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FACTORS INFLUENCING CUSTOMER PURCHASE DECISIONS DURING LIVE STREAMING SHOPPING

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ABSTRACT

The purpose of this study is to identify the factors influencing customer purchase decisions during live streaming shopping using a quantitative research method. Data was collected through a questionnaire distributed to 441 respondents, of which 433 had previously shopped via live streaming. The results indicated that 2 hypotheses were rejected while 10 were accepted. The rejection of hypothesis H2 indicates that Interactivity does not have a significant impact on Trust, and the rejection of hypothesis H4 shows that Visualization also does not significantly impact Trust. Interactivity, Visualization, Professionalization, System Quality, Information Quality, and Service Quality influence the Social Presence of Live Streaming Shopping. Professionalization impacts Trust. Both Social Presence of Live Streaming Shopping and Trust affect Purchase Decision, which in turn influences Purchase Intention.

Keywords: *Live Streaming Shopping, Social Commerce, Purchase Decision, Consumer Behavior, E-Commerce*

1. INTRODUCTION

The development of technology utilizing the internet has had a significant impact on the trading industry. Many companies are expanding their traditional sales and marketing activities to be more modern using online applications. The emergence of numerous online sales service providers or e-commerce platforms such as shopee, tokopedia, and bukalapak is increasing opportunities in online business. According to [1], online store transactions or e-commerce in indonesia are predicted to reach Rp600 trillion to Rp700 trillion, encompassing all types of e-commerce.

The intense competition in e-commerce has led companies to innovate in enhancing marketplace service features by offering various attractive deals to potential buyers. Implementing cashback and promotions on specific dates greatly attracts buyers. Some e-commerce platforms not only offer promotions and attractive deals but also employ social commerce systems to increase their visitors, such as shopee, tokopedia, and jd.id. According to [2], there were around rp42 trillion in gross transactions with the potential for as many as 30 million purchases on social commerce applications.

The adoption of social commerce systems utilizes features found in social media to support sales and purchases within the e-commerce platform itself. Features such as live streaming, ratings, and social advertising have been widely adopted by various e-commerce platforms. According to [3], one type of social commerce is based on e-commerce with added social community features and social interaction through web 2.0.

The adoption of live streaming as a tool to enhance sales performance and product purchases for potential customers is forming a trend known as live streaming shopping. This trend is increasingly prevalent in e-commerce and social commerce due to its unique social trading attributes [4] With this feature, sellers can showcase products in real-time to potential buyers in hopes of encouraging purchases. According to [5], 83.7% of indonesians have watched online shopping broadcasts through live streaming. Additionally, according to [6], there has been a 56% increase in product purchases through live streaming shopping during the pandemic in the indonesian market.

Live streaming shopping offers a more engaging and trustworthy online shopping experience compared to regular online shopping. Two-way interaction between streamers and viewers, as well as more open communication, can minimize risks and build consumer trust [7]. Live shopping provides a more interactive and personal sensation compared to traditional online shopping [8].

While the use of live streaming shopping in social commerce applications is growing, there is a problem noted in the data obtained [9]. The data indicates that out of 102 respondents sampled, only 19% used live streaming shopping with the intention of making a purchase decision. Despite live streaming shopping being a significant trend in the e-commerce and social commerce industries, its usage seems not to have reached its maximum potential. This phenomenon raises questions about the factors that may affect the low rate of purchase decision through live streaming shopping. Therefore, it is necessary to identify factors that can enhance or inhibit the success of live streaming shopping in influencing customer purchase decisions.

This research offers new contributions compared to previous studies. Based on the research [10], the live streaming variable partially has a significant influence on purchase decisions for muslim fashion products in surabaya. According to [11], live streaming shopping has a significant direct and indirect influence through trust on purchase decisions. Research by [12] shows that purchase intention variables significantly influence purchase decisions. Referring to these phenomena and research gaps, this study aims to identify the factors influencing customer purchase decisions during live streaming shopping on social commerce content. Thus, the study is titled "factors influencing customer purchase decisions during live streaming shopping".

Although previous research has explored the impact of live streaming and purchase intentions on purchase decisions, there is still a gap in understanding the specific factors that comprehensively influence customer purchase decisions in the context of live streaming shopping. Furthermore, there has been limited research combining elements of trust and other aspects such as social interaction and user experience in live streaming shopping. This study aims to identify the factors influencing customer purchase decisions during live streaming shopping on social commerce platforms. Specifically, we focus on how interactivity, visualization, streamer professionalism, system quality, information quality, service quality, and their impact on social presence and trust ultimately influence purchase intention.

The remainder of the paper is organized as follows: Chapter 1 introduces the background, scope, objectives, benefits of the research, and the structure of the paper. Chapter 2 provides a literature review, outlining theories and previous studies that form the foundation for data analysis. Chapter 3 explains the research methods, detailing how data is collected and analyzed to test hypotheses based on the proposed and modified model by the researcher, aiming to answer the research questions. Chapter 4 presents the results and discussion, including an analysis of respondent characteristics and hypothesis testing. Finally, Chapter 5 concludes the findings, offering conclusions from the research and discussion in the previous chapters, and provides recommendations for future research.

2. LITERATURE REVIEW

2.1 Interactivity

Interactivity, the interaction between customers and streamers as well as other customers in real-time, impacts the cognitive and affective conditions of customers in social commerce [13]. Researchers use interactivity to link with the social presence form of live streaming shopping and Trust to understand its influence. This topic encompasses communication between customers and streamers, the responsiveness of streamers to customer questions, and the relevance of information conveyed.

H1: Interactivity has a positive effect on the Social Presence of Live Streaming Shopping

H2: Interactivity has a positive effect on Trust

2.2 Visualization

Visualization, a form of streamer in live streaming that can showcase products in all directions, including trying on clothes directly, so customers can see product details and even feel as if they are there personally [14]. Researchers use the visualization variable to link it with the social presence form of live streaming shopping and Trust to determine whether this variable affects or is related to social presence form of live streaming shopping and Trust. This variable also discusses visualizing products as in the real world, making product details look lifelike.

H3: Visualization has a positive effect on the Social Presence of Live Streaming Shopping

H4: Visualization has a positive effect on Trust

2.3 Professionalization

Professionalization describes the extent to which streamers can provide accurate product knowledge and effective experiences to customers or potential customers [14]. Researchers use this variable to link it with the social presence form of live streaming shopping and Trust to determine whether this variable has an influence or relationship with those variables.

H5: Professionalization has a positive effect on the Social Presence of Live Streaming Shopping

H6: Professionalization has a positive effect on Trust

2.4 System Quality

System Quality, determined by access speed, user-friendliness, navigation, connectivity, and the visual appeal of the website [15]. Researchers use the System Quality variable to link it with the Trust variable to determine whether it has an influence or relationship with Trust.

H7: System Quality has a positive effect on Trust

2.5 Information Quality

System Information Quality reflects the relevance, accuracy, and timeliness of the information [15]. Researchers use the Information Quality variable to link it with the Trust variable to determine whether it has an influence or relationship with Trust.

H8: Information Quality has a positive effect on Trust

2.6 Service Quality

Service Quality is considered crucial in online shopping, with several factors used to measure service quality, including clarity, reliability, responsiveness, assurance, and empathy [16]. Researchers use the Service Quality variable to link it with the Trust variable to determine whether it has an influence or relationship with Trust.

H9: Service Quality has a positive effect on Trust

2.7 Social Presence Form of Live Stream

Social presence form of live streaming shopping refers to the significance of others' presence in interactions and the importance of interpersonal relationships enabling product purchases [17]. Some studies also indicate a correlation between social presence form of live streaming shopping and purchase intention. Researchers will use the social presence form of live streaming shopping variable to determine whether it influences or correlates with purchase intention. This variable will also be influenced by other variables such as professionalization, interactivity, and visualization.

H10: Social Presence Form of Live Stream has a positive effect on Purchase Intention

2.8 Trust

In the context of e-commerce, Trust has garnered significant attention due to the high level of uncertainty and risk associated with online transactions [18]. Researchers use the Trust variable to link it with the Purchase Intention variable to determine whether it influences or correlates with Purchase Intention. This variable will also be influenced by other variables such as professionalization, interactivity, visualization, System Quality, Information Quality, and Service Quality.

H11: Trust has a positive effect on Purchase Intention

2.9 Purchase Intention

Purchase intention is the customer's desire to purchase a product and takes days or weeks to form [19] [20]. This variable can materialize when customers are provided with knowledge about the benefits and drawbacks of the product, and it will be influenced by several preceding variables. Researchers use this variable to understand its relationship with the purchase decision variable. Several indicators used based on previous research include interest, desire, and attention. Researchers utilize these indicators in designing questionnaire questions to be distributed to respondents.

H12: Purchase Intention has a positive effect on Purchase Decision

2.10 Purchase Decision

Purchase decision is the stage in the buyer decision-making process where the actual purchase is made [21]. Researchers use the purchase decision variable to support their study and determine whether it is influenced by Purchase Intention or not.

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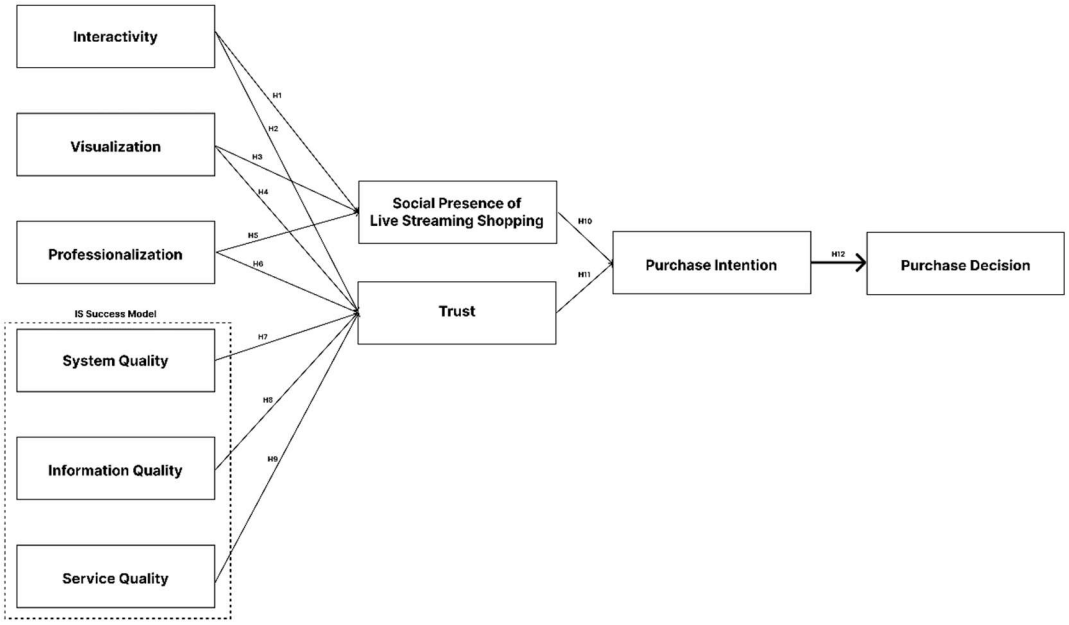

Figure 1: Research Model

2.11 Research Model

This study employs a quantitative approach, encompassing 12 hypotheses involving 10 variables correlated with 33 specific questions. The aim is to ascertain the factors influencing customer purchase decisions during live streaming shopping. Lastly, researchers identify a model that is consistent with the determinants of loyalty towards Indomaret. These factors are interactivity, visualization, professionalization, system quality, information quality, service quality, social presence of live streaming shopping, trust, purchase intention, and purchase decision. The research model is visually represented in Figure 1.

2.12 Previous Study

This [14] research focuses on the psychological mechanisms of live streaming e-commerce and concludes several findings. First, there is no direct influence of interactivity on trust, but interactivity indirectly affects trust through social presence. Second, there is no direct influence of professionalism on social presence, but professionalism directly affects trust. Third, trust and engagement fully mediate the influence of social presence on purchase intention. Lastly, engagement has a positive effect on purchase intention.

In the study of [22] , it is concluded that interactivity significantly influences social presence. Furthermore, the sense of community and emotional support significantly affect social presence. Moreover, social presence significantly influences watching intention. Streamer attractiveness mediates the relationship effectively between social presence and watching intention.

In the study of [23], it is concluded that interactivity significantly influences social presence. Furthermore, interactivity significantly affects flow experience. Then, social presence and flow experience significantly influence purchase intention. The mediation of social presence between interactivity and purchase intention is significant, while the mediation of flow experience between interactivity and purchase intention is also significant.

In the study of [17], it is concluded that interactivity significantly influences social presence. Furthermore, interactivity significantly affects telepresence. Then, telepresence and social presence significantly influence purchase intention. Trust strengthens the relationship between interactivity and social presence, but trust does not strengthen or significantly affect the relationship between interactivity and telepresence.

While previous research has explored the impact of live streaming and purchase intentions on purchase decisions, there is a limited understanding of the specific factors that comprehensively influence customer purchase decisions in the context of live streaming shopping. Existing studies often focus on isolated aspects like trust or purchase intention. This study addresses this gap by examining a broader range of factors, including social interaction, user experience, and streamer professionalism, to provide a more holistic view.

3. RESEARCH METHODS

3.1 Variable Measurement

Each variable is described through several indicators. The following table shows every indicator for each variable:

Table 1: Variable Measurement

Variable	Code	Indicator	Reference
Interactivity	IN1	Feelings	[14] [17] [23] [22]
	IN2	Activity	
	IN3	Information	
Visualization	VI1	Clarity	[14] [24] [25]
	VI2	Detail	
	VI3	Reality	
Professionalization	PR1	Expertise	[14] [26]
	PR2	Experience	
	PR3	Knowledge	
System Quality	SQ1	Speed	[27] [28] [12]
	SQ2	Ease of Use	
	SQ3	Ease of Navigation	
	SQ4	Interactive Visual	
Information Quality	IQ1	Relevant	[27] [12]
	IQ2	Adequate	
	IQ3	Accurate	
	IQ4	Up To Date	
Service Quality	SE1	Timely service	[29] [30] [12]
	SE2	Quick response	
	SE3	Understanding	
	SE4	Knowledge	
Social Presence of Live Streaming Shopping	SP1	Relationship	[31] [29] [32]
	SP2	Closeness	
	SP3	Friendliness	
Trust	TR1	Hope	[12] [33]
	TR2	Belief	
	TR3	Trust	
Purchase Intention	PI1	Consideration	[12] [34] [35] [36]
	PI2	Desire	
	PI3	Expectation	
Purchase Decision	PD1	Transaction	[37] [38] [39]
	PD2	Amount	
	PD3	Ease of Acquisition	

3.2 Data Collection

To collect data for testing the hypotheses of this study, data was obtained using a questionnaire distribution method conducted using Google Forms tools that were disseminated to respondents who had made purchases through live streaming shopping. The questionnaire was distributed via social media platforms such as Line, WhatsApp, Instagram, Telegram, and others, with a distribution period of one month. The questionnaire data was tested to obtain valid data using statistical tools such as SmartPLS. The questionnaire was structured using a Likert scale with 4 intervals. According to [40], the Likert scale is used to measure individuals' or groups' attitudes, opinions, and perceptions about social events or phenomena. The use of 4 intervals aimed to obtain clearer insights from respondents regarding the statements presented in the questionnaire without a neutral option. Bias was a consideration [41] when determining the number of intervals, and an even number (4 intervals) was preferable to an odd number (5 intervals) as it could reduce social bias. The bias in question was to avoid respondents tending to choose a neutral option, which might reduce the amount of information that could be filtered from respondents due to hesitation in choosing to agree or disagree.

3.3 Population and Sample

The data for the year 2023 indicated that the population of Indonesia reached 279,118,866 people [42]. Approximately 83.7% of the population had watched online shopping features through live streaming shopping, and 55% of them had made purchases through this platform [5]. Thus, the estimated number of Indonesians who had purchased products through live streaming shopping was approximately 128,492,370. To calculate a representative sample, the Slovin formula was used with a population of 128,492,370 people and a margin of error of 5%. Therefore, this research required a minimum of 400 respondents to adequately represent the population.

3.4 Analytical Methods

This study employed Structural Equation Modeling (SEM), a widely used multivariate analysis method in marketing research for testing theoretically supported linear and additive causal models [43]. SEM allowed marketers to visually examine relationships between variables to prioritize resources for improved customer service. Two SEM approaches, partial least squares (PLS) and covariance-based (CB), served different purposes:

CB-SEM confirmed or rejected underlying theories and hypotheses, while PLS focused on explaining variance in dependent variables [44]. PLS-SEM was utilized here to test relationships among variables in the research model. Data processing was conducted using SmartPLS software.

The Measurement Model assessed the validity and reliability of each indicator, with the outer model used to determine these values [45]. This model evaluated the relationship between latent variables and their manifestations in PLS-SEM. Validity testing was conducted after collecting questionnaire data, utilizing SmartPLS software to assess how well an instrument measured a research construct. Validity testing was crucial, with the Average Variance Extracted (AVE) examined to ensure validity (> 0.5 was acceptable). Loading factor values for each construct indicator were also examined, with > 0.5 considered valid and > 0.7 ideal.

Reliability testing, also known as internal consistency, examined Cronbach's alpha and composite reliability values [46]. This assessment ensured questionnaire consistency, indicating variable reliability. The methods used in this research included Cronbach's alpha and composite reliability, suitable for Likert scales. Variables with Cronbach's alpha > 0.6 and composite reliability > 0.7 (Santosa, 2018) were considered reliable.

The Structural Model, also known as the inner model, evaluated the influence of one variable on another [47]. It illustrated the relationships between latent variables in a study [45]. This model assessed R-Square to determine the extent of independent variables' influence on the dependent variable, with values ranging from 0.00 to 1.00. Additionally, path coefficients within the structural model were analyzed through t-statistic and p-value calculations, with a p-value of less than 0.05 indicating significance [46]. According to [43], a p-value < 0.05 was considered significant.

4. RESULT AND DISCUSSION

4.1 Respondent Demographics

A total of 441 respondents took part in this study, but not all of their data was processed. It was found that 8 respondents had never made purchases through live streaming shopping. Therefore, data collection for this research could be conducted with 433 respondents.

Table 2: Respondents Based on Gender

Gender	Percentage
Woman	41%
Man	59%

Table 3: Respondents Based on Age Group

Age Group	Percentage
<17 years old	21%
17 – 20 years old	26%
21 – 25 years old	30%
> 25 years old	23%

Table 4: Respondents Based on Province of Residence

Province	Percentage
Aceh	0.6%
Bengkulu	2%
DIY	2.7%
DKI Jakarta	48%
Gorontalo	0.23%
Jambi	2.5%
Jawa Barat	15%
Jawa Tengah	12%
Jawa Timur	15%

Table 5: Respondents Based on Platform they Used

Platform	Percentage
Bukalapak	3.4%
Instagram	3.6%
Lazada	5.7%
Shopee	23%
Tiktok	41.3%
Tokopedia	23%

Table 6: Respondents based on number of hours spent watching live streaming shopping per day

Hour	Percentage
< 1 hour	40.6%
1 – 2 hours	32.3%
2 – 3 hours	27.1%

Table 7: Respondents based on the time they start watching live streaming shopping

Time	Percentage
5 PM	13.1%
6 PM	12.2%
7 PM	15.01%
8 PM	17.3%
9 PM	11.5%
10 PM	10.%3
11 PM	9.9%
12 AM	10.3%

Table 8: Respondents based on the frequency of purchases made through live streaming shopping in one month

Frequency	Percentage
Once a month	45.2%
2 - 3 times a month	45.7%
4 – 5 times a month	4.8%
More than 5 times a month	4.1%

Table 9: Respondents based on spending amount

Amount	Percentage
< Rp 100.000	22.6%
Rp100.000 – Rp299.999	55.8%
Rp300.000 – Rp749.999	17.5%
Rp750.000 – Rp1.000.000	1.3%
> Rp1.000.000	2.3%

Table 10: Respondents based on the type of payment

Payment Type	Percentage
Bank Transfer	20%
Cash on Delivery (COD)	24.7%
Credit / Debit Card	10.1%
E - Waller	45%

Table 11: Respondents based on monthly income

Income	Percentage
No Income	3.8%
< Rp500.000	8%
Rp500.000 - Rp1.999.999	8.5%
Rp2.000.000 - Rp3.499.999	30.9%
> Rp3.500.000	47.8%

4.2 Measurement Model

The acquired data was subsequently analyzed utilizing SMART-PLS software. Upon input and computation, the software will present the results of validity and reliability tests. The ensuing outcomes encompass both validity and reliability assessments:

Table 12: Result of the Validity Convergence Test

Code	Loading Factor	AVE	Result
Interactivity			
IN1	0,850	0.746	Valid
IN2	0,855		Valid
IN3	0,886		Valid
Visualization			
VI1	0,874	0.728	Valid
VI2	0,885		Valid
VI3	0,798		Valid
Professionalization			
PR1	0,857	0.739	Valid
PR2	0,854		Valid
PR3	0,869		Valid
System Quality			
SQ1	0,875	0.712	Valid
SQ2	0,840		Valid
SQ3	0,830		Valid
SQ4	0,830		Valid
Information Quality			
IQ1	0,845	0.746	Valid
IQ2	0,877		Valid
IQ3	0,853		Valid
IQ4	0,879		Valid
Service Quality			
SE1	0,864	0.753	Valid
SE2	0,877		Valid
SE3	0,885		Valid
SE4	0,845		Valid
Social Presence of Live Streaming Shopping			
SP1	0,868	0.736	Valid
SP2	0,849		Valid
SP3	0,856		Valid
Trust			
TR1	0,885	0.753	Valid
TR2	0,838		Valid
TR3	0,880		Valid
Purchase Intention			
PI1	0,856	0.746	Valid
PI2	0,846		Valid
PI3	0,888		Valid
Purchase Decision			
PD1	0,902	0.749	Valid
PD2	0,857		Valid
PD3	0,836		Valid

Based on the results of the convergence validity test using the first loading factor, it can be observed from Table 13 that all indicators of each variable have loading factor values > 0.5. Hence, it can be concluded that all indicators for each variable in this study are valid. Furthermore, based on the results of the AVE value test as shown in Table 13, it is found that all variables have AVE values > 0.5, indicating that all variables in the study are valid.

Table 13: Result of the Validity Discriminant Test

	IN	VI	PR	SQ	IQ	SE	SP	TR	PI	PD
IN1	0,850	0,731	0,739	0,760	0,785	0,768	0,728	0,731	0,709	0,705
IN2	0,855	0,669	0,688	0,690	0,684	0,686	0,650	0,674	0,641	0,689
IN3	0,886	0,731	0,767	0,766	0,770	0,746	0,729	0,763	0,721	0,775
VI1	0,707	0,874	0,739	0,759	0,753	0,778	0,700	0,737	0,725	0,695
VI2	0,758	0,885	0,760	0,764	0,790	0,794	0,719	0,774	0,738	0,749
VI3	0,638	0,798	0,672	0,678	0,664	0,641	0,603	0,649	0,618	0,647
PR1	0,706	0,715	0,857	0,727	0,726	0,748	0,679	0,711	0,704	0,660
PR2	0,716	0,746	0,854	0,737	0,728	0,743	0,686	0,734	0,714	0,714

PR3	0,764	0,730	0,869	0,748	0,756	0,729	0,721	0,750	0,706	0,774
SQ1	0,732	0,764	0,754	0,875	0,804	0,806	0,748	0,769	0,792	0,739
SQ2	0,719	0,720	0,721	0,840	0,753	0,747	0,708	0,722	0,746	0,706
SQ3	0,715	0,729	0,735	0,830	0,740	0,726	0,698	0,724	0,715	0,717
SQ4	0,728	0,692	0,685	0,830	0,737	0,715	0,685	0,714	0,692	0,705
IQ1	0,722	0,716	0,695	0,741	0,845	0,721	0,684	0,725	0,684	0,696
IQ2	0,748	0,768	0,761	0,790	0,877	0,792	0,723	0,769	0,750	0,713
IQ3	0,738	0,749	0,741	0,777	0,853	0,776	0,721	0,777	0,767	0,745
IQ4	0,782	0,755	0,760	0,797	0,879	0,777	0,749	0,785	0,760	0,792
SE1	0,753	0,737	0,721	0,767	0,783	0,864	0,725	0,748	0,738	0,715
SE2	0,686	0,730	0,732	0,757	0,757	0,877	0,716	0,752	0,734	0,686
SE3	0,762	0,785	0,787	0,801	0,783	0,885	0,771	0,817	0,798	0,787
SE4	0,750	0,762	0,743	0,755	0,760	0,845	0,713	0,760	0,723	0,740
SP1	0,701	0,687	0,700	0,726	0,706	0,737	0,868	0,727	0,713	0,683
SP2	0,680	0,672	0,662	0,726	0,726	0,719	0,849	0,707	0,683	0,682
SP3	0,715	0,680	0,719	0,713	0,713	0,714	0,856	0,734	0,689	0,828
TR1	0,732	0,762	0,763	0,780	0,796	0,804	0,761	0,885	0,757	0,735
TR2	0,683	0,700	0,687	0,702	0,723	0,710	0,665	0,838	0,701	0,806
TR3	0,766	0,740	0,762	0,775	0,783	0,792	0,764	0,880	0,753	0,784
PI1	0,669	0,712	0,695	0,784	0,747	0,762	0,717	0,732	0,856	0,697
PI2	0,649	0,673	0,691	0,700	0,693	0,707	0,648	0,712	0,846	0,711
PI3	0,750	0,727	0,744	0,777	0,779	0,765	0,731	0,756	0,888	0,863
PD1	0,766	0,740	0,747	0,777	0,780	0,772	0,736	0,767	0,857	0,902
PD2	0,713	0,679	0,714	0,715	0,704	0,715	0,827	0,732	0,700	0,857
PD3	0,694	0,704	0,704	0,709	0,727	0,702	0,657	0,819	0,716	0,836

Based on the results of the discriminant validity test conducted by examining the cross-loading values, it can be observed from table 14 that the cross-loading values for each indicator are greater on their own construct than on other constructs. Therefore, it can be concluded that all indicators in this study are valid.

Table 14: Result of the Reliability Test

Variable	Cronbach's Alpha	Composite Reliability
Interactivity	0,830	0,898
Visualization	0,812	0,889
Professionalization	0,824	0,895
System Quality	0,865	0,908
Information Quality	0,886	0,922
Service Quality	0,891	0,924
Social Presence of Live Streaming Shopping	0,820	0,893
Trust	0,836	0,901
Purchase Intention	0,829	0,898
Purchase Decision	0,832	0,899

Based on the results of the validity tests (convergent and discriminant) and the reliability test, all 433 data points can be processed further.

4.3 Structural Model

The structural model test was conducted to examine the relationships between variables. This testing involved analyzing the R-square (R^2) values and path coefficients.

Table 15: R-Square Value

	R-square	R-square adjusted
Purchase Decision	0,776	0,776
Purchase Intention	0,753	0,752
Social Presence of Live Streaming Shopping	0,728	0,726
Trust	0,846	0,844

Table 16: Indirect Effect

	Original sample	97.5%
IQ -> TR -> PI -> PD	0,136	0,201
TR -> PI -> PD	0,507	0,598
IN-> SP -> PI -> PD	0,105	0,160
SP -> PI -> PD	0,287	0,379
IN -> TR-> PI-> PD	0,037	0,091
PR-> SP -> PI -> PD	0,084	0,131
PR -> TR -> PI -> PD	0,069	0,122
SQ -> TR-> PI -> PD	0,151	0,217

SQ -> TR -> PI -> PD	0,055	0,116
VI -> SP -> PI -> PD	0,069	0,118
VI -> TR -> PI -> PD	0,044	0,089
IQ -> TR -> PI -> PD	0,136	0,201

Table 17: Path Coefficient Value

Hypothesis	Relationship	Original sample	P-value	Result
H1	IN->SP	0,368	0,000	Supported
H2	IN->TR	0,073	0,150	Rejected
H3	VI->SP	0,241	0,000	Supported
H4	VI->TR	0,086	0,051	Rejected
H5	PR->SP	0,293	0,000	Supported
H6	PR->TR	0,136	0,006	Supported
H7	SQ->TR	0,109	0,048	Supported
H8	IQ->TR	0,268	0,000	Supported
H9	SE->TR	0,298	0,000	Supported
H10	SP->PI	0,325	0,000	Supported
H11	TR->PI	0,576	0,000	Supported
H12	PI->PD	0,881	0,000	Supported

Based on the bootstrapping results, H1, H3, H5, H6, H7, H8, H9, H10, H11, and H12 are supported. Meanwhile, H2 and H4 are rejected.

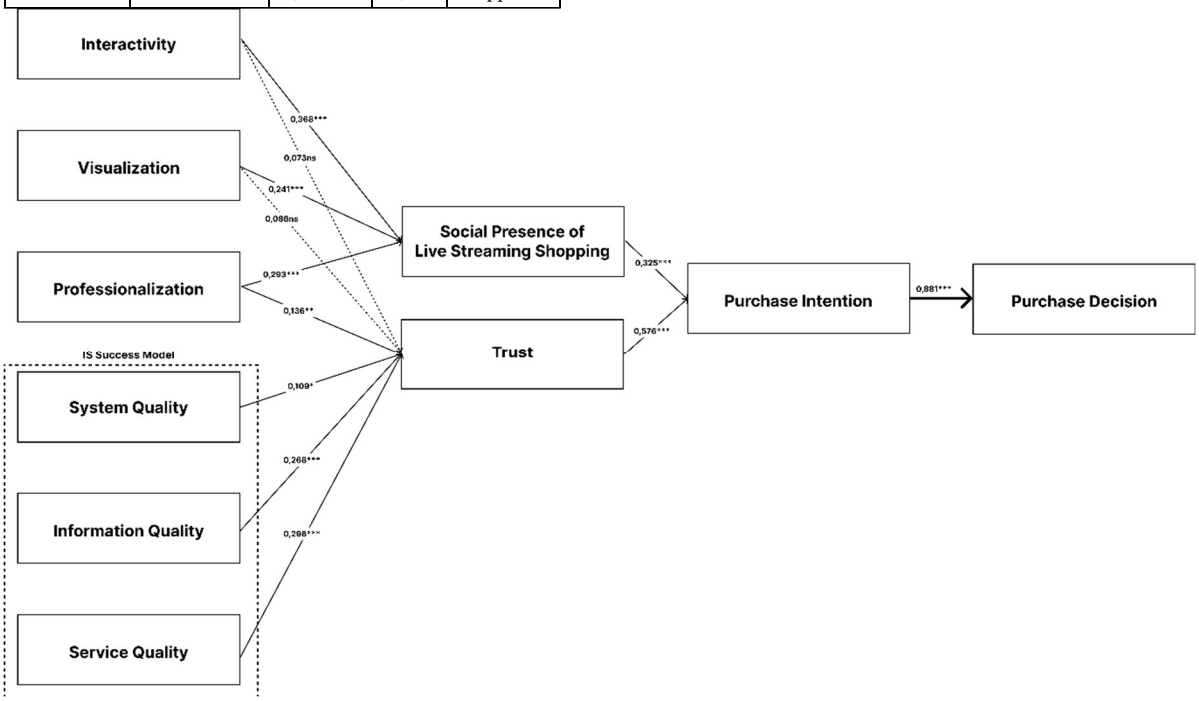

*Figure 2: Hypothesis Testing Result, Note: ns: non-significant; * p < 0.05; ** p < 0.01; *** p < 0.001.*

4.4 Discussions

First, based on the previous hypothesis testing results, the variable Interactivity on the variable Social Presence Form of Live Streaming Shopping has a p-value of less than 0.05, specifically 0.000, and a t-statistic value of 6.360. Based on these two values, it is stated that the Interactivity variable has a significant effect on the Social Presence Form of Live Streaming Shopping variable. This finding is consistent with research conducted by [14] [23] [22], which states that the Interactivity variable influences the Social Presence Form of Live Streaming Shopping. Based on the factor loading results in Table 13, the [IN3] indicator has a high value of 0.866. This corresponds to the statement that "In my opinion, an interactive streamer answers viewers' questions with relevant information." Conversely, the factor loading result for the [IN1] indicator has the lowest value of 0.850 with the statement that "In my opinion, an interactive streamer enjoys communicating with viewers during live streaming shopping.". This result indicates that the Interactivity variable significantly influences Social Presence, emphasizing the importance of informative interaction quality in live streaming shopping.

Second, based on the previous hypothesis testing results, the variable Interactivity on the variable Trust has a p-value greater than 0.05, specifically 0.150, and a t-statistic value of 1.441. Based on these two values, it is stated that the Interactivity variable does not have a significant effect on the Trust variable. This finding is consistent with research conducted by [14], which states that the Interactivity variable does not influence Trust. Based on the factor loading results in Table 13, the [IN3] indicator has a high value of 0.866, corresponding to the statement that "In my opinion, an interactive streamer answers viewers' questions with relevant information." Conversely, the factor loading result for the [IN1] indicator has the lowest value of 0.850, corresponding to the statement that "In my opinion, an interactive streamer enjoys communicating with viewers during live streaming shopping.". This result indicates that the Interactivity variable does not significantly influence Trust, suggesting that interactive communication alone is not sufficient to build trust in live streaming shopping.

Third, based on the previous hypothesis testing results, the variable Visualization on the variable Social Presence Form of Live Streaming Shopping has a p-value less than 0.05, specifically 0.000, and a t-statistic value of 4.179. Based on these two values, it is stated that the Visualization variable has a significant effect on the Social Presence Form of Live Streaming Shopping variable. This finding is consistent with research conducted by [14] [24]; and [25], which states that the Visualization variable influences the Social Presence Form of Live Streaming Shopping. Based on the factor loading results in Table 13, the [VI2] indicator has a high value of 0.885, corresponding to the statement that "Live streaming shopping makes product details clearly visible." Conversely, the factor loading result for the [VI3] indicator has the lowest value of 0.798 with the statement that "Live streaming shopping provides a visualization of the product as in the real world.". This result indicates that the Visualization variable significantly influences Social Presence, highlighting the importance of clear product detail visualization in enhancing viewers' social presence during live streaming shopping.

Fourth, based on the previous hypothesis testing results, the variable Visualization on the variable Trust has a p-value greater than 0.05, specifically 0.051, and a t-statistic value of 1.955. Based on these two values, it is stated that the Visualization variable does not have a significant effect on the Trust variable. This finding is not consistent with research conducted by [14], which states that the Visualization variable does influence Trust. Based on the factor loading results in Table 13, the [VI2] indicator has a high value of 0.885, corresponding to the statement that "Live streaming shopping makes product details clearly visible." Conversely, the factor loading result for the [VI3] indicator has the lowest value of 0.798, corresponding to the statement that "Live streaming shopping provides a visualization of the product as in the real world." This result indicates that the Visualization variable does not significantly influence Trust, suggesting that clear product visualization alone is not sufficient to build trust in live streaming shopping.

Fifth, based on the previous hypothesis testing results, the variable Professionalization on the variable Social Presence Form of Live Streaming Shopping has a p-value less than 0.05, specifically 0.000, and a t-statistic value of 4.324. Based on these two values, it is stated that the Professionalization variable has a significant effect on the Social Presence Form of Live Streaming Shopping variable. This finding is consistent with research conducted by [26], which states that the Professionalization variable influences Social Presence Form of Live Streaming Shopping. Based on the factor loading results in Table 13, the [PR3] indicator has a high value of 0.869, corresponding to the statement that "In my opinion, a professional streamer has good knowledge of the products explained during live streaming shopping." Conversely, the factor loading result for the [PR2] indicator has the lowest value of 0.854, corresponding to the statement that "In my opinion, a professional streamer is experienced in using the products explained during live streaming shopping." This result indicates that the Professionalization variable significantly influences Social Presence, emphasizing the importance of streamers' product knowledge and experience in enhancing viewers' social presence during live streaming shopping.

Sixth, based on the previous hypothesis testing results, the variable Professionalization on the variable Trust has a p-value less than 0.05, specifically 0.006, and a t-statistic value of 2.752. Based on these values, it is stated that the Professionalization variable significantly influences the Trust variable. This finding is consistent with research conducted by [14], which states that the Visualization variable influences Trust. Based on the factor loading results in Table 13, the [PR3] indicator has a high value of 0.869, corresponding to the statement that "In my opinion, a professional streamer has good knowledge of the products explained during live streaming shopping."

Conversely, the factor loading result for the [PR2] indicator has the lowest value of 0.854, corresponding to the statement that "In my opinion, a professional streamer is experienced in using the products explained during live streaming shopping." This result indicates that the Professionalization variable significantly influences Trust, highlighting the importance of streamers' product knowledge and experience in building trust during live streaming shopping.

Seventh, based on the previous hypothesis testing results, the variable System Quality on the variable Trust has a p-value less than 0.05, specifically 0.048, and a t-statistic value of 1.977. Based on these values, it is stated that the System Quality variable significantly influences the Trust variable. This finding is consistent with research conducted by [12], which states that the System Quality variable influences Trust. Based on the factor loading results in Table 13, the [SQ1] indicator has a high value of 0.875, corresponding to the statement that "The livestream feature on the e-commerce platform quickly loads all text and graphics." Conversely, the factor loading result for the [SQ3] indicator has the lowest value of 0.830, corresponding to the statement that "The livestream feature on the e-commerce platform is easy to navigate." This result indicates that the System Quality variable significantly influences Trust, highlighting the importance of features such as quick loading and ease of navigation in building trust in e-commerce livestreaming platforms.

Eighth, based on the previous hypothesis testing results, the variable Information Quality on the variable Trust has a p-value less than 0.05, specifically 0.000, and a t-statistic value of 4.299. Based on these values, it is stated that the Information Quality variable significantly influences the Trust variable. This finding is consistent with research conducted by [12], which states that the Information Quality variable influences Trust. Based on the factor loading results in Table 13, the [IQ4] indicator has a high value of 0.879, corresponding to the statement that "The livestream feature on the e-commerce platform provides me with the latest information." Conversely, the factor loading result for the [IQ1] indicator has the lowest value of 0.845, corresponding to the statement that "The livestream feature on the e-commerce platform provides me with information relevant to my needs." This result indicates that the Information Quality variable significantly influences Trust, highlighting the importance of providing up-to-date and relevant information in e-commerce livestreaming platforms to build trust among users.

Ninth, based on the previous hypothesis testing results, the variable Service Quality on the variable Trust has a p-value less than 0.05, specifically 0.000, and a t-statistic value of 5.158. Based on these values, it is stated that the Service Quality variable significantly influences the Trust variable. This finding is consistent with research conducted by [12], which states that the Service Quality variable influences Trust. Based on the factor loading results in Table 13, the [SE3] indicator has a high value of 0.885, corresponding to the statement that "When I participate in live-stream shopping on an e-commerce platform, the streamers understand my specific needs." Conversely, the factor loading result for the [SE4] indicator has the lowest value of 0.845, corresponding to the statement that "When I participate in live-stream shopping on an e-commerce platform, the live streamer has the knowledge to answer my questions about the products." This result indicates that the Service Quality variable significantly influences Trust, emphasizing the importance of streamers' understanding of users' needs and their knowledge about the products in building trust in e-commerce livestreaming platforms.

Tenth, based on the previous hypothesis testing results, the variable Social Presence of Live Streaming Shopping on the variable Purchase Intention has a p-value less than 0.05, specifically 0.000, and a t-statistic value of 6.140. Based on these values, it is stated that the Social Presence of Live Streaming Shopping variable significantly influences the Purchase Intention variable. This finding is consistent with research conducted by [14] [23] [22], which states that the Social Presence of Live Streaming Shopping variable influences Purchase Intention. Based on the factor loading results in Table 13, the [SP1] indicator has a high value of 0.868, corresponding to the statement that "I feel connected with the streamer when shopping through live streaming shopping." Conversely, the factor loading result for the [SP2] indicator has the lowest value of 0.849, corresponding to the statement that "I feel closeness with the streamer when shopping through live streaming shopping." This result indicates that the Social Presence of Live Streaming Shopping variable significantly influences Purchase Intention, emphasizing the importance of feeling connected and close to the streamer in influencing purchase decisions during live streaming shopping.

Eleventh, based on the previous hypothesis testing results, the variable Trust on the variable Purchase Intention has a p-value less than 0.05, specifically 0.000, and a t-statistic value of 11.326.

Based on these values, it is stated that the Trust variable significantly influences the Purchase Intention variable. This finding is consistent with research conducted by [12], which states that the Trust variable influences Purchase Intention. Based on the factor loading results in Table 13, the [TR1] indicator has a high value of 0.885, corresponding to the statement that "I trust that the products I order from the livestream feature on the e-commerce platform will meet my expectations." Conversely, the factor loading result for the [TR2] indicator has the lowest value of 0.838, corresponding to the statement that "I am confident that the products I receive will be the same as those shown in the livestream on the e-commerce platform." This result indicates that the Trust variable significantly influences Purchase Intention, highlighting the importance of trust in ensuring customers' confidence in their purchase intention during e-commerce livestreaming.

Finally, based on the previous hypothesis testing results, the variable Purchase Intention on the variable Purchase Decision has a p-value less than 0.05, specifically 0.000, and a t-statistic value of 70.331. Based on these values, it is stated that the Purchase Intention variable significantly influences the Purchase Decision variable. This finding is consistent with research conducted by [12] [34] [35] [36], which states that the Purchase Intention variable influences Purchase Decision. Based on the factor loading results in Table 13, the [PI3] indicator has a high value of 0.888, corresponding to the statement that "I intend to purchase products or services through live streaming shopping." Conversely, the factor loading result for the [PI2] indicator has the lowest value of 0.846, corresponding to the statement that "I plan to purchase products or services through live streaming shopping." This result indicates that the Purchase Intention variable significantly influences Purchase Decision, emphasizing the importance of consumers' intentions in shaping their actual purchasing behavior during live streaming shopping.

5. CONCLUSION AND SUGGESTION

5.1 Conclusion

The objective of this study is to identify the factors influencing customers' purchase decisions during live streaming shopping. From the analysis of 12 variables, 10 are found to have a significant impact. Firstly, we discover that interactivity significantly enhances the social presence during live streams. This means that engaging and informative interactions make viewers feel more connected to the shopping experience. Similarly, clear and detailed visualization of products also boosts social presence, making the experience more immersive.

The professionalism of the streamers plays a crucial role as well. Streamers' knowledge and expertise not only enhance social presence but also build trust with the audience. Moreover, system quality is vital, with features like quick loading times and easy navigation significantly contributing to trust. Providing accurate and up-to-date information is another key factor in establishing trust among viewers.

Service quality is equally important, as streamers who understand and meet users' needs help in building a trustworthy shopping environment. Social presence itself has a direct influence on purchase intention, emphasizing that feeling connected and close to the streamer motivates viewers to buy. Trust, naturally, is a major driver of purchase intention, ensuring customers feel confident in their buying decisions during live streams.

However, two hypotheses are not supported by the findings. Interactivity, while enhancing social presence, does not directly translate to increased trust. Likewise, visualization, although improving social presence, does not directly impact trust.

In summary, this study highlights the critical factors influencing purchase decisions in live streaming shopping. Interactivity, visualization, professionalization, system quality, information quality, service quality, social presence, and trust all play essential roles in shaping customers' experiences and their ultimate purchase decisions. Understanding these factors helps e-commerce platforms and streamers enhance their strategies, effectively engaging and converting viewers into buyers during live streams..

5.2 Suggestion

This research goes beyond existing studies by investigating the combined effects of social presence and trust on purchase intention. Additionally, we explore the mediating role of social presence in the relationship between other factors and trust. Based on the results of data collection and data analysis that have been carried out in this research, there are several suggestions that the researchers put forward, namely as follows:

- **For Streamers in Live Streaming Shopping**

Streamers can enhance their impact on viewers and boost purchase decisions by prioritizing engagement

through interactive elements like Q&A sessions, live demonstrations, and real-time responses to comments. This approach fosters a sense of connection and involvement, making the shopping experience more engaging for viewers. Additionally, streamers should ensure clear and detailed visualization of products using high-quality cameras and proper lighting to show products from multiple angles and provide close-ups of important features. Demonstrating extensive product knowledge and expertise further builds trust and enhances credibility, which is crucial for influencing purchase decisions. Choosing a user-friendly streaming platform with quick loading times and easy navigation can significantly improve viewer satisfaction. Streamers should also provide accurate and up-to-date product information, regularly updating their knowledge base to offer relevant details and comparisons. Lastly, understanding viewers' needs and providing tailored recommendations creates a supportive and trustworthy environment, enhancing the overall shopping experience.

- **For Customers in Live Streaming Shopping**

To maximize the benefits and satisfaction from live streaming shopping, customers should actively engage in live interactions by asking questions and seeking clarifications. This proactive approach helps in making informed decisions and enhances the overall shopping experience. Paying close attention to product demonstrations and visual details during the stream is crucial to ensure a clear understanding of product features and specifications before making a purchase. Customers should also assess the professionalism of streamers, opting for those who display thorough product knowledge and provide detailed information, as this can significantly influence confidence in the product and the purchase decision. Choosing to shop on platforms that offer a smooth and user-friendly experience ensures a hassle-free shopping process. It is beneficial to cross-check information provided by the streamer with other reliable sources to make well-informed purchase decisions. Lastly, valuing good customer service by choosing streamers who are attentive and responsive to customer needs enhances the overall experience and builds trust in the shopping process. By focusing on these areas, customers can significantly improve their live streaming shopping experiences, leading to more informed decisions and increased satisfaction.

5.3 Implications

By identifying the critical role of social presence and trust in influencing purchase decisions, this study offers valuable insights for e-commerce platforms and streamers. Enhancing interactivity, streamer professionalism, and providing high-quality information fosters a more engaging and trustworthy environment, ultimately leading to higher conversion rates. These findings can be used to develop strategies for optimizing live streaming experiences and maximizing customer satisfaction.

5.4 Limitation

This study provides valuable insights into factors influencing customer purchase decisions during live streaming shopping. However, limitations exist. The data was collected from a sample of Indonesian consumers, potentially limiting generalizability to other regions. Additionally, the study focused on a specific set of social commerce platforms. Future research could explore the influence of these factors across a broader range of platforms and demographics.

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