Would You Like to Buy Food via Ecommerce App? The Mediating Role of Brand Image in Electronic Word of Mouth, Perceived Ease of Use, and Purchase Intention

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Abstract: The rapid development of online food delivery applications in Indonesia currently makes Shopee launch a new feature, Shopee Food. By joining the online food delivery application market in Indonesia, Shopee Food must be able to compete with other online food delivery applications. This study aims to analyzed the factors that influencing purchase intention in Shopee Food. Using Brand Image as the mediating factor for Perceived Ease of Use and Electronic Word-of-mouth, this study tries to explain customer intention to purchase food in shopeefood. This study used quantitate method with purposive sampling to draw the respondent, with total 345 respondents. The findings of this study found that word-of-mouth, perceived ease of use plays significant role on user purchase intention in Shopeefood, and brand image also significantly mediate the relationship of perceived ease of use and word of mouth toward intention to use.

Keywords: Perceived Ease of Use; Word of Mouth; Brand Image; Intention to Use

Introduction

Nowadays, the growth of online food delivery is very popular. This situation arises when information and technology advance at a rapid pace. The use of the internet network known as smartphones is the most recent development (Sinulingga & Jokhu, 2021). The transformative energy of information technology has propelled peoples ahead and the proceeding of transitioning civilization forward, aided through the rapid flow of expertise (Widyanto & Rachmad Saleh, 2018).

Since the Covid-19 outbreak, people more often use online food delivery and use online food delivery during Covid-19 because they cannot go out. It is critical to monitor how this outbreak affects the business, and restaurants are one of the most impacted businesses (Liewin & Genoveva, 2019). A restaurant is a crucial venue since it is a public space that frequently becomes a gathering spot for many people (Lestari & Genoveva, 2021). The influence of social constraints imposed by
the Indonesian government has also evolved in online food purchases using online food delivery applications (Liewin & Genoveva, 2019). Because many people stay home due to social distancing, they order food more frequently (Kartono & Tjahjadi, 2021). In Indonesia, Google found that public interest in online food delivery services is very high. Those are reflected in the high search for food brands on Google to 13 times, the highest compared to neighboring countries (Kurnia, 2019). Nielsen Singapore research shows that around 58% of Indonesian’s people buy fast food through online applications via mobile phones (Jayani, 2019).

According to a Nielsen Singapore report, food delivery services are starting to become a trend in Indonesia. Therefore, the business potential is considered quite large. One of the pioneers of this service is GoFood from Gojek (Setyowati, 2019). Based on data in Statista as of July 2021 (Figure 1.3), online food delivery applications often use GoFood (Gojek) at 25%, second is Grabfood (Grab) at 20%, third is Others, and Yum! Brands by 15% (Statista, 2022). Now Shopeefood plays an important role on the competition as the new player on food delivery application. Using Promotion to accommodate new consumer and old user makes shopee one of the key player in food delivery application.

This study constructs a mobile app model by positioning perceived ease of use and electronic word of mouth as the antecedent of the purchase intention in shopeefood. It also includes brand image as the mediating role for the two determinants. These three variables used based on the literature study in the online context. Perceived ease of use has been used to determine the intention to use an app (Rini & Khasanah, 2021; Vahdat et al., 2021). The context that previously used are from online meeting app and shopping app while this research we focused on the context of food delivery app. Hence, this research play important role on the extending marketing scope to the new context of food delivery app purchase intention. Another determinant we use to adopt with context is electronic word of mouth. Previous literature study had been vigorously support the use of electronic worth of mouth as the determinant for intention to purchase in app, from online ecommerce to grocery shopping (Rusmayanti & Agustin, 2020; Shaikh et al., 2018; Sulthana & Vasantha, 2019). There’s a huge gap in term of food delivery app purchase intention research.

According to Erkmen and Turegun (2022) brand image mediate the relationship between system quality and service quality toward customer purchase intention in impulsive behavior on online food delivery. Another research brand image used as mediator effect on purchase intention in the effect of influencer with indirect effect of electronic word of mouth and celebrity endorser (Dewi & Giantari, 2020). Based on many others research this study add brand image as an important factor in online application transaction (Chitra et al., 2019; Li & Peng, 2021). Furthermore Sulaiman et al. (2022) mentioned brand image is important intangible assets that influence customer purchase decision and mediate the effect of promotion.

Based on the previous argument the authors feels adding brand image in this research is important. Since many online purchase decision used brand image to associate the application toward customer value. Following the previous research we used brand image as mediating variables in the context of purchase decision not impulsive behavior and also there are no research used brand image for online food purchase decision with the indirect effect of electronic word of mouth and perceived ease of use. This research tries to fill the important gap in the food delivery app purchase intention. Based on the previous argument, this study tries to check the direct relationship from perceived ease of use and electronic word of mouth toward shopeefood purchase intention. Next we tried to extend the marketing scope research by adding brand image as the mediating factor of those two relationship.
Literature Review

Brand Image

Brand image stems from all of a user perception, experience and consumption experience (Jalilvand & Samiei, 2012). According to Putri (2018), brand image is a brand’s perception of a consumer's memory that is mirrored in the brand association. Therefore, customers' opinions of a company's communication and operations are influenced by its brand image (Martínez et al., 2014). Brand image is a necessary factor in improving the relationship among the brand and the customer (Mabkhot et al., 2017). The previous research said brand image is defined as the general impression of a brand or product in the minds of consumers; it encompasses the complete identity of the product or brand (Mehmood & Shafiq, 2015).

Purchase Intention

Based on previous research by Aztiani et al. (2019), the meaning of purchase intention refers to a consumer’s intention to purchase a specific product and how many products are needed in a given time frame. Purchase intention may be defined as a mental statement made by a buyer that reflects a purchase plan for some products from a specific brand. Meanwhile, purchase intention is the chance that a purchasers will buy a product and has a high probability of doing so (Putri, 2018). Similarly, purchase intention refers to a consumer's desire to buy or prefer things based on their needs. Moreover, purchase intention is a consumer's enthusiasm to buy, and it is part of the mechanism that leads to a purchase action (Sinulingga & Jokhu, 2021). Intentions represent the motivating factors that impact action and indicate people's effort to perform the behavior. Hence, purchase intention described to the mental stage of the decision-making method in which the customer develops a authentic predisposition to behave in preference of a product or brand (Tardin & Pelissari, 2021).

Perceived Ease of Use

According to Venkatesh (2000) perceive ease of use is the extent to which a person believes that using technology will be free of effort. Many research of technology adoption model (TAM) used ease of use as the determinant for behavioral intention (Iyer & Siddhartha, 2021; Khanna & Wahi, 2017; Ying et al., 2021). As stated by Davis (1989), the meaning of perceived ease of use is the degree to whose someone believes that the usage of a given system does not require attempt. In addition, perceived ease of use describe as the lack of effort required to use a technology utility (Plidtookpai & Yoopetch, 2021). Perceived ease of use means the degree to know what the customers believe that an activity requires little effort, and the effort is seen as a limited resource associated with a particular activity on their part (Radner & Rothschild, 1975). Furthermore, the degree to which consumers agree with the internet site that used to purchase items and helps them to find lots of information with little person effort is called perceived ease of use (Rehman et al., 2019).

The study on perceived ease of use shows there are positive relationship toward purchase intention (Suprapto & Kunci, 2022). Previous research used fintech context on intention to adopt the application in which generalize to mobile application as a whole. In the other context perceived ease
of use on online shopping activity highly significant factor especially on the era of covid-19 pandemic (Iriani & Andjarwati, 2020). In the context of food application brand image is crucial when we order food from the credible application. Therefore, using brand image as the mediator between perceived ease of use and customer purchase intention deemed to be important. As mentioned by Vahdat et al., (2021) brand image play important role on perceived ease of use and purchase intention. An application with less effort to use without embedded image of brand in customer mind will stop them for trying the application. Therefore based on the previous argument we decide to add these two hypothesis:

H1: Perceived ease of use has positive influence on Purchase intention on shopeefood
H2: Perceived ease of use mediated by brand image has positive influence on Purchase intention on shopeefood

Electronic Word of Mouth

Electronic word-of-mouth is a good or negative statement or comment made through a past or actual purchaser approximately a product or company that can be accessed through massive number of people and institutions thru the internet. Individuals can transmit an EWOM message through a variety of social situations in general. (Hidayat & Astuti, 2019).

With the advent of social media, anyone can now express anything, from positive to negative experiences with a product. It is now known as EWOM. Electronic word-of-mouth is stated as an expressed as an informal, manor woman-to-character conversation about a brand, product, company, or carrier between a perceived non-industrial communicator and a recipient (Min, 2020). EWOM can instantly disseminate and diffuse information to a large number of clients. Customers may readily share their ideas on social media, contributing to spreading information (Erkan & Evans, 2016).

Based on the Vahdat et al., (2021) social influence and peer influence specially social media had a big impact toward the perception, motivation, and attitude toward a brand. Previous research shows a big impact on electronic word of mouth toward purchase intention in online shopping (Rusmayanti & Agustin, 2020). According to Dewi & Giantari, (2020) the role of brand image in mediating the EWOM and purchase intention is very important in the context of celebrity endorser. In our context we tried to extend the previous findings by advocating the context of food application in Indonesia. Therefore we try to explain the relationship between EWOM, brand image, and purchase intention with these hypothesis:

H3: Electronic word of mouth (EWOM) has positive influence on Purchase intention on shopeefood
H4: Electronic word of mouth (EWOM) mediated by brand image has positive influence on Purchase intention on shopeefood

Methods

This study used questionnaire to investigate the relationship between WOM and perceive of ease of use to purchase intention in shopee food mobile app mediated by brand image. In this study we used non probability sampling to draw our respondent because there are several criteria to filter our
respondent. To make sure we got the right sample we use purposive sampling which means can pull all 'Shopee food user' not only 'the shopee user'. The shopee users are the one who download shopee application while shopee food users are people who download and know food delivery features that may or may not use the features yet. The respondents were 345 in total from larger city in Indonesia that used shopeefood services. In the filtering, all respondent were asked whether they were shopee user, specifically shopeefood transaction. We draw our respondent from shopeefood users only to fill all the question. From 345 participants, 87% (301) female respondent and the rest are boys, and aging range 17 to 36 years. In this study, we also draw our respondent based on the average income of respondents in a month. Based on the visible results (Table 1), 194 respondents or 56%, have a monthly income <Rp. 1.000.000. Then 103 respondents or 30%, have a monthly income of Rp. 1.000.000 to 3.000.000. After that, 29 respondents or 9%, have a monthly income of Rp. 3.000.000 to 5.000.000. In addition, 8 respondents or 2%, have a monthly income of Rp. 5.000.000 to 7.000.000. The remaining 11 respondents or 3%, have a monthly income of >Rp. 7.000.000. Based on the results obtained, the common monthly income of respondents is <Rp. 1.000.000.

Table 1. Respondent Profile

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>44</td>
<td>13%</td>
</tr>
<tr>
<td>Female</td>
<td>301</td>
<td>87%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 – 25 Years old</td>
<td>316</td>
<td>95%</td>
</tr>
<tr>
<td>26 – 30 Years old</td>
<td>13</td>
<td>4%</td>
</tr>
<tr>
<td>More than 36 Years old</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>Monthly Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rp. 1.000.000. – Rp. 3.000.000</td>
<td>103</td>
<td>30%</td>
</tr>
<tr>
<td>Rp. 3.000.000 – Rp. 5.000.000</td>
<td>29</td>
<td>9%</td>
</tr>
<tr>
<td>Rp. 5.000.000 – Rp. 7.000.000</td>
<td>8</td>
<td>2%</td>
</tr>
<tr>
<td>&gt;Rp. 7.000.000</td>
<td>11</td>
<td>3%</td>
</tr>
</tbody>
</table>

Purchase intention in shopeefood was measured using previous research using 5 items Likert scale. (Jiménez-Castillo & Sánchez-Fernández, 2019). Perceived ease of use was measured was measured using five point Likert scale adopted from an existing research (Iriani & Andjarwati, 2020). Electronic word of mouth was measured using electronic based or online based theory using likert scale 5 items (Diantari & Jokhu, 2021). Brand was measured was measured using five point Likert scale adopted from an previous research that used online application context (Kadi & Amalia, 2021).

Table 2. Indicators Measurement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Operational Definition</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| Perceived Ease of Use (Iriani & Andjarwati, 2020; Venkatesh, 2000) | Perceived ease of use is stretch of a person believes of using technology without a hassle | I easily got what I was looking for in Shopee Food  
I feel Shopee Food is easy to access and use  
I feel the instruction in Shopee Food clear and understandable  
I easily remember how to use Shopee Food  
The more often I access the Shopee Food, I feel like more advanced in using Shopee Food |
| Brand Image (Jalilvand &   | Brand image is the perception about the                                                  | I can distinguish Shopee Food from other food delivery applications              |
|                            |                                                                                        |                                                                                  |

I feel that Shopee Food has very high quality than other food delivery applications

I feel that Shopee Food is very trustworthy than other food delivery applications

I feel that Shopee Food is better than other food delivery applications

I feel that Shopee Food is very innovative

Electronic word of mouth (Diantari & Jokhu, 2021; Jalilvand et al., 2011) Electronic word of mouth is the process of sharing information and opinion by consumer that affect buyer perception towards or away from specific product, brands, and services.

I frequently gather information from online reviews before I use the applications

When I purchase in Shopee Food, online reviews make me confident in purchasing to the Shopee Food

The online reviews recommend the Shopee Food

The online reviews of Shopee Food is understandable

The quality of online reviews of Shopee Food is high

Purchase Intention (Ali, 2016; Jiménez-Castillo & Sánchez-Fernández, 2019) Purchase intention is consumer's willingness to perform specific purchasing behavior towards product or services.

If have to choose a food delivery applications I will choose Shopee Food

I will always look for the information about Shopee Food

I will choose Shopee Food when needed next time

I plan to repurchase in Shopee Food in near future

I will recommended Shopee Food to my family and friends

The technique of sampling used in this research is purposive sampling. Purposive sampling is technique of sampling to draw the respondent from the population with certain criteria that had to been set before to validate our research findings (Jokhu & Armando, 2018). We uses Partial least Square Structural equation Modeling (PLS-SEM) to predict the hypothesis relationship (Diantari & Jokhu, 2021). PLS SEM also able to find the direct and indirect relationship in the model (Jokhu & Kawilarang, 2021).

PLS used to examine the reliability, validity, and path analysis of the determinant. The rule of thumb of Composite Reliability (CR) is 0,7 and Average Variance Extracted (AVE) for validity is 0,5. As for the validity of the items variable we examine the outer loadings (table 3). Based on Hair et al. (2019) the threshold for loadings is 0,7. Therefore, the items loading lower than 0,7 must be removed from the analysis. Based on the rule of thumb, in our validity test first test we exclude EWOM2, PEOU1, and BI1 from our models. Our construct validity and reliability value scored more then minimum threshold therefore we proceed to the structural modelling test.

Table 3. Construct Validity

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Factor Loading</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Ease of Use</td>
<td>PEOU2</td>
<td>0,862</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU3</td>
<td>0,863</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU4</td>
<td>0,842</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEOU5</td>
<td>0,838</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EWOM1</td>
<td>0,809</td>
<td>0,725</td>
<td>0,913</td>
</tr>
<tr>
<td>Electronic Word of Mouth</td>
<td>EWOM2</td>
<td>0,756</td>
<td>0,665</td>
<td>0,888</td>
</tr>
<tr>
<td></td>
<td>EWOM3</td>
<td>0,844</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EWOM4</td>
<td>0,850</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EWOM5</td>
<td>0,778</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BI2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Brand Image
BI3 0,872 0,712 0,908
BI4 0,897
BI5 0,824
PI1 0,796
PI2 0,759
Purchase Intention
PI3 0,798 0,635 0,897
PI4 0,852
PI5 0,775

Source: Author’s PLS Results

For discriminant validity we used Fornell-larcker criterion assess the results (Table 4). Based on the results the square root of the AVE of the latent variable is larger than the correlation coefficient between the other discriminant variable, thus the discriminant validity of the variables accepted (Wang et al., 2021). It means that there are no correlation between variables used in this model. Every variable has proven to be valid in discriminant validity test.

<table>
<thead>
<tr>
<th></th>
<th>Brand Image</th>
<th>EWOM</th>
<th>PEOU</th>
<th>Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Image</td>
<td>0,844</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EWOM</td>
<td>0,593</td>
<td>0,815</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEOU</td>
<td>0,522</td>
<td>0,520</td>
<td>0,851</td>
<td></td>
</tr>
<tr>
<td>Purchase Intention</td>
<td>0,652</td>
<td>0,553</td>
<td>0,572</td>
<td>0,797</td>
</tr>
</tbody>
</table>

Source: Author’s PLS Results

Findings

To check our hypothesis we used bootstrap features in SMART PLS. The results of the hypothesis and mediation testing were explained by the structural modelling software thus for we able to estimates the significance of path weight (Figure 1). First, Perceived ease of use have positively significant effect on purchase intention ($P<0,05$; $T = 5,224$). Second, as expected, brand image positively significant and partially mediate the relationship between perceive ease of use on purchase intention ($P<0,05$; $T = 6,007$). This means without mediated by brand image there still an effect of perceived ease of use on purchase intention. Third, as expected, Electronic word of mouth (EWOM) have positively significant effect on purchase intention ($P<0,05$; $T = 3,124$). Fourth, as expected, brand image positively significant and partially mediate the relationship between electronic word of mouth (EWOM) on purchase intention ($P<0,05$; $T = 4,800$). This means without mediated by brand image there still an effect of electronic word of mouth (EWOM) on purchase intention.
Figure 1. PLS – SEM Result

Table 5. Hypothesis Summary

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>T-value</th>
<th>P-Values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 : PEOU – Purchase Intention</td>
<td>5.224</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2 : PEOU - Brand Image - Purchase Intention</td>
<td>6.007</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3 : EWOM – Purchase Intention</td>
<td>3.124</td>
<td>0.002</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4 : EWOM - Brand Image - Purchase Intention</td>
<td>4.800</td>
<td>0.000</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Author’s PLS Results

The data shows that perceived ease of use significantly influences customer purchase intention in Shopee Food. This statement is substantiated by research established by previous research (Alhumaid et al., 2021; Rehman et al., 2019; Vahdat et al., 2021), which states that there are any positively and significantly influence of perceived ease of use on customer purchase intention. This result supported by the previous research by Suprapto and Kunci (2022) that found in the context of fintech perceive ease of use have significant impact toward purchase intention. On the other note, about online purchasing behavior, Iriani and Andjarwati (2020) found that perceive ease of use significantly affect purchase intention. these results shows that in the context of online purchase intention perceive ease of use is important factors for making online food purchase intention.

While in the context of perceived ease of use toward purchase intention mediate by brand image there are no previous research tries to ties down the know yet in online food delivery. Vahdat et al. (2021) supported this theory whereas his research implicitly mentioned the key point of brand image in perceived ease of use toward purchase intention behavior. According to Iyer and Siddhartha (2021) brand image is important to refer customer behavior intention in India. On the context of online buying brand familiarity and brand association is very crucial in creating perceived trustworthiness toward their product. Easiness user interface without good brand familiarity by customer experience might not develop the intention to purchase the product in the online food application.
For electronic word-of-mouth is significant influence on customer purchase intention in Shopee Food. This statement is substantiated by research conducted by Rusmayanti and Agustin, (2020), which establish significant influence of electronic word-of-mouth on customer purchase intention. Based on Usman and Dyanti (2019) electronic word of mouth play important role on buying product on online application. As mentioned word of mouth gives information that helps user to understand the application features better than the application customer service. Therefore the good opinion on application features increase the intention to use the features itself.

The mediating effect of brand image toward purchase intention from EWOM and brand image never been look in previous research (Dewi & Giantari, 2020; Kavitha Venkatasubramany Iyer & Siddhartha, 2021). This research supported by the previous research findings in EWOM influence toward purchase intention mediate by brand image, in Xiaomi smartphone and celebrity endorser (Dewi & Giantari, 2020; Yohana et al., 2020). According to Suprapto and Kunci (2022) brand image as a determinant has no effect on purchase intention in the context of fintech business. Different to the online food delivery application, brand image play crucial parts since opinion were flow through comment features and social media. These will effect the customer purchase intention on shopee food delivery services.

**Conclusion**

This research focuses on how perceive ease of use and EWOM factors determine shopeefood user purchase intention mediate by brand image. The results says that perceived ease of use and EWOM have significant effect on purchase intention and brand image partially influence the effect of those two factors. Intention to purchase in shopeefood was swayd by the effort of using the app. As Most shopee user already enjoyed the app user interface therefore they find it easy to use shopeefood for food delivery transaction. As for the EWOM, many young generations, most our respondent, have positive review on shopeefood app. This phenomenon shows an important role of social media community, EWOM, organically spread the positive word on shopeefood app increase the purchase intention on the app. Lastly, brand image of shopee plays important role in these two factors. Shopee that already known as the cheapest ecommerce in Indonesia makes its user convinced to purchase in their new innovation like shopeefood. The ease of use accompanied by shopee brand image as a reliable ecommerce positively effect user purchase intention on its food delivery features. Whereas EWOM indulge by shopee brand image increase its user intention to purchase in its food features. Shopee should increase their fanbase by indulging missionary marketing where they gives promotion toward consumer who can sell their recommendation food therefore it will increase the word of mouth flow on social media. Supported by the convenience user interface it will gives shopee better weapons on its shopee food features compare to the other online food delivery.

Like other studies there are limitations in this study. First, the context of food delivery always present special issue for customer behavior studies, different context makes it not applicable for every market. Future research should aim to determine the extent research on the demographic criteria. In the interest of food delivery app, this study did not examine the substitute factor in the market. Many players use different strategy for food delivery services. Last, this study did not examine technology acceptance model (TAM) as a whole, future research should consider of using TAM as their factors for purchase intention mediated by brand image.
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