

SERVICE RECOVERY DUE TO PLANE CRASH ON CUSTOMER TRUST: A CASE ON LOW-COST CARRIER AIRLINE

Harun Al Rasyid¹, Bayu Wisnu Wibowo², Danang Darunanto³, Primadi
Candra Susanto⁴

1,2,3,4 Institut Transportasi dan Logistik Trisakti, Jakarta, Indonesia
✉ corresponding author: harunelrasyid@gmail.com

Abstract

The aviation industry in Indonesia is currently experiencing rapid development, especially in low-cost carrier concept airlines. Several airlines offer each other ticket prices so that all operational costs are minimized as much as possible. Even though safety is the most crucial factor, there are still plane crashes in Indonesia. In several accidents that occurred in Indonesia, most of these incidents were experienced by airlines with Low-Cost Carrier (LCC) concepts. This study aims to explain the correlation between service failure, service recovery, and customer trust. The research uses quantitative methods and probability sampling techniques with simple random sampling. The questionnaire was addressed to 190 respondents who knew about the plane crash. Data were analyzed using SMART PLS. The outcomes of the research proved that there was a correlation between service failure, service recovery, and customer trust.

Keywords: service failure, aircraft accident, low-cost carrier, customer trust, service recovery, passenger

Introduction

The aviation industry in Indonesia is currently experiencing rapid development, driven by the increasing needs and potential of people from various circles in various cities in Indonesia and overseas destinations. It has resulted in air transportation is in great demand by consumers, especially with Low-Cost Carrier-based airlines. Low-Cost Carrier (LCC) is a type of flight that implementing a strategy of operating cost and cost efficiency on all fronts to provide low ticket prices and minimalistic services. Several airlines are competing to lower ticket prices to minimize all operational costs as best as possible. The result of the decrease in operating expenses resulted in a reduction of service. However, the safety factor remains the most crucial thing in air transportation. Although the safety factor is the most important thing, there are still plane accidents in Indonesia. In several accidents that occurred in Indonesia, the majority of these incidents were experienced by LCC-based airlines. The last accident that happened in the Indonesian aviation industry was Sriwijaya Air (SJ 182) on the Jakarta – Pontianak route, which crashed in the waters of the Kepulauan Seribu, claimed 62 victims on 9 January 2021. Quoted from the official website of the KNKT, at least for the last eight years, there have been several planes crash in Indonesia.

Table 1. List of Aircraft Accidents in Indonesia in the Last 8 Years

No	Airlines	Date of Occurrence	Number of Victims
1	Sriwijaya Air (SJ 182)	9 January 2021	62 victims
2	Lion Air (JT 610)	29 Oktober 2018	188 victims
3	Wings Air (IW 1286)	26 February 2017	0 victims
4	AirAsia (QZ 8501)	28 December 2014	162 victims
5	Trigana Air (Service Flight 267)	16 August 2015	54 victims

Based on the accident data table above, which was quoted from bisnika.com (11/01/2021), Lasafta., (2021) impacted decreasing ticket sales. Deputy Chairperson of the Association of Indonesian Airline Ticket Selling Companies (ASTINDO) said the Lion Air (JT 610) plane crash caused decreased ticket sales, although not too high, customer trust. It was noted that ticket sales decreased by 5 to 6 percent. In this study, cases of accidents that occurred several airlines in Indonesia have service failures in pre-flight and in-flight services. In general, in pre-flight services, several airlines that experienced accidents experienced problems in changing flight schedules and delays due to weather, technical and human error factors. In the in-flight service, some airlines are unable to deliver their passengers to their destination. As a result of this incident, we suspect a decrease in customer trust, which will impact decreasing ticket sales for airlines with accidents. Therefore, in this study, the author will analyze the impact of variables including service failure on customer trust interfered by service recovery on prospective passengers of several airlines with accidents.

Literature Review

Service Failure

According to Annex 13., (2001), an airplane accident is an incident related to the operation of the aircraft, from the time the passengers board the plane to their destination with varying degrees of damage, from minor to major. In this case, the airline has failed to provide services to passengers until they reach their destination. Service failure is the service performance performed by a company that does not meet one or more customers (Khamitov et al., 2020). Some cases of service failures include bad service performance, employees failing with customers, and delayed deliveries. As a result of this service failure, consumers will experience a sense of disappointment and decide not to use the product or service anymore, then switch to a competitor company

(Zeelenberg & Pieters, 2004). There are two classifications of service failures in the aviation industry: major incidents and minor incidents. Major incidents include accidents that cause injury or fatalities.

In contrast, minor incidents are service failures with complaints, delays, flight cancellations, divers, lost baggage (Keiningham et al., 2014). From service failures to plane crashes, as a service provider, airlines have failed to serve passengers. In service in the aviation world, there are three categories of services provided to passengers. Among them, there are pre-flight, in-flight, and post-flight. Pre-flight is an activity of service for handling passengers before departure. Latent factors included in pre-flight include prioritizing considerations of safety, availability, and flight schedules. In-flight service is a service activity for taking passengers from when they are on the plane to their destination. Important in-flight service factors include courtesy of cabin crew, flight entertainment, and comfort on board. Post-flight service is a passenger service activity after the passenger arrives at the destination airport, while the post-flight service factors on airlines include caution in handling baggage, services related to flights, and compensation in case of loss of baggage (Adekunle Faiyetole, 2018).

Service Recovery

According to Lorenzoni & Lewis., (2004), service recovery is repairing and restoring failed service elements, hoping that the service can be recovered so that it is under customer expectations. According to the type or variety of business/industry, several actions are needed so that these actions can be said to be feasible and safe. Meanwhile, based on Sitorus et al., (2020), the impact of service failure can be recovered by taking appropriate action to maintain customer loyalty to those who provide services. Service recovery is significant for airlines because it is related to passenger satisfaction. This shows that having a suitable service recovery procedure can strengthen relationships with customers (Ali et al., 2020). Based on Kau & Loh. 's research (2006), to realize service recovery actions using three main ways, procedural justice, interactional justice, and distributive justice.

Customer Trust

According to research conducted by Mayer et al. (1995), Trust is a person's enthusiasm to be responsive to the efforts of others in the hope that others will take reciprocal action to measure customer trust using benevolence, agility, and integrity. Customer trust in a product or service is crucial from a customer perspective because it is considered a justification based on integrity (Sindhu & Arif, 2017). There is a logical relationship between the airline that had a fatal accident and the airline. These incidents led to decreased customer trust,

which affected the airline that had the accident and all airlines (Rice et al., 2015). Customer trust is indispensable in increasingly fierce competition (Setiawan et al., 2020). This can be seen when passengers buy tickets, which means they trust the airline's services. However, if there is an accident on an airline, the possibility of customer trust will decrease. For this reason, airlines are required to maintain service and performance to maintain and increase customer trust.

Hypothesis Development

Bejou & Plamer (1995) suggest that the aviation industry is very vulnerable to a service failure. This is because the people who are employed are at risk of giving errors to the services offered. Therefore, service recovery is needed to recover the service failure that has been given. The model that has been studied by Hess et al., (2003) states that the efforts made by the organization in recovering service failures are needed. The recovery efforts on airline services do not require high costs. By providing information to passengers and explaining the service failure that occurred, the passenger has the opportunity to understand why the service failure occurred (Mostert et al., 2009).

H1: Service Failure has a significant positive influence on Service Recovery

According to Coye., (2004), airline passengers will have certain airline expectations they use before the journey begins. As a consequence of service failure, passenger's experience will be contrasted from their expectations. (Kevin & Anandya, 2021) stated that to build customer trust, not only functional aspects are needed but also service aspects. By paying attention to these aspects, the company can provide the best service compared to its competitors to trust the company.

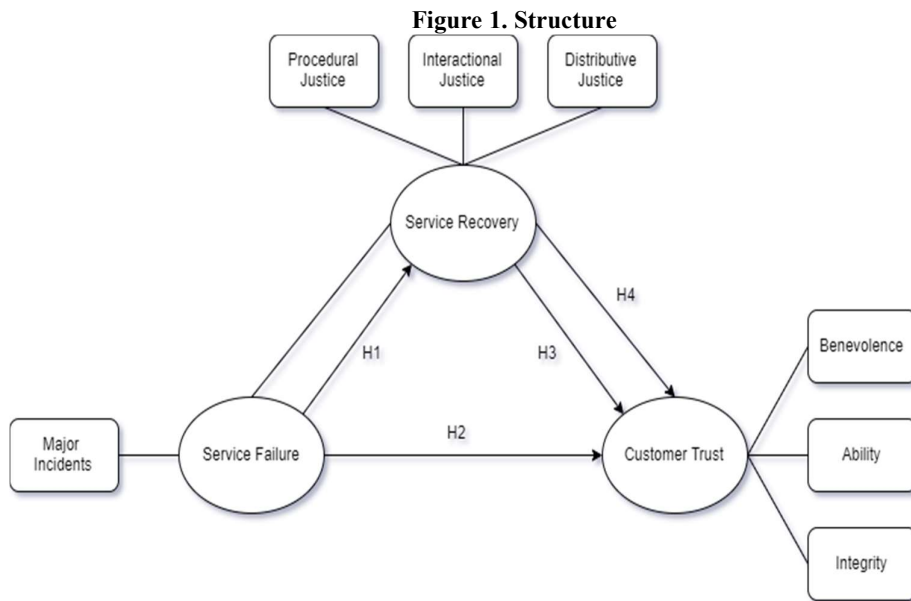
H2: Service Failure has a significant positive influence on Customer Trust

Consumers could recover in several aspects in line with the failure that consumers receive in terms of value and recovery (Smith et al., 1999). Bozic & Kuppelwieser., (2019) stated that there are several concepts to improve customer trust. Such actions include encouraging restoration of Trust, admitting failure, explaining, conducting investigations, cooperating with public investigators, and apologizing for losses that have occurred.

H3: Service Recovery has a significant positive influence on Customer Trust

There are two classifications of service failures in the aviation industry, namely, major incidents and minor incidents. Major incidents include accidents that cause injury or fatalities. In contrast, minor incidents are service failures with complaints, delays, flight cancellations, divers, lost baggage (Keiningham et al., 2014). Service recovery is needed to overcome the service failure that occurs. Based on research conducted by Gilliland (1993), service recovery can be made in three ways: distributive justice, interactional justice, and procedural justice. The step is needed to perform service recovery that will restore customer trust. This will impact the possibility of customer's enthusiasm to repurchase services (HU et al., 2013).

H4: Service Failure has a significant positive influence on Customer Trust interfered by Service Recovery



Research Methods

This research uses quantitative methods. The population in this research is people who know about plane accidents and have used low-cost carrier-based airlines. The data collection was drawn from a random sample of the population via the random sampling method, and the questionnaire was addressed to 190 respondents. Based on the research of Chou., (2015) that the questionnaire comes from the indicators of variables, including service failure, service recovery, and customer trust. In measuring respondents' opinions, attitudes, and perceptions towards this study, the Likert scale was

used. The respondent indicators start from strongly dissatisfied to strongly satisfied to explain the data using SmartPLS.

Table 2. Key Indicator

No	Variable	Dimension	Indicator
1	Service Failure (Keiningham et al., 2014)	Major	Plane accidents that occur due to the age of the aircraft are old.
			Incompetent human resources cause airplane accidents.
			Airplane crashes are caused by bad weather
			Airplane accidents are caused by non-optimal aircraft maintenance
2	Service Recovery (Kau and Loh.,2006)	Procedural Justice	Evacuation is carried out after the accident
			Evacuation is carried out after the accident.
			The conference is held after the accident by the airline.
		Interactional Justice	The victim's family complaint posts are established by the airline
			Complaints via interactive telephone are provided by the airline
		Distributive Justice	the apologies to the family members of the victims after the accident
Providing compensation in the form of money to the family members of the victims in a transparent manner			
3	Customer Trust Mayer et al. (1995)	Empathy	Sadness after the accident
		Trust	Desire to use the services of the airline
		Competence	Evaluation of plane crash
			Pilots ccompetencies
		Experience	Feeling disappointed with airlines that have repeatedly crashed planes.
		Compliance	The use of airlines because of affordability
Integrity	Details of the cause of the plane crash		

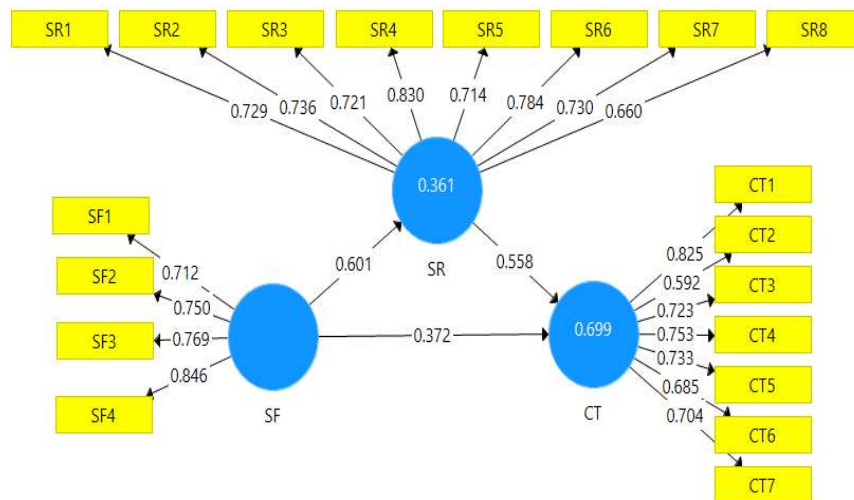
Results and Discussions

Table 3. Convergent Validity dan AVE

Variables	Items	Loading Factor	T-Statistics	AVE	Information
Service Failure	SF1	0,711	17,976	0,595	Valid
	SF2	0,750	17,619		Valid
	SF3	0,771	18,811		Valid
	SF4	0,846	27,883		Valid
Service Recovery	SR1	0,753	13,778	0,570	Valid
	SR2	0,755	14,262		Valid

	SR3	0,730	15,116		Valid
	SR4	0,823	27,263		Valid
	SR5	0,707	13,808		Valid
	SR6	0,780	19,819		Valid
	SR7	0,732	16,244		Valid
Customer Trust	CT1	0,826	26,136	0,517	Valid
	CT2	0,592	8,929		Valid
	CT3	0,722	15,631		Valid
	CT4	0,755	17,773		Valid
	CT5	0,732	15,673		Valid
	CT6	0,684	13,557		Valid
	CT7	0,702	13,574		Valid

Referring to the opinion of Joseph F. Hair et al., (2021), the validity of outer



loading can be allowed if > 0.5 . Based on table 3, loading factors are more than 0.5, so the results of all indicators can be used in this research, referring to convergent validity results.

Table 4. Discriminant Validity

	Customer Trust	Service Failure	Service Recovery
CT1	0,826	0,645	0,698
CT2	0,592	0,467	0,372
CT3	0,722	0,464	0,616
CT4	0,755	0,439	0,631

CT5	0,732	0,596	0,528
CT6	0,684	0,499	0,441
CT7	0,702	0,429	0,564
SF1	0,549	0,711	0,445
SF2	0,532	0,75	0,461
SF3	0,492	0,771	0,418
SF4	0,597	0,846	0,543
SR1	0,583	0,447	0,753
SR2	0,536	0,463	0,755
SR3	0,585	0,433	0,73
SR4	0,708	0,57	0,823
SR5	0,559	0,479	0,707
SR6	0,531	0,428	0,78
SR7	0,581	0,377	0,732

In table 4, we can observe that all variable indicators have a higher correlation than the results of other construct loadings. It can be decided that discriminant validity has good results for testing reliability testing using the Composite Reliability method (CR) and the Alpha-Cronbach method. If the value of CR and Alpha-Cronbach is higher than 0.7, the questionnaire can be trusted. Based on Eisingerich & Rubera., (2010), the study instrument is trusted if the value of Alpha-Cronbach > 0.7. The following are the results of the reliability testing scores.

Table 4. Reliability Testing

	Composite Reliability	Cronbach's Alpha	Results
Service Failure	0,854	0,771	Reliable
Service Recovery	0,903	0,874	Reliable
Customer Trust	0,882	0,843	Reliable

Table 5. R Square and Hypothesis Testing

Path	Path Coef	Sample Mean (M)	Standard Deviation	T-Statistics	P-Values	Results	R-Square
SF → CT	0,370	0,368	0,071	5,242	0,000	Supports	0,691
SF → SR	0,610	0,614	0,056	10,799	0,000	Supports	0,372
SR → CT	0,552	0,557	0,068	8,117	0,000	Supports	0,691

In table 5, service failure and customer trust are related because they have a P-value < 0.05. Moreover, the correlation between service failure and service recovery is related because it has a P-value < 0.05. And also the correlation

between service recovery and customer trust is related because it has a P-value < 0.05 .

Table 6. Indirect Table

	Path Coef	T-Statistics	P-Values	Result
Service Failure → Service Recovery → Customer Trust	0,336	6,662	0,000	Acceptable

The result based on table 6 that service failure has a significant positive correlation to customer trust interfered by service recovery with a $T_{statistics} 6,662 > 1,972 T_{table}$ and $P\text{-value } 0,000 < 0,05$.

Conclusion and Recommendation

This study proves that there is a correlation between service failure, service recovery, and customer trust. The outcomes reveal that service failure has a severe consequence on service recovery. Prospective passenger impression that several aircraft accidents on low-cost carrier airlines are caused by airlines that are less competent in managing aircraft fleet rejuvenation, human resources, anticipation in dealing with bad weather, and aircraft maintenance, which is not optimal. As for the aftermath of the plane crash, the airline evacuates victims, investigates the cause of the accident, press conferences, is responsible to the victims' families for the plane crash, and evaluates so that similar incidents do not happen again. This makes prospective passengers feel that the airline is responsible for the accident. Service failure also affects customer trust to use the airline. In this study, prospective passengers are hesitant to reuse the airline, but affordable ticket prices change the decision of the majority of prospective passengers to use the airline. Service recovery has a severe impact on customer trust. Based on the result, when airlines carry out service recovery efforts, they explain the cause of the plane crash and evaluate the accident, so that prospective passengers do not feel worried about using the airline. However, the impact in reality given by plane crashes, especially those that cause fatalities, will still give prospective passengers doubts about using the airline. The correlation between service failure and customer trust mediated by service recovery has a severe impact due to the role of service recovery as a mediation to improve customer trust. Although the role of service recovery has a significant in improving customer trust, the results of this study show that the airline's reputation is terrible for prospective passengers. As for further research, this research recommends that research cover low-cost carrier airlines and airlines with other types, focusing on major accidents and minor accidents, and getting more respondents who have experienced and known these accidents.

Based on the results, this research recommends that the airlines with low-cost carriers focus on safety aspects, including aircraft maintenance, crew competence, and aircraft rejuvenation. An airline can experience an accident that results in the deaths of casualties. In that case, the airline can perform service recovery. Consequently, the airline's reputation in the public will worsen, and the impact on prospective passengers to use the airline will decrease.

References

- Adekunle Faiyetole, A. (2018). *PRE-FLIGHT CONSIDERATIONS, IN-FLIGHT SERVICES, AND POST-FLIGHT RECEPTIONS: FACTORS INFLUENCING PASSENGERS' INTERNATIONAL AIRLINE CHOICES* Ayodele Adekunle Faiyetole (corresponding author) Department of Transport Management Technology, Federal Univer. 9(2), 1–23.
- Ali, S. R. O., Said, N. S. M., Jislan, F., Mat, K. A., & Aznan, W. N. M. W. (2020). The Correlation between Service Failure and Service Recovery with Airline Passenger Satisfaction. *Journal of Physics: Conference Series*, 1529(2). <https://doi.org/10.1088/1742-6596/1529/2/022062>
- Annex13. (2001). *Aircraft Accident and Incident Investigation Catalogue of ICAO Publications* (Issue July).
- Bejou, D., & Plamer, A. (1995). Retrospective: service failure and loyalty: an exploratory empirical study of airline customers. *Journal of Services Marketing*, 9(3), 1–72. <https://doi.org/10.1108/08876045199500001>
- Bozic, B., & Kuppelwieser, V. G. (2019). Customer trust recovery: An alternative explanation. *Journal of Retailing and Consumer Services*, 49(April), 208–218. <https://doi.org/10.1016/j.jretconser.2019.04.002>
- Chou, P. F. (2015). An analysis of the correlation between service failure, service recovery, and loyalty for Low-Cost Carrier travelers. *Journal of Air Transport Management*, 47, 119–125. <https://doi.org/10.1016/j.jairtraman.2015.05.007>
- Coye, R. W. (2004). Managing customer expectations in the service encounter. *International Journal of Service Industry Management*, 15(1), 54–71. <https://doi.org/10.1108/09564230410523330>
- Eisingerich, A. B., & Rubera, G. (2010). Drivers of brand commitment: A cross-national investigation. *Journal of International Marketing*, 18(2), 64–79. <https://doi.org/10.1509/jimk.18.2.64>
- Hess, R. L., Ganesan, S., & Klein, N. M. (2003). Service failure and recovery: The impact of correlation factors on customer satisfaction. *Journal of the Academy of Marketing Science*, 31(2), 127–145.

<https://doi.org/10.1177/0092070302250898>

- HU, K.-C., JEN, W., TU, C.-Y., & LU, M. (2013). Applying Critical Incidents Technique to Explore the Categories of Service Failure and Service Recovery for Taiwanese International Airlines. *Journal of the Eastern Asia Society for Transportation Studies*, 10(2001), 2255–2273. <https://doi.org/10.11175/easts.10.2255>
- Joseph F. Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (3rd ed.). SAGE Publications. <https://us.sagepub.com/en-us/nam/a-primer-on-partial-least-squares-structural-equation-modeling-pls-sem/book270548#contents>
- Kau, A. K., & Loh, E. W. Y. (2006). The effects of service recovery on consumer satisfaction: A comparison between complainants and non-complainants. *Journal of Services Marketing*, 20(2), 101–111. <https://doi.org/10.1108/08876040610657039>
- Keiningham, T. L., Morgeson, F. V., Aksoy, L., & Williams, L. (2014). Service Failure Severity, Customer Satisfaction, and Market Share: An Examination of the Airline Industry. *Journal of Service Research*, 17(4), 415–431. <https://doi.org/10.1177/1094670514538119>
- Khamitov, M., Grégoire, Y., & Suri, A. (2020). A systematic review of brand transgression, service failure recovery and product-harm crisis: integration and guiding insights. *Journal of the Academy of Marketing Science*, 48(3), 519–542. <https://doi.org/10.1007/s11747-019-00679-1>
- Lasافتa, D. I. (2021). *Harga tiket pesawat turun pasca kecelakaan, dialami Lion Air pada 2018 lalu*. www.Bisnika.com. <https://bisnika.hops.id/harga-tiket-pesawat-turun-pasca-kecelakaan-dialami-lion-air-pada-2018-lalu/>
- Lorenzoni, N., & Lewis, B. R. (2004). Service recovery in the airline industry: A cross-cultural comparison of the attitudes and behaviors of British and Italian front-line personnel. *Managing Service Quality: An International Journal*, 14(1), 11–25. <https://doi.org/10.1108/09604520410513640>
- Mayer, R. C., Davis, J. H., Schoorman, F. D., Mayer, R. C., & Davis, J. H. (1995). An Integrative Model of Organizational Trust. *Journal of the Institute of Brewing*, 20(3), 709–734. <https://doi.org/10.1002/j.2050-0416.1927.tb05040.x>
- Mostert, P. G., Meyer, C. F. De, & Rensburg, L. R. J. Van. (2009). *The impact of service failure and service recovery on airline passengers' correlations with domestic airlines : an exploratory study*. 13(2), 118–140.
- Rice, S. R., Cremer, S., & Mehta, I. (2015). *Consumer Trust Ratings After*

an Airline Accident: an Affective Perspective. 284–289.

https://corescholar.libraries.wright.edu/isap_2015https://corescholar.libraries.wright.edu/isap_2015/59

Setiawan, E. B., Wati, S., Wardana, A., & Ikhsan, R. B. (2020). Building trust through customer satisfaction in the airline industry in Indonesia: Service quality and price fairness contribution. *Management Science Letters*, 10(5), 1095–1102. <https://doi.org/10.5267/j.msl.2019.10.033>

Sindhu, M. I., & Arif, M. (2017). Corporate social responsibility and loyalty: Intervening impact of customer satisfaction and Trust. *Cogent Business and Management*, 4(1). <https://doi.org/10.1080/23311975.2017.1396655>

Sitorus, P. Y., Ellisa, D. T., Octora, Y., & Saidah, D. (2020). *THE EFFECT OF SERVICE FAILURE ON CUSTOMER BEHAVIOR MEDIATED BY SERVICE RECOVERY IN BAGGAGE HANDLING SYSTEMS TERMINAL 3 SOEKARNO HATTA*. 704–712.

Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, 36(3), 356–372. <https://doi.org/10.2307/3152082>

Zeelenberg, M., & Pieters, R. (2004). Beyond valence in customer dissatisfaction: A review and new findings on behavioral responses to regret and disappointment in failed services. *Journal of Business Research*, 57(4), 445–455. [https://doi.org/10.1016/S0148-2963\(02\)00278-3](https://doi.org/10.1016/S0148-2963(02)00278-3)