Determinants of E-Commerce Adoption: A Model Analysis Focused on GOJEK Users

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Abstract
Go-jek application is a form of innovation in terms of public transportation services .The presence of this system has been interesting for the public, not only attract consumers to try service facilities, but also attract attention of ojek drivers conventional as evidenced by many ojek drivers move to join and use the the application. Inefficiency of ojek drivers conventional has become an opportunity for go-jek to innovate and create a system based on application that aimed at increasing value from ojek service. Although the presence of the internet benefits useful for users and company, but behavioral intention to use e-commerce does not appear automatically in users to use the technology directly, proven by many e-commerce application who was not welcomed by consumers to shove their intention to use his services. So what was the causes of someone intention to appear and use go-jek and be able to received by the consumers?.Hence intention behavior to use e-commerce drift researchers to run a research against someone intention at using the technology. If the factors that could encourage the intention of an individual to use a e-commerce was known, the company will capable of created a e-commerce technology platform that could encourage intention of the e-commerce consumers in indonesia to use it , which consisted of more than 100 million people and ready to transact with the 5 billion usd, so the company will have a opportunities and the potential to be successful.

Introduction
Retail ecommerce sales which include products and services ordered via the internet over any device reach $1.915 trillion in 2016, accounting for 8.7% of total retail spending worldwide. While the pace of growth for overall retail sales is subdued, the digital portion of sales continues to expand rapidly, with a 23.7% growth rate for 2016.Online shopping growth rapidly to in indonesia, and lack of crime online causing trust and comfort higher on online shopping. Asian markets and pacific get the finding that based on characteristic demographic consumers who performs online shopping, some 53,2 % is consumers with spending more than 2 million rupiah per month. Based on the work of consumers apparently 33,9 % are employees private, by 19,4 % is entrepreneurs, student was in 19,9 %.Based on consumer characteristic demographic online at the indonesian, we found that consumers who shopping not consumers who have jobs and income, but consumers on students or students are also interested in online shopping and even has a bigger percentation than a self employed.

Neuwirth(2011), described how informal economic power to be a second biggest economy in the world. Informal, business produce $ 10 trillionusd per year in the world 15 years ahead, cities through the developing world will contribute 50 percent global economic growth. According to neuwirth challenges ahead is not how to embrace and empowering those who living and working in it, and this challenges is being answered by the entrepreneur who runs in the online transportation service.

Pt .Go-jekindonesia is one of the pioneer companies and largest in indonesia which moves in the provision of mobile based online transportation services who has launched the application of go-jek. Go-jekapplication constituting a form of innovation in terms of the provision of the service of public transport .The presence of an application had come to the public interest, not only attract consumers to try various facilities, but also attract interests of conventional motorcycle taxi driver which is evidenced by the number of motorcycle taxi driver moved to combine and devised a system of these applications. Inefficiency conventional motorcycle taxi has become an opportunity for go-jek to innovate and create a system based application that aims to improve value of the motorcycle taxi driver service .

The presence of the internet provide a useful benefits, but intentions to use e-commerce (behavior intention to use) not automatically appear in users to use the technology directly, proven similar application as bo-jek and lady-jekfail in offering their services. Then what caused someone intention to use is appearing then able to be accepted by consumers. Hence intention behavior using e-commerce (behavior intention to use) encourage researchers to conduct testing against someone intentions in using technology.

Literature Review

E-Commerce

Most of the literature uses the terms e-commerce and e-business interchangeably, as the definitions have often been confused among authors (Pather, Erwin,Remenyi, 2003). IBM first came up with the new term of e-business for doing business with the help of the Internet (Deitel, Nieto, 2001).Deitel and Nieto said that e-commerce, on the other hand, comprises the sales cycle (market development, demand creation, fulfillment, customer support, and customer relations), and is a subset of e-business.

McGahan and Porter (1998) described how, as a business tool, e-commerce has affected each portion of the business model. All stakeholders in businesses, competitors, consumers, suppliers, and government, are affected by e-commerce. Each has concerns about e-commerce; for example, several old and recent studies have shown that consumers regard online security as a major concern. The competitors are interested in finding the best of the countless strategies for attracting and holding Web consumers. Users' demographics also play a very important role in e-commerce. Over 15 million people between the ages of 16 to 27 account for over $6.5 billion online sales worldwide.

Technology Acceptance Model(TAM)

Technology Acceptance Model has been developed by davis (1989) is one of the most popular research model to predict use and acceptance of information and technology by individual users. TAM has been widely TAM posits that user acceptance is determined by two key factors: PU and PEOU. PU is defined as the extent to which a person believes that using a particular technology will enhance his/her job performance. PEOU is defined as the degree to which a person believes that using a technology will be free from effort. TAM argues that attitude and intentions are influenced by social norms, and that national culture is a construct to social norm. Two important constructs that have received very little attention in the context of TAM research are social influence and gender (Gefen& Straub, 1997).The following are the pictures of TAM model:

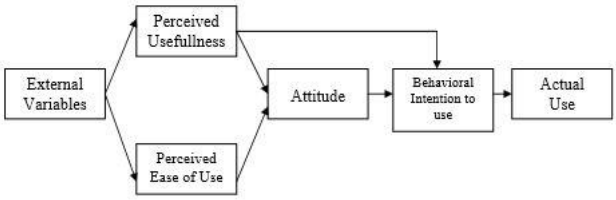

Image1.Technology Acceptance Model

Methods

Types and Sources of Data

The data collected are primary data and secondary data. Primary data were collected through direct observation in the field with the respondents who had been selected by the researchers. Respondents who interviewed are parties who act directly as Go-jek users to analyze the intention to use of Go-jek application and also to anlyze any factor that affects a person intention to use Go-jek application system. The selection of respondents was based on the assessment that the respondents who selected the parties that have relevance to the use of Go-jack applications in 5 different university. Secondary data were collected from literature, from various sources of information can be used for various concepts and theories that are relevant to the problems examined, and also the records that related to support the completeness of the information needed.

Data Analysis

Quantitative data was processed using a statistical model to see the results of the research that has been done. The model was analyzed with SEM structural equation modeling. The formula used to test the validty is the Product Moment of Karl Pearson:

If from the formula were obtained r count larger than r table, then the instruments is valid.While the formula used to test the reliability is as follows:

When Croanbach's Alpha valueless than 0,600 it mean rejected, but if the value is 0,700 it mean received and more than or equal to0,800 is recieved and catagorized as a good value. Next the data used for multicollinearity and normality test, multicollinearity happen if correlation coefficient value between independent variable more

than 0,6 . Multicolliniearity would not happen if correlation coefficient between independent variable less than 0,6or more than or equal to 0,6 (r < 0,60).

Normality test used to test independent variable data (X) anddependent variable (Y) on the regression equation is produced, wether normally distributed or not. If the data normally distributed, then the analysis of data and the testing of hypotheses used parametrical statistic. then the analysis of data and the testing of hypotheses or X2 for Goodness of fit testing.

The next step is testing the hypothesis with path analysis. Path analysisis aupgraded regresion models used to test suitability (*fit*) of matrik correlation of two or more model (Ghozali, 2006).Path analysis was used to analyze casual relationship pattern between variables to know wether the influence is direct or indirect.

Result

Goodness of Fit Model Test

Tabel1. Goodness of Fit Model Test

Goodness-of-Fit	Cutt-off-Value	Result	Conclusion
X^2 - Chi-square	Diharapkankecil	338.69	goodness of fit
Significance	≥ 0.05	P = 0.07170	
RMSEA	≤ 0.08	0.024	goodness of fit
GFI	Close to 1	0.94	goodness of fit
NFI	Close to 1	1.00	goodness of fit
CFI	Close to 1	1.00	goodness of fit

The results of goodness of fit test showed with chisquaretest obtained conclusion p-value 0.07170 > 0.05 so Ho accepted and H1rejected which mean the goodness of fit from tested model is good enough. Besides that the RMSEA value result is 0.024which mean the tested model is reached the goodnes of fit. Another goodness of fit criteria like GFI, NFI and CFI result is more than 0,9which mean the tested model reached the goodness of fit value.

Tabel 2. Relationship Between Variables

Path	Estimate		|t-hit|> .96	Conclusion
	Direct	Indirect		
PU «« SE	0.720	-	17.64	Significant
PEOU«« SE	0.620	-	15.90	Significant
Attitude «« PEOU	0.730	-	3.95	Significant
Attitude «« *PU*	0.068	-	0.55	Not Significant
PU «« *Culture*	0.630	-	16.63	Significant
PEOU «« SES	0.590	-	14.00	Significant
Attitude «« PW	0.033	-	0.34	Not Significant
Intention to use «« *Attitude*	0.930	-	11.13	Significant
Attitude «« SE	-	0.500	4.69	Significant
Attitude «« SES	-	0.430	4.03	Significant
Attitude «« *Culture*	-	0.040	0.55	Not Significant
Intention to use «« PW	-	0.030	0.03	Not Significant
Intention to use «« SE	-	0.460	4.78	Significant
Intention to use «« SES	-	0.400	4.02	Significant
Intention to use «« *Culture*	-	0.040	0.55	Not Significant

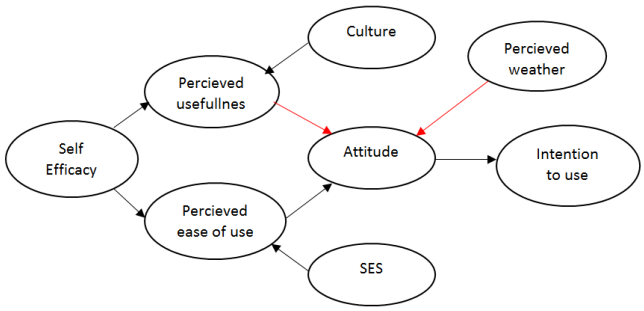

Image2.Intention to Use Model Test Result

Relationship Between Attitude and intention

we can see that the variable attitude is the only variable that has direct influence on intention use, but the attitude is the variable formed over his relationship with other variables, that is the cause of an attitude who reflecting the other variables who has relationship with the attitude. Because of that variables that shape an attitude has an important role in direct relation between intention and attitude.

Relationship Between Percieved Ease of Useand *Intention*

Percieved ease of use in using application have a directly significant positive influence against intention to use, it is because perceived ease of use in using application is the only variable that has a directly positive relationship with variable attitude, it means the better percieved ease of use application the more good an attitude toward application and the more good an attitude means the better intention to use.

Relationship Between Perceived Usefullnes and Intention

Percieved usefulness of an application have a direct relationship with attitude variable, that direct relationship connect the intention variable with the percieved usefulness variable, because the intention have a direct relationship with the attitude variable. Every variable who has a relationship with attitude automatically has an indirect relationship with intention variable. The arrows showed a direct relationship, red color on the arrow show an unsignificant relation and black color on the arrow show a significant relation.

Relationship Between Self Efficacy and Intention
From imgae above can be seen the relationship between variabelself efficacy to variabel intention to use had two ways of variables relationship namely PEOU and PU. Because of the relations between self efficacy and PEOU which have the largest direct influence to the attitudes, so the influence of the self efficacy variable is the basic influence that having an indirect effect against intention to use.

Relationship Between Culture and Intention
From image above we know there was no connection between a culture with attitude, although culture has a direct positive relationship to percieved usefulness but that relationship do not have any impact on attitude , so that it can be said the influence of culture is very minimum in determining intention to use application among students.

Relationship Between Social Economic Status and Intention
From the relations of social economic status with percieved ease of use (PEOU), we can see the reason why social economic status have an indirect positive influence on the attitude variables. Because the relationship between SES, PEOU, and attitude, is the reason for the SES entanglement with the intention to use.

Relationship Between Percieved Weather and Intention
Variable percieved weather having a direct relationship with a variable attitude but between the two is not a positive relationship until there is no influence either directly or indirectly of variable percieved weather to intention to use.

Implication, Conclusion, Suggestion

Managerial Implication
Percieved usefulness, percieved ease of use and percieved weather are variables which have direct influence against attitude variable, but only percieved ease of use variables who has significant influence. So application that easy to use and have the lesser effort to use was the most importance thing to build. The benefit of usage here is not only from technical point of view of platform and system but from result of research it is seen that factor of socioeconomic status also have influence to perception of ease of use, so technical and socio-economic aspect is fundamental aspect which is very important seen in its influence to perception will ease of use.

Conclusion

The results on the sem show all hypotheses have a positive relationship. Intention is influenced by good or not his attitude directly. If the atitude is good then the intention is also good. The variable that directly affect the atitude of percieved ease os use while percieved usefullnes and percieved weather does not affect Atitude. Then percieved ease os use effect on positive atitude, the better percieved ease os use then the better the atitude. Percieved ease os use is influenced by socioeconomic status and self efficacy. Socioeconomic status and self efficacy also have a positive influence on percieved ease os use, if the socio-economic status and self efficacy is good then percieved ease os use it is also good. This means that the intention to use the application will not be significantly influenced by the usefulness of the application and the weather but will be influenced by the ease of using the application, especially the ease of the economic side of the user due to the level of socioeconomic and self-ability factors is the thing that affects the perception of ease in using the application .

Suggestion

For further research, can be given some suggestions as follows:
1. For the next researcher is expected to take sample not only focusing on student, but also public society.
2. For the company is expected to pay attention to aspects of ease for use, especially on socio-economic aspects

For companies also need to review technical aspects in accordance with the individual ability factors, especially in technical terms, which is now there by fixing things that are still not appropriate, so that users with diverse ability of individuals able to use and run applications. It should always be done continuously and continuously in order to achieve maximum results.

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