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# The Effect of Online-Based Transportation on Conventional Transportation Revenues in Baubau City

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# ABSTRAK

Online-based transportation is a type of transportation that uses a smartphone to store applications in the form of a server that can be used to order transportation equipment in the form of two-wheeled or four-wheeled vehicles. With this online transportation, consumers now no longer have to wait or have to go to wait at the motorcycle taxi stand or at the roadside to wait for a taxi or tell the address because Taxi online already has a coordinate point for a pick-up point for customers. It can even be picked up at home though. In addition, consumers do not need to haggle about fares, because they have been determined based on the distance traveled. Initially, the presence of conventional taxis (Ade Taksi) in Baubau City was 25 units, but over time and coupled with the presence of online transportation, now there are only 8 taxi units that are actively operating. The purpose of this study is to find out how much influence the existence of online-based transportation has on the income of conventional taxi drivers and how people are interested in using conventional taxis after online transportation. Based on the results of research, online transportation has a very negative influence on the income or income of conventional taxi drivers. As evidence, it can be seen from the results of the study that the income of taxi drivers decreased before the presence of online transportation and after the presence of online transportation. The average income earned by conventional taxi drivers is Rp. 4,312,500 and after online transportation of Rp. 3,412,500 and the presence of online-based transportation has a negative impact on the large number of interest in using conventional taxis. This can be proven by the decrease in monthly taxi revenue before the online-based transportation and after the online-based transportation. So that the average number of taxi enthusiasts or customers before the online online-based transportation was 1,170 calls and the average number of customers after the online-based transportation was 927 calls (10.9%). 500 and the presence of online-based transportation has a negative impact on the large number of interest in using conventional taxis. This can be proven by the decrease in monthly taxi revenue before the online-based transportation and after the online-based transportation. So that the average number of taxi enthusiasts or customers before the online online-based transportation was 1,170 calls and the average number of customers after the online-based transportation was 927 calls (10.9%). 500 and the presence of online-based transportation has a negative impact on the large number of interest in using conventional taxis. This can be proven by the decrease in monthly taxi revenue before the online-based transportation and after the online-based transportation. So that the average number of taxi enthusiasts or customers before the online online-based transportation was 1,170 calls and the average number of customers after the online-based transportation was 927 calls (10.9%).

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# KEYWORDS

Analysis; Online; Transportation

# 1. Introduction

Along with the development of technology in this era of globalization, especially smartphones (smartphones). It turns out that transportation does not escape the positive impact as well. Now, transportation can be easily obtained through applications installed on consumer smartphones. The application technology used to order goods and services uses electronic systems and networks to connect consumers. Access to a location can be easier and faster, making the selling point more of this application technology.

Online transportation is transportation based on a particular application, where consumers order a means of transportation through an application system on a smartphone. With this online transportation, consumers now no longer need to approach the motorcycle taxi stand or have to wait on the side of the road to get a taxi. It can even be picked up at home though. In addition, consumers do not need to haggle about the tariff, because it has been determined based on the distance traveled. When stuck in traffic jams, consumers don't need to worry about inflated tariffs like when using metered transportation, because the tariffs that have been determined at the beginning of the trip are based on distance traveled.

Starting from the capital city, online transportation continues to spread its wings in Indonesia, now online transportation has been present in Baubau city and is booming among Baubau city residents such as Grab and Kurorio. The online transportation is considered as an alternative transportation that is easily accessible by every citizen of the city of Baubau.

Initially, the presence of conventional taxis (Ade Taksi) in Baubau City amounted to 25 units, but over time and added to the presence of online transportation, now there are only 8 taxi units that are actively operating.

Because more and more people use online transportation services, the less income earned by conventional public transportation drivers, because people prefer online transportation which is cheaper than other conventional transportation. Based on the background of the problem above, the authors are interested in conducting research with the title "Analysis of the Impact of the existence of Online Transportation on Conventional Transportation Revenues in Baubau City".

Based on the description of the background above, the problems that can be formulated are several problems, namely, does the existence of online transportation affect the income of conventional taxi drivers and what is the public's interest in using conventional taxi services after online transportation?

## 2. Literature Reveiew

## 2.1. Transportation

Literally the meaning of transportation is the transfer of people or goods from one place to another by using a vehicle that is driven by humans or machines. Transportation is used to make it easier for humans to carry out daily activities in all aspects of the life of the nation and state. There are 5 main elements of transportation, namely humans who need transportation, goods needed by humans, vehicles for transportation, infrastructure for transportation, and organizations managing transportation activities. Most activities or daily human activities are always related to the use of means of transportation. With this means of transportation, humans will find it easier to move places or also move goods to a certain destination.

# 2.2 Types of Transportation

In general, there are 3 types of transportation commonly used by the wider community today, namely land transportation, air transportation and sea transportation. This land transportation consists of two groups, namely Highway Transportation which is a vehicle that operates using asphalt/concrete roads, some of the facilities needed include roads, bridges, bus stops, traffic signs, and others. cars, motorcycles, tricycles, bicycles, while the Train / Electric This is a vehicle that moves using coal, diesel or electric power, which direction is in line with the rails. Air transportation is a vehicle that performs its operations in the air, whether to transport humans, animals, or goods. Like planes and helicopters. The infrastructure needed for air transportation includes airports, flight operators, and others, while water transportation is all types of vehicles that operate in waters. Such as, ships, submarines, boats, ferries, and others. The most needed infrastructure for water transportation includes ports as a place to transport passengers or goods.

# 2.3 Criteria for Public Transportation

According to Mr. Zulhelmi. MHSC (one of the lecturers at IAIN Ar-Raniry Banda Aceh). There are several criteria that must be carried out in order to create security and comfort for public transportation in Indonesia, namely:

The first is to establish a supervisory and executing agency for public transportation as an institution that has full authority to control public transportation activities. Second, knowing the number of public transportation by conducting a strict selection of the criteria for public transportation that is fit for operation. Third, certifying the drivers of public transportation. Becoming a public transport driver must meet special requirements that have been designed in such a way that he will become a professional driver. Fourth, publish the telephone number or place of complaint to the passengers. The goal is that if there is an incident that makes passengers uncomfortable or unsafe while on public transportation, they will call the number. Fifth, eradicate the thugs, seller or the like so as not to disturb the comfort of the passengers in public transportation. Instead of entertainment, public transportation is appropriate to provide radio, television or video facilities in it. Sixth, installing CCTV in every place that is prone to criminal acts. With CCTV and security personnel in crime-prone areas, passengers will feel safe, both while waiting for public transportation or while in it.

# 2.4 Online Transportation

Along with the development of technology in this era of globalization, especially smartphones (smartphones). It turns out that transportation does not escape the positive impact as well. Now, transportation can be more easily obtained through applications installed on consumers' smartphones. This is the result of developing the creativity of business actors who see business opportunities between consumers and service sellers. For this reason, business actors develop business by creating applications that can be used to connect consumers and business actors.



Figure 1. Baubau City Online Transportation Application

# 3. Research Method

The location of this research is in the city of Baubau and the research time is from September to November 2020. This study uses a quantitative descriptive research method that aims to analyze the data in depth. Later this study will describe the data related to the problems studied in the study. This research is verification by using primary data to answer

the main problem and describe the research objectives which will be obtained from the results of direct interviews with respondents to obtain the main research data and complete the explanations for the research.

The data collection method used in this research is quantitative data. Quantitative data is a type of data in research that can be measured, calculated and can be described using numbers. Generally, data like this are used to explain phenomena that are clear and there are already measuring instruments. This method is used to determine the impact of online transportation on conventional transportation.

## 4. Results

# 4.1 Respondents Overview

OndiscussionThe following is a description of the data that has been obtained in the study. Research data obtained directly from interviews, namely by asking questions that have been prepared by the researcher. Respondents in this study amounted to 8 conventional taxi drivers in the city of Baubau from a total of 25 fleet units.

# a. Characteristics of Respondents Based on Age

Other data presented regarding the general condition of the respondents is age. The percentage based on the age range of the respondents is presented in the table below;

Table 1. Characteristics of respondents by age						
No.	Age (Year)	Number of Respondents (people)	Percentage (%)			
1	31 - 40	3	37.5%			
2	41 - 50	2	25%			
3	51 - 60	3	37.5%			
	Amount	Amount 8				

## Source: 2021 data collection

Based on the data above, we can see that there are 8 conventional taxi drivers in the city of Baubau and currently active. From the age range of 31-40 years, there are 3 people (37.5%), those aged 41-50 years are 2 people (25%), those aged 51-60 years are 3 people (37.5%). It can be concluded that the more dominant age of conventional taxi drivers is in the range of 31-40 and 51-60 years (37.5%).

## b. Characteristics of Respondents Based on Education

The information presented is about the general condition of the respondents based on the level of education obtained from the research. The percentage based on education level is presented in the table below;

No.	Education	Number of Respondents (Persons)	Percentage (%)	
1	SD	2	25%	
2	junior high school	2	25%	
3	senior High School	3	37.5%	
4	<b>S</b> 1	1	12.5%	
	Amount	8	100%	

Source: 2021 data collection

Based on the data above, we can see that there are 8 conventional taxi drivers in the city of Baubau and currently active, out of 25 fleet units. 2 people (25%), SMP totaling 2 people (25%), and S1 amounting to 1 person (12.5%). It can be concluded that the more dominant taxi drivers are those with a high school education background.

c. Characteristics of Respondents Based on Work Experience

The information presented is about the general condition of the respondents based on work experience obtained from the research. The percentage based on work experience is presented in the following table:

No. Work Experience (Years)		Number of respondents (people)	Percentage (%)	
1 2-5		5	62.5%	
2	6-10	3	37.5%	
	Amount	8	100%	

# Table 3. Characteristics of respondents based on work experience

#### Source: 2021 data collection

From the data above, we can see that there are 5 conventional taxi drivers who have worked 2-5 years or 62%, and 3 people or 37.5% who have worked 6-10 years. From these data it can be concluded that the more dominant are those who work for 2-5 years, namely as many as 5 people.

# 4.2 Overview of Revenue and Number of Customers Before and After Online Transportation

#### a. Income

Based on research and interviews conducted in the field, the income data obtained by conventional taxi drivers before and after online transportation in Baubau city was obtained. The income earned by the driver each month is presented in the following table:

_		Before		After			
No	Total Income (Rp)	Number of Respondents	Percentage (%)	Total Income	Number of Respondents	Percentage (%)	
1	3m - 4m	2	25%	2m - 3m	2	25%	
2	4m - 5m	4	50%	3m-4m	5	62.5%	
3	>5m	2	25%	>4m	1	12.5%	
	Amount	8	100%	Amount	8	100%	

## Source: 2021 data collection

From the data above, we can see that the number of respondents who earn around Rp. 4 million – Rp. 5 million before the existence of online transportation was the most, namely there were 4 respondents (50%), then those who earned around Rp. 3 million – Rp. 4 million there are 2 people (2%), and those who earn in the range of more than Rp. 5 million there are 2 people (25%). In other words, it can be concluded that the most dominant amount of income earned by conventional taxi drivers before online transportation was Rp. 4 million – Rp. 5 million.

From table 4.5 above, we can see that the number of respondents who earn around Rp. 3 million – Rp. 4 million after online transportation was the most, there were 5 people (62.5%), then those who earned around Rp. 2 million – Rp. 3 million there are 2 respondents (25%) and the least are those whose income is more than Rp. 4 million there is 1 respondent (12.5). So it can be concluded that the most dominant amount of income obtained by respondents is Rp. 3 million – Rp. 4 million.

From the table data above, it can be seen how the difference in the amount of income of conventional taxi drivers before and after online transportation is available, that before online transportation the conventional taxi driver's income was still above Rp. 4 million per month, and after online transportation conventional taxi revenue decreased but not significantly.

# b. Customer

Information is presented about the number of customers who use conventional taxi services before and after online transportation in Baubau city each month is presented in the following table:

	Before			After			
No	Number of Customers	Number of Respondents	Percentage (%)	Number of Customers	Number of Respondents	Percentage (%)	
1	800-1000	2	25%	700-900	4	50%	
2	1000-1200	2	25%	900-1100	3	37.5%	
3	>1200	4	50%	>1100	1	12.5%	
	Amount	8	100%	Amount	8	100%	

#### Table 5. Number of Customers Before and After Online Transportation

#### Source: 2021 data collection

From the table above, we can see that the number of respondents who received customers in the range of >1200 calls prior to online transportation was the most, namely 4 respondents (50%), then those who received customers in the range of 800 - 1000 calls were 2 respondents (25%), and 2 0 people (25%). So it can be concluded that the most dominant number of customers obtained by respondents before online transportation was in the range of >1200 calls.

From the table above, we can see that the number of respondents who received customers in the range of 700 - 900 calls after online transportation was the most, namely there were 4 respondents (50%), then those who got customers in the range of 900 - 1100 calls were 3 respondents (37 .5%), and the lowest is the one who gets customers in the range of >1100 calls, there is 1 respondent (12.5%). So it can be concluded that the dominant number of subscribers obtained by respondents is in the range of 700 -900 calls.

From table 4.5 above, we can see how the difference in the number of conventional taxi customers before and after online transportation is, that before online transportation the number of customers was still above 1200 per month and after online transportation the number of customers was less than 1000 calls per month. This is due to the reduction in the conventional taxi fleet which is active from 25 units to 8 units, and customers switch to other transportation alternatives.

## 4.3 Data analysis

## a. Paired Sample t-Test Analysis

Paired-Sample t-Test was used to compare the difference between two means of paired samples assuming normally distributed data. To be able to analyze the income level of conventional taxi drivers before and after online transportation is to compare the income levels in two different circumstances, namely before the online transportation and after the online transportation in Baubau city. So it can be concluded that online transportation has an impact on the level of income and the number of customers of conventional taxi drivers in the city of Baubau. This study analyzes the impact of online transportation on the level of income and the number of customers of conventional taxi drivers of conventional taxi drivers before and after online transportation. The variables contained in this study are income variables and customer variables. The results of the analysis using a paired t-test regarding income and customers before and after online transportation can be seen as follows:

	mean		Std. De	t-	Sig.(2-	
Parameter	Before	After	Before	After	statistics	tailed)
Income	Rp.4.312.500,000	Rp.3.412.500,000	Rp.997,765,3603	Rp.847,580,5904	7,726	0.000
Customer	1,168,7500	927.5000	278,94892	192.33233	5.590	0.001

# Table 6. Descriptive Results of t-test Statistics

# Source: SPSS Output Results (Processed 2021)

Based on the results of calculations using the paired t-test above, it shows that the amount of income for conventional taxi drivers can be said to be reduced after online transportation in the city of Baubau. The average monthly income earned by conventional taxi drivers before online transportation was Rp. 4,312,500,000 with a standard deviation of Rp. 997,765,3603 and after the online transportation of Rp. 3,412,500,000 with a standard deviation of Rp. 847,580,5904. The results of the correlation between the two variables that produce the number 0.949 with a probability value (sig.) 0.000. This means that the correlation between before online transportation and after online transportation is significantly related, because the probability value is <0.05. Based on the output above, it is known that the value of Sig. (2-tailed) of 0.000 < 0.05. Because the value of Sig. (2-tailed) of 0.000 is smaller than 0.05, so it can be concluded that there is a difference in the amount of income before and after online transportation.

In the customer variable, it can be seen that after online transportation, conventional taxi drivers experienced a decrease in the number of customers. The results of the analysis using paired t-test regarding the number of customers showed that there was a decrease in the number of customers. This is evidenced by the average number of customers before online transportation per month was 1,168 calls using conventional taxi services with a standard deviation of 278 people and after online transportation the number of customers for conventional taxi drivers averaged 927 calls with a standard deviation of 192 people. The results of the correlation between the two variables that produce the number 0.924 with a probability value (sig.) 0.001. This states that the correlation between before the existence of online transportation and after the existence of online transportation is significantly related, because the probability value <0.05. Based on the output above, it is known that the value of Sig. (2-tailed) of 0.001 <0.05, it can be concluded that there are differences in the number of customers before and after online transportation.

## 5. Discussion

At the beginning of its appearance in the city of Baubau, conventional taxis dominated public transportation in every corner of the city, wherever we go it is very easy to find this means of transportation, starting from those at their respective bases or those on the road to deliver or pick up passengers. Generally, Baubau residents who do not have private vehicles prefer to use taxis to go to a place rather than other transportation. Besides being easy to find on the road, or even can be ordered via consumer telephones. Along with the development of increasingly sophisticated technology, there is a new breakthrough to facilitate the community, namely application-based transportation or often referred to as online transportation. Coupled with the existence of unofficial taxi transportation or illegal taxis,

From the results of interviews conducted by researchers with conventional taxi drivers in Baubau city, it can be concluded that the condition of conventional taxi drivers can be seen from their monthly income before online transportation, the average income obtained is Rp. 4,312,500 and the average number of passengers is 1,170 and after online transportation, conventional taxi drivers only earn an average of Rp. 3,412,500 and the average number of passengers is 927 calls. From the explanation above, it can be seen that the income condition of conventional taxi drivers is quite reduced due to online transportation.

The results of the study using the t-test obtained negative results on the income and the number of customers of conventional taxi drivers, which was much lower than before the presence of online transportation. From the results of interviews that were also conducted by researchers with conventional taxi drivers, most of them complained and did not agree with the existence of online transportation which is a rival in getting passengers. Even in the parking area of the Lippo Buton shopping center in Baubau City, online transportation is not allowed to enter or pick up passengers.

# 6. Conclusion

From the results of research on the Analysis of the Impact of the Presence of Online Transportation on Conventional Transportation Revenues in Baubau City, it is concluded that, the presence of online transportation has a negative impact on the income level of conventional taxi drivers. It is evident that there is a decrease in the income level of taxi drivers before and after online transportation. the average income earned by conventional taxi drivers is Rp. 4,312,500 and after online transportation of Rp. 3,412,500. Besides that, the presence of online transportation has a negative impact on the number of customers of conventional taxi drivers. It is proven that there is a decrease in the number of taxi customers per month before and after online transportation. the average number of taxi customers per of taxi customers per month before and after online transportation. the average number of customers after online transportation was 927 calls (10.9%)

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