

## **Drivers of Customer Satisfaction in Malaysia's Online Food Delivery Services: A Pilot Study**

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**Abstract.** This pilot study investigates factors influencing customer satisfaction in Malaysia's online food delivery services. Using a quantitative approach, data were collected from 150 customers through an online survey. Structural Equation Modeling (SEM) was employed to analyse the relationships between system complexity, food quality, payment methods, service quality, time-saving, and customer satisfaction. Results indicate that system complexity, food quality, and service quality significantly impact customer satisfaction, while payment methods and time-saving do not. Food quality emerged as the strongest predictor of satisfaction. This study provides initial insights into customer preferences in Malaysia's online food delivery market, offering a foundation for future comprehensive research and practical strategies for service providers.

**Keywords:** Customer satisfaction, online food delivery system, complexity of system, payment method, time-saving.

## **1. Introduction**

Digital platforms have expanded the marketplace for food delivery, making online food delivery services increasingly popular in recent years (Jun et al., 2021). Platforms such as Grab Food, Food Panda, and Lolol are rapidly being integrated into major urban areas such as Kuala Lumpur, Penang and Johor Bharu, catering to the preferences of millennials and Generation Z consumers. The swift integration of the food delivery service industry demonstrates its rapid expansion and significant global potential (Chai and Yat, 2019; Mohamad et al., 2020). Online food delivery platforms have significantly transformed the dining experience and meal delivery process, providing convenience and effortless accessibility (Chowdhury, 2023). Customers can conveniently browse a wide variety of food options and have them delivered to their door by using their phones (Pigatto et al., 2017).

Many individuals find it challenging to prepare meals due to early morning work commitments. Consequently, meal preparation and serving, particularly during lunchtime, becomes a difficult task (Das and Ghose, 2019). Fortunately, food delivery systems can effectively resolve this issue by offering a variety of meals in a timely and convenient manner, allowing individuals to enjoy high-quality food without the need to cook or dine out. Research shows that the increasing use of online food delivery services has led to a growing number of platforms offering these services.

A successful online food ordering system generally enhances customer satisfaction, leading to more positive evaluations (Kurniawan et al., 2024). Numerous studies have investigated the behavioural factors affecting customer satisfaction with online food delivery services. Saad (2021) identified four key factors—delivery time, service quality, price, and the condition of the delivered food—that directly impact customer satisfaction. Yeo et al. (2017) explored the effects of convenience motivation, post-usage usefulness, hedonic motivation, price-saving orientation, and time-saving orientation on online food delivery systems. Factors such as delivery speed, timeliness, delivery range, and food quality significantly influence customer satisfaction in the food delivery industry (Suhartanto, 2019). Failure to meet these standards often leads customers to switch to alternative service providers.

Many food delivery companies prioritise customer satisfaction by continually updating and refining their online delivery systems based on customer feedback and needs. As customer demand increases and more competitors enter the market, older online food service providers face growing challenges in maintaining high levels of customer satisfaction (Hong et al., 2021). The intensified competition makes it increasingly difficult for these established providers to satisfy their customers. While earlier research has extensively examined online buying behaviour, there has been limited investigation into the online food delivery industry (Yeo et al., 2017).

Despite the rapid growth of online food delivery services in Malaysia, there is limited understanding of the factors influencing customer satisfaction in this context. This study aims to address this gap by examining the impact of system complexity, food quality, payment methods, service quality, and time-saving on customer satisfaction. This study enhances current knowledge by identifying the factors that influence customer satisfaction with online food delivery service systems, providing insights for online food service providers to improve their services. Understanding customer preferences and expectations would help online food service providers satisfy and retain customers and promote business growth.

## **2. Literature Review**

### **2.1 Customer Satisfaction Towards Online Food Delivery Service Systems**

Customer satisfaction is a crucial factor for the success of online food delivery service systems. Customer satisfaction refers to the assessment made by customers after using a product or service (Gunawan, 2022). It reflects how customers feel about the products and services they receive based on their relationship with the service provider. Numerous studies have investigated the impact of customer

satisfaction on various aspects of online food delivery service systems. Previous research has identified several variables affecting customer satisfaction, including food availability, customer evaluations, payment options, and human interaction (Kwong et al., 2017). A review of the literature suggests that customer satisfaction is key to shaping customers' future purchasing intentions.

The usability of the application, order accuracy, and delivery timeliness are all strongly correlated with customer satisfaction in the online food delivery industry. A well-designed, user-friendly interface improves the ordering experience, hence raising customer satisfaction (Koay, Cheah, & Chang, 2022). Moreover, delivery reliability and punctuality are vital since they have significant effects on customer evaluations of service quality (Uzir et al., 2021). Previous research has shown that customer satisfaction positively influences the intention to continue using online food delivery service systems (Alalwan, 2020). Some critics argue that online food delivery service systems may decrease the overall dining experience (Li et al., 2020). The convenience of food delivery can discourage people from dining out or preparing meals at home (Keeble et al., 2020). Additionally, the increasing use of online food delivery services may lead to a decline in the profitability of traditional restaurants (Arunan & Crawford, 2021). As more customers opt for delivery rather than dining in, restaurants may face challenges in maintaining their dine-in clientele while also dealing with the expenses related to delivery services.

## **2.2 Complexity of System (COS)**

In recent years, online food delivery services have gained popularity due to their ability to offer convenience and flexibility to customers. The food delivery service system allows customers to find and order food through an online application (Xiao & Dong, 2015). Customers can browse menus, ratings, and locations of nearby restaurants through the food delivery service system (Jun-bin et al., 2021). It takes only a few minutes to download the application and complete the ordering and purchase process (Gupta, 2019; Ghadiyali, 2017).

While the system may be complex, this does not necessarily imply that it is a barrier to success (Ramesh et al., 2023). However, there is a gap in understanding how this complexity affects customer satisfaction. Some argue that the complexity of the system is a testament to the robustness and efficiency of online food delivery services (Luo et al., 2020). The coordination between the various components—restaurants, delivery drivers, and the platform itself—may seem daunting. However, it also allows for a seamless and comprehensive service that benefits both consumers and businesses (Chowdhury, 2023). It is undeniable that online food delivery services offer convenience for consumers. Yet, there is a lack of research on how this convenience influences customer satisfaction and long-term usage of these platforms. Hence, the following hypothesis is developed:

H1: There is a significant positive relationship between the complexity of the system and customer satisfaction with online food delivery service systems.

## **2.3 Food Quality (FQ)**

Food quality and customer satisfaction are critical factors in determining the success of online food delivery service systems (Azman et al., 2021). Food quality encompasses many factors, including appearance, flavour, menu variety, healthiness, and freshness. Past research has shown that customers associate food quality with freshness, taste, and appearance (Petrescu et al., 2020). Food quality is undeniably crucial in meeting the needs of restaurant patrons, leading to consumer loyalty and repeat purchases (Rozekhi et al., 2016). Several studies have indicated that food quality positively influences customer satisfaction (Zhong & Moon, 2020). According to Sjahroeddin (2018), customers prefer food quality over service quality in online food delivery orders.

However, there is limited research on the relationship between food quality and customer satisfaction in the context of online food delivery service systems (Smith & Heriyati, 2023). Several studies have examined the impact of food quality on customer satisfaction in traditional restaurant

settings. For example, a study by Leo et al. (2022) found that food quality significantly influences customer satisfaction in traditional dine-in restaurants. Therefore, food quality is essential, especially in the food industry, as it grows and more competitors enter the market. As such, the following hypothesis is developed:

H2: There is a significant positive relationship between food quality and customer satisfaction with online food delivery service systems.

## **2.4 Payment Method (PM)**

Payment methods play a crucial role in shaping customer satisfaction by influencing the convenience, security, and overall user experience of these platforms. Past studies have shown that a major advantage of food delivery applications is the provision of various flexible payment methods (Gupta, 2019; Azman et al., 2021). Customers prefer platforms that offer a range of payment methods, including credit and debit cards, digital wallets, and cash on delivery (Kim, Park, & Yoon, 2017). The platform integrates various digital payment methods to meet this demand and facilitate seamless transactions (Prasetyo, 2021). Consumers' satisfaction and loyalty to the service are significantly influenced by their confidence in the security of their payment information (Lu, Chen, & Chou, 2020). However, there is a lack of research on how different payment methods influence customer satisfaction and loyalty in the context of online food delivery service systems. This presents a significant gap in the literature, as understanding this relationship could provide valuable insights for improving online food delivery services.

According to Cho et al. (2019), convenience is another extremely important trait of food delivery applications. Therefore, customers can choose their preferred payment method to make purchases (Kurniawan et al., 2024). The convenience of the payment method measures the user's ease at the time of purchase. Customers can access various banking services to make payments (Mohamad et al., 2020). The payment process also affects customers' willingness to pay (Nayan & Hasan, 2020). Hence, we propose the following hypothesis:

H3: There is a significant positive relationship between the payment method and customer satisfaction with online food delivery service systems.

## **2.5 Quality of Service (QS)**

Research has indicated a strong correlation between the quality of service and customer satisfaction in online food delivery (Azman et al., 2021). Service quality is an important and central part of customer-focused businesses (Omar et al., 2021). The concepts of service quality and service satisfaction have received much attention, especially in the service industry (Uzir et al., 2021). Maintaining a high level of service quality is essential to achieve a competitive edge (Zhuang et al., 2021). Previous research has shown that service quality characteristics include reliability, access, security, responsiveness, capability, understanding, politeness, communication, credibility, and tangibility (Nitecki & Hernon, 2000).

High-quality service is a fundamental standard for measuring transaction success. Studies have shown that timely delivery and accurate orders are key determinants of customer satisfaction (Leo et al., 2022). However, there is a lack of research on how other aspects of service quality, such as communication and responsiveness, influence customer satisfaction in the context of online food delivery. Therefore, any service quality issues and difficulties involved in the service process will determine the key factors of customer satisfaction and purchase intention. Thus, the following hypothesis is developed:

H4: There is a significant positive relationship between quality of service and customer satisfaction with online food delivery service systems.

## **2.6 Time-Saving (TS)**

Customers believe online food delivery services are valuable because they save time, reduce workload, and provide extended business hours and efficient checkout processes (Perumal et al., 2021). According to Maimaiti et al. (2018), online food delivery services are more convenient for customers. Customers' orders can be conveniently tracked via mobile apps, and the payment transaction record is promptly sent to their mobile phone or email address (Jun et al., 2021). Ray et al. (2019) discovered that real-time tracking and optimised delivery routes significantly reduce wait times, thereby increasing customer satisfaction. Additionally, due to the convenience provided by online food delivery service systems, the time-saving aspect greatly impacts customer satisfaction and post-usage usefulness (Yeo et al., 2017). Therefore, for certain activities, such as buying food, people tend to use their time as efficiently as possible (Mohamad et al., 2020). Research by Zhao and Bacao (2020) indicates that customers who perceive significant time-savings are more likely to exhibit loyalty to a particular service. Thus, we hypothesise the following:

H5: There is a significant positive relationship between time-saving and customer satisfaction with online food delivery service systems.

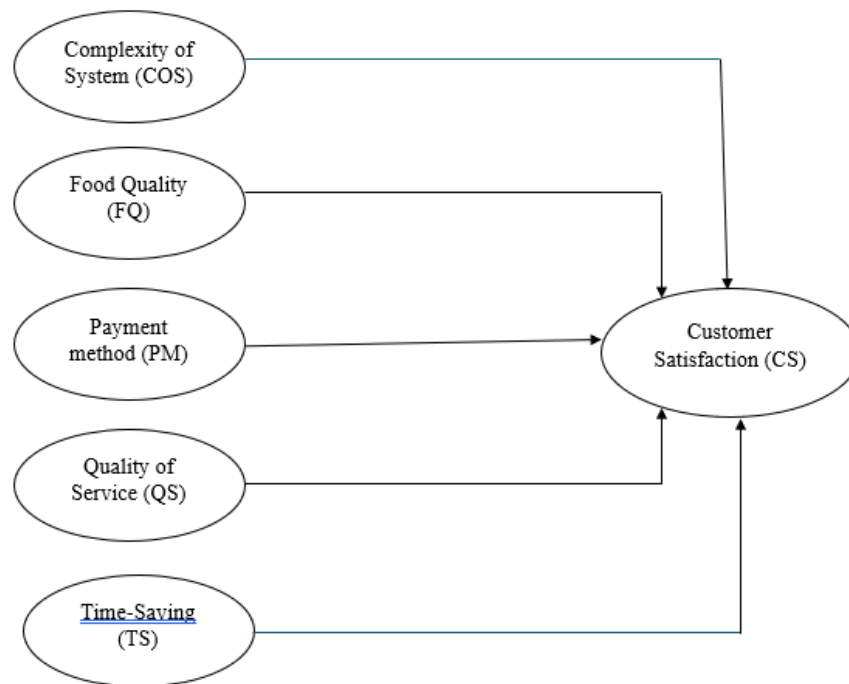


Fig 1: The Proposed Research Model

### 3. Methodology

#### 3.1 Data Collection

This is a pilot study, and data were gathered through an online survey distributed via social media platforms. The poll ran for two months, from January to March 2022. To ensure data quality, we included attention-check questions and removed incomplete responses. This preliminary investigation allows us to explore the factors influencing customer satisfaction with online food delivery services in Malaysia before proceeding to a larger-scale study. The study employs a quantitative research approach, with respondents selected through purposive sampling. Purposive sampling was employed to target respondents who have experienced online food delivery services in Malaysia. Selecting targeted experience respondents ensures the data provided will be more relevant in understanding customer

satisfaction with online food delivery services.

The sample size was determined using G\*Power 3 analysis, which suggested a minimum required sample size of 138, assuming an effect size of 0.15, a significance level of 5%, and a statistical power level of 95% (Cohen, 1988). However, to ensure the robustness of our findings, we collected data from an additional 12 respondents, bringing the total to 150. The study identifies five groups of independent variables, comprising 20 items and four dependent variables. These variables were adapted and modified from a recently published article (Hair, 2013). Respondents were asked to rate the significance of each item using a 5-point Likert scale, with 1 indicating 'Strongly Disagree' and 5 indicating 'Strongly Agree'. Data were analysed using the Statistical Package for Social Sciences (SPSS) and Structural Equation Modelling (SEM) procedures facilitated by the Smart PLS program. This pilot study is critical for refining our research design and techniques, ensuring their viability and reliability for the full-scale field study.

### 3. 2 Analysis Using PLS-SEM

The research model comprises 6 variables and 24 indicators. To analyse the data, we employed the PLS-SEM method, and after gathering respondents' data, we analysed it using SmartPLS 4.0 software. For the questionnaire responses to be recognised as indicators of latent variables in SmartPLS, they must be uploaded in '.csv' format. Assessing PLS-SEM involves two main steps, as outlined by Henseler et al. (2015). The first step entails evaluating the measurement model, which involves assessing the convergent validity and reliability of each factor within the measurement model. The second step, the structural model, involves testing proposed hypotheses and examining relationships among latent variables.

## 4. Results

### 4.1 Respondent characteristic

Potential respondents received the survey via WhatsApp, Facebook, and Gmail in January 2022, with a return date of March 25, 2022. A total of 150 Malaysian food delivery customers responded. The respondents for this study are predominantly female, with 98 respondents, followed by 52 male respondents. The highest age group is between 18-29 years old, which constitutes 83.3% of the population. The occupation with the highest frequency among respondents is students, constituting 78.7% of the sample. This indicates that students are the primary demographic utilising online delivery services. In terms of expenditure, the most common spending range is below RM 2000, accounting for 78.0% of respondents. This suggests that most consumers, particularly students, are spending within a relatively lower range on online delivery services. The most used food delivery application is Food Panda with 76 respondents (50.7%), followed by Grab Food with 59 respondents (39.3%), Lolol (4.7%), and the least preferred food delivery applications are Easi and Shopee, each with less than 1%, as shown in Table 1.

Table 1: Respondent characteristic

No	Demographic Characteristics	Customers (N=150)	
		Total	%
1.	<b>Gender</b>		
	Male	52	34.7
	Female	98	65.3
2.	<b>Age Group</b>		
	13-17	7	4.7
	18-29	125	83.3
	30-40	14	9.3
	41-50	3	2.0

	>50	1	0.7
	<b>Occupation</b>		
	Student	118	78.7
3.	Entrepreneur	6	4.0
	Employee	23	15.3
	Housewife/husband	3	2.0
	<b>Monthly Expenditure</b>		
	Below RM 2000	117	78.0
	RM 2001- RM 3000	19	12.7
4.	RM 3001- RM 4000	11	7.3
	RM 4001 – RM 5000	2	1.3
	Above RM 5000	1	0.7
5.	<b>Common Apps</b>		
	Grab Foods	59	39.3
	Food Panda	76	50.7
	Lolol	7	4.7
	Easi	6	4.0
	Others	2	1.3

## 4.2 Validity and Reliability Test

### 4.2.1 Validity test

In this study, convergent validity is assessed through a measurement model. Table 2 displays the AVE values for customer satisfaction, complexity of system, food quality, payment method, service quality, and time-saving, which are 0.607, 0.667, 0.631, 0.629, 0.573, and 0.592, respectively. These values surpass the established threshold of 0.5 (Fornell & Larcker, 1981; Hair et al., 2013), indicating the accuracy and validity of all variables.

Table 2: Average Variance Extracted (AVE) Results

Variable	AVE	Result
Customer Satisfaction	0.667	Valid
Complexity of System	0.607	Valid
Food Quality	0.631	Valid
Payment Method	0.629	Valid
Service Quality	0.573	Valid
Time-saving	0.592	Valid

### 4.2.2 Reliability test

Table 3 shows that the  $\alpha$  coefficient and composite reliability scores for customer satisfaction, complexity of system, food quality, payment method, service quality, and time-saving are above 0.70. These values indicate that all variables are reliable, as they exceed the minimum threshold of 0.7 (Hair et al., 2014). This result supports the reliability and validity of all constructs and measures applied in this research.

Table 3: Cronbach's Alpha and Composite Reliability Results

Variable	Cronbach's Alpha	Composite Reliability	Result
Customer Satisfaction	0.784	0.860	Reliable

Complexity of System	0.833	0.889	<b>Reliable</b>
Food Quality	0.805	0.872	<b>Reliable</b>
Payment Method	0.803	0.871	<b>Reliable</b>
Service Quality	0.757	0.843	<b>Reliable</b>
Time-saving	0.768	0.852	<b>Reliable</b>

### 4.3 Hypothesis testing

#### 4.3.1 The R-Square

Since PLS does not generate an overall goodness of fit index, the amount of variance explained by  $R^2$  provides an indication of the model fit, as well as the predictive ability of the endogenous variables (Chin et al., 1998). Hair et al. (2013) suggests that the minimum level for an individual  $R^2$  should be greater than a minimum acceptable level of 0.10. Table 4 shows the results of confirming the coefficient of determination  $R^2$  using the PLS algorithm. The  $R^2$  value for this study is satisfactory and is consistent with the study's character as exploratory research with an  $R^2$  value of 0.672, indicating that 67.2% of the dependent variable (Customer Satisfaction) can be explained by the independent variables (Complexity of System, Food Quality, Payment Method, Service Quality, and Time-saving).

Table 4: Evaluation of R-Square

	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Customer Satisfaction</b>	0.672	0.660

#### 4.3.2 Hypothesis testing result

In PLS-SEM, after the measurement model analysis is completed and the results are satisfactory, the structural model is evaluated. This phase focuses on determining the hypothesised relationship between latent variables. We use bootstrapping to examine these relationships. PLS-SEM uses a non-parametric bootstrap approach to determine the significance of path coefficients, which describe the strength and direction of the relationship between latent variables. Bootstrapping generates confidence intervals (usually at a 95% level) for path coefficients, allowing us to determine whether the predicted relationships are statistically significant (Hair et al., 2013; Su et al., 2023). Figure 2 exhibits the results of the bootstrap process employed for generating P-values and T-statistic values used in hypothesis testing. In this study, a significance level of 5% is applied. The null hypothesis ( $H_0$ ) states that the p-value  $> 0$ , while the alternative hypothesis ( $H_a$ ) involves p-values. The critical t-table value for a 5% significance level is 1.96. If the statistical t-value exceeds this critical t-table value, it indicates that the X variable influences the Y variable.



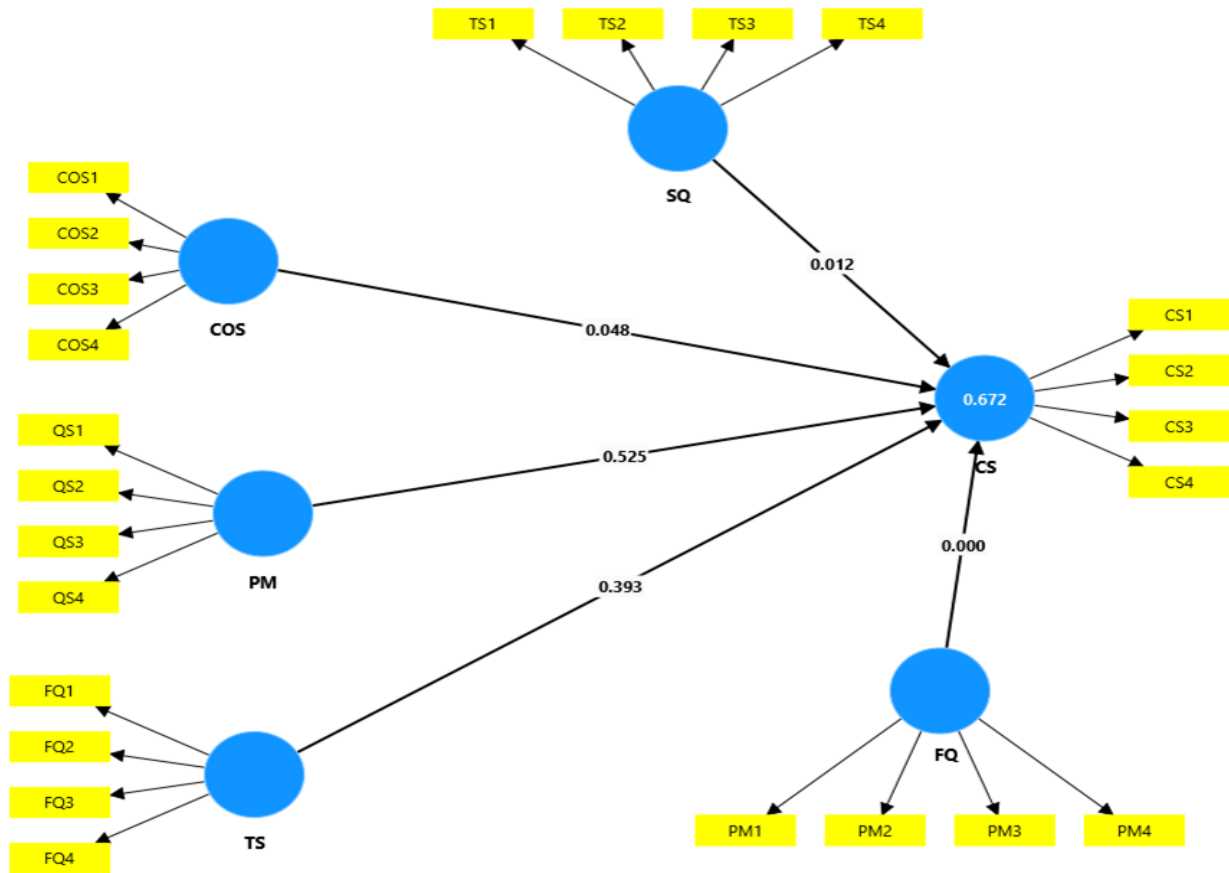


Fig 2: Bootstrapping path coefficient results

Table 5: Path Coefficients results

Hypothesis	Path	Ori Sample Value (O)	Standard Deviation	t – Value	p – Value	Result
H1	Complexity of System & Customer Satisfaction	0.185	0.094	1.974	0.048	Supported
H2	Food quality & Customer Satisfaction	0.398	0.088	4.547	0.000	Supported
H3	Payment Method & Customer Satisfaction	0.058	0.091	0.635	0.525	Not Supported
H4	Service Quality & Customer Satisfaction	0.207	0.082	2.508	0.012	Supported
H5	Time-saving & Customer Satisfaction	0.073	0.086	0.853	0.393	Not Supported

## 4.4 Theoretical Implications

### 4.4.1 Complexity of System on Customer Satisfaction (H1)

In this study, we evaluated convergent validity using the measurement model. The t-statistic value stands at 1.974, surpassing the critical value in the t-table (t-table = 1.96), indicating a significant impact of system complexity on customer satisfaction. Additionally, the p-values are 0.048, falling below the error threshold of 0.05, further affirming the substantial influence of system complexity on customer satisfaction. With a coefficient value of ( $\beta = 0.185$ ,  $p < 0.001$ ) suggesting a positive relationship, it can be inferred that system complexity positively affects customer satisfaction, particularly within the online food delivery service domain. This conclusion echoes findings from Ling et al. (2021), who highlighted that critical design factors—such as the structure of the payment system, the quality of information, and security—are crucial considerations for customers when using and deciding to continue using online food delivery apps. Furthermore, Gupta's previous study (2019) highlighted the importance of online food delivery services in driving growth within the restaurant and food supply sector.

#### **4.4.2 Food Quality on Customer Satisfaction (H2)**

The t-statistic value is 4.547, which exceeds the critical number in the t-table (t-table = 1.96), implying that food quality has a significant effect on customer satisfaction. Furthermore, the P-value is 0.000, which is less than the error threshold of 0.05, confirming the significant impact of food quality on customer satisfaction. With a coefficient of ( $\beta = 0.398$ ,  $p < 0.001$ ) indicating a positive connection, it is possible to conclude that food quality has a positive impact on customer satisfaction. As a result, it can be concluded that food quality has the strongest relationship with customer satisfaction in the context of online meal delivery service systems. These findings support previous studies that have shown a significant effect of food quality on customer satisfaction (Ghosh, 2020; Sjahroeddin, 2018). Likewise, Leo et al. (2022) confirmed this finding, claiming that food quality has a greater impact on customer satisfaction than the quality of online services.

#### **4.4.3 Payment Method on Customer Satisfaction (H3)**

The t-statistic value is 0.635, which is less than the crucial value in the t-table (t-table = 1.96), showing that the payment method has no significant impact on customer satisfaction. Additionally, ( $\beta = 0.058$ ,  $p > 0.001$ ), indicating that the influence of the payment method on customer satisfaction is not significant. Despite the positive coefficient value indicating a potential positive influence of payment method on customer satisfaction, it is possible to conclude that payment method has no significant effect on customer satisfaction in the context of food delivery services. This conclusion contradicts Nguyen et al. (2020), who found a strong positive relationship between payment methods and consumer satisfaction. As a result, restaurants and food suppliers should work on improving control over their technology tools in order to improve service quality and security measures and, ultimately, develop better relationships and increase customer satisfaction (Ajina et al., 2023).

#### **4.4.4 Service Quality on Customer Satisfaction (H4)**

The t-statistic is 2.508, which is above the key t-table value of 1.96, showing a significant impact of service quality on customer satisfaction. Concurrently, the P-value, standing at 0.012, falls below the error threshold of 0.05, highlighting the significance of service quality's influence on customer satisfaction. With a positive coefficient of ( $\beta = 0.207$ ,  $p < 0.001$ ), it is evident that service quality positively correlates with customer satisfaction. Consequently, it can be inferred that service quality significantly enhances customer satisfaction, indicating users' satisfaction with online food delivery service systems. These findings conform to earlier research, demonstrating a notable connection between service quality and user satisfaction (Maulidiyah et al., 2022; Yusra & Agus, 2018; Uzir et al.,

2021). In Lin's recent study (2024), the results strongly suggested a significant relationship between service quality and customer satisfaction in the context of online food delivery services.

#### 4.4.5 Time-Saving on Customer Satisfaction (H5)

The t-statistic value is 0.853, which is lower than the t-table value of 1.96, indicating that time-saving does not influence customer satisfaction. However, the P-value stands at 0.393, exceeding the error rate of 0.05, suggesting that the impact of time-saving on customer satisfaction lacks significance. Despite the positive coefficient value of 0.073, indicating a positive effect of time-saving on customer satisfaction but ( $\beta = 0.073$ ,  $p > 0.001$ ) reflected the overall conclusion that time-saving has an insignificant effect on customer satisfaction. Our findings contrast with Yeo et al. (2017), who found that customers view online food service delivery more favourably when it has a time-saving element. Users are more inclined to utilise online food delivery services when they can save time. Time-saving orientation occurs when consumers perceive that using the online food delivery service application can expedite the purchasing process. However, prolonged wait times may diminish customer satisfaction and reduce the likelihood of customers discounting the value of time lost (Caruelle et al., 2023).

#### 4.5 Practical Implication

In this section, we discuss the practical implications of our findings. According to Table 5, food quality is the variable showing the highest T-statistic. This significant T-statistic highlights that food quality is the most influential factor affecting customer satisfaction, confirming the acceptance of hypothesis H2. Our finding that food quality is the strongest predictor of customer satisfaction aligns with previous studies (e.g., Sjahroeddin, 2018; Leo et al., 2022). Triyuni et al. (2021) highlight that food quality in the culinary industry encompasses various aspects such as taste, nutritional value, freshness, and temperature, all crucial in meeting customer expectations. Therefore, restaurants must enhance food quality across dimensions, including nutrition, preparation processes, taste, ingredients, and healthiness, to elevate customer satisfaction. However, our study extends this understanding by demonstrating the relative importance of food quality compared to other factors in the Malaysian context.

The variable of service quality has been shown to impact customer satisfaction, as confirmed by the acceptance of H4. This study suggests that service quality plays a significant role in achieving customer satisfaction. Our findings conform with earlier research that service quality has a significant relationship with customer satisfaction in the context of online food delivery services (Koay et al., 2022; Uzir et al., 2021). Practically, this study emphasises the importance of service quality in increasing consumer satisfaction. Therefore, we recommend that developers of online food delivery apps focus on creating user-friendly and efficient apps that ensure a delightful experience from the initial purchase activity to the delivery of food in Malaysia. A positive delivery experience is crucial in fostering the adoption of online food delivery apps (Ling et al., 2021).

Time-saving was identified as having no impact on customer satisfaction with food delivery services. This finding contrasts with Yeo et al. (2017) and Caruelle et al. (2023), who indicated that customers feel satisfied when they perceive that using online food delivery apps expedites the purchasing process. This conflicting result may stem from the fact that food deliveries often take longer during peak hours, necessitating customers to wait longer for their orders. Consequently, customers may not perceive this delay as a significant issue affecting their satisfaction.

The findings of this study have shown that payment methods do not significantly influence customer satisfaction. This finding is inconsistent with previous studies (Nguyen et al., 2020; Ajina et al., 2023). Many online food delivery services offer typical payment methods, including mobile app payments, cash on delivery, credit and debit cards, and online banking (Chen et al., 2022). Consequently, these payment methods have no major effect on their satisfaction with food delivery systems. Our findings revealed that in the context of food delivery services, the availability of payment methods may be less

important to consumer satisfaction than other criteria, perhaps shifting the focus to aspects such as service quality, food quality and user-friendly apps.

This study confirmed that system complexity has a favourable effect on consumer satisfaction with online food delivery systems. This finding is consistent with studies conducted by Chow and Legowo (2023) and Ling et al. (2021). Based on these findings, it is advised that online food delivery systems provide user-friendly applications with secure, trustworthy features and information in order to attract and retain customers. Customers can easily order their meals at any time using mobile food delivery applications. As a result, the complexity of using mobile apps has been identified as a crucial element in determining customer satisfaction in Malaysia.

According to the findings of this study, food quality, service quality, and system complexity are the most important elements contributing to higher customer satisfaction with online food delivery systems in Malaysia. This study noted that to improve overall customer satisfaction, restaurants, decision-makers, and app developers should prioritise improving these factors and ensuring that their food delivery systems are user-friendly, provide high-quality food and provide prompt services.

## 5. Conclusion

This pilot study provides preliminary insights into the factors influencing customer satisfaction in Malaysia's online food delivery services. Our findings highlight the critical importance of food quality, service quality, and system usability in shaping customer satisfaction. Contrary to some previous studies, we found that payment methods and time-saving aspects did not significantly impact satisfaction in our sample. These results have both theoretical and practical implications. Theoretically, they contribute to the growing body of literature on customer satisfaction in digital food services, particularly in the Malaysian context. Practically, they suggest that online food delivery providers should prioritise food quality and service excellence to enhance customer satisfaction. However, as a pilot study, this research has limitations. The sample size is relatively small and may not be representative of the broader Malaysian population. Future research should build on these initial findings by conducting a larger-scale study, potentially incorporating additional variables such as customer demographics or platform-specific features. Qualitative research could also provide deeper insights into the reasons behind customer preferences and behaviours. In conclusion, while this pilot study offers valuable initial insights, it also underscores the need for more comprehensive research to fully understand the dynamics of customer satisfaction in Malaysia's rapidly evolving online food delivery market. Such research will be crucial in guiding the development of effective strategies for business growth and customer retention in this competitive industry.

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