

# Reliability and Perceived Ease of Use Mediate Customer E-Trust Towards Customer E-Retention

Nur Afika Fitriani<sup>1</sup>, Ely Siswanto<sup>2</sup> Ita Prihatining Wilujeng<sup>3</sup>

Master of Management, Faculty of Economics and Business, State University of Malang

email: [nur.afika.2404138@um.ac.id](mailto:nur.afika.2404138@um.ac.id)

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## Abstract

*This study investigates the mediating role of reliability and perceived ease of use in shaping customer e-trust and its subsequent influence on customer e-retention within the TikTok Shop platform. Grounded in the Technology Acceptance Model (TAM), the research employs a quantitative explanatory approach with a purposive sampling method, involving 80 respondents from TikTok Shop consumers in Malang City. Data were collected using structured online questionnaires and analyzed through Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0. The findings reveal that both reliability and perceived ease of use exert a positive and significant effect on customer e-trust, underscoring the importance of consistent system performance and user-friendly features in strengthening customer confidence. Moreover, reliability demonstrates a direct and significant influence on customer e-retention, indicating that customers who perceive the platform as dependable are more likely to remain loyal. In contrast, perceived ease of use does not directly affect customer e-retention, suggesting that while ease of navigation and interaction enhance trust, they are insufficient on their own to secure long-term retention. Importantly, customer e-trust significantly mediates the relationship between both reliability and perceived ease of use toward customer e-retention, highlighting trust as a critical mechanism for sustaining loyalty. These findings contribute to the literature on digital consumer behavior and provide practical implications for e-commerce platforms to prioritize trust-building strategies through system reliability and ease of use.*

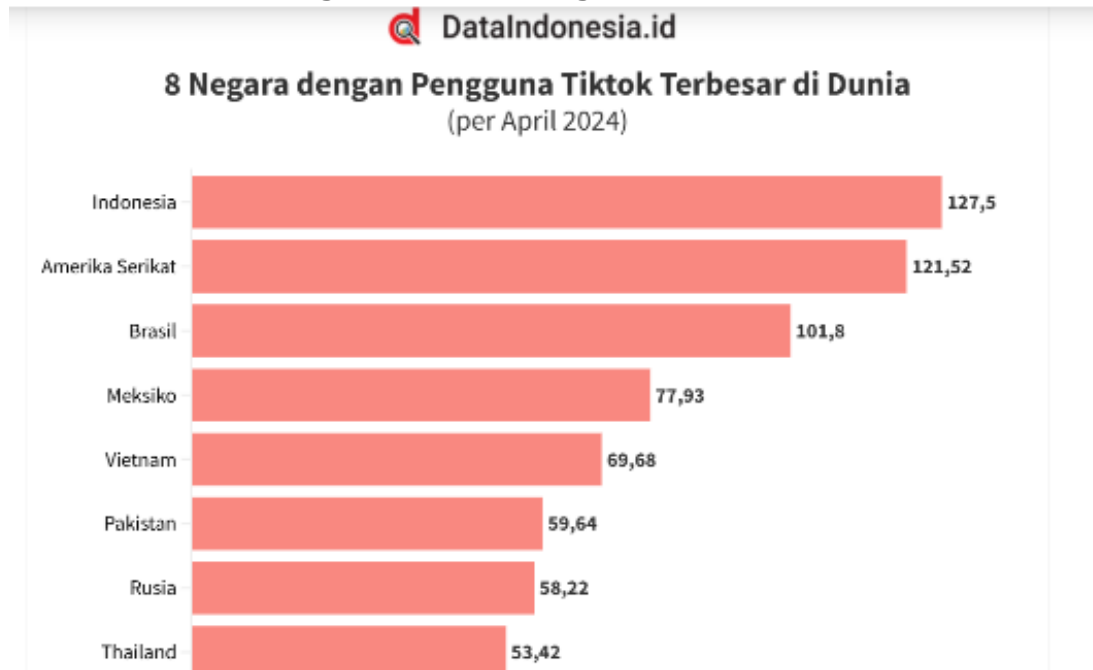
## 1. Introduction

The swift advancement of information and communication technology (ICT) has led to significant transformations in numerous areas, such as social, economic, and political. In the corporate realm, improvements in information and communication technology (ICT) facilitate the sales and marketing process, making it simpler without constraints of location and time (Tran & Vu, 2019). One of the applications is e-commerce, which offers flexibility and wider market access, which has a beneficial effect on the economy. E-commerce involves the utilization of electronic methods and technology to purchase, sell, and exchange goods and services by using the internet to find information (Jain et al., 2021). Nowadays, e-commerce is growing rapidly and is highly sought after by the public as it offers ease in performing digital transactions without the need for in-person meetings (Kalakota & Whinston, 1997). The swift expansion of e-commerce in Indonesia is fueled by various factors, including the rising use of smartphones

and internet access, along with the prevalence of the younger generation that is skilled in technology and quickly adapt to digital innovation.

E-commerce is currently in great demand by consumers, one of which is the TikTok shop. TikTok shop is an integrated feature within TikTok that enables users to make purchases directly through e-commerce services. Based on Indonesian Data (2024), there are 1.58 billion TikTok users in the world, the majority of whom are people aged 18-34 years. The most dominant TikTok users come from Indonesia with 127.5 million users. In contrast to the previous year, in 2023 Indonesia was in second place with 113.3 million users. This is evidenced by the following figure:

**Figure 1. World's Largest TikTok Users**



Source: Indonesian Data (2024)

TikTok shop provides several features that allow direct interaction between producers and consumers, thereby increasing audience engagement and expanding market reach in real time. One of the features provided by TikTok shop is live streaming as the main strategy to provide an interactive experience in introducing products. During live streaming, consumers can ask questions, see product demonstrations, and enjoy various promos such as flash sales, vouchers, free shipping, and cashback. This is done by TikTok shop to retain customers to continue to make transactions and interact repeatedly in the long term or called customer e-retention. Customer e-retention refers to how much customers keep shopping on the TikTok shop platform after their first purchase. Customer e-retention can lead to too many promotions and sponsored content that can make consumers feel annoyed and lose their interest. Some factors that affect customer e-retention are reliability, perceived ease of use, and customer e-trust.

Reliability includes system reliability, availability of information, and user trust in the services provided (Cao et al., 2024). This factor contributes to fostering a positive user experience and assessing service quality

(Barua et al., 2018). Reliability is used to facilitate access and interaction, as in live streaming, allowing consumers to see products live before buying, and personalization algorithms by recommending products based on user preferences improve the shopping experience (Saoula et al., 2023). Reliability also causes inconsistent reliability because many sellers make products vary. This study aligns with the investigation Saoula et al (2023) which states that reliability has a positive and significant effect on customer e-retention. Another study conducted by Nisa et al (2022) That reliability does not depend on customer e-retention. Apart from reliability, perceived ease of use also affects customer e-retention.

Perceived ease of use (PEOU) denotes the degree to which users perceive the TikTok shop as user-friendly for online shopping (Saoula et al., 2023). This convenience includes application navigation, transaction processes, and access to features such as live streaming and payment methods (Tanujaya, 2020). Perceived ease of use (PEOU) simplifies shopping within a single app, allowing users to purchase items while viewing content or live streaming, without having to switch platforms, and various payment methods are available,

including e-wallet, bank transfer, and COD, to make it easier when making transactions (Tahar et al., 2020). Perceived ease of use (PEOU) also causes dependence on algorithms, which, when algorithms are inaccurate, consumers can have difficulty finding products that suit their needs, and not all products have clear descriptions or valid reviews, so they can mislead consumers (Wilson et al., 2021). This study aligns with the investigation Saoula et al (2023) which states that perceived ease of use (PEOU) has a positive and significant effect on customer e-retention. Ashghar & Nurlatifah (2020) stated different results that perceived ease of use (PEOU) does not affect customer e-retention.

The Technology Acceptance Model Theory seeks to forecast an individual's behavioral intentions or inclination to act in a specific manner concerning the adoption and utilization of information systems Davis (1989). The use of systems is influenced by factors related to behavioral intention. In TAM theory, an external variable plays a crucial role in shaping attitudes and intentions regarding the use of technology or systems. In this case, reliability and perceived ease of use (PEOU) are variables that can determine attitudes and intentions toward using technology or systems. Thus, it will result in the influence of reliability and perceived ease of use (PEOU) on the utilization of e-commerce systems. Therefore, understanding external variables such as reliability and perceived ease of use (PEOU) is very important to increase customer e-trust.

Customer e-trust in online transactions reflects confidence in the reliability and perceived ease of use (PEOU). The TikTok shop phenomenon has brought significant changes to the e-commerce landscape. TikTok shops allow users to buy directly, creating an interactive and entertaining shopping experience (Amadea & Herdinata, 2022). However, there are concerns that TikTok shop may threaten the sustainability of MSMEs in Indonesia, as competition with large platforms may affect local businesses (Saoula et al., 2023).

The phenomenon of frequent TikTok shop customers reflects changing consumer behavior in the e-commerce ecosystem. As one of the platforms that combines entertainment and digital transactions, TikTok shop offers an interactive shopping experience through live streaming features, a personalization algorithm, and various payment methods that facilitate transactions. However, the sustainability of customer e-retention on this platform depends not only on an engaging shopping experience but also on the aspects of reliability and perceived ease of use (PEOU) that affect customer e-trust, becoming the main determinants of customer e-retention in the long run.

If reliability and perceived ease of use (PEOU) are high, then customer trust increases, encouraging them to continue transacting at TikTok shop. Conversely, if the platform is difficult to use, trust and retention will decrease. Therefore, it is important to understand the role of reliability and perceived ease of use (PEOU) in building customer e-trust, which is key for businesses to maintain competitiveness in the digital era. With this, the researcher took the topic of "**Reliability and Perceived Ease of Use Mediate Customer E-Trust Towards Customer E-Retention**". This study aims to explore and analyze the impact of reliability and perceived ease of use (PEOU) on customer e-retention, either directly or indirectly via customer e-trust. This study aims to offer a practical contribution, serving as an assessment tool for the future and offering insights for companies on implementing reliability and perceived ease of use (PEOU) to boost customer e-trust, thereby enhancing customer satisfaction, particularly on TikTok.

## 2. Literature Review

### 2.1 Technology Acceptance Model (TAM)

#### Theory

The Technology Acceptance Model (TAM) is a conceptual framework created by Davis (1989) to clarify how individuals adopt and utilize a technology. The Technology

Acceptance Model (TAM) was created based on the Theory of Reasoned Action (TRA) by Fishbein & Ajzen (1975), which emphasizes elements that affect the acceptance of technology. The Technology Acceptance Model (TAM) states how easy it is for customers to use TikTok shop features such as product search, payment, and interaction with sellers supported by an artificial intelligence-based recommendation algorithm that displays products that are relevant to user preferences so customers can find items quickly through the search feature or through video content that appears on the “For Your Page”. The combination of fast search, fast payment, and direct communication with sellers makes TikTok a more interactive and engaging platform for customers than conventional e-commerce.

## 2.2 Reliability

Reliability is the extent to which a system, service, or product can provide consistent and dependable outcomes within a specific timeframe (Sunarta et al., 2025). According to Delone & McLean (2014) Reliability refers to the ability of a system or service to function consistently, accurately, and meet customer expectations within a certain period. According to Saoula et al (2023) Reliability is the ability of a service or system to deliver the promised product or service within the specified time. From some of these definitions, it can be concluded that reliability is the ability of a system, service, or product to operate consistently, accurately, and reliably according to consumer expectations within a certain period of time, Reliability is measured using performance consistency, availability, and accuracy.

## 2.3 Perceived Ease of Use

Perceived ease of use refers to how much a person thinks that utilizing a system or technology will not require too much effort (Saoula et al., 2023). According to (Tanujaya, 2020) Perceived ease of use is a system that reflects how comfortable navigating the system

and completing tasks without obstacles. According to Barua et al (2018) Perceived ease of use is an assessment of the ease by users in operating self-service-based technology. From these several definitions, it can be concluded that perceived ease of use is the extent to which a person believes that a system or technology can be used easily. Perceived ease of use is measured using indicators of ease of learning, ease of navigation, and help availability.

## 2.4 Customer E-Retention

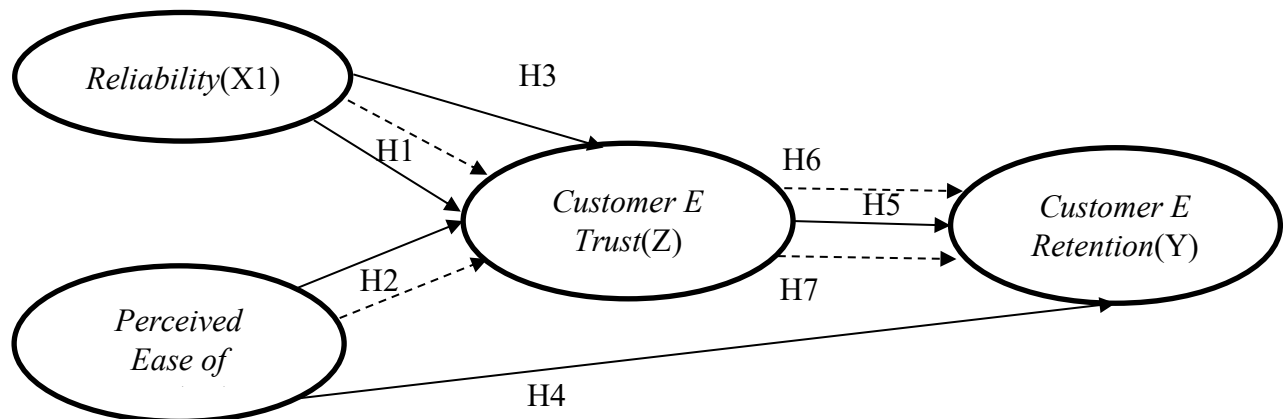
Customer e-retention is the ability of an e-commerce business to retain customers to keep using services or make repeat purchases on an ongoing basis (Wilson et al., 2021). According to Akbar et al (2024) Customer e-retention is a customer's decision to stay or make repeat purchases of a product or service in the future. According to Saoula et al (2023) Customer e-retention is the customer's desire to continue using e-commerce services and make repeat purchases on an ongoing basis. From these several definitions, it can be concluded that customer e-retention is the ability of an e-commerce business to retain customers to continue using services and make purchases on an ongoing basis based on customer decisions and desires. Customer e-retention is measured using indicators of customer satisfaction, customer service quality, and engagement indicators.

## 2.5 Customer E-Trust

Customer e-trust is customer confidence in the integrity, reliability, and credibility of the seller in providing products and services in accordance with expectations (Amadea & Herdinata, 2022). According to Alfarobi & Widodo (2023) Customer e-trust is the customer's trust in digital service providers to fulfill their promises. According to Saoula et al (2023) Customer e-trust is customer trust that reflects a sense of security and confidence in providing products or services according to customer expectations. From several of these definitions, it can be concluded that customer

e-trust is customer confidence in the integrity, reliability, and credibility of digital service providers in fulfilling promises and providing

products or services by customer expectations. Customer e-trust is measured using indicators of ability, integrity, and security.



**Figure 2. Conceptual Framework**

The diagram illustrates the connection between independent variables, specifically reliability ( $X_1$ ) and perceived ease of use ( $X_2$ ), and dependent variables, which are customer retention ( $Y$ ) and the mediating variable customer trust ( $Z$ ). The direct relationship is depicted with a straight line, and the indirect relationship is connected with a disconnected line.

H<sub>1</sub>: Reliability has a direct effect on customer e-trust in TikTok Shop consumers.

H<sub>2</sub>: Perceived ease of use has a direct effect on customer trust in TikTok Shop consumers.

H<sub>3</sub>: Reliability has a direct effect on customer retention in TikTok Shop consumers.

H<sub>4</sub>: Perceived ease of use has a direct effect on customer e-retention in TikTok Shop consumers.

H<sub>5</sub>: Customer e-trust has a direct effect on customer e-retention in TikTok Shop consumers.

H<sub>6</sub>: Reliability has an indirect effect on customer e-retention through customer trust in TikTok Shop consumers.

H<sub>7</sub>: Perceived ease of use has an indirect effect on customer e-retention through customer trust in TikTok Shop consumers.

### 3. Research Methods

In this study, the approach model used is a quantitative approach with descriptive and explanatory research types. Quantitative research is a number-based research based on data obtained about events or phenomena that occur today. This research is called explanatory research which explains the answers to the research into the material in the study with the aim of determining the hypothesis, the information obtained is the result of direct data collection (Sugiyono, 2018).

#### 3.1 Population

Population is data collection that is carried out to determine the characteristics and population of the study, the population is all the results calculated (Sugiyono, 2017). Population is the entire research object that is used as a source of data that has certain characteristics in a study. The population in this study were TikTok shop consumers in Malang City.

#### 3.2 Sample

A sample is part of the number and characteristics of a population with the aim of producing a relative source of information and can be said to be valid according to certain characteristics (Sugiyono, 2017). The sampling technique in this study is non-probability sampling. The non-probability sampling used is



purposive sampling with a sampling method according to certain criteria (Sugiyono, 2018). In this study, the sample were selected according to the following respondent criteria:

1. Domiciled or previously domiciled in Malang City
2. Aged  $\geq 17$  years
3. Have you ever shopped on the TikTok application using the live streaming feature using vouchers and discounts?

Based on the sample size calculation formula, the calculation results are as follows:

$$n = \frac{z^2 pq}{d^2}$$

$$n = \frac{1,96^2 \cdot 0,95 \cdot (1-0,95)}{0,05^2}$$

$$n = \frac{3,8416 \cdot 0,95 \cdot 0,05}{0,0025}$$

$$n = 73$$

Based on the results of the sample calculation, it can be seen that the number of samples in this study is 73 respondents. The number of samples to be studied was added by 7 respondents, so the total number became 80 respondents.

**Table 1. Instrument Grid**

Variables	Indicator	Statement Items	No Item
<b>Reliability DeLone &amp; McLean (2014)</b>	Performance consistency	TikTok shop works fine every time I use it	1
	Availability	TikTok shop can be used whenever I want to use it	2
	Accuracy	The product description on the TikTok shop reflects the product I received.	3
<b>Perceived Ease of Use Davis (2013) And Venkatesh &amp; Davis (2018)</b>	Ease of learning	I quickly understood how to use TikTok shop	4
	Ease of navigation	I easily found the products I was looking for on TikTok shop	5
	Help Availability	I feel helped by the FAQ feature provided by the TikTok shop	6
<b>Customer E-Retention Akbar et al (2024)</b>	Customer satisfaction	The products I bought at TikTok shop are according to my expectations	7
	Customer Service Quality	TikTok shop provides a quick solution to the problem I am facing	8
	Engagement	I interact with product reviews on TikTok shop before purchasing	9
<b>Customer E-Trust Phan et al (2024)</b>	Abilities	I believe that the TikTok shop is competent in handling transactions.	10
	Integrity	TikTok shop has adhered to high ethical standards	11
	Security	TikTok shop has adequate security to protect my data	12
		Encryption helps me protect payment information on TikTok shop	13

### 3.3 Data Type

This types of research data is quantitative data, namely data expressed in numerical form and can be measured objectively. This quantitative data is obtained

from the scores of respondents' answers to the questionnaire that has been distributed. The questionnaire used in this study is closed, where each question has been equipped with a predetermined answer choice.

### 3.4 Data Source

The data source in this study is primary data, namely through the results of observations made by the author, where the questionnaire was distributed to TikTok users who have shopped using vouchers and discounts at "TikTok shop".

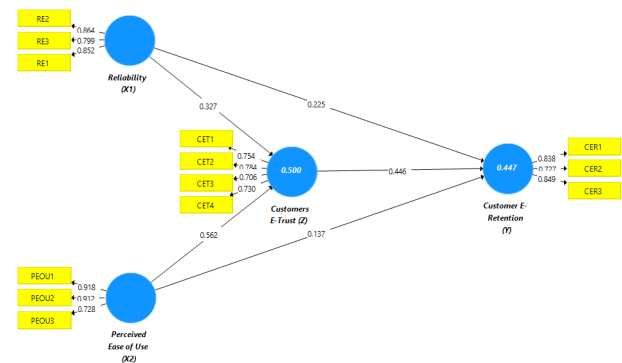
### 3.5 Data Collection Technique

To obtain the required data, the research was carried out using data collection techniques, researcher used the e-survey method or electronic questionnaire using Internet media (Sugiyono, 2018). This research questionnaire was prepared using Google Form, a digital platform from Google that allows respondents to fill out questionnaires online via the Internet. The research implementation was carried out by the researchers themselves by distributing the questionnaire link that had been made to TikTok users who had made purchases at the TikTok shop. In addition, the researcher will also distribute the questionnaire link to several existing WhatsApp groups. The results obtained from the questionnaire can be accessed and analyzed directly by the researcher in the form of structured data.

## 4. Results and Discussion

This research was conducted using the SmartPLS 3 program combined with Partial

Least Square (PLS). Outer models and inner models are components of PLS analysis. The outer model is usually called the outer model, while the inner model is the inner model.



**Figure 3. PLS Path Diagram**Source: Data processed by researchers, 2025

### 4.1 Outer Model (Measurement Model Evaluation)

#### a. Convergent Validity

Convergent validity can be seen from the loading factor value for each construct indicator. To assess convergent validity, the loading factor value must be more than 0.7. Besides that, it can also be seen through Average Variance Extracted (AVE). An instrument is said to be valid if the AVE value is above 0.5. The results of the convergent validity test using loading factors can be seen in the following table:

**Table 2. Loading Factor**

Variables	Item	Loading Factor	S.E.	Information
Reliability	RE1	0.864	0.7	Valid
	RE2	0.799	0.7	Valid
	RE3	0.852	0.7	Valid
	RE4	0.816	0.7	Valid
Perceived Ease of Use	PEOU1	0.918	0.7	Valid
	PEOU2	0.912	0.7	Valid
	PEOU3	0.728	0.7	Valid
Customer E-Trust	CET1	0.754	0.7	Valid
	CET2	0.784	0.7	Valid
	CET3	0.706	0.7	Valid
	CET4	0.730	0.7	Valid
Customer E-Retention	CER1	0.838	0.7	Valid
	CER2	0.727	0.7	Valid
	CER3	0.849	0.7	Valid

Source: Data processed by researchers, 2025

Based on Table 2, it can be seen that the statement items RE1-RE4 produce a loading factor greater than 0.7. Thus, items RE1-RE4 are declared valid in measuring the reliability variable. Of the four items measuring the reliability variable, it is known that RE4 is the most representative item in measuring the reliability variable.

Item the PEOU1-PEOU4 statement produces a loading factor greater than 0.7. Thus, the PEOU1-PEOU4 items are declared valid in measuring the perceived ease of use variable. Of the four items measuring the perceived ease of use variable, it is known that PEOU2 is the most representative item in measuring the perceived ease of use variable.

Item CET1-CET3 statements produce a loading factor greater than 0.7. Thus, CET1-CET3 items are declared valid in measuring the customer e-trust variable. Of the three items measuring the customer e-trust variable, it is known that CET1 is the most representative item in measuring the customer e-trust variable.

Item CER1-CER4 statements produce a loading factor greater than 0.7. Thus, CER1-CER4 items are declared valid in measuring the customer's e-retention variable. Of the four items measuring the customer's e-retention

variable, it is known that CER1 is the most representative item in measuring the customer's e-retention variable. In addition, the following shows the results of the convergent validity test using AVE.

**Table 3. Average Variance Extracted (AVE)**

Variables	AVE	Information
<b>Reliability</b>	0.703	Valid
<b>Perceived ease of use</b>	0.734	Valid
<b>Customer e-trust</b>	0.554	Valid
<b>Customer e-retention</b>	0.651	Valid

**Source: Data processed by researchers, 2025**

Based on Table 3, it can be seen that all variables produce an average variance extracted (AVE) greater than 0.5. Thus, all items measured in these variables are declared valid.

#### b. Discriminant Validity

Discriminant validity aims to test items or indicators of two constructs that should not be highly correlated. How to test discriminant validity by looking at the cross-loading value must be greater than other variables. The results of testing discriminant validity using cross-loading are presented in the following table.

**Table 4. Cross Loading**

Item	Reliability	Perceived Ease of Use	Customer E-Trust	Customers E-Retrieval
<b>RE1</b>	<b>0.852</b>	0.169	0.413	0.397
<b>RE2</b>	<b>0.864</b>	0.171	0.328	0.350
<b>RE3</b>	<b>0.799</b>	0.185	0.368	0.383
<b>PEOU1</b>	0.183	<b>0.918</b>	0.564	0.425
<b>PEOU2</b>	0.082	<b>0.912</b>	0.642	0.423
<b>PEOU3</b>	0.327	<b>0.728</b>	0.378	0.342
<b>CET1</b>	0.197	0.651	<b>0.754</b>	0.350
<b>CET2</b>	0.286	0.536	<b>0.784</b>	0.499
<b>CET3</b>	0.506	0.370	<b>0.706</b>	0.596
<b>CET4</b>	0.304	0.288	<b>0.730</b>	0.399
<b>CER1</b>	0.294	0.479	0.610	<b>0.838</b>
<b>CER2</b>	0.369	0.203	0.362	<b>0.727</b>
<b>CER3</b>	0.442	0.171	0.328	<b>0.849</b>

**Source: Data processed by researchers, 2025**

Based on Table 4, shows that the cross-loading value of the latent variable indicator

has a greater cross-loading value than other variables. Therefore, it can be concluded that



the latent variable has good discriminant validity. Another way that can be used in testing discriminant validity is to compare the square root of the Average Variance Extracted (AVE) for each construct with the correlation value between constructs in the model. The

square root value of AVE in a variable greater than the correlation value between latent constructs indicates that the discriminant validity of a construct is good. The following are the results of discriminant validity testing using the square root of AVE.

**Table 5. Square Root of AVE**

Variables	Reliability	Perceived Ease Of Use	Customer E-Trust	Customer E-Retention
<b>Reliability</b>	<b>0.839</b>	0.209	0.444	0.451
<b>Perceived Ease Of Use</b>		<b>0.857</b>	0.630	0.465
<b>Customer E-Trust</b>			<b>0.744</b>	0.632
<b>Customer E-Retention</b>				<b>0.807</b>

**Source: Data processed by researchers, 2025**

Table 5 shows that the variables reliability, perceived ease of use, customers' e-trust, and customers' e-retention have a larger AVE square root compared to the AVE square root of other variables. Thus, the variables reliability, perceived ease of use, customers' e-trust, and customers' e-retention are declared valid.

### c. Composite Validity

Test reliability is done to prove the accuracy, consistency and precision of the

instrument in measuring the construct. Composite Reliability is a closer approximation assuming accurate parameter estimates. To assess the reliability of the construct, the composite reliability value must be greater than 0.7. In addition, there is another way to test the reliability of a construct, namely through Cronbach's Alpha. If each question studied has a Cronbach alpha > 0.6, then the instrument is said to be reliable or consistent. The following are the results of testing using composite reliability and Cronbach's Alpha.

**Table 6. Composite Reliability And Cronbach's Alpha**

Variables	Composite Reliability	Cronbach's Alpha	Information
<b>Reliability</b>	0.877	0.792	Valid
<b>Perceived Ease Of Use</b>	0.858	0.858	Valid
<b>Customer E-Trust</b>	0.832	0.736	Valid
<b>Customer E-Retention</b>	0.848	0.759	Valid

Source: Data processed by researchers, 2025

Table 6, it is known that the composite reliability value of reliability, perceived ease of use, customers' e-trust, and customers' e-retention is more than 0.70. Therefore, each of these variables has met the composite reliability rules. In addition, the test results using Cronbach's Alpha state that the Cronbach's alpha value for each variable is more than 0.60 so it has met the Cronbach's alpha requirements. Thus, it can be interpreted that all constructs have high reliability.

## 4.2 Inner Model (Structural Model)

### a. R-Square

R-squares used to explain the influence of exogenous latent variables on endogenous latent variables. The R-Square results can also show the amount of variance of the constructs that have been explained in the model. The following are the results of the R-Square calculation.

**Table 7. Values R-Squares**

Variables	R-Squares
Customer E-Trust	0.447
Customer E-Retention	0.500

**Source: Data processed by researchers, 2025**

The test results show that the R-Square value of the customer e-trust variable obtained a value of 0.447 or equivalent to 47.7%. The results show that the reliability and perceived ease of use variables influence by contributing to forming the customer e-trust variable by 47.7%, while the remaining 52.3% is influenced by other variables not included in this study. The R-Square value is included in the moderate influence category. Meanwhile, the customer e-retention variable obtained an R-Square value of 0.500 or equivalent to 50.0%. The results show that the customer e-retention variable has a contribution to the influence of reliability and perceived ease of

use by 50.0%, while the remaining 50.0% is influenced by other variables not included in this study. The R-Square value is included in the moderate influence category.

#### **b. F-Square**

F-Square used to measure the magnitude of the influence of latent variables at the structural level. If the  $f^2$  value is 0.02, the latent variable predictor has little effect on the structural variable. The  $f^2$  value of 0.15 has a moderate effect, the  $f^2$  value of 0.35 has a large effect. The following are the results of testing using F-Square.

**Table 8. F-Squares Values**

Variables	Customer E-Retention	Customer E-Trust	Perceived Ease Of Use	Reliability
Reliability	0.072	0.204		
Perceived Ease Of Use	0.020	0.604		
Customer E-Trust	0.180			
Customer E-Retention				

**Source: Data processed by researchers, 2025**

The test results Table 8 shows that the F-Square of the reliability variable ( $X_1$ ) against the customer e-retention variable (Y) has a value of 0.072 which is classified as having a small effect. The F-Square of the perceived ease of use variable ( $X_2$ ) against the customer e-retention variable (Y) has a value of 0.020 which is classified as having a small effect. The F-Square of customer e-trust (Z) against the customer e-retention variable (Y) has a value of 0.180 which is classified as having a moderate effect. The F-Square of the reliability variable ( $X_1$ ) against the customer e-trust variable (Z) has a value of 0.204 which is

classified as having a moderate effect. The F-Square of the perceived ease of use variable ( $X_2$ ) against the customer e-trust variable (Z) has a value of 0.604 which is classified as having a large effect.

#### **c. Bootstrapping**

Bootstrapping used to determine the influence between variables by looking at the significance value. The bootstrapping method is carried out to minimize the existence of data abnormalities in the study. The following are the results of bootstrapping.

**Table 9. Bootstrapping Test Results**

Variables	Original Sample(O)	Sample Mean(M)	Standard Deviation(STDEV)	T-Statistics ( O/STDEV )	P-Values
Reliability (X1) → Customer E-Trust (Z)	0.327	0.330	0.080	4.099	0,000
Perceived Ease of Use (X2) → Customer E-Trust (Z)	0.562	0.563	0.089	6,317	0,000
Reliability (X1) → Customer E-Retention (Y)	0.225	0.217	0.095	2,354	0.019
Perceived Ease of Use (X2) → Customer E-Retention (Y)	0.137	0.139	0.148	0.927	0.354
Customer E-Trust (Z) → Customer E-Retention (Y)	0.446	0.458	0.147	3,033	0.003
Reliability (X1) → Customer E-Trust (Z) → Customer E-Retention (Y)	0.146	0.153	0.065	2,244	0.025
Perceived Ease of Use (X2) → Customer E-Trust(Z) → Customer E-Retention(Y)	0.251	0.259	0.095	2,635	0.009

**Source: Data processed by researchers, 2025**

Based on table 9 above, shows direct and indirect testing between variables:

1. Reliability ( $X_1$ ) has a T-statistic value of  $4.099 > 1.96$  and a P-value of  $0.000 < 0.05$ , this shows that the reliability of ( $X_1$ ) has a direct impact on customer e-trust (Z).
2. Perceived ease of use ( $X_2$ ) has a T-statistic value of  $6.317 > 1.96$  and a P-value of  $0.000 < 0.000$ , this shows that perceived ease of use ( $X_2$ ) has a direct impact on customer e-trust (Z).
3. Reliability ( $X_1$ ) has a T-statistic value of  $2.354 > 1.96$  and a P-value of  $0.019 < 0.05$ , this shows that the reliability of ( $X_1$ ) has a direct impact on customer e-retention (Y).
4. Perceived ease of use ( $X_2$ ) has a T-statistic value of  $0.927 < 1.96$  and a P-value of  $0.354 > 0.05$ , this shows that perceived ease of use ( $X_2$ ) has no effect on customer e-retention (Y).
5. Customer e-trust (Z) has a T-statistic value of  $3.033 > 1.96$  and a P-value of  $0.003 < 0.05$ , this shows that customer e-trust (Z) as a mediating variable that has a direct influence on customer e-retention (Y).
6. There is a mediation effect between reliability ( $X_1$ ) and customer e-trust (Z). This is indicated by the T-statistic value of

$2.244 > 1.96$  and the P-value value of  $0.025 < 0.05$ . So it can be concluded that there is an indirect effect between the reliability variable ( $X_1$ ) and customer e-trust (Z).

7. There is a mediation effect between perceived ease of use ( $X_2$ ) and customer e-trust (Z). This is indicated by the T-statistic value of  $2.635 > 1.96$  and the P-value value of  $0.009 < 0.05$ . So it can be concluded that there is an indirect effect between the perceived ease of use variable ( $X_2$ ) and customer e-trust (Z).

#### 4.3 The effect of reliability on customer e-trust on TikTok Shop consumers

This finding shows that the level of reliability directly affects customers' e-trust. This finding obtained a parameter coefficient value of 0.327, indicating that a unit increase in reliability will increase e-retention by 0.225 units, assuming other factors remain constant. In addition, the T-statistic value is  $4.099 > 1.96$  and the P-value is  $0.000 < 0.05$ . This means that the higher the level of reliability felt by consumers, the greater the likelihood of their trust in the TikTok shop platform service. This finding is in line with research conducted by Saoula et al (2023) which states that reliability

has a positive and significant effect on customer e-retention.

#### **4.4 The influence of perceived ease of use on customer e-trust in TikTok Shop consumers**

This finding shows that the level of perceived ease of use directly affects customers' e-trust. This finding obtained a parameter coefficient value of 0.562 which indicates that a unit increase in perceived ease of use will increase e-trust by 0.562 units, assuming other factors remain constant. In addition, the T-statistic value of  $6.317 > 1.96$  and the P-value of  $0.000 < 0.05$ , show that perceived ease of use directly affects customers' e-trust. This means that the easier a TikTok shop platform is to use, the more likely customers will trust the platform. This finding is in line with the research Saoula et al (2023) which states that perceived ease of use has a positive and significant effect on customer e-trust.

#### **4.5 The effect of reliability on customer e-retention on TikTok Shop consumers**

This finding shows that the level of reliability directly affects customer e-retention. This finding obtained a parameter coefficient value of 0.225 which indicates that a unit increase in reliability will increase e-retention by 0.225 units, assuming other factors remain constant. In addition, the T-statistic value is  $6.317 > 1.96$  and the P-value is  $0.019 < 0.05$ . This means that the higher the level of reliability, the more likely customers will remain loyal to the TikTok shop platform service. This finding is in line with research conducted by Saoula et al (2023) which states that reliability has a positive and significant effect on customer e-retention.

#### **4.6 The effect of perceived ease of use on customer e-retention on TikTok Shop consumers**

This finding shows that the level of perceived ease of use does not affect customers' e-retention. This finding obtained a

parameter coefficient value of 0.137 which indicates that a unit increase in perceived ease of use will increase e-retention by 0.137 units, assuming other factors remain constant. In addition, the T-statistic value of  $0.927 < 1.96$  and the P-value of  $0.354 > 0.05$ , indicates that perceived ease of use has no effect on customer e-retention. This means that the perceived ease of use felt by consumers does not directly affect consumer e-retention to continue using the TikTok shop platform. This finding is in line with the research Ashghar & Nurlatifah (2020) which states that perceived ease of use does not affect customer e-retention.

#### **4.7 The effect of customer e-trust on customer e-retention on TikTok Shop consumers**

This finding shows that the level of customer e-trust directly affects customer e-retention. This finding obtained a parameter coefficient value of 0.446 which indicates that a unit increase in customer e-trust will increase e-retention by 0.446 units, assuming other factors remain constant. In addition, the T-statistic value of  $3.033 > 1.96$  and the P-value of  $0.003 < 0.05$ , shows that customer e-trust directly affects customer e-retention. This means that the higher the e-trust in the TikTok shop platform, the more likely customers are to remain loyal and continue using the TikTok shop platform. This finding is in line with the research Saoula et al (2023) which states that perceived ease of use does not affect customer e-retention.

#### **4.8 The effect of reliability on customer e-retention through customer e-trust on TikTok Shop consumers**

This finding shows that there is a complete mediation effect between customer e-trust characteristics, which mediates the indirect relationship between reliability and customer e-retention. This is evidenced by the parameter value of 0.146, the T-statistic value of  $2.044 > 1.96$ , and the P-value of  $0.025 < 0.05$ . This means that reliability does not have a direct effect on e-retention, but its effect occurs

entirely through customer e-trust. In other words, customers will not immediately stick with customer e-retention just because of high reliability, but must first build e-trust towards the platform before finally deciding to remain loyal to using the platform.

#### 4.9 The influence of perceived ease of use on customer e-retention through customer e-trust on TikTok Shop consumers

This finding shows that there is a complete mediation effect between the characteristics of customers' e-trust, which mediates the indirect relationship between perceived ease of use and customers' e-retention. This is evidenced by the parameter value of 0.251, the T-statistic value of  $2.635 > 1.96$ , and the P-value of  $0.009 < 0.05$ . This means that perceived ease of use does not have a direct effect on e-retention, but its influence occurs entirely through customer e-trust. In other words, the ease of use of the platform does not directly make customers stay on the platform, but must first build trust in the services provided.

## 5. Closing

### 5.1 Conclusion

This study study uses a structural equation model (SEM) approach through partial least square (PLS) to investigate the effect of reliability, and perceived ease of use on customer e-retention through customer e-trust. Reliability has a positive and significant effect on customer e-trust, the higher the level of reliability felt by customers, the greater their level of trust in TikTok Shop services. Perceived ease of use has a positive and significant effect on customer e-trust, the easier the TikTok Shop platform is to use, the higher the level of customer trust in the platform.

Reliability has a positive and significant effect on customer e-retention, customer's who feel a high level of reliability are more likely to remain loyal to using TikTok Shop. Perceived ease of use does not have a direct effect on customer e-retention, the ease of use of the

platform does not necessarily increase customer retention. Other factors, such as trust, may play a greater role in retaining customers.

### 5.2 Suggestion

This study suggests further research with different variables to improve the research model.

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