Factors Affecting Customer Satisfaction & Loyalty in Online Food Delivery Service during COVID-19 Pandemic in A Developing Country: An Extended Theory of Planned Behavior

Yogi Tri Prasetyo 1,*, Hans Tanto 2, Martinus Mariyanto 2, Christopher Hanjaya 2, Satria Fadil Persada 3, Bobby Ardiansyah Miraja 3 and A.A.N. Perwira Redi 4

Abstract: Online food delivery service (OFDS) has been widely utilized during the new normal of COVID-19 pandemic especially in a developing country such as Indonesia. The purpose of this study was to determine factors influencing customer satisfaction & loyalty in OFDS during the new normal of COVID-19 pandemic in Indonesia by utilizing an extended Theory of Planned Behavior (TPB) approach. 253 respondents voluntarily participated and answered 65 questions. Structural equation modeling (SEM) indicated that Hedonic Motivation (HM) was found to have the highest effect on customer satisfaction, followed by Price (P), Information Quality (IQ), and Promotion (PRO). Interestingly, this study found out that usability factors such as Navigational Design (ND) and Perceived Ease of Use (PEOU) were not significant to customer satisfaction and loyalty in OFDS during the new normal of COVID-19. This study can be the theoretical foundation that could be very beneficial for OFDS investors, IT engineers, and even academicians. Finally, this study can be applied and extended to determine factors influencing customer satisfaction and loyalty in OFDS during the new normal of COVID-19 in other countries.

Keywords: food delivery, customer satisfaction, new normal, COVID-19, theory of planned behavior

1. Introduction

Online Food Delivery Service (OFDS) can be defined as any food delivery transaction with monetary value that is done through mobile handheld devise such as smartphone or personal digital assistants [1]. It is a common platform in 2020 due to the growth of internet users [2]. Academicians, marketing managers, and even retail industries are continuously engaged in the enhancement of OFDS, aiming to minimize the cost while also maximizing the number of users. One of the developing countries that heavily utilized OFDS in daily activities is Indonesia.

In Indonesia, OFDS has been consistently contributed to the sustainable revenue stream. It generated revenue approximately of 1.915 million USD in 2020 and forecasted to increase by 54.8% in 2024 [3]. Apart from the revenue stream, the penetration rate of OFDS apps in Indonesia also has been predicted to grow positively in the future. On 2024 OFDS will penetrate around 11% of the total food delivery. This penetration rate is described as how many customers who are using OFDS apps compared to the whole target market and the pattern is shown to be constantly increasing. The increasing pattern oc-
The new users of OFDS apps mainly attracted by the advantages provided by OFDS apps. These OFDS apps provide almost everything that customers need in buying food & beverages which can be done by only using a finger. Only by a finger, customers do not need to go out by themselves or make a call to the restaurant to order food. Customers are able to look for all nearby restaurants, see the menu, and select the food or beverages that they want [2]. Furthermore, OFDS apps nowadays have also been equipped with digital payment instruments to make purchasing steps even easier. Because of this new behavior, in order to attract customers and increase brand awareness, a lot of restaurants have been available on OFDS apps [4].

However, restaurant availability is not the only factor that influences customers’ satisfaction in using OFDS apps. Other factors such as ease of use, navigational design, and performance expectancy will also influence customer satisfaction. For example, several studies have analyzed factors of consumers’ initial app adoption during the early usage of OFDS apps [5-7]. As time goes, customers become more familiar with the apps and they become adapted to the apps without experiencing technical issues. Since technical issues are decreasing, it will be irrelevant and not enough to solely observe technology acceptance factors.

Additionally, several studies have already discussed behavioral factors that influence customer satisfaction and loyalty towards OFDS apps. Yeo et al. [8] analyzed convenience motivation, price, and time-saving orientation as well as hedonic motivation towards OFDS. In addition, Prabowo & Nugroho [9], also discussed prior online purchase experience to determine factors that influence attitude and behavioral intention to OFDS. Furthermore, Gunden et al. [10], also explained habit factors which influencing intention to use OFDS. Thus, OFDS apps has been an important topic in the past few years.

During COVID-19 pandemic, OFDS has been widely utilized especially in a developing country such as Indonesia. As a country which severely hit by the COVID-19 pandemic with more than 1,099,687 positive cases and 30,581 deaths as of February 3rd 2021 [11], some features in OFDS such as delivery service and non-cash transactions are very important [12]. Ali et al., [12] found that the moderating latent variable such as the COVID-19 pandemic had an influence on OFDS in Pakistan. Moreover, consumers are rarely to buy him/herself to avoid getting infected by the virus [12]. One of the most commonly utilized approaches to analyze this new behavior pattern is theory of planned behavior approach.

Previously, there were several studies utilizing TPB in the context of OFDS apps. Lau & ng. [4] utilized theory of planned behavior to identify several factors (Perceived Ease of Use, Time Saving Orientation, Convenience Motivation, and Privacy & Security) towards behavioral intention of OFDS apps. Furthermore, Yeo et al. [8] also utilized theory of g behavior to analyze factors (Hedonic Motivation, Prior Online Purchase, Time Saving Orientation, and Price Saving Orientation) influencing Convenience Motivation and Post Usage Usefulness to determine attitude towards and behavioral intention towards OFDS apps. Despite the availability of existing studies about customer satisfaction and loyalty towards OFDS apps [4, 8-10, 12], there is a significant lack of research on addressing OFDS during COVID-19 pandemic in Indonesia. A further application of TPB is important to be implemented in the context of OFDS during COVID-19 pandemic in Indonesia.

The purpose of this study is to determine factors influencing customer satisfaction and loyalty in OFDS measures among Indonesian during the new normal of COVID-19 pandemic by using an extended Theory of Planned Behavior (TPB) approach. This study is one of studies to analyze factors affecting customer satisfaction & loyalty towards OFDS apps during global COVID-19 pandemic. Finally, this study can be used and extended to measure the factors affecting customer satisfaction & loyalty towards OFDS apps in other countries in handling COVID-19 pandemic situations.
2. Conceptual Framework

Figure 1 represents the Theoretical Research Framework of the current study. The building block of this proposed framework is the Theory of Planned Behavior (TPB). Theory of planned behavior (TPB) is an extension of theory of reasoned action and consists of three independent predictors of an individual’s intention [13]. Three independent predictors are attitude towards behaviour, subjective norm, and perceived behavioral control. An individual's intention is the main difference between theory of reasoned action and theory of planned behavior which is located in the center of the model framework. In addition, an individual’s intention is used to identify factors which influence a behavior and indicate how hard people are willing to try to perform the behavior [14].

Based on Figure 1, there were 11 Exogenous latent variables which consist of Hedonic Motivation (HM), Convenience Motivation (CM), Perceived Ease of Use (PEOU), Navigational Design (ND), Information Quality (IQ), Privacy & Safety (P & S), Restaurant Credibility (RC), Perceived Severity (PSEV), Price, Safe Packaging (SP), and Promotion. In addition, Figure 1 also represents that there were 3 Endogenous latent Variable which consist of Intention to Use, Actual Use, and Satisfaction & Loyalty.

Hedonic Motivation can be translated into intrinsic motivation (e.g., happiness, fun and pleasure) which can be driven from using new products or services [15,16]. The role of hedonic motivation was found by Yeo et al. [8] and it shapes customers’ convenience and usefulness of online food delivery. Okumus and Bilgihan found that intrinsic motivation influences customers’ behavior to use Online Food Delivery Services [17]. Thus, we hypothesized the following:

H1. Hedonic Motivation had a significant direct effect on Intention to Use

In the urbanization era, people become busier with their own business and only have limited time to prepare food and dine in the restaurant [4]. Subsequently, people tend to use Online Food Delivery Services (OFDS) to save time and effort to go out. Convenience in time and effort are critical attributes to understand people’s behavior towards OFDS [18]. People prefer to use OFDS apps to buy food & beverages because they can do the transaction at anytime and anywhere [19]. Furthermore, in this modern era, people find out that using OFDS is relatively easy and not time consuming. People can easily find out what they need through an intuitive navigational design of OFDS. Thus, we hypothesized the following:

H2. Convenience Motivation had a significant direct effect on Intention to Use

H3. Perceived ease of use had a significant direct effect on Intention to Use
H4. Navigational Design had a significant direct effect on Intention to Use

Information quality & structure of information in mobile apps influences the users to enhance their loyalty towards it [20]. It is plausible because the users are demanding the up to date and complete information that is given at the right of detail before they use it. Misleading information will have an effect on the users of Online Food Delivery Services (OFDS) apps and makes them reluctant to use it. Thus, we hypothesized the following:

H5. Information Quality had a significant direct effect on Intention to Use

Belanger et al. [21] defined privacy as accessing, copying, using, and destroying personal security information. These become the threat which creates potential incidents related to security of payments and storing information through online transactions. By being secured while using Online Food Delivery Services (OFDS), people will have an urge to use OFDS. Thus, we hypothesized the following:

H6. Privacy and Security had a significant direct effect on Intention to Use

Brand awareness of restaurants is very important for the users to use Online Food Delivery Services (OFDS). The users tend to buy from well-known brands because they provide standard quality of food and outlet availability that are nearby the user’s location [22-25]. Completing the brand awareness, the users also pay attention to the number of ratings given to a particular restaurant in deciding to use OFDS. Subsequently, the following hypothesis was proposed:

H7. Restaurant Credibility had a significant direct effect on Intention to Use

Large-scale social restrictions during COVID-19 will cause closing in some restaurants that are not available to meet the safety standard. For the restaurants who are able to open, they need to implement the social distancing procedure to minimize the COVID-19. The method which is called social distancing is only to minimize the spread of the Covid-19 since there might be a chance to get infected by COVID-19. Although the restaurants already strictly followed the social distancing rules, there are still possibilities to get infected. Therefore, Using Online Food Delivery Services during COVID-19 is a good solution not to get infected from COVID-19. As a conclusion, we proposed the following hypotheses:

H8. Perceived Severity of COVID-19 had a significant direct effect on Intention to Use

H9. Intention to Use had a significant effect to Actual Use

H10. Price had a significant direct effect on Actual Use

COVID-19 virus can be spread through droplets, airstreams, and physical contact [26]. These reasons are very likely to be the media of spreading COVID-19 in the case of food delivery services. It is very common that every food needs to be prepared by a human and it’s impossible to eliminate human roles in preparing and delivering food to the customers. During the COVID-19 pandemic, in order to secure the customer’s concerns about minimizing the spread of COVID-19 virus, a sealed packaging is a must. A sealed packaging at least can reduce the possibility of food & beverages to be contaminated by the air streams during the delivery process. Health information of the employees who prepare the food is sometimes embedded in the packaging to make customers feel more comfortable. If customers are comfortable in using Online Food Delivery Services (OFDS), it could lead to the actual use of using OFDS more in the future. Thus, we hypothesized the following:
H11. Safety Packaging had a significant direct effect on Actual Use

Promotion in Online Food Delivery Services (OFDS) will influence people to use OFDS. People will prefer using OFDS if OFDS is able to offer a cheaper price than the Restaurants’ Price. On the other hand, OFDS needs to consider its terms and conditions when giving promo (e.g., Expired Date and Minimum of Payment). Short Expired date and High Minimum of Payment will directly affect people to prefer using Normal Delivery Services to OFDS. Therefore, to make people more interesting in using OFDS, promotion might be a good solution. The promotion that is offered must be reasonable (e.g., Long Expired Date and Low Minimum of Payment) to attract people to use OFDS. Thus, we hypothesized the following:

H12. Promotion had a significant direct effect on Actual Use

The experience economy is a condition where customers are willing to pay more if they enjoy the experiential value of products/services [27]. The experiential value which created through an interaction between the users and business providers. This interaction happens when people directly use or consume the products/services, in the current study, it lies on the actual use of OFDS. Actual use is very important for OFDS in order to attract loyal customers to consume the services more in the future. Subsequently, it will lead to customer satisfaction and loyalty. Thus, we hypothesized the following:

H13. Actual Use had a significant direct effect on Satisfaction and Loyalty

3. Methodology

3.1. Participants

The current study utilized Cross-Sectional Design. Due to the protocol of new normal of COVID-19 in Indonesia, an online questionnaire was distributed from September 15th to October 10th, 2020. A total of 253 Indonesian (15 – 55 years) answered the online questionnaire (Table 1) which has a total of 65 Questions and divided into 15 Segments (Table 2).

| Characteristics       | Category              | N     | %    |
|-----------------------|-----------------------|-------|------|
| Gender                | Male                  | 119   | 47.04% |
|                       | Female                | 134   | 52.96% |
| Age                   | 15 – 24               | 229   | 90.51% |
|                       | 25 – 34               | 4     | 1.58%  |
|                       | 35 – 44               | 5     | 1.98%  |
|                       | 45 – 54               | 6     | 2.37%  |
|                       | >=55                  | 9     | 3.56%  |
| Occupation            | Students              | 203   | 80.24% |
|                       | Entrepreneur          | 19    | 7.51%  |
|                       | Employee              | 28    | 11.07% |
|                       | Household wife/husband| 3     | 1.19%  |
| Average Expenditure / month | < 1 million rupiah | 113   | 44.66% |
|                       | >1– 3 million rupiah  | 109   | 43.08% |
|                       | >3 – 5 million rupiah | 15    | 5.93%  |
|                       | >5 – 7 million rupiah | 11    | 4.35%  |
3.2. Questionnaire

Following the theoretical framework explained before, we developed a self-administered questionnaire for this study to analyze factors that affect Online Food Delivery Services during COVID-19 situation in Indonesia (Table 2). The questionnaire consists of 14 Sections and 1 Introduction Section which are: (i) Demographic Information (Gender, Age, Occupation, Food Expenses / Month, Last Education, Number of OFDs Usage per month), (1) Convenience Motivation, (2) Perceived Ease Of Use, (3) Navigational Design, (4) Information Quality, (5) Privacy and Security, (6) Restaurant Credibility, (7) Perceived Severity, (8) Price, (9) Safe Packaging, (10) Promotion, (11) Hedonic Motivation, (12) Intention to Use, (13) Actual Use, (14) Satisfaction & Loyalty. All latent constructs included in the SEM were measured by using a 5-point Likert scale.

| Construct                          | Items | Measures                                                                 | References                        |
|------------------------------------|-------|--------------------------------------------------------------------------|-----------------------------------|
| Convenience Motivation             | CM1   | I can use OFD to make an order anywhere and anytime                      | Lau & ng. [4]                     |
|                                    | CM2   | I feel that using OFD can reduce my travel effort to buy food / beverages | Lau & ng. [4]                     |
|                                    | CM3   | I think that OFD helps me to save my time instead of buying food / beverages by myself | Yeo et al. [8]; Prabowo & Nugroho [9] |
| Perceived Ease of Use              | PEOU1 | I can easily find things that I need in OFD application                  | Suhartanto et al. [28]            |
|                                    | PEOU2 | I find that OFD has informative button to help me                        |                                   |
|                                    | PEOU3 | I can complete a transaction quickly                                     |                                   |
| PeOU4 | I feel that OFD application in terms of design & position are well organized |
|-------|----------------------------------------------------------------------------|

| Navigational Design | ND1 | I feel that Navigation Bar in OFD app is helpful |
|----------------------|-----|--------------------------------------------------|
|                     | ND2 | I can easily jump into & back to other pages in OFD app |
|                     | ND3 | I think that dynamic filter helps me to find restaurant or dish that I look for |
|                     | ND4 | I feel that keyword search in OFD app can reduce my effort |
|                     | ND5 | I think that order tracking status is essential to customers |

| Navigational Design | ND6 | I find that payment interface in OFD is easy to understand |
|----------------------|-----|----------------------------------------------------------|
|                     | ND7 | OFD provides stage of shopping cart and I can easily go back to my shopping cart |

| Information Quality | IQ1 | I find that OFD provides me with up to date information related to restaurant, food and discount |
|---------------------|-----|--------------------------------------------------------------------------------------------------|
|                     | IQ2 | I enjoy using OFD because it gives me believable information |
|                     | IQ3 | I think that OFD app provides information at the right of detail that I need |
|                     | IQ4 | I feel that information in OFD app is in an appropriate format |

| Privacy & Security | PS1 | I can feel secure because OFD app has protective measures |
|--------------------|-----|----------------------------------------------------------|

Kapoor & Vij [2], Kapoor & Vij [2], Lee et al. [29], Suhartanto et al. [27]
| Payment Instrument Steps | PS2 | I think that verification steps prior to usage both for user & driver can reduce the risk |
|--------------------------|-----|----------------------------------------------------------------------------------------|
|                          | PS3 | I think that OFD provider should not give personal information to other agents        |

| Restaurant Credibility  | RC1 | I think that restaurant rating in OFD app helps me to decide in making an order       |
|--------------------------|-----|----------------------------------------------------------------------------------------|
|                          | RC2 | I also concern with number of rating related to restaurant in making an order          |
|                          | RC3 | I prefer to buy from restaurant that has popularity or good brand awareness            |
|                          | RC4 | I think that outlets availability of restaurant is influencing me to make an order    |

| Perceived Severity       | Psev1 | I understand about social distancing regulations, so I choose to use OFD instead of dining in or buying it by myself |
|--------------------------|-------|---------------------------------------------------------------------------------------------------------------|
|                          | Psev2 | I am afraid to dine in a restaurant due to covid-19 pandemic                                                  |
|                          | Psev3 | I feel that OFD helps me to satisfy my craving for food during covid-19 pandemic                              |
|                          | Psev4 | I feel that OFD is a solution to a limited seat capacity in a restaurant due to social distancing regulations |
| Psev5                  | I find that using OFD is helpful to have a food that I can’t cook when I am lazy to go out |
|-----------------------|------------------------------------------------------------------------------------------|
| Price                 | P1 I think delivery price of OFD services is reasonable                                   | Ray & Bala [31] |
|                        | P2 I think that tax price in using OFD services is reasonable                             |
|                        | P3 I feel that OFD services overall price is affordable                                     |
| Safe packaging        | SP1 I think that food / beverages must be sealed well especially during covid-19 pandemic situation |
| SP2                   | I also concern with packaging material that influences food cleanliness                  |
| SP3                   | I find that health information of people involved in preparing & delivering my order ensures the food hygiene |
| Promotion             | Pro1 I feel that discount provided encourages me to use OFD services                      | Kapoor & Vij [2] |
|                        | Pro2 Terms & conditions of promotion are important to me before I use OFD services       |
|                        | Pro3 I think that promotion expiry date influences me in making an order                 |
| Hedonic Motivation    | HM1 I don’t use OFD only for fulfilling my basic needs                                    | Lee et al. [29]; Prabowo & Nugroho [9] |
| HM2                   | I usually spend more using OFD rather than buying it by myself due to minimum purchase & promo |
### Hedonic Motivation

| HM3 | I find that using OFD is very enjoyable to give food / beverages to someone else | Yeo et al. [8]; Prabowo & Nugroho [9] |

### Intention to Use

| ITU1 | I intend to continue using OFD in the future | Lee et al. [29] |
| ITU2 | I will always try to use OFD in my daily life |
| ITU3 | I plan to continue to use OFD frequently |
| ITU4 | I have decided to use OFD for purchasing food / beverages the next time |

### Actual Use

| AU1 | When buying food, I always use OFD app | Suhartanto et al. [27] |
| AU2 | I prefer to use OFD app rather than delivery service owned by the restaurant | Rivera [32] |
| AU3 | I always check the available food/restaurants |
| AU4 | I always check the notification & promotions |

### Satisfaction & Loyalty

| SL1 | I am satisfied with the way OFD app carried out transaction | Alalwan [33] |
| SL2 | Overall, I was satisfied with the OFD services | Suhartanto et al. [27] |
| SL3 | I always subscribe to OFD promotions |
| SL4 | I will use the OFD again in the future | Cai & Leung [34] |
| SL5 | I will promote the OFD to other people | Zhao & Bacao [35] |
| SL6 | I will share the testimonial of using OFD to the public |

### 3.3. Structural Equation Modelling

Structural Equation Modelling (SEM) is a powerful statistical technique used for identifying, estimating, and testing causal relationships between the latent variables [36,37]. AMOS 22 with Maximum Likelihood approach was utilized to derive the causal relationships of the proposed hypotheses construct.

Supporting the analysis of SEM model, six measurements were used to evaluate the model fit: Incremental Fit Index (IFI), Tucker Lewis Index (TLI), Comparative Fit Index...
(CFI), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), and Root Mean Square Error of Approximation (RMSEA) [38-40]. A value of higher than 0.9 is suggested for IFI, TLI, and CFI is 0.9 or above to have a good model [36,38,41,42]. For GFI and AGFI, a value greater than 0.8 is the minimum requirement to indicate a good model [43]. Finally, the RMSEA value should be less than 0.07 to indicate a good model [36,44].

4. Results

Figure 2 describes the initial SEM to determine factors influencing customer satisfaction & loyalty in OFDS measures among Indonesian during the new normal of COVID-19 in Indonesia. According to the figure 2, several hypotheses were not significant: Convenience Motivation to Intention to Use (Hypothesis 2), Perceived Ease of Use to Intention to Use (Hypothesis 3), Navigational Design to Intention to Use (Hypothesis 4), Privacy & Security to Intention to Use (Hypothesis 6), Restaurant Credibility to Intention to Use (Hypothesis 7), Perceived Severity to Intention to Use (Hypothesis 8), and Safety Packaging to Actual Use (Hypothesis 11). Therefore, a revised SEM model was constructed by omitting those hypotheses. Furthermore, in order to enhance the model’s fit, some modification indices were applied. Subsequently, the final SEM is presented in Figure 3.

Completing the final results, Table 3 demonstrates the descriptive statistics results of each indicator. Table 3 also reports the factor loadings both in the initial model (Figure 2)
and the final model (Figure 3). In addition, Table 4 describes the model fit of the final SEM. IFI, CFI, and TLI values were greater than the suggested cutoff of 0.90 which indicated that the final constructed model really represents observed data. Furthermore, the GFI and AGFI values were respectively 0.845 and 0.797 which indicate the good model. RMSEA value was 0.066 was also below the recommended value that indicates a good model.

Table 3. Descriptive Statistic Results.

| Factor                      | Item | Mean | StDev | Factor Loading |
|-----------------------------|------|------|-------|----------------|
|                             |      |      |       | Initial Model  | Final Model    |
| Convenience Motivation      | CM1  | 4.52 | 0.63  | 0.59           | -              |
|                             | CM2  | 4.44 | 0.69  | 0.69           | -              |
|                             | CM3  | 4.24 | 0.84  | 0.58           | -              |
| Perceived Ease of Use       | PEOU1| 4.03 | 0.78  | 0.67           | -              |
|                             | PEOU2| 4.08 | 0.75  | 0.75           | -              |
|                             | PEOU3| 4.43 | 0.65  | 0.75           | -              |
|                             | PEOU4| 4.02 | 0.77  | 0.72           | -              |
| Navigational Design         | ND1  | 4.11 | 0.76  | 0.79           | -              |
|                             | ND2  | 4.06 | 0.77  | 0.74           | -              |
|                             | ND3  | 4.25 | 0.74  | 0.56           | -              |
|                             | ND4  | 4.13 | 0.76  | 0.55           | -              |
|                             | ND5  | 4.57 | 0.58  | 0.41           | -              |
|                             | ND6  | 4.34 | 0.64  | 0.71           | -              |
|                             | ND7  | 4.15 | 0.79  | 0.55           | -              |
| Information Quality         | IQ1  | 4.12 | 0.79  | 0.66           | 0.66           |
|                             | IQ2  | 3.98 | 0.79  | 0.80           | 0.82           |
|                             | IQ3  | 3.96 | 0.76  | 0.80           | 0.77           |
|                             | IQ4  | 4.02 | 0.73  | 0.74           | 0.66           |
| Privacy & Security          | PS1  | 4.09 | 0.82  | 0.64           | -              |
|                             | PS2  | 3.95 | 0.87  | 0.82           | -              |
|                             | PS3  | 3.75 | 0.96  | 0.76           | -              |
| Restaurant Credility        | RC1  | 4.12 | 0.80  | 0.78           | -              |
|                             | RC2  | 4.01 | 0.91  | 0.74           | -              |
|                             | RC3  | 4.02 | 0.88  | 0.56           | -              |
|                             | RC4  | 4.15 | 0.81  | 0.54           | -              |
| Perceived Severity          | PSEV1| 4.12 | 0.84  | 0.64           | -              |
|                             | PSEV2| 3.84 | 1.07  | 0.40           | -              |
|                             | PSEV3| 4.18 | 0.78  | 0.70           | -              |
|                             | PSEV4| 4.22 | 0.79  | 0.80           | -              |
|                             | PSEV5| 4.47 | 0.68  | 0.63           | -              |
| Price                       | P1   | 3.82 | 0.78  | 0.85           | 0.85           |
|                             | P2   | 3.71 | 0.81  | 0.87           | 0.87           |
|                             | P3   | 3.90 | 0.75  | 0.84           | 0.85           |
| Safety Packaging            | SP1  | 4.56 | 0.61  | 0.76           | -              |
| Factor                        | Cronbach’s α | Average Variance Extracted (AVE) | Composite Reliability (CR) |
|-------------------------------|--------------|----------------------------------|----------------------------|
| Convenience Motivation       | 0.631        | 0.387                            | 0.653                      |
| Perceived Ease of Use        | 0.808        | 0.523                            | 0.814                      |
| Navigational Design          | 0.810        | 0.524                            | 0.884                      |
| Information Quality          | 0.835        | 0.534                            | 0.820                      |
| Privacy & Security           | 0.777        | 0.553                            | 0.786                      |
| Restaurant Credility         | 0.744        | 0.440                            | 0.754                      |
| Perceived Severity           | 0.751        | 0.419                            | 0.776                      |
| Price                        | 0.891        | 0.734                            | 0.892                      |
| Safety Packaging             | 0.791        | 0.569                            | 0.798                      |
| Promotion                    | 0.717        | 0.461                            | 0.718                      |
| Hedonic Motivation           | 0.661        | 0.407                            | 0.672                      |
| Intention to Use             | 0.836        | 0.587                            | 0.849                      |
| Actual Use                   | 0.660        | 0.278                            | 0.602                      |
| Satisfaction & Loyalty       | 0.817        | 0.393                            | 0.791                      |
5. Discussion

The current study using an extended Theory of Planned Behavior (TPB) to determine factors influencing customers’ satisfaction and loyalty in OFDS during the new normal of COVID-19 in Indonesia. SEM approach was utilized to identify interrelationship among latent variables: Hedonic Motivation (HM), Convenience Motivation (CM), Perceived Ease of Use (PEOU), Navigational Design (ND), Information Quality (IQ), Privacy and Security (P&S), Restaurant Credibility (RC), Perceived Severity (PSev), Intention to Use (ITU), Price (P), Promotion (Pro), Safe Packaging (SP), Actual Use (AU), and Satisfaction and Loyalty (SL).

SEM found that Hedonic Motivation (HM) had a significant direct effect on Intention to Use (ITU) ($\beta=0.53$, $p=0.001$) which supports the claim of Yeo et al. [8]. HM can be described as an irrational purchasing pattern because it doesn’t align with economic principles to cover basic needs. Instead, customers make a purchase in order to fulfill the pleasure and it is heavily influenced by the surroundings in which the user is. Moreover, HM strongly affects emotional arousal which triggers customers to make a purchase [9]. The respondents mostly felt that they utilized OFDS not only for fulfilling the basic needs, but they also perceived that as an enjoyable platform for buying food for someone else. In addition, the respondents also agreed that they spent more money while using OFDS rather than buying it directly from the stores due to the minimum purchase & promotion discount provided.

However, not only HM that influences the user to use OFDS, but also Information Quality (IQ). IQ can be described as the extension of a system which provides the user with useful and relevant information in a speedy and accurate manner [9]. The SEM indicated that IQ had a significant direct effect on ITU ($\beta=0.17$, $p=0.042$). Based on the finding indicators, the up to date and detailed information related to restaurant, food, and even discount provided in an appropriate place were the key for IQ that influences customer’s intention to use OFDS. Afterwards, it will lead to customer satisfaction and loyalty towards OFDS. The reason why IQ beta coefficient was not as high as HM could be because customers take it for granted. It means that IQ are basic features that OFDS must have, but not the main reason why people want to use OFDS. Although IQ was found not as strong as HM in influencing the users to use OFDS, but IQ was still important because no one wants to buy a product or use services that they don’t know. However, people will not use OFDS when those basic expectations don’t exist. It’s logically correct that information related to the restaurant, menu, location, food price, and delivery price are a must in OFDS, so the users are fully informed before making a purchase.

Price was found to have a significant direct effect on actual use ($\beta=0.34$, $p=0.001$). As discussed earlier, one of several pieces of information important for customers in making decisions is the price.
a purchase is price. Price which includes food, tax & delivery price can determine the customers’ willingness to pay and their perceptions toward OFDS. Customer perceptions toward OFDS can be measured by how much money they can save by using it. The more they can save or the lower price that customers need to pay, they tend to perceive that the related service is convenient to use [9]. Interestingly, SEM revealed that price has the second-largest effect after HM on the model framework. It’s plausible since HM is the main factor that makes customers intended to start using OFDS and supported with reasonable price will bring forward into actual use. In contrast, though customers have an intention to use OFDS, if the price is too high, they will cancel the order using OFDS. In addition, promotion as a complement to price is also useful to make customers keep using OFDS.

OFDS provides many promotions such as: discount coupons and free delivery services to attract customers. Promotion is another useful method for cognitive evaluation of a product and purchasing decision [45]. The result of the study confirmed that promotion had a significant direct effect on actual use ($\beta=0.15$, $p=0.019$). When OFDS provides a coupon discount and free delivery service, people will have more positive perceptions about the product value than without the promotion [46]. According to several studies [46,47], promotion is an important marketing tool for e-retailers to influence customers’ purchasing decisions. Sun et al. [30] found that promotion will make customers switch to another brand. Apart from it, promotion is also effective to attract new customers and to make them an actual user [48]. However, customers also consider the terms and condition of discounts (e.g minimum purchase, discount percentage and expiry date) in OFDS before making a purchase.

As the customers start using OFDS, they become more familiar with the interface of OFDS. This new behavioral pattern makes the usability factor such as Navigational Design (ND) that used to be significant [2] in affecting the purchase/conversion using OFDS is no longer relevant with the current condition. Furthermore, this new trend was also supported by existing study [4] that stated Perceived Ease of Use had no significant direct effect on behavioral intention of OFDS. It is proven with the hypothesis 3 “Perceived Ease of Use had a significant direct effect on Intention to Use” that was proven to be insignificant in the SEM result ($\beta=0.021$, $p=0.933$). These changes in customer behavior are logically correct since customers have spent a lot of time in using OFDS and already passed the learning phase moments when they encountered many technical problems.

5.1. Theoretical Contribution

This study contributes to several theoretical contributions to the existing literature of OFDS usage in Indonesia. Firstly, the contribution was to give a novelty about factors that affect the usage of OFDS especially during the new normal of COVID-19. During the new normal of COVID-19, there were additional factors that customers need to consider before ordering their food. These additional factors were modeled and analyzed using SEM (Structural Equation Modelling). According to Prabowo & Nugroho [9], SEM has the ability to recognize the relationship between constructed variables simultaneously and the results can be generalized into targeted populations. This justifies that the result of SEM Analysis is trustworthy and reliable.

Secondly, the contribution would be related to the theory that was utilized in this study. This study utilized and extended Theory of Planned Behavior (TPB) and it is implemented in a new context of COVID-19 pandemic in Indonesia. As compliant to Ajzen & Fishbein [13] and Ali et al., [12], this study carefully analyzed the customer’s attitude, perceived behavioral control, and subjective norms through constructed exogenous latent variables. Likewise, these exogenous latent variables will influence customer’s behavior towards OFDS.

5.2. Implications to practice

The findings from this study can be used to increase the number of people using OFDS in the future, but several aspects need to be considered. Interestingly, our findings
proved that Hedonic motivation (HM) was found to be the most important aspect. Thus, the OFDS developer needs to build a strong perception that using OFDS is enjoyable and interesting. In addition, marketers also need to instill a mindset that OFDS is a part of the user’s lifestyle. In order to cultivate OFDS in the user’s lifestyle, both traditional media (e.g., television, radio, newspapers) and social media (e.g., Facebook, Instagram, YouTube) should be used as a platform to advertise OFDS to the potential users [49,50].

Once advertisement issues are handled, OFDS developer is strongly suggested to focus on the price related to food, tax and delivery price in acquiring OFDS. Supporting the finding latent variables, Price (P) and Promotion (PRO) were important in influencing customer satisfaction and loyalty in OFDS. Having a collaboration with the restaurants is one way to create a proper price strategy. Thus, the OFDS developer together with the restaurant provider should set the food price in a reasonable amount and give a promotion regularly.

Furthermore, usability factors were proven not to be significant in influencing the customer satisfaction and loyalty in OFDS during the new normal of COVID-19 in Indonesia. Therefore, OFDS developer should not invest the resources mainly in improving the quality of usability such as Navigational Design (ND) and Perceived Ease of Use (PEOU). In contrast, the OFDS developers must put emphasis on deciding the reasonable price, giving discounts and promotions regularly to trigger the customers to use OFDS more. As a complement, the OFDS developer must also provide the customers with believable, detailed, and structured Information Quality (IQ) in an appropriate format. Therefore, customers will have less hesitation in using OFDS and in return increasing their satisfaction and loyalty in OFDS.

5.3. Limitations & Future research

Despite the significant contributions, this study would like to acknowledge several limitations while generalizing the current study’s significant findings. First, most of the respondents were coming from low-sized income or allowance. Moreover, 90.51% of the sample was in the 15-24 age segment. Hence, this sample may not be able to capture the whole OFDS targeted population and mainly dominated by young consumers [28,51]. Future studies need to expand their sample demographic in order to get the whole OFDS targeted population.

Second, this study also utilizes COVID-19 pandemic corresponding to OFDS usage in September until October 2020. One of the variables that related to and OFDS during COVID-19 pandemic would be Safe Packaging (SP). The final framework showed that SP was not significant in influencing the usage of OFDS. This result could be related to the samples which mostly were millennials and they perceived it as not important. Most of the respondents were Millennials and they considered the price and promotion instead of safe packaging. Thus, it is logically correct if price and promotion had significant impacts on the actual use.

Third, our study was mainly focused on the restaurant to costumer through an outsourcing platform since this type of OFDS is the most common in Indonesia. In fact, there are other types of OFDS such as platform to consumer immediately or restaurant to costumer through self-delivery. Future research to investigate the acceptance between these types would be a very promising research topic.

Last but not the least, this study was not considered the impact of cultural factors (e.g., food habits, health consciousness, family size, and lifestyle). For the future study, the researchers suggest using cultural factors that could have a direct and indirect effect on satisfaction and loyalty towards OFDS. Unfortunately, our study only considered the direct factors such as price, promotion, and safe packaging which directly relate to the food. Future research could incorporate several indirect factors such as the number of restaurants, menu, and driver’s attitudes.

6. Conclusions
The COVID-19 pandemic is a global serious crisis in 2020. In Indonesia, it has infected more than 1,099,687 positive cases and 30,581 deaths as of February 3rd 2021 [11].

The current study utilized an extended Theory of Planned Behavior (TPB) to determine factors affecting the customer satisfaction and loyalty in OFDS during the new normal of COVID-19 measured among Indonesian. A total of 253 voluntary respondents which consists of 65 questions distributed among 15 categories. The results of Structural Equation Modelling (SEM) indicated that Hedonic Motivation had the most significant direct effect on the Intention to Use (ITU). Furthermore, Price (P) also had a significant direct effect on the Actual Use (AU). Followed by Information Quality (IQ) which had a significant effect on ITU and Promotion (Pro) had a significant effect on AU.

Interestingly, this study found that usability factors related to technical issues were proven not to be significant. The current study is one of the studies that analyzed factors affecting customer satisfaction and loyalty in OFDS measures during the new normal of COVID-19 pandemic. The result of this study can be used as a reference for OFDS developer to improve their service quality. Furthermore, this study suggested that OFDS provider must pay attention to customer’s Hedonic Motivation (HM), Price (P), Information Quality (IQ) and Promotion (Pro). Finally, this study can also be applied to evaluate the factors affecting customer satisfaction and loyalty in OFDS measures in other countries which are also dealing with COVID-19 pandemic.

Author Contributions: Conceptualization, Y.T.P., H.T, M.M., and C.H.; methodology H.T, M.M., and C.H.; software, Y.T.P. and B.A.M.; validation, B.A.M., S.F.P., and A.A.A.P.R.; formal analysis, H.T., M.M., and C.H.; investigation, H.T.; resources, H.T.; data curation, H.T.; writing—original draft preparation, H.T, M.M., and C.H.; writing—review and editing, B.A.M., S.F.P., and A.A.A.P.R.; visualization, H.T, M.M, and C.H.; supervision, Y.T.P and S.F.P; project administration, Y.T.P.; funding acquisition, Y.T.P. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Mapúa University Directed Research for Innovation and Value Enhancement (DRIVE).

Acknowledgments: The authors would like to thank all the respondents who answered our online questionnaire.

Conflicts of Interest: The authors declare no conflict of interest.

References
1. Ngai, E.W.; Gunasekaran, A. A review for mobile commerce research and applications. Decision support systems 2007, 43, 3-15.
2. Kapoor, A.P.; Vij, M. Technology at the dinner table: Ordering food online through mobile apps. Journal of Retailing and Consumer Services 2018, 43, 342-351.
3. Statista. Online Food Delivery - Indonesia: Statista Market Forecast. Availabe online: https://www.statista.com/outlook/374/120/online-food-delivery/indonesia. (accessed on February 3rd 2020)
4. Chai, L.T.; Yat, D.N.C. Online Food Delivery Services: Making Food Delivery the New Normal.
5. Peng, K.-F.; Chen, Y.; Wen, K.-W. Brand relationship, consumption values and branded app adoption. Industrial Management & Data Systems 2014.
6. Verhoef, P.C.; Kannan, P.K.; Inman, J.J. From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing. Journal of retailing 2015, 91, 174-181.
7. Taylor, D.G.; Levin, M. Predicting mobile app usage for purchasing and information-sharing. International Journal of Retail & Distribution Management 2014.
8. Yeo, V.C.S.; Goh, S.-K.; Rezaei, S. Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. Journal of Retailing and Consumer Services 2017, 35, 150-162.
9. Prabowo, G.T.; Nugroho, A. Factors that Influence the Attitude and Behavioral Intention of Indonesian Users toward Online Food Delivery Service by the Go-Food Application. In Proceedings of 12th International Conference on Business and Management Research (ICBMR 2018).
10. Guniden, N.; Morosan, C.; DeFranco, A. Consumers' intentions to use online food delivery systems in the USA. *International Journal of Contemporary Hospitality Management* 2020.
11. World Health Organization. COVID-19 weekly epidemiological update, February 3rd, 2020. 2020.
12. Ali, S.; Khalid, N.; Javed, H.M.U.; Islam, D.M. Consumer Adoption of Online Food Delivery Ordering (OFDO) Services in Pakistan: The Impact of the COVID-19 Pandemic Situation. *Journal of Open Innovation: Technology, Market, and Complexity* 2021, 7, 10.
13. Fishbein, M.; Jaccard, J.; Davidson, A.R.; Ajzen, I.; Loken, B. Predicting and understanding family planning behaviors. In *Understanding attitudes and predicting social behavior*, Prentice Hall: 1980.
14. Ajzen, I. The theory of planned behavior. *Organizational behavior and human decision processes* 1991, 50, 179-211.
15. Van der Heijden, H. User acceptance of hedonic information systems. *MIS quarterly* 2004, 695-704.
16. Venkatesh, V.; Thong, J.Y.; Xu, X. Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly* 2012, 157-178.
17. Okumus, B.; Bilgihan, A. Proposing a model to test smartphone users' intention to use smart applications when ordering food in restaurants. *Journal of Hospitality and Tourism Technology* 2014.
18. Collier, J.E.; Kimes, S.E. Only if it is convenient: Understanding how convenience influences self-service technology evaluation. *Journal of Service Research* 2013, 16, 39-51.
19. Chen, N.-H.; Hung, Y.-W. Online shopping orientation and purchase behavior for high-touch products. " *International Journal of Electronic Commerce Studies* " 2015, 6, 187-202.
20. Ji, Y.G.; Park, J.H.; Lee, C.; Yun, M.H. A usability checklist for the usability evaluation of mobile phone user interface. *International journal of human-computer interaction* 2006, 20, 207-231.
21. Bélanger, F.; Crossler, R.E. Privacy in the digital age: a review of information privacy research in information systems. *MIS quarterly* 2011, 1017-1041.
22. Aaker, D.A.; Equity, M.B. Capitalizing on the Value of a Brand Name. *New York* 1991, 28, 35-37.
23. Bettman, J.R.; Park, C.W. Effects of prior knowledge and experience and phase of the choice process on consumer decision processes: A protocol analysis. *Journal of consumer research* 1980, 7, 234-248.
24. Hoyer, W.D.; Brown, S.P. Effects of brand awareness on choice for a common, repeat-purchase product. *Journal of consumer research* 1990, 17, 141-148.
25. Park, C.W.; Lessig, V.P. Familiarity and its impact on consumer decision biases and heuristics. *Journal of consumer research* 1981, 8, 223-230.
26. Galbadage, T.; Peterson, B.M.; Gunasekera, R.S. Does COVID-19 Spread Through Droplets Alone? *Frontiers in Public Health* 2020, 8, 163.
27. Pine, I. BJ et Gilmore, JH (2015). The experience economy: past, present and future. *Handbook on the experience economy*, 21-43.
28. Suhartanto, D.; Dean, D.L.; Leo, G.; Triyuni, N.N. Millennial experience with online food home delivery: a lesson from Indonesia. 2019.
29. Lee, S.W.; Sung, H.J.; Jeon, H.M. Determinants of continuous intention on food delivery apps: extending UTAUT2 with information quality. *Sustainability* 2019, 11, 3141.
30. Han, S.H.; Nguyen, B.; Lee, T.J. Consumer-based chain restaurant brand equity, brand reputation, and brand trust. *International Journal of Hospitality Management* 2015, 50, 84-93.
31. Ray, A.; Bala, P.K. User generated content for exploring factors affecting intention to use travel and food delivery services. *International Journal of Hospitality Management* 92, 102730.
32. Rivera, M. Online Delivery Provider (ODP) services: Who is getting what from food deliveries? Elsevier: 2019.
33. Alalwan, A.A. Mobile food ordering apps: An empirical study of the factors affecting customer e-satisfaction and continued intention to reuse. *International Journal of Information Management* 2020, 50, 28-44.
34. Cai, R.; Leung, X.Y. Mindset matters in purchasing online food deliveries during the pandemic: The application of construal level and regulatory focus theories. *International Journal of Hospitality Management* 2020, 91, 102677.
35. Zhao, Y.; Bacao, F. What factors determining customer continuously using food delivery apps during 2019 novel coronavirus pandemic period? *International journal of hospitality management* 2020, 91, 102683.
36. Prasetyo, Y.T.; Castillo, A.M.; Salonga, L.J.; Sia, J.A.; Seneta, J.A. Factors affecting perceived effectiveness of COVID-19 prevention measures among Filipinos during enhanced community quarantine in Luzon, Philippines: Integrating Protection Motivation Theory and extended Theory of Planned Behavior. *International journal of infectious diseases* 2020, 99, 312-323.
37. Rigdon, E.E.; Schumacker, R.E.; Wothke, W. A comparative review of interaction and nonlinear modeling. *Interaction and nonlinear effects in structural equation modeling* 1998, 1-16.
38. Hair, J.F.; Anderson, R.E.; Babin, B.J.; Black, W.C. Multivariate data analysis: A global perspective (Vol. 7). Upper Saddle River, NJ: Pearson: 2010.
39. Martinez, J.E.F.; Prasetyo, Y.T.; Robielos, R.A.C.; Panopio, M.M.; Urlanda, A.A.C.; Topacio-Manalaysay, K.A.C. The Usability of Metropolitan Manila Development Authority (MMDA) Mobile Traffic Navigator as Perceived by Users in Quezon City and Mandaluyong City, Philippines. In Proceedings of Proceedings of the 2019 5th International Conference on Industrial and Business Engineering; pp. 207-211.
40. Torres, M.E.S.; Prasetyo, Y.T.; Robielos, R.A.C.; Domingo, C.V.Y.; Morada, M.C. The Effect of Nutrition Labelling on Purchasing Decisions: A Case Study of Lucky Me! Instant Noodles in Barangay 454 and 455 Manila, Philippines. In Proceedings of Proceedings of the 2019 5th International Conference on Industrial and Business Engineering; pp. 82-86.
41. Hu, L.t.; Bentler, P.M. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal* 1999, 6, 1-55.
42. Chen, H.-S.; Liang, C.-H.; Liao, S.-Y.; Kuo, H.-Y. Consumer Attitudes and Purchase Intentions toward Food Delivery Platform Services. *Sustainability* 2020, 12, 10177.
43. Gefen, D.; Straub, D.; Boudreau, M.-C. Structural equation modeling and regression: Guidelines for research practice. *Communications of the association for information systems* 2000, 4, 7.
44. Steiger, J.H. Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual differences* 2007, 42, 893-898.
45. Raghubir, P. Free gift with purchase: promoting or discounting the brand? *Journal of consumer psychology* 2004, 14, 181-186.
46. Oliver, R.L.; Shor, M. Digital redemption of coupons: Satisfying and dissatisfying effects of promotion codes. *Journal of Product and Brand Management* 2003, 12, 121-134.
47. Hsu, C.k.; Liu, B.S.C. The role of mood in price promotions. *Journal of Product & Brand Management* 1998.
48. Darke, P.R.; Dahl, D.W. Fairness and discounts: The subjective value of a bargain. *Journal of Consumer psychology* 2003, 13, 328-338.
49. Alalwan, A.A.; Dwivedi, Y.K.; Rana, N.P. Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management* 2017, 37, 99-110.
50. Dwivedi, Y.K.; Kapoor, K.K.; Chen, H. Social media marketing and advertising. *The Marketing Review* 2015, 15, 289-309.