



INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



Factors that Influence Consumers' Perception towards Service Innovation Provided by Gojek in Indonesia

Muhammad Farhan, Siti Suraya Abd Razak

Faculty of Management, Universiti Teknologi Malaysia, 81310, Skudai, Johor Bahru, Malaysia.

Abstract

The remarkable growth of technology in business and internet has rapidly risen in recent years in various industries. Driven by consumers, service quality and innovation in the online transportation service have attracted people's interest and become the key factors to build competitive advantage. In Indonesia, transportation is an essential issue to be discussed since the ownership of individual vehicles is growing rapidly. Thus, the development of Gojek as the platform for people to share rides is a good idea to reduce the number of individuals riding or driving their own vehicles. This study was conducted to determine the factors that influence consumers' perception and investigate the correlation between specific demographic variables and consumers' perception towards service innovation provided by Gojek in Tanjungpinang. All of 8 specified hypotheses were analyzed by multiple regression and Pearson's correlation. As a result, Five out of eight hypotheses are positively affected and have influenced while rest are rejected and have no influence on the consumers' perception towards service innovation. The findings of this study, in the form of propositions, provide a foundation for future improvement, highlight the gap that must be solved and fixed while having a number of implications for both practitioners and academics.

Keywords: Consumers' Perception, Service Innovation, Transportation Innovation, Online Transportation Service, Gojek

Introduction

In the era of the fourth industrial revolution, technology in business and internet will be the basis of revolutionary change in all industries. It is essential in creating a tightly integrated value chain and delivering high-quality service for companies to always innovate as it plays a significant role to improve and provide the best service for customers that makes service quality and innovations are both elements that can build competitive advantage (Kusumadewi & Karyono, 2019). Current technological development has brought changes and development in transportation. Online transportation service has become a means of transportation development which is able to attract people's interest (Putri et al., 2019). Online transportation service is one of the newest service innovations in the e-commerce world. Online transportation service or ride-sharing is an individual transportation service where a customer can order a ride (car and motorcycle) through the mobile application and

the driver can respond the order through the applications (Silalahi et al., 2017). There are several online transportation applications found in Indonesia such as Uber Motor, Grab-bike, Go-Jek, Blue Jeck and others. However, the three main providers (such as Go-Jek, Grab, and Uber) are the top players in Indonesia and other big cities (Putri et al., 2019). In addition, as Gojek is one of the top players that provide online transportation in Tanjungpinang has made the researcher attracted to study the service innovation provided by them and what are the perception among the consumers.

In Indonesia, transportation is an essential issue to be discussed since the ownership of individual vehicles is growing rapidly from time to time especially in big cities. Thus, the development of Gojek as the platform for people to share their ride is a good idea as it will reduce the numbers of individual ride or drive by their own vehicles apart from the usage of inadequate public transportation. Gojek as one of the ride-sharing provider that has attracted its consumers to transact more has put effort to make them loyal in using the application with so many features and also promotions to keep them being loyal to be the user. Based on the prior survey, according to Afrina et al (2017) most of the respondents who are consumers of Gojek use it because the travel time is considered more quickly. The other reasons are due to avoid stuck in traffic and jostling in public transport, the road condition and other inadequate public transport that available could not solve the travel time issue that could affect their productivity and other opportunities. Furthermore, the authors also stated that the survey provides data on the interest of online consumers in the future. As many as 40,4% of respondents which are the users admitted will plan to continue using online Gojek within the next 1 - 5 years while 60% of online Gojek plan to remain as online Gojek drivers in the next 1 - 5 years, 20% will work for more than 5 years, 56% will work for 1-5 years, and 23% will work as an online Gojek for less than a year (Afrina et al., 2017). It can be concluded that there are so many people who are still interested in using the service innovation provided by Gojek. Besides, the Gojek or drivers still planning to use the platform as their way to gain profit and it shows an impact that the existence of Gojek is giving value to the people that lead to the perception that can vary from one to another consumer (Afrina et al., 2017). It has been a concern to the researcher to study the factors that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang. Based on the problem statements discussed above, the following are the research questions obtained:

1. What are the factors that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang?
2. What are the correlation between a specific demographic variable and consumers' perception towards service innovation provided by Gojek in Tanjungpinang?

The objectives of the study are as follows

1. To determine the factors that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang
2. To investigate the correlation between specific demographic variables and consumers' perception towards service innovation provided by Gojek in Tanjungpinang.

Literature Review

Service innovation can be defined as introduction of new services or incremental improvement of existing services that take place in the various contexts of the services sector (Durst et al., 2015). According to Carlborg et al (2014), "introduces something new into the way of life, organization, timing and placement of what can generally be described as the

individual and collective processes that relate to consumers". The definitions of factors that influence customers' perception towards service innovations (Fakhrullah, 2017). According to Tornatzky et al (1982) stated that the relative advantage of an innovation is the degree to which an innovation is perceived as being better than the idea it supersedes. Next, complexity is the degree to which an innovation is perceived as relatively difficult to understand and use. which argues the compatibility of an innovation is the degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of the receivers. Trying ability is the degree to which an innovation may be experimented with on a limited basis. Observability is the degree to which the results of an innovation are visible to others. According to Sabiha (2012), able to take permission is to allow marketers to bring the expected marketing message which is related to the consumers themselves known as allowed suggestibility. According to Siau and Shen (2003), confidence is one of the major reasons affecting people to give their own personal data to the electronic environment of service provider. Perceived Risk as Cited by Mitchell (2006), risk as an expectation of loss (Stone and Winter, 1987).

Factors that Influence Consumers' Perception towards Service Innovation

There are eight factors that influence the perception of Gojek consumers towards service innovation provided by Gojek in the proposed theoretical framework that become the independent variable such as relative advantage, complexity, compatibility, trying ability, observability, able to take permission, confidence, and perceived risk are adopted from Roger's diffusion of innovation theory to meet the research objectives. The impact of relative advantage on consumer adoption was significantly positive and negative towards the innovation resistance (Al-Gahtani, 2003; Abbas et al., 2017). Based on a number of studies in recent years, it can be concluded that relative advantage is one of the best and most consistent predictors in terms of adoption an innovation. It is due to the different advantages offered by a technological innovation that will lead to attract many consumers to adopt it (Abbas et al., 2017). An idea with a new approach is more likely to be adopted by an individual especially when it is compatible with the value systems and job responsibilities (Tornatzky & Klein, 1982 as cited in Alan et al., 2017). Rogers (2003) supported that with the compatible approach, innovation can be in harmony with the individual's ideas and needs or incompatible with socio-cultural values and belief for innovation.

Holak and Lehmann (1990) stated that there is a negative relationship between relative advantage and complexity as if a product was considered complex, it will be difficult for consumers to use and exploit for its usage and advantage for their own benefit. The author also proposed that complexity is one of the best and most consistent predictors of resistance to innovation between consumers because of its effect that triggered negative attitudes towards the innovation.

Trialability is understood as a way that can increase the likelihood of adoption if the potential users can experience any innovation before they really adopt it (Lin and Chen, 2012). As trying ability is one of the diffusions of innovation factors that are always used in prior studies which involve the perception of consumers, it will be used as one of the main factors that influence consumers' perception towards service innovation provided by Gojek. Observability can be defined as the degree to which the results of an innovation are visible to others (Rogers, 1995; Mairura, 2016). The greater the perceived observability by an organization will lead to the higher chance they will adopt an innovation. The visible results lower uncertainty and it also helps to stimulate peer discussion of a new idea as their surroundings often request

information about it. The author also added, observability is like trialability as they are not a strong predictor of current intentions to adopt a certain innovation.

Able to take permission can be defined as pressure to conform generated when a group is in an indistinct situation while other people express attitudes and beliefs. The pressure will force people to accept the suggestions or ideas offered by the others and there will be actions consistent with those of others. Apart from that, on one research finding it seems that brand trust and consumer control via permission are necessary conditions for the acceptance of mobile marketing. The consumers are really concerned about their privacy that makes them want their permission respected while also want to have some control over it (Persaud and Azhar, 2012). Confidence can be defined as determination of an individual attitude towards uncertainty and risk preference. The rationale about self-confidence is that consumers have sufficient information and knowledge that make them confident to handle a specific question or problem. Thus, self-confident individuals are assured that they can adopt an innovation successfully as they will assign higher values to success and attach lower value to failure. Thus, they would like to evaluate the consequences of adopting instead of not adopting innovation (Chuang et al., 2013).

Perceived risk can be defined as a subjectively-determined expectation of loss. The greater the probability of loss will lead to the greater risk thought to exist for an individual (Mitchell, 1999; Kiliç, 2012). Ghotbabadi et al (2016) stated that the consumers' perceived risk should be reduced by companies that have strong strategy due to its negative effect towards the consumers' satisfaction as it is the key factor in consumer retention and also the performance of the company itself.

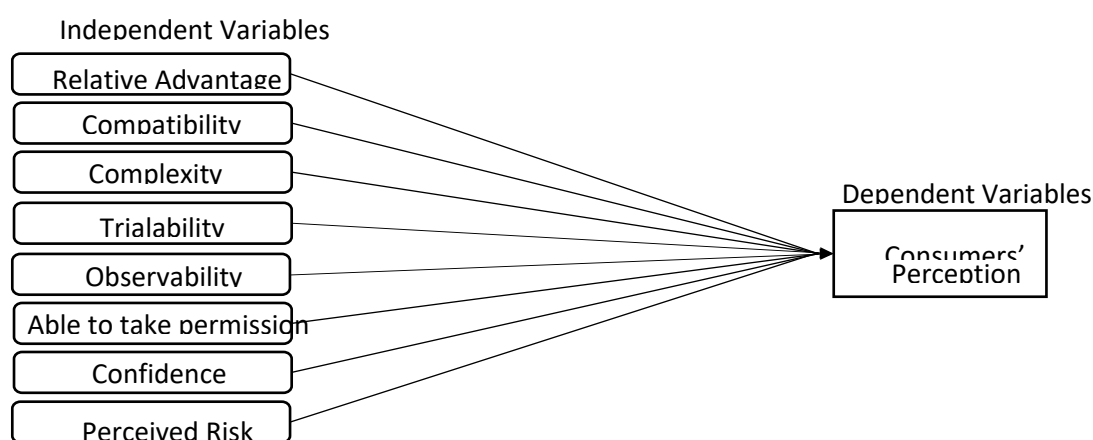


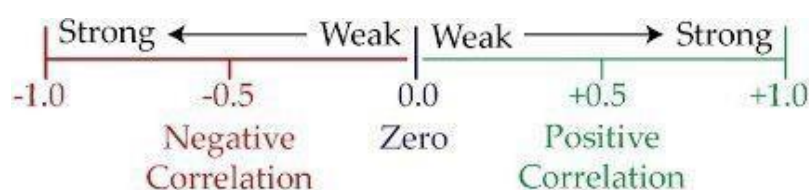
Figure 1: Theoretical Framework

Methods

According to (Ahmad et al., 2019) there are 2 types of research methods namely qualitative and quantitative. Thus, a quantitative approach will be used in this study in gathering information and data collection. This study can be categorized as a cross-sectional study since a large amount of data will be collected from the Gojek consumers as respondents in Tanjungpinang. The comprehensive overview of the procedures that are used to determine regression sample sizes is suggested by Green (1991) that to determine sample size the formula of $N > 50 + 8m$. M is for testing individual predictors (independent variables). Based on the formula, it shows that the sample size is $50 + 8$ (independent variables) that makes this study need to gain the sample size of $50 + 8(8) = 114$. The number for M is 8 because there

are 8 independent variables for this study. Thus, the sample size that need to be collected is 114 based on the formula suggested by (Green, 1991).

The researcher can collect the data from the units after preparing a suitable sample. For instance, in the survey method, the respondents are asked to fill out a questionnaire administered to them and while in the observation technique, the respondents are just observed with their direct participation in the research (Sreejesh et al., 2014). The analysis included descriptive analysis that According to Rahmah (2020) Descriptive analysis is used to present numerical facts that uncover issues about the world and it describe different kinds of data in a way that is understandable, useful and convincing. Next, multiple regression will be used as the method in analysing what are the factors that influence consumers' perception towards service innovation. The usage of multiple regression is to explore the important connection of several predictor variables in response of the variables' relation (Shieh, 2006). Thus, the predictors use in multiple regression are R2, Beta value and significant value that must be less than 0,5 to show relationship between variables. Lastly, the Pearson correlation analysis will be used by understanding that the values of correlation coefficient range from -1 to +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a positive (linear) manner, while a correlation coefficient of -1 indicates that two variables are perfectly related in a negative (linear) manner and when a correlation coefficient is zero indicates that there is no linear relationship between the two variables being studied (Gogtay & Thatte, 2017).



Source: Gogtay and Thatte (2016)

Results

The analysis allowed us to draw conclusions about factors that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang. There are 8 factors that adapted from Roger's diffusion of innovation theory such as relative advantage, compatibility, complexity, trialability, observability, confidence, able to take permission, and perceived risk. It is expected that all of those factors have a positive impact on the perception of consumer since the factors might have affect them to adopt an innovation in the transportation industry.

Reliability Test

Cronbach's Alpha was applied to measure the reliability and validity of the questionnaire. The result of reliability of each dimensions are used to examine the independent variable (IV) factors and consumers perceptions towards service innovation provided by Gojek in Tanjungpinang, Indonesia are shown in Table 4.0.1 below

Table 1

Cronbach's Alpha Result

Dimensions	Number of Items	Alpha Cronbach	Reliability
Relative Advantage	6	0.9	Excellent
Complexity	4	0.8	Good
Compatibility	2	0.8	Good
Trying Ability	3	0.8	Good
Observability	2	0.7	Acceptable
Able to take permission	2	0.7	Acceptable
Confidence	3	0.8	Good
Perceived Risk	4	0.8	Good

A total of 20 responses were collected and reported in SPSS to determine the reliability value for each dimension used in this study. The findings indicate that all data are valid and reliable as all 8 dimensions have a value of alpha Cronbach more than 0.6. To prove, the dimension of relative advantage has an alpha value of 0.9 which means excellent and followed by dimensions of complexity, compatibility, trying ability, confidence, and perceived risk with a value of 0.8 that indicates these instruments are good. Furthermore, the next instrument which values 0.7 which are observability and able to take permission has acceptable in terms of validity and reliability.

Demographic

The analysis that has been conducted was based on the respondents' background such as gender, age, highest education level, year of education, occupation, monthly gross income, business ownership, and the purpose of using service innovation.

Based on the analysis obtained in Table 4.2, about 38.4% were male respondents while 61.6% were female respondents. Next, most of the respondents are aged between 21 -23 years old which is about 69.2% followed by respondents aged between 18 - 20 years which has 27.2 % and the rest are 24 - 26 years with 3% and more than 26 years with 0.7%.

The majority of the respondents have SMA as their highest education level with 222 people 72.8%, continued by SMK with 31 people 10.2% and the least respondent would be MA / MK with 6 people 2% or it can be total that 259 people 85% were high school graduated. Surprisingly, there are 46 people 15.1 that freshly graduated from their respective universities and already hold diplomas. Furthermore, the majority of the respondents were final year students 53.4% followed by 3rd-year students 16.7%, sophomore or 2nd-year students 8.9%, freshman or 1st-year students 3.6%, and the least was from 5th-year students 2.3%.

According to the data gathered from the questionnaire, the majority of respondents were unemployed 58%, followed by the private sector 18.7%, self-employed 13.1%, and government sector 10.2%. Based on their occupation, the majority of the respondents acquire monthly income (gross) < RP 1.000.000 43.6%, followed by 12.1% of respondents' income between RP 1.000.000 - RP 1.499.000, about 10.2% of the respondents whose income between RP 1.500.000 - RP 2.499.000. The analysis also shows that about 5.6% of the respondents whose income was RP 2.500.000 - RP 3.499.000, followed by RP 3.500.000 - RP 3.999.000 with 3%, while there were 3.3% RP 4.000.000 - RP 4.499.000, continued by RP 4.500.000 - RP 4.999.000 with 2.3% and the highest income was > RP 5.000.000 with 4.3%.

Based on the data analysis, the majority of the respondents do not have their own business which was 73.8% compared with 26.2% of respondents that have their own business. Most of the respondents used Gojek service innovations because of the purchase of online

shopping which consists of 49.2% followed by 46.9% for delivering items and 3.9% for work or business purposes.

Table 2

Analysis on the Respondents' background based on the frequency and percentage

Demographic	Subject	f	(%)
Gender	Male	117	38.4
	Female	188	61.6
	Total	305	100
Age	18 - 20 Years	83	27.2
	21 - 23 Years	211	69.2
	24 - 26 Years	9	3
	>26 Years	2	0.7
	Total	305	100
Highest Education Level	SMA	222	72.8
	SMK	31	10.2
	MA / MK	6	2
	Diploma	46	15.1
	Total	305	100
Year of Education	1st Year	11	3.6
	2nd Year	27	8.9
	3rd Year	51	16.7
	4th Year	163	53.4
	5th Year	7	2.3
	Fresh Graduate	46	15.1
	Total	305	100
Occupation	Government Sector	31	10.2
	Private Sector	57	18.7
	Self Employed	40	13.1
	Unemployed	177	58
	Total	305	100
Monthly Income (Gross)	< RP 1.000.000	133	43.6
	RP 1.000.000 - RP 1.499.000	37	12.1
	RP 1.500.000 - RP 1.999.000	31	10.2
	RP 2.000.000 - RP 2.499.000	31	10.2
	RP 2.500.000 - RP 2.999.000	17	5.6
	RP 3.000.000 - RP 3.499.000	17	5.6
	RP 3.500.000 - RP 3.999.000	9	3
	RP 4.000.000 - RP 4.499.000	10	3.3
	RP 4.500.000 - RP 4.999.000	7	2.3
	> RP 5.000.000	13	4.3
	Total	305	100
Business Ownership	Yes	80	26.2
	No	225	73.8
	Total	305	100

Purpose of Using Gojek	Work / Business Purposes	12	3.9
	Purchase of Online Shopping	150	49.2
	Deliver Items	143	46.9
	Total	305	100

Multiple Regression

The aim of the study is to determine the factors that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang. According to the developed model of the study, service innovation is exposing consumers' to innovation firstly. In consequence, it is making to consumers' perception towards it. In accordance with the aim and the assumption of the study 8 developed hypotheses were analyzed by multiple linear regression to conclude which of the 8 independent variables is the most influential variable to the least influential on consumers' perception towards service innovation.

Table 3

Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	Collinearity Statistics			
	B	Std. Error	Beta	t	sig	Tolerance	VIF
(Constant)	.128	.213		.604	.547		
RA	.074	.049	.077	1.522	.129	.556	1.799
CB	.083	.061	.087	1.372	.171	.354	2.821
CX	.392	.059	.357	6.594	.000	.485	2.062
TA	.102	.042	.114	2.425	.016	.641	1.560
OB	.123	.053	.128	2.301	.022	.460	2.172
ATTP	.129	.047	.133	2.752	.006	.610	1.640
CD	.132	.052	.134	2.522	.011	.511	1.956
PR	-.063	.036	-.079	-1.747	.082	.689	1.452

The presence of multicollinearity will be defined by two given values which are Tolerance and VIF (Variance Inflation Factors). If the tolerance value of less than .10, or a VIF value of above 10 means that the value is unacceptable and there is multicollinearity. According to Table 4.4 above, the tolerance value is between 0.354 to 0.689 while the VIF value is between 1.452 to 2.821. This indicates that the tolerance and VIF value has fulfilled the acceptable value in evaluating no-multicollinearity of below 0.10 and above 10. Therefore, the values are acceptable and multicollinearity does not exist and it can be concluded that multiple regression is suitable in analyzing the data.

Testing the Hypotheses

Relative Advantage: Given the value of Sig. for the influence of relative advantage on consumers' perception is $0.129 > 0.05$, so it can be concluded that H1 is not acceptable which means that there is no influence Relative Advantage to Consumers' Perception.

Compatibility: Given the value of Sig. for the influence of compatibility on consumers' perception is $0.171 > 0.05$, so it can be concluded that H2 is not acceptable which means that there is no influence Compatibility to Consumers' Perception.

Complexity: Given the value of Sig. for the influence of compatibility on consumers' perception is $0.000 < 0.05$, so it can be concluded that H3 is accepted which means there is an influence Complexity to Consumers' Perception. Complexity has a positive effect on Consumers' Perception, with a regression of 0.392. This means that if efficiency increases by one unit, then consumers' perception will also increase by 0.392 assuming all other independent variables are constant.

Trying Ability: Given the value of Sig. for the influence of compatibility on consumers' perception is $0.016 < 0.05$, so it can be concluded that H4 is accepted which means there is an influence Trying Ability to Consumers' Perception. Trying Ability has a positive effect on Consumers' Perception, with a regression of 0.102. This means that if efficiency increases by one unit, then consumers' perception will also increase by 0.102 assuming all other independent variables are constant.

Observability: Given the value of Sig. for the influence of compatibility on consumers' perception is $0.022 < 0.05$, so it can be concluded that H5 is accepted which means there is an influence Observability to Consumers' Perception. Observability has a positive effect on Consumers' Perception, with a regression of 0.123. This means that if efficiency increases by one unit, then consumers' perception will also increase by 0.123 assuming all other independent variables are constant.

Able to Take Permission: Given the value of Sig. for the influence of compatibility on consumers' perception is $0.006 < 0.05$, so it can be concluded that H6 is accepted which means there is an influence Able to Take Permission to Consumers' Perception. Able to Take Permission has a positive effect on Consumers' Perception, with a regression of 0.129. This means that if efficiency increases by one unit, then consumers' perception will also increase by 0.129 assuming all other independent variables are constant.

Confidence: Given the value of Sig. for the influence of compatibility on consumers' perception is $0.011 < 0.05$, so it can be concluded that H7 is accepted which means there is an influence Confidence to Consumers' Perception. Confidence has a positive effect on Consumers' Perception, with a regression of 0.132. This means that if efficiency increases by one unit, then consumers' perception will also increase by 0.132 assuming all other independent variables are constant.

Perceived Risk: Given the value of Sig. for the influence of compatibility on consumers' perception $0.082 > 0.05$, so it can be concluded that H8 is not acceptable which means that there is no influence Perceived Risk to Consumers' Perception

Table 4.4

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	107.312	8	13.414	51.089	.000 ^b
	Residual	77.718	296	.263		
	Total	185.030	304			

Furthermore, ANOVA will be used to test the goodness of the model by using significance value lower than 0.05 (<0.05) in evaluating the variation of dependent variable. H0 must be

rejected if the significance value is below than 0.05 and H₁ will be accepted. Table 4.5 has shown that the significance value of this study is below than 0.05 which is 0.000 and the hypothesis can be developed as:

H₀: The model is not good

H₁: The model is good

From the findings, H₀ is rejected and H₁ is accepted means that the model used in this study is good and there is a relationship between both dependent variable (Consumer perception towards service innovation provided by Gojek) and independent variable (Complexity, Trialability, Observability, Able to take permission, Confidence)

Table 4.5

Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.762 ^a	.580	.569		.512	1.981

a. Predictors: (Constant), RA, CB, CX, TA, OB, ATTP, CD, PR

The generated data in Table 4.6, it can be concluded that the correlation coefficient (R) of 0.76 means that there is a strong correlation between both independent (Relative Advantage, Compatibility, Complexity, Trialability, Observability, Able to take permission, Confidence, Perceived Risk) and dependent variable (Consumer Perception). While, correlation coefficient R determines the relationship between variables, R Square determines the portion of dependent variable that can be explained by the independent variable. Thus, we can deduce that the R square value of 0.58 is explained as 58% of consumer perception towards service innovation provided by Gojek is explained by proposed independent variables whereas the leftover 42% is explained by other causes.

To be detailed, the value of Beta will be used to evaluate whether those variables are making a statistically significant unique contribution to the equation or not. It will be portray by percentage to show the strength of each independent variables towards dependent variables. Thus, It can be concluded that factors that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang the most is Complexity (CX) at 35.7%, Confidence (CD) at 13.4%, Able to take permission (ATTP) at 13.3%, Observability (OB) at 12.8%, and the least influence is Trying Ability (TA) at 11.4%.

Pearson Correlation Analysis

The aim of the study is to investigate the correlation between specific demographic variables and consumers' perception towards service innovation provided by Gojek in Tanjungpinang. According to the developed model of the study, service innovation is exposing consumers' to innovation firstly. The usage of Pearson's correlation coefficient is to measure the degree of the linear relationship between two constant variables (Sungur, 2008 as cited in Kiliç, 2012,p.116). The hypothesis developed according to the model of the study has been developed by taking into consideration the linear relationship between the service innovations and perception.

Correlations

		Age	CP
Age	Pearson Correlation	1	-.100
	Sig. (2-tailed)		.082
	N	305	305
CP	Pearson Correlation	-.100	1
	Sig. (2-tailed)	.082	
	N	305	305

Correlations

		Monthly Income (Gross)	CP
Monthly Income (Gross)	Pearson Correlation	1	.129*
	Sig. (2-tailed)		.025
	N	305	305
CP	Pearson Correlation	.129*	1
	Sig. (2-tailed)	.025	
	N	305	305

*. Correlation is significant at the 0.05 level (2-tailed).

Both tables are the results of correlation between specific demographics namely age, monthly income and consumers' perception towards service innovation provided by Gojek in Tanjungpinang. The r value for age is – 0.100 and shows that the relationship is negative that also means that as one variable increase in value than the second variable decrease in value. Meanwhile, the r value for monthly income (gross) shows positive relationship with 0.129 that also means that when the amount of monthly income (gross) increase, the consumers' perception will also increases.

Next, looking at the significant value of age 0.082 and monthly income (gross) 0,025 that shows the value less than 0.05 indicate that there is a statistically significant correlation between two variables. The increases or decreases in one variable do significantly relate to the increases and decreases in the other variable. Thus, age and monthly income (gross) has a statistically significant correlation with consumers' perception towards service innovation.

Discussion

Relative Advantage, Compatibility, Complexity, Trialability, Observability, Able to take permission, Confidence, Perceived Risk has been tested in this study to determine factors that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang, Indonesia. Five out of eight hypotheses are positively affect and have influenced consumers' perception (H3, H4, H5, H6, H7). Apart from that, Relative Advantage (H1), Compatibility (H2) and Perceived Risk (H8) are rejected and have no influence on the consumers' perception towards service innovation provided by Gojek in Tanjungpinang, Indonesia.

Among all factors, complexity is the most factor that influence consumers' perception towards service innovation provided by Gojek in Tanjungpinang. In comparison with other factors that have weak and moderate correlation, it has the highest proportion of value. In this sense, the

easy use of service innovations will positively affect the perception of consumers to these types of services and attitudes towards this kind of service. Service innovations tried by consumers are able to provide both facilitating of consumers to adapt to these services and improving their positive attitude toward these services. It is important to develop to try ability specification of service innovation. This means that this was made by Gojek to embrace innovations in their application, for developing to positive approach innovation service by consumers. The assumption of the study is perception, which is based on characteristics of perceived innovation and affected by service innovation, depends on consumer attitudes. Within the concept of this hypothesis, firstly there are eight hypotheses about service innovations and it is a positive effect on the hypothesis.

Conclusion

This study offers insights into customer perception to the service innovation in the usage of the Gojek application. The results, in the form of propositions, provide a foundation for future improvement and also highlight the gap that must be solved and fixed. This is an initial study and should be viewed as an introduction to more thorough investigations of the related topic. The finding of this study has a number of implications for both practitioners and academics. At this point, the important subjects are factors that are effective by consumers' perspective for service innovation. Data of the study include individuals up to various university students residing in Tanjungpinang. Therefore, the results of the study about factors that influence consumers' perception towards service innovation are limited by levels of perception of individuals up to various university students residing in Tanjungpinang. Results of the study contain the quality of data for future similar studies in the field of transportation industry and service innovation.

Acknowledgment

This research was funded by Universiti Teknologi Malaysia, UTM ER, cost centre number Q.J130000.3855.20J35

References

- Abbas, M., Shahid Nawaz, M., Ahmad, J., & Ashraf, M. (2017). The effect of innovation and consumer related factors on consumer resistance to innovation. *Cogent Business and Management*, 4(1), 1–23.
<https://doi.org/10.1080/23311975.2017.1312058>
- Afrina, E., Peters, R., Fanggihda, V., Lauranti, M., Wahyuni, N., Zunifar, A. Y., Wardani, L. K., Nurrahmah, B., Sari, A. M., Riristarida, E. N., Octavia, A., Fatchiyah, L., Fajar Rachmadi, R., Akbariandhini, M., & Enggaliandhini, T. (2017). *The Go-Jek Problem*. 88.
- Ahmad, S., Wasim, S., Irfan, S., Gogoi, S., Srivastava, A., & Farheen, Z. (2019). Qualitative v/s. Quantitative Research- A Summarized Review. *Journal of Evidence Based Medicine and Healthcare*, 6(43), 2828–2832.
<https://doi.org/10.18410/jebmh/2019/587>
- Alan, A. K., Kabadayi, E. T., Bakis, S., Can, Y., & Sekerin, M. C. (2017). Generating and Assessing Consumer's Innovation Adoption through Consumer Innovativeness, Innovation Characteristics and Perceived Brand Innovativeness. *International Journal of Marketing Studies*, 9(6), 68. <https://doi.org/10.5539/ijms.v9n6p68>

- Carlborg, P., Kindstrom, D., & Kowalkowski, C. (2014). The evolution of service innovation research: A critical review and synthesis. *Service Industries Journal*, 34(5), 373–398. <https://doi.org/10.1080/02642069.2013.780044>
- Chuang, S. C., Cheng, Y. H., Chang, C. J., & Chiang, Y. T. (2013). The impact of self-confidence on the compromise effect. *International Journal of Psychology*, 48(4), 660–675. <https://doi.org/10.1080/00207594.2012.666553>
- Durst, S., Mention, A. L., & Poutanen, P. (2015). Service innovation and its impact: What do we know about? *Investigaciones Europeas de Direccion y Economia de La Empresa*, 21(2), 65–72. <https://doi.org/10.1016/j.iedee.2014.07.003>
- Ghotbabadi, A. R., Feiz, S., & Baharun, R. (2016). The Relationship of Customer Perceived Risk and Customer Satisfaction. *Mediterranean Journal of Social Sciences*, 7(1), 161–173. <https://doi.org/10.5901/mjss.2016.v7n1s1p161>
- Gogtay, N. J., & Thatte, U. M. (2017). Principles of correlation analysis. *Journal of Association of Physicians of India*, 65(MARCH), 78–81.
- Jaidka, K., Khoo, C. S. G., & Na, J. C. (2013). Literature review writing: How information is selected and transformed. *Aslib Proceedings: New Information Perspectives*, 65(3), 303–325. <https://doi.org/10.1108/00012531311330665>
- Kilic, S. (2012). An Empirical Study on the Effects of Service Innovations in Marketing of Turkish GSM Mobile Operators on the Intention of Consumers to Re-Purchase the Same GSM Operator Sabiha Kiliç Professor Asistant PhD Faculty of Economic and Administrative Science The. *International Journal of Business and Social Science*, 3(21), 279–296.
- Kusumadewi, R. N., & Karyono, O. (2019). Impact of Service Quality and Service Innovations on Competitive Advantage in Retailing. *Budapest International Research and Critics Institute (BIRCIJournal): Humanities and Social Sciences*, 2(2), 366–374. <https://doi.org/10.33258/birci.v2i2.306>
- Lin, A., & Chen, N. C. (2012). Cloud computing as an innovation: Perception, attitude, and adoption. *International Journal of Information Management*, 32(6), 533–540. <https://doi.org/10.1016/j.ijinfomgt.2012.04.001>
- Mairura, K. O. (2016). Relative Advantage as a Determinant of Technology Adoption among Automobile Mechanics in Micro and Small Enterprises in Kenya. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 21(1), 86. <https://doi.org/10.9790/0837-21148692>
- Persaud, A., & Azhar, I. (2012). Innovative mobile marketing via smartphones: Are consumers ready? *Marketing Intelligence and Planning*, 30(4), 418–443. <https://doi.org/10.1108/02634501211231883>
- Putri, U. M., Amin, M., & Warjio. (2019). Development of Online Transportation Services : Effectiveness and Efficiency of The Grabbike Applications for Society in Medan City. *Research in Business and Social Science*, 8(4), 71–78.
- Rahmah, S. (2020). *Introductory Statistics for Social Science*. MY: dESKTOP PUBLISHER.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104(March), 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Sreejesh, S., Sanjay, M. M. R. A. (2014). Business Research Methods. In *Business Research Methods* (Issue July). <https://doi.org/10.22573/spg.020.bk/s/026>

VanVoorhis, C. R. W., & Morgan, B. L. (2007). Understanding Power and Rules of Thumb for Determining Sample Size. *Tutorials in Quantitative Methods for Psychology*, Vol.3, No.2, pp.43-50.