

ปัจจัยที่ส่งผลต่อความพึงพอใจของลูกค้า  
ต่อแพลตฟอร์มบริการส่งอาหาร: กรณีศึกษาในประเทศไทย  
THE DETERMINANTS OF CUSTOMER SATISFACTION ON FOOD  
DELIVERY PLATFORMS: A CASE STUDY IN THAILAND

เสฏฐนันท์ วรณวเรศจรูญ<sup>1</sup> จิรายุส มัญจะกาเภท<sup>2</sup>

Settanan Wanvoraset, Jirayut Monjagapate

Received August 2, 2024

Revised September 3, 2024

Accepted October 4, 2024

บทคัดย่อ

การศึกษานี้วิเคราะห์ปัจจัยที่มีอิทธิพลต่อการตัดสินใจใช้บริการส่งอาหารออนไลน์ (OFD) ของลูกค้า และผลต่อความพึงพอใจของลูกค้าโดยใช้การวิเคราะห์สมการถดถอย Ordinary Least Squares (OLS) พร้อมตัวแปร Interaction Term โดยใช้ตัวอย่างจากผู้เข้าร่วมจำนวน 390 คนเพื่อหาความสัมพันธ์ระหว่างความพึงพอใจของลูกค้า ปัจจัยในการเลือกแพลตฟอร์ม และตัวแปรต่าง ๆ ผลการศึกษาชี้ให้เห็นว่าบริการลูกค้าเป็นปัจจัยสำคัญที่ช่วยเพิ่มความพึงพอใจของลูกค้า ราคาที่แสดงบน OFD ก็มีผลต่อระดับความพึงพอใจอย่างมากเช่นกัน นอกจากนี้ ชื่อเสียงด้านการเป็นมิตรต่อสิ่งแวดล้อมของร้านอาหารบนแพลตฟอร์ม OFD ยังมีส่วนช่วยเสริมความพึงพอใจของลูกค้า แม้ว่าปัจจัยบางอย่าง เช่น การใช้งาน การเลือกสรร คุณภาพอาหาร ความตรงเวลา วิธีการชำระเงิน ความถูกต้องของการสั่งซื้อ และความไว้วางใจต่อแพลตฟอร์มจะไม่ส่งผลต่อความพึงพอใจอย่างมีนัยสำคัญทางสถิติ แต่ความสำคัญในเชิงบริบทของปัจจัยเหล่านี้ยังแสดงให้เห็นถึงโอกาสในการพัฒนาแพลตฟอร์มต่อไป การวิจัยนี้ให้ข้อมูลเชิงลึกที่สำคัญในการเพิ่มความพึงพอใจของลูกค้า โดยแนะนำว่าควรให้ความสำคัญกับการพัฒนากลยุทธ์การตั้งราคาเพื่อคุ้มค่าต่อการจ่าย และการใช้แนวทางที่เป็นมิตรกับสิ่งแวดล้อม เช่น การใช้บรรจุภัณฑ์ย่อยสลายได้และการจัดหาวัตถุดิบอย่างยั่งยืน เพื่อตอบสนองความต้องการที่เพิ่มขึ้นของผู้บริโภคที่ต้องการสินค้าและบริการที่ใส่ใจสิ่งแวดล้อม

คำสำคัญ: การถดถอยด้วยวิธีกำลังสองน้อยสุด ความพึงพอใจของลูกค้า บริการส่งอาหารออนไลน์

<sup>1</sup> หลักสูตรบริหารธุรกิจมหาบัณฑิตสากล (GMBA) มหาวิทยาลัยดังให้ ผู้เขียนหลัก อีเมล: settanan1999@gmail.com  
Global Master of Business Administration (GMBA), Tunghai University, Corresponding Author, Email  
Address: settanan1999@gmail.com

<sup>2</sup> การวิเคราะห์ธุรกิจและการเปลี่ยนแปลงสู่ดิจิทัล สถาบันเทคโนโลยีแห่งเอเชีย อีเมล: jirayut.monjagapate@gmail.com  
Business Analytics and Digital Transformation, School of Management, Asian Institute of Technology,  
Email Address: jirayut.monjagapate@gmail.com

## Abstract

This study investigates the factors that customers decide to use online food delivery (OFD) can influence satisfaction using Ordinary Least Squares (OLS) regression with interaction terms. A sample of 390 participants provided insights into the relationships between customer satisfaction, platform selection factors, and various variables. The findings highlight the critical role of customer service in enhancing customer satisfaction. Price showing in OFD is also significantly influence satisfaction levels, and environmentally friendly reputation of restaurants in OFD platform responds to customers satisfaction. Despite certain factors like navigation, choices, food quality, punctuality, payment methods, order accuracy, and platform trust not uniformly impacting satisfaction, their contextual relevance underscores ongoing opportunities for platform improvements. This research contributes essential insights for enhancing customer satisfaction by recommending that focus should be on developing pricing strategies that deliver strong value for money, and embracing environmentally friendly practices, like using biodegradable packaging and sourcing sustainably, is also key to meeting the growing consumer demand for eco-friendly products and services.

**Keywords:** OLS regression, Customer satisfaction, Online Food Delivery

## Introduction

Food delivery is a popular and convenient way for people in Thailand to enjoy a wide range of cuisine from both local and international restaurants. The highly competitive industry includes major players like GrabFood, Foodpanda, and LINE Man, which offer user-friendly mobile apps, a broad selection of restaurants and food options, and various payment methods to cater to different customer needs. Valuing quality and taste, Thai customers drive platforms to partner with renowned and highly-rated restaurants, often accompanied by promotions and discounts to encourage orders. A unique aspect of the sector is the extensive use of motorcycle drivers who adeptly navigate busy urban traffic, ensuring quicker delivery times and maintaining food freshness.

There are several reasons why people prefer ordering food delivery instead of dining out. According to The Asian Age (2020), one primary reason is convenience. Food delivery allows people to enjoy restaurant-quality meals from their own homes or offices, saving time on travel to and from a restaurant. This is especially important for those with busy schedules who lack the time or energy to cook or dine out. Another reason is the wider range of food options available. Food delivery platforms partner with various restaurants, offering a broader selection of cuisines and food options than a single restaurant can provide. This is crucial for individuals with specific dietary requirements or preferences, as they can choose from numerous options that cater to their needs. Additionally, food delivery can be more cost-effective for some people. Delivery fees are often lower than travel costs, and customers can compare prices and promotions across different platforms to find good deals and discounts. Finally, food delivery provides a safer and more comfortable option for those unable to leave their homes due

to illness, disability, or other reasons. They can still enjoy restaurant-quality meals without the risks or difficulties associated with going out. Overall, food delivery offers a convenient, flexible, and accessible way for people to enjoy restaurant-quality meals at home or work.

Moreover, food delivery services in Thailand have experienced significant growth in recent years, beginning with the launch of Foodpanda in 2012 and followed by the entry of other players such as GrabFood, Lineman, and Robinhood. The industry's rapid evolution reflects its increasing importance and suggests it will continue adapting to changing consumer preferences. Statista (2023) also categorizes online food delivery users by age, showing that 3 to 6 times per week users are: 17% are 16-24 years old, 27% are 25-34 years old, 22% are 35-44 years old, 20% are 45-54 years old, and 16% are 55-64 years old. This data indicates that online food delivery is popular across almost all age ranges, especially among working adults.

As the trend shows that people have been adapting more the food delivery services, the research will try to identify potential factors that can affect the customer satisfaction. Importance of this research can be partially interpreted that when customers feel satisfied from services, it can help the company in repurchase form the customers (Cha and Shin, 2021).

**Hypothesis**

As the research intentionally identifies factors influence customer satisfaction on online food delivery service, the hypothesis can be shown as follows:

**Table 1:** Hypothesis

Hypothesis	Relationship
$H_0$	There is no effect or no relationship between the following factors and customer satisfaction.
$H_{a1}$	Navigation on the platform significantly affects customer satisfaction.
$H_{a2}$	The variety of choices available significantly influences customer satisfaction.
$H_{a3}$	Food quality significantly impacts customer satisfaction.
$H_{a4}$	Punctuality of service significantly influences customer satisfaction.
$H_{a5}$	The quality of service significantly affects customer satisfaction.
$H_{a6}$	The availability of preferred payment methods significantly affects customer satisfaction.
$H_{a7}$	The accuracy of the order (correct order delivery) significantly influences customer satisfaction.
$H_{a8}$	Price on food delivery platform significantly impacts customer satisfaction.
$H_{a9}$	The food provider's reputation related to environmentally friendly significantly affects customer satisfaction.
$H_{a10}$	Customer trust in the platform significantly influences customer satisfaction.

## Literature Reviews

### Food delivery in Thailand

Kemp (2020) indicates that Thailand boasts the largest number of internet users in Southeast Asia, with around 52 million people averaging nine hours daily on mobile internet. Sirikeratikul (2020) highlights the rapid expansion of Thailand's online food delivery sector since 2019, outpacing the growth seen from 2012 to 2018. Consequently, Thailand's online food delivery market is among the fastest-growing in the region. Online food delivery typically accounts for about 15% of a restaurant's revenue, offering significant benefits to street food vendors with limited seating.

Since 2018, consumer behavior in Thailand's food delivery market has significantly evolved, with an annual growth rate averaging 10%. In Bangkok, office workers and middle-class groups, who value convenience, increasingly depend on food delivery services. This trend is driven by lifestyle changes and the rising use of the internet and smartphones in Thailand. The expanding consumer base mainly comprises the growing number of internet and smartphone users. Additionally, urban residents with busy lifestyles tend to place more online food orders than other demographic groups (Sirikeratikul, 2020).

### Consumption behavior

Over the past decade, online food delivery (OFD) has shown substantial growth, contributing significantly to the revenue of major companies, a trend expected to continue. Previous research has focused on customer adoption factors like satisfaction, food quality, and service quality dimensions such as perceived control, convenience, customer service, and fulfillment (Annaraud & Berezina, 2020). Ganapathi and Abu-Shanab (2020) conducted a study in Qatar highlighting service quality and customer satisfaction as crucial drivers of loyalty in OFD services, emphasizing the need for providers to assess and enhance their offerings.

To ensure customer satisfaction, OFD providers should prioritize efficient service delivery, user-friendly apps, timely delivery, electronic payment options, and regular discounts to understand market segments and preferences (Annaraud & Berezina, 2020). During the COVID-19 pandemic, Prasetyo et al. (2021) identified hedonic motivation, price, information quality, and promotions as significant factors influencing OFD service usage, offering insights for enhancing service quality during crises.

Implementing these insights can increase future OFD adoption by emphasizing enjoyable user experiences and effective marketing strategies (Annaraud & Berezina, 2020). Saad (2021) categorized factors influencing consumer choices into direct (delivery time, service quality, price, food condition) and indirect factors (restaurant variety, menu options), underscoring their role in shaping consumer behavior in online food ordering. Furthermore, Kedah et al. (2015) explored factors impacting

the customer ordering experience, finding positive relationships between website quality, service quality, customer satisfaction, and loyalty, offering operational insights for OFD services.

### **Repurchase on Food Delivery**

Previous studies have examined factors influencing customer repurchase intentions for food delivery apps, highlighting perceived usefulness, social influence, and trust as critical drivers (Yeo, Tan, Teo, & Tan, 2021). These insights underscore the importance of enhancing app platforms to boost customer satisfaction and repurchase intentions in the competitive food delivery market. Additionally, Cha and Shin (2021) investigated how service quality during the COVID-19 pandemic affects customers' emotional responses and repurchase likelihood in food delivery. Their research, based on a survey of 300 users, revealed that factors like taste, pricing fairness, and package design positively influence emotional responses and subsequent repurchase intentions. This study enriches understanding of consumer behavior in food delivery and provides strategic guidance for industry players seeking to improve service quality and customer loyalty.

### **Customer perception on Food Delivery and Sustainability**

The internet's growth and evolving lifestyles have propelled online food delivery into a thriving industry. Consumers are drawn to its convenience, variety, information accuracy, and cost-effectiveness (Frederick and Bhat, 2021). Factors such as price, time efficiency, prior experience, convenience, food quality, and e-service quality significantly influence consumer perceptions and satisfaction with food delivery services. Moreover, ensuring privacy, safety, and user-friendly features like call buttons or chatbots are crucial for older consumers navigating online food delivery apps (Frederick and Bhat, 2021). Resolving issues promptly regarding food quality, service, or payment is also vital to maintain customer satisfaction and loyalty.

From a sustainability perspective, online food delivery (OFD) has positive economic impacts but also raises concerns about high restaurant commissions and environmental footprints (Li, Miroso, and Bremer, 2020). Addressing these challenges requires stakeholders to minimize negative impacts and enhance the sustainability of OFD operations. Several findings say that sustainable food, green food, and organic food are important to promote sustainability conscious (Verain et al., 2015; Vermeir et al., 2020; Hasan et al., 2023). Therefore, online food delivery, particularly through mobile organic food delivery apps (MOFDAs), promotes sustainability by making it easier for consumers to access organic food options. These apps support safer, more hygienic consumption by reducing physical interaction. They also align with the values of sustainability-conscious consumers, helping to meet the growing demand for organic food by providing a convenient way to make environmentally friendly choices. In addition, users prefer eco-friendly food products that are grown organically without using regular pesticides, synthetic fertilizers, genetic modification, or radiation. Protecting the environment is important for keeping nature in balance (Loo et al., 2010).

### **Perception on platform of Food Delivery**

The quality of online food delivery platforms significantly influences customer repurchase intentions. Yeo et al. (2021) identified perceived usefulness, social influence, and trust as key factors positively impacting customer repurchase intentions for food apps. Similarly, Cha and Shin (2021) highlighted the interconnectedness of delivery food service quality, emotional response, and repurchase intentions, with factors such as taste, fair pricing, and package design influencing customer decisions. Customer satisfaction and loyalty are further bolstered by trust in website reliability and usability (Kedah, et al., 2015). Ensuring secure transactions, clear information, and user-friendly interfaces are essential to enhancing the online experience. Additionally, factors like price, time efficiency, prior experience, convenience, food quality, and e-service quality shape customer perceptions of online food delivery services (Ganapathi & Abu-Shanab, 2020; Prasetyo et al., 2021; Frederick & Bhat, 2021). In addition, by addressing sustainability concerns in online food delivery involves tackling issues related to restaurant commissions, working conditions for delivery staff, public health outcomes, traffic systems, and environmental impact (Li et al., 2020).

Moreover, the quality of restaurants plays a pivotal role in shaping consumer perceptions and satisfaction with online food delivery services. Frederick & Bhat (2021) emphasize that food quality significantly affects customer satisfaction, with preferences leaning towards healthier and personalized meals that cater to specific dietary needs and tastes. It is crucial to promptly address any issues related to food quality to prevent negative customer experiences.

Li, Miroso, and Bremer (2020) underscore the broader impacts of online food delivery on public health and the consumer-food relationship, stressing the importance of minimizing negative effects and ensuring food safety and quality. Upholding high food standards is essential for satisfying customers and positively influencing their overall satisfaction (Annaraud & Berezina, 2020).

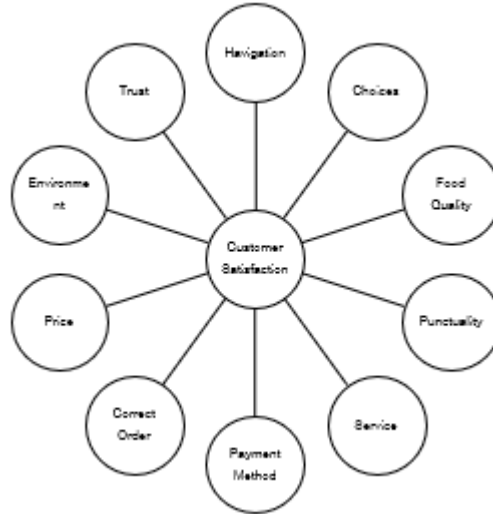
### **Quality of Food Delivery**

Delivery quality significantly shapes customer satisfaction in online food delivery services. Frederick & Bhat (2021) highlight that factors like food quality, e-service quality, prior experience, convenience, time efficiency, and pricing influence how customers perceive these services. Timely resolution of issues related to food quality, service, or payments is crucial to prevent negative customer decisions. Perceived control, convenience, customer service, and service fulfillment are identified by Annaraud & Berezina (2020) as critical elements that enhance customer satisfaction and foster loyalty. When customers feel in control of their service experience, find it convenient, receive excellent customer service, and have their service needs met, their overall satisfaction increases, leading to loyalty to the brand or service provider. Customers also value appropriate food temperature during delivery and the availability of vegan options, which significantly influence their perceptions of online food delivery services. Addressing sustainability concerns through practices like adopting electro-

mobility is essential to mitigate the negative environmental impacts associated with these services, such as waste generation and carbon footprints (Li, Miroso, & Bremer, 2020).

## Methodology

### Conceptual Framework



**Figure 1:** Conceptual Framework of Customer Satisfaction

Regarding literature reviews, Figure 1 illustrates the overall concept of factors potentially affect the customer satisfaction.

### Model Specification

To begin with, a regression model that you can use to analyze factors affecting customer satisfaction. In this model, based on literature reviews, it is assumed that customer satisfaction  $Y_i$  is influenced by three independent variables: platform quality  $X_1$ , restaurant quality  $X_2$ , and service quality  $X_3$ , and so on. It can be written:

$$\hat{Y}_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_n X_n + \varepsilon \dots \dots \dots (1)$$

Where

$Y$  is the customer satisfaction score (the dependent variable).

$X_1$  represents product quality.

$X_2$  represents customer service.

$X_3$  represents restaurant quality.

$X_n$  represents additional variables.

$i$  represents the individual customer.

$\beta_0, \beta_1, \beta_2, \dots, \beta_n$  are the regression coefficients that determine the relationship between the independent variables and customer satisfaction.

$\epsilon$  represents the error term, accounting for any unexplained variance in customer satisfaction.

To estimate the coefficients  $\beta_0, \beta_1, \beta_2, \dots, \beta_n$ , author uses a regression analysis technique such as ordinary least squares (OLS) regression. The OLS method finds the best-fitting line that minimizes the sum of squared differences between the predicted and actual customer satisfaction scores.

In addition, to develop a more complex regression model that includes additional variables and interactions to analyze factors affecting customer satisfaction:

$$\hat{Y}_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_1 X_2 + \beta_5 X_1 X_3 + \beta_6 X_2 X_3 + \epsilon \dots (2)$$

To develop form model 1, the variables remain the same, and the model includes the main effects of each variable ( $\beta_0, \beta_1, \beta_2, \dots, \beta_3, \dots$ ) as well as several interaction terms ( $\beta_4 X_1 X_2 + \beta_5 X_1 X_3 + \beta_6 X_2 X_3$ ) to capture potential combined effects. The coefficients from  $\beta_0$  to  $\beta_n$  represent the regression coefficients that determine the strength and direction of the relationship between the independent variables and customer satisfaction. The error term  $\epsilon$  accounts for any unexplained variance in customer satisfaction.

#### Data collection

According to Longtunman (2024), Grab monthly users are 19.4 million users. To grab some participants from this pool of users, authors utilize the sample size from Dhand & Khatkar (2014)'s sample size estimator. Authors set level of confidence at 0.95, and results show that 385 participants should be collected. Then, Data was collected via an online survey targeting individuals who had prior experience with food delivery services. To ensure a diverse sample, a non-probability sampling method known as convenience sampling was utilized to the research, selecting participants based on their accessibility and availability rather than through randomization. Recruitment (participants) was conducted through various online channels such as social media groups, email invitations, and forums authors provide. Convenience sampling was chosen because it allowed easy access to a relevant population—individuals who have used food delivery services. Since the research aims to study factors affecting customer satisfaction in food delivery, targeting those with direct experience ensured that the responses were relevant and informed.

While convenience sampling is widely used in fields like social sciences and market research where random sampling is challenging, it is important to recognize its limitations, as the resulting sample may not fully represent the entire population, potentially introducing bias (Nikolopoulou, 2022). Participants to this research needed to meet specific criteria: having used food delivery services, being at least 18 years old (with parental consent required for those under 18), having internet access, and consenting to data collection. The survey included closed-ended questions aimed at exploring different facets of food delivery services. A total of 390 finalized responses were collected, the predetermined



sample size for analysis, and rigorous data cleaning and screening procedures were applied to ensure data quality and completeness. Also, the total 390 participants satisfied Dhand and Khatkar (2014)'s condition.

### Data analysis

The methodology employed in this study involves Ordinary Least Squares (OLS) regression with interaction terms, a widely used statistical technique for modeling the linear relationship between a dependent variable and multiple independent variables, including interactions. OLS regression minimizes the sum of squared differences between observed and predicted values of the dependent variable. Specifically, this research applies OLS regression with interaction terms to explore how customer satisfaction can be influenced by three main data segments and their interactions. These interaction terms allow for examining synergistic or moderating effects between variables. The analysis will entail estimating coefficients for the independent variables and interaction terms, assessing their significance, and evaluating model fit using metrics like R-squared. Diagnostic tests will also be conducted to ensure the model meets regression assumptions, given the inclusion of interaction terms. By incorporating these interaction terms, the study aims to uncover nuanced relationships and interaction effects among various factors influencing customer satisfaction and platform selection.

### Variable Selection

**Table 2:** Selection of Variables

Questionnaire	Abbreviation (Variable)	Related Literature Reviews by Author(s)
The ease of navigating the food delivery platform is a crucial factor in deciding to use it.	Navigation	Prasetyo et al. (2021)
The variety of food available on the platform influences your decision to use it.	Choices	Cha and Shin (2021)
The quality of the food ordered on the platform is an important consideration in using it.	Food Quality	Cha and Shin (2021); Frederick and Bhat (2021)
Timely delivery (Being on time) is significant in your decision to use the food delivery platform.	Punctuality	Cha and Shin (2021); Frederick and Bhat (2021)
The customer service provided by the platform affects your decision to use it.	Customer Service	Annaraud & Berezina (2020); Ganapati and Abu-Shanab (2020); Prasetyo et al. (2021); Cha and Shin (2021); Frederick and Bhat (2021)
The payment method's ease of use is considered.	Payment	Annaraud & Berezina (2020)
The accuracy of orders is important in your decision to use the food delivery platform.	Correct Order	Cha and Shin (2021)

**Table 2:** Continued

<b>Questionnaire</b>	<b>Abbreviation (Variable)</b>	<b>Related Literature Reviews by Author(s)</b>
The price of food on the platform influences your decision to use it.	Price	Cha and Shin (2021); Prasetyo et al. (2021); Frederick and Bhat (2021)
The food delivery company's reputation for sustainability or eco-friendliness matters.	Environmentally Friendly	Li, Miroso, and Bremer (2020)
Trust in the online food delivery platform and protection of personal information are important.	Trust	Kedah et al. (2015); Cha and Shin (2021)
Overall user experience, evaluated based on previous questions, influences future use intentions of the food delivery platform.	Satisfaction	Kedah et al. (2015); Prasetyo et al. (2021)

## Results and discussion

**Table 3:** Descriptive Statistics of Participants

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. dev.</b>	<b>Min</b>	<b>Max</b>
<b>Personal Information</b>					
Male	159				
Female	215				
Others	16				
Age	390	36.3231	12.3530	13	70
Navigation	390	3.8778	1.0426	1	5
Choices	390	3.9669	0.9564	1	5
Food Quality	390	3.8905	0.9640	1	5
Punctuality	390	3.8498	1.0001	1	5
Customer Service	390	3.8549	0.9829	1	5
Payment	390	3.9821	0.9857	1	5
Correct Order	390	4	0.9897	1	5
Price	390	3.9821	0.9857	1	5
Environmentally Friendly	390	3.9185	0.9837	1	5
Trust in Platform	390	4.1195	0.9654	1	5
Satisfaction Score	390	3.7506	0.9483	1	5

**Table 4:** Regressions results with Robust check.

Variable	Model 1	Model 2
	OLS	OLS
Navigation	0.01473 (0.79)	0.0082 (0.88)
Choices	0.1173 (0.06)	0.1145 (0.07)
Food Quality	0.1055 (0.15)	0.1266 (0.62)
Punctuality	-0.0068 (0.89)	-0.0029 (0.95)
Customer Service	0.1632* (0.02)	0.3151 (0.15)
Payment	0.1382 (0.08)	0.1404 (0.08)
Correct Order	-0.0485 (0.50)	-0.0459 (0.54)
Price	0.1740* (0.016)	0.3339** (0.005)
Environmentally Friendly	0.1142* (0.03)	0.1091* (0.04)
Trust in Platform	0.0798 (0.25)	0.0778 (0.27)
Food Quality*Price		-0.0066 (0.90)
Customer Service*Price		-0.0386 (0.45)
Constant	0.3884*** (0.00)	-0.1605 (0.67)
Observations	390	390
R-squared	0.5253	0.5279
Root MSE	0.6619	0.6618

**Notice:** \* refers to  $p < 0.05$ : The result is statistically significant at the 5% level.

\*\* refers to  $p < 0.01$ : The result is statistically significant at the 1% level.

\*\*\* refers to  $p < 0.001$ : The result is statistically significant at the 0.1% level.

All models are robust check.

## Discussion

**Table 5:** Hypothesis Results

Hypothesis	Relationship	Model 1	Model 2
$H_{a1}$	Navigation on the platform significantly affects customer satisfaction.	Accepted $H_o$	Accepted $H_o$
$H_{a2}$	The variety of choices available significantly influences customer satisfaction.	Accepted $H_o$	Accepted $H_o$
$H_{a3}$	Food quality significantly impacts customer satisfaction.	Accepted $H_o$	Accepted $H_o$
$H_{a4}$	Punctuality of service significantly influences customer satisfaction.	Accepted $H_o$	Accepted $H_o$
$H_{a5}$	The quality of customer service significantly affects customer satisfaction.	Rejected $H_o$	Accepted $H_o$
$H_{a6}$	The availability of preferred payment methods significantly affects customer satisfaction.	Accepted $H_o$	Accepted $H_o$
$H_{a7}$	The accuracy of the order (correct order delivery) significantly influences customer satisfaction.	Accepted $H_o$	Accepted $H_o$
$H_{a8}$	Price on food delivery platform significantly impacts customer satisfaction.	Rejected $H_o$	Rejected $H_o$
$H_{a9}$	The food provider's reputation related to environmentally friendly significantly affects customer satisfaction.	Rejected $H_o$	Rejected $H_o$
$H_{a10}$	Customer trust in the platform significantly influences customer satisfaction.	Accepted $H_o$	Accepted $H_o$

According to Table 5, to check either to reject or accept hypothesis, authors found that critical values of t for two tailed tests are between  $\pm 1.98$  to  $1.96$ . As setting a significant level at  $\alpha = 0.5$ . The results show that in Model 1, authors reject the null hypothesis in Customer Service, Price, and Environmentally Friendly variables. In Model 2, authors reject the null hypothesis in Price, and Environmentally Friendly variables.

To demonstrate the results, In Model 1, the factors examined for their impact on customer satisfaction include Navigation, Choices, Food Quality, Punctuality, Customer Service, Payment, Correct Order, Price, Environmentally Friendly, and Trust on Platform. The result shows that Navigation, Choice, Food Quality, Punctuality, Payment, and Trust on Platform were found to lack statistical significance in influencing satisfaction, whereas Customer Service, Price, and Environmentally Friendly showed positively significant variables but varying degrees of significance.

In Model 2, similar factors were analyzed, with Navigation, Choices, Food Quality, Punctuality, Customer Service, Payment, Correct Order, Price, Environmentally Friendly, Trust on Platform, Food Quality, Price, and Customer Service, Price interaction terms included. The result of model 2 showed that Navigation, Choices, Food Quality, Punctuality, Customer Service, Payment, Correct Order, and Trust on Platform did not exhibit statistical significance in affecting satisfaction. Nonetheless, Price, and Environmentally Friendly were positively associated with statistically significant for satisfaction. Additionally, the interaction terms Food Quality, Price and Customer Service, Price were not statistically significant.

From both models, it is evident that price and environmental friendliness are factors influencing customer satisfaction in online food delivery. Prices in both models show that it can influence the customer satisfaction on online food delivery. As Prasetyo et al. (2021) previously claim that price can be factors for customers to select the use of OFD, authors' finding enlarges that price can significantly influence customer satisfaction. Also, both models show that environmentally friendly is significant to customer satisfaction. As Loo et al. (2010) claim that the environmentally friendly product can gain interests from customers who are environment-conscious customers, this research's finding reveals that majority of customers consider about sustainability when they decide to use OFD, and their satisfaction varies on the environmentally friendly food. On the other hands, Customer Service is significant only in Model 1. It reveals aligned with Annaraud & Berezina (2020)'s finding that customer service can influence customer satisfaction. The interaction term of food quality with price and customer service with price are not significant for the study.

These variables consistently showed significant impacts across different regression analyses. However, while emphasizing the importance of price and sustainability, it is essential not to overlook other variables that did not show significant effects consistently. These variables, such as navigation, food choices, food quality, punctuality, payment methods, order accuracy, and trust in the platform, still play relevant roles in shaping customer satisfaction. Therefore, a comprehensive approach that develops all aspects of service delivery is necessary to enhance overall customer satisfaction in online food delivery platforms.

### **Implications**

The comprehensive analysis of two regression models reveals key factors influencing customer satisfaction in online food delivery services. Customer service emerges as consistently significant. This highlights the importance for platforms to prioritize effective communication, prompt issue resolution, and friendly interactions with customers. Pricing also consistently impacts satisfaction, emphasizing the need for reasonable pricing strategies that offer value for money. By suggesting, they can start by introducing dynamic pricing strategies tailored to different income levels among their customers, making sure the prices remain affordable while still being profitable. Nivornusit, Kraiwaniit, & Limna (2024) suggest that dynamic pricing requires examining market data to establish flexible pricing that can adjust to changes in demand and customer preferences. Additionally, it's important to improve the availability of information about pricing, menu choices, and promotions through easy-to-

use digital platforms. Moreover, the inclusion of environmentally friendly indicates customer preference for sustainability efforts, suggesting platforms should adopt eco-friendly initiatives like biodegradable packaging and sustainable sourcing. These efforts will align with the growing demand for environmentally conscious products and services (Loo et al., 2010). While factors like navigation, menu choices, food quality, punctuality, payment methods, order accuracy, and platform trust did not uniformly affect satisfaction, their relevance remains contingent on context and requires ongoing improvement efforts by platforms to ensure a seamless customer experience.

### **Limitations and Further Study Recommendations**

The research mainly emphasizes on the survey, which the survey did not request participants to provide their personal opinions. For further study, it should include in-debt interviews to find insight or additional conditions for increase satisfaction on OFD. In addition, the sampling is convenience sampling method which may result in biased in some dimensions. In addition, price sensitivity and reputation on how sustainable on restaurants who sell their food in online platform should be considered.

### **Conclusion**

This study provides valuable insights into factors influencing customer satisfaction in the online food delivery sector. Using Ordinary Least Squares (OLS) regression with interaction terms, the research examined relationships between customer satisfaction, platform selection factors, and other relevant variables. The study included 390 participants, highlighting the critical role of customer service, pricing, and environment reputation of restaurant in OFD emerged as a significant factor. Despite variables like navigation, menu choices, food quality, punctuality, payment methods, order accuracy, and platform trust not consistently impacting satisfaction, their contextual significance underscores the ongoing need for improvements to ensure a seamless customer experience across online food delivery platforms. To help the satisfaction level on OFD, it is recommended to focus on pricing strategies that provide good value for money. One approach is to implement dynamic pricing tailored to different income levels, ensuring prices are both affordable and profitable. This involves analyzing market data to create flexible pricing that adapts to changes in demand and customer preferences. Additionally, enhancing the accessibility of information about pricing, menu options, and promotions through user-friendly digital platforms is essential. Incorporating environmentally friendly practices, such as biodegradable packaging and sustainable sourcing, is also important, as it aligns with the increasing demand for eco-conscious products and services.

### **References**

- Annaraud, K., & Berezina, K. (2020). Predicting satisfaction and intentions to use online food delivery: What really makes a difference? *Journal of Foodservice Business Research*, 23(4), 305-323. <https://doi.org/10.1080/15378020.2020.1768039>

- Cha, S., Shin, M. (2021). The Effect of Delivery Food on Customer Emotional Response and Repurchase Intention. *The Korean Journal of Food & Health Convergence*, 7(2), 1-10. <https://doi.org/10.13106/ kjfhc.2021.vol7.no2.1>
- Dhand, N. K., & Khatkar, M. S. (2014). Statulator: An online statistical calculator. Sample Size Calculator for Estimating a Single Proportion. Retrieved from <http://statulator.com/SampleSize/ ss1P.html>
- Frederick, D. P., & Bhat, G. (2021). Review on Customer Perception Towards Online Food Delivery Services. *International Journal of Creative Thoughts (IJCRT)*, 9(7), 301-314. Retrieved from <https://ssrn.com/ abstract=3896158>
- Ganapathi, P., & Abu-Shanab, E. A. (2020). Customer Satisfaction with Online Food Ordering Portals in Qatar. *International Journal of E-Services and Mobile Applications*, 12(1), 57-79. <https://doi.org/10.4018/ ijesima.2020010104>
- Hasan, M. M., Amin, M. A., Arefin, M. S., & Mostafa, T. (2023). Green consumers' behavioral intention and loyalty to use mobile organic food delivery applications: the role of social supports, sustainability perceptions, and religious consciousness. *Environment, Development and Sustainability*, 26, 15953-16003. Retrieved from <https://link.springer.com/article/10.1007/ s10668-023-03284-z>
- Kedah, Z., Haque, I. Y., & Ahmed, S. (2015). Key Success Factors of Online Food Ordering Services: An Empirical Study. *Malaysian Management Review*, 50(2). Retrieved from [https://www.researchgate.net/ publication/291074636\\_Key\\_Success\\_Factors\\_of\\_Online\\_Food\\_Ordering\\_Services\\_An\\_Empirical\\_Study](https://www.researchgate.net/ publication/291074636_Key_Success_Factors_of_Online_Food_Ordering_Services_An_Empirical_Study)
- Kemp, S. (2020). Digital 2020: Thailand. Retrieved from <https://datareportal.com/ reports/ digital-2020-thailand>
- Li, C., Miroso, M., & Bremer, P. (2020). Review of Online Food Delivery Platforms and their Impacts on Sustainability. *Sustainability*, 12(14), 5528. <https://doi.org/10.3390/ su12145528>
- Longtunman. (2024). When you order food once through Grab, how is the money divided among different parties? Retrieved from <https://www.longtunman.com/ 48781>
- Loo, E. V., Caputo, V., Nayga, R. M., Meullenet, J. F., Crandall, P. G., & Ricke, S. C. (2010). Effect of organic poultry purchase frequency on consumer attitudes toward organic poultry meat. *Journal of Food Science*, 75(7), 384–397. <https://doi.org/10.1111/ j.1750-3841.2010.01775.x>
- Nikolopoulou, K. (2022). What Is Convenience Sampling? | Definition & Examples. Retrieved from <https://www.scribbr.com/ methodology/ convenience-sampling/>
- Nivornusit, R., Kraivanit, T., & Limna, P. (2024). Food delivery competition in the digital economy: Price war strategy in a developing country. *Digital Business*, 4(1). <https://doi.org/10.1016/ j.digbus.2024.100076>
- Prasetyo, Y. T., Tanto, H., Mariyanto, M., Hanjaya, C., Young, M. N., Persada, S. F., ... Redi, A. A. N. P. (2021). Factors Affecting Customer Satisfaction and Loyalty in Online Food Delivery Service during the COVID-19 Pandemic: Its Relation with Open Innovation. *Journal of Open*

- Innovation: Technology, Market, and Complexity*, 7(1), 76. <https://doi.org/10.3390/joitmc7010076>
- Saad, A. T. (2021). Factors affecting online food delivery service in Bangladesh: an empirical study. *British Food Journal*, 123(2), 535-550. <https://doi.org/10.1108/BFJ-05-2020-0449>
- Sirikeratikul, S. (2020). Thailand Online Food Delivery Market. Retrieved from [https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Thailand%20Online%20Food%20Delivery%20Market\\_Bangkok\\_Thailand\\_05-28-2020](https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Thailand%20Online%20Food%20Delivery%20Market_Bangkok_Thailand_05-28-2020)
- Statista. (2023). Frequency of ordering food from food delivery apps in Thailand as of April 2023, by age group. Retrieved from <https://www.statista.com/statistics/1149000/thailand-frequency-of-using-food-delivery-apps-by-age/>
- The Asian Age. (2020). Why ordering food online is preferred than eating out. Retrieved from <https://www.asianage.com/life/food/030220/why-ordering-food-online-is-preferred-than-eating-out.html>
- Verain, M. C., Dagevos, H., & Antonides, G. (2015). Sustainable food consumption. Product choice or curtailment? *Appetite*, 91, 375-384. Retrieved from <https://doi.org/10.1016/j.appet.2015.04.055>
- Vermeir, I., Weijters, B., De Houwer, J., Geuens, M., Slabbinck, H., Spruyt, A., Van Kerckhove, A., Van Lippevelde, W., De Steur, H., & Verbeke, W. (2020). Environmentally sustainable food consumption: A review and research agenda from a goal-directed perspective. *Frontiers in Psychology*, 11, 1-24. <https://doi.org/10.3389/fpsyg.2020.01603>
- Yeo, S. F., Tan, C. L., Teo, S. L., & Tan, K. H. (2021). The role of food apps servitization on repurchase intention: A study of FoodPanda. *International Journal of Production Economics*, 234. <https://doi.org/10.1016/j.ijpe.2021.108063>