

THE EFFECT OF ONLINE SERVICE QUALITY AND OFFLINE SERVICE QUALITY ON TRUST AND SATISFACTION AND ITS IMPACT ON LOYALTY: AN EMPIRICAL STUDY ON ONLINE AND OFFLINE TRANSPORTATION CUSTOMERS

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Abstract

Sharing economy has attracted global attention with the growing popularity of sharing applications such as motorcycles and cars. People receive two types of services when using online transportation services, namely online services in the form of applications and offline services in the form of drivers, vehicles, and other conventional service aspects. Based on this description, research is needed that can serve as a reference to combine online service quality and offline service quality in one study. The purpose of this study is to analyze the effect of online service quality and offline service quality on customer trust and satisfaction and its impact on customer loyalty.

The objects of this research are online service quality, offline service quality, customer trust, customer satisfaction and customer loyalty. The unit of analysis of this research is online transportation customers in the Jakarta, Bogor, Depok, Tangerang and Bekasi areas. The data analysis technique used is Structure Equation Modeling (SEM). The data in this study were obtained by distributing questionnaires to online transportation customers. The sample taken was 411 respondents in the Jabodetabek area using purpose sampling and snowball sampling techniques. The research procedure carried out is divided into preliminary research consisting of research model development and questionnaire material development followed by validity and reliability testing of questionnaire materials and main research, namely the Goodness of Fit test and hypothesis testing.

The results of factor confirmatory analysis of question items representing the five variables, namely the variable factors of online service quality (IS Success Model), offline service quality (Service Quality), customer satisfaction, customer trust and customer loyalty show that the question items have high validity and reliability, it can be concluded that all indicators in this study have met the requirements of SEM analysis. The results of the mathematical equation show that online service quality and offline service quality simultaneously affect both customer trust and customer quality, and trust and satisfaction simultaneously affect customer loyalty. The partial hypothesis test results when viewed from the p-value mean that all partial hypotheses are accepted. The findings in this study are combining online service quality variables from Delone & McLean's theory (D&M IS Success Model, 2003) with offline service quality from Parasuraman, Zeithaml & Berry's theory (ServQual, 1988).

1. Introduction

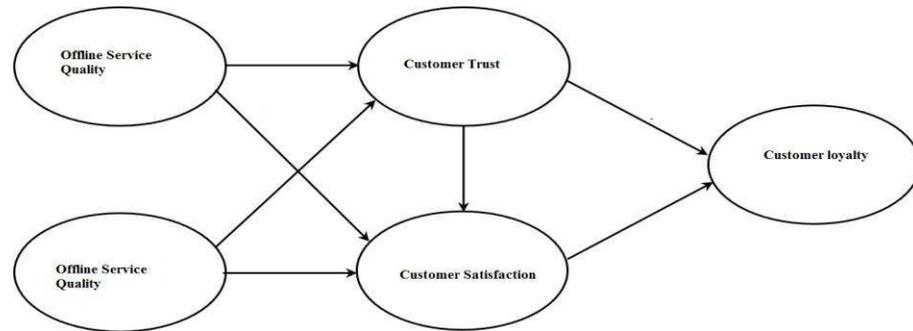
The development of business models in Indonesia with intermediary platforms began with online-based startups such as Tokopedia, which was founded in 2009, an online marketplace that provides a platform that brings sellers and buyers together online. After Tokopedia, many e-commerce companies based on online platforms were established such as Bukalapak, which is the strongest marketplace competitor with Tokopedia. Next came Traveloka, an online travel agent and Gojek which provides on demand transportation services. Gojek is a transportation business using a motorcycle application that brings together riders with prospective passengers based on Multi Side Platforms (MSPs). Next came GrabTaxi in Indonesia in 2014. Initially GrabTaxi was only a platform provider that connected conventional (offline) taxis with consumers. The high market potential in motorcycle and car transportation, Grab then expanded its business by naming GrabBike for its motorcycle taxi. The objectives of this research are as follows.

- Analyzing the simultaneous effect of online service quality and offline service quality on customer trust.
- Analyzing the simultaneous effect of online service quality and offline service quality on customer satisfaction.
- Analyzing the simultaneous effect of customer trust and customer satisfaction on customer loyalty.
- Analyzing the partial effect of online service quality and offline service quality on customer trust.
- Analyzing the partial effect of online service quality and offline service quality on customer satisfaction.
- Analyzing the partial effect of customer trust and customer satisfaction on customer loyalty.
- Analyzing the effect of customer trust on customer satisfaction.
- Identifying the variables that have the strongest effect on customer trust.
- Identifying the variables that have the strongest effect on customer satisfaction.
- Identifying the variables that have the strongest effect on customer loyalty.

2. Literature Review

Consumer behavior is the study of how individuals, groups and organizations choose, buy, use and place goods, services, ideas or experiences to satisfy their wants and needs. Based on some of the above definitions, it can be concluded that consumer behavior is the actions taken by individuals, groups, or organizations related to the decision-making process in obtaining, using economic goods or services in an effort to meet needs that can provide satisfaction. There are three reasons why the study of consumer behavior is so important. According to (Engel, Blackwell, Miniard, 2010) consumer behavior is an action that is directly involved in obtaining, consuming, and spending products and services, including processes that precede and follow these actions.

Based on the description above, the research model can be described as follows.

**Figure 1****Research Model**

Based on the research model above, the research hypothesis can be prepared as follows.

H1: Online service quality and offline service quality simultaneously affect customer trust.

H2: Online service quality and offline service quality partially affect customer trust.

H3: Online service quality and offline service quality simultaneously affect customer satisfaction.

H4: Online service quality and offline service quality partially affect customer satisfaction.

H5: Customer trust affects customer satisfaction.

H6: Customer trust and customer satisfaction simultaneously affect customer loyalty.

H7: Customer trust and customer satisfaction partially affect customer loyalty.

3. Methodology

The object of this research is online service quality and offline service quality, trust and satisfaction and customer loyalty in online transportation. The place of this research is in various cities such as Jakarta, Bogor, Depok, Tangerang and Bekasi which are communities as consumers or customers of online transportation users both four-wheeled (cars) and two-wheeled (motorbikes).

The reason for choosing this mode of transportation is because this mode of transportation has become a necessity for the community. Online transportation consisting of cars and motorbikes is an alternative choice for the community in facilitating mobility. Processing of data collected from the distribution of questionnaires and secondary data collection is carried out in (4) steps, namely: editing, entry, tabulation and data analysis. Given that the model in this study is a causality model (relationship/causal influence), the Structural Equation Model (SEM) analysis method is used to test the proposed hypothesis. SEM tests the structural model and measurement model which includes loading factors between indicators and latent variables (Ghozali & Fuad, 2008) and simultaneously conducts factor analysis and hypothesis testing including measurement error testing (Ghozali & Fuad, 2005).

In the figure below, the flowchart of this study is presented, and table 3.1 presents the variables and indicators, this is done to see an overview of the proposed research model if the model is analyzed using SEM.

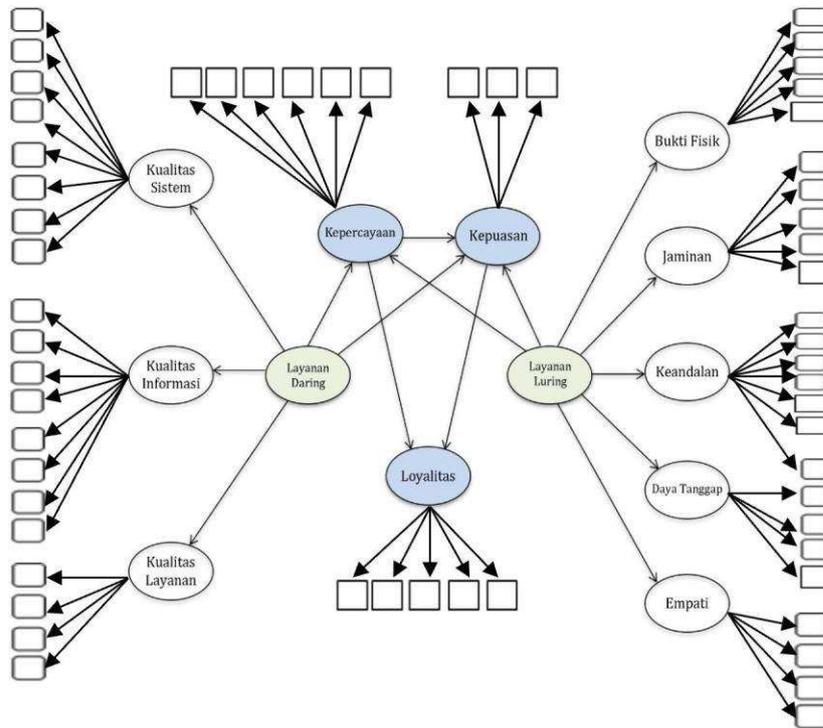


Figure 2 Flow Diagram (Path Diagram)

Hypothesis Testing

To test the hypothesis regarding causality developed in this research model, it is necessary to test the null hypothesis stating that the regression coefficient between relationships is equal to zero through the t-test commonly used in regression models. In the output of SEM, this causality test is carried out by reading the CR (Critical Ratio) value which is identical to the t-test. While the value listed in the significance column shows the level of significance between variables in the model. The relationship between variables with a significance level above 0.05 indicates that the relationship is a significant relationship.

4. Result and Analysis

The table below describes the frequency of use of online transportation vehicles according to the perceptions of respondents using online transportation on 411 respondents studied with the following results:

Table 1. Descriptive by Frequency of Use of Online Transportation

No.	Use	Always	Often	Enough	Seldom	Never	Total
1.	Use to go to the office Use on the way home Use	101 (23,8%)	124 (28,7%)	106 (24,9%)	67 (16,7%)	16 (5,9%)	411
2.	Use to go to the office Use on the way home	94 (22,4%)	147 (33,5%)	108 (25,3%)	50 (13,1%)	15 (5,7%)	411 <i>www.ijrp.org</i>

Source: Primary data processed, 2021

From Table 1, it shows that the frequency of use of online transportation that is often used by respondents to meet their activity needs is used for returning home with a total of 147 respondents or 33.5 percent. Other needs relate to transportation facilities for the purpose of going to the office, as many as 124 respondents or 28.7 percent.

The results of this calculation show that the use of online transportation for the community has become a necessity for the people who are consumers who use online transportation. Based on frequency of use, ranging from frequent, moderate and always use, 77.4 percent of the 411 respondents and the rest rarely and never use it for commuting to the office.

Regarding the use of online transportation to meet the needs of going home, there were 81.2 percent of respondents out of 411, which was indicated by frequency of use ranging from frequently, moderately and always using online transportation when going home. The remaining 18.8 percent of respondents rarely use frequency and never use it for returning home.

Next, Table describes the reasons consumers use online transportation with the following results:

Table 2 Descriptive Based on Reasons for Using Online Transportation

No	Reason	Yes	No	Amount
1	Speed to avoid traffic jams	314	97	411
2	Cheap price	335	76	411
3	Don't have a vehicle	166	245	411
4	Security	329	82	411
5	Comfort	358	53	411

Source: Primary data processed, 2021

Table above shows several reasons why respondents use online transportation. Based on the reasons given by respondents, it was stated successively that the majority of respondents had the reason to use online transportation because they felt comfortable, 358 respondents, because it had cheap prices, namely 335 respondents, while the reason for respondents who had the reason was because they felt safe was 329 respondents, the aim was to avoid traffic jams. as many as 314 respondents. There were 166 respondents for the reason that they did not have a vehicle and there were actually more respondents, namely 244 respondents. Based on calculations regarding respondents' reasons for using online transportation, it can be concluded that even though more respondents own vehicles, they still depend on online transportation services. This shows that online transportation services can provide comfort, have cheap prices, provide a sense of security and can avoid traffic jams.

Table 3. Descriptive Frequency of Use of Online Transportation Companies

No	Type	Amount	Prosentase
1	Gojek	350	85%
2	Grab	61	15%
	Amount	411	

Source: Primary data processed, 2021

Table 3 above shows the frequency of use of online transportation companies. Based on frequency of use, many respondents chose the Gojek online transportation mode with a total of 350 respondents or 85% and 61 respondents or 15% used Grab transportation.

Tabel 4 Respondent Profile and Characteristics

Respondent Profile	Criteria	Amount	Prosentase
Age	16-20 Years	99	24,1%
	21-30 Years	123	29,9%
	31-40 Years	81	19,7%
	> 40	108	26,3%
	TOTAL	411	100%
Gender	Man	189	46%
	Woman	222	54%
	TOTAL	411	100%
Married Status	Marry	167	40,6%
	Not married yet	244	59,4%
	TOTAL	411	100%
Education	SMA/SMK	90	22%
	D3	31	7,5%
	S1	158	38,4%
	Postgraduate	132	32,1%
	TOTAL	411	100%
Income per month	< IDR 5 Million	257	62,5%
	Rp. 5 Million - < IDR 10 Million	87	21,2%
	IDR 10 Million - < IDR 15 Million	31	7,5%
	IDR 15 Million - < IDR 20 Million	8	1,9%
	IDR 20 Million - <Rp. 25 Million	7	1,7%
	=>25 Million	21	5,2%
	TOTAL	411	100%
Occupation/Profession	Civil servants	16	3,9%
	Private	131	31,9%
	Student	198	48,2%
	Businessman	66	16%
	TOTAL	411	100%
Residence Location	Jabodetabek	367	89,3%
	Java	18	4,4%
	Outside Java	26	6,3%
	TOTAL	411	100%

Confirmatory Factor Analysis

After carrying out model specifications, collecting data through questionnaires, entering data into AMOS, and drawing a path diagram to then get the analysis results, then confirmatory factor analysis (CFA) is carried out. Factor confirmatory analysis can be used to see the validity of the measurement model, test overall model fit and reliability analysis of research variable models (Hair, Black, Babin and Anderson, 2014).

Cronbach alpha, Average Variance Extracted (AVE), and Composite Reliability (CR) calculations are presented for each group of variables, namely service quality online which is described by system quality, information quality and service quality. Offline service quality is formed by Service Quality (tangible, assurance, reliability, responsibility and empathy). The variables of customer trust, customer satisfaction and customer loyalty refer to Hair et al (2014)

that confirmatory factor analysis can be accepted if it has a loading factor value ≥ 0.5 ; Average Variance Extracted (AVE) value ≥ 0.5 ; Composite Reliability (CR) ≥ 0.7 . The table below explains the analysis for calculating Cronbach alpha, Average Variance Extracted (AVE), and Composite Reliability (CR) for each variable contained in this research.

Table. 5

Confirmatory Factor Analysis (CFA) and Variable Loadings of Online Service Quality (IS Success Model), Offline Service Quality (Service Quality), Customer Satisfaction, Customer Trust and Customer Loyalty

Latent Variable	Item	Mean	Standard Deviation	Loading Factor	Cronbach Alpha	AVE	CR
SQ	SQ1	3.84	.835	0,732	0.942	0,55	0.90
	SQ2	4.01	.834	0,821			
	SQ3	3.92	.821	0,778			
	SQ4	4.15	.832	0,899			
	SQ5	4.01	.820	0,773			
	SQ6	4.14	.828	0,875			
	SQ7	3.98	.814	0,854			
	SQ8	3.98	.834	0,821			
IQ	IQ1	3.97	.835	0.858	0.962	0.61	0.92
	IQ2	4.01	.834	0.902			
	IQ3	4.05	.821	0.920			
	IQ4	4.00	.832	0,880			
	IQ5	3.99	.820	0,892			
	IQ6	3.98	.828	0,849			
	IQ7	3.93	.814	0,861			
	IQ8	3.84	.834	0.803			
EQ	EQ1	3.85	.817	0.845	0.886	0.63	0.87
	EQ2	3.81	.842	0.795			
	EQ3	3.79	.881	0,762			
	EQ4	3.86	.841	0,830			
TS	TS1	3.78	.790	0,834	0.912	0.61	0.89
	TS2	3.74	.810	0,857			
	TS3	3.76	.818	0,869			

Latent Variable	Item	Mean	Standard Deviation	Loading Factor	Cronbach Alpha	AVE	CR
	TS4	3.62	.822	0,784			
	TS5	3.74	.801	0,765			
AS	AS1	3.77	.782	0,834	0.892	0.62	0.90
	AS2	3.78	.814	0,745			
	AS3	3.77	.818	0,841			
	AS4	3.94	.818	0,710			
	AS5	3.77	.816	0,832			
	RS7	3.59	.854	0,794			
	RS1	3.74	.790	0,708			
	RS2	3.45	.965	0,582			

RS	RS3	3.59	.855	0,816	0.895	0.54	0.90
	RS4	3.65	.825	0,838			
	RS5	3.58	.859	0,787			
	RS6	3.65	.822	0,727			
	RS7	3.59	.854	0,794			
OS	OS1	3.97	.782	0,865	0.897	0.62	0.83
	OS2	3.94	.793	0,869			
	OS3	3.73	.778	0,794			
	OS4	3.89	.778	0,878			
ES	ES1	3.68	.867	0,676	0.884	0.59	0.85
	ES2	3.78	.803	0,846			
	ES3	3.79	.765	0,867			
	ES4	3.85	.767	0,870			
CS	CS1	3.83	.813	0,812	0.945	0.68	0.87
	CS2	3.82	.786	0,830			
	CS3	3.83	.789	0,836			
CT	CT1	3.77	.783	0,829	0.921	0.63	0.91
	CT2	3.58	.790	0,858			
	CT3	3.82	.838	0,628			
	CT4	3.81	.762	0,886			
	CT5	3.81	.776	0,876			
	CT6	3.69	.840	0,817			
CL	CL1	3.69	.847	0,919	0.938	0.56	0.86
	CL2	3.70	.874	0,932			
	CL3	3.71	.828	0,858			
	CL4	3.62	.925	0,798			
	CL5	3.67	.904	0,828			

Primary data sources processed (2021)

The results of the confirmatory factor analysis of the question items representing the five variables, namely the online service quality variables (system quality, information quality and service quality), offline service quality, customer satisfaction, customer trust and customer loyalty, show that the question items have reliability. and fairly high validity,value

The Cronbach Alpha factor loading of all questions has a value above 0.5, the Average Variance Extracted (AVE) value for all questions has a value above 0.5 and Composite Reliability (CR) for all questions has a value above 0.7, so it can be concluded that all indicators in the research This meets the SEM analysis requirements.

Contribution of Dimensions to Online Service Quality and Offline Service Quality Variables.

The results of the Confirmatory Factor Analysis (CFA) calculation can be stated that a large loading factor indicates that the contribution or contribution of indicators or dimensions to forming a latent variable is greater.

Contribution of dimensions to the online service quality variable.

The contribution of each dimension contained in the online service quality variable can be explained through confirmatory factor analysis through the magnitude of the factor loading on each dimension that forms the variable as in Figure 4.47 below. The results of the Confirmatory Factor Analysis (CFA) calculation can be stated that a large loading factor indicates that the contribution or contribution of indicators or dimensions to forming a latent variable is greater

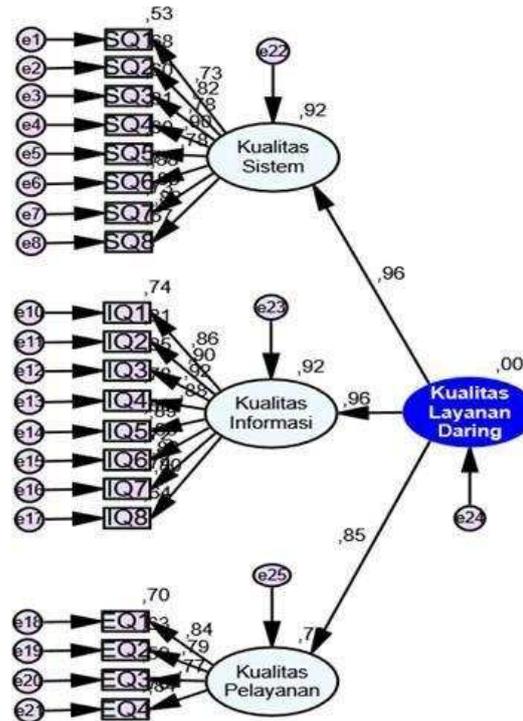


Figure 3. Results of Confirmatory Factor Analysis (CFA) calculations for online service quality variables

Based on Figure 3, the contribution of each dimension to the online service quality variable can be produced successively as follows: the system quality dimension is 0.96, which means that the information system or application from Gojek and Grab is easy to adapt, what you want is available customers, speed of access and response, appropriate for use, reliable and easy to use, as well as flexible and secure; an information quality dimension of 0.96 means that the information system also has information that is complete, up-to-date, easy to understand, in line with customer needs, relevant, varied, dynamic and accurate; and a service quality dimension of 0.85 means that the Gojek and Grab information systems have guaranteed services, are responsive to questions or complaints customers, helping to say there is a problem, reliable for example in tracing the road.

Contribution of dimensions to the offline service quality variable.

The contribution of each dimension contained in the offline service quality variable can be explained through confirmatory factor analysis through the magnitude of the factor loading on each dimension that forms the variable as in Figure 4. below.

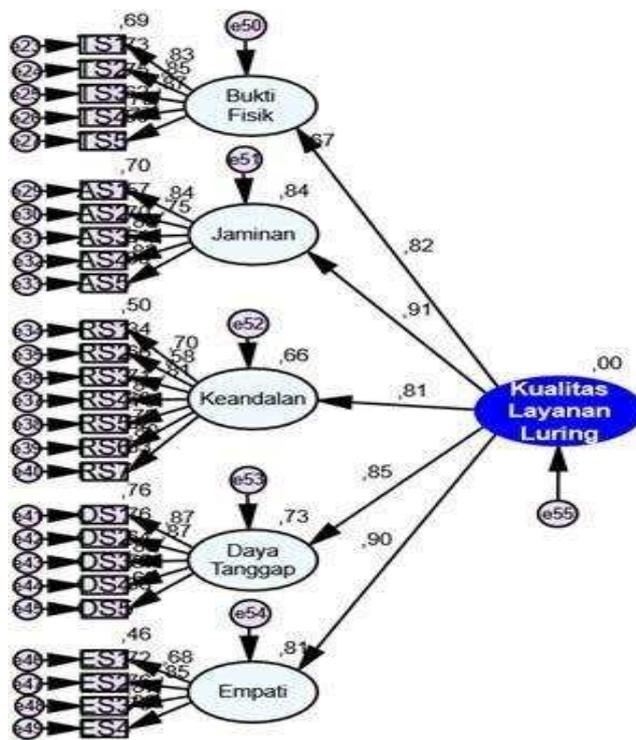


Figure 4. Results of Confirmatory Factor Analysis (CFA) calculations for online service quality variables

Based on Figure 4., the contribution of each dimension to the online service quality variable can be produced successively as follows: the system quality dimension is 0.96, which means that the information system or application from Gojek and Grab is easy to adapt, what you want is available customers, speed of access and response, appropriate for use, reliable and easy to use, as well as flexible and secure; an information quality dimension of 0.96 means that the information system also has information that is complete, up-to-date, easy to understand, in line with customer needs, relevant, varied, dynamic and accurate; and a service quality dimension of 0.85 means that the Gojek and Grab information systems have guaranteed services, are responsive to questions or complaints

customers, helping to say there is a problem, reliable for example in tracing the road.

4.5.1 Contribution of dimensions to the offline service quality variable. The contribution of each dimension contained in the offline service quality variable can be explained through confirmatory factor analysis through the magnitude of the factor loading on each dimension that forms the variable as in Figure 4.44 below.

Structural Equation Model (SEM) Analysis

One of the goals of SEM is to determine whether the research structural model makes sense or in simple terms, whether the model is "correct" (fit) based on the data at hand. Factors in SEM analysis are testing structural relationships by examining the overall and relative model fit, a measure of the acceptability of the model. followed (Hair et al., 2014).

Table 6. Variable Factor Loadings

	Estimate
KCustomer Trust <--- Online Service Quality	,417
Customer Trust <--- Offline Service Quality	,763
Customer Satisfaction <--- Online Service Quality	,252

Customer Satisfaction <--- Offline Service Quality	,436
Customer Satisfaction <--- Customer Trust	,346
Customer Loyalty <--- Customer Satisfaction	,305
Customer Loyalty <--- Customer Trus	,430

Standardized Regression Weights

Table 4 shows that offline service quality has a stronger influence on trust compared to online service quality on trust, namely with a path coefficient comparison of 0.763 for offline service quality compared to 0.417 for online service quality, while satisfaction is influenced by online service quality, offline service quality and trust. based on the path coefficient, the stronger influence is offline service quality at 0.436, next is customer trust at 0.346 while for online service quality it is 0.252. Customer loyalty is influenced by customer trust and customer satisfaction, based on the path coefficient, customer trust has a stronger influence on customer loyalty compared to customer satisfaction on customer loyalty with a path coefficient of 0.430 for customer trust and 0.305 for customer satisfaction. Offline service quality has a stronger influence than online service quality on both customer trust and customer satisfaction. This means that the service received by customers in the form of physical evidence, guarantees, reliability, responsiveness and empathy from drivers, which is a conventional service, has a greater influence. strong as rated by

Model Goodness of Fit Test

There is no single statistical test tool to measure or test hypotheses in SEM. Researchers can carry out tests using several Goodness of Fit Indices to measure whether or not the proposed model is "correct" (Hair et al, 1998).

Based on the output of SEM analysis using AMOS software, the values obtained are used as a reference in overall model testing. The Goodness of Fit of the structural equation model is quite good as measured by several statistical parameters as presented in table 4.18 below:

Table 7. Measurement of Goodness of fit

NO	GoF Measures	GoF values	Threshold ^(*)	Remark
1.	CMIN/DF	2.6	$0 \leq x^2 \leq 3$	Fit
2.	Goodness of Fit Index (GFI)	0.722	0.90	Moderate
3.	Normed fit index (NFI)	0.823	0.90	Moderate
4.	Relatif fit index (RFI)	0.815	0.90	Moderate
5.	Incremental Fit Index (IFI)	0.882	0.90	Moderate
6.	Tucker Lewis index (TLI)	0.877	0.90	Moderate
7.	Comparatifve Fit Index (CFI)	0.882	0.90	Moderate <small>www.ijrp.org</small>
8.	Root mean square error of approximation (RMSEA)	0.064	0.06	Fit

Source: Processed data, 2021

Based on table 4.18, it can be seen that the model fit test produces a CMIN/DF value of $2.6 \leq 3$, and an RMSEA value of $0.064 \geq 0.06$, the results are fit, while for GFI, NFI, RFI, IFI, TLI, CFI the results show that the model is moderate. NFI ($0.823 \leq 0.90$), RFI ($0.815 \leq 0.90$), IFI ($0.882 \leq$

0.90), TLI ($0.877 \leq 0.90$), CFI ($0.882 \leq 0.90$).

The results above can be stated that the empirical model generally has good model fit because 6 of the 8 GoF (Good of Fit) parameters in the table above are close to the threshold limit mentioned by Davcik, DaSilva, Hair, (2014). Based on the resulting values for the suitability requirements of a model, it can be concluded that in general the model obtained has a good level of suitability (fit).

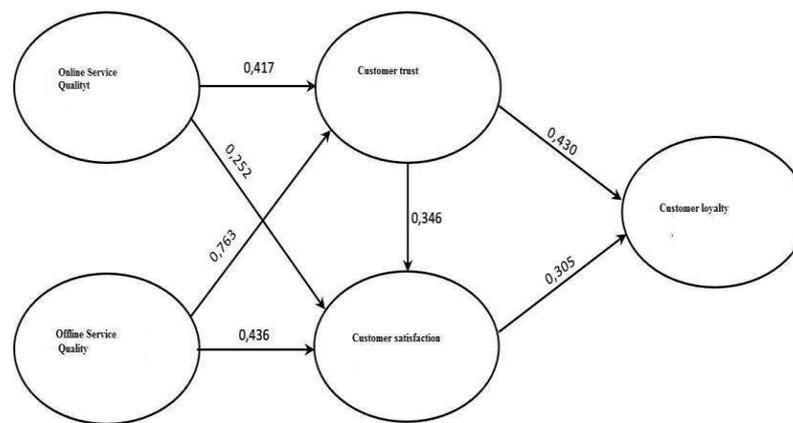


Figure 5. Research Structural Model

Source: Primary data processed, 2021

In Figure 4.49 above, it can be concluded that the structural model analysis in this research can be carried out, so the following structural model is obtained.

Structural equation 1

$$\text{Customer Trust} = 0.417 \text{ Online Service Quality} + 0.763 \text{ Offline Service Quality}$$

Structural equation 2

$$\text{Customer Satisfaction} = 0.252 \text{ Online Service Quality} + 0.436 \text{ Offline Service Quality}$$

Structural equation 3

$$\text{Customer Satisfaction} = 0.346 \text{ Customer Trust}$$

Structural equation 4

$$\text{Customer Loyalty} = 0.430 \text{ Customer Trust} + 0.305 \text{ Customer Satisfaction}$$

Based on the results of the mathematical equation above, it can be concluded that:

1. Structural equation 1 illustrates that online service quality and offline service quality simultaneously influence customer trust.
2. Structural equation 2 illustrates that online service quality and offline service quality simultaneously influence customer satisfaction.
3. Structural equation 3 illustrates that customer trust influences customer loyalty.
4. Structural equation 4 describes customer trust and customer satisfaction simultaneously

influencing customer loyalty.

Table 8. Coefficient of Determination (R-Square)

	Estimate
Online Service Quality	,000
Offline Service Quality	,000
CUstomer trust	,756
Customer satisfaction	,676
Customer loyalty	,483

Based on table 8. above, it is known that the R-square value for the customer trust variable is 0.756, which means that the online service quality and offline service quality variables are simultaneously able to explain the variance in customer trust by 75.6 percent while the rest is explained by other factors. The R-square value for the customer satisfaction variable is 0.676, which means that the online service quality and offline service quality variables are simultaneously able to explain 67.6 percent of the variance in customer satisfaction while the rest is explained by other factors. The R-square value for the customer loyalty variable is 0.483, which means that the customer trust and customer satisfaction variables are simultaneously able to explain 48.3 percent of the variance in customer loyalty while the rest is explained by other factors.

Partial Hypothesis Test Results

In making the decision to accept or reject the hypothesis in this research, a significance limit (p) of 0.05 or 5% is used, in other words the hypothesis is accepted if the significance value (p) obtained is less than or equal to 0.05 or 5% ($p \leq 5\%$) or CR value which is t-count > from T-Table (Hair et al., 1998). The results of the hypothesis test can be seen in table 4.20 below.

Table 9. Hypothesis Testing

Hipotesis			Estimate	S.E.	C.R.	P	Ket
CUstomer trust	<---	Online Service Quality	0,346	0,035	9,757	***	Accept
CUstomer trust	<---	Offline Service Quality	0,820	0,067	12,250	***	Accept
Customer satisfaction	<---	Online Service Quality	0,246	0,054	4,589	***	Accept

Hipotesis			Estimate	S.E.	C.R.	P	Ket
Customer satisfaction	<---	Offline Service Quality	0,502	0,108	4,634	***	Accept
Customer satisfaction	<---	CUstomer trust	0,437	0,113	3,861	***	Accept
Customer loyalty	<---	Customer satisfaction	0,306	0,079	3,866	***	Accept

Customer loyalty	<---	Customer trust	0,607	0,099	6,123	***	Accept
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Source: AMOS output processed data 2021

Information:

*** = 0.00 (p value is very small and is below 0.05). From the table it can be seen that whether the influence is significant or not is known from the p-value. The significance (alpha = α) used is 0.05. If the p-value is smaller than 0.05 and the CR value is > 1.65251 then the hypothesis is accepted.

Direct and Indirect Relationships

The variables that form the research model have a relationship between one variable and other variables. This relationship can be seen in the structural model in Figure 4.49 above. Based on Figure 4.49, it can be seen that the variables that only have a direct relationship are (1) online service quality to customer trust, (2) offline service quality to customer trust, (3) customer trust to customer satisfaction, and (4) customer satisfaction to loyalty customer. Variables that have a direct and indirect relationship are (1) online service quality on customer satisfaction and online service quality on customer loyalty through customer trust, (2) offline service quality on customer satisfaction and qualityoffline services towards customer satisfaction through customer trust, and (3) customer trust in customer loyalty and customer trust in customer loyalty through customer satisfaction. Variables that only have an indirect relationship are (1) online service quality on customer loyalty through customer trust, (2) online service quality on customer loyalty through customer satisfaction, (3) online service quality on customer loyalty through customer trust and customer satisfaction, (4) offline service quality on customer loyalty through customer trust. (5) offline service quality on customer loyalty through customer satisfaction. and (6) offline service quality on customer loyalty through customer trust and customer satisfaction. The magnitude of the direct and indirect relationships between these variables is presented in Table below.

Table 10. Direct and Indirect Relationships

Direct Connection				
	Online Service Quality	Offline Service Quality	Customer trust	Customer satisfaction
Customer trust	0,417	0,763	0,000	0,000
Satisfaction	0,252	0,436	0,346	0,000
Customer loyalty	0,000	0,000	0,430	0,305
Direct not Connection				
	Online Service Quality	Offline Service Quality	Customer trust	Customer satisfaction
Customer trust	0,000	0,000	0,000	0,000
Customer satisfaction	0,144	0,264	0,000	0,000
Customer loyalty	0,300	0,541	0,106	0,000
Total Relationship				
	Online Service Quality	Offline Service Quality	Customer trust	Customer satisfaction

Customer trust	0,417	0,763	0,000	0,000
Customer satisfaction	0,396	0,700	0,346	0,000
Customer loyalty	0,300	0,541	0,536	0,305

Source: Processed data, 2021

Table shows the path coefficient value which describes how big the relationship value is for each variable. The direct relationship between online service quality and customer satisfaction is greater than online service quality and customer satisfaction through customer trust. The test results show the path coefficient value is 0.252 compared to 0.144. This can be interpreted that online transportation customers will feel a greater level of satisfaction when users experience good online service quality without needing to add great trust from customers so that online service quality plays an important role in shaping customer perceptions to continue using online transportation.

The direct relationship between customer trust and customer loyalty is greater than customer trust towards customer loyalty through customer satisfaction. The test results show the path coefficient value is 0.430 for the direct relationship between customer trust and customer loyalty compared to 0.106 for the relationship between customer trust and customer loyalty through customer satisfaction. These results show that customer trust plays an important role in shaping customer perceptions about continuing to use online transportation services. Customer loyalty in using online transportation is formed from a sense of trust and dependence on online transportation. The process of trust and dependence on using online transportation is formed from an honest, caring attitude towards customers and is not opportunistic which is felt by customers. With the trust that is formed, without having to feel satisfaction in using online transportation, customers will still have loyalty towards using online transportation. Based on the indirect relationship between online service quality, offline service quality and customer trust in customer loyalty, it shows that offline service quality has the greatest relationship with customer loyalty compared to online service quality and customer trust in customer loyalty. The test results show that offline service quality has a path coefficient value of 0.541, followed by an online service quality path coefficient value of 0.300 and 0.106 for customer trust.

Testing Hypothesis 1: Simultaneous Influence of Online Service Quality and Offline Service Quality on Customer Trust

The significance level is $0.00 \leq 0.05$, so it can be interpreted that there is a joint influence of online service quality and offline service quality on customer trust. Based on the results of structural equation 1 above, it can be interpreted that online service quality and offline service quality simultaneously influence online transportation customer trust. The quality of online services is increasing which includes system quality, information quality and service quality, while the quality of offline services which includes physical evidence, guarantees, reliability is increasing customer confidence in using online transportation, whether cars or motorbikes.

Testing Hypothesis 2: Online Service Quality and Offline Service Quality Partially on Customer Trust

Online Service Quality Influences Customer Trust. Based on the results of statistical calculations in the table above, it can be stated that online service quality influences customer trust. Based on the test results, it is known that the probability value is 0.000 ($p < 0.05$) and the CR value is > 1.65251 and the estimate value is 0.346, thus H2 is accepted, which means that the quality of online services has a significant positive effect on consumer trust, so that the quality of online services which includes quality increases. systems, information quality and service quality provide increased customer confidence in using online modes of transportation, whether cars or motorbikes.

Increasing the information quality dimension of online service quality can also provide an increase in trust. Improving the quality of this information means that the applications used increasingly have complete information, the information services delivered are always current or updated, information can be easily understood, according to customer needs, relevant information according to needs such as price, distance, route and type of vehicle, has display variations, dynamic information in accordance with customer needs and developments, and information that is expected to be in accordance with consumer desires related to the specified level of accuracy

can provide customer improvement. Meanwhile, the improvement in the service quality dimensions of the online quality variable can be done through online transportation applications in a way the system can provide guarantees to customers, the application can quickly and responsively provide answers to questions submitted by customers, can even provide assistance or solutions if there are problems and has reliability in identifying travel traces, which will increase customer confidence.

This increase in customer trust is an increase in confidence that customer partners, in this case the Grab and Gojek companies, have been able to provide integrity (honest attitude), benevolence (care for consumers), not be opportunistic, have credibility or provide the best service, competency (trusted transportation), predictability (can be predicted) is able to understand the market. The magnitude of this contribution can be seen by looking at the factor loading value in the picture 4.47. Based on these three dimensions, it can be seen that the largest contribution in forming online service quality variables is formed by the dimensions of system quality and information quality which have the same value, namely 0.96 and the service quality dimension of 0.85.

Offline Service Quality Influences Customer Trust. Based on table 4 of the calculations above, it can be stated that offline service quality influences customer trust. Based on the test results, it is known that the probability value is 0.000 ($p < 0.05$) and the CR value is > 1.65251 and the estimate value is 0.820, thus H2 is accepted, which means that offline service quality has a significant positive effect on customer trust. The results of this research can be interpreted as increasing quality. offline services consisting of physical evidence, guarantees, reliability, responsiveness and empathy will provide change.

Improving the quality of offline services in the form of tangible or physical evidence, namely improvements in service to better vehicle conditions, cleaner vehicle conditions, increased comfort when driving, increasingly attractive driver appearance, as well as better and more certain driver health conditions. Assurance, namely improving driver skills, increasing compliance with driving regulations, prioritizing feelings of security, and increasingly prioritizing safety (seat belts, helmets) and caution. Reliability or reliability, the increasing trust in the driver, the driver rarely refuses orders, the driver is increasingly able to understand the appropriate route on the application, the driver increasingly understands the pick-up location, the more precise the pick-up arrival is according to the estimate stated on the application, and the more understanding of the fastest route and becoming more aware of the existence of alternative routes, as well as being more precise when picking up customers according to the estimates stated in the information in the application.

Testing Hypothesis 3: Simultaneous Influence of Online Service Quality and Offline Service Quality on Customer Satisfaction

The significance level is $0.00 \leq 0.05$, so it can be interpreted that there is a joint influence of online service quality and offline service quality on customer satisfaction. Based on the results of structural equation 2 above, it can be interpreted that online service quality and offline service quality simultaneously influence online transportation customer satisfaction. Improving the quality of online services and the quality of offline services together are variables that are considered by online transportation customers, both car and motorbike types, so that they can have an impact on increasing online transportation customer satisfaction. One way to improve the quality of online services can be done by improving the quality of systems that make it easier to use the application system. According to research which states that online transportation provides convenience for customers using their smartphone, customers can easily order services with just one touch (Farida, I., Tarmizi, A., & November, Y., 2016). Other improvements in service quality are related to cheaper costs, varied services, more guaranteed safety for consumers (Wahyusetyawati, E., 2017). Online transportation customer satisfaction can also be obtained by improving service quality, such as paying attention to the cleanliness and tidiness of the vehicle, providing a responsive service response with the right time of attendance along with increasing the driver's abilities. (Pasharibu, Paramita, and Febrianto, 2018).

Testing Hypothesis 4: Partial Influence of Online Service Quality and Offline Service Quality on Customer Satisfaction

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Service Quality Influences Customer Satisfaction. States that the quality of online services influences customer satisfaction. Based on the test results, it is known that the probability value is 0.000 ($p < 0.05$) and the CR value is > 1.65251 and the estimated value is 0.246, thus H4 is accepted, which means that online services have a significant positive effect on customer

satisfaction, so that the quality of service becomes more optimal, which includes increasing quality. online services which include system quality, information quality and service delivery quality increasing customer satisfaction in using online modes of transportation, whether cars or motorbikes.

Offline Service Quality influences Customer Satisfaction. Statistical calculation results can be stated that offline service quality influences customer satisfaction with online transportation. Based on the test results, it is known that the probability value is 0.000 ($p < 0.05$) and the CR value is > 1.65251 and the estimated value is 0.502, thus H4 is accepted, which means that offline service quality has a significant positive effect on customer satisfaction, or it can be interpreted that offline service quality consists of from physical evidence services, guarantees, reliability, responsiveness and empathy will make a difference in increasing customer satisfaction for online transportation customers, whether cars or motorbikes. Based on these results, it can be interpreted that improving the quality of offline services can contribute to increasing satisfaction customers on online car and motorbike transportation.

Testing Hypothesis 5: The Effect of Customer Trust on Customer Satisfaction

From the results of statistical calculations it can be stated that customer trust has an influence on customer satisfaction. Based on the test results, it is known that the probability value is 0.000 ($p < 0.05$) and the CR value is > 1.65251 and the estimate value is 0.437, thus H5 is accepted, which means that customer trust has a significant positive effect on customer satisfaction. This result can be interpreted as that the more consumers or customers Having trust in a service will increase customer satisfaction when using online modes of transportation, whether cars or motorbikes.

Based on the definition above, it can be interpreted that increasing customer trust will increasingly provide an increase in consumer or online transportation customer satisfaction. Customer trust is a variable that customers consider so that it can increase customer satisfaction when using online transportation. Increasing consumer trust is based on increasing integrity (honest attitude), benevolence (concern for consumers), not being opportunistic, credibility of the best service, having competence as a trusted and predictable form of transportation, and being able to understand the market that online transportation must have so that will have an impact on increasing customer satisfaction. Customer satisfaction in using online transportation can be felt by having a pleasant experience when using a car or motorbike, feeling satisfaction based on experience with the quality of product services, satisfaction with the quality of the services provided.

Testing Hypothesis 6: Simultaneous Influence of Customer Trust and Customer Satisfaction on Customer Loyalty

The significance level is $0.00 \leq 0.05$, so it can be interpreted that there is a joint influence of customer trust and customer satisfaction on customer loyalty. Based on the results of structural equation 4 above, it can be interpreted that customer trust and customer satisfaction simultaneously influence online transportation customer loyalty. The influence of changes in the level of customer trust and satisfaction has an impact on changes in increasing customer loyalty. The trust and satisfaction felt by customers are considerations for customers to become loyal in using online transportation, whether cars or motorbikes.

These results can be interpreted as increasing trust that both drivers and companies have more integrity (honest attitude), benevolence (concern for consumers), non-opportunism, credibility of the best service, competency (trusted transportation), predictability (can be predicted) understand the market, and increasing customer satisfaction regarding the experience of using online transportation which is enjoyable, experience of the quality of service products, gaining satisfaction with the services provided by the company will increase customer loyalty, where customers will have more encouragement to recommend to others, customers will have more perceptions positive, making it the main choice and will always use it as a means of transportation to meet their needs.

Customer trust and satisfaction in this research shows that trust related to a pleasant experience regarding the quality of service products and service satisfaction tends to be more in the type of transportation by car than by motorbike. Car transportation has provided a level of trust and satisfaction so that customers have become loyal in using online transportation. Testing Hypothesis 7: Partial influence of customer trust and customer satisfaction on customer loyalty

Customer Trust Influences Customer Loyalty. Based on statistical calculations via AMOS, it

can be stated that trust influences customer loyalty. Based on the test results, it is known that the probability value is 0.000 ($p < 0.05$) and the CR value is $>$

1.65251 and an estimated value of 0.607, thus H7 is accepted, which means that consumer trust in every service provided will encourage increased loyalty behavior and become the main choice in using online transportation modes.

Customer satisfaction influences customer loyalty. Based on the calculations in the table above, it can be stated that customer satisfaction influences customer loyalty. Based on the test results, it is known that the probability value is 0.000 ($p < 0.05$) and the CR value is $>$ 1.65251 and the estimated value is 0.304, thus H7 is accepted, which means that customer satisfaction has a significant positive effect on customer loyalty, so that there is an increase in satisfaction felt by consumers or customers. can encourage customers to become loyal online transportation customers by continuing to use the service and being able to recommend it to others.

Results of identifying the variables that have the most influence on customer trust.

Based on the results of calculations in the structural equation, it can be explained that the customer trust variable is influenced by the online service quality and offline service quality variables. The loading factor value from the calculation results shows that the quality of online services is 0.417 and the quality of offline services is 0.763. Based on the results of these calculations, it can be stated that offline quality is a variable that has a stronger influence on online transportation customer trust.

Results Identify the variables that have the most influence on customer satisfaction.

The customer satisfaction variable is influenced by online service quality and offline service quality. The calculation results based on structural equations show that the loading factor value for online service quality is 0.252 and offline service quality is 0.436. From these results, it can be stated that offline service quality is a stronger variable in influencing online transportation customer satisfaction.

Results of identifying the variables that have the most influence on loyalty.

Based on the results of calculations on the structural equation, it can be explained that the customer loyalty variable is influenced by the variables of customer trust and customer satisfaction. The loading factor value from the calculation results shows customer trust of 0.430 and customer satisfaction of 0.305. Based on the results of these calculations, it can be stated that customer trust is a variable that has a stronger influence on online transportation customer loyalty.

5. Conclusion

Based on the results of the analysis and discussion presented in the previous chapter, the following conclusions can be drawn.

1. Online service quality and offline service quality simultaneously influence customer trust.
2. Online service quality and offline service quality simultaneously influence customer satisfaction.
3. Customer trust and customer satisfaction simultaneously influence customer loyalty.
4. Online service quality and offline service quality partially influence customer trust. These two variables have the effect of increasing customer trust.
5. Online service quality and offline service quality partially influence customer satisfaction. These two variables have the effect of increasing customer satisfaction.
6. Customer trust and customer satisfaction partially influence customer loyalty. These two variables have the effect of increasing customer loyalty.
7. Customer trust influences customer satisfaction, where the higher the level of customer trust, the higher the customer satisfaction.
8. Offline service quality has a stronger influence than online service quality in influencing

customer trust.

9. Offline service quality has a stronger influence than online service quality in influencing customer satisfaction.

10. Customer trust has a stronger influence than customer satisfaction in influencing customer loyalty.

6. Suggestions and Recommendations for Research

Offline service quality influences customer trust and customer trust influences customer satisfaction, and customer trust and customer satisfaction will influence customer loyalty. This can also be interpreted that the use of variables in this research is important because it can increase customers' use of online transportation modes. This research has suggestions for various parties, including: For academics: the findings in this research provide theoretical benefits regarding concepts in consumer behavior. For companies: Online transportation companies such as Gojek and Grab should consider various service qualities both online and offline because both are one unit when seen in the service process, especially to their business partners (drivers). The Gojek and Grab companies for motorbikes have lower online service quality than car vehicles. Based on this, further research can be carried out

Consider:

1. The results of the descriptive analysis show that Gojek and Grab customers in the car type have a better level of online and offline service quality than motorbikes.

2. Online and offline service quality in this research are separate variables. In theory and concept, online and offline service quality have different meanings, but in implementation they both have similarities in measuring performance in terms of service quality, both products and services.

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