Factors Affecting Decisions to Choose Application Based Transportation

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Abstract
The existence of service application for ojek and call taxi is a solution for people who have difficulty using public transport due to its accessibility and point to point pick up service. This study aims to determine the factors that influence customer decisions in using application-based “Motorbike Taxi” like Go-Jek. This research was conducted on the Putera Batam University’s students that have used Go-Jek application, with a sample size of 100 students as its respondents. The sampling technique used is incidental sampling method and is estimated to represent the population. Data analysis method used in this research is descriptively quantitative analysis of the factors that influence students in using the services of Go-Jek. The results showed that service quality factors that influence students’ decisions to choose transportation services based on “Motorbike Taxi” service orders consist of 6 factors: service, completeness of driving, security, trust, responsiveness and reliability, where the most dominant factor is service factor.

Keywords— Application-based Transportation, Service Quality, Customer Decisions

I. INTRODUCTION
Transportations are important to carry out daily activities, both as a tool to move from one place to another and to deliver goods to their destination. There are a few forms of transportations, it could be in the form of land, sea and air transportations. Motorized vehicles both motorbikes and cars are the most widely used land transportation. In Indonesia, motorbikes are the most widely used vehicles due to its economical and affordable price compared to cars. The current types of public transportation in Batam are buses (Damri, Trans Batam-public transportation, taxis and motorbike taxis). Data from Samsat Batam shows yearly growth in the number of vehicles in Batam, up until the end of May 2016 there were 704,266 of vehicles in Batam consisting of...
587,241 of motorbikes, 117,025 of cars. In June 2013, the number of vehicles in Batam was 630,234, this shows a rapid growth in number of vehicles, where increase in traffic would be unavoidable.

The use of the internet has also shown continuous and rapid growth, this is due to the increasing amount of users and its importance as the source of competitive advantage in both B2B (Business to Business) or B2C (Business to Consumer) marketing systems. This has brought much attention to the growth of opportunities in digital marketing/e-marketing (Leeffang et al., 2014). Despite the current slowdown in economic development there is still growth in e-commerce. Electronic commerce utilizes the internet for advertisements and information sharing. In 2011, Google's advertising revenue exceeded USD 36 billion and internet advertisements continues to grow each year, with an estimation of approximately more than 10% each year, where in 2012, Google ads greeted $ 39.5 billion (Laudon & Laudon, 2015:8).

The phenomenon of online transportation is developing rapidly in Indonesia, entrepreneurs are competing to get customers, this is because smartphones are commonly used and owned by everyone despite their various lifestyles. The online transportation market in Indonesia is competitive due to the increase in online motorbike taxis applications available in Indonesia. Thus, resulting in a price-war phenomenon, where promotion codes and monthly/yearly subscription codes are offered to retain customer loyalty. Since 2016, Indonesia’s Business Competition Supervisory Commission (KPPU) has been involved in monitoring online motorbike taxi rates. The following are some application-based transportation operating in Indonesia: Go-Jek, Grab, Uber, WakJek, TopJek, TeknoJek, OjekArgo and many more. Regulations on online transportation are still very weak in some parts of Indonesia. Hence, due to weak government regulations, Go-Jek’s presence in Batam is considered illegal (non-permit Taxi). In addition, online transportation existence has been widely protested by conventional transportation businesses in Batam. Batam’s Local and Provincial Department of Transportation decided to be closed Go-Jek Batam’s Representative Office and enforced Go-Jek to lodge an operational permit. The community has disregarded these issues and was still using Go-Jek’s services due to affordability and convenience.

The presence of the motorbike taxis and call taxi service applications has offered accessibility, flexibility and convenience to ease consumers experiencing public transportation. Its point-to-point pick up services, with an affordable price, has provide convenience to consumers, this results in increase demands of Gojek’s pickup service (Go-ride) (Tong et al., 2017). Increase of awareness and unique benefits of taxi applications would likely result in change of world trends and radar over the near future (W. Y. Chan et al., 2016). Passengers in Thailand stated that using the GrabTaxi application has decrease duration of travel, ensure destination is reached, safety and comfort, these has become factors that influence the consumer decisions to use GrabTaxi. The purpose of this study is to determine factors that influence consumer decisions in Putera Batam University’s students to use Go-Jek services, as well as to determine dominant factors in consumer decisions to use Go-Jek services.

II. LITERATURE REVIEW

A. Application-Based Transportation

Call Taxi Application (CTA) is a smartphone application where passengers can easily get taxi information via cellphone and the information will be sent to all drivers using the CTA driver terminal (Peng et al., 2014). Online transportation companies provide very low prices and free services to consumers who order a car through their application for the first time. Moreover, some types of cars that are operated have higher quality than regular taxis and offer better services (Zhang & Lu, 2016). Emergence of support for technological features on smartphones as well as the development of Android applications would minimize risks in terms of time, convenience, cost and security using transportation modes (Amajda, 2016). Online transportation services have unique characteristics compared to other m-commerce services its core difference is in its service process of involving inseparable physical services between drivers, vehicles and the tendency of users repeated use of its services (Silalahi et al., 2018)

B. Consumer behavior

Consumer behavior is a study of how to satisfy consumers desires and needs, as an individual, groups and organizations, in choosing, using, buying, and placing goods, services, ideas or experience (Kotler & Keller, 2009). Consumer behavior is a dynamic relationship between influence and behavior situations and events that
exist around the environment in which humans carry out exchange activities in their lives (Paul & Olson, 2010). In online shopping sites, consumer loyalty is a factor that determines consumer's decision to continue shopping (Park & Kim, 2003). The intention to engage in online purchases is the exchange, trust, satisfaction and creativity of the seller which is a considerable force for the intention of consumers to engage in consumer buying behavior (Shiau & Meiling Luo, 2012).

C. Service quality

Consumer behavior is positively influenced by service quality, increase in service quality will increase consumer intentions for purchases (Zeithaml et al., 2009). Tangibles and Empathy in the case of physical appearance, cleanliness and overall appearance in service are important elements that must be considered to determine service satisfaction (Jeoung-Hak et al., 111). Users of public transportation value services in the form of less waiting time, cleanliness and comfort of transportation compared to driver’s driving skills, bus occupancy and duration of travel (dell’ Olio et al., 2011). Consumer satisfaction with public transportation can be improved by increasing consumer perceptions about waiting time, public transport vehicles conditions, online frequency, performance and terminal security (Morfoulaki et al., 2007).

D. Consumer Decision

Consumer decision exists in situations where there are two or more available (Schiffman & Kanuk, 2008). There are 5 (five) stages in purchase decision process namely problem recognition, information retrieval, consideration of several choices, decisions and consumer behavior after purchase (Kotler & Keller, 2009).

E. Previous Research

Research conducted by (W. Y. Chan et al., 2016) titled “Taxi App Market Analysis in Hong Kong” states that there are currently around 20 taxi applications in Hong Kong, their general business model is to automatically supply matching and direct communication services between the driver and prospective passengers. To get economic efficiency, a monthly subscription fee is charged to benefit from drivers who enjoy the economic efficiency provided by the application. The taxi application market in Hong Kong has promising potential, but it is still a transition from traditional to application dominated. By increasing awareness and benefits of the unique taxi application it is possible to replace radio channels that have been around for years. Research (Ackaradejruangsri, 2015) with the title “Insights on GrabTaxi: An Alternative Ride Service in Thailand” states that fast travel, certainty, travel security and comfort of the trip are the most influential factors behind their decision to use GrabTaxi. Taxi drivers assess the freedom of time, the number of channels that are connected to passengers; an efficient system, higher income and prosperity are their motivations for participation. But concerns and challenges remain that traditional practices and regulations are a challenge going forward.

Research Zhang and Lu (2016) entitled “Factors Affecting the Demand for the Taxi-Evidence from Zhejiang, China” found that four factors caught the attention of consumers when they chose different car ordering application. These factors are discounts given by different online transportation companies, different types of cars operated by online transportation companies, the time taken for the driver’s response. From the survey, discount offered by different online transportation companies are very attractive to consumers. Research (Pangaribuan et al., 2016) entitled “Factors Affecting Tourist Decisions Using Application-Based Transportation at PT Go-jek Indonesia” which states that the 5 factors that influence tourist in using the Go-jek application are external factors, psychological factors, internal factors, motivational factors and energy saving factors which of these factors have the biggest contribution are external factors namely reference, culture, saving, price competition, security perception and trust in using the internet. Research (Pratiwi & Djawoto, 2017) entitled “Analysis of Factors Affecting Consumer Decisions in Choosing a Grab-Car in Surabaya” states that the variables that influence consumers' decisions in choosing a Grab-Car consist of four variables: price, promotion, service quality and perceptions of utilization, of all these variables, the most dominant influence on consumer decisions in choosing a Grab-car is price, then followed by factors of expediency, service quality and promotion factors
Theoretical Framework

| Tangible Factor | Reliability Factor | Responsiveness Factor | Assurance Factor | Empathy Factor |
|-----------------|--------------------|-----------------------|------------------|---------------|
|                 |                    |                       |                  |               |

The decision to choose Go-Jek

Figure 1. Theoretical Framework (source: Researcher identification)

III. RESEARCH METHODOLOGY

The population in this study is students in Putera Batam University who had used Go-Jek application. Sample size needed in this study is 100 samples with a sampling technique using convenience sampling method and is expected to represent the population. The population is 6,180, namely the number of students at Putera Batam University in 2018. This research method uses a descriptive method that aims to explain and summarize the factors that influence students choosing Go-Jek services and what factors are the most dominant in influencing students choosing Go-Jek services. The study was conducted at the University of Putera Batam. Data collection is carried out between June - September 2018. The following is a research flow chart:

Figure 2. Diagram of the research (source: Researcher identification)

Data analysis method used in this study to assess whether a group of variables in the correlation matrix is in accordance with factor analysis using KMO (Kaiser-Mayer-Olkin) ie. the index used to compare observed relationships with the magnitude of partial coefficients. The number produced by KMO must be greater than
0.50 for the factor analysis to be further processed. *Bartlett's Test of Sphericity* is used to test interdependence between the variables as indicators. The value of the Barlet test must be $< 0.05$ for a factor analysis to be carried out (Santoso, 2012). *Anti-Image Matrices* table could be used to determine correlation between independent variables, where value is based on MSA (Measure of Sampling Adequacy), if the value of MSA $= 1$ then the variable can be predicted without error from other variables, if the value of MSA $> 0.5$ then the variable can predicted and analyzed further, but if the MSA value $<0.5$ then the variable cannot be further analyzed and must be excluded from other variables (Santoso, 2012).

PCA (Principal Component Analysis) is used to determine the number of factors in this study, it is an analytical technique for transforming old variables that are still correlated into new variables that are not correlated. PCA, when extracted, will produce an *Eigen correlation matrix*, the *eigen value* can determine the number of factors. If eigen value $> 1$, it can be used as a core factor, but if the eigen value $< 1$, it cannot be selected as a core factor (Parhusip et al., 2008). Then, *Varimax method rotation factor* is used to explain whether the factors formed are significant and different from other factors. *Varimax rotation* is a method to get the highest factor structure of each variable on a factor, the factor structure will indicate different construct in each factor, Varimax rotation will eliminate the common factor (Suprapto, 2004). This study used SPSS statistical software 21 Application to process data. There are five factors researched in this study, namely; tangibility, reliability, responsiveness, assurance and empathy as 1 variable, and decision-making variable to choose Go-Jek.

**IV. RESULTS AND DISCUSSION**

**A. Description of Respondents**

Description of respondents based on gender is 63% female and 37% male out of 100 respondents. While based on student departments were mostly from management department with 53%, accounting department with 17%, informatics engineering department with 7%, while English department with 2%. Respondents’ description based on having used Go-Jek more than twice was that 79% of respondents had used the Go-Jek application more than twice, and 21% used Go-Jek less than twice. The description based on respondents who own a motorcycle is that 84% of respondents already own a motorcycle and 16% of respondents do not own a motorcycle. From the results of the validity test showed significant for all indicators and statement items in the sense that the variables used in the questionnaire met the validity requirements. While the results of the reliability test using Cronbach alpha (α) show that the research variable is reliable, this can be seen from the result of the alpha coefficient value of each research variable greater than 0.7.

**B. Description of Research Data**

The following are the responses of respondents based on the questionnaire given to respondents:

1) **Tangible Variables**

![Figure 2. Respond of Respondents toward tangible variables](image-url)

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2) **Reliability Variables**

![Figure 3. Respondents responds towards Reliability](image)

3) **Responsiveness Variables**

![Figure 4. Respond of Respondents toward Responsiveness](image)

4) **Assurance Variables**

![Figure 5. Respond of Respondents toward Assurance](image)
5) *Emphaty Variables*

![Figure 6: Respond of Respondents toward Emphaty](image)

### C. Factor Analysis Results

**Overall Variable Testing and Data Adequacy Test**

Overall variable testing and data adequacy testing using the KMO (Kaiser Mayer Olkin) statistical test used to determine the feasibility of factor analysis and the Barlett Test Sphericity with a significant value <$0.05. Factor analysis is feasible if the KMO value is between 0.5 and 1. If the KMO value is below 0.05, then the factor analysis is not feasible. Following are the results of the Barlett Test Sphericity and KMO tests.

| Table 1. KMO Test Results and Barlett Test Sphericity |
|-------------------------------------------------------|
| **KMO and Bartlett’s Test**                           |
| Kaiser-Meyer-Oklin Measure of Sampling Adequacy.      |
| Approx. Chi-Square                                    |
| df                                                    |
| Sig.                                                  |
| 0.773                                                 |
| 1052.422                                              |
| 351                                                   |
| 0.000                                                 |

The results of KMO in table 1 show the value of 0.773 with a significant value of 0.000, this shows that the value of 0.773 > 0.5 and the significance of 0.000 <0.05 which indicates that the variables and samples can be further analyzed.

The following is the Anti-Image Matrices table used to test the results of the validity of research indicators.

| Table 2. Anti-Image Matrices |
|-----------------------------|
| **Variable**    | **MSA** |
| Q1              | 0.753  |
| Q2              | 0.797  |
| Q3              | 0.810  |
| Q4              | 0.810  |
| Q5              | 0.714  |
| Q6              | 0.802  |
| Q7              | 0.853  |
| Q8              | 0.807  |
| Q9              | 0.645  |
| Q10             | 0.850  |
| Q11             | 0.879  |
| Q12             | 0.792  |
| Q13             | 0.784  |
| Q14             | 0.790  |
| Q15             | 0.872  |
| Q16             | 0.763  |
| Q17             | 0.865  |
| Q18             | 0.778  |
Table 2 shows the result of the validity test of 22 questions in the questioner as all valid due to their MSA values ranging between 0 to 1, and hence all variables can be further analyzed.

**Numbers of factors**

Number of factors can be determined using Principal Component Analysis (PCA) method to transform correlated variables with new variables. The number of factors in the model would be based on its eigen value ($eigen\ value > 1$).

**Table 3. Eigen value and Percentage of Variance**

| Component | Initial Eigenvalues | Extraction Sums of Squared Loadings | Rotation Sums of Squared Loadings | Total Variance Explained |
|-----------|---------------------|-------------------------------------|-----------------------------------|-------------------------|
|           | Total               | % of Variance                       | Cumulative %                     | Total                   | % of Variance                       | Cumulative %                     |
| 1         | 6.414               | 29.155                              | 29.155                            | 6.414                   | 12.216                              | 12.216                              |
| 2         | 1.982               | 9.009                               | 38.164                            | 1.982                   | 9.009                               | 24.294                              |
| 3         | 1.656               | 7.525                               | 45.690                            | 1.656                   | 11.639                              | 35.933                              |
| 4         | 1.370               | 6.228                               | 51.918                            | 1.370                   | 12.078                              | 46.195                              |
| 5         | 1.162               | 5.283                               | 57.201                            | 1.162                   | 8.041                               | 54.236                              |
| 6         | 1.012               | 4.598                               | 61.799                            | 1.012                   | 7.563                               | 61.799                              |
| 7         | .902                | 4.098                               | 65.897                            | .902                    | .863                                | 69.822                              |
| 8         | .863                | 3.925                               | 73.469                            | .863                    | .802                                | 80.105                              |
| 9         | .802                | 3.646                               | 77.046                            | .802                    | .787                                | 80.105                              |
| 10        | .787                | 3.577                               | 80.105                            | .787                    | .787                                | 80.105                              |
| 11        | .673                | 3.060                               | 80.105                            | .673                    | .673                                | 80.105                              |
| 12        | .615                | 2.797                               | 82.902                            | .615                    | .615                                | 82.902                              |
| 13        | .588                | 2.672                               | 85.573                            | .588                    | .588                                | 85.573                              |
| 14        | .546                | 2.483                               | 88.057                            | .546                    | .546                                | 88.057                              |
| 15        | .471                | 2.141                               | 90.198                            | .471                    | .471                                | 90.198                              |
| 16        | .433                | 1.968                               | 92.166                            | .433                    | .433                                | 92.166                              |
| 17        | .372                | 1.693                               | 93.859                            | .372                    | .372                                | 93.859                              |
| 18        | .316                | 1.438                               | 95.297                            | .316                    | .316                                | 95.297                              |
| 19        | .291                | 1.325                               | 96.621                            | .291                    | .291                                | 96.621                              |
| 20        | .276                | 1.257                               | 97.878                            | .276                    | .276                                | 97.878                              |
| 21        | .235                | 1.069                               | 98.947                            | .235                    | .235                                | 98.947                              |
| 22        | .232                | 1.053                               | 100.000                           | .232                    | .232                                | 100.000                             |

Extraction Method: Principal Component Analysis.

Table 3 shows 6 factors with eigen value of more than 1, namely: Factor 1 has a variance of 29.115% with an eigenvalue value of 6.414, then a factor of 2 with a variance value of 9.009% with an eigenvalue of 1.982, a factor 3 with a variance of 7.525% with an eigenvalue of 1.656, factor 4 with a variance value of 6.228% with an eigenvalue of 1.370, a factor of 5 with a variance value of 5.283% with an eigenvalue of 1.162 and a factor of 6 with a variance of 4.598% with an eigenvalue of 1.012. The total of the six variables is 61.799% in the sense that the six factors are able to explain the variation of the factors that influence the decision to choose Go-Jek.

**Rotation Factors**

Rotation Factor is used to explain whether the factor formed is significant and different from other factors. The rotation factor used in this study is Varimax rotation, where this rotation can be used because it gives better results compared to using other rotation techniques The minimum loading factor value is 0.50, when a variable has loading factor value less than 0.5 it will be excluded from the model. The following table will explain the grouping of variables based on the loading factor value:
### Table 4. Value of Variable Loading Factor

| Component | 1     | 2     | 3     | 4     | 5     | 6     |
|-----------|-------|-------|-------|-------|-------|-------|
| Q1        | -0.199| 0.649 | 0.044 | 0.360 | -0.021| 0.217 |
| Q2        | 0.114 | 0.724 | 0.090 | 0.179 | 0.016 | -0.027|
| Q3        | 0.280 | 0.738 | 0.139 | -0.029| 0.150 | 0.062 |
| Q4        | 0.308 | 0.721 | 0.167 | 0.067 | 0.009 | 0.090 |
| Q5        | -0.061| 0.224 | -0.061| 0.184 | 0.676 | 0.396 |
| Q6        | 0.368 | 0.055 | 0.202 | 0.009 | 0.207 | 0.665 |
| Q7        | 0.037 | 0.316 | 0.328 | 0.034 | -0.067| 0.593 |
| Q8        | -0.121| 0.329 | 0.631 | 0.068 | 0.305 | 0.182 |
| Q9        | 0.015 | -0.093| 0.199 | 0.104 | 0.808 | 0.025 |
| Q10       | 0.378 | 0.138 | 0.490 | 0.136 | 0.122 | 0.109 |
| Q11       | 0.310 | 0.266 | 0.405 | 0.277 | 0.177 | 0.094 |
| Q12       | 0.143 | 0.198 | 0.157 | 0.497 | 0.438 | -0.103|
| Q13       | 0.129 | 0.170 | 0.149 | 0.789 | 0.025 | 0.232 |
| Q14       | 0.143 | 0.076 | 0.317 | 0.708 | 0.108 | 0.130 |
| Q15       | 0.013 | -0.052| 0.754 | 0.255 | -0.084| 0.168 |
| Q16       | 0.253 | 0.161 | 0.703 | 0.156 | 0.124 | 0.007 |
| Q17       | 0.386 | -0.034| 0.043 | 0.378 | 0.193 | 0.600 |
| Q18       | 0.773 | 0.250 | -0.036| 0.096 | 0.126 | 0.170 |
| Q19       | 0.623 | 0.294 | 0.010 | 0.322 | 0.092 | 0.141 |
| Q20       | 0.589 | 0.118 | 0.460 | 0.091 | -0.013| 0.026 |
| Q21       | 0.681 | -0.035| 0.259 | -0.062| -0.296| 0.097 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.a
a. Rotation converged in 10 iterations.

Table 5 Here is the simplified loading factors results from Table 4 results, which are variable loading factor values.

### Table 5. Value of the loading factor for each factor

| No | Variable | Factor 1: Service | Factor 2: Completeness of driving | Factor 3: Safety | Factor 4: Trust | Factor 5: Response | Factor 6: Reliability |
|----|----------|-------------------|-----------------------------------|------------------|-----------------|-------------------|----------------------|
| 1  | Q19      | 0.773             |                                   |                  |                 |                   |                      |
| 2  | Q20      | 0.623             |                                   |                  |                 |                   |                      |
| 3  | Q21      | 0.589             |                                   |                  |                 |                   |                      |
| 4  | Q22      | 0.681             |                                   |                  |                 |                   |                      |
| 5  | Q1       | 0.649             |                                   |                  |                 |                   |                      |
| 6  | Q2       | 0.724             |                                   |                  |                 |                   |                      |
| 7  | Q3       | 0.738             |                                   |                  |                 |                   |                      |
| 8  | Q4       | 0.721             |                                   |                  |                 |                   |                      |
| 9  | Q8       |                   | 0.631                             |                  |                 |                   |                      |
| 10 | Q16      |                   |                                   | 0.754            |                 |                   |                      |
| 11 | Q17      |                   |                                   |                  | 0.703           |                   |                      |
| 12 | Q14      |                   |                                   |                  |                 | 0.789             |                      |
| 13 | Q15      |                   |                                   |                  |                 | 0.708             |                      |
| 14 | Q5       |                   |                                   |                  |                 |                   | 0.676                |
| 15 | Q9       |                   |                                   |                  |                 |                   | 0.808                |
| 16 | Q6       |                   |                                   |                  |                 |                   | 0.665                |
| 17 | Q7       |                   |                                   |                  |                 |                   | 0.593                |
| 18 | Q18      |                   |                                   |                  |                 |                   | 0.600                |
V. RELIABILITY FACTOR

From table 5, a simplified loading factor results, shows value of loading factor variables. It can be concluded that from 22 question items can be grouped as the following: Service Factor (factor 1) consists of question items Q19, Q20, Q21 and Q22. Completeness of driving Factor (factor 2) of item questions Q1, Q2, Q3 and Q4, Safety Factor (factor 3) consists of question items Q8, Q16 and Q17, Trust Factor (factor 4) is grouped from question items Q14 and Q15, Response Factor (factor 5) which consists of question items Q5 and Q9, and Reliability Factor (factor 6) consists of question items Q6, Q7 and Q18.

Table 6 below shows the results of loading factors consisting of 6 factors and variables that form these factors.

| Factor Name         | Factor Forming Variables                                      | Total Diversity | Loading |
|---------------------|----------------------------------------------------------------|-----------------|---------|
| Factor 1: Service   | (Q19) Application Go-Jek understand customer needs            |                 | 0.773   |
|                     | (Q20) Go-Jek prioritizes the safety of the driver and the customer |                 | 0.623   |
|                     | (Q21) Go-Jek maintains good relations with customers           |                 | 0.589   |
|                     | (Q22) Go-Jek serves customers 24 hours                         | 29.155%         |         |
| Factor 2: Completeness of driving | (Q1) The Go-Jek driver's vehicle is proper to use |                 | 0.649   |
|                     | (Q2) Completeness gojek driver's vehicle                      |                 | 0.724   |
|                     | (Q3) Drive attributes (helmets, masks, raincoats) are clean    | 9.009%          |         |
|                     | (Q4) The appearance of the Go-Jek driver is neat               |                 | 0.738   |
|                     | (Q5) Go-Jek drivers know the area and the destination          |                 | 0.721   |
| Factor 3: Safety    | (Q16) I feel safe when using the Go-Jek                       | 7.525%          | 0.754   |
|                     | (Q17) Go-Jek drivers are patient in dealing with customers     |                 | 0.703   |
| Factor 4: Trust     | (Q14) Go-Jek drivers prioritize customer safety                | 6.228%          | 0.789   |
|                     | (Q15) Go-Jek drivers are polite in serving customers           |                 | 0.708   |
| Factor 5: Response  | (Q5) Go-Jek drivers quickly respond to customer requests       | 5.283%          | 0.676   |
|                     | (Q9) Go-Jek drivers are responsive to customer orders          |                 | 0.808   |
|                     | (Q6) The Go-Jek application is reliable when customers have complaints | 4.598%          | 0.593   |
| Factor 6: Reliability | (Q7) Bonuses offered by the Go-Jek app are interesting         |                 | 0.600   |
|                     | (Q18) Go-Jek applications serve a customer complaint           |                 |         |

V. CONCLUSION

In conclusion, student’s decisions to choose online transportation application (Go-Jek) are based on six main factors, namely:

1. Service Factor (factor 1) which includes Go-Jek application to understand customer needs, Go-Jek prioritizes driver and customer safety, Go-Jek maintains good relations with customers and Go-Jek services are provided 24 hours to customers.
2. Completeness of driving Factor (factor 2) which includes a Go-Jek driver use descent vehicle, complete Go-Jek driver’s driving equipment, complete driving attributes (helmet, mask, raincoat) and neat appearances of the Go-Jek driver.
3. Safety Factor (factor 3) which includes drivers are familiar with the route taken to reach destination, Go-Jek Drivers shows patience and respect customers’ privacy.
4. The Trust Factor (factor 4) which includes Go-Jek Drivers prioritizes customer safety and Go-Jek Drivers are polite in serving customers.
5. Response Factor (factor 5) which includes Drivers responding quickly to customer requests and Go-Jek Drivers are responsive to customer orders.
6. Reliability factor (factor 6) which includes the Go-Jek Application shows availability and provide reliability in handling customer’s complaints, and attractive Bonuses offered by Go-Jek application to value consumer’s loyalty.

Hence, Service Factor is the most dominant factor influencing student decisions in choosing transportation based on Go-Jek applications.

This research is expected to have implications to the development of marketing management science because to determine the factors that influence consumer interest in selecting based transport applications in these
research application users Go-Jek. This is in order to be a concern especially for companies engaged in the transport using the application that consumers prefer the service factor where consumers will continue to use the application if you have a good services such as understanding customer needs, service to customer safety, while maintaining good relations with customers and because it uses so it can serve the customers applications without the limitations of time. Besides the general in this study marketing management can provide input that the service factor is a very important factor to consider in retaining customers and remain the customer choice, although many other companies engaged in the same field.

VI. LIMITATIONS AND SUGGESTIONS

Based on the research results and conclusions obtained can be given some suggestions as follows:
1. Go-Jek can further improve and take into account the reliability of service as a factor of the lowest influence on consumer decisions in choosing an application-based transportation Go-Jek
2. Future studies are expected to conduct research on other application-based transportation user communities and research can be undertaken not only by students.

REFERENCES

Ackaradejruangsri, P. (2015). Insights on GrabTaxi: An Alternative Ride Service in Thailand. *Bus. Econ. Res. Online*, 4(49), 2304–1013.

Amajida, F. D. (2016). Kreativitas Digital Dalam Masyarakat Risiko Perkotaan: Studi Tentang Ojek Online “Go-Jek” Di Jakarta. *Informasi Kajian Ilmu KomunikasiKajian Ilmu Komunikasi*, 46(1), 115–128. https://doi.org/10.21831/INFORMASI.V46I1.9657

dell’ Olio, L., Ibeas, A., & Cecin, P. (2011). The quality of service desired by public transport users. *Transport Policy*, 18(1), 217–227. https://doi.org/https://doi.org/10.1016/j.tranpol.2010.08.005

Jeoung-Hak, L., Hyun-Duck, K., ong Jae, K., & Michael, S. (2011). The influence of service quality on satisfaction and intention: A gender segmentation strategy. *Sport Management Review*, 14(1), 54–63. https://doi.org/https://doi.org/10.1016/j.smr.2010.02.002

Kotler, P., & Keller, L. K. (2009). *Manajemen Pemasaran (Edisi Kedua Belas)*. PT. Indeks.

Laudon, K. C., & Laudon, J. P. (2015). *Sistem Informasi Manajemen, Mengelola Perusahaan Digital*. Salemba Empat.

Leeflang, P. S. H., Verhoeft, P. C., Dahlström, P., & Freundt, T. (2014). Challenges and solutions for marketing in a digital era. *European Management Journal*, 32(1), 1–12. https://doi.org/10.1016/j.emj.2013.12.001

Morfoulaki, M., Tyrinopoulos, Y., & Aifadopoulou, G. (2007). Estimation of Satisfied Customers in Public Transport Systems: A New Methodological Approach. *Journal of the Transportation Research Forum*, 46(1), 63–72.

Pangaribuan, N. R., Wijaya, N. M. S., & Mahadewi, N. P. E. (2016). Faktor-Faktor Yang Mempengaruh Keputusan Wisatawan Menggunakan Transportasi Berbasis Aplikasi Di Pt . Gojek Indonesia. *Jurnal IPTA*, 4(2), 64–68.

Parhusip, H. A., Widyantanto, D., & Desinova, B. (2008). PROPERTY DAN PERDAGANGAN SEBAGAI SEKTOR DOMINAN PADA DATA DENGAN PRINCIPAL COMPONENT ANALYSIS ( PCA ). *Prosiding Seminar Nasional Sains Dan Pendidikan Sains*.

Park, C., & Kim, Y. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. *31*(1), 16–29. https://doi.org/10.1108/09590550310457818

Paul, P. J., & Olson, J. C. (2010). *Consumer Behavior & Marketing Strategy*. Mc Graw Hill.

Peng, L., Wang, H., He, X., Guo, D., & Lin, Y. (2014). *Exploring Factors Affecting the User Adoption of Call-taxi App*.

Pratiwi, A., & Djawoto. (2017). ANALISIS FAKTOR YANG MEMPENGARUHI KEPUTUSAN KONSUMEN DALAM MEMILIH GRAB-CAR DI SURABAYA. *Jurnal Ilmu Dan Riset Manajemen*, 6(11), 1–17.

Santoso, S. (2012). *Analisis SPSS pada statistik parametrik*. PT. Elex Media Komputindo.

Schiffman, L., & Kanuk, L. L. (2008). *Customer Behavior 7th Edition (Perilaku Konsumen)*. PT. Indeks.

Shiau, W.-L., & Meiling Luo, M. (2012). Factors affecting online group buying intention and satisfaction: A social exchange theory perspective. *Computers in Human Behavior*, 28(6), 2431–2444. https://doi.org/10.1016/j.chb.2012.07.030
Silalahi, S. L. B., Handayani, P. W., & Munajat, Q. (2018). ScienceDirect Service Quality Analysis for Online Transportation Services: Case Study of GO-JEK. *Procedia Computer Science, 124*, 487–495. https://doi.org/10.1016/j.procs.2017.12.181

Suprapto, J. (2004). *Analisis Multivariate Arti dan Interpretasi*. PT. Rineka Cipta.

Tong, Y., Chen, Y., Zhou, Z., Chen, L., Wang, J., Yang, Q., Ye, J., & Lv, W. (2017). The Simpler The Better. *Proceedings of the 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining - KDD ’17*, 1653–1662. https://doi.org/10.1145/3097983.3098018

W. Y. Chan, J., L. N. Chang, V., K. Lau, W., K. T. Law, L., & J. Lei, C. (2016). Taxi App Market Analysis in Hong Kong. *Journal of Economics, Business and Management, 4*(3), 239–242. https://doi.org/10.7763/JOEBM.2016.V4.397

Zeithaml, V., Bitner, M. J., & Gremler, D. (2009). *Services Marketing - Integrating Customer Focus Across the Firm*. McGraw Hill.

Zhang, J., & Lu, S. (2016). Factors Affecting the Demand for the Taxi – Evidence from Zhejiang, China. *Review of Integrative Business and Economics Research, 5*(4), 379–394.