

# **Customer Satisfaction and Loyalty Towards Online Food Delivery Services in Indonesia: A Conceptual Model of P-SERVQUAL 4.0**

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## **Abstract**

Service quality is one of the main online food delivery services (OFDS) factors, especially related to the satisfaction and loyalty of the customer. Since the industry 4.0 era and the COVID-19 pandemic hit, society has been through a lot of changes including the customer standard of satisfaction and loyalty to products or services. For this condition, the SERVQUAL model for the OFDS industry needs to be expanded with two additional new criteria related to the COVID-19 pandemic and industry 4.0 (digital technology). This research purpose is to build the conceptual model based on the P-SERVQUAL 4.0, -Pandemic Service Quality in Industry 4.0 Era, -to evaluate customer satisfaction and loyalty of the OFDS in Indonesia. This conceptual model could be utilized as a basis to further empirical study of OFDS industry in Indonesia and to formulate the OFDS strategies in keeping up with the development of digital technology as well as adapting and overcoming the COVID-19 pandemic situation.

## **Keywords**

Online Food Delivery Services, Service Quality, Covid-19, Industry 4.0

## **1. Introduction**

On March 11th, 2020, World Health Organization (WHO) declared Sars-Cov2 or Corona Virus (COVID-19) as global pandemic (Cucinotta and Vanelli 2020). Since then, society have been through a lot of changes including behaviors, lifestyles, trends, habits, and many other things. One of the most obvious changes in society is the social distancing behavior. Social distancing is one of the steps decided by the government that effectively could prevent the COVID-19 virus spreads (Milne and Xie 2020). The access of almost every public service that barely important, store, restaurant, etc are limited as the implementation of social distancing (Nguyen and Vu 2020). This includes society restrictions for dine in. However, the regulation causes negative impact for the business owner and public. Therefore, Online Food Delivery Services (OFDS) became solutions in fulfilling public needs of food and maintain the business.

OFDS has been widely used a lot before but has getting more popular since COVID-19 pandemic. This happened due to the public's increasing willingness to have food at home as self-defense during COVID-19 pandemic (Zhao and Bacao 2020). Retrieved from Snapcart research, the OFDS market is led by ride sourcing company with initials "A" with market penetration of 82% followed by "B" with 71% market penetration and "C" with 28% market penetration. Based on OFDS market penetration in Indonesia, it can be seen that "A" and "B" which have been operating in Indonesia for a long time compete quite tightly to become the market leader. Meanwhile "C" shows its strength with a quite high penetration rate even though it has only been operating for a few months.

To face the intense competition between OFDS providers, it is very important for these service providers to build a strong bond with customers to form customer loyalty because customer loyalty is the main key to the longevity of food delivery services (Pee et al 2019). In addition of customer loyalty, OFDS need to pay attention to customer satisfaction to strengthen its position in the market. Customer satisfaction is an assumption that product or service performance meets the customer expectation. A bachelor in United States named Cardozo did research with result showing that customer satisfaction mainly influenced by two factors namely customer expectation of service and the actual service they receive (Ge et al 2021). Superior service quality is a vital and critical factor that can differentiate and improve the performance of company (Farooq et al., 2018). Conceptually, service quality is defined as an assessment related to the overall service excellence. The basic model of service quality namely SERVQUAL was developed by Parasuraman on 1988 and the dimensions are tangibles, reliability, responsiveness, assurance, and empathy. Since then, the model of service quality increasingly diverse along with the times. The example of service quality model development includes SEV-PERF (Service Performance), E-Servqual (E-Service Quality), Webqual (Website Quality), Software Quality, Food Quality, etc.

Based on previous study, it is clarified that service quality is something critical in the food delivery service business. With so many competitions between OFDS, companies need to pursue strategies that highlight service quality that is able to meet customer expectation and satisfaction. This aspect is the basis for the importance of this study. Another aspect that underlies the need of this study is the previous studies conducted in food delivery service quality haven't considered the effects of COVID-19 pandemic and the new normal era. Meanwhile, the pandemic has potential to change customer behavior and standard of satisfaction (Sheth 2020). To examine the quality of OFDS, the P-SERVQUAL 4.0 model developed by Tumsekcali in 2021 was used as the basis for the analysis of this study. P-SERVQUAL 4.0 is the development of the SERVQUAL (Service Quality) model where new dimensions are added to the basic service quality model, namely pandemic and industry 4.0 (Tumsekcali et al 2021). This model can represent the conditions that became a challenge for OFDS these days. This study will examine the comparison of the service quality of 3 food delivery service companies in Indonesia. The result of this paper is a conceptual model that can be used as a reference for further research.

## **2. Theoretical Background**

### **2.1 Online Food Delivery Services (OFDS)**

Online food delivery service is the process of delivering food or take away from home cooks, local restaurants, or other food vendors through mobile applications or through websites (Jadhav 2018). According to Jadhav 2018, customers prefer to use food ordering applications because customers can make orders without having to explain to others and the food will be directly delivered to the desired destination. With online food delivery services, customers can view the entire list of food vendors, view menus, and select the desired food or drink (Kapoor and Vij 2018). Furthermore, customers feel that the use of online food delivery service applications is currently very practical because it has been equipped with digital payment tools (Johnson et al 2018). In addition, discounts, free shipping, special prices, and promotional offers also encourage people to use online food delivery services (Hwang and Kim 2019).

With the online food delivery service, it certainly supports the dine-in restriction program that is being carried out by the government to break the chain of the spread of the corona virus. Restrictions on eating at places encourage people to use online food delivery services. Furthermore, according to a report from McKinsey 2020, food delivery services also provide job opportunities and entrepreneurship for sellers and order delivery couriers. However, a study in Vietnam reported that more than 60% of positive cases of COVID-19 in a public hospital in the Vietnamese capital Hanoi were related to food delivery services (Nguyen and Vu 2020). In addition, a study in Pakistan also found that the COVID-19 pandemic had an influence on consumer preferences for online food delivery services (Ali et al 2021).

Based on those previous studies, the COVID-19 pandemic is one of the important factors that food delivery services must pay attention to.

## **2.2 Service Quality**

Service quality is the feeling that arises in customers regarding products and services (Anouze and Alamro 2020). Customers' desire to use a product or service is usually driven by satisfactory service quality. In addition, service quality can also be defined as a modification between what customers expect from service providers and what customers get (Islam et al 2021). To face the intense market competition, service quality must be significantly included in the business plan of a service company (Khattab 2019). The concept of service quality itself has been developed since the 1980s by Churchill and Suprenant and Parasuraman et al (Fida et al 2020). The service quality model that is currently the most cited in various studies is the SERVQUAL model initiated by Parasuraman 1985. This model consists of 5 dimensions of measurement namely tangibles, reliability, responsiveness, assurance, and empathy.

One of the changes in world conditions is the occurrence of the COVID-19 pandemic. A pandemic is an epidemic that occurs worldwide, or over a very wide area, across international boundaries and usually affects large numbers of people (Grennan 2019). This has triggered one of the developments of the latest SERVQUAL model, namely the P-SERVQUAL 4.0 or Pandemic SERVQUAL 4.0 model (Tumsekcali et al 2021). This model has 7 measurement dimensions consisting of 5 dimensions of SERVQUAL measurement with the addition of two new dimensions, namely the pandemic and industry 4.0 dimensions. The pandemic measurement dimension related to the company's ability to provide services considering the conditions of the COVID-19 pandemic and the new normal as to gain consumer trust. The industry 4.0 dimension or digital technology is the ability of service companies to provide the best services by following technological developments so that customers feel comfortable.

## **3. Research and Methodology**

A theoretical approach method is used for designing the conceptual model based on the previous studies. This conceptual model is expected to be used as a reference that can help online food delivery services to improve their service quality to gain customers' satisfaction and loyalty. The first step of the research methodology is formulating the problem statement of the study. The main question that driving this study are how the satisfaction level of OFDS customers in Indonesia is and what are service quality factors that can increase customers' satisfaction and loyalty towards online food delivery services in Indonesia. Literature study was conducted by collecting several studies that have studied the relationship between OFDS service quality towards customer satisfaction and loyalty. By using four keywords, there has not been much research that has specifically been on the topics of OFDS service quality in pandemic COVID-19 and new normal era. The results of the literature study are then integrated and analyzed to develop the conceptual model of service quality, customer satisfaction, and customer loyalty.

## **4. Finding and Results**

This study specifically examines the quality of food delivery service services in Indonesia. This service quality assessment is measured using the P-SERVQUAL 4.0 model which has 7 dimensions of quality measurement, namely tangibles, reliability, assurance, responsiveness, empathy, pandemic, and industry 4.0. Various studies have been conducted to examine the importance of food delivery service quality related to customer satisfaction. Suhartanto et al 2019 conducted a study that examined the direct influence of food quality and electronic service quality on consumer loyalty to food delivery services in Indonesia. The service quality model used is e-servqual with dimensions measured namely system availability, efficiency, privacy, fulfillment, and food quality with dimensions measured namely presentation, variety, taste, health option. The results of the study indicate that the quality of food affects consumers' purchasing decisions and when the quality of the food is good, consumers tend to buy again and recommend the food. Then the quality of electronic services strengthens consumer satisfaction which then creates consumer loyalty. Food quality and electronic service quality are both important factors of consumer loyalty.

Study by Kunadi and Wuisan 2021 examines the relationship between the influence of E-Service Quality and Food Quality on consumer loyalty at a food delivery service company in Indonesia. This research is also mediated by consumer satisfaction and perceived value. Prasetyo et al 2021 conducted a study that aims to determine the factors that influence satisfaction and loyalty to OFDS during the Covid-19 pandemic in Indonesia. The factors studied in this study include hedonism motivation, convenience motivation, ease of use, navigation design, security, restaurant credibility, Covid-19 pandemic, intention to use, price, packaging safety, and promotion. The results of the study indicate that only the ease of use and navigation design factors have no effect on consumer satisfaction and loyalty.

Previous research that is used as a reference for the service quality model of this final project is the research by Tumsekcali et al 2021. In this study, a new service quality model was initiated that considers technological advances and the COVID-19 pandemic, namely the P-SERVQUAL 4.0 model. This study aims to analyze the best alternative public transportation that can be used during a pandemic using the IVIF AHP-WASPAS method. Hence, the proposed conceptual model for this study can be seen in Figure 1.

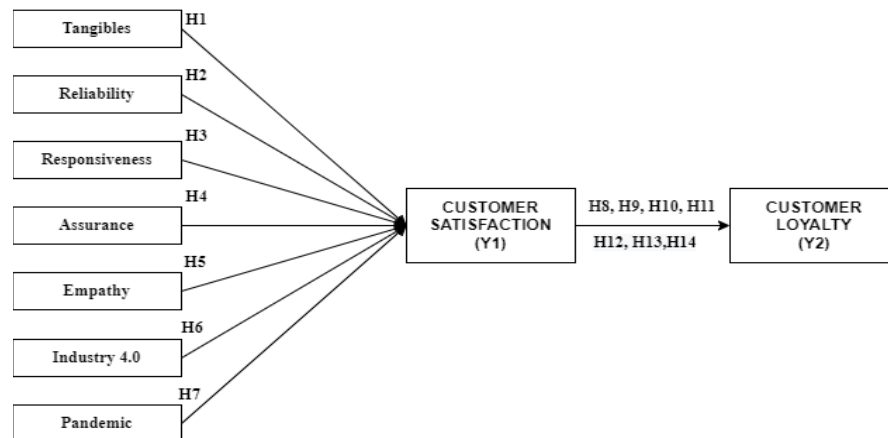


Figure 1. Proposed Conceptual Model for Analysis of OFDS Service Quality towards Customer Satisfaction & Loyalty

Based on the conceptual model, the fourteen hypotheses can be obtained that provide direction for future research. These hypotheses will be discussed as follows.

**The relationship between the SERVQUAL dimensions towards customer satisfaction.** Many studies with focus on analyzing the relationship between service quality and customer satisfaction have been carried out. Al-Tit 2015 conducted a study on the effect of service quality on customer satisfaction at restaurants in Jordan City with results showing that tangibles, reliability, responsiveness, assurance, and empathy have a significant positive effect on customer satisfaction. Other studies are used as references such as Leong et al 2015, Fida et al 2020, and Ge et al 2021. Based on some of these research results, the following hypotheses can be built.

**H1-5 : Service quality dimensions have positive and significant impact towards customer satisfaction (Y1)**

**The relationship between industry 4.0 dimension towards customer satisfaction & loyalty.** Research with a focus related to technology has been carried out by various researchers such as Akbar et al 2021, Kunadi and Wuisan 2021, Suhartanto et al 2019, and others. These three studies examine the relationship between e-service quality (related to technology) and consumer satisfaction in food delivery services and e-wallet and the results show that e-service quality has a significant positive effect on consumer satisfaction. Based on some of these research results, the following hypotheses can be built.

**H6 : Industry 4.0 (X6) have positive and significant impact towards customer satisfaction (Y1)**

**H13 : Industry 4.0 (X6) have positive and significant impact towards customer loyalty (Y2)**

**The relationship between pandemic dimension towards customer satisfaction & loyalty.** Various studies have been carried out by considering the effect of the Covid-19 pandemic on service quality on consumer behavior, for example Ali et al 2021, Prasetyo et al 2021, Tumsekcali et al 2021. The results of this study indicate that the pandemic has a significant positive effect on consumer behavior. Based on some of these research results, the following hypotheses can be built.

**H7 : Pandemic (X7) have positive and significant impact towards customer satisfaction (Y1)**

**H14 : Pandemic (X7) have positive and significant impact towards customer loyalty (Y2)**

**The relationship between the SERVQUAL dimensions towards customer loyalty with customer satisfaction as mediating role.** Previous research with focus on examining the effect of service quality on customer loyalty by mediating customer satisfaction has been carried out by various researchers such as Kurniawan et al 2020, Permatasari and Purwanto 2022, Rizqiningsih and Widodo 2021. Based on some of these research results, the following hypotheses can be built.

**H8-12 : Service quality dimensions have positive and significant impact towards customer loyalty (Y2) with customer satisfaction (Y1) as mediating role.**

## **5. Conclusion**

Based on the findings in the conceptual model and previous research it can be concluded that service quality has positive significant impact towards customer satisfaction and loyalty. The expected output of this study is a service quality improvement strategy. This strategy is considered capable of providing improvements in service quality to increase customer satisfaction and loyalty. The propositions described are expected to be a reference in further studies. Where the focus of this research is the development of a conceptual model that analyzes the relationship between service quality and customer satisfaction and loyalty.

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