

Research on User Behavior of Social E-Commerce

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Abstract: Under the influence of Web 2.0 and social media, the popularity of social e-commerce is increasing and its importance is rising, but the scope of social e-commerce and the actual consumption behavior it can drive are still under continuous observation. This study uses engagement and browsing attitudes to examine the recommendation, word-of-mouth, and purchase intention behavior of users after using e-commerce. Furthermore, the study cites five antecedents that influence users' use of social e-commerce: fashion, word-of-mouth, interactivity, entertainment, and customization, which are used to study users' browsing and engagement attitudes and influence users' intention to use social e-commerce platforms. The results of this study show that engagement and browsing attitudes have a positive effect on purchase intention, recommendation intention, and continued use intention. The results of the study can provide a reference direction for website operators to make decisions.

Keywords: E-commerce, Engagement attitudes, Browsing attitudes, User behavior

1. Introduction

Social e-commerce is a new form of business model in which users participate in activities and sell goods and services in online marketplaces and communities ^[1]. Social e-commerce sites allow customers to provide information to each other and influence the buying and selling of other customers, which provides a new platform for traditional retail and online brands ^[2].

The concept of the social network was first proposed by Rheingold's Virtual Community ^[3], who defined a social network as social aggregation on the network. Social networks use the Internet as a medium of communication or information exchange among users, and the interaction of users in cyberspace generates social network relationships. When community members communicate with each other, share common norms, values, and opinions, and develop ongoing relationships, the social network becomes a social community. In addition, social networks can form different types of thematic communities depending on their motives and purposes, and Kozinets ^[4] divided communities into two categories based on the different core actions of users. The first type of engagement attitudinal communities as communities with an affinity for sharing pleasure. The second type of browsing attitudinal communities, although similar to consumer communities, they mainly share common interests and interests or information about specific brands and those related to brands, markets, and products to consumers. Browsing communities require only a very small number of core users to contribute content, and the majority of users just browse and consume, so user comments and interactions are very rare. Participatory communities are usually social and rely heavily on interaction, discussion, and communication among members, with very little reliance on content ^[5].

Under the influence of Web 2.0 and social media, social e-commerce is becoming more and more popular, but the actual consumption that can be driven by social e-commerce is still under continuous observation. This study aims to understand the relationship between social commerce users' perceptions of their usage and their engagement and browsing behaviors, to investigate users' usage intentions and their influencing factors, and to provide a theoretical basis for enterprises and social commerce website operators.

2. Research Methods and Data Source

The study was conducted with users who use social e-commerce, which was promoted through Weibo, and the questionnaire was distributed from August 1 to August 31, 2021. A total of 300 questionnaires were returned during the survey period, and a total of 299 questionnaires were returned after deducting

invalid questionnaires. The study started with descriptive statistics of sample characteristics, including gender, age, occupation, education, frequency of using social e-commerce, the experience of using social e-commerce, and usage behavior, and then used structural equation modeling for research hypothesis testing, and the analysis tool was Smart PLS 3.0.

3. Theoretical Model and Research Hypothesis

3.1. Theoretical Model

The study was based on the proposed two community usage attitudes (engagement, and browsing attitudes), combined with Kim & Ko's division of social media marketing SMM activities into five items (fashion, word of mouth, interactivity, entertainment, customization) as an influence on attitudes [6], to explore the relational influence of usage attitudes on the behavior of virtual community users.

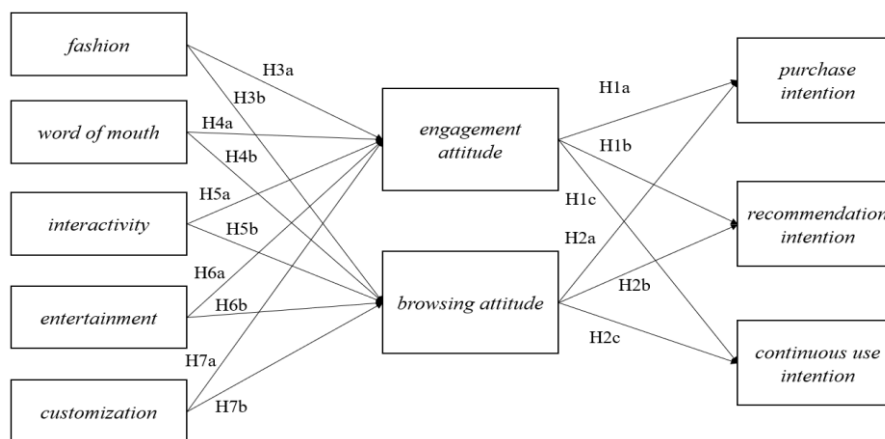


Figure 1: Theoretical model

3.2. Research Hypothesis

3.2.1. Relationship between engagement attitude, browsing attitude and purchase intention, recommendation intention, and continuous use intention

Community engagement attitudes, which represent emotionally responsive and loyal manifestations of users, are also considered to be the processes that precede referral intent, as well as lifetime value patterns that are viewed by consumers as purchase intent [7], thus inferring that when users are actively engaged in social e-commerce, there is a positive impact in purchase intent, and that engagement attitudes in social e-commerce, also result in referral intent.

H1a: Users' engagement attitude in social e-commerce sites positively influence users' purchase intention

H1b: Users' engagement attitude in social e-commerce sites positively influence users' recommendation intention

Engagement attitude toward a brand or community that exhibits effective remarks about participation is very much related to the intention to use this community consistently [8]. Thus inferring the relationship between engagement behaviors influencing continued use intentions.

H1c: Users' engagement attitude in social e-commerce sites positively influence users' continuous use intention

When users browse social e-commerce, they are influenced by the comments and experiences shared in the community, and they will continue to use the community because they get useful information from the browsing to help other users and prove their word-of-mouth value and generate recommendations for behavior. Therefore, the hypothesis is introduced:

H2a: Users' browsing attitudes in social e-commerce sites positively influence users' purchase intention

H2b: Users' browsing attitudes in social e-commerce sites positively affect users' recommendation

intention

H2c: Users' browsing attitudes in social e-commerce sites positively influence users' continuous use intention

3.2.2. Relationship between SMM (fashion, word of mouth, interactivity, entertainment, customization) and engagement attitude and browsing attitude

Simmel^[9] addresses fashion and finds that people have the characteristic of imitation and satisfy their needs in the pursuit of fashion. Therefore, it is inferred that consumers will continuously participate in or browse social e-commerce sites to get the latest mainstream information from them. Therefore, this study proposes the hypothesis:

H3a: Fashion of social e-commerce sites positively influences consumers' engagement attitude

H3b: Fashion of social e-commerce sites positively influences consumers' attitude browsing attitude

Petty & Cacioppo argue that more word-of-mouth information directly increases consumers' involvement^[10], and it can be inferred that when more word-of-mouth information is available on a social e-commerce website, it will increase consumers' involvement in the social e-commerce website and engagement or browsing.

H4a: Word-of-mouth information on social e-commerce sites positively influences consumers' engagement attitude

H4b: Word-of-mouth information on social e-commerce sites positively influences consumers' browsing attitude

The more frequent the interaction between members, the more naturally harmonious interpersonal relationships will be formed, the more enthusiastic participation in community discussions, and the higher the loyalty of members to the community will be. Therefore it is inferred that when users are more interactive in social e-commerce will browse online community information to interact with the community.

H5a: Interactivity of social e-commerce sites affects consumers' engagement attitude

H5b: Interactivity of social e-commerce sites affects consumers' browsing attitude

In addition, the exploratory browsing feature is relevant to hedonic users as they seek excitement such as fun and experience.

H6a: Entertainment on social e-commerce sites positively affects consumers' engagement attitude

H6b: Entertainment on social e-commerce sites positively affects consumers' browsing attitude

Customization is the ability to provide and design products and services for each customer through a highly flexible and integrated process. Therefore, it is inferred that customization of social networking sites can lead to increased consumer willingness to engage with or browse social e-commerce sites.

H7a: Customization of social e-commerce sites positively affects consumers' engagement attitude

H7b: Customization of social e-commerce sites positively affects consumers' browsing attitude

4. Analysis and Discussion

4.1. Descriptive Statistics

The ratio of male to female sample in this study is about 4:6; in terms of age, the majority is 18-22 years old, accounting for 71.6%, followed by 23-27 years old, accounting for 16.7%; the education level is mainly university 79.9%, accounting for about 80%; the majority is the student population with an income of less than 10,000 yuan. The sample has used social networking sites for more than one year, accounting for 65.6%; the frequency of using social networking sites is more than 5 days a week, accounting for 39.5%; the time of using social networking sites is less than 30 minutes a day, accounting for 38.5%; the habit of trading in social networking sites is not consumed, accounting for 46.5%. Finally, in terms of the use of social networking sites, the main way of learning about social networking sites is browsing related social networking sites, accounting for 54.85%; the main category of using social networking sites is food, accounting for 50.84%, followed by travel, accounting for 38.46%; the main social networking sites used shortly are microblogging shopping clubs, accounting for 52.5%.

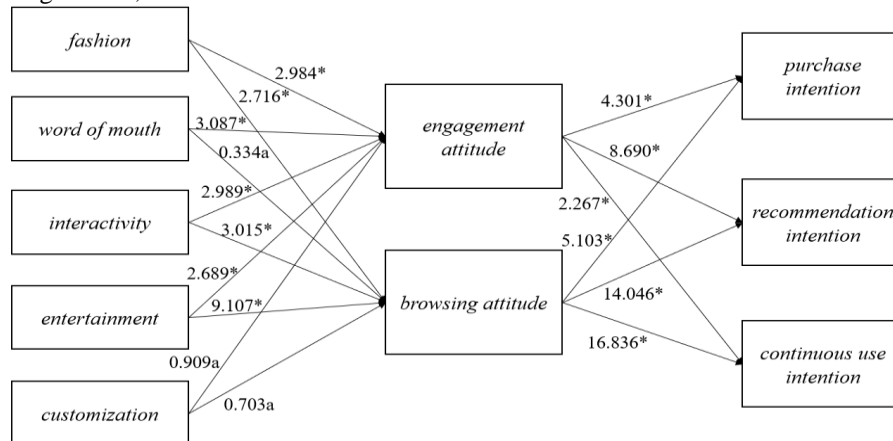
4.2. Hypothesis Testing Results

In this study, the BootStrap method was used to test whether the coefficients of the paths in the study model were significant and thus whether the hypotheses were valid (Table 1) and the model hypothesis is significant except for H7a, H7b, and H4b. The explanatory power of the endogenous construct can be expressed by R2. From the results of the structural model analysis, it was found that all the explanatory power of this study was greater than the threshold value of 0.1, indicating that the endogenous construct has high explanatory power for the overall model. In this study, the research hypothesis was tested by the significance indicator t-value in terms of potential variable validation, and the results of the model path analysis of this study are shown (Figure 2).

Table 1: Hypothesis test results

Hypothesis paths	Relation	Estimate	T-statistics	Results
H7a: customization → engagement attitude	+	-0.09	0.91	Reject
H7b: customization → browsing attitude	+	0.04	0.70	Reject
H6a: entertainment → engagement attitude	+	0.21	2.69	Accept
H6b: entertainment → browsing attitude	+	0.55	9.11	Accept
H5a: interactivity → engagement attitude	+	0.21	2.99	Accept
H5b: interactivity → browsing attitude	+	0.19	3.02	Accept
H4a: word of mouth → engagement attitude	+	0.24	3.09	Accept
H4b: word of mouth → browsing attitude	+	0.02	0.33	Reject
H3a: fashion → engagement attitude	+	0.18	2.98	Accept
H3b: fashion → browsing attitude	+	0.12	2.72	Accept
H2a: browsing attitude → purchase intention	+	0.33	5.10	Accept
H2b: browsing attitude → recommendation intention	+	0.56	14.05	Accept
H2c: browsing attitude → continuous use intention	+	0.67	16.84	Accept
H1a: engagement attitude → purchase intention	+	0.33	4.30	Accept
H1b: engagement attitude → recommendation intention	+	0.28	6.69	Accept
H1b: engagement attitude → continuous use intention	+	0.12	2.27	Accept

* Note: all significant, t-value < 1.645



* Note: a=reject

Figure 2: Results of the model path analysis

5. Conclusion

5.1. Research Findings

This study investigates the relationship between two community usage attitudes, engagement attitude, and browsing attitude, on the purchase behavior, recommendation behavior, and continuous usage behavior of virtual community users. In addition, Kim and Ko’s five categories of social media marketing SMM activities (fashion, word of mouth, interactivity, entertainment, and customization) are used to

understand the impact of social media marketing (SMM) on engagement and browsing attitude of social e-commerce users, which in turn affects user intention. The results of the study can provide a reference direction for website operators to make decisions.

5.1.1. Study on the impact of social e-commerce activities on users' attitude

The results of the study found that word-of-mouth had the greatest impact on engagement attitudes, indicating that word-of-mouth gives users more positive influence. That is, users, perceive that participating in a social e-commerce site belonging to their friends is of great value and use to them, especially when they receive approval during the engagement, which makes them more enthusiastic about participating and gaining a sense of belonging from it. Entertainment has the greatest impact on browsing attitudes, indicating that when a social e-commerce site makes users feel relaxed, they are more likely to visit the site more often and for a longer period, and are more likely to browse the information on the site and view the articles researched on the site and even start interacting with each other.

5.1.2. Study on the influence of engagement and browsing behavior on users' intention to use

The study found that engagement attitude has the greatest impact on recommendation intention, followed by purchase intention, showing that when users feel that the social commerce site is attentive, they are more likely to recommend the social e-commerce site to their friends than their purchase intention. Browsing attitude has the greatest influence on the intention to continue using the site, followed by the intention to recommend, which shows that when users are satisfied with the social commerce site, they are more likely to visit the site more often than to recommend it, and to interact when they feel that the social commerce site is well managed and provides the information they need. In addition to continued visits and interactions, loyalty is also likely to develop and trust the information and advice provided by the community.

5.2. Suggestion

According to the results of the study, fashion, interactivity, and entertainment all have a positive influence on the attitude of browsing and engagement on social networking sites, and interactivity has the greatest influence on browsing and engagement; and the attitude of browsing and engagement also has a positive influence on the intention to purchase, intention to continue using, and intention to recommend, and the attitude of browsing and engagement in social networking sites has the greatest influence on the intention to continue using. Therefore, when users feel the frequent interaction among members in the process, they are more likely to participate, and when information is more likely to create topics among the community, users will think that the community can give them some social and pleasure benefits, and these two factors also significantly affect the users' intention to use and will affect the subsequent continuous visiting behavior of community members.

Therefore, in terms of interactivity, it is recommended that community operators can provide a block for community members to exchange opinions and give immediate attention and respond to community members and whether operators will change their marketing activities based on the opinions of community members when they reflect on the content of social networking sites; in terms of popularity, operators should pay attention to whether the community can provide rich information and services and update the information to community members regularly. In terms of entertainment, it is important to make users feel that social networking sites can be stayed for a long time without feeling bored. Improving the business model of the website through social media marketing can make the community members feel the operator's intention, which will encourage the community users to continue to visit and become loyal in the future, and the community operator can use the community members to convey the message to more people.

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