Analysis of Online Car Service from User Aspect Using Importance Performance Analysis (IPA) Method

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Abstract

Several factors are considered by consumers in the selection of online transportation such as ease of ordering, appropriate prices and several other factors. The purpose of this study is to determine the effect of services provided online car services to users and determine the factors that need to be improved. This study used a sample of 96 respondents with data analysis using the Importance Performance Analysis method. The results showed that the Online Car (Grab Car) service affected User Satisfaction and the factors that needed to be improved consisted of Timeliness, Attention to, Safety and Environmental Pollution.
Keywords: Grab Car Services, Customer Satisfaction, Importance Performance Analysis

1. Introduction
a. Research Background
Today, transportation is one of the fields that sustains the economy throughout the world. Heizer, Render, & Munson (2017) explain, service matters underlie the largest economic sector in post-industrial societies. Service is an economic activity that produces an intangible product (government, education, finance, entertainment, and health). In 2019, society will enter an era where everything is sophisticated in all aspects and fields.

In this highly sophisticated era, people often use smartphones to look for needed needs such as looking for transportation that can deliver and pick them up to destinations using two-wheeled vehicles (motorcycles) commonly known as online motorcycle taxis or 4-wheeled vehicles (cars) known as an online car or online taxi by placing an order through an existing application.

Grab Online Transportation is currently in the middle of a public conversation. The online transportation company Grab is now trying to improve its services due to the high level of interest from customers.

b. Problem Formulation
Based on the background above, the problems to be examined are:
1) How does the influence of Online Car Services (Grab Car) on User Satisfaction of these services?
2) What services need to be improved and improved for Grab Car providers with the Importance Performance Analysis (IPA) method?

2. Literature Review
Transportation according to Nasution (1996) is defined as the transfer of goods and people from the place of origin to the destination. In the transportation activities, there are three things that underlie the load that is transported, available vehicles as a means of transportation, and the existence of a road that can be traversed. Conventional transportation is public transportation that we usually use, which is already available on conventional roads. In Indonesia there are several types of conventional transportation such as buses, taxis, public transportation, bajaj, and motorcycle taxis. So far conventional transportation in Indonesia, not all of them are good and comfortable for passengers or users of conventional transportation services.

Service quality according to Tjiptono (2007) is a statement about the attitude of the relationship that results from a comparison between expectations and the results to be obtained. In the business world, it's not just products /

services that are noticed. In terms of business quality of service must also be considered. Because service quality is a way to retain customers.In urban areas with large populations.

In the study of De Oña, Eboli, Forciniti, & Mazzulla (2016), which includes service quality indicators other than in terms of cost, quality has measurement dimensions consisting of the following aspects, namely:

a   Availability (Availabillity)
b   Accessibility
c   Information (Information)
d   Timeliness
e   Attention to clients (Attenton to client)
f   Comfort (Comfort)
g   Safety
h   Environmental pollution

According to Kotler & Keller (2009) customer satisfaction is a feeling of pleasure or disappointment someone who appears after comparing the performance (results) of products thought to the expected performance (expectations). There are several criteria to measure customer satisfaction, namely: a) Loyalty A person's loyalty to a service is a replication of a satisfying service. The measure of satisfaction can be measured by its loyalty to always use the product / service; b) Complaint (complaint) A complaint is a condition where a customer feels dissatisfied with the circumstances received from the results of a particular product or service so that it can cause the customer to run elsewhere if this complaint is not handled immediately. c) Participation Basically it can be measured from his awareness in carrying out the obligation to exercise his rights as a customer owned with a sense of responsibility. Customer satisfaction has 4 indicators according to De Oña, Eboli, Forciniti, & Mazzulla (2016) namely:

a.   Customer perception of the services provided
b.   Suitability of customer expectations of the services provided
c.   Interest
d.   Comfort

3.   Research Method

a. Data source

The research data was taken from primary data. Using data collection methods using questionnaires as a means of collecting survey data and accompanying respondents during the questionnaire filling process so that respondents more easily understand the purpose of the questionnaire and then the researcher will get all the answers to the questions that have been asked and listed in the questionnaire.

b. Operational Definition and Variable Measurement

1. Dependent Variable
    a. Service quality
        According to research studies De Oña, Eboli, Forciniti, & Mazzulla (2016), service quality indicators can be explained as follows:
        1) Availability
        2) Accessibility
        3) Information
        4) Timeliness
        5) Attention to clients
        6) Comfort
        7) Safety
        8) Environmental pollution
2. Independent Variable
    a. Consumer Satisfaction

c. Population and Sample

The population in this study is the people of Surabaya who use services from online transportation grab. Samples are part of the population that includes the number and special characteristics of a particular population. Research is not possible to study all aspects of the population if a large population according to Sugiyono (2015).

Samples taken are people who have used online grab transportation services in Surabaya. The target of this research is that some people in Surabaya as users of online grab transportation services according to individual characteristics and in this study used 96 respondents.
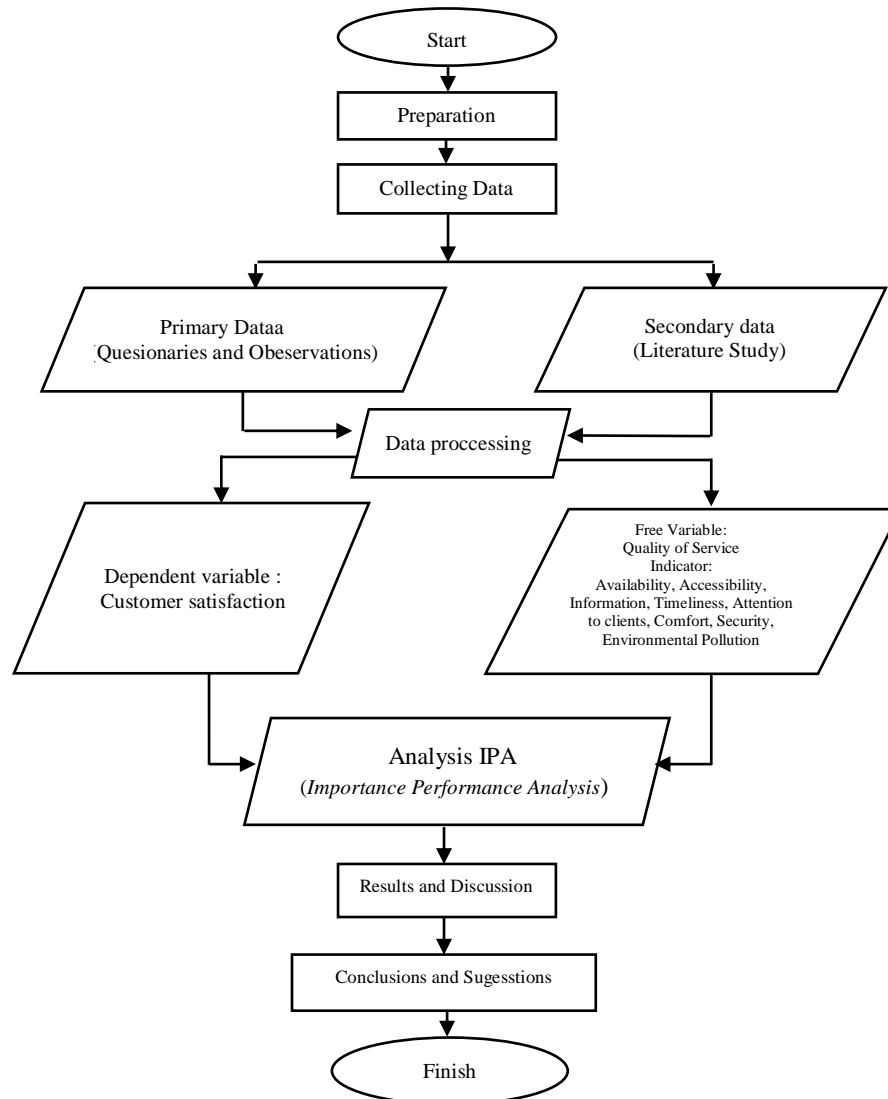

Figure 1. Research Flow Chart

d. Importance Performance Analysis

This research uses Importance Performance Analysis (IPA) which conceptually is a multi-attribute model. This technique identifies the strengths and weaknesses of market supply using two criteria, namely the relative importance of attributes and customer satisfaction. The application of natural science techniques begins with the identification of attributes that are relevant to the observed choice situation.

4. Results And Discussion

Table 1. Validity Test of Services Quality and Customer Satisfaction

Indicator	r count (Performance)	r count (Expectations)	Mark	r table	Information
Availability (X1.1)	0,623	0,633	>	0,1671	Valid
Accessibility (X1.2)	0,598	0,569	>	0,1671	Valid
Information (X1.3)	0,582	0,695	>	0,1671	Valid
Timeliness (X1.4)	0,720	0,631	>	0,1671	Valid
Attention to clients (X1.5)	0,585	0,538	>	0,1671	Valid
Comfort (X1.6)	0,647	0,669	>	0,1671	Valid
Safety (X1.7)	0,691	0,619	>	0,1671	Valid
Environmental pollution (X1.8)	0,549	0,411	>	0,1671	Valid
Consumer Perceptions (Y1.1)	0,712	0,788	>	0,1671	Valid

Source: processed data by researchers (2020)

From the table above shows that all indicators of performance and expectations have r count> r table that is equal to 0.1671. Then it can be concluded that all statements for the variable service quality and customer satisfaction both performance and expectations are valid.

Table 2. Validity Test of Service Quality and Customer Satisfaction

Variable	Cronbach's Alpha Value (Performance)	Cronbach's Alpha Value (Expectations)	Critical Value	Information
Services Quality	0,761	0,716	0,60	Reliable
Customer Satisfaction	0,770	0,807	0,60	Reliable

Source: processed data by researchers (2020)

Based on the table above it can be seen that the value of internal consistency reliability for the alpha coefficient of each variable both performance and expectations in each variable is declared reliable because it is greater than 0.6. The reliability test results obtained alpha coefficient values for the variable service quality (performance) of 0.761 and service quality (expectations) of 0.716. While consumer satisfaction (performance) amounted to 0.770 and customer satisfaction (expectation) amounted to 0.807.

Table 3. Perfomance and Expectation Score

Quadrant	Indicator	Indicator Name	Average (Xi)	Average (Yi)
B	1 (X1.1)	Availability	3.98	3.72
B	2 (X1.2)	Accessibility	4.06	3.85
D	3 (X1.3)	Information	3.97	3.52
C	4 (X1.4)	Timeliness	3.45	3.31
C	5 (X1.5)	Attention to client	3.31	3.36
B	6 (X1.6)	Comfort	3.78	3.60
C	7 (X1.7)	Safety	3.64	3.54
C	8 (X1.8)	Environmental pollution	3.24	2.95

B	9 (Y1.1)	Customer Perception	3.81	3.76
		Average Score	3.69	3.51

Source: processed data by researchers (2020)

From the table above shows the results of the calculation of the average value of the level of performance and the average level of expectation for each quadrant. The calculation results are displayed in the form of two kinds of graphs from the Natural Sciences method. The first graph uses the average value on the measurement scale of the performance level and Grab Car expectations level in Surabaya as a dividing line between quadrants as shown in the figure below:
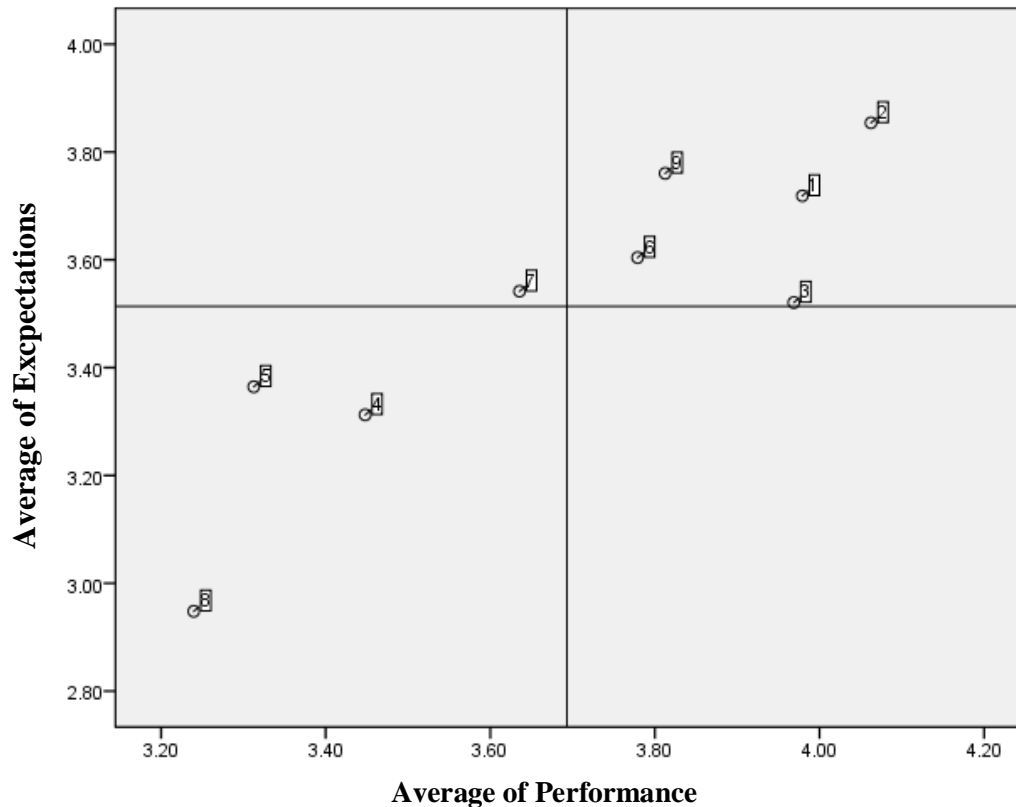

Figure 2. Cartesians Diagram of Grab Car Surabaya

Based on the Natural Sciences graph in the Figure above, the factors relating to the Grab Car service in Surabaya can be grouped in each quadrant as follows:

a   Quadrant A:
Quadrant A explains the performance of Grab Car in Surabaya is low but the level of expectation from users is high. There are no indicators included in this quadrant.

b   Quadrant B:
Quadrant B explains that the performance of Grab Car in Surabaya is high and the level of user expectations is also high. The indicators contained in this awareness are Availability (X1.1), Accessibility (X1.2), Comfort (X1.6), Customer perception of the services provided (Y1.1).

c   Quadrant C:
Quadrant C explains the performance of Grab Car in Surabaya is low and the level of user expectations is also low. Indicators of the suitability level are Timeliness (X1.4), Attention to client (Attention to client) (X1.5), Safety (X1.7), Environmental pollution (Environmental pollution) (X1. 8).

d   Quadrant D:

Quadrant D explains the performance of Grab Car in Surabaya is high but the level of user expectations is low. The indicator contained in this quadrant is Information (X1.3).

5.   Conclusion And Suggestions

Based on the results of the analysis of the research above it can be concluded that there is an influence of the Online Car (Grab Car) service to the User Satisfaction of the services. Then the better the level of service provided by Car Onluine (Grab Car), the better the satisfaction of users of these services. From the results of the analysis using the Importance Performance Analysis (IPA) method, services that need to be improved and improved for Car Online transportation service providers (Grab Car) are Timeliness with an average performance score of 3.45 and expectations of 3.51, Attention to clients (Attention to client) with an average performance score of 3.31 and expectations of 3.36, Safety (Safety) with an average performance score of 3.64 and expectations of 3.54 and Environmental pollution (Environmental pollution) with an average of average performance score is 3.24 and expectations are 2.95.

Based on the results of the study showed that the attributes included in the C quadrant must be improved performance. As for the attributes contained in quadrant C according to the order of priority for improvement is as follows:

a   Timeliness

The quality of timeliness must be further improved so that Grab Car users who have interests and circumstances with high urgency can maximize their time well.

b   Attention to client (Attention to client)

Giving more attention to Grab Car service users should also be given more attention especially for drivers who deal directly with customers.

c   Security (Safety)

The safety factor must also not be ruled out because customers always want good security in using the services of Grab Car.

d   Environmental Pollution

The fleet of Grab Car must also be given special attention, especially for vehicles that cause high environmental pollution, so it is necessary to filter and review about it so that the quality of Grab Car services in terms of environmental pollution can be maintained properly

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