



# The Influence of Customer Experience and Perceived Risk on Online Purchase Intention

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**Abstract.** This research aims to analyze and determine the influence of online customer experience and perceived risk on online purchase intentions in e-commerce. This research model used five variables, including online customer experience, product risk, financial risk, privacy risk, and online purchase intention, with seven hypotheses. This type of research is causal research. For data collection, researchers obtained data sources derived from respondents conducted online. This research used a non-probability sampling-purposive sampling method. This study shows that the financial hypothesis of risk and privacy risk has a negative and insignificant effect on online purchase intentions. The online customer experience hypothesis significantly affects the product, financial, and privacy risks. The online customer experience hypothesis has a positive and significant effect on online purchase intentions.

**Keywords:** Online customer experience · Perceived risk · Online purchase intention

## 1 Introduction

The Covid-19 pandemic has increased online shopping activity. E-commerce is the right choice for consumers to meet their needs. It is an activity that uses the internet and the web to conduct business transactions between individuals or organizations [1]. E-commerce is considered helpful during the Covid-19 pandemic, requiring consumers to stay at home. Consumers can shop online anywhere and anytime. On the other hand, consumers also bear product, financial, and privacy risks with online transactions.

According to Dabrynin and Zhang [2] and Hadining et al. [3], the financial risk does not significantly influence online purchase intentions. However, [4] and [5] showed that financial risk significantly influences online purchase intentions. The difference in the results of this study is intriguing to re-examine. Every consumer has financial risk in the online transaction process, impacting online purchase intentions.

Dabrynin and Zhang [2], Ariffin et al. [4], and Sudibyo et al. [5] showed that product risk has a significant influence on online purchase intentions. Hadining et al. [3] showed that product risk does not significantly influence online purchase intentions. The results of subsequent research found different results in online transactions. Purchasing products online does have risks and impacts the next online purchase intention.

Dabrynin and Zhang [2] stated that online customer experience significantly influences product risk, financial risk, privacy risk, and online purchase intention. However, Hadining et al. [3] results are not in line with Dabrynin and Zhang [2]. This fact is interesting to review by testing research models Dabrynin and Zhang [2] on other e-commerce. This is done to see consistent results and existing theories.

This research aims to analyze and determine the influence of online customer experience and perceived risk on online purchase intentions in e-commerce in Indonesia. This study is a replication of Dabrynin and Zhang [2]. This research model used five variables, including online customer experience, product risk, financial risk, privacy risk, and online purchase intention, with seven hypotheses.

### **1.1 The Effect of Product Risk on Online Purchase Intention**

Product risk can be the most potential reason for customers not to purchase products online. This has an impact on interest and reduces consumer confidence in shopping online. Product risk can occur because consumers buy products online and cannot physically check them and carefully test their characteristics [6]. Dabrynin and Zhang [2], Ariffin et al. [4], and Sudibyoy et al. [5] showed results that product risk has a significant influence on online purchase intentions.

H1: Product Risk has a significant influence on Online Purchase Intention.

### **1.2 The Effect of Financial Risk on Online Purchase Intention**

Online consumers can experience financial risks such as credit card fraud and web e-commerce phishing when conducting online shopping. High financial risk can reduce the frequency of purchases and customer activity on an online platform. Online purchase intentions are used as a benchmark to predict customers' actual purchasing activity. Ariffin et al. [4], and Sudibyoy et al. [5] showed that financial risk significantly influences online purchase intentions.

H2: Financial Risk has a significant influence on Online Purchase Intention.

### **1.3 The Effect of Privacy Risk on Online Purchase Intention**

Privacy risk relates to customers' personal information when doing online transactions. Concerns about privacy risk are primary barriers to e-commerce for customers to engage in online transactions, as it requires customers to release personal information. Higher risk also occurs when customers are forced to provide more information to e-commerce parties, significantly affecting customer interest in making purchases. These risks impact purchase interests, which are usually related to customer behavior, perception, and attitudes, making it a successful instrument for predicting the buying process [7].

H3: Privacy Risk has a significant influence on Online Purchase Intention.

#### **1.4 The Effect of Online Customer Experience on Product Risk**

When the product received by a customer is not as expected, the customer will consider not repurchasing at the online store because it cannot meet the needs desired by customers [4]. This bad experience can trigger consumers not to do online shopping activities in the future. Dabrynin and Zhang [2] stated that online customer experience significantly influences product risk.

H4: Online Customer Experience has a significant influence on Product Risk.

#### **1.5 The Effect of Online Customer Experience on Financial Risk**

Generally, customers consider financial risk one of the negative factors associated with online shopping activities, which can predict customer interest in shopping online. High financial risk can reduce the frequency of purchases and customer activity on online platforms [2]. Masoud [8] explained that all forms of financial risk, whether through credit card fraud or lack of quality of the products received, can negatively impact customers' interest to do online shopping in the future. Dabrynin and Zhang [2] stated that online customer experience significantly influences financial risk.

H5: Online Customer Experience has a significant influence on Financial Risk.

#### **1.6 The Effect of Online Customer Experience on Privacy Risk**

Dabrynin and Zhang [2] said customer problems are related to the flow of individual information between customers and online platforms. Customers limit their online shopping because there is a privacy risk related to customer personal information. Dabrynin and Zhang [2] stated that online customer experience significantly influences privacy risk.

H6: Online Customer Experience has a significant influence on Privacy Risk.

#### **1.7 The Effect of Online Customer Experience on Online Purchase Intention**

Individually, a high online customer experience can increase satisfaction when shopping online and increase the number of purchases. Schlosser et al. [9] stated that the existence of a privacy statement and providing more robust security cannot guarantee that online purchase intention is increasing. Dabrynin and Zhang [2] stated that online customer experience significantly influences online purchase intentions.

H7: Online Customer Experience has a significant favorable influence on Online Purchase Intention.

## 2 Research Methods

This type of research is causal research. Researchers obtained data sources derived from respondents conducted online. This research used a nonprobability sampling-purposive sampling method. Data processing used SPSS and AMOS 22 application programs.

Five variables were used in the research model. The Online Customer Experience (OPE) variable uses three measurement items [10]. Product risk (PR) uses five measurement items from [11]. Financial Risk (FR) uses 5 measurement items from [12]. Privacy Risk (PRI) uses 4 measurement items from [13]. Online purchase intention (OPI) uses 5 measurement items from [14].

Respondents to this study were 220 people and domiciled in Surabaya. Respondents were consumers who have shopped using Shopee e-commerce at least once in the last three months. Respondents were mostly aged 19–30 years (61%) and females as many as 171 respondents (78%). The last education was the high school level with 75%, and student status (83%). Respondents have had more than 6 years of experience using the internet. They have been actively shopping online for the last 1–3 years, with an online shopping frequency of at least 3 to 10 times or more per year (86%). Products often purchased were clothing, cosmetics, food, electronics & software, with an average total expenditure of IDR 200,000 to IDR 400,000.

## 3 Results and Discussion

Table 1 shows the test results of already qualified measurement models. The next stage is the calculation of Validity and Reliability. Construct distribution can be seen from the values of standardized loading ( $\lambda$ ), Average Variance Extracted (AVE), and Construct Reliability (CR). It required AVE value min. 0.5 and ideal standardized loading ( $\lambda$ ) min. Worth 0.7 [15]. The CR value is expected min. 0.6 [15]. Table 2 shows the results of standardized loading ( $\lambda$ ), Average Variance Extracted (AVE), and Construct Reliability (CR) calculations that have been qualified.

The results of the Structural Model test in Table 3 show that the entire index has qualified. The following is hypothesis testing. Table 4 can be seen the results of hypothesis testing. The hypothesis tested seven hypotheses and found that two hypotheses were not supported.

**Table 1.** Measurement Model Test Results

Goodness of Fit	Criteria	Results	Information
CMIN/DF	$\leq 3.00$	1.598	Good Fit
RMS	$\leq 0.08$	0.052	Good Fit
GFI	Marginal Fit (0.8–0.9)	0.892	Marginal Fit
CFI	Good Fit ( $\geq 0.9$ )	0.944	Good Fit
TLI		0.934	Good Fit

**Table 2.** Structural Model Test Results

Goodness of Fit	Criteria	Results	Information
CMIN/DF	≤3.00	1.852	Good Fit
RMS	≤0.08	0.062	Good Fit
GFI	Marginal Fit (0.8–0.9) Good Fit (≥0.9)	0.872	Marginal Fit
CFI		0.918	Good Fit
TLI		0.907	Good Fit

**Table 3.** Standard Loading, AVE and CRvalues

Variable/Indicator	Std Loading ( $\lambda$ )	AVE	CR
<b>Online Customer Experience (OCE)</b>			
OCE 1	0.765	0.549	0.785
OCE 2	0.751		
OCE 3	0.705		
<b>Product Risk (PR)</b>			
PR 1	0.782	0.520	0.844
PR 2	0.688		
PR 3	0.730		
PR 4	0.706		
PR 5	0.695		
<b>Financial Risk (FR)</b>			
FR 1	0.708	0.512	0.840
FR 2	0.784		
FR 3	0.683		
FR 4	0.684		
FR 5	0.715		
<b>Online Purchase Intention (OPI)</b>			
OPI 1	0.731	0.533	0.851
OPI 2	0.737		
OPTION 3	0.737		
OPTION 4	0.656		
OPTION 5	0.784		
<b>Privacy Risk (PRI)</b>			
PRI 1	0.794	0.583	0.848
PRI 2	0.789		
PRI 3	0.737		
PRI 4	0.731		

**Table 4.** Hypothesis Testing Results

Path	St. Est.	CR.	P-value	Information
PR > OPI	0.376	4.439	***	supported
FR > OPI	-0.165	-1.417	0.156	Not supported
PRI > OPI	-0.117	-1.243	0.214	Not supported
OCE > PR	0.604	6.241	***	supported
OCE > FR	0.630	6.667	***	supported
OCE > PRI	0.735	6.945	***	supported
OCE > OPI	0.377	2.611	**	supported

Hypothesis 1 explains the influence of product risk on online purchase intentions significantly. This result is in line with Dabrynin and Zhang [2], Ariffin et al. [4], and Sudibyo et al. [5] Consumers cannot check the quality of every item they want to buy directly from online shops.

Platform-commerce provides product risk in the form of warranty services for every transaction made. This aims to provide a sense of security for customers who want to buy a product online.

Hypothesis 2 states that financial risk variables have a negative and insignificant influence on online purchase intentions. This hypothesis supports Dai et al. [16] and Beneke et al. [17]. Consumers are concerned that there are high additional costs beyond calculating shipping costs and handling costs of one-commerce payment services. These costs are not proportional to the product's price purchased by the consumer. This results in a decreased interest in e-commerce shopping.

Testing the hypothesis of privacy risk against online purchase intentions is stated three unsupported. The results of this study are in line with Dai et al. [16] and Beneke et al. [17]. Consumers are concerned that personal data is given to third parties or there is a hack in online transactions. Platform e-commerce seeks to safeguard consumers' data through privacy laws. The dissemination of personal consumer data is still happening, and there is no absolute security guarantee. This can have an impact on online purchase intentions.

The online customer experience hypothesis test on product risk (H4) showed support by Dabrynin and Zhang [2]. Online customer experience is a consumer experience in using a website. Consumers engage in cognitive and affective processes through e-commerce platforms. The more experienced consumers use e-commerce platforms, the more consumers understand the product risk of e-commerce platforms.

Testing the hypothesis of online customer experience on financial risk (H5) in this study is in line with Dabrynin and Zhang [2] stated that online customer experience significantly influences financial risk. The more experienced consumers use e-commerce platforms, the more consumers understand the financial risk of e-commerce platforms. Experienced respondents of online shopping were shown through data on shopping frequency between 3 to 10 times more per year. This experience impacts the financial risk of respondents who are felt.

Hypothesis 6 states a significant awareness of online customer experience to privacy risk. This hypothesis supports the research of Dabrynin and Zhang [2]. Based on descriptive data, respondents in this study stated that respondents are pretty familiar with e-commerce platforms, and respondents also understand the privacy risks they receive. Platform-commerce strives to maintain and minimize consumer privacy risk through e-commerce customers' privacy security explanation information.

Hypothesis testing seven impact online customer experience against online purchase intentions is expressed supported. The results of this study are in conjunction with Dabrynin and Zhang [2]. Zhou et al. [18] state that individuals who feel a positive experience can increase online shopping satisfaction and impact increasing the number of purchases. The consumer experience related to the ease and convenience of online shopping impacts the next online purchase intention.

## 4 Conclusion

This study shows that two hypotheses are not supported, and five are supported. Product risk has a positive and significant effect on online purchase intentions. Financial risk has a negative and insignificant effect on online purchase intentions. Privacy risk has a negative and insignificant effect on online purchase intentions. Online Customer Experience has a significant positive effect on product risk. Online Customer Experience has a positive and significant effect on financial risk. Online Customer Experience has a positive and significant effect on privacy risk. Online customer experience has a significant positive effect on online purchase intentions.

The limitations of this research were only researched Shopee e-commerce only and the character of respondents who had a residence in Surabaya. Future research can be researched for other e-commerce and test this model for research objects such as online delivery services.

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