

Research Article

Determinants of Customer Loyalty with Customer Satisfaction as a Mediation Variable Among Users of Online Food Delivery Service Applications in Indonesia

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ABSTRACT

The rapid growth of online food delivery (OFD) services in Indonesia has intensified competition among platforms, making customer loyalty a critical issue for sustainability. This study aims to analyze the influence of price, service quality, food quality, and delivery time efficiency on customer loyalty in online food delivery services in Indonesia, with customer satisfaction as a mediating variable. A quantitative approach was employed using a survey method, with questionnaires distributed to 220 active users of online food delivery services in Indonesia. The collected data were analyzed using Structural Equation Modeling (SEM). The results indicate that price, food quality, and delivery time efficiency have a significant effect on customer satisfaction, while service quality does not show a significant influence. Furthermore, price, food quality, and delivery time efficiency significantly affect customer loyalty, whereas service quality does not have a direct significant effect on customer loyalty. Customer satisfaction is proven to mediate the relationship between price, food quality, and delivery time efficiency on customer loyalty, but it does not mediate the effect of service quality on customer loyalty. These findings suggest that customer loyalty in Indonesia's online food delivery services is primarily driven by perceived price value, food quality, and delivery timeliness. The study provides managerial implications for OFD platforms to prioritize pricing strategies, food quality control, and delivery efficiency in order to enhance customer loyalty.

Keywords: Price; Service Quality; Food Quality; Delivery Time Efficiency; Customer Loyalty.

1. INTRODUCTION

Online food delivery services (OFDS) have experienced rapid growth and have become an important part of modern lifestyles. These services allow consumers to conveniently order and enjoy food through digital applications, thereby significantly changing food purchasing and consumption patterns (Saad, 2021). Increasingly busy lifestyles, supported by digital technology penetration and high smartphone usage, have driven demand for online food delivery services (Samanta & Arkoudis, 2024). Online food delivery is a food delivery service that allows customers to order food online (Yeo et al., 2017). Online food delivery is a food delivery service that allows customers to order food online (Chai & Yat, 2019). Online food delivery has become an important part of modern lifestyles, especially in some countries (McKinsey, 2023). Based on a survey by Lokadata (2024), most Indonesians are accustomed to using online food delivery services. The survey results show that only 13% of respondents have never used this service, while 48% of respondents still actively use it and 39% have used the service before. In terms of frequency, 46% of respondents order food through food delivery services several times a week, and 29% do so once a week (Narasi TV, 2024).

In Indonesia, the OFDS industry is highly competitive. In 2024, GrabFood led the online food delivery market share with 47%, followed by GoFood with 35% and ShopeeFood with 18% (DATABOKS, 2024). This situation requires service providers to not only focus on acquiring new customers, but also on retaining customers by building long-term loyalty (Arslan, 2020). Customer loyalty is a strategic factor because it is directly related to business sustainability, increased revenue, and competitive advantage amid increasingly fierce platform competition (Oliver, 1999). IDN Times research (2024) shows that online delivery services have become part of the lifestyle of various segments of society. Users of these apps are predominantly students, followed by private sector employees and government officials. This is supported by the ease and convenience offered by online food delivery apps in transactions, which contributes to customer loyalty (Tech, 2020). Loyalty is a reflection of customer satisfaction, becoming an important asset for continued use of products or services (Singh et al., 2023). Several factors that can shape satisfaction and loyalty are price, service quality, food quality, and

delivery time efficiency (Ghosh, 2020; Siddiqi et al., 2024).

Price is the amount of money charged for a product or service (Kotler & Keller, 2016). Price reflects the value perceived by customers, and purchasing decisions are greatly influenced by the perception that the price is commensurate with the benefits obtained (Konuk, 2019). Satisfied customers are more likely to make repeat purchases, recommend products, and resist competitors' offers, which are indicators of loyalty (Yum & Kim, 2024). This is also supported by a statement (CNBCINDONESIA, 2022) that food prices listed on online food delivery apps are up to 20% higher than the prices of food sold on site. The payment summary for a food order on an online food delivery app shows that the total amount payable includes not only the price of the food, but also several additional fees (Carolan, 2018). Service quality is not limited to delivery speed, but also encompasses the entire customer experience, from ease of use of the app, order accuracy, to the friendly attitude of driver partners (Firdaus & Astuti, 2024). Each application has a high rating, but there are user complaints regarding order errors, lack of accuracy, and declining service quality (Lin, 2010). This shows that although consumer ratings are generally good, reliability and service accuracy remain weak points that service providers need to address in order to improve the overall customer experience (Berry et al., 2006).

Food quality is one aspect that can influence customer satisfaction and customer loyalty in online food delivery services (Suhartanto, Helmi Ali, et al., 2019). When customers are satisfied with the quality of the food they receive, they will reorder and recommend it to others (Siddiqi et al., 2024). Highly rated restaurants (4-5 stars) indicate that they consistently maintain the quality of their food. Reviews on GoFood, GrabFood, and ShopeeFood show that aspects of food quality such as taste, temperature, and accuracy of serving remain important challenges for the three platforms in maintaining customer satisfaction and consistency in service standards. If not addressed immediately, this could lower consumer satisfaction and impact customer loyalty (Komunda & Osarenkhoe, 2012). Delivery time efficiency is an important aspect in assessing customer satisfaction with online food delivery services (Siddiqi et al., 2024). Delivery time efficiency also plays a role in building customer trust in the platform used (Harter et al., 2025). Delays in delivery caused by negligence may entitle consumers to file complaints or claim compensation from delivery service providers (Widodo & Midia, 2024).

Customer satisfaction is an important element that influences consumer behavior and loyalty (Mittal et al., 2023). (Kotler & Armstrong, 2018) explains that customer satisfaction arises when customer expectations of a product or service are met or exceeded. Satisfaction can have a direct impact on loyalty, because customers who are satisfied with a positive experience tend to continue transacting and recommending the service to others (Chen, 2012). Loyalty can be defined through attitude, behavior, or both, and is understood as a multidimensional or unidimensional construct (Siddiqi et al., 2024). Customer loyalty in the context of online food delivery services is not only related to the decision to order the same service repeatedly, but also to the satisfaction received after using the service (Saad, 2021).

Based on this phenomenon, customer satisfaction is seen as a key variable that bridges the influence of price, service quality, food quality, and delivery time efficiency on customer loyalty. Expectation Confirmation Theory (ECT) explains that satisfaction is formed through a comparison between the customer's initial expectations and the actual perceived service performance (Oliver, 1999). The satisfaction created will encourage repeat usage and customer commitment to the online food delivery service platform. This study aims to analyze the effect of price, service quality, food quality, and delivery time efficiency on customer loyalty to online food delivery services in Indonesia, with customer satisfaction as a mediating variable. This study is expected to fill a gap in the literature, which still shows inconsistent findings, particularly regarding the role of service quality and the mediating mechanism of customer satisfaction in shaping OFDS customer loyalty. In practical terms, the results of this study are expected to contribute to online food delivery service providers in formulating strategies to improve overall service quality in order to create sustainable customer satisfaction and loyalty. The research question in this article is whether price, service quality, food quality, and delivery time efficiency have an effect on customer loyalty through customer satisfaction. The research hypothesis is formulated as follows:

- H₁: Price, service quality, food quality, and delivery time efficiency have a significant effect on customer satisfaction among users of online food delivery services in Indonesia.
- H₂: Price, service quality, food quality, and delivery time efficiency have a significant effect on customer loyalty among users of online food delivery services in Indonesia.
- H₃: Customer satisfaction has a significant influence on customer loyalty among users of online food delivery services in Indonesia.
- H₄: Customer satisfaction mediates the influence of price, service quality, food quality, and delivery time efficiency on customer loyalty among users of online food delivery services in Indonesia.

2. RESEARCH METHOD

The method used in this study is descriptive research with a quantitative approach. This research method uses a survey approach supplemented with a questionnaire instrument (Gul, 2023). Surveys were chosen because they are able to reach a large number of respondents efficiently, so that the data obtained can represent the conditions in the field more broadly (Creswell, 2014). Population is the most important consideration in determining sample size (Hair et al., 2020). The

population in this study is online food delivery users in Indonesia (Hair Jr et al., 2020). This study examines the factors that influence customer satisfaction and loyalty in online food delivery services in Indonesia. The research respondents are individuals who actively use online food delivery services. The sampling technique used is purposive sampling with the criterion that respondents have at least one month of experience using the service (Campbell et al., 2020). Data was collected through an online survey using Google Forms and obtained 220 respondents from various regions in Indonesia. All questionnaires received were used in the analysis because the survey system required all statements to be filled in. To ensure data quality, a nonresponse bias test was conducted by comparing the initial and final responses, and no statistically significant differences were found. Data analysis was performed using Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) approach due to its ability to test the relationship between latent variables and mediation effects simultaneously in a single integrated model (Nitzl et al., 2016).

3. RESULTS AND DISCUSSION

3.1 Demographic Profile

In addition to usage experience, respondents were also asked to provide demographic information such as gender, age, education, profession, and monthly expenses. This data was used as control variables in the analysis.

Table 1. Demographic Profile

| Category | Profile | Total | Percentage (%) |
|------------------------------------|--------------------------------------|-------|----------------|
| Gender | Male | 95 | 43.2 |
| | Female | 125 | 56.8 |
| Age | 18 - 25 years old | 69 | 31.4 |
| | 26 - 33 years old | 91 | 41.4 |
| | 34 - 41 years old | 49 | 22.3 |
| | 42 - 50 years old | 11 | 5.0 |
| Education | Diploma (D1-D3) | 20 | 9.1 |
| | Bachelor's Degree | 170 | 77.3 |
| | Master's Degree (S2/S3) | 30 | 13.6 |
| Profession | Not Working | 8 | 3.6 |
| | Private Employee | 98 | 44.5 |
| | Student | 25 | 11.4 |
| | Civil Servant/State-Owned Enterprise | 68 | 30.9 |
| | Entrepreneur/SME | 21 | 9.5 |
| Monthly Expenditure | < IDR 1,000,000 | 25 | 11.4 |
| | >IDR 10,000,000 | 27 | 12.3 |
| | IDR 1,000,000 – IDR 2,999,999 | 52 | 23.6 |
| | IDR 3,000,000 – IDR 4,999,999 | 44 | 20.0 |
| | IDR 5,000,000 – IDR 9,000,000 | 72 | 32.7 |
| Frequently used food delivery apps | GoFood | 110 | 50.0 |
| | GrabFood | 40 | 18.2 |
| | ShopeeFood | 32 | 14.5 |
| | More than 1 app | 38 | 15 |

Source: Processed from primary data (2026).

The majority of respondents were female (56.8%), aged 26–33 years (41.4%), with a bachelor's degree (77.3%), and working as private employees (44.5%). Respondents were predominantly from the group with monthly expenditures of IDR 5,000,000–IDR 9,000,000 (32.7%), and most frequently used the GoFood food delivery app (50.0%).

3.2 SEM Analysis Results

3.2.1 Convergent Validity Test

Table 2. Convergent Validity Test

| Z | Items | Indicators | Loading Factor |
|-------|-------|--|----------------|
| Price | X1.1 | Food prices on online food delivery apps are affordable | 0.844 |
| | X1.2 | Discounts obtained from purchases on online food delivery apps are satisfying. | 0.806 |

| | | | |
|--------------------------|------|--|-------|
| | X1.3 | The standard of service provided by online food delivery apps is commensurate with the price paid. | 0.833 |
| | X1.4 | I think the food prices on the online food delivery app are reasonable. | 0.829 |
| Service Quality | X2.1 | Orders are delivered on time | 0.757 |
| | X2.2 | Customers can provide feedback (ratings) for each order | 0.804 |
| | X2.3 | Online food delivery apps can reach locations accurately | 0.827 |
| | X2.4 | For damaged orders, the online food delivery app refunds the money | 0.743 |
| Food Quality | X3.1 | Food temperature is kept well | 0.704 |
| | X3.2 | All items ordered on the online food delivery app are correct. | 0.783 |
| | X3.3 | Food packaging intact without damage | 0.868 |
| | X3.4 | Food is delivered in hygienic conditions | 0.752 |
| | X3.5 | Online food delivery apps offer a wide selection of food | 0.760 |
| Delivery Time Efficiency | X4.1 | Ordering food on an online food delivery app saves time. | 0.822 |
| | X4.2 | Online food delivery services are available 24/7 | 0.756 |
| | X4.3 | Orders arrive according to the estimated delivery time provided by the online food delivery app. | 0.794 |
| Customer Satisfaction | Z1.1 | Ordering food on an online food delivery app is a wise decision. | 0.811 |
| | Z1.2 | I am pleased with the delivery performance provided by the online food delivery application. | 0.847 |
| | Z1.3 | Overall, I am satisfied with the food service on the online food delivery app. | 0.893 |
| Customer Loyalty | Y1.1 | I will subscribe to promotions on the online food delivery app. | 0.872 |
| | Y1.2 | I will go back to using the online food delivery app. | 0.836 |
| | Y1.3 | I will recommend the online food delivery app to other consumers. | 0.871 |

Source: Processed from primary data (2026)

Overall, the results of this test prove that all indicators and constructs in the study are valid, making them suitable for further analysis.

3.2.2 Reliability Test Results

Table 3. Reliability Test Results

| Category | Cronbach's Alpha | Results |
|--------------------------|------------------|----------|
| Delivery Time Efficiency | 0.702 | Reliable |
| Price | 0.847 | Reliable |
| customer satisfaction | 0.809 | Reliable |
| Service Quality | 0.791 | Reliable |
| Food Quality | 0.832 | Reliable |
| Customer Loyalty | 0.824 | Reliable |

Source: Processed from primary data (2026)

3.2.3 Goodness of Fit Test

Table 4. NFI and SRMR Test

| | Saturated Model | Estimated Model |
|------|-----------------|-----------------|
| SRMR | 0.072 | 0.072 |
| NFI | 0.739 | 0.739 |

Source: Processed from primary data (2026)

The Normed Fit Index (NFI) value of 0.739 indicates that the model fit is still in the moderate category. The Standardized Root Mean Square Residual (SRMR) value of 0.072, both in the saturated model and the estimated model, is below the maximum limit of 0.08. This indicates that the difference between the empirical covariance matrix and the covariance matrix estimated by the model is relatively low, so the model can be said to have a good level of suitability.

3.3 Hypothesis Testing

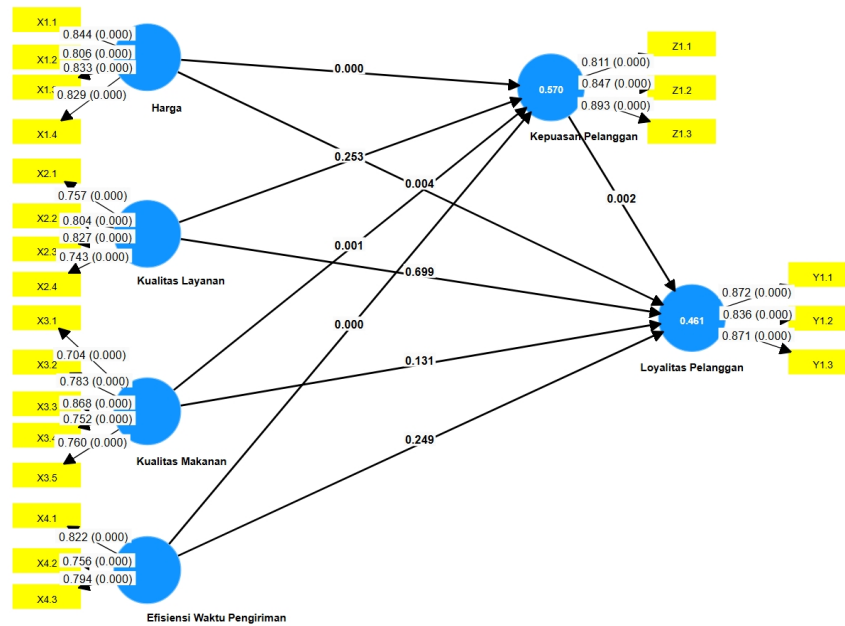


Figure 1. Research Structural Model

The criteria for testing hypotheses are based on the t-statistic and p-value. A hypothesis is accepted if the t-statistic is ≥ 1.96 and the p-value is ≤ 0.05 at a significance level of 5%. Conversely, if the t-statistic is < 1.96 and the p-value is > 0.05 , the hypothesis is rejected.

Table 5. Path Coefficients

| Variable | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (O/STDEV) | P Values | Description |
|--|---------------------|-----------------|----------------------------|------------------------|----------|-------------|
| Price->Customer Satisfaction->Customer Loyalty | 0.077 | 0.075 | 0.033 | 2.356 | 0.019 | Supported |
| ServiceQuality->Customer Satisfaction->Customer Loyalty | 0.028 | 0.026 | 0.027 | 1.047 | 0.295 | Rejected |
| FoodQuality->Customer Satisfaction->Customer Loyalty | 0.081 | 0.078 | 0.034 | 2.417 | 0.016 | Supported |
| Delivery Time Efficiency-> Customer Satisfaction -> Customer Loyalty | 0.108 | 0.107 | 0.046 | 2.338 | 0.019 | Supported |

Source: Processed from primary data (2026)

The test results show that not all independent variables have a significant indirect effect on customer loyalty.

1. The price variable has been proven to have a significant effect on customer satisfaction and customer loyalty, as well as a significant indirect effect on customer loyalty through customer satisfaction. This shows that customer satisfaction partially mediates the relationship between price and customer loyalty.
2. Food quality variables show a significant effect on customer satisfaction and customer loyalty, and have a significant indirect effect on customer loyalty through customer satisfaction. This indicates that customer satisfaction acts as a partial mediator in the relationship between food quality and customer loyalty.
3. The variable of delivery time efficiency has a significant effect on customer satisfaction and customer loyalty, and has a significant indirect effect on customer loyalty through customer satisfaction. These results indicate that customer satisfaction partially mediates the relationship between delivery time efficiency and customer loyalty.
4. The service quality variable shows no significant effect on customer satisfaction or customer loyalty, and has no significant indirect effect through customer satisfaction. Thus, it can be concluded that there is no mediating effect of customer satisfaction on the relationship between service quality and customer loyalty.

3.4 Inner Model Test

Table 6. R-Square Test

| | R-Square | R-Square Adjusted |
|-----------------------|----------|-------------------|
| Customer Satisfaction | 0.570 | 0.562 |
| Customer Loyalty | 0.461 | 0.449 |

Source: Processed from primary data (2026)

Overall, based on the R-Square assessment criteria, the R^2 values for customer satisfaction and customer loyalty variables are in the moderate category, so it can be concluded that the research model has a fairly good explanatory power for the endogenous latent variables studied.

3.5 Discussion

The Effect of Price on Customer Satisfaction

Based on the results of the first hypothesis testing, there is a positive and significant effect between price and customer satisfaction with a significance value of 0.000. These results illustrate that price is an important factor that customers pay close attention to when using online food delivery services. Prices that are considered appropriate and commensurate with the benefits received help customers assess the suitability of the delivery service used, thereby creating customer satisfaction. Setting the right price aims to build customer value perception and trust, which ultimately encourages customers to feel satisfied with their decision to use the selected online food delivery service application. Theoretically, these results are in line with the customer perceived value theory proposed by (Parasuraman et al., 1985), which states that customers will feel satisfied if the benefits received are greater than or at least equal to the sacrifices made, including the price paid. In addition, (Kotler & Keller, 2016) also emphasize that price is the only element of the marketing mix that directly generates revenue and has a strong influence on customer perception of quality and satisfaction. In the context of digital services such as online food delivery applications, price not only reflects the cost of food, but also includes delivery costs, service fees, and discounts offered.

These results are also supported by the questionnaire responses filled out by respondents, which show that customers are satisfied with the price aspect, particularly with regard to the indicator of satisfaction with discounts offered by online food delivery apps. However, some respondents felt that the prices of food on these apps were not entirely affordable without discounts. This condition indicates that the existence of discounts is an important factor in shaping perceptions of price affordability. This is in line with price promotion theory, which states that discounts can increase perceived value and reduce customers' perceived risk in making purchasing decisions (Steenkamp, 1990). The more frequent and larger the discounts given, the more likely customers are to use online food delivery applications. The results of this study indicate that consumers tend to seek information related to discounts first before deciding which online food delivery application to use. This phenomenon reinforces the view that customers of digital services are price-sensitive and tend to compare the economic benefits between platforms before making a transaction. The results of this first hypothesis test are in line with previous studies conducted by (Siddiqi et al., 2024), which state that price has a significant effect on customer satisfaction and encourages consumers to make more purchases. In addition, research by (Kadek et al., 2022) also found that discounts and competitive prices on online food delivery applications play an important role in increasing user satisfaction, especially in markets with high levels of competition. It can be concluded that the results of this study reinforce empirical evidence that price is a major determinant in shaping customer satisfaction with online food delivery application services.

The Effect of Service Quality on Customer Satisfaction

Based on the results of the second hypothesis test, service quality does not have a significant effect on customer satisfaction, even though it has a positive direction of influence. The test results show a significance value of 0.253, so the hypothesis stating that there is a significant effect of service quality on customer satisfaction cannot be accepted. These results illustrate that in the context of online food delivery applications, the quality of service perceived by customers is not yet a major factor in shaping customer satisfaction. This condition shows that customer satisfaction is not only determined by service aspects, but by a combination of various other factors that are more directly felt by customers. These results are supported by the respondents' questionnaire answers. Respondents generally rated several aspects of service quality as quite good, particularly the indicator of ease of providing feedback on each order. This ease provides a positive experience for customers to convey complaints, suggestions, and assessments of the services they receive. However, some respondents still felt that orders were not always delivered on time, resulting in a discrepancy between customer expectations and perceived service performance, which ultimately meant that overall service quality did not have a significant impact on customer satisfaction, even though the relationship remained positive.

The effect of service quality on customer satisfaction has not shown statistical significance, which can be explained through the Expectation Confirmation Theory (ECT) proposed by (Bhattacharjee, 2001). This theory states that customer satisfaction is formed from a comparison between the customer's initial expectations and the actual performance perceived. If service performance fails to meet or exceed customer expectations, satisfaction will not be achieved, even if the overall quality of service is considered to be quite good. In this study, delivery delays became a form of negative disconfirmation that reduced customer satisfaction levels. In addition, (Parasuraman et al., 1988) emphasized that customers consider perceived value more than service quality alone. This means that good service does not necessarily result in satisfaction if customers feel that the benefits received are not proportional to the time, cost, or effort spent. The results of this study are also in line with the research by (Mntande et al., 2023) which found that service quality does not have a significant direct effect on customer satisfaction. Satisfaction is more influenced by situational factors and customer expectations. In addition, research by (Rai & Srivastava, 2012) found that service quality does not have a significant effect on customer satisfaction, while food quality is the most dominant factor. Based on the results of testing the second hypothesis in this study, it reinforces the view that service quality is not the only factor, nor even the main factor, in shaping customer satisfaction with application-based services.

The Effect of Food Quality on Customer Satisfaction

Based on the results of the third hypothesis testing, it shows that food quality has a positive and significant effect on customer satisfaction with a significance value of 0.001. These results indicate that food quality is an important factor that customers pay close attention to when purchasing food through online delivery applications. This result is in line with the Expectation Confirmation Theory (ECT), which states that customer satisfaction is formed through a comparison between expectations before purchase and perceived product performance after consumption (Oliver, 1999). When the food quality received meets or even exceeds customer expectations, positive confirmation occurs, which encourages satisfaction with the purchase decision that has been made. Food quality reflects the ability of service providers to meet customer expectations regarding product attributes, such as taste, menu variety, freshness, and food presentation (Sari & Yulianto, 2024). In the context of online food delivery services, food quality not only plays a role as the core product, but also becomes a source of shaping customers' perceived value of the service used. According to (Parasuraman et al., 1988) positive perceived value will increase customer satisfaction because customers feel that the benefits obtained are comparable to or greater than the sacrifices made. Therefore, the better the food quality perceived by customers, the higher the level of satisfaction formed towards online food delivery services.

The results of this study are also supported by respondents' questionnaire answers, which indicate that online food delivery applications provide a wide variety of food options that are able to meet customer preferences. This menu diversity makes it easy for customers to choose according to their tastes, contributing to positive assessments of the quality of the food offered. However, some respondents still feel that the temperature of the food is not always maintained properly until it reaches the customer. This condition shows that although the quality of the food is considered good in terms of variety and menu options, there are still weaknesses in the presentation aspect, particularly regarding food temperature. This indicates that the quality of food in delivery services is not only determined by the product itself, but also by the packaging and delivery processes. Therefore, service providers need to improve the quality of packaging and delivery systems to maintain food quality, thereby optimizing customer satisfaction. These results are in line with previous research conducted by (Saad, 2021), which states that serving temperature is an important part of food quality because it directly affects consumer satisfaction. In addition, research conducted by (Ghosh, 2020) also shows that food quality is a major factor that drives customer satisfaction and has the potential to increase loyalty to a service. Thus, the results of this study reinforce previous empirical findings that food quality plays a strategic role in shaping customer satisfaction, particularly in the context of online food delivery services.

The Effect of Delivery Time Efficiency on Customer Satisfaction

Based on the results of the fourth hypothesis testing, there is a positive and significant effect between delivery time efficiency and customer satisfaction, with a significance value of 0.000. These results illustrate that delivery time efficiency is an important factor that customers pay close attention to when using online food delivery services. This result is in line with the expectation confirmation theory, which states that customer satisfaction is formed when the perceived service performance is able to meet or exceed the customer's initial expectations, particularly in terms of the speed and timeliness of the service (Zeithaml et al., 1990). In the context of digital-based services, speed and time efficiency are the main factors that determine customer evaluation of the quality of service received. Delivery time efficiency reflects the application's ability to save users time, provide 24-hour service, and give relatively accurate delivery time estimates (Vasić et al., 2019). According to customer perceived value theory, customers will be satisfied if the benefits they receive, such as time savings and ease of access, are greater than the costs or efforts incurred (Zeithaml, 1988). The accuracy and speed of delivery as perceived by customers can provide a sense of comfort and certainty of service, thereby increasing customer satisfaction. When online food delivery applications are able to provide efficiency, flexibility, and certainty of time, customers tend to

feel satisfied with their decision to use the selected service.

These results are also supported by respondents' answers indicating that online food delivery services are available 24 hours a day, providing flexibility in ordering times. However, some respondents still experience delays in the delivery process. This condition indicates that although delivery time efficiency is generally considered good, there are still obstacles in terms of consistency and punctuality. Therefore, service providers need to improve the consistency of delivery speed and accuracy so that time efficiency can be felt evenly by all customers, thereby optimizing customer satisfaction. The results of this study are in line with the results of previous research conducted by (Siddiqi et al., 2024) which showed that delivery time is one of the main factors affecting customer satisfaction with online food delivery services. Another study by (Vasić et al., 2019) also found that orders arriving within the estimated delivery time had a significant impact on customer satisfaction perceptions. The results of this study reinforce previous empirical findings that delivery time efficiency is an important determinant in shaping customer satisfaction with online food delivery services.

The Effect of Price on Customer Loyalty

Based on the results of the fifth hypothesis test, it is known that price has a positive and significant effect on customer loyalty with a significance value of 0.000. These results indicate that customers tend to consider the suitability between the price paid and the benefits received in determining the continued use of online food delivery applications. A price that is considered reasonable and commensurate with the quality of service and convenience obtained will encourage customers to continue using the same service and reduce the tendency to switch to other providers. Theoretically, price is one of the main elements in shaping perceived value. (Gupta et al., 2004) explain that customers will evaluate the value of a product or service by comparing the benefits received with the costs incurred. In line with this, (Martín - Consuegra et al., 2007) emphasizes that customer loyalty is not only influenced by the nominal price, but also by the perception of the fairness of the price relative to the overall benefits obtained. When customers perceive prices as fair and competitive, their level of satisfaction with service providers will increase, which ultimately encourages repeat purchases and the formation of customer loyalty. The results of this study reinforce marketing theory, which states that positive price perceptions play a strategic role in building long-term relationships between customers and service providers. The results of this study are also supported by research conducted by (Anderson & Sullivan, 1993), which states that price is one of the important factors of customer loyalty, where prices that affect customer satisfaction will have an impact on loyalty, either directly or indirectly. Furthermore, research conducted by (Siddiqi et al., 2024) in the context of online food delivery services found that price is one of the main factors that influence customer loyalty, especially when customers consider the price to be commensurate with the quality of service and convenience offered. It can be concluded that the consistency between the results of this study and previous theories and research shows that price remains an important determinant in shaping customer loyalty, especially in application-based service industries that have a high level of competition.

The Effect of Service Quality on Customer Loyalty

Based on the results of the sixth hypothesis test, it shows that service quality does not have a significant effect on customer loyalty with a significance value of 0.978 and a negative direction of influence. These results indicate that the quality of service perceived by customers is not yet able to directly encourage customer loyalty in the use of online food delivery applications. Thus, the hypothesis stating that there is an effect of service quality on customer loyalty cannot be accepted. Theoretically, customer loyalty is generally formed through repeated positive experiences and consistent levels of satisfaction over time (Mascarenhas et al., 2006). (Singh et al., 2023) asserts that loyalty is a deep commitment by customers to make repeat purchases, which is influenced not only by assessments of one aspect of service, but by a comprehensive evaluation of the value received by customers. The results show that even though customers perceive service quality, its influence is not strong enough to directly create loyalty. This indicates that service quality tends to act as a supporting factor that indirectly influences customer loyalty through customer satisfaction. When service quality is unable to significantly increase customer satisfaction, its impact on customer loyalty also becomes insignificant. Furthermore, the negative direction of influence that emerged in this study indicates the possibility of a mismatch between customer expectations and the service received. According to Expectation Confirmation Theory (ECT), when service performance fails to meet or exceed customer expectations, customer evaluation of the service tends to decline and does not encourage loyal behavior (Oliver, 1999). Therefore, in this research model, customer loyalty is more influenced by variables that provide direct functional benefits, such as price, food quality, and delivery time efficiency, than by service quality.

The results of this study are also in line with research conducted by (Siddiqi et al., 2024) which found that service quality does not have a significant direct impact on customer loyalty, except when it first increases customer satisfaction. In other words, service quality is only effective in promoting loyalty if it first increases consumer satisfaction; without satisfaction as an intermediary, service quality alone does not directly create strong loyalty. The results of this study are also supported by (Supriyanto et al., 2021), who stated that service quality does not have a significant direct effect on customer loyalty. The study confirms that customers who are satisfied with the service tend to have higher loyalty, while service quality will only have an impact on loyalty if it first increases customer satisfaction. Thus, the results of this study

reinforce the conclusion that the relationship between service quality and loyalty is indirect and highly dependent on the role of the customer satisfaction variable as a mediator.

The Effect of Food Quality on Customer Loyalty

Based on the results of the seventh hypothesis test, food quality was proven to have a positive and significant effect on customer loyalty with a significance value of 0.018. These results indicate that food quality is one of the main factors that customers consider in determining their continued use of online food delivery applications. Food that has the right taste, a good level of freshness, and consistent presentation quality tends to create a positive consumption experience for customers, encouraging them to continue using the same service in the future. These results are in line with (Marcos & Coelho, 2022) view that product quality is an important determinant in shaping customer satisfaction and loyalty. Products with good quality will meet or even exceed customer expectations, thereby creating sustainable satisfaction. This satisfaction then serves as the basis for loyalty, which is demonstrated through repurchase intent and the tendency of customers to maintain long-term relationships with service providers. In the context of online food delivery services, food quality is a core element of the value perceived by customers, thus having a direct influence on customer loyalty. The results of this study are also supported by (Suhartanto, Gan, et al., 2019) who found that product quality, including taste, freshness, and appearance of food, are the main factors that influence customer satisfaction and loyalty in the food service and online food delivery industries. The study confirms that customers tend to remain loyal if the quality of the food they receive is consistent and meets their expectations. Additionally, research conducted by (Poisson, 2018) also shows that food quality has a significant effect on customer loyalty, indicating that product quality is a key element in retaining customers amid increasingly fierce competition.

The Effect of Delivery Time Efficiency on Customer Loyalty

Based on the results of the eighth hypothesis test, it was found that delivery time efficiency had a positive and significant effect on customer loyalty with a significance value of 0.019. These results indicate that delivery accuracy and speed are important factors that customers consider in determining their continued use of online food delivery applications. Customers tend to show loyal behavior when the service they receive is able to meet their expectations regarding speed and certainty of delivery time, so that positive experiences encourage them to use the service again (Setó-Pamies, 2012). This study is supported by research by (Kadek et al., 2022) which found that delivery speed has a direct and significant effect on customer satisfaction and repurchase intention. The study confirms that timely delivery can strengthen customer relationships with service providers. In addition, research by (Limsarun et al., 2021) specifically shows that delivery efficiency is one of the most important factors affecting customer loyalty on food delivery application platforms. Similar results were also found by (Ray et al., 2019), who stated that delivery reliability and speed are the main determinants of customer loyalty in online-based services.

The Influence of Price, Service Quality, Food Quality, and Delivery Time Efficiency on Customer Loyalty Through Customer Satisfaction

Based on the results of the ninth hypothesis testing, it was found that customer satisfaction had a positive and significant effect on customer loyalty with a significance value of 0.002. These results indicate that customer satisfaction acts as a mediating variable that bridges the influence of price, service quality, food quality, and delivery time efficiency on customer loyalty in the use of online food delivery applications. These factors do not automatically form customer loyalty, but rather first affect the level of customer satisfaction before ultimately impacting loyalty. Customer satisfaction reflects the degree of conformity between customer expectations and the service performance received (Kotler, 2012). If service performance, as reflected in reasonable prices, adequate service quality, good food quality, and efficient delivery times, meets or exceeds customer expectations, then customers will feel satisfied. This satisfaction then encourages the formation of positive attitudes towards service providers, which leads to repeat purchase intentions and long-term commitment (Thaichon & Quach, 2015). This is in line with Expectation Confirmation Theory (ECT), which states that satisfaction is a major determinant in the formation of sustainable consumer behavior, including loyalty (McKnight & Chervany, 2001). The results of this study are also reinforced by research conducted by (Siddiqi et al., 2024; Zulkarnain et al., 2015) which shows that in the context of the online food delivery business, customer satisfaction is a key factor that influences price, service quality, food quality, and delivery time efficiency on customer loyalty. The study confirms that companies must prioritize creating customer satisfaction to maintain loyalty amid intense platform competition. In addition, (Ghosh, 2020) study also found that customer satisfaction has a positive and significant influence on customer loyalty, supporting the view that satisfaction is an important mediator in the relationship between service quality and loyal customer behavior.

4. CONCLUSION

Based on the results of hypothesis testing and discussion, several conclusions can be drawn as follows:

The influence of price, service quality, food quality, and delivery time efficiency on customer satisfaction

Price, food quality, and delivery time efficiency have been proven to have a significant impact on customer satisfaction among users of online food delivery apps in Indonesia. Appropriate prices supported by discounts increase customers' perception of value. Food quality, particularly menu diversity, and delivery time efficiency through 24-hour service availability can increase customer comfort and satisfaction. Conversely, service quality does not have a significant effect on customer satisfaction, indicating that although the ease of providing feedback has been felt, there are still weaknesses, especially in delivery timeliness, so that customer expectations are not fully met.

The influence of price, service quality, food quality, and delivery time efficiency on customer loyalty

Price, food quality, and delivery time efficiency have a significant influence on the loyalty of customers who use online food delivery applications in Indonesia. The alignment of price with perceived value, good food quality, and fast and accurate delivery encourage customers to continue using the service. However, service quality does not have a significant impact on customer loyalty and shows a negative influence, indicating that perceived service quality is not yet capable of building long-term customer commitment.

The effect of customer satisfaction on customer loyalty

Customer satisfaction has been proven to have a significant impact on customer loyalty. Satisfied customers tend to make repeat purchases, continue using the service, and recommend the online food delivery app to others.

The role of customer satisfaction as a mediating variable

Customer satisfaction has been proven to significantly mediate the influence of price, food quality, and delivery time efficiency on customer loyalty. These results indicate that these three factors first shape customer satisfaction, which then encourages customers to continue using the service, make repeat purchases, and recommend the online food delivery app to others. However, customer satisfaction is not able to mediate the influence of service quality on customer loyalty. This shows that the quality of service perceived by customers is not yet strong enough to shape customer satisfaction, so it does not lead to increased customer loyalty.

RECOMMENDATIONS

Improvements are needed as a basis for providing recommendations to increase customer satisfaction and loyalty, as follows:

1. There are still weaknesses in pricing when there are no discounts. Therefore, online food delivery app providers are advised to maintain affordability and cost transparency so that customers remain satisfied even without promotions.
2. Service quality has not been able to significantly improve customer satisfaction, mainly due to inconsistencies in delivery times. Therefore, GoFood, GrabFood, and ShopeeFood need to improve supervision and coordination with driver partners so that service quality can meet customer expectations.
3. Weaknesses are still found in the presentation aspect, particularly the temperature of the food when it is received by customers. Therefore, packaging and delivery standards need to be improved to ensure food quality is maintained until it reaches the customer.
4. GoFood, GrabFood, and ShopeeFood are advised to improve the consistency of delivery timeliness by optimizing their delivery systems and processes so that the estimated delivery times communicated to customers can be realized more accurately.

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REFERENCES

- Anderson, E. W., & Sullivan, M. W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12(2), 125–143. <https://doi.org/10.1287/mksc.12.2.125>
- Arslan, I. K. (2020). The importance of creating customer loyalty in achieving sustainable competitive advantage. *Eurasian Journal of Business and Management*, 8(1), 11–20. DOI:10.15604/ejbm.2020.08.01.002
- Berry, L. L., Wall, E. A., & Carbone, L. P. (2006). Service clues and customer assessment of the service experience: Lessons from marketing. *Academy of Management Perspectives*, 20(2), 43–57. DOI:10.5465/AMP.2006.20591004
- Bhattacharjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 351–370. DOI:10.2307/3250921
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. DOI:10.1177/1744987120927206
- Carolan, M. (2018). *The real cost of cheap food*. Routledge. DOI:10.4324/9781849776776
- Chai, L. T., & Yat, D. N. C. (2019). Online food delivery services: Making food delivery the new normal. *Journal of Marketing Advances and Practices*, 1(1), 62–77. DOI:10.31893/multiscience.2025031
- Chen, S.-C. (2012). The customer satisfaction–loyalty relation in an interactive e-service setting: The mediators. *Journal of Retailing and Consumer Services*, 19(2), 202–210. <https://doi.org/10.1016/j.jretconser.2012.01.001>
- Cnbcindonesia. (2022). Harga Makanan di Ojol Lebih Mahal Dibanding Resto, Kok Bisa? <https://www.cnbcindonesia.com/tech/20220629173536-37-351520/harga-makanan-di-ojol-lebih-mahal-dibanding-resto-kok-bisa>
- Creswell, J. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Thousand Oaks, CA: Sage. *English Language Teaching*, 12(5), 40.
- Databoks. (2024). Indonesia, Pasar Online Food Delivery Terbesar di Asia Tenggara. <https://databoks.katadata.co.id/infografik/2024/02/20/indonesia-pasar-online-food-delivery-terbesar-di-asia-tenggara>
- Firdaus, R. A., & Astuti, B. (2024). Analisis Pengaruh Kualitas Layanan terhadap Kepuasan Pelanggan dan Loyalitas Pelanggan E-Commerce Shopee. *Jurnal Informatika Ekonomi Bisnis*, 765–769. <https://doi.org/10.37034/infek.V6I4.983>
- Ghosh, D. (2020). Customer satisfaction towards fast food through online food delivery (OFD) services: an exploratory study. *International Journal of Management (IJM)*, 11(10), 645–658. DOI 10.34218/IJM.11.10.2020.061
- Gul, Y. E. (2023). A theoretical perspective on survey method from quantitative research methods. *Universum: Психология и Образование*, 4 (106), 64–68. DOI:10.32743/UniPsy.2023.106.4.15254
- Gupta, S., Lehmann, D. R., & Stuart, J. A. (2004). Valuing customers. *Journal of Marketing Research*, 41(1), 7–18. <https://doi.org/10.1509/jmkr.41.1.7.25084>
- Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Harter, A., Stich, L., & Spann, M. (2025). The Effect of Delivery Time on Repurchase Behavior in Quick Commerce. *Journal of Service Research*, 28(2), 211–227. <https://doi.org/10.1177/10946705241236961>
- Kadek, L., Martini, B., Mumtaz, Z. S., Calista, P., Yones, P., Muthaiyah, S., Raji, R. A., Darmatama, M., Erdiansyah, R., Chen, Y., Feng, X., He, Z., Liu, Y., Handayani, R., Fitriadi, B. W., Pauzy, D. M., Shafa, K. A., Hidayat, A., & Ellitan, L. (2022). *Journal of Entrepreneurship & Business*. *Asia Pacific Management Review*, 652(2), 888–892. <https://doi.org/10.2991/assehr.k.210805.140>
- Komunda, M., & Osarenkhoe, A. (2012). Remedy or cure for service failure? Effects of service recovery on customer satisfaction and loyalty. *Business Process Management Journal*, 18(1), 82–103. DOI:10.1108/14637151211215028
- Konuk, F. A. (2019). The influence of perceived food quality, price fairness, perceived value and satisfaction on customers' revisit and word-of-mouth intentions towards organic food restaurants. *Journal of Retailing and Consumer Services*, 50, 103–110. <https://doi.org/10.1016/J.JRETCONSER.2019.05.005>
- Kotler, P. (2012). *Manajemen Pemasaran*. Rajawali.
- Kotler, P., & Armstrong, G. (2018). *Prinsip-prinsip pemasaran (Vol. 1)*. Erlangga Jakarta.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management*. Pearson.

- Limsarun, T., Navavongsathian, A., Vongchavalitkul, B., & Damrongpong, N. (2021). Factors Affecting Consumer's Loyalty in Food Delivery Application Service in Thailand. *The Journal of Asian Finance, Economics and Business*, 8(2), 1025–1032. DOI:10.13106/jafeb.2021.vol8.no2.1025
- Lin, H.-T. (2010). Fuzzy application in service quality analysis: An empirical study. *Expert Systems with Applications*, 37(1), 517–526. <https://doi.org/10.1016/j.eswa.2009.05.030>
- Marcos, A. M. B. de F., & Coelho, A. F. de M. (2022). Service quality, customer satisfaction and customer value: holistic determinants of loyalty and word-of-mouth in services. *The TQM Journal*, 34(5), 957–978. <https://doi.org/10.1108/TQM-10-2020-0236>
- Martín-Consuegra, D., Molina, A., & Esteban, Á. (2007). An integrated model of price, satisfaction and loyalty: an empirical analysis in the service sector. *Journal of Product & Brand Management*, 16(7), 459–468. DOI:10.1108/10610420710834913
- Mascarenhas, O. A., Kesavan, R., & Bernacchi, M. (2006). Lasting customer loyalty: a total customer experience approach. *Journal of Consumer Marketing*, 23(7), 397–405. <https://doi.org/10.1108/07363760610712939>
- McKinsey. (2023). The changing market for food delivery. https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-changing-market-for-food-delivery/?utm_source=chatgpt.com
- McKnight, D. H., & Chervany, N. L. (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International Journal of Electronic Commerce*, 6(2), 35–59. <https://doi.org/10.1080/10864415.2001.11044235>
- Mittal, V., Han, K., Frennea, C., Blut, M., Shaik, M., Bosukonda, N., & Sridhar, S. (2023). Customer satisfaction, loyalty behaviors, and firm financial performance: what 40 years of research tells us. *Marketing Letters*, 34(2), 171–187. <https://doi.org/10.1007/S11002-023-09671-W/TABLES/3>
- Mntande, K. A., Stiehler-Mulder, B., & Roberts-Lombard, M. (2023). Securing delight and loyalty in a market with low switching costs. *European Business Review*, 35(1), 1–22. <https://doi.org/10.1108/EBR-03-2022-0043>
- Narasi TV. (2024). Masyarakat Indonesia Doyan Pesan Makanan Via Food Delivery, Ini Alasannya | Narasi TV. <https://narasi.tv/read/narasi-daily/masyarakat-indonesia-aktif-menggunakan-jasa-food-delivery-kecepatan-dan-harga-kunci-menarik-minat-konsumen>
- Nitzl, C., Roldan, J. L., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models. *Industrial Management & Data Systems*, 116(9), 1849–1864. <https://doi.org/10.1108/IMDS-07-2015-0302>
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(4_suppl1), 33–44.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. 1988, 64(1), 12–40.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49(4), 41–50.
- Poisson, D. C. (2018). The effectiveness of coupons on the restaurant consumers' purchase decision. *Journal of Foodservice Business Research*, 21(3), 280–296. <https://doi.org/10.1080/15378020.2017.1399048>
- Rai, A. K., & Srivastava, M. (2012). Customer loyalty attributes: A perspective. *NMIMS Management Review*, 22(2), 49–76.
- Ray, A., Dhir, A., Bala, P. K., & Kaur, P. (2019). Why do people use food delivery apps (FDA)? A uses and gratification theory perspective. *Journal of Retailing and Consumer Services*, 51, 221–230. <https://doi.org/10.1016/j.jretconser.2019.05.025>
- 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>
- Samanta, I., & Arkoudis, N. (2024). The Impact of Modern Lifestyles on Eating Habits and Food Shopping Behaviors: A Case Study of Omnichannel Retail Consumers Aged 25–40 in Athens. *Sustainability*, 16(17), 7521. DOI:10.3390/su16177521
- Sari, N. T. P., & Yulianto, E. (2024). A Literature Review: Unraveling the Dimensions of Food Quality and Its Influence on Consumer Satisfaction. *KnE Social Sciences*, 453–467. DOI:10.18502/kss.v9i11.15835
- Setó-Pamies, D. (2012). Customer loyalty to service providers: examining the role of service quality, customer satisfaction and trust. *Total Quality Management & Business Excellence*, 23(11–12), 1257–1271. <https://doi.org/10.1080/14783363.2012.669551>

- Siddiqi, K. O., Rahman, J., Tanchangya, T., Rahman, H., Esquivias, M. A., & Rahman, H. (2024). Investigating the factors influencing customer loyalty and the mediating effect of customer satisfaction in online food delivery services: empirical evidence from an emerging market. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2431188>
- Singh, V., Sharma, M. P., Jayapriya, K., Kumar, B. K., Chander, M., & Kumar, B. R. (2023). Service quality, customer satisfaction and customer loyalty: A comprehensive literature review. *Journal of Survey in Fisheries Sciences*, 10(4S), 3457–3464. DOI:10.53555/sfs.v10i4S.2218
- Steenkamp, J.-B. E. M. (1990). Conceptual model of the quality perception process. *Journal of Business Research*, 21(4), 309–333. [https://doi.org/10.1016/0148-2963\(90\)90019-A](https://doi.org/10.1016/0148-2963(90)90019-A)
- Suhartanto, D., Gan, C., Sarah, I. S., & Setiawan, S. (2019). Loyalty towards Islamic banking: service quality, emotional or religious driven? *Journal of Islamic Marketing*, 11(1), 66–80. <https://doi.org/10.1108/JIMA-01-2018-0007>
- Suhartanto, D., Helmi Ali, M., Tan, K. H., Sjahroeddin, F., & Kusdiby, L. (2019). Loyalty toward online food delivery service: the role of e-service quality and food quality. *Journal of Foodservice Business Research*, 22(1), 81–97. <https://doi.org/10.1080/15378020.2018.1546076>
- Supriyanto, A., Wiyono, B. B., & Burhanuddin, B. (2021). Effects of service quality and customer satisfaction on loyalty of bank customers Effects of service quality and customer satisfaction on loyalty of bank customers. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1937847>
- Tech, J. E. T. (2020). The influence of online food delivery service quality on customer satisfaction and customer loyalty: the role of personal innovativeness. *Journal of Environmental Treatment Techniques*, 8(1), 6–12. DOI:10.25105/ber.v23i1.15999
- Thaichon, P., & Quach, T. N. (2015). The relationship between service quality, satisfaction, trust, value, commitment and loyalty of Internet service providers' customers. *Journal of Global Scholars of Marketing Science*, 25(4), 295–313. <https://doi.org/10.1080/21639159.2015.1073419>
- Vasić, N., Kilibarda, M., & Kaurin, T. (2019). The influence of online shopping determinants on customer satisfaction in the Serbian market. *Journal of Theoretical and Applied Electronic Commerce Research*, 14(2), 70–89. DOI:10.4067/S0718-18762019000200107
- Widodo, S. E., & Midia, F. G. (2024). Wanprestasi Akibat Keterlambatan Pengantaran Oleh Kurir Gofood. *Mu'amalah: Jurnal Hukum Ekonomi Syariah*, 3(1), 141. <https://doi.org/10.32332/muamalah.V3I1.8136>
- Yeo, V. C. S., Goh, S.-K., & Rezaei, S. (2017). Consumer experiences, attitude and behavioral intention toward online food delivery (OFD) services. *Journal of Retailing and Consumer Services*, 35, 150–162. <https://doi.org/10.1016/j.jretconser.2016.12.013>
- Yum, K., & Kim, J. (2024). The Influence of perceived value, customer satisfaction, and trust on loyalty in entertainment platforms. *Applied Sciences*, 14(13), 5763. DOI:10.3390/app14135763
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22. <https://doi.org/10.2307/1251446>
- Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Simon and Schuster.
- Zulkarnain, K., Ahasanul, H., & Selim, A. (2015). Key success factors of online food ordering services: An empirical study. *Malaysian Institute of Management*, 50(2), 19–36.