The effect of service failure on customer loyalty through customer forgiveness and service recovery as mediation variables: A study on go-car in Surabaya

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**ABSTRACT**

This paper aims to examine more deeply the role of the customer forgiveness and service recovery variables on the relationship between service failure and loyalty. This research uses a go-car service on a gojek as the object of research. Go-car service was chosen because it is one of the services in Gojek that has received a lot of criticism from its users. The respondents in this research were Go-Car service users who had experienced service failures when using the service. The determination of the number of samples in this research used a purposive sampling technique with a sample of 200 respondents. The method of collecting data is using a questionnaire, the data is analyzed using PLS-SEM.

**Keywords:** Service failure, Customer forgiveness, service recovery, customer loyalty

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**Introduction**

One of the most popular online motorcycle taxi companies in Indonesia is PT. Gojek Indonesia or better known as Gojek. Where until 2020 Gojek had monthly active users reaching 38 million users (Kumaran, 2020). In the motor vehicle transportation business line, Gojek and Grab have had stiff competition in the past year. In this competition, it is known that Go-Jek is superior to grab as a whole in the past year; however, grab was able to outperform Go-Jek in several months of 2020. The underlying reasons why Grab is superior to Go-Jek are due to pricing, promos, and quality of drivers. Such as fewer errors, more friendly, more convenient, and safer drivers (mix.co.id, 2020).

From the survey conducted by mix.co.id (2020) it can be seen that the poor quality of drivers, especially in the go-car service, is one of the reasons why Grab can outperform Gojek. There are several examples related to the poor quality of go-car drivers, including the case experienced by Rayner, who became a victim of bullying after canceling his go-car order. Then there was the case of Nasya receiving dirty words from the go-car driver which then made her cancel the order (Quora.com, 2020). Furthermore, there were also several cases of harassment experienced by go-car users, such as the case of a student with the initials AN being harassed for 2 hours by a go-car driver in Surabaya (Merdeka.com, 2020). Some of the cases above show that the quality of services provided by go-car drivers often does not match consumer expectations and becomes a service failure. Therefore, it is important for gojek to respond to any service failure, especially on the go-car service to avoid decreasing customer loyalty.

However, in building customer loyalty, customer dissatisfaction caused by service failure is an important thing that must be avoided. Therefore, the company must be able to eliminate the negative feelings of the impact of service failure perceived by customers (Souza, R., & Voss, C. A., 2009). Service failure is something that is difficult to avoid which results in increased emotional reactions such as...
sadness, hopelessness, frustration, and anger. Customers who experience service failure with a high failure rate will show a greater tendency to engage in negative behavior compared to customers who have a lower service failure rate (Wang et al., 2011). Service recovery is a strategy used by service providers to regain customer satisfaction and strengthen relationships with customers after experiencing dissatisfaction caused by service failures (Sparks and McColl-Kennedy, 2001 & Chou, P. F., 2015). Customer forgiveness can be defined as an action taken by a customer to relieve anger and the desire to take revenge against a company that has caused a loss, thus causing thoughts to turn positive towards a company that was initially considered detrimental (Joireman, J., Grégoire, Y., & Tripp). T. M., 2016).

Previous research has tried to analyze the relationship between service failure and customer loyalty using switching costs and service recovery variables as moderating variables (Wang, Y. S., Wu, S. C., Lin, H. H., & Wang, Y. Y., 2011 & Kamble, A. A., & Walvekar, S. 2019). In this research, the researchers found that switching costs and service recovery have an impact on the weakening of the relationship between service failure and customer loyalty. Apart from these results, in previous studies both Wang et al., (2011) and Kamble et al., (2019) have not been able to show how the mechanism that occurs in consumers to overcome negative feelings caused by service failure. Therefore, to fill this gap, in this research the researcher will examine more deeply the role of the forgiveness variable on the relationship between service failure and customer loyalty. Forgiveness given by customers is one of the important variables that companies need to obtain in order to reduce the level of negative feelings caused by service failure (Pournanta, N., Psomas, E., & Vouzas, F., 2019).

**Literature Review**

**Grand Theory Service Failure and Recovery Process**

The process of service failure and recovery according to Tax & Brown (1998) in Lovelock & Wirtz (2011), namely the first stage of the service recovery process is to identify service failures, by setting performance standards, communicating the importance of service recovery, telling consumers how to file complaints on services, and use the technology support offered through the customer call center and the internet. The second stage is to resolve customer problems by being fair to consumers, through fair delivery of results, processes, and interactions; and develop strategies for successful recovery, by hiring, training and empowering employees, setting guidelines and standards, providing easy access and effective responses. The next stage is communicating and classifying service failures through the creation of an internal complaint form, accessing field complaints, and categorizing customers. The final stage is to integrate data and improve overall services through producing quality services and data, disseminating data, and investing in quality improvements.

**Consumer Behavior**

According to Kotler and Keller (2016) Consumer behavior is the research of how individuals, groups, and organizations choose, buy, use and how goods and services, ideas, or experiences to satisfy their needs and desires. Based on some of the definitions mentioned above, it can be concluded that consumer behavior is all activities, actions, and psychological processes that encourage these actions before buying, when buying, using, spending products and services after doing the things above or evaluating activities.

**Loyalty**

According to Kotler (2012) customer loyalty is a repeat purchase made by a customer because of a commitment to a brand or company. The factors that influence loyalty are good service quality and the creation of satisfaction with a product. Building customer loyalty is difficult. Even though companies put huge amounts of money and effort into trying to earn loyalty, they often don’t succeed in building true customer loyalty. The Loyalty Wheel (Wheel of loyalty) consists of 4 strategies, namely building a loyalty foundation, creating loyalty bonds, and reducing customer turnover factors, and finally understanding what causes customers to leave and then systematically reducing the triggers for customer hurt/customer defect. Loyalty indicators according to Wang et al. (2011) is making repeated purchases at the same business entity, buying product lines and services offered by the same business entity, informing others about the satisfaction obtained from the business entity and showing immunity to offers from competing business entities.

**Service Failure**

Service failure is something that cannot be completely eliminated by service providers. Often, service failure is inevitable, even though the service provider has tried his best to fulfill the needs and desires of his customers. Service failure is the performance of a service that is below the range of customer expectations or tolerance (Holloway & Beatty, 2003). Service failure can occur when a product or service does not meet customer needs (Hung & Lee, 2015). There are several outcomes of service failure, namely consumer complaints, negative word of mouth, switching by customers and customer disloyalty (Suh and et al., 2013). The switching of consumers or disloyalty to customers is determined by how severe the service failure occurs, if the service failure is severe or cannot be forgiven, the customer will definitely switch and be disloyal to the company. How big or how severe is the service failure is the service failure rate. The severity of service failure is a measure of the magnitude of losses faced by customers due to service failures (Sengupta, Balaji, & Krishnan, 2014). As for measuring service failure, there are several indicators adapted from (Kim and et al., 2014), namely core service failure, interpersonal service failure, and procedural service failure.
Service Recovery

Siu et al (2013) defines service recovery as an activity in which a company attempts to resolve customer complaints regarding service failures that have occurred. Handling this service failure should be done quickly as a preventive measure so that customers do not switch to other companies or to other service providers. The concept of service recovery has become a topic of concern for the service industry for the main reason that customer satisfaction has a direct relationship to loyalty and profitability for the larger organization (Krishna et al., 2011). Service recovery enhances improvements in customer satisfaction and customer retention leading to substantial gains in profitability. Satisfactory service recovery can increase loyalty and influence future behavior in purchasing (Krishna et al., 2011). The indicators used to measure Service Recovery according to Sabharwal (2010) in Chueh, Wang and Liao (2014) are as follows: (1) Distributive justice; (2) Procedural justice; (3) Interactional Justice.

Customer Forgiveness

Forgiveness is defined as a desire to reduce anger and avoid the person who has hurt us, and also reduce the desire to take revenge on that person (Worthington, 1998, quoted in Moorhead, Gill, Minton, & Myers, 2012,). People will reduce the motivation to get angry or take revenge when they forgive (Zourrig et al., 2009). Forgiveness allows consumers to remove negative emotions and turn them into positive emotions such as empathy, compassion, and sympathy (Worthington and Scherer, 2004; Zourrig et al., 2009). When customers forgive, they will gradually reduce negative emotions until they disappear (Noth, Jaroenwanit, & Brown, 2015). Forgiveness can create positive emotional reactions to service failures, minimize bad feelings and harm, and provide an opportunity to restore relationships (Chung & Beverland, 2006). There is motivation to continue a relationship with a company that makes service failures, wants to re-engage with the company, and remains loyal to customers, if positive emotions (eg, empathy, sympathy) from customers tend to increase (Howley et al., 2008, cited in Noth et al., 2008). According to Tsarenko (2012) the indicators of Customer Forgiveness are Emotional Forgiveness and Decisional Forgiveness.

Conceptual Framework of the Research

This research investigates four main constructs consisting of one independent variables (service failure) and one dependent variable (customer loyalty). In addition, this study also adds two mediating variables (customer forgiveness and service recovery). For more details, see Figure 1 below:

![Figure 1: Research Framework and Hypothesis](image)

The hypotheses of this study are:

H1: Service failure has a significant effect on customer loyalty
H2: Service failure has a significant effect on customer forgiveness
H3: Service failure has a significant effect on service recovery
H4: Customer forgiveness has a significant effect on customer loyalty
H5: Service recovery has a significant effect on customer loyalty
H6: The effect of service failure on customer loyalty is mediated by customer forgiveness
H7: The effect of service failure on customer loyalty is mediated by service recovery

Methodology

Participants and Data Collection

Customer Go-jek users in Surabaya have avoided the ads that appear in the application. Because there are certain criteria for selecting the sample, a non-probability approach with a purposive sampling technique was used to select the sample in this study and the sample in this study amounted to 200. The technique of data collection in this research used a questionnaire.
Data Analysis

The method of data analysis uses SEM (Structural Equation Modeling) based on Partial Least Square (PLS) that uses SmartPLS 3.0 software application.

Measurements

All indicators to measure the four variables were adopted from several previous studies. Indicators of service failure variables were adapted from Kim and et al., (2014) study which consisted of 3 indicators. Service recovery were measured through 3 indicators from Sabharwal (2010) dalam Chueh, Wang dan Liao (2014). Customer forgiveness variables were measured through 3 indicators from Tsarenko (2012). Customer loyalty variables were measured through 4 indicators from Wang et al. (2011).

Analysis and Findings

Result

Statistical tests were conducted to measure the validity and reliability in this research. Table 1 indicates that the scale, magnitude, and statistical concordance have been accepted. The average variance extracted (AVE) value of all latent variables shows a score of 0.731 for the Service Failure variable, 0.778 for the Service Recovery variable, 0.758 for the Customer Forgiveness variable, and 0.741 for the Customer Loyalty variable. Cronbach's alpha value for the reliability criteria is quite high; Customer Loyalty has the highest cronbach alpha value. Sequentially, the value of the Cronbach alpha coefficient for the four variables used in this research ranged from 0.841 to 0.883, they were acceptable.

Table 1: Composite Reliability, Cronbach Alpha, AVE

<table>
<thead>
<tr>
<th>Variables</th>
<th>Composite Reliability</th>
<th>Cronbach Alpha</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Failure</td>
<td>0.916</td>
<td>0.877</td>
<td>0.731</td>
</tr>
<tr>
<td>Service Recovery</td>
<td>0.913</td>
<td>0.857</td>
<td>0.778</td>
</tr>
<tr>
<td>Customer Forgiveness</td>
<td>0.904</td>
<td>0.841</td>
<td>0.758</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>0.920</td>
<td>0.883</td>
<td>0.741</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2021

Composite reliability (CR) values are 0.841, 0.857, 0.877, 0.883 (above 0.80), respectively. It can be concluded that all constructs are reliable, both according to composite reliability and Cronbach’s alpha. The R-square value of the Customer Loyalty variable in this research model is 0.849. Goodness of Fit (GoF) in this research is calculated using the equation $Q^2 = 1 - (1 - R1^2)(1 - R2^2)(1 - R3^2) = 1 - (1 - 0.18)(1 - 0.205)(1 - 0.849) = 0.978$. A score of 0.978 on the Q-Square calculation indicates that the model in this research can be said to have a good goodness of fit.

Table 2: Hypothesis Testing Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship Between Variable</th>
<th>Path Coefficient</th>
<th>t-statistics</th>
<th>p-values</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Service failure → Customer loyalty</td>
<td>-0.127</td>
<td>2.359</td>
<td>0.019</td>
<td>Significant Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>Service failure → Customer forgiveness</td>
<td>-0.425</td>
<td>3.395</td>
<td>0.001</td>
<td>Significant Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>Service failure → Service recovery</td>
<td>-0.453</td>
<td>3.275</td>
<td>0.001</td>
<td>Significant Accepted</td>
</tr>
<tr>
<td>H4</td>
<td>Customer forgiveness → Customer loyalty</td>
<td>0.241</td>
<td>4.784</td>
<td>0.000</td>
<td>Significant Accepted</td>
</tr>
<tr>
<td>H5</td>
<td>Service recovery → Customer loyalty</td>
<td>0.643</td>
<td>11.819</td>
<td>0.000</td>
<td>Significant Accepted</td>
</tr>
<tr>
<td>H6</td>
<td>Service failure → Customer forgiveness → Customer loyalty</td>
<td>-0.102</td>
<td>3.344</td>
<td>0.001</td>
<td>Significant Accepted</td>
</tr>
<tr>
<td>H7</td>
<td>Service failure → Service recovery → Customer loyalty</td>
<td>-0.291</td>
<td>3.397</td>
<td>0.001</td>
<td>Significant Accepted</td>
</tr>
</tbody>
</table>

Source: Primary Data Processed, 2022

Based on the results of the analysis in table 2, it is known that the effect of service failure on customer loyalty has a t-statistic value greater than the t-table value (2.359 > 1.96). It can be concluded that the service failure variable has a significant effect on customer loyalty, so H1 is accepted. The effect of service failure on customer forgiveness has a t-statistic value greater than the t-table value (3.395 > 1.96), it can be concluded that the service failure variable has a significant effect on customer forgiveness, so H2 is accepted. The effect of service failure on customer forgiveness has a t-statistic value greater than the t-table value (3.275 > 1.96). It can be
concluded that the service failure variable has a significant effect on customer forgiveness, so H3 is accepted. The effect of service recovery on customer loyalty has a t-statistic value greater than the t-table value (4.784 > 1.96). It is concluded that the service recovery variable has a significant effect on customer loyalty, so H4 is accepted. The effect of customer forgiveness on customer loyalty has a t-statistic value greater than the t-table value (11.819 > 1.96). It was concluded that the variable of customer forgiveness had a significant effect on customer loyalty so that H5 was accepted. The effect of service failure on customer loyalty through service recovery has a t-statistic value greater than the t-table value (3.344 > 1.96). It can be concluded that the service failure variable has a significant effect on customer loyalty through service recovery, so H6 is accepted. The effect of service failure on customer loyalty through customer forgiveness has a t-statistic value greater than the t-table value (3.397 > 1.96). It can be concluded that the service failure variable has a significant effect on customer loyalty through customer forgiveness, so H7 is accepted.

**Discussion**

**The Effect of Service Failure on Customer Loyalty**

The results showed that service failure had a negative effect on customer loyalty. This means that the more severe the service failure, the lower customer loyalty will be. Customers who experience service failures are likely to have low loyalty to Gocar, compared to those who do not experience service failures. The more disappointed they are with Gocar’s services, the more disloyal their customers will be. Some respondents still felt that the service from Gojek or drivers was not good or not friendly, had bad experiences when using Gocar such as angry drivers, late drivers, arriving, speeding drivers, and rude drivers and other problems. This is in line with the research revealed by Wang et al (2011); Kamble et al (2019).

**Effect of Service Failure on Customer Forgiveness**

The results showed that service failure had a significant effect on customer forgiveness. This means that the relationship between service failure variables and customer forgiveness has an inverse relationship, which means that when service failure increases, customer forgiveness will decrease. The more severe the level of service failure, the more difficult it will be for customers to forgive the gocar party. Service failure produces hatred, hurt feelings, and thoughts of revenge on injured customers. The more severe the service failure, the more difficult the customer will be to forgive or forgive. Forgiveness plays an important role in preventing consumers from being disloyal to service providers. The result of this research is in line with research by Tsarenko and et al (2012) that consumer personality characteristic of religiosity, spirituality, and emotional intelligence and the severity of service failure affect emotional forgiveness and decisions in response to service failure.

**Effect of Service Failure on Service Recovery**

The result showed that service failure had a negative effect on service recovery. The higher the service failure value, the lower the service recovery value. This can be caused by service failures that often occur on Gojek but are not used as evaluation material so that it is difficult to carry out optimal service recovery actions. In addition, Gocar has not been able to resolve the problems that occur between Gocar and customers. This research also shows that service failure affects service recovery for Gocar customers in Medan City. This means that the greater the service failure, such as the services offered and provided that are not in accordance with customer expectations, it will have a negative effect on the company and reduce the success rate of service recovery. This is in line with the research of Chou and et al (2015).

**The Effect of Forgiveness on Customer Loyalty**

Based on the result of the research indicate that there is a positive influence between forgiveness on customer loyalty. This means that the better customer forgiveness or the more gocar customers do forgiveness, their loyalty will also increase. Based on the results of the research above, it shows that the availability of customers to forgive Gocar for service failures that occur here is low, so this will certainly result in Gocar customer loyalty will also decrease. This could also be due to the severity of the service failure that occurred, making customers less willing to forgive Gocar. The results of this research are in line with the research of Tsarenko and et al (2012).

**The Effect of Service Recovery on Customer Loyalty**

This significant value indicates that an increase in the service recovery variable affects the level of consumer loyalty. Gocar or Gojek must also continue to improve the quality of their services. This is done to reduce the occurrence of service failures that can lead to consumer disappointment. Good service quality will also increase Gojek's consumer loyalty. Therefore, it is important for Gojek to pay attention to the quality of service they provide. This can be done by paying more attention to the rating or feedback given after they use Gojek services. The next thing that can be considered is by providing briefing on the importance of providing the best service on a regular basis to Gojek drivers or partners. The results of this research are in accordance with research conducted by Mostert, Meyer, and Rensburg (2009), and found that consumers who are satisfied with the service recovery provided by the company have a tendency to use the same service a second time, and show the level of consumer loyalty to the brand, and vice versa.
The Effect of Service Failure on Customer Loyalty through Customer Forgiveness as a Mediation Variable

The results showed that service failure had a significant effect on loyalty through forgiveness. The mediating impact of the forgiveness variable is partial mediation. The result of service failure is negative word of mouth, switching customers to other service providers and ultimately making customers disloyal to a service company (Tsarenko and et al, 2012). Customer forgiveness creates negative emotions felt by Gocar customers and turns them into positive emotions such as being willing to forgive again and ultimately keeps customers loyal to consumers. This means that when a service failure that occurs can still be tolerated, it can make Gocar customers continue to forgive service failures that occur to Gojek so that it can make customers not switch or remain loyal to Gocar, this can be because customers are already comfortable with Gocar, or it can also be caused by many promos provided by Gocar, or the ease of access provided by Gocar or other reasons.

The Effect of Service Failure on Customer Loyalty through Service Recovery as a Mediation Variable

The results show that service failure has a significant effect on loyalty through service recovery. The impact of service recovery variable mediation is partial mediation. Service recovery is an effort by a service company so that customers get solutions after service failures that can cause customers to be dissatisfied and become disloyal to the company. Customers who are treated unfairly or not being compensated commensurate with the severity of the service failure after a service failure, it will have a negative impact and disloyalty to the customer back. Gocar must minimize the impact of a service failure by implementing an efficient and effective service recovery strategy, with an efficient service recovery strategy and effective, of course Gocar can retain customers or keep customers loyal in a competitive industry as it is today (Hu and et al., 2013).

Conclusions

Based on the result of the research, it shows that there is a negative influence between service failures on service recovery, customer forgiveness, and customer loyalty, it can be concluded that the higher the service failure, the service recovery, customer forgiveness, and customer loyalty will decrease. Different results can be shown by the relationship between service recovery with loyalty and customer forgiveness with loyalty, because there is a positive relationship between these variables. This shows that high service recovery and high customer forgiveness can make customer loyalty even higher.

This research is limited to Gocar service users in the Surabaya area. Further research can be done by choosing another research location by considering the number of Gocar users in Indonesia. This research model should also be tested on other transportation users, such as Grabcar and Maxim to see the consistency of research results using the same research model as this research model. Further research can also add control variables of age, gender, education level and occupation for more in-depth results. This research in the future still needs to be enriched by increasing the number of respondents used as research samples, because the larger of the number research samples is expected to provide better research results.

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Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The authors declare no conflict of interest.

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