



Revealing the Role of Streamer Traits on Perceived Value and Impulsive Buying Behavior in TikTok Live Shopping

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This study research investigates the phenomenon of low purchase conversion rates amid the rapid growth of e-commerce and the widespread adoption of TikTok Live Shopping features in Indonesia. The study conceptualizes five streamer characteristics, namely attractiveness, popularity, experience, information quality, and interactivity, as stimuli; perceived value as the organism; and impulsive buying behavior as the consumer response. This research employs a quantitative approach using primary data collected through an online questionnaire administered to 225 valid respondents who had previously made purchases through Mami Louise's TikTok live shopping sessions. The data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The findings reveal that all five characteristics have a positive and significant effect on the formation of perceived value. Specifically, information quality emerges as the strongest determinant influencing consumers' perceived value, surpassing both popularity and physical attractiveness. Furthermore, the study confirms that perceived value acts as the primary predictor driving impulsive buying behavior, with a large effect size. These findings imply that within the live shopping ecosystem, substantive elements, particularly the accuracy of product information, are more crucial than mere visual entertainment in triggering spontaneous purchase decisions.

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INTRODUCTION

The growth of e-commerce in Indonesia has shown rapid development in recent years. A report by the Ministry of Trade in 2023 recorded that the value of e-commerce transactions reached IDR 533 trillion, positioning Indonesia as one of the enormous e-commerce markets in the world ([Catriana & Sukmana, 2024](#)). Furthermore, the Ministry of Trade also reported that in 2023, the number of e-commerce users continued to increase, reaching 58.63 million users, and is forecasted to rise to 99.1 million users by 2029 ([Kristomuliono, 2025](#)). This trend indicates that e-commerce has become an important pillar of the Indonesian economy, in line with the global shift from physical to digital commerce. E-commerce platforms enable consumers to compare prices, access user reviews, and make more informed

decisions ([Song et al., 2023](#); [Iothimani et al., 2023](#); [Rosario & Raimundo, 2021](#)). This convenience enhances shopping comfort and practicality, which are primary considerations in online shopping behavior. Statistical data also show that among the five largest e-commerce platforms in Indonesia based on website visits, Tokopedia recorded 158 million visits, while Shopee ranked second with 131 million visits. Lazada recorded 26 million visits ([Shahnaz, 2022](#)).

These data reflect intense competition among e-commerce platforms and encourage each platform to innovate in delivering shopping experiences that are not only functional but also emotionally engaging in order to increase sales ([Ahmad et al., 2022](#)). One prominent innovation is the Live Shopping feature, with GoodStats

reporting in 2022 that 83.7% of Indonesians had watched such broadcasts ([Naurah, 2022](#)). According to a GoodStats survey on consumer behavior patterns in live shopping in 2022, TikTok ranked highest at 56%, followed by Shopee at 33.3% ([Panggabean, 2024](#)). However, conversion rates remain low, as some sellers have complained that only a small proportion of viewers actually make purchases and instead merely watch the broadcasts ([Dwi, 2023](#)). This low conversion rate is associated with weakening purchasing power, as reflected in the decline of savings allocated for consumption to only 16% in 2024 ([Rachman, 2024](#)). On the other hand, the ability of live shopping features to provide a shopping experience that closely resembles conventional shopping methods can be utilized to stimulate impulsive buying behavior. A survey showed that the level of impulsive purchases in live shopping reached as high as 70 percent ([Faudzan, 2025](#)).

Studies on impulsive buying behavior in live shopping have been widely conducted ([Nguyen et al., 2025](#); [Lee & Chen, 2021](#); [Al-Roomedy & Zaki, 2024](#); [Shao et al., 2024](#)). Most of these studies found that impulsive buying behavior in live shopping is influenced by the role of the streamer during the session ([Maharani et al., 2025](#); [Shao et al., 2024](#)). Consistent with the phenomenon occurring in Indonesia, several streamers such as dr. Richard Lee, Kohcun, and Mami Louise have demonstrated the remarkable commercial potential of this format through high sales achievements during live shopping sessions ([Maulia, 2023](#); [Alessandrina, 2023](#)). However, at the same time, other streamers such as Sarwendah, despite being a public figure, reportedly experienced low purchase activity during their live sessions ([Alessandrina, 2023](#)). This condition has drawn attention to how streamers may trigger impulsive buying behavior.

Streamer characteristics are considered important because streamers who possess appealing appearance, style, and physical attractiveness are able to evoke positive emotional responses from viewers during live-stream e-commerce sessions ([Nguyen et al., 2025](#); [Guo et al., 2022](#)). In addition, streamer popularity can enhance viewers' perceptions of reputation, trust, and urgency to purchase products during live shopping sessions ([Nguyen et al., 2025](#); [Lee & Chen, 2021](#)). Furthermore, streamers who consistently provide comprehensive information about the products being sold demonstrate experience, knowledge, and expertise, which help build viewers' trust during live-stream e-commerce sessions ([Ladhari et al., 2020](#); [Liu & Oda, 2021](#)). The ability to deliver accurate, relevant, and complete quality information, according to [Jiang et al. \(2021\)](#), can enhance perceived value and trigger spontaneous purchase decisions. In addition, interaction between streamers and viewers can boost trust, comfort,

and social closeness of the audience to the streamer ([Huang et al., 2024](#); [Chen & Yang, 2023](#)).

Thus, streamer characteristics not only influence viewers' perceptions individually, but also collectively contribute to the formation of perceived value, which becomes the basis for consumers in making rapid evaluations during live shopping sessions. Given that livestreams occur within a short period and are often accompanied by a sense of urgency, consumers' evaluation processes tend to occur spontaneously and with minimal deliberation, thereby creating substantial opportunities for impulsive buying behavior ([Xu et al., 2020](#)). Therefore, understanding how perceived value is formed through streamer traits is important for explaining the tendency toward impulsive buying in live shopping.

To explain the mechanism underlying this relationship, the Stimulus–Organism–Response (S-O-R) model serves as an appropriate approach for examining how external factors acting as stimuli influence human behavior or responses through the organism mechanism. Numerous studies have identified organism in the context of live shopping through customer hedonic value ([Huang et al., 2024](#); [Soomro & Habeeb, 2025](#)), customer attitude ([Song et al., 2023](#)), customer beliefs ([Ladhari et al., 2020](#)), and cognitive value ([Xu et al., 2020](#)). However, relatively few studies have examined organism through the perspective of perceived value in a comprehensive manner, encompassing both hedonic and utilitarian value. Several studies found that perceived value can be identified through other benefits such as time savings and cost reduction, referred to as utilitarian value ([Bapat & Hollebeek, 2023](#); [Cankül et al., 2024](#); [Song et al., 2023](#); [Xu et al., 2020](#)). Therefore, there is an urgency to re-evaluate the organism mechanism based on perceived value experienced during live shopping sessions in shaping impulsive buying as the response.

According to the phenomena and problems raised in this study, the research aims to explore impulsive buying in TikTok Live Shopping hosted by Mami Louise. Given the increasing popularity of both the live shopping feature and Mami Louise, this study is highly relevant in providing a better understanding of the factors influencing impulsive buying behavior. This study is a replication of [Nguyen et al. \(2025\)](#); however, it also offers important novelty that may provide a significant contribution to the development of the literature on e-commerce and digital marketing. The novelty of this study lies in integrating the five main characteristics of Mami Louise as a streamer, namely attractiveness, popularity, experience, quality information, and interactivity, as stimuli that shape perceived value as the organism mechanism within the S-O-R model. Unlike prior studies that tend to examine hedonic

value, attitude, beliefs, or cognitive value separately, this study positions perceived value more comprehensively by including both hedonic and utilitarian value. This distinction is particularly relevant in the context of TikTok Live Shopping powered by Tokopedia as a new phenomenon in the Indonesian e-commerce ecosystem.

The Theory of Stimulus-Organism-Response

The S-O-R theory is a profound frameworks to explain how environmental psychology effects individual behavioral responses. The core premise of the S-O-R theory is that various stimuli (S) affect an individual's emotions or internal states (organism/O), which subsequently trigger behavioral responses ([Mehrabian & Russell, 1974](#); [Song et al., 2023](#)). As one of the most frequently applied theories in online shopping behavior research, the S-O-R framework is highly appropriate for use in the present research model. This model links individual psychology and behavior while explaining the mechanism through which behavior emerges when individuals are exposed to stimulation from the external environment. There several studies in e-commerce have utilize live-stream features and situational atmosphere as stimulus variables to examine consumers' online purchase intentions and behaviors, including impulsive buying.

HYPOTHESES DEVELOPMENT

Streamers serve as representatives of products or brands during live shopping sessions while simultaneously enhancing consumers' cognitive assimilation, as a result of the association formed between a brand and an attractive streamer during the live session ([Xu et al., 2020](#); [Lee & Chen, 2021](#)). Streamer attractiveness encompasses appearance, talent, and personality displayed during live shopping sessions ([Fu & Hsu, 2023](#); [Guo et al., 2022](#)). In other words, an attractive streamer can enhance viewers' positive responses throughout the live session. Previous studies have shown that attractiveness influences viewers' perceptions through sensory stimulation ([Xu et al., 2020](#)). Furthermore, the attractiveness and appearance of the streamer also enhance viewers' hedonic value ([Cai et al., 2018](#)). Although prior findings indicate a positive effect of streamer attractiveness on perceived value, such studies remain limited to developed countries ([Ni & Ueichi, 2024](#); [Huang et al., 2024](#); [Xu et al., 2020](#)). Therefore, further research is needed in developing countries such as Indonesia to gain a deeper understanding of consumer behavior. Accordingly, the following hypothesis is proposed:

H1: Streamer's Attractiveness has a positive and significant influence on Perceived Value.

Popularity arises from individuals' beliefs and perceptions regarding the accumulation of information about other individuals over time, from the past to the present, and is reflected in an overall assessment of unique characteristics, image, and the impression they leave behind ([Nguyen et al., 2025](#)). In live shopping, streamer popularity can function as a factor that attracts viewers' attention ([Guo et al., 2022](#)). When the streamer is a well-known influencer, the level of interaction generated during the live shopping session tends to become more intense ([Guo et al., 2022](#)). This popularity shapes viewers' positive attitudes and behaviors, including the perceived value of the products being offered, which ultimately leads to purchase decisions ([Chen & Lin, 2018](#); [Ryu & Han, 2021](#)). Beyond the context of live shopping, individuals who possess popularity on social media have also been shown to encourage positive behaviors that are readily converted into purchasing behavior ([Hill et al., 2020](#)). Thus, these findings support the relationship between streamer popularity and perceived value. Hence, the hypothesis is postulated as follows:

H2: Streamer's Popularity has a positive and significant effect on Perceived Value.

A seller's experience is highly important because it determines the amount of information received by viewers and influences their attitudes and evaluations of the products offered ([Ladhari et al., 2020](#)). [Cankül et al. \(2024\)](#) demonstrated that seller experience might affects the formation of perceived value. [Guo et al. \(2022\)](#) also conceptualized experience from the perspective of expertise as an important factor in shaping perceived value. Although previous studies have consistently concluded that streamer experience plays an important role in enhancing customers' perceived value ([Liao et al., 2023](#)), only a few studies have examined this relationship in live-stream e-commerce, in Indonesia. Given the unique nature of selling through live shopping, which differs from conventional selling ([Huang et al., 2024](#)), it is important to reexamine the relationship between streamer experience and perceived value. Accordingly, the following hypothesis is proposed:

H3: Streamer's Experience has a positive and significant effect on Perceived Value.

[Sharma and Fatima \(2024\)](#) explained that high-quality information delivered by the streamer is essential for building trust and providing the information needed by viewers. [Khôi et al. \(2023\)](#) argued that high-quality information must be based on accuracy, clarity, concreteness, and timeliness of delivery. On the

other hand, streamers play an important role in live shopping because they are responsible for delivering product information and answering viewers' questions directly (Xu et al., 2020). Therefore, information quality as a form of customer stimulus and the emergence of evaluations concerning the benefits obtained or the costs incurred (Xu et al., 2020). This is consistent with Nguyen et al. (2025), who found that the quality of information provided by streamers during live shopping sessions can influence perceived value. However, studies examining this relationship remain limited, especially in developing countries such as Indonesia, so further in-depth investigation is needed to better understand this relationship. Hence, the hypothesis is postulated as follows:

H4: Streamer's Quality information has a positive and significant effect on Perceived Value.

The intensive interaction that occurs between streamers and viewers during live shopping sessions enhance viewer satisfaction through its influence on perceived utilitarian value, which triggers impulsive purchase within a short period of time (Yu et al., 2025). Interactivity can be viewed from various perspectives, including indirect interaction such as textual content, for example reviews and suggestions (Li et al., 2024), verbal communication (Chen & Yang, 2023), and social interactivity (Huang et al., 2024). Huang et al. (2024) explained that social interactivity plays a role in creating value, as the interaction helps clarify the benefits obtained from

the products offered. In addition, Song et al. (2023) found that direct interaction contributes to increase stimulation, improve product perceptions, and enhance viewers' perceived value. Hence, the hypothesis is postulated as follows:

H5: Streamer's Interactivity has a positive and significant effect on Perceived Value.

Previous studies have found a significant effect of perceived value on purchasing behavior (Chen & Yang, 2023). However, due to the fast-paced nature of live shopping, viewers tend to make purchase decisions impulsively (Xu et al., 2020). Several studies examined the relationship between perceived value and impulsive buying behavior, such as Huang et al. (2024), Xu et al. (2020), and Zhang et al. (2023), these studies have only addressed perceived value from particular perspectives. For example, Huang et al. (2024), and Zhang et al. (2023) examined perceived value from a hedonic perspective, whereas Xu et al. (2020) approached it from the standpoint of cognitive perception and stimulation. As noted earlier, perceived value consists of both utilitarian and hedonic value (Guo et al., 2022). This is also confirmed by several findings, such as Sun et al. (2023), Yu et al. (2025), and Nguyen et al. (2025), which found a significant effect of perceived value on impulsive buying behavior in live shopping. Hence, the hypothesis is postulated as follows:

H6: Perceived Value has a positive and significant effect on Impulsive Buying Behavior.

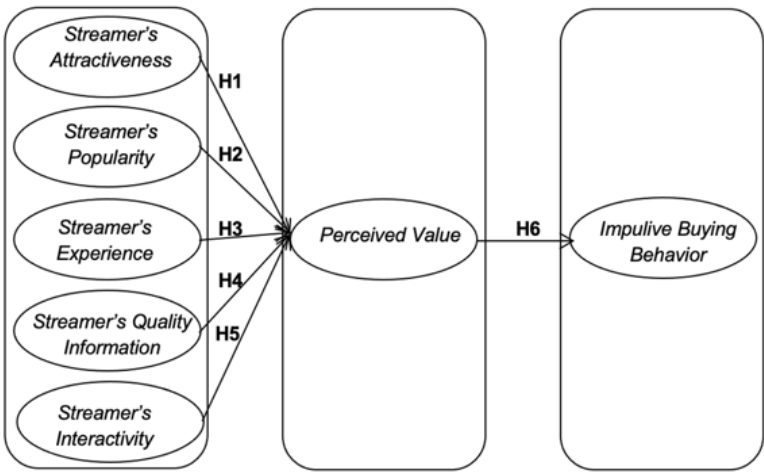


Figure 1. Research Model

METHOD

This study employs a quantitative approach with an explanatory-causal design to examine the relationships among streamer characteristics, perceived value, and impulsive buying behavior in TikTok Live Shopping. The study uses primary data collected through an online questionnaire

distributed to respondents who had purchased or transacted products through TikTok Live Shopping broadcasts hosted by Mami Louise at least once within the last three months.

The measurement instrument was adapted from Nguyen et al. (2025) and adjusted to suit the context of Mami Louise's live shopping

broadcasts. The population of this study consists of individuals who have purchased products through TikTok Live Shopping broadcasts hosted by Mami Louise within the last three months. Since the exact number of this population is unknown, this study applied a non-probability sampling technique using purposive sampling.

The respondent criteria were established to ensure that the participants had relevant experience with the research context. Specifically, respondents had to be at least 18 years old, have an active account on the TikTok Live Shopping platform powered by Tokopedia, and have made at least one purchase through Mami Louise’s live shopping broadcast within the past three months.

The minimum sample size was determined based on the guideline proposed by [Hair et al. \(2022\)](#), which recommends using five to ten times the number of research indicators. Since this study includes 25 indicators, the minimum required sample size was 125 respondents. Data were collected using Google Forms and measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The data were analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4. This method was selected because it is suitable for examining predictive relationships among latent variables and can be applied to models involving multiple constructs and indicators.

The analysis consisted of two stages: measurement model evaluation and structural model evaluation. The measurement model was used to assess the reliability and validity of the research instruments, including indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Meanwhile, the structural model was used to evaluate collinearity, explanatory power, effect

size, predictive relevance, and hypothesis testing through the bootstrapping procedure.

RESULT AND DISCUSSION

A total of 398 respondents participated in this study. However, 173 responses were deemed ineligible and were subsequently excluded, leaving 225 valid responses that met the selection criteria established by the researcher. Based on the respondents’ demographic characteristics, the majority were female, accounting for 174 individuals (77.33%). In addition, most respondents were aged 18–23 years, comprising 182 individuals (80.89%). A total of 71 respondents originally came from Bengkulu Province (31.56%). Other provinces were also fairly represented, including West Java (11.56%), Central Java (11.56%), DKI Jakarta (9.33%), and East Java (9.78%). Furthermore, the majority of respondents were students, with 159 individuals (70.67%). Based on income level, the largest group of respondents earned between IDR 1,200,000 and IDR 2,400,000, comprising 89 individuals (39.56%), followed by those earning below IDR 1,200,000 (29.78%). In terms of purchase frequency, the largest proportion of respondents reported making purchases twice per month (28.00%), followed by three times per month (24.44%) and once per month (19.11%).

Measurement Model Evaluation

The measurement model stage aims to assess the extent to which the measurement instrument used in this study is valid and reliable. Reliability evaluation was conducted by analyzing indicator reliability and internal consistency reliability to ensure the accuracy and consistency of the measurements.

Tabel 1. Results of Indicator Reliability and Internal Consistency Evaluation

Variable	Item Measurement	Code	Indicator Reliability	Internal Consistency Reliability		
			Loading Factor	CA	Composite Reliability	
					rho_A	rho_C
Impulsive Buying	While watching Mami Louise’s live shopping session, I purchased items that I had not previously planned to buy.	IB1	0.926	0.941	0.942	0.957
	While watching Mami Louise’s live shopping session, I often made purchases spontaneously.	IB2	0.920			
	While watching Mami Louise’s live shopping session, I purchased items without much deliberation.	IB3	0.913			

	While watching Mami Louise's live shopping session, I felt inclined to purchase more than I actually needed.	IB4	0.926			
Perceived Value	Considering the purchase price, shopping through Mami Louise's live shopping session seemed beneficial to me.	PV1	0.949			
	Considering the effort I invested, shopping through Mami Louise's live shopping session felt worthwhile.	PV2	0.953			
	Considering the risks associated with online shopping, purchasing through Mami Louise's live shopping session still provided benefits to me.	PV3	0.939	0.963	0.964	0.974
	Overall, shopping through Mami Louise's live shopping session was perceived as providing good value.	PV4	0.957			
Streamer's Quality Information	The streamer (Mami Louise) whom I watched delivered product or service information accurately.	QI1	0.951			
	The streamer (Mami Louise) whom I watched presented the product or service from multiple perspectives.	QI2	0.947			
	The streamer (Mami Louise) whom I watched helped me understand the product or service more thoroughly.	QI3	0.965	0.965	0.966	0.974
	Directly observing the product through the streamer (Mami Louise) improved my understanding of the product.	QI4	0.942			
Streamer Attractiveness	I liked the personal appearance of the live streamer (Mami Louise) whom I watched.	SA1	0.965			
	The appearance of the live streamer (Mami Louise) whom I watched was very stylish.	SA2	0.956	0.958	0.960	0.973
	The live streamer (Mami Louise) whom I watched had an attractive appearance.	SA3	0.961			
Streamer's Experience	The streamer (Mami Louise) whom I watched was highly skilled in promoting sales through live shopping.	SE1	0.953			
	The streamer (Mami Louise) whom I watched was highly experienced in live shopping sales.	SE2	0.960	0.970	0.970	0.978
	The streamer (Mami Louise) whom I watched had a strong	SE3	0.958			

	understanding of the products she promoted.				
	The streamer (Mami Louise) whom I watched provided highly comprehensive product information.	SE4	0.957		
	I was able to communicate quickly with the streamer (Mami Louise) during the live shopping session.	SI1	0.945		
	As a viewer, I was able to participate and leave comments effectively during Mami Louise's live shopping session.	SI2	0.964		
Streamer's Interactivity				0.966	0.969 0.975
	I was able to interact quickly with other viewers during Mami Louise's live shopping session.	SI3	0.943		
	I was able to obtain the information I needed when communicating with the streamer (Mami Louise).	SI4	0.956		
	Many people liked this streamer (Mami Louise).	SP2	0.966		
	This streamer (Mami Louise) attracted a large number of viewers.	SP3	0.954		
Streamer's Popularity				0.970	0.971 0.978
	Based on the number of fans, this streamer (Mami Louise) could be considered popular.	SP4	0.957		
	Based on the number of viewers, this streamer (Mami Louise) could be considered popular.	SP5	0.954		

As shown in Table 1, the results of the outer loading analysis indicate that, out of 29 indicators, 27 met the criterion for indicator reliability, as their values exceeded the threshold recommended by [Hair et al. \(2022\)](#). This finding suggests that each indicator in this study was able to represent its respective construct adequately. Meanwhile, SA4 and SP1, had to be eliminated because their loading values were far below the threshold proposed by [Hair et al. \(2022\)](#). The low contribution of SA4 and SP1 indicates that respondents' perceptions of the streamer's unique personality and the number of the streamer's fans were not consistently formed the constructs of Streamer Attractiveness and Popularity.

There are two possible explanations for the elimination of SA4 and SP1. The statement items may not have been aligned with the respondents' experiences. Furthermore, the items may have contained a high degree of ambiguity, causing both indicators to fail to measure the construct variance accurately. The data were then reanalyzed to ensure that all remaining indicators were consistent with the standards proposed by [Hair et al. \(2022\)](#).

For the Impulsive Buying construct, as presented in Table 1, the highest loading values were found for IB1 (0.926) and IB4 (0.926), indicating that respondents tended to make unplanned purchases and purchase beyond their actual needs while watching live shopping sessions. For Perceived Value, the highest loading value was PV4 (0.957), suggesting that live shopping activities were perceived as providing good overall value. Furthermore, he, highest loading value for Streamer's Quality Information was QI3 (0.965), reflecting the streamer's ability to help viewers understand the product more thoroughly. For Streamer Attractiveness, the highest loading value was SA1 (0.965), indicating that respondents were primarily attracted to the streamer's personal appearance. Furthermore, the highest loading value for Streamer's Experience was SE2 (0.960), which reflects respondents' perceptions of the streamer's experience and expertise in conducting live broadcasts. For Streamer's Interactivity, the highest loading value was SI2 (0.964), reflecting respondents' ease of participation and communication during the live broadcast. Lastly, for the Streamer's Popularity

construct, the highest loading value was SP2 (0.966), which relates to respondents' perceptions of the streamer's popularity among viewers.

Table 1. also presents the results of the evaluation of internal consistency reliability. All variables met the internal consistency standards suggested by [Hair et al. \(2022\)](#), as the values of Cronbach's Alpha, rho_A, and Composite Reliability were all above 0.70. These findings indicate that all constructs in this study demonstrated a very high level of reliability.

Moreover, the evaluation results were also consistent with the rule of thumb proposed by [Hair et al. \(2022\)](#), whereby for each variable the values followed the pattern of Cronbach's Alpha < rho_A < rho_C. Therefore, all items and variables in this study were considered reliable and could be further evaluated in terms of validity. In this study, validity was assessed based on convergent validity and discriminant validity, in accordance with the guidelines of [Hair et al. \(2022\)](#). A more detailed presentation of the evaluation results is provided in Table 2 below.

Table 2. Regression Results

	AVE	Heterotrait-Monotrait Ratio (HTMT)						
		IB	PV	SA	SE	SI	SP	QI
Impulsive Buying (IB)	0.849							
Perceived Value (PV)	0.901	0.625						
Streamer Attractiveness (SA)	0.923	0.394	0.576					
Streamer's Experience (SE)	0.917	0.184	0.511	0.183				
Streamer's Interactivity (SI)	0.906	0.235	0.511	0.239	0.481			
Streamer's Popularity (SP)	0.917	0.356	0.651	0.475	0.282	0.255		
Streamer's Quality Information (QI)	0.905	0.388	0.681	0.422	0.312	0.265	0.504	

Based on the evaluation results presented in Table 2, all variables exhibited Average Variance Extracted (AVE) values well above the threshold of 0.50 ([Hair et al., 2022](#)). This indicates that each variable demonstrated strong convergent validity, meaning that the measurement items within each variable were positively correlated and were able to effectively measure the intended construct. The Streamer's Attractiveness variable showed the highest level of convergent validity, with an AVE value of 0.923. Meanwhile, the lowest convergent validity was found for the Impulsive Buying variable (0.849), although this value still remained well above the required threshold. Hence, the assessment of validity of the research instrument was continued for further the evaluation.

The results of the discriminant validity evaluation are also presented in Table 2. In line with the guidelines proposed by [Hair et al. \(2022\)](#), the assessment of discriminant validity was conducted using the Heterotrait–Monotrait Ratio (HTMT) matrix. The results shown in Table 3 indicate that all HTMT values among variables were below the threshold of 0.85 ([Hair et al., 2022](#)). This suggests that discriminant validity among the constructs was adequate. In other words, the constructs in this research model were conceptually distinct and could be clearly differentiated from one another. Furthermore, [Hair et al. \(2022\)](#) recommends using HTMT only, as it has been shown to be more reliable in

evaluating discriminant validity compared with the other metrics.

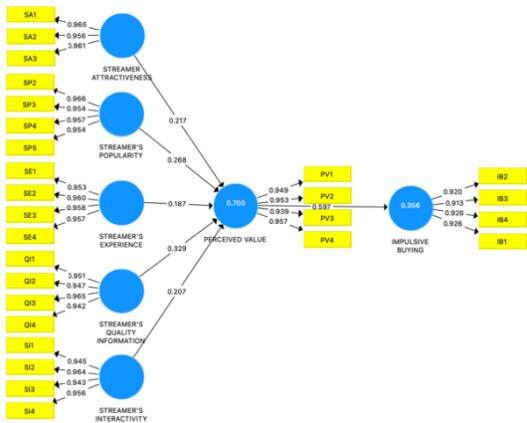


Figure 2. Full-Model (Loading Factor)

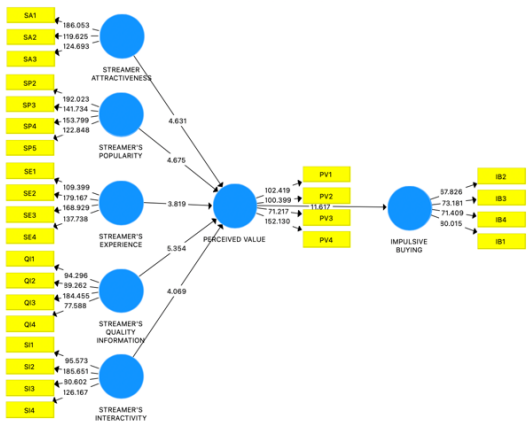


Figure 3. Full-Model (Path Coefficient)

Structural Model Evaluation

The next step was to conduct the structural model evaluation. [Hair et al. \(2022\)](#) explain that structural model evaluation includes the analysis of the coefficient of determination, collinearity, effect size, predictive relevance, and hypothesis testing.

Tabel 3. The Result of Coefficient Determination

Variabel	R ²	R ² Adjusted
Impulsive Buying	0.356	0.353
Perceived Value	0.700	0.693

As shown in Table 3, the test results reveal that the Perceived Value variable has an Adjusted R² value of 0.693, meaning that 69.3% of the variance in perceived value can be reliably explained by the streamer attributes examined in this study, this value falls into the substantial category ([Chin, 1998](#)) while the remaining 30.7% is explained by other factors not included in the model. Meanwhile, the Impulsive Buying variable has an Adjusted R² value of 0.353, indicating that the model explains only 35.3% of the variance in impulsive buying behavior, which falls into the

moderate category ([Chin, 1998](#)). The remaining 64.7% is explained by other factors not investigated in this study. Hence, future model needs to consider other independent variables that would make a substantive contribution in understanding the live-stream phenomenon.

Furthermore, as to ensure the predictive accuracy of the research model, the PLSpredict evaluation was conducted by comparing the Mean Absolute Error (MAE) values between the PLS model and the Linear Model (LM). The majority of indicators for the Impulsive Buying variable (IB2, IB4, and IB1) and the Perceived Value variable (PV3 and PV2) have lower MAE values in the PLS model than in the LM model. In accordance with the criteria proposed by [Shmueli et al. \(2019\)](#) and [Hair et al. \(2022\)](#), this pattern, in which most indicators exhibit smaller prediction errors in PLS-SEM than in a naïve linear regression model, indicates that the research model has medium predictive power. These findings suggest that the structural model developed in this study is not only theoretically relevant but also possesses adequate capability for out-of-sample prediction, which is a crucial aspect in ensuring the practical relevance of research in the field of live streaming commerce.

Tabel 5. The Result of Collinearity Statistics (VIF), Effect Size (f²), dan Hypothesis

Hypothesis		VIF	f ²	(O)	T Stats	P Value	Result
H1	Streamer Attractiveness → Perceived Value	1.355	0.116	0.217	4.599	0.000	Accepted
H2	Streamer's Popularity → Perceived Value	1.500	0.159	0.268	4.548	0.000	Accepted
H3	Streamer's Experience → Perceived Value	1.353	0.086	0.187	3.948	0.000	Accepted
H4	Streamer's Quality Information → Perceived Value	1.448	0.249	0.329	5.720	0.000	Accepted
H5	Streamer's Interactivity → Perceived Value	1.327	0.108	0.207	3.795	0.000	Accepted
H6	Perceived Value → Impulsive Buying	1.000	0.552	0.597	9.992	0.000	Accepted

The evaluation of statistical collinearity aims to ensure that there is no estimation bias caused by excessive correlation among predictor variables ([Hair et al., 2022](#)). Based on the data processing results presented in Table 5, the Variance Inflation Factor (VIF) values for all relationships among constructs ranged from 1.000 to 1.500. These findings confirm that the research model is free from multicollinearity issues, as all values are well below the conservative threshold of 3.3 recommended by Kock (2015) as well as the tolerance limit of 5.0 suggested by [Hair et al. \(2022\)](#). Thus, the stability of the path coefficients in this model is assured, meaning that each

independent variable makes a unique and valid contribution to explaining the endogenous variable without conceptual overlap that could compromise predictive accuracy.

Furthermore, Table 5 also presents the results of the effect size (f²) analysis. The relationship between Perceived Value and Impulsive Buying yielded an f² value of 0.552, which indicates a large effect according to [Cohen's \(1988\)](#) criteria. On the other hand, Streamer's Quality Information contributed to Perceived Value at a moderate effect level, with an f² value of 0.249, while at the same time emerging as the strongest determinant of perceived value. This

was followed by other attributes, including Streamer's Popularity ($f^2 = 0.159$), Streamer's Attractiveness ($f^2 = 0.116$), Streamer's Interactivity ($f^2 = 0.108$), and Streamer's Experience ($f^2 = 0.086$), all of which indicate that perceived value and the quality of information represent the most substantive drivers in stimulating impulsive behavior.

Table 5 presents the results of the hypothesis testing, showing that all path relationships (H1 to H6) demonstrated very strong statistical significance, with p-values of 0.000. Therefore, all hypotheses in this study were supported. The path coefficients (O) reveal that Perceived Value was the most dominant predictor of Impulsive Buying, with an original sample value of 0.597. Meanwhile, in explaining Perceived Value, Streamer's Quality Information was found to be the strongest determining factor (0.329), followed sequentially by Streamer's Popularity, Streamer's Attractiveness, Streamer's Interactivity, and Streamer's Experience. These findings provide robust empirical evidence that the integration of the streamer's personal and characteristics effectively builds perceived value, which stimulates impulsive purchasing decisions within the live streaming commerce ecosystem.

Discussion

The results of the hypothesis testing provide empirical evidence that all streamer characteristics examined in this study significantly influence Perceived Value, which subsequently affects Impulsive Buying Behavior. In the S-O-R framework, these findings indicate that streamer-related attributes function as external stimuli that shape viewers' internal evaluation before generating behavioral responses in the form of spontaneous purchasing decisions.

The results of the first hypothesis test (H1) empirically confirm that the more attractive the streamer's physical appearance and personal characteristics are, the higher the perceived value experienced by viewers. This finding is consistent with the studies of [Xu et al. \(2020\)](#) and [Huang et al. \(2024\)](#), which highlight the role of sensory stimulation in enhancing viewers' hedonic value. This result is also reflected in the strongest indicator of the Streamer's Attractiveness variable, namely SA1, which addresses viewers' preference for the streamer's personal appearance. However, when viewed based on the effect size, Streamer's Attractiveness does not appear to be the strongest determinant of Perceived Value. This suggests that although attractiveness can serve as an initial appeal in live shopping sessions, viewers still require other forms of value, particularly product-related information, before evaluating a live shopping session as beneficial.

Furthermore, the results of the second hypothesis test (H2) confirm that Streamer's

Popularity has a positive and significant effect on Perceived Value. This finding is consistent with [Nguyen et al. \(2025\)](#) and [Lee & Chen \(2021\)](#), who explain that popularity can serve as a signal of credibility in digital commerce. The strongest indicator of this construct, SP2, shows that viewers' perception that many people like the streamer contributes to the formation of perceived value. In the context of live shopping, popularity may strengthen viewers' confidence in the shopping session because popular streamers are often perceived as having stronger public recognition and social acceptance. Nevertheless, this finding should be interpreted as evidence of perceived social validation rather than as a direct indication of psychological pressure such as FOMO. Based on its effect size, Streamer's Popularity contributes more strongly than Attractiveness, Experience, and Interactivity, indicating that public recognition is an important component in shaping consumer value evaluation.

The statistical testing results for the third hypothesis (H3) empirically confirm that Streamer's Experience positively influences Perceived Value. This finding is consistent with [Ladhari et al. \(2020\)](#) and [Cankül et al. \(2024\)](#), which position seller experience as an important signal of competence in online shopping contexts. The strongest indicator of this construct, SE2, shows that viewers evaluate the streamer's experience in conducting live shopping sales as an important aspect of the shopping session. However, the effect size of Streamer's Experience is relatively lower than Popularity and Quality Information. This indicates that experience contributes to perceived value, but its influence becomes more meaningful when supported by other attributes, such as the ability to deliver clear information and create credibility during the live shopping session.

The results of the fourth hypothesis test (H4) show that Streamer's Quality Information has the strongest effect on Perceived Value among all streamer characteristics. This finding is in line with [Sharma and Fatima \(2024\)](#) and [Xu et al. \(2020\)](#), which emphasize the role of information in reducing uncertainty and perceived risk in online shopping. The strongest indicator, QI3, shows that the streamer's ability to help viewers understand the product more thoroughly is a key factor in shaping perceived value. This result indicates that viewers do not only respond to entertainment or personal appeal, but also evaluate whether the information delivered during the live session helps them understand product benefits, features, and suitability. Therefore, information quality becomes the most substantive stimulus in forming perceived value in live shopping.

The results of the fifth hypothesis test (H5) also confirm that Streamer's Interactivity has a

positive and significant effect on Perceived Value. This finding is consistent with [Huang et al. \(2024\)](#) and [Chen and Yang \(2023\)](#), who explain that viewer engagement can create a more immersive and participatory shopping experience. The strongest indicator of this construct, SI2, reflects viewers' ability to participate and leave comments effectively during the live shopping session. However, the effect size of Interactivity is lower than Quality Information and Popularity. This suggests that interaction is important in creating comfort and engagement, but it functions more as a supporting mechanism rather than the main determinant of perceived value. In other words, responsive communication can enhance the shopping experience, but it needs to be accompanied by credible information and clear product value to create stronger consumer evaluation.

Finally, the results of the sixth hypothesis test (H6) empirically confirm that Perceived Value has a positive and significant effect on Impulsive Buying Behavior. This finding is in line with [Chen and Yang \(2023\)](#) and [Xu et al. \(2020\)](#), which emphasize that value evaluation plays an important role in shaping impulsive shopping decisions. The strongest indicator of Perceived Value, namely PV4, indicates that viewers' overall evaluation of the live shopping session becomes an important basis for spontaneous purchasing. This relationship is also reflected in the Impulsive Buying indicators IB1 and IB4, which show unplanned purchases and purchases exceeding actual needs. Thus, impulsive buying in live shopping is not only driven by emotional stimulation, but also by a rapid evaluation of perceived benefits, including information, price consideration, convenience, and entertainment value.

From a theoretical perspective, this study contributes to the digital marketing literature by extending the application of the S-O-R theory proposed by [Mehrabian and Russell \(1974\)](#) in the context of live shopping. This study enriches the Stimulus dimension by decomposing streamer characteristics into five dimensions, namely Attractiveness, Popularity, Experience, Quality Information, and Interactivity. In addition, this study positions Perceived Value as the Organism mechanism that connects streamer-related stimuli with Impulsive Buying Behavior. This finding provides a more comprehensive explanation because perceived value reflects both utilitarian aspects, such as information quality and shopping benefits, and hedonic aspects, such as attractiveness and interactive experience.

The results also show that not all streamer characteristics contribute equally to perceived value. Streamer's Quality Information emerges as the strongest determinant, followed by Popularity, Attractiveness, Interactivity, and Experience. This

finding indicates that, in live shopping, consumers do not merely rely on the streamer's personal appeal, but also evaluate the usefulness and credibility of the information provided during the session. Therefore, the findings strengthen the argument that impulsive buying in live shopping can occur through a rapid value evaluation process, rather than through emotional reaction alone.

From a managerial perspective, the findings suggest that streamers and brands should prioritize informational substance in live shopping sessions. Since Streamer's Quality Information has the strongest effect on Perceived Value, live shopping strategies should emphasize accurate, complete, and understandable product explanations. Streamers should not only focus on appearance or entertainment, but also demonstrate product functions, explain product benefits, and respond to viewers' questions clearly. At the same time, popularity and interactivity can be used to strengthen social credibility and audience engagement. By combining clear information, credible presentation, and interactive communication, live shopping sessions may create stronger perceived value and increase the likelihood of impulsive buying behavior.

CONCLUSION AND RECOMMENDATION

This study confirms the relevance of the Stimulus–Organism–Response (S-O-R) framework in explaining impulsive buying behavior within the TikTok Live Shopping ecosystem. The findings indicate that streamer characteristics, including attractiveness, popularity, experience, quality information, and interactivity, function as important external stimuli that shape viewers' perceived value. Perceived value then serves as a central internal mechanism that connects these streamer-related stimuli with impulsive buying behavior. Theoretically, this study contributes to the digital marketing and live commerce literature by positioning perceived value as a comprehensive organism mechanism in the S-O-R model. This perspective shows that impulsive buying in live shopping is not merely driven by emotional appeal or entertainment, but also by consumers' rapid evaluation of the benefits, credibility, information, and overall value offered during the live shopping session.

Practically, the findings suggest that streamers and brands should not rely solely on popularity or visual appeal, but should also strengthen product information quality, credibility, and interactive communication to create stronger perceived value among viewers. This study has several limitations. The respondents were dominated by younger consumers, so the findings should be generalized

cautiously to broader demographic groups. In addition, the model used in this study does not capture all possible factors that may influence impulsive buying behavior in live shopping. Future research is therefore recommended to involve more diverse respondent groups and examine additional variables such as scarcity messages, price promotions, platform trust, product type, or consumer financial condition. These variables may provide a more comprehensive understanding of how impulsive buying behavior is formed in live shopping environments.

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