

## Perceived usefulness and confirmation on continuance intention of Shopee application users

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### ABSTRACT

E-commerce is becoming increasingly common in a variety of industrialized and developing nations, including Indonesia. After the acceptance phase has been successful, it is important to learn more about the user's intention to continue utilizing e-commerce alternatives. The goal of this study is to examine the influences of perceived usefulness and confirmation on users of the Shopee application's intention to continue using it in Padang City. All Padang City Shopee application users made up the study's sample. There are 200 respondents in the research sample. An online questionnaire was used to collect data, and state-of-the-art PLS (Partial Least Square) software was used to process the data. The results of the data analysis reveal the following: (1) Perceived Usefulness has a significant effect on the satisfaction of Shopee application users. (2) Confirmation has a significant effect on the satisfaction of Shopee application users. (3) Satisfaction has a significant effect on the continuance intention of Shopee application users. (4) Perceived Usefulness has a significant effect on the continuance intention of Shopee application users mediated by satisfaction. (5) Confirmation has a big impact on users of the Shopee application's intention to continue using it, via satisfaction.

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## INTRODUCTION

The internet, often known as the World Wide Web (www), has a significant impact on how businesses behave. Information and technological advancements have fueled the internet's growth. The administration of business transactions and the advancement of company operations are made possible by information technology. In the corporate realm, this results in a shift in substance. The internet has become a need that cannot be isolated from daily life due to its increased accessibility. The Internet has also brought about major changes in the development of businesses around the world. The availability of the internet provides an opportunity for business people to increase the marketing of products or services globally. The use of the internet in carrying out business activities results in companies needing to adapt their business activities to existing technological developments.

Hootsuite (We are Social) regularly presents data and trends needed to understand the internet, social media, and e-commerce behavior every year in the world, including Indonesia. In 2022, Hootsuite will release data and trends about the internet and social media in February. In 2022, Indonesia will have a total population (population) of 277.7 million. 204.7 million individuals (73.7% of the Indonesian

population) use the internet on a regular basis. Through Instagram, Facebook, online storefronts, and online malls, the internet provides options for online sales. Indonesian internet malls make it simpler for companies to launch online storefronts. E-commerce is the selling and purchase of goods or services that enables the exchange of information via electronic media and the internet network.

E-commerce is becoming increasingly common in a variety of industrialized and developing nations, including Indonesia. After the acceptance phase has been successful, it is important to learn more about the user's intention to continue utilizing e-commerce alternatives. E-commerce application usage is currently one of the most popular trends among the general population.

According to Iprice Research, 129,320,800 people visited the e-commerce site Shopee per month in the fourth quarter of 2020. Meanwhile, Tokopedia is in second place with 114,655,600 monthly visits. However, in 2021, Shopee experienced a decrease in the number of visitors, which was beaten by Tokopedia. It can be seen that Tokopedia is the most visited e-commerce site in Indonesia in 2021, reaching 149.6 million, while Shopee is in second place with an average monthly visitor. reached 131.89 million. Then Bukalapak is in third place with 29.88 million visitors, Lazada is in fourth position with 28.58 million visitors and followed by Blibli with 17.51 million visitors. In 2022 Tokopedia will still lead the e-commerce market in Indonesia and Shopee will be in second place, Tokopedia's average monthly visitors will reach 157.2 million in the first quarter of 2022. This figure is up 5.1% from the fourth quarter of 2021 which recorded 149.6 million visits. Shopee is in second place with an average monthly visitor of 132.77 million in the first quarter of 2022, up 0.6% from the previous quarter which was still 131.9 million. Then Lazada rose to third place, shifting Bukalapak in the first three months of this year.

In Indonesia, there are several marketplace providers, including Tokopedia, Shopee, Bukalapak, Lazada, and Blibli. The rivalry between service providers in Indonesia is becoming more intense due to the prevalence of e-commerce. With a variety of options in Indonesia, the author decided to focus his investigation on Shopee. The decision is based on issues with the data factor for Shopee visitors in 2021–2022, which has fallen, reduced free shipping coupons, and a lack of service levels in customer care so it becomes a reoccurring intention factor for customers to use the Shopee program.

E-commerce service providers need to have a strategy and innovation that effectively motivates consumers to keep using the service if they want to boost use. Other factors that can affect continuance intention in shopping online are confirmation, perceived usefulness, and satisfaction. The result of research by (Daneji et al., 2019) shows that confirmation is the strongest predictor of satisfaction that will lead users to continuance intention on Shopee applications in the future.

## LITERATURE REVIEW

### **Continuance intention**

Continuance Intention is the user's intention to continue using related application services and willingness to pay (Bhattacharjee, 2001). According to (Daneji et al., 2019) mentions indicators for measuring continuous intentions in learning management systems that are user continuation, decision to use the system instead of stopping use and decisions to use the system instead of other alternatives. Continuance intention is an illustration of the extent to which consumers will decide to use an information system and refers to individual intentions to continue participating in activities after previously adopting it (Chen & Lin, 2015).

### **Perceived usefulness**

According to (Wang et al., 2019) say that a perceived benefit is the confidence within the individual that a system has benefits that can improve performance. (Bertagnolli, 2011) defines perceived usefulness as a level where one believes that the use of technology can improve the person's work performance. (Grover et al., 2019) Perceived benefit is defined as an individual's belief that his or her job performance will improve when using information technology systems.

### **Confirmation**

Confirmation describes the fulfillment of expectations that consumers have about the performance of a product or service (Pereira & Tam, 2021). When the actual performance of a good or service is considered to have met expectations or even above consumer expectations, confirmation is formed to the consumer. This is because consumer expectations can serve as a basis for comparing real performance where positive confirmation or negative confirmation (disconfirmation) can arise from the results of these assessments. If the initial expectation is exceeded, then confirmation will arise. Conversely disconfirmation will occur when actual performance cannot meet initial expectations (Wolverton et al., 2020).

### **Satisfaction**

Satisfaction is a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what is expected or expected from a product or service (Ardani et al., 2019). According to (Lim et al., 2019) in a research focused on fintech technology customers, satisfaction or dissatisfaction will be created after purchase transactions, because when making their first transaction, customers will get an experience that gives rise to a form of satisfaction felt by customers when enjoying existing content will be able to encourage them to continue subscribing (Pereira & Tam, 2021).

### **Perceived usefulness's impact on contentment**

Perceived usefulness refers to the extent to which the activity of using a computer is considered useful regardless of the consequences that may occur (Pereira & Tam, 2021). Some empirical evidence regarding the contribution of perceived usefulness to satisfaction the context of transportation service users. (Lee & Kwon, 2011) said that perceived usefulness is how much consumer trust in online shopping activities can make transaction performance more developed, If users can interact easily with a website, so that they can easily find information on a product or pay online, then consumers will increase satisfaction with the application used.

H1: Perceived usefulness has a significant effect on user satisfaction with the Shopee application

### **Effect of confirmation on satisfaction**

Confirmation is a variable that describes consumer expectations. Confirmation explains the fulfillment of expectations that consumers have about the performance of a product or service (Pereira & Tam, 2021) When the actual performance of a product or service is deemed to have met expectations or even exceeded consumer expectations, a confirmation is formed in the consumer. This is because consumer expectations can act as a basis for comparing actual performance where positive confirmation or negative confirmation (disconfirmation) can arise from the results of this assessment. If the initial expectation is exceeded, a confirmation will occur. Conversely, disconfirmation will occur when actual performance cannot meet initial expectations (Wolverton et al., 2020).

H2: Confirmation has a significant effect on user satisfaction with the Shopee application

### **Effect of satisfaction on continuance intention**

Satisfaction is a psychological concept that involves feelings of well-being and pleasure resulting from getting what is expected or expected of a product or service (Ardani et al., 2019). Based on the Expectation Confirmation Model (ECM), repurchasing behavior by consumers will be related to consumer satisfaction with the products they buy. According to (Trivedi & Yadav, 2020), satisfaction is a reaction to fulfilling demands and consumer expectations and involves two triggers, namely success and hope. Customers who are happy with their purchases online say that their requirements and expectations were satisfied.

H3: The intention of Shopee application users to continue using it is significantly impacted by satisfaction

### **The role of satisfaction as a mediating factor in understanding how perceived usefulness affects continuation intention**

According to (Chen & Lin, 2015) where perceived usefulness is a subjective probability of using technology that can improve consumer performance in carrying out existing tasks. Perceived usefulness is a factor that has a broad impact on the sustainability of a service that can be packaged in such a way that the services offered have more value for users and can make users use these services on an ongoing basis (Zhang et al., 2017).

H4: Users' intentions to keep using the Shopee program are significantly impacted by perceived utility, which is mediated through satisfaction.

### **The role of satisfaction as a mediating factor in understanding how perceived usefulness affects continuation intention**

According to (Bhattacharjee, 2001) confirmation can be considered as a representation of cognitive beliefs regarding consumer expectations for the use of a service that is met by reality in the assessment process. Perceived experience has a positive effect on user confirmation, as it is a factor in meeting current expectations and in creating future expectations (Chen & Lin, 2015) that confirmation affects satisfaction and shared use as a key determinant for user intentions continuously.

H5: perceived usefulness has a significant effect on the continuance intention of Shopee application users mediated by satisfaction.

## **METHOD**

The type of research used in this study is classified as causal associative research with quantitative techniques. Primary data is data collected directly by researchers to be used in research. Through the use of Google forms, surveys are disseminated online to collect research data. Statistical models are used in data calculations. To classify measurement models and measurement structures in measurement data using PLS (Partial Least Square). Validation in the measurement model uses a measuring instrument of validity that is measured by convergent validity and discriminant validity. Reliability will be evaluated and carried out based on a structural model that evaluates r squared after validation checks. The strength and direction of the relationship between variables can be determined by using the p-value findings before the hypothesis testing is carried out.

## **RESULT AND DISCUSSION**

The Google form has been used to send the important data that we collected utilizing the questionnaire tool. There are 200 respondents in the research sample. From the number of surveys distributed, all respondents answered that met the criteria. Characteristics of respondents based on gender showed that out of 200 respondents there were 95 people or 47.5% men who used Shopee, while those who used Shopee the most were women as many as 105 people or 52.5% in Padang City. The characteristics of respondents based on age in this study were dominated by respondents aged 17-22 years with a total of 51 people or 25.5%, respondents aged 23-28 years totaled 121 people or 60.5%, respondents aged 29-34 years totaled 25 people or 12, 5%, and respondents aged 35 years and over amounted to 3 people or 1.5%. Characteristics of respondents based on education level in this study were dominated by respondents with high school/vocational high school education as many as 59 people or 29.5%, respondents with Diploma education level as many as 67 people or 33.5%, respondents with undergraduate education level. amounted to 72 people or 36% and the last respondent with a Master's degree was 2 people or 1%. The characteristics of respondents based on work in this study were dominated by respondents with other jobs as many as 91 people or 45.5%, respondents with jobs as civil servants as many as 5 people or 2.5%, respondents with jobs as entrepreneurs as many as 10 people or 5%, respondents with jobs as private employees amounted to 34 people or 17% and respondents with

student/student jobs amounted to 60 people or 30%. Respondent characteristics based on online shopping applications that are often used in this study are dominated by respondents in this study, namely shopee with a total of 200 people or 100%, respondents who use Tokopedia as many as 41 people or 20.5%, respondents who use Lazada as many as 55 people or 27.5%, respondents who use blibli are 5 people or 2.5% and respondents who use Bukalapak are 15 people or 7.5%. The characteristics of respondents based on the frequency of using Shopee per month in this study were dominated by respondents who used Shopee > 2 times a month with a total of 138 people or 69% and respondents who used Shopee < 2 times a month were 62 people or 31%.

The accuracy and reliability of the equipment is checked by measurement in the measurement model test (outside model). Outer loading > 0.7 and Average Variance Extract (AVE) value > 0.5. This result indicates that convergent validity is deemed to be legitimate based on the outer loading findings, which show that all values on each indicator have a value over 0.7.

**Table 1. Average Varian Extract**

Variable	Average variance extracted (AVE)
Confirmation (X2)	0.988
Continuance Intention (Y)	0.758
Perceived Usefulness (X1)	0.627
Satisfaction (Z)	0.637

Source: Research Result, 4.0 SmartPLS Processed (2023)

The convergent validity of the variables is supported by the fact that all AVE values for the variables in Table 1 are higher than 0.5.

To ensure that the indication of each construct or variable is greater than the other variables, a discriminant validity test is then performed. Based on the discriminant validity test, there is good discriminant validity because the indicator's correlation value to the construct is higher than the indicator's correlation value to the other constructs. The discriminant validity test of this study was declared valid.

**Table 2. Test of Reliability**

	Cronbach's alpha	Composite reliability
Confirmation (X2)	0.988	0.994
Continuance Intention (Y)	0.834	0.903
Perceived Usefulness (X1)	0.803	0.870
Satisfaction (Z)	0.811	0.875

Source: Research Result, 4.0 SmartPLS Processed (2023)

It is clear from the data processing findings that the alpha and composite reliability scores of each of the Cronbach constructs are higher than 0.7. Cronbach's alpha and composite reliability were both over 0.7, according to generalizations. As a consequence, it has been determined that all the research variables are reliable.

**Table 3. R Square**

	R-square	R-square adjusted
Continuance Intention (Y)	0.358	0.348
Satisfaction (Z)	0.275	0.268

Source: Research Result, 4.0 SmartPLS Processed (2023)

Table 3 shows that the continuance intention variable is 0.358, this value states that the continuance intention variable can be explained by the perceived usefulness and confirmation variables of 35.8%. While the remaining 64.2% is explained by other variables not included in the study. The

perceived usefulness and confirmation variables may explain 27.5% of the satisfaction variable, and the remaining 72.5% of the satisfaction variable can be explained by other factors not included in this study, according to the R Square value of the satisfaction variable, which is 0.275.

**Table 4. Path Analysis (Direct Effect)**

	Original sample (O)	T statistics ( O/STDEV )	P values
Confirmation (X2) -> Satisfaction (Z)	0.291	4.129	0.000
Perceived Usefulness (X1) -> Satisfaction (Z)	0.340	5.093	0.000
Satisfaction (Z) -> Continuance Intention_ (Y)	0.289	3.920	0.004

Source: Research Result, 4.0 SmartPLS Processed (2023)

Hypothesis 1: Confirmation has a significant effect on satisfaction

According to the analysis in Table 4, the original sample variables X2 and Z have a score of 0.291, which indicates that there is a positive relationship between the two variables. The t-statistic has a score of 4.129, which is > 1.96, and the p value has a score of 0.000, which is 0.05. The results of the study indicate that the first hypothesis, namely confirmation of satisfaction, has positive and significant results, so the first hypothesis or H1 is accepted.

Hypothesis 2: Perceived usefulness has a significant effect on satisfaction

The original sample variables X1 and Z have a score of 0.340, indicating a positive relationship between the two variables, according to the analysis of Table 4. The t-statistic has a score of 5.093, which is > 1.96, and the p value has a score of 0.000, which is 0.05. The results of the study indicate that the second hypothesis, namely perceived usefulness on satisfaction, has positive and significant results, so the second hypothesis or H2 is accepted.

Hypothesis 3: The intention to continue is significantly impacted by satisfaction.

According to the analysis of table 4, the original sample variables Z and Y have a score of 0.289, indicating a positive relationship between the two, while the t-statistic has a score of 3.920, which is > 1.96, and the p value has a score of 0.000, which is 0.05. The results of the study indicate that the third hypothesis, namely satisfaction with continuance intention, has positive and significant results, so the third hypothesis or H3 is accepted.

**Table 5. Path Analysis (Indirect Effect)**

	Original sample (O)	T statistics ( O/STDEV )	P values
Confirmation (X2) -> Satisfaction (Z) -> Continuance Intention (Y)	0.084	2.558	0.011
Perceived Usefulness (X1) -> Satisfaction (Z) -> Continuance Intention(Y)	0.098	2.887	0.004

Source: Research Result, 4.0 SmartPLS Processed (2023)

Hypothesis 4: Confirmation has a significant effect on continuance intention which is mediated by satisfaction

The original sample variables X2 and Y, which were mediated by Z, have a score of 0.084, which indicates a positive relationship between the two variables, according to the analysis of table 5, while the t-statistic has a score of 2.558, which is > 1.96, and the p value has a score of 0.011, which is 0.05. The results of the study indicate that the fourth hypothesis, namely confirmation of continuance intention mediated by satisfaction, has positive and significant results, so the fourth hypothesis or H4 is accepted.

Hypothesis 5: Perceived usefulness has a significant effect on continuance intention which is mediated by satisfaction

According to the analysis in Table 5, the initial sample variables X1 and Y, through the mediation of Z, have a score of 0.098, indicating a positive relationship between the two variables. The t-statistic has a score of 2.887, which is  $> 1.96$ , and the p value has a score of 0.004, which is  $< 0,05$ . The results of the study indicate that the fifth hypothesis, namely perceived usefulness of continuance intention mediated by satisfaction, has positive and significant results, so the fifth hypothesis or H5 is accepted.

#### **The impact of perceived utility on customers' pleasure with the Shopee app**

Based on path analysis (direct effect) perceived usefulness has a positive and significant effect on satisfaction. This can be proven by the calculation results obtained from the path coefficient value of 0.340 with a t-statistic value of 5.093 where this value is greater than 1.96. The results of this study are supported by research by Devaraj et al (2002) in Chiu et al (2009) showing that perceived usefulness has an important impact on satisfaction.

Perceived usefulness is one of the factors that contribute to the satisfaction of the Shopee application users. The higher the user's perception of usability, the more likely they are to be satisfied with the Shopee application users.

#### **Confirmation has a significant effect on the satisfaction of Shopee application users**

According to the findings of the route analysis (direct impact), confirmation significantly and favorably affects satisfaction. The calculations that were performed using the path coefficient value of 0.291 and the t-statistic value of 4.129, where the value is more than 1.96, provided evidence for this. The research (Chen & Lin, 2015) which demonstrates that confirmation has a major influence on overall satisfaction, supports the findings of this study. Furthermore (Bhattacharjee, 2001), concluded that confirmation has a positive effect on satisfaction, if the confirmation has been obtained and has fulfilled the customer's wishes, customer satisfaction will occur.

Confirmation or confirmation refers to the conformity of user expectations with their real experience using the Shopee application. If the user's experience using the Shopee app meets or exceeds their expectations, this will result in a positive confirmation. Users will feel satisfied and happy with them, because their expectations are met or even exceeded. For example, if a user expects a quick and easy purchase process, and gets a good quality product, and the Shopee app provides that experience, this will increase user satisfaction.

#### **Satisfaction has a significant effect on the continuance intention of Shopee application users**

According to the findings of the path analysis (direct impact), satisfaction significantly and favorably influences the intention to continue. The calculations that were performed using the path coefficient value of 0.289 and the t-statistic value of 3,920, where the value is more than 1.96, provided evidence for this. Research (Trivedi & Yadav, 2020) demonstrating that satisfaction has a major impact on continuing intention is consistent with the findings of this study. In other words, a rise in customer satisfaction affects a rise in the intention to continue.

User satisfaction is an important factor in shaping the continuance intention of Shopee application users, when users are satisfied with their experience using the Shopee application, they tend to become loyal users. They firmly want to keep utilizing the Shopee app for their future purchasing requirements.

#### **Perceived usefulness has a significant effect on continuance intention through satisfaction as mediation**

Based on the results of path analysis (indirect effect), perceived usefulness has a positive and significant effect on continuance intention through satisfaction as a mediating variable. The calculations that were performed using the path coefficient value of 0.098 and the t-statistic value of 2.887, where the value is

larger than 1.96, provide evidence for this. Research (Gao et al., 2020) shows the results that perceived usefulness has a substantial impact on continuance intention to continue using these technological services on an ongoing basis and raises continuance intention, which supports the findings of this study.

If users feel that the Shopee application provides significant benefits in meeting their shopping needs, such as ease of finding products, competitive prices and a smooth transaction process, they are more likely to be pleased with the experience and, as a result, be more inclined to use the Shopee app again in the future.

### **Through satisfaction as a mediating variable, confirmation significantly affects continuation intention.**

Perceived usefulness has a positive and substantial impact on continuation intention through satisfaction as a mediating variable, according to the findings of the path analysis (indirect effect). The computation outcomes derived from the path coefficient value of 0.084 with a t-statistic value of 2.558, where the value is larger than 1.96, serve as evidence for this. Research has validated the study's findings (Bhattacharjee, 2001). Confirmation may be viewed as a reflection of cognitive views about how customer expectations for utilizing a service are met in practice, which results in an evaluation process.

Satisfaction acts as a mediating variable in the relationship between confirmation and continuance intention. This means that satisfaction links confirmation with continuance intention. Users are more likely to be happy with using the Shopee application and, as a result, be more inclined to use it again in the future if they believe that the app satisfies their expectations.

## **CONCLUSION**

In this study, the authors examined the continuance intention of using the Shopee application as the dependent variable, using perceived usefulness and confirmation as independent and satisfaction as mediating variables. Perceived usefulness has a positive and significant effect on satisfaction. This means that the higher the level of perceived usefulness provided by Shopee, the greater the satisfaction of the Shopee application users. Confirmation has a positive and significant effect on satisfaction. This means that the higher the level of confirmation given by Shopee, the greater the satisfaction of the Shopee application users. Satisfaction has a positive and significant effect on continuance intention. This means that the higher the level of satisfaction provided by Shopee, the greater the satisfaction of the Shopee application users. Perceived usefulness has a positive and significant effect on continuance intention through satisfaction as a mediating variable. This means that mediating satisfaction can increase the effect of perceived usefulness on the continuance intention of the Shopee application user. By acting as a mediating factor, satisfaction, confirmation has a favorable and considerable impact on continuation intention. This implies that satisfaction in mediating can enhance the impact of confirmation on the Shopee application user's inclination to continue.

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