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# Analysis of The Influence of Delivery Service Quality on Customer Satisfaction JNE Trucking Sub Agent Klaten

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**Abstract**

The purpose of this study is to analyze the effect of the quality of freight forwarding services on customer satisfaction by using five variables, namely Tangible, Reliability, Responsiveness, Assurance, Empathy, and the variable customer satisfaction as a dependent variable. The population is all JNE customers, sampling on 30 respondents, using non-probability sampling technique and accidental sampling approach, anyone who is met can sample. The method used is descriptive statistics, multiple linear regression, validity and reliability test, T test, F test and the determinant coefficient (R2). The results of the analysis, research indicators are valid and reliable, does not happen heteroscedasticity seta normally distributed.

***Keywords:*** Indicator, validity, heteroscedasticity, reliable, probability.

## 1. Introduction

Business competition in the current era of globalization is getting tougher, especially in the field of transportation services (Pearce, 2005). Developments that occur today, many transportation service companies are transforming from traditional freight forwarding services to modern transportation service companies (Cherry, 1998). This is due to the rapid development of technology the market requires business people to maintain the competitive position of competitors (Freund, 2006). The main goal of a business and the main key to a business is the consumer (Oja, 1983). To win the business competition, companies are competing to develop the right product marketing strategy (Frankfort-Nachmias et al., 2019). Quality of service can build satisfaction, customer loyalty, and help keep competitors at a distance. There are many expedition services that are known by the public such as JNE, TIKI, Pos Indonesia, J&T at this time. In addition, there are also companies engaged in expeditions that have a global (international) scale, such as FedEx and DHL. This is the cause of increasingly fierce business competition in the field of shipping services and document packages. Delivery service providers always try to provide the best service to attract consumers. One of the most popular shipping services in Indonesia, namely JNE, with the official name PT Tiki Jalur Nugraha Ekakurir (Tiki JNE). JNE is the largest and most comprehensive logistics service provider in Indonesia, with customers who use JNE services enough to be taken into account by competitors engaged in the same field. JNE provides shipping documents, vehicles, packages and many others. Currently, Indonesia has a representative office of PT. 105 JNE units, 563 branch offices and 13,863 agents and sub-agents. The growth and development of the JNE freight forwarding service business in Indonesia during the COVID-19 pandemic in 2020 reached 18.85%, and experienced an increase of up to 100 trillion per year. JTR or JNE Trucking is an expedition service / delivery service for heavy goods (min 10 kg), large quantities. Using a fleet of trucks by land and sea with competitive prices and lower shipping costs.

The reliability, consistency, responsibility and speed of the services provided, make JNE's credibility even higher in the eyes of customers and partners. The increase in foreign investment, domestic economic growth, and the development of information technology, as well as various product innovations developed, have made JNE's performance increasingly developed in the business world and the Indonesian people. People's lifestyles and the development of the business world have increased the demand for handling imported shipments, including small packages, document packages, to transportation, logistics, and distribution. This opportunity encourages JNE to expand its network to all major cities in Indonesia. More than 150 JNE locations have been connected to an on-line communication system, escorted by an effective and efficient system and access to information sites for consumers to

know the latest delivery status. JNE prioritizes human resources as well as technology, from X-Ray machines, GPS, to satellite communication tools. JNE's commitment and reliability has been proven by the achievement of various awards and ISO 9001:2008 certification for its quality management system as well as the Top Brand Award in the category of Courier Services in Indonesia. The Brand Award in the category of Courier Service Category in Indonesia is given based on the results of a national-scale survey under the implementation of Frontier Marketing from 2018 to 2022 and the results are (Table 1, Figure 1):

**Table 1:** Top Brand Index for Courier Service Category in Indonesia in 2018-2022.

| Brand | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Jne | 45.00% | TOP | 26.40% | TOP | 27.30% | TOP | 33.40% | TOP | 39.30% | TOP |
| J&T | 13.90% | TOP | 20.30% | TOP | 21.30% | TOP | 28.00% | TOP | 23.10% | TOP |
| Tiki | 13.60% | TOP | 12.60% | TOP | 10.80% | TOP | 11.20% | TOP | 11.10% | TOP |
| Indonesian Post | 11.60% | | 5.40% | | 7.70% | | 8.50% | | 8.50% | |
| Dhl | 3.50% | | 3.80% | | 4.10% | | 6.00% | | 6.90% | |

Data source, https://www.topbrand-award.com/

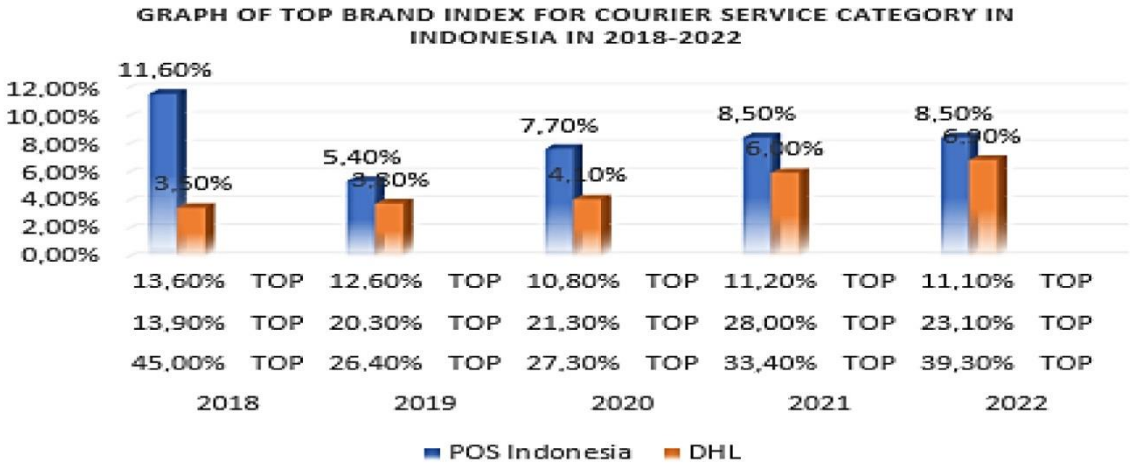


**Figure 1:** Graph of Top Brand Index for Courier Service Category in Indonesia in 2017-2022

Table 1, shows that the two companies that became the top brands in the express service category from 2018 to 2022 are JNE and J&T. In 2018, JNE's revenue was 45.0%, and J&T's revenue was 13.9%. In 2019, JNE fell to 26.4%, and J&T rose to 20.3%, in 2021, JNE's growth rate will be 27.3%, and J&T will also reach 21.3% and in 2022 it will increase to 39.3 %, and J&T fell to 23.1%. JNE and J&T have more advantages than other express services. Top Brand Index (TBI) is an award given to the best brands based on research on Indonesian consumers. The Top Brand Index itself is a barometer for measuring the success of a product brand in the market and a brand that obtains a Top Brand Index of at least 10% and according to the survey results is in the top three positions, then the brand will bear the title of the Top Brand award brand.

## 2. Methodology

### 2.1. Research Approach

The research method used is a qualitative descriptive approach, namely the design or research design used to examine natural research objects, real conditions, not set up like an experiment. Descriptive means that the results of the research will be described as clearly as possible based on the research that has been done without drawing a conclusion based on the results of the research (Shavelson, 1988).

### 2.2. Research design

The research objective is to examine the effect of service quality and customer satisfaction, using a quantitative approach based on the philosophy of positivism. The research design was in the form of associative correlation research with the aim of knowing the causal relationship between service quality and customer satisfaction. The

function of research is to establish and explain a phenomenon. The causal relationship is the influence of service quality on customer satisfaction.

### 2. 4. Population and Sample

#### 2.4.1.Population (Statistics)

According to Wikipedia, population or statistics is a collection of data that has the same characteristics and becomes the object of inference, statistical inference is based on two concepts the basis, the population as a whole of data, both real and imaginary, and the sample, as part of the population that is used to make inferences (approaches / depictions) of the original population. JNE Trucking Sub-Agent Klaten in 2022 as many as 56,065 customers. This can be seen from the number of connotes which are representatives or representatives of the number of customers who transact at JNE sub-agent klaten. Connote is data on the number of packages sent by the shipping company to various destinations.

#### 2.4.2.Sample

The sample is representative of the population to be studied. The sample must be representative or representative of the population so that the research objectives can be achieved properly.

#### 2.4.3.Sampling Technique

The sample used in the study used a sampling technique. The sampling technique that will be used in this research is probability sampling technique (Hartig, 2011). How to determine the size of the sample to be studied, the researcher uses the formula from slovin. Slovin's formula is used because it assumes that the population is normally distributed. Determination of sample size according to Slovin is formulated as follows:

$$s = \frac{n}{1 + n(e^2)}$$

Information:
$s$ : sample
$n$ : total population
$e$ : significance level 10%

### 2.5. Data Types and Sources

#### 2.5.1. Data Type

This type of data becomes a source of information for a study. The type of data in the study is divided into two, namely qualitative and quantitative data (Pyle, 1999).

#### 2.5.2. Data source

Secondary data is data that contains information and is related to research so that it supports primary data (Agresti,2012). Sources of data in the study, there are primary data in the form of filling out questionnaires to 30 respondents and secondary data obtained through literature studies from relevant sources in accordance with research such as scientific journals, literature books, and articles.

### 2.6. Data collection technique

The effect of service quality on customer satisfaction at JNE Trucking Sub-Agent Klaten. on service quality and customer satisfaction at JNE sub-agent klaten produces primary data. So that research is effective then (StataCorp, 2005):

a) Requesting the Head of Research and Development Center and PPM to make a research assignment letter.
b) Conducting research at JNE Trucking Sub-Agent Klaten, then the researcher goes to the HRD (Human Resource Department) office in terms of asking for research permission.
c) After receiving permission from the HRD (Human Resource Department) Manager, the researcher went straight to the office at JNE sub-agent klaten, sales counter.
d) Before giving the questionnaires to the respondents, the researcher first conducted a dialogue to be able to determine the respondents who were in accordance with the sample criteria that the researchers had determined.

e) Respondents were asked to fill out a questionnaire, which was then used as the researcher's raw data. With service quality as variable $X$ and customer satisfaction as variable $Y$. Operational definitions in this study can be shown in table 2.

### 2.7. Data collection technique

Research on the effect of service quality on customer satisfaction at JNE Trucking Sub-Agent Klaten, produces primary data. In order for research to be effective then:

a) Kapuslit and PPM prepare a research assignment letter.
b) Make a research permit.
c) The research was conducted at the sales counter department.
d) Researchers give questionnaires to respondents, researchers determine sample criteria.
e) Respondent data is used as raw data for researchers.
With service quality as variable $X$ and customer satisfaction as variable $Y$ (Table 2).

**Table 2:** Definition of Operational Variables

| **Variable** (2) | **Definition** (3) | **Indicator** (4) | **Items** (5) |
|---|---|---|---|
| Service Quality (X) | The expected level of excellence and control over these advantages is certainly to meet consumer desires | Tangible (physical evidence) | 1. JNE Sub-Agent Klaten has quite a lot of sales counter officers.<br>2. Sales counter employees of JNE Sub-Agent Klaten have a neat appearance. |
| | | Empathy (empathy | 1. Employees can explain the type of service that customers want.<br>2. Employees are friendly and polite when providing services. |
| | | Responsiveness (responsiveness) | 1. Employees are able to respond to customer complaints well.<br>2. Employees can provide information to customers quickly and clearly |
| | | Reliability (reliability) | 1. Employees perform service processes in accordance with SOP.<br>2. Timely delivery of goods as promised. |
| | | Assurance (guarantee) | 1. Guarantee that the package is not damaged.<br>2. Guaranteed compensation for lost packages. |
| Consumer Satisfaction (Y) | Feelings of pleasure and disappointment of employees towards the expected service performance | Feelings of satisfaction | 1. Satisfied with the quality of service provided.<br>2. The quality of the delivery of the goods provided is as expected. |
| | | Fulfilling consumer expectations | 1. Packages sent by customers arrive on time.<br>2. Packages sent by customers are not damaged products to others<br>3. Customers will recommend services to others |

### 2.8. Variable Measurement Scale

Variable measurement is the process of assigning values or attributes to objects. There are 4 measurement scales, namely nominal, ordinal, interval and ratio. The part of the ordinal scale that is often used in research is the Likert scale, where JNE Trucking Sub-Agent Klaten respondents are asked to choose one of five answer choices written in numbers 1-5, each indicating strongly disagree (1), disagree (2 ), neutral or disagree (3), agree (4), strongly agree (5).

### 2.9. Research Instrument Test

Instrument testing is needed to test the validity and accuracy of the research instrument (Pyle, 1999). In this study, the following instrument tests will be carried out:

### 2.10. Variable Measurement Scale

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### 2.11. Research Instrument Test

Instrument testing is needed to test the validity and accuracy of the research instrument (Pyle, 1999). In this study, the following instrument tests will be carried out:

#### 2.11.1. Validity test

To test the validity of the research instrument, the Pearson Product Moment Pearson's correlation formula will be used, namely by correlating each question with a total value, then the correlation results are compared with the critical number with a significant level of 5% using the formula (Altman, 1994).

Information:

$r$ : correlation coefficient
$X$ : question score
$Y$ : total score
$n$ : number of samples

$$r = \frac{N(\sum XY) - (\sum X \sum Y}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

From the results of the study obtained a significance level of 5%.

#### 2.11.2. Reliability Test

Reliability test is conducted to test how reliable or appropriate the research instrument is. The research instrument can be said to be reliable if it is used several times to measure the same object, it will produce the same data (Pyle, 1999). The reliability test in this study was carried out using the Cronbach Alpha test (a) with the following formula (Altman, 1994).

$$\alpha = \frac{kr}{1 + (k-1)r}$$

Information:

$\alpha$ : reliability coefficient
$r$ : average coefficient
$k$ : number of independent variables in the equation

A variable is said to be reliable if it gives a Cronbach Alpha value > 0.60.

### 2.12. Classic assumption test

#### 2.12.1. Normality test

The data normality test is a test that aims to determine whether the independent variable and the dependent variable are normally distributed or not (Bewick, 2004). This test uses 2 analyzes, namely statistical analysis and graphic analysis. For statistical analysis, the tool used is Kolmogorov Smirnov with a rate of 5% or 0.05. If the significance > 0.05 then the data can be said to be normally distributed, otherwise if the significance is < 0.05 then the data can be said to be not normally distributed. The graphical analysis tool used is the Probability Plot (P-Plot). If the data spreads around the diagonal line and follows the direction of the diagonal line, it can be said that the results of

the study are normally distributed. On the other hand, if the data is spread far apart and does not follow a diagonal line, the results of the study are not normally distributed (Siegel, 2011).

### 2.12.2. Heteroscedasticity Test

Heteroscedasticity test is a test to determine the occurrence of variance inequality from the residuals in the regression model because the regression model is considered good if there is no heteroscedasticity problem. Heteroscedasticity causes the coefficient of determination to be very high and the estimate to be inefficient (Bewick, 2004). To detect the presence or absence of heteroscedasticity, by looking at the scatterplot. Decision making basis:

a. If there is a certain pattern, such as the dots that form a certain pattern that is regular and (wavy, widened then narrowed) then it indicates that heteroscedasticity has occurred.
b. If there is no clear pattern, and the points spread above and below the number 0 on the Y axis, then there is no heteroscedasticity.

### 2.13. Data analysis method

The analytical method that will be used in this study will be adapted to the research objectives, namely knowing the effect of price and service quality on customer satisfaction. Based on this, the data analysis method that will be used in this study is simple linear regression and hypothesis testing consisting of t test and coefficient of determination (R2).

### 2.13.1. Simple Linear Regression Analysis

Regression analysis is carried out when the relationship between two variables is a causal or functional relationship (Pyle, 1999). To analyze the relationship between variables $X$ and $Y$ in this study where the purpose of this study was to determine the effect of service quality on customer satisfaction of JNE sub-agent Klaten. Then a simple linear regression formula will be used as follows:

$$Y' = a + bX$$

Information:

$Y'$: Subject in the predicted dependent variable
$a$ : Price $Y$ if $X = 0$ (constant price)
$b$ : Regression coefficient which shows the number of increase or decrease in the dependent variable based on the independent variable.
$X$ : Subject on the independent variable that has a certain value

### 4.11. Hypothesis testing

### 4.11.1. T test

The $t$ test (partial) aims to determine the effect of each independent variable on the dependent variable. $T$-test was conducted in this study to determine the effect of service quality $(X)$ partially on customer satisfaction $(Y)$. The significance of the influence of the independent variable on the dependent variable can be known if $t$ count is greater than $t$ table, this indicates that the hypothesis is accepted, on the contrary if $t$ count is smaller than $t$ table, then the hypothesis is rejected. The calculated $t$ value can be seen in the regression results and the $t$ table value is obtained through significance = 0.05 (5%).

**Decision-making:**

If $t$ arithmetic $<$ $t$ table at = 0.05 then $H_0$ is accepted and $H_a$ is rejected. If $t$ arithmetic $>$ $t$ table at = 0.05 then H0 is rejected and Ha is accepted.

To test the effect of significance, it is necessary to calculate the $t$ value with the following formula:

$$t = \frac{b}{s(b)}$$

Information:

$t$: result of $t$ count
$b$: standard error of independent variable
$s$: independent variable regression coefficient

### 4.11.2. Coefficient of Determination Test ($R^2$)

The coefficient of determination test is used to determine the proportion of the direct influence of the independent variable on the dependent variable. $R^2$ will show the percentage of the influence of the independent variable (service quality) on the dependent variable (customer satisfaction).

The magnitude of $R$ Square is getting closer to 1, then the relationship between the two variables is getting stronger. Conversely, if $R$ Square is close to 0 then the relationship between the two variables is getting weaker. The formula for obtaining the coefficient of determination is as follows:

$$R^2 = \frac{SSR}{TSS}$$

Information:

$R^2$ : coefficient of determination
$SSR$ : regression diversity
$TSS$ : total diversity

### 4.12. Troubleshooting Framework

From the problems that have been described previously, a research problem solving framework can be arranged. (See Figure 2).

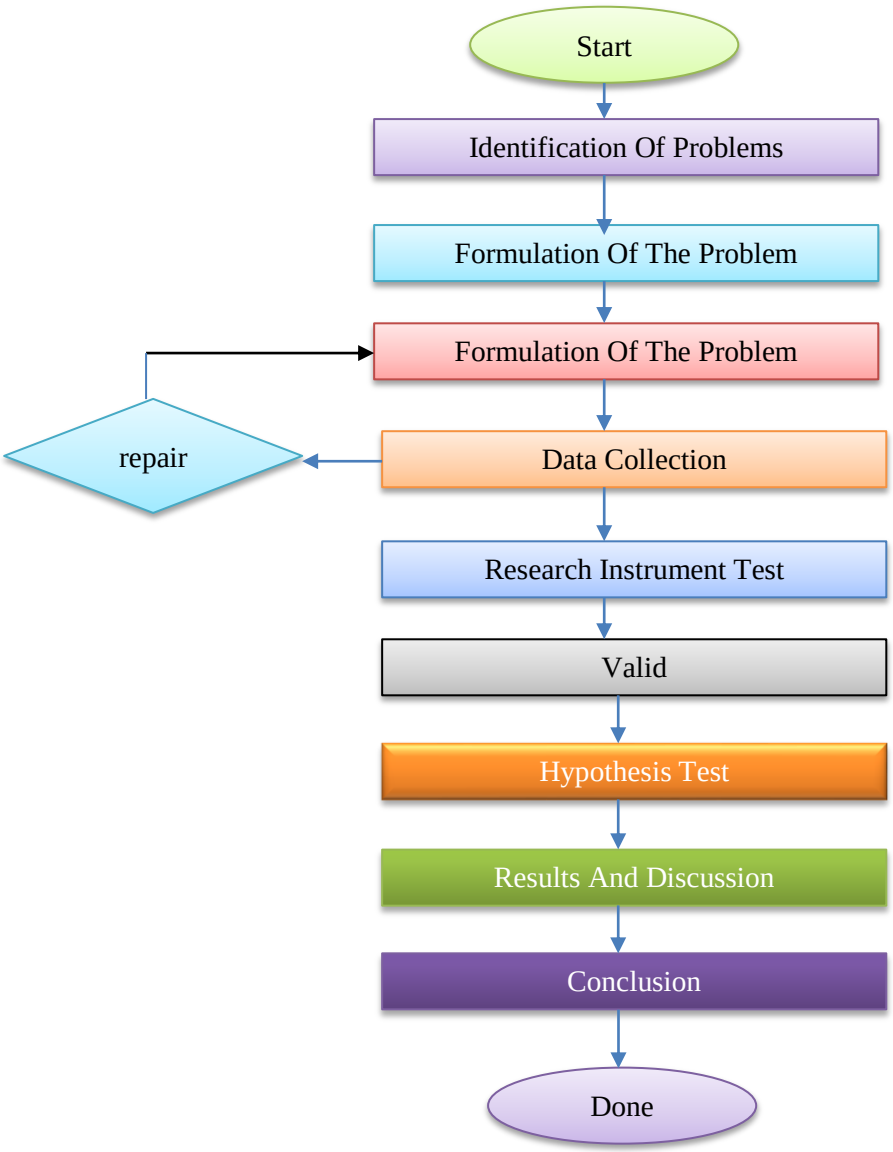


**Figure 2:** Research Problem Solving Framework

## 3. Results and Discussion

### 3.1. Discussion

#### 3.1.1. Descriptive Statistical Analysis

Descriptive statistical analysis aims to collect, process and analyze data so that it can be presented in a better view (Agresti,2012). Descriptive statistics is a method to describe and provide an overview of the frequency distribution of the variables in research. The ordinal variable used to measure customer satisfaction is a Likert scale (see table 3).

**Table 3:** Likert scale

| No | Question | Score |
|---|---|---|
| 1 | SS= Strongly agree | 5 |
| 2 | S= Agree | 4 |
| 3 | KS = Disagree | 3 |
| 4 | TS = Disagree | 2 |
| 5 | STS = Strongly disagree | 1 |

#### 3.1.2. Respondents Based on Gender

Description of respondents JNE Trucking Sub-Agent Klaten by gender (see table 4).

**Table 4:** Respondents of JNE Trucking by Gender

| Gender | Number of People | Percentage (%) |
|---|---|---|
| Male | 35 | 35% |
| Female | 65 | 65% |
| Total | 100 | 100% |

#### 3.1.3. Respondents Based on Age.

Description of respondents JNE Trucking Sub-Agent Klaten by Age (see table 5).

**Table 5:** Respondents of JNE Trucking by Age

| Age | Number of People | Percentage (%) |
|---|---|---|
| 16-20 | Years 8 | 8% |
| 21-25 | Years 44 | 44% |
| 26-30 | Years 30 | 30% |
| 31-35 | Years 18 | 18% |
| Total | 100 | 100% |

#### 3.1.4. Respondents by Occupation

Description of JNE Trucking Sub-Agent Klaten respondents based on occupation. (see table 6).

**Table 6:** Respondents by Occupation

| Employment | Number of People | Percentage (%) |
|---|---|---|
| Student / Student | 35 | 35% |
| Employee / Employee | 30 | 30% |
| Entrepreneur | 25 | 25% |
| Others | 10 | 10% |
| Quantity | 100 | 100% |

#### 3.1.5. JNE User Respondent Data Presentation

Description of data presentation based on users of JNE Trucking Sub-Agent Klaten (Table 7).

**Table 7.** Presentation of Respondents by JNE users

| JNE Users | Number of People | Percentage (%) |
|---|---|---|
| 3-6 | Times 40 | 40% |
| Above 6 | times 60 | 60% |
| Quantity | 100 | 100% |

## 3.2. Analysis

### 3.2.1. Validity and Reliability Test

Validity test, validity comes from the word validity which means the extent to which the accuracy and accuracy of a measuring instrument in carrying out the function of measure, or a measure that indicates that the variable being measured is really the variable to be studied. The test is said to have high validity if the test produces precise and accurate measurement results. So validity is the accuracy of the measurement results.

In testing the validity of the questionnaire, it is divided into 2, namely factor validity and item validity. From the results of the correlation calculation, the correlation coefficient is obtained which is used to measure the level of validity.

Whether or not an item is used, a significant correlation coefficient test is carried out at a significant level of 0.05, meaning that an item is considered valid if it has a significant correlation with the total score. The validity test was carried out by researchers using the SPSS program. The testing technique that researchers use is Bivariate Pearson (Pearson's Product Moment). The analysis was carried out by correlating each item with a total score. The total score is the sum of all items. Question items that are significantly correlated with the total score indicate that the item provides support for what will be revealed, it is valid. If r count r table (2-sided test with sig. 0.05) then the instrument or items questions significantly correlated to the total score (valid). The steps in testing this validity (see picture 3), Analyze Correlate Bivariate (see picture 4), and Bivariate Correlation (see picture 5):

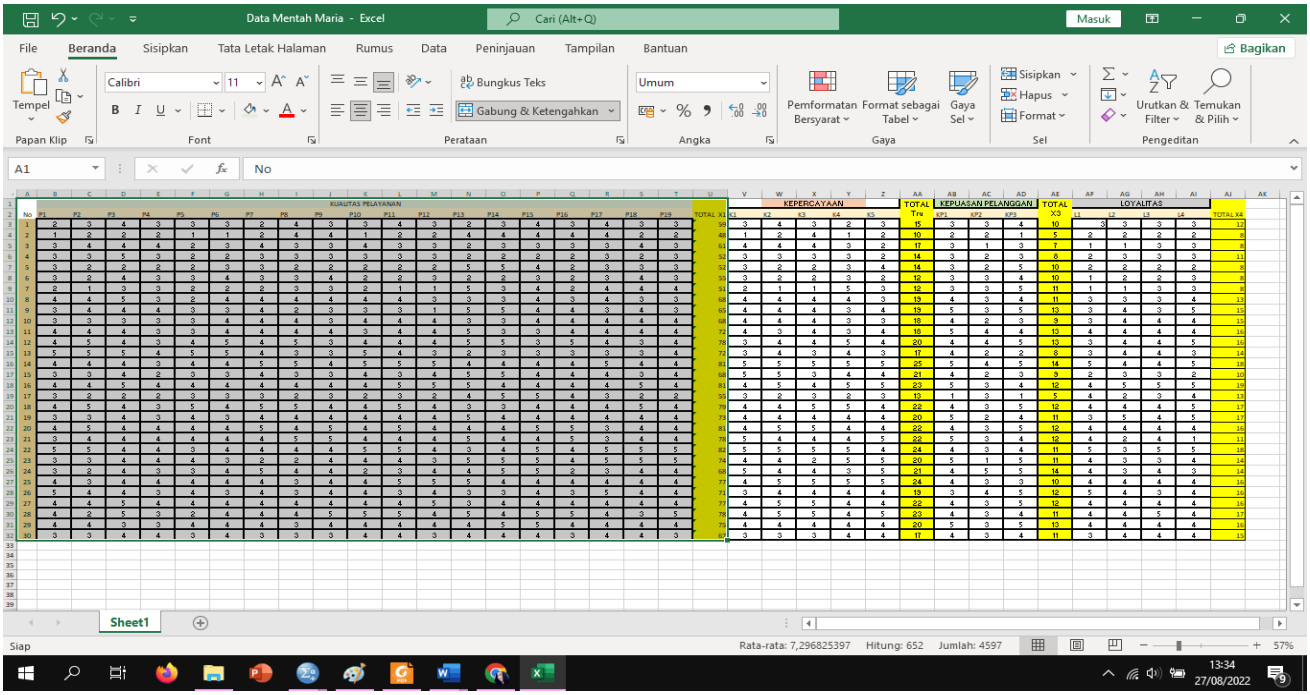


**Figure 3:** Sources of Respondent Data Processing, 2022

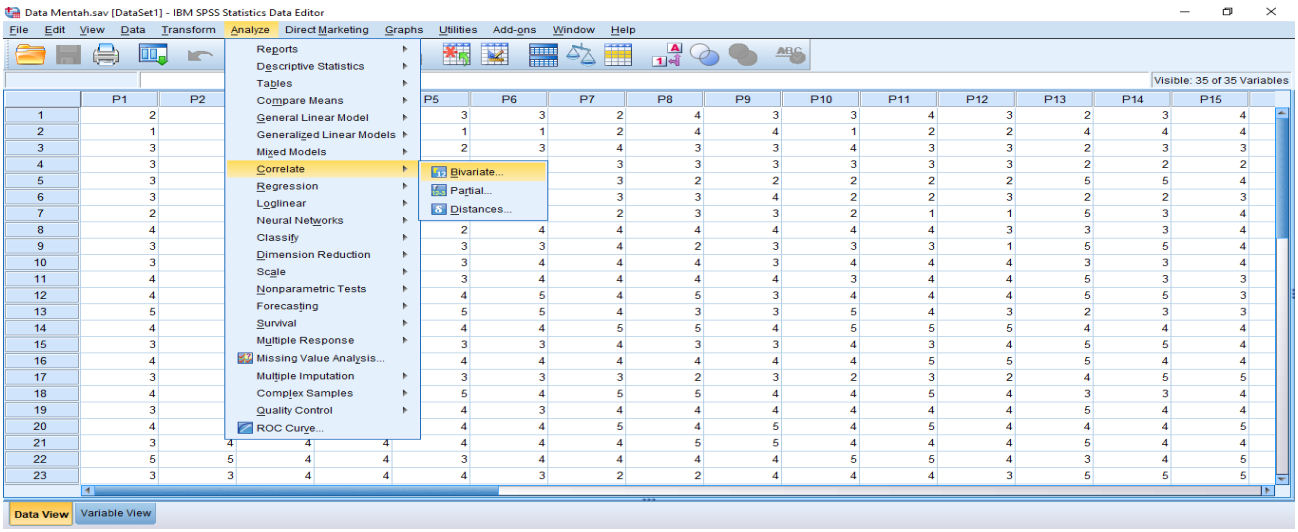

**Figure 4:** Analyze Correlate Bivariate

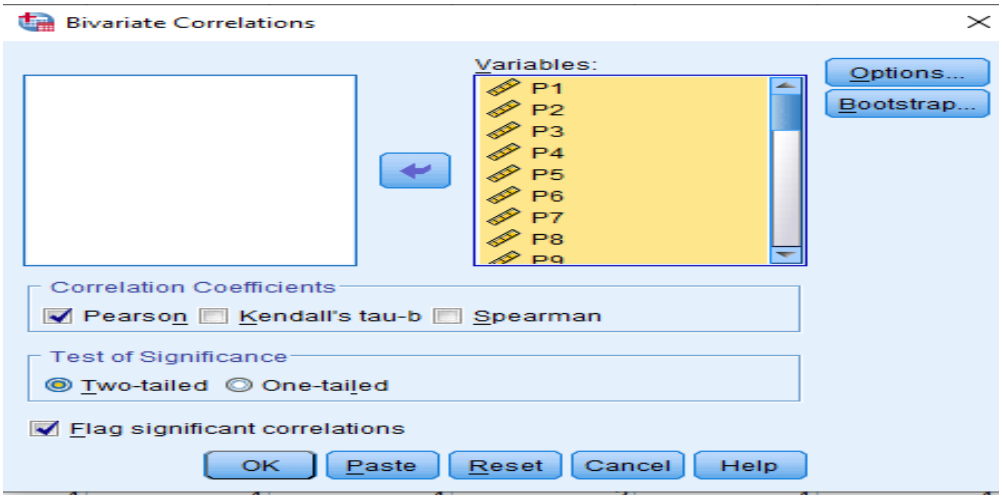


**Figure 5:** Bivariate Correlation

### 3.2.2 Correlations

From the respondents' data collected in the study, raw data were obtained (see table 8) as follows:

**Table 8:** [DataSet1] F:\MARIA\ Raw Data.sav

| | | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 | P13 | P14 | P15 | P16 | P17 | P18 | | Service Quality |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P1 | Pearson Correlation | 1 | .690** | .514** | .394* | .592** | .717** | .653** | .174 | .288 | .725** | .615** | .570** | -.110 | -.035 | .052 | .256 | .266 | .363* | .559** | .728** |
| | Sig. (2-tailed) | | .000 | .004 | .031 | .001 | .000 | .000 | .359 | .123 | .000 | .000 | .001 | .561 | .854 | .786 | .173 | .155 | .049 | .001 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P2 | Pearson Correlation | .690** | 1 | .452* | .516** | .619** | .568** | .592** | .404* | .220 | .668** | .641** | .449* | -.204 | -.034 | -.126 | .463** | .160 | .359 | .317 | .693** |
| | Sig. (2-tailed) | .000 | | .012 | .003 | .000 | .001 | .001 | .027 | .243 | .000 | .000 | .013 | .280 | .857 | .506 | .010 | .398 | .051 | .088 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P3 | Pearson Correlation | .514** | .452* | 1 | .583** | .324 | .455* | .377* | .299 | .344 | .616** | .507** | .471** | -.230 | -.335 | -.275 | .079 | .086 | .249 | .441* | .516** |
| | Sig. (2-tailed) | .004 | .012 | | .001 | .081 | .011 | .040 | .108 | .062 | .000 | .004 | .009 | .222 | .070 | .142 | .679 | .651 | .185 | .015 | .004 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P4 | Pearson Correlation | .394* | .516** | .583** | 1 | .437* | .429* | .237 | .072 | .309 | .539** | .486** | .271 | -.092 | -.102 | 0.000 | .207 | .031 | .613** | .413* | .541** |
| | Sig. (2-tailed) | .031 | .003 | .001 | | .016 | .018 | .206 | .707 | .096 | .002 | .006 | .147 | .627 | .592 | 1.000 | .272 | .873 | .000 | .023 | .002 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P5 | Pearson Correlation | .592** | .619** | .324 | .437* | 1 | .630** | .490** | .247 | .266 | .547** | .575** | .553** | .029 | .123 | .096 | .373* | .182 | .513** | .478** | .715** |
| | Sig. (2-tailed) | .001 | .000 | .081 | .016 | | .000 | .006 | .188 | .155 | .002 | .001 | .002 | .878 | .517 | .615 | .042 | .337 | .004 | .008 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P6 | Pearson Correlation | .717** | .568** | .455* | .429* | .630** | 1 | .631** | .377* | .244 | .614** | .638** | .580** | -.031 | .073 | .054 | .318 | .012 | .374* | .470** | .722** |
| | Sig. (2-tailed) | .000 | .001 | .011 | .018 | .000 | | .000 | .040 | .193 | .000 | .000 | .001 | .873 | .701 | .777 | .087 | .950 | .042 | .009 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P7 | Pearson Correlation | .653** | .592** | .377* | .237 | .490** | .631** | 1 | .472** | .387* | .533** | .570** | .630** | .028 | .108 | .106 | .354 | -.047 | .343 | .383* | .700** |
| | Sig. (2-tailed) | .000 | .001 | .040 | .206 | .006 | .000 | | .008 | .035 | .002 | .001 | .000 | .885 | .571 | .578 | .055 | .804 | .063 | .037 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P8 | Pearson Correlation | .174 | .404* | .299 | .072 | .247 | .377* | .472** | 1 | .503** | .329 | .501** | .590** | -.029 | -.182 | -.052 | .428* | .242 | .174 | .297 | .516** |
| | Sig. (2-tailed) | .359 | .027 | .108 | .707 | .188 | .040 | .008 | | .005 | .076 | .005 | .001 | .878 | .336 | .787 | .018 | .197 | .357 | .112 | .003 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P9 | Pearson Correlation | .288 | .220 | .344 | .309 | .266 | .244 | .387* | .503** | 1 | .311 | .505** | .527** | .156 | -.035 | .392* | .520** | .219 | .348 | .453* | .590** |
| | Sig. (2-tailed) | .123 | .243 | .062 | .096 | .155 | .193 | .035 | .005 | | .095 | .004 | .003 | .409 | .853 | .032 | .003 | .245 | .060 | .012 | .001 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P10 | Pearson Correlation | .725** | .668** | .616** | .539** | .547** | .614** | .533** | .329 | .311 | 1 | .789** | .619** | -.051 | -.006 | .089 | .491** | .419* | .400* | .668** | .816** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .002 | .002 | .000 | .002 | .076 | .095 | | .000 | .000 | .791 | .975 | .639 | .006 | .021 | .028 | .000 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P11 | Pearson Correlation | .615** | .641** | .507** | .486** | .575** | .638** | .570** | .501** | .505** | .789** | 1 | .736** | .052 | .089 | .264 | .645** | .354 | .402* | .536** | .873** |
| | Sig. (2-tailed) | .000 | .000 | .004 | .006 | .001 | .000 | .001 | .005 | .004 | .000 | | .000 | .786 | .638 | .159 | .000 | .055 | .028 | .002 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P12 | Pearson Correlation | .570** | .449* | .471** | .271 | .553** | .580** | .630** | .590** | .527** | .619** | .736** | 1 | .024 | .012 | .086 | .434* | .377* | .391* | .565** | .783** |
| | Sig. (2-tailed) | .001 | .013 | .009 | .147 | .002 | .001 | .000 | .001 | .003 | .000 | .000 | | .898 | .951 | .650 | .017 | .040 | .032 | .001 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P13 | Pearson Correlation | -.110 | -.204 | -.230 | -.092 | .029 | -.031 | .028 | -.029 | .156 | -.051 | .052 | .024 | 1 | .676** | .368* | .436* | .146 | .138 | .275 | .233 |
| | Sig. (2-tailed) | .561 | .280 | .222 | .627 | .878 | .873 | .885 | .878 | .409 | .791 | .786 | .898 | | .000 | .046 | .016 | .441 | .468 | .141 | .214 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P14 | Pearson Correlation | -.035 | -.034 | -.335 | -.102 | .123 | .073 | .108 | -.182 | -.035 | -.006 | .089 | .012 | .676** | 1 | .610** | .405* | .057 | .023 | .126 | .235 |
| | Sig. (2-tailed) | .854 | .857 | .070 | .592 | .517 | .701 | .571 | .336 | .853 | .975 | .638 | .951 | .000 | | .000 | .026 | .765 | .906 | .507 | .211 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P15 | Pearson Correlation | .052 | -.126 | -.275 | 0.000 | .096 | .054 | .106 | -.052 | .392* | .089 | .264 | .086 | .368* | .610** | 1 | .349 | .280 | .277 | .310 | .319 |
| | Sig. (2-tailed) | .786 | .506 | .142 | 1.000 | .615 | .777 | .578 | .787 | .032 | .639 | .159 | .650 | .046 | .000 | | .059 | .135 | .138 | .096 | .086 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P16 | Pearson Correlation | .256 | .463** | .079 | .207 | .373* | .318 | .354 | .428* | .520** | .491** | .645** | .434* | .436* | .405* | .349 | 1 | .256 | .150 | .365* | .671** |
| | Sig. (2-tailed) | .173 | .010 | .679 | .272 | .042 | .087 | .055 | .018 | .003 | .006 | .000 | .017 | .016 | .026 | .059 | | .172 | .428 | .047 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P17 | Pearson Correlation | .266 | .160 | .086 | .031 | .182 | .012 | -.047 | .242 | .219 | .419* | .354 | .377* | .146 | .057 | .280 | .256 | 1 | .385* | .498** | .413* |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sig. (2-tailed) | .155 | .398 | .651 | .873 | .337 | .950 | .804 | .197 | .245 | .021 | .055 | .040 | .441 | .765 | .135 | .172 | | .036 | .005 | .023 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P18 | Pearson Correlation | .363* | .359 | .249 | .613** | .513** | .374* | .343 | .174 | .348 | .400* | .402* | .391* | .138 | .023 | .277 | .150 | .385* | 1 | .621** | .602** |
| | Sig. (2-tailed) | .049 | .051 | .185 | .000 | .004 | .042 | .063 | .357 | .060 | .028 | .028 | .032 | .468 | .906 | .138 | .428 | .036 | | .000 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| P19 | Pearson Correlation | .559** | .317 | .441* | .413* | .478** | .470** | .383* | .297 | .453* | .668** | .536** | .565** | .275 | .126 | .310 | .365* | .498** | .621** | 1 | .752** |
| | Sig. (2-tailed) | .001 | .088 | .015 | .023 | .008 | .009 | .037 | .112 | .012 | .000 | .002 | .001 | .141 | .507 | .096 | .047 | .005 | .000 | | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Service Quality | Pearson Correlation | .728** | .693** | .516** | .541** | .715** | .722** | .700** | .516** | .590** | .816** | .873** | .783** | .233 | .235 | .319 | .671** | .413* | .602** | .752** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .004 | .002 | .000 | .000 | .000 | .003 | .001 | .000 | .000 | .000 | .214 | .211 | .086 | .000 | .023 | .000 | .000 | |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| K1 | Pearson Correlation | .457* | .397* | .406* | .338 | .392* | .517** | .700** | .285 | .371* | .583** | .582** | .603** | .159 | .268 | .304 | .339 | .125 | .509** | .568** | .692** |
| | Sig. (2-tailed) | .011 | .030 | .026 | .067 | .032 | .003 | .000 | .127 | .044 | .001 | .001 | .000 | .401 | .152 | .102 | .066 | .511 | .004 | .001 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| K2 | Pearson Correlation | .582** | .611** | .611** | .482** | .499** | .520** | .653** | .392* | .443* | .799** | .811** | .756** | .033 | .207 | .254 | .561** | .322 | .384* | .596** | .836** |
| | Sig. (2-tailed) | .001 | .000 | .000 | .007 | .005 | .003 | .000 | .032 | .014 | .000 | .000 | .000 | .862 | .273 | .175 | .001 | .082 | .036 | .001 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| K3 | Pearson Correlation | .494** | .573** | .319 | .284 | .300 | .393* | .735** | .595** | .570** | .523** | .736** | .666** | -.002 | .096 | .221 | .628** | .218 | .220 | .290 | .694** |
| | Sig. (2-tailed) | .006 | .001 | .085 | .128 | .107 | .032 | .000 | .001 | .001 | .003 | .000 | .000 | .992 | .613 | .240 | .000 | .247 | .242 | .121 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| K4 | Pearson Correlation | .592** | .415* | .443* | .470** | .568** | .491** | .374* | .248 | .264 | .668** | .500** | .471** | .294 | .103 | .134 | .256 | .479** | .630** | .747** | .706** |
| | Sig. (2-tailed) | .001 | .022 | .014 | .009 | .001 | .006 | .042 | .186 | .158 | .000 | .005 | .009 | .115 | .588 | .480 | .172 | .007 | .000 | .000 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| K5 | Pearson Correlation | .397* | .187 | .223 | .295 | .498** | .443* | .441* | .226 | .433* | .443* | .568** | .538** | .658** | .577** | .526** | .465** | .353 | .505** | .658** | .736** |
| | Sig. (2-tailed) | .030 | .323 | .237 | .114 | .005 | .014 | .015 | .229 | .017 | .014 | .001 | .002 | .000 | .001 | .003 | .010 | .056 | .004 | .000 | .000 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Trust | Pearson Correlation | .647** | .565** | .516** | .480** | .576** | .602** | .740** | .450* | .532** | .774** | .820** | .776** | .283 | .312 | .362* | .578** | .386* | .569** | .727** | .936** |
| | Sig. (2-tailed) | .000 | .001 | .004 | .007 | .001 | .000 | .000 | .013 | .002 | .000 | .000 | .000 | .130 | .094 | .050 | .001 | .035 | .001 | .000 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| KP1 | Pearson Correlation | .384* | .470** | .486** | .518** | .508** | .500** | .477** | .320 | .382* | .588** | .564** | .490** | .389* | .207 | .095 | .395* | .277 | .627** | .652** | .729** |
| | Sig. (2-tailed) | .036 | .009 | .006 | .003 | .004 | .005 | .008 | .084 | .037 | .001 | .001 | .006 | .034 | .272 | .616 | .031 | .138 | .000 | .000 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| KP2 | Pearson Correlation | .315 | .107 | .117 | -.048 | .210 | .397* | .427* | .424* | .296 | -.044 | .168 | .306 | .150 | .094 | .159 | .042 | .119 | .118 | .132 | .303 |
| | Sig. (2-tailed) | .090 | .572 | .539 | .799 | .266 | .030 | .019 | .020 | .113 | .816 | .374 | .100 | .428 | .623 | .400 | .824 | .532 | .535 | .488 | .104 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| KP3 | Pearson Correlation | .279 | .227 | .243 | .273 | .313 | .295 | .295 | .183 | .195 | .216 | .161 | .207 | .232 | .158 | .200 | -.013 | .260 | .594** | .504** | .409* |
| | Sig. (2-tailed) | .135 | .228 | .196 | .144 | .092 | .113 | .113 | .333 | .301 | .251 | .396 | .273 | .217 | .406 | .289 | .947 | .166 | .001 | .005 | .025 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Customer Satisfaction | Pearson Correlation | .421* | .352 | .371* | .337 | .451* | .509** | .511** | .387* | .371* | .340 | .382* | .426* | .337 | .202 | .201 | .176 | .292 | .607** | .578** | .627** |
| | Sig. (2-tailed) | .020 | .056 | .043 | .068 | .012 | .004 | .004 | .034 | .044 | .066 | .037 | .019 | .068 | .285 | .287 | .352 | .117 | .000 | .001 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| L1 | Pearson Correlation | .623** | .460* | .207 | .273 | .563** | .447* | .496** | .327 | .537** | .507** | .726** | .597** | .188 | .309 | .528** | .524** | .481** | .375* | .499** | .754** |
| | Sig. (2-tailed) | .000 | .011 | .272 | .145 | .001 | .013 | .005 | .078 | .002 | .004 | .000 | .000 | .321 | .097 | .003 | .003 | .007 | .041 | .005 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| L2 | Pearson Correlation | .550** | .486** | .460* | .284 | .602** | .501** | .510** | .298 | .276 | .562** | .703** | .602** | .178 | .125 | .088 | .442* | .334 | .301 | .423* | .687** |
| | Sig. (2-tailed) | .002 | .006 | .010 | .128 | .000 | .005 | .004 | .110 | .140 | .001 | .000 | .000 | .346 | .510 | .644 | .015 | .071 | .106 | .020 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| L3 | Pearson Correlation | .594** | .467** | .484** | .499** | .479** | .634** | .582** | .513** | .455* | .705** | .804** | .670** | .196 | .131 | .284 | .534** | .279 | .459* | .681** | .826** |
| | Sig. (2-tailed) | .001 | .009 | .007 | .005 | .007 | .000 | .001 | .004 | .012 | .000 | .000 | .000 | .300 | .490 | .128 | .002 | .135 | .011 | .000 | .000 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L4 | Pearson Correlation | .506** | .433* | .275 | .294 | .407* | .372* | .384* | .174 | .138 | .443* | .567** | .310 | .080 | .089 | .176 | .329 | .452* | .441* | .318 | .540** |
| | Sig. (2-tailed) | .004 | .017 | .142 | .115 | .026 | .043 | .036 | .357 | .468 | .014 | .001 | .095 | .672 | .638 | .352 | .075 | .012 | .015 | .087 | .002 |
| | N | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Loyalty | Pearson Correlation | .681** | .553** | .415* | .392* | .619** | .575** | .585** | .380* | .419* | .653** | .833** | .646** | .191 | .202 | .328 | .545** | .474** | .467** | .562** | .834** |

| K1 | K2 | K3 | K4 | K5 | Trust | KP1 | KP2 | KP3 | Customer Satisfaction | L1 | L2 | L3 | L4 | Loyalty |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| .457* | .582** | .494** | .592** | .397* | .647** | .384* | .315 | .279 | .421* | .623** | .550** | .594** | .506** | .681** |
| .011 | .001 | .006 | .001 | .030 | .000 | .036 | .090 | .135 | .020 | .000 | .002 | .001 | .004 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .397* | .611** | .573** | .415* | .187 | .565** | .470** | .107 | .227 | .352 | .460* | .486** | .467** | .433* | .553** |
| .030 | .000 | .001 | .022 | .323 | .001 | .009 | .572 | .228 | .056 | .011 | .006 | .009 | .017 | .002 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .406* | .611** | .319 | .443* | .223 | .516** | .486** | .117 | .243 | .371* | .207 | .460* | .484** | .275 | .415* |
| .026 | .000 | .085 | .014 | .237 | .004 | .006 | .539 | .196 | .043 | .272 | .010 | .007 | .142 | .023 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .338 | .482** | .284 | .470** | .295 | .480** | .518** | -.048 | .273 | .337 | .273 | .284 | .499** | .294 | .392* |
| .067 | .007 | .128 | .009 | .114 | .007 | .003 | .799 | .144 | .068 | .145 | .128 | .005 | .115 | .032 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .392* | .499** | .300 | .568** | .498** | .576** | .508** | .210 | .313 | .451* | .563** | .602** | .479** | .407* | .619** |
| .032 | .005 | .107 | .001 | .005 | .001 | .004 | .266 | .092 | .012 | .001 | .000 | .007 | .026 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .517** | .520** | .393* | .491** | .443* | .602** | .500** | .397* | .295 | .509** | .447* | .501** | .634** | .372* | .575** |
| .003 | .003 | .032 | .006 | .014 | .000 | .005 | .030 | .113 | .004 | .013 | .005 | .000 | .043 | .001 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .700** | .653** | .735** | .374* | .441* | .740** | .477** | .427* | .295 | .511** | .496** | .510** | .582** | .384* | .585** |
| .000 | .000 | .000 | .042 | .015 | .000 | .008 | .019 | .113 | .004 | .005 | .004 | .001 | .036 | .001 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .285 | .392* | .595** | .248 | .226 | .450* | .320 | .424* | .183 | .387* | .327 | .298 | .513** | .174 | .380* |
| .127 | .032 | .001 | .186 | .229 | .013 | .084 | .020 | .333 | .034 | .078 | .110 | .004 | .357 | .038 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .371* | .443* | .570** | .264 | .433* | .532** | .382* | .296 | .195 | .371* | .537** | .276 | .455* | .138 | .419* |
| .044 | .014 | .001 | .158 | .017 | .002 | .037 | .113 | .301 | .044 | .002 | .140 | .012 | .468 | .021 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .583** | .799** | .523** | .668** | .443* | .774** | .588** | -.044 | .216 | .340 | .507** | .562** | .705** | .443* | .653** |
| .001 | .000 | .003 | .000 | .014 | .000 | .001 | .816 | .251 | .066 | .004 | .001 | .000 | .014 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .582** | .811** | .736** | .500** | .568** | .820** | .564** | .168 | .161 | .382* | .726** | .703** | .804** | .567** | .833** |
| .001 | .000 | .000 | .005 | .001 | .000 | .001 | .374 | .396 | .037 | .000 | .000 | .000 | .001 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .603** | .756** | .666** | .471** | .538** | .776** | .490** | .306 | .207 | .426* | .597** | .602** | .670** | .310 | .646** |
| .000 | .000 | .000 | .009 | .002 | .000 | .006 | .100 | .273 | .019 | .000 | .000 | .000 | .095 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .159 | .033 | -.002 | .294 | .658** | .283 | .389* | .150 | .232 | .337 | .188 | .178 | .196 | .080 | .191 |
| .401 | .862 | .992 | .115 | .000 | .130 | .034 | .428 | .217 | .068 | .321 | .346 | .300 | .672 | .313 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .268 | .207 | .096 | .103 | .577** | .312 | .207 | .094 | .158 | .202 | .309 | .125 | .131 | .089 | .202 |
| .152 | .273 | .613 | .588 | .001 | .094 | .272 | .623 | .406 | .285 | .097 | .510 | .490 | .638 | .284 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .304 | .254 | .221 | .134 | .526** | .362* | .095 | .159 | .200 | .201 | .528** | .088 | .284 | .176 | .328 |
| .102 | .175 | .240 | .480 | .003 | .050 | .616 | .400 | .289 | .287 | .003 | .644 | .128 | .352 | .077 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .339 | .561** | .628** | .256 | .465** | .578** | .395* | .042 | -.013 | .176 | .524** | .442* | .534** | .329 | .545** |
| .066 | .001 | .000 | .172 | .010 | .001 | .031 | .824 | .947 | .352 | .003 | .015 | .002 | .075 | .002 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .125 | .322 | .218 | .479** | .353 | .386* | .277 | .119 | .260 | .292 | .481** | .334 | .279 | .452* | .474** |
| .511 | .082 | .247 | .007 | .056 | .035 | .138 | .532 | .166 | .117 | .007 | .071 | .135 | .012 | .008 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .509** | .384* | .220 | .630** | .505** | .569** | .627** | .118 | .594** | .607** | .375* | .301 | .459* | .441* | .467** |
| .004 | .036 | .242 | .000 | .004 | .001 | .000 | .535 | .001 | .000 | .041 | .106 | .011 | .015 | .009 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .568** | .596** | .290 | .747** | .658** | .727** | .652** | .132 | .504** | .578** | .499** | .423* | .681** | .318 | .562** |
| .001 | .001 | .121 | .000 | .000 | .000 | .000 | .488 | .005 | .001 | .005 | .020 | .000 | .087 | .001 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .692** | .836** | .694** | .706** | .736** | .936** | .729** | .303 | .409* | .627** | .754** | .687** | .826** | .540** | .834** |
| .000 | .000 | .000 | .000 | .000 | .000 | .000 | .104 | .025 | .000 | .000 | .000 | .000 | .002 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| 1 | .729** | .489** | .431* | .617** | .823** | .650** | .194 | .348 | .522** | .508** | .311 | .558** | .225 | .472** |
| | .000 | .006 | .017 | .000 | .000 | .000 | .305 | .060 | .003 | .004 | .095 | .001 | .232 | .009 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .729** | 1 | .733** | .472** | .570** | .898** | .589** | .108 | .239 | .409* | .595** | .620** | .670** | .394* | .677** |
| .000 | | .000 | .008 | .001 | .000 | .001 | .570 | .203 | .025 | .001 | .000 | .000 | .031 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .489** | .733** | 1 | .194 | .377* | .720** | .336 | .326 | .078 | .304 | .637** | .542** | .625** | .455* | .675** |
| .006 | .000 | | .304 | .040 | .000 | .070 | .079 | .684 | .103 | .000 | .002 | .000 | .012 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .431* | .472** | .194 | 1 | .593** | .686** | .581** | .145 | .537** | .569** | .373* | .380* | .567** | .468** | .526** |
| .017 | .008 | .304 | | .001 | .000 | .001 | .443 | .002 | .001 | .042 | .038 | .001 | .009 | .003 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .617** | .570** | .377* | .593** | 1 | .797** | .659** | .399* | .513** | .687** | .710** | .508** | .607** | .299 | .636** |
| .000 | .001 | .040 | .001 | | .000 | .000 | .029 | .004 | .000 | .000 | .004 | .000 | .108 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .823** | .898** | .720** | .686** | .797** | 1 | .713** | .296 | .432* | .629** | .719** | .608** | .774** | .475** | .765** |
| .000 | .000 | .000 | .000 | .000 | | .000 | .113 | .017 | .000 | .000 | .000 | .000 | .008 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .650** | .589** | .336 | .581** | .659** | .713** | 1 | .135 | .546** | .747** | .405* | .611** | .575** | .363* | .578** |
| .000 | .001 | .070 | .001 | .000 | .000 | | .477 | .002 | .000 | .026 | .000 | .001 | .049 | .001 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .194 | .108 | .326 | .145 | .399* | .296 | .135 | 1 | .403* | .638** | .495** | .280 | .330 | .280 | .420* |
| .305 | .570 | .079 | .443 | .029 | .113 | .477 | | .027 | .000 | .005 | .134 | .075 | .134 | .021 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .348 | .239 | .078 | .537** | .513** | .432* | .546** | .403* | 1 | .885** | .267 | .262 | .203 | .330 | .323 |
| .060 | .203 | .684 | .002 | .004 | .017 | .002 | .027 | | .000 | .153 | .162 | .283 | .075 | .082 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .522** | .409* | .304 | .569** | .687** | .629** | .747** | .638** | .885** | 1 | .492** | .495** | .469** | .424* | .564** |
| .003 | .025 | .103 | .001 | .000 | .000 | .000 | .000 | .000 | | .006 | .005 | .009 | .019 | .001 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .508** | .595** | .637** | .373* | .710** | .719** | .405* | .495** | .267 | .492** | 1 | .589** | .645** | .498** | .830** |
| .004 | .001 | .000 | .042 | .000 | .000 | .026 | .005 | .153 | .006 | | .001 | .000 | .005 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .311 | .620** | .542** | .380* | .508** | .608** | .611** | .280 | .262 | .495** | .589** | 1 | .636** | .672** | .871** |
| .095 | .000 | .002 | .038 | .004 | .000 | .000 | .134 | .162 | .005 | .001 | | .000 | .000 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .558** | .670** | .625** | .567** | .607** | .774** | .575** | .330 | .203 | .469** | .645** | .636** | 1 | .524** | .818** |
| .001 | .000 | .000 | .001 | .000 | .000 | .001 | .075 | .283 | .009 | .000 | .000 | | .003 | .000 |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .225 | .394* | .455* | .468** | .299 | .475** | .363* | .280 | .330 | .424* | .498** | .672** | .524** | 1 | .813** |
| .232 | .031 | .012 | .009 | .108 | .008 | .049 | .134 | .075 | .019 | .005 | .000 | .003 | | .000 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| .472** | .677** | .675** | .526** | .636** | .765** | .578** | .420* | .323 | .564** | .830** | .871** | .818** | .813** | 1 |
| .009 | .000 | .000 | .003 | .000 | .000 | .001 | .021 | .082 | .001 | .000 | .000 | .000 | .000 | |
| 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

From the table 8. above, it can be explained that the calculated r value > r table based on a significant test of 0.05, meaning that the data items are valid. With the Product Moment Correlation formula:

$$r_{xy} = \frac{N\sum XY - (\sum x)(\sum y)}{\sqrt{(N\sum x^2 - (\sum x)^2(N\sum y^2 - (\sum y)^2)}}$$

Information:

$r_{xy}$ : Correlation coefficient between variable $X$ and $Y$
$\sum XY$ : Total Multiplication between $X$ and $Y$ variable
$\sum x^2$ : The sum of the squares of the $X$ values
$\sum y^2$ : Sum of $Y$ Value Squares
$(\sum x)^2$ : The sum of the $X$ values is then squared
$(\sum y)^2$ : The sum of the $Y$ values is then squared

Then table in the conclusions about the results of the validity of the respondent's data:

**Table 9:** Summary of validity test

| Question Number | r count | r table | Description |
|---|---|---|---|
| 1 | 0.728 | 0.000 | Valid |
| 2 | 0.693 | 0.000 | Valid |
| 3 | 0.516 | 0.004 | Valid |
| 4 | 0.541 | 0.002 | Valid |
| 5 | 0.715 | 0.000 | Valid |
| 6 | 0.722 | 0.000 | Valid |
| 7 | 0.700 | 0.000 | Valid |
| 8 | 0.516 | 0.003 | Valid |
| 9 | 0.590 | 0.001 | Valid |
| 10 | 0.816 | 0.000 | Valid |
| 11 | 0.873 | 0.000 | Valid |
| 12 | 0.783 | 0.000 | Valid |
| 13 | 0.233 | 0.214 | Valid |
| 14 | 0.235 | 0.211 | Valid |
| 15 | 0.319 | 0.086 | Valid |
| 16 | 0.671 | 0.000 | Valid |
| 17 | 0.413 | 0.023 | Valid |
| 18 | 0.602 | 0.000 | Valid |
| 19 | 0.752 | 0.000 | Valid |
| 20 | 0.692 | 0.000 | Valid |
| 21 | 0.836 | 0.000 | Valid |
| 22 | 0.694 | 0.000 | Valid |
| 23 | 0.706 | 0.000 | Valid |
| 24 | 0.736 | 0.000 | Valid |
| 25 | 0.936 | 0.000 | Valid |
| 26 | 0.729 | 0.000 | Valid |
| 27 | 0.303 | 0.104 | Valid |
| 28 | 0.409 | 0.025 | Valid |
| 29 | 0.627 | 0.000 | Valid |
| 30 | 0.754 | 0.000 | Valid |

| | | | |
|---|---|---|---|
| 31 | 0.687 | 0.000 | Valid |
| 32 | 0.826 | 0.000 | Valid |
| 33 | 0.540 | 0.002 | Valid |
| 34 | 0.834 | 0.000 | valid |

Reliability test, comes from the word Reliability, namely the reliability, consistency, constancy of a series of measurements of a measuring instrument. Reliability shows an understanding that the instrument used in research to obtain information can be trusted as a data collection tool and is able to reveal actual information in the field (Bitanov, 2015). The level of reliability is empirically indicated by a number which is called the value of the reliability coefficient. High reliability is indicated by the $r_{xx}$ value close to 1, and the reliability is quite satisfactory if 0.700. The reliability test instrument uses the Cronbach alpha formula because the instrument is in the form of a questionnaire and a graded scale, as follows:

$$r_{11} = \left(\frac{n}{n-1}\right)\left(1 - \frac{\sum \sigma_t^2}{\sigma_t^2}\right)$$

Information:

$r_{11}$ :Looking for reliability
$n$ : Number of question items tested
$\sum \sigma_t^2$ : Total Variant Score for each item
$\sigma_t^2$ : Total variance

If the value of alpha > 0.7 means that the reliability is sufficient (sufficient reliability) while if the alpha 0.80 means suggesting all reliability items and all tests consistently have strong reliability. Or if alpha > 0.90 then the reliability is perfect, if the alpha is between 0.70 – 0.90 the reliability is high, if the alpha is 0.50 – 0.70 the reliability is moderate and if the alpha is < 0.50 the reliability is low. If the alpha is low then the item is not reliable. Tests were carried out with SPSS20 (see Figure 6.7).

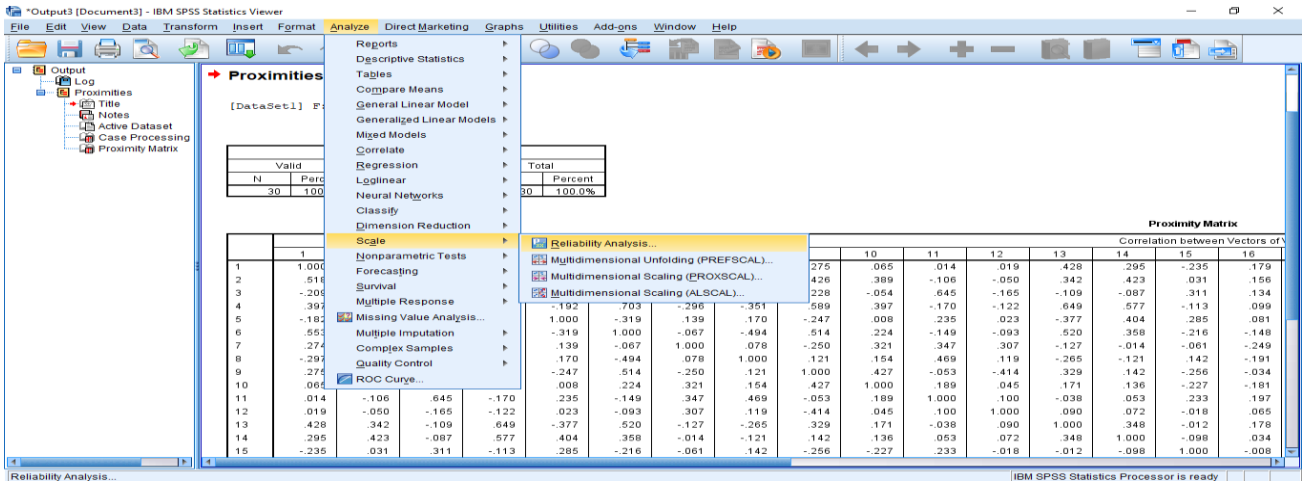


**Figure 10:** Reliability Test

## Reliability

Reliability Statistics

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .902 | .902 | 19 |

The Cronbach Alpha value is 0.902 which indicates that the 19 statements are quite reliable.

## Regression

[DataSet1] F:\MARIA\ Raw data.sav

**Variables Entered/Removed[a]**

| Model | Variables Entered | Variables Removed | Method |
|---|---|---|---|
| 1 | Service quality, Loyalty, Trust [b] | . | Enter |

a. Dependent Variable: Customer satisfaction

b. All requested variables entered.

### 3.2.2. Multiple Linear Regression Test

Multiple linear regression test is a regression model that involves more than one independent variable. Multiple linear regression analysis was conducted to determine the direction and how much influence the independent variable has on the dependent variable. (Ghozali, 2018). Regression analysis is used to measure how much influence between the independent variable and the dependent variable. The results of the analysis of multiple linear regression equations (see Figure 11).

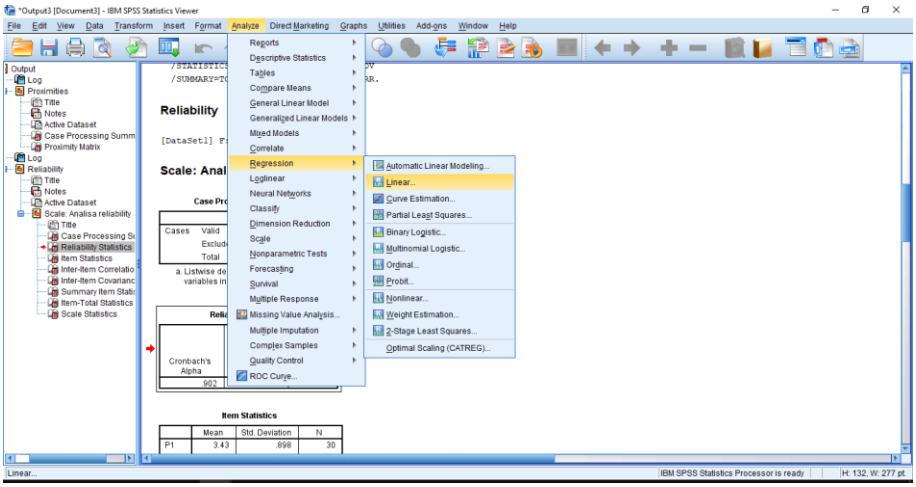


**Figure 11:** Multiple linear regression analysis

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .644[a] | .415 | .347 | 1.866 |

a. Predictors: (Constant), Service Quality, Loyalty, Trust

**ANOVA[a]**

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 64.132 | 3 | 21.377 | 6.139 | .003[b] |
| | Residual | 90.535 | 26 | 3.482 | | |
| | Total | 154.667 | 29 | | | |

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Service Quality, Loyalty, Trust

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.817 | 2.975 | | .947 | .352 |
| | Kepercayaan | .209 | .249 | .361 | .841 | .408 |
| | Loyalitas | .105 | .186 | .155 | .568 | .575 |
| | Kualitas Pelayanan | .036 | .112 | .160 | .320 | .752 |

a. Dependent Variable: Customer satisfaction

Research Respondent Data Source, 2022

Based on data analysis using SPSS 20, the results of the regression equation are obtained as follows:

$$Y = +1X1 + 2X2 + 3X3 + e$$
$$Y = (2.817) + 0.209X1 + 0.105X2 + 0.036X3 + e$$

From the multiple linear regression equation above, it can be explained as follows:

1. The constant value (a) has a positive value of 2.817. A positive sign means that it shows a unidirectional influence between the independent variable and the dependent variable. This shows that if all independent variables including CSR (X1), trust (X2), loyalty (X3), and service quality (X4) are 0 percent or have not changed, customer satisfaction with the services of JNE Trucking Sub-Agent Klaten is 2.817.
2. The value of the regression coefficient for the CSR variable (X1) is 0.209. This value shows a positive (unidirectional) effect between CSR variables and customer satisfaction on the services of JNE Trucking Sub-Agent Klaten. This means that if the CSR variable has increased by 1%, then customer satisfaction with the services of JNE Trucking Sub-Agent Klaten has increased by 0.209. Demonstrate customer satisfaction with the services of JNE Trucking Sub-Agent Klaten, contributing positively to customer satisfaction.
3. The value of the regression coefficient for confidence (X2) is 0.105. This value shows a positive (unidirectional) effect between customer satisfaction and the service of JNE Trucking Sub-Agent Klaten. This means that if the customer satisfaction variable has increased by 1%, then customer satisfaction has increased by 0.105. Showing customer satisfaction with the services of JNE Trucking Sub-Agent Klaten positively contributes to customer satisfaction.
4. The value of the regression coefficient for the loyalty variable (X3) has a positive value of 0.036. This shows that if loyalty increases by 1%, then tax aggressiveness will increase by 0.036 with the assumption that other independent variables are held constant. A positive sign means that it shows a unidirectional influence between the independent variable and the dependent variable.
5. The value of the regression coefficient for the service quality variable (X4) has a positive value of 2.817. This shows that if the service quality has increased by 1%, then customer satisfaction with the services of JNE Trucking Sub-Agent Klaten has increased by 2.817 assuming other independent variables are held constant. A positive sign means that it shows a unidirectional influence between the independent variable and the dependent variable.

## 4. Classic assumption test

The classical assumption test is a statistical requirement that must be met in multiple linear regression analysis based on ordinary leases square (OLS).

### 4.1. Normality test

Normality is used to test whether in a regression model, the dependent variable, the independent variable, or both have a normal distribution or not.

**a) Histogram Graph**

Based on data analysis using SPSS 20, the following normal distributed histogram results were obtained: (see Figure 12).

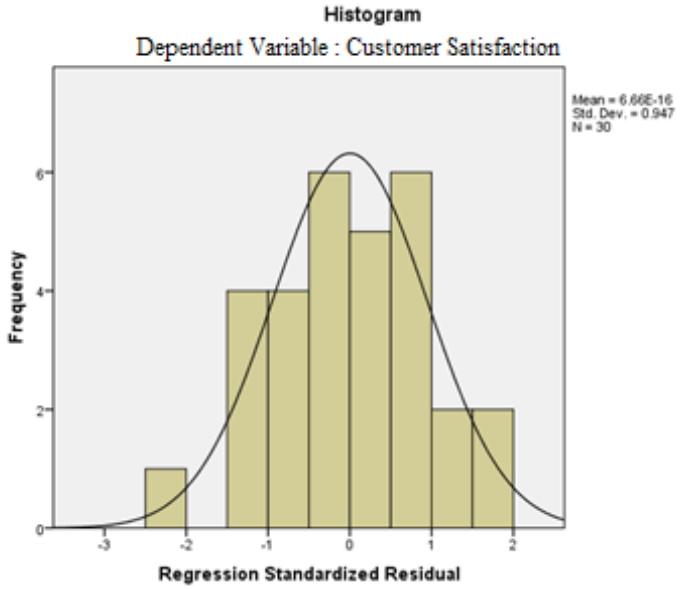


**Figure 12:** Histogram graph with normal distribution from JNE Trucking respondent data

The meaning of the histogram above the data is normally distributed.

**b) P-Plot Normal Graph**

Normality test with P-P Plot, namely: (see Figure 13)

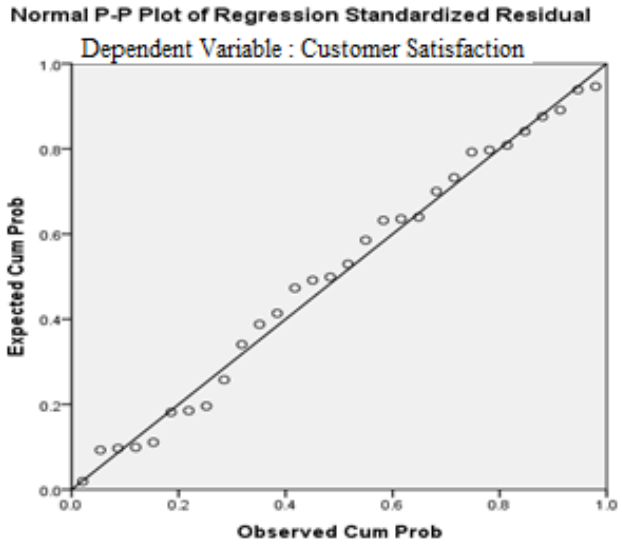


**Figure 13:** P-Plot Normal Graph

**c). Scatterplot Graph**

Heteroscedasticity test is a normal linear regression test that is carried out by observation, shown by a scatterplot graph, namely: (see Figure 14).

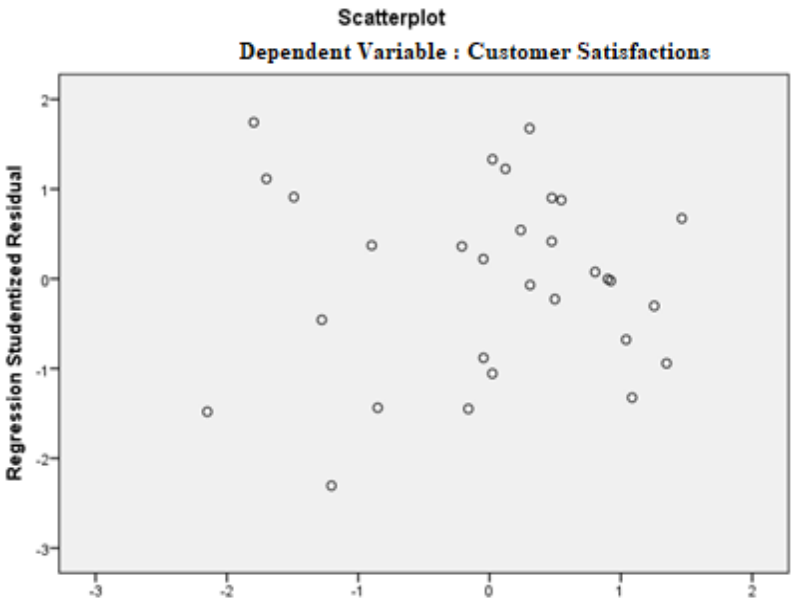


**Figure 14**: Scatterplot normal graph

## 4. Conclussion

Based on the results of the analysis and discussion that have been described, it can be concluded that the results of simple linear regression testing on the effect of service quality on customer satisfaction at JNE Sub-Agent Klaten show a positive and significant relationship. The results of simple regression analysis have been carried out, it is known that the constant value is 1.925, which means that the consistent value of the customer satisfaction variable is 1.925. The coefficient value of the service quality variable is worth 0.947, which means that for every 1% change in the value of service quality, the value of customer satisfaction changes by 0.947. The regression coefficient is positive, so it can be said that the direction of the influence of the *X* variable on *Y* is positive (an increase in one variable causes an increase in the value of another variable, on the contrary the smaller the value of a variable value, the other variables will also decrease). This positive relationship shows that the higher the quality of service provided, the higher the satisfaction felt by customers. Vice versa, the lower the quality of service provided, the lower the satisfaction felt by customers.

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