THE INFLUENCE OF USERS' PERCEPTION OF GO-FOOD'S PERSONALIZATION FEATURES ON THE USERS' ATTITUDE TOWARD THE APPLICATION

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Abstract. Collaborative consumption companies that are really growing in Indonesia provide personalization features inside application that enable users to personalize display as they want so they can be more engaged when using it. But, not all the users can easily understand and accept the usage of this new innovation. Therefore, it has to be investigated on the level of acceptance in using the technology by measuring users' attitude. This research aims to determine the key determinant predictor and analysing the influence that arise from users' perception as improvement of personalization features. This research adapted Technology Acceptance Model (TAM) by Davis, et al. where users' attitude can be influenced by perceived usefulness and perceived ease of use. The data was collected through online where questionnaire is adapted from the related previous study. Population used is 15-34 years old users across Jakarta and Bandung. As much as 415 people has responded and the data analysis technique was processed using Binary Logistic Regression. Result shows that either personalization features' function or easiness affect to how they represent good attitudes. It also proved that users get benefits after using the personalization features and made them consider the personalization features a necessity in completing process.

Keywords: Collaborative Consumption; Personalization Features; Technology Acceptance Model (TAM); Perceived Usefulness; Perceived Ease of Use; Users' Attitude

INTRODUCTION

Nowadays, technology is developing very quickly and innovation is a necessity to increase the likelihood of the business succeeding. The current online business is already outspread to the establishment of service platform that was developed on the smartphone application where people or users are delivering products and services to other people in the network, or could be determined as Collaborative Lifestyles (Botsman & Rogers, 2010). Collaborative consumption is described as a social, economic and technological model where groups share the financial burden of ownership and maintenance of a product or service while maintaining access to the value that product or service provides (Piscicelli, et al., 2015). Collaborative consumption companies that are currently growing in Indonesia such as Grab, GO-JEK, Tokopedia, Lazada, etc. provide features that will make consumers are able to personalize layout or service as they like or want. One that will be more focused in here is about the personalization features inside the smartphone application that help users or consumers be easier and more engaged when using it. Personalization can be said as a means to meet customer's needs effectively and efficiently, making interactions faster and easier and, consequently, increasing customer satisfaction and the likelihood of repeat visits (Rouse, 2007). In some cases, consumers can customize the application's interface layout to be more personalized as their needs. It will help them find what they need easily thus will build customer relationship and familiarity. Moreover, personalization features may not always positively generate users' positive attitude or furtherly can enhance their intention to make a purchase. Therefore, it has to be measured by the level of acceptance and understanding in using the technology by measuring the attitude of users. Users' attitude towards something can be used as a prediction of whether or not something is accepted because attitude will show the positive or negative feelings in an acceptance. The attitude of the users in receiving a new technology has a big impact on the success of the innovation. Focus of the study is to know the influence of personalization features toward consumer attitude by determining the key determinant predictor caused by their perceptions toward it. This research used Technology Acceptance Model (TAM) theory in order to make predictions about technology acceptance and it hypothesized that the attitude of a user toward a system was a major factor that influences the use or reject the system. Since the users' attitude seems to be influenced by two major beliefs: perceived usefulness and perceived ease of use, then these factors are used as variables to be analyzed. This research used GO-FOOD, an online food delivery service from GO-JEK as a case study because it is one of the collaborative consumption companies in Indonesia where GO-FOOD contributed 73.20% as the second most frequent used service in GO-JEK mobile application.

LITERATURE REVIEW

Collaborative Consumption

Collaborative consumption is often described as a social, economic or technological model, it represents groups who share their financial burden in terms of ownership and maintenance about the access to value those products or services that are provided (Hamari, et al., 2016).

Personalization

According to Ball (2006), personalization is a creation or adjustment to meet customer requirements. Personalization in this context is co-creating value by using marketing tools and decisions to increase individualization to meet customer needs, today often through the use of technology (Taylor, 2014). Surprenant and Solomon (1987) identify three ways of implementing personalization:

Table Error! Use the Home tab to apply 0 to the text that you want to appear here. Type of Personalization

Type of Personalization	Definition	Example of Features
Option personalization	A focus on the service creates personalization which is providing an alternative where consumer can choose the option best suited to their specific needs.	App Interface, Re-order Button, Categories
Programmed personalization	Method of giving the impression of personalized service by encouraging small talk, using customers' names, etc. It is often accomplished by making personal referents to make each person feel like an individual, not "just another customer."	Track Order, In-App Chat, Name Recognition
Customized personalization	The method based on the desire to help consumers in achieving the best possible form of the service offering for their needs. This type of personalization, decreases predictability and increases cognitive effort.	Search Column, Favorite Button, Quantity Order

References: Suprenant and Solomon (1987)

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is an information systems theory developed in order to make predictions about technology acceptance. The Technology Acceptance Model has been adapted from the Theory of Reasoned Action (TRA) regarding beliefs, attitude, intention and behavior for modelling user acceptance of information systems (Davis & Bagozzi, 1989). This model suggested that technology adoption can be explained by three factors, Perceived Ease of Use is the degree to which consumers perceive a new product or service as better than its substitutes (Rogers, 1983), Perceived Usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, et al., 1989), and Attitude is an individualist positive or negative behavior towards innovation adaptation (Triandis, 1979).

Research Framework and Hypothesis Development

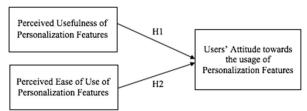


Figure Error! Use the Home tab to apply 0 to the text that you want to appear here. Research Framework (Modified from: Davis, et al., 1989)

On this research, the researcher only focused on user attitudes (AT) as a factor to determine and analyse significant factors that influencing them when using personalization features. This is because according to Hartono (2007), the attitude of a user to a new technology is an important aspect which can show the extent to which they feel that the technology is good or bad. If the users feel that the technology-based is good, then it is possible for customers to show a positive attitude and even have an impact on using it. However, if the users feel that information technology-based is bad, it is possible for customers to show negative attitudes and furtherly will affect to not using the technology at all. From this framework, researcher propose to examine these following hypotheses:

H1: Perceived Usefulness of Personalization Features has a significant influence on users' attitudes.

H2: Perceived Ease of Use of Personalization Features has a significant influence on users' attitudes.

METHODOLOGY

This research used GO-FOOD, an online food delivery service from GO-JEK as one of the collaborative consumption companies in Indonesia to be a case study. Jakarta and Bandung were chosen to be the research place to conduct this study because GO-JEK

Company has been operating in more than 50 cities in Indonesia, including these cities for selected as Smart City due to its technology initiatives and implementation to its residents (EIU, 2016) where they have high ability to process in digital skills, in this context an application with advanced features innovation. Data shows that GO-JEK has reached the most total active users of 20 million people across Indonesia (Setyowati, 2018) where GO-FOOD contributed 73.20% as the second most frequent used service in GO-JEK mobile application (Demografi, 2017). As much as 96% of GO-JEK users are high-schoolers (equivalent or above) Also, according to APJII (Asosiasi Penyelenggara Jasa Internet Indonesia), 49.52% of internet users in Indonesia are 19-34 years because internet nowadays is inseparable from daily lives of young people in the productive age (APJII, 2018).

From this data, researcher was focused on 15-34 age range as high-schoolers to adulthood active users specifically in Jakarta and Bandung area in a more specific on the combination of these age range. Therefore, researcher used data that was taken from Badan Pusat Statistik Jakarta and Bandung which shows the total population of citizen for the age range of 15-34 is 3.492.487 people across Jakarta (BPS Jakarta, 2019) and 919.419 people across Bandung (BPS Bandung, 2019). From the data, researcher got 400 people as a minimum sample size needed using Slovin's Formula.

This research was done by using questionnaire through online survey with total 20 questions which all the designated questions was measured with a seven-point Likert scale with range from strongly disagree (1) to strongly agree (7). The data then was analyzed on SPSS to test the data validity and reliability using Pearson Correlation's Score and Cronbach Alpha Score. To process the data using Multiple Linear Regression, it is required to test the Classical Assumption. Since there were two assumptions not fulfilled, researcher cannot continue to process the data with Multiple Linear Regression. Instead, researcher use Binary Logistic Regression.

FINDINGS AND ARGUMENT

Descriptive Analysis

This research is dominated by 25-34 years old GO-FOOD users that contributed as much as 53% (221 people of 415 of total respondents). While the rest of respondents are 15-24 years old GO-FOOD users that contributed as much as 47% (194 people). From the domicile, 77% of respondents or GO-FOOD users are domiciled in Jakarta as much as 320 people of 415 of total respondents and the rest 23% or 95 people are domiciled in Bandung.

Validity Test and Reliability Test

Table Error! Use the Home tab to apply 0 to the text that you want to appear here. Validity and Reliability Test

Test	Requirements	Result		
Validity	Pearson Correlation above 0,0963 DF value	All questions are valid		
Reliability	Cronbach's Alpha above 0,7	All variables are extremely reliable		

To test validity of all questions, Pearson Correlation value has to be compared with R Table at DF = N-2 and Probability 0.05. DF value on this research is 415 (number of samples) -2 = 413. R Table on DF 413 probability of 0.05 is 0.0963. The result shows each questions' Pearson Correlation Value is above the DF Value. Meanwhile, the measurement is considered reliable if the Cronbach's Alpha is approaching 1 (perfectly reliable). The result shows that the value of Cronbach's Alpha is approaching to 1. These tests mean that all variables and questions are valid and reliable to be used as an instrument in this research.

Classical Assumption

Table Error! Use the Home tab to apply 0 to the text that you want to appear here. Classical Assumption

Test	Requirements	Result	Analysis
Linearity	Sig. value < 0.05	Sig. value = 0.0	Passed
Normality	Sig. value > 0.05	Sig. value = 0.0	Not Passed
Homoscedasticity	All variables sig. value > 0.05	All variables sig. value = 0.0	Not Passed
Multi-collinearity	VIF Score all variables < 10	VIF score all variables = 1,696	Passed

From the summarized table, it shows that there are two conditions that didn't meet the assumption, which are Normality and Homoscedasticity.

Multiple Linear Regression

Multiple linear regression is the appropriate method of analysis when the research problem involves single metric dependent variable that is related to two or more metric independent variables. (Hair Jr., et al., 2014). The classical assumption for this research is not completely fulfilled and it means that the data cannot be processed by using Multiple Linear Regression.

Furthermore, the researcher used Binary Logistic Regression to process the data. This is because binary logistic regression models are a combination of multiple regression and multiple discriminant analysis. What differentiate a logistic regression model from multiple regression is that the dependent variable is nonmetric, as in discriminant analysis (Hair Jr., et al., 2014). Hence, researcher will transform the dependent variable from metric to nonmetric.

Binary Logistic Regression

On this research, there are two independent variables used, Perceived Usefulness (PU) and Perceived Ease of Use (EU), and one dependent variable Consumer's Attitudes toward using Personalization Features (AT). This model primarily accepts all types of independent variables (metric or nonmetric) and do not require the assumption of multivariate normality (Hair Jr., et al., 2014).

Dependent Variable Encoding

Before the data is analysed, researcher have to convert the dependent data from metric to nonmetric. Since the dependent question of this research is asking about users' attitude toward using personalization feature, therefore respondents' answer who choose >4 in 7 scale of agreement interprets as YES, means they agree to have good attitude after using personalization features. Otherwise, respondents' answer who choose ≤ 4 in 7 scale of agreement interprets as NO, means they don't agree to have good attitude after using personalization features.

Variables in the Equation

Table 4. Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	PU	2.991	.645	21.467	1	.000	19.901
	EU	.893	.523	2.915	1	.088	2.444
	Constant	-16.239	4.019	16.327	1	.000	.000
a. Variable(s) entered on step 1: PU, EU.							

PU (Perceived Usefulness) variable has a significant partial effect on AT in the model because it has sig. value of 0,000 <0,05 so that it means H1: Perceived Usefulness of Personalization Features has a significant influence on users' attitudes is accepted. It proved that users have experienced benefits from the personalization features on their attitude and they considered the personalization features a necessity in completing food ordering process. Meanwhile, EU (Perceived Ease of Use) variable has a Sig value of 0.088 > 0.05 so that it means H2: Perceived Ease of Use of Personalization Features has a significant influence on users' attitudes is rejected. It turned out that the personalization features on the application have not been able to make GO-FOOD users experience the convenience, especially in the process of ordering food. How big the influence is indicated by the EXP value (B) or also called Odds Ratio (OR). Perceived usefulness variable (OR 19.091) means the person who experience the use or benefit of personalization features is more influencing good attitudes toward it as much as 19.091 times compared to those who didn't experience it. From the table above, the equation is as below:

 $\hat{\mathbf{g}}(x) = -16.239 + 2.991X1 + 0.893X2$ Odds Ratio: 19.901X1 + 2.444X2

CONCLUSIONS

The data analysis calculation indicates that there is influence between the independent variables on attitude toward using personalization features, where Perceived Usefulness variable becomes the factor that is giving more significant influence to the Users' Attitude. It means the users experienced the benefits after using the personalization features and made them consider the personalization features in GO-FOOD application a necessity in completing food ordering process. In contrary, perceived ease of use doesn't influence users' attitude after using personalization features the app. Thus, as a contribution to the company, this research recommends for GO-JEK (GO-FOOD Company Developer) to create a more detailed information about each feature in easy and simple explanation to improve users' understanding about it. They can also develop a pop-up recommendation within the application when users are in the process of ordering food. If this element exists, it would make the ordering food process become shorter because a long journey will make users become overwhelmed on too much requirements needed.

This research shows that not all factor or variables that previous studies proved, could be adapted in all conditions. Since there are still relatively few existing researches that adapt TAM model to Personalization feature on application, this research become providing new references especially to collaborative consumption company specifically online food delivery service about the influence between the personalization features and attitudes that arise from some factors. For the enhancement of future research, researcher suggests that it will be better if the future research use bigger sample and more scattered in all over big cities in Indonesia so it will make the data be more convincing and valid. Furthermore, use more factors that predictably will influence

the attitude because based on the data analysis, there are still 44.3% other factors out there that are not used in this research that able to explain the users' attitude.

REFERENCES

- APJII , 2018. Pulau Jawa tak lagi Jawara, Inilah Jumlah Pengguna dan Penetrasi Internet di Seluruh Indonesia. [Online] Available at: https://www.goodnewsfromindonesia.id/2018/02/19/pulau-jawa-tak-lagi-jawara-inilah-jumlah-pengguna-dan-penetrasi-internet-di-seluruh-indonesia [Accessed 02 May 2019].
- Ball, A. D., Coelho, P. S. & Vilares, M. J., 2006. Service personalization and loyalty. *Journal of Services Marketing*, 20(6), pp. 391-
- Botsman, R. & Rogers, R., 2010. What's Mine is Yours: The Rise of Collaborative Consumption. New York, USA: Harper Collins.

 BPS Bandung, 2019. Statictable. [Online]

Available at: https://bandungkota.bps.go.id/statictable/2017/08/29/104/jumlah-penduduk-menurut-kelompok-umurdan-jenis-kelamin-di-kota-bandung-2016-.html

[Accessed December 2019].

- BPS Jakarta, 2019. *Statictable*. [Online]
 Available at: https://jakarta.bps.go.id/statictable/2017/01/30/142/jumlah-penduduk-menurut-kelompok-umur-dan-jenis-kelamin-di-provinsi-dki-jakarta-2015.html
 [Accessed 18 December 2019].
- Davis, F. D. & Bagozzi, R., 1989. User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 8(35), pp. 982-1003.
- Davis, F. D., 1989. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *ITUsefulness and Ease of Use*, 13(3).
- Davis, F. D., Bagozzi, R. P. & Warshaw, P. R., 1989. User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 8(35), pp. 982-1003.
- Demografi, L., 2017. RINGKASAN HASIL SURVEI DAMPAK GO-JEK TERHADAP PEREKONOMIAN INDONESIA, Jakarta: Fakultas Ekonomi dan Bisnis Universitas Indonesia.
- EIU, 2016. Special Reports. [Online]
 Available at: http://www.eiu.com/landing/special_reports
 [Accessed December 2018].
- Hair Jr., J. F., Black, W. C., Babin, B. J. & Anderson, R. E., 2014. Multivariate Data Analysis (7th Edition). s.l.:s.n.
- Hamari, J., Sjoklint, M. & Ukkonen, A., 2016. The Sharing Economy: Why People Participate in Collaborative Consumption. *Journal of the Association for Information Science and Technology,* September, 14(4), pp. 90-103.
- Hartono, J., 2007. Sistem Informasi Keperilakuan (2 ed.). Yogyakarta: ANDI.
- Park, J., 2003. Consumer Attitudes Toward Personalization Features and Intention to Purchase Online.
- Piscicelli, L., Cooper, T. & Fisher, T., 2015. The role of values in collaborative consumption: insights from a product-service system for lending and borrowing in the UK. *Journal of Cleaner Production*, Volume 97, pp. 21-29.
- Rogers, E. M., 1983. Diffusion of Innovations. Volume 4.
- Rouse, M., 2007. Definition. [Online]

 Available at: https://searchsalesforce.techtarget.com/definition/personalization
 [Accessed September 2018].
- Setyowati, D., 2018. Berita: Digital. [Online]
 Available at: https://katadata.co.id/berita/2018/04/26/nadiem-makarim-klaim-go-jek-punya-20-juta-pengguna
 [Accessed March 2019].
- Surprenant, C. F. & Solomon, M. R., 1987. Predictability and Personalization in Service Encounter. *Journal of Marketing,* pp. 86-96. Triandis, H. C., 1979. Values, Attitudes and Interpersonal Behaviour.