

## **Sales Promotions As A Catalyst: How E-Commerce Quality Influences Impulse Buying Behavior During Live Shopping**

### **Promosi Penjualan Sebagai Katalis: Bagaimana Kualitas E-Commerce Mempengaruhi Perilaku Pembelian Impulsif Selama Live Shopping**

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#### **ABSTRACT**

*This study investigates the underexplored relationship between e-commerce quality and sales promotions in shaping impulse buying behavior within live shopping contexts. Employing a quantitative research methodology, data were collected from 302 respondents who made impulsive purchases during live shopping sessions using a structured questionnaire and purposive sampling. The analysis reveals that while e-commerce quality does not have a direct significant impact on impulse buying, it plays a crucial role in enhancing consumer purchasing decisions by facilitating effective sales promotions during live shopping events. These findings underscore the importance of implementing well-designed sales promotions to stimulate impulse buying and optimize the overall consumer experience. Furthermore, this study emphasizes the need for businesses to refine their live shopping strategies to better engage consumers and enhance satisfaction in the rapidly evolving digital marketplace. The study also highlights areas for future research, including the exploration of additional variables that may influence these relationships and the inclusion of diverse cultural contexts, ultimately providing a comprehensive understanding of how to enhance live shopping experiences and boost sales.*

**Keyword:** E-Commerce Quality, Sales Promotion, Impulse Buying, Live Shopping

#### **1. Introduction**

The rapid advancement of information technology and increased access to online e-commerce platforms via mobile devices have significantly transformed consumer behavior, making online shopping more appealing and accessible. This shift has underscored the critical role of website quality in shaping online customer experiences, which are influenced by consumers' thoughts, emotions, and psychological factors (Hult et al., 2019). As these experiences can differ widely depending on the platform, companies must focus on optimizing their website quality to remain competitive in the market (Sharma & Lijuan, 2015). A well-designed and user-friendly website can enhance the overall customer journey, leading to higher satisfaction and increased sales (Jabar & Anubhakti, 2022). Recognizing this, businesses continuously strive to improve their websites, ensuring a seamless and engaging shopping experience that attracts and retains customers (Izogo & Jayawardhena, 2018).

This evolution is particularly relevant in the context of live shopping, a growing trend that combines e-commerce with real-time interaction, allowing consumers to engage with products and sellers through live video streams. As live shopping gains popularity, the quality of e-commerce platforms becomes increasingly critical for enhancing the customer experience and encouraging purchase decisions. A high-quality live shopping experience that is visually

appealing, interactive, and easy to navigate can significantly impact consumer engagement and satisfaction (Kinda, 2019). The dynamic nature of live shopping environments creates unique opportunities for businesses to showcase their products and connect with consumers on a more personal level, ultimately driving sales (Kathuria & Bakshi, 2024; Wang et al., 2024).

Impulse buying behavior is a significant aspect of consumer behavior, characterized by spontaneous and unplanned purchase decisions often triggered by external stimuli (Alemu & Zewdie, 2021). In the context of live shopping, sales promotions play a pivotal role in influencing this behavior. Targeted sales promotions, such as time-limited discounts or exclusive offers presented during live streams, can create a sense of urgency and excitement, encouraging consumers to make impulsive purchases (Oberoi, 2024). However, the relationship between e-commerce quality and sales promotions in shaping impulse buying behavior within live shopping contexts remains underexplored. While previous studies have examined the influence of e-commerce quality and sales promotions on consumer behavior, there is a lack of research specifically focusing on how these factors interact to shape impulse buying behavior in the context of live shopping. Most research tends to focus on traditional e-commerce models, leaving a gap in understanding how live shopping can leverage these elements to attract impulsive buyers.

The novelty of this research lies in its comprehensive approach to understanding how e-commerce quality and sales promotions interrelate and impact consumer behavior within live shopping environments. This study holds significant urgency for businesses engaged in live shopping, as it provides in-depth insights into how e-commerce quality and sales promotions interact to influence impulse buying behavior. A better understanding of these factors can enable businesses to refine and enhance their live shopping strategies, creating a more engaging and satisfying customer experience. The research helps businesses comprehend the crucial role of effective sales promotions in driving impulse buying behavior during live shopping events, enabling them to maximize the impact of their promotional strategies and enhance overall competitiveness in the digital marketplace.

## **2. Literature Review**

### ***E-commerce Quality and Impulse Buying Behaviour***

High-quality e-commerce platforms significantly influence customers' perceptions of a brand or product (Stein & Ramaseshan, 2016). E-commerce quality can play a pivotal role in triggering impulse buying behavior, which often occurs when customers are exposed to factors that influence their purchase intentions (Widagdo & Roz, 2021; Wiranata & Hananto, 2020). This makes impulse buying an attractive strategy for marketers to promote products and boost sales. The phenomenon of impulse buying has a notable impact on consumer behavior, with many respondents actively engaging in unplanned purchasing (Wu et al., 2016). In response to these insights, more online retailers have started designing strategies aimed at leveraging impulse buying to attract and retain customers. These strategies focus not only on external factors like product offerings and the shopping environment but also on internal factors such as consumers' desires and purchase intentions. In this context, the role of e-commerce quality as a tool to influence and manage impulse buying behavior becomes increasingly important (Dey & Srivastava, 2017).

### ***Sales Promotion and Impulse Buying Behaviour***

Sales promotion as a marketing tactic where companies provide additional incentives, such as discounts, coupons, or gifts, to attract consumer interest for a limited time. Sales promotions are commonly employed to boost short-term sales and enhance brand awareness (Bondarenko & Vyshnivska, 2023). By offering these incentives, businesses can encourage

consumers to make purchases they might not have considered otherwise. The effectiveness of sales promotions lies in their ability to create a sense of urgency or scarcity, prompting consumers to act quickly to take advantage of the offers, which Shwastika & Keni (2021) highlight as essential for driving immediate sales while expanding brand awareness among a broader audience. Sales promotions are particularly effective in encouraging impulse buying, which refers to spontaneous purchasing decisions influenced by attractive promotional incentives. Research indicates that when consumers encounter enticing sales promotions, they are more likely to make unplanned purchases driven by the appeal of the offer (Alimpić et al., 2020; Musadik & Azmi, 2020). The reach of these promotions has been amplified through channels such as social media, email, and e-commerce websites, allowing companies to quickly connect with a wider audience (Štreimikienė et al., 2021). Furthermore, well-designed sales promotions significantly impact impulse buying behavior, especially when consumers perceive urgency or exclusivity in the offers they receive (Mandolfo et al., 2022). This interplay between sales promotions and impulse buying highlights the importance of strategic marketing initiatives in driving consumer behavior and enhancing overall sales performance.

### Hypothesis



**Figure 1. Research Model**  
Source: Arissaputra et al., 2024

Based on the Figure 1, the hypothesis in this study is as follows

H1 : *E-commerce Quality significantly affects Live Shopping Impulse Buying*

H2 : *E-commerce Quality significantly affects Impulse Buying through Live Shopping Sales Promotion*

### 3. Research Methods

As shown in Figure 1, this study investigates the intricate relationships among e-commerce quality, live shopping sales promotion, and live shopping impulse buying. Classified as survey research, it primarily relies on a structured questionnaire for data collection. Three key constructs are central to the research. The methodology adopted is quantitative, aligning with hypothesis testing and statistical analysis. Particularly effective for examining specific samples or large populations, quantitative research methods are employed in this context (Hair Jr et al., 2021). Data is collected from the target audience through the questionnaire.

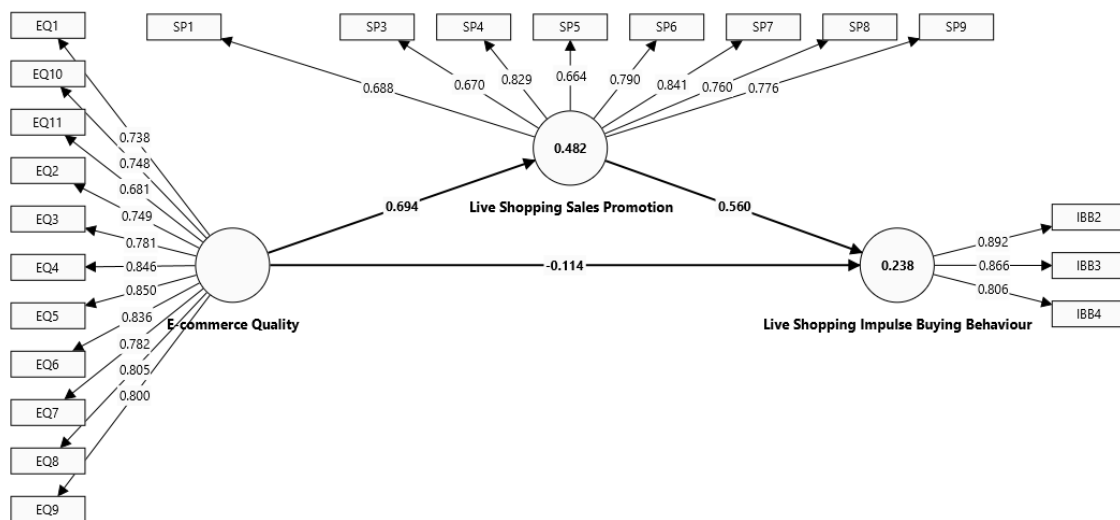
To obtain the dataset, questionnaires were distributed to respondents who have purchased products impulsively during live session. This study utilized a non-probability sampling technique, specifically employing purposive sampling. This approach enables researchers to select sample units according to specific criteria, ensuring that the selected

sample exhibits the desired characteristics necessary for achieving the research objectives (Hair Jr et al., 2021). The minimum sample size is calculated by multiplying the number of instruments by 10 (Hair Jr et al., 2021), resulting in the identification of 24 items to measure the variables, which leads to a required minimum sample size of 240 respondents for testing the research hypothesis. In this study, 302 participants who were obtained as respondents were used as the main data for further processing.

**4. Results and Discussions**  
**Outer Model**

The evaluation of the outer model in this study plays a crucial role in understanding how each set of indicators relates to its respective latent variables. This process is fundamental to ensuring that the model accurately measures what it is intended to, thereby establishing both the validity and reliability of the model. A thorough evaluation helps to confirm that the indicators used are suitable and represent their underlying constructs effectively. The analysis places a particular emphasis on assessing reflective indicators, which are indicators that reflect the latent variable they measure. To evaluate the quality of the outer model, several key metrics are used, including convergent validity, discriminant validity, and composite reliability. Convergent validity ensures that indicators of a latent variable are highly correlated, indicating they converge toward a common construct. Discriminant validity ensures that indicators distinguish between different constructs, verifying that each latent variable is unique. Composite reliability, on the other hand, assesses the internal consistency of the indicators, ensuring that they consistently measure the intended construct.

Convergent validity focuses on analyzing loading factors and Average Variance Extracted (AVE) values. The loading factor measures how strongly an indicator is correlated with its underlying construct. In confirmatory research, a loading factor greater than 0.6 indicates strong validity, while values between 0.6 and 0.7 are deemed acceptable in exploratory studies (Hair Jr et al., 2021). This ensures that the model accurately represents the relationships between the latent variables and their indicators.



**Figure 2. Outer Model**  
*Source: Processed Data (2024)*

As depicted in Figure 2, the model demonstrates a strong alignment with the established criteria for the outer model, highlighting its robustness and reliability. A thorough

examination of the results from the outer model assessment further emphasizes the validated credibility and dependability of the model. The evaluation of the outer model in Figure 2, indicates that all reflective indicators across the latent variables exhibit strong loading factors, exceeding the recommended threshold of 0.6. The outer loading value above 0.6 indicates that the indicator has a strong and valid relationship with the measured construct, except SP2 and IBB1. This assessment confirms that each indicator significantly contributes to its latent variable, reinforcing the model's integrity and effectiveness in capturing the relationships within the study.

**Table 1. Average Variance Extracted (AVE)**

	<b>AVE</b>
<b>E-commerce Quality</b>	0.616
<b>Live Shopping Sales Promotion</b>	0.732
<b>Live Shopping Impulse Buying</b>	0.570

*Source: Data Processing, 2024*

The Average Variance Extracted (AVE) values provided for the constructs of your study indicate the level of construct validity for each variable. For e-commerce quality, an AVE of 0.616 suggests that approximately 61.6% of the variance in the observed variables related to this construct can be attributed to the underlying e-commerce quality itself, while the remaining 38.4% is due to measurement error. This value is generally considered acceptable, as it exceeds the common threshold of 0.50, indicating good convergent validity. In contrast, the live shopping sales promotion construct exhibits an even stronger AVE of 0.732, meaning that 73.2% of the variance in its observed variables can be explained by the construct itself. This high AVE value indicates robust validity and suggests that the measurement accurately reflects the intended construct. Lastly, the live shopping impulse buying construct has an AVE of 0.570, which also meets the acceptable threshold, indicating that 57% of the variance in this construct can be explained by the observed variables, demonstrating a satisfactory level of convergent validity. Overall, these AVE values reflect that all three constructs—e-commerce quality, live shopping sales promotion, and live shopping impulse buying—are adequately capturing the intended underlying phenomena.

### **Inner Model**

The evaluation of R-square values for endogenous latent variables measures how well the exogenous constructs explain the variability in these dependent variables. This provides insights into the strength and explanatory power of the relationships among the constructs within the model. After assessing R-square values, path coefficients are calculated using bootstrapping techniques. A variable is considered to have a significant effect on another when its t-statistic surpasses the critical value of 1.96, which corresponds to a 5% significance level. If the t-statistic is greater than 1.96, it indicates a statistically significant influence of one variable on another (Hair Jr et al., 2021). This approach helps in understanding the explanatory power of the model and identifying which relationships are statistically significant within the structural equation modeling (SEM) framework, thus highlighting the meaningful connections among the studied variables.

**Table 2. Hypothesis Testing**

Variabel	T Statistic (>1.96)	P Value (<0.05)	Result	Hypothesis
H1 : E-Commerce Quality → Live Shopping Impulse Buying	1.694	0.090	Not Significant	Rejected
H2 : E-Commerce Quality → Live Shopping Sales Promotion → Live Shopping Impulse Buying	7.888	0.000	Significant	Supported

Source: Data Processing, 2024

The results of the hypothesis testing indicate varying degrees of significance for the proposed relationships. For H1 (E-Commerce Quality → Live Shopping Impulse Buying), the T statistic is 1.694, which is below the critical value of 1.96, and the P value is 0.090, exceeding the significance threshold of 0.05. As a result, this hypothesis is deemed not significant and is therefore rejected. Conversely, H2 (E-Commerce Quality → Live Shopping Sales Promotion → Live Shopping Impulse Buying) shows a T statistic of 7.888, significantly above 1.96, and a P value of 0.000, indicating strong statistical significance. Thus, this hypothesis is supported.

The rejection of H1 indicates that the direct relationship between e-commerce quality and live shopping impulse buying is not statistically significant. This suggests that while e-commerce quality is essential for creating a positive online shopping environment, its influence on impulse buying may not be straightforward. These results contradict previous research conducted by Arissaputra et al. (2024), which states that e-commerce quality affects impulse buying. In this study the possibility that impulse buying behavior is influenced by a range of factors beyond just website quality, such as emotional triggers, product visibility, and the social context of shopping is unavoidable. For instance, the dynamic nature of live shopping—where consumers interact with hosts and see products in real-time—may diminish the direct impact of website quality on impulse purchases, as the immediate interaction and promotional elements take precedence in shaping consumer decisions.

On the other hand, the strong support for H2 underscores the critical role that e-commerce quality plays in enhancing sales promotions, which subsequently drive impulse live shopping impulse buying. This aligns with existing literature that emphasizes the effectiveness of well-structured sales promotions in capturing consumer attention and creating urgency, especially in live shopping scenarios. The finding suggests that high-quality e-commerce platforms can facilitate more compelling promotional strategies, leading to higher engagement and increased likelihood of impulsive purchases in accordance with research conducted by Firdausy & Fernanda (2021) and Prasetyo & Muchnita (2022). For example, live shopping events that combine high-quality visuals with time-sensitive discounts can create a compelling shopping atmosphere that encourages impulse buying. Therefore, the results highlight the importance for businesses to not only focus on improving website quality but also to strategically leverage that quality to implement effective sales promotions that resonate with consumers in live shopping contexts.

## 5. Conclusion

This study provides valuable insights into the complex dynamics of e-commerce quality, live shopping sales promotions, and live shopping impulse buying. The findings reveal that while e-commerce quality does not have a direct significant impact on impulse buying, it plays a crucial role in facilitating effective sales promotions that significantly enhance impulsive buying behaviors in live shopping contexts. However, this research is not without its limitations. The study primarily focuses on a specific context of live shopping, which may limit

the generalizability of the findings to other e-commerce settings. Factors such as cultural differences, consumer demographics, and varying levels of engagement in live shopping environments were not extensively examined, potentially influencing impulse buying behavior.

Future research is recommended to explore these limitations by examining the role of additional variables that may mediate or moderate the relationship between e-commerce quality, sales promotions, and impulse buying. Longitudinal studies could also provide deeper insights into how these relationships evolve over time, particularly as live shopping continues to gain traction. Furthermore, expanding the research to include diverse cultural contexts and consumer demographics could enhance the understanding of impulse buying behavior across different markets. By addressing these areas, future studies can build on the current findings and offer more comprehensive strategies for businesses aiming to optimize their live shopping experiences and maximize sales.

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