



Online Food Delivery App Distribution and Determinants of Jakarta's Gen Z Spending Habits

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Abstract

Purpose: Considering the COVID-19 pandemic and the increasing number of online food delivery applications (OFDA), this study aims to assess the distribution of the presence of Indonesian OFDA and to measure the factors that influence the spending habits of OFDA users. **Research design, data and methodology:** Two hundred and nine OFDA users from Jakarta's Generation Z were surveyed via a questionnaire. The data were analyzed using Structural Equation Modeling and SMART PLS 3.0. **Results:** OFDAs were introduced into Indonesia in the recent past with varying degrees of popularity determined by the number of downloads. Users' intention to use was not determined by the speed of the introduction of an OFDA. This study also reveals that previous experience of the service, the orientation of time and price savings had a significant effect on spending habits. A moderating role of the saving variable on time and price was not demonstrated. **Conclusions:** The results of the study suggest that, in COVID-19 pandemic conditions, the spending habits of Generation Z are not based on impulse, thrift, or extravagance. The pandemic shaped specific motivations in spending habits, namely prioritizing need. This study has limitations, including the small sample size and the use of internal variables.

Keywords : Online Food Delivery App, Distribution Channel, Time Saving, Price Saving, Spending Habits

JEL Classification Code : D39, L84, L86, L66

1. Introduction

Competition in the online food delivery service industry or OFD (Gunawan, Sondakh, & Alamsjah, 2020; Gunden, Morosan, & DeFranco, 2020; Suhartanto, Ali, Tan, &

Sjahroeddin, 2019) in Indonesia is increasing. OFD can be used on websites or applications. Along with the demand from customers, several brands have emerged that create or complement their services with an online food delivery feature. Online food delivery service application (OFDA)

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can be divided into 2 categories in Indonesia, namely those managed by the restaurant brand itself and those managed by a separate company not related to the restaurant brand. On Google Play Store, several OFDAs are managed by restaurant brands such as Pizza Hut Delivery, McDonald's Delivery Indonesia, KFC Delivery, and Burger King Indonesia. OFDAs managed by separate companies include GoFood, GrabFood, ShopeeFood, and Traveloka Eats.

In addition to the attractive business opportunities in this sector, these modes of management are supported by the characteristics and behavior of target users who are consumers and favor contemporary lifestyle applications. This supports the findings of Thamizhvanan and Xavier (2013) that emphasize those factors that companies must consider to maximize online market profits, including the need to understand the preferences and mindsets of target customers. Several studies have raised the phenomena of direct effects on online purchasing decisions that include consumer behavior, business orientation, and technical aspects (Bringula, 2016; Clemes, Gan, & Zhang, 2014; Ingham, Cadieux, & Berrada, 2015; Lian & Yen, 2013). This suggests that business growth in the service sector is highly dependent on consumer behavior. Further, technical aspects are a factor given that technological capabilities facilitated the emergence of applications for online food delivery. These applications represent a solution to the high consumer demand for online purchases. This again echoes Thamizhvanan and Xavier's findings (2013) that emphasize the cause of increasing public demand for online shopping being related to the gaps in supply chain distribution that make it difficult for companies to reach all points in an area.

A further perspective related to spending behavior in online purchases concerns previous experiences (Sitar-Taut, Mican, & Codruta, 2020; Yeo, Goh, & Rezaei, 2017) that can trigger either a trauma response or an addiction to repeat purchase. A further aspect here are the characteristics of consumers who are attracted to OFDA's time-saving (Bashir, Mehboob, & Bahtti, 2015) and price-saving orientation (Akroush & Al-Debei, 2015; Assaker, Hallack, & El-Haddad, 2020). However, these characteristics do not apply equally to all consumers, especially when viewed from the perspective of the generation group. Thus, studies are needed to provide deeper insights into the behaviors and orientations of this age group. As Punj (2011) shows, factors such as income, education, and age need to be considered when analyzing spending habits in online purchases. In addition to the buying habits of this age group in online buying purchases, studies are needed to compare the perspectives of other generations, such as Generation Z that has a birth year after 1995 (Bassiouni & Hackley, 2014). This generation exhibits different characteristics, such as making social media a medium for life interests (Nuzulita & Subriadi, 2020), searching for information on the internet

(Dabija, Bejan, & Tipi, 2018) and on YouTube (Christian, Pardede, & Indriyarti, 2022).

As outlined above, previous research on spending habits using online food delivery applications focused more on the research models that involved direct effects. However, it is necessary to consider indirect effects, such as moderating effects. Few previous studies considered the indirect effect of the variables used in explaining spending habits. Some (Aharony, 2015; Mang, Piper, & Brown, 2016; Tan & Ooi, 2018; Wong, Yeung, Ho, Tse, & Lam 2012) did consider a moderating effect of the use of technology in purchasing. However, these studies used customer age as a moderator. Complementary studies are still needed to understand the interests and behavior of consumers in specific age groups. Further, research models based on a structural modeling approach, especially those that assess the indirect effects of moderating variables, such as time-saving and price-saving orientations, are rarely encountered, particularly when evaluating online food delivery using applications. In contrast, this study aims to explore the distribution of online food delivery applications in Indonesia from the perspective of user download popularity. A second aim is to explore and analyze the effect of factors, such as previous experience, time-saving orientation, and price-saving orientation on spending habits in the Generation Z group in using online food delivery applications in Jakarta. The Generation Z group was chosen for this research because of its spontaneous consumption behavior, it is close to the technology of lifestyle applications and its development, and it provides novelty in terms of the target group. Together, these variables represent a new approach to an in-depth analysis of spending habits using online food delivery applications.

2. Literature Review

2.1. Spending Habits

Hoang and Le (2020) and Tan and Ooi (2018) explain that habit is the extent to which individuals take actions or carry out their behavior automatically. This is consequent to lessons from previous experiences. This phenomenon also applies to spending habits in buying food online. Thus, spending habits in this context can be explained as a form of online food buying behavior by individuals using applications to make repeat purchases at the same place or different places. Further, spending habits, especially those online, are often associated with habits involving the use of technology (Venkatesh, Thong, & Xu, 2012). As the Unified Theory of Acceptance and Usage of Technology expounds, the use of a technology must be based on consumer acceptance, which is formed by hedonic motivation and

habits. Such hedonic motivation can be influenced by age and consumer experience. This theorizing provides the support for the measurement of spending habits used in this study, especially benefits related to spending habits when using technologies such as OFDA. Following Tan and Ooi (2018), the study also considers aspects of performance expectancy and effort expectancy in the use of mobile devices in shaping consumer behavior. Furthermore, and based on this previous research, the age of consumers is included because of the influence of users' experience in using a particular technology. Thus, this study re-evaluates the role of age in a specific and targeted way through the Generation Z group. However, online purchases still include risk, because there is no direct interaction between the purchaser and the product being purchased (Thamizhvanan & Xavier, 2013). One such risk is the consumer's anxiety about price comparisons. Consequently, getting the best price is one of the most common habits of online buying.

2.2. Time Saving Orientation

Purchasing online can save time (Chiu, Wang, Fang, & Huang, 2012). Moreover, with high-income shoppers, online purchasing can save time (Punj, 2012). Time saving benefits for this customer group means that they can use this time for other activities. However, purchasing food through applications that provide a variety of choices can take time. Characteristics that are oriented towards a time-saving orientation are usually found in urban areas with a relatively high level of activity mobility. Some urbanities usually do not spend time making purchases thus making online purchasing a solution. This view may operate in the Generation Z group in a big city like Jakarta. As explained above, Generation Z tends to prefer what is instant, being able to make purchases quickly, and doing other things instead, for instance having time for entertainment (Bashir et al., 2015).

2.3. Price Saving Orientation

Price is a form of monetary value in exchange for a product or service. This accords with the previous research (Assaker et al., 2020; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Gupta, Dogra, & George, 2018) that an orientation to save on prices is a monetary value for consumers. In other words, there is a value advantage in the price for the buyer. In the context of purchasing, customers want to get as cheap a price as possible (DeVecchio & Puligadda, 2014). This is a characteristic of OFDA that can provide price information. Thus, price orientation comes into play, where consumers take concerted action to save money by getting a cheap(er) price. Escobar-Rodríguez & Carvajal-Trujillo (2014) explain that this orientation allows

researchers to understand action taken to save as a strategy to get the best deal while avoiding additional prices that may rise during the buying process. Thus, online purchases provide customers with the benefit of comparing food prices of both traditional retailers and between online retailers (Akroush & Al-Debei, 2015; Chiu et al., 2012). In food purchasing, some customers still want to consider prices that are not cheap but that reflect other factors, such as food quality or food nutrition.

2.4. Prior Online Purchase Experience

Online purchases begin with a desire or plan to make an online purchase (Chen, Hsu, & Lin, 2010) in the knowledge that the process will take time and money to complete (Wu, 2013). Previous experience using OFDA will then be an assessment or evaluation for the next purchase, which can take the form of a recommendation to either keep buying or not to buy, or just giving a lesson about what things should and should not be done in making an online purchase. This corresponds to Yeo et al.'s (2017) findings that previous purchase experience can be useful for reducing doubts so that purchasing decisions can be formed with certainty. Similarly, Sitar-Taut et al. (2020) suggest that previous buying experience can reduce the process of searching for unnecessary information on the product/service to be purchased. A pleasant buying experience can be shaped not only from the quality of information available on online sales media (Chen & Tsai, 2019) but also from the smooth functioning of the sales media used which can build trust (Bobadilla, Ortega, Hernando, & Gutiérrez, 2013), loyalty (Melis, Campo, Breugelmans, & Lamey, 2015) and save time. In summary, consumers use previous experiences in online purchases to evaluate the experience in terms of benefitting in the next online purchase, especially in saving time and seeking information about more cost-effective price options.

2.5. Hypothesis Development

Previous research used prior experience to measure customer intentions in making online purchases (Ling, Chai, & Piew, 2010; Thamizhvanan & Xavier, 2013). This research emphasized that the more experience in making previous online purchases, the higher the customer's intention to make future online purchases, including the use of OFDA. The next proposition, based on Akar and Nasir's findings (2015), uses the prior purchase experience factor to measure purchase intentions. This factor is a predictor of the desire to make a purchase. As with Bonera (2011) evidence in relation to online purchases, this study uses experience as determining purchasing decisions. Based on these previous studies, a point of note is that, in online purchases,

previous experience is closely related to the habit of making future purchases. This study therefore proposes hypotheses (H) as follows:

- H1:** Prior online purchase experience significantly affects the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic.
- H2:** Prior online purchase experience significantly affects the time saving orientation of Generation Z in Jakarta in buying food using applications during the pandemic.
- H3:** Prior online purchase experience significantly affects the price saving orientation of Generation Z in Jakarta in buying food using applications during the pandemic.

Research conducted by Jadhav and Khanna (2016) on students making online purchases in India uses the time-consciousness factor to measure purchasing decisions. Furthermore, this study explained the time factor as a determinant in online purchasing. Measuring the intention of consumers to buy food in Malaysia using a smartphone also involved a time-saving orientation factor (Pitchay, Ganesan, Zulkifli, & Khaliq, 2022). The importance of the time-saving orientation for customers using smartphones to access OFDA has a significant impact in shaping customers' attitudes in continuing to use them. Customer behavior in the decision to spend forms the output of satisfaction in using online food delivery services. One form of satisfaction is the orientation factor in saving time (Agarwal & Sahu, 2021). However, time saving orientation is still measured as a direct effect in these studies. Nonetheless, the orientation of saving time could be a predictor variable that has an indirect effect as a moderator. Thus, this research addresses this issue and propose the following hypotheses:

- H4:** Time saving orientation significantly affects the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic.
- H5:** The time saving orientation will moderate the relationship between prior online purchase experience and the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic.

Previous studies have attempted to explain the various forms of price linkage to online purchasing decisions. Kim, Xu, and Gupta (2012) in their research on online purchases in Korea, used the price factor to measure the purchase intention of potential and previous customers. Regarding the price perspective, Bringula (2016) explains that, if the price is not accompanied by product quality, a habit to buy online will not be formed, and customers will be more likely to

choose to buy in traditional shops. Pitchay et al. (2022) developed the Unified Theory of Acceptance and Use of Technology (UTAUT) using a price saving orientation factor to measure attitudes relating to customer use of smartphones in Malaysia. The price-saving orientation factor in this study has a direct impact on customer attitudes towards smartphones in online food delivery purchases. Complementing the concepts of existing studies, this research seeks to assess whether the orientation of saving on price plays a role in the direct effect only or whether it can also act as a moderator on the indirect effect in online food purchases using OFDA. Therefore, this study involves the orientation of saving on price in direct and indirect effects based on the following hypotheses:

- H6:** Price saving orientation significantly affects the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic.
- H7:** Price saving orientation will moderate the relationship between prior online purchase experience and the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic.

Based on the explanations for developing the hypotheses above, the paradigm of this research model is described in Figure 1 below:

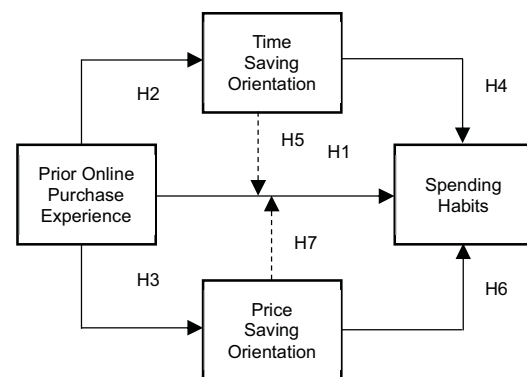


Figure 1: Research Model

3. Research Methods and Materials

3.1. Measurement of Operational Variables

3.1.1. The Measurement of Spending Habits

The explanations above referenced several previous studies that measure spending habits (Chong, Chan, & Ooi, 2012; Hoang & Le, 2020; Thamizhvanan & Xavier, 2013; Venkatesh et al., 2012) from various perspectives.

Considering the characteristics of the sample, research area, and cultural characteristics in measuring spending habits using OFDA, this study uses five measurement items that adapt research from (Crosta, Ceccato, Marchetti, Malva, Maiella, & Cannito, et al., 2021). The first item is *feeling more efficient in making online purchases of food that is a necessity during the pandemic* (SPEND1). The second item used to measure spending habits is *feeling more extravagant in making online purchases on food that is a necessity during the pandemic* (SPEND2). The third item is *feeling more efficient in making online purchases of complementary foods (not primary needs) during the pandemic* (SPEND3). Fourth, this study uses measurements with items that *feel more extravagant in making online purchases of complementary foods (not primary needs) during the pandemic* (SPEND4). The fifth item is *to make impulse purchases more often during the pandemic on complementary foods (not primary needs)* (SPEND5).

3.1.2. The Measurement of Prior Online Purchase Experience

Few studies specifically use previous experience as a measurement variable. However, several indicators have been developed that can measure previous experiences with online purchases. Some (Thamizhvanan & Xavier, 2013) used indicators of comfort in making online purchases, being experienced in making online purchases, and felt able to use web sites to make online purchases. In relation to convenience in previous experiences, Bringula (2016) mentions three comparisons as measurement items, namely online and in-store purchases in terms of ease of replacing purchased products, ease of paying for purchased products, and ease of choosing products. In terms of convenience, this study uses two items, namely places (online or in stores) that are more fun and those that are more recreational in making purchases. Based on this evidence, this study uses two items to measure prior online purchase experience in using OFDA, namely *comfort in the experience of using online food purchase application services* (PRIOR1) and *habits in using online food purchasing application services* (PRIOR2) (Thamizhvanan & Xavier, 2013; Yeo et al., 2017).

3.1.3. The Measurement of Time Saving Orientation

Previous studies describing orientation to time saving involve a series of perspectives. For example, Jadhav and Khanna (2016) use the term 'time consciousness' to mediate the relationship between time saving and customer behavior. On the other hand, Pitchay et al. (2022) and Agarwal and Sahu (2021) use direct aspects related to time-saving orientation in online food purchases. The time saving orientation in the use of OFDA in this study adapts measurements from Alreck and Settle (2002) and Yeo et al. (2017) which consist of four items, namely *the use of online*

food purchasing application services provides benefits (TISO1), *the use of online application services can speed up the food purchasing process* (TISO2), *the use of online food purchase application services can save users time* (TISO3), *trust in the importance of a fast food ordering/purchase process online for users* (TISO4).

3.1.4. The Measurement of Price Saving Orientation

Several previous studies measured the orientation of price savings on online purchases (Bringula, 2016; Kim et al., 2012; Pitchay et al., 2022). Bringula (2016) for example, used the statements to the effect that: it is more expensive to buy online, limitations in bidding prices, limitations in comparing prices directly. To measure the price-saving orientation in the use of OFDA, this study adapted the measures of Tomás Escobar-Rodríguez & Carvajal-Trujillo (2013) and Yeo et al. (2017) which consisted of two items, namely *the use of services and online food purchase application can get savings on prices for users* (PRSO1) and *an online food purchase application service allows users to search for cheap food offers from various restaurants* (PRSO2).

3.2. Sample and Data Collection

This study uses a questionnaire survey to collect data which was randomly distributed in early March 2022. This period is still categorized as the COVID-19 pandemic period in Jakarta. The questionnaire was prepared using 13 statement items on a Likert measurement scale with a range of 5, where 1 = strongly disagree to 5 = strongly agree. The criteria for the participants in this study were the Generation Z group born after 1995 (Bassiouni & Hackley, 2014). From this age group of participants, the study determined the minimum age of participants to be 17 years (the minimum age limit for adults in general in Indonesia) and a maximum age of 26 years (the age limit for the Z Generation group).

The diversity of OFDA in Indonesia requires that this study determine the criterion for a user in Jakarta, as being one of the OFDA managed by an independent company (i.e., not managed by a restaurant brand). The next criterion is that the participant must have experience buying food (food as a primary need and non-mainstream need) using one of the OFDAs during the COVID-19 pandemic. The population size for these criteria is not known with certainty, however, the sample size can be determined by multiplying the number of items on the questionnaire by 5 to 10 (for the maximum sample size) (Benitez, Henseler, Castillo, & Schuberth, 2020; Willaby, Costa, Burns, MacCann, & Roberts, 2015; Wolf, Harrington, Clark, & Miller, 2013). In the process of recruiting participants according to the criteria specified above, participants were required to answer these questions at the beginning of the questionnaire

for later screening to determine participant eligibility for analysis. After the screening process, of the 227 prospective participants who filled out the questionnaire, 209 (92.07%) were subsequently eligible for analysis. This number constitutes the sample size of this study. The number of participants accords with the provisions for determining the sample size described above.

3.3. Analysis Technique

The first part of this research is an explanation of OFDA distribution in Indonesia. These distribution data were obtained from Google Play Store and then cross tabulated analysis using IBM SPSS Statistic 25 was performed. Secondly, to analyze the determinants of spending habits, the study used partial structural modeling analysis using SMART PLS 3.0. Data can be analyzed if they are reliable and valid. Therefore, this study tested data reliability and validity. The reliability test used composite reliability (CR). The CR results obtained must be > 0.7 to determine the reliability of data. Furthermore, the validity test examined the results of the outer loading (OL) and average variance extracted (AVE). The OL results obtained must be > 0.7 and $AVE > 0.5$ to determine the validity of the data (Barati, Taheri-Kharamah, Farghadani, & Rásky, 2019; Christian, Dewi, Rembulan, Indriyarti, Wibowo, & Yuniarto, 2021; Memon & Rahman, 2014). The fit model considered the results of Standardized Root Mean Square (SRMR) where $SRMR < 0.1$, $Chi2 > 0.05$, Normed Fit Index (NFI) < 0.09 (Hu & Bentler, 1999; Hussain, Fangwei, Siddiqi, Ali, & Shabbir, 2018). This research will explain the coefficient of determination based on the results of R^2 . The results of R^2 with a number > 0.75 indicate that the exogenous variables used in measuring endogenous variables are strong, 0.5 to < 0.75 are moderate, and < 0.5 are weak. In explaining the results of the hypotheses, this study considers the p-value results where $p < 0.05$ (Ali, Hilman, & Gorondutse, 2020; Christian, Haris, Indriyarti, Wibowo, & Sunarno, 2021; Otache, 2019).

4. Results and Discussion

4.1. Results

4.1.1. Distribution of Participant Profile

As shown in Table 1 about how the participants' profiles are distributed, this study consisted of 209 participants from Generation Z and included more women than men. Based on the frequency of buying food during the COVID-19 pandemic online, more than 45 percent of participants made purchases more than 5 times a month. Meanwhile, participants who buy with less frequency starting from once

a month, 2-3 times a month and 4-5 times a month had almost the same number of participants, which was more than 30%. These results can indirectly explain that online food purchases with applications during the pandemic were quite often used by Generation Z groups in Jakarta. Furthermore, the applications that were most often used to purchase food online during the pandemic were predominantly the Shopee Food application (40 percent), followed by Grab Food (30 percent), Go Food (20 percent) and Traveloka Eats (less than 2 percent). This result is noteworthy, in that the preference of the Z Generation group for using online food purchase applications during the pandemic was possibly still being influenced by the offers of new applications. This is evidenced by the large number of Shopee Food users, while Shopee application began to be known and discussed only in early 2021. Older applications included those such as GoFood from Gojek (launched 2015) and Grab Food from Grab (launched in 2016) that were operating with their existing marketing strategies. Marketing on online food purchasing applications for Generation Z in Jakarta was still directed to the companies' own users, although companies targeting this group slowly began to share with other competitors. On the other hand, as the newest application (that started becoming popular in 2022), Traveloka Eats from Traveloka still must compete with online food service applications generally. In terms of the payment method participants used in this study, most used Shopee Pay (almost 40%), followed by OVO (almost 30%), and Gopay (almost 21%). The cashless payment method or the default digital wallet from the online food purchase application service provider company was the mainstay of the users in this study. Under some conditions (for example, there are no funds, or customers didn't want to top up funds on digital wallets), the users in this study still relied on cash payments (almost 11%).

Table 1: Distribution of Participant Profile

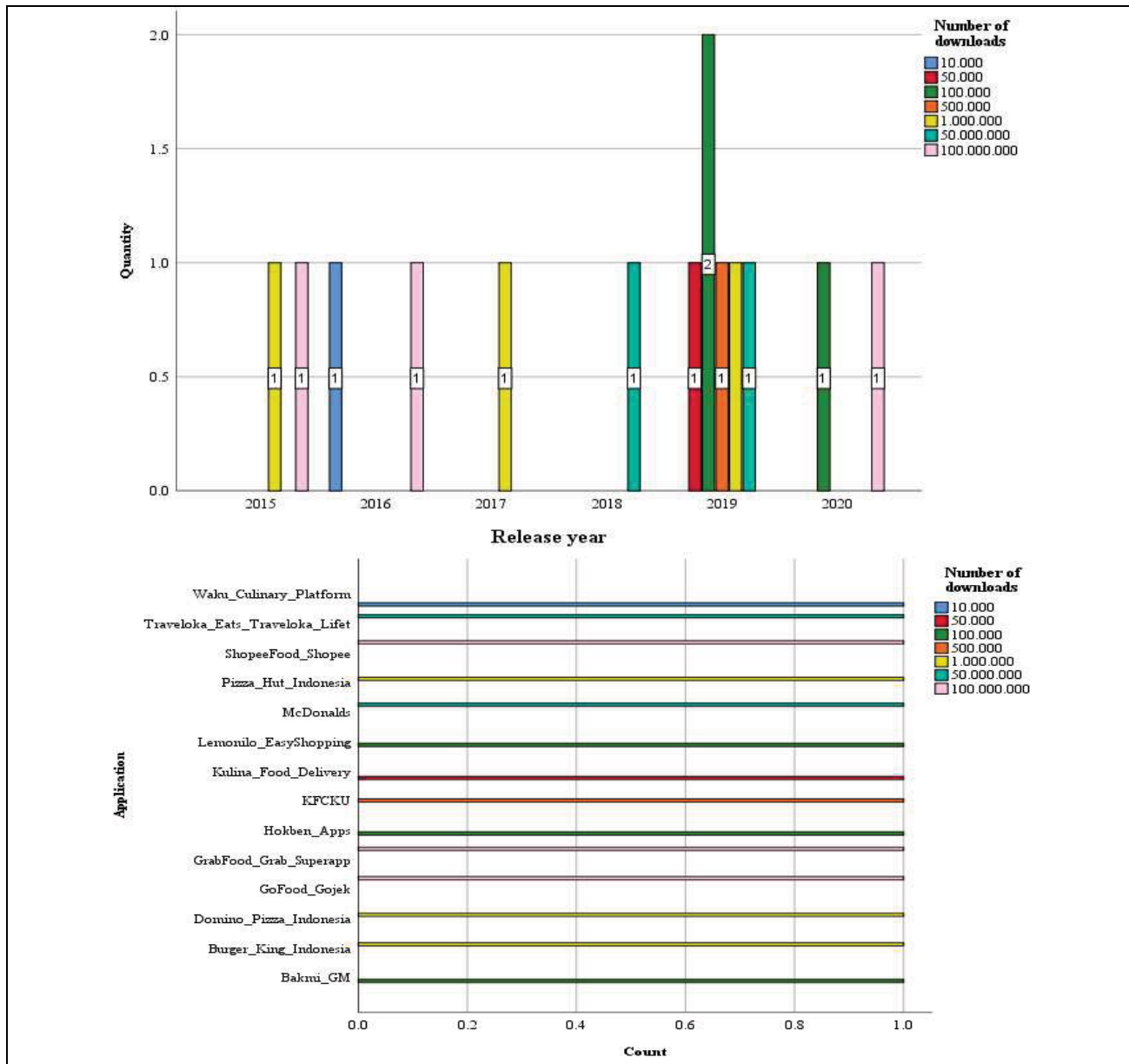
Profile	Frequency	
	N	%
Gender	Female	120 57.42%
	Male	89 42.58%
Frequency of buying food during the pandemic (in a month)?	Once	33 15.80%
	2-3 times	43 20.57%
	4-5 times	36 17.22%
	>5 times	97 46.41%
The most frequently used food purchase application during the pandemic?	GoFood	48 22.97%
	GrabFood	67 32.06%
	Traveloka Eats	4 1.91%
	Shopee Food	90 43.06%
	Gopay	43 20.57%
The most frequently used payment method?	OVO	61 29.19%
	Shopee Pay	83 39.71%
	Cash	22 10.53%

Source: IBM SPSS Statistic 25; n=209

4.1.2. OFDA Distribution in Indonesia

Figure 2 shows food delivery service applications, both those managed by restaurant brands and those that are not. Figure 1, directly above it, shows the number of applications downloaded over a particular period. Online food delivery applications were distributed in the 2015-2020 period, where 2019 was the period in which the most online food delivery applications were released, numbering six applications. This indicates that, for the past six years,

Indonesia has had an attractive market for food and beverage delivery services. The picture also indicates the popularity of the application, seen from the number of application downloads for three of the applications, namely ShopeeFood, GrabFood, and GoFood, released in 2015, 2016, and 2020 respectively, with more than 100 million downloads. The minimum number of downloads is 10 thousand on the Waku Culinary Platform application released in 2015.



Source: processed from Google Play Store, 2022

Figure 2: OFDA Distribution in Indonesia 2015-2020

4.1.3. PLS Algorithm Measurement

The results of the reliability test in this study were based on composite reliability (CR). Table 2 shows the results of CR on the variables of prior purchase experience, time-saving orientation, price-saving orientation, and spending habits, all above 0.7, indicating that all variables in this study are reliable. Furthermore, in the validity test, this study considered the average variance extracted (AVE) results. In Table 2, the AVE results on the variables of prior purchase experience, time-saving orientation, price-saving orientation, and spending habits are all above 0.5 indicating that all variables are valid. In addition, the validity test is based on the results of the outer loading (OL). In Table 2, the results of OL on the variables of prior purchase experience (PRIOR1, PRIOR2), time-saving orientation (TISO1, TISO2, TISO3, TISO4), price-saving orientation (PRSO1, PRSO2), and spending habits (SPEND2, SPEND4, SPEND5) are all above 0.5, indicating that all variables are valid. There are two items in spending habits (SPEND1 and SPEND3) whose test results did not meet the requirements. Both items were eliminated.

Table 2: Distribution of Reliability and Validity Test Results

Variable	Item	OL	CR	AVE
Prior Online Purchase Experience	PRIOR1	0.922	0.911	0.837
	PRIOR2	0.908		
Time Saving Orientation	TISO1	0.862	0.923	0.749
	TISO2	0.882		
	TISO3	0.907		
	TISO4	0.810		
Price Saving Orientation	PRSO1	0.797	0.846	0.734
	PRSO2	0.912		
Spending habits	SPEND2	0.902	0.911	0.773
	SPEND4	0.887		
	SPEND5	0.848		

Source: SMART PLS, n=209

4.1.4. Fit Model and Coefficient of Determination

Table 3 shows the results of the Standardized Root Mean Square (SRMR) <0.1, Chi2>0.05 and Normed Fit Index (NFI) <0.09 indicate that the model used for this study can be said to fit. The coefficient of determinants in the time-saving orientation shows $R^2 = 0.460$. These results explain that the use of prior online purchase experience in measuring time-saving orientation is 46 percent. Furthermore, the results on price-saving orientation where $R^2 = 0.125$ explains that the use of prior online purchase experience in measuring price-saving orientation is 12.5 percent. In spending habits, R2 shows a result of 0.656. This explains that the use of prior online purchase experience, time-saving orientation and price saving orientation in measuring spending habits is 65.6 percent.

Table 3: Model Fit and Coefficient of Determination

Description	Saturated Model	Estimated Model	R ²
SRMR	0.063	0.070	-
Chi ²	283.907	297.619	-
NFI	0.797	0.787	-
Time Saving Orientation	-	-	0.460
Price Saving Orientation	-	-	0.125
Spending habits	-	-	0.656

Source: SMART PLS, n=209

4.1.5. Hypothesis Test

The hypothesis test is based on the p-value results. Based on Table 4, the path of prior online purchase experience → spending habits shows $p = 0.000 (<0.05)$. These results provide an explanation where prior online purchase experience significantly affected the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic. In other words, this result indicates that **hypothesis 1 (H1) is accepted**. The path of prior online purchase experience → time-saving orientation shows $p = 0.000 (<0.05)$. These results provide an explanation where prior online purchase experience significantly affected the time-saving orientation of Generation Z in Jakarta in buying food using applications during the pandemic. In other words, this result indicates that **hypothesis 2 (H2) is accepted**. Furthermore, the prior online purchase experience path → price saving-orientation shows $p = 0.000 (<0.05)$. These results provide an explanation where prior online purchase experience significantly affected the price-saving orientation of Generation Z in Jakarta in buying food using applications during the pandemic. Based on these results, **hypothesis 3 (H3) is accepted**.

The path of time-saving orientation → spending habits shows a value of $p = 0.577 (>0.05)$. These results provide an explanation where time-saving orientation did not significantly affect the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic. Based on these results, it can be stated that **hypothesis 4 (H4) is rejected**. Another path is moderating 1 (time-saving orientation): prior online purchase experience → spending habits shows a value of $p=0.152 (>0.05)$. Based on these results, it can be stated that time-saving orientation did not moderate the relationship between prior online purchase experience and the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic. In other words, **hypothesis 5 (H5) is rejected**.

Next, the path of price-saving orientation → spending habits shows a value of $p=0.564 (>0.05)$. This result explains that price-saving orientation did not significantly affect the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic, or, in

other words, **hypothesis 6 (H6) is rejected**. The next path is in moderating 2 (price-saving orientation): prior online purchase experience → spending habits, shows a value of $p=0.793 (>0.05)$. These results provide an explanation where price-saving orientation did not moderate the relationship between prior online purchase experience and the spending habits of Generation Z in Jakarta in buying food using applications during the pandemic. Based on these results, it can be stated that **hypothesis 7 (H7) is rejected**.

Table 4: Hypothesis Test

Path	Original Sample	STD	P-Values	Remark
Prior Online Purchase Experience → Spending habits	0.390	0.098	0.000	H1: accepted
Prior Online Purchase Experience → Time Saving Orientation	0.810	0.030	0.000	H2: accepted
Prior Online Purchase Experience → Price Saving Orientation	0.678	0.045	0.000	H3: accepted
Time Saving Orientation → Spending habits	0.065	0.116	0.577	H4: rejected
Moderating 1 (Time Saving Orientation): Prior Online Purchase Experience → Spending habits	0.102	0.071	0.152	H5: rejected
Price Saving Orientation → Spending habits	-0.054	0.094	0.564	H6: rejected
Moderating 2 (Price Saving Orientation): Prior Online Purchase Experience → Spending habits	-0.018	0.070	0.793	H7: rejected

Source: SMART PLS, n=209

4.2. Discussion

In terms of OFDA distribution in Indonesia, the popularity of the application can be seen from the number of application downloads. Three applications, namely ShopeeFood, GrabFood, and GoFood released in 2015, 2016, and 2020 respectively, had more than 100 million downloads. The minimum number of downloads was ten thousand on the Waku Culinary Platform application, released in 2015. In the 2020 period, there were two applications that appeared at the start of the COVID-19 pandemic, namely Hokben and ShopeeFood, which show a different pattern of downloads. ShopeeFood is an online food delivery service provider application that also provides a variety of restaurant brands or food and beverage tenants, as do GrabFood and GoFood. This is one of the attractions explaining the high number of application downloads. These results also explain that the success of an online food delivery application based on user downloads does not

depend on whether the application was released early or late. Several factors determined the desire to use an application, namely ease of use and reviews of other users (Suhartanto, Dean, Leo, & Triyuni, 2019) or the availability of promotional programs (Gunden et al., 2020).

The first result of this study confirms that previous purchase experiences have a significant influence on spending habits on online food delivery using applications for Generation Z in Jakarta. The most dominant aspect that forms the previous purchase experience was convenience in the experience of using online food purchasing application services. These results indicate that, in the context of online food delivery, customers who come from the younger generation will also make their previous buying experience an important consideration in determining their attitude to make repeat purchases. These considerations form the evaluation or assessment of young customers by consulting online assessment scores or online reviews. Theoretically, the results of this study reinforce the concept that previous experience is one of the main considerations in determining attitudes to make a purchase (Kim, Park, Lee, & Choi, 2016; Ko, Phau, & Aiello, 2016). Customers will seek ratings or responses of others before making a purchase and provide an assessment before buying (Lee & Watkins, 2016; Oncioiu, 2014). In the next purchase intention, the customer will carry out the same evaluation process, even for an expensive item.

The results of this study, firstly, contribute to the development of theoretical concepts where evaluations by way of online review features or media on online food purchasing applications also apply to customers in the younger generation, namely the Generation Z group. Furthermore, the results of this study support previous research, such as that by Hanafizadeh, Behboudi, Iani, and Kalhor (2012). In relation to the evaluation of experience, the study further explains that the trust felt by customers regarding their experience of making online purchases determined the decision to continue to make online purchases or not. One form of trust can be determined from the information available in the application, such as the appearance and description of the taste of food, food prices, current promos, or discounts, to payment methods. Lack of clear information about the products being sold will form a sense of insecurity to buy (Luo, Ba, & Zhang, 2012). On the other hand, the existence of clear product information or reviews from previous buyers can shape and increase the intention to make purchases online (Park, Lee, & Chung, 2013).

Secondly, the results of this study explain that previous experiences will have a significant impact on the orientation of saving time in making online food purchases using applications for Generation Z in Jakarta. This explains that previous experience provides technical information

regarding the duration of the online food purchase process using the application. As has already been shown, a fast and practical online purchase process can provide benefits for customers in terms of time savings (Punj, 2012). This concept of benefit continues to be developed both theoretically and practically. The results of this study show that customers from the younger generation are still looking for the practicality and fast process of buying food online. This is related to the evaluation of previous experiences, in that customers in this group tended to avoid unsatisfactory choices in terms of the speed of the food purchase process. Specifically, Chiu et al. (2012) emphasizes that high-income customers tended to be sensitive to this aspect. This means that the group did not hesitate to buy at a high price if the quality of service and product was comparable. This view accords with the explanation given earlier, that customers from Generation Z do not hesitate to buy at a higher price, especially those who live in urban areas (Bashir et al., 2015). The high mobility of daily activities and lifestyle characteristics orient the generation of customers who live in urban areas to prefer practicality, including for buying food online using applications. The findings of this study support those of several previous studies in relation to time saving (Agarwal & Sahu, 2021; Jadhav & Khanna, 2016; Pitchay et al., 2022).

Thirdly, the results of this study indicate that prior experience in buying food online using an application had a significant effect on cost-saving orientation for customers from Generation Z in Jakarta. These results provide a deeper insight into why younger customers are price sensitive. Previous research emphasized that this generation of customers was willing to pay a higher price if the quality of service and product was comparable to what the customer expected. On the other hand, this research found that this generation of customers will preferably choose a lower price from the available options. Seeing this, the evaluation of previous experiences will be a stronger factor in choosing a more affordable price. This can be achieved by looking at the reviews or ratings of other customers. Statements of affordable prices with a comparable quality of services or products will be the rationale for determining purchasing decisions. These results accord with the theoretical concept that customers will seek and obtain cheaper prices where possible (DeVecchio & Puligadda, 2014) and can be specifically applied to customers from the Generation Z group in terms of purchasing food online using applications. The results of this study support Pitchay et al.'s (2022) results related to prices where attitudes in determining a purchase are largely determined by the price factor. The findings of this study are similar to those of Akroush and Al-Debei (2015) and Chiu et al. (2012) in that, to get the best price, customers do not hesitate to compare prices. This indirectly explains that, even though the price listed is relatively cheap,

customers will still verify the suitability of the price with the experience of previous customers.

The fourth and fifth set of results in this study indicate that the orientation of time saving did not significantly affect the spending habits of Generation Z in making online food purchases using applications. Furthermore, time-saving orientation has not been shown to moderate previous experience with spending habits. In this case, the most dominant item forming the time-saving orientation variable was the use of an online food purchase application service that could save the user time (TUSO3). This study is not in accord with the research of Jadhav and Khanna (2016) and Pitchay et al. (2022) about time savings gained from the online purchasing process providing benefits, such as the formation of customer perceptions of the ease of use of the available purchasing process. These results provide contributions both theoretically and practically. As already known, time-saving orientation provides benefits for customers (Chiu et al., 2012; Punj, 2012). This does not fully apply to Generation Z in Jakarta in making online food purchases using the application. The time-saving orientation specifically did not have an impact on aspects of spending habits during the pandemic (purchasing staple foods becomes more efficient, purchasing staple foods becomes more wasteful, purchasing complementary foods becomes more efficient, purchasing complementary foods becomes more wasteful, and more impulsive buy complementary foods).

During the pandemic, customers from this generation group do not question whether they were thrifty or impulsive in purchasing staple and complementary foods. Factors that can cause this result related to the existence of social restrictions that limit available restaurants. This makes customers, including this generation, buy food, either staple or complementary foods, to meet their needs only. In other words, the results cannot be interpreted in the context of spending intended to be frugal, extravagant, or impulsive. The time-saving orientation in this case puts more emphasis on the aspect of finding out information about restaurants available on the application during the COVID-19 pandemic. Likewise, the role of time saving did not moderate previous experience with spending habits. As previously explained, there are special motivational factors for using apps to buy food during a pandemic. The changing conditions of the pandemic have adjusted food and beverage business policies, including permits and business operating hours. Under these conditions, businesses can only wait for a policy from the government to operate again. Restaurants do take advantage of social media, providing information related to menus or to pandemic conditions. This approach aims to maintain relationships with customers so that the business remains a choice in the minds of customers (Chaturvedi & Gupta, 2014; Forbes & Vespoli, 2013; Leerapong, 2013; Vinerean,

Cetina, Dumitrescu, & Tichindelean, 2013). This strategy can reach a wider range of customers during the pandemic, because the focus of the community on seeking information and entertainment has shifted, including for the media.

The sixth and seventh set of results in this study indicate that the orientation of saving on prices had no significant effect on spending habits for Generation Z in Jakarta. Likewise, the role of price-savings orientation as a moderator was not affected by the previous experience in terms of spending habits. In this case, the most dominant item that forms a cost-saving orientation variable was the online food purchase application service that allows users to search for cheap food offers from various restaurants (PRSO2). This result is in line with those described previously where both the orientation of saving on time and saving on costs had no impact on the spending habits of customers of this generation during the pandemic. The impact of the pandemic on the food and beverage service sector, especially in Jakarta, has not given the public many options for buying food online, either by using an application or not. This makes spending habits focus more on the process of finding information on available restaurants. This action indirectly explains the first point, that customers in this generation did not mind the price of food available in the application because it occurred in difficult conditions and was therefore different from the general view about the attractiveness of low prices (Gatautis, Kazakeviciute, & Tarutis, 2014).

Restaurants also had limitations in finding raw materials to produce food amid the policy of limited operating hours. From the application provider side, this limitation had an impact on the reduced number of fleets serving customer orders. Therefore, it is possible that the price were relatively higher. Secondly, younger customers, as in this study, explained that spending habits during the pandemic did not emphasize looking for cheap or extravagant prices (as explained above) or being more impulsive. Limited conditions made it difficult to shift spending habits to neutral patterns, namely buying food or supplements to fulfill daily food needs during the pandemic. This result provides a significant theoretical contribution, that spending habits in difficult times, such as a pandemic, are not based on extravagant, impulsive, or frugal motivations. These results only partially support those of (Assaker et al., 2020; T. Escobar-Rodríguez & Carvajal-Trujillo, 2014; Gupta et al., 2018; Morosan & DeFranco, 2016) about the best offer at the price which can make buyers more frugal being a strong attraction in determining the intention to buy, was not fully supported in this study. This was because the main factor, the availability of sufficient options to buy food during the pandemic, did not operate.

This result relates to the concept of Theory of Planned Behavior (TPB) where the contribution of this research has

been in exploring consumer behavior. In the use of OFDA, attitudes towards evaluating previous experiences for consumers in Generation Z not only have an impact on considering the benefits of saving time and money, but also influence spending habits. This strengthens the implementation of aspects of perceived behavioral control and attitudes towards behavior in the theoretical concept. Based on these results, user experience of OFDA, either developed independently or by third parties, becomes a vital point in shaping the benefits of saving time and money that can influence customer attitudes in becoming a habit of repurchasing and hence loyal. Information needs to be kept current and phrased in such a way as to make it easy for the customer to find. Thus, successive versions of smartphones need to be compatible with each other. These findings are of particular relevance to industry in offering on-line services.

5. Conclusions

This study concludes, firstly, that the emergence of various online meal purchase applications provides a variety of choice of types of food and attractive price offers for customers. However, the speed at which the application is released does not guarantee that it will be more popular or more widely used. The marketing and promotional aspects, dependent on the company's financial capacity, become vital capital in the success of the branding strategy. Secondly, in terms of the determinants of spending habits during the pandemic, this study demonstrates that previous experiences have an impact on spending habits, time, and price orientation for Generation Z customers in Jakarta in buying food online using applications during the COVID-19 pandemic. Furthermore, this study shows that the role of time and price orientation does not have a direct effect and does not moderate previous experiences with spending habits. Rather, this is based on the special motivation to buy food online using an application that prioritizes the fulfilment of food needs, both staple and complementary foods, during limited operational hours of the food and beverage business during the pandemic. This research makes a significant contribution to the theoretical concept where the more time customers spend at home during the pandemic, the more the spending habits in buying food online become impulsive, thrifty, or extravagant. Special conditions need to be added to complement the concept where difficult conditions, such as the COVID-19 pandemic, form special motivations in spending habits, namely prioritizing the meeting of needs.

There are limitations to this study, such as the sample size. As explained, pandemic conditions created obstacles in gathering participants. A further limitation is that this research focused only on the experience aspect and the

orientation of price and cost savings in measuring spending habits which emphasized internal customer factors. The pandemic has a broad impact, including of external factors, such as government policies and the scarcity of various types of raw materials, that can be considered as the subject of future studies.

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