The Impact of Online Motorcycle Fare on Customer Satisfaction

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Abstract. The upturn of internet technology presents a practical and low-fare online motorcycle taxis service which becomes a solution under a high demand of Indonesian society regarding traffic issue. Fare strategies continue to be carried out by the online transportation companies in order to create customer satisfaction and to win the competition. This research aims to find the impact of Grab-Bike fare offered towards the students of Management and Business Faculty, Institute of Transportation and Logistics Trisakti. The method used in this research is survey by distributing questionnaires to 100 respondents. The using of standard regression linear analysis technique aims to examine hypothesis with the support of SPSS software. The result of this research is showing that Grab-Bike fare positively and significantly influenced the satisfaction of the students of Management and Business Faculty, Institute of Transportation and Logistics Trisakti.

1. Introduction

Transportation is really needed in present time, because with the presence of transportation can make work more effective and helpful in daily needs. People’s dependency on transportation is really high, it can shorten trip time as the reason. That’s why the transportation service provider is competing to get their customers.

In accordance with present day technology, there’s an application which introduce motorcycle ordering service or known as ojek online. Online based transportation service company that is developing in Indonesia right now is Grab. Grab is a company that originally came from Singapore which serves transportation provider’s application and it’s available in six countries on South East Asia, which are Malaysia, Singapore, Thailand, Vietnam, Philippine and Indonesia. Grab’s founder and also the CEO is Anthony Tan. This company serves in transportation service provider as a connector between the ojek driver and their customers by using the existence of developing technology [1]. Grab is more in demand by user online transportation service than Go-jek. Because of the fare more inexpensive and Grab also often provide discounted travel prices to get their customer’s.

[2] explains that price is one of the mixed market element which resulting income, other element is resulting cost. While [3] explain that price is one of the important element in marketing, where the price can affect consumer in making decision to buy a product for some reason.

[4], stated that price is the consumer’s appraisal for product or service convenient in accordance with the customer’s preception based on customer’s condition and environment. [5] inferred that fare is amount of money that paid to get and use a product or service.

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Price measurement with six indicators stated by [6] in research [7] are: 1. Price affordability; 2. Price accordance with product or service’s quality; 3. Price competitiveness in market; 4. Price accordance with service advantage; 5. Fare effect customer’s purchase ability; and 6. Fare effect customer in making decision.

[8] stated that customer’s satisfaction which is the function of difference between result performance with expectation which performance has been compared. [9], contend that customer’s satisfaction is a customer’s perception towards the look of a product or service which relate with customer’s expectation. While [10] defined satisfaction as an evaluation post to consumption that a chosen alternative at least fulfill or higher than expected. [11] explained that consumer satisfaction is an upcoming pleasant feeling or disappointment on result of performance comparing which percept in a product (or result) towards their expectation.

[12] in research [13] to measure customer’s satisfaction using four indicators which consist of: 1. Consumer generally pleased with the use of online service; 2. Online service company’s service is gratify; 3 consumer is very pleased with online company’s service; 4 Consumer is happy with the online service company.

From description above, researcher’s interested to discuss and do research about consumer’s satisfaction in transportation service business ojek online and take price matter toward consumer’s satisfaction in ojek online transportation service (grab bike) particularly the college students of Institute of Transportation and Logistics Trisakti.

2. Research Method

According to [14], quantitative research method is a research in a form of numbers and the analysis is using statistics. Quantitative research method can be interpreted as a research method based on positivism philosophy, used to research on certain sample or population. Sampling technique generally conduct in random (random sampling), data collecting using research instrument, data analysis is in quantitative/statistic in order to test the applied hypothesis.

Data collecting method using Cross Section method through structured questioner that given to respondent and design in certain way to get specific information.

This population in this study are students of Management and Business Faculty in Institute of Transportation and Logistics Trisakti. The location and object was chosen because it’s easy to conduct the research because the location’s distribution in not too far wide.

The numbers of population are all the active students in 2018 period with the total of 3,545 students. With the amount of sample based on the calculation using Slovin formula according to [15] is 100 samples. In this research using five Likert Scale, which are: very agree (5), agree (4), quite agree (3), not agree (2), very not agree (1).

To get subjective data in this research, data collecting sample through questioner was used. Questioner is a data collecting technique conducted by giving a set of questions or written test to respondents to be answered. This questioner will be given to randomly selected respondent in this research sample.

Data analysis technique that used in this research is a simple linear regression analysis which processed using SPSS software. Data analysis technique is used to know the amount of price impact towards customer’s satisfaction.

3. Result and Discussion

Based on our research result, data recapitulation taken from respondent characteristic is as follow:
Figure 1. Characteristics of Respondents by Gender

From figure 1 we can see the average female respondents are 51%. And male respondents are 49%.

Figure 2. Characteristics of Respondents by Age

From figure 2 we can see the average age ranging from 15-20 years old are 37%. And age ranging from 21-26 years old are 63%. And there are no respondent >26 years old for their average age rate.

Figure 3. Respondent characteristic from their living place

From figure 3, we can see the average respondent living place in Capital City of Jakarta are 65%. And for those who live in Bogor City are 3%. Those who live in Depok City are 4%. And those who live in Tangerang are 4%. And the last respondent who live in Bekasi are 24%.
From figure 4, we can see the majority of respondent’s educational background with S1 are 87.9%. And respondent who have D.III education background are 12.1%.

From figure 5, we can see the respondent percentage of whom ever use ojek online are 99%. While the respondent who never use are 1%.

Validity test determine the instrument that being used to get data in research is valid to use or not. According to [16] to test the validity construction done by correlating between question score and the total score. Pearson’s formula that used to test instrument validity is:

$$R_{xy} = \frac{\Sigma X \Sigma Y - (\Sigma X)(\Sigma Y)}{\sqrt{\Sigma X^2 - (\Sigma X)^2} \sqrt{\Sigma Y^2 - (\Sigma Y)^2}}$$

Based on the calculation of simple linear regression’s correlation, it’s known that the value of Sig.(2-tailed) for item_1 until item_10 with the value of total score less than 0.05 and Pearson Correlation value for item_1 until item_10 is stated as valid and the question items can be used as an accurate data collecting tool in a research. So researcher was using the whole question items number 1 until 10 to do this research.

In decision making on reliability test is as follow:
1. If Cronbach’s Alpha value > 0.60 then the questioner is stated as reliable or consistent.
2. If Cronbach’s Alpha value < 0.60 then the questioner is stated as unreliable or inconsistent.

Based on “Reliability Statistic” calculation, can be known that there is N of items that stated there are 10 question items in this research. And in Cronbach’s Alpha there are 0.951 value which stated the overall Cronbach’s Alpha. Because the Cronbach’s Alpha value is 0.951 > 0.60, then just like the decision making in reliability test above, it can be concluded that the-10 or the whole question items in research questioner is stated as reliable or consistent.

This hypothesis test research was using simple linear regression analysis using SPSS.
Table 1. Simple Linear analysis Regression

| Coefficientsa | B     | Std. Error | Beta  | T  | Sig. |
|---------------|-------|------------|-------|----|------|
| Model         |       |            |       |    |      |
| 1 (Constant)  | 5.861 | 1.409      | 4.159 | 4.159 | .000 |
| Price         | .416  | .062       | .563  | 6.741 | .000 |

a. Dependent Variable: Customer Satisfaction

Based on the above table can be inferred the simple linear regression:

\[ Y = 5.861 + 0.416x \]

Constanta value has a positive value 5.861, this number is a constant number which means that if there is no Price (X) then consistent value of customer’s satisfaction (Y) is 5.861. The customer’s satisfaction variable regression value is positive 0.416, this means that if the customer’s satisfaction variable is increased can affect the increase of price variable.

Table 2. Correlation Coefficient Analysis

| Model Summary |
|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|-------------------|---------------------------|
| 1     | .563a | .317     | .310              | 2.41300                   |

a. Predictors: (Constant), Price

Based on the calculation table above, the correlation coefficient value (R) is 0.563a which interpreted that the price variable relation towards customer’s satisfaction is in a strong category.

Table 3. Coefficient Determination

| Model Summary |
|---------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|-------------------|---------------------------|
| 1     | .563a | .317     | .310              | 2.41300                   |

a. Predictors: (Constant), Price

SPSS value resulting R Square 0.317. This value means that the effect of Price (X) towards Customer’s Satisfaction (Y) is 31.7% while 68.3% Customer’s Satisfaction is influenced by other variable which are not being research.

Table 4. t test (comparing the value of t count with t table)

| Coefficientsa | B     | Std. Error | Beta  | T  | Sig. |
|---------------|-------|------------|-------|----|------|
| Model         |       |            |       |    |      |
| 1 (Constant)  | 5.861 | 1.409      | 4.159 | 4.159 | .000 |

a. Predictors: (Constant), Price
Based on the above output it is known that t count is 5.074. After that search for t table with the following formula:

Value $a / 2 = 0.05 / 2 = 0.025$

Degree Freedom (DF) = $n - 2 = 100 - 2 = 98$

Value 0.025 : 98 to know t table value, which is 1.987

t count value is 6.741 bigger than > 1.987, so it can be concluded that H0 refused dan Ha accepted which means that there is an influenced between Price (X) towards Customer’s Satisfaction (Y).

4. Conclusion

Based on research result about the price effect towards the customer’s satisfaction on ojek online Grab Bike transportation service at Institute of Transportation and Logistics Trisakti, can be found that price variable (X) has a positive and significant effect towards related variable which is customer’s satisfaction (Y) ojek online Grab Bike transportation service at Institute of Transportation and Logistics Trisakti.

5. References

[1] Grab Indonesia, “About,” 2019. [Online]. Available: https://www.grab.com/id/about/.
[2] Kotler dan Keller, “Prinsip-Prinsip Pemasaran,” Erlangga, Jakarta, p. 67, 2009.
[3] Tjiptono and Fandy, Strategi Pemasaran. Yogyakarta: CV. Andi Offset, 2008.
[4] Kotler dan Amstrong, “Prinsip-Prinsip Pemasaran,” Erlangga, Jakarta, vol. 12, no. Jilid 1 dan 2, 2008.
[5] Kotler and Philip, Manajemen Pemasaran. jakarta: PT. Indeks, 2007.
[6] A. Aptaguna and E. Pitaloka, “Pengaruh Kualitas Layanan Dan Harga Terhadap Minat Beli Jasa Go-Jek,” Widyakala, p-ISSN: 2337-7313, vol. 3, no. 2012, pp. 49–56, 2016.
[7] Yuliarmi and Riyasa, “Analisis faktor-faktor yang mempengaruhi kepuasan pelanggan produk L’ Oreal Paris,” vol. 12, no. April, pp. 1–121, 2010.
[8] Schiffman, Leon, Kanuk, and L. Lazar, Consumer Behaviour, Edisi 7. jakarta: PT. Indeks.
[9] Engel, J. F, Blackwell, R. D, and M. P. W, Perilaku Konsumen, Edisi 6. jakarta: binarupa aksara, 1995.
[10] Kotler and Keller, Prinsip-Prinsip Pemasaran. 2009.
[11] D. Ribbink, S. Streukens, A. C. R. Van Riel, and V. Liljander, “Comfort your online customer: Quality, trust and loyalty on the internet,” Manag. Serv. Qual. An Int. J., vol. 14, no. 6, pp. 446–456, 2004.
[12] Hanifah, Sandriana, and Aswanti, “Kepuasan Pelanggan Jasa Transportasi ojek on line dalam Perspektif Kualitas Pelayanan dan Harga (Studi Pada Mahasiswa Sekolah Tinggi Di Lingkungan Yayasan Trisakti Jakarta),” 2017.
[13] Sugiyono, Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Afabeta, 2011.
[14] Sugiyono, Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Afabeta, 2011.
[15] Sugiyono, Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Afabeta, 2013.