

# Research on the Impact of Online Brand Community Participation on Consumers' Repurchase Intention under the Situation of Product Harm Crisis

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## Abstract

With the continuous development of social media, product injury incidents of many domestic and foreign companies are increasingly exposed to the public. Advances in digital technology have strengthened online brand communities and promoted the establishment of a network of relationships between consumers, brands and marketers. When a company has a product harm scandal, digital platforms can hurt its profits because many consumers use community tools (I.e. share, like, comment) spread news about the scandal to everyone in its network, which may affect people's willingness to buy from the brand. With the increasing popularity of consumer digital technologies, companies are increasingly investing in facilitating customer engagement in online communities based on social media. Therefore, it is very important for companies to influence consumers' willingness to buy again through online brand community participation after the crisis. This research examines the impact of online brand community participation on consumers' repurchase intentions. In response to the Samsung Galaxy Note 7 battery crisis, data was collected from members of the brand's online brand community in China. Research results show that higher levels of consumer brand engagement can offset the negative consequences of brand scandals, highlighting the importance of cultivating customer engagement in brand online communities. This research has important theoretical and practical significance.

## Keywords

Product Harm Crisis; Online Brand Community Participation; Repurchase Willingness.

## 1. Introduction

In the era of mobile Internet, information sources are ubiquitous. With the growth of social media coverage, product injury incidents of many domestic and foreign companies, including well-known brands, are increasingly exposed to the public's field of vision. For example, in 2018 Johnson & Johnson's "carcinogenic door", 22 women suffered from cancer due to the use of Johnson & Johnson talcum powder products. Johnson & Johnson was required to pay US\$4.69 billion in compensation for this, which is the highest compensation amount in talcum powder rights protection cases so far, followed by Johnson & Johnson's stock price fell 1.4% after the market. After the crisis, the keyword "J&J's talcum powder carcinogenicity case judgment" quickly appeared on the hot search lists of major social media and news apps. Netizens often used social media to release information in the first time, which instantly detonated the public opinion field. The company caused a second blow.

The occurrence of product harm incidents, on the one hand, damages the rights and interests of consumers and causes economic losses for the enterprise; on the other hand, it is very likely that consumers are reluctant to buy products of the brand, and may even take retaliatory behaviors such as negative word-of-mouth communication. It will bring heavy losses to the

business and production activities of the enterprise and affect its long-term development. However, the negative impact of the product harm crisis does not mean that the brand and consumers will lose contact forever. Havila (2002) pointed out that the damaged relationship may still be restored under certain conditions. If companies can take appropriate repair measures after the crisis, consumers may still choose to return to the wrong brand [1].

With the rapid development of big data, more and more companies invest in customer participation in online communities [2-4]. Most domestic and foreign studies have investigated the role of online brand community participation in brand evaluation, brand promise, use intention and company performance, and little attention has been paid to its role in product harm crisis [5-8]. Consumers are increasingly using social media brand communities to express their disappointment or frustration with the failure of branded products or services, resulting in negative electronic word-of-mouth (e-WOM). Negative electronic word-of-mouth (e-WOM) spreads faster than positive electronic word-of-mouth (e-WOM), and can have a greater impact on consumers' perception of brands and products, thereby affecting product sales [9-11]. Therefore, it is important to study whether online brand communities can mitigate the negative impact of the product harm crisis.

The main purpose of this research is to study the impact of online brand community participation on consumers repurchase intentions in the context of product harm crisis. This article selects a representative product harm crisis, the Samsung Galaxy Note 7 battery crisis, to conduct an empirical test, and collect data from consumer members of the Samsung China online brand community immediately after the crisis broke out.

## 2. Literature Review

### 2.1. Product Harm Crisis

#### 2.1.1. The Concept and Classification of Product Injury Crisis

According to previous literature, product harm crisis is defined as accidental and widely disseminated incidents about a product that is defective or that will bring danger to consumers [12]. Under normal circumstances, the product harm crisis occurs because the products produced by the company are indeed defective and are made public; there are also a few cases where the quality of the company's product is not problematic but is questioned by the official or unofficial, and consumers are in a large number of miscellaneous. It is also difficult to distinguish the truth from the information, which ultimately brought unpredictable disasters to the enterprise [13-15]. The impact of the product harm crisis on the company mainly has four points: first, consumers have resistance and disgust towards the product and the company, resulting in product sales difficulties; second, the company's marketing strategy will not achieve the expected results, and even more marketing. The phenomenon of conflict; third, it will promote the sales growth of other companies in the same industry; fourth, it is difficult to compete on an equal footing with other companies in the same industry through simple marketing methods [16]. Siomkos et al.'s definition of product harm crisis is accurate but broad. With the deepening of research, domestic scholars have distinguished similar concepts such as product injury crisis, product liability, and product recall. Although the expressions of product harm crisis at home and abroad are not exactly the same, in essence, it will not bring disagreement and misleading research [17].

Based on different research perspectives and directions, product harm crisis has a variety of classification methods. In 2007, Coombs tended to classify product harm crises into victimized, negligent, and intentional [18]. This classification method is based on the company's attitude towards products, and is a classification method recognized by most scholars. Sujay et al. divide it into performance type and value type, and the classification is based on whether the cause of product injury crisis is the product performance problem or the divergence of product and

consumer values [19]. Chinese scholar Fang Z and others have clearly divided the concepts of product liability and product recall [20]. Product liability has the following characteristics: First, it can be analyzed not only from a marketing perspective, but also from a legal perspective. Second, most of the people affected are relatively large, but there are also a considerable number of product liability incidents that only affect very few consumers. Third, product liability will involve legal liability. Correspondingly, the characteristics of product recalls are generally only analyzed from the perspective of marketing, generally involving a large range of consumer groups, and generally not involving legal liability. Based on Smith et al., Founder and others classified product injury crises into defensible and unjustifiable types, and based on this qualitative distinction of product injury crises in recent years, they were highly praised by scholars at home and abroad [21]. A lot of recent work is based on this classification, specializing in research on consumer behavior and corporate coping strategies in the context of defensible product harm crisis.

### **2.1.2. The Impact of Product Harm Crisis on Consumers' Willingness to Buy**

The impact of product harm crisis on consumers' purchasing intention is comprehensively affected by multiple factors. Factors such as consumers' age, gender, occupation, corporate reputation, response attitude, and crisis severity will all affect consumers' final decision-making.

Based on the consideration of demographic factors, Wu et al. found that young people's willingness to buy decreases even more when a defensible product harm crisis occurs [22]. On the contrary, after research by Jahn et al., it is believed that the purchase intention of elderly consumers is more significantly reduced by the product harm crisis [23]. David et al. supported Wu Jianlin's point of view from the side, pointing out that young people have stronger ability to perceive crisis, while older people are more willing to introduce products to others [24]. Regarding gender, Laufer et al.'s study concluded that men are much more affected than women, and that it is related to the difference in perceived vulnerability between men and women [25]. From the perspective of enterprises, foreign scholars use big data calculations to believe that brand loyal users are least affected by the product harm crisis, and people without brand buying habits will easily choose similar substitutes [26]. Zhao and others continue to study and believe that the good reputation of the brand can make light users more trust in the product, and when the unjustifiable product harm crisis occurs, the purchase intention of heavy users drops the most [27]. A large number of domestic and foreign studies have analyzed the countermeasures that should be taken when product injury crises occur in different situations, and have provided help for companies to get out of the predicament.

As the research continues to deepen, some scholars have found that factors that are difficult to quantify, such as consumers' psychological state and interpersonal communication habits, can also have a significant impact on purchase intentions. Taking the automotive industry as an example, Liu et al. pointed out that because consumers' cognitive abilities are imperfect and they are susceptible to emotions, when faced with a complex market environment, they often show impulse and anger when they receive information about product harm crisis. Other emotions affect consumers' purchasing decisions [28].

### **2.1.3. Response Strategies to Product Harm Crisis**

In the 1990s, Siomkos et al. divided the corporate response strategies into four categories, called corporate response sets [12]. Furthermore, they have proved through research that if companies want to obtain good treatment results, the strategies they should adopt are, in order, to actively take responsibility, actively recall, passively recall, and deny the crisis. Because this classification method does not define the type of product harm crisis, there is a certain generality. With the continuous deepening of research in this field, different coping strategies according to the type of crisis have become a research hotspot. Founder and others based on

the types of defensible/non-justifiable product injury crisis proposed by them [20], classify the strategies that companies can adopt, and believe that when facing defensible product injury crises, companies can choose the response methods include active clarification, public apology, ignorance and denial of rebuttal. In the face of an indefensible product harm crisis, companies will receive official warnings and penalties, so they cannot take an attitude of ignoring them. They can choose response methods such as active commitment, active and passive recalls, and even resolute denial. In addition, some scholars have analyzed the interaction between the government, peer companies, industry experts and other roles taking different measures to assist or criticize companies and the response measures taken by companies. For example, Wang Xiaoyu and others focused on the impact of industry experts' comments on corporate response strategies [29].

## 2.2. Online Brand Community Participation

Online communities are also called virtual communities or electronic communities. Rheingold (1993) first proposed the concept of virtual community and defined it as a social aggregation of personal relationship networks based on Internet technology, formed by long-term connections among multiple people in cyberspace [30]. When the focus of an online community is on a specific brand, the online community has developed into an online brand community, which is also called a virtual brand community by scholars. Companies like Dell and Cisco Systems have transformed suppliers and customers into members of their corporate communities, thereby realizing the exchange of valuable information and knowledge. More and more companies realize the importance of online brand communities. Through online brand communities, companies can effectively communicate with customers and obtain valuable ideas. The brand community not only provides additional communication channels for the company, but also guarantees the possibility of establishing contact with specific users.

Muniz & O'Guinn (2001) put forward the concept of "Brand Community" for the first time in a study on Fairlawn Neigli-borhood [31]. He defined "Brand Community" as "consumption by using a certain brand." A non-geographical, specialized community based on social relationships formed by the creators. This form of community transcends all geographical restrictions among consumers who pay attention to and use the brand's products." Subsequent scholars deepened and broadened the concept of online brand communities. McAlexander, Schouten, and Koenig (2002) pointed out that the brand community is not only the relationship between consumers, it includes the relationship network derived from the consumer as the core, including the relationship between consumers and enterprises, the relationship between consumers and products, the relationship between consumers and brands, as well as the relationship between consumers and consumers [32]. Sung et al. (2010) defined an online brand community as a community formed based on attachment to a commercial brand in the cyberspace [33]. Chang Rong (2007) defines a virtual brand community as a social network of a specific brand initiated by a company, brand followers or a third party, based on digital communication [34]. Brand followers can exchange information about products or services in the virtual brand community, share the experience of brand products or services, and share the symbolic value of the brand. Gradually, they will form a long-term relationship and have a strong sense of belonging to the virtual brand community.

Vivek, Beatty, and Morgan (2012) define customer participation as "the intensity of individual participation and the connection with the organization's products and activities initiated by the customer or organization"[35]. Customer brand participation in social media can be further conceptualized, including three dimensions: enthusiasm, conscious participation, and social interaction [36]. Some scholars have also explained online brand community participation from different perspectives. For example, some scholars refer to it as the mental state of participation, connection, participation, and interest in the brand community, while others regard it as a

behavioral term, such as communication between users The intensity of interaction, consumer participation, and brand connection [37,38]. The core of online brand community participation lies in the realization of interactive experience and value creation through the learning, sharing, influence, advocacy, social and joint development activities of community users [39,40]. The interaction between community users helps build brand affinity and consumer empowerment, which makes online brand communities a powerful and reliable platform for consumer-to-consumer and consumer-to-brand communication [41].

### 2.3. Repurchase Willingness

The term "intention" began in psychology, and was later widely used by scholars to purchase behavior. Previous studies have focused on customer purchase intentions. With the deepening of research and application and the growing need for awareness of this concept, there is a growing need for repurchase There are too many studies on willingness, and the research field is getting bigger and bigger. Customer repurchase intention is also called "customer repurchase intention", "customer repurchase willingness", "customer repurchase intention", etc. It is also in the service field. It is called "customer re-use willingness", "customer re-experience willingness", etc. This article refers to it as "repurchase willingness" according to the research field and objects, which is the same as the original intention.

Ajzen (1975) believes that repurchase intention is the same as willingness to express the subjective feelings of customers, and repurchase intention is an extension based on willingness to reflect the possibility of customers buying products or services [42]. Schiffinan et al. (2000) proved that purchase intention is to predict the purchase behavior of customers [43]. Based on the perspective of online shopping, Jones et al. (1995) defined repurchase intention as the customer's subjective feeling of satisfaction after purchasing a product or service for the first time, and then decided whether to patronize the company again. Mtoal et al. (2001) believe that repurchase intention is the possibility that consumers will continue to maintain a transaction relationship with a certain company in the future. Jiang T believes that the willingness to repurchase is the subjective judgment of the possibility that customers will purchase the products and services of the enterprise again in the future [44]. Chen M L (2003) regarded repurchase intention as a tendency for consumers to maintain a cooperative relationship with suppliers [45].

## 3. Hypothesis and Methods

### 3.1. The Relationship between Online Brand Community Participation and Repurchase Intention

Online brand community participation can help brands improve financial results, for example, increase conversion rates, purchase intentions, brand usage intentions, and sales. Secondly, online brand community participation enhances brand-related results, such as influencing brand evaluation, improving brand satisfaction, building brand trust, fostering higher brand promises, self-brand connection, brand use intentions, corporate performance, and increasing brand loyalty [4-8]. Third, participating in online brand communities will produce consumer/customer-related results, such as promoting word-of-mouth communication and knowledge contributions, continuing to participate in the commitments and intentions of online brand communities, and incentivizing brand promotion. In addition, customers with higher participation in the brand community are more likely to generate post-purchase reviews and spread positive word-of-mouth, thereby effectively increasing customer purchase value. Hollebeek et al. (2014) showed that OBCE significantly strengthened the relationship between consumers and brands [3]. Consumers' participation in online communities of their favorite brands can improve relationship quality and brand loyalty.

Consumers participating in online brand communities interact more with brands and other consumers, and establish emotional connections with them, resulting in higher loyalty, trust and commitment. Online brand community participation can provide a buffer effect to mitigate the negative impact of service failure or product damage crisis. Pansari & KumarOBCE (2017) pointed out that one of the results of online brand community participation is repeat purchases. Active consumers have confidence in the quality of the brand and its products [4]. Therefore, they may be willing to reduce the negative impact of the product harm crisis. Therefore, for the above reasons, this article expects that consumers dealing with a certain brand's online community will continue to buy products of the same brand, regardless of the product hazard crisis. Therefore, the following hypothesis are made:

H: The product harm crisis has a positive effect on repurchase willingness.

### 3.2. Research Methods

The product Shanghai crisis case used in this article is Samsung's smartphone battery crisis. In 2016, shortly after the release of the Samsung Galaxy Note 7 mobile phone, some consumers posted a video recording the event that the Samsung Galaxy Note 7 battery overheated and exploded in some cases. Samsung tried to solve this problem by stopping the production of this series of devices and replacing smartphones for affected customers. During this period, consumer discussions in Samsung's online brand community surged. Consumers' comments range from shifting to the intention of competing brands to forgiving the harm caused and their core loyalty to Samsung. The reason why this case study is selected in this article is that it is a typical product harm crisis case, and Samsung is a world-renowned brand, so product recall and recovery strategies have received great attention from media around the world.

#### 3.2.1. Measurement of Variables

This paper collects the data needed by the research through questionnaires. According to the conceptual model and research hypothesis mentioned above, we can know the research variables involved in the questionnaire design, draw on the mature scales developed by domestic and foreign scholars to measure them, and make appropriate measures according to the research needs. The adjustment of, finally formed a questionnaire suitable for the study of this article.

**Table 1.** Measurement items for online brand community participation

Dimensions	Item	Reference Source
Conscious participation	C1 Anything related to the Samsung community will attract my attention	Vivek ( 2009) & Zhang et al. (2017)
	C2 I want to know more about the Samsung community	
	C3 I am very concerned about everything in the Samsung community	
Enthusiasm	E1 I spent a lot of free time in the Samsung community	
	E2 I like the Samsung community very much	
	E3 I am passionate about the Samsung community	
	E4 Without the Samsung community, my life would be different	
Social interaction	S1 I like to join the Samsung community with my friends	
	S2 Compared to being with others, I prefer to participate in the Samsung community	
	S3 Participation in Samsung Community is more fun when other people around me do it too.	

**Table 2.** Measurement items of repurchase willingness

Dimensions	Item	Reference Source
repurchase willingness	R1 My next phone is still Samsung	Johnson et al. (2006)
	R2 Next time I need a new phone, I will buy a Samsung phone	
	R3 When I need to replace my current phone, I still buy a Samsung	

### 3.2.2. Sample and Data Collection

The target participants of this study are members of the Samsung online user community in China. According to the latest official statistics of CNNIC (2021), as of the end of 2020, China has 989 million Internet users, accounting for 68% of China's total population, and mobile payment users accounted for 58% of China's total population.

A total of 467 questionnaires were distributed, and a total of 425 were received. Among them, 47 questionnaires were not in line with the actual situation, and 378 valid questionnaires. The effective response rate of the questionnaires reached 80.94%. Among them, the proportions of men and women were 48% and 52% respectively. In terms of age, the six segments are distributed, but they are mainly concentrated in the 20-35 years old. The number of people in this range accounts for 64.03% of the total. See the table below for details.

**Table 3.** Basic situation of survey samples (N=378)

Demographic characteristics	Category	Quantity	Percentage
Gender	Male	226	48.39%
	Female	241	51.61%
Age	Under 20	63	13.49%
	20-25 years old	122	26.12%
	26-30 years old	103	22.06%
	31-35 years old	74	15.85%
	36-40 years old	65	13.92%
	Over 40 years old	40	8.57%
Education	High school / technical secondary school and below	66	14.13%
	Junior college	107	22.91%
	Undergraduate	214	45.82%
	Master degree and above	80	17.13%
Tenure of Samsung online community	Less than one year	150	39.68%
	Between 1 and 2 years	55	14.55%
	Between 2 and 3 years	58	15.34%
	3 years and more	115	30.42%

### 3.2.3. Reliability Analysis

This article uses Cronbach's Alpha coefficient to analyze the reliability of each measurement index. The overall reliability analysis results of this study are shown in Table 4. The Cronbach's Alpha coefficient of the large sample population is 0.909, which is significantly greater than 0.7, indicating that the scale has a high overall reliability.

**Table 4.** Analysis of overall reliability of the scale

Measurement item	Cronbach's Alpha
13	0.909

The reliability analysis results of each variable in this study are as follows:

**Table 5.** Scale reliability analysis

Dimension	Item	CITC	Delete Cronbach's Alpha for this item	Cronbach's Alpha
Conscious participation	C1	0.727	0.850	0.879
	C2	0.728	0.849	
	C3	0.741	0.844	
Enthusiasm	E1	0.747	0.848	0.881
	E2	0.691	0.862	
	E3	0.723	0.854	
Social interaction	S1	0.778	0.847	0.888
	S2	0.757	0.855	
	S3	0.738	0.862	
repurchase willingness	R1	0.714	0.841	0.866
	R2	0.741	0.817	
	R3	0.783	0.777	

It can be seen from Table 5 that the Cronbach's Alpha values of the three dimensions of the independent variables in this article are 0.879, 0.881, and 0.888, which are all above 0.7; the CITC of the measurement items of each variable is greater than 0.5, indicating that each All the items meet the research requirements, and the reliability of the scale is good. The CITC of each variable measurement item is greater than 0.5, indicating that each item meets the research requirements, and the reliability of the scale is good.

### 3.2.4. Validity Analysis

In terms of structure validity, this paper adopts confirmatory factor analysis method and uses analysis software Amos21.0 to test whether the structure of the measurement scale in this paper is valid. The specific analysis results are as follows:

It can be seen from Table 6 that all indicators are within the standard range, where 2/df is 1.210 and less than 3, the root mean square residual (RMR) is 0.043 and less than 0.050, and the root mean square error (RMSEA) is 0.024 and less than 0.05. The adjusted goodness of fit index (AGFI), normative fit index (NFI), Tucker-Lewis index (TLI) and comparative fit index (CFI) are all greater than the ideal standard of 0.900. These indicators all show that the model has a good goodness of fit.



**Table 6.** Overall fitness test of the scale confirmatory factor analysis model

Fitting index	$\chi^2/df$	RMR	RMSEA	PGFI	AGFI	NFI	TLI	CFI
Fitting standard	<3	<0.050	<0.080 (If<0.05, excellent; If<0.08, good)	>0.500	>0.900	>0.900	>0.900	>0.900
Calculation result	1.210	0.043	0.024	0.736	0.936	0.955	0.990	0.992

**Table 7.** Convergence validity analysis of the scale

Dimension	Item	Factor loading	Reliability factor	Measurement error	CR	AVE
Conscious participation	C1	0.792	0.627	0.373	0.879	0.645
	C2	0.798	0.637	0.363		
	C3	0.801	0.642	0.358		
Enthusiasm	E1	0.810	0.656	0.344	0.882	0.599
	E2	0.740	0.548	0.452		
	E3	0.790	0.624	0.376		
	E4	0.719	0.517	0.483		
Social interaction	S1	0.851	0.724	0.276	0.888	0.664
	S2	0.825	0.681	0.319		
	S3	0.793	0.629	0.371		
repurchase willingness	R1	0.785	0.616	0.384	0.869	0.688
	R2	0.825	0.681	0.319		
	R3	0.876	0.767	0.233		

It can be seen from Table 7 that the factor loading of each measurement item is above 0.7, and they are all significant at the level of  $P < 0.001$ , the combined reliability of the four variables is all higher than 0.6, and the Average Variance Extracted of each factor is high at 0.5, this indicates that the measurement items have good convergence validity.

**Table 8.** Discrimination validity analysis

	Conscious participation	Enthusiasm	Social interaction	repurchase willingness
Conscious participation	0.645			
Enthusiasm	0.073	0.599		
Social interaction	0.198	0.099	0.664	
repurchase willingness	0.190	0.138	0.270	0.688

The AVE of each factor studied in this paper is greater than the square value of the corresponding correlation coefficient, which shows that the discrimination validity between the measured factors is good.

### 3.2.5. Correlation Analysis

This paper uses the Pearson Correlation coefficient to measure the degree of close correlation between variables. The larger the coefficient, the stronger the correlation.

**Table 9.** Correlation analysis

	Conscious participation	Enthusiasm	Social interaction	repurchase willingness
Conscious participation	1			
Enthusiasm	.270**	1		
Social interaction	.445**	.315**	1	
repurchase willingness	.436**	.372**	.520**	1

Note: \*\* means significant level  $P < 0.01$

It can be seen from Table 9 that the correlation coefficients between the three dimensions of online brand community participation (conscious participation, enthusiasm, social interaction) and willingness to purchase again are: 0.436, 0.372, 0.520, and they are all significant at the level of  $P < 0.01$ , Which shows that there is a positive correlation.

### 3.2.6. Regression Analysis

In order to further study the influence relationship between the variables, this part uses SPSS22.0 statistical analysis software to perform multiple regression analysis. The regression analysis results reference indicators include the standardized regression coefficient of the independent variable to the dependent variable, t value, tolerance, variance expansion coefficient, R-square and F-test coefficient.

**Table 10.** Regression analysis of online brand community participation on repurchase intention

Dependent variable	Independent variable	Model standardization coefficient and significance test				Model parameters	
		$\beta$	t	Tolerance	VIF	R <sup>2</sup>	F
repurchase willingness	Conscious participation	.200***	4.293	.762	1.312	.385	38.656 (0.000)
	Conscious participation	.185***	4.244	.874	1.145		
	Enthusiasm	.333***	7.072	.748	1.337		

Note: \*\*\* means significant level  $P < 0.001$

The F value of this model is 38.656, which is significant at the level of  $P < 0.000$ . The influence of online brand community participation on the willingness to renew the dependent variable brand relationship is significant at the  $P < 0.001$  level, and the regression coefficients are 0.200, 0.185, and 0.333, respectively. Therefore, hypothesis is supported. In addition, the VIF values

of the regression model are all greater than 1 and less than 10, and the tolerance is between 0 and 1, indicating that there is no multicollinearity problem among the variables, which meets the assumptions of linear regression.

#### 4. Conclusion

Due to the development of the Internet, news of product crises can be quickly and widely spread through social media and online brand communities. Negative word-of-mouth can attract more attention than positive information clues and become a diagnostic tool for consumer decision-making. Therefore, it is important not only to monitor the product harm crisis in the online brand community, but also to resolve the crisis in a timely manner. The main purpose of this research is to explore the role of online brand community participation in the product harm crisis. However, in the existing marketing literature, online brand community participation has been neglected. This research focuses on the crisis after the Samsung Note 7 smartphone battery exploded. The results show that online brand community participation has a direct impact on consumers repurchase intentions.

The research expands the theory of customer participation and studies the impact of online brand community participation on consumers repurchase intentions from three aspects: conscious participation, enthusiasm and social interaction. In the context of product harm crisis, studying the influence of online brand community participation on repurchase intentions, broadening the research boundary of product harm crisis, and enriching the research on product harm crisis theory.

The development of digital technology has changed the way consumers complain. Online brand communities provide them with a space to express their dissatisfaction with the failure of brand products and services quickly and easily. Negative word-of-mouth spreads rapidly in the online community environment and may adversely affect brand sales. Brand managers need to invest more resources to promote consumer participation in online brand communities, especially during product harm crisis events. This will not only generate positive word of mouth, increase loyal customer base, and ultimately achieve sales growth. Therefore, this research has important practical significance in marketing management.

#### 5. Shortcomings and Prospects

This research focused on a single product harm crisis event—the Samsung Galaxy Note 7 battery exploded, and investigated members of the Samsung online community. Although these data come from real cases, the generality is limited. Future research can test the model in other product environments, for example, research on crises that have more serious consequences for consumers. In the future, we can study the mediating role of consumer psychology, as well as brand coping behaviors after a crisis, broaden and enrich the research model of online brand community participation in consumers repurchase intentions. In the future, we can also study the effects of different ways of participation on consumers' psychology and whether they will affect their purchase intention from the way of consumer participation.

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