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# **Research on User Emotion Marketing in Internet Environment**

Junjie Zhao (Corresponding Author)

School of Business Management, Anhui University of Finance & Economics, bengbu 233030, China Email: <a href="mailto:zhaozjj@126.com">zhaozjj@126.com</a>

#### Pingshui Wang

School of Management Science and Engineering, Anhui University of Finance & Economics, Bengbu 233030, China

## Peigang Liu

School of Business Management, Anhui University of Finance & Economics, bengbu 233030, China

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# **Abstract**

Emotional marketing is consistent with the trend of "product-centered" to "user-centered" marketing. In the past, marketing was more concerned about the function of products. Now, it is based on users' emotions and humanistic care to achieve marketing purposes. According to data, more than 80% of purchases are based on emotional emotions rather than rational logic, and most purchases are triggered by emotions. Users also have different reactions to marketing information under different emotions. The emotional response degree of female customers is stronger than that of male customers in both positive and negative states. If you can sense whether the user is in a positive or negative emotional state, then consider whether to promote or not, otherwise little effect.

**Keywords:** Internet; Emotions; Emotional marketing; Weibo.

#### 1. Introduction

Emotion is a complex psychological state that is distinct from the other three key variables in psychology, namely cognition and judgment. As a hot spot in psychological research, emotion has been applied to a variety of research fields. Therefore, different scholars put forward different definitions from different perspectives. In Emotional Psychology, the emotional psychologist K.T. Stallman summarized the views of predecessors, believing that emotion is a feeling produced by people in a specific situation accompanied by external reactions of other parts of the body (such as changes in facial expressions) (Akpinar and Berger, 2017). In the field of information management, Soussan Djamasbi and DianeM. Strong defined emotion as a kind of psychological feeling caused by specific external factors with a short existence and Strong effect (Berger, 2011) when they investigated the influence of emotion on users' behavior of adopting DSS. There are various emotions, which can be divided into positive emotion and negative emotion according to their valence. Positive emotions are those that give people a broad sense of pleasure. Positive emotions can promote people's cognition and behavior, and make people have a more "accepting" attitude and tendency towards things. According to the view of emotional consistency, people's thoughts and emotions are matched in valence, that is, people in a positive mood tend to make a better evaluation of things; People in a negative mood tend to make negative comments on things (Le Guoan and Dong Yinghong, 2013). In addition, the positive Mood theory explains the mechanism of the influence of positive emotions on human attitude and behavior. The theory suggests that the cues that trigger positive emotions are very broad and can trigger other positive emotional material that people already have in their memory. Therefore, when people are in positive emotions, they can access a large number of positive cognitive materials that are closely related to each other, so that positive emotions can promote people's cognition and behavior, and at the same time lead to the amplification of positive emotions (Guo Tingting et al., 2011). Positive emotions can enable people to integrate more new information more effectively and have a clearer understanding of the problems they face, so as to encourage people to conduct exploratory behaviors and improve their intention to try new products (Zhang Hong et al., 2019).

In general, scholars at home and abroad have done a lot of in-depth studies on emotions, but most of them are only studied from the perspective of psychology, and few are combined with marketing. Therefore, there are few studies on emotional marketing as a whole. Emotional marketing includes two aspects: one is the influence of users' emotions on marketing effects; the other is how enterprises' products and brands use users' emotions to select marketing strategies (Li Hong and Liu Feifei, 2018). When "emotional marketing" is used as a keyword in the search of CNKI, only 124 relevant documents are retrieved. Most of them are the choice of marketing strategy for enterprise products and brands combined with users' emotions, and the influence of users' emotions on marketing effect is only studied in the aspect of users' venting emotional consumption. Therefore, this topic is prepared to focus on the impact of users' emotions on the marketing effect and the organic combination of products and emotional marketing.

## 2. User Sentiment Classification

Scholars at home and abroad have a variety of methods to classify user emotions, most of which take knowledge in marketing and psychology as reference. The main classifications are as follows:

Ekman proposed six basic emotions of human beings -- happiness, sadness, fear, anger, surprise and disgust (Ding Xuwu et al., 2014) based on six basic facial expressions of human beings.

Pluchik proposed 8 basic emotions of human beings: happiness versus sadness, anger versus fear, trust versus disgust, surprise versus expectation (Liu Cong et al., 2015).

In addition, relevant studies show that "joy, fear, disgust and anger" are four typical emotions with high arousal, and corporate marketing should pay attention to "joy, fear, disgust and anger" (Xu Xiang, 2017).

In order to comprehensively understand the impact of user emotions on marketing results, this paper classifies user emotions into six categories: happiness, sadness, anger, fear, disgust and surprise based on the viewpoints of domestic and foreign scholars.

# 3. Questionnaire Analysis of the Relationship between User Emotion and Marketing

Data show that more than 80% of purchases are based on emotional emotions rather than rational logic, and most purchases are triggered by emotions (Zhong Yiping et al., 2014). Therefore, users' emotions have a direct impact on the effect of marketing.

#### 3.1. Questionnaire Design

In this paper, 659 questionnaires were distributed and collected by combining online and offline methods. After removing some invalid questionnaires, a total of 648 valid questionnaires were collected. The content of the questionnaire mainly includes: gender, age, and which of the following operations (reading, forwarding, possibly buying, directly ignoring or deleting) are likely to be performed on the product information recommended by merchants under normal circumstances? In the six emotions of happiness, sadness, anger, fear, disgust and surprise, what actions may be done to the product information recommended by the merchant (read, forward, may buy, directly ignore or delete).

#### 3.2. Basic Data Analysis

31.45% of the sample was male; Females account for 68.55%. Their age distribution is shown in Table 1, among which middle-aged and young people account for a larger proportion.

> Table-1. Age distribution Ratio Age 10-20 20.21% 21-30 35.35% 31-40 24.63% 41-50 15.30% 51-60 4.51%

In the questionnaire, "Under normal circumstances, which of the following operations would you do for the product information recommended by the merchant?" The statistical results of this survey option are shown in Table

Table-2. Consumers' reactions to product recommendation information of merchants under normal circumstances

Action	Ratio
Read	64.78%
Forward	5.03%
They are likely to buy	45.91%
were directly ignored or deleted	57.23%

As can be seen from Table 2, under normal circumstances, more than half of the users will read or ignore and delete; Close to half of users are likely to buy; Fewer people have the intention to forward.

Table 3 shows the statistical results of consumers' reactions to product recommendation information under different emotions:

Table-3. Reaction of consumers to product recommendation information of merchants under different emotions

<b>Emotional Categories</b>	Read	Forward	May be Purchased	Directly by Ignoring or	
				Deleting	
Directly by ignoring or deleting	69.95%	6.98%	64.15%	26.42%	
Sadness	19.5%	1.89%	12.58%	89.94%	
Anger	10.69%	3.77%	8.18%	93.71%	
Fear	17.61%	3.14%	10.06%	86.16%	
Disgust	8.18%	1.89%	6.29%	94.97%	
Surprise	52.83%	15.72%	31.45%	52.83%	

As can be seen from Table 3, in the mood of happiness and surprise, the proportion of users who are willing to read is larger than half, and the proportion of users who are likely to buy is also higher. For the other four emotions, the percentage of people willing to read was smaller, less than 20%. It can be seen that under different emotions, users have different reactions to marketing promotion, and users' emotions directly affect the marketing effect.

### 3.3. Crossover Analysis

The gender factor is added here for cross-analysis of statistical results, and the analysis results are shown in Table 4 and Table 5.

Table-4. Reactions of male and female consumers to product recommendation information of merchants in general

X∖Y	Read	Forward	May be Purchased	Directly by Ignoring or Deleting
Male	62%	6%	40%	54%
Female	66.06%	4.59%	48.62%	58.72%

Table-5. Responses of male and female consumers to product recommendation information of merchants under different emotions

Emotional Categories	Read		Forward		May be Purchased		Directly by Ignoring or Deleting	
Gender	Male	Female	Male	Female	Male	Female	Male	Female
Directly by ignoring or deleting	72.02%	68.81%	6.03%	7.34%	52.22%	69.72%	32.15%	23.85%
Sadness	18.23%	20.18%	4.56%	0.92%	18.43%	10.09%	86.36%	91.74%
Anger	8.56%	11.93%	4.33%	3.67%	10.32%	7.34%	90.46%	95.41%
Fear	10.14%	21.10%	2.54%	3.67%	12.12%	9.17%	88.31%	85.32%
Disgust	8.32%	8.26%	0.15%	2.75%	8.23%	5.50%	94.25%	95.41%
Surprise	50.22%	54.13%	18.24%	14.68%	28.56%	33.03%	56.74%	51.38%

As can be seen from Table 4, there is no significant difference in the statistical results of male and female users' response to product recommendation information of merchants in general. The statistical results in Table 5 show that under the mood of happiness and surprise, female users have higher shopping intention than male users. Women were less likely than men to buy when they were feeling sad, angry, fearful or disgusted. This indicates that female users have slightly stronger responses to marketing messages than male users under different emotions.

## 4. Experimental Design and Analysis Based on Weibo Platform

The expression of users' emotions has changed dramatically in recent years. The rapid development of the Internet makes the expression and transmission of users' emotions constantly evolve. The continuous innovation of media makes the channels for users to express their emotions more abundant, more diversified, and more free in time and space. In view of this series of changes in user emotion expression, we believe that we should pay attention to the research on the impact of user emotion on marketing effect. In this paper, the influence of different emotions of Internet users on marketing effect is tested and compared with the results of offline questionnaire survey to further verify and illustrate the conclusion that different emotions of users have an impact on marketing effect.

## 4.1. Experimental Design

Collect information about the customer groups of an enterprise, and judge their emotional states through text orientation analysis according to the information released by users on weibo platform. The specific process is as follows: a large number of microblog texts with emoticons are captured from the microblog platform, and six emotional tendencies are manually annotated according to emoticons to generate an emotional corpus. To participle corpus, to the heavy work such as pretreatment, according to the parts of speech in the micro blog this rule extraction mood word, each emotions word in six kinds of corpus statistics, the number of occurrences of computing mood word card statistics get emotional intensity, according to the mood word in micro blog this probability to determine the orientation of mood word, mood, in turn, generate a dictionary. For the information published by each user's microblog platform, the emotional state is judged according to the emotional dictionary.

#### 4.2. Experimental Data and Results

With the permission of a garment enterprise, 455 member user weibo platforms of the enterprise were visited respectively, among which 348 frequently posted weibo and had relatively complete customer information.41.2 percent of the sample was male; Women accounted for 58.8%. Since some customers do not post their micro-blogs every day, we conducted tests on these customers in two weeks. That is, we collected their micro-blog content, judged their emotional state, and pushed marketing information to them. Two weeks later, I made a statistical summary of all customer responses, such as clicking links to view, forward, comment, etc.

Due to the short collection period, there are few samples of fear emotion in the collected samples, so the results of such emotional reaction are not included in the statistics. The other five emotions all had a distribution of more than 10%, which allowed for normal statistical analysis.

Tab.6 shows the statistical results of consumers' reactions to product recommendation information under different emotions on Weibo platform:

Table-6. Reaction of consumers to product recommendation information of merchants under different emotions							
<b>Emotional Categories</b>	Forward	May be Purchased	Directly by Ignoring or Deleting				
Sadness	7.95%	64.26%	24.11%				
Anger	2.56%	12.29%	85.39%				
Fear	4.68%	8.15%	91.26%				
Disgust	2.56%	6.39%	95.12%				
Surprise	16 15%	27 14%	46 75%				

Table-6. Reaction of consumers to product recommendation information of merchants under different emotions

The data in Table 6 are similar to those in Table 3, indicating that Internet users have different responses to marketing information under different emotions, and the conclusions are basically consistent with the statistical results of offline questionnaires.

The statistical results were further cross-analyzed using gender factors, and the statistical results are shown in Table 7.

Emotional Categories	Read		Forward		May be Purchased		Directly by Ignoring or Deleting	
Gender	Male	Female	Male	Female	Male	Female	Male	Female
directly by ignoring or deleting	69.55%	70.12%	5.21%	8.56%	52.35%	67.86%	30.26%	22.65%
Sadness	19.46%	21.57%	3.16%	2.05%	15.85%	9.46%	75.65%	88.32%
Anger	6.38%	9.56%	6.21%	3.12%	12.06%	4.95%	87.25%	93.19%
Fear	8.17%	11.26%	2.06%	2.75%	8.26%	5.52%	94.25%	95.41%
Disgust	59.26%	60.47%	15.71%	16.32%	22.89%	29.12%	49.68%	44.59%

Table-7. Consumers' reactions to product recommendation information under different emotions

The data proportion in Table 7 is different from that in Table 5. It can also be concluded that female customers' emotional response is stronger than male customers in both positive and negative states.

Through offline questionnaire analysis and online actual test, it is shown that users react differently to marketing information under different emotions, and the marketing effect is better under the mood of happiness and surprise. In the mood of sadness, anger, disgust and fear, marketing is much less effective. Therefore, if you can perceive the emotional state of users, then consider whether to carry out marketing promotion. When the user is happy and other positive emotions, the effect is better; For sadness and other negative emotions, the effect is poor.

#### 5. Conclusion

In fact, emotional marketing dovetail with the shift from "product-centric" to "user-centric" marketing. In the past, marketing focused more on the functional level of products, but now, with users as the core, marketing aims are achieved based on users' emotions and humanistic care. Users have different reactions to marketing information under different emotions. Female customers' emotional reactions are stronger than male customers in both positive and negative states. If you can sense whether users are in a positive or negative emotional state, then consider whether to carry out marketing, otherwise it will have little effect.

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#### Remark

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About the author:

Zhao Junjie (1973-), male, Han nationality, suzhou, Anhui, Associate professor, master, engaged in data mining and e-commerce research; Email: zhaozjj@126.com, phone: 13053112809

Wang pingshui(1972-),male,Han nationality, suzhou, Anhui,Professor, ph. D. Research interests: Network security, cryptography;

Liu Peigang (1964-), male, Han nationality, Xinyang, Henan province, Associate professor, bachelor, director of E-commerce Laboratory, School of Business Administration.