

# The Influence of IWOM on Restaurant Consumers' Purchase Intentions: Taking PANGGELIA as an Example

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**Abstract:** This paper explores the factors influencing consumers' willingness to purchase under the influence of IWOM, taking perceived risk as the theoretical framework. The factors influencing consumers' willingness to purchase under IWOM are investigated from three perspectives: perceived functional risk, perceived psychological risk, and perceived financial risk. A combination of quantitative and qualitative research methods is used to derive the questionnaire theory using the interview method. The research findings are drawn using the questionnaire method and combined with the path analysis method. Based on the research results, relevant suggestions and countermeasures are proposed for such IWOM-influenced restaurants.

**Keywords:** IWOM; Purchase intention; Perceived risk

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## 1. Background

With the popularity of social media, consumption is increasingly influenced by internet word-of-mouth<sup>[1]</sup>. While ordinary restaurants may gain popularity with the inclusion of the term "internet celebrity," outstanding restaurants may lose appeal due to the lack of marketing. Given IWOM's clout over internet celebrity eateries, how should they respond to bad reviews? PANGGELIA is a renowned restaurant brand among young people, and its distinctive taste and affordable prices have won the hearts of many customers. However, recent negative reviews about PANGGELIA have filled the headlines, leaving a growing number of customers unsatisfied. How should PANGGELIA recover after experiencing negative IWOM?

With negative word of mouth, consumers tend to continue to doubt the restaurant, even if the restaurant has been standardized following the occurrence. In the face of IWOM, most restaurants solely focus on how to manage positive word of mouth but tend to neglect the handling of negative word of mouth, causing hindrance to the restaurant's business<sup>[2]</sup>. Therefore, it is of great significance to explore the perceived risk of consumers' purchase intentions under the influence of IWOM on behalf of PANGGELIA, in order to make targeted suggestions.

## 2. Literature review and research hypothesis

### 2.1. Literature review

#### 2.1.1. IWOM

The phrase "strength of relationship" is commonly used in sociology to describe the strength of social relationships between individuals. In simpler terms, it defines the degree of relationship. Studies have

shown that the strength of relationship not only influences the behavior of word-of-mouth communication between individuals<sup>[3]</sup>, but also the strength of the messages they convey about consumer behavior<sup>[4]</sup>. IWOM is based on social networks, evolved from traditional word of mouth in the social media environment, and is a form of social capital. With the prevalence of social media, IWOM not only plays an important role in consumers' buying decision process, but also an important way for merchants to attract and retain customers.

### **2.1.2. Purchase intention**

The concept of purchase intention is generally considered to be the probability of consumers' willingness to assume a specific purchase behavior. Mullet believes that the consumers' attitude toward a product or brand, along with the effect of external factors, constitutes consumers' purchase intention, which can be regarded as consumers' subjective tendency to choose a specific product; it has been proven to be an important indicator for predicting consumer behavior<sup>[5]</sup>. Dodds argue that purchase intention refers to the subjective probability or likelihood of consumers to purchase a particular product<sup>[6]</sup>, while other scholars argue that purchase intention is the consumers' purchase plan for a particular product. According to Schiffma and Kanuk, purchase intention is a measure of the likelihood that a consumer will purchase a product<sup>[7]</sup>. In short, purchase intention measures the likelihood of consumers to purchase a certain good and represents the subjective tendency of consumers to purchase.

### **2.1.3. Perceived risk**

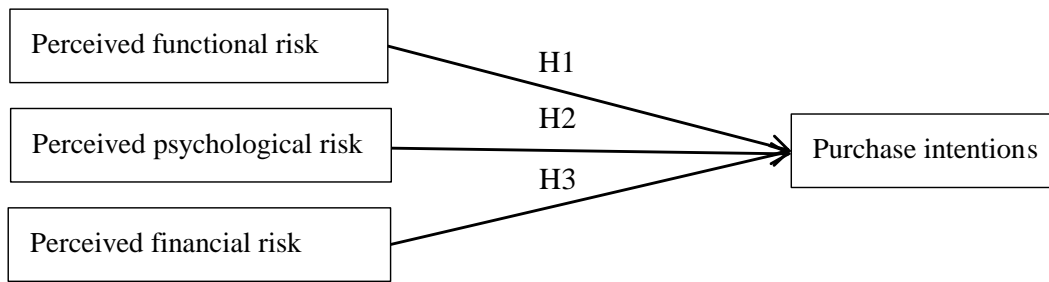
Perception, as an important intermediate state variable in consumers' buying process, is an antecedent influencing purchase intention<sup>[8]</sup>. The concept of perceived risk was introduced by Bauer in 1960, who argued that the uncertainty of the purchase outcome is implicit in every purchase decision made by consumers, and that this uncertainty is the risk perceived by consumers<sup>[9]</sup>. Jing Miao and several other scholars classified the perceived risk of consumers in the online shopping process into eight dimensions; namely, functional risk, psychological risk, financial risk, time risk, social risk, privacy risk, physical risk, and service risk<sup>[10]</sup>. Among them, this paper focuses on the perceived functional risk, perceived psychological risk, and perceived financial risk<sup>[11]</sup>.

- (1) Perceived functional risk: the risk that a product does not perform as well as one would expect or that the product performs worse than its competitors.
- (2) Perceived psychological risk: the risk of self-inflicted emotional harm among consumers due to poor decision-making.
- (3) Perceived financial risk: the risk of financial loss due to overpricing of products or quality problems with products.

## **2.2. Research hypothesis**

The consumers' purchase intention of a restaurant under IWOM is influenced by a number of factors<sup>[12]</sup>, including consumers' perceptions of the restaurant's food, their own psychological perceptions of the restaurant's brand, and their consumption situation. This study makes several assumptions (**Figure 1**).

- (1) H1: Perceived functional risk has a negative effect on the purchase intentions of the restaurant's food.
- (2) H2: Perceived psychological risk has a negative effect on the purchase intentions of the restaurant's food.
- (3) H3: Perceived financial risk has a negative effect on the purchase intentions of the restaurant's food.



**Figure 1.** Research structure of food consumption decision behavior

### 3. Data analysis and results

#### 3.1. Qualitative analysis

##### 3.1.1. Interviews

Prior to the study, nine consumers were interviewed, and the interview questions were used to compare the impact of IWOM on restaurant brands and to explore consumer thoughts from three perspectives <sup>[13]</sup>: perceived functional risk, perceived psychological risk, and perceived financial risk. The interview questions are shown in the **Table 1**.

**Table 1.** Interview questions

Number	Questions
1	What did you think of PANGGELIA before you read the negative reviews about it?
2	Have you changed your perception of PANGGELIA after reading the negative reviews?
3	Have you changed your perception of the brand PANGGELIA after reading the negative reviews?
4	How have you changed your spending behavior after reading the negative reviews about PANGGELIA?
5	What do you think of PANGGELIA after reading the negative reviews on the internet? How has it affected your spending?

##### 3.1.2. Sentiment analysis

The responses to questions 1 and 5 were imported into NVivo 12.0 for sentiment analysis. The findings revealed that the sentiment of consumers was mixed and positive before the appearance of negative IWOM; however, with negative IWOM, the consumers' sentiment appeared negative. This shows that negative IWOM has a negative impact on consumers' purchase intention <sup>[14]</sup>.

##### 3.1.3. Coding analysis

By automatically and manually coding questions 2, 3, and 4, the corresponding perceived functional risk, perceived psychological risk, and perceived financial risk were derived as shown in **Table 2**. The questionnaire was designed based on the resulting conceptions.

**Table 2.** Code table

Variant	Conception
Perceived functional risk	Problems, Negative reviews, Ingredients
Perceived psychological risk	Security, Dishes, Psychology, Feelings, Degree
Perceived financial risk	Additional overhead, Prices

## 3.2. Quantitative analysis

### 3.2.1. Questionnaire design and statistical data

The questionnaire was designed and constructed around the qualitative analysis components, and the main part was measured using a 5-point Likert scale. The data were collected through online research, with a total of 390 questionnaires collected. A total of 330 questionnaires were tested to be valid; hence, all 330 valid questionnaires were included in the data analysis. The validity of the questionnaire was 84.62%.

### 3.2.2. Descriptive statistical analysis

As shown in **Table 3**, the proportion of male respondents was 17.95%, while that of female respondents was 82.05%, indicating that the consumer group is mostly composed of women. In terms of consumption level, more than half of the consumers were in the 1,000-2,000 and 2,001-3,000 RMB ranges, which is still at a low level overall, suggesting that perceived financial risk may indeed have a favorable influence on reducing purchase intentions. The fact that 330 out of 390 consumers in the survey have eaten PANGGELIA reflects the product's popularity.

**Table 3.** Sample characteristics

Variable name	Variable options	Frequency	Percentage (%)
Gender	Male	70	17.95%
	Female	320	82.05%
Level of consumption	Less than 1,000	59	15.12%
	1,000-2,000	130	33.33%
	2,001-3,000	140	35.9%
	3,000 or more	61	15.38%
Have you ever eaten?	Yes	328	84.10%
	No	62	15.90%

### 3.2.3. Reliability analysis

The Cronbach's alpha reliability coefficient is the most commonly used reliability coefficient. Its formula is as follows:

$$\alpha = (k / (k-1)) * (1 - (Si^2) / ST^2)$$

As can be seen from the formula, the alpha coefficient evaluates the consistency between the scores of the items in the scale, and it is an internal consistency coefficient. This method is applicable to analyzing the reliability of attitude and opinion-based questionnaires (scales). A reliability coefficient of 0.8 or higher is desirable for the total scale, with 0.7-0.8 being acceptable; a reliability coefficient of 0.7 or higher is desirable for the subscales, with 0.6-0.7 being acceptable.

**Table 4.** Reliability analysis of the questionnaire

Conception	CITC	Cronbach's $\alpha$
Problems	0.812	
Negative reviews	0.770	
Ingredients	0.626	
Security	0.759	
Dishes	0.873	0.927
Psychology	0.874	
Feelings	0.730	
Degree	0.777	
Additional overhead	0.636	
Prices	0.743	

From the **Table 4**, it can be seen that the reliability coefficient is 0.927, which is greater than 0.9, suggesting that the reliability of the study data is of high quality. For the "CITC value," the CITC values of the analyzed items were all greater than 0.4, indicating that there is a good correlation between the analyzed items and also a good level of reliability. In short, the reliability coefficient values of the data were noted to be above 0.9, which collectively indicates that the data are of high quality and can be used for further analysis.

### 3.2.4. Path analysis

The path analysis is used to evaluate causal models and to verify hypotheses. The model is first built, and the model fit structure is assessed, along with the significance of regression coefficients, etc. Then, the model is adjusted, and if the fit indicators do not meet the standards, the model requires readjustments until the fit indicators are within the standard range. The model is finally analyzed. The model is analyzed and explained in detail after the model fit indexes meet the criteria.

**Table 5.** Path analysis model regression

	SE	z	p	Path coefficient
<b>H1</b>	0.123	-1.993	0.046	-0.328
<b>H2</b>	0.098	-2.101	0.036	-0.344
<b>H3</b>	0.073	-3.387	0.001	-0.508

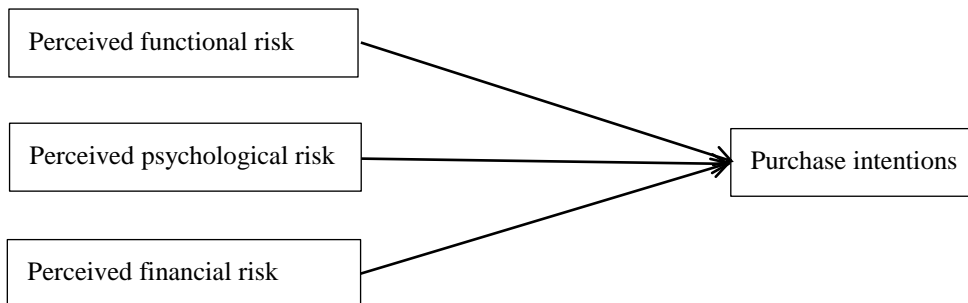
As shown in the **Table 5**, the data were coded and analyzed for perceived functional risk, perceived psychological risk, and perceived financial risk. From the above table, it can be seen that the standardized path coefficient values of H1, H2, and H3 are -0.328, -0.344, and -0.508, respectively, and the paths show significance at 0.05, 0.05, and 0.01 levels, respectively; the standardized path coefficients were all less than zero, indicating that the perceived functional risk, perceived psychological risk, and perceived financial risk have a significant negative relationship with purchase intentions.

## 4. Conclusion and recommendations

### 4.1. Research findings

According to the path analysis as shown in **Figure 2**, perceived functional risk, perceived psychological risk, and perceived financial risk all play a negative role for the purchase intentions of the restaurant's food.

Accordingly, a path diagram is derived, and it can be concluded that consumers' perceived functional risk, psychological perception, and financial perception of the restaurant's food under negative IWOM reduce purchase intentions.



**Figure 2.** Structural equation path model

## 4.2. Insights and recommendations

Based on the results of this study, this paper argues that if food and beverage (F&B) companies wish to have long-term growth, they must focus on improving positive word of mouth, while recognizing the significant influence of social media networks on corporate value in the contemporary word-of-mouth marketing effect and ensuring the core element of F&B companies – brand quality. Therefore, three recommendations are made.

### 4.2.1. Increase positive word of mouth

The homogeneity of the catering industry and the low threshold for entry make it impossible for consumers to judge the quality and taste of thousands of restaurants and their food; hence, they often make their choices based on word of mouth. In this context, word-of-mouth marketing has become one of the promotion methods that catering companies must implement nowadays <sup>[15]</sup>. In order to ensure long-term growth, catering enterprises, such as PANGGELIA, must enhance positive word of mouth, which breaks the homogeneity in the corporate environment, taste, and service, as well as establish positive word of mouth to reshape consumers' trust toward these enterprises <sup>[16]</sup>.

### 4.2.2. Focus on the power of the network

The influence of social networks on F&B companies, such as PANGGELIA, is growing. The internet can amplify positive word-of-mouth marketing, creating an “internet celebrity” type of restaurant that is blindly sought after by consumers. However, it may also amplify the influence of negative word of mouth, making the negative reviews of a restaurant more intense and widespread <sup>[17]</sup>. Hence, it is important to pay attention to the extreme impact of the power of the internet <sup>[18]</sup>, increase positive word of mouth and reduce negative word of mouth through online channels <sup>[19]</sup>, as well as implicitly build or re-build consumer trust toward catering companies on social networks.

### 4.2.3. Focus on brand quality

At the end of the day, the essence of a catering company's growth is still its brand quality, and no matter how well word-of-mouth marketing is done, it falls back on its brand quality. Only if the brand quality is up to mark will consumers be willing to try or return; as long as the brand quality is up to mark <sup>[20]</sup>, positive word of mouth will follow and negative word of mouth will gradually disappear.

## Disclosure statement

The author declares no conflict of interest.

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