

WHY DO PEOPLE DECIDE TO BUY FROM SHOPEE? AN EMPIRICAL STUDY ON THE INFLUENCE OF TRUST, SECURITY, E-SERVICE QUALITY AND RISK PERCEPTION IN PEKANBARU

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ABSTRACT

This study aims to answer the question of why people in Pekanbaru choose to shop at Shoope? by using trust, security, electronic service quality and risk perception as causal factors. Based on 200 respondents who are Shopee users in Pekanbaru and using multiple linear regression analyses, the results showed that trust and service quality have a significant influence on the purchase decision, while security and risk do not have a significant influence on the purchase decision. Of the four factors tested, trust has the greatest influence on consumers' purchasing decisions at Shopee in Pekanbaru.

Keywords : Trust; Security; Electronic Services Quality; Risk Perception; Purchase Decision

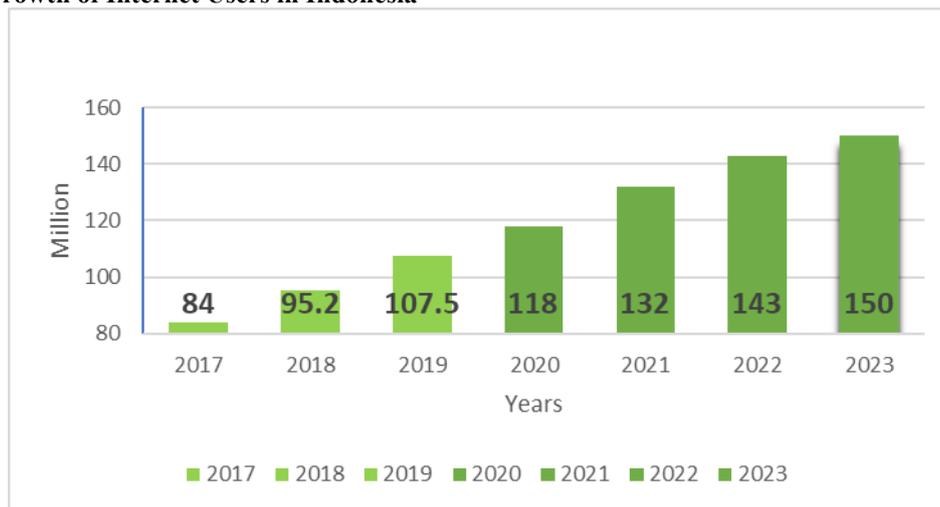
INTRODUCTION

Background

Developments in the field of information and communication technology today no longer know boundaries, distance, space and time. The pace of technological development today allows people to interact with other people who are anywhere in a short time. People have now utilized technology in everyday life, especially in information processing and communication activities, one of which is the internet media. The internet is a dominant tool or media in today's technological developments. The internet continues to grow until now even people make it a tool to meet needs, one of which is buying and selling goods or services online, electronic business activities are also called e-commerce. Amalia (2019).

Internet users in Indonesia in 2018 were 95.2 million users, growing 13.3% from 2017 which was only 84 million users. In 2019 the number of internet users in Indonesia grew 12.6% compared to 2018, to 107.2 million users. In 2023, the number of internet users in Indonesia is projected to reach 150 million users, internet users in Indonesia are projected to increase with an average growth of 10.2% in the 2018-2023 period. Jayani (2019).

Figure 1. Growth of Internet Users in Indonesia

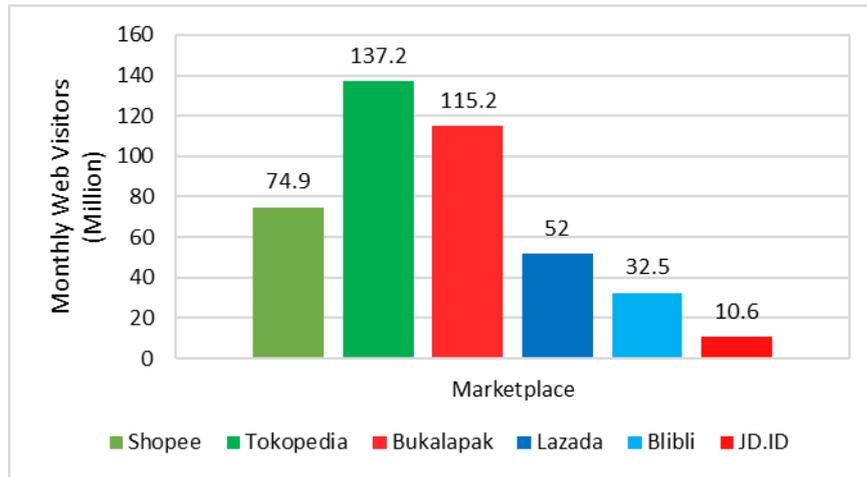


Source: *databoks.katadata.co.id* (2019)

With the growing number of internet users, now the virtual world will grow rapidly. This phenomenon is certainly a very potential market for business people in the e-commerce sector. With the Internet network, all business activities can be carried out by consumers and companies effectively and efficiently (Databoks.katadata.co.id, 2019). One type of e-commerce that is currently growing rapidly in Indonesia is marketplace type e-commerce. Marketplace is a place where information products or services are provided by third parties, while transactions are processed by service provider operators. Marketplace is basically a place where sellers and buyers can create accounts to sell and buy products or services online. The advantage of selling on the marketplace is that sellers do not need to create a personal site or online store. The seller only needs to provide a photo of the product and upload a photo which is then accompanied by a description of the product. Then, if there are consumers who want to buy the displayed product, the seller will be notified by the Market Place provider.

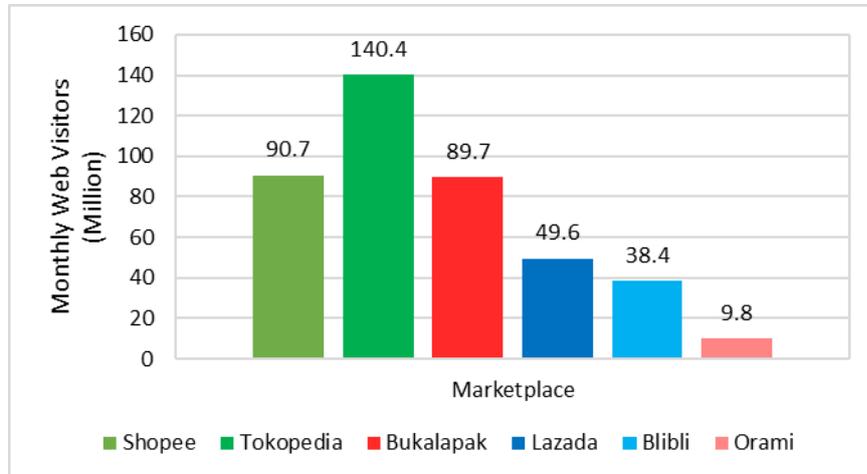
In Indonesia, online shopping is currently one of the choices for consumers to obtain goods, thus certainly becoming a business opportunity for marketplace service providers. In Indonesia, there are currently several marketplaces that are most often used, including Shopee, Tokopedia, Bukalapak, Lazada, Blibli, and JD.ID. The following data compares visitors from several marketplaces mentioned earlier:

Figure 2. E-commerce visitor data in the first quarter of 2019



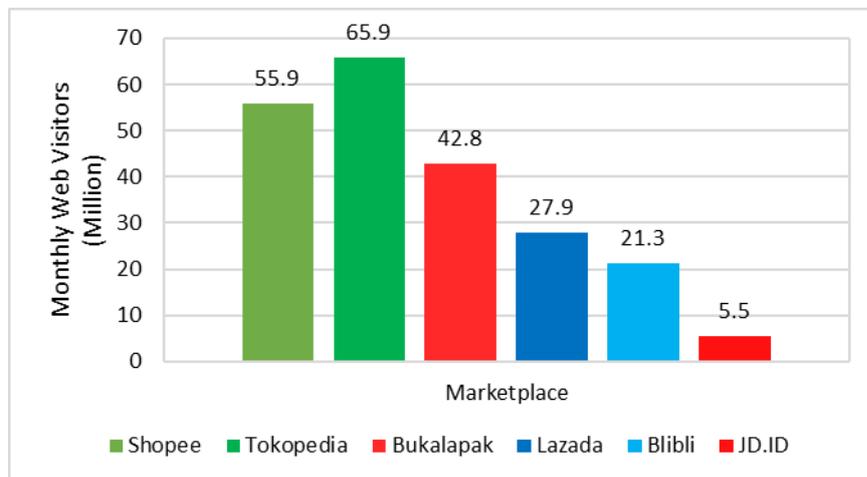
Source: (<https://iprice.co.id/insights/mapofecommerce/>, n.d.)

Figure 3. E-commerce visitor data in the second quarter of 2019



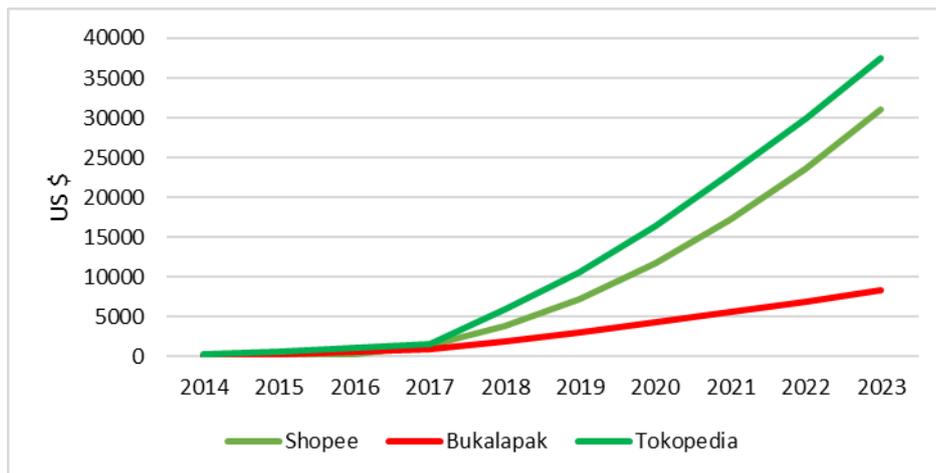
Source: (<https://iprice.co.id/insights/mapofecommerce/>, n.d.)

Figure 4. E-commerce visitor data in the third quarter of 2019



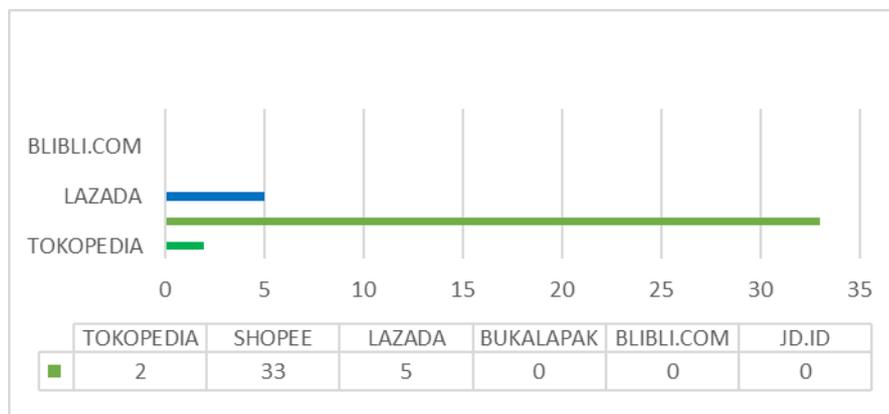
Source: (<https://iprice.co.id/insights/mapofecommerce/>, n.d.)

Figure 5. E-commerce Transaction Value in 2014-2019



Source: (databoks.katadata.co.id)

Figure 6. Pre-Survey of e-commerce sites used by the people of Pekanbaru



Source: Processed Data, 2020

From the above phenomenon, it can be seen that Tokopedia topped the ranking in terms of the number of visitors and transaction value until 2019, but it was not directly proportional to the results of a pre-survey conducted in Pekanbaru where Shopee was more in demand than Tokopedia as its rival on e-commerce sites.

According to Lim (2010) consumer trust in shopping on the internet is as a willingness of consumers to expose themselves to possible losses experienced during shopping transactions via the internet, this is based on the expectation that sellers promise transactions that will satisfy consumers and are able to send goods or services that have been promised.

According to Chazar (2015) said that information system security aims to ensure and ensure the integrity, availability and confidentiality of information processing. With good information system security management, it is expected to predict the risks that arise so as to avoid and reduce risks that may be detrimental.

According to Zeithaml and Berry (1991) stated that service quality is a comparison between the service expected by consumers with the service they receive. Therefore, if the service received or felt is in accordance with what is expected by consumers, of course, the quality of service can be perceived as good and satisfying.

According to Suryani (2008), risk perception is where when they want to buy, consumers will consider the risks that will occur. This perceived risk will be based on many considerations derived from related information and experience. Perceived risk is defined as the uncertainty that consumers face when

they are unable to see the possibilities that will occur from their purchase decisions.

According to Maulina Hardiyanti (2012) said the purchase decision is an action taken by consumers to buy a good or service that begins to meet needs and ends with selecting alternatives about available goods or services.

A product or service that is the same as the intended purpose. Quality perception is one of the key dimensions of brand equity, because it has important attributes that can be applied in various ways. Product quality also reflects the ability of the product to perform its duties which include durability, reliability or efficacy, strength, ease in packaging and product repair and other characteristics. If consumers are satisfied with the quality of a *mobile phone*, then the company must retain its consumers so as not to move to competing company products. The business that is carried out is by creating brand loyalty.

LITERATURE REVIEW

Marketing Definition

Marketing according to Swastha & Irawan (2008) is one of the main activities carried out by entrepreneurs who in their efforts are to maintain their lives, to develop and also get large profits. William J. Stanton (2012), the definition of marketing is an overall system of various business activities or ventures aimed at planning, determining the price of goods or services, promoting them, distributing them, and being able to satisfy consumers.

From the definition above, it can be concluded that the meaning of marketing is an activity carried out by an organization or institution in doing business in order to be able to accommodate market demand by creating products of selling value,

Definition of E-commerce

According to Laudon (1998), "e-commerce is a process of buying and selling products electronically by consumers and from company to company with computers as intermediaries of business transactions". E-commerce is a business activity between consumers, manufacturers, service providers, and sellers who both use the internet as an intermediary.

Based on the description of the definition above, then overall e-commerce contains the understanding of a process of buying and selling between sellers and buyers electronically.

Definition of Trust

According to Lim (2010) stated that consumer confidence in shopping on the internet is as a willingness of consumers to expose themselves to possible losses experienced during shopping transactions via the internet, this is based on the expectation that sellers promise transactions that will satisfy consumers and are able to send goods or services that have been promised.

Security Definition

According to Park & Kim, (2006) said security is the ability of online stores to control and maintain security over data transactions. Security guarantees are acceptable with the expectation of consumers, then consumers will probably be willing to provide their personal information and will make purchases feeling safe.

Electronic Service Quality Definition (E-SERVQUAL)

According to Zeithaml and Berry (1991) stated that service quality is a comparison between the service expected by consumers with the service they receive. Therefore, if the service received or felt is in accordance with what is expected by consumers, of course, the quality of service can be perceived as good and satisfying.

Definition of Risk Perception

According to Suryani (2008), risk perception is where when they want to buy, consumers will consider the risks that will occur. This perceived risk will be based on many considerations derived from related information and experience. Perceived risk is defined as the uncertainty that consumers face when they are unable to see the possibilities that will occur from their purchase decisions.

Definition of Purchase Decision

According to Kotler and Armstrong, (2001) Purchasing decision is the stage in the buyer's decision-making process where consumers actually buy. Purchasing decisions are the activities of individuals who are directly involved in making decisions to obtain and use the desired or offered products.

Research Hypothesis

A hypothesis is a provisional conjecture whose veracity remains to be tested. The hypotheses developed in

this study based on literature reviews and previous research that have been described are as follows

The influence of trust on purchasing decisions

In Iskandar & Nasution's research (2019) and also Solihin's research (2020) said that trust variables have a positive and significant influence on purchasing decisions. In Anwar & Afifah's (2018) research and Nursani's research, Arifin, & Hufron (2018) said trust has a significant effect on purchasing decisions.

H₁ : Trust affects purchasing decisions at Shopee.

How security affects purchasing decisions

In research conducted by Anwar & Afifah (2018) and also research by Nursani, Arifin, & Hufron (2018) said that security has a significant effect on purchasing decisions. Meanwhile, Iskandar & Nasution's research (2019) says that security has a positive and significant effect on purchasing decisions.

H₂ : Security affects purchasing decisions at Shopee

The influence of electronic service quality on purchasing decisions

Based on research conducted by Nursani, Arifin, & Hufron (2018) stated that the quality of electronic services has a significant effect on purchasing decisions. And research conducted by Iskandar & Nasution (2019) states that the quality of electronic services has a positive and significant effect on purchasing decisions.

H₃ : The quality of electronic services affects purchasing decisions at Shopee

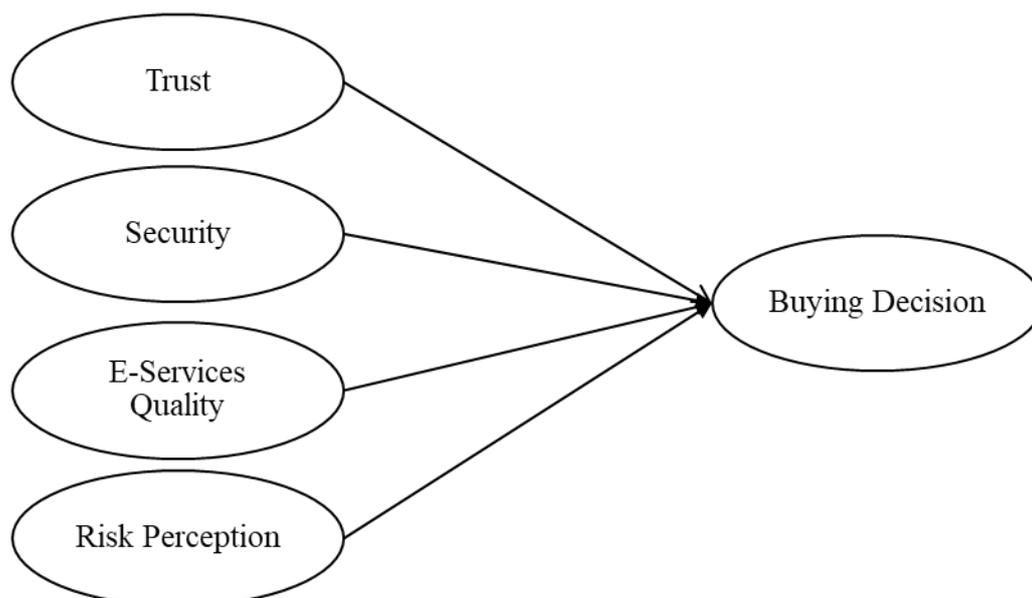
The influence of risk perception on purchasing decisions

Based on Haryani research (2019) states that risk perception has a positive effect on purchasing decisions. And in the research of Nursani, Arifin, & Hufron (2018) stated that risk perception has a significant effect on purchasing decisions.

H₄ : Risk perception affects purchasing decisions at Shopee

Frame of Mind

Based on a review of the theoretical foundation and previous research, a theoretical framework can be compiled as presented in the following picture:



Source : Processed Data 2020

Figure 7. Frame of Mind

RESEARCH METHODS

Why do People Decide to Buy from Shopee? An Empirical Study on the Influence of Trust, Security, E-Service Quality and Risk Perception In Pekanbaru (Deny Chrystian Ginting Suka, Onny Setyawan, Sarli Rahman, and Bord Nandre Aprila)

Population

According to Sugiyono (2008), population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. The population in this study is consumers who have shopped using Shopee E-commerce in Pekanbaru with an unknown population.

Sample

Sugiyono (2010) sample is part of the number and characteristics possessed by the population. The determination of the number of samples in this study can use the Roscoe theory formula. Roscoe's theory says that if the study will conduct analysis with multivariate (multiple correlation or regression), then the number of sample members is at least 10 times the number of variables studied by Sugiyono (2010). So because this study consists of 5 variables, the number of samples is $5 \times 10 = 50$ respondents. To anticipate incomplete and valid data, and to obtain better results, this study determined the number of samples as many as 200 respondents.

Sampling Techniques

This study uses purposive sampling techniques, where every element in the population does not have the same opportunity to be selected as a sample. Sampling using a disproportionate count based on sub-districts in Pekanbaru.

$$\text{Count: } \frac{\text{jumlah sampel}}{12 \text{ kecamatan}}$$

$$= \frac{200 \text{ responden}}{12 \text{ kecamatan}}$$

$$= 16.66 \text{ 17 Respondents / Sub-district} \rightarrow$$

The sample was selected based on certain criteria, namely individuals who understand sites that offer online sales facilities, as well as who have made product purchases on Shopee E-commerce.

Data Types and Sources

The types of data used in this study are primary and secondary data. The primary data in this study is in the form of data obtained from the answers of the respondents through the questionnaire that has been given. Secondary data are data that are not obtained directly by researchers, but are obtained from data published by companies, reports of an institution, literature studies, literature, previous research journals, and magazines related to the problem studied.

Operational Definition of Research Variables

This study consists of independent variables namely Brand Awareness (X_1), Brand Association (X_2), Quality Perception (X_3), and Brand Loyalty (X_4), and the dependent variable is Purchase Decision (Y)

Table 1. Variable Operational Definition

Variable	Indicator	Scale
Trust (X1)	1) Honesty in managing online buying and selling sites. 2) Competence, i.e. the site is competitive and reliable. 3) The information provided is reliable. (McKnight et. al. 1998)	Interval
Security (X2)	1) Authentication 2) Confidentiality (data confidentiality / privacy) 3) Integrity (authenticity of data) 4) Non-Repudiation (Irawan, 2017)	Interval

Variable	Indicator	Scale
Electronic Service Quality (X3)	1) Efficiency 2) Fulfillment 3) System Availability 4) Privacy Parasuraman and. al., (2005)	Interval
Risk Perception (X4)	1) Financial Risk 2) Social Risk 3) Performance Risk 4) Time and Convenience Risk 5) Physical Risk 6) <i>Psychological Risk</i> (Liau Xia 2004)	Interval
Purchase Decision (Y)	1) Steadiness in a product. 2) Habits in buying and using products. 3) Give recommendations to others 4) Evaluation of the product 5) Make a repurchase (Kotler,2011)	Interval

Source : Processed Data 2020

Data Analysis Methods

Descriptive Analysis

In getting an overview of the problem to be studied, data analysis is carried out with the Descriptive Analysis Method, analysis carried out by determining data, and interpreting data so that it can provide an overview of the problem at hand.

Perceptual Level Analysis

To determine the level of perception of the variables Trust, Security, Quality of Electronic Service and Risk Perception using e-commerce (Shopee) on Purchasing Decisions, descriptive analysis is used based on the average value calculated at five levels with a range of perception levels of $(5-1) / 5 = 0.8$. The level of perception can be seen in the table below:

Table 2. Respondents' responses to variables

Interval	Variable	
	Independent	Depend on
4,20 – 5,00	Excellent	Very High
3,40 – 4,19	Good	Tall
2,60 – 3,39	Good enough	Keep
1,80 - 2,59	Bad	Low

Interval	Variable	
	Independent	Depend on
1,00 – 1,79	Very Not Good	Very Low

Source : Processed Data, 2020

Preliminary Test

In a study, the measuring instrument that is also used to collect this data must be valid and reliable. The validity and reliability of a research result depend on the measuring instruments used and the data obtained. Furthermore, if the measuring instrument used is not valid and unreliable due to a very large / significant bias, then the results of the study do not describe the real situation. Therefore, two types of tests are needed, namely the test of validity and the test of reliability so that bias in data collection and data analysis can be known.

Validity Test

Validity test is a measure that shows the level of validity of an instrument. An instrument is considered valid if it is able to measure what is desired. The method used to measure the validity test is the pearson correlation test. Where if the r count is greater than the table r and the r value is positive, then the proof of statement is declared valid (Ghozali, 2012).

Reliability Test

Reliability is the level of confidence in the results of a measurement. Measurements that have high reliability, namely measurements that are able to provide reliable measuring results. Reliability is one of the main characteristics or characteristics of a good measurement instrument. Sometimes reliability is also called trust, reliability, consistency, stability and so on. However, the main idea in the concept of reliability is the extent to which the measurement result score is free from measurement error.

Classical Assumption Test

Before testing multiple linear regression analysis of the research hypothesis, it is necessary to first test the classical assumptions of the data to be processed.

Normality Test

The Normality Test aims to test whether in a regression model, confounding or residual variables have a normal distribution. It is known that the t and F tests assume that the residual values follow the normal distribution. If this assumption is violated, the statistical test becomes invalid for a small sample number. There are two ways to detect whether residuals are normally distributed or not: by chart analysis and statistical tests. To test whether the data is normally distributed or not, a statistical test of the Kolmogorov-Smirnov Test is performed. Residuals are normally distributed if they have a significance value of >0.05 (Ghozali, 2012).

Multicollinearity Test

According to (Ghozali, 2012) the multicollinearity test aims to test whether the regression model found a correlation between independent variables. To test multicollinearity by looking at the VIF value of each independent variable, if the VIF value < 10 , then it can be concluded that the data is free from the symptoms of multicollinearity.

Heteroscedasticity Test

The Heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual one observation to another. There are several ways that can be done to perform heteroscedasticity tests, namely the Plot Graph Test, Park Test, Glacier Test, and White Test. Testing in this study uses a Plot Graph between the predicted value of the dependent variable, namely ZPRED and the residual SRESID. There is no heteroscedasticity if there is no clear pattern, and the points spread above and below the number 0 on the Y-axis.

Autocorrelation Test

The autocorrelation test is to find out if there is a correlation between fellow observational measures over

time. The detection of autocorrelation can be done by graphing methods or using statistical tests, in this case using the statistics of Durbin Watson.

Decision making for autocorrelation symptom testing is carried out by calculating the value of d_u , if Durbin Watson values are between d_{you} and $(4 - d_u)$ then no autocorrelation symptoms occur.

Model Test (Test f)

Model Test in this study uses a method of testing simultaneously or simultaneously against all regression coefficients to test the effect of the dependent variable simultaneously on the dependent variable. The tests carried out are:

Significant Test of Regression Coefficients Simultaneously or Simultaneously (f test)

The value used for simultaneous testing is the calculated F value. The significant F test shows that the value of variation in the dependent variable i.e. purchase decision, which is explained jointly by the independent variables i.e. brand awareness, quality perception, brand association and brand loyalty is really significant and occurs in real terms and not just by chance.

The basis for decision making with a confidence level of 0.05 according to Sugiyono (2014), is: If the significance level obtained < 0.05 then it can be concluded that all independent variables simultaneously affect the dependent variable. If the significance level obtained > 0.05 then it can be concluded that all independent variables simultaneously have no effect on the dependent variable.

Coefficient of Determination (R²)

According to Ghazali (2012) Determination (R²) is a tool to measure how far the model is able to explain the variation of dependent variables. The value of determination is either zero or one. A small R² value means that the ability of independent variables to explain the dependent variable is very limited, and conversely if a value is close to 1 it means that the independent variable provides almost all the information needed to predict the dependent variables

Multiple Regression Analysis

Regression analysis is used to estimate the value of variable Y based on the value of variable X, as well as the estimated change in variable Y for each unit change in variable X. The form of the equation of multiple linear regression is:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$$

Test the hypothesis

Hypothesis Test (Test t) aims to test all independent variables contained in the equation partially affect the value of the dependent variable. According to Ghazali (2012) the way to determine the criteria is to look at the significance value of t at the alpha level ($\alpha = 5\%$), namely: If the significance value > 0.05 then the independent variable has no partial effect on the dependent variable. If the significance value < 0.05 then the independent variable partially affects the dependent variable.

Test Equipment Used

In this study, the entire data analysis process was carried out using the help of the Statistical Package For Social Science (SPSS) program.

RESULTS AND DISCUSSION

Characteristics of Respondents

The results of research on the characteristics of respondents can be described as follows: (1.) The characteristics of respondents based on age showed that as many as 200 respondents, 1% were 14 years old, namely as many as 2 respondents, 14% aged 15 years – 20 years, namely 27 respondents, 77% aged 21 years – 26 years, which is 153 respondents, and 9% aged 27 years – 32 years, which is as many as 18 respondents. Based on these data, it is known that Shopee users in Pekanbaru are more dominated by those aged 21 – 26 years. This is because the age of 21 years – 26 years is the age of the millennial generation who are literate and sensitive to technology to make it easier to find the need for the desired product, one of which is through online shopping facilities. This is in line with the results of a socio-demographic survey on

the impact of Covid-19 conducted by the Central Statistics Agency (BPS) in 2020 which stated that 54 out of 100 millennial generation respondents during the Covid-19 pandemic carried out online shopping activities from home for the reason of maintaining personal and family health. (2.) The characteristics of respondents based on gender showed that as many as 200 respondents, 26% were male, namely as many as 51 respondents and 75%. There were 149 female respondents. Based on the data above, it can show that Shopee users in Pekanbaru are more dominated by the female gender. This is in line with the results of a socio-demographic survey of the impact of Covid-19 conducted by the Central Statistics Agency (BPS) in 2020 which stated that there is a tendency that women do more online shopping activities than men. (3.) The characteristics of respondents based on education showed that as many as 200 respondents, 10% had Diploma education, namely 19 respondents, 25% had Bachelor S1 / S2 education, which was 49 respondents, 61% had high school education, which was 121 respondents, and 6% had junior high school education, which was as many as 11 respondents. Based on this data, Shopee users in Pekanbaru are dominated by users with high school education backgrounds up to S1 / S2 graduates, this is directly proportional to the previous data, which is dominated by the age of 21 years - 26 years. (4.) The characteristics of respondents based on occupation showed that as many as 200 respondents, 4% worked as civil servants, namely 8 respondents, 81% worked as students / students, namely 162 respondents, and 15% worked as employees, which was as many as 30 respondents. Based on this data, Shopee users in Pekanbaru are dominated by students who are looking for the need for products in Shopee e-commerce. This is in accordance with the data where the age of 21 – 26 years is dominated and is still a student and student. (5.) The characteristics of respondents based on monthly income show that as many as 200 respondents, 50% earn < Rp. 1.000.000 which is as many as 99 respondents, 28% earn Rp.1.000.000 - Rp. 2.000.000 which is as many as 56 respondents, 18% earn Rp.3.000.000 - Rp.4.000.000 which is as many as 35 respondents, and 5% earn >Rp.4.000.000 which is as many as 10 respondents. Based on this data, Shopee users in Pekanbaru are dominated by people with an income of < Rp.1,000,000. This is because respondents are more dominated by students and students who are still under the responsibility of parents.

Descriptive Analysis of Research Variables

Trust variable (X1)

From the overall analysis of respondents' responses to the trust indicator, the highest score was the second statement with a score of 4.49, which stated "In my opinion, transactions through the Shopee site can be trusted". This shows that as shopee users, respondents trust shopee in transactions. The lowest score is the fourth statement with a score of 4.20, which states "I believe the products I ordered on the Shopee site are in accordance with expectations", this shows that the suitability of the goods received is in accordance with the expectations of buyers. The average overall score is 4.33 so the overall confidence variable indicator can be said to be very good.

Security Variable (X2)

From the overall analysis of respondents' responses to security indicators, the highest score was the seventh statement with a score of 4.23, which stated "I feel online transactions on Shopee are protected". This shows that as shopee users, respondents feel safe in transacting. The lowest score is the first statement with a score of 4.10, which states "I feel safe sharing personal information with Shopee", this shows that as a user, will provide personal information data to shopee with a sense of security. The average overall score is 4.15 so the overall indicator of security variables can be said to be good.

Electronic Service Quality Variable (X3)

From the overall analysis of respondents' responses to electronic service quality indicators, the highest score was the first statement with a score of 4.42, which stated "The Shopee site is easy to access". This shows that Shopee provides services to users in the ease of accessing the site. The lowest score is the fifth statement with a score of 4.17, which states "Shopee is responsive in resolving customer complaints", this shows that the service provided by Shopee to users for customer complaints is rated good. The average overall score is 4.27 so the overall variable indicator of electronic service quality can be said to be very good.

Risk Perception Variable (X4)

From the overall analysis of respondents' responses to the Risk Perception indicator, the highest score was the eleventh statement with a score of 4.29, which stated "I believe the product I ordered matches the picture.". This shows that users feel confident that the goods they order will reach the buyer's hands according to what they see in the picture. The lowest score is the second statement with a score of 4.12, which states "I feel the risk of becoming a victim of fraud if I buy Shopee site products is low.", this shows that users feel guaranteed from the risk of fraud that may occur in transacting on Shopee. The average overall score is 4.19 so the overall indicator of risk perception variables can be said to be good.

Purchase Decision Variable (Y)

From the overall analysis of respondents' responses to the Purchase Decision indicator, the highest score was the first statement with a score of 4.44, which stated "I look for information before buying products online. Is the product I want on Shopee". This shows that most users will look for information on the desired product on the Shopee site. The lowest score was the fifth statement with a score of 4.27, which stated "I bought products on Shopee after asking for advice with friends and family", this shows that some consumers make purchases at Shopee on the advice of friends and family. The average overall score is 4.32 so the overall indicator of purchasing decision variables can be said to be very good.

Research Results of Validity Test

Validity testing is carried out to determine the validity or absence of a questionnaire from each of these variables. If the value of Corrected Item-Total Correlation of each statement item > 0.30 , it can be said to be valid.

Table 3. Variable Validity Test

Variable	Indicator	Corrected Item-Total Correlation	R- Table	Conclusion
Belief	Statement 1	0.776	0,30	Valid
	Statement 2	0.799		
	Statement 3	0.839		
	Statement 4	0.836		
	Statement 5	0.757		
	Statement 6	0.743		
Security	Statement 1	0.828	0,30	Valid
	Statement 2	0.881		
	Statement 3	0.833		
	Statement 4	0.851		
	Statement 5	0.901		
	Statement 6	0.837		
	Statement 7	0.845		
Electronic Service Quality	Statement 1	0.700	0,30	Valid
	Statement 2	0.801		
	Statement 3	0.782		
	Statement 4	0.777		

Variable	Indicator	Corrected Item- Total Correlation	R- Table	Conclusion
	Statement 5	0.824		
	Statement 6	0.815		
	Statement 7	0.833		
	Statement 8	0.839		
	Statement 9	0.807		
	Statement 10	0.842		
	Statement 11	0.792		Valid
	Statement 12	0.780		
	Statement 13	0.769		
	Statement 14	0.786		
	Statement 1	0.466		
	Statement 2	0.645		
	Statement 3	0.661		
	Statement 4	0.658		
	Statement 5	0.632		
	Statement 6	0.707		
Risk Perception	Statement 7	0.652	0,30	Valid
	Statement 8	0.679		
	Statement 9	0.656		
	Statement 10	0.711		
	Statement 11	0.610		
	Statement 12	0.622		
	Statement 1	0.795		
Purchasing Decision	Statement 2	0.817	0,30	Valid
	Statement 3	0.795		

Variable	Indicator	Corrected Item-Total Correlation	R- Table	Conclusion
	Statement 4	0.835		
	Statement 5	0.816		
	Statement 6	0.829		
	Statement 7	0.825		
	Statement 8	0.849		
	Statement 9	0.833		
	Statement 10	0.840		

Source : SPSS Processed Data Results

Based on table 3 above, it shows that all statement items for the variables of trust, security, quality of electronic service, risk perception, and purchasing decisions have a Corrected Item-Total Correlation value (correlation value) of > 0.30 , then the overall variable items are considered valid.

Reliability Test

Reliability Test is a tool to measure the consistency of respondents' answers, if the answers given are consistent, then it is said that the research instrument (questionnaire) can be said to be realistic. In this study, reliability testing was carried out once using Cronbach's Alpha feature on SPSS. If Cronbach's Alpha score > 0.70 , it can be said that the questionnaire has been realized.

Table 4. Research Instrument Reliability Test

Variable	Cronbach's Alpha	Exp
Trust (X1)	0.928	Reliable
Security (X2)	0.958	Reliable
Electronic Service Quality (X3)	0.964	Reliable
Risk Perception (X4)	0.909	Reliable
Purchase Decision (Y)	0.960	Reliable

Source : SPSS Processed Data Results

From the results of reliability tests show that each variable has a Cronbach's Alpha value greater than 0.70, therefore it can be concluded that all variables in this study are considered reliable.

Normality Test

The Normality Test aims to test whether in the regression model the dependent variable and the independent variable both have a normal distribution or not. The way that can be taken to test the normality of the data is through the test of normality table using Kolmogorov-Smirnov sig value > 0.05 , then the data is normally distributed.

Table 5. Normality Test

		Unstandardized Residual
N		200
Normal Parameter ^{a,b}	Mean	.0000000
	Std. Deviation	.33822125
Most Extreme Differences	Absolute	0.070
	Positive	0.053
	Negative	-0.070
Kolmogorov-Smirnov Z		0.985
Asymp. Sig. (2-tailed)		0.286

Source : SPSS Processed Data Results

Multicollinearity Test

The multicollinearity test is part of the classical assumption test in multiple linear regression analysis. The purpose of using the multicollinearity test in research is to test whether the regression model found a correlation (strong relationship) between independent variables or independent variables. A good regression model should not have correlation between independent variables or no symptoms of multicollinearity. To detect the presence or absence of multicollinearity symptoms in the regression model, it can be done by looking at the tolerance and VIF values using the SPSS program. The basis for decision making in the multicollinearity test with Tolerance and VIF is If the Tolerance value < 0.10 then it means that multicollinearity occurs and If the VIF value > 10.00 then it means that multicollinearity occurs.

Table 6. Multicollinearity Test

Variable	Collinearity Statistics		Criteria
	Tolerance	BRIGHT	
Trust (X1)	0.254	3.934	No Multicollinearity
Security (X2)	0.268	3.728	No Multicollinearity
Electronic Service Quality (X3)	0.222	4.499	No Multicollinearity
Risk Perception (X4)	0.819	1.221	No Multicollinearity

Source : SPSS Processed Data Results

From table 6 above, it is known that all independent variables have a Tolerance value of > 0.10 and

a VIF value of < 10.00. Thus, it can be said that there is no multicollinearity in this study.

Heteroscedasticity Test

Heteroscedasticity is a condition in regression models where there is an inequality of variance from residuals in one observation to another. A good regression model is that heteroscedasticity does not occur. Heteroscedasticity testing in this study was detected using the Glejser test. The Glejser test is used by progressing between the independent variable and its residual absolute value. If the significance value between independent variables is greater than 0.05 then heteroscedasticity does not occur.

Table 7. Heteroscedasticity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	SIG.
	B	Std. Error	Beta		
Belief	0.038	0.041	0.128	0.921	0.358
Security	-0.060	0.040	-0.203	-1.500	0.135
Electronic Service Quality	-0.030	0.050	-0.089	-0.599	0.550
Risk Perception	-0.016	0.038	-0.033	-0.424	0.672

Source : SPSS Processed Data Results

From table 7 above, the regression results between independent variables show that all independent variable significance > 0.05. So that it does not become heteroscedasticity.

Autocorrelation Test

The autocorrelation test aims to test in linear regression models whether or not there is a correlation between confounding errors in period t and confounding errors in period t-1 or previous periods. The autocorrelation test in this study used the Durbin Watson test.

Table 8. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.886 ^a	0.785	0.781	0.342	2.112

Source : SPSS Processed Data Results

From table 8 it is known that the value of Durbin-Watson (d) is 2.112. Then compare it with the value of durbin watson's table at 5% significance with the formula (k ; N). The number of independent variables is 4 or "k" = 4, while the number of samples or "N" = 200, then (k ; N)=(4 ; 200). In the distribution of durbin watson table values, dL values of 1.7279 and dU of 1.8094 were found.

The Durbin-Watson value (d) of 2.112 is greater than the upper bound (dU) of 1.8094 and less than (4-du) 4-1.8094= 2.1906. So as the basis for decision making in the Durbin Watson test above, it can be concluded that there are no problems or symptoms of autocorrelation.

Test F (Simultaneous Test)

The F test basically shows whether all the independent variables referred to in the model have an influence together on the dependent variable. The F test is used to test whether the four independent variables simultaneously affect the dependent variable. In this study, the method used is to compare the value of F count and Ftable. If F-count < F-table, then the independent variable simultaneously has no effect on the

dependent variable (hypothesis rejected). If F counts $>$ F -table, then the independent variable simultaneously affects the dependent variable (hypothesis accepted).

Table 9. F Test Results

Model	Sum of Squares	df	Mean Square	F	Itself.
Regression	83.293	4	20.803	178.373	0.000 ^b
Residual	22.764	195	0.117		
All	106.058	199			

Source : SPSS Processed Data Results

Based on the table above, it can be seen that F -count has a value of 178,373 greater than F -table, which is 2.42 and a significance value of 0.000 ($p < 0.05$). Thus, it can be said that trust, security, quality of electronic services, risk perception simultaneously influence purchasing decisions.

Test Coefficient of Determination (R^2)

The R^2 test is used to measure how far the model is capable of explaining variations in the dependent variable. In this study the coefficient of determination uses an adjusted value of R^2 .

Table 10. Coefficient of Determination (R^2)

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.886 ^a	0.785	0.781	0.342

Source : SPSS Processed Data Results

From table 10 of R^2 test results, an adjusted R^2 value of 0.781 or 78.1% was obtained. Thus, it can be explained that the variables of trust, security, quality of electronic services, and risk perception affect purchasing decisions by 78.1%. While the remaining 21.9% was influenced by other variables that were not studied in this study.

Multiple Regression Analysis

Multiple regression analysis is used in this study to prove the hypothesis of the effect of independent variables (trust, security, electronic service quality, and risk perception) partially or jointly on purchasing decisions.

Table 11. Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
(Constant)	0.069	0.233	
Belief	0.243	0.064	0.251
Security	0.101	0.061	0.106
Electronic Service Quality	0.599	0.076	0.555
Risk Perception	0.054	0.058	0.034

Source : SPSS Processed Data Results

The regression equation can be explained as follows: [1] The constant value (a) is 0.069 which means that if the value of the regression coefficient of the other variable is zero (0) then the purchase decision value (Y) is 0.069. [2] The value of the regression coefficient of the confidence variable (X₁) is 0.243, if the confidence variable is increased by 1 unit then the purchase decision (Y) will increase by 0.243 assuming the other independent variables are fixed. Conversely, if the confidence variable (X₁) decreases by 1 unit, then the purchase decision (Y) will decrease by 0.243 assuming the other respondent variables are fixed. [3] The value of the regression coefficient of the security variable (X₂) is 0.101, if the security variable is increased by 1 unit then the purchase decision (Y) will increase by 0.101 assuming the other independent variables are fixed. Conversely, if the security variable (X₂) decreases by 1 unit, then the purchase decision (Y) will decrease by 0.101 assuming the other respondent variables are fixed. [4] The regression coefficient value of the electronic service quality variable (X₃) is 0.599, if the electronic service quality variable is increased by 1 unit, the purchase decision (Y) will increase by 0.599 assuming other independent variables are fixed. Conversely, if the electronic service quality variable (X₃) decreases by 1 unit, then the purchase decision (Y) will decrease by 0.101 assuming the other respondent variables are of fixed value. [5] The value of the regression coefficient of the risk perception variable (X₄) is 0.054, if the risk perception variable is increased by 1 unit then the purchase decision (Y) will increase by 0.054 assuming the other independent variables are fixed. Conversely, if the risk perception variable (X₄) decreases by 1 unit, then the purchase decision (Y) will decrease by 0.054 assuming the other respondent variables are fixed.

Hypothesis Test (Test t)

The t-test is used to determine whether the independent variable partially affects the dependent variable. It is used to determine that the independent variables of trust, security, quality of electronic services, and risk perception, partially have a significant or no effect on the dependent variable of purchasing decisions at a significance level of 5%.

For the effect test see from the comparison of t_{table} and t_{count} : If the value of t is $t_{calculated} > t_{table}$ then there is an influence of the independent variable (X) on the dependent variable (Y) or the hypothesis is accepted. If the value of t is $t_{calculated} < t_{table}$ then there is no influence of the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.

This test is also carried out by comparing the significance value t with the predetermined significance level of 0.05, with the following test criteria: If the value is Significance (Sig). < probability 0.05 then there is an influence of the independent variable (X) on the independent variable (Y) or the hypothesis is accepted. If the value is Significance (Sig). > probability of 0.05 then there is no influence of the independent variable (X) on the dependent variable (Y) or the hypothesis is rejected.

Table 12. Hypothesis Test (Test t)

Hypothesis	T Count	T Table	Itself.	Conclusion
Hypothesis 1	3.821	1.972	0.000	Accepted
Hypothesis 2	1.662	1.972	0.098	Rejected
Hypothesis 3	7.890	1.972	0.000	Accepted
Hypothesis 4	0.937	1.972	0.350	Rejected

Source : SPSS Processed Data Results

From table 12 above, the test results can be partially explained as follows: [1] It is known that the trust variable has a t count of 3.821 while 1.972 (t table) so $t_{count} > t_{table}$ with a significance value for the trust variable of 0.000 which is smaller than 0.05. So H₀ is rejected and H₁ is accepted, so it can be concluded that the trust variable has a significant effect on the purchasing decisions of Shopee consumers in Pekanbaru. [2] It is known that the security variable has a count t of 1.662 while 1.972 (t table) so $t_{count} < t_{table}$ with a significance value for the security variable of 0.098 which is greater than 0.05. So H₀ is accepted and H₂ is

rejected, so it can be concluded that security variables do not have a significant effect on the purchasing decisions of Shopee consumers in Pekanbaru. [3] It is known that the electronic service quality variable has a t count of 7.890 while 1.972 (t table) so $t \text{ count} > t \text{ table}$ with a significance value for the electronic service quality variable of 0.000 which is smaller than 0.05. So H_0 is rejected and H_3 is accepted, so it can be concluded that the variable quality of electronic services has a significant effect on the purchasing decisions of Shopee consumers in Pekanbaru. [4] It is known that the risk perception variable has a t count of 0.937 while 1.972 (t table) so $t \text{ count} < t \text{ table}$ with a significance value for the risk perception variable of 0.350 which is greater than 0.05. So H_0 is accepted and H_4 is rejected, so it can be concluded that risk perception variables do not have a significant effect on the purchasing decisions of Shopee consumers in Pekanbaru.

Discussion of Research Results

Trust Has a Significant Effect on Purchasing Decisions (X1)

Buyer trust in sellers and online buying and selling sites is the main thing for consumers in determining purchase decisions, this shows that only consumers who have trust in e-commerce want to make transactions online, without trust it is impossible for e-commerce transactions to occur.

Based on the results of questionnaire testing that has been carried out that the trust variable has a significant effect on purchasing decisions. From respondents' responses to the trust variable, it can be seen that Shopee users have a sense of trust to make transactions in buying and selling activities at Shopee on the basis of honesty, competence and information provided. This is related to the characteristics of respondents who are dominated by millennials who are sensitive and responsive to technology. Shopee users will see product testimonials / reviews before buying the desired product so that it will be a consideration for users in determining purchase decisions. This means trust has a role to play in purchasing decisions. This explains that the trust that users feel is very good.

The results of this study are in line with Iskandar & Nasution's (2019) research and Solihin's (2020) research which says that trust variables have a positive and significant effect on purchasing decisions. And not in line with Saputra's research (2015) which in his research found that trust did not have a significant effect on purchasing decisions.

Security has no significant effect on purchasing decisions (X2)

Security in online transactions is a matter of how to prevent fraud or at least detect fraud in an information-based system. As important as the value of information is, the desired information should only be accessed and processed by certain people. This is intended to avoid information falling to irresponsible parties and can cause harm to the owner of the information. Therefore, the security of an information system must be guaranteed safe.

Based on the results of questionnaire testing that has been conducted that security variables do not have a significant effect on purchasing decisions. From the lowest average value of respondents' responses to security variables, it can be seen that Shopee users still have doubts about the security of their personal information data if provided to shopee services, this doubt is in line with the discussion of examples of cases previously discussed, namely related to theft of consumer personal data some e-commerce and traded in online black market forums (darkweb). This explains that the security felt by users is still in doubt, especially in terms of the security of personal information of Shopee users, where users still doubt the security of their personal data information to be provided to the Shopee application service.

The results of this study are in line with Saputra's research (2015) stating in his research that security has no influence on purchasing decisions and is not in line with the research of Rafidah (2017) and Sudjarmika (2017) which states that security variables have a positive and significant effect on purchasing decisions.

Electronic Service Quality Has a Significant Effect on Purchasing Decisions (X3)

The quality of electronic services is closely related to purchasing decisions. One of the keys to the success of a company is influenced by the company's ability to serve its consumers. The service provided must pay attention to the standard quality provided to consumers even must exceed what is expected so that customer satisfaction can be obtained. Providing the best service is a must that must be done by the company in order to survive and continue to gain customer trust.

Based on the results of questionnaire testing that has been carried out that the variable Electronic service quality has a significant effect on purchasing decisions. From the average value of respondents' responses to the Electronic Service Quality variable, it can be seen that Shopee users feel that the Shopee site has complete features and information as well as ease of accessing the Shopee site, of course, in this case it will complement and make it easier for users to feel the services provided. This means that the quality of electronic services has a role to play in purchasing decisions. This explains that the quality of electronic

services felt by users is very good, especially in terms of ease of using and accessing the Shopee application and the attention given by sellers to customers in full.

The results of this study are in line with Triana (2014) which states that service quality does not affect purchasing decisions and is not in line with Ernanda's (2017) research which states that service quality has a positive and significant effect on purchasing decisions.

Risk perception has no significant effect on purchasing decisions (X4)

In internet trading, risk is considered higher than physical trading because of the limited physical contact consumers have with the product, so consumers cannot supervise product performance before making a purchase Harris & Goode (2004).

Based on the results of questionnaire testing that has been carried out that risk perception variables do not have a significant effect on purchasing decisions. From the lowest average value of respondents' responses to risk perception variables, it can be seen that Shopee users still have doubts about the risk of becoming victims of fraud in buying products on the Shopee site, this doubt is in line with the example of a case in the previous discussion about fraud committed by sellers against buyers where the goods ordered do not come and the goods that come do not match those displayed on the site. This explains that users still feel they have the risk of becoming a victim of fraud when buying the desired product and the risk to the quality of the product sold is not as expected.

The results of this study are in line with Saifulloh's (2019) research stating that risk perception does not affect purchasing decisions and is not in line with Wahyuningtyas & Widiastuti's (2017) research which states that risk perception has a positive and significant effect on purchasing decisions.

CONCLUSION

Based on the data analysis in the discussion that has been carried out, the following conclusions can be drawn: [1] Trust has a significant positive effect on shopee consumer purchasing decisions in Pekanbaru, with the value of user trust in Shopee it will increase shopee consumer purchasing decisions in Pekanbaru. [2] Security does not affect the purchasing decisions of shopee consumers in Pekanbaru, this is because the level of security owned by Shopee is still doubtful by its users to make buying and selling transactions or provide personal data information. [3] The quality of electronic services has a positive and significant influence on the purchasing decisions of shopee consumers in Pekanbaru, with the provision of good quality services provided by Shopee will certainly further increase the level of purchasing decisions of shopee consumers in Pekanbaru. [4] Risk perception does not affect the purchasing decisions of shopee consumers in Pekanbaru, this is because users still feel there is a risk that they will become victims of fraud when buying the desired product and the risk to the quality of the products sold is not good.

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