

Increase Sales with Influencers and Word of Mouth: a Live Streaming Study on Cosmetics and Fashion Products at Shopee Batam Customers

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Abstract

This study tries to determine the impact of influencers and word of mouth on purchasing decisions with live streaming as a moderating variable on cosmetic and fashion products. This study uses the population of Batam City People who have used the Shopee application. This quantitative research uses the path analysis method as the data analysis technique. Data collection will be done by distributing questionnaires to the Batam City community. Using the Lemeshow formula, 150 respondents were obtained in Batam City. The research findings show that influencers have a positive and significant effect on purchasing decisions on cosmetic and fashion products, word of mouth has a positive and significant impact on buying decisions on cosmetic and fashion products, live streaming as a moderating variable weakens the influence of influencers on purchasing decisions on cosmetic and fashion products, and live streaming as a moderating variable strengthens the impact of word of mouth on buying decisions on cosmetic and fashion products

Keywords: Influencer, Word of Mouth, Live Streaming, Purchase Decision

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INTRODUCTION

One of the most influential technological developments today is the use of e-commerce. E-commerce is an online platform based on digital business; users can do it online. One of them is the user of the Shopee application (Waluyo & Trishananto, 2022). One vital strategy to increase purchases is to promote through an influencer. Influencers are experts in promoting products through their video content. They share their expertise through social media such as Instagram, YouTube, and TikTok because they have a large and active fan base. They also promote businesses and products through social media (Taftazani Hilbram Alhilal, 2023). Not only influencers but also word of mouth can influence consumer purchases.

The Word of Mouth Marketing Association (WOMMA) defines word-of-mouth marketing as a consumer activity informing other buyers about a particular product label. Without realizing it, customers who have previously purchased or used a product are entitled to promotions from one merchant to another when interacting with others. This word of mouth has nothing to do with business. In other words, word of mouth refers to direct communication between consumers (Julianti & Junaidi, 2020).

In addition to applying word of mouth, live streaming also plays a role in increasing sales. Manufacturers need to pay attention to the sales strategy. One of the essential parts of the buying process in e-commerce is building customer trust because social media cannot display products and store environments like traditional stores. With live streaming, businesses can directly answer potential customers' questions and communicate (Saputra & Fadhilah, 2022).

Consumer behavior studies how individuals, communities, or organizations determine what to acquire, how to use, and how to satisfy their wants and urges (Kotler & Armstrong, 2018). The purchase decision is one of the components of this field. Goods/Services Widely Sold on E-commerce 2016, 25, 15, 04, 15, 10, 0, 5, 6, 85, 2021 KOSMETIK 5,37, 2022 FASHION

Statistik E-commerce 2021 & 2022 shows that, sales through e-commerce for cosmetic products reached 6.85% in 2021, while sales of fashion products reached 16.25%. In 2022, sales of cosmetic products are estimated to have reached 5.37%, while sales of fashion items are estimated to have reached 15.04%. It can be observed that there was a decline in 2021 and 2022. This research is also motivated by gap theory, a gap from previous research. Several researchers examined influencers. Research by Waluyo & Trishananto (2022), indicates that influencers significantly and positively affect the online sales process in e-commerce stores. However, research by Purwanto & Sahetapy (2022), indicates that although influential endorsers have an influence, it is not statistically significant in purchase intention for specific products. According to research by Sabita & Mardalis (2023), word of mouth significantly impacts consumers' desire to buy safe products. Furthermore, research by Anisa et al., (2022), shows that word of mouth hurts millennial consumers' intention to buy on TikTok Shop live streaming. Despite the rise of influencer marketing, live streaming introduces a dynamic element in e-commerce, allowing businesses to engage directly with consumers. However, the effectiveness of live streaming as a moderating variable remains unclear. While previous studies confirm that influencers can drive sales (Waluyo & Trishananto, 2022), conflicting research suggests their influence may not always be statistically significant (Purwanto & Sahetapy, 2022). Similarly, while word-of-mouth is generally positive for sales (Sabita & Mardalis, 2023), its effectiveness through live streaming remains underexplored (Anisa et al., 2022). This study aims to fill this theoretical gap by investigating the moderating role of live streaming on influencers and word-of-mouth in purchasing decisions.

RESEARCH METHOD

This research applies a quantitative approach relevant to my research objectives to test the relationship between the independent and dependent variables. The path analysis method determines direct and indirect effects, and the data is processed using the SmartPLS3 application (Sugiyono, 2022). According to Hardisman (2021), the partial least square is a statistical method that simultaneously analyses independent and dependent variables. Data

collection is obtained from questionnaires in data collection—Batam people who have used the Shopee application, which is the topic of this research. This study uses influencer variables (X1) and word of mouth (X2) as dependent variables, live streaming (Z) as a moderating variable, and purchasing decisions (Y) as independent variables.

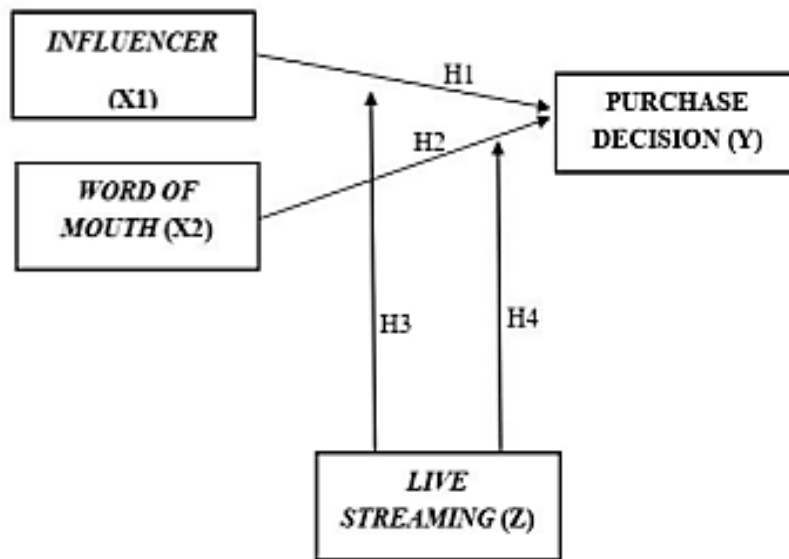


Figure 1. Conceptual Framework

The influence of influencers on purchasing decisions Based on research from Rahmawaty (2024), The study on the impact of customer reviews, influencers, and price on purchasing decisions for Something Serum on the Shopee e-commerce platform concludes that influencers positively and significantly affect buying decisions.

H1: "The influence of influencers has a positive and significant influence on online cosmetics and fashion in the Batam City Community".

The effect of word of mouth on purchasing decisions Based on research from Nur & Octavia (2022) on "The effect of electronic word of mouth on purchasing decisions with consumer confidence as mediation in the Shopee marketplace in Jambi city," the analysis concluded that electronic word of mouth has a positive and significant impact on purchasing decisions.

H2: "The influence of word of mouth has a positive and significant influence on purchasing decisions for online cosmetic and fashion products in the Batam City Community".

The influence of live streaming weakens the impact of influencers on purchasing decisions at Shopee This hypothesis is generated from the influence of the independent and dependent variables. In this study, the hypothesis is that live streaming weakens the variables that influence purchasing decisions. Therefore, the researcher proposes the third hypothesis, which is as follows.

H3: "The effect of live streaming as a moderating variable weakens the relationship between influencer influence and has a positive but insignificant effect on purchasing decisions for online cosmetics and fashion products in the Batam City Community".

The effect of live streaming strengthens the influence of word of mouth on purchasing decisions at Shopee Based on research from Anisa et al., (2022) on "The effect of word of mouth about TikTok Shop live streaming on consumer purchasing decisions," this study assumes that live streaming is believed to increase the influence of word-of-mouth variables on purchasing decisions. Therefore, the researcher makes the fourth hypothesis.

H4: The effect of live streaming as a moderating variable strengthens the word-of-mouth relationship and positively and significantly impacts online purchasing decisions.

RESULTS AND DISCUSSION

Evaluation of The Measurement Model (Outer Model) The Measurement Model Evaluation (outer model) is used to evaluate the validity and reliability of the model.

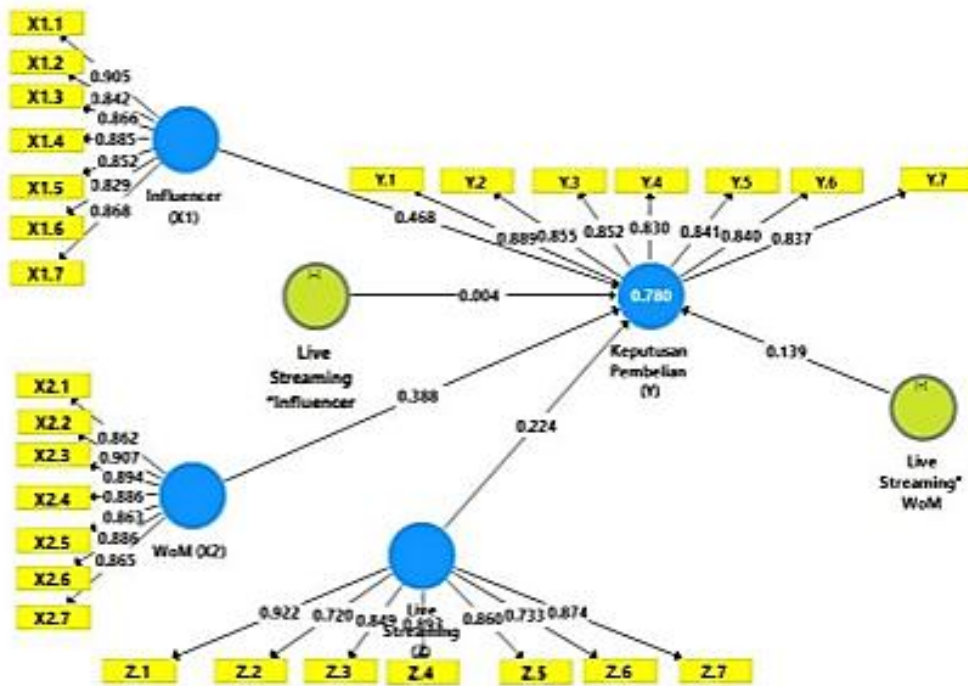


Figure 2. Structural Model

Figure 2 above shows that no data has a loading factor below 0.70. This shows that all indicators are valid and ideal for measuring latent constructs; therefore, this data can be processed for the next stage.

Convergent Validity

Convergent validity measures the validity of each predictor on a composite score. The validity indicator is calculated by the magnitude of the loading factor of each predictor on the latent variable. If the loading factor value is > 0.7, the predictor or item is considered valid in confirmatory research, namely, in research that has conducted an initial test of the previous research instrument (Hardisman, 2021).

Table 1. Loading Factor Value

Variable	Indicator	Loading Factor
Influencer (X1)	X1.1	0.905
	X1.2	0.842
	X1.3	0.866
	X1.4	0.885
	X1.5	0.852
	X1.6	0.829
	X1.7	0.868
Word of Mouth (X2)	X2.1	0.862
	X2.2	0.907
	X2.3	0.894
	X2.4	0.886
	X2.5	0.863
	X2.6	0.886
	X2.7	0.865

Variable	Indicator	Loading Factor
Live Streaming (Z)	Z.1	0.922
	Z.2	0.720
	Z.3	0.849
	Z.4	0.893
	Z.5	0.860
	Z.6	0.733
	Z.7	0.874
	ZX1Y	0.866
	ZX2Y	0.922
Purchase Decision (Y)	Y.1	0.889
	Y.2	0.855
	Y.3	0.852
	Y.4	0.830
	Y.5	0.841
	Y.6	0.840
	Y.7	0.837

All loading factor values on the indicators in each instrument in the Cosmetics and Fashion cross-loading table above are more than 0.7, and their validity is recognized.

Average Variance Extracted (AVE)

One of the structural validity tests is AVE. A construction is considered valid if the AVE value is > 0.5. Convergent validity can be determined using an AVE value > 0.5.

Table 2. Average Variance Extracted(AVE)

Variable	AVE	Cut Off	Ket
Influencer (X1)	0.75	0.5	Valid
Word of Mouth (X2)	0.78	0.5	Valid
Live Streaming (Z)	0.70	0.5	Valid
Purchase Decision (Y)	0.72	0.5	Valid
Live Streaming * Influencer (Z*X1)	1000	0.5	Valid
Live Streaming * Word of Mouth (Z*X2)	1000	0.5	Valid

The AVE value for each construct, namely influencer = 0.746; wom = 0.775; live streaming = 0.704; purchase decision = 0.722; ls* Influencer = 1000 and ls* Wom = 1000, already has a value > 0.50, which means that the six constructs are categorized as valid.

Discriminant Validity

According to Hardisman (2021), discriminant validity predictors are evaluated by looking at how they relate to other variations. Predictors are considered valid if the cross-loading value is > 0.7 or when the cross-loading value for the hidden variable itself is higher than that of different variables. In addition, the HTMT criterion, according to Hair Jr. Joseph F et al., (2021), proposes that the constructed boundary is said to be valid if the HTMT value is < 0.90. The discriminant validity value is invalid or non-existent if it is above that. The Heterotrait-Monotrait Ratio (HTMT) value for the above variables is said to be fulfilled or valid because the HTMT value is above

Table 3. Composite Reliability and Cronbach Alpha

Variable	X1	Y	Z	Z*X1	Z*X2
Influencer (X1)					
Word of Mouth (X2)	0.619	0.798	0.409	0.057	0.043
Purchase Decision (Y)	0.826				
Live Streaming (Z)	0.390	0.529			
Live Streaming * Influencer (Z*X1)	0.147	0.073	0.289		
Live Streaming * WoM (Z*X2)	0.079	0.055	0.343	0.543	

Reliabilities

Evaluation of The Measurement Model (Inner Model)

Inner model analysis is a step used to test the model or hypothesis. The leading indicators assessed in structural analysis or hypothesis testing are R-squared value (R²) and significance (T and P). In addition, F square (F²) and Q² can also be evaluated (Garson, 2016; Ghazali and Luthan, 2015; Hair, et al., 2017; Wong in (Hardisman, 2021).

R-Square

According to Hardisman (2021), the R-square value of SmartPLS is obtained along with the validity and reliability analysis (outer model). An R-square value exceeding 0.75 suggests a robust model, while a value between 0.50 to 0.75 indicates a moderate model and a value from above 0.25 to 0.50 suggests a weak model.

Variance Inflation Factor (VIF)

According to David Garson G 2016), multicollinearity is a situation where two or more independent variables or exogenous constructs have a strong correlation, which makes the model power low. Statistics often show the presence of multicollinearity if the VIF Value < 5 because if > 5 indicates there is collinearity between constructs.

Table 4. Variance Inflation Factor (VIF)

Variable	Y
Influencer (X1)	1,757
Word of Mouth (X2)	1,689
Purchase Decision (Y)	
Live Streaming (Z)	1,477
Live Streaming * Influencer (Z*X1)	1,598
Live Streaming * WoM (Z*X2)	1,540

Before hypothesis testing, the inner VIF is examined. The VIF table above shows that the VIF Value for influencer variables, women, and live-streaming moderation variables is below 5, so the level of multicollinearity is low.

F-Square

According to Hardisman (2021), the f-square value is an additional analysis used to assess the strength of the influence of exogenous variables and endogenous variables. It is calculated concurrently with the PLS algorithm. Based on the F-square value, the influence strength can be categorized as follows:

- F-Square value < 0.02: no effect
- F-Square value < 0.02 - < 0.15 : small effect
- F-Square value < 0.15 - < 0.35: medium effect
- F-Square value > 0.35: large effect

Based on the moderation test F-Square, it is known that: The effect of live streaming variables in moderating the influence of influencers on purchasing decisions has an F-Square value of 0.000 (no effect).

Table 5. F-Square

Variabel	Y
Influencer (X1)	0,566
Word of Mouth (X2)	0,405
Purchase Decision (Y)	
Live Streaming (Z)	0,154
Live Streaming * Influencer (Z*X1)	0,000
Live Streaming * WoM (Z*X2)	0,049

Path Coefficient

Based on the moderation test F-Square, it is known that: The effect of live streaming variables in moderating the influence of influencers on purchasing decisions has an F-Square value of 0.000 (no effect).

Table 6. Path Coefficients

Variable	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Influencer (X1) → Keputusan Pembelian (Y)	0.468	0.468	0.057	8.172	0.000
WoM (X2) → Keputusan Pembelian (Y)	0.388	0.385	0.071	5.433	0.000
Live Streaming (Z) * Influencer (X1) → Keputusan Pembelian (Y)	0.004	-0.001	0.055	0.071	0.472
Live Streaming (Z) * WoM (X2) → Keputusan Pembelian (Y)	0.139	0.135	0.065	2.154	0.016

The following explanation explains the influence between the independent and dependent variables:

1. Influencers have a positive and significant effect on purchasing decisions with an original sample value of 0.468 and a statistical T value of 8.172 > 1.96 (t-table) with a P-value level of 0.000 < 0.05 meeting the criteria for a significant Pvalue level which means the hypothesis is accepted. According to previous research by Rahmawaty (2024), influencers positively and significantly influence consumer purchasing decisions. Thus, influencers are significant in improving consumer purchasing decisions.
2. Word of Mouth positively and significantly impacts purchasing decisions with an original sample value of 0.388 and a statistical T value of 5.433 > 1.96 (t-table); the P-value meets the significance level criteria of 0.000 < 0.05. These values show that the hypothesis is accepted. This research is relevant to research Nur & Octavia (2022), which means that word of mouth significantly increases consumer purchasing decisions. The better a review, the higher the desire to make a purchase.
3. Live Streaming as a moderating variable weakens the influence of influencers on purchasing decisions with an original sample value of 0.004, T statistics because as much as 0.071 is lower than 1.96 (t-table) and P-value: 0.472 is higher than 0.05, namely the P-value above the reference value. This value shows that the hypothesis is rejected. Research conducted by Mada & Prabayanti (2024), shows that live-streaming shopping conducted by influencers has a positive and significant effect. Meanwhile, the research conducted in Batam City did not have a considerable positive impact.

4. Live Streaming as a moderating variable strengthens the effect of word of mouth on purchasing decisions with an original sample value of 0.139 and a statistical T value of 2.154 > from 1.96 (t-table) with a significant P-value level of 0.016 < 0.05, where the P-value is included in the considerable P-value criteria. These results show that the hypothesis is accepted. This research is in line with research (Anisa et al., 2022). This means that word of mouth significantly improves consumer purchasing decisions—the more positive recommendations from word of mouth, the more purchases consumers will make

CONCLUSION

This study aims to assess the impact of influencer variables and word of mouth on purchasing decisions, with live streaming as a moderating factor in cosmetics and fashion products. The research focuses on using cosmetics and fashion products in Batam City. Using the Path Analysis method and distributing questionnaires through online forms to 150 participants, the study draws several conclusions: Influencers significantly and positively affect purchasing decisions for cosmetics and fashion products. Word of Mouth also positively and significantly influences buying decisions for these products. Live Streaming as a moderator diminishes the impact of influencers on purchasing decisions but enhances the effect of word of mouth on buying decisions for cosmetics and fashion products.

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