



Factors affecting interest in utilization and use of online shop (study on shopee customers)

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ABSTRACT

The development of information technology has led to the emergence of various e-commerce services. One of them is engaged in the mobile marketplace, namely Shopee. Shopee as a mobile marketplace is always faced with competitors. Therefore, this study aims to determine the factors that influence the interest in the use and use of the online shop, especially the Shopee application. In this study, the UTAUT2 framework was used, where this framework is a framework that is often used to determine user intentions and behavior in using technology or applications. The UTAUT2 framework has seven main constructs and in this study one construct is added, namely trust. The results of this study indicate that the UTAUT2 framework with additional trust constructs has a positive regression weight for all UTAUT2 constructs and additional trust constructs except for the effort expectancy and hedonic motivation constructs. This shows that all UTAUT2 constructs and additional trust constructs have a positive effect on the intention to use the Shopee application when shopping online except for the effort expectancy and hedonic motivation constructs. Intention to use also has a positive effect on user behavior to use the Shopee application when shopping online.

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1. INTRODUCTION

The development of information technology is currently growing rapidly. The existence of cell phones or gadgets is one proof of the rapid development of information technology. From what was originally a cell phone functioned only for communication, now it has morphed into a smartphone that can do many things. Apart from smartphones, the internet is another proof of the development of information technology.

The development of internet media also affects the business world. In ancient times, the business of selling was done directly where the seller and the buyer meet and the buyer could choose and experience the product being offered directly. However, since the existence of the internet, there has been a change from conventional transactions to online transactions via the internet or so-called e-commerce, where buyers only need to choose the products displayed on the website screen whenever and wherever [1]. Through online shopping, buyers can buy quickly, have a wide selection of goods, and buyers can also order products or services by comparing and looking for products at the lowest prices [2]. With e-commerce, customers can make purchases and orders online [3].

One of the most popular e-commerce is Shopee. Shopee is the first consumer-to-consumer (C2C) mobile marketplace application that is safe, fun, easy, and practical in buying and selling [4]. Shopee is an

international e-commerce that first appeared in early 2015 in Singapore as the first mobile marketplace in Southeast Asia [5].

Lots of attractive offers provided by Shopee. Starting from the free shipping service (postage), various kinds of vouchers that users can get, to massive discounts every month. Not only offers discounts and free shipping, the Shopee application also allows users to play some of the games available. By playing existing games, users will usually get Shopee coins. The collected Shopee coins can be exchanged for various kinds of vouchers or they can also be exchanged when checking out purchases to get a discount.

Apart from the conveniences offered by the online buying and selling method, there are risks that must be faced, especially in terms of trust. There are many cases of fraud that occur in the online business world so that the trust factor is of great concern to consumers [6] When shopping online, you have to be more careful because the threat of fraud can occur at any time. Besides fraud, it is also possible to get items that do not match the display image. Therefore, users must choose a trusted store before shopping.

This research was conducted to determine the factors that interest consumers in using and utilizing the Shopee application when shopping online. This study uses the UTAUT2 framework. The UTAUT2 framework is a framework commonly used to analyze the acceptance and use of technology within an organization [7]. The UTAUT2 model was introduced in 2012 and is considered the newest structured model to explain technology adoption by individual consumers and organizations [8]. The UTAUT2 framework has seven main constructs, namely performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value and habit [9]. In this study, one more construct was added, namely trust.

2. METHOD

2.1 Hypothesis

A. Performance Expectancy (PE)

Performance expectancy is hoped that using technology for some activities will improve the performance of users [8]. By shopping online it is hoped that users can get benefits such as saving time and the ease of transactions offered. Users can also see a wide variety of products offered by different sellers. In addition, users can also compare prices to be able to get goods at lower prices and because it is done online, users can do their shopping activities whenever and where the user. This possible increase in performance may be the reason behind the intention to shop online. Regarding performance expectancy, the following hypothesis is proposed:

H1: performance expectancy has a positive effect on user intention to use the Shopee application to do online shopping.

B. Effort Expectancy

Effort expectancy is the ease of using a technology. If users think that shopping online is an easy thing, then this can be an intention to use online shopping. Regarding the effort expectancy, the following hypothesis is proposed:

H2: effort expectancy has a positive effect on user's intentions to use the Shopee application to do online shopping.

C. Social Influence

Social influence represents social pressure from other people who are considered important, such as family or friends. If the closest person uses technology or the web to shop, this can be a factor that affects the user's intention to shop online [8]. Regarding social influence, the following hypothesis is proposed:

H3: social influence has a positive effect on the user's intention to use the Shopee application to do online shopping.

D. Facilitating Conditions

Facilitating conditions represent the items and support needed to use the new technology. To be able to do online shopping, the required facility conditions include a computer or smartphone, internet connection, online customer support, knowledge, skills, and so on [8]. Regarding facilitating conditions, the following is the hypothesis that is proposed:

H4: facilitating conditions have a positive effect on user intention to use the Shopee application to do online shopping.

E. Hedonic Motivation

Hedonic motivation is defined as a sense of pleasure obtained when using technology. It has been shown to play an important role in determining the acceptance and use of technology. In information systems research, hedonic motivation related to perceived pleasure has been shown to directly influence the acceptance and use of technology. From a consumer point of view hedonic motivation is also considered an important determinant of technology acceptance and use [10]. Regarding hedonic motivation, the following hypothesis is proposed:

H5: hedonic motivation has a positive effect on user intention to use the Shopee application to do online shopping.

F. Price Value

Price value is defined as a consumer's cognitive tradeoff between the perceived benefits of an application and the cost of using it [11]. The price value is positive when the benefits of using technology are felt to be greater than the costs incurred and this price value has a positive impact on the intention of using it [10]. Online shopping can offer consumers lower prices due to lower online business operating costs. By shopping online, consumers can make savings because when shopping online consumers can compare prices between stores to get cheaper prices, discounts offered, discounted shipping costs given and others [8].

H6: price value has a positive effect on user intention to use the Shopee application to do online shopping.

G. Habit

Habit is defined as the extent to which people tend to perform behavior automatically due to learning [12]. The empirical findings about the role of habits in technology use illustrate the different basic processes by habits that influence technology use [10]. The experiences experienced by a person will form various levels of habits, depending on the extent of interaction and familiarity that is developed for the target technology. Users who are used to shopping online will tend to browse online stores as part of their natural behavior [8]. Regarding habit, the following hypotheses are proposed:

H7: habit has a positive effect on user intention to use the Shopee application to do online shopping.

H. Trust

Trust is very important in every buying and selling transaction, especially transactions that are carried out online. Online shopping has many risks from online fraud, data privacy, security issues, and so on. Trust has various aspects in the context of online shopping such as whether online stores will keep their promises and commitments regarding their products and services and whether these stores will remain trusted through their abilities. Trust can influence usage intention and behavior [8]. Regarding trust or trust, the following are the proposed hypotheses:

H8: trust has a positive effect on the user's intention to use the Shopee application to do online shopping.

I. Behavioral Intention and Use Behavior

In addition to the seven main constructs of UTAUT2 and trust, the following hypotheses are proposed as hypotheses related to intention and use behavior:

H9: Behavioral Intention has a positive value on user behavior to use the Shopee application to shop online.

J. Measurements

This research was conducted to understand the factors that influence a person's interest in using the Shopee application using UTAUT2, as well as the addition of the trust construct. For this purpose, user data related to the use of Shopee has been collected. The statements on the questionnaire related to the construct in UTAUT2 and the trust construct were adopted from various related studies. In accordance with a total of eight constructs and intent to use and user behavior, there are 50 statement items. The questionnaire in this study was based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

2.2 Participants and Data Collection

The questionnaire in this study was given online, via google form. Questionnaires were distributed for 3 days. The total number of respondents who filled out the questionnaire was 129 people. From a total of 129 respondents, three respondent data had to be deleted because the data were errors. So the final total of respondents obtained is 126 respondents. The following are the demographics of the respondents.

Table 1 Respondent Demographics

		Amount	Percentage
Gender	Man	37	29.5%
	Women	88	70.5%
Age	<17	1	0.8%
	17-24	124	98.4%
	25-34	1	0.8%
	35-49	-	-
	50-64	-	-
	> 64	-	-
Education	SD	-	-
	Junior High	2	1.6%
	High school	33	25.6%
	D3	6	4.7%
	S1 / D4	83	65.1%
	S2	-	-
	S3	1	0.8%
	Others	1	0.8%
Profession	Student / Student	118	93%
	Government employees	1	0.8%
	Private employees	5	3.9%
	Labor	-	-
	Traders	-	-
	Does not work	-	-
	Others	2	1.6%
	Frequency of use in one week	1-2	116
3-4		4	3.1%
5-6		4	3.1%
7		2	1.6%

3. RESULTS AND DISCUSSIONS

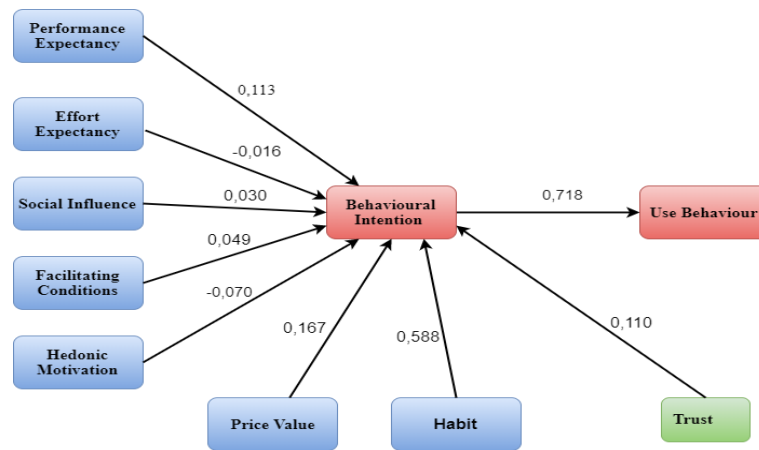


Figure 1: UTAUT2 Framework

Table 2 Hypothesis Results

Hypothesis	Path	Regression Weight
H1	PE-BI	0.113
H2	EE-BI	-0.016
H3	SI-BI	0.030
H4	FC-BI	0.049
H5	HM-BI	-0.070
H6	PV-BI	0.167
H7	HT-BI	0.588
H8	TR-BI	0.110
H9	BI-UB	0.718

The results of this study using the UTAUT2 framework with the addition of the trust construct have a positive regression weight for the UTAUT2 construct and additional trust constructs, except for the effort expectancy and hedonic motivation constructs. All AVE values are above 0.5 and the loadings factor is more than 0.7.

This shows that the construct of performance expectancy, social influence, facilitating conditions, price value, habit, and trust has a positive effect on the intention to use the Shopee application when shopping online. Likewise, the intention to use also has a positive effect on user behavior in using the Shopee application when shopping online. Meanwhile, the constructs of effort expectancy and hedonic motivation did not have a positive effect on the intention to use the Shopee application when shopping online.

For analysis, this study uses structural equation modeling (SEM) which is carried out using SPSS 22 and AMOS 22. SEM is used to test several hypotheses by estimating the relationship between the independent variable and the dependent variable in the structural model [13].

3.1 Measurement Model

Measurement Model was made based on a total of eight constructs and the intention to use factor analysis was carried out to test convergent validity and discriminant validity. Factor analysis is a technique used to look for factors that can explain the correlation between the independent variable and the object under study [9].

The convergent validity of the scale should be assessed using two criteria [14] : (1) all factor loadings must exceed 0.7 and (2) the average variance extracted (AVE) for each construct must exceed 0.5. Factor loadings in the range of ± 0.30 to ± 0.40 are considered to meet the minimum level for structure interpretation and factor loadings of ± 0.50 or greater are considered to be practically significant [15]. For convergent validity, the pattern matrix is checked to check the measurement items on each of the factor loadings of the construct. Factor analysis was performed using the maximum likelihood estimation method

and promax rotation. In this study, all constructs contained factor loadings greater than 0.7. In addition, for all constructs, AVE was more than 0.5, thus passing the convergent validity test.

Validity is how well a concept is defined by measures, whereas reliability is related to consistency of action [15]. Reliability was tested through the calculation of Cronbach alpha for each construct. It is generally agreed that the minimum limit for Cronbach alpha is 0.70 although it may decrease to 0.60 in exploratory research [16]. Cronbach alpha all exceeds 0.70 as shown in the table below

Table 3. Convergent Validity

Construct	Item	Factor loading	CR	AVE	Cronbach's α
Performance Expectancy	PE4	0.794	0.771	0.627	0.776
	PE5	0.790			
Effort Expectancy	EE1	0.732	0.764	0.619	0.755
	EE2	0.838			
	SI2	0.779			
Social Influence	SI3	0.865	0.928	0.764	0.926
	SI4	0.939			
	SI5	0.905			
Facilitating Condition	FC3	0.757	0.724	0.567	0.724
	FC4	0.749			
Hedonic Motivation	HM1	0.933	0.858	0.753	0.853
	HM2	0.797			
Price Value	PV3	0.843	0.760	0.615	0.755
	PV4	0.720			
Habit	HT1	0.883	0.830	0.710	0.828
	HT2	0.800			
Trust	TR1	0.729	0.882	0.653	0.879
	TR3	0.859			
	TR4	0.789			
	TR5	0.849			
Behavioral Intention	BI2	0.801	0.794	0.659	0.794
	BI4	0.822			
Use Behavior	UB2	0.815	0.823	0.699	0.811
	UB4	0.857			

Discrimination validity measure the extent to which a concept and its indicators differ from other concepts and indicators. Discrimination validity must be assessed by the following criteria: the average variance extracted (AVE) of a construct must be greater than the correlation between the construct and all other constructs [14].

As shown in the table below, the square root of the mutual variance between constructs and their items is greater than the correlation between other constructs and constructs in the model, then it passes the validity discrimination test.

Table 4 Discrimination Validity

HT	SI	EE	HM	TR	PE	FC	PV	UB	BI
0.843									
0.182	0.874								
	-								
0.157	0.034	0.787							
0.537	0.328	0.312	0.868						
0.471	0.289	0.488	0.579	0.808					
0.416	0.148	0.346	0.477	0.606	0.792				
0.432	0.478	0.105	0.550	0.647	0.431	0.753			
0.495	0.383	0.267	0.615	0.652	0.713	0.614	0.784		
0.722	0.255	0.187	0.482	0.456	0.559	0.391	0.564	0.836	
0.798	0.254	0.195	0.509	0.585	0.588	0.530	0.663	0.764	0.852

3.2 Structural Model

Analysis of structural equation modeling (SEM) was carried out with seven UTAUT2 constructs, trust, intention to use, and use. The fit model index is analyzed to ensure that the model can be used. The chi-square value is a traditional measure used to evaluate the entire model and assess the magnitude of the difference between the samples and the covariance matrix installed [17]. A good fit model gives insignificant results starting at 0.05 [18].

RMSEA values between 0.08 and 0.10 indicate a poor fit, while below 0.08 indicates a good fit [16]. The CFI criterion ≥ 0.90 was initially considered high. However, recent studies have shown that a value greater than 0.90 is required to ensure that the model is not specificationally accepted [17]. Values for the RMR standard range from zero to 1.0, with a value fit model less than 0.05 [8]; However, a value of more than 0.08 is considered acceptable [17].

Chi-square In this study it was 285.976 with a value of 207 degrees of freedom. For the root mean square error of approximation (RMSEA), namely 0.55, the comparative fit index (CFI) was 0.956, and the root mean square residual (RMR) was 0.046.

4. CONCLUSION

This research was conducted to determine the factors that interest consumers in using and utilizing the Shopee application when shopping on line. In this study using the UTAUT2 framework and additional trustworthiness structures. The results of this study using the UTAUT2 framework with the addition of the trust construct have positive regression weights for all UTAUT2 constructs and additional trust constructs except for the effort expectancy and hedonic motivation constructs. This shows that all the UTAUT2 constructs and additional trust constructs have a positive effect on the intention to use the Shopee application when shopping online except for the effort expectancy and hedonic motivation constructs. The intention to use also has a positive effect on user behavior in using the Shopee application when shopping online.

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