

# Research on Consumer Online Reviews Intention of E-Commerce Platforms --Based on Maslow's Human Motivation Theory

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## ABSTRACT

It is becoming increasingly important for e-commerce platforms and operators to understand motivations for posting online reviews. The study aims at understanding the motivation of the users writing online consumption reviews. Based on Maslow's human motivation theory, the study builds a theory model of the consumer posting online reviews intention. The proposed model reveals the factors that encourage consumers to contributing electronic word of mouth (eWOM) willingness on e-commerce platforms. The factors include understanding motive, career motive, enjoying helping others, fun and enjoyment motive. The empirical study shows that all the hypotheses proposed in this study are supported. All the motivations have a significant influence on consumers' online reviews willingness. Based on the study results, important managerial implications for e-commerce platforms and operators are presented. In addition, the future research is discussed.

**Keywords:** Online consumer reviews, Willingness, E-commerce platform.

## 1. INTRODUCTION

With the increasing acceptance of the mode of the e-commerce transactions, the wide application of Web2.0 and the rise of social networking sites and new media, consumer online reviews which is also called electronic word-of-mouth (eWOM) have increasingly become the focus of the academic and business communities. Online consumer reviews play a very important role for the stakeholders of the e-commerce. Online consumer reviews can not only reduce the uncertainty and risk of the customers purchasing decisions, but also improve the benefits of the e-commerce enterprises and related platform operators[1]. However, many research results indicated that most of online shoppers would not be willing to take the initiative to write and post their consumption experience or product reviews, which led to consumer reviews with either little or useless information on online feedback systems of e-commerce platforms. Thus to some extent it seriously interferes with and affects decision-making behaviour of the online shoppers.

Moreover, the existing majority of the customer reviews systems of e-commerce platforms are short of effective incentive measures to encourage consumers to

actively write and post their high quality reviews on products and services, rather than giving reviewers favourable shopping points, corresponding virtual currency, or other economic rewards. At present, it has very important theoretical and practical significance for e-commerce platforms and related platforms service providers to understand and research real motivations of consumers posting product reviews accurately, to develop and optimize customer reviews systems of e-commerce platforms, and to encourage consumers to actively post high quality product reviews. However, few studies of this perspective have been carried out until now.

The findings of this research will be helpful to e-commerce platforms enterprises or platform service providers to optimize their customer reviews systems. The remainder of this paper is structured as follows. The next section elaborates the basis of theory and research hypotheses of the study. Section 3 gives a brief description about the research methods. Section 4 elaborates data analysis and results. The last section draws a conclusion and makes a further discussion.

## 2. THEORY AND HYPOTHESES

### 2.1. Research Background

There are many research theories to interpret human behaviour's motivation, such as the theory of rational behaviour[2]; functional approach, according to the functionalist view in social psychology, a motive is oriented to a goal or a function[3]; utilitarian perspective, which means people do all the social activities is to seek for the utility maximization, etc. This paper try to use Maslow's theory of human motivation to explore why online consumers contributing their consumption experience actively. Maslow's theory of human motivation is one of the most important theory of motivation. The theory hypothesizes that human behaviour is motivated by a complex set of conscious and unconscious needs, as well as the socio-cultural context. The theory proposes a five-level hierarchy needs, which includes physiological needs, safety needs, love/belonging needs, esteem needs and self-actualization needs[4].

Electronic shoppers commonly used e-commerce platforms, such as Taobao, Jingdong in China. The study takes those customer review systems as the research object to explore consumer's motives of online reviews. Through the preliminary network ethnography survey of those customers review systems, it is found that the users mainly present four motivations to contribute consumption reviews, which including understanding motive, career motive, enjoying helping others, fun and enjoyment motive. It is worth mentioning that there are no contributing consumer reviews based mainly on material incentives. This may be due to the social interaction among users of those customers review communities. In such a social community situation, monetary rewards cannot stimulate the occurrence of consumer review behavior. On the contrary, material reward has a certain inhibitory effect on their comments[5].

Through online commerce platforms' experience and survey, it is found that the career motivation of consumption reviews on e-commerce platforms is often due to the users' perception that posting reviews is useful or helpful for their current or future career. Career motive could be considered as consumers' physiological needs and the safety needs. Making consumption reviews can satisfy consumers' career motivation, thus meeting their security needs.

Understanding motive means that the reviewer consider that posting consumer reviews can develop his/her knowledge of the goods or services. What's more, this kind of review behavior can improve their sense of belonging. That is, consumption reviews may meet reviewers' belonging needs or the esteem needs.

Enjoying helping others means the consumption reviewer feels good to help others make correct consumption decisions. In addition, this kind of review behavior can improve the reviewers' reputation and status in the community, and then meet their self-esteem needs.

As for the motivation of fun and enjoyment, reviewers think that writing consumption reviews is an interesting activity and get fun and amusement. Contributing consumption reviews can meet reviewers' self-actualization needs and unleash their inside creative power.

### 2.2. Research Hypothesis

#### 2.2.1. Understanding Motive and Consumer Review Intention

Writing consumption reviews can improve the understanding ability of reviewers[6]. Moore (2012) shows that explaining review content influences online reviewers by increasing their understanding of consumption experiences[7]. Based on this, the study puts forward the following hypothesis,

*H1: Understanding motive has a positive effect on the consumer review intention in customer review systems of e-commerce platforms.*

#### 2.2.2. Career Motive and Consumer Review Intention

By contributing consumer reviews in the customer review community of the e-commerce platform, users can show their abilities in some aspects and improve their potential employment opportunities. So we propose the following hypothesis,

*H2: Career motive has a positive effect on the consumer review intention in customer review systems of e-commerce platforms.*

#### 2.2.3. Enjoying Helping Others and Consumer Review Intention

Hennig-Thurau et al. (2004) through customer's review system shows that helping for others is one of the motives of consumers contributing their consumption experience[8]. Xiang et al.(2018) also shows that enjoying helping others of customer's review motivation will promote consumer satisfaction, thus encouraging their consumption reviews[9]. So we propose the following hypothesis,

*H3: Enjoying helping others motive has a positive effect on the consumer review intention in customer review systems of e-commerce platforms.*

2.2.4. Fun and Enjoyment and Consumer Review Intention

One of the intrinsic motivations of consumers contributing their consumption experience is fun and enjoyment[10]. Relevant research also indicates that posting online product reviews can activate consumers' delight response[11]. So we propose the following hypothesis,

H4: Fun and enjoyment motive has a positive effect on the consumer review intention in customer review systems of e-commerce platforms.

Based on the above hypotheses, we develop a conceptual model as illustrated in Figure 1.

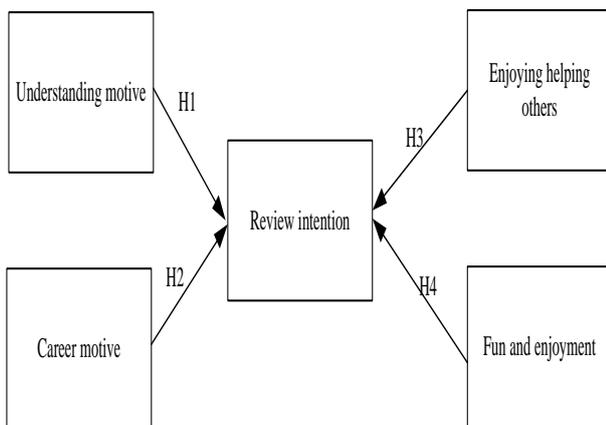


Figure 1. Research Model

3. RESEARCH METHODOLOGY

3.1. Data Collection

In order to collect study data for testing the above proposed research hypotheses, an online survey was conducted. The questionnaire was posted on the professional survey website. Users who had written reviews of online consumption were invited to fill in the questionnaire by snowballing. Finally, 351 valid questionnaires were collected.

3.2. Measurement

The study measured each construct with three or four items that were all on a 7-point Likert scale, from strongly disagree to strongly agree. All items were adapted from the classic literatures and considered e-commerce environment.

4. DATA ANALYSIS AND RESULTS

4.1. Assessment of Measurement Model

Table 1. Results summary for the measurement model

Construct	Items	CM	FE	EH	INT	UM
Career motive (CM,α=0.961) CR=0.972	CM1	<b>0.943</b>	0.545	0.237	0.585	0.582
	CM2	<b>0.949</b>	0.537	0.180	0.547	0.507
	CM3	<b>0.953</b>	0.559	0.149	0.555	0.518
	CM4	<b>0.942</b>	0.551	0.145	0.550	0.514
Fun and enjoyment (FE,α=0.890) CR=0.926	FE1	0.504	<b>0.904</b>	0.387	0.552	0.508
	FE2	0.537	<b>0.943</b>	0.377	0.567	0.463
	FE3	0.548	<b>0.935</b>	0.320	0.548	0.475
	FE4	0.423	<b>0.676</b>	0.152	0.370	0.322
Enjoying helping others (EH,α=0.906) CR=0.934	EH1	0.134	0.313	<b>0.842</b>	0.393	0.332
	EH2	0.071	0.267	<b>0.886</b>	0.314	0.337
	EH3	0.194	0.346	<b>0.924</b>	0.458	0.409
	EH4	0.244	0.356	<b>0.879</b>	0.400	0.418
Review intention (INT,α=0.921) CR=0.950	INT1	0.590	0.580	0.411	<b>0.914</b>	0.613
	INT2	0.542	0.539	0.427	<b>0.949</b>	0.672
	INT3	0.515	0.530	0.417	<b>0.924</b>	0.619
Understanding motive (UM,α=0.932) CR=0.957	UM1	0.506	0.511	0.427	0.644	<b>0.935</b>
	UM2	0.507	0.490	0.426	0.667	<b>0.951</b>
	UM3	0.569	0.442	0.346	0.611	<b>0.929</b>

The measurement model was further assessed for construct reliability and construct validity. The study apply the indicators of the composite reliability(CR), Cronbach's Alpha(α), item reliability for each construct to judge the measurement model internal consistency reliability. As shown in Table 1, the values of Cronbach's α for all of the constructs are above 0.7, the CR values are above 0.8, and cross loadings of all the items are above the recommended 0.7[12] except FE4. The results show that the scale or test items have good reliability.

In order to verify the validity of the measurement model, we usually need to evaluate the content validity, convergence validity and discriminant validity. Content validity is the degree to which the measurement content can represent the subject of the measurement. Each variable scale is a mature scale selected from classic literature maturity scale combined with online review system context in the study. Therefore, it has good

content validity. Convergence validity usually adopts average variance extracted (AVE) and CR indexes to evaluate. If  $AVE \geq 0.5$ ,  $CR \geq 0.7$ , then the measurement model has good convergence validity. As shown in table 2, the corresponding AVE and CR are both above the threshold, indicating that the measurement model in this study has good convergence validity. As shown in table 2, off-diagonals are the correlations between constructs. When they are larger than the correlation coefficient of its row and column values, the measurement model has better discriminant validity. As Hair, et al. (2014) recommended, the results indicate the high reliability and convergent validity of the data. In conclusion, the quality of the measurement model is satisfactory.

**Table 2.** Correlations between constructs and average variance extracted

Construct	AVE	CM	FE	EH	INT	UM
CM	0.896	<b>0.947</b>				
FE	0.760	0.579	<b>0.871</b>			
EH	0.780	0.189	0.367	<b>0.883</b>		
INT	0.864	0.591	0.592	0.450	<b>0.929</b>	
UM	0.881	0.561	0.513	0.427	0.684	<b>0.938</b>

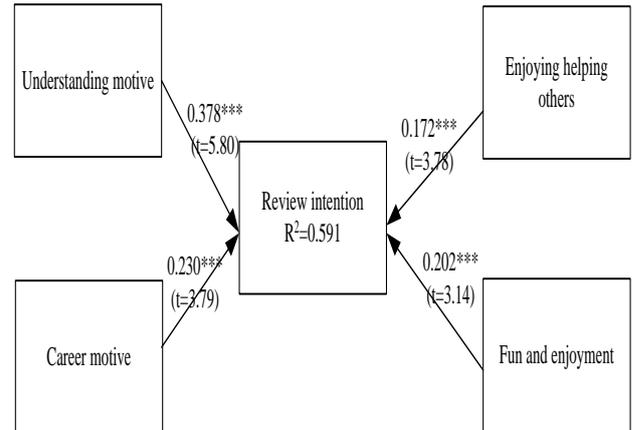
*Notes: The bold diagonals represent the square root of average variance extracted (AVE) and off-diagonals are the correlations between constructs.*

#### 4.2. Assessment of the Structural Model

Due to the variance hypothesis of the PLS-SEM free distribution, it is not suitable to estimate PLS-SEM to use a single goodness of fit standard. The nonparametric estimation standard based bootstrapping algorithm is more suitable [12]. Through Harman single factor test showed that there is no serious common method deviation problem in the study. And the variance inflation factors (VIF) values, which shown that there is no multicollinearity problem.

We use the software smartpls3.0 to test the PLS algorithm of the sample data set, and use the nonparametric bootstrapping method, 5000 sub samples, no sign changes algorithm to test the significance of the path coefficient of the structural model. The operation results are shown in Figure 2. The results show that the relationships among all variables in the structural model are significant at the 1% importance level, which shows that the model has a good internal structure. The  $R^2$  value of the final endogenous variable user consumption review intention (INT) in this study is 0.591, which indicates that the corresponding predictive variable accounts for 59.1% of the variance of the intention to consumption review. It can be seen that the structural model of this study has a good prediction accuracy, and

the explanatory power of the model for the consumer review intention of e-commerce platform users is acceptable and satisfactory.



Note: \*\*\*p < 0.01

**Figure 2.** Results of Structural Model Tests

## 5. CONCLUSIONS AND DISCUSSION

### 5.1. Conclusions

The study aims at understanding the motivation of the users writing online consumption reviews. Based on Maslow’s human motivation theory, the study builds a structure model of the consumer posting online reviews intentions. The proposed model reveals the factors that encourage consumers to contributing eWOM on e-commerce platforms. The research shows that the motivations of customers writing online reviews including understanding motive, career motive, enjoying helping others, fun and enjoyment motive. The empirical study shows that all the hypotheses proposed in this study are supported. All the motivations had a significant influence on consumers’ online reviews willingness. We not only enriches the application of the Maslow’s human motivation theory in the customer reviews system, but also has some practical implications for e-commerce platforms.

### 5.2. Managerial Implications

Understanding what motivates consumers posting and sharing their online consumption experiences to engage in eWOM can help e-commerce platform enterprises and businesses carry out business better and promote the sales of products and services. The results show that in order to better encourage users to write high-quality online consumption reviews, e-commerce platform enterprises and operators should focus on the motivation of understanding. For the understanding motive, it may meet reviewers’ belonging needs or the esteem needs. The e-commerce platforms should create a good learning environment to improve the

understanding motivation of reviewers, so as to promote users to write more consumption reviews.

Then the e-commerce platforms and operators also should pay close attention to the career motive, enjoying helping others, fun and enjoyment motivations. Those motivations can meet users' different needs. E-commerce operators should adopt appropriate incentive mechanism when designing the customer review system to create conditions and situations for users' enjoying helping others, fun and enjoyment motivations, in order to incentive consumers to actively write effective consumption reviews.

### **5.3. Limitations and Future Research**

It is of great theoretical and practical significance to study the motivation behind the users' consumption reviews intention on the e-commerce platform for optimizing the user online review systems, improving the customer review incentive mechanism. With the rise of cross-border e-commerce, it is particularly urgent to study the willingness of global users to consumption reviews. However, this paper is mainly based on the research of Chinese users. There may be national cultural differences in users' willingness to consumption reviews. In the future, we can further explore the user's review intention from the cross-cultural perspective.

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