



Increasing Online Purchase Intention Based on The Integration of The Technology Acceptance Model and Theory of Planned Behavior

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ABSTRACT

This study aims to integrate TAM and TPB to provide the best model to help predict the online shopping intentions of Shopee marketplace consumers. The sampling techniques in this study combine purposive and snowball sampling, in which 234 respondents were obtained from several islands in Indonesia. This research uses three software for data processing and testing: Microsoft Excel, IBM SPSS Statistics version 26, and IBM AMOS version 24. The findings of this study are as follows. Perceived ease of use positively affects attitude. Perceived usefulness does not positively affect attitude. Perceived ease of use positively affects perceived usefulness. Attitude positively affects purchase intention. Subjective norms positively affect purchase intention. Perceived behavioral control positively affects purchase intention.

Keywords. ease of use, usefulness, attitude, subjective norm, perceived behavioural, purchase intention, TAM, TPB,

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INTRODUCTION

Advances in the field of technology have created many innovations by presenting an unprecedented, competitive internet-based business environment. Almost every business relies on online platforms to reach its customers to provide various goods and services. In the past, the Indonesian community still carried out conventional shopping activities. Now, they are shifting towards shopping online without involving face-to-face processes or direct meetings between sellers and buyers. Online shopping activities through digital online platforms such as websites or applications are known as e-commerce or Electronic Commerce (Turban et al., 2015). One type of e-commerce chosen by the Indonesian

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community to meet their daily needs is the type of marketplace. From several marketplace platforms in Indonesia, in the third quarter of 2020, Shopee was ranked first, with the number of visitors reaching 96.5 million.

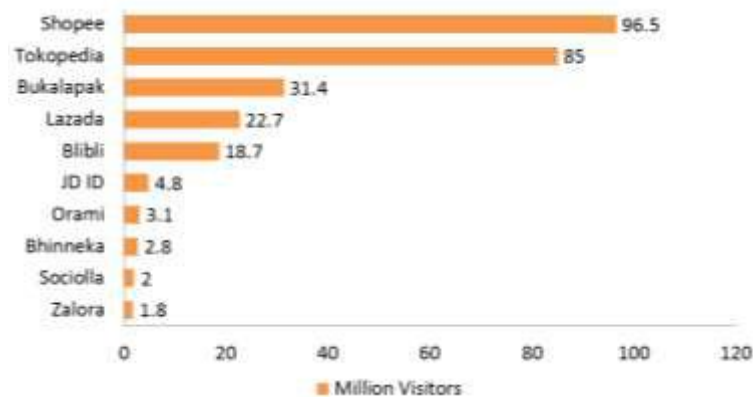


Figure 1: Number of Marketplace Visitors in the Third Quarter of 2020

Shopee's achievements can't be separated from the increase in consumer intentions to make online purchases. Online purchase intention is important because it can increase the number of consumers and company income (Lee et al., 2018). Companies must study the factors influencing consumers' intentions and attitudes to adapt and use the marketplace (Fataya et al., 2023; Prajogo & Purwanto, 2020; Rohman, 2019; Nisafani et al., 2017), especially Shopee, which beats competitors. Technology Acceptance Model (TAM) is a model that has been used over the last few decades to assess the acceptance of technology use as measured by intention, which is determined by attitude, which is derived from perceived ease of use and perceived usefulness (Davis, 1989). Perceived ease of use is an individual's perception that with use the technology can facilitate or make the person detached from the effort. In this regard, perceived usefulness is an individual's belief that doing something with the help of technology can maximize that person's performance.

Attitude is a person's positive or negative feelings towards a behavior (Ajzen, 1991). Consumer attitudes to Shopee will be influenced by perceived ease of use, such as the ease of choosing delivery services. However, in recent times, Shopee users have complained about changes to the delivery service display design. Consumers feel disappointed because they can't choose a preferred delivery service or which one has been used frequently. This problem arose due to a change in Shopee's delivery service policy since February 22, 2021. Shopee has updated the system to automatically choose a delivery service. Users can only choose based on the type of service available, namely instant, same day, next day, regular and "hemat".

If consumers believe that doing something with technology is easy, then consumers will get the benefit from using the technology. Consumers use Shopee as a tool to get the products they expect. Not only that, consumers get other benefits from using Shopee, such as inexpensive shopping with free shipping of Rp. 0, shopping for the cheapest products with additional vouchers, and shopping with COD payment methods or using ShopeePay. Especially for new users, they will get gifts, discounts, cashback, and other promos when joining Shopee. The perceived usefulness will shape consumer attitudes to shop online using Shopee rather than other marketplaces. However, not all vouchers are ready for use. Some several terms and conditions must be met by consumers make it feel difficult and inconvenient. Users must use certain shipping services and payment methods to get free shipping. In addition, consumers must meet minimum requirements for product purchases.

Some researchers have criticized the use of TAM because it only offers general information about individual opinions when using the technology without considering social influences (Malhotra & Galletta, 1999) and personal characteristics with the assumption that the use of technology is the desire of the individual without any constraints (McMaster & Wastell, 2005). According to Bagozzi

(2007), the variables perceived ease of use and perceived usefulness are not sufficient to accurately measure the behavior of using technology. Turner et al. (2010) also argue that the TAM model generally fails to examine the benefits and value of using new technologies. Therefore, Hur et al. (2014) and Chen et al. (2018) suggested the need to expand TAM by including other variables to increase the explanatory power. In addition, Sánchez-Prieto et al. (2017) proposed the expansion of TAM with Theory of Planned Behavior (TPB) to study consumer behavior while using various types of information technology systems. In TPB, behavioral intention is influenced by attitude, subjective norms, and perceived behavioral control.

In connection with the limitations of TAM, researchers decided to add variable subjective norms as social pressures that influence consumers to do shopping online (Ajzen, 1991). The social pressure comes from relatives, families, friends, colleagues, and other important people around consumers and becomes a reference group in carrying out behavior such as shopping online. The researcher also added the variable perceived behavioral control to analyze the opportunities and barriers to carrying out certain behaviors such as shopping online (Ajzen, 1991). Consumers will have the intention to do shopping online if it's supported by the availability of adequate devices and internet services to access the marketplace (Anisah & Miswanto, 2021b, 2021a; Patmawati & Miswanto, 2022). In fact, Indonesia's internet network is still unstable and the connection quality varies in each region. An unstable network will cause problems while using the marketplace such as images not showing or blank pages. Not only that, the device used will affect the fluency of the online shopping process.

Several researchers have tried using TAM and TPB, but they found results that contradicted the theory and previous research. In research conducted by Yadav et al. (2016) to understand and predict the adoption of mobile commerce, it was found that the variable perceived ease of use did not have a positive and significant effect on the adoption of mobile commerce. Furthermore, Durman & Musdholifah (2020) researched the context of mobile payments. However, they found that perceived ease of use and perceived usefulness didn't have a positive and significant effect on consumers' intention to use OVO. In addition, Yulianita (2018) conducted a study consisting of two generations (X and Y). If generations X and Y are tested separately, then perceived usefulness doesn't affect purchase intention in generation X. About the results found, the researchers explain that the path model used is still limited to the direct effect of the independent variable on the dependent variable. Therefore, they suggested furthering researchers to explore the effect of independent variables such as perceived ease of use on perceived usefulness.

Based on the inconsistent research results, this research topic becomes interesting. Researchers will evaluate the results of existing research using the integration of TAM and TPB with a more varied path model, specifically testing the influence between independent variables as suggested by previous researchers, such as testing the effect of perceived ease of use on perceived usefulness, as well as the direct effect of these two variables on attitude. The researcher also adds the influence of variables subjective norms and perceived behavioral control on online purchase intention to complement the weaknesses and limitations of the TAM model. The researcher hopes that the novelty of integrating TAM and TPB in this research model can answer the gaps in the results of previous studies, especially if applied in the online shopping context. Therefore, the researcher wants to conduct research titled "The Integration of Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) on Online Purchase Intentions of Shopee Marketplace Consumers."

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The Technology Acceptance Model (TAM) is a model that has been used over the last few decades to assess the acceptance of technology use as measured by intention, which is determined by attitude, which is derived from perceived ease of use and perceived usefulness (Davis, 1989). Perceived ease of use is an individual's perception that with the use of technology can facilitate or make the person

detached from the effort. In this regard, perceived usefulness is an individual's belief that doing something with the help of technology can maximize that person's performance.

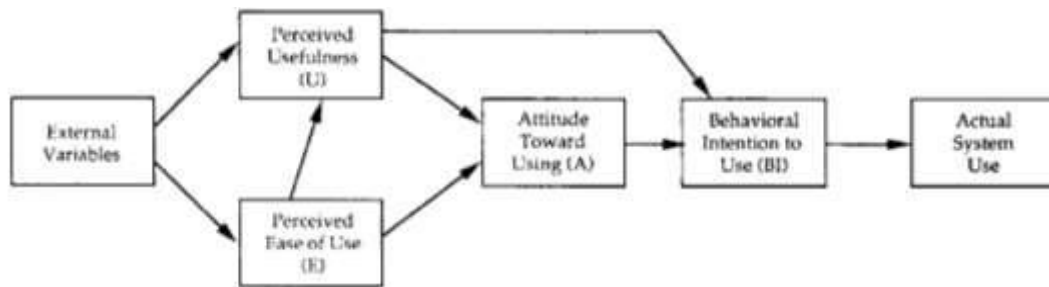


Figure 2: Technology Acceptance Model

Theory of Planned Behavior (TPB) was developed by Ajzen to overcome the limitations of Theory of Reasoned Action (TRA) in explaining human behavior (Ajzen, 1991). Research conducted by Hansen et al. (2004) can prove that TPB can explain consumer behavior better than TRA. Several researchers then used TPB to develop a conceptual model that explains consumer intentions and behavior in online shopping (Fogel & Schneider, 2010; Han et al., 2018; Huang et al., 2011; Rong-Da Liang, 2014). TPB conceptual framework has proven to be very relevant for use in research to examine consumer behavior in shopping online (George, 2004; Hansen et al., 2004; Ketabi et al., 2014). In TPB, behavioral intention is influenced by attitude, subjective norms, and perceived behavioral control. Attitude is a person's positive or negative feelings towards a behavior, subjective norms are social pressures that can encourage someone to reject or carry out certain behaviors, and perceived behavioral control is the belief that a person has the control and ability to perform a behavior (Ajzen, 1991).

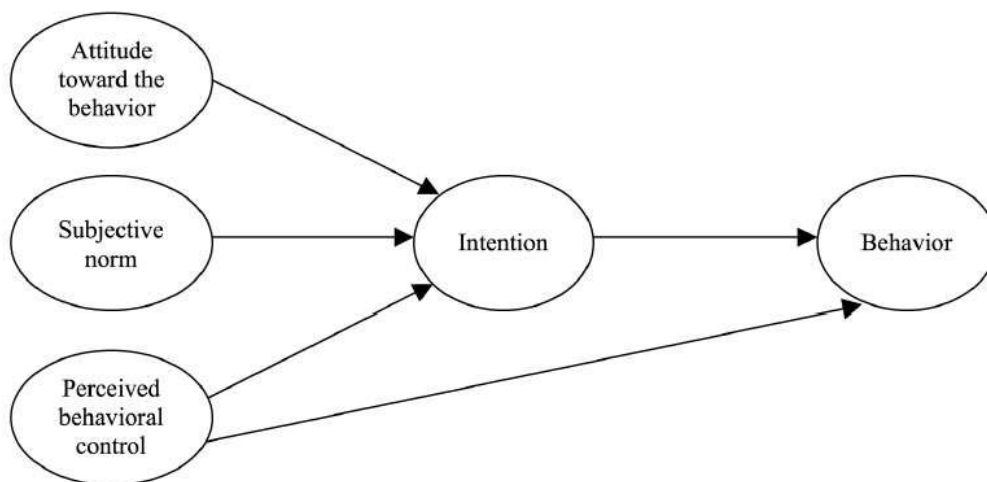


Figure 3: Theory of Planned Behavior

Perceived Ease of Use and Attitude

Technologies or applications considered easier to learn and use are more likely to be accepted by consumers (Pikkarainen et al., 2004). In this regard, Law et al. (2016), Blagoeva & Mijoska (2017), Rahmiati & Yuannita (2019), and Ardiyanto & Kusumadewi (2020) conducted research showing that perceived ease of use has a positive and significant impact on consumer attitudes toward shopping online. This reflects the existence of individual efforts to study the use of technology as a support for the acceptance of the technology (Moore & Benbasat, 1991). So, the perceived ease of use experienced by consumers when using the marketplace Shopee will positively impact consumer attitudes toward shopping online.

H1: Perceived ease of use has a positive influence on attitude.

Perceived Usefulness and Attitude

Perceived usefulness will affect consumer attitudes to use new technology (Davis, 1989). Consumers will accept new technology when they feel the benefits of the technology (Mallat, 2007). Shang et al. (2005) emphasized that users or consumers who search for product information and decide to buy online are more likely to receive benefits from shopping online. Consumers feel the benefits of using the marketplace because there is a lot of product information at a lower cost, making it easier for consumers to evaluate the various offers provided (Alba et al., 1997). In this situation, consumers feel that purchases online through virtual stores are more useful than face-to-face transactions through conventional stores (Moslehpour et al., 2018). Accordingly, the results of Law et al. (2016), Blagoeva & Mijoska (2017), Ardiyanto & Kusumadewi (2020) prove that perceived usefulness has a positive and significant effect on attitudes. In this research, the factor of perceived usefulness felt by consumers when using the marketplace Shopee will encourage consumer attitudes to shop online.

H2: Perceived usefulness has a positive influence on attitude.

Perceived Ease of Use and Perceived Usefulness

According to Venkatesh & Davis (2000), perceived usefulness can be caused by perceived ease of use because each new technology is considered more useful if it is easier to use. The research results by He et al. (2008) and Chiu et al. (2009) showed that perceived ease of use was positively related to perceived usefulness. Furthermore, the ease of comparing virtual stores with other virtual stores is one of the factors that support perceived usefulness (Barkhi & Wallace, 2007). An easy-to-use marketplace site known as user-friendly makes consumers feel that the marketplace is useful and enhances the online shopping experience (Yang, 2010). This follows the reference from Kim et al. (2010), Blagoeva & Mijoska (2017), which prove that perceived ease of use positively and significantly affects perceived usefulness. So, perceived ease of use is an essential determinant of perceived usefulness. In the context of this research, if Shopee marketplace consumers find it easy to get information and make online purchasing decisions, they will be more confident about the benefits of shopping online.

H3: Perceived ease of use has a positive influence on perceived usefulness.

Attitude and Purchase Intention

Attitude is a positive or negative feeling experienced by a person when performing a certain behavior (Ajzen, 1991). Huang et al. (2011) have investigated the positive relationship between online shopping attitudes and behavior. Research by Han et al. (2018), Law et al. (2016), and Rong-Da Liang (2014) also show that consumer attitudes have a positive effect on online purchase intentions. Furthermore, research about mobile payments by Durman & Musdholifah (2020) supports that attitude positively affects consumer intentions to use OVO. In the context of this research, when consumers desire to use Shopee, their intentions will come from their attitudes towards the marketplace. A favorable attitude will increase consumer intentions to shop online. This relationship has been supported by Ardiyanto & Kusumadewi (2020), Pinasthika et al. (2021), Rahmiati & Yuannita (2019).

H4: Attitude has a positive influence on purchase intention.

Subjective Norms and Purchase Intention

Subjective norm is a social urge that can influence a person to refuse or carry out certain behavior (Ajzen, 1991). If the social pressure supports individuals to participate in online shopping activities, then the individual tends to do that (George, 2004). Research by Han et al. (2018) and Yulianita (2018) explain that subjective norms positively correlate with online shopping intentions. This shows that

community encouragement, reference groups such as family members and friends, and various rules and regulations around individuals have an important role in consumers' intentions to shop online (Lin, 2007).

H5: Subjective norms have a positive influence on purchase intention.

Perceived Behavioral Control and Purchase Intention

According to Ajzen (1991), a person's intention is influenced by perceived behavioral control, which is a person's belief that he has control and ability to perform certain behaviors. The research by Pinasthika et al. (2021) proved that perceived behavioral control positively affects purchase intention. Regarding online shopping, if someone feels they have the ability to do online shopping, that person is more likely to do it (George, 2004). Perceived behavioral control represents the ability of consumers to have adequate knowledge and infrastructure, including the availability of smartphones, the internet, and services to support transactions and the use of online shopping (Yang, 2012). Furthermore, Behjati et al. (2012), Han et al. (2018), and Noor et al. (2020) also explain that perceived behavioral control has a positive effect on online purchase intention.

H6: Perceived behavioral control has a positive influence on purchase intention.

The hypotheses mentioned above which explain the influence of one variable on another variable can be illustrated in a research model. The research model is presented below.

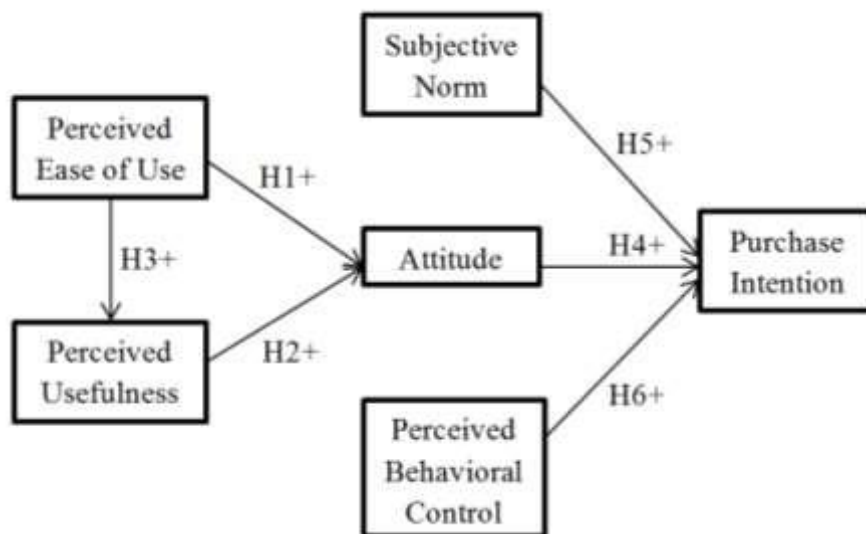


Figure 4: Research Model

METHOD

The population related to this research is all internet users in Indonesia who have already used the marketplace. This research is a case study that is limited to the criteria of a certain group of respondents, specifically Shopee marketplace consumers so that researchers take samples using a purposive sampling technique combined with snowball sampling to increase the number of respondents. The purposive sampling criteria that became the source of sampling were Indonesian people who were at least 15 years old and had used the Shopee marketplace.

The validity test was implemented to ensure the indicators on the questionnaire represented the research variables. The validity test was conducted using the SPSS 26 application, which applied Confirmatory Factor Analysis (CFA) by matching the KMO Bartlett's test results. If the loading factor is above 0,5, then the statement of the questionnaire has met the validity requirements (Hair et al., 2019).

Furthermore, the reliability test was implemented to check the durability or stability of the instruments, showing the same results from time to time. The reliability test using application SPSS 26 is based on the Cronbach's Alpha. Reliable requirements can be met if Cronbach's Alpha value is more than 0,6 (Hair et al., 2019). Next, the researcher conducted a normality test that aimed to fulfill one of the assumptions of the Structural Equation Model (SEM) analysis. Normality test using application AMOS 24. The data can be concluded to be normally distributed if the skewness value is ± 3 and the kurtosis value is ± 10 (Brown, 2006). Moreover, the model test was conducted, which showed that the entire hypothesized model was suitable for representing the existing structure of the observed data. The model test using application AMOS 24 is based on the criteria of goodness. Finally, hypothesis testing was implemented to test the effect of the independent variable on the dependent variable. Hypothesis testing is using path analysis with application AMOS 24. The hypothesis is supported if the probability (P) value is marked with *** (star) or ≤ 0.05 . The direction of positive or negative influence can be seen in the estimated value.

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RESULTS AND FINDINGS

Participants' Demography

Table 1 shows that the characteristics of respondents according to gender, it can be concluded that women dominated this study with a total of 163 people (70%). Based on age, it is dominated by the age of 23-26 years with a total of 158 people (67%). The last education of the respondents was dominated by Bachelor's Degree with a total of 159 people (68%). Based on domicile, respondents in Java are dominated at 56% (130 people). Based on the income per month is dominated by respondents who have a monthly income of more than Rp 2,500,000.

Table 1: Participants' Demography

Gender		
Man	71	30%
Woman	163	70%
Age		
15 – 18 years old	2	1%
19 – 22 years old	38	16%
23 – 26 years old	158	67%
27 – 30 years old	23	10%
> 30 years old	13	6%
Last Education		
Primary School	0	0%
Junior High School	1	1%
Senior High School	42	18%
Diploma	17	7%
Bachelor's Degree	159	68%
Master's Degree	15	6%
Domicile		
Java	130	56%
Sumatera	14	6%
Sulawesi	17	7%
Kalimantan	9	4%
Bali-Nusa Tenggara	55	23%
Maluku-Papua	9	4%
Income per Month		
< Rp 1,000,000	74	32%
Rp 1,000,000 – Rp 1,500,000	34	14%
Rp 1,500,000 – Rp 2,000,000	19	8%
Rp 2,000,000 – Rp 2,500,000	23	10%
> Rp 2,500,000	84	36%

Validity and Reliability Test

The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO MSA) = 0.890 is above 0.7, so factor analysis can be implemented. The factor analysis results show that all question items for each variable have a factor loading value of more than 0.5. This test is followed by calculating Cronbach's alpha to measure reliability which is above 0.6. The results show that all items are valid, and all instruments are reliable.

Table 2: Validity and Reliability Test Result

Variable	Statement	Factor Loading	Cronbach's Alpha
Perceived Ease of Use	PEOU1	0.756	0.815
	PEOU2	0.678	
	PEOU3	0.789	
	PEOU4	0.793	
	PEOU5	0.795	

Perceived Usefulness	PU1	0.745	0.832
	PU2	0.805	
	PU3	0.812	
	PU4	0.735	
	PU5	0.799	
Attitude	AT1	0.822	0.821
	AT2	0.796	
	AT3	0.714	
	AT4	0.760	
	AT5	0.728	
Subjective Norm	SN1	0.857	0.757
	SN2	0.809	
	SN3	0.798	
Perceived Behavioral Control	PBC1	0.859	0.838
	PBC2	0.853	
	PBC3	0.895	
Purchase Intention	PI1	0.909	0.859
	PI2	0.910	
	PI3	0.832	

Descriptive Statistics

Descriptive statistics in this study use the average respondent's answer to each statement on the questionnaire with a value or weight between 1 to 5. The mean results of each variable are evenly distributed, with an average value between 3 to 4. This shows that all variables in this research are feasible to use.

Table 3: Descriptive Statistics

Variable	Mean	Std. Deviation	PEOU	PU	AT	SN	PBC	PI
PEOU	4.5470	0.44424	1	0.673**	0.523**	0.272**	0.520**	0.478**
PU	4.5282	0.47093	0.673**	1	0.533**	0.300**	0.467**	0.539**
AT	4.1068	0.54469	0.532**	0.533**	1	0.384**	0.356**	0.501**
SN	3.6481	0.85258	0.272**	0.300**	0.384**	1	0.218**	0.377**
PBC	4.5812	0.48468	0.520**	0.467**	0.356**	0.218**	1	0.548**
PI	4.3504	0.61199	0.478**	0.539**	0.501**	0.377**	0.548**	1
N	234	234	234	234	234	234	234	234

****Correlation is significant at the 0.01 level (2-tailed).**

Notes. PEOU: Perceived Ease of Use, PU: Perceived Usefulness, AT: Attitude, SN: Subjective Norm, PBC: Perceived Behavioral Control, and PI: Purchase Intention

Normality Test

All indicators below have a critical ratio value of kurtosis in the interval $-10 < z < 10$, but most indicators still show a critical ratio skewness value outside the interval $-3 < z < 3$. Byrne (2016) suggests that kurtosis is more relevant than skewness in the context of SEM because kurtosis impacts variance and covariance tests, while skewness has a greater impact on the mean value. For this reason, researchers should pay more attention to the problem of kurtosis, rather than skewness, when evaluating data that deviate substantially from normality. Therefore, the researcher can state that the data in this research have met the normality assumption.

Table 4: Normality Test Result

Variabel	Minimum	Maximum	Skewness	Critical ratio	Kurtosis	Critical ratio
PI3	3.000	5.000	-0.525	-3.280	-0.859	-2.681
PI2	2.000	5.000	-0.670	-4.182	-0.290	-0.904
PI1	2.000	5.000	-0.809	-5.051	-0.010	-0.031
PBC3	3.000	5.000	-1.117	-6.977	0.247	0.771
PBC2	3.000	5.000	-0.656	-4.097	-0.600	-1.872
PBC1	3.000	5.000	-0.946	-5.906	-0.244	-0.762
SN3	1.000	5.000	-0.532	-3.321	-0.151	-0.471
SN2	1.000	5.000	-0.748	-4.671	0.239	0.746
SN1	1.000	5.000	-0.085	-0.531	-0.945	-2.950
AT5	3.000	5.000	-0.316	-1.976	-0.701	-2.188
AT4	2.000	5.000	-0.284	-1.772	-0.361	-1.128
AT3	2.000	5.000	-0.610	-3.809	-0.312	-0.975
AT2	2.000	5.000	0.008	0.049	-0.685	-2.140
AT1	2.000	5.000	-0.314	-1.960	-0.688	-2.148
PU5	3.000	5.000	-0.981	-6.126	-0.082	-0.257
PU4	2.000	5.000	-0.664	-4.146	-0.328	-1.025
PU3	2.000	5.000	-1.054	-6.584	0.602	1.880
PU2	3.000	5.000	-0.873	-5.449	-0.315	-0.984
PU1	3.000	5.000	-1.378	-8.605	0.827	2.582
PEOU5	3.000	5.000	-1.153	-7.199	0.314	0.980
PEOU4	3.000	5.000	-0.827	-5.163	-0.322	-1.006
PEOU3	3.000	5.000	-0.842	-5.259	-0.351	-1.096
PEOU2	2.000	5.000	-0.798	-4.986	-0.126	-0.393
PEOU1	3.000	5.000	-0.905	-5.649	-0.274	-0.857
Multivariate					100.707	21.804

Model Fit Test

From several goodness of fit indices in Table 5, it can be seen that the model is fit because it can fit more than one cut-off value. Although the chi-square value indicates the "poor fit" category, the RMSEA value of 0,065 can be used as an alternative and comparison that shows the "good fit" category because the chi-square value is very sensitive to the number of samples. If the number of research samples is above 200, the chi-square value will continue to rise so that there is a tendency for the model to be inappropriate (Haryono & Wardoyo, 2013). Next, the CMIN/DF value of 1.982 indicates the "good fit" category, meaning that the research model is fit. In addition, the GFI value of 0.858 and AGFI of 0.822 indicate the "marginal fit" category, meaning that the cut-off value is below the goodness of fit criteria. However, the model is still acceptable, and further analysis is being implemented because it

is close to the "good fit" criteria (Seguro, 2008). Furthermore, the TLI value of 0.902 and CFI of 0.915 indicate the "good fit" category. meaning that the research model can be well received.

Table 5: Model Fit Evaluation

Goodness of Fit Index	Cut-off value	Calculated result	Model Evaluation
<i>Chi-square</i>	Small, not significant	475.585	Poor Fit
CMIN/DF	≤ 2.00	1.982	Good Fit
GFI	≥ 0.90	0.858	Marginal Fit
AGFI	≥ 0.90	0.822	Marginal Fit
TLI	≥ 0.90	0.902	Good Fit
CFI	≥ 0.90	0.915	Good Fit
RMSEA	≤ 0.08	0.065	Good Fit

Hypothesis Testing and Finding

Hypotheses 1 stating that supportive perceived ease of use has a positive influence on attitude is supported ($\beta = 0.640$, $p < 0.05$). These results are in accordance with research by Blagoeva & Mijoska (2017) and Ardiyanto & Kusumadewi (2020) which reveal that perceived ease of use has a positive and significant influence on consumer attitudes towards online shopping. Most consumers in this research have the perception that the Shopee marketplace is easy to use, so shopping activities have become more enjoyable. This is supported by clear and understandable product information on the Shopee marketplace. The high influence of perceived ease of use on attitude can also be seen from the ability of the Shopee marketplace as a flexible place for consumers to shop.

Hypotheses 2 stating that supportive perceived usefulness has a positive influence on attitude is not supported ($\beta = 0.418$, $p > 0.05$). These results are in accordance with research from Rahmiati & Yuannita (2019), which shows that perceived usefulness has no significant influence on attitude. There are other factors that are more important in influencing consumer attitudes towards online shopping, such as perceived ease of use. Perceived usefulness aims to predict system use, but doesn't specifically explain the benefits that consumers will get when using the Shopee marketplace. For example, indicators stating that the Shopee marketplace makes it easy for consumers to shop (for example it can be done anytime and anywhere), are less identical to use in measuring perceived benefits. Consumers feel that other marketplaces can also provide the same benefits.

Hypotheses 3 stating that supportive perceived ease of use positively influences perceived usefulness is supported ($\beta = 0.777$, $p < 0.05$). These results are in accordance with research by Blagoeva & Mijoska (2017) which shows that perceived ease of use significantly and positively affects perceived usefulness. Most of the consumers in this research confirmed that the Shopee marketplace displayed clear and understandable product information. The available information helps consumers save time during shopping. This shows that the Shopee marketplace has made it easy for consumers, so the benefits of shopping online are increasingly felt.

Hypotheses 4 stating that supportive attitude has a positive influence on purchase intention is supported ($\beta = 0.472$, $p < 0.05$). These results are in accordance with the research of Han et al. (2018) and Durman & Musdholifah (2020), which state that consumer attitudes have been proven to positively impact online shopping intentions. When consumers desire to use Shopee, their attitudes towards the marketplace shape their intentions. Most of the respondents in this research felt that using the Shopee marketplace was fun. This attitude will shape consumers' intentions to do online shopping. Shopee has succeeded in creating a good image in the minds of consumers, so consumers will always remember

that image (Miswanto & Astuti, 2018). Consumers are also pleased to recommend the Shopee marketplace to others.

Hypotheses 5 stating that supportive subjective norms positively influence purchase intention is supported ($\beta = 0.112$, $p < 0.05$). These results are based on the research of Han et al. (2018) and Yulianita (2018), which explains that subjective norms have a positive relationship with online shopping intentions. Most of the respondents in this research stated that the family's opinion is the main factor affecting their plans to shop online using the Shopee marketplace. In addition, consumers believe that their intention to shop online will continue in the future because it is supported by positive experiences from friends using the Shopee marketplace.

Hypotheses 6 stating that supportive perceived behavioral control has a positive influence on purchase intention is supported ($\beta = 0.605$, $p < 0.05$). These results are in accordance with the research of Noor et al. (2020) and Pinasthika et al. (2021) which explains that perceived behavioral control positively affects online shopping intentions. Most of the respondents in this research can process transactions online. This supports their intention to use the Shopee marketplace as a platform to shop online. Consumer confidence in using the Shopee marketplace will increase along with the knowledge they have. In addition, the availability of devices with internet access has also increased consumer interest in shopping online using the Shopee marketplace.

Table 6 : Hypothesis Testing Result

	Hypothesis	Estimate	<i>P-value</i>	Label
H1	Perceived ease of use has a positive influence on attitude	0.640	0.011	Hypotheses supported
H2	Perceived usefulness has a positive influence on attitude	0.418	0.119	Hypotheses not supported
H3	Perceived ease of use has a positive influence on perceived usefulness	0.777	***	Hypotheses supported
H4	Attitude has a positive influence on purchase intention	0.472	***	Hypotheses supported
H5	Subjective norms have a positive influence on purchase intention	0.112	0.020	Hypotheses supported
H6	Perceived behavioral control has a positive influence on purchase intention	0.605	***	Hypotheses supported

CONCLUSION

This research focuses on the integration of the Technology Acceptance Model and Theory of Planned Behavior on the online shopping intentions of Shopee marketplace consumers. Technology Acceptance Model (TAM) is used to assess the acceptance of technology use as measured by intention, which is determined by attitude, which comes from perceived ease of use and perceived usefulness (Davis, 1989). Researchers use TAM factors such as perceived ease of use and perceived usefulness that affect consumer attitudes regarding the use of the Shopee marketplace. Next, the researcher examined the effect of attitude, subjective norms, and perceived behavioral control variables on online shopping intentions of Shopee marketplace consumers based on the concept of Theory of Planned Behavior.

This research uses three software for data processing and testing: Microsoft Excel, IBM SPSS Statistics version 26, and IBM AMOS version 24. Data collection begins in July 2021, while data testing starts in August 2021. Descriptive statistical results all variables in this research are evenly distributed, which has an average value between 3 to 4 so that it is feasible to use. The research sample is 234 respondents who had used the Shopee marketplace. Based on the respondent's characteristic data, it can be concluded that the majority of respondents who make online purchases are female, with an age range

of 23-36 years, the latest education is Bachelor's Degree, domiciled in Java and has a monthly income of more than Rp. 2,500,000.

The findings of this study are: (a) perceived ease of use positively affects attitude, (b) perceived usefulness does not positively affect attitude, (c) perceived ease of use positively affects perceived usefulness, (d) attitude positively affects purchase intention, (e) subjective norms positively affect purchase intention, and (f) perceived behavioral control positively affects purchase intention. The findings indicate that the Technology Acceptance Model and Theory of Planned Behavior can be integrated to provide a better research model in predicting consumer intentions to shop online.

Practical and Theoretical Implication

This research has produced a model with an in-depth analysis of consumer behavior, especially online shopping intentions of Shopee marketplace consumers through the integration of the Technology Acceptance Model and Theory of Planned Behavior. In this research, there is an influence between independent variables, such as perceived ease of use positively influences perceived usefulness and a direct effect of perceived ease of use on attitude. However, perceived usefulness does not significantly influence attitude. Consumers feel that the benefits provided by Shopee can be found in other marketplaces such as Tokopedia, Bukalapak, Lazada, and BliBli so it does not significantly influence consumer attitudes to use Shopee. In addition, this research proved attitude, subjective norms, and perceived behavioral control can directly influence that purchase intention. The results of this research are useful for the Shopee marketplace in developing features, services, and systems that are in accordance with consumer expectations in order to increase online shopping intentions and build positive relationships with customers.

Limitation

Respondents in this study had unequal proportions, the majority of respondents filling out the questionnaire were domiciled on Java at 56% (130 people) and the Bali-Nusa Tenggara at 23% (55 people). Meanwhile, respondents who live in other areas have a percentage below 10% with Sumatra at 6% (14 people), Sulawesi 7% (17 people), Kalimantan 4% (9 people), and Maluku-Papua 4% (9 people). The subjective norms variable has a very small influence, and the estimate value is only 0.112. The indicators of subjective norms used are also still limited to the influence of family and friends as a reference group. During data collection, the author could not supervise the process of filling out questionnaires distributed online through Google Forms. This causes the possibility of respondents filling out the questionnaire in haste and dishonesty, making the research results biased.

Recommendation

There are several recommendations for further researchers:

- 1) Using quota sampling technique so the number of respondents can represent the characteristics of each island in Indonesia, in particular, it is recommended to increase the number of respondents who live on the islands of Sumatra, Sulawesi, Kalimantan, Papua, and Maluku.
- 2) Develop a research model by adding antecedents of subjective norms variables that are relevant to the use of marketplaces such as consumer online ratings and consumer online reviews. In addition, self-efficacy and facilitating conditions can be used as antecedents that affect perceived behavioral control variables.
- 3) This research shows that perceived usefulness doesn't significantly influence attitude. Therefore, further researchers need to examine the direct influence of perceived usefulness variables on purchase intention or use other variables such as trust, compatibility, accessibility, and convenience.
- 4) Directly involved in the process of filling out the questionnaire by using the offline questionnaire data collection method. So if there is a statement that is not clear, the respondent can ask questions.

However, future researchers can save time and money by trying other alternatives such as using experimental methods or online interviews.

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