

# Service Usage Behavior of Online Ride-Sharing Bike in Indonesia

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**Abstract:** *This research analyzed the service usage behavior of online bike. The method used in this research was descriptive with the survey conducted through questionnaire. Purposive sampling was used as the sampling technique. Data were collected using questionnaire on 200 respondents around Jakarta and its buffer zone area (Bogor, Depok, Tangerang and Bekasi), Indonesia, who had the application of online ride-sharing bike, had ordered online ride-sharing bike through application and had been using online ride-sharing bike in the last a month. The findings revealed that this study was dominated by women with the total percentage of nearly 70 percent. Half of the sample of this study belongs to the 15-24 years old age group meanwhile the education level was dominated by the undergraduate degree. Spending per month is predominantly  $\geq$  IDR 3,000,001 with a percentage of almost 30 percent. Price was the main reason why respondents decided to use online ride-sharing bike.*

**Keywords:** descriptive, online ride-sharing bike, service usage behavior, reasons to use online ride-sharing bike

## 1. Introduction

The problem of congestion is a challenge faced by the government, especially in developing countries such as Indonesia. One of the transportation that can be used as an effective solution for the congestion is bike. A new breakthrough was generated by enthusiastic young entrepreneurs looked at business opportunities in developing new innovations for the provision of online transportation services, namely online ride-sharing bike. Online ride-sharing bike was gained popularity among people because it allowed people to book online bike anywhere and anytime.

But, the existence of online ride-sharing bike companies in Indonesia caused controversy from various circles of society. This online ride-sharing bike became competitors for conventional bikes. On the other hand the existence of an online ride-sharing bike could give convenience for consumers.

A survey had been conducted by the Indonesian Consumers Foundation or YLKI on 5-16 April 2017 to online transport consumers involving 4,688 respondents [5]. The main reason for the selection of online transportation was cheap (84.1 percent), and fast (81.9 percent). However, as many as 41 percent of consumers claimed that they had been let down by online transportation services. Some forms of technological disappointments on online transport were difficulty to get driver (21.19 percent) and damaged map application (13.11 percent). Some forms of risk disappointments were poor vehicle condition (6.04 percent) and dishonest driver to consumer (5.03 percent). Competition also occurred among the perpetrators of the online bike industry. The highest order of ratings consumers choose was Go-Jek (72.6 percent), Grab (66.9 percent) and Uber (51 percent).

According to [1] the results of the analysis show that compared to the conventional vehicles, online ride-sharing bike was more efficient in the terms of transportation within the travel time, but vice versa for transportation costs. Existence of online transportation bike was able to open employment opportunities in the transportation sector, but the impact on the reduction of unemployment still must be learned more considering the majority of online ride-sharing bike drivers previously already have a job.

According to [2] The existence of the legal subjects that had been willed to be incorporated for the sake of efficiency and the business's security is also challenged its existence. Turns to subject law can conduct business such as the emergence of on-line stores, online transportation and other online businesses.

## 2. Literature Review

There are numerous studies related to assessment on service usage. Service usage was influenced by several factors.

### 2.1 Service Usage Behaviour

According to [4], services are produced and consumed simultaneously. Consequently, service companies have a great opportunity to actively help customers maximize the value of their consumption experience. Service providers can effectively influence the consumption and evaluation process. [7] state that services are any activities or benefits offered by a party on the other party and are essentially intangible, and do not result in ownership of anything.

According to [3], there were three stages in the behavior of

service use. The stages include pre-purchase, service encounter and post-encounter. These stages help to understand how consumers recognize their needs, find alternative solutions, choose and experience being part of a service, and evaluate the results of service experience.

**1) Pre-purchase stage**

It is a situation where potential customers are aware of the need and continue to search for alternative information and evaluation to decide whether or not to buy certain services.

**2) Service encounter stage**

It is a situation where there is a direct interaction between the customer and the service provider. During service delivery, many customers begin to evaluate the quality of service received and decide whether it meets their expectations.

**3) Post-encounter stage**

At this stage, the consumer will consider whether to subsequently repurchase and become a loyal customer or not. At this stage, the customer will evaluate the performance of the service and compare it with the customer's expectations.

**2.2 Online Ride-Sharing Bike**

According to [6] online ride-sharing transportation is a single, or recurring rideshare trip with no fixed schedule, organized on a onetime basis, with matching of participants occurring as little as a few minutes before departure or as far in advance as the evening before a trip is scheduled to take place. Brand of online ride-sharing bike expanded in Indonesia is Go-jek, Grab and Uber.

Online ride-sharing bike provides access to online ride-sharing bike applications for demand booking online. This can replace the growth of the vehicle on home and provide public transportation for business and entertainment needs. Online ride-sharing bike has a different purpose that is in addition to profit-oriented however there are also better environmental and social change missions according to [1].

**3. Method**

This research took place in the area of Jakarta and its buffer zone (Bogor, Depok, Bekasi and Tangerang). This study was conducted for six months starting from July to December 2017. The approach used in this study is a quantitative approach.

The data used in this study was the primary data. Primary data was data obtained from the first source, among others, from the results of questionnaires that have been filled by respondents. Primary data referred to in this study, namely data respondents (service users) in the form of demographic characteristics, vehicle ownership and the reason to use online ride-sharing bike. Primary data was obtained from interviews with respondents.

The sampling technique used in this research was purposive sampling. Respondents related to the people who had the online ride-sharing application, had ordered the application and had used the application. This study uses a sample

number of 200 people who are considered to have been able to represent the population. The method used in this study was descriptive.

**3.1 Reliability Test**

Reliability test results can be seen that each variable has Cronbach's alpha > 0.6 as presented in Table 1. This shows that service usage behavior of online ride-sharing bike used in this research is reliable.

**Table 1: Reliability test**

Variable	Cronbach's alpha	Standard of alpha	Note
Service usage behavior	0.7	0.6	Reliable
- Usage in rush hour			
- Main choice			
- Cash payment			
- Rating			
- Self initiative			

**3.2. Service Usage Behavior**

Service usage behavior was measured by descriptive analysis as presented in Table 2 and 3.

**Table 2: Service usage behavior**

Brand	Usage		Usage Frequency		
	Yes	No	Rarely	Often	Always
Go-jek					
Grab					
Uber					

**Table 3: Service usage behaviour**

Brand	Feedback		Payment Method		
	Rating	Comments	Cash	Non-cash	Both
Go-jek					
Grab					
Uber					

**3.3 Rank of Reasons to Choose Online Ride-Sharing Bike**

Rank of reasons to choose online ride-sharing bike was measured by descriptive analysis as presented in Table 4.

**Table 4: Rank of reasons to choose online ride-sharing bike**

Reasons	Rank		
	Go-jek	Grab	Uber
1. Price			
2. Promotion			
3. Comfort			
4. Easiness to get			
5. Safety			
6. Driver			
7. Payment method			

**4. Result**

**4.1 Descriptive Analysis**

The sample of this research was the users of online ride-sharing bike in Jakarta and its buffer zone area; and has been using ojek online at least once a month. Questions on the demographics given, i.e gender, age, education level,

occupation, and monthly expenditure/allowances. Descriptive analysis of demographic and vehicle ownership was shown in Table 5.

**Table 5:** Demographic and vehicle ownership

Characteristic	Category	Amount	Percentage (%)
Gender	Male	62	31.0
	Female	138	69.0
Age	15-24	93	46.5
	25-35	71	35.5
	36-45	20	10.0
	46-55	11	5.5
	> 55	5	2.5
Education	Junior High	12	6.0
	High School	47	23.5
	Diploma	9	4.5
	Bachelor	117	58.5
	Master	15	7.5
Occupation	Student	21	10.5
	Undergraduate	78	39.5
	Housewife	9	4.5
	Professional	6	3.0
	Entrepreneur	12	6.0
	Private	48	24.0
	Civil	16	8.0
	Others	10	5.0
Expenditure/month	< IDR 700,000	25	12.5
	IDR 700,001–IDR 1,000,000	27	13.5
	IDR 1,000,001–IDR 1,500,000	25	12.5
	IDR 1,500,001–IDR 2,000,000	26	13.0
	IDR 2,000,001–IDR 3,000,000	41	20.5
	IDR > 3,000,001	56	28.0
Vehicle ownership	Car	36	18.0
	Motorcycle	75	37.5
	Bicycle	4	2.0
	Car and motorcycle	149	74.5
	Car, motorcycle and bicycle	158	79.0
	None	38	19.0

Gender is an important component of marketing, but not all products and services can be differentiated by this segment. The example of this study is dominated by women with a total percentage of almost 70%. The example in this study dominated the age of 15-24 years, reaching 46.5%. The fewest examples in this study were respondents aged > 55 years, which is about 2.5%.

The level of education will greatly affect the consumer process of determining the choice of goods and services consumed or used. The level of education in this study is divided into five groups, namely Junior High School, High School, Diploma, Bachelor and Postgraduate. The respondent education level of this study is dominated by the level of undergraduate degree. About 6 out of 10 people samples from this study have undergraduate degree of education level. Second rank of education level is occupied by high school education level which reach more than 20%. The least educational level of the sample is a diploma of less than 5%.

Various levels of education made the respondents had a diverse profession. The respondents job was divided into 8 groups, i.e students, housewives, professionals,

entrepreneurs/traders, private employees, civil servants/police/Indonesian army and others. Based on the results of the study, the work is dominated by students. A total of 4 out of 10 sample studies were students.

Information on expenditure or allowance per month was required to determine the economic background of the sample. Comprehensive data on monthly expenditure/allowance can explain sample groups with which monthly expenditure/allowance is the most widely used online bike. A total of 3 out of 10 total samples had monthly expenses  $\geq$  Rp 3,000,001. While the most recent position of expenditure per month example is  $\leq$  Rp 700,000 and Rp 1,000,001 - Rp 1,500,000, that is equal to 12.5%.

Vehicle was one of the important investments in everyday life. Information on the ownership of respondent vehicles was needed to find out how many examples have private vehicles but also to use online ride-sharing bike in daily life. There were six groups of vehicle ownership, namely cars, motorcycles, bicycles, cars and motorcycles, all and none. Vehicle ownership is dominated by respondents who own vehicles in the form of cars, motorcycles and bicycles that is 158 out of a total of 200 respondents (79%).

#### 4.2 Service Usage Behavior of Online Ride-Sharing Bike

Based on the results of the research, examples of online bike were dominated by online bike with brand Grab with percentage reaching almost 100%. Table 6 shows service usage of online ride-sharing bike.

**Table 6:** Service usage behavior

No.	Aspects	Percentage (%)		
		Go-jek	Grab	Uber
1.	Usage			
	- Yes	89.5	96.0	56.5
	- No	10.5	4.0	43.5
2.	Frequency			
	- Rarely	48.6	40.6	66.4
	- Often	39.7	46.9	24.8
	- Always	11.7	12.5	8.8
3.	Payment			
	- Cash	59.2	88.0	96.5
	- Non-cash	33.5	8.3	3.5
	- Both	7.3	3.6	0
4.	Feedback			
	- Rating	81.0	84.9	83.2
	- Rating and comments	19.0	15.1	16.8

In the next position, it is occupied by a distinctly different Go-Jek with Grab that was almost 90%. While the least-used online ride-sharing bike by respondents was an online ride-sharing bike with Uber brand that reached more than half the total respondents of online ride-sharing bike.

Frequency of use of the sample was divided into three groups, i.e rarely, frequently and always. Frequency of use for rarely was dominated by Uber. More than 60% of Uber online ride-sharing bike users rarely use this brand. Frequency of use for often was dominated by the Grab where nearly half the total Grab users instanced often use the Grab.

Frequency of use for always was dominated by the Grab. As many as 12.5% of online bike users always use this brand.

Payment method for online bike was divided into three categories, such as cash, non-cash as well as cash and non-cash. The cash category was dominated by Uber which was about 9 out of 10 examples of Uber brand users used cash payment method. The non-cash category was dominated by the Go-Jek, which is more than 30% examples of Go-jek brand used the non-cash payment method ie Go-Pay. The Go-Jek brand outperformed the category of cash and non-cash payments of 7.3%. However, there was another interesting point where there were no examples of users of Uber users used cash and non-cash payment methods.

Feedback was an assessment of the performance of online ride-sharing bike drivers after an example using an online ride-sharing bike with a particular brand. Category of feedback itself was divided into two types, named rating and also rating and comments. There was intense competition between the three online bike brands in the rating category where about 8 out of 10 examples of the three users of online ride-sharing bike provided feedback in the form of rating after using the online bike. The rating and comment categories were dominated by an online ride-sharing bike with Go-Jek brand, where about 2 out of 10 examples of online bike users gave feedback in the form of ratings and comments.

### 4.3 Reasons of Choosing Online Ride-Sharing Bike

Each example must have a reason in choosing an online ride-sharing bike with a certain brand. The reason for choosing an online ride-sharing bike was divided into 7 categories, namely price, easiness to get, comfort, safety, promotion, payment method and driver. Table 7 shows reasons of choosing online ride-sharing bike.

**Table 7:** Reasons of choosing online ride-sharing bike

Reasons	Rank		
	Go-jek	Grab	Uber
1. Price	1	1	1
2. Promotion	2	2	2
3. Comfort	3	3	3
4. Easiness to get	4	4	-
5. Safety	5	5	4
6. Driver	6	6	5
7. Payment method	7	7	6

The reason for the selection of online bike under the Go-Jek is dominated by price reasons. Online ride-sharing bike users under the Go-jek agree that prices are the main reason they use online ride-sharing bike with the brand. The second reason for the selection of online ride-sharing bike under the Go-Jek was often promotion. The last position of the reason for the selection of the online bike Go-jek was the payment method. Respondents agreed that the method of payment was the last reason for the selection of online ride-sharing bike of the Go-Jek.

There was similarity between the rank of Go-jek and Grab. The top position of the reason for the selection of online bike with the Grab was filled by the price aspect. The second

position was also occupied by the frequent reasons of promotion. The last position was occupied by the payment method where users of online bike Grab choose payment method as the last reason for the use of this brand-based online bike.

The first rank of the reason for the choice of online with the Uber brand was the price respondents consider price was the main reason the respondents use Uber. There was slight difference in the reasons for selection, i.e the respondents did not include easy reasons on the order of reasons for the selection of Uber online bike. This proves that it is still rather difficult to find an online bike with Uber.

The result of the reasons for the selection of online bike that are not so different to prove that often users ojek online did not pay attention to certain brands. Price competition as the main reason for choosing this service should be paid more attention by the perpetrators of the online bike industry but still pay attention to other reasons aspect in order to be a value added for certain online bike.

## 5. Conclusions

Based on the service usage behavior of the online ride-sharing bike, Grab is an online ride-sharing bike most used by respondents. 96% of the respondents used the Grab, followed by Gojek (89.5%) and Uber (56.5%). The main reason for the usage of these three online motorcycle taxi brands is price. The largest age group of online ride-sharing bike users is 15-24 years old and has three online ride-sharing bike applications because the age group tends to compare promotions and pricing among the three online ride-sharing bike applications before finally deciding to use one. Interesting phenomenon obtained from this research that there are no respondents who only have an online ride-sharing bike of Uber application because it is still a bit difficult to get this online ride-sharing bike drivers and this brand is still relatively new when compared to other competitors.

## 6. Research Scope

This study has limitations in the form of focusing on online ride-sharing bike and does not include the use of online transportation car. In addition, this research is also more emphasized from the point of view of consumers so do not see from the point of view of online ride-sharing bike drivers.

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