

The Effect of Demand, Convenience, Interactivity, Playfulness Through Impulsive Buying as an Intervening Variable on Shopee Live

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ABSTRACT

Lifestyles and patterns of people's behavior in everyday life have been influenced by technology that is currently developing rapidly which is followed by the use of the internet, especially in online trading, especially in purchasing products through ecommerce. Technology and innovation have changed the way buyers and sellers engage in market exchanges. Live streaming has become a new medium for e-commerce marketing. Shopee is the number 1 e-commerce in Indonesia followed by the number 1 Shopee Live feature in Indonesia which is widely accessed. With the new trend of shopping through live streaming, the aim of this research is to analyze the influence demand, convenience, interactivity, playfulness to impulsive buying through perceived enjoyment Shopee Live in the Indonesian region. This study uses a quantitative approach with descriptive analysis. The sampling technique used is non-probability sampling with 400 respondents with a Likert scale. The data analysis method used is partial least square on SmartPLS 3.0 software. The results of this study are variable demand (X1) has a positive and significant effect on variables perceived enjoyment (Z) and impulsive buying (Y) mediated by perceived enjoyment (Z), variable convenience(X2) has a positive and not significant effect on variables perceived enjoyment with impulsive buying (Y) mediated by perceived enjoyment (Z), variable interactivity (X3) has a positive and not significant effect on variables perceived enjoyment (Z) dan impulsive buying (Y) mediated by perceived enjoyment(Z), variable playfulness (X4) has a positive and significant effect on variables perceived enjoyment (Z) and against impulsive buying (Y) mediated by perceived enjoyment (Z), variable perceived enjoyment (Z) has a positive and significant influence on impulsive buying.

Keywords: Demand, Convenience, Interactivity, Playfulness, Impulsive Buying, Perceived Enjoyment

INTRODUCTION

Internet -network (Internet) is a private computer network that connects to one another around the world using standards Internet Protocol Suite . The level of operational effectiveness of the company has increased since the presence of the internet as an infrastructure, especially in means of publication, communication and means of obtaining information. In everyday life, the internet can be used to exchange information through social media, online sales and purchases, online academic registration, and others. Internet technology is almost used by all community activities in Indonesia. Lifestyle and patterns of people's behavior in everyday life have been influenced by technology that is currently developing rapidly. Utilization of information technology is currently used as a marketing tool to better introduce the products offered by business people and can carry out buying and selling activities

to make transactions through e-commerce. The existence of e-commerce can be used as an alternative by the public in shopping without having to come directly to the store.

Shopping trends using direct shopping can be found in markets and on social media . Technology and innovation continue to evolve to change the way buyers and sellers engage in market exchanges in retail and customer service. As mentioned by (Hu & Chaudhry, 2020)in the context of the development of technological innovation, live streaming has become a new medium in e-commerce marketing . With the existence of live streaming on e-commerce has been considered as the latest marketing trend and become a new channel, a new way, and a new experience for consumers to shop. At this time, sellers are taking advantage of the advantages of live streaming platforms on e-commerce to increase



the popularity of their stores and some of them are promoting online business based on the convenience for their viewers such as live chat features, virtual gift systems, and online shop functions (Li et al., 2022).

Shopee ranks as the number one e-commerce website in Indonesia. Shopee is aware of the importance of content marketing and its impact on the engagement that will be built between the audience and Shopee. Therefore, Shopee created a new channel for its application called Shopee Live. Shopee Live is a feature that provides an opportunity for sellers to promote their stores and products directly to viewers or potential buyers and can create live streaming sessions. Buyers can interact directly with sellers in real time to learn more about products and make purchases without ever leaving the website.

From the explanation above, technology greatly influences and changes consumer behavior so that researchers are encouraged to conduct research entitled "**The Effect of Demand, Convenience, Interactivity, Playfulness on Impulsive Buying with Perceived Enjoyment as an Intervening Variable at Shopee Live**".

METHOD

The research method used in this research is to use quantitative methods with descriptive research types. The research was conducted with 400 samples obtained from a questionnaire where the use of a Likert scale was worth 1-5 in a questionnaire

that was filled in by respondents who had made purchases through Shopee Live and are domiciled in Indonesia. The sampling technique is non-probability sampling through purposive sampling . Because the certainty of the total population is not known, the use of the Shows lemes formula in research with a 95% confidence level and 5% error tolerance . Data analysis techniques through SmartPLS 3.0 software .

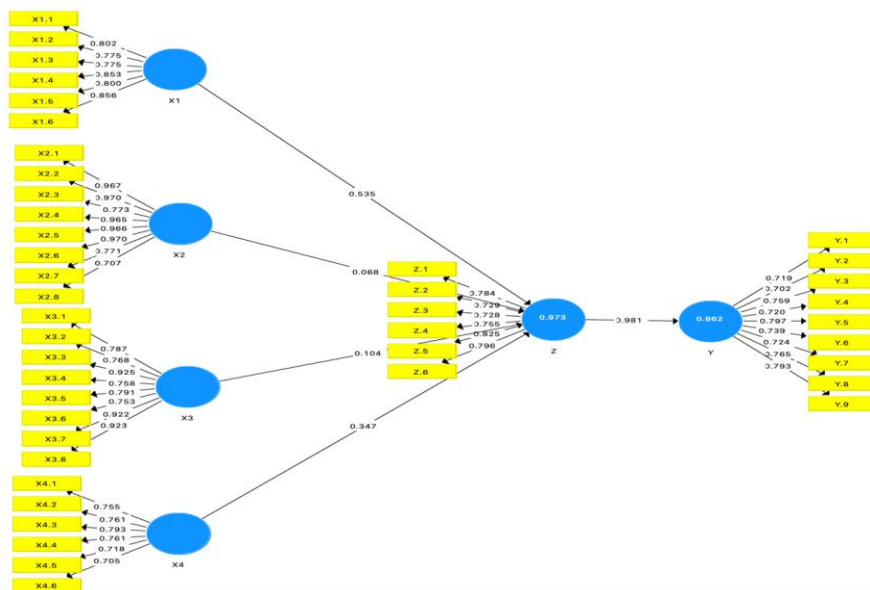
RESULT and DICUSSION

1. Descriptive Analysis Results

- Demand on Shopee Live is in the good category and has a proportion of 79.16%.
- Convenience on Shopee Live is in the good category and has a proportion of 79.31%.
- Interactivity on Shopee Live is in the good category and has a proportion of 68.91%.
- Playfulness on Shopee Live is in the good category and has a proportion of 78.53%.
- The pleasure felt at Shopee Live is in the good category and has a proportion of 78.93%.
- Impulsive Purchases on Shopee Live are in the good category and have a proportion of 77.93%.

2. Outer Models

Measurement (outer model) is a link between the direct variable and the indirect variable. Based on the SmartPLS estimation method, the path diagram measurement model can be described as follows:



Gambar 4. 1 Path Diagram Outer Model
 Sumber : Data Primer Oleh Peneliti (2023)

3. Convergent validity

Convergent validity can be said to be valid if the score obtained from the results of measuring the concept or through different methods has shown a high relationship. The

following are the results obtained by the researcher after carrying out the tests shown in the table below:

Table 1. Outer Loading Results

Indikator	demand	Comfort	Interactivity	Cheerfulness	Experienced Pleasure	Impulsive Purchases
DO.1	0.802					
DO.2	0.775					
DO.3	0.775					
DO.4	0.853					
DO.4	0.800					
DO.6	.856					
CO. 7		0.967				
CO. 8		.970				
CO. 9		0.773				
CO. 10		0.965				
CO. 11		0.966				
CO. 12		.970				
CO. 13		0.771				
CO. 14		0.707				
IN. 15			0.787			
IN. 16			0.768			
IN. 17			.925			
IN. 18			.758			
IN. 19			0.791			
IN. 20			0.753			
IN. 21			0.922			
IN. 22			0.923			
PL. 23				.755		
PL. 24				0.761		
PL. 25				0.793		
PL. 26				0.761		
PL. 27				0.718		
PL. 28				0.705		
PE.29					0.784	
PE.30					0.729	
PE.31					0.728	
PE.32					.755	
PE.33					.825	
PE.34					0.796	
IB.35						0.719
IB.36						0.702
IB.37						0.759
IB.38						0.720
IB.39						.797
IB.40						0.739
IB.41						0.724
IB.42						0.765

Source: Primary Data by Researchers (2023)

After all the indicators in the outer loading obtained have a value of > 0.7 so that they can be declared valid as in table 4.1, then a convergent validity test is carried out which

takes into account the average value of the difference extracted (AVE) . The following table is presented which is the result of AVE in this study:

Table 4. 1Average Variance Extracted (AVE) Results

Variable	AVE	Critical Value	Model Evaluation
Request (X1)	0.66	>0.5	Legitimate
Convenience (X2)	0.8		Legitimate
Interactivity (X3)	0.69		Legitimate
Happiness (X4)	0.56		Legitimate
Perceived Pleasure (Z)	0.59		Legitimate
Impulsive Purchase (Y)	0.56		Legitimate

Source: Primary Data By Researchers (2023)

Based on Table 4.9 above, it can be seen that the value of each variable has an AVE value greater than the critical value of 0.5 so that the above variables fulfill the convergent validity requirements.

data shows a construct correlation for each indicator is higher than the value of the other constructs , then the variable has a high cross loading factor and Fornell Less . The results of the cross loading factor using SmartPLS 3.0 are presented in the table below:

4. Discriminant Validity

Cross Loadings and Fornell are two ways in which Discriminant Validity is viewed. If the

Table 4. 2Results (Cross Loading Factor)

Indicato	demand	Comfor	Interactivit	Cheerfulnes	Experienced	Impulsive
r	s	t	y	s	Pleasure	Purchases
DO.1	0.802	0.674	0.782	0.591	0.766	0.757
DO.2	0.775	0.477	0.523	0.666	0.7	0.728
DO.3	0.775	0.475	0.522	0.667	0.702	0.729
DO.4	0.853	0.663	0.765	0.666	0.789	0.822
DO.4	0.8	0.675	0.783	0.588	0.765	0.755
DO.6	0.856	0.667	0.768	0.671	0.793	0.825
CO. 7	0.701	0.967	0.921	0.715	0.793	0.792
CO. 8	0.705	0.97	0.925	0.715	0.795	0.794
CO. 9	0.607	0.773	0.76	0.611	0.744	0.656
CO. 10	0.696	0.965	0.917	0.713	0.787	0.786
CO. 11	0.703	0.966	0.921	0.719	0.793	0.793
CO. 12	0.705	0.97	0.925	0.718	0.797	0.796
CO. 13	0.607	0.771	0.758	0.609	0.743	0.654
CO. 14	0.616	0.707	0.757	0.549	0.724	0.639
IN. 15	0.797	0.68	0.787	0.586	0.764	0.754
IN. 16	0.856	0.667	0.768	0.671	0.793	0.825
IN. 17	0.705	0.97	0.925	0.718	0.797	0.796
IN. 18	0.607	0.771	0.758	0.609	0.743	0.654
IN. 19	0.677	0.688	0.791	0.629	0.744	0.706
IN. 20	0.61	0.702	0.753	0.542	0.718	0.632
IN. 21	0.699	0.965	0.922	0.714	0.792	0.791
IN. 22	0.705	0.966	0.923	0.721	0.796	0.794
PL. 23	0.529	0.412	0.445	0.755	0.551	0.557

PL. 24	0.558	0.449	0.487	0.761	0.585	0.593
PL. 25	0.657	0.539	0.593	0.793	0.759	0.784
PL. 26	0.589	0.488	0.544	0.761	0.72	0.731
PL. 27	0.705	0.97	0.925	0.718	0.797	0.796
PL. 28	0.436	0.377	0.395	0.705	0.469	0.481
PE.29	0.657	0.535	0.59	0.789	0.756	0.784
PE.30	0.775	0.475	0.522	0.667	0.702	0.729
PE.31	0.585	0.483	0.537	0.756	0.714	0.728
PE.32	0.8	0.675	0.783	0.588	0.765	0.755
PE.33	0.856	0.667	0.768	0.671	0.793	0.825
PE.34	0.705	0.97	0.925	0.718	0.797	0.796
IB.35	0.606	0.509	0.559	0.602	0.719	0.644
IB.36	0.775	0.475	0.522	0.667	0.702	0.729
IB.37	0.657	0.539	0.593	0.793	0.759	0.784
IB.38	0.589	0.488	0.544	0.761	0.72	0.731
IB.39	0.705	0.97	0.925	0.718	0.797	0.796
IB.40	0.601	0.774	0.759	0.605	0.739	0.65
IB.41	0.616	0.707	0.757	0.549	0.724	0.639
IB.42	0.8	0.675	0.783	0.588	0.765	0.755
IB.43	0.856	0.667	0.768	0.671	0.793	0.825

Source: Primary Data by Researchers (2023)

Based on Table 4.10 it shows that all the hypothesized constructs meet the criteria of discriminant validity, with the square root value of AVE in each construct being higher than the

correlation value between constructs which is a prerequisite for the AVE value being met, so that in this study it can be concluded that the indicators used meet these requirements.

Table 4.4 3 Fornell-Lacker Criterion Results

	demand s	Comfor t	Interactivit y	Cheerfulnes s	Impulsive Purchases	Enjoyment
demands	0.811					
Comfort	0.75	0.892				
Interactivity	0.856	0.968	0.832			
Cheerfulness	0.791	0.753	0.785	0.749		
Impulsive Purchases	0.929	0.864	0.926	0.89	0.747	
Enjoyment	0.95	0.832	0.901	0.904	0.981	0.77

Source: Primary Data by Researchers (2023)

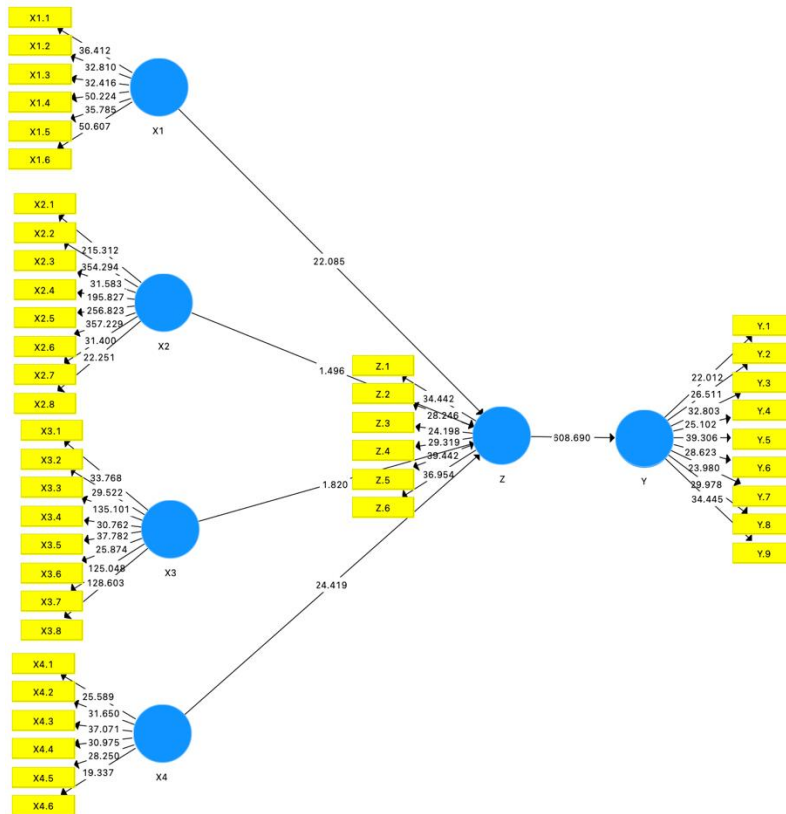
5. Reliability Test

Table 4.5 4Source: Primary Data by Researchers (2023)

the Composite Reability and Chronbach's Alpha values are above 0.7 for each variable, so that it can be resolved that the data has high reliability.

6. Deep Models

The following is a path diagram of the inner model that was carried out through the bootstrapping process in the study:



Gambar 4.2 Path Diagram Inner Model (Bootstrapping)
 Source: Primary Data by Researchers (2023)

R-Square

Table 4.6 Value of R Square

	R square
Impulsive Buying	0.962
Experienced Pleasure	0.973

From Table 4.6 it can be seen that the R-Square value for the Perceived Enjoyment (Z) variable is 97.3% and the Impulsive Buying (Y) variable is 96.2%. From this it can be stated that the R-Square value in the Perceived Enjoyment variable is 97.3% where Perceived Enjoyment (Z) can be explained by the independent variable (X) and 2.7% is influenced by other variables not examined in this study. Then the R-Square value for the Impulsive Buying variable (Y) is 96.2%,

Estimate the Path Coefficient

hypothesis	Variable	Original Sample (O)	Average Sample (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Mark	Information
H1	Demand -> Perceived Pleasure	0.535	0.536	0.024	22,246	0	Positive and

which means it can be explained by the independent variable (X) and the remaining 3.8% is influenced by other variables not examined in this study.

7. Predictive Relevance

Inner model testing with predictive relevance is done using the following formula:

$$Q2 = 1 - (1 - R1^2)(1 - R2^2)$$

$$Q2 = 1 - (1 - 0.973^2)(1 - 0.962^2)$$

$$Q2 = 0.996$$

From the results above it can be seen that the model has a significant predictive value because the predictive relevance of 0.996 means greater than 0.

Hypothesis	Path	t-statistic	p-value	Path Coefficient	Significance	Result	
H2	Comfort -> Enjoyment	0.068	0.07	0.045	1,518	0.13	Significant Positive and Not Significant
H3	Interactivity -> Perceived Pleasure	0.104	0.101	0.056	1871	0.062	Significant Positive and Not Significant
H4	Delight -> Felt Pleasure	0.347	0.348	0.014	24,645	0	Significant Positive and Significant
H5	Perceived Pleasure -> Impulsive Purchase	0.981	0.981	0.002	571,412	0	Significant Positive and Significant
H6	Request -> Received Pleasure -> Impulsive Purchase	0.525	0.525	0.022	24,046	0	Significant Positive and Significant
H7	Convenience -> Perceived Pleasure -> Impulsive Purchase	0.067	0.067	0.043	1,551	0.122	Significant Positive and Not Significant
H8	Interactivity -> Perceived Enjoyment -> Impulsive Buying	0.102	0.102	0.052	1964	0.05	Significant Positive and Not Significant
H9	Excitement -> Perceived Pleasure -> Impulsive Buying	0.341	0.342	0.014	23,570	0	Significant Positive and Significant

Source: Primary Data By Researchers (2022)

1) H1: Demand will positively affect Perceived Pleasure.
 The results based on the t-statistic test give a significance value of $22.246 > 1.96$ and a path coefficient of 0.535, p-values $0.000 < 0.005$, so H_0 is rejected. The correlation between demand and perceived pleasure is positive and significant. From this it can be concluded that demand does not affect the acceptance of perceived pleasure. A positive relationship between Perceived Enjoyment is positive and not significant. So, it can be stated that Convenience towards Impulsive Buying is rejected. The relationship that is not significant shows an

performances shows that as demand increases, it will be followed by an increase in perceived enjoyment.
 2) H 2: Comfort will positively affect perceived pleasure.
 The results obtained based on testing in the t-statistics study obtained a significance value of $1.518 > 1.96$ and a path coefficient value of 0.068, p-values $0.130 < 0.005$, so that H_0 is accepted. The relationship between Convenience and increase in comfort, then it is not followed by an increase in perceived pleasure.
 3) H 3 : Interactivity will positively affect perceived enjoyment.



The results obtained based on testing in the t-statistics study obtained a significance value of $1.871 > 1.96$ and a path coefficient value of 0.104 , p-values $0.062 < 0.005$, so that H_0 is accepted. The relationship between interactivity and perceived pleasure is positive and not significant. So, it can mean that interactivity has no effect on the enjoyment that is felt being rejected. The relationship is not significant the more interactivity the performance increases, then it is not followed by an increase in perceived pleasure.

- 4) H 4 : Playing will positively affect perceived enjoyment.

The results based on the t-statistic test give a significance value of $24.645 > 1.96$ and a path coefficient of 0.347 , p-values $0.000 < 0.005$, so H_0 is rejected. The correlation between playfulness and perceived enjoyment is positive and significant. From this it can be concluded that playing has an effect on the acceptance of perceived pleasure. A positive relationship shows that playfulness increases, it will be followed by an increase in perceived enjoyment.

- 5) H 5: Perceived Pleasure will positively influence consumers to make Impulsive Purchases.

The results based on the t-statistic test give a significance value of $571.412 > 1.96$ and a path coefficient of 0.981 , p-values $0.000 < 0.005$, so H_0 is rejected. The correlation between perceived enjoyment and impulse buying is positive and significant. From here it can be concluded that perceived enjoyment affects the acceptance of impulse buying. A positive relationship shows that when pleasure is felt, it will be followed by an increase in impulse purchases.

- 6) H 6 : Effect of demand Impulse buying is mediated by perceived pleasure.

The results obtained based on testing in the t-statistics study obtained a significance value of $24,046 > 1.96$ and a path coefficient value of 0.525 , p-values $0.000 > 0.005$, so H_0 was rejected. Demand relationship to impulsive buying which is mediated by perceived enjoyment is positive and significant. So, it can be concluded that the demand for impulsive

purchases mediated by perceived pleasure has an effect on being accepted. The positive relationship shows an increase in demand mediated by perceived pleasure followed by an increase in impulsive purchases.

- 7) H 7 : Convenience influences impulse buying mediated by perceived pleasure.

The results obtained based on testing in the t-statistics study obtained a significance value of $1.551 > 1.96$ and a path coefficient value of 0.067 , p-values $0.122 < 0.005$, so that H_0 is accepted. The relationship between convenience and impulse buying mediated by perceived enjoyment is positive and not significant. So, it can be stated that convenience has no effect on impulsive buying which is mediated by the perceived pleasure of being rejected. The relationship that is not significant shows an increase in comfort mediated by perceived pleasure, so it is not followed by an increase in impulsive purchases.

- 8) H 8 : Interactivity influences impulse buying mediated by perceived pleasure.

The results obtained based on testing in the t-statistics study obtained a significance value of $1.964 > 1.96$ and a path coefficient value of 0.102 , p-values $0.050 > 0.005$, so H_0 is accepted. The relationship between interactivity and impulsive buying mediated by perceived pleasure is positive and not significant. Thus, it can be stated that interactivity influences impulsive buying which is mediated by pleasure that is felt rejected. The relationship that is not significant shows an increase in interactivity mediated by perceived pleasure, so it is not followed by an increase in impulsive buying.

- 9) H 9 : Happiness affects impulse buying mediated by perceived pleasure.

The results obtained based on testing in the t-statistics study obtained a significance value of $23,570 > 1.96$ and a path coefficient value of 0.431 , p-values $0.000 > 0.005$, so H_0 was rejected. The relationship of playfulness to impulsive buying mediated by perceived enjoyment is positive and significant. So, it can be concluded that play on impulsive buying mediated by perceived pleasure has an effect on being received. The positive relationship shows

an increase in pleasure mediated by perceived pleasure followed by an increase in impulsive buying.

β = beta = effect coefficient of comfort exogenous variable vector (X2)

π = pi = effect coefficient of the interactivity exogenous variable vector (X3)

γ = the effect coefficient of the exogenous variable vector of joy (X4)

X1 = demand variable vector

X2 = comfort variable vector

X3 = vector of the interactivity variable

X4 = playful variable vector

error = vector of structural error

Error = $1 - R^2$ ($R^2 = 0.972$)

= $1 - 0.972 = 0.028$

Then obtained ,

Equation Models

The first sub-structural

In this study, the independent variables have empathy, namely demand, convenience, interactivity, playfulness and impulsive buying bond variables if calculated using the formula below:

$$Z = \alpha_n X_1 + \beta_n X_2 + \pi_n X_3 + \gamma_n X_4 + \text{error}$$

Information :

α = alpha = effect coefficient of the demand exogenous variable vector (X1)

$$Z = 0,535X_1 + 0,068X_2 + 0,104 X_3 + 0,347X_4 + 0.028$$

Influence between First Sub Structural Variables

Variable	Track	Coefficient	Indirect Influence				Total indirect influence	Total influence
			Direct influence	x1	x2	x3		
x1	x1		0.535²		0.535x0.068	0.535x0.104		
	->z	0.535	0.286	-	x0.750 = 0.027	x0.856 = 0.048	0.535x0.347x0.791= 0.147	0.222
x2	x2		0.068²	0.068x0.535		0.068x0.104		
	->z	0.068	0.005	x0.750=0.027	-	x0.986=0.007	0.068x0.347x0.753=0.018	0.052
x3	x3		0.104²	0.104x0.535	0.104x0.068		0.104x0.347	
	->z	0.104	0.011	x0.856=0.048	x0.968=0.007	-	x0.785=0.028	0.083
x4	x4		0.347²	0.347x0.535	0.347x0.068	0.347x0.104		
	->z	0.347	0.127	x0.791=0.147	x0.753=0.018	x0.785=0.028	-	0.193
Total Impact								0.972
Error	-	1-0.972 = 0.028						2.80%

Source: Primary Data by Researchers (2023)

- the demand contribution (X1) which directly affects the pleasure felt (Z) is $0,535^2 = 0.2862$ or 28.62%
- comfort contribution (X2) which directly affects the pleasure felt (Z) is $0,068^2 = 0.0046$ or 0.46%
- interactivity contribution (X3) which directly affects the pleasure felt (Z) is $0,104^2 = 0.0108$ or 1.08%
- The magnitude of the contribution of joy (X4) which directly affects the pleasure felt (Z) is $0,347^2 = 0.1204$ or 12.04%

5. The magnitude of the contribution of demand (X1), comfort (X2), interactivity (X3), and playfulness (X4) totally and directly affect the perception of enjoyment is 0.972 or 97.2% and the remaining 2.8% comes from other factors that not used in this study.

Second Sub Structural

$$Y = \theta Z + \text{error}$$

$$Y = 0,981 (\alpha_n X_1 + \beta_n X_2 + \pi_n X_3 + \gamma_n X_4) + \text{error}$$

α = alpha = effect coefficient of the demand exogenous variable vector (X1)
 β = convenience (X2)

π = pi = effect coefficient of the interactivity exogenous variable vector (X3)
 γ = cheerfulness vector (X4)

X1 = demand variable vector
 X2 = comfort variable vector
 X3 = vector of the interactivity variable
 X4 = playful variable vector
 error = vector of structural error

$$\text{Error} = 1 - R^2 (R^2 = 0.960)$$

$$= 1 - 0.960 = 0.04$$

So,

$$Y = 0,981 (0,535X_1 + 0,068 X_2 + 0,104 X_3 + 0,347X_4) + 0.04$$

Influence between Second Sub Structural Variables

Variable	Track	Koeff	Direct influence	Indirect Influence				Total indirect influence	Total influence
				x1	x2	x3	x4		
x1	x1	0.5	0.535 ²					0.218	0.504
	>y	0.98	x0.98	0.535x0.068x	0.535x0.104x	0.535x0.347x			
	>z	0.86	1=0.2	0.750x0.981=	0.856x0.981=	0.791x0.981=			
			0.027	0.047	0.144				
x2	x2	0.068	0.068 ²	0.068x0.535x		0.068x0.104x	0.068x0.347x	0.051	0.056
	>y	0.98	x0.98	0.750x	-	0.986x0.981=	0.753 x0.981		
	>z	0.05	1=0.0	0.981=0.027		0.007	= 0.017		
x3	x3	0.104	0.104 ²	0.104x0.535x	0.104x0.068x		0.104x0.347x	0.081	0.092
	>y	0.98	x0.98	0.856=0.047	0.968=0.007	-	0.785x0.981=		
	>z	0.11	1=0.0				0.028		
x4	x4	0.347	0.347 ²	0.347x0.535x	0.347x0.068x	0.347x0.104x		0.189	0.308
	>y	0.98	x0.98	0.791x0.981=	0.753x0.981=	0.785x0.981=	-		
	>z	0.18	1=0.1	0.144	0.017	0.028			
Total Impact								0.9	6
Error		0.04							4%



Source: Primary Data by Researchers (2023)

From the results of the conclusion in table 4.16, the data described below can be generated:

1. the demand contribution (X1) which directly affects impulse purchases (Y) is $0,535^2 = 0.286$
2. convenience contribution (X2) which directly affects impulsive purchases (Y) is $0,068^2 = 0.005$
3. The magnitude of the contribution of interactivity (X3) which directly affects impulsive buying (Y) is $0,104^2 = 0.011$
4. The magnitude of the contribution of joy (X4) which directly affects impulsive purchases (Y) is $0,347^2 = 0.120$
5. The magnitude of the contribution of demand (X1) that influences impulsive buying (Y) mediated by perceived enjoyment (Z) is $0,535^2 + (0.535 \times 0.068 \times 0.750 \times 0.981) + (0.535 \times 0.104 \times 0.856 \times 0.981) + (0.535 \times 0.347 \times 0.791 \times 0.981) = 0.504$
6. playful contribution (X2) which indirectly influences impulsive buying (Y) mediated by perceived enjoyment (Z) is $0,068^2 + (0.068 \times 0.535 \times 0.750 \times 0.981) + (0.068 \times 0.104 \times 0.986 \times 0.981) + (0.068 \times 0.347 \times 0.753 \times 0.981) = 0.056$
7. Convenience contribution (X3) which influences impulse buying (Y) indirectly mediated by perceived pleasure (Z) is $0,104^2 + (0.104 \times 0.535 \times 0.856) + (0.104 \times 0.068 \times 0.968) + (0.104 \times 0.347 \times 0,785 \times 0.981) = 0.092$
8. playful contribution (X4) which indirectly influences impulsive buying (Y) mediated by perceived pleasure (Z) is $0,347^2 + (0.347 \times 0.535 \times 0.791 \times 0.981) + (0.347 \times 0.068 \times 0.753 \times 0.981) + (0.347 \times 0.104 \times 0.785 \times 0.981) = 0.310$
9. The magnitude of the contribution of demand (X1), convenience (X2), interactivity (X3), and playfulness (X4) totally and directly affects impulse buying (Y) is 0.960 or 96% and the remaining 4% comes from other factors that are not used in this research .

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

- 1) Live streaming of shopping is considered as the latest e-commerce trend , and impulse buying is considered as an important factor in sales

success. Based on the SOR theory, this study develops the factors that influence impulse buying after watching live streaming . Stimulus factors include demand , convenience , interactivity , playfulness . The psychological response is the perceived pleasure perception , while the end result is an impulsive purchase intention. This study applies SOR theory to adjust for the relationship between external environmental factors and internal psychological changes while suggesting a relationship between psychological responsiveness and impulsive purchase intention. This study makes several meaningful contributions to the development of SOR theories and understanding of external environmental factors and internal psychological changes.

- 2) The demand variable has an influence on impulsive purchases and the shortage dimension has the greatest influence with the statement " I want to buy a product while watching live streaming at Shopee " so it can be concluded that Shopee Live is able to influence its users to make purchases when Sjopee Live takes place. In testing the hypothesis on the demand variable, it was found that the positive effect of demand on perceived pleasure obtained positive and significant results. There was a positive effect of demands on impulsive purchases mediated by the perception of pleasure, which obtained positive and significant results.
- 3) The convenience variable has an influence on impulsive purchases and the transaction convenience dimension has the greatest influence with the statement " The product purchase transaction process at Shopee Live is easy " so that it can be concluded that Shopee Live has provided convenience in transactions to consumers. In testing the hypothesis on the convenience variable , the positive effect of comfort on perceived pleasure is positive and significant, and there is a positive effect of convenience on impulsive purchases mediated by perceived pleasure, which is positive and insignificant.
- 4) The interactivity variable has a major influence on impulsive buying and the dimensions of

perceived interactivity as a whole has the greatest influence with the statement " When using Shopee Live, I am free to convey whatever information I want to convey to fellow users and sellers ". This reveals that Shopee Live has provided easy communication to its users. In testing the hypothesis on the interactivity variable , the results of the positive influence of interactivity on perceived pleasure obtained positive and significant results, and there was a positive effect of interactivity on impulsive buying mediated by the perception of pleasure, which obtained positive and insignificant results.

- 5) The happiness variable has a large influence on impulsive purchases and the attractive dimension has the greatest influence with the statement " The content displayed on Shopee Live is interesting " so it can be concluded that Shopee Live has provided interesting content . In testing the hypothesis on the cheerful variable, the positive effect of play on perceived pleasure was positive and significant, and there was a positive effect of play on impulsive buying mediated by the perception of pleasure , which obtained positive and significant results.
- 6) On the perceived pleasure variable , it has a big influence on impulsive buying and the help dimension . has the greatest influence with the statement " I can access Shopee Live anywhere " so that it can be concluded that Shopee Live has provided easy access for its users so that consumers can access Shopee Live anywhere. In testing the hypothesis on the perceived pleasure variable , the results of the positive influence of perceived pleasure on impulsive buying obtain positive and significant results.
- 7) The impulsive purchase variable has the greatest value on the dimensions of excitement and stimulation with the statement " Discounts at Shopee Live urge me to make purchases " so that it can be concluded that limited product stock at Shopee Live can attract consumers to make purchases at this very moment . In testing the hypothesis, it is obtained that the positive influence of perceived pleasure on impulsive purchases obtains positive and significant results, there is a positive influence of demand on impulsive purchases mediated by perceived pleasure obtained positive and significant results, there was a positive effect of convenience on impulsive purchases mediated by perceived pleasure which obtained positive

and insignificant results, there was a positive effect of interactivity on impulsive purchases mediated by perceived pleasure which obtained positive results and not significant , and there is a positive effect of play on impulsive buying which is mediated by the perception of pleasure obtained positive and significant results .

- 8) Live streaming shopping for product promotion, audience or audience as a target can be enjoyed to guide the occurrence of impulse purchases so as to achieve sales goals or promotions. This shows that perceived enjoyment has an important role in influencing consumers to make purchases in a shopping flow life.

Suggestion

The author's suggestions for the company are as follows:

- 1) In the demands variable , there is a statement that has the lowest value with a percentage of 76.75% with the statement "I can easily find what I need to buy at Shopee Live". It can be concluded that Shopee Live users still don't feel fulfilled in finding what they want to buy. Based on this, suggestions from researchers are that Shopee Live can conduct an analysis of consumer behavior by sorting and presenting content directly to consumers that is tailored to consumer product search stories about what products consumers often buy so that consumers can easily find the product to buy. Shopee Live can vary the content in each live streaming episode based on consumer characteristics in a segmentation manner so that specifics can be mapped clearly.
- 2) In the convenience variable , there is a statement that has the lowest value with a percentage of 78.20% with the statement " I feel comfortable shopping through Shopee Live ". It can be concluded that Shopee Live users still don't feel comfortable shopping through Shopee Live. Based on this, the suggestion from the researcher is that Shopee Live can increase the convenience of features on Shopee Live such as increasing user privacy security by providing a PIN via a male email. In addition , Shopee Live can increase consumer convenience in shopping , such as providing free shipping vouchers for each of the payment methods provided . As it is known that free shipping vouchers are often only available for the shopeepay / shopeepaylater payment method.

- 3) In the interactivity variable there is a statement that has the lowest value with a percentage of 74.10% with the statement " When I click on the Shopee Live Feature, I get a quick response ". It can be concluded that Shopee Live is still unable to provide response speed in its features. Shopee is often slow because this application requires a large amount of storage space on your mobile phone (HP), so that a cellphone with a small RAM capacity will experience inconvenience when accessing Shopee. It is recommended that Shopee provide a feature to compress images / videos that are uploaded by buyers / sellers so that access to Shopee that takes too long does not cause slowness and the application does not come out on its own which causes consumers difficulties in selecting products and purchasing.
- 4) In the happiness variable there is a statement that has the lowest value with a percentage of 75.45% with the statement " I think Shopee Live is exciting ". It can be concluded that Shopee Live is still unable to arouse the desire of its users to access or buy products through the Shopee Live feature. Based on this, the researcher's suggestion is that Shopee Live can improve the quality of the user's shopping experience when using the Shopee Live feature so that users can feel more excited when using the Shopee Live feature. Streamers must actively interact with consumers, activate the atmosphere in the live streaming space, provide detailed and accurate answers to consumer questions. In addition, it is recommended to increase Shopee's credibility as an online buying and selling platform. For example, by
 1. Restrain other independent variables that are still related to moderation such as income, hedonic spending, and so on.
 3. from this research.

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- correctly sorting sellers who register to sell on Shopee, considering that there are many spam sellers who are dishonest in selling, namely presenting product information that is irrelevant or does not match the actual product conditions.
- 5) In the perceived enjoyment variable , there is a statement that has the lowest value with a percentage of 77.15% with the statement " storing content on Shopee Live makes my mood happy ". It can be concluded that Shopee Live is still not able to give users a feeling of joy when using the Shopee Live feature. Based on this, the suggestion from the researcher is that Shopee Live can add a funny face filter feature so that live content is not boring and sellers can carry out entertaining live selling activities.
 - 6) In the impulsive purchase variable , there is a statement that has the lowest value with a percentage of 74.10% with the statement " My interest in Shopee Live makes me prefer to leave what I work to watch content on Shopee Live ". It can be concluded that Shopee Live is still unable to provide sales content that can influence users to prefer accessing Shopee Live features over other applications. Based on this, the researcher suggests tactics so that future sales and marketing for potential customers can strengthen the service and user interface on the Shopee Live feature so that they can provide more attractive sales content such as by creating a CTA (Call To Action) feature so that users can be interested and make purchases through Shopee Live.

Suggestions for further research are as follows:

2. Looking for interesting and different phenomena

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