

How Livestream Interactivity Drives Repurchase Intention in Social Commerce: The Mediating Role of Trust

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Abstract: TikTok Shop has swiftly advanced social commerce via live shopping, where immediate engagement can influence consumer loyalty. Nevertheless, empirical evidence regarding the translation of live-stream involvement into repurchase intention is scarce in regions with high digital penetration, such as Bali. This research investigates the impact of TikTok Live Interactivity on Repurchase Intention, with Live Streaming Trust serving as a mediating factor among TikTok Shop users in Bali. A quantitative explanatory approach was employed utilizing purposive sampling of 234 eligible TikTok Shop users from five principal regions in Bali: Badung, East Denpasar, Singaraja, West Denpasar, and Kuta. Data were gathered by a structured questionnaire comprising 18 reflective indicators across three categories and analyzed with SEM-PLS (SmartPLS 4) with bootstrapping (5,000 resamples). The findings indicate that TikTok Live Interactivity significantly elevates Live Streaming Trust ($\beta = 0.804$) and directly improves Repurchase Intention ($\beta = 0.431$). Live Streaming Trust significantly influences Repurchase Intention ($\beta = 0.476$) and partially mediates the association between interactivity and repurchase (indirect $\beta = 0.383$). The model exhibits significant explanatory capability ($R^2 = 0.646$ for trust; $R^2 = 0.743$ for repurchase intention). These findings emphasize that interactive live features must be combined with intentional trust-building tactics to optimize recurring transactions, providing practical recommendations for merchants and platform designers to enhance retention strategies in TikTok Live commerce.

Keywords: TikTok Live Interactivity, Live Streaming Trust, Repurchase Intention

INTRODUCTION

Social commerce has emerged as a transformational entity in the digital realm by integrating social media with e-commerce to create a personalized and interactive real-time purchase experience. By integrating social data and user-generated content, social commerce systems can markedly enhance client trust and loyalty (Tripath, 2023). Digital interactivity, encompassing real-time communication and electronic word-of-mouth (eWOM), significantly influences customer purchase intentions across multiple nations, including (Alsoud et al., 2022). The study affirms that trust and interactivity are fundamental factors influencing purchasing decisions in the contemporary digital world (Hajli et al., 2017).

TikTok Shop has established itself as a leader in Indonesia's digital commerce landscape, notably through its live shopping functionality, which integrates entertainment,

social engagement, and real-time interactivity. These elements facilitate a heightened emotional presence and a strong social connection with vendors, thereby enhancing purchase intentions (W. K. Chen et al., 2022; C. H. Lee et al., 2023). The dynamic characteristics of TikTok Shop cultivate a community atmosphere and enhance interaction, hence reinforcing perceptions of use and confidence in the platform (Qin et al., 2023). In this setting, compelling visual material and social connections are crucial factors in fostering user loyalty and retention (Yang & Lee, 2022).

The live streaming functionality on TikTok facilitates direct two-way contact and fosters emotional intimacy between sellers and consumers. The social presence impact generated during these sessions markedly affects consumer identification and purchase (L. R. Chen et al., 2023; Yin et al., 2023). Real-time engagement and prompt feedback foster elevated trust and perceived utility, which have demonstrated efficacy in promoting repeat purchases (Mai et al., 2023; Song et al., 2022). Moreover, superior material during live sessions promotes consumer loyalty and retention (Jiao et al., 2023).

Interactivity is a crucial factor in fostering trust and enhancing user experience during live streaming sessions. Prior studies indicate that interaction affects users' sense of social presence and trust, which then impacts engagement behavior (J. Lv et al., 2022). In the realm of e-commerce, interactivity substantially affects purchase intention via the mediating factor of trust (Liu & Zhang, 2024). A robust social presence enhances social telepresence, perhaps stimulating more purchasing behavior (Kim et al., 2023; Suntornpithug & Khamalah, 2010).

In the digital realm, perceived trust and engagement are fundamental elements influencing consumer behavior. Trust functions as an intermediary between platform attributes like visibility and authenticity and the intention to purchase (Qin et al., 2023; Wu & Huang, 2023). In mobile commerce, elements like user control and contextual offers significantly influence transaction intention (Lee, 2005). Studies conducted in the post-pandemic scenario substantiate that interactivity markedly enhances digital behavioral intention (Al-Geitany et al., 2023).

TikTok Live influences user behavior via real-time interactivity and human–AI collaboration, enhancing social engagement. Research indicates that consumers depend on both technical attributes and subjective judgments of engagement to establish a connection with material (Leiner & Quiring, 2008; J. Lv et al., 2022). In this context, users' tactics for influencing content curation algorithms also enhance sustained engagement (Kang & Lou, 2022). TikTok functions not only as an e-commerce site but also as a forum for social activism, enhancing user loyalty (Cheng & Li, 2024; J. J. Lee & Lee, 2023).

Numerous studies emphasize that trust in live broadcasting is essential for transforming involvement into intentions for repeat purchases. Interactivity enhances trust and bolsters consumers' propensity to persist in transactions on the same platform (Liu & Zhang, 2024; Qin et al., 2023). Trust facilitates the transition from customers' initial content perceptions to their subsequent purchasing decisions, indicating that trust is a crucial factor in fostering consumer loyalty (J. Lv et al., 2022; Song et al., 2022; Wu & Huang, 2023).

Nevertheless, local data regarding TikTok Shop utilization in regions with significant digital penetration, such as Bali, is exceedingly scarce. Notwithstanding considerable digital progress in Bali, including immunization initiatives and illness surveillance systems (Jusril et al., 2020; Schwind et al., 2014), the digital socio-commercial landscape remains little examined.

METHOD

This research employed a quantitative methodology utilizing an explanatory survey to investigate the impact of TikTok Live interaction on repurchase intention, with faith in live streaming serving as a mediating variable. The research was carried out in the five largest districts of Bali: Badung, East Denpasar, Singaraja, WestDenpasar, and Kuta. Two hundred

fifty respondents were purposively chosen based on the following criteria: active TikTok Shop users, having made at least one purchase using the live streaming feature in the past three months, and permanent residency in the area. This methodology adheres to the concepts established in a prior study (Tampubolon et al., 2024) for picking regions based on population density and digital significance.

The data collection tool was a closed-ended questionnaire on a five-point Likert scale, with 18 variables that represent three primary constructs: TikTok Live Interactivity, Live Streaming Trust, and Repurchase Intention. Each construct was assessed utilizing six reflecting indicators derived from prior studies (Liu & Zhang, 2024; X. Lv et al., 2022; Yang & Lee, 2022). Content validity was assessed via expert review, while construct validity and instrument reliability were statistically evaluated through outer loading values, AVE, composite reliability, and Cronbach's alpha using SmartPLS software version 4.0

The investigation employed the Structural Equation Modeling-Partial Least Squares (SEM-PLS) method, deemed suitable for studies involving intricate theoretical frameworks and non-normally distributed data. The measuring model (outer model) was evaluated for validity and reliability, whereas the structural model (inner model) was employed to analyze the links across components and the mediating influence of the trust variable. A bootstrapping method involving 5,000 resamplings was employed to guarantee the stability of parameter estimates. This study adhered to ethical research norms, with all participants granting informed consent and preserving data confidentiality.

RESULTS AND DISCUSSION

Results

Tiktok Live Interactivity

The interactivity of TikTok Live is a vital factor in establishing confidence in live streaming, especially inside social commerce environments such as TikTok Shop in Bali. Interactive elements, like real-time commentary, live host answers, and emotional interaction via emojis or virtual presents, foster a robust sense of social presence and authenticity, hence enhancing user trust (J. Lv et al., 2022; Song et al., 2022). This study emphasizes that trust arises not solely from technological attributes but also from personal connections and parasocial interactions between streamers and viewers (Mai et al., 2023). Utilizing AI-driven algorithms, TikTok provides tailored content, enhancing relevance and perceived authenticity (Kang & Lou, 2022). Interactivity is crucial for fostering trust in live broadcasting among TikTok Shop consumers in Bali's five main regencies.

Moreover, elevated interactivity in TikTok Live positively influences repurchase intention by enhancing engagement, perceived value, and user trust. Studies indicate that customers who experience active engagement and obtain both practical and pleasurable value from material are more inclined to make repeat purchases (Lin et al., 2022; Song et al., 2022). This study demonstrates that trust in live streaming serves as a crucial mediator between interactivity and repurchase intention, aligning with evidence showing that trust mediates the connection between interactive social aspects and consumer choices (Liu & Zhang, 2024; Wang & Oh, 2023). The integration of interaction and trust is a successful approach for fostering enduring client loyalty on platforms such as TikTok, especially in areas witnessing swift digital commerce expansion, like Bali (Qin et al., 2023; Wang & Oh, 2023).

Hence, the concluded hypothesis that:

H1: Tiktok Live Interactivity Positively Influences Live Streaming Trust

H2: Tiktok Live Interactivity Positively Influences Repurchase Intention

H3: Tiktok Live Interactivity Positively Influences Repurchase Intention from Live Streaming Trust as a Mediator

Live Streaming Trust

Confidence in live streaming has been demonstrated to be essential in influencing consumers' decisions to make repeat purchases, especially within the realm of video-centric social commerce such as TikTok Live. This study examined TikTok Shop users in five prominent regencies in Bali, identifying user confidence in the host and live stream content as a crucial determinant of behavioral loyalty. The trust factor includes views of the authenticity, reliability of information, and integrity of the host during the broadcast (Liu & Zhang, 2024; Sawmong, 2022). When consumers have confidence in the information conveyed directly by the streamer, they are more inclined to make purchases, including repeat transactions. This corresponds with the source credibility paradigm, wherein trust functions as an essential link between consumer expectations and actual purchasing decisions.

Moreover, prior research indicates that trust serves as a mediating factor between perceived value (utilitarian, hedonic, and social) and repurchase intention (Wu & Huang, 2023). This indicates that although consumers recognize advantages from the live streaming experience, trust serves as a reinforcing element that ultimately leads to recurrent purchases. The TikTok Live event in Bali fostered a reliable and enjoyable digital environment for consumers through content visibility, interactive host reactions, and an engaging broadcast ambiance (L. R. Chen et al., 2023; Yin et al., 2023). This trust, thus, enhanced consumers' propensity to revisit and repurchase products advertised via TikTok Live. Consequently, establishing and sustaining trust in live streaming is an essential approach for brands and content creators to enhance repurchase intentions in the context of digital social commerce.

Hence, the concluded hypothesis that:

H4: Live Streaming Trust Positively Influences Repurchase Intention

Repurchase Intention

Repurchase intention serves as a crucial metric of client loyalty, especially pertinent to TikTok Shop, a social commerce site centered on short-form videos. In the mobile short-form video (MSFV) domain, such as TikTok, the quality of content presented during live broadcasts and the intimate connection between the streamer and the audience greatly influence user engagement and long-term loyalty (Yang & Lee, 2022). An enjoyable and noteworthy buying experience, characterized by a coherent flow of information, captivating visual appeal, and robust social engagement, motivates consumers to make subsequent purchases on the same platform. In Bali, a location characterized by significant digital penetration, this phenomenon is particularly pronounced since young consumers often correlate favorable digital experiences with intentions to repurchase, especially when engagement and trust have been formed during TikTok Shop live sessions.

Moreover, characteristics such as the incorporation of online customer reviews and e-servicescape components, including the application's design, functionality, and financial security, enhance user trust and comfort in executing repeat transactions (Oebit, 2018; Qin et al., 2023). Recent research indicates that customer happiness and loyalty, fostered through pertinent content and tailored experiences, substantially affect repurchase intentions on platforms such as TikTok Live (Lin et al., 2022; Wang & Oh, 2023). In this study, TikTok Shop customers in the five main regencies of Bali are likely to base their repurchase decisions on the quality of their digital experience. Consequently, enhanced involvement, streaming credibility, and overall contentment from live purchasing experiences are critical elements influencing repurchase intentions within the TikTok Shop framework.

Figure 1 represents the measuring model (outer model) of this study, illustrating the interaction among the constructs of TikTok Live Interactivity, Live Streaming Trust, and Repurchase Intention. Each construct is assessed by six reflective indicators that are systematically organized and demonstrate a substantial contribution to the construct they signify. The model's structure demonstrates that all indicators are correctly and relevantly

interconnected, hence affirming the conceptual validity of each variable. This visualization validates the measurement model's efficacy in uncovering latent associations for subsequent analysis in the structural model and reinforces the theoretical arguments outlined in the literature review.

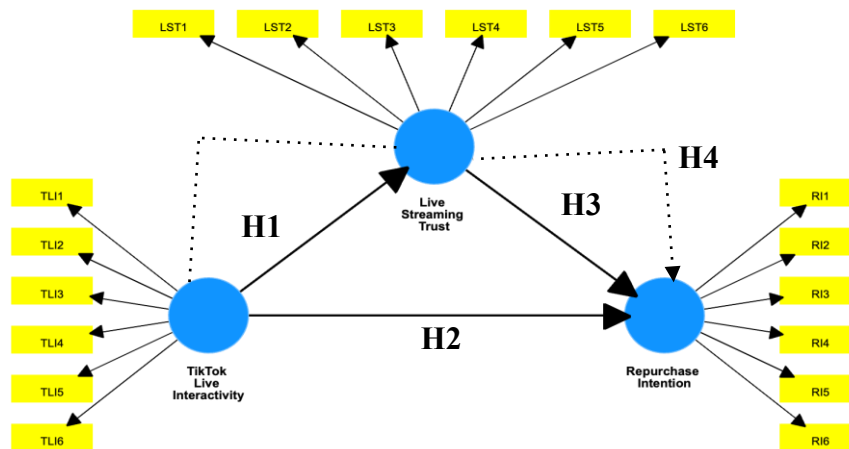


Figure 1. Path Model: The Influence of Tiktok Live Interactivity on Repurchase Intention with Live Streaming Trust as a Mediator Among Tiktok Shop Users in Bali

Based on Table 1, the research instrument utilized in this study was designed based on theoretical premises corroborated by prior research. The TikTok Live Interactivity (X) variable was assessed through six indicators representing the characteristics of bidirectional interaction between dealers and consumers during live streaming sessions. Metrics including the capacity for direct feedback (X1), mutual engagement (X2), and sensations of participation during live streaming (X3) were derived from research conducted by (Cheng & Li, 2024; Wu & Huang, 2023), which underscored the significance of interactive elements in fostering intimacy between users and service providers.

The Live Streaming Trust (Z) variable is characterized as user confidence in the material and participants associated with TikTok Live. Six variables were employed to assess the aspects of information credibility (Z1), seller integrity (Z2), responsiveness to customer wants (Z3), and the impact of other users' reviews (Z4), as delineated (Liang & Yoon, 2022) and (Wu & Huang, 2023). These dimensions indicate that trust serves as a significant mediator that can enhance the association between interactive experiences and repurchase intentions.

The Repurchase Intention (Y) variable is assessed using six measures that gauge consumers' preferences and confidence in making repeat purchases following their participation in TikTok Live. Metrics include repurchase intention (Y1), utilization of TikTok Live as a principal purchasing platform (Y2), and referrals to others (Y6), signifying consumer intentions shaped by interactions and trust established during live streaming sessions, as articulated by (Wu & Huang, 2023). All indicators employ a 5-point Likert scale and have been contextually adapted to the characteristics of TikTok Shop consumers in Bali.

Table 1. List of Variables, Indicators, Codes and Research Reference Sources

Variable	Indicator	Code	References
TikTok Live Interactivity	I believe I can provide input immediately during TikTok Live.	X1	(Cheng & Li, 2024; Leiner & Quiring, 2008; Wu & Huang, 2023)
	TikTok Live facilitates reciprocal engagement between the vendor and me.	X2	(Cheng & Li, 2024; Wu & Huang, 2023)
	I felt engaged watching the TikTok Live.	X3	(Leiner & Quiring, 2008)
	TikTok Live enables me to inquire about products in real-time.	X4	(Wu & Huang, 2023)

Live Streaming Trust	The interaction during TikTok Live was intimate and pertinent.	X5	(Leiner & Quiring, 2008)
	The elevated interactivity compels me to focus on the seller.	X6	(Cheng & Li, 2024)
	I consider the information disseminated during TikTok Live to be credible.	Z1	(Liang & Yoon, 2022; Wu & Huang, 2023)
	I am confident that the sellers on TikTok Live are not deceiving consumers.	Z2	(Wu & Huang, 2023)
	The sellers at TikTok Live appeared to be responsive to the clients' requirements.	Z3	(Wu & Huang, 2023)
	I rely on the evaluations and remarks of other users during TikTok Live.	Z4	(Wu & Huang, 2023)
	I am at ease purchasing the product due to my faith in the vendor throughout the live session.	Z5	(Wu & Huang, 2023)
	I am assured that TikTok Live ensures transactional transparency.	Z6	(Liang & Yoon, 2022; Wu & Huang, 2023)
	I want to reacquire the merchandise via TikTok Shop shortly.	Y1	(Wu & Huang, 2023)
	I am contemplating utilizing TikTok Live as the principal platform for my forthcoming purchasing event.	Y2	(Wu & Huang, 2023)
Repurchase Intention	I am assured in my decision to make a subsequent purchase after viewing TikTok Live.	Y3	(Wu & Huang, 2023)
	I prefer to repurchase from sellers I observe on TikTok Live.	Y4	(Wu & Huang, 2023)
	I will be searching for particular sellers based on prior TikTok Live experiences.	Y5	(Wu & Huang, 2023)
	I would endorse TikTok Live to my friends as a reliable buying platform.	Y6	(Wu & Huang, 2023)

Respondent Profile

This study's respondent descriptions seek to offer a comprehensive picture of the characteristics of TikTok Shop users included in the research, specifically from five primary regions in Bali. A total of 234 respondents were gathered using a purposive sampling strategy based on the following criteria: current TikTok Shop users, permanent residents of Bali, and previous purchasers through the TikTok Live function. Demographic data including age, gender, residence, TikTok Live viewing behaviors, shopping experiences, purchased product categories, payment methods, and experiences with gifting during live events. This profile is elaborated upon in Table 2 below.

Table 2. List of Respondents' Profile		
Category		
--- Gender ---	Frequency	Percentage
Man	94	40.4
Woman	140	59.6
Total	234	100%
--- Age ---	Frequency	Percentage
<18	34	14.5
18–22	69	29.4
23–25	54	23.0
26–30	50	21.3
>30	27	11.9
Total	234	100%
--- Domicile ---	Frequency	Percentage
Badung	42	17.9
Denpasar Timur	40	17.0
Singaraja	48	20.4
Denpasar Barat	53	22.6

Kuta	51	22.1
Total	234	100%
--- Watch Frequency ---		
Infrequently	64	27.2
Sometimes	95	40.4
Often	75	32.3
Total	234	100%
--- Watch Duration ---		
<15 minute	47	20.0
15–30 minute	112	48.1
>30 minute	75	31.9
Total	234	100%
--- Purchase Experience ---		
1–2x	45	19.2
3–4x	102	43.6
5–6x	68	29.0
>6x	19	8.2
Total	234	100%
--- Product Category ---		
Gadget	60	25.5
Beauty	53	22.6
Fashion	71	30.2
Household	50	21.7
Total	234	100%
--- Payment Method ---		
Transfer Bank	66	28.1
COD	56	23.8
E-Wallet	112	48.1
Total	234	100%
--- Gift Experience ---		
Yes	71	30.6
No	163	69.4
Total	234	100%

Table 1 shows that most of the people who answered are women (59.6%), while men make up 40.4%. This means that this sample has a moderate female skew. The biggest age group is 18 to 22 years old (29.4%), next 23 to 25 years old (23.0%), and finally 26 to 30 years old (21.3%). 14.5% of the people who answered are under 18, and 11.9% are over 30. The sample is mostly made up of young individuals, but it also has a good number of elderly users. This means that purchasing experiences and behavioral intentions can be different.

Responders are spread out among five areas in Bali, with West Denpasar (22.6%) and Kuta (22.1%) having the most responders. Singaraja (20.4%), Badung (17.9%), and East Denpasar (17.0%) follow. This distribution shows that the data aren't all in one place and come from a variety of urban and peri-urban areas. When it comes to how often people use TikTok Live, 72.7% of those who answered said they watch live streaming "sometimes" (40.4%) or "often" (32.3%). Only 27.2% watch them "rarely." The length of time you watch also shows that you are still exposed: 80.0% of people watch for more than 15 minutes at a time (15–30 minutes: 48.1%; >30 minutes: 31.9%), and just 20.0% watch for less than 15 minutes. This usage pattern suggests that the majority of respondents possess adequate interaction time to effectively assess live-stream interactivity and cultivate trust perceptions.

The shopping experience on TikTok Shop is also significant. The most common buy frequency is 3–4 times (43.6%), followed by 5–6 times (29.0%). 19.2% have purchased 1–2 times and 8.2% have purchased more than six times. This means that the sample include both people who have bought things before and people who buy things often, which is what you need to look at repurchase intention instead of first-time adoption. Fashion (30.2%) is the most popular category for buying things, followed by gadgets (25.5%), beauty (22.6%), and domestic products (21.7%). This suggests that people don't just buy things from one category. E-wallets are the most popular way to pay (48.1%), followed by bank transfer (28.1%) and cash on delivery (23.8%). This shows that this set of users really likes digital payment methods. Lastly, giving gifts during live streaming is not very common: only 30.6% of people have done so, while 69.4% have not. This indicates that, in this group, involvement is more prominently demonstrated through viewing and purchasing rather than virtual gifting, suggesting that gifting may be perceived as a specialized kind of social interaction rather than a prevalent habit.

Partial Least Squares Analysis

An outer loading analysis was conducted on each construct to assess the validity of the indicators in the measurement model. Outer loading signifies the extent to which each indication contributes to the assessed latent variable. According to the criteria established by (Hair, J. F., Black, W. C., Babin, B. J., & Anderson, 2010), an outer loading value of ≥ 0.70 signifies strong indicator validity. Consequently, only indicators over this threshold may be deemed convergently valid. This study assessed TikTok Live Interactivity (TLI), Live Streaming Trust (LST), and Repurchase Intention (RI) through six distinct indicators for each construct. The outcomes of the external loading test are illustrated in Figure 2 and further upon in Table 3 below.

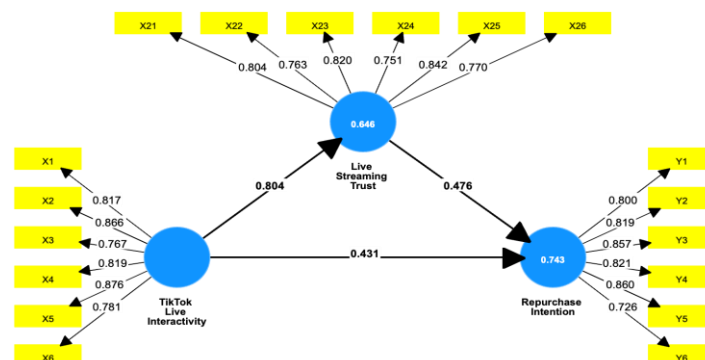


Figure 2. Outer Loading

Outer Loading

According to Table 3, all indicators assessing the TikTok Live Interactivity (TLI) construct possess outer loading values ranging from 0.767 to 0.876, signifying compliance with convergent validity standards. Indicator X5 ("The heightened interactivity compels me to concentrate on the seller") possesses the highest value (0.876), signifying that the element of active involvement significantly enhances the feeling of interactivity on TikTok Live.

In the Live Streaming Trust (LST) design, the outer loading values vary from 0.751 to 0.842, above the minimal criterion. This signifies that user perceptions regarding the legitimacy and reliability of the information presented in TikTok Live have been accurately assessed. Indicator X25 demonstrates the greatest contribution (0.842), underscoring the significance of trust in visual information within the realm of live purchasing.

Table 3. Outer Loading		
	LST	RI
X1		0.817

X2	0.866
X21	0.804
X22	0.763
X23	0.820
X24	0.751
X25	0.842
X26	0.770
X3	0.767
X4	0.819
X5	0.876
X6	0.781
Y1	0.800
Y2	0.819
Y3	0.857
Y4	0.821
Y5	0.860
Y6	0.726

Similarly, for the Repurchase Intention (RI) construct, all outside loadings exceeded 0.70, varying from 0.726 to 0.860. Indicator Y5 ("I intend to repurchase products from TikTok Live in the future") attained the highest value (0.860), substantiating that repurchase intention is significantly affected by future intentions to persist in utilizing the platform.

These findings demonstrate that all indicators in the model satisfy the criteria for convergent validity, rendering it appropriate for subsequent study of the structural model.

R Square

The R-Square (R^2) value signifies the extent to which the independent variables account for the variation in the dependent variable within the model.

The Live Streaming Trust (LST) model exhibits a R^2 value of 0.646, indicating that 64.6% of the variance in user trust regarding TikTok live broadcasts is attributable to TikTok Live Interactivity (TLI). This score is deemed moderate to strong (Hair et al., 2021), signifying that TikTok Live engagement substantially influences user trust.

The Repurchase Intention (RI) construct exhibits a R^2 value of 0.743, indicating that 74.3% of the variability in repurchase intention is attributable to the combined effects of TikTok Live Interactivity (TLI) and Live Streaming Trust (LST). This number is deemed robust, signifying the model's substantial predictive capacity for repurchase behavior.

The Adjusted R^2 value, closely aligned with the R^2 value, signifies the model's robustness relative to the number of predictors and demonstrates the lack of overfitting.

Table 4. R Square

	R-square	R-square adjusted
LST	0.646	0.645
RI	0.743	0.741

F Square

The F-Square (f^2) value quantifies the extent of each independent variable's contribution to the dependent variable. Interpretation according to Cohen's (1988) directives: 0.02 is minimal, 0.15 signifies a middling value, and 0.35 is substantial.

According to Table 5, TikTok Live Interactivity (TLI) → LST has a $f^2 = 1.827$, which is deemed substantial. This signifies that TLI has a substantial and predominant role in elucidating the Live Streaming Trust variable.

The Live Streaming confidence (LST) has a f^2 value of 0.312, which is deemed substantial, signifying that confidence in live streaming significantly affects repurchase intention.

TikTok Live Interactivity (TLI) → The relationship index (RI) has a $f^2 = 0.256$, categorized as medium to big, signifying that interactivity during live broadcasts substantially influences users' repurchase decisions.

Table 5. F Square

	LST	RI	TLI
LST		0.312	
RI			
TLI	1.827	0.256	

The developed structural model exhibits significant explanatory capability, especially regarding repurchase intentions. The interactivity of TikTok Live is demonstrated to be a crucial element in establishing user trust, and these aspects substantially enhance repurchase intentions. These findings underscore the significance of interactive live features as a strategic component in social commerce.

Construct Reliability and Validity

Table 6. Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
LST	0.881	0.885	0.910	0.628
RI	0.898	0.903	0.922	0.665
TLI	0.903	0.906	0.926	0.676

Discriminant Validity

Table 7. Discriminant Validity

	LST	RI	TLI
LST			
RI	0.919		
TLI	0.892	0.899	

Collinearity Statistic

Collinearity or multicollinearity denotes a circumstance in which two or more independent variables in a regression model exhibit a high degree of correlation, thereby distorting coefficient estimates and diminishing model accuracy.

The Variance Inflation Factor (VIF) is employed to identify probable multicollinearity. According to the criteria established by Hair et al. (2021), the interpretation of VIF values is delineated as follows: $VIF < 3$ means no evidence of significant multicollinearity, $VIF 3-5$ means Caution is advised; however, it remains permissible, $VIF > 5$ indicates significant multicollinearity, necessitating intervention (removal or model reorganization).

Table 8. Collinearity Statistic

	VIF
X1	2.312
X2	2.854
X21	2.022
X22	1.839
X23	2.408
X24	1.996
X25	2.646
X26	1.921
X3	2.052
X4	2.593

X5	2.941
X6	2.039
Y1	2.066
Y2	2.207
Y3	2.581
Y4	2.198
Y5	2.623
Y6	1.683

According to Table 8, all indicators within the TikTok Live Interactivity (X1–X6), Live Streaming Trust (X21–X26), and Repurchase Intention (Y1–Y6) constructions have VIF values that fall within the specified range: Minimum: 1.683 (Y6), Maximum: 2.941 (X5).

All VIF values are below 3, suggesting the absence of multicollinearity concerns in this model. Each indicator is distinct and autonomous in elucidating its hidden construct. It is unnecessary to discard indicators due to redundancy or information duplication.

Model Fit

To evaluate the comprehensive adequacy of the structural model, various fit indices were analyzed, including the Standardized Root Mean Square Residual (SRMR), d_ ULS, d_ G, Chi-square, and Normed Fit Index (NFI). These indices offer insight into the efficacy of the suggested model in replicating the observed covariance matrix and the alignment of the theoretical model with the empirical data.

Table 9. Model Fit

	Saturated Model	Estimated Model
SRMR	0.062	0.062
d_ ULS	0.657	0.657
d_ G	0.351	0.351
Chi-square	460.248	460.248
NFI	0.853	0.853

The SRMR value of 0.062 for both the saturated and estimated models is beneath the required threshold of 0.08, signifying a favorable match between the model and the observed data. The d_ ULS (0.657) and d_ G (0.351) values are comparatively low, indicating negligible differences between the empirical and model-implied correlations. The Chi-square score of 460.248, albeit influenced by sample size, is deemed adequate when considered in conjunction with other fit indices. The NFI score of 0.853 surpasses the widely recognized threshold of 0.80, indicating that the model accounts for a significant percentage of the variance in the data relative to a null model. These results indicate that the model exhibits an adequate to good fit, instilling confidence in the robustness of the examined structural relationships.

Inner Loading

Specific Indirect Effect – Mean, STDEV, T Values, P Values

Table 9 displays the outcomes of direct and indirect path testing using bootstrapping, including the following indicators: original sample (O), sample mean (M), standard deviation (STDEV), t-statistic, and p-value. This test evaluates the relevance of the relational pathways between constructs in the model, while simultaneously supporting or refuting the research premise.

H1: TikTok Live Interactivity Enhances Trust in Live Streaming (TLI → LST)

Initial Sample (O): 0.804, T-statistic: 19.190; p-value: 0.000. The interpretation indicates substantial support for Hypothesis H1. The t-statistic significantly exceeds the minimum criterion of 1.96, and the p-value is less than 0.05, demonstrating that TikTok Live

interaction exerts a positive and highly significant effect on trust in live streaming. This indicates that increased interactivity in TikTok Live sessions correlates with a heightened level of user trust in both the information presented and the sellers during the live stream.

H2: TikTok Live Interactivity Enhances Repurchase Intention (TLI → RI)

Initial Sample (O): 0.431, T-statistic: 7.455; p-value: 0.000. The significance of Hypothesis H2 is established. The direct impact of TikTok Live interactivity on repurchase intention is both positive and significant, suggesting that the interactive experience on TikTok Live fosters customers' propensity for repeat purchases without middlemen.

H3: TikTok Live Interactivity Enhances Repurchase Intention via Live Streaming Trust as a Mediating Factor (TLI → LST → RI)

Initial Sample (O): 0.383, T-statistic: 8.012; p-value: 0.000. The results indicate that Hypothesis H3 is significant, demonstrating that Live Streaming Trust serves as a partial mediator in the association between TikTok Live Interactivity and Repurchase Intention. This mediation enhances the indirect influence of interactivity on repurchase intention. Elevated interactivity enhances trust, which then influences repurchase intention.

H4: Live Streaming Trust Positively Affects Repurchase Intention (LST → RI)

Initial Sample (O): 0.476, T-statistic: 8.626; p-value: 0.000. The hypothesis H4 is strongly substantiated. User confidence in TikTok Shop live streaming significantly enhances repurchase intention, highlighting trust as a crucial factor in user purchasing behavior.

All hypotheses (H1, H2, H3, and H4) were deemed significant, with p-values <0.001 and t-statistics >7, signifying that the conceptual model possesses substantial empirical robustness. Substantial mediation suggests that trust is not only a byproduct of interactivity but a crucial element that enhances the connection between interactive experience and user loyalty, specifically in terms of repurchase intention.

Table 10. Specific Indirect Effect – Mean, STDEV, T Values, P Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T statistics (O/STDEV)	P Values
LST -> RI	0.476	0.477	0.055	8.626	0.000
TLI -> LST	0.804	0.800	0.042	19.190	0.000
TLI -> RI	0.431	0.430	0.058	7.455	0.000
TLI -> LST -> RI	0.383	0.381	0.048	8.012	0.000

The results of the structural model analysis, as illustrated in the Inner Model Figure 3, confirmed the significance of all assumptions in this study. TikTok Live interactivity (TLI) significantly impacts trust in live streaming (LST) and repurchase intention (RI), while also exerting an indirect effect through the mediating role of trust. The TLI → LST pathway yielded a coefficient value of 0.804, affirming that interactive experiences during live streaming are a crucial basis for establishing consumer trust. Moreover, the LST → RI pathway demonstrated a substantial contribution (0.476), reinforcing the role of trust as a potent mediating variable. The indirect impact (TLI → LST → RI) was significant (0.383), with a t-statistic of 8.012 and a p-value <0.001. The inner model image, featuring arrow representations and coefficient magnitudes among variables, enhances the visual validity of the suggested theoretical model. This study empirically validates the conceptual model connecting interactivity, trust, and repurchase intention within the TikTok Shop context in Bali. These findings contribute theoretically to the advancement of user behavior models in social commerce and have practical implications for the prevailing live streaming-based digital marketing methods.

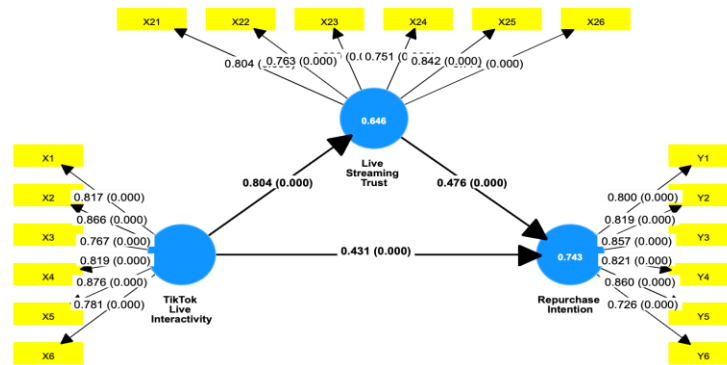


Figure 3. Inner Loading

Discussion

Comparative Perspective and Theoretical Implications

This study's findings reveal substantial positive effects of TikTok Live Interactivity (TLI) on both Live Streaming Trust (LST) and Repurchase Intention (RI), aligning with an expanding body of literature that underscores interactivity as a pivotal factor in consumer engagement within social commerce. The robust path coefficient from TLI to LST (0.804) signifies that real-time responsiveness, personalized content delivery, and active audience engagement are essential for cultivating trust, corroborating prior empirical findings that social presence and prompt feedback enhance user confidence in live shopping environments (Mai et al., 2023; J. Lv et al., 2022; Song et al., 2022). This finding underscores the notion that trust functions not just as a consequence of interaction but also as a proactive mechanism that enables the shift from engagement to behavioral loyalty (Liu & Zhang, 2024; Wu & Huang, 2023).

The significant indirect effect of TLI on RI through LST (0.383) corroborates the mediation model suggested in prior studies, wherein trust mediates the relationship between platform characteristics and repurchase behavior (Qin et al., 2023; Wang & Oh, 2023). Practically, improving interactive elements without simultaneously fostering trust may restrict the total effectiveness of client retention. The backdrop of Bali enhances this discussion by illustrating that regions with high digital penetration and robust youth populations respond exceptionally well to dynamic and participative live commerce elements (Yang & Lee, 2022).

These findings theoretically enhance the Uses and Gratifications (U&G) framework by demonstrating that the satisfaction obtained from interactivity is intensified when associated with perceived authenticity and vendor credibility (Cheng & Li, 2024; Liang & Yoon, 2022). The amalgamation of entertainment, social interaction, and transactional clarity in TikTok Live fosters a multifaceted engagement atmosphere that directly facilitates the intention to repurchase. This corresponds with the social presence hypothesis (Kim et al., 2023) and further substantiates the SOR (Stimulus–Organism–Response) model in elucidating how environmental stimuli (interactivity) influence internal states (trust) that propel behavioral reactions (repurchase).

In conclusion, empirical evidence confirms that for platforms such as TikTok Shop, strategic investment in interactive features must be paired with intentional trust-building methods to optimize long-term consumer loyalty. Subsequent studies may build upon these findings by investigating cross-platform discrepancies or by conducting longitudinal studies to determine the longevity of trust effects, and by recent appeals for more comprehensive regional comparison analyses in social commerce research (Al-Geitany et al., 2023).

CONCLUSION

This study empirically establishes that TikTok Live Interactivity significantly enhances both Live Streaming Trust and Repurchase Intention. Furthermore, Live Streaming Trust was

identified as a major mediator in the association between interactivity and repurchase intention. The R^2 value of 0.743 for repurchase intention, along with a substantial indirect effect of 0.383, substantiates the theoretical framework that asserts real-time contact fosters trust, hence enhancing consumer loyalty. The internal model validates the strength of the path correlations, evidenced by high t-values and substantial p-values. TikTok Live is a crucial tool that significantly improves user engagement, fosters trust, and increases purchase frequency in Bali's digital commerce environment.

Suggestion

Marketers and sellers may dramatically enhance consumer trust and promote repeat purchases during TikTok Live sessions by improving real-time interactions, such as replying to comments, providing targeted offers, and assuring visual transparency.

For TikTok Platform Developers: Future advancements should prioritize the incorporation of features that enhance consumer-streamer trust, including verified seller badges, real-time Q&A tools, and comprehensive feedback systems.

Future researchers are advised to undertake longitudinal studies to investigate if prolonged interactivity and trust persist in affecting repurchase intention over time. Comparative analyses across several locations in Indonesia can enhance the comprehension of regional behavioral trends in social commerce.

REFERENCES

- Al-Geitany, S., Aljuhmani, H. Y., Emeagwali, O. L., & Nasr, E. (2023). Consumer Behavior in the Post-COVID-19 Era: The Impact of Perceived Interactivity on Behavioral Intention in the Context of Virtual Conferences. *Sustainability (Switzerland)*, 15(11). <https://doi.org/10.3390/su15118600>
- Alsoud, M., Al-Muani, L., & Alkhazali, Z. (2022). Digital platform interactivity and Jordanian social commerce purchase intention. *International Journal of Data and Network Science*, 6(2), 285–294. <https://doi.org/10.5267/j.ijdns.2022.1.009>
- Chen, L. R., Chen, F. S., & Chen, D. F. (2023). Effect of Social Presence toward Livestream E-Commerce on Consumers' Purchase Intention. *Sustainability (Switzerland)*, 15(4). <https://doi.org/10.3390/su15043571>
- Chen, W. K., Chen, C. W., & Silalahi, A. D. K. (2022). Understanding Consumers' Purchase Intention and Gift-Giving in Live Streaming Commerce: Findings from SEM and fsQCA. *Emerging Science Journal*, 6(3), 460–481. <https://doi.org/10.28991/ESJ-2022-06-03-03>
- Cheng, Z., & Li, Y. (2024). Like, Comment, and Share on TikTok: Exploring the Effect of Sentiment and Second-Person View on the User Engagement with TikTok News Videos. *Social Science Computer Review*, 42(1), 201–223. <https://doi.org/10.1177/08944393231178603>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis 7th Edition* (pp. 1–761). Pearson Prentice Hall.
- Hajli, N., Wang, Y., Tajvidi, M., & Hajli, M. S. (2017). People, Technologies, and Organizations Interactions in a Social Commerce Era. *IEEE Transactions on Engineering Management*, 64(4), 594–604. <https://doi.org/10.1109/TEM.2017.2711042>
- Jiao, Y., Sarigöllü, E., Lou, L., & Huang, B. (2023). How Streamers Foster Consumer Stickiness in Live Streaming Sales. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(3), 1196–1216. <https://doi.org/10.3390/jtaer18030061>
- Jusril, H., Ariawan, I., Damayanti, R., Lazuardi, L., Musa, M., Wulandari, S. M., Pronyk, P., & Mechael, P. (2020). Digital health for real-time monitoring of a national immunisation campaign in Indonesia: A large-scale effectiveness evaluation. *BMJ Open*, 10(12), 1–9. <https://doi.org/10.1136/bmjopen-2020-038282>

- Kang, H., & Lou, C. (2022). AI agency vs. human agency: Understanding human-AI interactions on TikTok and their implications for user engagement. *Journal of Computer-Mediated Communication*, 27(5), 0–13. <https://doi.org/10.1093/jcmc/zmac014>
- Kim, J., He, N., & Miles, I. (2023). Live Commerce Platforms: A New Paradigm for E-Commerce Platform Economy. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(2), 959–975. <https://doi.org/10.3390/jtaer18020049>
- Lee, C. H., Lee, H. N., & Choi, J. Il. (2023). The Influence of Characteristics of Mobile Live Commerce on Purchase Intention. *Sustainability (Switzerland)*, 15(7), 1–13. <https://doi.org/10.3390/su15075757>
- Lee, J. J., & Lee, J. (2023). #StopAsianHate on TikTok: Asian/American Women’s Space-Making for Spearheading Counter-Narratives and Forming an Ad Hoc Asian Community. *Social Media and Society*, 9(1). <https://doi.org/10.1177/20563051231157598>
- Leiner, D. J., & Quiring, O. (2008). What interactivity means to the user essential insights into and a scale for perceived interactivity. *Journal of Computer-Mediated Communication*, 14(1), 127–155. <https://doi.org/10.1111/j.1083-6101.2008.01434.x>
- Liang, Y. Q., & Yoon, S. (2022). Uncovering the Cognitive, Psychological, and Social Mechanisms Affecting TikTok’s Reuse Intention: Verifying the Role of Platform Characteristics, Psychological Distance, and Social Identity. *Global Media and China*, 7(4), 400–421. <https://doi.org/10.1177/20594364221131134>
- Lin, B., Chen, Y., & Zhang, L. (2022). Research on the factors influencing the repurchase intention on short video platforms: A case of China. *PLoS ONE*, 17(3 March), 1–14. <https://doi.org/10.1371/journal.pone.0265090>
- Liu, J., & Zhang, M. (2024). Formation mechanism of consumers’ purchase intention in multimedia live platform: a case study of taobao live. *Multimedia Tools and Applications*, 83(2), 3657–3680. <https://doi.org/10.1007/s11042-023-15666-6>
- Lv, J., Cao, C., Xu, Q., Ni, L., Shao, X., & Shi, Y. (2022). How Live Streaming Interactions and Their Visual Stimuli Affect Users’ Sustained Engagement Behaviour—A Comparative Experiment Using Live and Virtual Live Streaming. *Sustainability (Switzerland)*, 14(14). <https://doi.org/10.3390/su14148907>
- Lv, X., Zhang, R., Su, Y., & Yang, Y. (2022). Exploring how live streaming affects immediate buying behavior and continuous watching intention: A multigroup analysis. *Journal of Travel and Tourism Marketing*, 39(1), 109–135. <https://doi.org/10.1080/10548408.2022.2052227>
- Mai, T. D. P., To, A. T., Trinh, T. H. M., Nguyen, T. T., & Le, T. T. T. (2023). Para-Social Interaction and Trust in Live-Streaming Sellers. *Emerging Science Journal*, 7(3), 744–754. <https://doi.org/10.28991/ESJ-2023-07-03-06>
- Oebit, Z. (2018). Pengaruh E-Servicescape terhadap Trust dan Dampaknya pada Repurchase Intention. *Jurnal Sistem Informasi*, 14(2), 43–52. <https://doi.org/10.21609/jsi.v14i2.698>
- Qin, C., Zeng, X., Liang, S., & Zhang, K. (2023). Do Live Streaming and Online Consumer Reviews Jointly Affect Purchase Intention? *Sustainability (Switzerland)*, 15(8). <https://doi.org/10.3390/su15086992>
- Sawmong, S. (2022). Examining the Key Factors that Drives Live Stream Shopping Behavior. *Emerging Science Journal*, 6(6), 1394–1408. <https://doi.org/10.28991/ESJ-2022-06-06-011>
- Schwind, J. S., Wolking, D. J., Brownstein, J. S., Predict, C., Mazet, J. A. K., Smith, W. A., Aguirre, A., Aguirre, L., Akongo, M. J., Robles, E. A., Ambu, L., Anthony, S., Antonjaya, U., Aguilar, G. A., Barcena, L., Barradas, R., Bogich, T., Bounga, G., Buchy, P., ... Zimmerman, D. (2014). Evaluation of local media surveillance for improved disease recognition and monitoring in global hotspot regions. *PLoS ONE*, 9(10). <https://doi.org/10.1371/journal.pone.0110236>

- Song, Z., Liu, C., & Shi, R. (2022). How Do Fresh Live Broadcast Impact Consumers' Purchase Intention? Based on the SOR Theory. *Sustainability (Switzerland)*, 14(21). <https://doi.org/10.3390/su142114382>
- Suntornpithug, N., & Khamalah, J. (2010). Machine and Person Interactivity: the Driving Forces Behind Influences on Consumers' Willingness To Purchase Online. *Journal of Electronic Commerce Research*, 11(4), 299–325.
- Tampubolon, N. K. T., Roessali, W., & Santoso, S. I. (2024). An analysis of consumer behavior regarding green product purchases in Semarang, Indonesia: The use of SEM-PLS and the AIDA model. *Open Agriculture*, 9(1). <https://doi.org/10.1515/opag-2022-0407>
- Tripath, V. M. (2023). Role of Social Commerce in Consumer Trust and Loyalty: A Quantitative Investigation. *Journal of Algebraic Statistics*, 9(1), 150–154. <https://doi.org/10.52783/jas.v9i1.1453>
- Wang, J., & Oh, J. I. (2023). Factors Influencing Consumers' Continuous Purchase Intentions on TikTok: An Examination from the Uses and Gratifications (U&G) Theory Perspective. *Sustainability (Switzerland)*, 15(13). <https://doi.org/10.3390/su151310028>
- Wu, Y., & Huang, H. (2023). Influence of Perceived Value on Consumers' Continuous Purchase Intention in Live-Streaming E-Commerce—Mediated by Consumer Trust. *Sustainability (Switzerland)*, 15(5). <https://doi.org/10.3390/su15054432>
- Yang, Q., & Lee, Y. C. (2022). What Drives the Digital Customer Experience and Customer Loyalty in Mobile Short-Form Video Shopping? Evidence from Douyin (TikTok). *Sustainability (Switzerland)*, 14(17). <https://doi.org/10.3390/su141710890>
- Yin, J., Huang, Y., & Ma, Z. (2023). Explore the Feeling of Presence and Purchase Intention in Livestream Shopping: A Flow-Based Model. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(1), 237–256. <https://doi.org/10.3390/jtaer18010013>