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EXPLORATION OF TRUST PARADOX IN CONSUMER BEHAVIOR IN THE USE OF THE TOKOPEDIA APPLICATION

***[1]Suliha, [2]Rico Brahmana, [3]Firman Rachmadi, [4]Amelia Delfina Putri, [5]Virdha Rahma Aulia**
*[1,2,3,4,5]Universitas Pembangunan Nasional "Veteran" Jawa Timur
Email: *[1]23082010214@student.upnjatim.ac.id, [2]23082010220@student.upnjatim.ac.id,
[3]23082010202@student.upnjatim.ac.id, [4]23082010215@student.upnjatim.ac.id,
[5]virdha.rahma.fasilkom@upnjatim.ac.id

Abstract
This study explores the Trust Paradox phenomenon among Tokopedia users, a condition where consumers still intend to buy even though their level of trust in the platform is low. Using a quantitative approach and PLS-SEM analysis of 154 respondents, it was found that Perceived Value, User Experience, and Trust Paradox have a significant effect on Purchase Intention. In contrast, Trust and Perceived Risk do not show a significant direct effect. Exploratory analysis identifies user segments with high purchase intentions despite having low trust, strengthening the existence of the Trust Paradox in digital consumer behavior.

Keywords: Trust Paradox, Tokopedia, Consumer Behavior, Purchase Intention, PLS-SEM

Abstrak
Penelitian ini mengeksplorasi fenomena Trust Paradox pada pengguna Tokopedia, yaitu kondisi ketika konsumen tetap berniat membeli meski tingkat kepercayaan terhadap platform rendah. Menggunakan pendekatan kuantitatif dan analisis PLS-SEM terhadap 154 responden, ditemukan bahwa Perceived Value, User Experience, dan Trust Paradox berpengaruh signifikan terhadap Purchase Intention. Sebaliknya, Trust dan Perceived Risk tidak menunjukkan pengaruh langsung yang signifikan. Analisis eksploratif mengidentifikasi segmen pengguna dengan niat beli tinggi meski memiliki trust rendah, memperkuat keberadaan Trust Paradox dalam perilaku konsumen digital.

***Kata kunci**: Trust Paradox, Tokopedia, Perilaku Konsumen, Purchase Intention, PLS-SEM*

Introduction

The advancement of information technology today is happening very quickly and has had a wide impact on various aspects of life, especially in the field of commerce and digital lifestyle. This significant change can be seen from the shift in people's shopping patterns which now tend to use digital devices and internet networks compared to conventional methods. The internet has become an important part of the daily lives of the Indonesian people, including in online buying and selling transactions. One of the tangible results of this development is the presence of e-commerce, which allows consumers to make transactions without time and location restrictions. Among the many e-commerce platforms in Indonesia, Tokopedia has emerged as one of the most popular. However, in the process of purchasing through Tokopedia, there are various psychological and technical factors

that also affect consumer behavior, including the phenomenon of trust paradox which is the focus of this study.

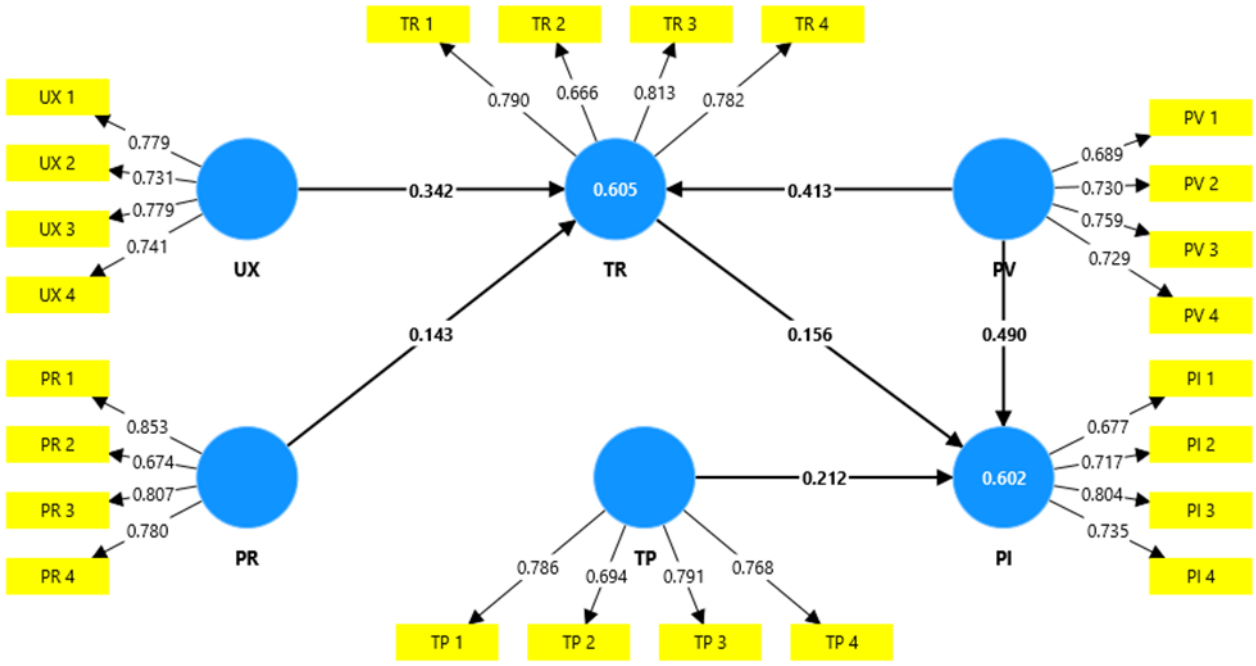
One of the main factors that play a role is trust. Consumers tend to feel safe to transact if they have a high level of trust in platforms and sellers (Gefen et al., 2003). Trust can be formed from previous experience, system security, and reviews from other users. In addition, perceived risk is also an important determinant. Risks such as product mismatches, delivery delays, or potential fraud can reduce consumer buying interest (Bauer, 1960; Forsythe et al., 2006). In the context of e-commerce, the higher the perceived risk, the lower the likelihood of consumers continuing to make purchases. No less important is perceived value, which is the consumer's assessment of the benefits relative to costs, the higher the value will increase the tendency to buy (Zeithaml, 1988). In addition, user experience (UX) such as ease of navigation, speed, and system security also plays an important role in purchasing decisions, as positive experiences can drive consumer satisfaction and loyalty (Hassenzahl & Tractinsky, 2006).

Interestingly, there is a phenomenon that deviates from the rational approach to consumer behavior, namely the trust paradox. This phenomenon describes a situation where purchases are still made despite low trust in the platform (Metzger, 2006). This condition can be triggered by an urgent need, a major promotion, or the influence of user reviews. The study by Zhang & Zhao (2025) shows a complex interaction between perceived risk and trust in influencing purchase intent on Tmall Global, while Liu et al. (2025) reveal that consumers continue to shop even though they do not fully trust the seller, indicating that there are other factors outside of trust that influence purchasing decisions.

Based on previous literature, it is known that consumer purchase intention in e-commerce platforms is influenced by various factors such as trust, perceived risk, perceived value, and user experience (Ajzen, 1991). However, there have not been many studies that explicitly incorporate the trust paradox as a stand-alone variable in e-commerce consumer behavior models, especially in local contexts such as Tokopedia users in Indonesia. This study aims to analyze the influence of trust, perceived risk, perceived value, user experience, and *trust paradox* on the *purchase intention* of active Tokopedia users. The novelty of this study lies in testing the *trust paradox* as a moderation and independent variable in a single quantitative model. This study is important to understand the behavior of Indonesia's digital consumers and support a more adaptive e-commerce strategy. The method used is a quantitative approach with SEM-PLS analysis to accurately test the relationships between variables.

The conceptual model used in this study is illustrated in Figure 1 below:

Figure 1. Research Conceptual Model



Source: SmartPLS 4 output, processed by researchers (2025)

Based on this model, the hypotheses proposed in this study are as follows:

H1: User Experience (UX) affects Trust (TR)

A good user experience, such as an intuitive interface, easy navigation, and clarity of information, increases trust in the platform. The study of Zaato et al. (2023) shows that UX plays an important role in building trust in mobile commerce applications, in line with the TAM theory by Davis (1989) and the research of Hsu & Lin (2016).

H2: Perceived Risk (PR) affects Trust (TR)

The higher the perception of risks such as fraud, delivery delays, or poor product quality, the lower the user's trust in the platform. These findings are supported by Wu et al. (2020), Martin et al. (2015), and Kim et al. (2008).

H3: Trust (TR) affects Purchase Intention (PI)

Trust is considered to be the main foundation in shaping behavioral intentions, including the desire to buy back. Gefen et al. (2003) and Liu et al. (2025) emphasized that trust has a direct influence on purchasing decisions in digital transactions.

H4: Perceived Value (PV) affects Purchase Intention (PI)

Perceived value reflects the consumer's perception that a product or service is worth the cost, time, and effort expended. Yang & Kim (2022) and Sweeney & Soutar (2001) state that perceived value directly increases purchase intent.

H5: Trust Paradox (TP) affects Purchase Intention (PI)

Trust paradox occurs when users continue to transact despite having a low level of trust, driven by practical reasons such as promos, urgent needs, or limited platform choices. Chai & Yeo (2022) and Zhang et al. (2023) show that the trust paradox is a real behavior in modern e-commerce.

H6: Perceived Value (PV) affects Trust (TR)

The high value of a platform, such as competitive pricing and time efficiency, can increase users' trust in the service. This is in accordance with the findings of Kim et al. (2021), Chou et al. (2015), and Ryu et al. (2012).

Research Methods

This study uses a quantitative approach focused on numerical measurement and statistical analysis of the variables studied, with the main objective of testing hypotheses that have been established based on previous theories.

Research Location and Sample

The research was conducted online with respondents spread across various regions of Indonesia. The population in this study is active users of the Tokopedia application who have made transactions. The sample was taken using a purposive sampling technique with the following criteria: (1) active Tokopedia users, (2) at least 17 years old, and (3) have made transactions at least twice in the last three months. The number of samples obtained was 154 respondents through the distribution of online questionnaires. The determination of the sample number refers to the *10-times rule* approach (Hair et al., 2019) and the Slovin formula with an error rate of 8%, so that the number is considered adequate for analysis based on *Partial Least Square Structural Equation Modeling* (PLS-SEM).

Data Collection Instruments and Techniques

The research instrument is in the form of a structured questionnaire that contains six main constructs: trust, perceived risk, user experience, perceived value, trust paradox, and purchase intention. All question items were adapted from previous research and measured using a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Results and Discussion

Indicator Validity Test (Outer loading)

Table 1. Outer loading test results

	PI	PR	PV	HCMC	TR	UX
PI 1	0.677					
PI 2	0.717					
PI 3	0.804					
PI 4	0.735					
PR 1		0.853				
PR 2		0.674				
PR 3		0.807				

PR 4	0.780					
PV 1		0.689				
PV 2		0.730				
PV 3		0.759				
PV 4		0.729				
TP 1			0.786			
TP 2			0.694			
TP 3			0.791			
TP 4			0.768			
TR 1				0.790		
TR 2				0.666		
TR 3				0.813		
TR 4				0.782		
UX 1					0.779	
UX 2					0.731	
UX 3					0.779	
UX 4					0.741	

The results of outer loading show that most of the indicators meet these criteria. Some indicators such as PR2 (0.674), PV1 (0.689), TP2 (0.694), and TR2 (0.666) have a loading value slightly below 0.70, but are still within tolerance limits and can be maintained because the CR and AVE values of the construct still meet the standard (Hair et al., 2019).

Uji Construct Reliability and Validity

Table 2. Hasil Uji Construct Reliability and Validity

	Cronbach's alpha	**Composite reliability (rho_a)**	**Composite reliability (rho_c)**	**Average variance extracted (AVE)**
PI	0.715	0.725	0.824	0.540
PR	0.786	0.803	0.862	0.611
PV	0.703	0.706	0.818	0.529
HCMC	0.757	0.764	0.846	0.579
TR	0.761	0.763	0.849	0.585
UX	0.752	0.753	0.843	0.574

The results of the reliability test show that the entire construct in the model meets the recommended criteria. Based on Table 2, Cronbach's Alpha value of the entire construct is above 0.70, which indicates that each indicator in the construct has good internal consistency (Hair et al., 2019).

Uji Discriminant validity

Table 3. Results of the Discriminant Validity Test

	PI	**PR**	**PV**	**HCMC**	**TR**	**UX**
PI						
PR	0.685					

PV	1.033	0.800				
HCMC	0.866	0.707	0.915			
TR	0.868	0.738	0.963	0.896		
UX	1.124	0.708	0.840	0.789	0.888	

Khosrow-Pour (2020) in the Handbook of Research on Modern Educational Technologies, Applications, and Management explains that HTMT values that slightly exceed 0.90 are still acceptable if the constructs are theoretically closely related and conceptually overlapping each other. In some studies, models with an HTMT of > 0.90 remained used because they were supported by the clarity of the construct definition and the strength of the theory.

Uji Discriminant validity-Fornell-Larcker

Table 4. Results of the Fornell-Larcker Discriminant Validity Test

	PI	**PR**	**PV**	**HCMC**	**TR**	**UX**
PI	0.735					
PR	0.529	0.781				
PV	0.742	0.594	0.727			
HCMC	0.647	0.557	0.671	0.761		
TR	0.648	0.575	0.707	0.685	0.765	
UX	0.834	0.548	0.612	0.604	0.673	0.758

Based on table 4. It shows that all constructs in this research model meet the criteria of discriminant validity according to the Fornell-Larcker approach, so that it can be concluded that each construct is able to distinguish itself from other constructs adequately. This strengthens the validity of discrimination in the analysis of relationships between variables in the context of the Trust Paradox in Tokopedia Consumer Behavior.

Uji Discriminant validity-Cross-Loading

Table 5. Hasil Uji Discriminant validity-Cross-Loading

	PI	**PR**	**PV**	**HCMC**	**TR**	**UX**
PI 1	0.677	0.278	0.455	0.404	0.361	0.503
PI 2	0.717	0.443	0.554	0.519	0.556	0.712
PI 3	0.804	0.495	0.636	0.515	0.501	0.667
PI 4	0.735	0.304	0.516	0.451	0.465	0.542
PR 1	0.449	0.853	0.547	0.517	0.519	0.458
PR 2	0.295	0.674	0.304	0.289	0.369	0.382
PR 3	0.448	0.807	0.429	0.486	0.478	0.488
PR 4	0.445	0.780	0.556	0.417	0.414	0.374
PV 1	0.464	0.567	0.689	0.444	0.466	0.401
PV 2	0.587	0.440	0.730	0.485	0.517	0.481
PV 3	0.568	0.429	0.759	0.500	0.526	0.443
PV 4	0.532	0.311	0.729	0.519	0.545	0.451
TP 1	0.570	0.438	0.537	0.786	0.569	0.551
TP 2	0.447	0.268	0.440	0.694	0.459	0.391
TP 3	0.462	0.512	0.527	0.791	0.512	0.436

TP 4	0.473	0.471	0.531	0.768	0.533	0.439
TR 1	0.509	0.458	0.598	0.554	0.790	0.506
TR 2	0.497	0.400	0.513	0.440	0.666	0.512
TR 3	0.501	0.468	0.553	0.579	0.813	0.537
TR 4	0.470	0.429	0.489	0.514	0.782	0.499
UX 1	0.631	0.428	0.461	0.515	0.531	0.779
UX 2	0.641	0.444	0.434	0.459	0.525	0.731
UX 3	0.609	0.424	0.398	0.408	0.487	0.779
UX 4	0.643	0.361	0.563	0.442	0.492	0.741

Based on table 5. Indicates that all indicators in the model have the highest load on the corresponding construct. This proves that the validity of the discriminant has been met based on the cross-loading method, and that each indicator is able to measure the constructs that should be measured specifically. These findings strengthen the validity of the construct in explaining the Trust Paradox phenomenon in Tokopedia's consumer behavior.

Uji Path Coefficients – Bootstrapping

Table 6. Path Coefficients Test Results - Bootstrapping

	Original sample (O)	**Sample mean (M)**	**Standard deviation (STDEV)**	**T statistics (|O/STDEV|)**	**P values**
PR -> TR	0.143	0.142	0.116	1.231	0.218
PV -> PI	0.490	0.470	0.148	3.312	0.001
PV -> TR	0.413	0.422	0.154	2.682	0.007
TP -> PI	0.212	0.213	0.088	2.412	0.016
TR -> PI	0.156	0.178	0.145	1.079	0.281
UX -> TR	0.342	0.340	0.139	2.465	0.014

The test results showed that Perceived Value had a significant effect on Purchase Intention (β = 0.490; p = 0.001) and Trust (β = 0.413; p = 0.007). Trust Paradox also significantly affects Purchase Intention (β = 0.212; p = 0.016), as well as User Experience to Trust (β = 0.342; p = 0.014). In contrast, Perceived Risk to Trust (β = 0.143; p = 0.218) and Trust to Purchase Intention (β = 0.156; p = 0.281) were not statistically significant. These findings confirm that value perception, user experience, and the trust paradox are the main determinants of purchase intent, while trust has no significant direct influence.

R-Square Test (Coefficient of Determination)

Table 7. R-Square Test Results (Coefficient of Determination)

R-square	**R-square adjusted**

PI	0.602	0.594
TR	0.605	0.597

Based on table 7. The R^2 value of 0.602 in the Purchase Intention construct indicates that 60.2% of the variability of the user's purchase intention can be explained by the free variables in the model. Similarly, 60.5% of the variability in the Trust construct can be explained by the preceding variables. Based on the criteria of Hair et al. (2019), the R^2 value > 0.50 is categorized as moderate to strong, so this model is considered to have good explanatory power for endogenous constructs.

Predictive Relevance Test (Q^2 Predict)

Table 8. PLS-Predict Test Results: Q^2predict, RMSE, and MAE

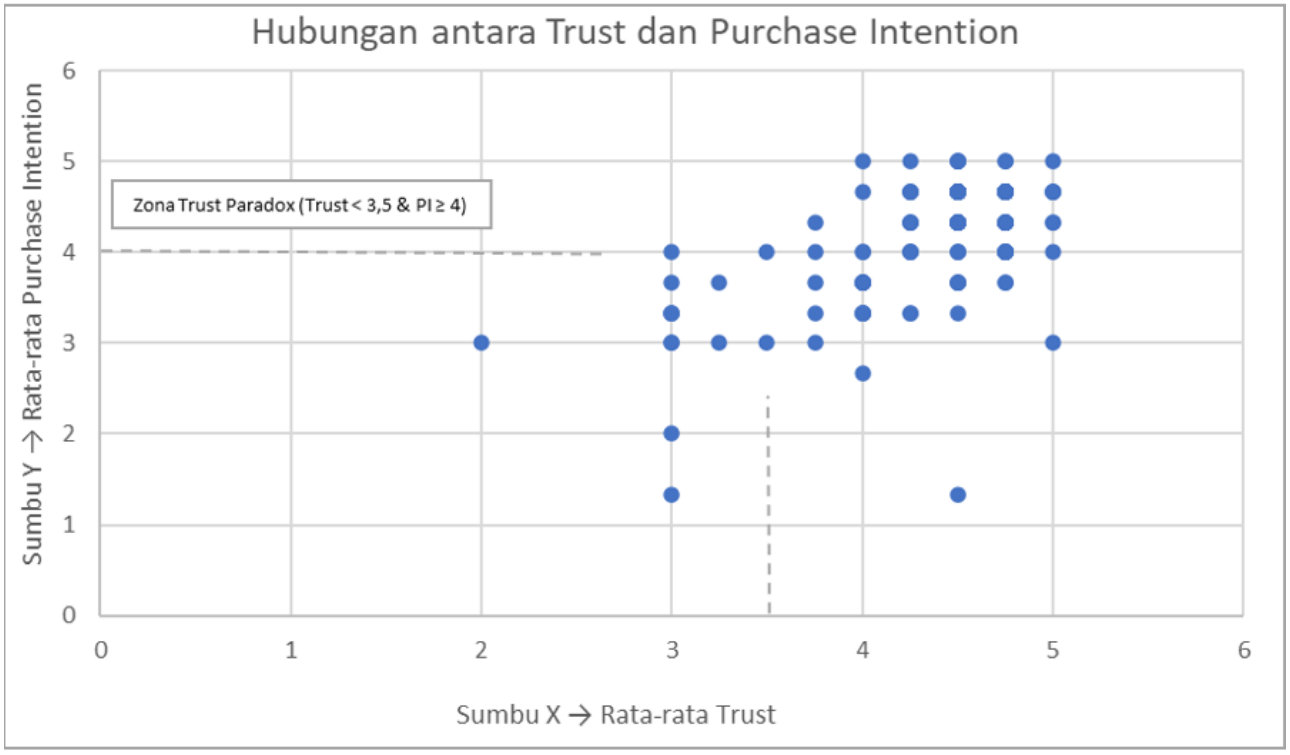
	Q^2predict	**RMSE**	**IT IS**
PI	0.590	0.662	0.494
TR	0.497	0.726	0.485

The results of the Q^2predict test show that the Purchase Intention (PI) and Trust (TR) constructs have values of 0.590 and 0.497 respectively, both well above the minimum threshold of 0. Based on the criteria of Hair et al. (2019), this value shows strong predictive relevance. This means that the built model not only has the ability to explain statistically, but is also able to accurately predict new data, thus strengthening the external validity of the model.

Trust Paradox Exploratory Test

Trust Relationship and Purchase Intention Chart

Figure 2. Graph of the Relationship between Trust and Purchase Intention



Source: Data processed by the author (2025)

The analysis graph shows the existence of a "Trust Paradox Zone", i.e. an area with a value of *Trust* below 3.5 and *Purchase Intention* (PI) at least 4.0. This zone describes respondents who have low trust in Tokopedia, but still show high buying intentions, show inconsistent behavior and reinforce the existence of the phenomenon *trust paradox*.

Gap Trust Analysis Dan Purchase Intention

Data analysis from 154 respondents showed that there was a gap between the average value of Trust and Purchase Intention (PI), which was used as an indicator of trust paradox behavior. It was found that several respondents with significant positive gaps, for example Trust 3.00 and PI 4.33 (gap +1.33), reflect high buying intentions despite low confidence. This classification identified about 3.2% of respondents (5 out of 154) who exhibited the characteristics of the trust paradox.

Trust Correlation Test to Purchase Intention

To support the exploration of the graph statistically, a Pearson correlation analysis was performed between the Trust and Purchase Intention variables.

Correlation result: $r = 0.45$ and $p < 0.01$

These results show a positive and significant relationship between Trust and Purchase Intention, which means that the higher the user's trust in the platform, the higher their purchase intent. However, the presence of the Trust Paradox zone in the graph shows that the relationship does not apply absolutely to all users.

Exploratory Interpretation

These findings show that trust is not the only determinant of purchase intent on Tokopedia. Some respondents are still interested in buying even though the level of trust is low, indicating the role of other factors such as promos, convenience, social influence, or urgent needs. This reinforces the existence of *Trust Paradox*, where consumers continue to transact even though they do not fully trust the system.

Discussion

The Influence of User Experience on Trust

The test results showed a significant relationship (coefficient = 0.342, p = 0.014), which means that the user experience positively affects trust in the Tokopedia platform. These findings are consistent with previous literature such as Zaato et al. (2023) and Hsu & Lin (2016) which states that ease of use and good interface shape perceptions of trust in digital applications.

The Effect of Perceived Risk on Trust

This relationship was not statistically significant (coefficient = 0.143, p = 0.218). Despite previous literature (Wu et al., 2020; Martin et al., 2015) indicate the negative influence of risk on trust, the results of this study show that risk perception is not strong enough to directly reduce the trust of Tokopedia users.

The Influence of Trust on Purchase Intention

The test results showed an insignificant relationship (coefficient = 0.156, p = 0.281), contrary to assumptions in the literature such as Gefen et al. (2003) and Liu et al. (2025). This is an important finding in the context of exploration *Trust Paradox*, where trust does not directly encourage the purchase intention of Tokopedia users.

The Effect of Perceived Value on Purchase Intention

The pathway test showed a significant and strong relationship (coefficient = 0.490, p = 0.001). This means that the perception that Tokopedia provides high value (in terms of price, convenience, convenience) is the main factor in shaping buying intentions. These findings are consistent with the studies of Yang & Kim (2022) and Sweeney & Soutar (2001).

The Influence of the Trust Paradox on Purchase Intention

This relationship is also significant (coefficient = 0.212, p = 0.016), confirming that the phenomenon *Trust Paradox* It really happens: users still have a strong desire to buy despite low trust in the platform. This reinforces exploratory findings such as those in the Trust Paradox zone chart and supports theories from Chai & Yeo (2022) and Zhang et al. (2023).

The Effect of Perceived Value on Trust

The pathway test showed a significant influence (coefficient = 0.413, p = 0.007), meaning that the perception of value towards the platform encouraged the emergence of trust. The greater the benefits or efficiency that users feel, the greater the level of trust that is formed. These findings are in line with theories from Kim et al. (2021) and Chou et al. (2015).

Conclusion

The conclusion of this study shows that User Experience and Perceived Value have a significant effect on Trust, while Perceived Risk does not. Trust also does not have a significant effect on Purchase Intention, supporting the existence of Trust Paradox, which is a condition when users still intend to buy even though trust is low. Both Perceived Value and Trust Paradox have proven to be significant in driving Purchase Intent, indicating that perceived value and irrational behavior both play a role. These findings are reinforced by scatter plot and gap analysis, which identified a segment of users who are actually experiencing the Trust Paradox.

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