

Extending Trust Transfer Theory to Live Social Commerce: Impacts of Personalization on Loyalty

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Abstract – This study aims to examine how personalization influences consumer loyalty in live-streaming social commerce through trust transfer mechanisms. Specifically, it investigates the effects of personalization on trust in products and in streamers as well as evaluates how these 2 trust dimensions mediate the relationship between personalization and loyalty. A quantitative survey was conducted with 300 active TikTok Shop Live users in East Java, Indonesia, and the data were analyzed using Partial Least Squares Structural Equation Modeling with SmartPLS 4. The results showed that personalization had positive and significant effects on both trust in products and in streamers. Both trust dimensions also significantly enhanced consumer loyalty, but trust in products had a stronger influence. The mediation analysis confirmed that trust transfer was a key mechanism linking personalization and loyalty, with trust in products serving as the more dominant mediator. Theoretically, this study extended trust transfer theory by distinguishing product-based and streamer-based trust pathways in live social commerce. The results suggested that sellers and platforms must prioritize personalized recommendations, credible product demonstrations, and transparent product information to strengthen product trust and sustain consumer loyalty

Keywords: personalization; trust transfer; live streaming commerce; product trust; customer loyalty

I. INTRODUCTION

Live streaming commerce has become an increasingly important form of social commerce as it combines real-time interaction, entertainment, product demonstration, and

direct purchasing features in a single digital environment. In Indonesia, the rapid growth of e-commerce after the COVID-19 pandemic has accelerated consumer migration from offline to online shopping and created stronger demand for interactive and trustworthy digital shopping experiences (Hutahaeen et al., 2022; Putranto et al., 2021). Platforms such as TikTok Shop Live and Shopee Live enable sellers, including micro, small, and medium enterprises, to communicate directly with consumers, show products, answer questions in real time, and encourage purchase decisions through interactive engagement.

Despite the rapid development of live streaming commerce, an important theoretical question remains insufficiently explained, namely how does personalization create consumer loyalty through trust formation? Previous studies have shown that interactivity, social presence, streamer credibility, and perceived usefulness influence purchase intention and customer engagement (Kartawinata et al., 2024; Razafinandrasana & Tamara, 2024; Utami & Ardiansah, 2023). Other studies have also emphasized the importance of trust in streamers and products in shaping consumer responses (Hsu & Hu, 2024; Kim et al., 2025; Zhang et al., 2025). However, limited attention has been given to how personalized interaction simultaneously strengthens both forms of trust and mediate the relationship between personalization and consumer loyalty. This gap is important because trust in live streaming commerce may not operate as a single general construct, but directed toward different objects, namely the product being promoted and the streamer who presents it.

Personalization has become a key strategy in digital commerce because it allows firms to tailor product recommendations, content, communication, and shopping experiences to individual consumer preferences.

In live streaming commerce, personalization is not limited to algorithmic product recommendation. It also appears in the streamer's ability to respond to viewers' questions, adapt product explanations to consumer needs, and create relevant interaction during live sessions. Previous studies suggest that personalization can increase customer engagement, perceived relevance, and purchase-related responses by making digital interaction more meaningful (Bozkurt et al., 2024; Jayapal, 2025; Yadav et al., 2024). Personalized content on social media also supports consumer decision-making by increasing the perceived fit between needs and product offerings (Rajput et al., 2024).

In live streaming commerce, personalization is closely related to trust formation. Consumers often face uncertainty regarding product quality, authenticity, value, and seller credibility because purchasing decisions are made in a digital environment. Personalized recommendations and tailored communication can reduce this uncertainty by providing relevant information and increasing confidence in the product. It can also strengthen trust in streamers because viewers may perceive responsive and adaptive streamers as more honest, competent, and benevolent. Therefore, personalization can influence loyalty not only directly, but also indirectly through trust-based mechanisms.

Trust transfer theory provides a relevant theoretical foundation for explaining this process. The theory suggests that trust can be transferred from one trusted source or context to another related target. In live streaming commerce, trust may develop through interaction with the streamer and then extend to the promoted product, or personalized product-related information may directly strengthen trust in the product. Previous studies have shown that trust in streamers can influence confidence in products and purchase intention in live commerce settings (Hsu & Hu, 2024; Zhang et al., 2025). However, the role of personalization as an antecedent of the transfer process remains underexplored. In particular, few studies have compared whether trust in product or streamer plays a stronger mediating role in converting personalization into loyalty.

Based on this gap, this study examines the effects of personalization on consumer

loyalty through 2 pathways, namely trust in product and in streamer. The study focuses on active users of TikTok Shop Live in East Java, Indonesia, because this context represents a rapidly growing live streaming commerce environment characterized by real-time interaction, algorithmic personalization, and socially embedded shopping behavior. By distinguishing between product-based trust and streamer-based trust, the results are expected to offer a more specific explanation of how personalization contributes to loyalty in live social commerce. Therefore, this study aims to investigate whether personalization influences consumer loyalty directly and indirectly through trust in product and in streamer. The results are expected to contribute to the existing literature in 3 ways. First, it extends trust transfer theory by examining personalization as an antecedent of trust formation in live streaming social commerce. Second, it differentiates trust in product and trust in streamer as 2 distinct targets rather than treating trust as a single construct. Third, it identifies which trust pathway is more dominant in explaining consumer loyalty. The proposed theoretical framework is presented in Figure 1.

Based on the theoretical arguments above, the following hypotheses are proposed:

H1: Personalization has a positive and significant effect on loyalty.

H2: Personalization has a positive and significant effect on trust in product.

H3: Personalization has a positive and significant effect on trust in streamer.

H4: Trust in product has a positive and significant effect on loyalty.

H5: Trust in streamer has a positive and significant effect on loyalty.

H6: Trust in product and trust in streamer mediate the relationship between personalization and loyalty.

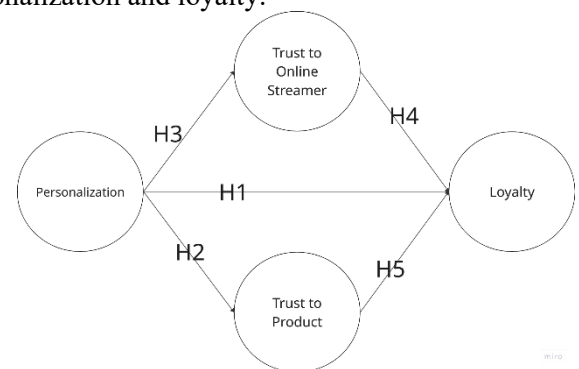


Figure 1 Theoretical framework

II. METHODS

This study applied a quantitative approach using an online survey method to examine the relationships among personalization, trust in product, trust in streamer, and consumer loyalty in the context of live streaming social commerce. The quantitative design was considered appropriate because this study aimed to test a theoretically developed model as well as evaluate direct and indirect relationships among latent constructs. The target population consisted of active users of live streaming social commerce platforms, particularly TikTok Shop Live users in East Java, Indonesia.

The respondents were selected using purposive sampling. This technique was used because the study required those who had specific experience with live streaming shopping and were therefore able to provide relevant evaluations of personalization, trust, and loyalty. To ensure that met the research context, several inclusion criteria were applied. These included respondents who had used TikTok Shop Live or other live streaming commerce platforms, watched live streaming shopping sessions during the data collection period, made at least one purchase or had direct shopping experience through live streaming commerce, located in East Java, and were willing to complete the questionnaire voluntarily. These criteria were established to ensure that the collected data reflected actual consumer experience rather than general perceptions of e-commerce.

A total of 300 valid responses were obtained. This sample size was considered adequate for Partial Least Squares Structural Equation Modeling because the proposed model consisted of a limited number of latent variables and structural paths, while 300 observations provided sufficient statistical power for estimating the measurement and structural models. The use of this sample size also improved the stability of parameter estimates, specifically in testing mediation effects involving trust in product and trust in streamer. Primary data were collected through a closed-ended online questionnaire distributed

over a 3-month from October to December 2025. All items were measured using a 5-point Likert scale ranging from strongly disagree to strongly agree.

Before the main data analysis, the questionnaire items were reviewed to ensure clarity, relevance, and consistency with the research constructs. The measurement items were adapted from established previous studies and adjusted to the context of live streaming commerce. Personalization was measured using 3 indicators adapted from Xu et al. (2020) and Y. Li et al. (2022), namely the relevance of product recommendations during live streaming, the alignment of streaming content with personal needs, and the quality of personalized interaction provided by the streamer. Trust in streamer was measured using 3 indicators adapted from Wongkitrungrueng and Assarut (2020) and J. Chen and Shen (2015), covering honesty, competence, and benevolence. Trust in product was measured using 3 indicators adapted from Ha et al. (2021) and G.-H. Huang et al. (2018), including trust in product quality, authenticity, and value. Loyalty was measured using 3 indicators adapted from Oliver (1999) and Zeithaml et al. (1996), representing repurchase intention, recommendation intention, and commitment to using live streaming commerce as a future shopping channel.

Data analysis was conducted using Partial Least Squares Structural Equation Modeling with SmartPLS 4. PLS-SEM was selected because it is suitable for examining predictive models involving latent constructs and mediation mechanisms. The analysis was carried out in 2 stages. First, the measurement model was evaluated to assess convergent validity, reliability, and discriminant validity. Convergent validity was examined through outer loadings and Average Variance Extracted, while reliability was assessed using Cronbach's Alpha (CA) and Composite Reliability (CR). Discriminant validity was evaluated using the Heterotrait-Monotrait Ratio. Second, the structural model was assessed by examining R-square, F-square, path coefficients, t-statistics, p-values, and indirect effects. The bootstrapping procedure was used to test the significance of the hypothesized direct and mediated relationships. This analytical process allowed the study to evaluate not only whether personalization influences loyalty, but also how

trust in product and trust in streamer mediate this relationship.

III. RESULTS AND DISCUSSION

Based on Table 1, this study included 300 respondents, with a relatively balanced gender composition, although male respondents accounted for a slightly larger proportion (54.7%) than female respondents (45.3%). This distribution suggested that live streaming shopping engagement in the sample was not restricted to one gender group alone, but rather showed participation from both male and female consumers. In terms of age, the sample was dominated by respondents aged 21 to 25 years (30.0%), followed by those aged 26 to 30 years (25.7%) and 31 to 40 years (18.7%). This pattern showed that the respondents were largely concentrated in young adult and early working-age groups, which were commonly characterized by high digital exposure, familiarity with interactive platforms, and greater responsiveness to real-time online marketing stimuli. Such an age profile was highly relevant to the context of live streaming commerce, as younger consumers tend to be more adaptive to personalized digital content and more active in technology-mediated shopping environments.

With regard to educational background, the respondents were also relatively well distributed, although the largest proportion held a Diploma/Bachelor's degree (36.7%), followed closely by those with senior high school or equivalent education (35.0%). This composition suggested that live streaming commerce attracted consumers from both moderately and highly educated segments, showing that its appeal cut across different educational levels. The result could also imply that consumer participation in live streaming shopping was shaped not only by educational attainment, but by platform accessibility, convenience, and the attractiveness of interactive content.

In terms of platform usage, TikTok Live emerged as the most frequently used platform (48.0%), followed by Shopee Live (30.7%). This result showed the dominant position of TikTok Live within the live streaming commerce ecosystem represented in this study.

The strong preference for TikTok Live showed that respondents were particularly attracted to platforms that combined entertainment, short-form content, algorithm-driven personalization, and direct shopping features in a seamless environment. Meanwhile, the substantial share of Shopee Live users suggested that platform choice was also influenced by transactional convenience and marketplace integration.

The frequency data showed that the most common shopping intensity through live streaming was 2 to 3 times per week (40.3%), followed by 4 to 6 times per week (26.3%). This result suggested that live streaming shopping was not merely an incidental or occasional activity for many respondents, but rather a recurring consumption practice embedded in their weekly routines. Such frequency showed repeated exposure to streamers, products, and promotional messages, which was important because repeated interaction could strengthen familiarity, trust formation, and eventually loyalty.

Despite the relatively frequent engagement, respondents' monthly expenditure through live streaming was predominantly less than IDR 100,000 (50.0%). This pattern suggested that although respondents actively participate in live streaming shopping, their purchases tend to be relatively low in monetary value. Live streaming commerce in this sample appeared to be characterized more by repeated small-scale transactions than by high-value purchases. This showed cautious spending behavior, trial-oriented consumption, or the popularity of low-priced products typically promoted in live streaming sessions. Overall, the descriptive statistics portrayed respondents as digitally active, relatively young, moderately educated consumers who engaged with live streaming shopping on a regular basis, yet still show spending behavior that was relatively price-conscious and selective.

Table 1 Demographic profile and live streaming shopping characteristics of respondents

Characteristics	Category	Number (n)	Percentage (%)
Gender	Female	136	45.3%
	Male	164	54.7%
Age	17–20	38	12.7%
	21–25	90	30.0%
	26–30	77	25.7%

Characteristics	Category	Number (n)	Percentage (%)
Highest Education	31–40	56	18.7%
	41+	39	13.0%
	Senior High School/Equivalent	105	35.0%
	Diploma/Bachelors (S1)	110	36.7%
	Postgraduate (S2/S3)	53	17.7%
Frequently Used Live Streaming Platform	TikTok Live	144	48.0%
	Shopee Live	92	30.7%
	Instagram Live	37	12.3%
	YouTube Live	13	4.3%
	Others	14	4.7%
Live Streaming Shopping Frequency	0–1 time/week	59	19.7%
	2–3 times/week	121	40.3%
	4–6 times/week	79	26.3%
	7+ times/week	41	13.7%
Monthly Live Streaming Shopping Expenditure	< IDR 100,000	150	50.0%
	IDR 100,000–300,000	60	20.0%
	IDR 300,000–500,000	46	15.3%
	IDR 700,000–900,000	25	8.3%
	> IDR 900,000	19	6.3%

Source: Researchers' SMART PLS 4 Compilation (2026)

The evaluation of the measurement model was conducted through convergent validity and reliability testing. Based on Table 2, all indicators exhibited very high outer loadings on their respective constructs, namely Personalization (0.935–0.939), Trust in Streamer (0.946–0.949), Trust in Product (0.947–0.955), and Loyalty (0.944–0.945). This shows that each indicator strongly reflects its underlying construct. Furthermore, construct reliability was also achieved. CA and CR values were categorized as excellent, namely: Personalization (CA 0.931; CR 0.932), Trust in Streamer (CA 0.944; CR 0.945), Trust in Product (CA 0.948; CR 0.951), and Loyalty (CA 0.940; CR 0.940).

Table 2. Convergent validity and reliability results of the measurement model

Construct	Items	Outer Load.	CA	CR	AVE
Personalization	Relevance of product recommendations	0.938	0.931	0.932	0.879
	Alignment of streaming content	0.935			
	Quality of interaction	0.939			
Trust in Streamer	Trust in honesty	0.946	0.944	0.945	0.899
	Competence	0.949			
	Streamer benevolence	0.948			
Trust in Product	Trust in quality	0.955	0.948	0.951	0.906
	Authenticity	0.947			
	Product value	0.953			
Loyalty	Repurchase intention	0.945	0.940	0.940	0.893
	Recommendation intention	0.945			
	Commitment	0.944			

Source: Researchers' SMART PLS 4 Compilation (2026)

The AVE values for all constructs exceeded 0.879, showing that the proportion of indicator variance explained by the construct was greater than measurement error. Discriminant validity was tested using the HTMT criterion. Table 3 showed that HTMT values between constructs ranged from 0.311 to 0.608, showing adequate construct distinctiveness and reducing the risk of conceptual overlap among variables.

Table 3. Discriminant validity results based on the Heterotrait-Monotrait Ratio

Construct	Loyalty	Personalize	Trust Product	Trust Streamer
Loyalty				
Personalize	0.361			
Trust Product	0.474	0.608		
Trust Streamer	0.311	0.546	0.409	

Source: Researchers' SMART PLS 4 Compilation (2026)

After the measurement model met the required criteria, evaluation proceeded to the structural model. Based on Table 4, the R-

square value for Loyalty was 0.218 (Adjusted 0.213), showing that the combination of Trust in Product and Trust in Streamer explained 21.8% of the variance in Loyalty. The R-square values for Trust in Product (0.328; Adjusted 0.326) and Trust in Streamer (0.263; Adjusted 0.260) showed that Personalization provides a substantial explanatory contribution to both trust variables.

Table 4. Explanatory power and effect size of the structural model

Construct	R-Square	R-Square Adjusted
Loyalty	0.218	0.213
Trust in Product	0.328	0.326
Trust In streamer	0.263	0.260
F- Square		
Personalise -> Trust Product	0.488	

Personalise -> Trust Streamer	0.356
Trust Product -> Loyalty	0.169
Trust Streamer -> Loyalty	0.022

From the effect size (F-square) perspective, the effect of Personalization → Trust in Product was 0.488 and Personalization → Trust in Streamer was 0.356, showing that personalization played a relatively strong role in building trust, particularly in products. Meanwhile, the effect of Trust in Product → Loyalty had an effect size of 0.169 (more substantial), while Trust in Streamer → Loyalty was only 0.022 (relatively small). These results suggested that loyalty in the context of live streaming shopping was more strongly influenced by trust in the product than by trust in the streamer.

Table 5. Direct and indirect effects of personalization, trust in product, trust in streamer, and loyalty

Relationship	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
Personalize -> Trust Product	0.573	0.572	0.037	15.380	0.000
Personalize -> Trust Streamer	0.513	0.513	0.043	12.008	0.000
Trust product -> Loyalty	0.394	0.394	0.055	7.201	0.000
Trust Streamer -> Loyalty	0.141	0.142	0.056	2.500	0.012
personalize -> Trust product -> Loyalty	0.226	0.225	0.035	6.364	0.000
personalize -> Trust Streamer -> Loyalty	0.072	0.073	0.031	2.347	0.019

Source: Researchers' SMART PLS 4 Compilation (2026)

Based on Table 5, the structural model results showed that personalization had a positive and significant effect on trust in product ($\beta = 0.573$; $t = 15.380$; $p < 0.001$). This result showed that when live streaming commerce provided relevant product recommendations, content that matched consumer needs, and interactive communication tailored to viewers' preferences, consumers were more likely to develop stronger confidence in the products being offered. In the context of live social commerce, personalization reduced uncertainty by helping consumers process product-related information more efficiently and by making product offers appeared more relevant to their personal needs. This result was consistent with previous studies suggesting that personalization could strengthen consumer trust by increasing

perceived relevance, usefulness, and decision-making convenience in digital shopping environments. Therefore, personalization must not be understood merely as a promotional tactic, but as an informational and relational mechanism that enhanced consumers' perceived confidence in product quality, authenticity, and value.

The results showed that personalization had a positive and significant effect on trust in streamer ($\beta = 0.513$; $t = 12.008$; $p < 0.001$). This result confirmed that personalized interaction in live streaming did not only influence product-related evaluations but also shaped consumers' perceptions of the streamer. When streamers respond to viewers' questions, adapt explanations to audience needs, and provide recommendations that appeared relevant, consumers were more likely to perceive the streamer as honest, competent, and benevolent.

This supported the argument that trust in live streaming commerce was formed through interactive communication and social presence. In this sense, personalization became a trust-building signal because it allowed streamers to show attentiveness, expertise, and responsiveness during real-time interaction.

Regarding the effect of trust on loyalty, the results showed that trust in product had a positive and significant effect on loyalty ($\beta = 0.394$; $t = 7.201$; $p < 0.001$). This suggested that consumers who believed promoted products were reliable, authentic, and valuable were more likely to repurchase, recommend, and continue using live streaming commerce as a shopping channel. This result strengthened the view that product trust was a central determinant of loyalty in online and social commerce contexts. Although live streaming commerce was highly interactive and entertainment-oriented, consumers' long-term loyalty ultimately depended on whether the product was perceived to meet expectations and deliver the promised value. Therefore, product trust served as a critical bridge between the live streaming experience and sustained consumer commitment.

Trust in streamer had a positive and significant effect on loyalty ($\beta = 0.141$; $t = 2.500$; $p = 0.012$). This result suggested that streamers remained important actors in shaping consumer loyalty because these individuals functioned as product presenters, information providers, and relational agents during live streaming sessions. Viewers who trust the streamer were more likely to remain engaged and develop favorable behavioral intentions toward live streaming shopping. However, the effect of trust in streamer was weaker than the effect of trust in product. This difference suggested that streamer credibility could attract attention and initiate consumer confidence, but loyalty was more strongly determined by consumers' evaluation of the product itself. Interpersonal trust in the streamer was important, but it must be supported by product credibility to generate stronger and more sustainable loyalty.

The mediation analysis further confirmed the relevance of trust transfer theory in live social commerce. The indirect effect of personalization on loyalty through trust in product was positive and significant ($\beta = 0.226$;

$t = 6.364$; $p < 0.001$). This result showed that personalization strengthened loyalty mainly by increasing consumers' trust in the products offered during live streaming. From the perspective of trust transfer theory, personalized content and interaction functioned as initial trust cues that were transferred into product-related confidence. When consumers perceived that the recommendations and product explanations were relevant to their needs, they become more confident in the product. This confidence subsequently encourages loyalty. The result of this study showed that product trust was not only an outcome of personalization but also a key mechanism through which personalization was converted into loyalty.

The indirect effect of personalization on loyalty through trust in streamer was positive and significant ($\beta = 0.072$; $t = 2.347$; $p = 0.019$). This result showed that personalized interaction could enhance loyalty by strengthening trust in the streamer. However, the smaller coefficient suggested that the streamer-based mediation pathway was less dominant than the product-based pathway. This result provided an important theoretical insight: although live streaming commerce relied heavily on streamer interaction, consumer loyalty was more strongly formed when trust was transferred toward the product rather than remaining only at the interpersonal level. Therefore, trust transfer in live social commerce must be understood as a dual-path mechanism, involving both trust in streamer and trust in product, but with product trust playing a more influential mediating role.

Overall, the results showed that personalization enhanced loyalty through 2 significant trust-based pathways. However, the stronger direct effect of trust in product on loyalty and the larger indirect effect through trust in product showed that product trust was the more dominant explanatory mechanism. This result extended trust transfer theory by showing that in live social commerce, trust generated through personalized interaction was most effective when it was transferred into confidence in the product. Theoretically, this study contributed by distinguishing the roles of product trust and streamer trust rather than treating trust as a single general construct. Practically, the results suggested that sellers and

platforms must not rely solely on streamer attractiveness or entertainment value. Instead, personalization must be used to provide accurate product recommendations, transparent product information, credible demonstrations, and responsive answers to product-related concerns. Such strategies were more likely to strengthen product trust and, in turn, create sustainable consumer loyalty.

IV. CONCLUSION

In conclusion, this study examined how personalization influences consumer loyalty in live streaming social commerce through trust transfer mechanisms. The results show that personalization has a positive and significant effect on both trust in product and trust in streamer. These show that relevant product recommendations and content were consistent with consumer needs, and personalized interaction during live streaming strengthened consumer confidence in both the products being offered and the streamers who presented. The results also confirm that both trust in product and trust in streamer significantly enhance consumer loyalty. However, trust in product has a stronger effect on loyalty than trust in streamer, suggesting that long-term loyalty in live streaming commerce depends more strongly on consumers' confidence in product quality, authenticity, and value.

The mediation results further show that trust transfer is an important mechanism linking personalization and loyalty. Personalization affects loyalty indirectly through both trust in product and trust in streamer, but the mediating role of trust in product is stronger. This result shows that personalization is most effective in building loyalty when it strengthens product-related trust. Therefore, live streaming commerce must not rely only on streamer attractiveness, entertainment, or persuasive communication. Instead, personalized interaction must be directed toward improving product credibility, reducing perceived risk, and helping consumers make more confident purchase decisions.

Theoretically, this study contributes to the extension of trust transfer theory in the context of live social commerce. By distinguishing between trust in product and trust

in streamer, this study shows that trust in live streaming commerce is not a single general construct. Rather, it operates through different trust targets that have different effects on consumer loyalty. The stronger role of product trust suggests that trust transfer in live streaming commerce becomes more meaningful when interpersonal and personalized interaction is converted into confidence in the product itself. This result enriches the literature on personalization, trust, and loyalty by explaining how personalized digital interaction can generate loyalty through trust-based mechanisms.

Practically, the results suggest that sellers, streamers, and platform managers should design personalization strategies that emphasize product credibility. Sellers must provide accurate product recommendations, transparent product information, clear demonstrations, credible testimonials, and responsive answers to product-related questions. Streamers must function not only as entertainers but also as credible product informants who can explain product quality, authenticity, benefits, and value clearly. Since the respondent profile shows frequent live streaming shopping activity but relatively low monthly spending, sellers must also communicate product value carefully through personalized offers, relevant bundles, and risk-reducing information. These strategies can help strengthen product trust and encourage repeat purchase, recommendation, and long-term loyalty.

This study has several limitations. First, the respondents were limited to live streaming social commerce users in East Java, Indonesia, which may restrict the generalizability of the findings to other regions or cultural contexts. Second, the study focused mainly on TikTok Shop Live and related live streaming commerce platforms, while consumer behavior differs across other platforms with different technological features and audience characteristics. Third, the study used a cross-sectional survey design, which captures consumer perceptions at one point in time and does not fully explain changes in trust and loyalty over a longer period. Fourth, the model focused on personalization, trust in product, trust in streamer, and loyalty, while other relevant variables such as satisfaction, perceived value, shopping enjoyment, platform

trust, price promotion, and service quality are not included.

Future studies must extend this study in several ways. First, future studies can test the proposed model in broader geographical areas or compare different countries to examine whether trust transfer mechanisms vary across cultural and market contexts. Second, future studies can compare different live streaming platforms, such as TikTok Live, Shopee Live, Instagram Live, and YouTube Live, to identify platform-specific effects. Third, longitudinal research is recommended to examine how personalization, trust, and loyalty develop over time. Fourth, future studies include additional constructs such as satisfaction, perceived value, customer engagement, platform trust, shopping enjoyment, privacy concerns, and promotional effectiveness to provide a more comprehensive explanation of loyalty formation in live streaming social commerce.

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