Factors Influencing To Intention Of Purchase Food Through Online Apps: The Case Of Jakarta

Rintinta Ayu Pradhani, M.M
Management Department, Binus Online Learning, Bina Nusantara University,
Jakarta, Indonesia

Abstract: As smartphone usage has increased in recent years, mobile commerce has also experiencing rapid growth. The objective of this study is to provide a specific study focused on the factors influencing intention behavior of online food delivery service (GO-FOOD) users, specifically in Jakarta. Technology Acceptance Model (TAM) is used in this study to know about the influencing factors. This research uses Multiple Simple Regression and Simple Regression Method. The sampling method in this research is purposive sampling, where the unit of sample is focused on the online food delivery. Finding shows that all of the variables significantly effect behavioral intention behavior of customers. Attitude of Go-Food service users are influenced by three factors, namely perceived usefulness, perceived ease of use, and environment. Attitude has positive and significant influence on Intention. The findings of this research show that it is important for online food delivery service to maintain the usefulness and ease of use of their app. When the app itself is considered useful and bring benefit to users, it affects the attitude of the users to adopt the app and to use it again in the future. Findings offers practical and theoretical implications.

Keywords: Ease of use, Online app, Usefulness, Intention, Jakarta

I. INTRODUCTION

For many businesses, mobile apps can be used as an addition to electronic marketing and they can help increase a company’s competitiveness. In addition, mobile apps are also able to alternate how consumers purchase due to their prevalence and convenience. This allows mobile app users to receive and spread information faster than ever (Islam, Low, & Hasan, 2013). One of the industries which heavily depends on Internet services and mobile apps in food industry. Indonesia as fourth populated country has growing number of mobile users. Due to large population and increasing spending power of people, food industry is growing rapidly in Indonesia (Kementrian Pariwisata Republik Indonesia, 2016). The number of new restaurants with new innovation and services is encouraging the existing restaurants to increase their competition in order to survive in the food industry.

As food service industry keeps innovating as noted by Prasetyo (2018), the technological advancement based on the Internet created a great impact in food service industry. Since technology has made it easy to gather and deliver information around the world, it is likely for food service industry to utilize the benefit of technology to obtain needed information and to promote their business through Internet or mobile app in order to achieve an efficient and effective marketing effort. As stated by Pamungkas (2016), food delivery app has gained high popularity that makes the competition in the food delivery market to be more aggressive.

Fauzi (2018) revealed that the lifestyle of Indonesians has a hobby of ordering food. Most people in Indonesia have the lifestyle of favoring to eat that is reflected in the number of food orders made by online food delivery services, and the phenomenon in Jakarta was people prefer to stay home rather than to come out because of the traffic and turned out it happens everywhere else apart from Jakarta (Fauzi, 2018).

Delivery service is the process of which goods are transferred from an initial location to a predefined location. This service has an advantage of making it easier for consumers to order and purchase food conveniently without having to visit the restaurant. Online food delivery service...
apps are being a trend as the level of acceptance and competitiveness in the market has increased (Agustinus & Momongan, 2018).

In Indonesia, computer-based restaurant services have been gradually replaced by mobile apps (Money & I Magazine, 2018). Thus, many restaurant managers have found the need to use apps to offer customers a personalized and diverse experience. The Jakarta food delivery service market is very competitive (Elvandari, Sukartiko & Nugrahini, 2018), and examples of new apps include the Go-food app, the Food panda app, and the Grab-food app. Due to large number of users of Go-Food app, current study focus on this mobile app.

By looking at the number of users of Go-Food app, it seemed that Gojek company have gained a massive popularity from Indonesian market. Not only to utilize the function of Go-Food app, but the user also utilizes it to promote their own start-up business in the food industry. According to Setyowati (2018), recently the Chief Commercial Expansion Go-Jek Indonesia states that the merchant that use Go-Food app as their media to promote their food or their restaurant has reached 125 thousand. Moreover, the number of transactions made in a day can reached 1,400, thus can be conclude that not only Go-Jek have a massive merchant partners from their users, but also, they have a massive customer from their users to buy food from those merchants.

Go-Food is claimed to be the largest food delivery service in the world (Ayuwuragil, 2018). At the end of 2017, GO-JEK Indonesia company has been the biggest digital company e-commerce in Indonesia (Lembaga Demografi, 2017). According to the Lembaga Demografi (2017), the research data showed that GO-JEK company has contributed over Rp 8 trillion per year into Indonesian economy from their transportation feature and has contributed Rp 1.7 trillion per year into the economy, through to their company income. It has been predicted that there will be an increase by over Rp 138 billion per month from their Go-Food feature.

Hence, Technology Acceptance Model (TAM) will be used to analyze the level of intention of people to use or to accept the technology such as Go-Food in their daily activity. The model is based on perceived usefulness and perceived ease of use (Kang & Namkung, 2019). Since the food service industry is now highly demanded and the competition in the market become more aggressive, it will be very beneficial to also know how the customer in the market react to the app that provide food delivery service (Kapoor & Vij, 2018). This study also modified the TAM model by adding the environment factor to know if environmental factors such as advertising affect to decision making of consumers by using this app.

PROBLEM STATEMENT

The demand for food delivery service exists before Go-Food app was established, and that time the service was already popular. Since the technology become more advance, electronic company that produces mobile phones is able to invent smartphones and allows the device to have more feature including smartphone apps such as Go-Food. The demand for food delivery service will significantly higher than ever since Go-Food complements the existing market with a more convenient, fast, and cost-efficient way for the customer to order and receive food. The benefit is not only by the customer who orders food, but it is also enjoyed by start-up businesses to promote themselves as start-up restaurant with their homemade menu.

Hence, although the online food delivery apps in Jakarta have been rapidly growing, very little academic research has been about consumer behavior who use online delivery app. Additionally, Go-Food has just been operated since early of 2015 and not a lot research has been conducted for Go-Food and there is not a lot of research that show how companies can get benefit from this app like the restaurant industry (Handi, Hendratalo, Purwanto & Halauw, 2018). Hence, this research will fill in the previous gaps and will explore the factors influencing users’ behavior when using online food delivery service app to accommodate for the lack of research on the customers’ perspectives.

PURPOSE OF THIS STUDY

The objective of this research is to explore the factors that influence users’ intentions of online food delivery service app in Jakarta, specifically GO-FOOD based on Technology Acceptance Model (TAM).

SIGNIFICANT OUTCOME

This study will potentially enrich the existing literature of mobile technology adoption in the food delivery service industry. Thus, the proposed model can be an appropriate theoretical model for exploring mobile apps in the food delivery service industry. Moreover, this study will offer restaurant owners information regarding how consumers in Jakarta diners perceive online food delivery mobile apps as well as what drives them to adopt technologies. The findings of this study can be used as a guide for restaurant managers to effectively improve their marketing strategies. Beside consumers, restaurants also can find benefit from this research through knowing what consumers think about this online app so they can maintain their service through this app.

II. LITERATURE REVIEW

Literature was selected based on the alignment of the various aspects that affect customer’s intention. Those angles include ease of use, usefulness, environment, and attitude.

USEFULNESS

“Perceived usefulness” can be defined as the level to which a technology may increase job performance for an individual. The possible “ease of use” means the level to which individuals think that using a specific technology lacks a significant amount of effort (Davis, 1989).

Davis (1989) explained perceived usefulness as the level at which consumers think that a specific technology can upgrade job performance. The higher the potential usefulness of the technology, the more likely the technology will be adopted (Mun Lim, 2009). Morosan (2011) justified that if the
potential usefulness of a technology is greater, then the chance of users that will use the technology in the future will also be greater (Lee, Lee & Jeon, 2017). According to Kim (2014) and Xu, Gan and Yan (2010), the positive relationship exists between perceived usefulness of the intention to use the technology. In this study, the technology refers to is Go-Food app. If the Go-Food user perceived that the GO-FOOD app is very useful for them, they would be more likely to try or use the app. Chang (2013) suggest that the perceived usefulness can be seen as performance expectancy. Therefore, if the app user expect that the Go-Food would improve their performance in ordering food more efficiently, they would become more likely to use the app. With these factors involved, this study hypothesizes: H1: There is a positive relationship between consumer’s perceived usefulness of online food delivery app and their attitude to adopt the online food delivery app.

EASE OF USE

Perceived ease of use is defined as the user’s perception of a specific technology is effortless to utilize (Davis, 1989). The more convenient a piece of technology is users are more likely to adopt it (Morosan, 2011; Sohn, 2017). Yoon (2016) states in his study that perceived ease of use has a positive relationship with Intention. Further, perceived ease of use also has a positive relationship with attitude. According to their research on librarian’s technological acceptance, Sheikhshoaei and Oloumi (2011) found that perceived ease of use has an effect towards the attitude. Thus, based on the previous findings it can be conclude that if the app user perceived that the app is easy to use, they would be more likely to use it. In the case of current study, if GO-FOOD user find it easy to use the app they will use it more frequently or even promote the app if they are satisfied beyond their expectation. With these considerations, this study hypothesizes: H2: There is a positive relationship between consumers’ perceived ease of use of online food delivery app and their attitude to adopt the online food delivery app.

ENVIRONMENT

According to Le Roux (1994), attitude is the emotional reaction of a person towards certain events, object, or a person. Another researcher defined attitude as the reaction of a person towards non-verbal social features and an object, and they must gain certain attitude through an experience that would influence their behavior (Breckler & Wiggins, 1991; Wang, Zuo, Yang & Wu, 2019). Therefore, one’s perspective towards technology or in this case GO-FOOD app, will be influenced by their experience of using technology and delivery services that would affect their attitude towards the technology that they were using.

Lewin (1936) introduced the formula B=f (P, E) where B is the Behavior, P is the Person, and E is Environment. The formula showed that behavior of a person is influenced by the interaction between individuals with other people and also with their environment. This assumes that if the environment of a person is supportive in terms of technology acceptance, the behavior or the attitude of a person towards technology would be more positive. A considerable number of studies have extended the TAM in order to fit the more complex consumer environment and reflect on the nature of a particular technology (Mo Kwon, Bae, & Blum, 2013; Morosan, 2011). This study hypothesizes: H3: There is a positive relationship between users’ environment and their attitude to adopt the online food delivery app.

ATTITUDE

Ajzen (1991) defined attitude as the positive and negative emotions towards doing certain activity. Supported by the previous studies by Joo and Choi (2015) and Nguyen et al., (2019), a positive attitude towards certain activity will trigger an intention to actually do that activity. Thus, in this study, if the user already established a good and positive attitude towards accepting technology in their daily life and towards the new app so called GO-FOOD that enables them to order food conveniently, they would likely be intent to utilize the app to ease their effort to purchase food. Another research conducted by Davis (1989) suggested that in some cases, the process does not always have to be in order. In some cases, one could directly develop behavioral intentions and not develop any attitudes towards the activity (Sumerta & Wardana, 2018). In their research, Davis (1989) found that this process could sometimes occur when one found the usefulness of the activity or when one directly perceived the activity to be useful. Therefore, this study hypothesizes: H4: Attitude has a significant effect on behavioral intention.

INTENTION BEHAVIOR

As stated by Wibowo (2008), behavioral intention to use is the intention of a person to start using or keep using a certain technology. The willingness or the intention to use of a person towards technology can be measured by looking at their motivation and effort to get to know or to maintain to use the technology (Dixit & Prakash, 2018). For example, if the user is keen to get to know of how to use the technology by doing some research in order for them to be able to use it, they are considered to be high in their Intention to Use. If the user tries to maintain to use certain technology by purchasing or adding some additional hardware or software, they can be seen of having a highly positive Behavioral Intention towards the technology. In case of Go-Food, a person can be considered as highly motivated in the intention to use if he or she is willing to use the app again in the future or sharing the information about the app to other people.

TECHNOLOGY ACCEPTANCE MODEL

Technology Acceptance Model (TAM), created by Davis (1989), is a popular theory that aims to explore one person’s intentions with using specific technologies (Hong, Thong, & Tam, 2006). TAM is originated from the Theory of Reasoned Action developed by Ajzen and Fishbein (1975). To this day, technology adoption studies grounded in TAM predominantly identifies ‘perceived usefulness’ and ‘ease of use’ as the determinants of technology adoption (Chang, 2013; Morosan, 2014). According to Hindagolla (2014), Technology
Acceptance Model (TAM) is a model that can predict the behavior of the user. The component of this model includes perceived ease of use and perceived of usefulness, followed by attitude, and finally behavioral intention. Rafique et al., (2020) and Han (2003) believed that TAM is very influential and frequently used in the information system research. The function of this model is believed to be very beneficial and very accurate to predict user’s behavior in terms of technology. Muchran and Ahmar (2019) posits that TAM model is the strongest model that predicts user’s behavioral intention compared to other acceptance theories. Supported by Han (2003), that TAM provides a simple model of framework and yet can explain a complex problem in a various area of research with a quick and cost-effective method to obtain the result. Morosan (2014) mentioned there are other ideas about technology adoption such as Theory of Reasoned Action, Theory of Planned Behaviour but the TAM is still the primary theory with regard to research in “technology adoption”.

RESEARCH FRAMEWORK

This framework shows the relationship of the variables in this study. The research framework of this research is adapted from the Technology Acceptance Model by Davis (1989). The variables as well as the relationship that are adapted from the TAM are perceived usefulness, perceived ease of use, attitude and behavioral intention. Whilst environment is an additional variable that is also tested in this research.

![Figure 1: Theoretical Framework of the Study](image)

### III. RESEARCH METHODOLOGY

To measure the customer’s intention about purchase food through online apps, questionnaires were distributed randomly to people who are ordered food by Go-Food app. This research adopted quantitative approach and applied a purposive sampling method. The distribution of the questionnaires was done through online method to 149 respondents. Previous literature was used to develop the questionnaires. There were modification and adjustment as well to validate the content.

The first part of the questionnaire consisted of 5 questions to ask about the usefulness of online app. The questions for this part were borrowed from previous study (Ventakesh & Bala, 2008). The second part comprised of 4 questions in order to know the ease of use of online app. Relevant questions were adopted from previous literature (Ventakesh & Bala, 2008). The third section consisted of 6 questions to know the environment (Kalanda, 2005). While, for the fourth segment which consisted of 5 questions that measured the attitude of the customers (Doub, Levin, Heath, & LeVangie, 2015). The fifth section measured the intention to purchase through online apps with 3 questions (Ventakesh & Bala, 2008). All of them used five-point Likert scale (1=strongly disagree to 5=strongly agree). And finally, at the last part of the questionnaires, the questions were about socio-demographic characteristics of the participants. A pilot test was conducted to 20 random respondents in order to confirm the reliability and validity. The result indicated that majority of the respondents were single (71.8 per cent) and most of them were bachelor graduates (58.4 per cent). Data also indicated the majority of respondents were entrepreneur (34.2%) and their level of income were between 3 to 10 million Indonesian Rupiah per month (38.3%). In terms of frequency most of them order 2-3 times a week (36.2%) and in each time spend between 50 000 to 100 000 Indonesian Rupiah (47.7%). Table 1 depicts the respondents’ profile.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>78</td>
<td>52.3</td>
</tr>
<tr>
<td>Female</td>
<td>71</td>
<td>47.7</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School (SMA)</td>
<td>34</td>
<td>22.8</td>
</tr>
<tr>
<td>Diploma</td>
<td>23</td>
<td>15.4</td>
</tr>
<tr>
<td>Bachelor (S1)</td>
<td>87</td>
<td>58.4</td>
</tr>
<tr>
<td>Master (S2/S3)</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>107</td>
<td>71.8</td>
</tr>
<tr>
<td>Married</td>
<td>41</td>
<td>27.5</td>
</tr>
<tr>
<td>Divorced/widow</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;20 years old</td>
<td>40</td>
<td>26.8</td>
</tr>
<tr>
<td>20-30 years old</td>
<td>71</td>
<td>47.7</td>
</tr>
<tr>
<td>31-40 years old</td>
<td>24</td>
<td>16.1</td>
</tr>
<tr>
<td>&gt;40 years old</td>
<td>14</td>
<td>9.4</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>39</td>
<td>26.2</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>51</td>
<td>34.2</td>
</tr>
<tr>
<td>Student</td>
<td>27</td>
<td>18.4</td>
</tr>
<tr>
<td>Freelancer</td>
<td>18</td>
<td>12</td>
</tr>
</tbody>
</table>
This analysis aims to investigate the factors that influence and contribute to users’ intention to use Go-Food app. If users feel confident that the Go-Food app is useful, perceived ease of use, and environment has a significant effect on users’ intention in the future. The behavioral intention in using the GO-FOOD app is inseparable from the influence of attitudes towards the GO-FOOD app. Attitude towards Go-Food app are influenced by three factors, which are perceived usefulness, perceived ease of use, and environment with the attitude as a strong predictor. Furthermore, the results showed the majority of the respondents are young, from the working class and with middle level of income. Companies can use this category of respondents when they want to target their market as well as developing their app.

V. CONCLUSION

The primary objective of this study was to identify the factors that influence and contribute to customers’ intention to use Go-Food app. The results of the study were able to prove the Technology Acceptance Model (TAM) in explaining the factors that influence users’ behavior intention in of Go-Food app. The results showed a significant effect of the factors to users’ intention in the future. The behavioral intention in using the GO-FOOD app is inseparable from the influence of attitudes towards the GO-FOOD app. Attitude towards Go-Food app are influenced by three factors, which are perceived usefulness, perceived ease of use, and environment with the attitude as a strong predictor. Furthermore, the results showed the majority of the respondents are young, from the working class and with middle level of income. Companies can use this category of respondents when they want to target their market as well as developing their app.

PRACTICAL IMPLICATION

Based on the results of this study, there are four factors that can determine the users’ behavioral intention in using the GO-FOOD app, which are perceived usefulness, perceived ease of use, environment, and attitude. Therefore, it is important to monitor the performance of the Go-Food app system so that there will be no problems that can disadvantage app users, so that Go-Food app is truly beneficial for people who using this app. If users feel confident that the Go-Food app is useful, it will have an attitude that supports the use of the app, which will ultimately affect the behavioral intention of users in using the app in the future. Likewise, the ease of using the Go-Food should also be maintained by GOJEK management. Environmental factors also play a crucial role; the study found that environment has a strong positive relationship to attitude meaning GOJEK company can increase them advertisements through social media to attract more customers and for their other services to penetrate the market. Through the findings of this research, food business owners can also benefit from the online delivery app and for people who want to develop an online app, the findings of this research show the factors that indicate the intention of users for the app. Other business apart from food business such as travel industry that want to maintain their app can also use the findings of this research. Marketers and advertisers should emphasize and put more attention to the socio-demographic of their target customers by doing pre-analysis before launching the advertising. Companies need to know which type of method that is more engaging to the customers.

THEORETICAL IMPLICATIONS

The findings of this study can add to literature about online app in Indonesia and can be the base for providing...
questionnaire in future study in this field. Moreover, the research framework of this study can also be used in future research to make comparisons of the findings. This research can also contribute to the literature in consumer behavior and online apps studies, especially in the case of Jakarta.

VI. LIMITATION AND FUTURE SUGGESTION

There are some limitations related to this research. First is the number of respondents that still need to be improved so that it can represent the GO-FOOD app user population and the data obtained can be more varied and accurate results. Secondly, the location of the research is only done to users in the Jakarta region, while GOFOOD app can also be enjoyed by users in other big cities such as Surabaya, Bandung, Semarang, and others. Therefore, data analysis in this study cannot be generalized to GO-FOOD consumers in Indonesia and the perception of people in different regions are different as Jakarta is more technology oriented. For future research, using a larger number of samples and involve GO-FOOD consumers from other cities so that they can represent the study population. Future research can also use GO-FOOD customers in other big cities in Indonesia to provide data regarding the different perception of people in different regions. Moreover, future research can be conducted as a qualitative research to show more in-depth findings.

REFERENCES


