

# ANALYSIS OF ACCEPTANCE AND USE OF ONLINE TRANSPORTATION ON GRAB AND GO-JEK APPLICATION FOR THE PUBLIC USING THE UTAUT2 MODEL (CASE STUDY: BANDUNG)

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## ABSTRACT

The development of online transportation using grab and go-jek applications is now very rapidly developing and more influencing in changing people's lives. This research was focus on Bandung, West Java, Indonesia. In 2021, Grab and Go-jek applications are not only developing in Indonesia but have spread throughout Southeast Asia such as Singapore, Malaysia, and Thailand. However, use of the online transportation can make competition between other public transportation. This research will help online transportations to evaluate their performance on the acceptance and use of grab and go-jek applications. With this research grab and go-jek applications can know which part they need to improve and suggestions for grab and go-jek applications to increase their service and quality of orders. This research takes eleven major factors UTAUT 2 models that have an impact on how a customer can accept and use online transportation for grab and go-jek applications. Those factors are performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit, and then add two external variables are service quality and customer satisfaction. This research will use survey and distribution of questionnaires method to gain some information from the customer. After collecting some data and information. This research will use SPSS and AMOS to process the data to know which hypotheses are accepted and rejected. The method using by this research in AMOS is SEM. SEM will give a significant point for every question to know the result can accept or reject.

## Introduction

Grab and go-jek applications are growing fast enough for online transportation service companies that use android applications. Many people are starting to switch to online transportation for reasons of speed, timeliness, and also low prices compared to public transportation (Silalahi, Handayani, & Munajat, 2017). Thus, some

public transportation or conventional transportation has moved to online transportation. The purpose of all this is none other than to win the competition with the existing competitor people as users or consumers of online transportation will choose to use transportation with easy access, comfort, and at low rates. Thus,

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online transportations are the main choice for consumers.

Along with the development of online transportation technology, it has become the choice of a community to facilitate their destinations (Septiani, Handayani, & Azzahro, 2017). In this study, the researchers will discuss online transportation using the grab and go-jek applications the grab and go-jek applications have become a means of public transportation for the community, both online motorcycle taxis in the form of motorbikes and cars. Online transportation itself is one of the vehicle choices for the community because it is considered to fulfill a sense of security, safety, affordability, and convenience in using an application-based motorcycle taxi service as online transportation, which makes it very easy for the community (Hardaningtyas, 2018).

In Indonesia, there are almost 21.7 million people using ride services or various rides on the grab and go-jek applications (Tempo, 2018). Almost 75% of Indonesian internet users already use mobile applications such as grab and go-jek applications. With the development and competition that is getting faster, these two applications are increasingly dominating users because of the shortcomings of conventional types of transportation. In addition, there are disturbances from new competitors because of the small opportunity to enter the work sector in community online transportation.

Competition has developed in online transportation using mobile applications that do not reduce the public's use of grab and go-jek applications. With the transportation development process that continues to run, the grab and go-jek applications provide easy access and convenience (Fauz, Widodo, & Djatmiko, 2018). People in Indonesia, especially in Bandung, the online transportation industry has the opportunity to grow rapidly.

This study using the UTAUT 2 model. This study is based on the UTAUT 2 model that has developed using seven main constructs, namely performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit, and adds two external variable constructs, namely service quality, and customer satisfaction. To find out and test the analysis of the acceptance and use of the

grab and go-jek applications on the attitudes of community users towards the entry of online transportation and the benefits of an application for using online transportation.

According to (Venkatesh, Thong, & Xu, 2012), the definition of a unified theory of acceptance and use of technology 2 (UTAUT2) is a model with acceptance of new technology. According to (Bendi & Andayani, 2013), the definition of a unified theory of acceptance and use of technology 2 (UTAUT2) is a model that can explain how user behavior responds to new information technology. Meanwhile, the research opinion according to (Arenas Gaitán, Peral Peral, & Ramón Jerónimo, 2015) defines the UTAUT 2 model as to how to unite several models to be compared into one theory of technology acceptance. The UTAUT 2 model has been developed from the development of new technologies that have been adapted from the previous UTAUT model, where the previous UTAUT model used in the form of an organization or group is reduced to individual use.

According to (Venkatesh et al., 2012) effort expectancy is a construction of the UTAUT model that measures the level of ease of use associated with the use of information technology. Meanwhile, according to (Celik, 2016) effort expectancy is an individual assessment of the level of technology utilization that does not require more effort. From some of these studies, it can be concluded that effort expectancy is the ease with which users can use a system or technology.

Moreover, this study aims to knowing performance expectancy can influence behavioral intention towards grab and go-jek applications the people of the city Bandung, knowing effort expectancy can influence behavioral intention towards grab and go-jek applications the people of the city Bandung, knowing social influence can influence behavioral intention towards grab and go-jek applications the people of the city Bandung, knowing facilitating conditions can influence behavioral intention towards grab and go-jek applications the people of the city Bandung, knowing facilitating conditions can influence user behavior towards grab and go-jek applications the people of the city Bandung, knowing hedonic motivation can influence behavioral intention towards grab and go-jek

applications the people of the city Bandung, knowing price value can influence behavioral intention towards grab and go-jek applications the people of the city Bandung, knowing habits can influence behavioral intention towards grab and go-jek applications the people of the city Bandung, knowing habits can influence user behavior towards grab and go-jek applications the people of the city Bandung, knowing service quality can influence behavioral intention towards grab and go-jek applications the people of the city Bandung, knowing customer satisfaction can influence behavioral intentions towards the people of the city Bandung, and knowing behavioral intention can influence user behavior towards the people of Bandung.

## Method

In this methodology, the questionnaire is used as part of a survey-based method (Sugiyono, 2019). The questionnaire used describes questions about the benefit of using online application-based transportation, namely, grab and go-jek using the UTAUT 2 model method which consists of several constructs, and the objects used in this study are the people of Bandung who use online transportation based on the grab and go-jek applications. This study uses SPSS and SEM AMOS to check the answers from this survey that target samples do (Cresswell, 2017). SPSS is a software or program stands for statistical product and service solution, which is a program or software used for statistical data processing purposes (Herlina, 2019). Structural equation modeling (SEM) as a multivariate statistical tool that combines factor analysis and multiple equations (regression) or correlation analysis, models (Santoso, 2015). Not only that, but this research also can control the target sample so that answers from the survey could not sample any.

### A. Research Model

This research model was conducted using a modified model of the unified theory of acceptance and use of technology 2 (UTAUT 2) developed by (Venkatesh et al., 2012). By eliminating gender construction because this study is aimed at all people regarding the

acceptance and use of information technology in the form of a grab and go-jek application for online transportation. While the aim is to find out whether a new technology in the form of online transportation for the grab and go-jek applications can enter the community and be accepted by its use.

### B. Research Hypothesis

- H1:How does the relationship between performance expectancy affect behavioral intention to grab and go-jek applications for the community.
- H2:How does the relationship between effort expectancy affect behavioral intention to grab and go-jek applications for the community.
- H3:How does the relationship between social influence affect behavioral intention to grab and go-jek applications for the community.
- H4:How does the relationship between facilitating conditions affect behavioral intention to grab and go-jek applications for the community.
- H5:How does the relationship facilitating condition affect use behavior to grab and go-jek applications for the community.
- H6:How does the relationship hedonic motivation affect behavioral intention to grab and go-jek applications for the community.
- H7:How does the relationship price value affect behavioral intentions for the community.
- H8:How does the relationship habit affect behavioral intention for the community.
- H9:How does the relationship habit affect user behavior for the community.
- H10:How does the relationship service quality affect behavioral intention for the community.
- H11:How does the relationship customer satisfaction affect behavioral intention for the community.
- H12:How does behavioral intention affect use behavior to grab and go-jek applications for the community.

### C. Research Objects

#### 1. GRAB

Grab is an application-based transportation service and service

company that was originally located in Singapore. Starting from an online taxi service, the grab has a vision and mission to revolutionize the taxi industry in Southeast Asia but over time, the grab has spread other types of features in the form of online transportation services in the form of motorbikes taxis, and cars (Chan, Maharani, & Tresna, 2017). Grab now has additional feature services such as food delivery and payment which are accessed via the mobile application. In Indonesia, the grab service has been around since 2012 as a rural taxi application and has provided various transportation options such as cars and motorbikes in the form of online motorcycle taxis.

Grab is an online transportation service company that transports passengers with an application that moves on the android application to order shuttle passengers to the destination users. The grab application uses GPS to use a mapping tool or a location map to read the point where the customer is located (Widyatama et al., 2020). In addition, the grab service has a ride hilling service as a daily transportation solution. Where users of the grab application can determine the type of vehicle, payment method, and also the desired destination through the application.

## 2. GO-JEK

The go-jek journey began in 2010 as an ojek call center in Indonesia. In 2015, Indonesian-made applications launched services namely Goride, GoCar, Godsend, and Gomart. With the development of technology since then, the go-jek application can develop into a super application with a multi-service platform with more than 20 services to date (Pudjarti, Nurchayati, & Putranti, 2019). Now, go-jek has become a leading technology platform group that serves millions of users in Indonesia by developing three super-apps such as for customers, driver-partners, and merchant partners.

With GPS, users can monitor the location of the nearest motorcycle taxi fleet and car the shortest and farthest route to reach their destination. So that the GPS (Global Positioning System) can provide convenience by providing information on whereabouts for pick-up and drop-off purposes to the user's location. The presence of application-based online transportation can provide many benefits for the community and also benefits for online motorcycle and car taxi drivers themselves. Starting from saving travel time, making costs more economical, to making travel more practical.

## Results And Discussion

### A. The Results of Early-Stage Data Collection

There are several points of analysis points of analysis contained in the discussion of this research.

1. How performance expectancy does the grab and go-jek applications work as online transportation on behavioral intention in public.
2. How effort expectancy does the grab and go-jek applications work as online transportation on behavioral intention in public.
3. How social influence do the grab and go-jek applications work as online transportation on behavioral intention in public.
4. How facilitating condition do the grab and go-jek applications work as online transportation on behavioral intention in public.
5. How facilitating condition do the grab and go-jek applications work as online transportation on use behavior in public.
6. How hedonic motivation do the grab and go-jek applications work as online transportation on behavioral intention in public.
7. How price do the grab and go-jek applications work as online transportation on behavioral intention in public.
8. How habit do the grab and go-jek applications work as online transportation on behavioral intention in public.

9. How habit do the grab and go-jek applications work as online transportation on use behavior in public.
10. How service quality does the grab and go-jek applications work as online transportation on behavioral intention in public.
11. How customer satisfaction does the grab and go-jek applications work as online transportation on behavioral intention in public.
12. How behavioral intention do the grab and go-jek applications work as online transportation on use behavior in public.

In this data analysis, researchers used gender and age as respondent data in filling out and managing the

questionnaire. Using gender and age with the aim that the data can be grouped in the concept that can be seen. The use of gender serves to make it easier for researchers to divide the grouping of how many genders is male and female and how much is the use of an application for gender.

The validity test of data collection was carried out to obtain results from a respondent who was suitable as data sources because researchers did not know the number of respondents in the community as users or customers of the grab and go-jek applications. A reliability test is used to measure two or more times of symptoms and use the same measuring instruments.

**Table 1**  
**Results The Reliability Test**

<b>Manifest</b>	<b>Index Value</b>	<b>Sig</b>	<b>Validate</b>
PE1	0.827	0.000	Valid
PE2	0.789	0.000	Valid
PE3	0.736	0.000	Valid
PE4	0.532	0.002	Valid
PE5	0.778	0.000	Valid
EE1	0.608	0.000	Valid
EE2	0.657	0.000	Valid
EE3	0.809	0.000	Valid
SI1	0.644	0.000	Valid
SI2	0.883	0.000	Valid
SI3	0.854	0.000	Valid
SI4	0.599	0.000	Valid
FC1	0.620	0.000	Valid
FC2	0.765	0.000	Valid
FC3	0.640	0.000	Valid
FC4	0.881	0.000	Valid
HM1	0.633	0.000	Valid
HM2	0.784	0.000	Valid
HM3	0.736	0.000	Valid
PV1	0,844	0,000	Valid
PV2	0,857	0,000	Valid
PV3	0,741	0,000	Valid
H1	0,827	0,000	Valid
H2	0,789	0,000	Valid
H3	0,736	0,000	Valid
SQ1	0,859	0,000	Valid
SQ2	0,756	0,000	Valid
SQ3	0,856	0,000	Valid
SQ4	0,722	0,000	Valid
SQ5	0,782	0,000	Valid

SQ6	0,800	0,000	Valid
CS1	0,759	0,000	Valid
CS2	0,704	0,000	Valid
CS3	0,848	0,000	Valid
CS4	0,837	0,000	Valid
BI1	0,834	0,000	Valid
BI2	0,840	0,000	Valid
BI3	0,613	0,000	Valid
UB1	0,832	0,000	Valid
UB2	0,866	0,000	Valid
UB3	0,785	0,000	Valid

The size method used in this study to measure the range scale of an indicator can be declared reliable using Cronbach alpha. Cronbach alpha can find out the consistency of the measuring instrument whether the item of a question is included in the testing phase whether the instrument is reliable or using acceptable limits if the value is > 0,6.

**Table 2**  
**Cronbach's Alpha**

<b>Variable</b>	<b>Cronbach Alpha (&gt;0,6)</b>
Performance Expectancy (PE)	0,730
Effort Expectancy (EE)	0,601
Social Influence (SI)	0,723
Facilitating Condition (FC)	0,703
Hedonic Motivation (HM)	0,655
Price Value (PV)	0,738
Habit (H)	0,685
Service Quality (SQ)	0,891
Customer Satisfaction (CS)	0,790
Behavioral intention (BI)	0,823
Use Behavior (UB)	0,655

### B. Second Stage Data Testing Result

Test the validity and overall reliability in the second data testing stage using a whole questionnaire consisting of 175 research samples. The correlation value in table 3 below is compared with

the r table at a significance of 0.05 with a 2-sided test and the number of questionnaire data is 175 samples (N=175). By looking at the r table from Kolmogorov-Smirnov the value obtained is 0.148.

**Tabel 3**  
**Overall Validity Test**

<b>Item-Total Statistics</b>				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PE1	150,34	245,675	,249	,847
PE2	150,59	240,565	,379	,843
PE3	150,48	241,205	,408	,843
PE4	150,66	243,227	,314	,845
PE5	150,45	240,904	,412	,843

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EE1	150,42	244,694	,290	,846
EE2	150,46	239,629	,436	,842
EE3	150,51	239,125	,411	,843
SI1	151,05	245,871	,198	,848
SI2	150,82	247,273	,168	,849
SI3	150,78	253,297	-,003	,853
SI4	150,78	249,539	,102	,850
FC1	151,11	244,327	,280	,846
FC2	150,58	241,671	,439	,843
FC3	150,74	242,307	,363	,844
HM1	150,96	247,993	,132	,850
HM2	151,01	242,942	,335	,845
HM3	150,91	242,348	,397	,843
PV1	151,01	243,213	,320	,845
PV2	150,88	241,129	,380	,844
PV3	150,94	240,783	,373	,844
H1	150,45	240,168	,469	,842
H2	151,02	240,247	,408	,843
H3	150,57	237,914	,563	,840
SQ1	150,74	238,836	,445	,842
SQ2	150,75	238,140	,479	,841
SQ3	150,93	238,897	,451	,842
SQ4	150,66	237,077	,519	,840
SQ5	150,53	237,411	,527	,840
SQ6	150,63	238,808	,479	,841
CS1	150,74	238,953	,447	,842
CS2	150,63	240,003	,430	,842
CS3	150,66	236,029	,581	,839
CS4	150,81	256,683	-,099	,856
BI1	150,65	245,782	,206	,848
BI2	150,76	235,494	,516	,840
B13	150,54	238,146	,413	,843
UB1	150,85	258,947	-,152	,858
UB2	150,75	256,474	-,092	,857
UB3	150,59	237,945	,452	,842

Overall the reliability test used the coronach's alpha method with a limit of Cronbach's alpha method. In general, 0.6 which is acceptable reliability. decision-making for reliability testing can use

**Table 4**  
**Overall Reliability Test**

		N	%
Cases	Valid	175	100,0
	Excluded <sup>a</sup>	0	,0
	Total	175	100,0

**Table 5**  
**Cronbach's Alpha**

Scale	Cronbach's Alpha	N of Item
All Variable	,851	41

### C. The Whole Model Test

#### 1.Variable Testing

The variable validation test is of each variable used to determine how

much the value of each construct on the manifest variable is whether the results are valid or not

**a) Testing Variable Performance Expectancy**

From the results of the table below, it can be seen that the five constructs of the performance

expectancy variable have a significance to the variable, it can be seen by the construct \*\*\* in column P. With the symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% (P<0.05)

**Table 6**  
**Testing Variable Performance Expectancy**

			Estimate	S.E.	C.R.	P	Label
<b>PE1</b>	<-	PE	1,000				
<b>PE2</b>	<-	PE	,741	,174	4,267	***	
<b>PE3</b>	<-	PE	1,030	,189	5,448	***	
<b>PE4</b>	<-	PE	1,167	,213	5,473	***	
<b>PE5</b>	<-	PE	,569	,160	3,551	***	

**b) Testing Variable Effort Expectancy**

From the results of the table below, it can be seen that the three constructs of the effort expectancy variable have a significant relationship to the measured variable. Three

constructs can be significant to the variable, it can be seen by the construct \*\*\* in column P. The symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% (P<0.05).

**Table 7**  
**Testing Variable Effort Expectancy**

			Estimate	S.E	C.R.	P	Label
EE1	<---	EE	1,000				
EE2	<---	EE	1,340	,310	4,327	***	
EE3	<---	EE	1,861	,490	3,796	***	

**c) Testing Variable Social Influence**

From the results of the table below, it can be seen that the four constructs of the social influence variable have a significant relationship to the measured variables. Four constructs can be

significant to the variable, it can be seen by the construct \*\*\* in column P. The symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% (P<0.05)

**Table 8**  
**Testing Variable Social Influence**

			Estimate	S.E	C.R.	P	Label
EE1	<-	EE	1,000				
EE2	<-	EE	1,340	,310	4,327	***	
EE3	<-	EE	1,861	,490	3,796	***	

**d) Testing Variable Facilitating Condition**

From the results of the table below, it can be seen that the four constructs on the facilitating condition variable have a significant relationship to the measured

variable. Four constructs can be significant to the variable, it can be seen by the construct \*\*\* in column P. The symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% (P<0.05).

**Table 9**  
**Variable Facilitating Condition**

	Estimate	S.E	C.R.	P	Label
FC1 <--- FC	1,000				
FC2 <--- FC	1,665	,503	3,312	***	
FC3 <--- FC	1,521	,428	3,550	***	
FC4 <--- FC	,938	,357	2,631	,008	

**e) Testing Variable Hedonic Motivation**

From the results of the table below, it can be seen that the three constructs on the hedonic motivation variable have a significant relationship to the measured variables. Three constructs can be

significant to the variable, it can be seen by the construct \*\*\* in column P. With the symbol \*\*\*\* indicates that P (probability value) is less than 0.05 or below 5% ( $P < 0.05$ ).

**Table 10**  
**Testing Variable Hedonic Motivation**

	Estimate	S.E	C.R.	P	Label
HM1 <--- HM	1,000				
HM2 <--- HM	1,618	,328	4,930	***	
HM3 <--- HM	,770	,127	6,049	***	

**f) Testing Variable Price Value**

From the results of the table below, it can be seen that the three constructs of the price value variable have a significant relationship to the measured variable.

Three constructs can be significant to the variable, it can be seen by the construct \*\*\* in column P. With the symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% ( $P < 0.05$ ).

**Table 11**  
**Testing Variable Price Value**

	Estimate	S.E	C.R.	P	Label
PV1 <--- PV	1,000				
PV2 <--- PV	1,454	,268	5,427	***	
PV3 <--- PV	,823	,140	5,898	***	

**g) Testing Value Habit**

From the results of the table below, it can be seen that the three constructs of the habit variable have a significant relationship to the measured variable.

Three constructs can be significant to the variable, it can be seen by the construct \*\*\* in column P. The symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% ( $P < 0.05$ ).

**Table 12**  
**Testing Value Habit**

	Estimate	S.E	C.R.	P	Label
H1 <--- H	1,000				
H2 <--- H	,842	,120	7,025	***	
H3 <--- H	1,107	,145	7,625	***	

**h) Testing Value Service Quality**

From the results of the table below, it can be seen that the six constructs of the service quality variable have a significant relationship to the measured variables. Six constructs can be significant

to the variable, it can be seen by the construct \*\*\* in column P. With the symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% ( $P < 0.05$ ).

**Table 13**  
**Testing Value Service Quality**

	Estimate	S.E	C.R.	P	Label
SQ1 <--- SQ	1,000				
SQ2 <--- SQ	1,248	,336	3,716	***	
SQ3 <--- SQ	1,351	,352	3,833	***	
SQ4 <--- SQ	1,819	,429	4,240	***	
SQ5 <--- SQ	1,732	,410	4,224	***	
SQ6 <--- SQ	1,811	,425	4,266	***	

**i) Testing Value Customer Satisfaction**

From the results of the table below, it can be seen that the four constructs on the customer satisfaction variable have a significant relationship with the measured variables. Four constructs can be

significant to the variable, it can be seen by the construct \*\*\* in column P. The symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% ( $P < 0.05$ ).

**Table 14**  
**Testing Value Customer Satisfaction**

	Estimate	S.E	C.R.	P	Label
CS1 <--- CS	1,000				
CS2 <--- CS	1,665	,503	3,312	***	
CS3 <--- CS	1,521	,428	3,550	***	
CS4 <--- CS	,938	,357	2,631	,008	

**j) Testing Value Behavioral Intention**

From the results of the table below, it can be seen that three constructs on the behavioral intention variable have a significant relationship to the measured variable. Three constructs can be

significant to the variable, it can be seen by the constructs \*\*\* in column P. The symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% ( $P < 0.05$ ).

**Table 15**  
**Testing Value Behavioral Intention**

	Estimate	S.E	C.R.	P	Label
BI1 <--- BI	1,000				
BI2 <--- BI	2,842	,785	2,993	,286	
BI3 <--- BI	1,460	,865	1,688	,091	

**k) Testing Value Use Behavior**

From the results of the table below, it can be seen that the three constructs in the user behavior variable have a significant relationship to the measured variables. Three constructs can

be significant to the variable, it can be seen by the construct \*\*\* in column P. The symbol \*\*\* indicates that P (probability value) is less than 0.05 or below 5% ( $P < 0.05$ ) the goodness of fit test of the research model is an intermediate level of suitability.

**Table 16**  
**Value Testing Use Behavior**

	Estimate	S.E	C.R.	P	Label
BI1 <--- BI	1,000				
BI2 <--- BI	2,634	,724	3,967	,273	
BI3 <--- BI	1,895	,638	1,157	,030	

## 2. Goodness of Fit

Hypothesis testing in order does not lose all variables, a goodness of fit test is carried out using an SEM model consisting of a measurement model and a structural model to determine the feasibility of the variables and whether the model is fit with existing data. The goodness of fit test is

conducted to test the feasibility and linkages between constructs and indicators which can be adjusted to the research hypothesis and testing all constructs. Based on the table below, it can be concluded that the goodness of fit test of the research model is an intermediate level of suitability.

**Table 17**  
**Goodness of Fit**

			Estimate	S.E.	C.R.	P	Label
BI	<---	SQ	,080	,061	1,400	,174	Unsignificant
BI	<---	PE	,166	,048	3,448	***	Significant
BI	<---	EE	,170	,055	2,213	***	Significant
BI	<---	SI	,309	,092	3,417	***	Significant
BI	<---	FC	,835	,179	,4786	***	Significant
BI	<---	HM	,169	,054	3,446	***	Significant
BI	<---	PV	-,033	,033	-1,013	,311	Unsignificant
BI	<---	H	-,167	,064	3.762	,028	Significant
BI	<---	CS	,593	,070	,8626	***	Significant
UB	<---	FC	,102	,046	2,215	***	Significant
UB	<---	H	,110	,054	2,223	***	Significant
UB	<---	BI	,965	1,34	7,323	***	Significant

## 3. Hypothesis Testing

The research hypothesis test is used based on the research model that has been developed. Hypothesis testing aims to analyze the relationship between two interrelated construct variables.

From the parameterization results shown in table 5 below, it is obtained with a probability (P) value of 0.0 \*\* which means the P-value < 0.05 and it can be interpreted that the hypothesis H) is rejected and if the P-value > 0.05 then HO

is accepted. So that the hypothesis with a significant value is found in the variable performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, habit and customer satisfaction with behavioral intention and facilitating conditions, habit and behavioral intention to use behavior. Meanwhile, the hypothesis with an insignificant value is found in the variable price value and service quality on behavioral intention.

**Table 18**  
**Hypothesis Testing**

			Estimate	S.E.	C.R.	P	Label
<b>BI</b>	<-	SQ	,080	,061	1,400	,174	Unsignificant
<b>BI</b>	<-	PE	,166	,048	3,448	***	Significant
<b>BI</b>	<-	EE	,170	,055	2,213	***	Significant
<b>BI</b>	<-	SI	,309	,092	3,417	***	Significant
<b>BI</b>	<-	FC	,835	,179	,4786	***	Significant
<b>BI</b>	<-	HM	,169	,054	3,446	***	Significant
<b>BI</b>	<-	PV	-,033	,033	-1,013	,311	Unsignificant
<b>BI</b>	<-	H	-,167	,064	3.762	,028	Significant
<b>BI</b>	<-	CS	,593	,070	,8626	***	Significant
<b>BI</b>	<-	FC	,102	,046	2,215	***	Significant

<b>BI</b>	<-	H	,110	,054	2,223	***	Significant
<b>BI</b>	<-	BI	,965	1,34	7,323	***	Significant

#### 4. Summary of Hypotheses

From the results of hypothesis testing above, here are the results of the

hypothesis of research variables in the table below:

**Table 19**  
**Summary of Hypothesis**

<b>Hypotheses Path</b>	<b>Hypotheses Result</b>
H1: Performance Expectancy --> Behavioral Intention	The Hypothesis is accepted
H2: Effort Expectancy --> Behavioral Intention	The Hypothesis is accepted
H3: Social Influence --> Behavioral Intention	The Hypothesis is accepted
H4: Facilitating Condition --> Behavioral Intention	The Hypothesis is accepted
H5: Facilitating Condition --> Use Behavioral	The Hypothesis is accepted
H6: Hedonic Motivation --> Behavioral Intention	The Hypothesis is rejected
H7: Price Value --> Behavioral Intention	The hypothesis is rejected
H8: Habit --> Behavioral Intention	The hypothesis is accepted
H9: Habit --> Use Behavior	The hypothesis is accepted
H10: Service Quality --> Behavioral Intention	The hypothesis is rejected
H11: Customer Satisfaction ---> Behavioral Intention	The Hypothesis is accepted
H12: Behavioral Intention --> Use Behavior	The Hypothesis is accepted

#### 5. Female Gender Moderator Test

From below the table, it can be seen that the gender variable for data that is not significant is found in hedonic motivation and price value on behavioral intention and also in the relationship between habit variables and behavioral

use. It is explained that women more often use online transportation facilities on the grab and go-jek applications because they are easy to use and as daily necessities.

**Table 20**  
**Hypothesis Testing**

BI	<-	HM	,019	,114	,446	,163	Unsignificant
BI	<-	PV	,243	,033	,213	,275	Unsignificant
BI	<-	H	,766	,172	4,762	***	Significant
BI	<-	CS	,693	,170	8,720	***	Significant
UB	<-	FC	,667	,150	2,325	***	Significant
UB	<-	H	,385	,195	,753	,089	Unsignificant
UB	<-	BI	,975	,145	7,532	***	Significant

#### 6. Male Gender Moderator Test

From the results of the table below, it can be seen that the gender variable for data that is male which is not significant is found in effort expectancy, price value, and customer satisfaction on behavioral intention and also in the relationship of

the facilitating condition, price value and customer satisfaction variables to behavioral intention and also which is not significant is found in the relationship between facilitating conditions and behavioral intention to use behavior. It is

explained that men very rarely use online transportation facilities on the grab and go-jek applications because the male

community uses and owns private vehicles more.

**Table 21**  
**Male Gender Moderator Test**

		<b>Estimate</b>	<b>S.E.</b>	<b>C.R.</b>	<b>P</b>	<b>Label</b>
BI <---	SQ	,150	,100	4,520	***	Significant
BI <---	PE	,988	,152	7,946	***	Significant
BI <---	EE	,015	,030	,213	,076	Unsignificant
BI <---	SI	,820	,182	6,087	***	Significant
BI <---	FC	,668	,170	7,451	***	Significant
BI <---	HM	,519	,197	7,446	***	Significant
BI <---	PV	,143	,013	,313	,065	Unsignificant
BI <---	H	,766	,172	4.762	***	Significant
BI <---	CS	,093	,020	,720	0,96	Unsignificant
UB <---	FC	,187	,064	,325	,043	Unsignificant
UB <---	H	,745	,161	5,153	***	Significant
UB <---	BI	,040	,050	,342	,087	Unsignificant

**7. Moderator Variable Age Test**

Testing the age or age variable is carried out to measure whether is a change between the age level of the people of the city of Bandung towards

ordering and using online transportation for the Grab and Go-Jek applications.

**Table 22**  
**Moderator Variable Age Test**

		<b>Age (all)</b>	<b>Age (18-25)</b>	<b>Age (26-35)</b>	<b>Age (36-50)</b>	<b>Results (all)</b>
BI <---	SQ	,174	,180	,142	,230	Unsignificant
BI <---	PE	***	***	***	***	Significant
BI <---	EE	***	***	***	***	Significant
BI <---	SI	***	***	,002	***	Significant
BI <---	FC	***	***	***	***	Significant
BI <---	HM	***	***	***	***	Significant
BI <---	PV	,311	,033	,213	,275	Unsignificant
BI <---	H	,028	.035	.062	,092	Unsignificant
BI <---	CS	***	***	***	***	Significant
UB <---	FC	***	***	,002	,001	Significant
UB <---	H	***	***	***	***	Significant
UB <---	BI	***	***	***	***	Significant

It can be seen from the results of the table above in table 8 that the data tested are between the ages of 18-25, 26-35, and 36-50 years, because the data is processed to meet the SEM SPSS test

requirements by meeting the appropriate data for 175 respondents. From the results that have been tested on the variables between age for data on the people of the city of Bandung, an insignificant relationship is found in the service quality,

price value, and habit variables on behavioral intention. It is concluded that the people of Bandung City can use online transportation in the form of grab and go-jek applications. And some people do not understand the use of online transportation on the grab and go-jek applications.

**8. Trimming**

This process is carried out to eliminate the relationship between

variables that do not have a significant effect. After eliminating each variable that does not have a significant effect, it will be tested again.

Based on table 23 below, the trimming test process is carried out by eliminating several variables that are not significant, the elimination is in the price value and service quality variables on behavioral intention.

**Table 23**  
**Trimming Test**

	<b>P (Before Trimming)</b>	<b>P (After Trimming)</b>	<b>Results (Before Trimming)</b>	<b>Results (After Trimming)</b>	<b>Description</b>
	***	***	Unsignificant	Significant	fixed
BI <--- PE	***	***	Significant	Significant	fixed
BI <--- EE	***	0,002	Significant	Significant	increase
BI <--- SI					0,0002
BI <--- FC	***	***	Significant	Significant	fixed
BI <--- HM	***	***	Significant	Significant	fixed
BI <--- H	***	***	Significant	Significant	fixed
BI <--- CS	***	***	Significant	Significant	fixed
UB <--- FC	***	***	Significant	Significant	fixed
UB <--- H	***	***	Significant	Significant	fixed
UB <--- BI	,028	,020	Significant	Significant	decrease
	***	***	Significant	Significant	0,008
					fixed

**Conclusion**

Many studies have been conducted on the acceptance and use of technology to users using the unified theory of acceptance and use of technology 2 (UTAUT 2) model developed by Venkatesh et al (2012). In the study, researchers conducted a study using this model to see and analyze the relationship between variables in the acceptance and use of technology in online transportation on grab and go-jek applications.

There have 12 factors, which affect online transportation on grab and go-jek applications for the public. That is performance expectancy, effort expectancy, social influence, facilitating condition, hedonic motivation, price value, habit, service quality, customer satisfaction, behavioral intention, and use behavior. Base on this research using SPSS and SEM AMOS analysis that has 12 factors, which have to affect to influence customer satisfaction. The 12 factors are performance expectancy, effort expectancy, social influence, facilitating condition, hedonic

motivation, price value, habit, service quality, customer satisfaction, behavioral intention, and use behavior.

After the researchers tested all the variables that affect the acceptance and use of online transportation for the grab and go-jek application for the people in Bandung using the UTAUT 2 model.

Can be concluded in this research that between performance expectancy and behavioral intention has a significant influence with a probability value with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted

Between effort expectancy and behavioral intention has a significant influence with a probability value with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

Between social influence and behavioral intention has a significant influence with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted

Between facilitating condition and behavioral intention has a significant influence with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

Between facilitating condition and use behavior has a significant influence with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

Between hedonic motivation and behavioral intention has a significant influence with a probability value with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

Between price value and behavioral intention does not have a significant effect with a probability (P) value of 0.311 which means that the P value > 0,05 hypothesis H<sub>0</sub> is rejected.

Between hedonic motivation and behavioral intention has a significant influence with a probability value with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

Between habit and use behavioral has a significant influence with a probability value with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

Between service quality and behavioral intention does not have a significant effect with a probability (P) value of ,174 which means that the P value > 0,05 hypothesis H<sub>0</sub> is rejected.

Between customer satisfaction and use behavior has a significant influence with a probability value with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

Between behavioral intention and use behavior has a significant influence with a probability value with a value of 0,0\*\* which means that the P value < 0,05 hypothesis H<sub>0</sub> is accepted.

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