

Intention to repurchase after a data leak on Tokopedia: Mediated by consumer forgiveness

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Abstract

During a brand crisis, this research investigates the impact of brand super-recovery efforts and online brand community engagement (OBCE) on repurchase intention as mediated by consumer forgiveness. The data for this quantitative study was gathered from members of the Tokopedia community in Central Java. Partial Least Squares Structural Equation Modeling is the analytical technique used (PLS-SEM). The results indicate that brand super-recovery efforts and online brand community engagement (OBCE) influence repurchase intention directly or indirectly via the mediating variable of consumer forgiveness. The results indicate that when a brand crisis occurs, the presence of a brand super-recovery effort, online brand community engagement (OBCE), and consumer forgiveness can reduce the negative impact of a brand crisis and encourage customers to repurchase. This research results have significant implications for theory and practice.

Keywords: Brand Super-Recovery Effort; Online Brand Community Engagement (OBCE); Repurchase Intention; Consumer Forgiveness

1. Introduction

The company's crisis is inextricably linked to its brand reputation. A brand crisis is defined as an event, rumor, or information that has a negative impact on the brand [1]. The occurrence of data leaks from Tokopedia market place users is an example of a brand crisis. The leak of Tokopedia marketplace personal data in early May 2020 resulted in the hacking of approximately 91 million Tokopedia user accounts [2]. The brand damage crisis resulted in brand losses such as decreased sales, decreased marketing effectiveness, loss of market share, and investor confidence [3].

After a few months, consumers may forget about a brand's crisis, especially if the brand is socially responsible and the company's brand recovery efforts are successful [4]. Customers will forgive and continue to purchase products from the company if service recovery is properly carried out and their problems are satisfactorily addressed [4].

The existence of online brand communities facilitates the interaction of consumers, brands, and marketers [5]. When there is a brand crisis, social media platforms such as Twitter and Facebook allow negative news to spread quickly and easily [6]. For brands that experience product damage, the existence of an online brand community can provide positive news because many community members will spread positive news about product damage to everyone on social media, influencing people's intentions to repurchase from the brand [7].

Companies are increasingly investing in driving customer engagement in social media-based online communities as digital technology grows in popularity [8]. Recent research has focused on the beneficial role of online brand community engagement (OBCE) in effective marketing and communication in overcoming product defects [9].

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Managers must seek consumer forgiveness in order to successfully rectify the consequences of product defects [10]. Product defects are now widely discussed on social media, particularly on the product's social media pages, where affected customers voice their complaints and researchers closely monitor the brand's reaction to the damage. In product crises, apologies, compensation, and positive comments influence consumer forgiveness [10].

Members of the online brand community have an emotional bond with the brand and a positive relationship with it, which can encourage consumer forgiveness of product crises and the intention to repurchase the brand that is experiencing a crisis [11]. This research specifically looks at a conceptual model that uses consumer forgiveness as a mediator between brand super-recovery efforts and online brand community engagement (OBCE) and repurchase intention [11]. This research will be conducted on Tokopedia customers in Central Java, Indonesia who have made purchases and are members of the Top Community (the Top Community is a gathering place for Tokopedia sellers to get education, exchange insights, and even create new opportunities).

Based on the above background, the following hypothesis can be drawn:

- H1: There is a positive effect of brand recovery efforts on consumer forgiveness.
- H2: There is a positive effect of brand recovery efforts on repurchase intention.
- H3: There is a positive effect of online brand community involvement on consumer forgiveness.
- H4: There is a positive effect of online brand community involvement on repurchase intention.
- H5: There is a positive effect of consumer forgiveness on repurchase intention.
- H6: Consumer forgiveness mediates the effect of brand recovery efforts on repurchase intention.
- H7: Consumer forgiveness mediates the effect of online community involvement on repurchase intention.

2. Methodology

Four variables will be tested in this conceptual framework: brand super recovery effort as an exogenous variable, online brand community involvement (OBCE) as an exogenous variable, consumer forgiveness as a mediating variable, and repurchase intention as an endogenous variable.

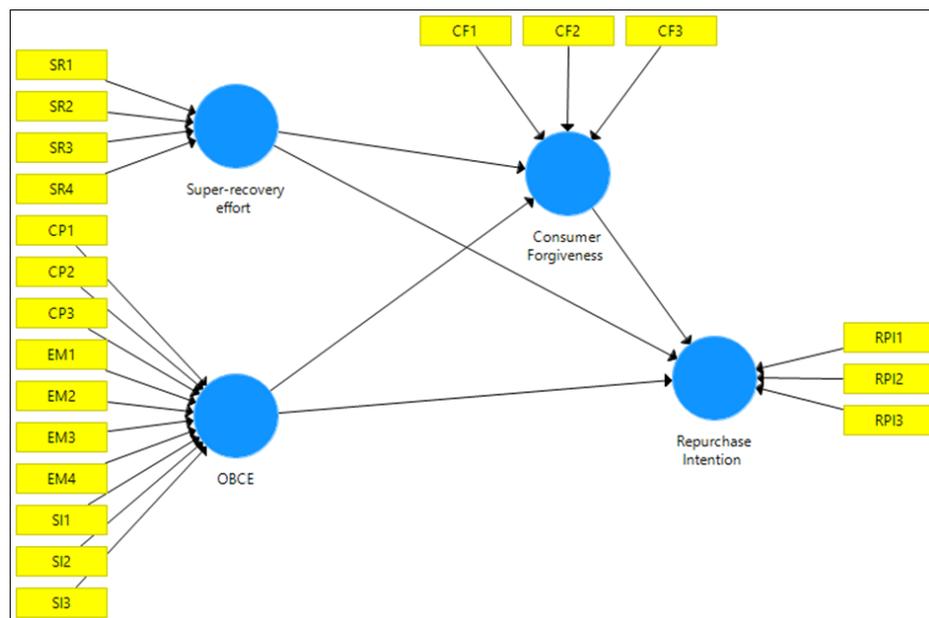


Figure 1 Research Framework

2.1. Research Design

The research method used is quantitative research. Research based on the philosophy of positivism is a scientific or scientific method because it has fulfilled scientific principles in a concrete or empirical manner that is objective, measurable, rational, and systematic [12].

This research uses a cross-sectional design. Cross-sectional research collects data in a single time period to answer research questions [13].

2.2. Sample and data collection

This research will use a sample of 186 users who have made purchases on the Tokopedia platform and are members of the Central Java Tokopedia community. The data for this research were gathered through an online questionnaire distributed to Tokopedia users, namely the Google form. The questionnaire was distributed to the top community telegram and Facebook groups.

The respondent's characteristic data is explained through a table in this research to determine the respondent's background. Gender, age, education, and the duration using Tokopedia were the characteristics of the respondents studied (within years).

Table 1 Respondent Description Data

	Number of Respondents	Percentage
Gender		
Male	84	45,2%
Female	102	54,8%
Age		
<18	7	3,7%
18-24	99	53,3%
25-30	58	31,2%
>30	22	11,8%
Education		
Secondary School	3	1,6%
Senior High School	40	21,5%
Bachelor Degree	138	74,2%
Master Degree	5	2,7%
The duration using Tokopedia (years)		
<1	41	22%
1-2	78	42%
3-4	53	28,5%
>5	14	7,5%

Source: Data processing results, 2022

2.3. Construct measures

All measurement items are based on a five-point scale ranging from "1 = strongly disagree" to "5 = strongly agree". To measure brand recovery efforts, use four measurement items [14, 15]. Online community involvement is measured through three dimensions of conscious participation, enthusiasm, and social interaction [16, 17]. Consumer forgiveness is measured by three measurement items [18]. Meanwhile, repurchase intention was measured by three measurement items [19].

2.4. Data analysis

The data analysis technique in this reserach used Partial Least Square Structural Equation Modeling (PLS-SEM). The aim of PLS-SEM is to develop a theory or build a theory (prediction orientation) [20]. PLS-SEM is used to explain whether there is a relationship between latent variables (prediction) [20]. PLS-SEM is a powerful analytical method because it

does not assume current data with a certain scale measurement. The number of samples is small [20]. Because this study has a complex model and a limited number of samples, the data is analyzed using SmartPLS 3.0 software.

3. Results and discussion

3.1. Outer model evaluation

The outer model evaluation is used to define how each indicator relates to its latent variable [20]. In testing the measurement model (outer model), it is necessary to test the validity and reliability of the indicators used [20]. The outer model in this research can be seen in the following figure:

3.1.1. Test of Validity

The indicator in the convergent validity test is said to be valid if the AVE (Average Variance Extracted) value > 0.5 , so that it can be said that the measurement has met the criteria for convergent validity [20]. Discriminant validity can represent the extent to which a construct empirically differs from other constructs [20, 21, 22]. If the data shows that the correlation construct of each indicator has a value greater than the value of the other constructs, then the variable has a high cross loading factor [20].

Table 2 Test results Convergent Validity, discriminant validity

Latent Variable	Item	Brand Super Recovery Effort	Online Brand Community Engagement	Consumer Forgiveness	Repurchase Intention
Brand Super Recovery Effort	SR1	0.867	0.661	0.653	0.767
	SR2	0.849	0.607	0.652	0.751
	SR3	0.828	0.573	0.711	0.733
	SR4	0.898	0.641	0.712	0.820
Online Brand Community Engagement	CP1	0.590	0.811	0.576	0.638
	CP2	0.542	0.829	0.516	0.614
	CP3	0.639	0.851	0.627	0.688
	EM1	0.575	0.798	0.588	0.630
	EM2	0.584	0.814	0.556	0.644
	EM3	0.605	0.766	0.578	0.639
	EM4	0.571	0.723	0.592	0.623
	SI1	0.484	0.824	0.495	0.577
	SI2	0.593	0.850	0.609	0.679
SI3	0.606	0.793	0.616	0.697	
Consumer Forgiveness	CF1	0.704	0.673	0.867	0.748
	CF2	0.631	0.559	0.836	0.691
	CF3	0.704	0.609	0.872	0.737
Repurchase Intention	RPI1	0.839	0.704	0.711	0.887
	RPI2	0.764	0.724	0.752	0.878
	RPI3	0.727	0.664	0.749	0.849

Source: Researcher Data Processing Results with SmartPLS (2022)

3.1.2. Test of Reliability

The reliability test in Partial Least Square (PLS) can be performed using two methods: Composite Reliability and Cronbach's Alpha [20]. The composite reliability value must be greater than 0.70 and the Cronbach alpha value must be greater than 0.60 in order for each variable to be declared reliable [20, 21, 22].

Table 3 Reliability Test Results

Latent Variable	Composite Reliability	Cronbachs Alpha
Brand Super Recovery Effort	0.894	0.822
Online Brand Community Engagement	0.949	0.940
Consumer Forgiveness	0.904	0.841
Repurchase Intention	0.920	0.883

Source: Researcher Data Processing Results with SmartPLS (2022)

3.2. Inner Model Evaluation

Measurement of the structural model (inner model) aims to test the effect of other latent variables [20].

3.2.1. Test R Square

The goodness of fit model is calculated using R-square to determine how well the independent variable explains the dependent variable [20]. R Square results are classified into three categories [21, 22], namely:

- The model is said to be good if the results are 0.67.
- The model is said to be moderate if the results are 0.33.
- If the result is less than 0.19, the model is said to be weak.

Table 4 R-Square value

Latent Variable	R-Square
Consumer Forgiveness	0.672
Repurchase Intention	0.873

Source: Researcher Data Processing Results with SmartPLS (2022)

3.2.2. Hypothesis Testing

Hypothesis testing is done by using bootstrapping in Smart PLS software, then comparing the T-table values with T-statistics. The hypothesis can be accepted if the T-statistics value is higher than the T-table value (1.96) with a significance level of 5% (two-tailed) [21, 22].

Based on the data in Table 5, it can be seen that of the 5 direct hypothesis, all hypothesis were accepted because they had a p-value of more than 0.05. The accepted hypothesis are H1, H2, H3, H4, and H5.

The results of hypothesis 1 confirm the argument that studies regarding service failure recovery have identified that recovery strategies have a positive effect on the acquisition of consumer forgiveness [24, 10, 25]. Additionally, brand restoration efforts prioritize consumer welfare; thus, brand recovery efforts have the greatest potential to improve brand reputation and restore customer relationships [26]. For example, it takes great effort to reduce damage and compensate customers with free samples, coupons, and discounts. This research shows that if Tokopedia users feel that there are efforts to restore brands, such as having acted responsibly and honestly, having cared for their customers, having taken extra actions, and having made efforts due to data leaks, consumers will provide forgiveness in the form of providing opportunities to correct errors, forgive, and think positively about Tokopedia.

The results of hypothesis 2 are in accordance with the argument that consumers may forget the crisis after a few months, especially when the company is socially responsible and voluntary brand recovery efforts are achieved [28]. Repurchase intention reflects the desire that consumers will return to the brand after corrective action or brand improvement [29].

This research shows that if Tokopedia users feel that there are efforts to restore brands, such as having acted responsibly and honestly, having cared for their customers, having taken extra actions, and having made efforts due to data leaks, consumers will have the intention to repurchase, which means that shopping made will stay at Tokopedia, will buy goods at Tokopedia when they need goods, and will still buy at Tokopedia even though there are other competitors.

Table 5 Path Coefficient

H	Variable Relationship	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values	Description
H1	Super-recovery effort -> Consumer Forgiveness	0.575	0.569	0.071	8.086	0.000	Accepted
H2	Super-recovery effort -> Repurchase Intention	0.498	0.492	0.070	7.162	0.000	Accepted
H3	OBCE -> Consumer Forgiveness	0.302	0.311	0.081	3.722	0.000	Accepted
H4	OBCE -> Repurchase Intention	0.243	0.250	0.059	4.129	0.000	Accepted
H5	Consumer Forgiveness -> Repurchase Intention	0.277	0.274	0.065	4.280	0.000	Accepted

Source: Researcher Data Processing Results with SmartPLS (2022)

The results of Hypothesis 3 confirm that consumers who are highly involved with the brand in their online community have a strong relationship with the brand [8,29]. Previous research on product failure and service recovery has found that consumers who have a strong bond with the brand are more willing to forgive the company [30]. According to the result of this research, if Tokopedia users who are members of the top community and make connections, such as those who are interested in Tokopedia, learn, pay attention, spend a lot of time in the top community, like, and enjoy discussing Tokopedia, the user or consumer will forgive in the form of giving an opportunity to correct mistakes, forgive, and think positively about Tokopedia.

The results of this hypothesis 4 are in accordance with the findings [31, 32]. When consumers forgive brands that are involved in a product breakdown crisis, they are motivated to restore their relationship and commitment to the brand. Therefore, they are likely to continue to buy the brand. This research shows that if Tokopedia users who are members of the top community and make connections, such as those users who are interested in Tokopedia, study, pay attention, and spend a lot of time in the top community, like, enjoy discussing Tokopedia, the user or consumer is less likely to have the intention to buy. Specifically, shopping that is done will remain at Tokopedia, people will buy goods at Tokopedia when they need goods, and they will still buy at Tokopedia even though there are other competitors.

The results of this hypothesis 5 confirm the findings of [25, 10], finding empirical evidence to support that customer forgiveness is positively related to repurchase intention after service failure. When consumers forgive brands that are involved in a product breakdown crisis, they are motivated to restore their relationship and commitment to the brand, and therefore, they are more likely to continue buying the brand [32]. In this research, it shows that if Tokopedia users forgive related to data leaks, such as giving them the opportunity to correct their mistakes and thinking positively about Tokopedia, then consumers will have the intention to repurchase, which means that their shopping habits will remain at Tokopedia, they will buy goods at Tokopedia when they need goods, and they will still buy at Tokopedia even though there are other competitors.

Mediation test

Testing the mediating effect in the analysis using PLS using the procedure developed by Baron and Kenny with the following stages [21, 22]:

- The first model examines the effect of exogenous variables on endogenous variables and must be significant at t-statistic > 1.96.
- The second model examines the effect of exogenous variables on the mediating variable and must be significant at a t-statistic > 1.96.

- The third model simultaneously examines the effects of exogenous and mediating variables on endogenous variables.

To analyze this simple mediation model, the authors adopt the plot created by Zhao, Lynch, and Chen [23].

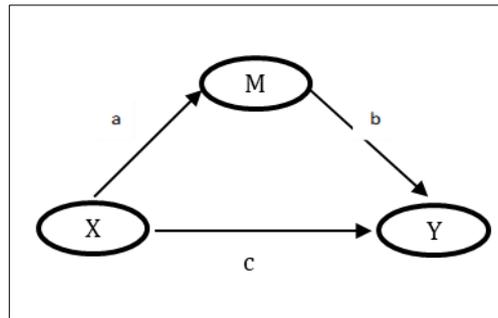


Figure 2 Simple Mediation Model [23]

Figure 2 is a simple mediator model. The mediation effect analysis utilizes the following values in [23]:

- c is a direct effect,
- The multiplication of $a \times b$ and $a \times c$ equals the indirect effect.
- $c + (a \times b)$ equals the total effect (total effect).

Table 6 Consumer Forgiveness Mediation Hypothesis Test

H	Vvariable Relationship Indirect effect	H	Variable Relationship direct effect	Mediation effect status
H6	Super-recovery effort -> Consumer Forgiveness -> Repurchase Intention (Original Sample = 0.159, T Statistics = 3.534, P Values = 00.004) (significant)	H2	Super-recovery effort -> Repurchase Intention (Original Sample = 0.498, T Statistics = 7.162, P Values = 0.000) (significant)	partial mediation
H7	OBCE -> Consumer Forgiveness -> Repurchase Intention (Original Sample = 0.084, T Statistics = 2.974, P Values = 0.003) (significant)	H4	OBCE -> Repurchase Intention (Original Sample = 0.243, T Statistics = 4.129, P Values = 0.000) (significant)	partial mediation

Source: Researcher Data Processing Results with SmartPLS (2022)

The partial mediation model that occurs in hypothesis 6 can be interpreted as brand recovery efforts directly influencing repurchase intentions without the need for consumer forgiveness. These findings corroborate previous research [10] that forgiveness mediates the relationship between service recovery strategies and repurchase intention. Consumer forgiveness mediates the relationship between super-recovery effort and repurchase intention; that is, brand-recovery effort influences forgiveness, and forgiveness influences repurchase intention [11].

The mediation model that occurs in hypothesis 7 is partial mediation. This means that online community involvement can directly influence repurchase intentions without the need for consumer forgiveness. These findings support research that suggests online brand community engagement (OBCE) has a positive effect on forgiveness, and forgiveness in turn positively affects repurchase intention [11].

4. Conclusion

- Consumer forgiveness is significantly influenced by brand recovery efforts.
- Repurchase intention is significantly influenced by brand recovery efforts.
- Consumer forgiveness improves significantly when the online brand community is involved.
- Participation in the online brand community has a significant positive impact on repurchase intention.
- Forgiveness has a significant positive impact on repurchase intention.

- Consumer forgiveness has a significant positive effect on repurchase intentions and partially mediates brand recovery efforts.
- Consumer forgiveness has a significant positive effect on the online brand community's involvement in repurchase intentions, but it is only a partial mediator.

The result of this research indicates that online brand community engagement in the social media environment reduces the negative impact of a brand crisis, encouraging consumer forgiveness and ultimately leading to repurchase intentions. Meanwhile, Tokopedia's brand super-recovery efforts, such as being responsible and caring for consumers during a brand crisis, encourage consumer forgiveness, resulting in repurchase intentions. Furthermore, consumer forgiveness reduces the impact of brand super-recovery efforts and online brand community engagement on repurchase intentions. The mediation that occurs is only partial mediation.

This study makes three contributions to the academic literature. First, the study the customer engagement theory to examine the management of brand crises. Second, about online brand community engagement into a conceptual model with the construct of brand super-recovery effort to identify their differential influences. Third, that is consumer forgiveness in connecting online brand community engagement with repurchase intention and observe consumer reaction to a brand's recovery strategy during a brand crisis, thus extending the construct of consumer forgiveness recently highlighted in the service recovery literature.

Compliance with ethical standards

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Disclosure of conflict of interest

The authors declare that there is no conflict of interest.

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