The 15th BENJAMIT Network National & International Conference

The 15th BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand

May 15, 2025

The Impact of E-commerce Platform User Reviews on Consumer Purchasing Intention -- Taking Taobao as an Example, China

Hao Li[1], Ampol Navavongsathian[2]

[1-2]MBA Program, Faculty of Accounting and management science, Southeast Bangkok University, Thailand,
[2]siriporn@southeast.ac.th

Abstract

With the rapid development of e-commerce and the change of consumer decision-making patterns, user reviews have become the core information medium connecting merchants and consumers, directly affecting purchasing behavior and market trust. The scale of global e-commerce transactions continues to rise, but challenges such as information asymmetry, evaluation authenticity and dynamic feedback mechanism still restrict consumer decision-making efficiency and the healthy development of platform ecology. This study takes Taobao platform users as the object and systematically explores the impact mechanism of the number, timeliness and specificity of user reviews on consumer purchase intention. 323 valid sample data were collected through questionnaire survey method. Combined with information processing theory, social identity theory and signaling theory, multiple regression analysis was used to verify the correlation between variables.

The results show that the timeliness of user reviews has the most significant impact on purchase intention (Beta=0.39), followed by the specificity of the reviews (Beta=0.36), and the impact of the number of reviews is relatively weak (Beta=0.21). The study further reveals the synergistic mechanism of the evaluation system by reducing information asymmetry, reducing perceived risk and enhancing social identity. Among them, the timeliness evaluation dynamically reflects the product iteration status, the specificity evaluation improves trust through multimedia content, and the number of reviews needs to balance quality and credibility. Based on the conclusions, this paper proposes suggestions such as optimizing platform evaluation display rules, encouraging high-quality evaluation generation, and strengthening the governance of false evaluations, providing theoretical and practical guidance for e-commerce platforms, merchants, and consumers.

Keywords: User evaluation, Purchase intention, E-commerce platform; Information asymmetry

Background and Statement of the problem

With the rapid development of Internet technology, e-commerce (E-commerce) has become an indispensable part of modern business activities. E-commerce platforms such as Taobao, JD.com, and Amazon have not only changed the traditional way of shopping, but also greatly enriched consumers' choices. According to Statista data, global e-commerce sales are expected to reach 6.3 trillion US dollars in 2023, accounting for 20% of global retail sales (Statista, 2023). In this context, the user evaluation system of e-commerce platforms, as an important bridge connecting consumers and merchants, has increasingly attracted the attention of academia and industry for its impact on consumers' willingness to buy.

In recent years, there has been an increasing number of studies on the impact of user evaluations of e-commerce platforms on consumers' willingness to buy. Through empirical research, it is found that the quantity and quality of user evaluations have a significant impact on consumers' purchasing decisions. Chen and Lan (2022)'s research shows that negative evaluations have a much greater impact on consumers' willingness to buy than positive evaluations. In addition, Bok. (2023)'s research pointed out that the user evaluation system of e-commerce platforms can be optimized through algorithms to further improve user experience and willingness to buy.

Importance of user reviews on e-commerce platforms

User reviews are the evaluations and feedback of products by consumers based on their own experience after purchasing products on e-commerce platforms. User reviews are an important source of information

The 15th BENJAMIT Network National & International Conference

The 15th BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

on e-commerce platforms, which can influence consumers' purchasing decisions. User reviews can provide actual product experience and help consumers evaluate the quality, performance and applicability of products. These reviews include not only text descriptions, but also ratings, pictures and videos. The importance of user reviews is reflected in the following aspects:

Information transparency: User reviews provide potential consumers with real product experience and help them make more informed purchasing decisions.

Trust building: Positive reviews can enhance consumers' trust in products and merchants, thereby increasing their willingness to buy.

Market competition: Merchants understand market demand and consumer preferences through user reviews, thereby improving products and services and enhancing market competitiveness.

Theoretical significance: This study will enrich and improve the relevant theories on the impact of e-commerce platform user reviews on consumer behavior and provide reference for subsequent research.

Practical significance: The research results can help e-commerce platforms and merchants better understand the role of user reviews, thereby optimizing the evaluation system and improving user satisfaction and purchase conversion rate.

In today's digital age, e-commerce platforms have become one of the main channels for consumers to shop. Among them, Taobao, as China's largest e-commerce platform, has a huge user base and rich product categories. In such an information-intensive environment, user reviews have become an important basis for consumers to make purchasing decisions. With the continuous development of e-commerce, the importance of user reviews has become increasingly prominent. Platforms and merchants are in urgent need of understanding how to better use user reviews to improve their competitiveness. This study can respond to this industry demand and provide them with empirical evidence and decision-making support. However, although there have been many studies on user reviews, there are still deficiencies in research on the Taobao platform and detailed analysis of evaluation content. The authenticity and objectivity of user reviews and their specific impact mechanism on consumers' purchase intention are still issues worthy of in-depth discussion. This study aims to reveal how user reviews on the Taobao platform affect consumers' purchase intention and analyze the key influencing factors, so as to provide valuable suggestions for e-commerce platforms and merchants, help them better understand the role of user reviews, and thus optimize the evaluation system and improve user satisfaction and purchase conversion rate. Therefore, in-depth research on the impact mechanism of user reviews on consumers' purchase intention can fill in and contribute to academic research in related fields, and has important theoretical and practical significance for e-commerce platforms to optimize user experience and improve sales performance.

Objective

1. To study the quantity of evaluations, the timing of evaluations, the specificity of evaluations.

2. To study the quantity of evaluations, the timing of evaluations, the specificity of evaluations Impact on consumer purchase intention -- Taking Taobao as an example,China.
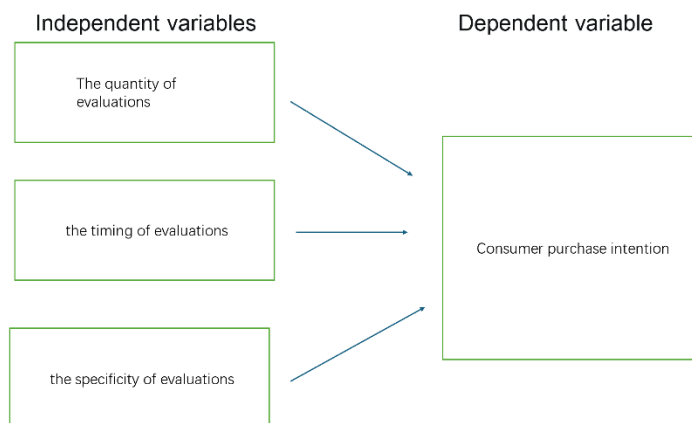
Expected benefits

For e-commerce platforms: This study can provide valuable decision-making support for e-commerce platforms. Enrich the theoretical system of user reviews on e-commerce platforms. Provide e-commerce platforms with theoretical basis and practical guidance for user review management. Help e-commerce platforms optimize the design direction of their evaluation systems and improve user experience and user satisfaction.

For consumers: This study will provide valuable reference for consumers to choose to buy goods. Help consumers to view evaluation information more rationally and make more informed purchasing decisions.

For merchants: This study will provide merchants with targeted marketing strategy suggestions. Merchants can manage user reviews more targeted, improve product and service quality, and help merchants attract more consumers. Improve user satisfaction and purchase conversion rate.

For society: Promote the establishment of trust between e-commerce platforms and consumers, enhance interactivity, and promote the healthy development of the e-commerce industry.

The 15ᵗʰ BENJAMIT Network National & International Conference

The 15ᵗʰ BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

Conceptual Framework

Research Methodology

The theme of this research is "The impact of e-commerce platform user reviews on consumer purchasing intention". This study was a survey study. The author had determined the methods of conducting this studies in order as follows:

1. Population and Sample
   (1) The population is All consumers using Taobao platform in 2024.
   (2) The sample is 323 users randomly selected from the user database of the Taobao platform. The sample were measured using Cochran formula, and a Convenience sampling method was used (Cochran formula,1977).

$$n = P(1-P)Z^2/d^2$$
$$= 0.3（1-0.3 (1.96)^2/(0.05)^2$$
$$= 323$$

   The time range adopted by the study is from October 2024 to February 2025.

2. Research tools

To gather pertinent information from participants, a survey methodology was employed with a structured questionnaire. The questionnaire, comprising three sections, covered Demographic Information in part one. This part included questions related to gender, age, Years of shopping, number of purchases per month, and monthly income, each offering 4 alternative options. The subsequent sections elicited responses on the quantity of evaluations (5 questions), the timing of evaluations (5 questions), the specificity of evaluations (5 questions). Part three was consumer purchase intention. (5 questions). Part two and part three used a five-level Likert scale to measure the responses of each factor in the study. The five-point scale from 1 to 5, from low to high, indicates: 1 = strongly disagree, 2= disagree, 3 = Neutral, 4 = agree, and 5 = strongly agree

3. Research step

The author conducted a comprehensive examination of the research instruments through the following steps:

Initial Draft: The author sent the draft questionnaires to the advisor to assess their suitability. These questionnaires covered dimensions on the quantity of evaluations, the timing of evaluations, the specificity of evaluations, consumer purchase intention, necessitating a thorough evaluation of their quality.

Revision: Upon receiving feedback from the advisor, the author revised the draft questionnaires accordingly.

Expert Evaluation: The revised draft questionnaires were then sent to three experts for assessment of content validity. The experts analyzed the Index of Congruence (IOC) between the content and questionnaires used in the study. Questions with an index of consistency falling within the range of 0.67 to 1.00 were selected (Leekitchwatana, 2022).

The 15ᵗʰ BENJAMIT Network National & International Conference

The 15ᵗʰ BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

Expert Feedback: Following the evaluation by the three experts, the author revised the draft questionnaires based on their recommendations.

Pilot Testing: The revised questionnaires were piloted with a non-study sampling group comprising teachers. These questionnaires were then analyzed for reliability using Cronbach's coefficient alpha.

Reliability Testing

Cronbach's coefficient alpha was employed to assess the reliability of the research instruments. Acceptable values for the sample group are typically set at 0.7-0.9, indicative of a sufficiently reliable scale. As depicted in Table 1, all estimates of Cronbach's alpha for independent variables exceeded 0.7. Specifically, the Cronbach's alpha coefficients for the quantity of evaluations, the timing of evaluations, the specificity of evaluations, consumer purchase intention were 0.76, 0.72, 0.71, and 0.73, respectively. These results demonstrate that the responses for each variable successfully passed the reliability test, affirming the overall internal consistency and reliability of the questionnaire data as shown in Table 1.

Table 1 overall internal consistency and reliability of the questionnaire data.

Variables	Cronbach's Alpha	N of items
The quantity of evaluations	0.76	5
The timing of evaluations	0.72	5
The specificity of evaluations	0.71	5
The consumer purchase intention	0.73	5

4. Data collection

A total of 323 questionnaires were distributed and 323 questionnaires were recovered, of which 323 were valid questionnaires, with an overall effective recovery rate of 100%.

5. Data Analysis

The author utilized a computer package to analyze the data as outlined below:

Part 1: Personal information factors of the respondents, including gender, age, Years of shopping, number of purchases per month, and monthly income.

Parts 2 and 3: These sections encompassed the subsequent sections elicited responses on the quantity of evaluations the timing of evaluations, the specificity of evaluations. on consumer purchase intention. Mean and standard deviation values were employed as criteria for analysis (Leekitchwatana, 2022).

6. Statistics used in data analysis

Following data collection, this study utilized statistical software to conduct comprehensive data analysis. The specific statistical analysis methods included:

Descriptive Statistics: Descriptive statistics was performed on the data acquired from the questionnaire survey. This included calculating measures such as the mean, standard deviation, frequency, etc., to gain insights into the personal information of the sample and the distribution of variables.

Correlation Analysis: By computing the correlation coefficient between the independent and dependent variables, this analysis explored the relationship between them.

Multiple Linear Regression: Multiple linear regression was employed to establish a relationship between the dependent variable and the independent variables. Tolerance and Variance Inflation Factors (VIF) was utilized to detect multicollinearity within the multiple regression model

Research Results

As can be seen from Table 2, the personal information of 323 Taobao users who answered the questionnaire according to variables are as follows:

1. In terms of gender, the majority of users are female, of whom 107 are male, 33.13%, followed by 216 are female, 66.87%.

2. The group with the largest number of users on Taobao is 19-30 years (171, accounting for 52.94%), followed by31-50 years old (113, accounting for 34.98%). followed by 18 years below (31 accounting for 9.6%). 8 people over 51 years old, accounting for 2.48%.

The 15ᵗʰ BENJAMIT Network National & International Conference

The 15ᵗʰ BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

3. In terms of the time spent shopping on e-commerce platforms, The largest number of users are those who have used the service for 1-5 years, with 197 users, accounting for 60.99%, followed by users who have used the service for less than one year, with 63 users, accounting for 19.51%, users who have used the service for 5-10 years, with 57 users, accounting for 17.65%, and users who have used the service for more than 10 years, with 6 users, accounting for 1.86%.

4. In terms of the average monthly purchase frequency on e-commerce platforms, the users with the most purchases were 6-10 times, with 126 users, accounting for 39.01%, followed by 91 users who shopped more than ten times, accounting for 28.17%, followed by 3-5 times, with 62 users, accounting for 19.2%, and the least number of users who shopped 0-2 times, with only 44 users, accounting for 13.62%.

5. In terms of monthly income level, the largest number of users have a monthly income of 2,000-5,000 yuan, with 160 people accounting for 49.54%, followed by users with a monthly income of less than 2,000 yuan, with 152 people accounting for 47.06%, followed by users with an income of 5,000 to 10,000 yuan, with 11 people accounting for 3.41%, and users with an income of more than 10,000 yuan, with 0 people accounting for 0%.

Table 2 Individual Characteristics of the Valid Sample Derived from the Questionnaire

Personal Factor	Number	Percentage
Gender		
Male	107	33.13
Female	216	66.87
Total	**323**	**100**
Age		
Under 18 years	31	9.6
19-30 years	171	52.94
31-50 years	113	34.98
51 years above	8	2.48
Total	**323**	**100**
Years of using e-commerce platform		
Less than 1 year	63	19.5
1 - 5 years	197	60.99
5 - 10 years	57	17.65
More than 10 years	6	1.86
Total	**323**	**100**
Average number of monthly purchases on e-commerce platforms		
0 - 2 times	44	13.62
3 - 5 times	62	19.2
6 - 10 times	126	39.01
More than 10 times	91	28.17
Total	**323**	**100**
Monthly income level		
2000 below yuan	152	47.06
2000-5000 yuan	160	49.54
5000-10000 yuan	11	3.41
10000 above yuan	0	0
Total	**323**	**100**

Descriptive analysis：

Table 3 shows the mean and Standard Deviation of four variables

Variables	n = 323		Level of Agreement
	$\bar{x}$	SD	
The quantity of evaluations	3.45	1.39	Moderate
The timing of evaluations	3.45	1.36	Moderate
The specificity of evaluations.	3.45	1.35	Moderate
The consumer purchase intention	3.44	1.35	Moderate
Total Average	3.45	1.36	Moderate

The 15ᵗʰ BENJAMIT Network National & International Conference

The 15ᵗʰ BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

The researcher presents the results of analysis on average and standard deviation in Table 3, The 5 level frequency range principle, Overall, all aspects are at the Moderate level ($\bar{x}$ = 3.45). The highest satisfaction is the quantity of evaluations ($\bar{x}$ = 3.45), The timing of evaluations ($\bar{x}$ = 3.45), and the specificity of evaluations ($\bar{x}$ = 3.45), finally the consumer purchase intention ($\bar{x}$ = 3.37),as shown in the figure above.

Table 4 ANOVA a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	350.19	3	116.73	671.36	0,00b
	Residual	55.47	319	0.17		
	Total	405.66	322			

a. Predictors: The quantity of evaluations; The timing of evaluations; The specificity of evaluations
b. Dependent Variable: The consumer purchase intention

From Table 4 that when the F test is performed on the model, it is found that the model passes the F test (F=671.36, p=0.00<0.05), which means that the model construction is meaningful. The analysis of the model shows that Perceived The quantity of evaluations; The timing of evaluations; The specificity of evaluations all positively affect the consumer purchase intention. The correlation coefficient reveals that the timing of evaluations has the strongest influence on the consumer purchase intention, followed by the specificity of evaluations, Finally the quantity of evaluations

Table 5 Correlation Analysis

Variables	The quantity of evaluations	The timing of evaluations	The specificity of evaluations	The consumer purchase intention
The quantity of evaluations	1	0.90*	0.91*	0.89*
The timing of evaluations	0.90*	1	0.90*	0.90*
The specificity of evaluations	0.91*	0.90*	1	0.90*
The consumer purchase intention	0.89*	0.90*	0.90*	1

Correlation is significant at the 0.01 level (2-tailed)

From table 5 the correlation coefficient between the quantity of evaluations and the consumer purchase intention is 0.89*, the timing of evaluations is 0.90*, the specificity of evaluations is 0.90*, and shows that they are in the positive moderate relationship with the consumer purchase intention. All factors are also significant at 0.00 less than 0.01.

Table 6 Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.20	0.08		2.64	0.01*
The quantity of evaluations	0.21	0.05	0.21	3.80	0.00
The timing of evaluations	0.38	0.05	0.39	7.24	0.00
The specificity of evaluations	0.35	0.05	0.36	6.60	0.00

a. Dependent Variable: The consumer purchase intention
R = 0.93   R² = 0.86   Adjusted R-square = 0.86, F=671.36, *P<0.05

Independent variable: The quantity of evaluations; The timing of evaluations; The specificity of evaluations
Dependent Variable: The consumer purchase intention

Table 6 shows a statistical analysis of the relationship between user reviews and purchase intention. The results show that the quantity of evaluations; timing of evaluations and specificity of evaluations has a significant impact on the consumer purchase intention. The results of the five sub-variables in the specificity of evaluations are supported at the significance level: The quantity of evaluations (Sig<0.001), The timing of evaluations (Sig<0.001); The specificity of evaluations (Sig<0.001)

The 15ᵗʰ BENJAMIT Network National & International Conference

The 15ᵗʰ BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

This study aims to explore the positive factors that affect the consumer purchase intention. The results of multiple regression analysis showed that the variable was the timing of evaluations most predictive independent sub resources (Beta= 0.39), followed by the specificity of evaluations (Beta=0.36); The quantity of evaluations (Beta= 0.21) at a significant level of 0.05. Therefore, the timing of evaluations can prove to have a positive impact on the consumer purchase intention. The formula is as follows:

The consumer purchase intention = 0.20 + 0.21 the quantity of evaluations + 0.38 the timing of evaluations + 0.35 the specificity of evaluations.

The meaning of this equation is as follows:

if, other factors being equal, the quantity of evaluations increases by 1 point, consumer purchase intention will increase by 0.21 points.

if the timing of evaluations increases by 1point, other factors being equal, The consumer purchase intention will increase by 0.38 points.

if the specificity of evaluations increases by 1point, other factors being equal, The consumer purchase intention will increase by 0.35 points.

Summary of the Study

This study uses users of the Taobao platform as empirical objects. Through theoretical analysis and data verification, it systematically explores the impact mechanism of the number, timeliness and specificity of user reviews on consumer purchase intention. The results show that these dimensions have a significant impact on consumer purchase intention. The three dimensions of user reviews act on consumer decisions through different paths, and show significant differences in explanatory power and importance. Among them, the impact of evaluation time is the most significant. The following are specific conclusions

The impact of the number of user reviews on purchase intention: The number of reviews has a significant positive impact on consumer purchase intention, but the impact is weaker than other variables. Consumers tend to judge the popularity of products through a large number of reviews, but duplicate content will reduce attractiveness. The balance between quantity and quality needs to become a core issue of platform governance.

The key role of user review timeliness on purchase intention: Review timeliness is the strongest factor affecting purchase intention. Consumers pay more attention to recent reviews (such as within one month), believing that they can better reflect the current quality of the product, while reviews that have not been updated for a long time have a lower reference value because they can reflect the true status of the product after iteration, highlighting the core position of information timeliness in the e-commerce environment.

Importance of the specificity of user reviews: The specificity of reviews has the second highest impact on purchase intention. Descriptions containing pictures, videos or detailed usage scenarios can significantly enhance consumer trust, while brief and vague reviews (such as "easy to use") have limited reference value. Specificity reviews are the key basis for consumers to judge product quality.

Strong correlation between the number, time and specificity of reviews: The number, time and specificity of reviews are highly correlated, indicating that these dimensions have a synergistic effect in consumer decision-making and together constitute the comprehensive influence of the evaluation system. Merchants should pay attention to all three at the same time.

The role of social identity theory is obvious: Social identity theory was verified in this study, that is, consumers will be influenced by the evaluation of other consumers in the purchase decision-making process and form a purchase intention through social comparison and recognition.

Consumer behavior characteristics: Most respondents are female, aged 19-30, and shop online 6-10 times a month, reflecting the dominant position of young women on the Taobao platform. Their consumption habits rely more on the evaluation system to avoid risks.

In general, the timeliness, specificity and quantity of user reviews jointly promote consumer purchase intention by reducing information asymmetry, reducing perceived risk and enhancing social identity. Among them, timeliness is the most critical driving factor. The study provides empirical evidence for optimizing the evaluation system of e-commerce platforms through the integrated application of information processing theory, signaling theory and social identity theory, expands the theoretical boundaries of user evaluation research, and promotes the user service capabilities of e-commerce platforms.

The 15th BENJAMIT Network National & International Conference

The 15th BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

Discussions

This study deeply explores the impact of three key dimensions of user reviews on the Taobao platform - the number of reviews, the timeliness of reviews, and the specificity of reviews - on consumers' purchase intention. The empirical results clearly reveal that all three dimensions have a significant effect on consumers' purchase decisions, and each exerts influence through different mechanisms, and shows differences in explanatory power and importance. Among them, the timeliness of reviews is confirmed to be the most critical factor affecting consumers' purchase intention. This study reveals the mechanism of the impact of user evaluation on consumer purchase intention from both theoretical and empirical perspectives, but its significance needs to be further explored in combination with the complexity of the e-commerce ecosystem. Based on the above conclusions, this study further discusses the deep-seated reasons for the impact of user evaluation on consumer purchase intention and future research directions.

The impact of the number of reviews on purchase intention: platform governance that balances quantity and quality

Discussion: This study confirms that there is a significant positive relationship between the number of reviews and consumers' purchase intention, which is consistent with the view in social identity theory that individuals tend to be influenced by group behavior. A large number of positive reviews can create a signal that the product is popular, reduce the uncertainty of potential buyers, and induce herd behavior, thereby increasing purchase intention. However, the study also pointed out that the influence of the number of reviews is weaker than the other two variables, and repetitive content will reduce attractiveness. This suggests that simply pursuing the number of reviews may not be able to effectively and continuously increase purchase intention. The key to platform governance is to balance the quantity and quality of reviews and encourage users to provide valuable and differentiated evaluation content. Future research can further explore whether there is a threshold effect on the impact of the number of reviews on purchase intention in different product categories and price ranges, and how to effectively identify and filter duplicate or invalid reviews.

The key role of review timeliness on purchase intention: the core position of information timeliness

Discussion: One of the core findings of this study is that review timeliness is the strongest predictor of consumer purchase intention. Consumers give higher weight to recent reviews (such as within one month), which is consistent with the view in information utility theory that the value of information lies in reducing decision uncertainty. Recent reviews are considered to be more reflective of the current status and quality of the product, especially in the e-commerce environment with rapid product iteration, and the reference value of outdated reviews is significantly reduced. This finding highlights the core position of information timeliness in the e-commerce environment. Merchants should attach importance to maintaining recent user reviews and update product information in a timely manner to respond to user feedback. Platforms should also optimize the display mechanism of reviews, highlight recent reviews, and may consider marking or downgrading older reviews to improve the effectiveness of information.

The importance of review specificity: the key basis for improving trust

Discussion: The results show that the impact of review specificity on consumer purchase intention is second only to timeliness. Reviews that include pictures, videos, or detailed descriptions of usage scenarios can significantly enhance consumers' trust, which is consistent with the view in signaling theory that high-quality signals can effectively reduce information asymmetry. Specific reviews provide potential buyers with more intuitive and comprehensive product information, helping them to more accurately evaluate product quality, thereby increasing their willingness to buy. In contrast, short reviews such as "easy to use" provide limited reference value for decision-making. This suggests that merchants should encourage users to share more detailed shopping experiences, and platforms can guide users to evaluate from multiple dimensions and provide convenient functions for uploading pictures and videos.

Strong correlation between the number, timeliness, and specificity of reviews: the comprehensive influence of the evaluation system

Discussion: The study found that there is a high correlation between the number, timeliness, and specificity of reviews, which shows that these three dimensions do not affect consumer decisions in isolation but interact with each other to jointly constitute the comprehensive influence of the evaluation system. Merchants

139

The 15ᵗʰ BENJAMIT Network National & International Conference
The 15ᵗʰ BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

should pay attention to these three aspects at the same time during operations, for example, encouraging users to share reviews containing detailed usage experiences as soon as possible after purchase. Platforms should also design mechanisms to encourage more recent and specific reviews to improve the effectiveness of the overall evaluation system.

The significant role of social identity theory: the social impact of user reviews

Discussion: This study verifies the applicability of social identity theory in the e-commerce environment. Consumers' purchasing decisions are significantly affected by the reviews of other consumers, and they form their purchasing intentions through social comparison and recognition. This further emphasizes the importance of user reviews as a source of social information. Platforms should actively maintain the authenticity and objectivity of reviews and provide consumers with reliable social references.

Consumer behavior characteristics: the dominant position of young women in the evaluation system

Discussion: The study found that the respondents were mainly young women aged 19-30, and they had a high frequency of online shopping and relied more on the evaluation system to avoid risks. This reveals the consumption characteristics of young women on the Taobao platform and the importance of user reviews to their purchasing decisions.

Conclusion: The comprehensive mechanism of user reviews driving purchasing intention.

Practical application value: The results of this study have important practical application value for e-commerce platforms. The platform can optimize the evaluation system based on the research conclusions, such as increasing the display ratio of recent evaluations, encouraging users to publish specific and detailed evaluations, etc., to improve user experience and purchase conversion rate.

Interpretation of consumer behavior patterns: Through this study, we can have a deeper understanding of consumers' behavior patterns and psychological mechanisms in the purchase decision-making process. This is of great significance for merchants to formulate targeted marketing strategies and improve the quality of products and services.

Mitigation of information asymmetry problem: This study verifies the important role of user evaluation in alleviating information asymmetry problem. This suggests that e-commerce platforms should further strengthen the management and review of user evaluation to ensure the authenticity and objectivity of evaluation information.

Balance between theoretical contribution and practical significance: This study has achieved a good balance between theoretical contribution and practical significance. The effectiveness of relevant theories has been verified through empirical analysis, and valuable references and suggestions have been provided for the actual operation of e-commerce platforms.

In summary this study confirms that the timeliness, pertinence and quantity of user reviews on the Taobao platform jointly promote consumers' purchasing intention by reducing information asymmetry, reducing perceived risk and enhancing social identity. Among them, the timeliness of reviews is the most critical driving factor. The results of this study provide empirical evidence for optimizing the evaluation system of e-commerce platforms, emphasizing the importance of comprehensive application of information processing theory, signaling theory and social identity theory. This study has achieved a good balance between theoretical contribution and practical significance, and verified the validity of relevant theories through empirical analysis, and verified the multidimensional influence mechanism of user evaluation. This study constructs a theoretical framework for the multidimensional influence of user evaluation, deepens the understanding of the evaluation evolution mechanism, provides dynamic strategy support for platform algorithm optimization, expands the theoretical boundaries of user evaluation research, helps to improve the user service capabilities of e-commerce platforms, and provides valuable references and suggestions for the actual operation of e-commerce platforms.

Recommendations

Based on the above conclusions, this study further discussed the deep-seated reasons, research limitations and future research directions for the impact of user reviews on consumer purchase intention. The following are research suggestions.

The 15th BENJAMIT Network National & International Conference

The 15th BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand
May 15, 2025

1. The impact of the number of reviews on consumers' willingness to buy

Research results: This study found that the number of product reviews significantly and positively affects consumers' willingness to buy. When a product has more reviews, consumers usually think that the product is more popular and has a wider user base, thereby reducing their risk perception of purchasing decisions and increasing their confidence in purchasing.

Application and use of research results:For e-commerce platforms: The platform should encourage merchants to actively guide users to make reviews, such as encouraging users to share real shopping experiences through points, coupons, etc. At the same time, the platform needs to establish a more complete evaluation display mechanism, such as highlighting the number of reviews, and providing evaluation sorting and filtering functions to help consumers quickly obtain effective information. In addition, the platform should strengthen the identification and crackdown on false reviews and maintain the authenticity and credibility of the evaluation system.

For merchants: Merchants should attach importance to the accumulation of user reviews, actively respond to questions and feedback raised by users, and show a good after-sales service attitude, thereby encouraging more users to leave real reviews. At the same time, merchants can analyze the sales of products with different numbers of reviews, understand the impact of the number of reviews on sales, and formulate more effective marketing strategies accordingly.

2. The impact of review timeliness on consumer purchase intention

Research results: This study shows that the timeliness of reviews has a significant impact on consumer purchase intention. Compared with reviews from a long time ago, recently released reviews have a higher reference value for consumers' purchase decisions. This is because consumers are more inclined to believe the latest information that reflects the current quality of the product, service and user experience. Outdated reviews may not reflect the latest status of the product or service, and their reference value will be reduced accordingly.

Application and use of research results:For e-commerce platforms: The platform should clearly mark the release time of the review on the review display page and provide a time-sorting function to facilitate consumers to view the latest review information. The platform can consider archiving or weakening the display of reviews before a certain time to highlight the importance of recent reviews.

For merchants: Merchants should pay attention to recent user reviews, handle user feedback issues in a timely manner, and optimize products and services based on the latest user experience. Merchants can highlight recent user reviews in marketing activities to enhance consumer purchasing confidence.

3. The impact of review specificity on consumer purchase intention

Research results: This study found that the specificity of reviews has a significant positive impact on consumers' purchase intention. Detailed and specific reviews, such as those that describe the functional characteristics, usage experience, advantages and disadvantages of the product, and even come with pictures or videos, can provide potential consumers with richer and more authentic product information, thereby effectively reducing their information asymmetry and purchase risks and increasing their willingness to buy.

Application and use of research results:For e-commerce platforms: The platform should encourage users to write more detailed and descriptive reviews, such as by increasing the word count reward for reviews, encouraging the uploading of pictures and videos, etc. The platform can optimize the review editing function and guide users to evaluate products from multiple dimensions. At the same time, the platform can consider weighted display or top recommendations of high-quality and specific reviews to improve their visibility.

For merchants: Merchants should guide users to evaluate products from all aspects, such as quality, appearance, performance, service, logistics, etc. Merchants can provide review templates or guiding questions on the product details page to help users share their experiences more specifically. For reviews with rich content and value, merchants can give certain rewards or interact with them to encourage more users to write high-quality reviews.

Summary: Suggestions for e-commerce platforms: Optimize the display of reviews, add an independent section of "latest reviews", and support time sorting to highlight time-sensitive information. Encourage specific reviews, and motivate users to upload pictures, videos and detailed user experiences through point rewards or priority display.

Suggestions for merchants: Actively guide reviews, push review reminders during the logistics confirmation stage, shorten the time difference of reviews, and ensure timely feedback. Refine replies, respond

The 15th BENJAMIT Network National & International Conference

The 15th BENJAMIT Network National & International Conference
(Artificial Intelligence : A Driving Force For Sustainable Development Goals)

Thonburi University, Bangkok, Thailand

May 15, 2025

in detail to specific reviews, and enhance the trust of potential consumers. Differentiation strategy, provide personalized services for high-frequency shopping groups, and increase repurchase rate.

Suggestions for consumers: Rationally screen reviews, give priority to recent, specific and media-supported reviews. Participate in the evaluation ecosystem, actively contribute high-quality evaluations, promote platform information transparency, and help others make decisions.

Through platform optimization, merchant strategy adjustment and consumer behavior guidance, the three-party collaboration can maximize the value of the user evaluation system. Merchants and platforms should continue to track the impact of user evaluations on purchase intentions, and timely adjust marketing strategies and evaluation management strategies to adapt to market changes and changes in consumer demand.

Acknowledgment

Reference

Ahearne, M., Atefi, Y., Lam, S. K., & Pourmasoudi, M. (2022). The future of buyer–seller interactions: Aconceptual framework and research agenda. *Journal of the Academy of Marketing Science*, 1-24.

Bok, S. K. (2023). *Enhancing User Experience in E-Commerce through Personalization Algorithms.*

Bauer, R. A. (1967). Consumer behavior as risk taking. In D. F. Cox (Ed.), *Risk taking and information handling in consumer behavior* (pp. 23–33). Harvard Business School.

Chen, T., Samaranayake, P., Cen, X., Qi, M., & Lan, Y. C. (2022). The impact of online reviews on consumers' purchasing decisions: Evidence from an eye-tracking study. *Frontiers in Psychology,* 13, 865702.

Cong, Y., & Zheng, Y. (2017). A literature review of the influence of electronic word-of-mouth on consumer purchase intention. *Open Journal of Business and Management, 5*(03), 543.

Cox, D. F. (1967). Risk handling in consumer behavior: an intensive study of two cases. In D. F. Cox (Ed.), Risk taking and information handling in consumer behavior (pp. 34–81). Harvard Business School.

Dong, L., Hua, Z., Huang, L., Ji, T., Jiang, F., Tan, G., & Zhang, J. (2024). The impacts of live chat on service–product purchase: Evidence from a large online outsourcing platform. *Information & Management, 61*(3), 103931.

Gemünden, H. G. (1985). Wahrgenommenes Risiko und Informationsnachfrage: Eine systematische Bestandsaufnahme der empirischen Befunde. *Marketing: Zeitschrift für Forschung und Praxis, 7*(1), 27–38.

Ha, N. T., Nguyen, T. L. H., Pham, T. V., & Nguyen, T. H. T. (2021). Factors influencing online shopping intention: An empirical study in Vietnam. *The Journal of Asian Finance, Economics and Business, 8*(3), 1257-1266.

Jiménez, F. R., & Mendoza, N. A. (2013). Too popular to ignore: The influence of online reviews on purchase intentions of search and experience products. *Journal of interactive marketing, 27*(3), 226-235.

Majeed, M., Owusu-Ansah, M., & Ashmond, A. A. (2021). The influence of social media on purchase intention: The mediating role of brand equity. *Cogent Business & Management, 8*(1), 1944008.

Mavlanova, T., Benbunan-Fich, R., & Koufaris, M. (2012). Signaling theory and information asymmetry in online commerce. *Information & management, 49*(5), 240-247.

Park, D. H., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International journal of electronic commerce, 11*(4), 125-148.

Statista. (2023). *E-commerce worldwide - Statistics & Facts.* Statista.

Staniewski, M., & Awruk, K. (2022). The influence of Instagram on mental well-being and purchasing decisions in a pandemic. *Technological Forecasting and Social Change*, 174, 121287.

Sheth, J. N., & Parvatiyar, A. (1995). Relationship marketing in consumer markets: Antecedents and consequences. *Journal of the Academy of Marketing Science, 23*(9), 255–271.

Schwarzenegger, C. (2020). Personal epistemologies of the media: selective criticality, pragmatic trust, and competence-confidence in navigating media repertoires in the digital age. *New Media & Society, 22*(2), 361–377.

Tinonetsana, F. (2023). *The influence of electronic word-of-mouth communication on online consumer buying behaviour in South Africa.*

Yones, P. C. P., & Muthaiyah, S. (2023). eWOM via the TikTok application and its influence on the purchase intention of somethinc products. *Asia Pacific Management Review, 28*(2), 174-184.