

# The Influence of E- Service Quality and Trust on E-Customer Loyalty Through Satisfaction for users of Grab Online Services in Medan City

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## ABSTRACT

Objective study This is For analyze the influence of E - service quality and trust on E-customer loyalty through satisfaction user Grab online services in Medan City . The number of respondents in the research was 144 users of Grab online services in Medan City. The sampling technique used was Purposive Sampling with the Non-probability Sampling method. In accordance with data availability and analytical demands, researchers used SPSS version 24 to analyze the data. This research suggests that all variables have a significant influence between direct and mediated relationships starting from E-service quality and trust have a positive and significant influence on satisfaction, E-service quality and trust have a positive and significant influence on E-customer loyalty then Satisfaction has a positive and significant influence on E-customer loyalty. Furthermore, E-service quality and trust have an influence positive And significant towards E - customer loyalty through satisfaction user Grab online services in Medan City .

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## 1. INTRODUCTION

The growth in smartphone use in Indonesia has encouraged internet-based companies from within and outside the country to emerge and develop their businesses in Indonesia, such as online shops, transportation, and so on. This results in rapid business growth, which results in increasingly fierce market competition. Since competition is the key to competition, businesses must pay attention to customer needs and wants and strive to meet customer expectations by providing better service than competitors do. As a result, businesses must create marketing systems and strategies to compete with other companies.

With the presence of Grab, an online transportation company that is very popular in cities today, this application-based company has been proven to provide significant changes, especially to people's social lives. This company has even developed into an application-based service company that is the main choice in society, offering various types of services with the aim of increasing customer satisfaction by increasing customer retention.

The large amount of competition among Grab online application users, especially in the transportation sector, has resulted in more and more people's choices for things that make their daily activities easier and are beneficial to society or users. Apart from that, Gojek faces its own challenges in providing the best and highest quality satisfaction to its customers or online application users because of its negative value as one of the most popular online motorcycle taxi applications in big cities, such as Grab and Maxim most recently.

E-Service Quality focuses on meeting customer needs and desires and optimizing services to meet customer expectations. So it can be concluded that the quality of e-service services depends on the business's ability to consistently meet customer expectations. Chandra (2017) states that good e-service quality together with other trust components influences the success of a product on the market.

Trust is the consumer's belief in the truth. For example, consumers prefer goods or services that have been used for a long time to new goods or services that have never been used before. Susaryono (2017) Hurriyanti (2010) states that trust is the way someone describes something. Marketers are interested in people's beliefs about certain goods or services because consumers' perceptions of those goods and brands are influenced by these beliefs. Consumers will be satisfied if businesses implement e-commerce service quality and trust.

Therefore, satisfaction, according to Chandra (2018: 153), is a feeling of pleasure or disappointment resulting from a comparison of products or services that are felt to be in line with expectations. Consumers are satisfied if the product or service meets expectations, but if it does not, they feel dissatisfied. According to this definition, satisfaction is defined as the level of a person's response to a product or service that is felt by each consumer. According to Effendi (2019), achieving customer satisfaction is the responsibility of every business organization, marketing research, and even business executives. Consistent and superior service can increase e-customer satisfaction and loyalty. E-customer loyalty is a strong incentive for customers to subscribe again, according to Oliver (2014:432). Therefore, e-customer loyalty stems from customers assessing the quality of the goods or services they receive, which is based on the expectations they have instilled. If a consumer has a positive perception of the goods or services provided by the company, they will continue to want to obtain the company's goods or services and can build consumer electronic loyalty. To maintain consumer electronic loyalty to the company's goods or services, the quality of the electronic services provided by a consumer must also be considered. This can be seen from the description of the electronic services provided by the company. Because for customers, the quality and trustworthiness of e-service is often associated with the perceived benefits of the goods or services consumed, which will have an impact on the level of satisfaction, a business must be known by customers in terms of e-service quality and others.

Many competitors, including Maxim, Go-Jek, and Grab, have criticized the current trend. Now, people who need pick-up and drop-off services, both two-wheeled and four-wheeled, can use Grab via the internet. Since 2015, the GRAB smartphone application has made Grab online popular in Indonesia. This app allows users to connect with each other with online grab drivers. Grab is now available online throughout Indonesia, including Medan City. It cannot be denied that the existence of Grab helps create new jobs in urban areas which are full of community activities.

As a result, grab online is used to save time if you need to do many things at the same time. such as asking to drop off and pick up people or goods, and ordering food through existing applications.

Then a large number of online grab companies emerged, increasing the number of drivers and increasing competition. "Currently in Medan City there are fewer customers because there have been many additional drivers, and now there is a lot of competition from partners or companies," said an online grab driver. On Friday, August 12 2022, Mukhsin, a Grab driver, gave a statement to READERS.ID. The income of online motorcycle taxi drivers has decreased in Medan, especially Medan City. This is caused by the close distance between customer pick-up and drop-off and the large number of drivers, which has resulted in a decrease in demand for automatic drivers. This is different from previous years, when customer pickup took a long time, but now there are more drivers and it is faster.

## 2. RESEARCH METHOD

The influence of electronic service quality and trust on electronic customer loyalty through electronic customer satisfaction in Medan City is the subject of this research. The population of this research is users of Grab online services in the city of Medan. The sample used in this study was 5-10 times the number of indicators Hair et al. (2014). The discovery uses a data collection method using a questionnaire, also known as a questionnaire, to obtain data and information that is relevant to the research object. Choice-type questionnaires allow respondents to choose between a variety

of available answers, which makes it easier for them to provide their choices and reduces the amount of time required to answer the questionnaire. Data processing is data check, coding, tabulation, statistical analysis

### 3. RESULTS AND DISCUSSIONS \_

#### Descriptive Characteristics of Respondents

Table 1. Descriptive Table of Respondent Characteristics

No.	Description	Frequency	Percentage (%)
<b>Type Sex :</b>			
1.	Man	76	52.8
	Woman	68	47.2
	Total	144	100.0
<b>Marital status :</b>			
2.	Marry	32	22.2
	Not yet Marry	87	60.4
	Widow widower _	25	17.4
	Total	144	100.0
<b>Age Respondent</b>			
3.	17 years	26	18.1
	18 to 23 Years	42	29.2
	24 to 29 Years	22	15.3
	30 to 35 Years	18	12.5
	36 to 41 Years	16	11.1
	42 to 47 years old	7	4.9
	48 to 59 years old	5	3.5
	54 to 59 years old	6	4.2
	> 59 years old	2	1.4
Total	144	100.0	
<b>Education Final</b>			
4.	high school or equal	10	6.9
	Diploma (D-II)	12	8.3
	Diploma (D-III)	28	19.4
	Bachelor degree	33	22.9
	Post Bachelor or S2	30	20.8
	Doctoral or S3	31	21.5
	Total	144	100.0
<b>Type Work</b>			
5.	Student	38	26.4
	Student	47	32.6
	civil servants	12	8.3
	Entrepreneur	25	17.4
	Professional	22	15.3
	Total	144	100.0
<b>Income</b>			
6.	IDR 2,500,000;- IDR 3,900,000;	52	36.1
	IDR 4,000,000;- IDR 7,900,000;	49	34.0
	IDR 8,000,000;- IDR 10,000,000;	32	22.2
	> IDR 10,000,000;	11	7.6
	Total	144	100.0

Of the 133 respondents studied, gender was dominated by women, with 76 (52.8%), and the second most numerous were men, with 68 (47.2%).

In this research, the majority of Grab online service users in Medan City have different marital statuses, with 87 respondents (60.4%) who are not married, 32 respondents (22.2%) who are

married, and 25 respondents (17.4%) who are married. %) who are widows or widowers. The most common number of respondents from the 18 to 23 year age range was 42 respondents (29.2%), followed by people aged 18 to 23 years.

The characteristics of respondents based on their latest level of education show that respondents with a Bachelor's degree (S1) were most involved in this research, with 33 respondents (22.9%), followed by respondents with a Doctoral degree (S3) with 31 respondents (21.5%), with a Postgraduate degree (S2) as many as 30 respondents (20.8%), and with a Diploma degree (D-III) as many as 28 respondents (19.4%). Based on type of work, student work was the most popular in this study, with 38 respondents (26.4%), followed by students, 47 respondents (32.6%), self-employed, 22 respondents (15.3%), and civil servants, 12 respondents (8.3%). The characteristics of respondents based on income show that income ranging from 2,500,000 to 3,900,000 is the most dominant in this study, namely 52 respondents (36.1%), income ranging from 4,000,000 to 7,900,000, as many as 49 respondents (34.0%), income ranging from 8,000,000 to 10,000,000, as many as 32 respondents (22.2%), and the highest was more than 10 thousand rupiah, as many as 11 respondents (7.6%).

### Descriptive Analysis Of Variables

The average assessment interval was created to facilitate the average assessment of questionnaire items. In this research, the author determined the number of interval classes for all research variables as 5 (five classes) using the formula used according to Sugiyono (2017).

$$\text{Panjang Kelas} = \frac{\text{Nilai tertinggi} - \text{Nilai terendah}}{\text{Banyak Kelas Interval}}$$

$$\text{Banyak Kelas Interval}$$

Based on this formula, the length of the research variable interval class is as follows:

$$\text{Panjang Kelas} = \frac{5 - 1}{0,5}$$

$$0,5$$

So the criteria for assessment are as follows:

**Table 2.** Respondent Answer Assessment Interval Table

Intervals	Evaluation
1.00 – 1.79	Very No Good
1.80 – 2.59	No Good
2.60 – 3.39	Not enough Good
3.40 – 4.19	Good
4.20 – 5.00	Very Good

**Table 3.** Descriptive E-Service Quality Variables

No	Statement	Alternative Choice Answer										Average
		VeryNo Agree		NoAgree		Not enough Agree		Agree		Very Agree		
		Fr	%	Fr	%	Fr	%	Fr	%	Fr	%	
		1	2	3	4	5						
1.	Medan City <i>Online</i> Grab provides good facilities	2	1.4	5	3.5	48	33.3	72	50.0	17	11.8	3.67
2.	Grab <i>Online</i> Medan City provides reliable service	3	2.2	4	2.8	54	37.5	64	44.4	19	13.2	3.64
3.	Grab <i>Online</i> Medan City is responsive to all user complaints and difficulties	2	1.4	4	2.8	57	39.6	62	43.1	19	13.2	3.64
4.	Grab <i>Online</i> Medan City provides user-friendly services	3	2.1	7	4.9	48	33.3	63	43.8	23	16.0	3.67

5.	Grab <i>Online</i> Medan City responded all request user	3	2.1	5	3.5	52	36.1	58	40.3	26	18.1	3.69
Average											3.66	

Of the five statements about the quality of Grab services in Medan City, the indicator with the highest average value is "Grab Online Medan City responds to all user requests", with an average value of 3.69, while the indicator with the smallest average value is "Grab Online Medan City responds to all user requests", with an average rating of 3.69.

### Descriptive Trust Variables

**Table 4.** Table of Trust Variable Questionnaire Answer Results

No	Statement	Alternative Answer Choices										Average
		Strongly Disagree		Don't agree		Disagree		Agree		Strongly agree		
		Fr	%	Fr	%	Fr	%	Fr	%	Fr	%	
		1	2	3	4	5						
1.	Grab <i>Online</i> Medan City has a good, safe and comfortable experience when you become a user	3	2.1	17	11.8	12	8.3	58	40.3	54	37.5	3.99
2.	Information about Grab <i>Online</i> Medan City is very useful for Grab users when delivering users	2	1.4	12	8.3	44	30.6	67	46.5	19	13.2	3.62
3.	Medan City Grab <i>Online</i> users feel safe and comfortable when Grab delivers users	3	2.1	23	16.0	16	11.1	34	23.6	68	47.2	3.98
4.	Medan City Grab <i>Online</i> users believe in the security that Grab provides	2	1.4	9	6.3	34	23.6	83	57.6	16	11.1	3.71
5.	Medan City Grab <i>Online</i> users feel satisfied after becoming one of the users	2	1.4	10	6.9	46	31.9	64	44.4	22	15.3	3.65
Average											3.79	

The table shows that the role of trust in Grab online service users in Medan City is "Good" with a calculated average of 3.79. Of the 5 trust statement items, "Grab Online Medan City has a good, safe and comfortable experience when becoming one of the users" has the highest average value, namely 3.99, while "Grab Online Medan City users feel satisfied after becoming one users" had the lowest, 3.62.

### Descriptive Variable E-Customer Loyalty

**Table 5.** Table of Answer Results for the E-Customer Loyalty Variable Questionnaire

No	Statement	Alternative Choice Answer										Average
		VeryNo Agree		NoAgree		Disagree		Agree		Very Agree		
		Fr	%	Fr	%	Fr	%	Fr	%	Fr	%	
		1	2	3	4	5						
1.	I will place orders continuously for online Grab services in Medan City.	4	2.8	6	4.2	35	24.3	77	53.5	22	15.3	3.74
2.	I will use Grab's other services, such as : ( Grabfood / Grabexpress ).	2	1.4	4	2.8	46	31.9	74	51.4	18	12.5	3.71
3.	I will recommend to other people to use Grab online in Medan City.	2	1.4	3	2.1	55	38.2	68	47.2	16	11.1	3.65
4.	I have never used other services.	2	1.4	10	6.9	15	10.4	75	52.1	42	29.2	4.01
Average											3.77	

The role of electronic customer loyalty among Grab online service customers in Medan City is "Good" based on the average table calculation of 3.77. Of the 4 statement items regarding E-customer loyalty, "I never use other services." has the highest average value, 4.01, while "I would recommend other ways to use Grab online in Medan City." had the lowest, 3.65.

### Descriptive Variable Satisfaction

**Table 6.** Answer Results for the Satisfaction Variable Questionnaire

No	Statement	Alternative Choice Answer										Average
		VeryNo Agree		No Agree		Disagree		Agree		Very Agree		
		Fr	%	Fr	%	Fr	%	Fr	%	Fr	%	
		1		2		3		4		5		
1.	Grab Online Medan City always keeps promises to users	2	1.4	8	5,6	55	38.2	70	48.6	9	6.3	3.53
2.	Grab Online Medan City is always ready to help users when needed	3	2.1	7	4.9	40	27.8	79	54.9	15	10.4	3.67
3.	Grab Online Medan City is always polite to its users	2	1.4	4	2.8	69	47.9	45	31.3	24	16.7	3.56
4.	Grab Online Medan City always cares about its users	2	1.4	8	5,6	68	47.2	50	34.7	16	11.1	3.49
<b>Average</b>											<b>3.56</b>	

Consumer satisfaction with Grab online services in Medan City is "Good" based on the estimated average satisfaction in the table of 3.56. Of the 4 satisfaction statement items, "Grab Online Medan City is always ready to help users when needed" has the highest average value of 3.67, while "Grab Online Medan City always cares about users" has the lowest average value of 3.49

### Validity Testing

**Table 7.** Validity of Question Items

Items Question	Variable	r- count	r- table	Mark Crisis	Information
		Total Correlation			
X1.1	E-Service Quality	0,554	0,162	0,5	Valid
X1.2		0,815		0,5	Valid
X1.3		0,779		0,5	Valid
X1.4		0,583		0,5	Valid
X1.5		0,632		0,5	Valid
X2.1	Trust	0,552	0,162	0,5	Valid
X2.2		0,425		0,5	Valid
X2.3		0,634		0,5	Valid
X2.4		0,520		0,5	Valid
X2.5		0,542		0,5	Valid
Y1.1	E-Customer Loyalty	0,745	0,162	0,5	Valid
Y1.2		0,760		0,5	Valid
Y1.3		0,739		0,5	Valid
Y1.4		0,479		0,5	Valid
Z1.1	Satisfaction	0.506	0.162	0.5	Valid
Z1.2		0.509		0.5	Valid
Z1.3		0.760		0.5	Valid
Z1.4		0.707		0.5	Valid

Based on the table above, all variables used in this research are valid because they have a correlation coefficient above the critical value, namely 0.50, so all questions in this research questionnaire are valid for further research. Thus, all indicator items for each variable in this study meet the testing standards.

## Reliability Testing

**Table 8.** Reliability Test Results

no.	Variable	Number of Items	Cronbach 's Alpha		Information
			Point a)	Mark Critical	
1.	<i>E-Service Quality (X<sub>1</sub>)</i>	5	0.695	0.60	Reliable
2.	<i>Trust (X<sub>2</sub>)</i>	5	0.691	0.60	Reliable
3.	<i>E-Customer Loyalty (Y)</i>	4	0.765	0.60	Reliable
4.	<i>Satisfaction (Z)</i>	4	0.736	0.60	Reliable

Based on the table above, it shows that the E-service Quality variable (X1) has a Cronbach Alpha value of 0.695, the Trust variable (X2) has a Cronbach Alpha value of 0.691, the E-Customer Loyalty variable (Y) has a Cronbach Alpha value of 0.765 and the Satisfaction variable (Z) has a Cronbach value. Alpha is 0.736. The reliability test in this study obtained a Cronbach Alpha value > 0.60 for all variables, indicating dependency.

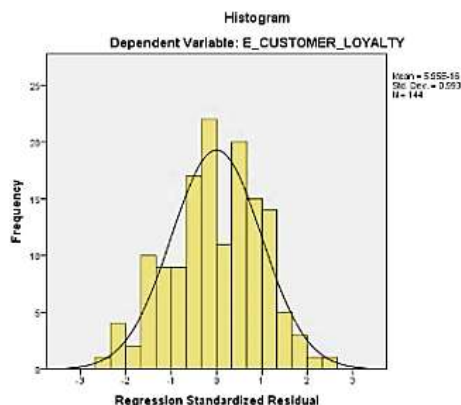
## Normality Test Results

**Table 9.** Normalitas Test – One-Sample Kolmogorov-Smirnov

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		144
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.88793858
Most Extreme Differences	Absolute	.060
	Positive	.034
	Negative	-.060
Test Statistic		.060
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

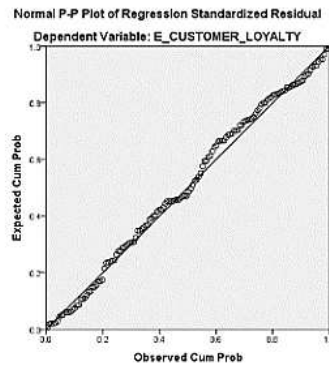
- Test distribution is Normal.
- Calculated from data.
- Lilliefors Significance Correction.
- This is a lower bound of the true significance .

Based on the table above, the significance value of the normality test is 0.060 or > 0.05. Thus, the residual value is distributed in an orderly manner. Graphs such as histogram diagrams and Normal Probability Plot diagrams show that the data is normally distributed because it spreads around the diagonal line and follows its direction, as shown in Figure. The histogram graph in Figure shows a data distribution pattern that is close to normal.



Draw a Histogram Graph

Based on the Normal Probability Plot graph in the figure below, it can be seen that the distribution of points is close to a normal line or straight line. So it can be concluded that the data is normally distributed.



Normal Probability Plot Image

**Multicollinearity Test**

**Table 10.** Multicollinearity Test Results

No	Variable	Collinearity Statistics		Information
		Tolerance	VIF	
1	<i>E-Service Quality (X1)</i>	,897	1,114	Free Multicollinearity
2	<i>Trust (X2)</i>	,897	1,114	Free Multicollinearity
3	<i>Satisfaction (Z)</i>	,897	1,114	Free Multicollinearity

Based on the table above, the multicollinearity test is declared passed if all independent variables meet the requirements, with a tolerance value of <0.10 and a VIF value of >10. Thus, all independent variables in this study are uncorrelated.

**Heteroscedasticity Test**

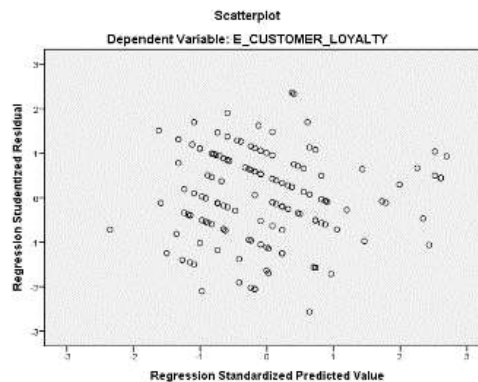


Image of Heteroscedasticity Test Results

Based on the test results in the image above, the regression model in this study does not experience heteroscedasticity because there is no particular pattern on the scatterplot graph and the points do not form a regular pattern (wavy, widening, narrowing). If the points spread above and below 0 on the Y axis then heteroscedasticity does not occur, this is in line with Ghozali (2011).



### Table Effect of E-Service Quality and Trust of Satisfaction

**Table 11.** Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.672 <sup>a</sup>	.452	.444	1.504

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Z

Based on the regression table above, electronic service quality and trust have a positive influence on satisfaction of 0.672 (67.2%) and the influence of independent variables is 0.452 (45.2%). This shows that every change in service quality E and trust changes satisfaction by 0.444 (44.4%). If the quality and trustworthiness of e-services increases, satisfaction will increase by 44.4%. This situation shows 55.6% external impact.

A t-test was then conducted to assess whether e-service quality and trustworthiness influenced satisfaction. Following table results analysis regression t test :

**Table 12.** Results Analysis Linear Regression (t- test ) Effect of E-Service Quality and Trust on Satisfaction Coefficients\*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,587	1,081		4,243	,000
	X1	,463	,147	,642	9,750	,000
	X2	,223	,062	,288	3,580	,000

Based on the table above, it can be seen that the linear regression model can be analyzed based on its coefficients. The multiple linear regression equation model based on the table above is:

$$Z = 0.642 (X1) + 0.288(X2)$$

Information : X1 = E -Service Quality

X2 = Trust

Z = Satisfaction

The regression test in equation 1 shows that E-service quality has a positive and significant effect on satisfaction of 0.642 and a significance of 0.000 <0.05. Trust also has a positive and significant effect on satisfaction of 0.288 and a significance of 0.000 <0.05.

Hypothesis 1 (Ha1) states that the electronic service quality variable has a positive and significant effect on Grab online service users on the Medan City satisfaction variable, and hypothesis 2 (ha2) states that the Trust variable has an effect.

### The Influence of E-Service Quality and Trust on E-Customer Loyalty

**Table 12.** The Influence of E-Service Quality and Trust on E-Customer Loyalty Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.531 <sup>a</sup>	.282	.271	1.901

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

Electronic service quality and trust have a positive effect on electronic customer loyalty by 0.531 (53.1%), with the independent variable influencing the dependent variable by 0.282 (28.2%). This means that every change in the quality and trustworthiness of E's services will change E's customer loyalty by 0.271 (27.1%). If the quality and trustworthiness of e-services increases, e-customer loyalty will increase by 27.1%. This condition shows 72.9% external influence.

Next, the t-test determines whether e-service quality and trustworthiness influence e-customer loyalty. Following table results analysis regression t test :

**Table 13.** Results Analysis Linear Regression ( t-test ) The Influence of E-Service Quality and Trust on E-Customer Loyalty Coefficients\*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6,148	1,367		4,499	,000
X1	,382	,060	,479	6,357	,000
X2	,236	,069	,275	3,408	,001

As seen in the table above, coefficients can be used to test linear regression models. Based on this table, the multiple linear regression equation model is:

$$Y = 0.479 (X1) + 0.275 (X2)$$

Information : X1 = E -Service Quality

X2 = Trust

Y = E-Customer Loyalty

Test regression on equation 2 shows that E-service quality has influence positive And significant towards E-customer loyalty of 0.479 and significance equal to 0.000 <0.05. Trust also has a positive and significant influence on loyalty of 0.275 and a significance of 0.001.

The results above show that Hypothesis 3 (Ha3) which states that the electronic service quality variable has a positive and significant effect on the electronic customer loyalty variable among Grab online service users in Medan City, and hypothesis 4 (Ha4) which states that the trust variable has a positive and significant effect. significant.

### The Effect of Satisfaction on E-Customer Loyalty

**Table 14.** The Effect of Satisfaction on E-Customer Loyalty Model Summary <sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,507 <sup>a</sup>	,257	,252	1,927

The regression table shows that the satisfaction variable has a positive effect on electronic customer loyalty by 0.507 (50.7%) and the independent variable has a positive effect on the dependent variable by 0.257 (25.7%). This means that each variation in satisfaction influences customer loyalty E by 0.252 (25.2%). Increasing satisfaction increases e-customer loyalty by 25.2%. This condition shows 74.8% external impact.

Next, the t test determines whether partial satisfaction influences e-customer loyalty. Following table results analysis regression t test :

**Table 15.** Results Analysis Linear Regression ( t-test ) Effect of Satisfaction on E-Customer Loyalty Coefficients\*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	7,118	1,150		6,187	,000
Z	,560	,080	,507	7,010	,000

Based on the table above, it can be seen that the linear regression model can be analyzed based on its coefficients. The multiple linear regression equation model based on the table above is:

$$Y = 0.507 (Z)$$

Information:

Z = Satisfaction

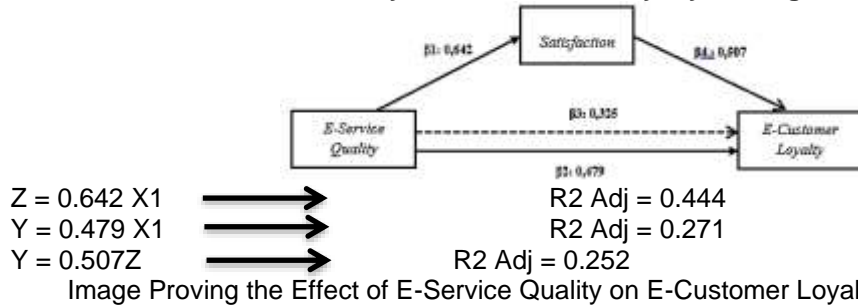
Y = E-Customer Loyalty

The results of the regression test on equation 3 show that satisfaction has a positive and significant effect on the E-customer loyalty variable of 0.507 and there is a significance of 0.000 <0.05. The description of the results above shows that Hypothesis 5 (Ha5) is accepted which states

that the satisfaction variable has a positive and significant effect on the E-customer loyalty variable for Grab online service users in Medan City.

Analysis of the Effect of Mediation

**The Influence of E-Service Quality on E-Customer Loyalty Through Satisfaction**



Based on the picture, it can be explained that the E-service quality variable has a significant influence on satisfaction ( $\beta_1 = 0.642, p < 0.05$ ). Then, the E-Service quality variable has a significant influence on E-customer loyalty ( $\beta_2 = 0.479, p < 0.05$ ), and when the influence of E-service quality on E-customer loyalty is mediated by satisfaction, the way to get the influence is by  $\beta_1 \times \beta_4 = \beta_3$ , these results show a significant effect ( $\beta_3 = 0.325, p < 0.05$ ).

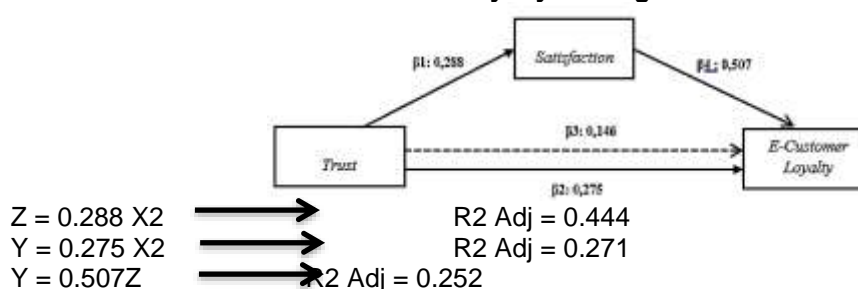
Calculation of the p-value on the path of the mediating influence of E-service quality on E-customer loyalty through satisfaction as mediation can be done using a sobel test calculator with the following results:

**Table 16.** Sobel Test Results on the Effect of E-Service Quality on E-Customer Loyalty Through Satisfaction

Input:	Test statistic:	Std. Error:	p-value:
a: .463	Sobel test: 2.87229479	0.09026929	0.00407503
b: .560	Aroian test: 2.84822635	0.09103209	0.00439636
$s_a$ : .147	Goodman test: 2.89698389	0.08949998	0.00376769
$s_b$ : .080	Reset all	Calculate	

The Sobel test calculation produces 2.872, which is significant because it is  $> 1.96$ . Therefore, satisfaction partially mediates the influence of e-service quality on e-customer loyalty. The mediation effect test reveals that e-service quality directly influences e-customer loyalty, which of course requires satisfaction. This explanation supports hypothesis 6 which states that consumers of Grab online services in Medan City are satisfied with E-service quality, thereby increasing E-customer loyalty.

**The Influence of Trust on E-Customer Loyalty Through Satisfaction**



Based on Figure 4.5, it can be explained that the trust variable has a significant influence on satisfaction ( $\beta_1 = 0.288, p < 0.05$ ). Then, the trust variable has a significant influence on E-customer loyalty ( $\beta_2 = 0.275, p < 0.05$ ), and when the influence of trust on E-customer loyalty is mediated by

satisfaction, the way to get the influence is by  $\beta_1 \times \beta_4 = \beta_3$ , from the results This shows a significant effect ( $\beta_3 = 0.147, p < 0.05$ ).

Calculation of the p-value on the path of the mediating influence of trust on E-customer loyalty through satisfaction as mediation can be done using a sobel test calculator with the following results:

**Table 17.** Sobel Test Results on the Effect of Trust on E-Customer Loyalty Through Satisfaction

Input:	Test statistic:	Std. Error:	p-value:
a .223	Sobel test: 3.19916681	0.03903516	0.00137825
b .560	Aroian test: 3.17364933	0.03934902	0.00150535
$\beta_a$ .062	Goodman test: 3.22530988	0.03871876	0.00125836
$\beta_b$ .080	Reset all	Calculate	

The Sobel test calculation produces 3.199, which is significant because it is  $> 1.96$ . Satisfaction partially mediates the effect of trust on electronic customer loyalty. Testing of mediation effects shows that trust directly influences e-customer loyalty, which of course requires satisfaction. This explanation supports hypothesis 7 which states that trust influences consumers of Grab online services on E-customer loyalty in Medan City through satisfaction.

PATH ANALYSIS APPROACH (PATH ANALYSIS APPROACH)

**Table 18.** Total Effect of Independent Variables on Dependent Variables

Equality	Put Directly (Direct Effect)	Influence Mediation
$X_1 Y \rightarrow$	0.479	.....
$X_1 Z \rightarrow$	0.642	.....
$X_1 YZ \rightarrow \rightarrow$		0.325
$ZY \rightarrow$	0.507	.....
$X_2 Y \rightarrow$	0.275	.....
$X_2 Z \rightarrow$	0.288	.....
$X_2 YZ \rightarrow \rightarrow$		0.146

Information: X1 = E-Service Quality  
 X2 = Trust  
 Y = E-Customer Loyalty  
 Z = Satisfaction

Based on the table, the service quality variable E on satisfaction has the greatest influence, with a regression coefficient of 0.642, and the trust variable on customer loyalty E through satisfaction has the lowest influence, with a regression coefficient of 0.146.

**The Influence of E-Service Quality on Satisfaction**

The results of testing hypothesis 1 show that the quality of electronic services has a positive and significant impact on Grab Online customer satisfaction in Medan City. This finding supports previous research by Onsardi (2022). The research results show that the quality of e-grab services has a positive and significant effect on the satisfaction of Bengkulu City Branch Grab Partners. Thus, good quality e-grab services will greatly influence the satisfaction of customers who use Grab services.

**The Influence of Trust on Satisfaction**

The results of testing hypothesis 2 show that trust has a positive and significant impact on user satisfaction of Grab online services in Medan City. This finding supports the findings of previous research by Onsardi (2022) which shows that customer trust has a positive and significant impact on the satisfaction of Grab partners in the Bengkulu City Branch. Good E-Service Quality will foster trust, and when customer trust has been obtained, the level of customer satisfaction can be increased.

### **The Influence of E-Service Quality on E-Customer Loyalty**

The results of this research support the findings of previous research by Yusita (2021: 216), Deccasari (2018), and Yulia Larasati (2017), who found that service quality components had a positive and significant effect on electronic service loyalty among Grab online service users in Medan City. In this research, the service quality variable has a positive and significant effect on electronic service loyalty. In other words, the higher the quality of e-service, the higher the loyalty

### **The Influence of Trust on E-Customer Loyalty**

The results of testing hypothesis 4 are that trust has a positive and significant effect on E-customer loyalty among Grab online service users in Medan City. The results of this research support the results of previous research conducted by Mohamad Najmudin (2011). with the research title The Influence of E-Service Quality, Satisfaction and Trust on E-Customer Loyalty in Using the Yogyakarta "KIRIMAJA" Delivery Service. The research results show that the Trust variable has a positive and significant effect on E-Customer Loyalty.

### **The Effect of Satisfaction on E-Customer Loyalty**

The results of testing hypothesis 4 are that satisfaction has a positive and significant effect on E-customer loyalty among Grab online service users in Medan City. The results of this research support the results of previous research conducted by Yuzza Bayhaqi (2019), Satisfaction has a positive and significant effect on E-Customer Loyalty. Based on the description above, there is an influence of Satisfaction on E-Customer Loyalty for transportation services.

### **The Influence of E-Service Quality on E-Customer Loyalty Through Satisfaction**

The results of testing hypothesis 6 are that E-service quality has a positive and significant effect on E-customer loyalty through satisfaction among Grab online service users in Medan City. Satisfaction which mediates the influence of E-service quality on E-customer loyalty is partial mediating. Where the mediation effect test shows that the E-service quality variable is able to directly influence the E-customer loyalty variable, which must involve the satisfaction variable.

### **The Influence of Trust on E-Customer Loyalty Through Satisfaction**

The results of testing hypothesis 7 are that it has a positive and significant effect on E-customer loyalty through satisfaction among Grab online service users in Medan City. Satisfaction which mediates the influence of trust on E-customer loyalty is partial mediating. Where in testing the mediation effect, it shows that the trust variable is able to directly influence the E-customer loyalty variable, which must involve the satisfaction variable.

## **4. CONCLUSION**

E-service quality has a positive and significant effect on satisfaction of Grab online service users in Medan City. Trust has a positive and significant effect on satisfaction among Grab online service users in Medan City. E-service quality has a positive and significant effect on E-customer loyalty among Grab online service users in Medan City. Trust has a positive and significant effect on E-customer loyalty among Grab online service users in Medan City. Satisfaction has a positive and significant effect on E-customer loyalty among Grab online service users in Medan City. E-service quality has a positive and significant effect on E-customer loyalty through satisfaction among Grab online service users in Medan City. Trust has a positive and significant effect on E-customer loyalty through satisfaction among Grab online service users in Medan City .

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