

## **The Analysis of Factors Driving Consumer Engagement and Purchase Intention in E-Commerce Live Streaming**

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**Abstract:** The rise of e-commerce has enabled consumers to shop anytime and anywhere, access extensive product descriptions, read reviews, compare a wide range of products and prices, and take advantage of offers. Moreover, interactive and personalized shopping experiences have become possible through the latest innovation in e-commerce: live streaming. E-commerce live streaming allows real-time interaction with sellers, combining engagement and convenience, which is highly favored among consumers in Indonesia. One of the main factors influencing the selection of live streaming platforms is the promotional offers provided, as most shopping behaviors are driven by attractive offers. In addition to promotions, the presence of hosts and their interactivity in leading live streaming sessions play a crucial role. Hosts ability to interact with viewers, present informative content, and provide personalized recommendations effectively enhances consumer engagement and purchase intention. However, many local businesses, particularly SMEs, suffer losses due to ineffective host and promotional strategies during live streaming sessions that fail to attract consumers. Therefore, this research aims to provide valuable insights for optimizing live streaming strategies, helping hosts develop more effective approaches and strategies to drive sales in a competitive market. This study focuses on analyzing which host gender, host interactivity, and promotions are more effective strategies in driving higher consumer engagement and purchase intention. The research examines 864 live stream sessions from the three most used and favored e-commerce live streaming platforms in Indonesia: Shopee Live, TikTok Live, and Tokopedia Play. This research applied a descriptive research design with an observational method. The data was analyzed using Descriptive Analysis, Chi-Square Test, Post Hoc Test, and Correlation Analysis through SPSS. The results indicate that host interactivity and promotion are significantly associated with consumer engagement and purchase intention, while host gender does not show a significant association. Moreover, female hosts, responsiveness in interactivity, and flash sales as a promotional strategy appear to be more effective in achieving higher consumer engagement and purchase intention compared to others across all e-commerce live streaming platforms. Shopee Live also emerges as the e-commerce live streaming platform that generates the highest consumer engagement and purchase intention compared to other platforms. The correlation analysis reveals a strong positive relationship between consumer engagement and purchase intention, indicating that higher levels of consumer engagement are associated with higher purchase intentions. These findings highlight the importance of attractive host and promotional strategies in live streaming to maximize consumer engagement and purchase intention in the competitive landscape of e-commerce live streaming.

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## INTRODUCTION

The rapid growth of e-commerce in Indonesia has been remarkable, positioning the country as one of the largest e-commerce markets in Southeast Asia. In 2022, Indonesia led the ASEAN countries in e-commerce business revenue, amounting to USD 51.9 billion. According to the (International Trade Administration, 2024), the market size of Indonesia's e-commerce is expected to grow from USD 52.93 billion in 2023 to an impressive USD 86.81 billion by 2028. One of the critical drivers behind this rapid and sustained growth is a significant increase of internet penetration rates in Indonesia over the years. As per a report by The Indonesian Internet Service Providers Association, internet penetration in Indonesia has risen from 78.1 percent in 2023 to 79.5 percent in 2024, enabling a larger amount of the population to access the internet (Mordor Intelligence, 2024). This increase in internet access has naturally led to a rise in online transactions, making online shopping increasingly popular and shifting consumers behavior towards e-commerce.

According to Snapcart, Indonesia has four major e-commerce players, which are Shopee, Tokopedia, TikTok Shop, and Lazada. In the first half of 2023, Snapcart conducted a survey of 1,000 respondents aged 20 to 35 years, spread across various areas in Indonesia, to examine the competitive landscape among these four online shopping platforms. Based on the Brand Use Most Often (BUMO) indicator, 61% of respondents chose Shopee as their most frequently used brand, followed by Tokopedia (22%), TikTok Shop (9%), and Lazada (7%). In terms of the Top of Mind (TOM) indicator, Shopee led with 70%, followed by Tokopedia (22%), TikTok Shop (5%), and Lazada (2%). Regarding the share of order indicator, Shopee achieved the highest market share of transactions in the past three months at 51%, with Tokopedia (22%), TikTok Shop (11%), and Lazada (8%) following. For the share of transaction value indicator, Shopee again ranked first with the largest market share at 46%, followed by Tokopedia (26%), TikTok Shop (10%), and Lazada (7%). These results clearly indicate that Shopee dominates the e-commerce market across all four indicators, quite far surpassing other brands, while Tokopedia and TikTok Shop follow in second and third place, respectively (Snapcart, 2023).

The presence of various e-commerce platforms, as well as its development, have significantly contributed to the popularity of online shopping in Indonesia and increased consumers' online shopping habits. Rakuten Insight's data in 2023 reveals the online shopping habits of Indonesian consumers are exceptionally high, a trend that is far from coincidental, where several critical factors are believed to significantly drive the substantial growth of online shopping in the country.

According to recent research, consumers prefer online shopping primarily due to its convenience and personalized experience. The rise of e-commerce allows consumers to shop anytime and anywhere, access extensive product description, read reviews, compare a wide range of products and prices, and also take advantage of offers and discounts (Thakkar & Prachi, 2024). Furthermore, consumers can experience interactive and personalized shopping through the latest development in e-commerce: live streaming. As it is considered as the newest trend, live streaming provides a new channel, new way and new experience for online shopping (Geng et al., 2020).

This ground-breaking innovation brings out the ability to interact with sellers in real-time, where consumers typically ask for requests, suggestions, or personalized recommendations

through a live chat section, and the salesperson will respond, demonstrate and provide detailed information of the products directly to consumers who inquire (Zhang et al, 2020). This approach combines interaction and convenience of online shopping and appears to be highly favored among consumers in Indonesia. This is supported by a survey from Snapcart (2022) to 6.756 respondents as shown in Figure 1.2, which indicates that 57% of Indonesian consumers engage in live streaming through e-commerce platforms, making it the most popular medium for live streaming compared to social media (33%) and television (10%).

Among the various e-commerce platforms in Indonesia, there must be one platform that stands out as the most preferred and frequently used by Indonesian consumers to watch live stream shopping. Based on a survey conducted by Populix (2023) towards 506 men and women aged 17-45 in May, Shopee Live is chosen as the most used live streaming feature in Indonesia, with 69% of respondents. This number surpasses other e-commerce's live streaming features, which are TikTok Live (25%), Tokopedia Play (4%), and LazLive (2%). One of the main factors influencing the selection of live streaming platforms is the promotional offers provided by each e-commerce. It is undeniable that most shopping behaviors are still driven by the search for promotion or attractive offers whether offline, online, or through live stream shopping. According to the same survey, the most appealing promotions to the respondents are free shipping (91%), discounts (87%), cashback (65%), shopping vouchers (47%), special bundles (34%), and exclusive product launches (20%). Shopee Live stands out as the live streaming feature offering the lowest prices, the most promotions and free shipping, and the largest discounts and cashback incentives. This has once again positioned Shopee Live as the most favored live streaming platform, surpassing its competitors with a preference rate of 66%, compared to TikTok Live at 28%, Tokopedia Play at 3%, and LazLive at 3% (Putri, 2023). These findings highlight the importance of attractive promotional strategies in enhancing consumers preference in the competitive landscape of e-commerce live streaming.

In addition to promotions, the presence of hosts and their interactivity in leading live streaming sessions also play a big role in attracting consumers to engage and make purchases. According to Wongkitrungrueng & Assarut (2020), hosts significantly influence the success of live streaming e-commerce by creating a more engaging shopping experience. Their ability to interact with viewers, present informative content, and provide personalized recommendations are very effective to enhance consumer engagement. Another study by Hartono et al. (2023) states that strategies employed by hosts in live streaming, such as interactivity, informativeness, and personalization, are also critical for driving consumer engagement.

Live streaming that is executed with the right strategies also offers significant benefits for sellers, especially local brands and SMEs. A study by Cheng et al. (2019) established a causal relationship between adopting live streaming strategies and online sales. The results indicated a 21.8% increase in online sales after implementing live streaming. This is supported by a survey conducted by IPSOS (2023), titled "Tren Live Streaming E-commerce bagi Penjual," involved respondents, primarily local brand owners and SMEs in Indonesia, who utilized various live streaming features in marketplaces. The survey results revealed that live streaming platforms led to a 73% increase in revenue, a 68% expansion in market reach, a 64% reduction in promotional costs, and a 60% ease of real-time online customer interaction. Additionally, 59% feel more trusted by their customers, 49% feel safer during transactions with customers, and 37% perceive themselves as more competitive in the market.

The number of Indonesian local brands and SMEs involved in e-commerce has been steadily increasing over recent years. This growth is expected to accelerate further due to the

widespread adoption of the internet and smartphone in Indonesia. However, many businesses, particularly SMEs, continue to encounter significant challenges in optimizing digital platforms for business expansion. A survey conducted by INDEF (2024), which included 254 SME respondents in the Java Island area, identified three primary challenges: intense competition among businesses on digital platforms (96.46%), the impact of consumer feedback and suggestions on digital platforms on business reputation (96.07%), and the insufficient digital skills of the workforce (83.46%). This is further supported by a report from Boston Consulting Group (BCG) and Telkom Indonesia, which indicates that the majority of the 3,700 SMEs surveyed in Indonesia face challenges in maximizing e-commerce presence due to a lack of digital skills training (Ahdiat, 2022). CNBC Indonesia also conducted a survey in 2022 that highlighted further challenges for SMEs in live streaming on e-commerce platforms. The survey results revealed that 25% of SMEs suffered losses due to ineffective host and promotional strategies during live streaming sessions, which failed to attract consumers (Adibah, 2023).

Moreover, based on the limitations of previous studies, significant gaps still remain. Prior research has focused on purchase intention (Chen et al., 2022; Gao et al., 2021; Guo et al., 2022; Sun et al., 2019; Zhang et al., 2023), but has paid little attention to consumer engagement. There is still limited research exploring patterns and trends to determine which host strategies and promotions are most effective in driving higher consumer engagement and purchase intention within a single live streaming session. To the best of the researcher's knowledge, only a few studies have examined and compared different live streaming strategies across Indonesia's major e-commerce live streaming platforms: Shopee Live, TikTok Live, and Tokopedia Play. This gap in the literature indicates the need for a thorough analysis of how different host gender, interactivity, and promotions generate different impacts on consumer engagement and purchase intention. This research aims to provide valuable insights for optimizing live streaming strategies on e-commerce platforms, helping retailers, specifically hosts, to develop more effective strategies to drive sales in a competitive market through live streaming.

## **METHOD**

### **Research Flow and Design Overview**

This research focuses on understanding the effectiveness of various live streaming strategies on e-commerce platforms in Indonesia, with particular attention to host gender, interactivity, and promotional tactics. The study begins by identifying a key problem faced by Small and Medium Enterprises (SMEs) in Indonesia—losses resulting from ineffective promotional strategies during live streaming sessions. This issue is crucial as live streaming has become a prominent tool for online sales, yet many SMEs struggle to leverage it effectively.

To address this problem, the research aims to analyze patterns and trends in live streaming that influence consumer engagement and purchase intention. The study will provide insights into which host characteristics (such as gender and interactivity) and promotional strategies are most effective. A comprehensive literature review was conducted to build a theoretical foundation, leading to the formulation of hypotheses. Data collection is carried out using structured observational methods, which involve systematically recording behaviors and events during live streaming sessions on platforms such as Shopee Live, TikTok Live, and Tokopedia Play. The data collected will be analyzed using various statistical tests, including chi-square tests, post hoc tests, and correlation analysis. The results will then be discussed, leading to conclusions and recommendations aimed at enhancing the effectiveness of live streaming as a marketing tool for SMEs.

## **Research Design**

The research adopts a descriptive research design, which is essential for exploring and describing market characteristics, such as consumer behavior and the effectiveness of marketing strategies. As defined by Malhotra (2007), descriptive research is used to describe the characteristics of relevant groups, such as consumers and salespersons, and to determine the degree to which marketing variables are associated. This approach is particularly useful in this study as it allows for the examination of interactions between live stream hosts and viewers, as well as the assessment of promotional strategies' effectiveness in real-time.

The observational methods applied in this study are a key component of descriptive research. Unlike experimental methods, observational techniques do not involve manipulating the environment. Instead, they focus on documenting what naturally occurs during live streaming sessions. This approach ensures that the data collected reflects actual consumer behavior and host interactions, providing a reliable basis for analysis.

Descriptive research begins with the formulation of specific hypotheses, which guide the data collection process and ensure that the information gathered is relevant and well-defined. By using large, representative samples, this research aims to enhance the reliability of its findings, making them applicable to a broader context.

## **Observational Method**

The study employs a structured observational method to gather data from live streaming sessions on e-commerce platforms. This method involves systematic documentation of behavioral patterns, interactions, and events, which provides the necessary information for the research. According to Malhotra (2007), structured observation is an organized approach where the researcher specifies the behaviors to be observed and outlines the procedure and measurement criteria in advance.

The structured observational method is particularly valuable in this research due to the limited availability of studies that investigate consumer engagement and purchase intention in e-commerce live streams using this approach. Most previous research has relied on surveys, which depend on self-reported data (Guo et al., 2021; Chen et al., 2021; Sun et al., 2021). In contrast, observational methods allow researchers to capture real-time data on interactions and behaviors, such as host-to-viewer communication, promotional offers, and viewer engagement metrics like comments and purchase notifications. This approach leads to more accurate and reliable data, providing deeper insights into the factors driving consumer engagement and purchase intention.

## **Sampling Technique**

The study uses a work sampling technique to collect data. This technique involves conducting random observations at discrete time intervals, which can be either periodic or random, to record the activities being performed (Du et al., 2024). Observations were conducted on three major platforms: Shopee Live, TikTok Live, and Tokopedia Play. These platforms were selected based on their popularity, as identified by Populix (2023), which ranked them as the top three most favored and frequently used live streaming platforms in Indonesia.

To maintain effectiveness in capturing data, each live stream session was observed for a predetermined duration of 5 minutes. This duration is supported by existing research, such as Finkler et al. (1993), which indicated that shorter intervals between data collection points can enhance data accuracy. Additionally, research by Savaskan (2023) and Gandhi et al. (2023) suggested that a significant portion of consumer purchase decisions occurs within 3 to 5 minutes, making this timeframe particularly relevant for studying purchase intentions during live streams.

The sample size was determined by dividing the total minutes in a day (1440 minutes) by

the duration of each observation (5 minutes), resulting in 288 samples per platform. Over a 12-day observation period, a total of 864 live stream sessions were observed across the three platforms. The observation sessions were randomly selected from the “For You” page of each platform to ensure a representative and unbiased sample. Additionally, observations were distributed across different hours of the day using a random number table to avoid time-related biases and ensure that data collected reflects a diverse range of consumer behaviors throughout the day.

**Observation Design**

The observations were meticulously planned to avoid biases that could arise from the algorithms of the live streaming platforms. To achieve this, the researcher created new accounts on Shopee Live, TikTok Live, and Tokopedia Play for conducting the observations. This approach was based on findings by Boeker & Urman (2022) and Rodgers & Nguyen (2022), which highlighted how algorithmic influences can significantly distort content presentation to users, making it crucial to use fresh accounts for unbiased observations.

For each live stream session, the first six live streams that appeared on the “For You” page were randomly selected and observed for five minutes each. Data points captured during these observations included the day of the week, time of day, platform, brand, category, number of comments, average number of viewers, host gender, host interactivity, promotion type, consumer engagement, and purchase intention. These variables were then operationalized and coded for statistical analysis, ensuring consistency and clarity in how the data was categorized and interpreted.

**RESULTS AND DISCUSSION**

**Shopee Live**

*Table 1. Chi Square Test for Shopee Live*

Variable Pairs	Value	df	P-Value	Result
Host Interactivity > Consumer Engagement	190.185a	6	<.001	Significant Association
Host Interactivity > Purchase Intention	59.370a	6	<.001	Significant Association
Host Gender > Consumer Engagement	5.457a	3	0.141	Not Significant
Host Gender > Purchase Intention	4.056a	3	0.256	Not Significant
Promotion > Purchase Intention	37.540a	3	<.001	Significant Association

The Chi-Square Test results for Shopee Live, as illustrated in Table 4.2.1, reveal distinct patterns in the impact of host interactivity, host gender, and promotional strategies on consumer engagement and purchase intentions in Shopee Live. Significantly, host interactivity demonstrates a profound association with both consumer engagement ( $\chi^2 = 190.185$ ,  $df = 6$ ,  $p < .001$ ) and purchase intentions ( $\chi^2 = 59.370$ ,  $df = 6$ ,  $p < .001$ ). In contrast, host gender does not show a significant association with either consumer engagement ( $\chi^2 = 5.457$ ,  $df = 3$ ,  $p = .141$ ) or purchase intentions ( $\chi^2 = 4.056$ ,  $df = 3$ ,  $p = .256$ ). Promotion has significant association with purchase intention ( $\chi^2 = 37.540$ ,  $df = 3$ ,  $p < .001$ ).

## TikTok Live

Table 2. Chi Square Test for TikTok Live

Variable Pairs	Value	df	P-Value	Result
Host Interactivity > Consumer Engagement	69.504a	6	<.001	Significant Association
Host Interactivity > Purchase Intention	61.214a	6	<.001	Significant Association
Host Gender > Consumer Engagement	.768a	3	0.857	Not Significant
Host Gender > Purchase Intention	4.511a	3	0.211	Not Significant
Promotion > Purchase Intention	52.638a	3	<.001	Significant Association

The Chi-Square Test results for TikTok Live, as shown in Table 4.2.2, indicate significant statistical relationships in certain aspects of the live streaming sessions. The results show that host interactivity has a notable association with both consumer engagement ( $\chi^2 = 69.504a$ ,  $df = 6$ ,  $p < .001$ ) and purchase intention ( $\chi^2 = 61.214a$ ,  $df = 6$ ,  $p < .001$ ). Conversely, host gender does not show a statistically significant association with either consumer engagement ( $\chi^2 = .768a$ ,  $df = 3$ ,  $p = 0.857$ ) or purchase intention ( $\chi^2 = 4.511a$ ,  $df = 3$ ,  $p = 0.211$ ). Moreover, promotions are also shown to significantly associate with purchase intentions ( $\chi^2 = 52.638a$ ,  $df = 3$ ,  $p < .001$ ).

## Tokopedia Play

Table 3. Chi Square Test for Tokopedia Play

Variable Pairs	Value	df	P-Value	Result
Host Interactivity > Consumer Engagement	175.584a	6	<.001	Significant Association
Host Interactivity > Purchase Intention	35.535a	4	<.001	Significant Association
Host Gender > Consumer Engagement	1.645a	3	0.649	Not Significant
Host Gender > Purchase Intention	5.359a	2	0.069	Not Significant
Promotion > Purchase Intention	14.027a	2	<.001	Significant Association

The Chi-Square Test results for Tokopedia Play, as presented in Table 4.2.3, show significant associations in host interactivity with both consumer engagement ( $\chi^2 = 175.584$ ,  $df = 6$ ,  $p < .001$ ) and purchase intention ( $\chi^2 = 35.535$ ,  $df = 4$ ,  $p < .001$ ). In contrast, host gender does not exhibit a significant association with either consumer engagement ( $\chi^2 = 1.645$ ,  $df = 3$ ,  $p = 0.649$ ) or purchase intention ( $\chi^2 = 5.359$ ,  $df = 2$ ,  $p = 0.069$ ). In addition, promotional offers prove to be significantly associated with purchase intentions ( $\chi^2 = 14.027$ ,  $df = 2$ ,  $p < .001$ ).

## Correlation Analysis

Table 4. Correlation Analysis Result

Correlations		Consumer Engagement	Purchase Intention
Consumer Engagement	Pearson Correlation	1	.637**
	Sig. (2-tailed)		<.001
	N	864	864
Purchase Intention	Pearson Correlation	.637**	1
	Sig. (2-tailed)	<.001	
	N	864	864
	N	864	864

The correlation analysis presented at Table 4.4 examines the relationship between consumer engagement and purchase intention in live stream e-commerce. The Pearson correlation coefficient for this relationship is 0.637, indicating a strong positive correlation between the two variables. This suggests that higher consumer engagement is associated with higher purchase intentions. The significance value (Sig. (2-tailed)) is less than 0.001, which means the correlation is statistically significant at the 0.01 level (2-tailed). This result implies that as consumer engagement increases, purchase intention also tends to increase, reflecting a strong linear relationship. These findings highlight the importance of strategies that boost consumer engagement, as they are likely to lead to higher purchase intentions. This insight can guide live stream e-commerce platforms in optimizing their host interactivity and promotional strategies to maximize both engagement and purchase outcomes.

## Construct Validity

Triangulation is used to validate and establish the credibility of the research findings on e-commerce live streaming. This method involves comparing the findings with secondary data collected through a literature review, considering the independent variables and dependent variables of this research. Therefore, the researcher confirms the validity of the variables by integrating observation findings with theoretical insights from the literature review. The results presented at Table 4.5.

Table 5. Construct Validity Result

Variables	Literature Review	Observation
Female Host	V	V
Male Host	V	V
Informativeness	V	V
Responsiveness	V	V
Persuasiveness	V	V
Discount	V	V



Flash Sale	V	V
Consumer Engagement	V	V
Purchase Intention	V	V

**Discussion**

The hypothesis assumed that host gender is significantly associated with consumer engagement. The Chi Square Test results show that p-value for host gender on Shopee Live is 0.141, TikTok Live is 0.857, Tokopedia Play is 0.649, which are higher than 0.05 ( $p > 0.05$ ). Thus, the hypothesis is rejected. This result is aligned with the previous research that examined gender affects in influencer marketing via live streaming, indicating host gender does not significantly influence consumer engagement (Hudders & Jans, 2021).

The hypothesis assumed that host gender is significantly associated with purchase intention. The Chi Square Test results show that p-value for host gender on Shopee Live is 0.256, TikTok Live is 0.211, Tokopedia Play is 0.069, which are higher than 0.05 ( $p > 0.05$ ). Thus, the hypothesis is rejected. This result is aligned with the previous studies that examined the impact of streamers characteristics on sales performance (Yang et al., 2023) and gender difference in consumer buying intention via live streaming (Zhu et al., 2023), indicating host gender does not significantly influence purchase intention.

The hypothesis assumed that host interactivity is significantly associated with consumer engagement. The Chi Square Test results show that p-value for host interactivity on Shopee Live, TikTok Live, Tokopedia Play are  $< 0.001$ , which is lower than 0.05 ( $p < 0.05$ ). Thus, the hypothesis is accepted. Moreover, the Post-Hoc Test (Residual Analysis) indicates that responsiveness is the most effective host interactivity to drive high consumer engagement compared to others across all live streaming platforms. These findings suggest that hosts who actively engage, respond quickly to all consumers queries, and offer personalized answers to address specific consumer’s needs is the most effective strategy to generate high consumer engagement.

The hypothesis assumed that host interactivity is significantly associated with purchase intention. The Chi Square Test results show that p-value for host interactivity on Shopee Live, TikTok Live, Tokopedia Play are  $< 0.001$ , which is lower than 0.05 ( $p < 0.05$ ). Thus, the hypothesis is accepted. Moreover, the Post-Hoc Test (Residual Analysis) again indicates that responsiveness is the most effective host interactivity to drive high purchase intention compared to others across all live streaming platforms. These findings propose that employing responsiveness in host interactivity is essential. This indicates that engaging, responding quickly to all consumers' queries, and offering

The hypothesis assumed that promotion is significantly associated with purchase intention. The Chi Square Test results show that p-value for promotion on Shopee Live, TikTok Live, Tokopedia Play are  $< 0.001$ , which is lower than 0.05 ( $p < 0.05$ ). Thus, the hypothesis is accepted. Moreover, the Post-Hoc Test (Residual Analysis) indicates that flash sale is a more effective promotion strategy to drive high purchase intention compared to basic discount across all live streaming platforms. These findings suggest employing a promotional strategy with a limited time offer and limited quantities is more effective since it creates a sense of urgency and encourages consumers to make immediate purchases. This is aligned with previous study by Fu (2021) that revealed a limited time offer leads to higher frequency of purchase intention in e-commerce live streaming.

The correlation analysis indicates a strong positive relationship between consumer engagement and purchase intention in live stream e-commerce. The Pearson correlation coefficient is 0.637, suggesting a robust linear relationship between the two variables. The significance value (Sig. (2-tailed)) is less than 0.001, confirming that the correlation is statistically significant at the 0.01 level. This result demonstrates that as consumer engagement increases, purchase intention also tends to increase. These findings underscore the critical role of strategies that enhance consumer engagement, as higher engagement levels are likely to translate into higher

purchase intentions. Therefore, live stream e-commerce platforms should focus on optimizing host interactivity and promotional tactics to maximize both consumer engagement and purchase outcomes. Given the strong positive correlation and statistical significance, the hypothesis that consumer engagement has a positive relationship with purchase intention is accepted.

## CONCLUSION

This research is conducted to investigate trends and patterns, also factors driving consumer engagement and purchase intention in e-commerce live streaming. This study examines a total of 864 live stream sessions from the three most used and favored e-commerce live streaming platforms in Indonesia: Shopee Live, TikTok Live, and Tokopedia Play. The findings provide valuable insights into which host gender, host interactivity, and promotional offers are most effective in driving higher consumer engagement and purchase intention across different e-commerce live streaming platforms.

Based on the findings, host gender is not significantly associated with consumer engagement and purchase intention. However, female hosts show effectiveness in driving high consumer engagement and purchase intention across Shopee Live and TikTok Live, while both female hosts and male hosts show potential for increasing consumer engagement and purchase intentions on Tokopedia Play, respectively. This analysis showed that employing female hosts as salespersons in live streaming sessions is more effective to enhance consumer engagement and purchase intention, while conversely, male hosts might require different strategies to enhance the effectiveness in achieving higher consumer engagement and purchase intentions. Furthermore, responsiveness emerges as the most effective interactivity style for driving both high consumer engagement and purchase intention, likely due to host ability to respond quickly, engage viewers in real-time, and address the concerns or interests immediately in e-commerce live streaming. This result suggests that hosts should actively engage with viewers to maintain the engagement, give quick responses to answer viewers queries and requests, and provide helpful and personalized responses to specific viewers to achieve highest consumer engagement and purchase intention during live stream sessions across different platforms.

Based on the findings, flash sale is most effective at converting viewers who are already considering making purchases into high intent buyers, showing significant effectiveness in generating highest purchase intention during e-commerce live streaming across different platforms. Flash sale is a promotional practice where products are offered at substantial discounts for a limited time and often in limited quantities. This strategy is designed to create a sense of urgency, encouraging consumers to make prompt purchase decisions to benefit from the limited time offer. Meanwhile, discounts are frequently used and perform well across purchase intentions, maintaining initial interest and moderately increasing intention but not as effective as flash sale. Therefore, it is recommended to use promotion strategy such as flash sale to drive purchase intention during e-commerce live streaming sessions.

Based on the findings, TikTok Live emerges as the most effective platform for achieving the highest consumer engagement, indicating its excel in captivating and retaining viewer interest through interactive content. In contrast, Shopee Live, while somewhat effective, does not reach the high engagement capabilities of TikTok Live, often maintaining consumer interest at mid-level engagement. Tokopedia Play shows significant limitations, primarily generating lower engagement, suggesting a need for strategic improvements in its engagement tactics to enhance consumer engagement and purchase intention. Shopee Live and TikTok Live are more effective in driving higher purchase intentions compared to Tokopedia Play, which seems to struggle moving users beyond low purchase intention. Shopee Live shows the strongest ability

to generate highest

purchase intentions, potentially making it the most effective platform for driving purchase intention in e-commerce live streaming. TikTok Live appears to be effective at converting mid-low into mid-high intentions, despite its lower performance at the very highest intention level. On the other hand, Tokopedia Play, with its concentration at lower purchase intentions, indicates a need for strategic enhancements to effectively transition these initial interests into actionable purchase decisions. These insights underscore the importance of platform-specific strategies to optimize consumer engagement and purchase intention in e-commerce live streaming.

The result of the correlation analysis revealed a strong positive relationship between consumer engagement and purchase intention. The Pearson correlation coefficient was 0.637, indicating a positive linear relationship between the two variables. This means that higher levels of consumer engagement are associated with higher purchase intentions. This finding underscores the importance of strategies that enhance consumer engagement, as increased engagement is likely to lead to higher purchase intentions.

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