

Association for Information Systems
AIS Electronic Library (AISeL)

ICEB 2020 Proceedings

International Conference on Electronic Business
(ICEB)

Winter 12-5-2020

Research on Users' Perceived Beliefs from the Perspective of Review Components

Qiong Jia

Hohai University, Nanjing, China, jiaqionghit@163.com

Huizhou Jiao

Hohai University, Nanjing, China, 864277136@qq.com

Yuxuan Li

Hohai University, Nanjing, China, 1433635381@qq.com

Follow this and additional works at: <https://aisel.aisnet.org/iceb2020>

Recommended Citation

Jia, Qiong; Jiao, Huizhou; and Li, Yuxuan, "Research on Users' Perceived Beliefs from the Perspective of Review Components" (2020). *ICEB 2020 Proceedings*. 16.

<https://aisel.aisnet.org/iceb2020/16>

This material is brought to you by the International Conference on Electronic Business (ICEB) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICEB 2020 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Research on Users' Perceived Beliefs from the Perspective of Review Components

(Full Paper)

Qiong Jia*, Hohai University, Nanjing, China, jiaqionghit@163.com
 Huizhou Jiao*, Hohai University, Nanjing, China, 864277136@qq.com
 Yuxuan Li, Hohai University, Nanjing, China, 1433635381@qq.com

ABSTRACT

In the Internet era, how the review system brings user good experiences and influences users' perceived beliefs has become an important issue. Based on word-of-mouth and user perception theory, this article builds the model between four characteristics of the review components (integrity, intelligent extraction, operability and social interaction) and four types of users' perceived beliefs (perceived usefulness, reliability, convenience and pleasure). Also, this study makes analysis of 101 questionnaires, which shows that integrity, intelligent extraction has a positive influence on perceived usefulness; intelligent extraction and operability have a positive influence on perceived convenience; operability and social interaction have a positive influence on perceived pleasure; and social interaction has a positive influence on perceived reliability. According to these research results, user awareness and the performance of review components can be improved through measures to meet users' demand in practice.

Keywords: Review component, users' perception, word-of-mouth theory

*Corresponding author

INTRODUCTION

With the development of the digital economy, it has been popular for users to browse, use, or purchase online platform products. According to a report by Forrester, China's online system will be expected to reach USD1.8 trillion in 2022 with the development of online platforms like Taobao.com and JD.com. In addition to the large scale of online platforms, the number of online shoppers in China is also expected to grow from 460 million in 2016 to 660 million users in 2020 (Erickson, 2019). Compared to US consumers, just 25% of which were considered as "the most demanding, advancing, and innovation-hungry digital shoppers", Chinese consumers were found with 72% ranked as "Progressive Pioneers" (Long, 2018).

Users' perceived beliefs lead to decision-making behaviors. The composition of different types of review systems, which means an integral part consisting of different sections and the content on the network platform, also affects users' perception in different ways, as shown in Figure 1. For example, the missing design of the screening components of the review systems may lead to user's fatigued reading and influence user's decision-making (Sun, Zheng & Chen, 2020). What's more, with the advancement of online interactive technology, the review component also serves as a user-experiencing-platform and a communication bridge thus making the following decisions more rational (Jiang, 2020). Under such conditions, how each part of the functions in review components meets users' needs and brings them a convenient experience is the important factor that affects users to choose websites for purchase behavior and social activities.

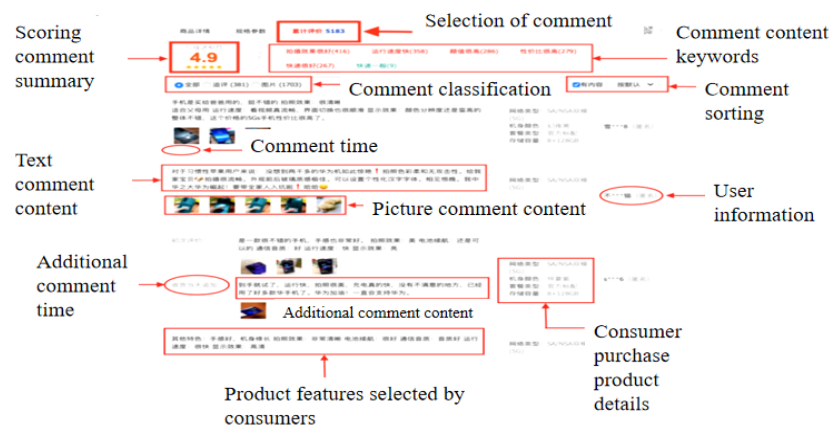


Figure 1: The review component on Taobao.com

However, most previous studies concerning the review components and users' perception focused on few parts of review components instead of an integrated perspective according to "Classification of mobile commerce and research review of user adoption behavior" (Li, 2020). In terms of users' perception, it only involves the analysis of part of the users' behavior according to "Consumer Trust, Value, and Loyalty in Relational Exchanges" (Sirdeshmukh, Singh & Sabol, 2002). So there exists a research gap to look at the strategic potential of a novel model - the relationship between review component and users' perception to providing theoretical and practical guidance for the platform to improve the existing review component system.

Hence, this article will systematically analyze the various parts of the review components in different types of websites and map the relationship between these components and users' perceptions. Also, it will analyze and allocate different kinds of perceptions on corresponding components when they use website platforms. In terms of practical significance, it will study the relationships between review components and users' perceptions from the perspective of the website platforms. From the review components' point of view, it will enable the website to update the existing review component, thereby improving the efficiency of the website. From the users' point of view, it can help users quickly and effectively make references and decisions for better user experience. Briefly, the main issues discussed in this paper will focus on how the characteristics of the review components perceived in different types of websites will affect users' perception beliefs, and different component characteristics will bring users what kind of perceptions. The remainder of this paper is organized into five sections namely literature review, model construction and hypotheses, methodology, discussion, and conclusion as follows.

LITERATURE REVIEW

Online Review Components

Table 1 is an overview of previous research involving the review components. Most of the existing research on review components focuses on the impact of the content of the review or the positive or negative attributes to consumers' purchase intention according to "An empirical study on the influence of online reviews on consumer purchase intentions." (Song & Tang, 2020) and "Research on the effect of online reviews' presentation order on consumers' purchase intentions." (Li et al., 2020). Also, some have conducted empirical researches on the presentation of reviews and concluded corresponding conclusions based on "Research on the impact of online reviews on five-star hotel spending intentions" (Jiang, 2020). However, none of them systematically involves the connection between review components and users' perceptions, and there is no article expounding the corresponding influence relationship between two of them.

Table 1: Overview of research related to online review components

Author (published time)	Research topic	Research method	Conclusion
Song & Tang (2020)	An empirical study on the influence of online reviews on consumer purchase intentions.	Through eye-tracking experiments to explore the influence of online reviews on consumer purchase decisions.	Individuals' processing of attribute review information is longer than that of experience reviews, and it takes more cognitive effort. However, consumers' willingness to buy is even smaller.
Li et al. (2020)	Research on the effect of online reviews' presentation order on consumers' purchase intentions.	Conduct empirical research and use SPSS 21.0 to process the data.	The online reviews' presentation order influence consumers' purchase intentions by influencing consumer attitudes.
Jiang (2020)	Research on the impact of online reviews on five-star hotel spending intentions.	Quasi-experimental methods	Negative reviews have a more significant impact on consumer spending intentions than positive reviews, the impact of review scores on spending intentions is in an important position.

User perception Belief

From the perspective of users' perception, most current studies link the content or the nature of reviews to their users' influence. It can be concluded from previous studies that the content of reviews is one of the core factors of consumer perception.

Table 2: Overview of research related to user perception belief

Author (published time)	Research topic	Research method	Conclusion
Sun, Zheng, Chen (2020)	Research on the impact of perceived online review credibility on consumer trust - the moderating effect of uncertainty avoidance	Questionnaire design and sample research	The objectivity of platforms, the professionalism of reviewers, and the quality of reviews positively affect the credibility of online reviews perceived by consumers; the perceived credibility of online reviews positively affects consumers' ability, trust, and goodwill in businesses trust; uncertainty avoidance mediates the relationship between platform objectivity, the professionalism of reviewers, and perceived credibility of online reviews.
Tan (2019)	Research on online group purchase consumers' buying behavior based on customer perceived value	Empirical research	The three dimensions of perceived quality, perceived price benefits, and perceived convenience will all have a positive impact on group buying consumers' purchasing decisions; and perceived risk is negatively correlated with consumers' online group buying decisions.

The Relationship between Review Components and Users' Perceived Beliefs

As a module provided by the website for users to browse and use, the review component plays the role of constructing a platform for interconnection between users and websites. Users' perception belief is the user experience during and after using the online review component, and there is a certain mutual relationship between two of them. Different types of review components on the website have different effects on users' perceptions. After preliminary generalization, the most representative features of the four types of review components which have impact on users' perceptions are integrity, intelligent extraction, operability, and social interaction. Different types of review components also have different characteristics. These components can bring different perceptions to users because they have the above characteristics.

However, the existing literature has two main deficiencies. On the one hand, there is no mention of the impact of review components on users' perceptions. On the other hand, users' perception only focuses on perceived value. Therefore, this research will analyze what impact the characteristics of review components will make users aware of, and how review components will make users feel. Drawing lessons from previous studies on network platform services and users' perceived value, and combining the functions of the website review components and the concept of users' perception beliefs, this research divides the characteristics of review components into integrity, intelligent extraction, operability, and social interaction, considering perceived usefulness, perceived reliability, perceived convenience, and perceived social interaction of users' perception.

The characteristic of review component system is integrity. As can be seen from Figure 1, the review component of Taobao.com includes a scoring review component, a keyword extraction component, a review classification component, a review ranking component, a user information component, and a review content component. These review components serve functions like viewing product ratings, browsing reviews, and selecting intent reviews for browsing, which can meet the needs of users who want to learn from past consumer reviews to make their purchase decisions more rational, indicating the completeness of the entire component system. If the review component is not complete, it may not meet the users' needs, which means that the integrity of the review component may affect the usefulness perceived by users. The characteristic of review content component is intelligent extraction; it is the fastest channel for users to find their intended product reviews. This review component extracts specific words, eliminates the trouble for users to repeatedly browse during the browsing process. It can help users save time and facilitate users' use process, and it can be inferred that intelligent extraction may affect the users' perceptions of whether review components are convenient. The characteristic of the scoring review component is operability. The scoring review component is the most intuitive among all components, and can directly reflect the evaluation of the product in the past by consumers, so this component can enable consumers to make the fastest decision about whether you want to continue browsing the review. It can be seen that the operability of the review component may have an impact on the ease of use perceived by the user. Therefore, it reveals that the characteristics of review components provided by network platforms will have different effects on users' perceived beliefs. The relationship between specific review components and users' perception will be further hypothesized and verified in the following empirical research.

Related Theories

Word-of-mouth Theory

Hennig-Thurau et al. (2004) pointed out that online word-of-mouth is that consumers share their own experience, opinions, and related knowledge of consumer products or services with other consumers through online channels. From the perspective of shopping platforms, online word-of-mouth refers to the process by which consumers share information about products and services

through the Internet after purchasing products. It is a form of consumer experience exchange between consumers, mainly in text, pictures, and videos presented in Figure 2.

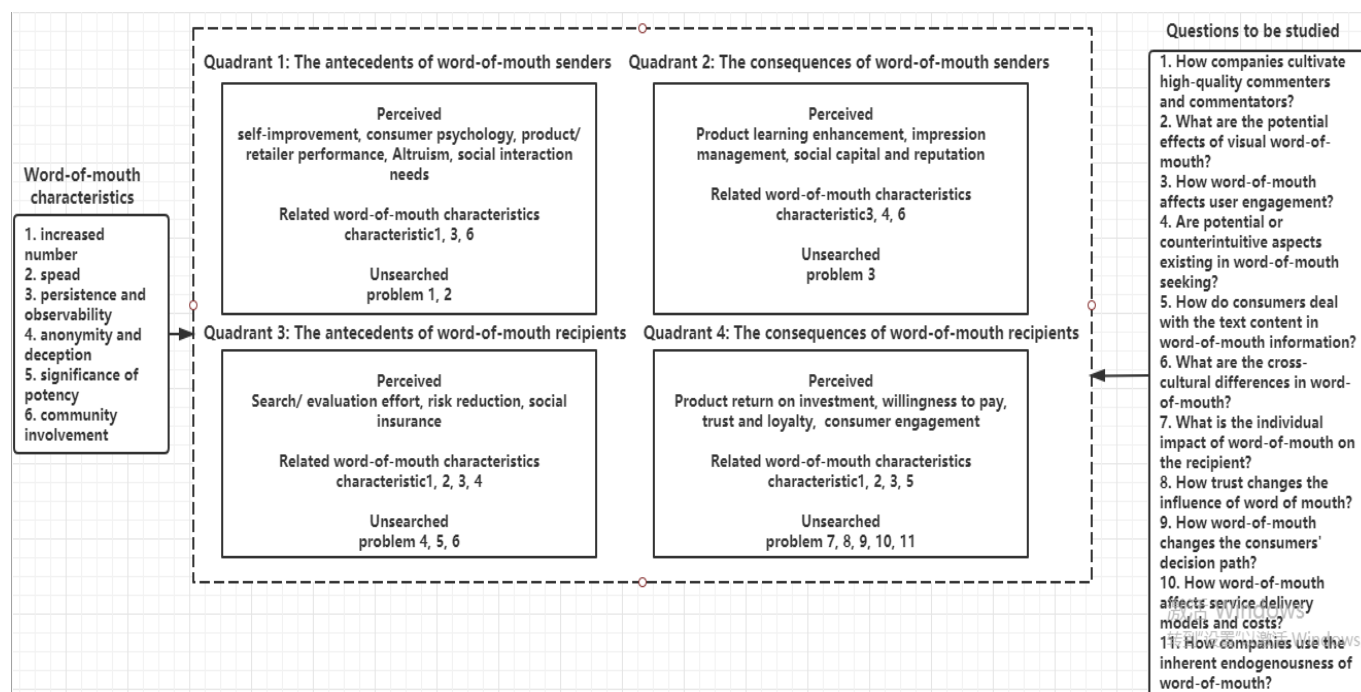


Figure 2: Online Platforms Based on Word-of-Mouth Theory in Marketing

In the process of reviewing the literature, previous researchers believe that the main reasons that prompt users to pay attention to word-of-mouth include: (1) saving time in the evaluation work and search process before purchase; (2) reducing the possibility of making mistakes when shopping; (3) seek psychological protection and comfort; (4) possible negative psychology (Figure 2 third quadrant). Moreover, different types of websites will provide consumers with different types of perceptions about word-of-mouth so that consumers will have corresponding differences behaviors when they use review components.

User Perception Theory

In the research on the composition of users' perception, Sheth et al. (1991) found that five types of values affect the consumer's purchasing behavior, namely functional value, cognitive value, social value, contextual value, and emotional value. Also, Cheung (2009) believed that the credibility of online reviews refers to website users' perception of the reliability or authenticity of reviews on online platforms. This perception is not limited to shopping websites, it also has the same effect on other types of websites in the passage. According to Sun (2020), the objectivity, the quality of review contents, and the professionalism of reviewers will positively affect consumers' perception of the credibility of online reviews; and the credibility of online reviews will positively affect consumers' ability trust, honesty trust and good faith trust in the platform; uncertainty will evade the mediation of the relationship between the objectivity of review content, the professionalism of reviewers and the perceived credibility. This conclusion explains how the information provided by the platform affect the users' perception and perceptual attributes, and further explains the multidimensional and personalized characteristics of perception.

In summary, based on the literature, we can find that users' perceptions of review components come from the website itself, and the website itself also provides users with information about services, and affects the users' experience during use. Hence, there is a close relationship between two of the factors. The website affects the user's perception so that users have a different experience in the process of using different websites and components provided by the website; the users' perception also functions with the website platform so that the platform can improve and adjust its components according to user' feedback after use.

Characteristics of Different Review Component System

From the classification of the review components and the functions they provide in the previous article, the characteristics of the components can be divided into four categories in our study: integrity, intelligent extraction, operability, and social interaction. These four types of characteristics describe how the review component affects users' perception. Table 3 is a detailed description of the characteristics of the review component and the judgment criteria.

Table 3: Review systems: characteristics and concepts

Characteristics	Definition
Integrity	The degree of user’s feeling about the integrity of review components.
Intelligent extraction	The degree of user’s feeling about whether review components is timely and conforms to the current user habits.
Operability	The degree of user’s feeling about whether they have a convenient using experience on review components and whether they can quickly and accurately complete the operations they want.
Social interaction	The degree of user’s feeling about whether the website can meet users’ needs to communicate with others in the process of using review components.

MODEL CONSTRUCTION AND RESEARCH HYPOTHESES

Model

Online review component and users' perception model

The following icons show the relationships between the features of components and users' perception:

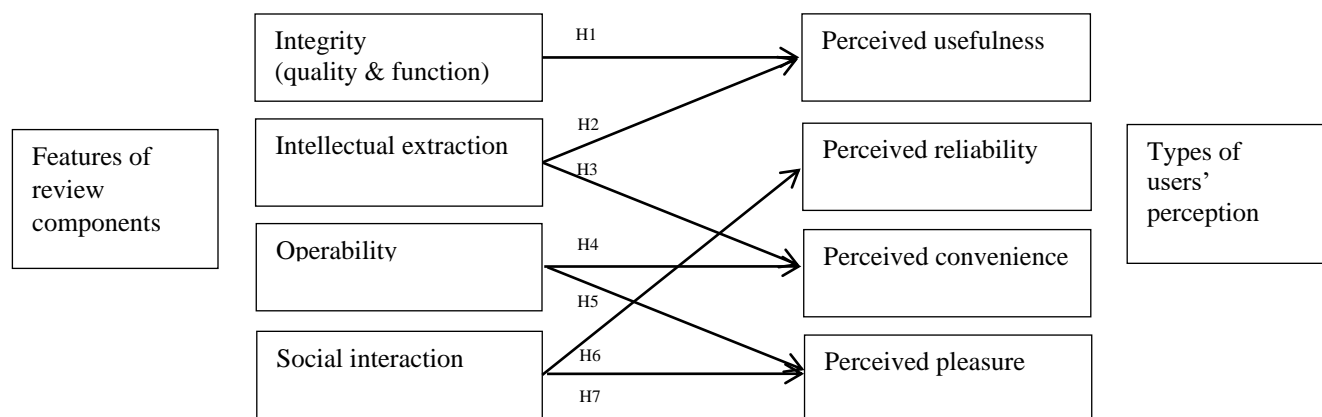


Figure 3: The relationship between users' perception and review components

Research Hypotheses

Wood & Scheer (2006) believed that users' perception is a trade-off between perceived benefit and perceived risk. Perceived risk is the main perceived cost (including time, energy, and money) that users spend on the platform, which has a significant impact on users' perceived usefulness, perceived reliability, perceived convenience, and perceived pleasure. Based on the above point of view, this study believes that the characteristics of the four components proposed in Figure 3 will have a positive impact on the four types of perception. Research hypotheses are 1-7, which are as follows:

- H1: The integrity of the review component (quality and function) has a positive influence on the perceived usefulness; When reviewing the literature, integrity refers to the degree of user’s feeling about the integrity of review components. The more content users adopt, the higher the perceived usefulness, and the relationship between them is positively correlated. Therefore, the analysis of perceived usefulness should focus on whether the characteristics of the review component can improve the users’ acceptance of the content provided in the component. When the review component can display enough information to the user, the user can make their judgments and make decisions based on the obtained information. In this case, the users’ acceptance of the content provided in the component will increase. At this time, the usefulness perceived by the user will become more prominent. Therefore, we can derive the relationship between the integrity of the component and the perceived usefulness based on this connection: the more significant the integrity of the review component, the more perceived usefulness will be.
- H2: The intelligent extraction of the review component has a positive influence on the perceived usefulness;
- H3: The intelligent extraction of the review component has a positive influence on the perceived convenience; The users’ acceptance of the content provided in the component will not change due to the slow update of the component as they make decisions after obtaining the existing information. Also, the component iteration has no effect on the user’s acceptance so that there is no direct connection between intelligent extraction and user perceived usefulness. When judging the user perceived convenience, the core of attention is whether the component can meet the users' desire to save time and unnecessary costs through the component. This standard is related to the degree of user’s feeling about whether review components is timely and conforms to the current user habits, and it can be concluded that: the convenience perceived by users has a corresponding relationship, and there is a positive correlation between two of them.

- H4: The operability of the review component has a positive influence on the perceived convenience;
- H5: The operability of the review component has a positive influence on the perceived pleasure;

According to the previous analysis, the operability of the review component is related to the degree of user's feeling about whether they have a convenient using experience on review components and whether they can quickly and accurately complete the operations they want. The more obvious the operability of the component, the lower time-cost of the users spent in the process of use, and the required effort will be reduced accordingly. From the description of these characteristics of the component, it can be concluded that the operability will affect the users' perception of convenience. Since the criterion for operability does not involve the adoption of review components and the process of helping users make decisions and enjoying using components. Based on this, it can be judged that the operability of the review component only affects the perceived convenience, and the more obvious the operability of the component, the more obvious the perceived convenience will be. Hence there is a positive correlation between the two of them.

- H6: The social interaction of the review component has a positive influence on the perceived reliability;
- H7: The social interaction of the review component has a positive influence on the perceived pleasure;

The social interaction of components reflected that the website can provide users with a platform for expressing their opinions and communicating with others. In the research on shopping websites, the platform that provides user feedback components can show that it has social interaction, and the existing component is intended to enable users to obtain more information by communicating with consumers and helping consumers make rational shopping decisions. This concept of characteristic can be explained whether the social interaction of component will affect the perceived reliability. Due to the characteristics of the video website itself, the review component is the core of the operability. The main needs of users are to use components to express opinions and discussions, so review components also emphasize social interaction. The purpose of users' expressing opinions is to gain a sense of identity or to improve their opinions by communicating with other users. In this process, users' perceived pleasure is highly significant.

In conclusion, based on the relevant research hypotheses proposed above, this questionnaire survey sets the characteristics of the review component as an independent variable, and the users' perception as a dependent variable. The model is shown in Figure 3.

METHODOLOGY

To collect practical data, this research designs a questionnaire to explore the connection between review components and users' perceptions. The questionnaire starts from the user's point of view, uses the review components provided on different types of websites as independent variables, users' perceptions of review components as dependent variables, users who fill in the questionnaire as the subjects. The questions involved in the questionnaire will revolve around the user experience and feelings in the process of using the review component.

Measurement

Perceptions refers to the impacts of the user when using the review component. Feelings are generated by users during and after using review components. In this article, perceptions are used to detect the impact of the users' measurement review component, and the feelings are used to measure the users' perceptual beliefs. The specific scale is as follows:

Table 4: Measurement items

Variable	Sources	Questions
DC: Perceived integrity	Huang & Hsieh (2011)	DC1: I perceive that the frequently used website components are fully functional. DC2: I noticed that the review component is not missing when using it. DC3: I perceive that what I want to know can be found through components.
DI: Perceived intelligent extraction	Novak et al. (2000)	DI1: I noticed that the review component can help me filter information intelligently. DI2: I noticed that the review component has the function of intelligent keyword extraction. DI3: I noticed that the review component has a smart sorting function.
DH: Perceived operability	Huang (2003)	DH1: I noticed that it is easy to operate the review component. DH2: The review component I noticed is easy for me. DH3: I noticed that it is easy to use components.

DSI: Perceived social interaction	Novak et al. (2000)	DSI1: I noticed that I can communicate with others through components. DSI2: I noticed that I made friends when using the review component. DSI3: I noticed that I can interact with others on the review component.
PU: Perceived usefulness	Mantymaki & Salo (2011)	PU1: I felt a lot of time saved after using components. PU2: I felt that the components make my shopping/video browsing process easier. PU3: I felt that using components can help me make purchase/video browsing decisions. PU4: I felt that using components can help me learn more information.
PR: Perceived reliability	Nysveen et al. (2005)	PR1: I felt that the information provided by the review component is reliable. PR2: I felt that the information obtained through the component is real. PR3: I felt that the information provided by the component is of a certain quality.
PC: Perceived convenience	Agarwal (2000)	PC1: I felt that components make it easier for me to get information. PC2: I felt that using components allows me to get information faster. PC3: I felt that using components can make my shopping/video browsing process more smoothly.
PP: Perceived pleasure	Webster & Ho (1997)	PP1: I felt very happy when I browse the reviews. PP2: I felt that it makes me happy to support or like other users by using the review component. PP3: I felt that using components to reply to other users can make me happy.

Empirical analysis

Sample selection and data collection

In this survey, a total of 101 questionnaires were sent to platform users with experience in online shopping and video websites, and 101 valid questionnaires were returned. Descriptive statistics on valid questionnaires are seeing in the table below for details:

Table 5: Statistics report: background check

Characteristics	Types of sample	Numbers of sample	Percentage	Characteristics	Types of sample	Numbers of sample	Percentage	
Gender	Male	55	54.46%	Age	18 years old and below	1	0.99%	
	Female	46	45.54%		18-24 years old	73	72.28%	
Education	Elementary school and below	1	0.99%		25-30 years old	11	10.89%	
	Junior high school	3	2.97%		31-40 years old	4	3.96%	
	High school/ technical school/ technical school	6	5.94%		41-50 years old	5	4.95%	
	College	5	4.95%		51-60 years old	7	6.93%	
	Undergraduate college	66	65.35%		61 years old and above	0	0%	
	Master's degree and above	20	19.8%		Frequency of shopping video sites	Several times a day	11	10.89%
Frequency of viewing video	Several times a day	42	41.58%			Once a day	17	6.93%
	Once a day	21	20.79%			Several times a week	41	40.59%
				Once a week	25	24.75%		

sites	Several times a week	29	28.71%		Several times a month	15	14.85%
	Once a week	3	2.97%		Once a month or less	2	1.98%
	Several times a month	5	4.95%				
	Once a month or less	1	0.99%				
Most frequently used video sites	Tencent	22	21.78%	Most frequently used shopping sites	Taobao	87	86.14%
	IQIYI	24	23.76%		JD	5	4.95%
	Youku	7	6.93%		Suning	0	0%
	Mango TV	2	1.98%		Pinduoduo	8	7.92%
	Bilibili	41	40.59%		Amazon	0	0%
	Others	5	4.95%		Others	1	0.99%

From Table 5, it can be concluded from samples that the proportion of gender is almost balanced, most of them are undergraduate students which from 18 to 24 years old. On the one hand, the frequency of viewing video is high, nearly half of the samples view video sites several times a day. Samples are prone to concentrate on video sites like Bilibili, Tencent and IQIYI. On the other hand, the frequency of shopping video sites comparatively lower than video sites. Also, Taobao consists large percentage of markets and has obvious advantages (see Table 6 for details).

Reliability and validity analysis

This analysis refers to the Cronbach coefficient to test the internal consistency among the items. The larger the Cronbach coefficient, the higher the internal consistency between the measurement items, and the higher the reliability of the scale. The specific measurement is as follows:

Table 6: Reliability and validity analysis

Independent variable	Cronbach Coefficient	KMO	Bartley number
Integrity	0.81	0.818	752.949
Intellectual extraction	0.767	0.663	350.324
Opeability	0.775	0.74	472.361
Social interaction	0.909	0.853	1187.524
Perceived usefulness	0.92	0.864	1367.902
Perceived reliability	0.767	0.726	507.864
Perceived convenience	0.738	0.754	436.858
Perceived pleasure	0.897	0.842	1007.145

From Table 6, it can be concluded that the Cronbach coefficients of the four independent variables and the four dependent variables are all greater than 0.7, indicating the setting of the question is reasonable enough. Also, the independent variable, and the dependent variable have high consistency and structure to reach the research standards. This questionnaire is designed based on existing research conclusions, so it can ensure the content validity of the measurement items. In terms of verifying the validity of the structure, the Bartlett sphericity test, and measurement test were performed on the items set by independent variables (see Table 7 for details). Since the Bartlett value of the independent variable is significant and the KMO value is greater than 0.7, it is suitable for factor analysis. Performing factor analysis on the collected data, extracting the factors with a characteristic root greater than 1 and rotating through the Varimax surface, it can be found that the factor loads values corresponding to the same independent variable setting items exceed 0.6, which can be judged that the questionnaire has good construct validity.

Related Analysis

The purpose of the correlation test is to analyze the correlation between the characteristics of the review components mentioned above and the users' perception. The following table will test the correlation between variables.

Table 7: The correlation between variables

	Average	Standard deviation	Perceived usefulness	Perceived reliability	Perceived convenience	Perceived pleasure
Integrity	4.863	0.724	0.547**	0.045	0.029	0.094
Intellectual extraction	3.199	0.819	0.416**	0.042	0.151**	0.032
Operability	3.081	0.109*	0.031	0.007	0.233*	0.456**
Social interaction	2.852	0.752	0.041	0.346**	0.094	0.143**

Note: * Significant at $p < 0.05$ level, ** Significant at $p < 0.01$ level, the coefficients in the table are standardized coefficients

It can be seen from Table 7 that there is a correlation between the independent variables and the dependent variables. Among them, perceived usefulness is related to the integrity, the intelligent extraction of review components; perceived reliability is related to the social interaction of review components; perceived convenience is related to the intelligent extraction and operability of review components; perceived pleasure is related to the operability and the social interaction of review components. And the above relationships are all positive correlations.

Regression Analysis

This article takes perceived usefulness, perceived reliability, perceived convenience, and perceived pleasure as dependent variables, integrity, intelligent extraction, operability, and social interaction are independent variables. The regression analysis of the impact of the review component on users' perception is as follows:

Table 8: Regression analysis result of review component and perception belief

Variable	Perceived usefulness		Perceived reliability		Perceived convenience		Perceived pleasure	
	coefficient	P value	coefficient	P value	coefficient	P value	coefficient	P value
Integrity	0.124**	0.000	0.214	0.647	0.153	0.059	0.330	0.072
Intellectual extraction	0.549***	0.000	0.361	0.056	0.167**	0.041	0.304	0.054
Operability	0.101	0.424	0.141	0.531	0.103***	0.005	0.242***	0.024
Social interaction	0.437	0.253	0.188***	0.008	0.231	0.2567	0.352***	0.001
F	27.202		16.951		14.647		13.409	
R ²	0.531		0.414		0.379		0.358	
Adjust R ²	0.512		0.390		0.353		13.408	
N	101							

Note: * Significant at $p < 0.05$ level, ** Significant at $p < 0.01$ level, *** Significant at $p < 0.001$ level, the coefficients in the table are standardized coefficients

The integrity and intelligent extraction of review components have significantly positively relations with the perceived usefulness at the significant level of $p < 0.01$; The F statistic of the perceived reliability model is 16.951, the overall model fits well, meets the F test and t-test requirements, and the regression effect is significant. The significance level of social interaction is less than 0.001, indicating the social interaction of the review component significantly positively affect the perceived reliability; The F statistic of the perceived convenience model is 14.647, the overall model fits well, meets the F test and t-test requirements, and the regression effect is significant. The significance level of operability and intelligent extraction is less than 0.001, indicating the operability and intelligent extraction of review components significantly positively affect the perceived convenience; The F statistic of the perceived pleasure model is 13.409, the overall model fits well, meets the F test and t-test requirements, and the regression effect is significant. The significance levels of operability and social interaction are less than 0.001, indicating the operability and social interaction significantly positively affect the perceived pleasure. Through regression analysis, the hypothesis test results proposed in this article are supported.

DISCUSSION

Through case analysis and empirical research, we have verified that there is a correlation between review components and users' perceptions of network platforms. The different characteristics of the review component will bring different users' perceptions. By analyzing the integrity of the review component, we know that the review component has a significant positive influence on the user perceived usefulness. That is to say, the more complete the review component provided by the network platform, the more users will feel that the platform is more useful, and vice versa. This conclusion can remind the website to pay attention to whether the review component provided by its platform can meet users' all needs. Once the review component is missing, it should be

adjusted immediately to make up for the missing component, as described in the previous article. The intelligent extraction of review components has a positive influence on the perceived convenience and usefulness, and the positive influence on usefulness is more significant. This shows that the smarter the components provided by the network platform, the more useful and convenient the user will find the website to use. Therefore, if the website can keep up with the development of the Internet, update the review component in time, and optimize the function of the component, it can save users more time and energy thus improve user-experiences. The convenience and pleasure perceived by the user will be positively affected by the operability of the review component, which has a more significant impact on the perceived convenience. That is to say, if the review components are simpler and easier to use, the user will find them more convenient and will enjoy the process more. This conclusion suggests that the network platform can continue to optimize the operation mode of the review component, making the component easier and faster to display and clearer in the process of using, which can bring users a faster and more efficient user experience. The social interaction of the review component will have a positive impact on the perceived reliability and pleasure, among which the pleasure is more significant. Based on the review components, the reliability is more obvious in shopping websites, and the pleasure and social interaction are both prominent. As people spend more time on the Internet, and it is more common for friends and strangers to communicate on the Internet platform, then if the website can be more detailed and interactive in terms of social interaction, it can correspondingly improve the user experience, increase the number and using frequency of the website.

To sum up, if the review component in the network platform can pay attention to the needs of users as much as possible, respond quickly and timely to changes and increases in user needs, optimize the performance of existing review components, provide users with convenient, high-speed, efficient use of the environment, it can bring users better experiences and increase the number and using frequency of the website, thus it will bring higher browsing to the website and increase the profit of the website, which is a win-win situation for users and network platforms. .

CONCLUSIONS

From the perspective of the review component, this research analyzes the relationship between the four characteristics of review components and users' perceived beliefs. Based on the comparison and analysis of the review components, four characteristics of the review components are extracted, including integrity, intelligent extraction, operability, and social interaction. Based on the word-of-mouth theory and user perception theory, we established a theoretical model of the relationship between the four characteristics of review components and the different users' perceived beliefs and proposed 7 relationships between the two hypotheses. To verify the model, we used previous research to clarify the items to be measured, designed a questionnaire about review components and users' perceptions, and collected 101 valid questionnaires. In terms of data analysis, this study conducted factor analysis, correlation analysis, and regression analysis on the collated data. The results showed that there was indeed a correlation between review components and users' perceived beliefs. The further analysis concludes that in practice, the strategy of optimizing the function of the review component and measures to meet the changing needs of users as much as possible can improve users' perception, which provides theoretical and practical guidance for the platform to improve the existing review component system and enhance users' perception. The research results show that the relationship between review components and users' perceptions that we considered in our hypothesis is reasonable.

After conducting a case analysis on different types of websites and issuing questionnaires to the target group, the regression analysis can be used to sort out the results displayed in this research. The four characteristics of review components have four users' perceptions. There are different types of influences, and there are also different attributes between the salience of characteristics and perception. Such a result indicates the integrity of component and functions will have a corresponding impact on the use of the component to browse reviews, post reviews, and communicate with others. Therefore, if the website can provide users to meet their basic needs, it can help users reduce the economic and time loss caused by incomplete and untimely information acquisition when making decisions. From the websites' point of view, a platform for friendly communication will bring users an excellent experience to harvest more active users, improve the quality of website operations, and generate revenue for the platform. From the users' point of view, an excellent review component can save user resources and improve user-experiences.

The research has implications for improving the review component of the website. When the website changes the review component, it needs to pay attention to users' needs, and make timely and rapid remedies for the missing components in the website. At the same time, measures to optimize website functionality must be converted promptly by users' needs. By analyzing and understanding the psychological characteristics and behavioral needs of users, the website can strengthen the update and construction of components based on the conclusions drawn, and meet users' needs as much as possible. This not only enhances users' perceived value but also maintains the construction of the website and provides the competitiveness of the website. This research focuses on the corresponding relationship between the characteristics of review components and users' perceptions and conducts an empirical analysis. Although some meaningful conclusions and implications have been drawn, there are still certain limitations. This article only investigates its impact on users' perceptions from the perspective of review components, but it does not involve the overall construction of the website and other perceptions that users will generate when using the website. And due to various restrictions and force majeure factors, we have not been able to adopt a more comprehensive investigation and research method and sample. It is hoped that in future research, scholars can analyze other components related to users' perceptions, review

in more detail, and put forward more constructive theories and meanings for further improving user experience and enhancing website competitiveness.

REFERENCES

- [1] Agarwal, R. & Karahanna, E. (2000). Time flies when you are having fun: Cognitive absorption and beliefs about information technology usage. *MIS Quarterly*, 24(4), 665-694. doi:10.2307/3250951
- [2] Cheung, M. Y., Luo, C., Sia, C. L. & Chen, H. (2009). Credibility of electronic word-of-mouth: Informational and normative determinants of on-line consumer recommendations. *International Journal of Electronic Commerce*, 13(4), 9-38.
- [3] Fang, X., Chan, S., Brzezinski, J. & Xu, S. (2005). Moderating effects of task type on wireless technology acceptance. *Journal of Management Information Systems*, 22(3), 123-157.
- [4] Hennig-Thurau, T., Gwinner, K. P., Walsh, G. & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: what motivates consumers to articulate themselves on the internet? *Journal of Interactive Marketing*, 18(1), 38-52.
- [5] Hwang, Y. (2005). An empirical study of online trust and consumer behavior: Cultural orientation, social norms, and personal innovativeness in information technology. Paper presented at the International Conference on Information Systems, Las Vegas, NV.
- [6] Jarvenpaa, S. L. & Todd, P. A. (1996). Consumer reactions to electronic shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1(2), 59-88.
- [7] Sheu, Jyh-Jian. Chang, Yao-Wen. Chu, Ko-Tsung. (2008). Applying decision tree data mining for online group buying consumers' behaviour. *International Journal of Electronic Customer Relationship Management*, 2(2): 140-157.
- [8] Moore, J. F. (1998). The rise of a new corporate form. *Washington Quarterly*, 21(1):167-181.
- [9] Morales Mediano, J. & Ruiz-Alba, J. L. (2019). New perspective on customer orientation of service employees: A conceptual framework. *The Service Industries Journal*, 39(13-14), 966-982.
- [10] Ngai, E.W. T., Gunasekaran, A. A. (2007). Review for mobile commerce research and application. *Decision Support Systems*, 43(1): 3-15.
- [11] Murphy, J., Hofacker, C. & Mizerski, R. (2006). Primacy and recency effects on clicking behavior. *Journal of Computer-Mediated Communication*, (11): 522-535.
- [12] Keen, C., Wetzels, M., De Ruyter, K. & Feinberg, R. (2004). E-tailers versus retailers: Which factors determine consumer preferences. *Journal of Business Research*, 57(7), 685-695.
- [13] Novak, T., Hoffman, D. & Yung, Y. (2000). Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19(1), 22-42. doi: 10.1287/mksc.19.1.22.15184
- [14] 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.
- [15] Rose, S., Clark, M., Samouel, P. & Hair, N. (2012). Online customer experience in e-retailing: an empirical model of antecedents and outcomes. *Journal of Retailing*, 88(2), 308-322.
- [16] Rose, S., Hair, N., Rose, S., Hair, N. & Clark, M. (2011). Online customer experience: A review of the business - to - consumer online purchase context. *International Journal of Management Reviews*, 13(1), 24-39.
- [17] Sheth, J. N. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159-164.
- [18] Sirdeshmukh, D., Singh, J. & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, 66(1), 15-37.
- [19] Sweeney, J. C. & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203-220.
- [20] Webster, D. M. & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67(6), 1049-1062
- [21] Wilson, E. J., Sherrell, D.L. (1993). Sources effects in communication and persuasion research: Meta-analysis of effect size. *Journal of the Academy of Marketing Science*, 21: 101-112.
- [22] Wood, C., Scheer, M. (2006). Incorporating perceived risk into model of consumer deal assessment and purchase intent. *Advances in Consumer Research*, 23(1), 399- 404.
- [23] Woodruff. (1997). Customer value: the next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2): 139-153.
- [24] Zeithaml, V. A., Parasuraman, A. & Malhotra, A. (2002). Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4), 362-375.