

Determinants of customers' intention to use online food delivery platforms in Thailand

Pensri Jaroenwanit^{a*}, Ali Abbasi^a and Patcharee Hongthong^a

^aFaculty of Business Administration and Accountancy, Khon Kaen University, Thailand

ABSTRACT

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This paper aims to examine what factor relevancy influences consumers' preference to use online food delivery platforms in Thailand. Further, it investigates consumers' behavior during the covid-19 pandemic. A questionnaire was used to examine a sample of 400 Thai consumers who were using online food delivery platforms. Collected data were analyzed using a statistical package program in 3 steps: Confirmatory factor analysis, path analysis, structural equation model analysis (SEM). Thai consumers increasingly used food delivery on online platforms during the covid-19 epidemic. The study also found that the platform's ease of use, the food delivery service fees, offers or privileges, and payment security on online food delivery platforms influenced consumers' future use of online food delivery platforms. The food delivery service fees are the most influential factor in using online food delivery platforms. Future research can explore the role of using online food delivery platforms and their impact on the online food delivery platforms. Online food delivery platform providers should lower their service fees, always be implementing new promotions, provide various coupon codes, and create games so that consumers can win prizes. The online food delivery platform providers need to develop consumer trust, ensure that payments are secure, and enhance the ease of use of their platforms. This study contributes to the emerging literature related to online food delivery platforms by studying the relevancy factor that influences consumers' preference to use online food delivery platforms, which are critical for the success of any online food delivery platform provider.

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1. Introduction

People's lifestyles have been altered as a result of modern life changes. Subsequently, technology is a need (Kantatasiri, Jaroenwanit, & Brown, 2015). The popularity of mobile meal ordering is growing every year (Navavongsathian, Trimetsoontorn, Rungruang, & Janthongpan, 2020). As a result, additional platforms for online food ordering are being developed. The essential factor is that technology is crucial in connecting individuals with restaurants. As a result, in many countries, the market for these platforms is rapidly expanding. Furthermore, according to Navavongsathian, Trimetsoontorn, Rungruang, & Janthongpan, (2020), the On-Demand company is a meal delivery service whose market value was estimated to be 41 billion baht in 2020. In the first half of 2020, the number of food orders placed through the Food Delivery service increased by more than 150 percent over the same period. The number of food deliveries done by food delivery services was predicted to grow up to 78%-84% of the prior year. As measured by four key platforms, the rate of expansion in Thailand's food delivery market could be described as "leaps and bounds". The growing number of e-commerce websites, mobile commerce (m-commerce) applications, instant payment systems, and mobile payment systems facilitates the use of the internet as a platform for exchanging products and services. (Bibi, Akhunzada, Malik, Ahmed, & Raza, 2019) The accessibility or ease of using online food delivery platforms, the food delivery service fees offered on the food delivery platforms, the platform's offers or privileges, and the payment security (Kaur, Dhir, Talwar, & Ghuman, 2021; Gupta &

* Corresponding author
E-mail address penjar@kku.ac.th (P. Jaroenwanit)

Duggal, 2020). Consumption and supply in the manufacturing and service sectors have been disrupted due to the COVID-19 outbreak in 2020 around the world, including Thailand (Cho, Bonn, & Li, 2019). As a result, Thailand's online meal delivery platforms have become increasingly popular (Jaroenwanit, Daowadueng, & Hongthong, 2021). Because online meal delivery platforms are a relatively novel method of purchasing food, they are regarded as a breakthrough that best fits the social and personal demands of clients. Online meal delivery services allow customers to get the nutrition they need without leaving their homes. Foodservice companies have been able to keep their operations open despite the epidemic because of this factor. According to an AARCH study on the elements that influence the use of online food delivery platforms in Thailand, it is critical to truly understand consumers' behaviors and motives when they choose to utilize these platforms. To examine the situation in Thailand regarding the Electronic Transactions Development Agency or ETDA, the Ministry of Digital Economy and Society conducted a survey in which the behaviors of the Thai people, who were using online food ordering services, were investigated. The findings from data collection, which was carried out during the period from 5-15 March 2020, found that users between the ages of 19-38 years had the most frequently used Online Food Delivery Platforms. This was followed by the users between the ages of 39-54 years whose reason for choosing to use the service was that they did not want to travel or sit and eat in a restaurant. It was also found that concerns about the situation of the COVID-19 pandemic had also been another important factor that had affected the decision-making behaviors of Thai people when choosing online food ordering services. The group that was the most worried about the spread of COVID-19. The platform or application is an intermediary in helping to order food, and various applications available in Thailand, such as Grab Food, Line Man, Food Panda, Get food, and many others, have different and interesting promotions. This was followed by choosing to directly use the platforms of the restaurants themselves, which included choosing to order via the restaurants' inboxes or by using Direct Messages via social media channels, such as Facebook and Instagram, which was favored of respondents (Sinaga, Siregar, Hutabarat, & Systems, 2020).

There have been numerous studies on the main drivers of online food delivery platforms. Israel et al. (2019), Lu et al. (2017), Lee (2019) and Tribhuvan (2020) noted that in recent years many innovations and new technologies had impacted the food and beverage business. In particular, advances in food delivery services have changed consumer food purchasing behaviors (Bresciani, 2017) and food delivery. Moreover, profitable channels for restaurants have increased as well (Alalwan, 2020). In the consumers' corner, online food delivery services are continuing to widen the consumers' choices of restaurant options (Pigatto, Machado, dos Santos Negreti, & Machado, 2017; Yeo, Goh, Rezaei, & services, 2017). Some scholars have focused on the characteristics of mobile applications (Pigatto et al., 2017; Cho et al., 2019), while others have studied the behavioral models of mobile applications. Consumption indeed affects online food delivery platforms (Alagoz & Hekimoglu, 2012). A study of consumer confidence and the traditional values of using online food delivery platforms (Fitch Rating) was also found (Schleicher, 2020). However, no survey of future consumer demand and how it influences the use of online food delivery platforms have yet been conducted (Hassan, 2020). In the future, online food delivery to consumers will intensify the competition in the food delivery market. Therefore, it is important to study the factors affecting online food delivery platforms in Thailand. This understanding further the factors affecting the use of online food delivery platforms among Thai consumers and discover the factors behind the consumers' decision-making processes when they use online food delivery platforms in the future.

2. Conceptual framework

2.1 Consumers' behavior during the COVID-19 pandemic

Kotler et al. (2019) explain that a consumer purchases a product or service to show their behavior to others. (Schiffman & Wisenblit (2019) and Jaroenwanit et al. (2021) stated that consumer behavior is the study of consumer actions during their search, purchase, use, and evaluation of the goods and services they choose, which they expect will meet their needs. The pandemic global COVID-19 pandemic has caused changes in consumer behaviors, according to Mehta et al. (2020). One such change is increased dietary restrictions, which has prompted consumers to look for options that meet their basic nutritional needs. These are my findings from Sheth (2020), who discovered that consumers make changes when changing economic conditions or the emergence of a new crisis. Consumer behaviors have resulted in the habits of consumers changing more and more as they turn to online food delivery platforms because online food delivery platforms can provide greater convenience and can promptly meet the needs of today's consumers.

2.2 The ease of use

Those who use online food delivery platforms can do so without much effort by studying or learning to use online food delivery platforms. According to Newman et al. (2018), online food delivery platforms offer convenience, flexibility, speed, and smoothness. A previous study by Israel et al. (2019) found that the ease of using online food delivery platforms has influenced the continued use of online food delivery platforms among the sample of users in Chennai, India. This finding was similar to results Chetan et al. (2019) and Tribhuvan (2020) found that ease of use and the 'enjoyment factor' affects online food delivery platform services. In addition, users may also recommend that their friends use their favorite online food delivery platforms. The operating system's responsiveness impacts the consumers' continued use of an online food delivery platform. As a result, they would most likely use the service again. Based on the consistency of the studies mentioned above, Hypothesis 1 of this research is as follows:

H₁: *The ease of use of online food delivery platforms positively influences online food delivery platforms in Thailand.*

2.3 The food delivery service fees

As the consumers' demands for online food delivery platforms grow, online food delivery platform operators will have to find new strategies. Concerning attracting users, a study by Chai et al. (2019) found that consumers had chosen to order food online from platforms that are free of charge for online food delivery services. Similarly, Chandrasekhar et al. (2019) found that most consumers would compare their choices of online food delivery platforms by focusing on those platforms offering cheaper food delivery rather than those charging more. This finding was consistent with Dazmin and Ho (2019), who found that the factors of the food delivery service fees had significantly influenced the consumers' use of online food delivery platforms. It was also in line with Kaur et al. (2021), who found that the food delivery service fees had been a key factor in the consumers' choices of online food delivery platforms. Based on the consistency of the studies mentioned above, Hypothesis 2 of this research is as follows:

H₂: *The food delivery service fees positively influence the usage of online food delivery platforms in Thailand.*

2.4 The offers or privileges of online food delivery platforms

The varieties of offers or privileges extended to consumers by online food delivery platforms were another factor that had influenced the future usage of online food delivery platforms in Thailand. Certain platforms offer more than others in terms of price, service, speed of food delivery, and other benefits. A study by Mangwani et al. (2020) explained that when online food delivery platforms make attractive offers, it can result in the consumers becoming aware that they are receiving more value for their money. Choosing to use such online food delivery platforms has resulted in consumers becoming more and more likely to use online food delivery platforms. This is consistent with research by Gupta et al. (2020) on the use of online food delivery platforms in India. The factor of receiving benefit influences the customers and impacts their intention to use online food delivery platforms with an influence level of 12.36%. Moreover, this finding is consistent with studies by Moondra et al. (2020), who found that providing good benefits and offers can influence the customers' decision-making processes by assisting them in opting for a particular online food delivery platform. Based on the consistency of the studies mentioned above, Hypothesis 3 of this research is as follows:

H₃: *The factor of offers or privileges in online food delivery platforms positively influences the usage of online food delivery platforms in Thailand.*

2.5 Payment safety

Due to the increasing development of online services to meet consumer demand, online food delivery platforms must be able to support the consumer cycles of online food ordering. Furthermore, to successfully compete with their competitors, these platforms must also be able to effectively help secure online payments (Li, Miroso, & Bremer, 2020). The continuity of online food delivery platform services in China was examined in a study by Lu et al. (2017). The respondents who were satisfied with the safety of secure payments for online food delivery platforms had been more likely to use online food delivery platforms. This is consistent with research by Israel et al. (2019), who found that payment security for online food delivery platforms would affect the continued use of online food delivery platforms. Based on the consistency of the studies mentioned above, Hypothesis 4 of this research is as follows:

H₄: *The payment safety factors of online food delivery platforms positively influence the usage of online food delivery platforms in Thailand.*

3. Methodology

This study has approved the human ethical survey by the Human Research Ethics Assessment Document No. HEC-01-64-016, dated March 17, 2022, from the Human Research Ethics Committee, Khon Kaen University, as this research is not contrary to international ethics and follows the Declaration of Helsinki. In this research, the research team used quantitative research methods by utilizing the following research methods.

3.1 The research population

The population in the study consisted of Thai consumers who were using online food delivery platforms.

3.2 The sample for this research

Purposive sampling was used to select a model. Three screening questions were asked before the respondents were given a questionnaire with the following items: 1) *Have you ever used an online food delivery platform?* 2) *Have you ever paid for a service?* 3) *Do you have food delivered to you using your mobile phone.*

3.3 Sample size

This study was quantitative, and the population size was unknown. The computational method, which was based on Cochran's formula (Cochran & Techniques), was used to calculate the unknown sample size of the population. After making calculations using Cochran's recipe, the author determined that the sample size for this research must be 400 samples.

3.4 Measurement instrument

The data was collected using the field survey method, which employed a self-administered questionnaire for this research. The questionnaire was translated from English to Thai by language experts, and a back-translation process was used to re-translate the text into English to prevent any distortions in meaning (Douglas & Craig, 2007)

The Index of Item-Objective Congruence (IOC) was used for content validity testing. In this process, the questionnaire was checked by three experts. The IOC evaluated the questionnaire items based on the score range from -1 to +1. The items that had scored lower than 0.5 were revised. On the other hand, the items with scores higher than or equal to 0.5 were reserved. This was found that the IOC values of all items were greater than 0.7, which supported the instrument's high validity. Moreover, confirmatory factor analysis (CFA) was used to test the construct validity. All constructs' factor loading was above the minimum recommended value (0.5) which also confirmed the high validity of the instrument (Turner & Carlson, 2003)

The reliability of the questionnaire was determined to ensure that the responses collected through the instrument were reliable and consistent. The questionnaire was tested with 30 people that were not in the sample group. The reliability value was calculated using Cronbach's alpha to ensure internal consistency within the items (George & Mallery, 2010). Coefficient Cronbach's Alpha value must be at least 0.7 for accepted reliability. According to the questionnaire pre-test, Cronbach's Alpha coefficient of all parts is greater than 0.70, ranging from 0.733 to 0.962, which confirmed the high reliability of the instrument (Turner & Carlson, 2003)

3.5 The questionnaire

To collect data, a questionnaire was designed so that respondents could answer the questions by themselves. The data was collected using a self-administered questionnaire on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. This self-administered questionnaire was divided into five parts as follows: Part 1 contained information about the use of food delivery services and consisted of two-item multiple-choice questions which had been updated based on research by (Alagoz & Hekimoglu, 2012). Part 2 contained questions to gather information about food delivery services: the ease of use, the food delivery service fees, the offers or privileges of online food delivery platforms. It's contained 13 multiple choice questions, which had been updated based on research by Newman et al. (2017), Israel et al. (2019), Chetan et al. (2019), Dazmin and Ho (2019), Kaur et al. (2021), Gupta and Duggal (2020), Moondra et al. (2020) and Lu et al. (2017). Part 3 contained questions to gather information about the use of mobile payment services, which had been updated based on research by (Li et al., 2020) and (Lu et al., 2017) Part 4 contained questions to gather information on future food delivery services, which had been updated based on research by (Hassan, 2020) Part 5 contained questions to gather information about the personal data of the respondents and had been customized by the researcher.

3.6 Data analysis and statistics used

The information from the questionnaire was gathered, and SPSS was used to present the demographic data of the respondents in descriptive statistics, such as percentages, means, and standard deviations. Next, the reliability and validity of the data from the corroborative component analysis (CFA) were both analyzed, and to test the research hypothesis, the structural equation model analysis (SEM) was performed (Jaroenwanit, Kattiyapornpong, & Deeboonmee, 2020; Chaveesuk, Khalid, & Chaiyasoonthorn, 2021; Chaveesuk, Khalid, & Chaiyasoonthorn, 2022). The analyses of the hypotheses between multiple variables were carried out simultaneously. The analytical tool, which was used in this study, was AMOS 22.0.

4. Results

4.1 Consumer behavior factors

Most of the respondents were female (59.3%), between the ages of 19-30 years, and had received a bachelor's degree. Moreover, they had, on average, ordered food from online food delivery platforms once a week. The type of product they had ordered from the online food delivery platforms was ready-made food (as opposed to food ingredients or beverages, for example). The most frequently ordered types of food for the day were for the consumers' main meals, with the most frequently ordered meal being lunch. The average cost of food and services using the online food delivery platforms had been 1 - 500 baht. Their reason for choosing an online food delivery platform had been the benefit of home delivery as the Table 1.

Table 1The consumers' demographic and behaviors statistics ($n = 400$)

| | Frequency | Percent (%) |
|---|-----------|-------------|
| <i>Genders</i> | | |
| Male | 163 | 40.8 |
| Female | 237 | 59.3 |
| <i>Ages</i> | | |
| 18 and below | 20 | 5.0 |
| 19-30 | 363 | 90.8 |
| 31-40 | 10 | 2.5 |
| 41-50 | 5 | 1.3 |
| 51-60 | 1 | 0.3 |
| 61 and over | 1 | 0.3 |
| <i>Educational levels</i> | | |
| Primary school | 4 | 1.0 |
| Junior High school | 2 | 0.5 |
| High school | 18 | 4.5 |
| Bachelor's degree | 372 | 93.0 |
| Post-graduate Degree | 4 | 1.0 |
| <i>Frequency of usage</i> | | |
| Once per week | 135 | 33.8 |
| Twice per week | 88 | 22.0 |
| Three times per week | 72 | 18.0 |
| Four times per week | 50 | 12.5 |
| Five times per week | 27 | 6.8 |
| Six or more times per week | 28 | 7.0 |
| <i>Types of products do you order from the food delivery platform.</i> | | |
| Food | 385 | 96.3 |
| Beverages | 225 | 56.3 |
| Fresh ingredients | 12 | 3.0 |
| Daily necessities | 14 | 3.5 |
| <i>When the products are purchased from the food delivery platforms</i> | | |
| Breakfast time | 32 | 8.9 |
| Lunchtime | 206 | 51.5 |
| Dinner time | 136 | 34.0 |
| Afternoon tea | 26 | 6.5 |
| <i>The amount spent on the food delivery platform per month</i> | | |
| 1-500 Baht | 291 | 72.8 |
| 501-1,000 Baht | 69 | 17.3 |
| 1,001-3,000 Baht | 33 | 8.3 |
| 3,001-5,000 Baht | 5 | 1.3 |
| 5,001-7,000 Baht | 1 | 0.3 |
| 7,000 Baht up | 1 | 0.3 |
| <i>The reasons of decided to the use food delivery platform</i> | | |
| Inertia | 239 | 59.8 |
| Free shipping | 205 | 51.2 |
| Delivery Schedule | 107 | 26.8 |
| Weather | 208 | 52.0 |
| Endorsers | 54 | 13.5 |
| Multiple payment methods | 138 | 34.5 |
| No limits on consumption | 86 | 21.5 |
| Door-to-door service | 245 | 61.3 |
| Skip waiting in line at popular shops | 174 | 43.5 |
| Platform limited meals | 86 | 21.5 |
| Variety of items | 169 | 41.7 |
| The time-saving feature | 159 | 39.8 |
| <i>A list of the food delivery platforms that you use most often</i> | | |
| Food Panda | 75 | 18.8 |
| Lineman | 5 | 1.3 |
| Grab food | 312 | 78.0 |
| Get food | 7 | 1.8 |

4.2 Verifying the completeness of the data before running the statistical analysis

After analyzing the skewness and kurtosis of the data, it was found that the minimum skewness had been -0.836 and the maximum had been -0.128 , while the lowest skewness had been -0.501 and the maximum had been 1.441 , which is shown in Table 2,3. It can be seen that the skewness and prevalence of the data were between -2 and 2 , which indicated that the data was normally distributed (Tabachnick, 2007).

Table 2

The skewness and kurtosis test

| | Skewness | | Kurtosis | |
|------------|----------|------|----------|------|
| EOU | -0.836 | .122 | .465 | .243 |
| FDF | -0.238 | .122 | .002 | .243 |
| OFD | -0.737 | .122 | 1.44 | .243 |
| PMS | -0.128 | .122 | -.501 | .243 |
| UFD | -0.227 | .122 | .581 | .243 |

* EOU=The ease of use, FDF=The food delivery service fees, OFD=The offers of online food delivery platforms, PMS=Payment safety, UFD=The usage of online food delivery platforms

From Table 2, when considering the size of the relationship between each variable, it was found that the usage of online food delivery platforms and the ease of use showed the highest correlation coefficient at 0.547, followed by the offers online food delivery platforms and the ease of use with a correlation coefficient of 0.531. Meanwhile, payment safety with the food delivery service fees had shown the lowest correlation coefficient at 0.005. And table 3 shows the tolerance and VIF analysis.

Table 3

Tolerance and VIF analysis

| Models | Collinearity Statistics | |
|------------|-------------------------|-------|
| | Tolerance | VIF |
| EOU | 0.608 | 1.644 |
| FDF | 0.776 | 1.288 |
| OFD | 0.593 | 1.686 |
| PMS | 0.987 | 1.013 |
| UFD | 0.625 | 1.600 |

* EOU=The ease of use, FDF=The food delivery service fees, OFD=The offers of online food delivery platforms, PMS=Payment safety, UFD=The usage of online food delivery platforms

Test for multicollinearity, the association between five variables is known as multicollinearity. (Tabachnick, Fidell, & Ullman, 2007) They raise the magnitude of the error term and the regression coefficient's standard error. As a result, the coefficients' statistical significance becomes weak. (Hair Jr, Babin, & Anderson, 2010) advocate using tolerance and the Variance Inflation Factor (VIF) in investigating multicollinearity problems with cut-off values of more than 0.1 and less than 10. Table 3 reveals that the tolerance values vary from 0.608 to 0.987, much greater than 0.10. This suggests that the highly correlated variables include unnecessary information that should be removed because not all of them are needed for the analysis. Furthermore, the VIF spans from 1.013 to 1.686, less than 10, indicating that multicollinearity is not a concern among the exogenous variables.

4.3 An analysis of relationships between variables: The correlation matrix was analyzed when considering the correlation coefficient between the five observed variables

The reliability coefficients, and average variance extracted (AVE) were all high in all constructs (Farrell & Rudd, 2009). The AVE for each concept was less than the squared correlation coefficient between factors, indicating discriminant validity (Farrell & Rudd, 2009). Each construct's AVE was more than 0.50 of the total variances, implying convergent validity (Table 4). And the CR of all constructs was greater than 0.60, ranging from 0.735 to 0.940 (Table 4). All square roots of AVEs were bigger than correlations between pairs of constructs when (Farrell & Rudd, 2009) used the most rigorous method to examine discriminant validity. This revealed adequate discriminant validity (Table 4).

Table 4

The reliability and convergent validity test

| Items | Factor loading | Cronbach's Alpha | AVE | CR |
|------------------------|----------------|------------------|------|------|
| <i>The ease of use</i> | | | | |
| EOU1 | 0.71 | 0.70 | 0.55 | 0.73 |
| EOU2 | 0.56 | 0.72 | 0.58 | 0.78 |
| EOU3 | 0.80 | 0.75 | 0.57 | 0.72 |
| FDF1 | 0.73 | 0.85 | 0.61 | 0.71 |
| FDF2 | 0.87 | 0.87 | 0.66 | 0.89 |
| FDF3 | 0.84 | 0.81 | 0.52 | 0.82 |
| OFD1 | 0.89 | 0.83 | 0.68 | 0.88 |
| OFD2 | 0.72 | 0.89 | 0.56 | 0.73 |
| OFD3 | 0.73 | 0.76 | 0.51 | 0.73 |
| PMS1 | 0.84 | 0.76 | 0.51 | 0.74 |
| PMS2 | 0.85 | 0.74 | 0.54 | 0.87 |
| PMS3 | 0.95 | 0.78 | 0.68 | 0.85 |
| PMS4 | 0.87 | 0.75 | 0.58 | 0.74 |
| UFD1 | 0.75 | 0.77 | 0.53 | 0.73 |
| UFD2 | 0.77 | 0.81 | 0.66 | 0.89 |
| UFD3 | 0.87 | 0.69 | 0.56 | 0.76 |
| UFD4 | 0.79 | 0.82 | 0.68 | 0.77 |

Note *p < 0.05 was statistically significant at the 0.05 level.

The correlation coefficient between all the variables were positive, indicating the correlation to be in the same direction. This indicated that all of the variables were consistent with the conceptual and theoretical framework of the structural equation model created by the researchers (Tabachnick et al., 2007)

Table 5
The correlation of the coefficient matrix

| | EOU | FDF | OFD | PMS | UFD |
|-----|---------|---------|---------|-------|-----|
| EOU | 1 | | | | |
| FDF | 0.304** | 1 | | | |
| OFD | 0.531** | 0.449** | 1 | | |
| PMS | 0.054 | 0.005 | 0.053 | 1 | |
| UFD | 0.547** | 0.350** | 0.494** | 0.039 | 1 |

Note *p < 0.05 was statistically significant at the 0.05 level.

EOU=The ease of use, FDF=The food delivery service fees, OFD=The offers of online food delivery platforms, PMS=Payment safety, UFD=The usage of online food delivery platforms

Summary of hypotheses evaluation

Table 6
The characteristics of influence showing a causal relationship between the variables and hypothesis testing

| Hypotheses | B | p-value | Supported hypothesis |
|---|------|---------|----------------------|
| H1: The ease of use of online food delivery platforms positively influences online food delivery platforms in Thailand. | 0.52 | 0.001 | Yes |
| H2: The food delivery service fees positively influence the usage of online food delivery platforms in Thailand. | 0.78 | 0.905 | Yes |
| H3: The factor of offers or privileges in online food delivery platforms positively influences the usage of online food delivery platforms in Thailand. | 0.64 | 0.002 | Yes |
| H4: The payment safety factors of online food delivery platforms positively influence the usage of online food delivery platforms in Thailand | 0.63 | 0.202 | Yes |

Note *p < 0.05 was statistically significant at the 0.05 level.

From Table 5, it can be seen that the ease of use of the food delivery platforms was variable. The service fees charged by online food delivery platforms, the offers or privileges extended to consumers, and the online food delivery platforms' payment security had a causal relationship with the consumers' future usage of the online food delivery platforms. Therefore, the test results could be accepted for all the preset assumptions. The most influential factor was the service charges of the online food delivery platforms, followed by offers or privileges, payment security, and the ease of use of the food delivery platforms, as shown in Fig. 1.

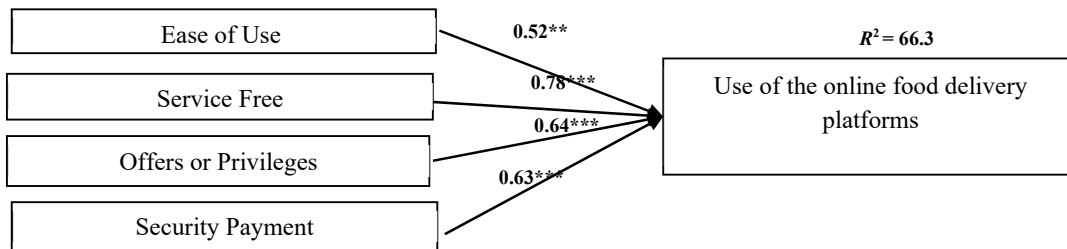


Fig. 1. The analysis of factors influencing the causal relationships between the variables and the hypothesis

4.4 Structural equation modeling

When considering the harmony between models and the empirical data determined from the statistical value χ^2/df , it should be less than 3.00. The probability of testing the variance matrix of variables in the approximate model with the empirical data must exceed the statistical significance level of 0.05 ($p > 0.05$) so that it can be accepted that the model is consistent with the data.

Table 7
The results of the consideration of the coherence values of the direct influence path analysis model

| Statistical Values | Criteria for consideration | Statistics | Results |
|--------------------|----------------------------|------------|---------|
| χ^2 | - | 2.27 | - |
| Df | - | 1 | - |
| χ^2/df | should be less than 3.00 | 2.47 | Pass |
| P | more valuable 0.05 | 0.120 | Pass |
| CFI | more valuable 0.90 | 0.915 | Pass |
| GFI | more valuable 0.90 | 0.972 | Pass |
| RMSEA | Is less than 0.08 | 0.037 | Pass |
| SRMR | Is less than 0.08 | 0.047 | Pass |

The harmonization index must be greater than 0.90 (i.e., the Goodness of fit index (GFI), the Comparative fit index (CFI), and the non-conformance index or residual index must be less than 0.08). RMSEA is the root mean square error of approximation (RMSEA), and the root means a square error of standard error is the Standardized root mean squared residual (SRMR). The results indicated that the intervariable relationship model was consistent with the empirical data. The statistical values passed all of the specified criteria, as shown in Table 7.

5. Discussion

The study of the factors affecting the use of online food delivery platforms in Thailand has led to a better understanding of Thai consumers' behaviors when using online food delivery platforms (Jaroenwanit and Deeboonmee, 2017). The study found that the factors of ease of use, service fees online, offers or privileges, and the payment security of online food delivery platforms had influenced the consumers' future usage of the platforms. In addition, this information gives owners the ability to effectively predict phenomena and their consequences. Moreover, it could be useful material when seeking to study, modify, improve, and develop future online food delivery platforms in Thailand. This study also revealed the fact that the food delivery service fees had the most positive effect on the intended future use of online food delivery platforms, such as in educational benefits. This makes it possible to carry out further research on the changes being made to online food delivery platforms and create other movements in the academic field and promote this branch of knowledge.

5.1 *The factors related to the ease of use of online food delivery platforms*

From the results of the data analysis, it was found that the sample group had focused on the ease of use of the online food delivery platforms. Flexibility and speed were determined to be the factors that would result in the future use of online food delivery platforms and would offer smooth service throughout the online food delivery platforms with a predictive influence coefficient of $B = 0.520$. When there are only a few steps to access the platform, consumers feel that using the platform is easy. This finding is consistent with a study by Israel et al. (2019) in which it was found that the ease of use of an online food delivery platform would affect its continued use. Their study's sample consisted of individuals from Chennai, India. Similarly, Chetan et al. (2019) found that ease of use and enjoyment had affected the use of online food delivery platforms. Users had also recommended the online food delivery platforms to their friends. This is in line with research by Tribhuvan (2020), who found that among consumers, the factors of ease of use, responsiveness and speed, and the accuracy of the operating system could all influence the continued usage of online food delivery platforms. These factors could also contribute to the continued use of services in the future.

5.2 *The food delivery service fees*

The food delivery service fees were the most influential factor in the future use of online food delivery platforms. Among Thai consumers, the predictive coefficient of influence was $B = 0.780$. Listing the details of the food items on the menu, showing the food prices, and stating delivery charges are important because by clearly showing all of the service charges, consumers can calculate the total costs before placing an order, which, in turn, allows the consumers to compare the prices being offered by other online food delivery platforms. This result was in line with previous research by (Chandrasekhar et al., 2019). Their study revealed that the majority of consumers had compared the online food delivery platforms and had chosen those platforms which were offering cheaper food delivery instead of selecting the more costly platforms. Similarly, in a study by Dazmin and Ho (2019), it was found that cost and delivery time factors had significantly influenced the consumers' use of online food delivery platforms. This was also in line with research by Kaur et al. (2021), who found that the food delivery service fees had been the key factor in assisting consumers choose their online food delivery platforms.

5.3 *The factors related to offers or privileges of the online food delivery platforms*

The results of the data analysis revealed that the sample group had prioritized the offers or benefits of online food delivery platforms, which would result in the future use of online food delivery platforms. Good deals were determined both in terms of price and the various discount offers and the speed of the food delivery and other benefits that one platform offers more than another. This is in line with research by Mangwani et al. (2020), who explained how the factor of having attractive offers, which were extended to consumers by online food delivery platforms, had resulted in consumers seeing greater value from what they had received. Choosing to use such online food delivery platforms will result in a greater likelihood of consumers using online food delivery platforms. This is consistent with (Gupta & Duggal, 2020) research, who studied the use of online food delivery platforms in India. It was found that the benefit factor which the customers received had influenced their future intentions to use online food delivery platforms. Its influence level was 12.36%, which was also consistent with studies by and Churchil et al. (2020), whose research findings noted that good benefits and offers influence the consumers' decision-making processes causing them to opt for a certain online food delivery platform.

5.4 *The payment safety factors related to online food delivery platforms*

According to the results of the data analysis, the sample group had prioritized the payment safety of the online food delivery platforms, resulting in the future use of online food delivery platforms. Suffice it to say, this factor is a top priority because

consumers are concerned about a lack of payment security. In addition to the price and benefits factors, consumers are also worried about their ability to make safe and efficient online payments. According to the results of this study, providing customers with the ability to make safe and efficient purchases creates a more competitive environment for online food delivery platforms. The findings of this study were consistent with research by Li et al. (2020) and analysis by Lu et al. (2017) who investigated the continuity of online food delivery platform services in China. The results showed those samples which had been satisfied with the safety and security of making payments on the online food delivery platforms would be more likely to use online food delivery platforms in the future. The results from this study were also consistent with research by Israel et al. (2019) who found that the payment security of online food delivery platforms would affect the continued use of online food delivery platforms in the future.

6. Suggestion

6.1 The food delivery service fees

According to the research findings, consumers value the price factor the most, indicating that providers of online food delivery platform should lower their prices. When food is sold and delivered in certain areas, delivery only takes a short time. It should not be more expensive when delivery is included than when customers travel to buy it themselves. In order to be able to compete with other online food delivery platforms, there should be a strategy to charge the actual delivery fee by the distance that is traveled when making the delivery. This would make customers feel that they would not have to pay an expensive delivery fee when they ordered food at a nearby restaurant. Another approach could be to create a special menu with a special price, such as a set menu. A pair of products could be offered at a special price so that customers could see the difference in price between specially priced menu items and the other food items. Moreover, this specially-priced food could be separated from the main menu. However, there should be a clear timeline. To encourage customers to make faster ordering decisions, the price structure on the online food delivery platforms should be improved and developed. Moreover, prices need to be visible and easy to follow to attract consumers in other ways. It will be important to convince consumers to use online food delivery platforms for future success.

6.2 The factors of offers or privileges

According to the research findings, consumers valued the characteristics of offers or privileges. Therefore, online food delivery platform providers should always be implementing new promotions, possibly reducing the delivery costs, reducing the cost of food purchased from famous restaurants, having various coupon codes, and creating games so that consumers can win prizes. Alternatively, you can order food through the application so that it can also be picked up at the store, which also saves waiting time. There could also be discounts on service fees when a customer pays in conjunction with a credit card or membership card. In order to attract customers who will want to use the online food delivery platform in the future, many discounts and benefits can be offered on the online food delivery platforms.

6.3 Payment security factors

According to the research findings, consumers pay more attention to the payment safety factor when using online food delivery platforms. Online food delivery platform providers need to develop consumer trust and ensure that payments are secure. In other words, consumers need to be able to trust the amount of money on online food delivery platforms, and the providers need to make certain that the payments are secure. For example, online food delivery platforms should be designed to be more concise and faster, and consumers should be able to check their past payment transactions. Measures are currently in place that make consumer access to banking information secure and provide alerts via SMS or email about the movement of the service, including the payments. If consumers are confident in payment security, then they will be more likely to use Future Online Food Delivery Platforms.

6.4 The ease of use of food delivery platforms

According to the research findings, consumers pay more attention to the ease of using online food delivery platforms, which indicates that online food delivery providers could further improve and enhance the ease of use of their platforms. Consistent service from the providers simplifies and shortens the access process. It does not take much work to make it more likely for consumers to use online food delivery platforms in the future.

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