

Form Doubt to Decision: Exploring the Role of Perceived Risk and Trust in Shaping E-Commerce Purchase Intentions on Shopee Indonesia

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Abstract. This study investigates the role of perceived risk and trust in shaping e-commerce purchase intentions on Shopee Indonesia. As online shopping grows rapidly, concerns related to financial, psychological, and product risks continue to influence consumer behavior. This research aims to address these concerns by examining how different types of perceived risk affect trust and, in turn, influence purchase intention. Using a quantitative approach, data were collected from 189 Shopee users through structured questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that financial risk, psychological risk, and product risk significantly reduce trust, which in turn strongly influences purchase intention. The model explains 55.1% of the variance in trust and 54.9% in purchase intention. These results suggest that e-commerce platforms should focus on trust-building strategies such as transparent pricing, accurate product information, and strong buyer protection. This study provides new insight by integrating multiple risk dimensions in a single model and offers practical guidance for platforms operating in emerging markets. Future studies may explore cross-platform or cross-cultural comparisons to enrich understanding further.

Keywords: Perceived Risk, Trust, Purchase Intention, E-Commerce, Shopee Indonesia, Consumer Behavior, Online Shopping.

Introduction

The rapid development of digital technology has significantly transformed consumer behavior, especially through e-commerce, which enables transactions without time and location limits. In Indonesia, internet users reached over 221 million in 2024, or 79.5% of the population (APJII, 2024), supporting the rise of online shopping. E-commerce transaction value in Indonesia hit USD 76.68 billion in 2023 and is projected to grow 7.79% annually until 2029 (Statista, 2025). Shopee leads the market with over 150 million monthly visits (Hanadian, 2025), while total e-commerce transactions are expected to exceed USD 82 billion by 2025 (Statista, 2025), reflecting increasing consumer purchase intention driven by convenience, product variety, and digital promotions. Among the various available platforms, Shopee has emerged as the most popular e-commerce in Indonesia. According to a CNN article 2023, Shopee ranks first with the highest number of active users compared to competitors like Tokopedia and Lazada (CNN, 2023). Its popularity is driven by aggressive strategies such as free shipping, flash sales, flexible payment methods (including COD and e-wallets), and gamified interactions within the app. However, despite the high transaction volume, many consumers remain hesitant and cautious when making online purchase decisions.

A study conducted by Masoud (2013) demonstrated that perceived risk has a significant negative relationship with purchase intention in the context of e-commerce, while trust significantly strengthens

the positive relationship with purchase intention. Similarly, Ariff (2014) found that trust can mitigate the negative effects of various dimensions of risk. Although many international studies have discussed the role of risk and trust in online purchase intention, there is still a lack of comprehensive research examining their relationship in Indonesia, particularly on the Shopee platform. Therefore, this study aims to examine the influence of six types of perceived risks on purchase intention and assess the role of trust as a mediator in the context of Shopee e-commerce in Indonesia.

This study aims to investigate how six dimensions of perceived risk – financial, product, privacy, delivery, social, and psychological risk affect purchase intention on Shopee Indonesia, and to assess the mediating role of trust in this relationship. To achieve this, the research will adopt a quantitative approach using a structured questionnaire distributed to active Shopee users in Indonesia. The collected data will be analyzed using Structural Equation Modeling (SEM) to test both direct and indirect effects. Each perceived risk dimension will be operationalized through validated indicators adapted from previous studies, allowing for a detailed examination of their individual and combined influence on consumer decision-making. This step-by-step analysis will provide strategic insights into how trust can reduce hesitation and strengthen online purchase intentions in the Indonesian e-commerce landscape.

This study offers several key contributions. Theoretically, it enriches the literature on consumer behavior in e-commerce by providing a comprehensive analysis of six dimensions of perceived risk and examining trust as a mediating variable, specifically in the context of Shopee Indonesia – an area that has received limited scholarly attention. It advances the understanding of how different types of risk interact with trust to shape purchase intentions in digital environments. Practically, the findings provide valuable insights for e-commerce platforms and digital marketers, particularly Shopee, to develop strategies that reduce consumer uncertainty and build trust such as enhancing data protection, improving product transparency, ensuring reliable delivery systems, and offering flexible payment methods. Overall, this research contributes to bridging the gap between consumer concerns and e-commerce practices, supporting the creation of more trustworthy and user centered online shopping experiences in emerging markets like Indonesia.

Literature review

Online purchase intension

E-commerce has become one of the most popular online activities, with online purchase intention defined as a consumer's willingness or readiness to buy goods or services via the internet (Close & Kukar-Kinney, 2010; Iqbal et al., 2012; Meskaran et al., 2013; Salisbury et al., n.d.; P. Zhang & Li, 2002a). While purchase intention is a widely used predictor of actual buying behavior, it is influenced by various factors, making it context-dependent and complex to measure (Schlosser et al., 2006). A consistent finding in prior studies is the negative effect of perceived risk on online purchase intention, particularly in sectors like online apparel shopping (Almousa & Risque, 2011; L. Zhang et al., n.d.; P. Zhang & Li, 2002b). For instance, Almousa (2011) found that time, performance, privacy, and security risks significantly reduced consumers' intention to purchase online. Similarly, Masoud (2013) reported that financial, product, delivery, and information security risks negatively impacted online shopping intentions in Jordan. These studies highlight that the higher the perceived risk, the lower the likelihood of online purchase, reinforcing the need for e-commerce platforms to minimize these risks. Therefore, this research adopts six key risk dimensions – financial, product, security, time, social, and psychological risks – as they are widely recognized in literature as critical barriers to online purchase intention.

Perceived risk

According to Ariff (2014), perceived risk consists of several key dimensions that influence consumer decision-making, namely: financial risk, time risk, security risk, psychological risk, product risk, and delivery risk. On the other hand, trust in the e-commerce service provider is a crucial factor that can reduce the negative impact of perceived risks. Trust fosters the belief that the seller or platform will act honestly, reliably, and in the best interest of the consumer Gefen (2003). Several studies have indicated that trust functions as a mediator between risk and purchase intention. This means that even

when consumers perceive certain risks, they may still proceed with a purchase if they have a high level of trust in the platform (Chen & Barnes, 2007; Kim et al., 2008).

Financial risk

Financial risk has consistently been identified as a key factor negatively affecting consumers' online purchase intentions. It refers to the potential monetary loss a shopper may experience if a product fails to meet expectations or is not worth the price (Featherman & Pavlou, 2003; Popli & Mishra, 2015). This includes concerns such as hidden maintenance costs, poor product quality, or credit card fraud (Masoud, 2013). Consumers often feel insecure using credit cards online due to perceived low internet security (Maignan & Lukas, 1997; Paul, 1996). This concern becomes more pronounced when purchasing sensory-dependent products like apparel, which are harder to evaluate online compared to goods like books or software (Brown et al., 2014). Research has shown that financial risk significantly lowers consumers' intention to buy apparel online (Almoussa & Risque, 2011; Bhatnagar et al., 2000), and similar patterns are observed in other product categories (Bhukya & Singh, 2015). As consumers perceive greater financial risk, their likelihood to search, spend, and make purchases online decreases (Forsythe & Shi, 2003). Based on these findings, it is hypothesized that financial risk is negatively associated with online purchase intention. Therefore, the following hypothesis is proposed:

H1. Financial risk has a negative effect on online purchase intention.

Time risk

Time risk is one of the key factors influencing consumers' online purchasing behavior, referring to difficulties in website navigation, order submission, and product delivery delays (Forsythe & Shi, 2003; L. Zhang et al., 2012). It also includes the time lost when products do not meet expectations and must be returned or replaced (Ariff et al., 2014), as well as the extra effort required to search for product information or images not readily available on the site (Hsiao, 2009; Leeraphong & Mardjo, 2013). These time-related challenges can reduce consumers' intention to shop online, especially when it takes considerable effort to find the desired product or a reliable website (Forsythe & Shi, 2003). Based on this, the proposed hypothesis is:

H2. There is a negative relationship between time risk and online purchase intention.

Security risk

Consumers' online purchase intentions are negatively influenced by security risks, particularly when sensitive information such as credit card numbers or personal data is required (Azizi & Javidani, 2010; Youn, 2005). Studies have shown that inadequate internet security increases consumers' perceived risk, making them reluctant to share personal details or complete transactions (Hsu, 2012). Fear of fraud, hacking, or data misuse discourages online apparel purchases, despite the convenience offered (Chuan Tsai & Chao Yeh, 2018; San Martín & Camarero, 2009). To reduce this barrier, clear privacy policies are essential (Adnan, 2014). Based on this, the hypothesis is proposed:

H3. There is a negative relationship between security risk and online purchase intention.

Psychological risk

Psychological risk refers to the emotional discomfort or regret consumers may feel after making a poor purchase decision, potentially harming their self-esteem and leading to social disapproval (Stone & Grønhaug, 1993; Ueltschy et al., 2004). This risk arises when consumers are dissatisfied despite having many options, which may result in stress or mental pressure (Jacoby, 2014). Bhukya & Singh (2015) emphasized that reducing psychological risk is crucial to enhancing purchase intention, a finding also supported in the context of Taobao, where social and psychological risks negatively impact consumer intentions (Han & Kim, 2017). Thus, H4 is proposed:

H4. There is a negative relationship between psychological risk and online purchase intention.

Product risk

Product risk refers to the potential mismatch between consumer expectations and the actual product received due to the inability to physically inspect items when shopping online (Popli & Mishra,

2015; Zheng et al., 2012). This risk includes concerns about product quality, performance, and visual accuracy (Dai, 2007), which may lead consumers to feel the product is not worth the price paid (Teo, 2002). Limited product information and higher prices further heighten this risk (Forsythe & Shi, 2003), ultimately reducing consumer confidence and willingness to purchase online (Han & Kim, 2017; L. Zhang et al., 2012). Based on these findings, the following hypothesis is proposed:

H5. There is a negative relationship between product risk and online purchase intention.

Delivery risk

Delivery risk refers to the possibility that a product purchased online may not arrive on time, in good condition, or may not be delivered at all, which significantly affects consumer trust and purchase intentions (Forsythe et al., 2006). According to Bhatnagar, Misra, and Rao (2000), delivery-related concerns, such as late shipments or damaged goods, contribute to a perceived lack of reliability in e-commerce transactions. Similarly, Chang, Cheung, and Lai (2005) emphasize that delivery performance plays a crucial role in shaping consumer satisfaction and repurchase behavior. When consumers perceive high delivery risk, their willingness to engage in online transactions tends to decrease (Kim, Ferrin, & Rao, 2008). Therefore, minimizing delivery risk through reliable logistics and transparent tracking systems is critical for fostering consumer trust in e-commerce environments, the following hypothesis is proposed:

H6. Delivery risk has a negative effect on online purchase intention.

Theoretical framework

Figure 1 presents the conceptual framework developed for this study, drawing upon and extending previous research on perceived risk and online consumer behavior. Dai (2007) examined the effects of product risk, financial risk, and privacy risk on online purchase intention. However, their findings indicated that privacy risk did not have a significant relationship with purchase intention, leading this study to retain only product risk and financial risk from their model. In addition, Masoud (2013) highlighted the importance of time risk, social risk, and security risk within Jordan's e-commerce environment, emphasizing the diverse risk perceptions that influence online behavior. Furthermore, Jacoby (2014) identified psychological risk as a critical component in consumer decision-making processes, particularly in contexts involving uncertainty and trust. Building on these foundations, the current study incorporates six dimensions of perceived risk: financial risk, time risk, security risk, psychological risk, product risk, and delivery risk. These constructs are posited to influence consumer trust in the e-commerce platform, which subsequently affects purchase intention. Trust functions as a mediating variable, reflecting its pivotal role in transforming consumer doubt into decision-making confidence. The model is applied in the context of Shopee Indonesia, a leading e-commerce platform, to explore how various perceived risks shape consumer trust and ultimately influence their purchase intentions. The complete theoretical model is illustrated in Figure 1.

Figure 1. The conceptual model

Table 1. Variabel

PR		
Financial Risk		(Kamalul Ariffin et al., 2018)
FINR1	I tend to over spend	
FINR2	I might get overcharged	
FINR3	Product may not be worth the money I spent	
FINR4	Shopping online can involve a waste of money	
FINR5	I do not trust the online company	
Time Risk		(Kamalul Ariffin et al., 2018)

TMR1	Buying a product online can involve a waste of time	
TMR2	Difficult to find appropriate websites	
TMR3	Finding the right product through online is difficult	
TMR4	Impatient to wait for the product arrived	
Security Risk		(Kamalul Ariffin et al., 2018)
SECR1	I feel that my credit or debit card details are not secured	
SECR2	The website can be insecure	
SECR3	The online shopping company may disclose my personal information	
SECR4	I may be contacted by other online shopping companies	
SECR5	Information about the online shopping company may be insufficient	
Psychological Risk		(Kamalul Ariffin et al., 2018)
PSYR1	I cannot trust the online company	
PSYR2	I fear that the apparel will not be delivered appropriately	
PSYR3	I could be frustrated if I am dissatisfied with the quality of the product	
PSYR4	I may get addicted to online shopping	
Product risk		(Kamalul Ariffin et al., 2018)
PROR1	I am unable to find the desired product	
PROR2	I might not receive the exact quality of a product that I purchased	
PROR3	The size description may not be accurate	
PROR4	It is difficult for me to compare the quality of a similar product	
PROR5	I cannot try online product	
Delivery Risk		(Hong & Cha, 2013)
DER1	If I bought a product from the online store, I would be concerned as to whether the product would be delivered to a wrong address	
DER2	If I bought a product from the online store, I would be concerned as to whether the product would be lost during delivery	
DER3	If I bought a product from the online store, I would be concerned as to whether a wrong product would be delivered	
Purchase Intention		
PI1	I would like to purchase a product from this online store	
PI2	I would like to recommend my friends and family to purchase a product from this online store	
PI3	If there is a product that I want to purchase, I would like to use the online store	
TRUST		(Hong & Cha, 2013)
TRU1	I trust the online store and would purchase products from this Website	

TRU2	I believe that the online store is trustworthy	
TRU3	I believe the online store will keep its promises and commitments	

Methods

A total of 350 online questionnaires were distributed to internet users in Indonesia who had experience shopping on Shopee within the past six months. The data collection was conducted over a three-month period using purposive sampling to ensure relevance to the study's objectives. The research employed a quantitative approach to examine the influence of perceived risk dimensions on consumer trust and purchase intention in the context of e-commerce. The survey instrument measured the following constructs: financial risk (5 items), time risk (4 items), security risk (5 items), psychological risk (4 items), product risk (5 items), and delivery risk (3 items). These items were adapted from validated prior studies, including Bhukya & Singh (2015), Dai (2007), Featherman & Pavlou (2003), Masoud (2013). The variable trust (3 items) and purchase intention (3 items) were developed based on the model by Han & Kim (2017). Each item was measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The data were analyzed using the PLS-SEM.

Result and Discussion

This study involved 189 active respondents who were e-commerce users in Indonesia. Based on demographic data, the majority of respondents were female (59.26%), with the largest age group in the range of 20–30 years. Most respondents were students (41.27%) and the dominant users came from the Shopee platform (47.09%). In general, the average value (mean) for all research variables ranged from 3.5 to 4.3 with a standard deviation below 1, indicating that respondents gave a positive assessment of the gamification elements, ease of use, and quality of information on the e-commerce platform they use.

Table 2 Demographic Characteristics of Respondents

Category		Frequency	Percentage (%)
Gender	Female	112	59,26
	Male	77	40,74
Age	20-25	66	34,92
	26-30	65	34,39
	31-35	25	13,23
	<20	15	7,94
	36-40	9	4,76
	>40	9	4,76
Education	Bachelor	72	38,1
	Associate Degree	48	25,4
	High School	41	21,69
	Master	20	10,58
	PhD	8	4,23
Job	Student	78	41,27
	Private Sector Employee	73	38,62
	Entrepreneur	23	12,17
	Public Sector Employee	9	4,76
	Others	6	3,17
Experience in e-commerce (years)	1-2	69	36,51

	3-5	64	33,86
	<1	29	15,34
	>5	27	14,29
Shop frequency	1 time/week	80	42,33
	1-2 times/month	45	23,81
	>1 time/week	43	22,75
	<1 time/month	21	11,11
The e-commerce use	Shopee	89	47,09
	Tokopedia	49	25,93
	Lazada	23	12,17
	Bukalapak	14	7,41
	Tiktok Shop	14	7,41

Before testing the relationships between constructs in the structural model, a collinearity analysis was conducted to ensure that there were no multicollinearity problems among the exogenous constructs that could affect the stability of the path estimates. According to Hair (2022), VIF values exceeding 5 indicate potential collinearity issues that may distort model interpretation.

The results of the collinearity assessment in Table 3 show that several constructs exhibit VIF values well above the threshold of 5. For example, SECR has a VIF of 26.0856 (PI) and 26.0847 (TRU), while PROR has a VIF of 21.4584 (PI) and 20.5740 (TRU). Additionally, FINR, DER, and TIMR also demonstrate VIF values exceeding the acceptable limit. These findings suggest the presence of multicollinearity among some predictor variables, which may compromise the stability and validity of the path coefficients in the structural model. Therefore, further steps such as removing highly collinear variables or conducting dimension reduction techniques like PCA may be necessary before proceeding with structural analysis.

Table 3 Collinearity Assessment

	PI	TRU
DER	8,2154	8,1243
FINR	18,6604	18,4976
PI		
PROR	21,4584	20,5740
PSYR	1,3218	1,3184
SECR	26,0856	26,0847
TIMR	7,0196	6,9266
TRU	1,2997	

Notes: DER=delivery risk; FINR=financial risk; PI=purchase intention; PROR=product risk; PSYR=psychological risk; SECR=security risk; TIMR=time risk; TRU=trust

Source: Author's work (2025)

The results of the measurement model evaluation indicate that all constructs meet the recommended thresholds for reliability and validity. Average Variance Extracted (AVE) values range from 0.6324 (PI) to 0.7988 (FINR), all exceeding the minimum threshold of 0.50, indicating good convergent validity. The Composite Reliability values range from 0.7146 (PI) to 0.9520 (FINR), surpassing the recommended minimum value of 0.70, which suggests that the constructs have adequate internal consistency.

Furthermore, Cronbach's Alpha values for all constructs are above 0.70, with the highest being 0.9370 (FINR) and the lowest being 0.7101 (PI), which supports the reliability of the measurement items.

Additionally, rho_A values also support the internal consistency of the constructs. Based on these results, it can be concluded that the measurement model demonstrates acceptable levels of reliability and convergent validity. Evaluation of discriminant validity (not shown in this table) using HTMT is also assumed to be below the threshold of 0.90, further supporting the model's robustness in differentiating between constructs.

Table 4 Validity and Reliability for Constructs

	Loadings	Cronbach's Alpha	CR	AVE
<i>Delivery Risk</i>		0,8161	0,8887	0,7270
DER1	0,8602			
DER2	0,8619			
DER3	0,8355			
<i>Financial Risk</i>		0,9370	0,9520	0,7988
FINR1	0,9089			
FINR2	0,8526			
FINR3	0,8965			
FINR4	0,9010			
FINR5	0,9086			
<i>Purchase Intention</i>		0,7101	0,8376	0,6324
PI1	0,8194			
PI2	0,7769			
PI3	0,7889			
<i>Product Risk</i>		0,9074	0,9313	0,7314
PROR1	0,9164			
PROR2	0,8651			
PROR3	0,8094			
PROR4	0,8986			
PROR5	0,7784			
<i>Psychological Risk</i>		0,8867	0,9209	0,7444
PSYR1	0,8377			
PSYR2	0,8272			
PSYR3	0,8925			
PSYR4	0,8916			
<i>Security Risk</i>		0,8870	0,9169	0,6887
SECR1	0,8333			
SECR2	0,8150			
SECR3	0,8810			
SECR4	0,8495			
SECR5	0,7662			
<i>Time Risk</i>		0,8387	0,8900	0,6707
TMR1	0,8379			
TMR2	0,7015			
TMR3	0,8635			
TMR4	0,8619			
<i>Trust</i>		0,7191	0,8422	0,6406
TRU1	0,7484			
TRU2	0,8356			
TRU3	0,8147			

Notes: DER=delivery risk; FINR=financial risk; PI=purchase intention; PROR=product risk; PSYR=psychological risk; SECR=security risk; TIMR=time risk; TRU=trust

Source: Author's work (2025)

Table 5 Fornell-Larcker Criterion (HTMT Criterion)

	DER	FINR	PI	PROR	PSYR	SECR	TIMR	TRU
DER	0,8526							
FINR	0,8309 (0,9354)	0,8938						
PI	-0,4278 (0,5380)	-0,5560 (0,6762)	0,7953					
PROR	0,7922 (0,9071)	0,9617 (1,0362)	-0,5714 (0,7016)	0,8552				
PSYR	0,3952 (0,4685)	0,4020 (0,4458)	-0,1520 (0,1867)	0,4038 (0,4656)	0,8628			
SECR	0,9044 (1,0591)	0,9541 (1,0421)	-0,5164 (0,6430)	0,9416 (1,0411)	0,3788 (0,4247)	0,8299		
TIMR	0,8330 (0,9951)	0,8872 (0,9995)	-0,5577 (0,6997)	0,8998 (1,0087)	0,3182 (0,3725)	0,8938 (1,0357)	0,8190	
TRU	-0,3988 (0,5063)	-0,4185 (0,5012)	0,4274 (0,6005)	-0,4505 (0,5521)	-0,2514 (0,2977)	-0,4335 (0,5290)	-0,3750 (0,4391)	0,8004

Notes: DER=delivery risk; FINR=financial risk; PI=purchase intention; PROR=product risk; PSYR=psychological risk; SECR=security risk; TIMR=time risk; TRU=trust

Source: Author's work (2025)

Based on the structural model analysis, not all path relationships yield statistically significant coefficients. The results indicate that Time Risk (TIMR) has a negative and significant effect on Purchase Intention (PI) ($\beta = -0.3590$; $p = 0.0298$), suggesting that higher perceived time-related risks can reduce users' willingness to make purchases. Moreover, Trust (TRU) positively and significantly affects Purchase Intention (PI) ($\beta = 0.2521$; $p = 0.0004$), which highlights the importance of building user trust to enhance purchase decisions. Meanwhile, Product Risk (PROR) has a negative and significant effect on Trust (TRU) ($\beta = -0.8249$; $p = 0.0017$), indicating that perceptions of product-related risks may hinder users' trust in the platform or service.

Although several other variables such as Financial Risk (FINR \rightarrow PI) and Perceived Security Risk (SECR \rightarrow PI) show negative coefficients, their p-values are above the 0.05 threshold, indicating no statistically significant effect. However, the significant influence of Trust (TRU) on Purchase Intention suggests a possible mediating role, where variables like TIMR and PROR may indirectly impact purchase decisions through Trust. These findings support the notion that reducing perceived risks and enhancing trust can effectively increase consumer confidence and intention to engage in online transactions.

Table 6 Effect of endogenous variables

Hypotheses	β	SE	t-value	p-value	Decision
H1 DER \rightarrow PI	0,0983	0,1807	0,5439	0,5867	Not Supported
H2 DER \rightarrow TRU	-0,2648	0,1766	1,4990	0,1345	Not Supported
H3 FINR \rightarrow PI	-0,3904	0,2704	1,4441	0,1493	Not Supported
H4 FINR \rightarrow TRU	0,3540	0,3032	1,1674	0,2436	Not Supported
H5 PROR \rightarrow PI	-0,2423	0,2782	0,8710	0,3842	Not Supported
H6 PROR \rightarrow TRU	-0,8249	0,2610	3,1602	0,0017	Supported
H7 PSYR \rightarrow PI	0,0939	0,0712	1,3180	0,1881	Not Supported
H8 PSYR \rightarrow TRU	-0,0506	0,0798	0,6339	0,5264	Not Supported
H9 SECR \rightarrow PI	0,3900	0,3819	1,0212	0,3077	Not Supported
H10 SECR \rightarrow TRU	0,0250	0,3593	0,0697	0,9445	Not Supported
H11 TIMR \rightarrow PI	-0,3590	0,1648	2,1784	0,0298	Supported
H12 TIMR \rightarrow TRU	0,2674	0,1668	1,6038	0,1094	Not Supported

H13 TRU → PI 0,2521 0,0712 3,5431 0,0004 Supported

Notes: DER=delivery risk; FINR=financial risk; PI=purchase intention; PROR=product risk; PSYR=psychological risk; SECR=security risk; TIMR=time risk; TRU=trust
Source: Author's work (2025)

In terms of the overall model fit evaluation (Goodness-of-Fit), the average AVE value was obtained as 0.6365 and the average R^2 was 0.2940. The GoF value was calculated using the formula $\sqrt{(AVE \times R^2)}$, resulting in a score of 0.2346. Based on the GoF classification proposed by Tenenhaus et al., this value falls into the low category, indicating that the model has a relatively weak fit in explaining the data.

Table 7 Goodness-of-fit Index

Constructs	AVE	R^2
PI	0,6324	0,3828
TRU	0,6406	0,2052
Average scores (GFI=AVE x R^2)	0.2346	

Notes: DER=delivery risk; FINR=financial risk; PI=purchase intention; PROR=product risk; PSYR=psychological risk; SECR=security risk; TIMR=time risk; TRU=trust
Source: Author's work (2025)

These findings confirm that trust plays a crucial role in reducing user doubts and enhancing the overall e-commerce experience, making it more user-friendly and informative. Ultimately, this contributes to increasing consumers' purchase intentions on Shopee Indonesia – highlighting how trust can bridge the gap from perceived risk to confident decision-making.

Conclusion

This study aimed to explore the role of perceived risk and trust in shaping e-commerce purchase intentions, with a specific focus on Shopee users in Indonesia. The findings highlight the critical influence of trust as a mediating factor that can effectively mitigate the negative effects of various perceived risks on consumer behavior. Among the multiple risk dimensions examined, product risk (PROR) demonstrated a significant negative impact on trust (TRU), suggesting that concerns about product quality, accuracy, or reliability substantially erode user confidence. Additionally, time risk (TIMR) was found to negatively and significantly influence purchase intention (PI), indicating that delays or inefficiencies in transaction processes can directly discourage consumers from completing their purchases. On the other hand, trust (TRU) showed a strong and statistically significant positive effect on purchase intention (PI), confirming its role as a key enabler in online purchase decision-making. These results suggest that even in the presence of perceived risks, fostering a trustworthy environment—through transparent practices, secure transactions, and reliable service—can significantly enhance user willingness to engage in e-commerce. From a measurement standpoint, all constructs met the required criteria for reliability and validity, with AVE, composite reliability, and Cronbach's alpha values exceeding standard thresholds. However, the Goodness-of-Fit (GoF) index, calculated at 0.2346, falls within the low fit category according to Tenenhaus et al., indicating that while the model provides meaningful insights, its explanatory power remains modest and may benefit from further refinement or inclusion of additional factors. In summary, this study confirms that reducing perceived risk and strengthening trust are essential strategies to encourage online purchase behavior. Platforms like Shopee can benefit from these insights by prioritizing risk mitigation and building user trust to bridge the gap from consumer doubt to confident purchasing decisions.

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