

# Acceptance Model for Utilizing E-Marketplace Tokopedia with Technology Acceptance Model Among Pekanbaru City Communities

Jushermi<sup>1</sup>, Yelgo Daniel Turnip<sup>2</sup>, Tengku Firli Musfar<sup>3</sup>

<sup>1,2,3</sup>Management Department, Faculty of Economics and Business, University of Riau

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## ABSTRACT

This research is based on the urgency of understanding how people adopt Tokopedia e-marketplace, utilizing the conceptual framework of the Technology Acceptance Model. The research follows a quantitative approach, with primary data collected used a questionnaire. The study's target population are Tokopedia's user at Pekanbaru. Non-probability sampling was employed, specifically purposive sampling, with sample criteria including individuals who have engaged in transactions on Tokopedia within the past 3 months, with ages ranging from 17 to 45, and domiciled at Pekanbaru. A total of 100 respondents participated in this study. Path analysis was employed for data analysis using SPSS. Result shown that perceived usefulness has a positive and significant effect toward behavioral intention to use, perceived ease of use has a positive and significant effect toward behavioral intention to use, perceived usefulness has a positive and significant effect toward actual use, behavioral intention to use has a positive and significant effect toward actual use, perceived ease of use has a positive but insignificant effect toward actual use, perceived usefulness has a positive and significant effect toward actual usage through behavioral intention to use, perceived ease of use has a positive but insignificant effect toward actual usage through behavioral intention to use.

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## Corresponding Author:

Name: Jushermi

Institution Address: Kampus Bina Widya KM. 12,5, Simpang Baru, Kota Pekanbaru, Riau 28293

e-mail: [jushermi@lecturer.unri.ac.id](mailto:jushermi@lecturer.unri.ac.id)

## 1. INTRODUCTION

The development of the internet, coupled with the increasing number of internet users, has significantly influenced the current business landscape. This impact is particularly evident in the proliferation of start-up companies, both domestic and international, seeking to capitalize on business opportunities within the digital market, commonly referred to as a marketplace. The diverse array of

marketplaces that have emerged serves as a tangible manifestation of the advancements in internet-based technology. As elucidated by [1], a marketplace is a virtual space where electronic product marketing brings together numerous sellers and buyers, facilitating transactions between them. This arrangement simplifies the process of transactions for sellers and buyers alike, transcending limitations of distance, location, and time, as all interactions are conducted electronically.

**Table 1. The Most Active Marketplace Users (Q1) 2021 in Indonesia**

E-Marketplace	Total Active User
Tokopedia	135.100.000
Shopee	127.400.000
Bukalapak	34.200.000
Lazada	30.500.000
Blibli	19.600.000
JD.id	4.100.000

Source: Survey Ginee, (Q1) 2021

The survey data from Ginee.com, as illustrated in Figure 1.2, highlights a significant level of engagement among e-marketplace users in Indonesia. The report identifies the top five e-marketplaces with the highest active users during the first quarter of 2021. In the sixth position is JD.id, boasting 4.1 million active users. Following closely, in the fifth and fourth positions, are Blibli.com and Lazada, with 19.6 million and 30.5 million active users, respectively. Securing the third position is Bukalapak, with a substantial 34.2 million active users nationwide. Moving to the second position, Shopee stands out with an impressive 127.4 million active users across Indonesia in the first quarter of 2021. Finally, occupying the top position is Tokopedia, which, according to Ginee.com's survey, amassed a substantial 135.1 million active users, clinching the leading spot in terms of active application users. This data underscores the intense competition between

these two leading marketplaces, Shopee and Tokopedia.

Certainly, according to [2], one of the key factors contributing to the growth of Tokopedia users is its application, which offers numerous advantages compared to other marketplaces. Tokopedia, recognized as one of the largest online marketplaces in Indonesia, is noted for having a lightweight, informative, and minimalist application design. This design contributes to a user-friendly experience. This initiative likely plays a role in attracting and retaining users by providing a well-organized and efficient platform for online shopping. In summary, the application's user-friendly design, coupled with innovative features like the Tokopedia Center, contributes significantly to Tokopedia's appeal and user growth in the competitive online marketplace landscape.

**Table 2. Total Visitor of Marketplace in Indonesia Quarter IV, 2022**

Month	Shopee	Tokopedia	Lazada	Blibli	Bukalapak
	Total Visitors / Month				
10/ 2022	179.000.000	139.100.000	67.800.000	30.200.000	20.300.000
11/ 2022	173.600.000	129.700.000	73.700.000	33.900.000	20.300.001
12/ 2022	191.600.000	136.700.000	83.200.000	37.400.000	19.700.000

Sources: databoks.katadata.co.id, 2022

Based on the data published by databoks.katadata.co.id, the visit traffic for some of the most popular marketplaces in Indonesia during the fourth quarter of 2022 is evident. The data provides a monthly breakdown of visitor traffic to these marketplaces. Notably, Shopee emerges as the e-marketplace with the highest website visits in Indonesia throughout the fourth quarter of 2022. In October of the previous year,

the Shopee website recorded 179 million visits, experiencing an increase to 191 million visits (a 7.03 percent growth) by December. In the second position, Tokopedia serves as a formidable competitor to Shopee. Despite Tokopedia having the highest number of active users in Indonesia in 2021, totaling 135.1 million active users, the data from Table 1.1 shows that the total number of visitors to Tokopedia in October 2022 was 139.1

million. Although there was a slight decline in the middle of the quarter, with 129.7 million visitors (approximately a 6.75% decrease), by the end of the fourth quarter, the number of visitors started to increase again, reaching 136.7 million (about a 5.39% increase from the previous month). It's worth noting that the decrease in Tokopedia's visitor numbers in the latter part of 2022 deviates slightly from expectations, considering Tokopedia had the highest number of active users in Indonesia, as indicated by data published by Ginee.com in 2021. The figure stood at 135.1 million active users.

The success of a technology offered by companies to the public must certainly go through various studies, one of the models that is often used to test individual acceptance of a new technology is by using the technology acceptance model (TAM) approach. Technology acceptance model (TAM) is a model put forward by [5]. The popularity of Davis' theory is evident among researchers, as reflected in the substantial number of studies that reference this model. The Social Science Citation Index (SSCI) report indicates a significant utilization of the Davis model as a reference. By the year 2000, the Davis model had been cited in 424 studies. Notably, this number increased to 698 studies by the year 2003, underscoring its enduring influence and relevance in scholarly research [3]. In a similar vein, Praveena & Thomas [4] emphasize the Technology Acceptance Model (TAM) as the most widely tested model for elucidating the acceptance of information technology systems. This recognition further solidifies the TAM's position as a robust and extensively studied framework in understanding user acceptance of technology across various contexts. The enduring appeal of these models attests to their effectiveness in explaining and predicting user behaviors in the context of information technology adoption.

The technology acceptance model (TAM) proposed by Davis is a development of the theory of reasoned action (TRA). Within technology acceptance model, there are several constructs that are considered to influence a person's interest in adopting a

technology, namely perceived usefulness (PU), referring to the extent to which a person believes that using a technology will boost his productivity [5]. Meanwhile, according to [6] perceived ease of use (PEOU), refers to the extent to which a person thinks that the use of the technology does not require extra effort. Furthermore, is attitude toward using, according to [7], attitude toward using refers to a person's attitude of rejecting or accepting a technology in doing his job. as well as having an impact on intention and usage behavior. Hereinafter is behavior intention, according to Joubert and Prihantoko [8] defining behavioral intention to use as a condition where a person has the intention to perform a certain behavior in the future. While actual usage is a real condition of using a particular system. The real conditions of use are formed by a condition where a person feels satisfied with the use of a system and the person believes that the system is easy to use and encourages productivity [8].

In order to mitigate the potential for a trial-and-error approach in the research, the researcher took the initiative to conduct a preliminary survey in the city of Pekanbaru. Mini questionnaires were distributed, incorporating inquiries related to the characteristics and demographics information of the respondents. Additionally, four core statements were included, each representing a variable in the study. The total number of respondents for this preliminary survey was 59 individuals. Based on the outcomes of the preliminary survey, it was determined that 31 individuals, constituting 52.5% of the total respondents, identified themselves as Tokopedia users. In contrast, 28 respondents, comprising 47.5% of the total, indicated that they were not users of Tokopedia. Consequently, a notable prevalence of Tokopedia users in the city of Pekanbaru can be inferred. Further analysis of the preliminary survey results revealed that out of the 31 respondents who identified as Tokopedia users, 100% expressed agreement with the statement asserting that the Tokopedia application aids them in the process of purchasing products. Additionally,

a substantial 93.5% of the total respondents, or 29 individuals, acknowledged that they found the Tokopedia application to be highly user-friendly. Moreover, an overwhelming 96.8% of the respondents, constituting 30 individuals, expressed their intention to persist in using Tokopedia in the future. Regarding the frequency of Tokopedia usage for online shopping, 61% of the respondents, equivalent to 19 individuals, affirmed that they engage in this practice regularly. Conversely, 38.7% of the respondents, or 12 individuals, disagreed with the notion that they frequently utilize Tokopedia for online shopping.

However, notwithstanding the results of the aforementioned preliminary survey, it is not immediately possible to draw conclusions for all research questions. Therefore, further in-depth research is necessary to understand how the adoption of Tokopedia's e-marketplace technology unfolds among the residents of Pekanbaru city. The aim is for the results of this research to provide valuable insights, answer research questions, and offer practical benefits. Built upon the background described, which encompasses the evolution of information system technology in E-Commerce, the trends in online shopping behavior, supported by existing data, prior research, and the insights gained from the preliminary survey, the research will particularly focus on the development of Tokopedia's marketplace features. This focus is essential as it introduces new challenges for users, specifically addressing how the service features developed by Tokopedia align with customer expectations and how easily these features can be utilized. Motivated by these considerations, the author is keen on undertaking scientific research to investigate the response of Tokopedia users towards adopting new features developed by Tokopedia. The proposed research is titled "Acceptance Model for Utilizing E-Marketplace Tokopedia with the Technology Acceptance Model among Pekanbaru City Communities."

## 2. LITERATURE REVIEW

### 2.1 E-Marketplace

E-Marketplace is an electronic marketing medium that was built with the aim of connecting sellers and buyers so they can make transactions [1]. Likewise, according to Nathasya [9] defines a e-marketplace as a facility to accommodate the online buying and selling transaction process which can be in the form of a website or online application.

### 2.2 Technology Acceptance Model

The Technology Acceptance Model (TAM) is a conceptual framework for understanding the acceptance and utilization of technology. It originated as an extension of the Theory of Reasoned Action (TRA) developed by Icek Ajzen in 1975, which posits that an individual's attitude and behavior toward something are influenced by their reactions and perceptions. In 1986, Fred Davis adapted the TRA as the foundational theory for the development of TAM. TAM is designed to explain the process by which individuals accept and use technology. Despite its simplicity, TAM provides a robust explanation for technology acceptance [5]. The model focuses on two fundamental dimensions that shape attitudes and behavior in embracing or rejecting a technology: perceived ease of use and perceived usefulness. In essence, TAM serves as a comprehensive framework for studying and understanding user behavior in the context of the development or evolution of innovative technologies prevalent in contemporary life. The model operates on the premise that the perceived ease of use and perceived usefulness are critical determinants in shaping individuals' attitudes and behaviors regarding the acceptance or rejection of a technology.

### 2.3 Perceived Usefulness

Perceived usefulness according to [5] is a gradation of one's belief in the usefulness of a technology. This opinion is also not much different from the opinion [10] and [11] which defines perceived usefulness as a gradation of individual belief that the information system they are currently using is able to encourage their productivity in carrying out a particular task or activity. An understanding of what are

the benefits of an information technology is a driving factor for a person's decision to use an information technology, and these benefits can be measured by the frequency of using the information technology itself [11].

#### 2.4 Perceived Ease of Use

In the opinion of [5] perceived ease of use is defined as a gradation regarding how much a person has confidence that by using technology, that person will be able to minimize the effort or energy that must be sacrificed in carrying out an activity or job. This opinion is also in line with another opinion from Wibowo [13] and [26] which explains that perceived ease of use is a parameter in which a person believes that a technology can be easily understood and operated. The perceived construct of use is one of the determinant constructs used by [5] to test empirically about individual acceptance of a technology, and it is proven that the perceived ease of use of a new system is a consideration of whether or not the technology is accepted by end users.

#### 2.5 Behavioral Intention

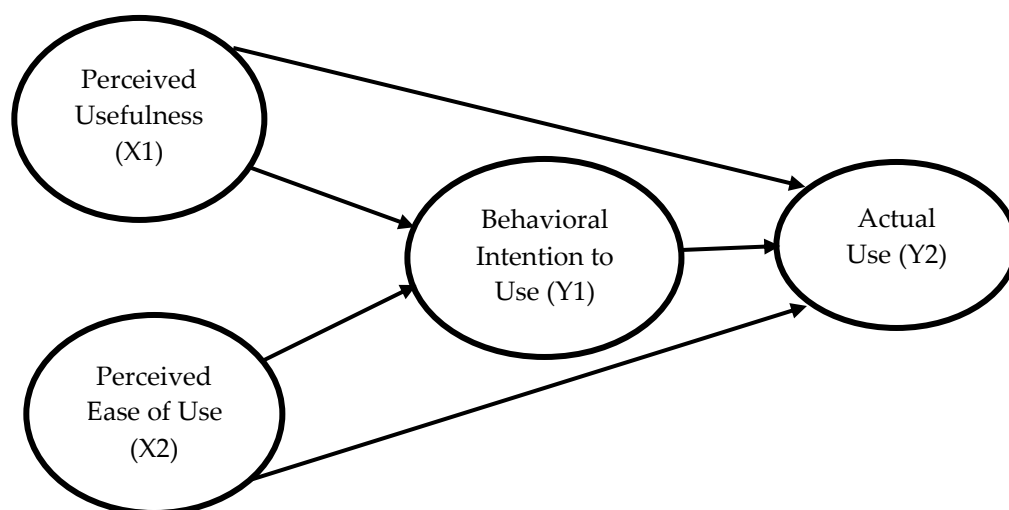
According to Ajzen & Fishbein in [14] behavioral intention is a factor used as an individual orientation parameter to take part in a predictable behavior when wanting to take an action. Ajzen & Fishbein's opinion is also supported by [15] and [16] who formulate that behavioral intention is a certain behavioral condition that is motivated by a person's interest in a particular thing. Intention is described as a condition of a

person before deciding to take an action [16]. Meanwhile, according to [5] behavioral intention to use is a behavioral orientation to continue to adopt a technology. Individual actions or behavior are formed basically based on behavioral intention. Behavioral intention is a direct determinant of an action or a person's behavior [18]. Likewise with a person's behavior in adopting a technology that is driven by behavioral interest. Suggests that individual reluctance to accept technology is a factor that causes the failure of the application of a technology [5]. According to [5] one's behavioral interest in adopting a technology or system depends on perceived usefulness and perceived ease of use.

#### 2.6 Actual Use

Actual system use is a picture of external psychomotor responses that can be measured from someone with real use [5]. Meanwhile, Wibowo defines actual system usage as a real condition of using the system [19]. In the context of the use of information technology systems, behavior is conceptualized as actual use which is a form of measurement of the frequency and duration of technology use [19]. Rigopoulos & Askounis in [21] states that actual use can be measured based on repeated and more frequent use of technology. In other words, actual use is measured as the amount of time spent interacting with a technology and the frequency of its use.

#### 2.7 Research Framework



Source: [22]

**Figure 1. Research Framework**

**2.8 Research hypothesis**

- H1: Perceived usefulness has a positive and significant effect toward behavioral intention to use.
- H2: Perceived ease of use has a positive and significant effect toward behavioral intention to use.
- H3: Perceived usefulness has a positive and significant effect toward actual use.
- H4: Behavioral intention to use has a positive and significant effect toward actual use.
- H5: Perceived ease of use has a positive and significant effect toward actual use.
- H6: Perceived usefulness has a positive and significant effect toward actual use through behavioral intention to us
- H7: Perceived ease of use has a positive and significant effect toward actual use through behavioral intention to use.

sample was selected using a non-probability sampling technique, namely purposive sampling with the following criteria: at least 17 years of age up to maximum of 45 years of age and have used Tokopedia E-Marketplace at least once within the last 3 months.

Determining the number of samples in this study was carried out using the formula Hair, et al. [23]. Therefore, it is suggested that the minimum sample size is 5-10 observations for each parameter to be estimated. In this study there were 20 total indicators so that the following sample sizes were obtained: Number of Samples = 5 × Number of indicators = 5 × 20 = 100 (number of samples)

**3.3 Data Collection Technique**

Data collection in this research will be conducted through three methods. Firstly, through the process of literature review to gather information from relevant written sources related to the research topic. Secondly, by distributing questionnaires to the respondents involved in the study. Lastly, through conducting interviews to gain in-depth insights from the respondents regarding the research topic.

**3.4 Operational Definition and Measurement**

**3. METHODS**

**3.1 Location and Time of Research**

This research is set to take place in the city of Pekanbaru. The designated timeframe for the research spans from May 05 to June 06, 2023.

**3.2 Population and Samples**

The population in this study are Tokopedia marketplace users who are domiciled in the city of Pekanbaru. The

**Table 3: Operational Definition and Variable Measurement**

Variable	Definition	Indicator	Scale
Perceived Usefulness (X1)	The degree of a person's belief that the use of a particular system will boost performance [5].	a) Work more quickly. b) Makes the job easier. c) Useful d) Increase productivity. e) Enhance effectiveness. f) Improve job performance.	Ordinal
Perceived Ease of Use (X2)	The degree to which a person believes that using a system does not require great effort [5].	a) Ease of learning. b) Controllable. c) Clear and understandable. d) Flexible. e) Easy to become skilled. f) Easy to use.	Ordinal

Variable	Definition	Indicator	Scale
Behavioral Intention To Use (Y1)	The degree to which a person has formulated a conscious plan to do or not to do some specific behavior in the future [5].	a) Motivation continues to use b) The main choice in using c) Desire to use the system frequently d) Motivate to other users	Ordinal
Actual Use (Y2)	Real conditions in the use of certain systems [5].	a) Frequency of use b) Duration of use c) Real use of technology d) User satisfaction	Ordinal

Source: Author Processed Data, 2022

#### 4. RESULTS AND DISCUSSION

##### 4.1 Result of Validity Test

**Table 4. Validity Test Result**

Variable	Instrument	R count	R table	Description
Perceived of Usefulness (X1)	X1.1	0.707	0.1966	Valid
	X1.2	0.780	0.1966	Valid
	X1.3	0.767	0.1966	Valid
	X1.4	0.807	0.1966	Valid
	X1.5	0.797	0.1966	Valid
	X1.6	0.762	0.1966	Valid
Perceived Ease of Use (X2)	X2.1	0.762	0.1966	Valid
	X2.2	0.844	0.1966	Valid
	X2.3	0.818	0.1966	Valid
	X2.4	0.748	0.1966	Valid
	X2.5	0.808	0.1966	Valid
	X2.6	0.864	0.1966	Valid
Behavioral Intention to Use (Y1)	Y1.1	0.850	0.1966	Valid
	Y1.2	0.906	0.1966	Valid
	Y1.3	0.882	0.1966	Valid
	Y1.4	0.823	0.1966	Valid
Actual Use (Y2)	Y2.1	0.824	0.1966	Valid
	Y2.2	0.828	0.1966	Valid
	Y2.3	0.641	0.1966	Valid
	Y2.4	0.848	0.1966	Valid

Source: Author's Processed Data Using SPSS 25, 2023

According to Table 3. presented above, it is evident that all questionnaire items have successfully met the validity criteria, as the calculated value of r (r count) > the critical value of r (r table). Consequently, it can be inferred that the research instrument

(questionnaire) employed in this study has indeed passed the validity test, thus demonstrating its capability to accurately assess each research variable.

##### 4.2 Result of Reliability Test

**Table 5. Reliability Test Results**

Variable	Cronbach Alpha	Critical Value	Description
Perceived of Usefulness	0,861	0,6	Reliable
Perceived Ease of Use	0,893	0,6	Reliable
Behavioral Intention to Use	0,889	0,6	Reliable
Actual Use	0,795	0,6	Reliable

Source: Author's Processed Data Using SPSS 25, 2023

Based on the information provided in Table 4, it is evident that the Cronbach's alpha values for all variables exceed 0.60. Therefore, we can confidently conclude that the indicators or questionnaires utilized for all

variables are reliable and can be trusted as effective tools for measuring those variables.

4.3 Result of Normality Test

Table 6. One-Sample Kolmogorov Smirnov Test Equation 1

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			100
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	.15216595	
Most Extreme Differences	Absolute	.097	
	Positive	.072	
	Negative	-.097	
Test Statistic			.097
Asymp. Sig. (2-tailed)			.021 <sup>c</sup>
Monte Carlo Sig. (2-tailed)	Sig.	.288 <sup>d</sup>	
	99% Confidence Interval	Lower Bound	.276
		Upper Bound	.300
a. Test distribution is Normal.			
b. Calculated from data.			

Source: Author's Processed Data Using SPSS 25, 2023

Table 7. One-Sample Kolmogorov Smirnov Test Equation 2

One-Sample Kolmogorov-Smirnov Test			
			Unstandardized Residual
N			100
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	.11221170	
Most Extreme Differences	Absolute	.089	
	Positive	.089	
	Negative	-.070	
Test Statistic			.089
Asymp. Sig. (2-tailed)			.051 <sup>c</sup>
Monte Carlo Sig. (2-tailed)	Sig.	.390 <sup>d</sup>	
	99% Confidence Interval	Lower Bound	.378
		Upper Bound	.404
a. Test distribution is Normal.			



b. Calculated from data.

Source: Author's Processed Data Using SPSS 25, 2023

Based on the table of the Kolmogorov-Smirnov normality test (Table 5 and Table 6), it is known that the significance value of the normality test (Monte Carlo Sig. 2-tailed) > 0.05. Since the significance value is greater than 0.05, it can be concluded that the

data from equation 1 and equation 2 follows a normal distribution.

**4.4 Result of Multicollinearity Test**

**Table 8. Multicollinearity Test Equation 1**

Model		Collinearity Statistics		Descriptions
		Tolerance	VIF	
1	(Constant)			
	Perceived of Usefulness	.707	1.415	no symptoms of multicollinearity
	Perceived Ease of Use	.707	1.415	no symptoms of multicollinearity

Source: Author's Processed Data Using SPSS 25, 2023

**Table 9. Multicollinearity Test Equation 2**

Model		Collinearity Statistics		Descriptions
		Tolerance	VIF	
1	(Constant)			
	Perceived of Usefulness	.591	1.692	no symptoms of multicollinearity
	Perceived Ease of Use	.678	1.475	no symptoms of multicollinearity
	Behavioral Intention to Use	.676	1.479	no symptoms of multicollinearity

Source: Author's Processed Data Using SPSS 25, 2023

Based on the information provided in tables 7 and 8, it is evident that the Variance Inflation Factor (VIF) values for each independent variable in both equation 1 and equation 2 are less than 10 (< 10), and the

tolerance values are greater than 0.10 (> 0.10). Based on these results, it can be concluded that there are no symptoms of multicollinearity in this case.

**4.5 Result of Heteroscedasticity Test**

**Table 10. Heteroscedasticity Glejser Test Equation 1**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.104	.269		-.387	0.699
	Perceived of Usefulness	.091	.086	.126	1.049	0.297
	Perceived Ease of Use	-.021	.087	-.029	-0.245	0.807

a. Dependent Variable: Abs\_Res1

Source: Author's Processed Data Using SPSS 25, 2023

**Table 11. Heteroscedasticity Glejser Test Equation 2**

Coefficients <sup>a</sup>					
Model		Unstandardized Coefficients	Standardized Coefficients	T	Sig.

		B	Std. Error	Beta		
1	(Constant)	.324	.180		1.802	.075
	Perceived of Usefulness	.041	-.063	.084	0.647	.519
	Perceived Ease of Use	-.053	.059	-.109	-.899	.371
	Behavioral Intention to Use	-.069	.041	-.204	-1.684	.095

a. Dependent Variable: Abs\_Res2

Source: Author’s Processed Data Using SPSS 25, 2023

In both equation 1 and equation 2, the significance values for each independent variable are greater than 0.05. Consequently, it can be confidently concluded that there are

no symptoms of heteroscedasticity in this particular case.

4.6 Hypothesis Test

4.6.1 Result of Regression Test Equation 1

Table 12. The Result of t Test Equation 1

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.200	.445		-.450	.654
	Perceived of Usefulness	.624	.143	.433	4.364	.000
	Perceived Ease of Use	.292	.143	.202	2.038	.044

Source: Author’s Processed Data Using SPSS 25, 2023

Based on the table 11 above, it can be concluded that the results as follows:

a) Perceived of usefulness. From data processing, we obtained a t-value (4.364) greater than the critical t-value (1.984) with a significance value of 0.000, which is < 0.05. The result indicates that perceived usefulness has a positive and significant effect on behavioral intention to use.

b) Perceived ease of use. From data processing, we obtained a t-value (2.038) greater than the critical t-value (1.984) with a significance value of 0.044, which is < 0.05. Indicated that perceived ease of use has a positive and significant effect on behavioral intention to use.

Table 13. The Result of Coefficient Determination Equation 1

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.569 <sup>a</sup>	.324	.310	.15373

A. Predictors: (constant), Perceived of Usefulness, Perceived Ease of Use

B. Dependent variable: Behavioral Intention to Use

Source: Author’s Processed Data Using SPSS 25, 2023

4.6.2 Result of Regression Test Equation 2

Table 14. The Result of t Test Equation 2

Coefficients <sup>a</sup>						
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Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.378	.330		1.145	.255
	Perceived of Usefulness	.271	.116	.228	2.339	.021
	Perceived Ease of Use	.178	.109	.149	1.640	.104
	Behavioral Intention to Use	.355	.075	.431	4.721	.000

Source: Author's Processed Data Using SPSS 25, 2023

Based on the table 13 above, thus it can be concluded that the results as follows:

- a) Perceived of usefulness. From data processing, we obtained a t-value (2.339) greater than the critical t-value (1.984) with a significance value of 0.021, which < 0.05. The result indicates that perceived usefulness has a positive and significant effect on actual use.
- b) Perceived ease of use. From data processing, we obtained a t-value (1.640) less than the critical t-value (1.984) with a

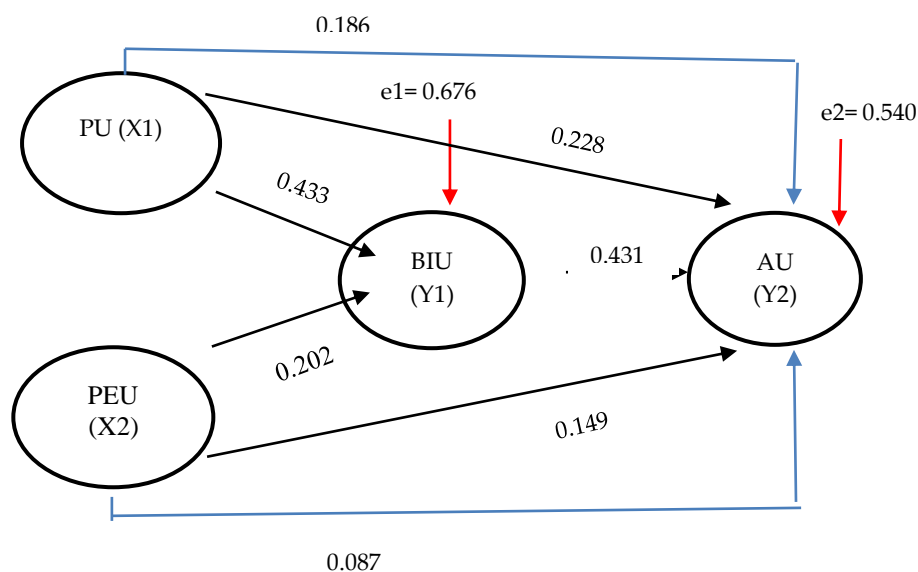
- significance value of 0.104, which is > 0.05. The result indicates that the perceived ease of use has a positive but insignificant effect on actual use.
- c) Behavioral intention to use. From data processing, we obtained a t-value (4.721) greater than the critical t-value (1.984) with a significance value of 0.000, which is < 0.05. This result indicates that behavioral intention to use has a positive and significant effect on actual use.

**Table 15. The Result of Coefficient Determination Equation 2**

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.678 <sup>a</sup>	.460	.433	.11395
A. Predictors: (constant), Perceived of Usefulness, Perceived Ease of Use, Behavioral Intention to Use				
B. Dependent variable: Actual Use				

Source: Author's Processed Data Using SPSS 25, 2023

**4.7 Path Analysis**



Source: Processed by Authors, 2023  
**Figure 2. Result of Path Analysis**

**Table 16. Direct and Indirect Effect**

Variable	Path Coefficient		Total	Category
	Direct Effect	Indirect Effect		
X1 → Y1	0.433	-	0.433	Strong
X2 → Y1	0.202	-	0.202	Medium
X1 → Y2	0.228	-	0.228	Medium
X2 → Y2	0.149	-	0.149	Medium
Y1 → Y2	0.431		0.431	Strong
X1 → Y1 → Y2	0.228	0.433 x 0.431 = 0.186	0.414	Strong
X2 → Y1 → Y2	0.149	0.202 x 0.431 = 0.087	0.236	Medium

Source: Author's Processed Data Using SPSS 25, 2023

**Table 17. Sobel Test Result 1 & 2**

Sobel Test Result 1	X1 → Y1 → Y2		Statistic Test	P-value
	a	0.433		
	b	0.431		
	Sa	0.143		
	Sb	0.075		
Sobel Test Result 2	X2 → Y1 → Y2		Statistic Test	P-value
	a	0.202		
	b	0.431		
	Sa	0.143		
	Sb	0.075		

Source: Author's data processed using Sobel Calculator, 2023

- a) The result of Sobel test 1 (table 16) indicates that the P-value (0.00) is smaller (<) than the significance level (0.05). This shows that perceived usefulness has a positive and significant effect on actual use through behavioral intention to use.
- b) The result of Sobel test 2 (table 16) indicates that the P-value (0.17) is greater (>) than the significance level (0.05). This shows that perceived ease of use has a positive but insignificant effect on actual use through behavioral intention to use.

#### **4.8 The Effect Perceived of Usefulness toward Behavioral Intention to Use**

The result of the study shown the value of the direct influence of perceived of usefulness towards behavioral intention to use is 0.433 and the level of significance less than 0,05 namely 0,00, which means that perceived of usefulness has a significant positive effect toward behavioral intention to

use Tokopedia among the urban community of Pekanbaru. The findings indicate that a higher level of perceived usefulness by users toward Tokopedia leads to a correspondingly greater behavioral intention to use the Tokopedia e-marketplace. These findings are also supported by previous research conducted by [24] & [25] which demonstrates that perceived usefulness has a positive and significant influence on behavioral intention to use.

#### **4.9 The Effect Perceived Ease of Use toward Behavioral Intention to Use**

The result of the study shown the value of the direct influence of perceived ease of use towards behavioral intention to use is 0.202 and the level of significance less than 0,05. These implies that perceived ease of use has a positive and significant influence on behavioral intention to use. In other words, an increase in the perceived ease of use will

stimulate the behavioral intention to use Tokopedia in the city of Pekanbaru. These findings are also consistent with the results of a previous study by [26] and [27], which concluded that perceived ease of use has a positive and significant impact on behavioral intention to use.

#### ***4.10 The Effect Perceived of Usefulness toward Actual Use***

The result of the study shown that the value of the direct influence of perceived of usefulness towards actual use is 0.228, and the level of significance less 0.05, namely 0.02 which means that perceived of usefulness has a significant positive effect on actual use. Individuals may embrace Tokopedia if they perceive it as capable of delivering advantages. Conversely, Tokopedia may face rejection from individuals if they deem it incapable of providing benefits. These findings are also consistent with prior research conducted by [28] and also which concluded that perceived usefulness has a positive and significant impact on actual use.

#### ***4.11 The Effect Behavioral Intention to Use toward Actual Use***

The result of the study shown that the value of the direct influence of behavioral intention to use towards actual use is 0.431, with the level of significance less than 0.05, namely 0.00, which means that behavioral intention has a significant positive effect on actual use. The results demonstrate that the actual use of Tokopedia in Pekanbaru is effectively stimulated by behavioral intention to use. These findings align with a previous study conducted by [29] and [30] which also concluded that behavioral intention to use has a positive and significant impact on actual use.

#### ***4.12 The Effect Perceived Ease of Use Toward Actual Use***

The result of the study shown that the value of the direct influence of perceived ease of use towards actual use is 0.149, with the level of significance more than 0.05, which means that perceived ease of use has a positive but insignificant effect on actual use. The results demonstrate that the actual use of Tokopedia in Pekanbaru is can't effectively

stimulated perceived ease of use, or in other words, changes in the perceived ease of use do not significantly impact or provide a clear meaning to the increase or decrease in the actual use value of the Tokopedia e-marketplace in Pekanbaru. The result of this research is in line with previous research conducted by [21], in which from their research findings, they concluded that perceived ease of use has insignificant impact on the actual use.

#### ***4.13 The effect Perceived Usefulness toward Actual Usage through Behavioral Intention to Use***

The result of the study shown that the value of the indirect influence of perceived of usefulness towards actual use through behavioral intention to use is 0.186, with the p-value less than 0.05, namely 0.00. This signifies that perceived usefulness has a positive and significant impact on actual use through behavioral intention to use. In other words, the actual use of Tokopedia in the city of Pekanbaru can be optimized with improvement of the influence of perceived usefulness and behavioral intention to use. These results are further supported by prior research conducted by [22] and [31], in which their findings concluded that perceived usefulness has a significant and positive impact on actual use through the behavioral intention to use.

#### ***4.14 The Effect Perceived Ease of Use toward Actual Use through Behavioral Intention to Use***

The result of the study shown that the value of the direct influence of perceived ease of use towards actual use is 0.087, with the p-value greater than 0.05, namely 0.17, which means that perceived ease of use has a positive but insignificant effect on actual use through behavioral intention to use. In other words, perceived ease of use still has modest capability to effected actual use of Tokopedia among Pekanbaru city communities, despite the assistance of behavioral intention to use within their relationship. This research outcome slightly differs from the previous study conducted by [32], which concluded that perceived ease of use has positive and

significant effect on actual use through behavioral intention to use in their studies result.

## 5. CONCLUSION

Based on analysis and discussions, it can be concluded that Perceived usefulness has a positive and significant effect toward behavioral intention to use of Tokopedia, perceived ease of use has a positive and significant effect toward behavioral intention to use, perceived usefulness has a positive and significant effect toward actual use, behavioral intention to use has a positive and significant effect toward actual use, perceived ease of use has a positive effect but insignificant toward actual use, perceived usefulness has a positive

and significant effect toward actual use through behavioral intention to use, and perceived ease of use has a positive effect but insignificant toward actual use through behavioral intention to use of Tokopedia among Pekanbaru city communities.

Therefore, for future research, the author recommends adding other variables besides perceived usefulness and perceived ease of use. In addition, it is expected that future researchers can address the limitations of this study, such as increasing the sample size from the population, exploring different locations and research subjects, so potentially resulting novelty and valuable findings.

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