STUDY ON CONSUMER PREFERENCE OF ONLINE PUBLIC TRANSPORTATION AMONG STUDENTS IN MALANG

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By

DEO WAHYU ADITIA

145020107121004

INTERNATIONAL UNDERGRADUATE PROGRAM OF ECONOMICS
ECONOMICS DEPARTMENT
FACULTY OF ECONOMIC AND BUSINESS
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Written by:

Name: Deo Wahyu Aditia
Student Number: 145020107121004
Faculty: Economics and Business
Department: International Undergraduate Program of Economics
Concentration: Economics Development

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Dr. rer. pol Wildan Syafitri, SE., ME
NIP. 19691210 19703 1 003
STUDY ON CONSUMER PREFERENCE OF ONLINE PUBLIC TRANSPORTATION AMONG STUDENTS IN MALANG

Deo Wahyu Aditia
Faculty of Economic and Business, Universitas Brawijaya
E-mail: deowahyua@gmail.com

ABSTRACT

This study aims to empirically examine the effect of mobility, price, promotion, and service experiences on consumption behavior taken by researchers. This analysis uses independent variables namely mobility, price, promotion, and service. The dependent variable is consumption behavior.

The research sample is active students who study in Malang. The sample is done by purposive sampling method. Data collection was carried out with questionnaires distributed directly to respondents as many as 100 questionnaires. The statistical method uses Partial Least Square Analysis by testing the t-statistic testing hypothesis. This study also used Logistic Regression and Linear Regression as the help testing.

The results of this study indicate that promotion significantly positively influences consumption behavior taken by respondents, mobility, price, and service significantly negatively affect the consumption behavior taken by respondents.

Keywords: Online Transportation, Partial Least Square, Logistic Regression, Linear Regression, Purposive Sampling

INTRODUCTION

Everything is possible in this digital era. In contrast to the previous era, any digital business usually can only be done by using a computer. However, in the present, smartphone is a good choice to do any business such as exchanging email, information, seeking for entertainment, or even making transaction and ordering food. In this era, almost everything can be done by using smartphone. Indonesia is the 4th largest population in the world and it will not be left in this digital era. In 2016, Indonesia was the country with the highest number of internet users in the world (Statista, 2017).

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>24.32%</td>
</tr>
<tr>
<td>2016</td>
<td>26.52%</td>
</tr>
<tr>
<td>2017</td>
<td>28.78%</td>
</tr>
<tr>
<td>2018*</td>
<td>31.1%</td>
</tr>
<tr>
<td>2019*</td>
<td>33.46%</td>
</tr>
<tr>
<td>2020*</td>
<td>35.84%</td>
</tr>
</tbody>
</table>

Source: Statista, 2017
From 260 million total population, 132.7 million is active internet users. Most Indonesians access the internet by mobile devices. In 2016, it is estimated that around 26.5% of the population accessed internet from their mobile device.

The digital era is also promoting growth to digital companies, which gradually develop rapidly. It is called digital startup. Startup is an enterprise that can be expanded into a large business (Nathasya and Sitepu, 2017). Many companies established within a few years. In marketplace business, Indonesia has Tokopedia, Bukalapak, Blibli.com, Quapa, and Blanja.com; transportation we have GOJEK, Grab (Singapore, previously Malaysia), Uber (U.S); for ticket booking Indonesia has Traveloka, Pegipegi, Agoda (Singapore), and Tiket.com. However, from many digital startup companies in Indonesia, GOJEK is the famous and most frequently used by society. The development of digital company bring a disruption to the public transportation. Behind the easiness that online transportation offered to the customer, it brings also some denial from conventional transportation. From Detik.com (2017) The conventional drivers, especially from the “angkot” drivers did not want GOJEK and other online transportation operated in Malang. However, GOJEK now is officially allowed to operate and there is no strike from conventional transportation anymore. Moreover, most of the citizens of Malang welcome GOJEK very well.

However, there were restrictions on access to online transportation drivers, especially for motorbikes because they could not enter the Brawijaya campus environment in the mid-year of 2018 because the presence of online transportation drivers is considered to interfere with the smooth flow of traffic in Universitas Brawijaya. they can only take orders outside the campus or in front of the campus entrance gate. Meanwhile, most students objected to the policy because they needed a long time to go to their destination faculty. Even so, the effect is felt on the traffic in the Universitas Brawijaya environment more smoothly. There had been protests from the online transportation drivers but now the problem has ended with their entry as long as they do not to stop for a long time, meanwhile the traffic now still under control and still smooth.

If we look at the area near the campuses and schools, there are many GOJEK drivers waiting at the pool stop or driving the passenger. It looks like the community and the conventional transportation drivers are more enthusiastic about the existence of online transportation.

**LITERATURE REVIEW**

1. **Consumption Theory**

As explained by Case, et.al. (2012), consumption behavior is an activity to allocate income for maximizing utilities. The consumption behavior is different depending on each income. If an individual has a high income, his consumption will be high. Vice versa, if a person has a low income, the level of consumption will be low. Thus, consumer behavior can be defined as an activity to spend or exchange individual wealth to get a good or service that they need.

As explained by Duesenberry (1949) that consumption expenditure of individual or community is determined a maximum of the income that they achieved. If their income gets lower, consumers will not spend a lot of their money. To maintain consumption, they must use their savings. However, if their income increases, their consumption will increase

2. **Consumer Preference Theory**

Consumer preference theory is defined as a theory that shows a consumer perspective to that state about what they want from offered perspective. (Case et al., 2012) stated that the change of consumer preference can manifest himself into the market behavior. A good price change can change the constraints and limitations from each individual’s choice so that it will change the allocation income at all. The logic of consumer preference is impossible can measure their utility appropriately. This is because each individual has different needs and wants, it will difficult to
determine their choice. It assumed that consumer could pick a choice among two choices that offered (Nicholson & Synder, 2008).

3. **Ride-sharing**

Online transportation service or ride-sharing is an individual transportation services where a customer can order a ride (car, motorcycle, etc.) through a mobile application and the driver can respond the order through the apps (Wallsten, 2015). It was called “ride-sharing” because first time in the USA and Europe countries the cars being used are owned by individual (private cars) which then are shared with other (customers) when delivering the services (Wallsten, 2015). Online transportation is an on-demand service connecting passengers and vehicle owners in real-time through mobile technology.

4. **Disruption Technology**

Disruptive technologies are those that from the start have worse performance and lower price than the mainstream technologies but given their convenience, and with the technological improvement, they can take over the market (Sprei, 2018). In case of shared transportation disruption, we can see from the service that has lower costs, and lower product performance than the mainstream by the innovative technology that they made, e.g. GOJEK, Uber, and Grab through their mobile application to order taxi or motorcycle taxi (ojek). The lower costs and lower product performance are improved into flexibility, especially for owned vehicle change into shared transportation.

5. **Hypothesis**
   
   a. Hypothesis 1: Suspected the Mobility has a significant effect on Consumption Behavior.
   b. Hypothesis 2: Suspected Price have a significant effect on Consumption Behavior.
   c. Hypothesis 3: Suspected Promotion has a significant effect on Consumption Behavior.
   d. Hypothesis 4: Suspected Service has a significant effect on Consumption Behavior.

**Previous Research**

Sohn (2017) in his/her research entitled “A Contextual Perspective on Consumer’s Perceived Usefulness: The Case of Mobile Online Shopping” utilized Usefulness Perception of Mobile Online Stores for Purchasing (Y1) dan Usefulness Perception of Information Search (Y2) as the dependent variables. And then, the independent variables were Technical Quality (TQ), Information Quality (IQ), Aesthetic Quality (AQ), and Security Quality (SQ). By employing Confirmatory Factor Analysis (CFA), it is shown that AQ and IQ has significant positive effect toward the Y2, and SQ has significant effect toward Y1 mobile online stores.

**RESEARCH METHODOLOGY**

**Type, Source of Data, and Data Collecting Method**

This study is a quantitative research which specialized in processing data numbers. This study made it easier for researchers in processing data which soon will be analyzed by regression analysis using SmartPLS 3.2.7 application. The scope of this research are students who are actively studying at several universities in Malang. It is because researchers want to know how economic behavior of students in Malang students of choosing online transportation. This study used primary data by questionnaire. The questionnaire spreaded using Google Form online. And the collecting data was taken from October to December 2018.

**Research Variables**

There are five variables used. The dependent variable is the Consumption Preference, and for independent variables are Mobility, Price, Promotion, and Service.
### Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td>A movement of people or goods; it refers to “travel” means the person or freight vehicle trip, Litman (2003)</td>
</tr>
<tr>
<td>Price</td>
<td>A unit that becomes the exchange rate of an item. In addition, prices can also be defined as the amount of money charged on an item or service, or the amount of value that consumers exchange for satisfaction as a result of using the goods or services, (Case, et.al, 2012)</td>
</tr>
<tr>
<td>Promotion</td>
<td>A communication to give people more information about the product that offered that can make consumer interested in buying the product, which are goods or services that offered, (Sembiring, 2017)</td>
</tr>
<tr>
<td>Service</td>
<td>An act of an individual or some people that give satisfaction to the consumers, Sembiring (2017)</td>
</tr>
</tbody>
</table>

### Analysis Method

To measure the variables that will be examined in this study, the five-point Likert scale was used. The Likert scale is useful for determining the perceptions or opinions of respondents. The questionnaire made in this research was consisted of 5 answers that are already available so that the respondent can directly select them.

The Likert measurement scale provided in this study includes:
- Strongly Disagree: 1
- Disagree: 2
- Ordinary: 3
- Agree: 4
- Strongly Agree: 5

### Data Analysis

The data analysis techniques are used to answer the problem formulation and test the hypotheses that have been formulated, and because of using quantitative data, the data analysis technique uses the existing statistical methods (Sugiyono, 2010).

In this study, the main data (Likert) uses PLS-R analysis, while for demographic data uses the analysis of Logistic Regression and Linear Regression. Logistics and Linear Regression used in this research are aimed at helping to find out other causes outside Likert data that might influence data.

1. **Partial Least Square Regression (PLS-R)**

   This research used Partial Least Square method and processed with SmartPLS 3.2.7 version. By using SmartPLS, the data processing can be analyzed and suitable with Partial Least Square Regression (PLS-R). Thus, the model can be written as below:

   \[ Y = \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 \]

   Information:
   - \( Y \) = Consumption Preference
   - \( X_1 \) = Mobility
   - \( X_2 \) = Price
   - \( X_3 \) = Promotion
   - \( X_4 \) = Service
   - \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \) = Regression Coeffecient

### A. Outer Model Test

Outer Model Analysis is an analysis to know the relation between latent variable to the indicators. Outer model can also called as the model of the Partial Least Square which describes about how indicator can relate to the latent variable (Solimun, Fernandes, and Nurjannah, 2017). The outer model have two testing namely: instrument validity test and reability instrument test.

1. **Validity Test**
Validity test is a test used in the Partial Least Square Regression model to determine the ability of a research instrument in measuring what should be measured (Cooper and Schindler, 2006). If using SmartPLS, the criteria for passing the validity test is that the value of Average Variance Extracted (AVE) must be more than 0.50.

2. Reliability Test
Reliability testing is a test conducted to find out that the instrument used in research to obtain information, can be trusted as an instrument of data collection and able to reveal actual information in the field (Sitinjak and Sugiarito, 2006). By using SmartPLS, the criteria for passing the reliability test is that the Cronbach's Alpha value must be more than 0.70.

B. Inner Model Test
Inner model analysis is done to find out about the relationship between latent variables (Solimun et al., 2017). Inner model testing is done by bootstrapping method which can do resampling with the same or smaller size than the original sample and repeated 100 times to converge. The bootstrapping results will show some parts of the inner model, namely T-Statistics, Probability Values and $R^2$.

1. T-statistic
T-statistic is a part of inner model useful for knowing the significance of the independent variable on the dependent variable. The requirement for t-statistics to be significant is that t-statistics must be greater than the t-table which is stated at 1.96.

2. Probability Values
Probability Values are part of the inner model which is also useful to determine the significance of an independent variable on the dependent variable. Independent variables can be said to be significant to the dependent variable if the Probability Values are less than $\alpha = 0.05$.

3. R-square ($R^2$)
R-square is one part of the inner model that is useful to know how much the dependent variable can be predicted by the independent variables.

2. Logistic Regression Model

Logistic regression model is used to find out the relationship of response variable which is binary or dichotomous, by an independent variable or more continued scaled or categoric. Hosmer & Lemeshow (1989) stated that logistic regression method is a statistical analysis method that describes the relationship between dependent variables that have two or more categories with one or more independent variables scale categories or intervals.

General form of logistic regression is:

$$\pi(x_i) = \frac{e^{(\beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \cdots + \beta_k x_{ki})}}{1 + e^{(\beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \cdots + \beta_k x_{ki})}}$$

Evidence:
- $\pi(x_i)$ : type of online transportation
- $e$ : natural number (2.7183)
- $I$ : 1, 2, ..., n
- $\beta_k$ : coefficient model which get from regression test
- $x_k$ : observation of $k$ dependent variable from $p$ dependent variable amount

3.9.3 Linear Regression
Regression analysis, besides being used to measure the strength of the relationship between two variables, can also show the direction of the relationship between the dependent variable and independent variables.

The simple general linear regression equation is:

$$Y = \alpha + \beta X + \varepsilon$$
Information:
Y = Dependent variable
α = Constants, that is the value of Y when the value of X = 0
β = Direction of regression coefficient, which states the change in Y value if there is a change in the value of X. If (+) then the direction of the line will rise, and if (-) then the line value will drop
X = independent variable
ε = other factors that affect the variable Y

FINDINGS AND DISCUSSION

Demography of Respondents’ Characteristic
This research was using a specific category to classify the respondents. The categories are based on sex, age, semester being taken, income monthly, way to go to campus, owning vehicle, type of online transportation used, frequency of online transportation, and time estimation.

1. Respondent Based on Age Category

<table>
<thead>
<tr>
<th>Ages</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20 years old</td>
<td>20</td>
<td>20%</td>
</tr>
<tr>
<td>21-23 years old</td>
<td>70</td>
<td>70%</td>
</tr>
<tr>
<td>24-27 years old</td>
<td>10</td>
<td>10%</td>
</tr>
</tbody>
</table>

The majority of respondents in this research are between 21-23 years old as many as 70% or as many as 70 respondents. While respondents aged 18-20 years as many as 20% or as many as 20 respondents and respondents aged 24-27 years as many as 10% or 10 respondents.

2. Respondents Based on Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>46</td>
<td>46%</td>
</tr>
<tr>
<td>Female</td>
<td>54</td>
<td>54%</td>
</tr>
</tbody>
</table>

In this research, total respondents of men are 46% or 46 respondents. Then, 54% or 54 respondents are women. Women, in this research, dominated the total respondents in Malang.
3. **Respondents Based on Semester being Taken**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>16</td>
<td>16%</td>
</tr>
<tr>
<td>6-9</td>
<td>50</td>
<td>50%</td>
</tr>
<tr>
<td>10-16</td>
<td>34</td>
<td>34%</td>
</tr>
</tbody>
</table>

50% (50 respondents) are undergoing semesters between 1-5. 34% (34 respondents) were undergoing semesters between 6-9, while the remaining 16% (16 respondents were undergoing semesters between 11-16). Students who are undergoing 1-5 semesters are the most respondents in this research.

4. **Respondents Based on Income**

![Income Distribution Chart]

Respondents' income in this research is quite varied. The majority of respondents who have an income of Rp1,500,000 every month are 26% (26 respondents). While as many as 15% (15 respondents) have an income of Rp1,000,000. Moreover, as many as 14% (14 respondents) have an income of Rp2,000,000 each month. Also, the rest spreads on an income scale of Rp200,000 to Rp10,000,000.

5. **Respondents Based on Way to Campus**

<table>
<thead>
<tr>
<th>Way to Campus</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorbike</td>
<td>67</td>
<td>67%</td>
</tr>
<tr>
<td>Non-motorbike (car, angkot, taxi on foot)</td>
<td>33</td>
<td>33%</td>
</tr>
</tbody>
</table>

As many as 67% (67 respondents) answered that their trip to the campus are by riding a motorcycle. While the remaining 33% (33 respondents) use other transportations such as cars, public transportation, or walking. The majority of students in Malang in this research used a motorbike to get to campus.

6. **Respondents Based on Owning Vehicle**

<table>
<thead>
<tr>
<th>Owning Vehicle</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>78</td>
<td>78%</td>
</tr>
<tr>
<td>No</td>
<td>22</td>
<td>22%</td>
</tr>
</tbody>
</table>

Many students in Malang have private vehicles in Malang. 78% or 78 respondents answered that they owned a vehicle and 23% or 23 respondents did not have a private vehicle.
7. Respondents Based on Type of Online Transportation Used

<table>
<thead>
<tr>
<th>Type</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorbike</td>
<td>83</td>
<td>83%</td>
</tr>
<tr>
<td>Car</td>
<td>17</td>
<td>17%</td>
</tr>
</tbody>
</table>

Types of online transportation that are often or ever used by Malang students are as many as 83% motorcycles or 83 respondents. While the remaining 17% or 17 respondents had or often used an online type of vehicle transportation. The majority of students in Malang in this research used motorbikes more often.

8. Respondents Based on Ordering Online Transportation Frequently

<table>
<thead>
<tr>
<th>Frequency (week)</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 time</td>
<td>41</td>
<td>41%</td>
</tr>
<tr>
<td>2 times</td>
<td>44</td>
<td>44%</td>
</tr>
<tr>
<td>3 times</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>4 times</td>
<td>10</td>
<td>10%</td>
</tr>
</tbody>
</table>

Within a week, 44% (44 respondents) ordered online transportation for two times. Followed by as many as 41% (41 respondents) at all, 10% (10 respondents) four times and 5% (5 respondents) three times ordering online transportation in a week. In this research, students in Malang mostly order online transportation twice a week.

9. Respondents Based on Time Estimation

<table>
<thead>
<tr>
<th>Time Estimation</th>
<th>Total Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-8 minutes</td>
<td>29</td>
<td>29%</td>
</tr>
<tr>
<td>10-20 minutes</td>
<td>59</td>
<td>59%</td>
</tr>
<tr>
<td>25-26 minutes</td>
<td>12</td>
<td>12%</td>
</tr>
</tbody>
</table>

The time that has been taken by students from residence to campus was answered as much as 59% (59 respondents) for 10-20 minutes. While as many as 29% (29 respondents) are for 3-8 minutes. Moreover, as many as 12% (12 respondents) took 26-60 minutes to go to campus.

Respondents' Demographic Analysis

This analysis is used to know how the demographic factors can affect to the answer of the questionnaire questions. The variables that used are:

\[ Y_1 = \text{types of online transportation} \]
\[ Y_2 = \text{ordering online transportation frequently in a week} \]
\[ X_1 = \text{gender} \]
\[ X_2 = \text{income} \]
\[ X_3 = \text{owning a vehicle} \]
\[ X_4 = \text{time estimation} \]

The reasons for the variables selected above are because not all them can be regressed, and also to know and explain the output of the questionnaire if it has relation to the demographic variables.
1. **Linear Regression**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 Frequency Ordering in a Week (Y1)</td>
<td>2.441</td>
<td>1.124</td>
<td>2.170</td>
<td>.032</td>
</tr>
<tr>
<td>Gender (X1)</td>
<td>-.018</td>
<td>.053</td>
<td>-.033</td>
<td>-.351</td>
</tr>
<tr>
<td>Income (X2)</td>
<td>1.696E-7</td>
<td>.000</td>
<td>.283</td>
<td>2.983</td>
</tr>
<tr>
<td>Owning Vehicle (X3)</td>
<td>-.787</td>
<td>.214</td>
<td>-.350</td>
<td>-.260</td>
</tr>
<tr>
<td>Time Estimation (X4)</td>
<td>.011</td>
<td>.009</td>
<td>.106</td>
<td>1.134</td>
</tr>
</tbody>
</table>

From the result above, Income and Owning Vehicle are significant. Their number is smaller than α = 0.05. Income has amount 0.004 < 0.05, and Owning Vehicle 0.000 < 0.05. Thus, Income and Owning Vehicle have relation to the Ordering Online Transportation Frequently in a Week.

2. **Logistic Regression**

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Gender (X1)</td>
<td>1.669</td>
<td>.684</td>
<td>5.951</td>
<td>1</td>
<td>.015</td>
<td>5.304</td>
</tr>
<tr>
<td>Step 1</td>
<td>Income (X2)</td>
<td>.000</td>
<td>.000</td>
<td>1.315</td>
<td>1</td>
<td>.252</td>
<td>1.000</td>
</tr>
<tr>
<td>Step 1</td>
<td>Owning Vehicle (X3)</td>
<td>-1.938</td>
<td>1.080</td>
<td>3.216</td>
<td>1</td>
<td>.073</td>
<td>.144</td>
</tr>
<tr>
<td>Step 1</td>
<td>Time Estimation (X4)</td>
<td>-.001</td>
<td>.033</td>
<td>.001</td>
<td>1</td>
<td>.972</td>
<td>.999</td>
</tr>
<tr>
<td>Step 1</td>
<td>Type of Online Transportation (Y2)</td>
<td>2.981</td>
<td>1.120</td>
<td>7.079</td>
<td>1</td>
<td>.008</td>
<td>19.710</td>
</tr>
</tbody>
</table>

From the result above, Gender and Owning Vehicle are significant. Their number are smaller than α = 0.1. Gender has 0.015 < 0.1, and Owning Vehicle has 0.073 < 0.1. Thus, Gender and Owning Vehicle have relation to the Type of Online Transportation Usually Used.

**Data Analysis**

1. **Partial Least Square Regression**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility &gt; Consumer Behaviour</td>
<td>0.096</td>
</tr>
<tr>
<td>Price &gt; Consumer Behaviour</td>
<td>0.255</td>
</tr>
<tr>
<td>Promotion &gt; Consumer Behaviour</td>
<td>0.385</td>
</tr>
<tr>
<td>Service &gt; Consumer Behaviour</td>
<td>-0.092</td>
</tr>
</tbody>
</table>

Regression model based on the analysis above is:

\[
Y = 0.096X1 + 0.255X2 + 0.385X3 - 0.092X4
\]

Information:

X1 = mobility
X2 = price
X3 = promotion
X4 = service

Based on the data above, it can be known that coefficient score from Mobility towards Consumer Behavior amount 0.096, Price towards Consumer Behavior amount 0.255, Promotion towards Consumer Behavior amount 0.385, and Service towards Consumer Behavior amount -0.092. Thus, Service is the only variable that has a negative influence on Consumer Behavior; Meanwhile, Mobility, Price, and Promotion are variables that have a positive influence on Consumer Behavior.

2. **Outer Model**
Outer model analysis is an analysis to know the specification of the relationship between a latent variable and the indicators. Outer model also called the model of Partial Least Square which able to define how indicators can have a relation with the latent variable (Solimun et al., 2017). There are two tests that can be used in outer model, i.e., instrument validity test and instrument reliability test.

a. Instrument Validity Test

Validity test is a test to know how far the questionnaire or instrument that used for research, which able to measure what could measure recently (Solimun et al., 2017). Questionnaire is valid if the questions of the questionnaire are able to explain about something that will be measured on that questionnaire. By using SmartPLS 3.2.7, the chosen terms for passing validity test is from amount of Average Variance Extracted (AVE) must be greater than 0.50.
Based on data above, it can be known that Average Variance Extracted (AVE) amounts of the Consumer Behavior is 1.000, Mobility is 0.703, Price is 0.770, Promotion is 0.766, and Service is 0.678. Thus, it can be concluded that all variables that used in this research are passing the validity test because all variables have AVE amounts’ more than 0.5 and can define that all instrument of this research is valid to measure the thing that measured.

b. Reliability Instrument Test

Reliability Instrument test is a test to know the criterion which showed how far the questionnaire or instrument that used on the research to get the information could be trusted and able to measure the variable consistently (Solimun et al., 2017). Reliability instrument test is useful to know whether the instrument in this research can measure the consistency of respondents answers every question item of the instrument in this research.

Variable can be passing from the instrument reliability test if the variable has Cronbach’s Alpha value more than 0.70. The test is used SmartPLS 3.2.7 to test the reliability instrument.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Behavior</td>
<td>1.000</td>
</tr>
<tr>
<td>Mobility</td>
<td>0.865</td>
</tr>
<tr>
<td>Price</td>
<td>0.850</td>
</tr>
<tr>
<td>Promotion</td>
<td>0.697</td>
</tr>
<tr>
<td>Service</td>
<td>0.539</td>
</tr>
</tbody>
</table>

From the data above, it can be known that Consumer Behavior, Mobility, and Price are passing the 0.70 value of Cronbach’s Alpha test with each amount 1.000, 0.865, and 0.850. Meanwhile, Promotion, and Service are not passing the Cronbach’s Alpha which each amount 0.697 and 0.539. Thus, Consumer Behavior, Mobility, and Price are showing the consistency of the respondent answer each question of the questionnaire itself. Promotion and Service are showing inconsistency of the respondent to answer each question of the questionnaire.

3. Inner Model

Inner model analysis is done to know the specification relationship between variables or usually called as Structural Model (Solimun et al., 2017). Without losing its general nature, it is assumed that the latent variable and indicator in is zero which means that the scale and variance unit is equal to one, thus the location parameter or constant parameter can be removed from the model. Inner model testing can be done with bootstrapping method. Bootstrapping method can resample big amount of certain sample (bigger or smaller than the original sample) and repeat 100 times of bootstrap sample to reach convergence. After bootstrapping has done, there will be some criteria from the inner model such as t-statistics, probability values, and $r^2$ appeared.

a. T-statistics

T-statistics is a part of the inner model which useful to know the significance between independent to dependent variable. Independent variable can be significant toward dependent variable if the value of t-statistic is higher than t-table that stated at 1.96.

<table>
<thead>
<tr>
<th>Variable</th>
<th>t-statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility $&gt;$ Consumer Behavior</td>
<td>0.783</td>
</tr>
<tr>
<td>Price $&gt;$ Consumer Behavior</td>
<td>1.890</td>
</tr>
<tr>
<td>Promotion $&gt;$ Consumer Behavior</td>
<td>2.953</td>
</tr>
<tr>
<td>Service $&gt;$ Consumer Behavior</td>
<td>1.013</td>
</tr>
</tbody>
</table>
From the result above, it can be known that variable Mobility toward Consumer Behavior amount is 0.783, Price toward Consumer Behavior amount is 1.890, Promotion toward Consumer Behavior amount is 2.953, Service toward Consumer Behavior amount is 1.013. From all variables above, only Promotion is significant toward Consumer Behavior; it means Service influences Consumer Behavior while other variables are not.

b. Probability Value

Probability value is a part of the inner model which is useful to know the significance of the independent variables towards the dependent variable. Independent variable can state significant toward the dependent variable if probability values are less than $\alpha = 0.05$.

<table>
<thead>
<tr>
<th>Variable</th>
<th>P. Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility &gt; Consumer Behavior</td>
<td>0.434</td>
</tr>
<tr>
<td>Price &gt; Consumer Behavior</td>
<td>0.059</td>
</tr>
<tr>
<td>Promotion &gt; Consumer Behavior</td>
<td>0.003</td>
</tr>
<tr>
<td>Service &gt; Consumer Behavior</td>
<td>0.311</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed, 2019

From Probability Values result can be known that Mobility toward Consumer Behavior is amount 0.434, Price toward Consumer Behavior is amount 0.059, Promotion toward Consumer Behavior amount is 0.003, and Service toward Consumer Behavior amount is 0.311. From the mentioned result can be concluded that Promotion is the only independent variable that significant toward Consumer Behavior because it was amount less than 0.005.

c. R-square ($R^2$)

R-square is a part of the inner model which useful to know how much dependent can be predicted by all independent variables. Falk & Miller (2014) categorized r-square into four categories, they are:

1. If r-square amount more than 0.67 is high or strong,
2. If r-square amount more than 0.33 is moderate,
3. If r-square amount more than 0.19 is low or weak, and
4. If r-square amount less is not recognized or not accepted.

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>r-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Behavior</td>
<td>0.381</td>
</tr>
</tbody>
</table>

Based on R-square Result, it can be defined that the amount of r-square in Consumer Behavior as a dependent variable can be predicted as well by Mobility, Price, Promotion, Service, and Trust amount 0.381. So, it can be concluded that r-square in this research belongs to the “moderate” category.

**Economic Analysis**

Based on the analysis of variable mobility that influences consumer choice, it can be seen some implications of the influence. If viewed from students as consumers, it can be seen that the mobility offered by online transportation does not affect the desire of students to order transportation online. While the online transportation side pad, the many regulations issued by the government have caused their income to be slightly disrupted despite legal protection. On the other hand, conventional transportation will feel the good impact of the regulation because it can make consumers look back on conventional transportation.

Based on the analysis of the price variable that influences consumer choice, it can be seen some implications of the influence. When viewed from the student side, the price offered by online transportation does not affect the desire of students to choose online transportation. On the other hand, the implications of the choice of students affect online transportation revenues, especially
after the government regulates prices. This is good for online transportation drivers because it can increase their income, but on the student side it does not mean it because it causes them not to order online transportation because tariffs are increasingly expensive. On the side of conventional transportation, there is not much effect because even though online transportation tariffs are rising, students still have the option of using private vehicles that are cheaper than seen from the money spent on buying gasoline by paying the cost of conventional transportation.

Based on the variable analysis of Promotion which influences consumer choice, it can be seen some implications of the influence. If viewed from the student side, it turns out that promotion is enough to influence them to order transportation online. The promotion offered is quite interesting for students because they will get cheaper tariffs. On the side of online transportation, of course this is very beneficial because they increase the number of consumers and their income. But on the side of conventional transportation this is not profitable because students will increasingly abandon conventional transportation and switch to online transportation.

Based on Service variable analysis that has an influence on consumer choice, it can be seen some implications of the influence. When viewed from students as consumers the services provided by online transportation do not affect students' interest in using online transportation. On the side of online transportation this certainly causes a decrease in the desire of students to order their transportation online. This is due to complaints that have arisen over online transportation services. On the side of conventional transportation this can benefit the brand because students turn to conventional transportation. However, if viewed from the number of complaints that exist, online transportation gets fewer complaints than online transportation so that this does not have a big effect on conventional transportation revenues.

CONCLUSIONS AND SUGGESTIONS

Conclusions
Based on the results of the research and discussion described in the previous chapter regarding mobility, price, promotion, and service to student consumption choices, it can be concluded as follows:

1. Mobility offered cannot increase students' desire for online transportation consumption choices. So that consumers consider the higher mobility offered, there will be no effect on consumer choice on online transportation. In addition, interest in ownership of motorized vehicles as personal consumption is also still high.
2. Price offered by online transportation is not enough to influence student consumption choices. Even though it has offered an affordable price, in fact it did not affect students' interest in choosing online transportation due to the emergence of protests among drivers and price rules from the government. And also students consider using private vehicles to be cheaper than using online transportation.
3. Promotion carried out by online transportation is able to attract students to order it. So that the higher the promotion offered, the higher the interest of students will order online transportation. Especially every month there are promotions offered by online transportation companies.
4. Services offered by online transportation are not able to attract students to order them. The higher service does not increase the interest of students ordering online transportation. Complain that often arises causes students to reconsider ordering online transportation.

Suggestions

Based on the conclusion above, there are some suggestions proposed by the researcher.

1. The online transportation companies can make more promotion, especially for the users that are not using e-wallet such as GOPAY and OVO. Most of the promotions are for e-wallet users. The companies need to embrace all the various income of the consumer.
Also, the companies must be making more promotion for customers who still use private vehicles. It would make the order increase.

2. The companies can also consider women as the driver because most of the consumers are women. It would provide more security for woman consumer to order it.

3. In addition, the government is also expected to prioritize public transportation such as online and conventional transportation so that people prefer to use public transportation rather than private vehicles.

BILBIOGRAPHY


32.


