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CUSTOMERS' SATISFACTION FACTORS OF ONLINE TRANSPORTATION SERVICES

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Abstract: Customers' Satisfaction Factors of Online Transportation Service. The purpose of this study is to determine the effect of quality of information system, quality of service, perceived security and perceived privacy on customer satisfaction in using online motorcycle transportation. This research is a survey based research with quantitative approach. The populations in this study are all users of Grab online motorcycle transportation services in Special Region of Yogyakarta. Sampling technique in this study used purposive sampling (non-probability sampling) with a total sample of 162 people. The data collection technique used an online questionnaire that has been qualified for validity and reliability. The data analysis method is multiple linear regression analysis methods. The results showed that there is partial positive effect between quality of information system, quality of service, perceived security, and perceived privacy of Grab customers' satisfaction. The four dependent variable simultanously showed a significant positive effect between customer satisfaction and the independent variable with value number of the coefficient of determination (adjusted R^2) is 0,488, the value of the F-test results is 39.412> 2,868312 and significance 0.000.

Keywords: Information Systems Quality, Service Quality, Perceived Security, Perceived Privacy, Customer Satisfaction

Abstrak: Faktor-Faktor Kepuasan Pengguna Jasa Transportasi Ojek Online. *Tujuan dari penelitian ini untuk mengetahui pengaruh kualitas sistem informasi, kualitas pelayanan, persepsi keamanan, dan persepsi privasi terhadap kepuasan pengguna transportasi ojek online. Penelitian ini merupakan penelitian suvei dengan pendekatan kuantitatif. Populasi dalam penelitian ini adalah seluruh pengguna layanan jasa transporasti ojek online Grab di Propinsi Daerah Istimewa Yogyakarta. Teknik penentuan sampel dalam penelitian ini menggunakan purposive sampling (non-probability sampling) dengan jumlah sampel sebanyak 162 orang. Teknik pengumpulan data menggunakan kuesioner online yang telah memenuhi syarat uji validitas dan reliabilitas. Metode analisis data yang digunakan adalah metode analisis regresi linear berganda. Hasil penelitian menunjukan bahwa adanya pengaruh positif secara parsial kualitas sistem informasi, kualitas pelayanan, persepsi keamanan, dan persepsi privasi terhadap kepuasan pelanggan Grab. Keempat variabel dependen tersebut secara simultan menunjukan pengaruh positif signifikan terhadap variabel independen kepuasan pelanggan dengan nilai koefisien determinasi (Adjusted R^2) sebesar 0,488, nilai dari hasil uji F yaitu 39,412 > 2,868312 dan signifikansi sebesar 0,000.*

Kata kunci: *Kualitas Sistem Informasi, Kualitas Pelayanan, Persepsi Keamanan, Persepsi Privasi, Kepuasan Pelanggan*

INTRODUCTION

In this globalization era, people can not be separated from interne. The need for internet is very high, especially to support activities/community activities. According to (IWS, 2019), Asia is the continent with the highest internet users among others, which up to 50.7 percent. Indonesia ranks 5th out of

20 countries with number of internet users up to 143,260,000 as of June 30th, 2019. According to data from Internet World Stats 2019, the percentage growth of internet users is 7.063 percent, range from December 2000 to June 2019. The above statement shows that the use of the internet to support various activities in Indonesia is very high. Based on the results of a survey conducted in 2016 by Asosiasi Penyedia Jasa Internet Indonesia (APJII), it shows that internet in Indonesia used by Indonesian people for various things.

According to data obtained from (APJII, 2016), 26.48 percent people in Indonesia spent over seven hours a day to access the internet every day and up to 65.98 percent people access the Internet every day per week. Indonesia is on of the countries that its internet users were increased rapidly. In 1998, internet users in Indonesia only recorded about 500 thousand. In the early decades of the 21st century, a surge growth of internet users happened and it increased up to around 61 million (Karimuddin, 2012). Those numbers put Indonesia as the fourth largest country that accesses the Internet. Activities of internet users in Indonesia are quite high which allow the people of Indonesia to do online shopping. One of the examples is online food purchases made through delivery system. Online food delivery service is a way to connect with consumers in a way that restaurants partnered with delivery services, then put their menu on a platform to reach more consumers, and consumers can order online and can receive it at their locations in a short time (Lan H, 2016).

According to the researchers obtained from www.grab.com accessed on Saturday, October 26th, 2019 at 17:25, Grab is one of the online-based transportation services providers. Indonesia is a lucrative market for transportation service provider-based applications. No exception for Grab (formerly GrabTaxi), a startup from Malaysia. Grab first entered Indonesian market in June 2014 with a service called GrabTaxi. In 2015 grab taxi spread its wings with the release of a motorcycle online service to compete with Go-Jek, namely GrabBike. This service can be received well by the public. In June 2015, the latest service was released, called GrabCar, in Bali. Then, in August in the same year, GrabCar also presents in Jakarta. GrabCar is a black unmarked car transport service.

According to information obtained from Grab app download page in the Play Store on Thursday, January 9th, 2020. Grab application in Indonesia has been downloaded by more than 100 million times, and get a rating of 4.6 out of 5,308,878 users. It illustrates that Grab is a service company

that is in demand by the people of Indonesia, so the customer satisfaction factors have become a benchmark for the company's success. According to the news quoted https://news.detik.com, on Saturday, October 26th, 2019, at 17:12, a survey conducted by the Yayasan Lembaga Konsumen Indonesia (YLKI) on the satisfaction of the people in Indonesia to transport services online, about 41 percent consumers feel less satisfied with the services of the transport line. The survey was conducted from 5th until 16th April 2017, involving 4,668 respondents spread across Indonesia. The population and sample in this research is people in Indonesia who have used online motorcycle transport facilities. The sample used is by taking random samples that are spread throughout Indonesia. Here are consumers' complaints against the online transportation company services by YLKI survey:

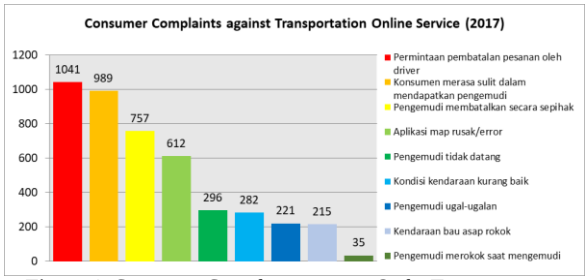

Figure 1. Consumer Complaints against Ojeks Transportation Online (2017)
Source: https://news.detik.com

The research design used in this study is between-subject. The independent variable is the customer satisfaction. The dependent variables are the amount of Information System Quality, Service Quality, Perceived Security, and Perceived Privacy. The purpose of this study was to determine the effect between quality of information system, quality of service, perceived security and perceived privacy on online transportation service customer satisfaction are partial or simoultanous. Based on the description of the problem regarding the quality of information system, the service quality is not optimal, perceived security, and perceived privacy suffered by Grab that has been described above, the researchers are interested to take the research title "Customers' Satisfaction Factors of Online Transportation Service."

LITERATURE REVIEW

Technology Acceptance Model (TAM)

This study refers to the theory of the Technology Acceptance Model (TAM). Referring to the theory of the Technology Acceptance Model (TAM), which explains that the model known as the Technology Acceptance Model (TAM) is a model of information system that shows how users accept and use the technology, the model shows that when the user is presented with a new technology, several factors influence their decision about how and when they will use it, mainly on Perceived Usefulness and Perceived Ease of Use, as well as their attitude towards the usage of new information system (Davis, 1998). According to (Jogiyanto, 2008), the

definition of perceived ease of use also means ease of use; this perception is also a belief about the decision-making process. (Jogiyanto, 2008), also states "If a person feels confident that the information system is easy to use, he will use it". From this statement, the quality of the information system will also affect satisfaction in using the system. Therefore, based on the theory of the Technology Acceptance Model (TAM) on aspects of the perceived ease of use, researchers intend to research with one of the variables on the effect of the quality of information system on the satisfaction of Grab application's customers.

Service Quality and Information System Quality

Quality of service is defined as how different realities and expectations of consumers for services they receive. Quality of service can be determined by comparing the perceptions of consumers with the services they receive. The quality of service here is the quality of service that will affect customer satisfaction. Indicators to measure the quality of service was adapted from the study (Raymond McLeod, 2007), namely: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. Quality Information System according to (Davis, 1989), is defined as the perceived ease of use based on the level of how much technology is relatively easy to understand and use. Grab as providers of online motorcycle taxi services should have a reliable information system, considering the breakthrough Grab is an online-based, which means that the comany must have an effective and efficient information system for its customers. Thus, it takes a quality of a good information system so that a business will run smoothly. Without good quality of information system the company will have difficulty in processing information effectively and efficiently. If the quality of the information system can run well, Grab consumers will benefit such security in the use of information system so the consumers will be satisfied with the company. Customer satisfaction will be created if an information system made easier for Grab consumers.

H_1: There is a positive influence between the quality of the information system and consumer satisfaction on Grab services in Special Region of Yogyakarta.

H_2: There is a positive effect between service quality and customer satisfaction on Grab services in Special Region of Yogyakarta.

Perceived Security

Perceived security is defined as consumer perceptions of safety in conducting e-commerce transactions (Eid, 2011). Consumer satisfaction is the rate of quality of

a product based on product's perceived performance against customer expectations (Kotler and Armstrong, 2012). If consumers feel safe in shopping online, consumer will satisfied. (Jin and Park, 2006) indicate that there is a positive effect between customer satisfaction and online security. This result was also supported by empirical evidence from studies of (Chung and Shin, 2009).

H_3: There is a positive influence between perceived security and customer satisfaction on Grab services in the Special Region of Yogyakarta**.**

Perceived Privacy

According to (Roca et al, 2009), perceived privacy is a possibility that online sellers collect and use data about individuals improperly. Therefore, it makes consumers reluctant to enter their personal information when sites ask for this information because they are worried about the collection and misuse of information sent over the Internet and how their data will be used. The impact is an online consumer be free to provide any personal or financial information to the seller online because they felt that online sellers may misuse or divulge any personal information to other parties. And (Abdullah Kassim, 2010), states that the handling of privacy needs to refer to the protection of various types of data collected (with or without the knowledge of the user) for interaction between users with an online system.

Consumer satisfaction is the rate of quality of a product based on product's perceived performance against customer expectations (Kotler and Armstrong, 2012). If consumer privacy is maintained and protected, consumers will be satisfied to use an onlie motorcycle taxi service. (Chung and Shin, 2010) state that the protection of privacy is important to improve satisfaction. The opinion was supported by the results of the empirical research of (Jin and Park, 2006).

H_4: There is a positive influence between perceived privacy and consumer satisfaction on Grab services in the Special Region of Yogyakarta.

H_5: There is a positive influence between quality of information system, quality of service, perceived security and perceived privacy simultaneously and consumer satisfaction on Grab services in Special Region of Yogyakarta

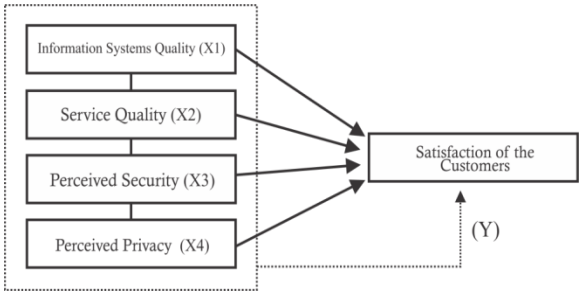

Figure 2. Design Research
Source : Primary Data, 2019

RESEARCH METHOD

Data Collection

In this study, data were collected using a questionnaire tool. The data used in this study are obtained from source specifically collected and processed for later use as object of research. The questionnaire was distributed via online through a google form and spread through social media such as Twitter, Line, Instagram, and WhatsApp. According to (Sugiyono, 2008), research instrument is a tool/instrument used to measure the natural and social events that were observed in detail / specific, all these events named as the study variables. Instrument or measuring devices in this study is questionnaire which contains points of the statement to be given feedback by the study subjects.

The preparation of the questionnaire was based on a theoretical construction which has been prepared previously. Based on these theoretical developed indicators and further developed, the grains instrument of questions and statements have been prepared using a Likert scale. Assessment of the respondents were using a Likert scale, then produced measurement variables in interval scale. Variable Consumer Satisfaction (Mardikawati and Farida, 2013) were measured through 9 item statements. Each statement is measured using a Likert Scale ranging from 1 strongly disagree to 4 for strongly agree. The higher the score of these variables means the higher user satisfaction on Grab services according to user perception. The lower the score of this variable, indicating lower customer satisfaction perceived by consumers. Variable Quality Information System (Gita Gowida 2010) were measured through 10 items statement. Each statement is measured using a Likert Scale ranging from 1 strongly disagree to 4 for strongly agree. The higher the score of these variables means the higher quality of the information system of Grab services according to user perception. The lower the score of this variable, indicating the lower quality of the information system according to consumer perceptions. Variable Quality of Service (Raymond McLeod, 2007) measured by an 11 item statement. Each statement is measured using a Likert Scale ranging from 1 strongly disagree to 4 for strongly agree. The higher the score of these variables means the higher quality of Grab's services according to user perception. The lower the score of this variable, shows lower quality of service as perceived by consumers. Variable Perceived security (Raman Arasu and Viswanathan, 2011) measured through 6 item statements. Each statement is measured using a Likert Scale ranging from 1 strongly disagree to 4 for strongly agree. The higher the score of these variables means the higher quality of service

of Grab services according to user perception. The lower the score of this variable, indicating the lower quality of service as perceived by consumers. Perceived Privacy variables (Malhotra et al, 1994) measured through 6 item statements. Each statement is measured using a Likert Scale ranging from 1 strongly disagree to 4 for strongly agree. The higher the score of these variables means the higher quality of the service according to user perception.

Research Variables

The research design used is between-subject. The independent variable is the customer satisfaction. The dependent variable is the amount of Information System Quality, Service Quality, Perceived Security, and Perceived Privacy.

Population and Sample

The population in this study are all people who have used the services of Grab in the Special Region of Yogyakarta. Grab Consumers have a number that can not be estimated. Therefore, researchers decided to use non-probability sampling techniques. Non-probability sampling is model/techniques in sampling which not provide equal opportunities for every member of the population, the following areas/elements to be determined as the study sample (Sugiyono, 2007). Non-probability sampling techniques are suitable for very large populations where there is a lot of availability in the population, therefore, this sample is used because it represents the population and the results can be generalized to the entire population. The population size in this study was very broad with an unknown number of certainity, therefore the researchers used a sample size, (Rao Purba, 1996).

Data Analysis

This research is survey based research with a quantitative approach. The population in this study are all users of Grab online motorcycle transport service in Special Region of Yogyakarta. Sampling technique in this study is using purposive sampling (non-probability sampling) with a total sample 162 people. The data collection technique was an online questionnaire that has been qualified for validity and reliability.

Table 1. Reliability Test

Variable	Cronbach's Alpha	Result
Information System Quality (X1)	0,848	Reliable
Service Quality (X2)	0,860	Reliable
Perceived Security (X3)	0,900	Reliable
Perceived Privacy (X4)	0,926	Reliable
Customer Satisfaction (Y)	0,930	Reliable

Table 2. Vaidity Test of Customer Satisfaction (Y)

Questions	R-test	R-table	Result
1	0,757	0,294	*Valid*
2	0,762	0,294	*Valid*
3	0,704	0,294	*Valid*
4	0,623	0,294	*Valid*
5	0,613	0,294	*Valid*
6	0,685	0,294	*Valid*
7	0,791	0,294	*Valid*
8	0,721	0,294	*Valid*
9	0,499	0,294	*Valid*

Table 3. Vaidity Test of Information System Quality (X_1)

Questions	R-test	R-table	Result
1	0,661	0,294	*Valid*
2	0,583	0,294	*Valid*
3	0,672	0,294	*Valid*
4	0,825	0,294	*Valid*
5	0,656	0,294	*Valid*
6	0,585	0,294	*Valid*
7	0,700	0,294	*Valid*
8	0,659	0,294	*Valid*
9	0,702	0,294	*Valid*
10	0,689	0,294	*Valid*

Table 4. Vaidity Test of Service Quality (X_2)

Questions	R-test	R-table	Result
1	0,734	0,294	*Valid*
2	0,616	0,294	*Valid*
3	0,568	0,294	*Valid*
4	0,668	0,294	*Valid*
5	0,726	0,294	*Valid*
6	0,742	0,294	*Valid*
7	0,663	0,294	*Valid*
8	0,797	0,294	*Valid*
9	0,821	0,294	*Valid*
10	0,745	0,294	*Valid*
11	0,816	0,294	*Valid*

Table 5**.** Vaidity Test of Perceived Security (X_3)

Questions	R-test	R-table	Result
1	0,834	0,294	*Valid*
2	0,900	0,294	*Valid*
3	0,756	0,294	*Valid*
4	0,836	0,294	*Valid*
5	0,921	0,294	*Valid*
6	0,889	0,294	*Valid*

Table 6. Vaidity Test of Perceived Privacy (X_4)

Questions	R-test	R-table	Result
1	0,639	0,294	*Valid*
2	0,872	0,294	*Valid*
3	0,898	0,294	*Valid*
4	0,896	0,294	*Valid*
5	0,907	0,294	*Valid*
6	0,927	0,294	*Valid*

The data analysis method was multiple linear regression analysis methods. The research design used in this study is survey research. In survey research, the information collected from respondents using a questionnaire. According to (Sugiyono, 2008), Survey research is data collection using questionnaire/interviews to get feedback from respondents. Casual comparative research is a type of research which determine causal relationship of two or more variables. Researchers can identify the facts or events as a variable that is affected (the dependent variable) and launched an investigation of the variables that influence (independent variable).

RESULT AND DISCUSSION

The data were obtained using online questionnaire through a google form. Questionnaire which meet the criteria of valid and reliable publicized through social media such as Line, Instagram, and Whatsapp, then from the questionnaire dissemination, the data which can be processed were from 162 respondents. Grab respondents are customers in the Special

Region of Yogyakarta. Respondents consisted of 23.5% male and 76.5% female, with the following description, the number of men was 38 respondents, and women were 124 respondents. All respondents had met the criteria that are domiciled in Special Region of Yogyakarta, gender to male or female, have used Grab application services at least once, and aged 15 to 60 years. The respondents involved various age groups, which 40 respondents were 16-20 years old respondents or 24.7%, 92 respondents were aged 21-25 years or 56.8%, age 26-30 years were 11 respondents or 6.8%, age 31-35 years were 4 respondents or 2.5%, age > 36 years were 15 respondents or 9.3%. Based on the frequency above it can be concluded that the respondent was dominated by 21-25-year-old respondents with 56.8 percent.

Table 7**.** Variable Data Description

Var.	N	Min	Max	mean	St. dev
Information System Quality (X_1)	162	25	36	30.3457	2.95583
Service Quality (X_2)	162	20	40	31.0247	3.51209
Perceived Security (X_3)	162	27	43	34.1852	3.10524
Perceived Privacy (X_4)	162	12	24	18.2716	2.52939
Customer Satisfaction (Y)	162	12	24	18.1296	2.77777

Test of validity is used to measure the level of validity (valid or invalid) of a questionnaire. A questionnaire considered valid if the questions were able to reveal something that will be measured by the questionnaire (Ghozali, 2011). To measure the validity, it can be done with correlation between scores of the questions/statements and total score of constructs or variables. Criteria for the submission of an item is said to be valid if the correlation coefficient r count is positive and equal to or greater than r table with a significance level of 5%, if the coefficient is smaller than 5% r table the correlation is said to be significant. Test reliability is a device used to perform measurements on a questionnaire that includes an indicator of variables or constructs (model). A questionnaire said to be reliable or not if someone answers are consistent or stable over time. Measurement reliability in this study using one-shot or measurement method once and then the results will be compared with other questions or measure the correlation between the answers to the questions using Cronbach's alpha statistic test in which a variable is said to be reliable if the value of Cronbach's Alpha > 0.70 (Ghozali, 2011). Normality test used to test whether a regression model, the confounding variable, has a normal distribution or not (Ghozali, 2011). The method used in this study is One-Sample Kolmogorov-Smirnov test with a significance level of 0.05.

Data are expressed in normal distribution if the significance is greater than 0.05. The linearity test is used to see if the specifications of the model used are correct or not. The functions used in empirical studies preferably in the form of linear, quadratic or cubic, to test the linearity will obtain empirical information on whether the model should be linear, quadratic or cubic (Ghozali, 2011). Linearity can be known through the linearity test of ANOVA by finding the value of deviation from the linearity of test F is linear (Sutrisno Hadi, 2004). A multicollinearity test is used to determine whether there is a correlation between the independent variables in the regression model. A good regression model does not contain multicollinearity. Detecting multicollinearity can be dodone by seeing the value of tolerance and variance inflation factor (VIF) as a benchmark. If the tolerance value $\leq 0,10$ and VIF ≥ 10 it can be concluded that the study are multicollinearity (Ghozali, 2011). Heteroscedasticity test is performed to determine whether inequalities occur variants of residuals some observations to other observations in a regression (Husein Umar, 2011: 179).

Table 8**.** Normality Test Results

Variables	Sig	Level of Sig.	Information
residual	0.059	0:05	Normal

Table 9. Linearity Test Results

Variables	*Sig. (Defiation From Linearity)*	Information
$Y\text{-}X_1$	0.279	linear
$Y\text{-}X_2$	0,071	linear
$Y\text{-}X_3$	0.104	linear
$Y\text{-}X_4$	0.368	linear

Table 10. Multicollinearity Test Results

Variables	*Tolerance*	VIF	Information
Information System Quality (X_1)	0.518	1,929	Not Contain Multicollinearity
Service Quality (X_2)	0.554	1.806	Not Contain Multicollinearity
Perceived Security (X_3)	0.416	2,405	Not Contain Multicollinearity
Perceived Privacy (X_4)	0.446	2,243	Not Contain Multicollinearity

Table 11. Heteroskidasticity Test Results

Variables	Sig.	Information
Information System Quality (X1)	0.828	Not Contain Heteroscedasticity
Service Quality (X2)	0.809	Not Contain Heteroscedasticity
Perceived Security (X3)	0.887	Not Contain Heteroscedasticity
Perceived Privacy (X4)	0,462	Not Contain Heteroscedasticity

This research will be carried out using glejser heteroscedasticity test that correlates with the residual absolute value of each variable. When the independent variables significantly influence the dependent variable, it indicated that there is heteroscedasticity. This can be seen when the significance probability value above 5% (0.05) (Ghozali, 2011). Heteroscedasticity

test is performed to determine whether residual variants inequalities occur in some observations with other observations in a regression (Husein Umar, 2011).

Multiple Regression Significance Test (F-Test)

F statistical test used to test the effect of independent variables together on the dependent variable. The way to determine whether the independent variables have the same effect on the dependent variable or not is by comparing the value of F calculated by the value of F-table. The criteria for determining the hypothesis acceptance is if the significance value F is smaller than the significance level of 5% and F count larger than F-table. Test significance of the regression is done by comparing the F-count with the F-table or by comparing with the level of significance probability is 0.05.

Table 12. Test Results F-Test

	Regression	
	F	**Sig.**
Regression Model	39.412	0,000

Based on the table above, it can be seen that the F-count is greater than F-table is 39.412> 2,868312 and 0.000 significance value is smaller than the predetermined level of significance 0.000 <0.05, which means there is a significant effect. This means that the effect of Information System Quality, Service Quality, Perceived Security and Perceived Privacy towards customer satisfaction is significant. Because of this, the fifth hypothesis (H_5), there is positive influences between Information System Quality, Service Quality, Perceived Security and Perceived Privacy against Customer Satisfaction of online motorcycle taxi services in Special Region of Yogyakarta, accepted.

The Coefficient of Determination (Adjusted R^2)

The coefficient of determination is one of the statistical values used to determine the effect of two variables. The coefficient of determination (R^2) was used to measure how well the regression line with the actual data (goodness of fit). This determination coefficient measures the percentage of the total variation in the dependent variable Y that is explained by the independent variable in the regression line. Value (R^2) is 0 and 1 ($0 \leq R^2 \leq 1$). (R^2) getting closer to 1 means the better regression line, and getting closer to the number 0 means the regression line is not good. (Ghozali, 2011).

Table 13. Test Results the Coefficient of Determination (Adjusted R^2)

	Regression		
	R	**R Square**	***Adjusted R Square***
Regression Model	0.708	0.501	0,488

According to the table above, it can be seen that the coefficient of determination (adjusted R^2) is 0.488. From the value can be interpreted that 48.8% Customer Satisfaction variables were influenced by Information System Quality, Service Quality, Perceived Security and Perceived Privacy, while the remaining 51.2% were influenced by other factors not included in this model.

Simple Regression Significance Test (T-Test)

The t-test is a parametric test to see the significance of the influence of the independent variables individually (partially) on the dependent variable. H_o: bi = 0, 000 means that the independent variable has no significant effect on the dependent variable. H1: bi ≠ 0 means that the independent variables significantly influence the dependent variable. The t-test can be done by comparing the value of the t statistic with a crisis point according to the table. If t-test < t-table then the decision is failing to reject (accept) the null hypothesis (H_o) and reject the alternative hypothesis (H_a). If t-test > t-table, then the decision is to reject the null hypothesis (H_o) and failed to refuse (receive) the alternative hypothesis (H_a).

The results of the study support the fifth hypothesis that there is positive influences between Information System Quality, Service Quality, Perceived Security and Perceived Privacy and Customer Satisfaction on Grab services in Special Region of Yogyakarta simultaneously. Based on the Table 14. Above, it can be seen that the F-count is greater than F-table (39.412>2,868312), and 0.000 significance is smaller than the predetermined level of significance 0.000 <0.05, which means there is a significant effect.

Table 14. Test Results T-Test

Model	coefficients unstandardized		standardized Coefficients	T-Count	T-Table	Sig.
	B	Std. Error	beta			
Constants	7.170	1,899		3.776	1,6546 2	0,000
Quality Information System	0.259	0,066	0,308	3.935	1,6546 2	0,000
Service quality	0.430	0,072	0.451	5.958	1,6546 2	0,000
Security perceptions	-0.154	0.102	-0.132	-1.506	1,6546 2	0,067
Perceived Privacy	0.180	0.090	0.169	1,999	1,6546 2	0,0235

Dependent Variables: Customer Satisfaction

H_5: There is positive influence between the quality of information system, quality of service, perceived security and perceived privacy simultaneously on consumer

satisfaction on Grab services in Special Region of Yogyakarta

This is indicated by a constant value of 7.170 means that if the quality of Information System, Service Quality, Perceived Security and Perceived Privacy variable considered constant, then the value of customer satisfaction is equal to 7.170. The coefficient value 0.259 of the quality Information System indicated that if Quality Information System increased by 1 point, then customer satisfaction will be increased by 0.259 assuming variable Service Quality, Perceived Security and Perceived Privacy remains. Service Quality variable coefficient value of 0,430 means that if the Quality of Service increased 1 point, then the value of customer satisfaction will be increased by 0.430 assuming the Information System Quality variables, Perceived Security and Perceived Privacy remain. Perceived security variable coefficient value of -0.154, which means when the Security Perception increased 1 point, then the value of customer satisfaction will be reduced by 0,154, assuming the variable quality of Information System, Quality of Service, and Perceived Privacy remain. Perceived Privacy variable coefficient value of 0.180 which means that if the Perceived Privacy increased 1 point, then the value of customer satisfaction will be increased by 0.180 assuming variable Information System Quality, Service Quality and Perceived Security remains. The results support the hypothesis that there is positive influences between Quality Information System and Customer Satisfaction on Grab services in Special Region of Yogyakarta. This statement is supported by the t-test value of 3.935. When compared to the t-table at a significance level of 0.05 with df = 157 at 1,65462, then the t-count larger than t-table 3.935>1,65462. Besides the significance probability value of 0.000 is smaller than the significance level was set at 0.05 yan (0.000 <0.05) means that the variable quality of information system variables significantly influences customer satisfaction.

H_1: There is a positive influence on the quality of the information system on consumer satisfaction on services Grab in the Special Region of Yogyakarta.

The results of the study support the second hypothesis that there is a positive influence on the Service Quality and Customer Satisfacti on Grab services in the Special Region of Yogyakarta. This is indicated by the value of t-count equal to 5.958. When compared to the t-table at a significance level of 0.05 with df = 157 at 1,65462, then the t-count larger than t-table 5.958> 1,65462. Additionally, the significance probability value of 0.000 is smaller than the determined significance level of 0.05 (0.000 <0.05) means that the

variables significantly influence the Quality Service Customer Satisfaction variables.

H_2: There is a positive effect between service quality and customer satisfaction on Grab services in the Special Region of Yogyakarta.

The results of the study did not support the third hypothesis, which explained as there is a negative influence between the perceived security and Customer Satisfaction on Grab services in the Special Region of Yogyakarta. This is indicated by the t-test value of -1.506. When compared to the t-table at a significance level of 0.05 with df = 157 at 1,65462, then the t-count smaller than t-table -1.506<1,65462. Additionally, the significance probability value of 0,134 is larger than the significance level was set at 0.05 (0.067 > 0.05) means that the variables not significantly influence the security perception variable Customer Satisfaction.

H_3: There is a negative influence on the perceived security of customer satisfaction on service Grab in the Special Region of Yogyakarta.

The results of the study support the fourth hypothesis which indicated that there is a positive influence between the Perceived Privacy and Customer Satisfaction on Grab services in Special Region of Yogyakarta. This is indicated by the t-test value of 1,999. When compared to the t-table at a significance level of 0.05 with df = 157 at 1,65462, then the t-count larger than t-table 1,999>1,65462. Additionally, the significance probability value of 0,0235 is smaller than the determined significance level at 0.05 (0.0235 <0.05) means that the Perceived Privacy variable significantly influence customer satisfaction.

H_4: There is a positive influence between the perceived privacy and consumer's satisfaction on Grab services in Special Region of Yogyakarta.

CONCLUSION

Based on the analysis of the influence of Information System Quality, Service Quality, Perceived Security and Perceived Privacy on User Satisfaction Perception of Online Motorcycle taxi transportation, it can be concluded that there is a positive and significant correlation between Quality Information System and online Motorcycle taxi Customer Satisfactio. There is a positive and significant correlation between Quality of Service to the Customer Satisfaction of Online Motorcycle taxi. There is a negative and insignificant correlation between perceived security against Customer Satisfaction Online of Motorcycle taxi. There is a positive and significant influence between Perceived Privacy against Customer Satisfaction of Online Motorcycle taxi. There is a positive and significant effect

simultaneously between Information System Quality, Service Quality, Perceived Security and Perceived Privacy against Customer Satisfaction Online Motorcycle taxi. F-count value summed up to 39.412 is larger than the F-table at the 5%, with significance level 2,868312. Beside that, the significance probability value of 0.000, which is smaller than the significance level was determined to be 0.05, meaning that the variable quality of Information System, Quality of Service, Perceived Security, and Perceived Privacy variables significantly influence customer satisfaction. The coefficient of determination (adjusted R^2) of 0.488 implies that the Grab as a provider of information system needs to perform an effective Quality Information System in the applicatikn, which aims to facilitate users and ensure the security of user data that does not happen again Grab unwanted things. The better the quality of the information system, the user satisfaction will increase. The Grab company needs to pay attention to its user, in this case, the Grab and the Customer Service are expected to provide optimum service to the user, so the user will feel the benefits and can create user loyalty. Additionally, the driver Grab needs to improve the quality of the vehicles that will be used. For example, provide a decent helmet for the user, check the vehicle condition, and be friendly to the user. The higher quality of service it will improve user satisfaction. If consumers feel safe in shopping online, then a consumer will feel satisfied. Thus, the company Grab needs to improve the quality of information system so that the system can not be hacked by certain elements, in addition to Grab as a company also need to increase user confidence in the security of the transaction against cash and non-cash, to provide security to the user. The higher-level Information System Security will increase user satisfaction. By protecting consumer's information when filling personal data, protecting consumers' transaction data, and providing protection facility for credit card data, it will make the user feel the satisfaction. By mean of this, the company need to manage a user's personal information wisely, do not misuse the personal information of the users, and to guarantee the protection of user's personal information. The higher the level of protection of users' personal information will increase user satisfaction. Suggestion for a result to this research are Grab drivers need to prepare for change, so when the user gave the money to pay for the services, Grab has been ready to give the change. Grab as an online based transportation company must make a compatible application for all kinds of devices and always monitor the server to be ready if there is a malfunction or disorder perceived by teh users. Grab also must pay attention to the facilities used by the partners,

for example a driver Grab. Grab is also required to provide newer facilities to be used in future such as the selection of the driver so the later users will feel satisfied. The sample used in this study is small compared to the Grab in Yogyakarta province. Further research is expected to increase the number of samples, so the research results closer to the actual conditions.

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