

# Research on Customer Satisfaction of e-Commerce Based on Content Analysis of Network Comments

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**Abstract:** with the Development of Network Technology, More and More People Begin to Use Online Transaction to Do Online Shopping. Therefore, in This Environment, Customer Satisfaction and Customer Loyalty Are Particularly Important for the Development and Decision-Making of Enterprises and the Development of e-Commerce. This Paper Discusses the New Characteristics of Customer Demand in e-Commerce Environment, the General Situation of Customer Satisfaction, the Evaluation System of Customer Satisfaction in e-Commerce Environment, the Empirical Analysis of Customer Satisfaction in e-Commerce Enterprises and the Improvement of Customer Satisfaction.

## 1. Introduction

With the Development of e-Commerce, Online Shopping Has Been Replaced by the Traditional Way of Shopping, Which Has Changed the Traditional Way of Sales. This Makes It More Convenient for Customers to Shop, and the Enterprise's Business Methods Gradually Change, and Gradually Explore. the Emergence of e-Commerce is Accompanied by Fierce Market Competition. That is the Competition between Big Enterprises and Big Enterprises, and Small and Medium-Sized Enterprises Can Also Share. At This Time, How to Let Enterprises Develop Their Own Advantages, Seek Innovation and Maximize the Benefits is a Problem That All Enterprises Should Face and Think about. This Problem Requires the Enterprise to Be Loyal to the Enterprise, Make the Enterprise Responsible for Customers and Customers, and Increase Customer Value and Customer Satisfaction as Much as Possible. with the Rapid Development of the Internet, the Internet Information Has Exploded. Taobao.com, Jingdong.com, Amazon.com and Other Internet e-Commerce Websites Are Developing Rapidly. They Regularly Hold Shopping Festivals to Attract a Large Number of Users to Shop Online. Nowadays, Online Shopping Has Become a Trend. These e-Commerce Sites Have a Large Number of Products and a Huge User Base. They Really Turned Traditional Offline Purchases into Online Transactions[1]. Online Transactions Provide Convenience for Users, Overcome Geographical Restrictions, and Provide Convenience for Customers Who Buy Across Regions, So That Users Can Buy Their Favorite Items At Home. for the Sake of Users, Almost All Users Should Pay Attention to the Quality of Products and Understand the User Evaluation of Products Before They Buy Products At First. However, the Main Problem Users Face is That There is a Large Number of Products, and According to the Amount of All Products, It is Very Huge. According to the Product Reviews, Users Can Judge Whether a Product Wants to Be Qualitative[2]. This is a Huge Time and Labor Cost of Users' Consumption, Which Affects the Timeliness of Users' Purchase. in Addition, If the Product is Not Satisfied, Users May Have an Impact on Satisfaction. for Manufacturers, They Can't Understand Their Customers' Dissatisfaction and Demand through This Majority of User Comments.

## 2. Overview of Customer Satisfaction in e-Commerce Environment

In the traditional shopping mode, customer satisfaction theory plays a leading role in the whole competitive market. Through the investigation of customer satisfaction, the gap among

manufacturers, sellers and customers can be partially eliminated, so as to improve production, improvement, sales, management and customer satisfaction[3]. Under the environment of e-commerce, most of the decision-making information of an enterprise is the transaction activities of network customers and enterprises, the feedback of customers on products and services, or the online survey of enterprises from customers through the network, so as to get the evaluation of general customer satisfaction. Enterprises can improve these problems and provide customers with products that meet customer needs, quality assurance, timely delivery and appropriate price[4]. Further improve service attitude and realize customer value. user evaluation information is the first feedback of users after using and experiencing the product, and has a good mining value. It's unwise not to use that. It is difficult to analyze these text data for the birth of Web information mining. Therefore, in recent years, network information mining has been widely concerned by computer science, economics, management and other related fields. As a comment mining or opinion mining, it also knows to analyze the automatic analysis of the text content of a specific product comment as a reference, from the user's emotional tendency to extract the text from the emotional trend, as a fuzzy product, it reflects the user's attitude and the degree of criticism. According to the results of the mining and using analysis of the product review information on the Internet, users can choose the best purchase decision if they have ambiguous attitude towards the product or whether they understand the degree of derogatory fuzzy contempt. In addition, the attitude and opinions of users are analyzed[5]. Therefore, the manufacturer also understands the needs of users and the defects of products, which can be applied to the right medicine. In order to improve the satisfaction of users, improve products, obtain more loyal users and gain competitive advantage. Compared with the traditional research methods, emotion analysis usually combines machine learning, data mining, text mining to analyze the user's emotion, and provides real-time user's emotion analysis. Moreover, it has the advantages of less time cost and convenient operation.

### 3. New Features of Customer Demand in e-Commerce Environment

#### 3.1 Wide Range of Options

Limit the place, time and product category of customers in traditional shopping mode. In the e-commerce environment, customers can choose any product online for comparison through the Internet at any time, so as to make more reasonable consumption behavior.

Table 1 Conditional Probability Of Appearance

Parent satisfaction	Probability			
	2	3	4	5
1	0.00	1.00	0.00	0.00
2	0.00	1.00	0.00	0.00
3	0.09	0.82	0.09	0.00
4	0.02	0.61	0.13	0.24
5	0.00	0.73	0.14	0.13

#### 3.2 Personalization and Diversification

Before the development of the Internet, people's information was blocked, and their thoughts were still single. People had less requirements for products, and they bought products more evenly[6]. However, with the development of society and technology, people's living standards are gradually improving, more and more channels are used by news, and their ideas have changed dramatically. Consumer demand has shifted from low-cost to personalized and diversified. In the e-commerce environment, enterprises can customize various products according to customer needs.

#### 3.3 Timeliness

With the development of e-commerce, customers' needs are met in time. Customers can bypass many intermediate links and communicate with enterprises. Customers can pass on their own needs through feedback and exchange with enterprises so as to meet them within a certain period of time.

## 4. Evaluation Index System of Customer Satisfaction in e-Commerce Environment

### 4.1 Establishment of Customer Satisfaction Index System

The purpose of establishing customer satisfaction evaluation system is to help enterprises understand customers' actual ideas, needs and expectations in a timely and correct way, so as to provide satisfactory products and services[7]. Please avoid the waste of enterprise resources caused by blind management. It is beneficial to provide the basis and guidance for the fair and objective evaluation of customer satisfaction. It can continuously improve and improve the customer satisfaction of enterprises, so as to establish higher customer loyalty and help to realize the long-term interests of enterprises.

The basic principles of establishing customer satisfaction evaluation system: importance principle; importance principle; operability principle[8]; economy principle; comprehensiveness principle; controllability principle and relative stability principle

China's satisfaction evaluation system is based on the new characteristics of e-commerce environment based on customer demand, the expected quality Bureau, perceived product quality, perceived service quality, perceived value, user satisfaction, user complaints, and user loyalty. It is for the calculation of consumer satisfaction index of products.

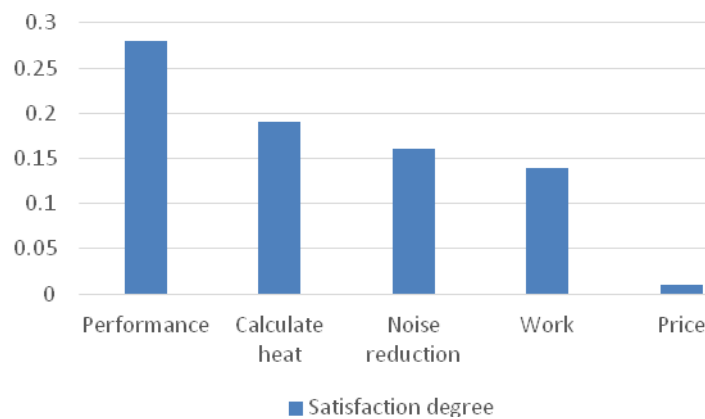


Fig.1 Table of Importance Degree of Each Prediction Variable

### 4.2 Implementation of Customer Satisfaction Index System

The implementation of customer satisfaction evaluation, first of all, is the quantitative indicators of the characteristics of the enterprise, and the decision of objectification, evaluation, implementation of questionnaire survey methods, surveys, etc[9]. to find appropriate methods, the survey data after the survey simplifies customer satisfaction indicators, please calculate, analyze and evaluate.

## 5. An Empirical Analysis on Customer Satisfaction of Alibaba e-Commerce Company

### 5.1 Current Situation of the Company

Alibaba is the world's first commercial website, with a famous global e-commerce brand and 1 million businesses. It integrates B 2B, C 2c, search engine and portal well. There are now four main business groups: Alibaba (B2B), Taobao (2C), YAHOO (search engine) and Alipay (electronic payment). He was named one of the top five Internet business types by the media. However, due to too much and complex information, there are problems that cannot be applied in time.

### 5.2 Customer Satisfaction Evaluation

Because Alibaba has a wide range of customers, we analyzed the establishment and implementation of the evaluation index system, product transaction records, customer opinions, feedback on products and services, and questionnaire survey of the enterprise. Enterprises can obtain commodity demand directly through the transaction records of various products. This is more

objective through the feedback of customers' opinions, products and services. Questionnaire survey method, that is, online survey, online survey, visitors can directly fill in and submit. After the statistical analysis of staff questionnaire, experts, experts and customers scored. Level: very dissatisfied (20 points), dissatisfied (40 points), average (60 points), satisfied (80 points), very satisfied. The score value of each level is given, as shown in the above table, and different weight values are determined according to the importance of the impact of each index on customer satisfaction. According to the survey analysis and customer satisfaction index and its weight calculation, the company's customer satisfaction score is 78.5 points. Customers are generally satisfied and need continuous improvement.

### **5.3 Improve Customer Satisfaction**

Customer satisfaction determines customer satisfaction. Therefore, in order to improve customer value and customer satisfaction, customer exchange forum and QQ group can establish communication according to customers' needs, understand customers' ideas in time, improve and provide personalized products and customers' interests and mutual responsibilities; in order to facilitate customers' reading and organize product information in time.

## **6. Conclusion**

The continuous development of network technology has also changed the traditional business model. In different environments, the emergence of e-commerce model leads to new methods of calculating and evaluating customer value. In the fierce competition environment, in order to seek long-term development alone, enterprises improve their competitiveness and open up new markets. More and more enterprises use e-commerce to achieve business. E-commerce is rooted in customer value, which is closely related to customer satisfaction. Therefore, how to obtain customer satisfaction, evaluation and use is the concern of all enterprises. Adhering to the concept of "customer-centered", improving customer satisfaction, increasing customer value and improving customer loyalty will bring huge economic benefits to enterprises.

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