

Continuance Usage Intention of Auto Service Booking Application

Stefy Falentino Akuba¹, David Loei²

¹Graduate School of Management, Universitas Pelita Harapan Indonesia,

²Graduate School of Management, Universitas Pelita Harapan, Indonesia.

Abstract:- The development of auto repair booking application service is highly dependent on the intention to use of the consumers. This research aims to investigate the relationship of self-efficacy, perceived usefulness, perceived risk and perceived ease of use on intention of use effects. The data were collected by surveying 309 users of the auto repair booking application service in Jakarta, Indonesia. The research analysis used part least square-structural equation modeling (PLS-SEM) through SmartPLS 3.2.7 application. The research results indicate that the variables of perceived usefulness and perceived ease of use have positive effect on continuance intention, while perceived risk has negative effect. Mobile Self-Efficacy has positive effect on perceived ease of use but does not have an effect on perceived ease of use.

Keywords:- Self-Efficacy, Perceived Usefulness, Perceived Ease of Use, Intention To Use, Technology Acceptance Model, Perceived Risk

I. INTRODUCTION

In digital era, application technology has an important role in affecting consumer behavior (Thaichon, 2017), for this reason many companies are shifting to online business (Jensen & Wagner, 2018). The way companies interact with consumers has changed significantly over the past twenty years due to technological developments including mobile technology that makes easier interaction with consumers (Viswanathan et al., 2017). Mobile apps get into the business world as a marketing tool for companies (San-Martín, Jiménez, & López-Catalán, 2016). Without using computer and only mobile phone, consumers can access information and make purchases (Verma, Sharma, & Sheth, 2016), even make a schedule to get services, such as service in an automotive auto repair shop. One of the automotive companies in Indonesia that fairly dominates the market share has motivation to maintain their excellence as a market leader. Therefore, they make an Auto Service Booking Application (ASB App) to improve the services to their customers. By using the application, consumers can register the queue online and get info on what time they can come to the auto repair shop, whether it is according to their readiness or based on the availability of hours, so that consumers do not have to wait long at the auto repair shop.

The confidence to launch the ASB App is supported by the growth of consumers in terms of internet growth, in which the number of internet users reached 176 million out

of a total population of 268 million in 2018. From the total population of 268 Million, 62% of Indonesian people use smartphones (Statistics Indonesia, 2019). Based on the confidence in market share data and mobile users as well as internet growth data, it is important to launch applications to penetrate the potential customers and keep the consumers in order to provide the best service. There is a potential that for the next 5 to 10 years, consumers will switch to use the application due to the simple and fast technology. After launching the application, it turns out that there is a gap phenomenon. There is no significant increase on the application users compared to the increase in smartphone users in Indonesia.

There is a gap between consumers who book applications via offline and online channels. Consumers still prefer the offline booking service although they must wait in a queue at the auto repair shop. Several marketing strategies are carried out to acquire consumers who use services via offline to become online. Specifically, the application provides a booking service without queuing thanks to the special pit provided. In addition, the application also provides discounts during service. Even though various marketing strategies are carried out, the gap still becomes a challenge.

To investigate this gap, a pilot study was conducted with a Forum Group Discussion (FGD) to find out consumers' opinions about the service booking application gap. The Forum Group Discussion (FGD) process was performed in several major cities to find out the views or opinions of consumers regarding the application with specific problems in each region. The Forum Group Discussion (FGD) process consisted of 18 people in each major city area. The samples consisted of as consumers who had booked service without going through the application (via walk-in), consumers who booked via WhatsApp or website, and consumers who used ASB App.

The FGD conducted several times with different criteria by the research team, with surveys in 6 major cities resulted in several points to be drawn as a temporary conclusion in connection with high market share data and changes in consumers using the internet via their mobile phones. From the FGD, the several opinions found mentioning that consumers did not book through the application since they considered it as inefficient, unappealing benefits, and even some of them were unfamiliar with the ASB App. In short, they thought that other ways were considered easier. Based on these findings and literature review, several variables were formulated that

were thought to have a significant effect on consumer intention to use auto service booking, including mobile consumer self-efficacy, perceived ease of use, perceived usefulness, and perceived risk.

II. MODEL CONCEPTUALISATION AND HYPOTHESIS DEVELOPMENT

This research aims to examine the intention of use of ASB App. In the previous research, Technology Acceptance Model (TAM) as a research model was frequently used. TAM was first introduced by Davis. It explains the use of a computer or a technology related to the user habits (Davis, 1989). TAM is suitable to be used as a research in a mobile application, because it can be modified according to the factors needed on the acceptance aspect of a technology (Shin, 2009). Through the study of TAM, there are several variables that are proven to affect each other including: perceived usefulness, perceived ease of use that affect the actual system and lead to the intention to use of the user (Davis, 1989).

Based on the theory developed under Technology Acceleration Model (TAM) derived from the theory of reasoned action (motivation) which explains that attitude toward using has an effect on behavioral intention to use variables which ultimately affect the actual usage. TAM is the first method applying psychological factors to information system, computer adoption, and is now developing into smart mobile (smartphone). According to Davis (1989), there are several variables affecting users in using a technology including: perceived usefulness and perceived ease of use. Perceived usefulness is defined as a level in which someone believes that using the system can improve performance at work. Perceived ease of use is a level in which someone believes that the system is easy to be used. Attitude toward using is often conceptualized as acceptance or rejection as an impact if someone uses a technology for his/her work. Behavioral intention to use is defined as behavioral tendency to continue to use a technology (Davis, 1993).

TAM has limitations in examining a technology in the form of mobile or mobile wallet (Shin, 2009). In the research, the first affecting factor is not paying attention to social effect factor in adopting new technologies. The second factor is the presence of obstacles for the users of certain technology when they are faced with the choice of wanting to use or not (Mathieson, Peacock, & Chin, 2001). The third factor is where TAM thinks that there is only one technology and cannot ignore other alternative technologies. From this limitation, a modification to the TAM model is needed to examine some of the latest technologies, especially in mobile applications in which modifications are made to include the adoption of the technology users modified from the TAM model in the beginning. Although there are various obstacles, TAM is widely used in research on the process of information technology adoption. This model is used to find out user behavior and how the acceptance of the technology will affect whether or not the system is accepted. Therefore,

TAM analysis always involves the aspects of user convenience (ease of use) and usefulness.

Several previous research found that self-efficacy also affects perceived ease of use, perceived usefulness, and continuous intention of use of technology (Joo, Park, & Lim, 2018; Zhang et al., 2017). The concept of self-efficacy has been extended to various scopes such as learning in school's curriculum materials in mathematics, sports, and computers. Adapted from the general concept of self-efficacy, Computer Self Efficacy (CSE) refers to an assessment of a person's ability to use a computer system successfully.

CSE perception has been found to affect a variety of behaviors and outcomes related to computers. For example, CSE shows a negative effect on computer anxiety and a positive impact on the effect on computer, expectations of performance results, expectations of personal results, and actual system usage (Compeau & Higgins, 1995). In the late 2000s, internet technology developed rapidly, and it also encouraged the emergence of new technology products such as cellphones and PDAs, triggering new patterns in the use of technology. Using a mobile device requires different capabilities than using a computer. Therefore, Mobile Self-Efficacy (MSE) is formed to understand the behavior and use of mobile devices and mobile applications. Based on this aspect, there is a suspicion that MSE also affects one's perception of the ease of use of an application. It is also strengthened by research proving that there is a relationship between self-efficacy and perceived benefits and a positive relationship between self-efficacy and perceived ease of use (Bailey, Pentina, Mishra, & Ben Mimoun, 2017; Keith, Babb, Furner, & Abdullat, 2011; Sánchez-Prieto, Olmos-Migueláñez, & García-Peñalvo, 2017). Therefore, it can be concluded by the following hypothesis:

H1. Mobile self-efficacy amongst the ASB App's users has a positive effect on their perceived ease of use ASB App.

When individuals interact with technology, there are judgments about what individuals can do with the technology. It describes mobile self-efficacy as "an assessment of one's ability to use mobile" as an extension of the self-efficacy concept developed by Bandura. There are some views that are also developed on self-efficacy in mobile devices or often referred to as Mobile Self-Efficacy (MSE). MSE can be defined as an assessment of one's ability to use mobile devices and related services, as well as an assessment of the ability to apply these skills to broader tasks (Keith et al., 2011). Self-efficacy technology is proven to have an impact on the level of individual persistence when interacting with technology. It is also shown to have an impact on the use of individual technology and has been used in several studies as an important introduction to the use of technology.

This research aims to investigate how the perception of an individual's ability with a mobile device directly

affects the level of adaptation with the device. For example, if someone cannot determine the location sent to them via a message on a smartphone, this will severely limit the level of a person's effect on a device. Furthermore, it would be highly unlikely that someone would be able to carry out and complete other activities on a mobile device or fully understand the simplicity of a cellular device fundamentally even though many mobile devices come with manuals (Hasan, 2007). It means that there is a positive relationship between self-efficacy and perceived usefulness. Therefore, it can be concluded by the following hypothesis:

H2. Mobile self-efficacy amongst the ASB App's users has a positive effect on their perceived usefulness of the ASB App.

Perception of a risk experienced by someone naturally will affect one's perception of these benefits. There are some risks that can be experienced by consumers, such as failure on a product, failure to do something expected, failure to do what is desired like on the expectations they want in a product. With higher penetration rates in car applications, many people worry about the various types of risks when doing activities by using an application (Ba & Pavlou, 2002). When consumers are unsure about the quality of products, brands, and services, they might be worried about delays or uncertainties in using an application that is far from their expectations or making payments without receiving products or services that are not as expected and prone to fraud. The theory or perception of perceived risk has been applied to explain consumer behavior in decision making since the 1960s.

Risk perception can be determined as consumers' predictions on uncertainty that tends leading to negative results in online transactions in which the definition of perceived risk has changed since the rise of online transactions (Kim, Tao, Shin, & Kim, 2010). Before the digital era, the perceived risk was primarily perceived as fraud on a quality product. At present, perceived risk refers to various types such as financial, product performance, social, psychological, physical risk, or the time when consumers use an application whether the benefits can be proportional to the risks experienced. Therefore, it can be concluded by the following hypothesis:

H3. Perceived risk amongst the ASB App's users has a negative effect on their perceived usefulness of the ASB App.

Bauer initially introduced the concept of perceived risk. He defines risk as an uncertainty and the resulting consequences associated with actions taken by consumers (Lu, Hsu, & Hsu, 2005). Several researchers have adopted this definition, for example, the researchers define perceived risk as consumers' perceptions about uncertainty and consequential loss associated with the purchase of a product or service (Juniwati, 2014). The perceived risk increases with uncertainty and/or the level of associated negative consequences that would be experienced.

Several research have treated perceived risk as a multi-dimensional construction in which there are various kinds of risks that would be experienced by consumers consisting of various types of risks, including financial risk, physical risk, functional risk, social risk, and time loss risk emphasizing the importance of risk related to opportunity costs for making purchasing decisions or decisions for reusing a product (Forsythe & Shi, 2003). In the context of conducting an information technology on the internet, especially using an application, it is frequently defined in situations in which the decision makers have knowledge about the consequences of alternative possibilities that will occur (Forsythe & Shi, 2003). In the previous research, a research on the perception of risk was conducted regarding the existence of a negative influence on technology acceptance in the use of internet banking (Lee, 2009). Other research also say that there is a negative effect on the perception of risk in online banking (Madinios, Chatzoudes, & Sarigiannidis, 2013). Therefore, it can be concluded by the following hypothesis:

H4. Perceived risk amongst the ASB App's users has a negative effect on their ASB App continuance usage intention.

In this research, we have studied the correlation between perceived ease of use and perceived usefulness, however, it is still contradictory (Aladwani, 2013; Moon & Kim, 2001). For example, Gefen and Straub (Gefen & Straub, 2000) found that the correlation is insignificant in predicting e-mail approval as a technology, while other research proved on the contrary (Moon & Kim, 2001; Ramayah & Ignatius, 2005). In the context of using an application, the two correlations between perceived usefulness and perceived ease of use are particularly related because the internet and application users feel that purchasing via the internet as well as making transactions either via mobile or computer is very easy. This is partially due to the fact that an internet or application user will try to shape perceptions about internet shopping based on his/her experience in using internet shopping and how easy the task is carried out (i.e. the perceived ease of use). Therefore, it can be concluded by the following hypothesis:

H5. Perceived ease of use amongst the ASB App's users has a positive effect on their perceived usefulness of ASB App.

Perceived Ease of Use also has an important role in consumers when using an application. Although shopping via the internet using a smartphone is expected to have beneficial results, the complexity of engaging in interaction media (i.e. application) can prove to be worrying for some consumers (Venkatesh, Morris, Davis, & Davis, 2003). Basically, perception of the ease of an application is often associated with "user friendliness" in the application usage (Chau, 2001). If the complexity is proved to be greater than the benefits, then potential application users will prefer to use other simpler applications. One of the obstacles is the long download time for some applications. In addition, the poor design can cause the electronic buyer potentials lose

their focus and do not understand the purpose in using the application. In other words, these obstacles reduce perceptions about the ease of use of the application. In the end, this causes the unwillingness of consumers to get involved in using an application (Mathieson et al., 2001). Therefore, it can be concluded by the following hypothesis:

H6. Perceived ease of use amongst the ASB App's users has a positive effect on their ASB App continuance usage intention.

In the intention to reuse an application or information device, the perceived usefulness is considered as motivation to engage in repetitive information system use, while the perceived ease of use is considered to precede the perceived usefulness. More specifically, perceived usefulness can be defined as "the extent to which a person believes that using a particular system will improve the performance of his/her work".

Perceived ease of use, on the other hand, refers to "the extent to which a person believes that using a particular system will make someone free from effort or in other words to use the system without too much burden. (Davis, 1998). This research also examines the impact of convenience and benefits on the intention to use in various kinds of information technology including online ordering, booking, shopping, and so forth.

According to a research of Kucukusta, it is said that the perception of usefulness and convenience is a fundamental component in examining the adoption of the latest technology and can affect the behavior of its user. Both of these perceptions can affect someone to have the intention to use the product or system (Kucukusta, Law,

Besbes, & Legohérel, 2015). In other research, to find out the intention to order products or services online, a research is also conducted to determine perceptions of usability and convenience that are fundamental to the acceptance of new technology (Technology Acceptance Model). The research was conducted and proven by (Kim et al., 2010). Therefore, it can be concluded by the following hypothesis:

H7. Perceived usefulness amongst the ASB App's users has a positive effect on their ASB App continuance usage intention.

III. METHODOLOGY

A. Sample and Data Collection

The target population of this study was ASB App users in Jakarta, Indonesia. According to the internal data, the ASB App has 1352 active users as of October 2019. This study used non-probability sampling based on convenience sampling. 309 questionnaires were completed by the app users and can subsequently be processed for the analysis. The participants were asked to respond to the items on a five-point Likert-scale ranging from 1 for 'strongly disagree' to 5 for 'strongly agree'.

B. Measurement

This study modified scales that have been tested for reliability and validity in the earlier relevant studies, which include Mobile Self-Efficacy questionnaire (Nikolopoulou & Gialamas, 2017), Perceived usefulness and perceived ease of use (Weng, Zailani, Iranmanesh, & Hyun, 2017), perceived risk (Yang, Pang, Liu, Yen, & Michael Tarn, 2015) and continuance usage (Weng et al., 2017). All items of these questionnaires have high validity, as presented in Table 1.

		Items	FL	α	CR	AVE
MSE	MSE1	I think I can use Apps a mobile device	0.802	0.802	0.863	0.564
	MSE2	I think I can click the link or button to enter a new step using a mobile device	0.773			
	MSE3	I think I can read the content on the screen using a mobile device	0.808			
	MSE4	I think I know how to book service in auto shop using ASB App.	0.515			
	MSE5	I think I know how download content from internet using a mobile device.	0.813			
PU	PU1	ASB App is useful tool for booking service in auto shop	0.898	0.573	0.772	0.537
	PU2	ASB App is more convenience for booking service in auto shop	0.673			
	PU3	ASB App can help me to book an auto service easier.	0.595			
PEU	PEU1	ASB App is easy to use	0.720	0.797	0.860	0.537
	PEU2	ASB App is easy to learn how to use	0.810			
	PEU3	ASB App is flexible to interact with	0.762			
	PEU4	Using ASB App does not require a lot of mental effort	0.622			
	PEU5	I find ASB App to be easy to access.	0.794			
PR	PR1	I think there is a risk that my personal information can be improperly collected.	0.459	0.797	0.860	0.554
	PR2	I think ASB App will cost me much time	0.873			
	PR3	I worry that error can be caused by improper operation of ASB App.	0.937			
CI	CI1	My intentions are to continue using ASB App than booking service offline.	0.935	0.916	0.947	0.855
	CI2	I intend to continue using ASB App rather than discontinue its use	0.931			
	CI3	If I could, I would like to continue using ASB App as much as possible.	0.908			

Table 1:- Instrument items and reliability indices.

C. Structural Equation Modelling

To analyse a model, SEM (*Structural Equation Modelling*) is seen as a proper technique to empirically examine the theoretical relationship of the effects among variables (Chatelin, Esposito, & Tenenhaus, 2002). In SEM, variables of the study are called latent variable, while indicators or items of questionnaires determine the score of each studied variable which are called manifest variable (Monecke & Leisch, 2012). According to Gall, Gall and Borg (2003, 357) Latent variables are constructed based on literature review while manifest variables are variables that are directly measured by researchers.

Model measurement begins with the test for convergent and discriminant validity. Convergent validity aims to determine the degree of correlation between manifest variables and latent variables while discriminant validity is to measure the degree of correlation among manifest variables of different latent variables. (John & Benet-Martínez, 2000). In the convergent validity test, a manifest variable is valid if factor loading is greater than

0.70. Factor loading is the degree of correlation between manifest variables and latent variables (Hatcher & O'Rourke, 2013).

SEM shares a similar method to path analysis, both of which are used to examine interrelationship between variables. Like path analysis, SEM also uses path coefficients to measure degree of the relationship among variables. The path coefficients determine whether the research hypotheses are accepted or rejected. Path coefficient ranges from -1.00 to 1.00. The larger the coefficient the stronger the effect between the two variables (Gall, Gall, & Borg, 2006).

IV. RESULT

A. Demographic characteristic

Descriptive analysis, with percentage, summarized demography of the participants including gender, age, level of education, and frequency of booking using the App. The result is presented in Table 2.

Composition		Number	%
Gender	Male	163	52.5
	Female	146	47.5
Age	18-30	204	66
	31-40	68	22
	41-50	24	7.8
	51 and above	13	4.2
Education	High School and below	40	12.8
	Bachelor	239	77.3
	Master and above	31	9.9
ASB App usage	Once	13	4.3
	Twice	11	3.5
	Thrice	33	10.6
	More than thrice	252	81.6

Table 2:- Sample Structure

B. Measurement model results.

Table 1 shows the result of the Average Variance Extracted (AVE) test. A model is said to be good if the AVE of each variable is larger than the cut off 0.50. AVE is used to assess convergent validity. The results show that all variables have met the criteria. Composite reliability (CR) serves the same function as Cronbach's alpha which measures relationship of internal reliability. Table 1 indicates that all the CRs of the construct variables are greater than 0.7, which meets the rule of thumb. (Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, 2013).

The manifest variable or the items must not be highly correlated with the manifest variable from a different construct. To ensure this, the next step is to establish discriminant validity. In this step, discriminant validity is assessed through the cross-loading value for each variable which should exceed 0.70 or comparing the square root of AVE of each latent variable with the correlation coefficient among latent variables within the model. (Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, 2013). Table 3 shows that all variable meets the criteria of discriminant validity.

	CI	MSE	PU	PEU	PR
CI	0.925				
MSE	0.570	0.751			
PU	0.777	0.517	0.733		
PEU	0.775	0.702	0.710	0.745	
PR	-0.270	-0.322	-0.189	-0.218	0.785

Table 3:- Discriminant Validity

C. Structural Model Results.

The standardized root mean square residual of the research model was 0.05. The results of the model test indicate that the research model explains 51.1% in the perceived usefulness, 49.2% in perceived ease of use, and 71.4% in continuance intention. From the path coefficient, in the correspondent sample, it is confirmed that the mobile self-efficacy has a positive effect on the perceived ease of use ASB App, with a path coefficient of 0.702, and also has a positive effect on the perceived usefulness, with 0.022. According to Gall, Gall and Borg (2003) SEM and path analysis have similar method, both of which are used to determine interrelationship among variables. Therefore, like path analysis, SEM also uses the path coefficient to measure degree of the relationship among variables. The path coefficient is a criterion to accept or reject research hypotheses. The value ranges between -1.00 and 1.00, with value closer to either 1 or -1

indicating stronger relationship between variables (Gall, Gall & Borg, 2003). Furthermore, from the correspondent as a sample, it was confirmed that perceived risk has negative effect on perceived usefulness, with path coefficient of -0.035 and also a negative effect on continuance intention, with -0.089. Perceived ease of use of the ASB App has a positive effect on perceived usefulness (0.691) and continuance intention (0.429). In addition, Perceived usefulness has a positive effect on continuance intention, with 0.458.

The value of effect indicated by path coefficient is only applicable to the sample. To determine whether the result is significant or represents population, non-parametric technique of bootstrapping is necessary (Berrar, 2019). Figure 1 and Table 4 show the result of PLS analysis, and all paths are significant, except for two hypotheses of H2 and H3.

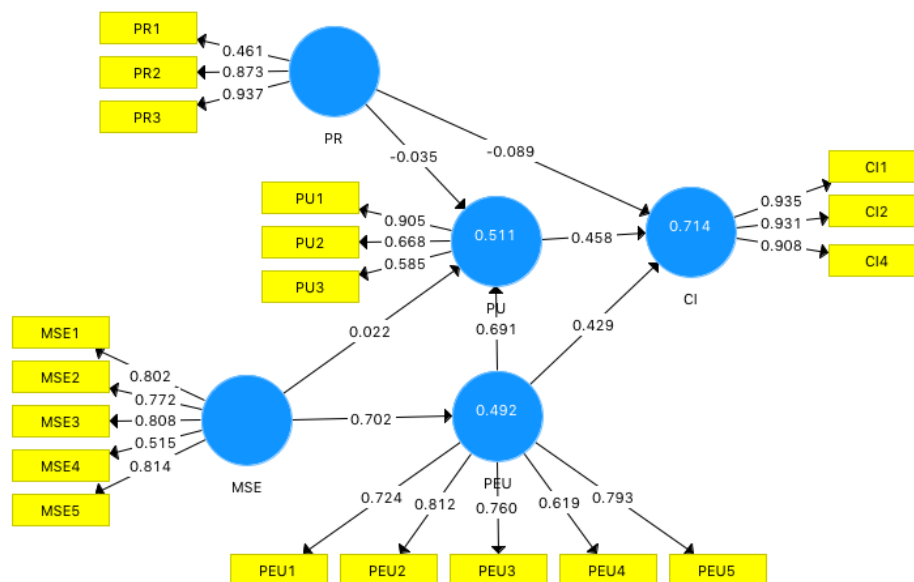


Fig 1:- Research Model after PLS Analysis

Hypothesis	Relationship	Path Coefficient	P Value	Decision
H1	MSE (+) → PEU	0.702	0.000	Supported
H2	MSE (+) → PU	0.022	0.725	Not Supported
H3	PR (-) → PU	-0.035	0.397	Not Supported
H4	PR (-) → CI	-0.089	0.009	Supported
H5	PEU (+) → PU	0.691	0.000	Supported
H6	PEU (+) → CI	0.429	0.000	Supported
H7	PU (+) → CI	0.458	0.000	Supported

Table 4:- Path coefficient and hypothesis testing

V. DISCUSSION

Hypothesis testing for the inner model was performed to predict the inferential relationship among variables. To measure the value of the hypothesis, this study compared t-tables and t-statistics. Hypothesis is accepted if the value of t-statistic value is higher than t-table. This study used a confidence interval level of 95% (alpha 5%) with a one-tailed hypothesis. In other words, the value of the existing t-table should be greater or equal to 1,645. Because the

respondent was infinite, bootstrapping of the existing data was performed during the calculation. The results of hypothesis testing, showing both significant and insignificant result, can be seen in:

H1: Mobile Self Efficacy has a significant effect on Perceived Ease of Use

From Table 4, it can be concluded that hypothesis 1 is supported, where Mobile Self Efficacy has a positive and significant effect on Perceived Ease of Use. This result is

consistent with a study by Zhang, showing that mobile self-efficacy of the mobile health service has a significant effect on Perceived Ease of Use among users of the service (Zhang et al., 2017). Similarly, for the level of mobile self-efficacy of ASB app users, the higher the MSE the easier the ASB app to use, and the other way around.

Furthermore, from the Focused-Group Discussion, consumers or users of the App has not been familiar to use booking service and find difficult using the App. The company has to find a solution to deal with the needs and problems encountered by the consumers. Therefore, the company can change User-Interface and simplify the Flow Journey of booking. Flow journey has to be as easy as possible along with nice user interface in order to be user-friendly and easy to learn for consumers.

H2: Mobile Self Efficacy has a positive effect on Usefulness

From Table 4.14, as for hypothesis 2, it can be concluded that Self Efficacy has a positive effect on Perceived Usefulness, but this is not significant. The result of this study is in line with research by Chau which found that self-efficacy did not significantly influence Perceived Usefulness (Chau, 2001). This proves that individual's level of self-efficacy does not affect his/her perceived usefulness. There are other explanations suggesting that under a high level of self-efficacy, a person can increasingly see limitation of the application that may not be visible to someone who has low self-efficacy. Alternatively, another explanation argues that with the lower self-efficacy, someone cannot understand the perceived benefits of the application. In conjunction with the problems where consumers feel that the benefits of the app are too small as well, the company should find solutions to provide greater perceived benefits to the consumers regardless the level of their self-efficacy.

H3: *Perceived Risk has a negative effect on Perceived Usefulness*

Consumer's Perceived Risk of the ASB app has a negative effect on the Perceived Usefulness, but this is not significant. Based on these results it could be argued that the risks perceived by ASB app users do not affect their view on the benefits of the application. This finding differs from a study conducted by Ozturk, where the study revealed a significant relationship between the risks experienced by consumers and the benefits they received. (Ozturk, 2016). This research gap implies unidentified variable which possibly moderate the relationship between perceived risk and perceived usefulness.

H4: *Perceived Risk has a negative effect on Continuance Intention.*

It was found that perceived risk influences continuance intention, in line with a study by Zakariya, which found that the rate of system reuse of someone was greatly influenced by the level of risk (Zakariya, 2009). Therefore, we can see that a high level of risk affects whether someone wants to reuse an existing system or

application. In this study there are various kinds of risks, including fear of booking failure which becomes the main concern of consumers. This might happen, because booking in the application can fail due to various reasons. For instance, this can be caused by running out of mobile data quota, inadequate booking system, and so forth. Thus, the company must always maintain the system by performing weekly testing and also analyze the server every day to prevent potential troubles that can cause booking failures.

Hypothesis 5: Perceived Ease of Use has a positive effect on Perceived Usefulness

Hypothesis testing found that consumers' perceived ease of use of the ASB App has a significantly positive effect on the perceived usefulness. This result is in line with research conducted by Ozturk (2016) which suggests a strong influence of perceived ease of use on perceived usefulness, wherein research conducted on mobile payment applications concluded that a system is beneficial if the system is easy to use. (Ozturk, 2016). In the service booking application, the benefits received by consumers does not only begin with a service voucher but also start from the ease of using the application. The ease of using an application must be highly regarded because it can cover a variety of aspects such as easy to operate, easy for logging in, easy to book a service, and easy to do all activities. This convenience must be a focus of attention so that consumers can feel the benefits of using the application and will influence the intention to use the product in accordance with the TAM theory developed.

H6: Perceived Ease of Use has a positive effect on Continuance Intention

The result of calculation shows that H6 is accepted, the consumers' perceived ease of use on the ASB App have a positive and significant effect on continuance intention. The result of the study is in line with a study conducted by Ozturk (2016) showing that ease of using mobile payment in an application affects whether the application will be reused or not. Perception about perceived ease of use entails to what extent technology is easily understood by consumers. In this study, consumers can easily use an application supported by a nice user interface (appearance) of the application. FGD revealed that consumers found it difficult to use the booking service application, indicating that consumers did not really understand how to order services through the application via their smartphone. For this reason, it is recommended to change the appearance so that consumers can understand the service booking application.

Hypothesis 7: Perceived Usefulness has a positive effect on Continuance Intention

In Table 4 it can be seen that the effect of perceived risk on perceived usefulness is in a positive direction or direction with the coefficient of 0.458. Thus, the increase in perceived usefulness will also be followed by an increase in continuance intention to use. This result is consistent with research by Ozturk (2016), where perceived usefulness influences on intention to use. In the study, it was argued that greater benefits will influence someone's level of use,

which is the use of the booking service application. The perception of a benefit is a reference for consumers' use the application, because the perception of the benefits talks a lot about how the use of a system can improve the performance of the person, in this case how the application booking service can improve performance or provides effectiveness. It can be concluded that, booking service applications must improve the benefits of someone's performance. For this reason, the company focuses on this by launching a service booking application with the tagline "GaPakeAntre" (NoMoreQueueLine). The tagline must be tried to be implemented consistently because it can be a selling point to consumers in a promotional activity. Under certain conditions, when someone wants to order a service, there can be queues due to the limited workshop capacity and very high demand for service. This can be a good solution for the company to provide various benefits that can be enjoyed by consumers which will lead to the intention to use the booking application continuously.

VI. IMPLICATION

This study offers managerial recommendation for automotive industry which target millennial consumers. The company's management can increase sales by focusing on the factors that influence Intention to Use. This study concluded that there are many factors that influence a person's intention to use an application product, where the most dominant factor is Perceived Usefulness, Perceived Ease of use, and Perceived Risk. Based on the results of this study, the three variables determine whether someone want to reuse the application, especially the service booking application.

There are several steps that should be done by the company to increase consumers' intentions to use a product. First, the company needs to change User Interface and also the User Experience (UI/UX) of an App, where consumers can order service themselves without anyone having to tell, because the modified version of interface design must be able to address the issues that occur in the field. The next step is to increase awareness of booking applications among consumers throughout Honda workshops in Indonesia. For each motorcycle purchase and servicing, the workshop team is obliged to educate consumers by asking them to download, and to teach how to book service through the application which will facilitate consumers.

The company must continue to create benefits for each Honda customer so that the benefits received by consumers outweigh the risks they incur. The company must minimize the risk of booking failures in the system to prevent disappointment and worries among consumers when they want to service. To minimize risk, the company is obliged to carry out weekly server testing and maintenance and develop a security system that can protect consumer's privacy.

VII. CONCLUSION

The ASB app has great potential to transform behavior of the motorcycle users to service in the workshop from offline to online. On the other hand, sustainability of this app is also an important issue which has not received attention in the previous studies in Mobile App for auto service booking. Therefore, this study uses TAM to analyze the factors that influence the user's motivation to continuously use the ASB app. In conclusion, MSE affects perceived ease to use and perceived ease to use along with perceived risk and perceived usefulness are proven to be important factors that influence continuance intention to use the ASB App. To increase perceived ease of use and perceived usefulness, the ASB App must be made easy and meet the user's expectations. Consumers will be satisfied if they find that the ASB app provides more benefits compared to the conventional method of direct booking in the workshop. In addition, service providers must also improve services to minimize perceived risk to the ASB App. To sum up, the service provider of the ASB App should understand the expectations of the users, develop with ease and provide benefits, and be able to guarantee consumers' security to improve marketing and increase awareness of the existence of the ASB App to the motorcycle users.

REFERENCES

- [1]. Aladwani, A. M. (2013). A contingency model of citizens' attitudes toward e-government use. *Electronic Government*. <https://doi.org/10.1504/EG.2013.051276>
- [2]. Ba, S., & Pavlou, P. A. (2002). Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behavior. *MIS Quarterly: Management Information Systems*. <https://doi.org/10.2307/4132332>
- [3]. Bailey, A. A., Pentina, I., Mishra, A. S., & Ben Mimoun, M. S. (2017). Mobile payments adoption by US consumers: an extended TAM. *International Journal of Retail and Distribution Management*, 45(6), 626–640. <https://doi.org/10.1108/IJRDM-08-2016-0144>
- [4]. Berrar, D. (2019). *Introduction to the Non-Parametric Bootstrap*. (April), 0–15. <https://doi.org/10.1016/B978-0-12-809633-8>
- [5]. Chatelin, Y.-M., Esposito, V., & Tenenhaus, M. (2002). State-of-art on PLS path modeling through the available software. *I de E France*.
- [6]. Chau, P. Y. K. (2001). Influence of computer attitude and self-efficacy on IT usage behavior. *Journal of End User Computing*. <https://doi.org/10.4018/joeuc.2001010103>
- [7]. Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly: Management Information Systems*. <https://doi.org/10.2307/249688>
- [8]. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information*

- Systems*. <https://doi.org/10.2307/249008>
- [9]. Davis, F. D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies*. <https://doi.org/10.1006/imms.1993.1022>
- [10]. Forsythe, S. M., & Shi, B. (2003). Consumer patronage and risk perceptions in Internet shopping. *Journal of Business Research*. [https://doi.org/10.1016/S0148-2963\(01\)00273-9](https://doi.org/10.1016/S0148-2963(01)00273-9)
- [11]. Gall, M. D., Gall, J. P., & Borg, W. R. (2006). *Educational Research: An Introduction*, 8th Edition. *Educational An Introduction*.
- [12]. Gefen, D., & Straub, D. (2000). The Relative Importance of Perceived Ease of Use in IS Adoption: A Study of E-Commerce Adoption. *Journal of the Association for Information Systems*. <https://doi.org/10.17705/1jais.00008>
- [13]. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2013). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks. *Sage*.
- [14]. Hasan, B. (2007). Examining the effects of computer self-efficacy and system complexity on technology acceptance. *Information Resources Management Journal*. <https://doi.org/10.4018/irmj.2007070106>
- [15]. Hatcher, L., & O'Rourke, N. (2013). *A Step-by-step Approach to Using SASR for Factor Analysis and Structural Equation Modeling 2nd Ed.* North Carolina: SAS Institute Inc.
- [16]. Jensen, J. M., & Wagner, C. (2018). A cross-national comparison of Millennial consumers' initial trust towards an e-travel website. *Marketing Intelligence and Planning*, 36(3), 318–333. <https://doi.org/10.1108/MIP-12-2017-0327>
- [17]. John, O. P., & Benet-Martínez, V. (2000). Measurement: Reliability, construct validation, and scale construction. In *Handbook of research methods in social and personality psychology*.
- [18]. Joo, Y. J., Park, S., & Lim, E. (2018). Factors influencing preservice teachers' intention to use technology: TPACK, teacher self-efficacy, and Technology Acceptance Model. *Educational Technology and Society*.
- [19]. Juniwati. (2014). Influence of Perceived Usefulness, Ease of Use, Risk on Attitude and Intention to Shop Online. *European Journal of Business and Management*.
- [20]. Keith, M. J., Babb, J. S., Furner, C. P., & Abdullat, A. (2011). The role of mobile self-efficacy in the adoption of location-based applications: An iPhone experiment. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 1–10. <https://doi.org/10.1109/HICSS.2011.430>
- [21]. Kim, C., Tao, W., Shin, N., & Kim, K. S. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. *Electronic Commerce Research and Applications*. <https://doi.org/10.1016/j.elerap.2009.04.014>
- [22]. Kucukusta, D., Law, R., Besbes, A., & Legohérel, P. (2015). Re-examining perceived usefulness and ease of use in online booking the case of Hong Kong online users. *International Journal of Contemporary Hospitality Management*. <https://doi.org/10.1108/IJCHM-09-2013-0413>
- [23]. Lee, M. C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*. <https://doi.org/10.1016/j.elerap.2008.11.006>
- [24]. Lu, H. P., Hsu, C. L., & Hsu, H. Y. (2005). An empirical study of the effect of perceived risk upon intention to use online applications. *Information Management and Computer Security*. <https://doi.org/10.1108/09685220510589299>
- [25]. Maditinos, D., Chatzoudes, D., & Sarigiannidis, L. (2013). An examination of the critical factors affecting consumer acceptance of online banking: A focus on the dimensions of risk. *Journal of Systems and Information Technology*. <https://doi.org/10.1108/13287261311322602>
- [26]. Mathieson, K., Peacock, E., & Chin, W. W. (2001). Extending the Technology Acceptance Model: The Influence of Perceived User Resources. *Data Base for Advances in Information Systems*. <https://doi.org/10.1145/506724.506730>
- [27]. Monecke, A., & Leisch, F. (2012). SemPLS: Structural equation modeling using partial least squares. *Journal of Statistical Software*. <https://doi.org/10.18637/jss.v048.i03>
- [28]. Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web context. *Information and Management*. [https://doi.org/10.1016/S0378-7206\(00\)00061-6](https://doi.org/10.1016/S0378-7206(00)00061-6)
- [29]. Nikolopoulou, K., & Gialamas, V. (2017). High School Pupils' Attitudes and Self-Efficacy of Using Mobile Devices. *Themes in Science and Technology Education*, 10(2), 53–67.
- [30]. Ramayah, T., & Ignatius, J. (2005). Impact of Perceived usefulness, Perceived ease of use and Perceived Enjoyment on Intention to Shop Online. *ICFAI Journal of Systems Management (IJSM)*.
- [31]. San-Martín, S., Jiménez, N. H., & López-Catalán, B. (2016). Los beneficios del CRM móvil para la empresa desde la perspectiva del marketing relacional y el modelo TOE. *Spanish Journal of Marketing - ESIC*, 20(1), 18–29. <https://doi.org/10.1016/j.reimke.2015.07.001>
- [32]. Sánchez-Prieto, J. C., Olmos-Migueláñez, S., & García-Peñalvo, F. J. (2017). MLearning and pre-service teachers: An assessment of the behavioral intention using an expanded TAM model. *Computers in Human Behavior*, 72, 644–654. <https://doi.org/10.1016/j.chb.2016.09.061>
- [33]. Shin, D. H. (2009). Towards an understanding of the consumer acceptance of mobile wallet. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2009.06.001>
- [34]. Statistics Indonesia. (2019). *Telecommunication Statistics in Indonesia 2018*.

- [35]. Thaichon, P. (2017). Consumer socialization process: The role of age in children's online shopping behavior. *Journal of Retailing and Consumer Services*, 34(September 2016), 38–47. <https://doi.org/10.1016/j.jretconser.2016.09.007>
- [36]. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly: Management Information Systems*. <https://doi.org/10.2307/30036540>
- [37]. Verma, V., Sharma, D., & Sheth, J. (2016). Does relationship marketing matter in online retailing? A meta-analytic approach. *Journal of the Academy of Marketing Science*, 44(2), 206–217. <https://doi.org/10.1007/s11747-015-0429-6>
- [38]. Viswanathan, V., Hollebeek, L. D., Malthouse, E. C., Maslowska, E., Kim, S. J., & Xie, W. (2017). The dynamics of consumer engagement with mobile technologies. *Service Science*, 9(1), 36–49. <https://doi.org/10.1287/serv.2016.0161>
- [39]. Weng, G. S., Zailani, S., Iranmanesh, M., & Hyun, S. S. (2017). Mobile taxi booking application service's continuance usage intention by users. *Transportation Research Part D: Transport and Environment*, 57, 207–216. <https://doi.org/10.1016/j.trd.2017.07.023>
- [40]. Yang, Q., Pang, C., Liu, L., Yen, D. C., & Michael Tarn, J. (2015). Exploring consumer perceived risk and trust for online payments: An empirical study in China's younger generation. *Computers in Human Behavior*, 50, 9–24. <https://doi.org/10.1016/j.chb.2015.03.058>
- [41]. Zhang, X., Han, X., Dang, Y., Meng, F., Guo, X., & Lin, J. (2017). User acceptance of mobile health services from users' perspectives: The role of self-efficacy and response-efficacy in technology acceptance. *Informatics for Health and Social Care*, 42(2), 194–206. <https://doi.org/10.1080/17538157.2016.1200053>