based interaction, algorithmic

recommendation, live selling, seller communication, and direct purchasing activities within one digital ecosystem.

Customer loyalty in social commerce is more complex than loyalty in conventional e-commerce because consumers are influenced not only by product and price, but also by entertainment, interaction, personalization, trust, seller responsiveness, and digital experience (Febrian et al., 2025; Vebrianti et al., 2025). Recent studies indicate that AI-based personalization can strengthen customer loyalty by improving relevance, convenience, trust, and relationship quality in online commerce (Abdullah, 2025; Edberg, 2025; Syamsir et al., 2025). Syawaludin and Nasir (2025) also found that digital trust contributes to consumer loyalty in AI-based e-commerce among Indonesian millennials, while Kusbianto et al. (2026) confirmed that trust mediates the relationship between personalization and customer loyalty in Indonesian e-commerce. These findings suggest that personalization is no longer limited to promotional targeting, but has become a strategic mechanism for shaping customer relationships and loyalty.

AI-driven personalization is one of the central factors in social commerce because it enables platforms and sellers to deliver content, offers, and product suggestions that are more relevant to individual user preferences. Previous research shows that AI-powered personalization improves customer engagement, satisfaction, trust, and loyalty in e-commerce settings (Abdullah, 2025; Edberg, 2025; Sumarto et al., 2026). In social commerce, personalization becomes even more important because users interact with algorithm-based content, short videos, live-streaming sessions, chat features, and seller recommendations before making purchase decisions (Febrian et al., 2025; Muliansyah & Nurhidayah, 2024). However, Wulandari et al. (2025) noted that consumers may also show resistance to AI-powered marketing when they perceive it as intrusive, irrelevant, or lacking transparency. Therefore, examining AI-driven personalization in TikTok Shop is important to understand whether personalized digital interaction can strengthen customer experience and loyalty.

Perceived financial value is another important factor in customer loyalty formation. In digital marketplaces, consumers evaluate not only the product itself, but also whether the price, discount, promotion, free shipping, cashback, and payment benefits provide sufficient economic value (Ismail et al., 2025; Yusrin, 2025). Financial value is especially relevant in social commerce because users can compare prices and promotional offers across platforms quickly before deciding to purchase or repurchase (Aribowo et al., 2026; Firahmi et al., 2025). Prior studies indicate that perceived value, satisfaction, and trust are closely related to repurchase intention and customer loyalty in digital commerce (Yusrin, 2025). Thus, perceived financial value should be considered not only as a pricing factor, but also as part of the customer's overall evaluation of whether the platform offers worthwhile and repeatable shopping benefits.

Seller digital competence is also increasingly important in social commerce. Unlike traditional e-commerce, social commerce requires sellers to manage digital interaction, product content, live-streaming communication, chat responses, customer complaints, and service recovery through online platforms. Digital competence reflects the seller's ability to use digital tools, communicate effectively with customers, present product information clearly, and create trustworthy online interactions. Studies on AI chatbots, conversational commerce, and digital service interaction show that digital service capability can enhance engagement, satisfaction, and loyalty (Muliansyah & Nurhidayah, 2024; Prasasti et al., 2026; Vebrianti et al., 2025). In addition, research on digital transformation emphasizes that organizational and human capability are essential in improving customer experience and competitiveness in digital markets (Asif, 2025; Djajanto et al., 2026; Rahmansyah & Risqiani, 2026). Therefore, seller digital competence is

relevant to TikTok Shop because sellers are directly involved in shaping customer perceptions during digital shopping interactions.

Customer experience is positioned as a mediating variable in this study because loyalty in social commerce is often formed through users' overall experience with the platform, seller, content, financial benefits, and service interaction. Customer experience reflects how customers perceive convenience, relevance, enjoyment, trust, economic benefit, and service quality throughout the shopping process (Asif, 2025; Kanapathipillai et al., 2024). Prior studies show that customer experience plays an important role in linking digital transformation, AI assimilation, trust, and loyalty outcomes (Mohamad et al., 2026; Rahmansyah & Risqiani, 2026). In e-commerce, AI-driven service, trust, and digital experience have also been found to influence repurchase intention and loyalty-related behavior (Erdavit & Salim, 2025; Firahmi et al., 2025). Therefore, customer experience can explain how AI-driven personalization, perceived financial value, and seller digital competence are converted into stronger customer loyalty.

Although previous studies have examined AI personalization, digital trust, satisfaction, and loyalty, several research gaps remain. First, many studies focus on general e-commerce rather than social commerce platforms that integrate entertainment, live interaction, algorithmic recommendation, and instant purchasing features (Febrian et al., 2025; Muliansyah & Nurhidayah, 2024). Second, prior studies have mostly emphasized AI personalization, trust, or satisfaction, while perceived financial value and seller digital competence are less frequently integrated into one loyalty model (Abdullah, 2025; Kusbianto et al., 2026; Syawaludin & Nasir, 2025). Third, limited studies combine marketing, financial, and human resource perspectives in explaining customer loyalty in Indonesian social commerce. Marketing is represented by AI-driven personalization, finance is reflected in perceived financial value, and human resource capability is represented by seller digital competence. This integrated perspective is important because customer loyalty in social commerce is shaped by technological, economic, and human interaction factors simultaneously (Asif, 2025; Djajanto et al., 2026; Rahmansyah & Risqiani, 2026).

The novelty of this study lies in developing an integrated model that examines AI-driven personalization, perceived financial value, and seller digital competence as antecedents of customer loyalty through customer experience among TikTok Shop users in Indonesia. This model extends previous studies on AI-driven personalization and loyalty (Abdullah, 2025; Edberg, 2025; Syamsir et al., 2025), personalization, trust, and customer loyalty in Indonesian e-commerce (Kusbianto et al., 2026; Syawaludin & Nasir, 2025), and AI-based engagement, satisfaction, and loyalty in social commerce (Febrian et al., 2025; Vebrianti et al., 2025). By focusing on TikTok Shop users, this study provides a more specific understanding of how AI-enabled marketing, perceived financial benefits, and seller competence shape customer experience and loyalty in a social commerce environment.

Based on the background and research gap, this study aims to examine the influence of AI-driven personalization, perceived financial value, and seller digital competence on customer loyalty, with customer experience as a mediating variable among TikTok Shop users in Indonesia. Specifically, this study investigates whether AI-driven personalization, perceived financial value, and seller digital competence significantly affect customer experience and customer loyalty. It also examines whether customer experience significantly influences customer loyalty and mediates the relationships between the three independent variables and customer loyalty. This study uses a quantitative approach by collecting primary data from TikTok Shop users in Indonesia through a structured questionnaire, and the data are analyzed using Partial Least Squares Structural Equation Modelling to test both direct and indirect relationships among the variables.

This research is expected to contribute to digital marketing, social commerce, financial value, and human resource management literature by integrating personalization, perceived value, and seller capability into a single customer loyalty framework. Practically, the findings are expected to provide insights for TikTok Shop sellers, digital marketers, and platform managers in designing more relevant AI-based marketing strategies, improving perceived financial benefits, strengthening seller digital capability, and creating better customer experiences to support sustainable customer loyalty.

METHOD

This study applied a quantitative research design with an explanatory approach to examine the relationships among AI-driven personalization, perceived financial value, seller digital competence, customer experience, and customer loyalty among TikTok Shop users in Indonesia. The explanatory design is considered appropriate because the study aims to test causal relationships among latent variables and evaluate both direct and indirect effects within a social commerce context. Quantitative methods are suitable for measuring consumer perceptions, digital shopping experiences, and loyalty behavior in AI-supported commerce environments, as prior studies have also used similar approaches to examine personalization, trust, satisfaction, customer experience, and loyalty in digital platforms (Syawaludin & Nasir, 2025; Edberg, 2025; Yusrin, 2025; Febrian et al., 2025).

The population of this study consists of TikTok Shop users in Indonesia who have made at least one purchase through the platform within the last six months. This criterion is used to ensure that respondents have recent experience with TikTok Shop and are able to evaluate AI-based recommendations, perceived financial benefits, seller interaction, customer experience, and loyalty intention. The study focuses on TikTok Shop because social commerce integrates entertainment, algorithm-based content, live selling, seller communication, and direct purchasing features, making it relevant for examining customer loyalty in the AI-driven digital marketplace. Since the exact number of TikTok Shop users in Indonesia is large and difficult to determine, this study uses a non-probability sampling technique with purposive sampling.

Respondents must meet four criteria: they must be Indonesian residents, at least 17 years old, active TikTok Shop users, and have completed at least one purchase transaction on TikTok Shop during the past six months.

The sample size is determined using the recommendation of Hair et al. (2021), which suggests that the minimum sample in PLS-SEM can be estimated by multiplying the total number of indicators by five to ten. This study uses five constructs: AI-driven personalization, perceived financial value, seller digital competence, customer experience, and customer loyalty. Each construct is measured using five reflective indicators, resulting in 25 indicators in total. Based on this rule, the minimum sample size is 125 respondents, while the recommended upper range is 250 respondents. To improve statistical power, increase model stability, and strengthen mediation testing, this study targets at least 300 respondents.

Primary data are collected through an online questionnaire distributed using Google Forms and shared through social media platforms, including TikTok, WhatsApp, Instagram, and online communities related to digital shopping. Online data collection is appropriate because the respondents are digital platform users and the research context focuses on social commerce. The data collection process is planned to take approximately two to three months. Before completing the questionnaire, respondents are informed about the purpose of the study, the voluntary nature

of participation, and the confidentiality of their responses. Only respondents who meet the screening criteria are allowed to continue to the main questionnaire.

The research instrument consists of two main parts. The first part collects demographic and usage information, including gender, age, domicile, purchase frequency, duration of TikTok Shop usage, and product categories frequently purchased. The second part measures the five research constructs using a five-point Likert scale, ranging from 1, strongly disagree, to 5, strongly agree. The use of a Likert scale is appropriate for measuring attitudes, perceptions, and behavioral intentions in consumer behavior and digital marketing research. The questionnaire items are adapted from prior studies to maintain theoretical relevance and content validity.

AI-driven personalization is measured through indicators related to personalized product recommendations, relevance of promotional content, algorithm-based shopping suggestions, personalized communication, and perceived usefulness of AI-based features. These indicators are adapted from studies on AI personalization and customer loyalty in e-commerce and digital marketing (Edberg, 2025; Syamsir et al., 2025; Abdullah, 2025; Sumarto et al., 2026). Perceived financial value is measured using indicators related to price attractiveness, discount benefits, value for money, promotional advantages, and perceived economic fairness. These indicators are developed based on digital commerce and marketing mix studies emphasizing the importance of price and value in shaping consumer intention and loyalty (Ismail et al., 2025; Yusrin, 2025; Firahmi et al., 2025). Seller digital competence is measured through indicators related to sellers' ability to use digital tools, present product information clearly, respond to customer inquiries, manage live-selling interactions, and provide reliable digital service.

These indicators are adapted from research on digital transformation, AI-assisted commerce, chatbots, conversational commerce, and digital service capability (Tiwari & Fahrudin, 2024; Muliansyah & Nurhidayah, 2024; Vebrianti et al., 2025; Prasasti et al., 2026).

Customer experience is measured through indicators reflecting convenience, enjoyment, trust in the shopping process, interaction quality, and overall experience with TikTok Shop. These indicators are based on studies explaining the role of digital technologies, AI, trust, and service interaction in shaping customer experience in emerging digital markets (Kanapathipillai et al., 2024; Asif, 2025; Rahmansyah & Risqiani, 2026; Mohamad et al., 2026). Customer loyalty is measured through repurchase intention, willingness to recommend, preference for TikTok Shop over competitors, continued usage intention, and resistance to switching. These indicators are adapted from studies on AI-based e-commerce, trust, personalization, satisfaction, and loyalty (Syawaludin & Nasir, 2025; Kusbianto et al., 2026; Ramadhani & Wijayanto, 2025; Reni, 2025).

Before the main survey is conducted, a pilot test is carried out with a small group of respondents to assess item clarity, wording accuracy, and preliminary reliability. The questionnaire is reviewed to ensure that each item is understandable in the Indonesian social commerce context. If necessary, unclear or ambiguous statements are revised before the full data collection process. This step is used to improve the quality of the instrument and reduce measurement error.

Data analysis is conducted using Partial Least Squares Structural Equation Modeling. PLS-SEM is selected because the research model contains multiple latent variables, reflective indicators, and mediation paths that must be tested simultaneously. This method is also suitable for predictive research and theory development in digital commerce studies. Hair et al. (2021) explain that PLS-SEM is appropriate for examining complex structural models, especially when the research objective is to predict key target constructs and assess relationships among latent variables. In this study, PLS-SEM is used to examine the effects of AI-driven personalization,

perceived financial value, and seller digital competence on customer experience and customer loyalty, as well as the mediating role of customer experience.

The analysis is conducted in two stages: measurement model evaluation and structural model evaluation. The measurement model is assessed using indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability is evaluated through outer loading values, with values above 0.70 considered acceptable. Internal consistency is examined using Cronbach's Alpha and Composite Reliability, where values above 0.70 indicate reliable constructs. Convergent validity is assessed using Average Variance Extracted, with values above 0.50 indicating that the construct explains more than half of the variance of its indicators. Discriminant validity is examined using the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio, following the PLS-SEM evaluation procedure recommended by Hair et al. (2021).

The structural model is evaluated by examining path coefficients, t-statistics, p-values, coefficient of determination, effect size, and predictive relevance. Bootstrapping is applied to test the significance of direct and indirect effects. A relationship is considered statistically significant when the t-statistic is greater than 1.96 and the p-value is below 0.05.

The coefficient of determination is used to assess the explanatory power of customer experience and customer loyalty, while effect size is used to examine the relative contribution of each predictor. Predictive relevance is assessed to determine whether the model has sufficient predictive capability.

The mediation effect of customer experience is tested by analyzing the indirect effects of AI-driven personalization, perceived financial value, and seller digital competence on customer loyalty. Mediation is supported when the indirect effect is statistically significant. If both direct and indirect effects are significant, the mediation is classified as partial mediation; if only the indirect effect is significant while the direct effect becomes insignificant, the mediation is classified as full mediation. This approach follows common mediation testing procedures in PLS-SEM and is consistent with prior studies that examine customer experience, satisfaction, trust, and loyalty as intervening mechanisms in digital commerce research (Febrian et al., 2025; Rahmansyah & Risqiani, 2026; Mohamad et al., 2026).

The scope of this study is limited to TikTok Shop users in Indonesia who have recent purchasing experience. Therefore, the findings may not fully represent users of other social commerce or e-commerce platforms. In addition, the study uses cross-sectional survey data, which captures respondent perceptions at one point in time. Despite these limitations, the methodology is expected to provide a reliable basis for examining how AI-driven personalization, perceived financial value, and seller digital competence contribute to customer loyalty through customer experience in Indonesian social commerce.

RESULT AND DISCUSSION

This section presents the empirical findings obtained from 300 valid responses from TikTok Shop users in Indonesia. The analysis covers descriptive statistics, measurement model evaluation, structural model assessment, direct hypothesis testing, mediation testing, and interpretation of the findings in relation to previous studies on AI-driven personalization, perceived financial value, seller digital competence, customer experience, and customer loyalty in social commerce.

Table 1. Demographic Profile of Respondents

Characteristic	Category	Frequency	Percentage
Gender	Male	126	42.0%
	Female	174	58.0%
Age	17–25 years	165	55.0%
	26–35 years	93	31.0%
	36–45 years	30	10.0%
	> 45 years	12	4.0%
Domicile	Java	156	52.0%
	Outside Java	144	48.0%
Education	Senior High School	84	28.0%
	Diploma	36	12.0%
	Bachelor's Degree	147	49.0%
	Postgraduate Degree	33	11.0%
Occupation	Student	99	33.0%
	Private Employee	105	35.0%
	Entrepreneur / MSME Owner	45	15.0%
	Others	51	17.0%
TikTok Shop Usage	< 1 year	120	40.0%
	1–2 years	117	39.0%
	> 2 years	63	21.0%
Monthly Purchase Frequency	1–2 times	102	34.0%
	3–5 times	132	44.0%
	> 5 times	66	22.0%
Purchased Most Often	Fashion	96	32.0%
	Beauty and Personal Care	66	22.0%
	Food and Beverage	45	15.0%
	Household Products	39	13.0%
	Electronics and Gadgets	30	10.0%
	Others	24	8.0%

Source: Research Data, 2026

The respondent profile indicates that the sample is dominated by female users, representing 58.0% of the total respondents. Most respondents are aged 17–25 years, suggesting that TikTok Shop users in this study are largely young digital consumers who are familiar with social commerce, live shopping, and algorithm-based product recommendations. In terms of location, 52.0% of respondents are from Java, while 48.0% are from outside Java, indicating relatively broad geographic coverage.

Most respondents hold a bachelor's degree, accounting for 49.0%, and the largest occupational groups are private employees and students. Regarding platform usage, 60.0% of respondents have used TikTok Shop for at least one year, while 66.0% make purchases at least three times per month. These characteristics indicate that the respondents have sufficient experience to evaluate AI-driven personalization, perceived financial value, seller digital competence, customer experience, and customer loyalty in the TikTok Shop context.

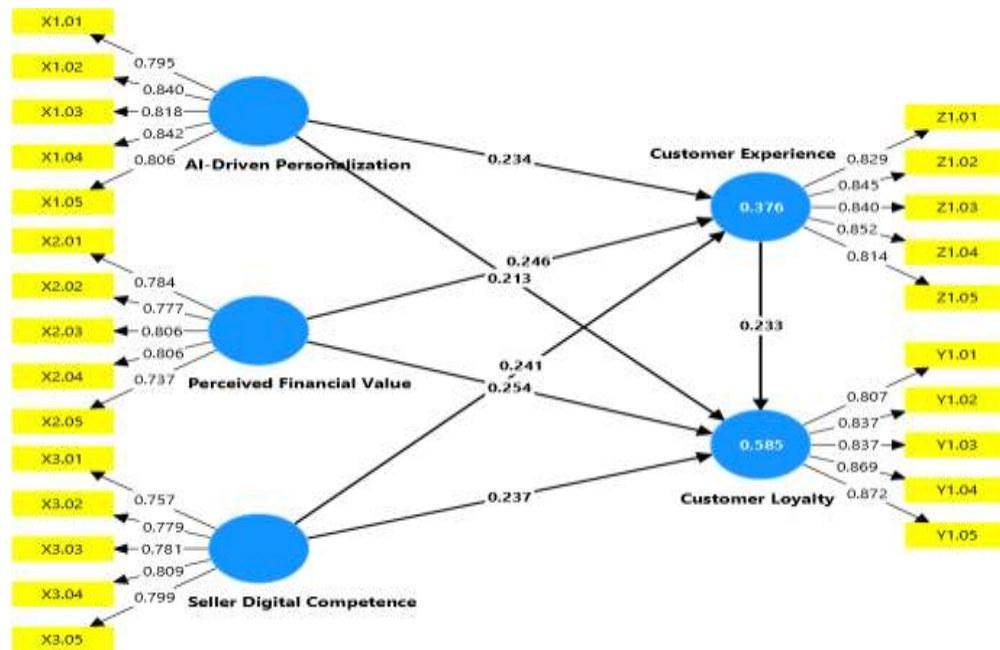
The descriptive results show that respondents generally provided positive evaluations of all constructs. Customer Loyalty recorded the highest mean score, followed by Seller Digital Competence, Perceived Financial Value, AI-Driven Personalization, and Customer Experience.

This indicates that TikTok Shop users in Indonesia tend to show relatively strong loyalty intention, while their experience is shaped by personalization, perceived economic benefits, and seller capability in digital interaction.

Table 2. Descriptive Statistics of Constructs

Construct	Mean	Standard Deviation	Interpretation
AI-Driven Personalization	3.946	0.715	High
Perceived Financial Value	3.979	0.671	High
Seller Digital Competence	3.987	0.609	High
Customer Experience	3.877	0.736	High
Customer Loyalty	4.163	0.751	High

Source: Research Data, 2026



Source: Research Data, 2026

Figure 1. Outer Loading and Path Coefficient

The measurement model indicates that all constructs satisfy reliability and validity requirements. Outer loading values range from 0.737 to 0.872, exceeding the recommended threshold of 0.70. Cronbach's Alpha values range from 0.841 to 0.899, while Composite Reliability values range from 0.887 to 0.926. These results confirm that the constructs have adequate internal consistency. In addition, the Average Variance Extracted values range from 0.612 to 0.714, exceeding the minimum criterion of 0.50. Therefore, the measurement model demonstrates acceptable convergent validity.

Table 3. Construct Reliability and Validity

Construct	Cronbach's Alpha	rho_A	Composite Reliability	AVE
AI-Driven Personalization	0.879	0.881	0.911	0.673
Customer Experience	0.893	0.893	0.921	0.699
Customer Loyalty	0.899	0.900	0.926	0.714

Perceived Financial Value	0.841	0.841	0.887	0.612
Seller Digital Competence	0.844	0.848	0.889	0.616

Source: Research Data, 2026

Discriminant validity was also supported. The HTMT values range from 0.553 to 0.818, which are below the conservative threshold of 0.85. This suggests that each construct is empirically distinct from the others. The Fornell-Larcker criterion also confirms discriminant validity because the square root of AVE for each construct is higher than its correlations with other constructs. Thus, the instrument is considered reliable and valid for structural model evaluation.

The structural model results show that the model has moderate explanatory power. The R^2 value for Customer Experience is 0.376, meaning that AI-Driven Personalization, Perceived Financial Value, and Seller Digital Competence explain 37.6% of the variance in Customer Experience. Meanwhile, the R^2 value for Customer Loyalty is 0.585, indicating that 58.5% of loyalty variance is explained by AI-Driven Personalization, Perceived Financial Value, Seller Digital Competence, and Customer Experience. The Q^2 values for Customer Experience and Customer Loyalty are above zero, showing that the model has predictive relevance.

Table 4. R-Square and Predictive Relevance

Variable	R Square	Adjusted R Square	Q^2
Customer Experience	0.376	0.370	0.258
Customer Loyalty	0.585	0.579	0.408

Source: Research Data, 2026

The direct effect results show that all proposed relationships are positive and statistically significant. AI-Driven Personalization significantly influences Customer Experience and Customer Loyalty. This finding supports previous studies showing that AI-based personalization improves relevance, convenience, satisfaction, and loyalty in digital commerce environments (Edberg, 2025; Abdullah, 2025; Syamsir et al., 2025).

In the context of TikTok Shop, personalized recommendations, relevant promotional content, and algorithm-based product exposure appear to strengthen users' shopping experience and loyalty intention.

Table 5. Direct Effects

Path Relationship	Original Sample	T-Statistic	P-Value	Conclusion
AI-Driven Personalization → Customer Experience	0.234	2.690	0.007	Significant
AI-Driven Personalization → Customer Loyalty	0.213	2.556	0.011	Significant
Customer Experience → Customer Loyalty	0.233	4.147	0.000	Significant
Perceived Financial Value → Customer Experience	0.246	2.867	0.004	Significant
Perceived Financial Value → Customer Loyalty	0.254	3.067	0.002	Significant

Seller Digital Competence → Customer Experience	0.241	3.693	0.000	Significant
Seller Digital Competence → Customer Loyalty	0.237	4.220	0.000	Significant

Source: Research Data, 2026

Perceived Financial Value has the strongest direct effect on Customer Loyalty. This means that TikTok Shop users are highly responsive to perceived economic benefits, such as attractive prices, discounts, promotional offers, and value for money. This finding is consistent with studies showing that financial and value-related evaluations are important in shaping online repurchase intention and loyalty behavior (Ismail et al., 2025; Yusrin, 2025; Firahmi et al., 2025). In social commerce, users can easily compare offers across platforms, so perceived financial benefit becomes a practical basis for deciding whether to continue using TikTok Shop.

Seller Digital Competence also has significant effects on Customer Experience and Customer Loyalty. This finding indicates that sellers' ability to communicate digitally, present product information clearly, manage live-selling interactions, and respond to customer inquiries contributes to better customer experience and stronger loyalty. This result is aligned with studies on conversational commerce, AI chatbots, and digital service interaction, which highlight the importance of digital capability in shaping engagement, satisfaction, and loyalty (Muliansyah & Nurhidayah, 2024; Prasasti et al., 2026; Vebrianti et al., 2025). In TikTok Shop, seller competence is especially important because customers often evaluate products through videos, live sessions, chat responses, and seller credibility before making purchase decisions.

Customer Experience significantly influences Customer Loyalty. This confirms that loyalty in TikTok Shop is not only formed through direct exposure to personalization, price benefits, or seller competence, but also through the overall experience felt by users. When customers perceive the shopping process as relevant, convenient, enjoyable, trustworthy, and economically beneficial, they are more likely to repurchase, recommend the platform, and continue using it. This finding supports previous research emphasizing customer experience as a key mechanism in digital transformation and loyalty formation (Asif, 2025; Rahmansyah & Risqiani, 2026; Mohamad et al., 2026).

The mediation results show that Customer Experience significantly mediates the relationships between AI-Driven Personalization, Perceived Financial Value, Seller Digital Competence, and Customer Loyalty. All indirect effects are significant at the 5% level. This means that personalization, financial value, and seller competence strengthen loyalty partly because they create a better customer experience.

Table 6. Indirect Effects

Indirect Path	Original Sample	T-Statistic	P-Value	Conclusion
AI-Driven Personalization → Customer Experience → Customer Loyalty	0.054	2.232	0.026	Significant
Perceived Financial Value → Customer Experience → Customer Loyalty	0.057	2.276	0.023	Significant
Seller Digital Competence → Customer Experience → Customer Loyalty	0.056	2.607	0.009	Significant

Source: Research Data, 2026

The mediation finding suggests that Customer Experience serves as an important pathway through which AI-driven, financial, and seller-related factors are translated into loyalty. This supports Febrian et al. (2025), who found that AI influences trust and satisfaction in social commerce, and Rahmansyah and Risqiani (2026), who emphasized customer experience as a mediating mechanism in digital transformation contexts. The finding also complements Reni (2025), who showed that personalization and user experience are relevant in shaping trust, satisfaction, and loyalty in Indonesian digital platforms.

Because both direct and indirect effects are significant, the mediation pattern can be categorized as partial mediation. This indicates that AI-Driven Personalization, Perceived Financial Value, and Seller Digital Competence can directly influence Customer Loyalty, while their effects also become stronger through Customer Experience. Therefore, TikTok Shop loyalty is shaped by both functional evaluation and experiential response. Users may remain loyal because they receive personalized content, perceive good financial benefits, and interact with digitally competent sellers, but these factors are more effective when they create a satisfying and meaningful shopping experience.

The effect size results show that the relationships among variables are statistically significant, although the f^2 values indicate small effect sizes. This means that each predictor contributes to the model, but no single variable fully dominates loyalty formation. This result is reasonable in social commerce because customer loyalty is often shaped by multiple factors, including AI-based recommendation, seller interaction, financial benefits, trust, entertainment, and platform experience. Therefore, the findings should be interpreted as evidence of combined influence rather than as proof that one variable alone determines loyalty.

Thus, the findings advance the understanding of customer loyalty in Indonesian social commerce by integrating three perspectives. From a marketing perspective, AI-Driven Personalization helps create relevant and targeted digital interaction. From a financial perspective, Perceived Financial Value explains how customers evaluate economic benefits in digital shopping. From a human resource perspective, Seller Digital Competence reflects the role of seller capability in managing online interaction and service quality. This integrated approach extends previous studies that mainly focused on AI personalization, trust, or satisfaction separately (Syawaludin & Nasir, 2025; Kusbianto et al., 2026; Sumarto et al., 2026).

Practically, TikTok Shop sellers and platform managers should not rely only on algorithmic personalization or price promotion. They also need to ensure that personalized recommendations are relevant, promotional offers are perceived as financially valuable, and sellers have sufficient digital competence to communicate, respond, and serve customers effectively. Improving customer experience should become the central strategy because it connects marketing personalization, financial benefits, and seller capability with long-term loyalty.

This study is limited to TikTok Shop users in Indonesia and uses cross-sectional survey data. Therefore, the findings reflect customer perceptions at one point in time and may not fully represent long-term behavioral changes. Future research may compare TikTok Shop with other social commerce platforms, examine generational differences, or include additional variables such as digital trust, customer engagement, perceived risk, emotional connection, and resistance to AI-powered marketing. These extensions would provide a broader understanding of how customer loyalty develops in AI-supported social commerce environments.

CONCLUSION

Customer loyalty in Indonesian social commerce is strengthened when users receive relevant AI-driven personalization, perceive clear financial value, and interact with digitally competent sellers. The findings confirm that these three factors contribute not only directly to customer loyalty but also indirectly through customer experience. This indicates that loyalty among TikTok Shop users is not formed solely through attractive promotions or algorithmic recommendations, but through an integrated shopping experience that combines personalized content, economic benefits, responsive seller interaction, and perceived convenience. Customer experience serves as an important mechanism that translates marketing, financial, and seller-related capabilities into stronger loyalty behavior. Theoretically, this study extends social commerce and digital marketing literature by integrating AI-driven personalization, perceived financial value, and seller digital competence into one loyalty framework. Practically, the results suggest that TikTok Shop sellers and platform managers should focus on improving the relevance of personalized recommendations, maintaining attractive financial benefits, and strengthening sellers' digital service capabilities to create better customer experiences and sustain long-term loyalty. Future research may expand this model by comparing different social commerce platforms or including variables such as digital trust, customer engagement, perceived risk, and resistance to AI-powered marketing.

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