



Research on The Effect of UGC Characteristics on Consumers' Impulse Purchase Intention in Community E-commerce Platform

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Abstract. From the perspective of consumers, based on SOR model and flow experience theories, this paper constructs a research model on the impact of UGC characteristics of social e-commerce platforms on consumers' impulse purchase intention, and empirically analyzes the impact of UGC characteristics on consumers' impulse purchase intention. Research shows that UGC characteristics (S) indirectly affect consumers' impulse purchase intention (R) through flow experience (O).

Keywords: UGC; flow experience; impulse buying

1 INTRODUCTION

With the continuous updating of customer demand in the new era of new technology, the traditional commodity-based e-commerce model has been unable to meet the psychological needs of many consumers in the new era. E-commerce platforms have begun to seek transformation, and many UGC (user-generated content) social e-commerce platforms stand out with their "community + content + e-commerce" innovation model, ushered in a development boom, and achieved great success in a short period of time. User-generated Content (UGC) refers to the pattern that audio, video, comments, articles and other forms of content created and shared by users are consumed and used by others under the support of network services and technologies. UGC content community has also attracted the attention of major traditional e-commerce platforms with its own huge traffic entry and emotional connection with consumers. At present, many enterprises or merchants use the communication community of social e-commerce platforms as a marketing position, and use UGC content to channel brands and products to increase exposure and product sales. Therefore, in order to fully and effectively play the positive role of social e-commerce platform UGC in enterprise marketing activities, it is very important to explore how UGC affects consumer behavior.

2 THEORETICAL ANALYSIS AND HYPOTHESIS DEVELOPMENT

2.1 User Generated Content features

User generated content was born in the Internet web2.0 era. Jarrett (2008) believes that users can freely create and share some content on the platform according to the rules and regulations specified by the platform^[1]. The research object of Wang Xuhui et al. (2015) thinks user-generated content is divided into information quality and interaction quality. Among them, the evaluation dimension of information quality is the accuracy, timeliness, richness and vividness of the content produced by the information source, and user-generated content in the community is rich and timely. Interaction quality is measured by interpersonal interaction, that is, the interaction process between consumers and between consumers and retailers. Chang Yaping (2014) divided consumption information in virtual communities into five dimensions: reliability, objectivity, relevance, interest and timeliness.

Three dimensions usefulness, interest and interactivity are selected to analyze the impact mechanism of user-generated content on impulse purchase decision. The following definitions are based on the research literature: Usefulness: The information provided in user-generated content brings tangible benefits to consumers' lives, For example, provide timely promotional information, provide comparative information of different brands of products in the same category etc. (Chai et al., 2009)^[2]. Fun: Content publishers use humorous tone, story plot and other ways of expression, so that the content is attractive to consumers, consumers can generate a sense of pleasure in the process of browsing, is an important factor to attract consumers' attention and accept information (Chang Yaping and Dong Xuebing, 2014). Interactivity: interactivity in this paper refers to the ability to conduct interpersonal communication and rapid response through user-generated content. H1: UGC characteristics positively and significantly affect consumers' impulse purchase intention. H1a: Usefulness positively and significantly affects consumers' impulse purchase intention. H1b: Fun positively and significantly affects consumers' impulse purchase intention. H1c: The interaction is positive and significantly affects consumers' impulse purchase intention.

2.2 Flow experience

Mihaly Csikszentmihalyi (1975) first proposed the concept of flow experience, believing that when people are engaged in what they enjoy, they can lose the sense of time, forget where they are, ignore what is happening around them, and ignore the loss and gain of self-consciousness^[3]. Later, Hoffman and Novak (1996) first contextualized the flow experience in the context of online shopping as a manifestation of a mental state that primarily encompasses sustained focus, perceived control, perceived pleasure, and loss of self-awareness (Koufaris, 2002). Many studies have confirmed that flow experience is positively correlated with purchase intention (Hausman&Siekpe, 2009; Yi Jia-bin and Ji Shuxian, 2011)^[4]. When shopping online, consumers will be stimulated by the outside world, and when the flow experience is generated, they will feel happy and

focused, with a sense of immersion. Time passes quickly, and it is easier to search and click links to stimulate impulse purchase intention. The higher the flow experience, the easier it is to make second purchase and unplanned purchase decisions (Chen Jie, Cong Fang and Kang Feng, 2009)^[5]. This study uses Ghani's two-dimensional segmentation method to take pleasure and focus as consumers' psychological responses, the hypothesis is made: H2: UGC features have a significant positive impact on consumer flow experience. H2a: Usefulness has a significant positive impact on consumer flow experience. H2b: Fun has a significant positive impact on consumers' flow experience. H2c: Interactivity has a significant positive impact on consumer flow experience. H3: Flow experience has a significant and positive impact on consumers' impulse purchase intention

2.3 Research Methods

In this paper, questionnaire survey was used to conduct the research. Each item in the questionnaire was evaluated with a seven-level Likert scale, which included seven choices, in order of strongly disagree to strongly agree. The score was from 1 to 7. To improve reliability, this paper uses the existing maturity scale, as shown in the table 1.

Table 1. Variable scale items

Variable	Scale item	Reference source
<i>Usefulness</i>	1. I believe that the users who share this content have knowledge in the field related to the product	Qin et al(2008)
	2. I believe that the user who shared the content has experience with the product	Yuksel(2016)
<i>Fun</i>	1. The language used by the user in the content shared on the platform is humorous	Barnett(1990)
	2. The content shared by the user on the platform is very attractive to me	Karat et al (2002)
<i>Interactivity</i>	1. I think we can get valuable information by browsing the content shared by users on social e-commerce platforms	Goh, K. Y(2018)
	2. When I post questions on social e-commerce platforms, I can usually get help and answers from others	
<i>Flow experience(Pleasure)</i>	1. When I browse the product-related information posted by the user on the social e-commerce platform, the happy mood will make me continue to browse the product-related content	Koufaris (2012)
<i>Flow experience(Focus)</i>	2. When I browse the product related information posted by the user on the social e-commerce platform, I feel that time passes quickly	Ghani etal.(1991)

Impulse buying	After browsing the product information published by the user on the social e-commerce platform, I will have the impulse to buy the relevant product	Beatty et al(1998)
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Through convenience sampling, consumers with social e-commerce purchasing experience are selected as the survey objects. After ensuring the validity and reliability of the questionnaire data, SPSS25.0 software was used to conduct correlation and regression analysis on the data to test the hypothesis.

A. Reliability and validity

The results showed (see Table 2) that the combined reliability (CR) of all variables were higher than 0.8 and Cronbach coefficient was higher than 0.9, indicating that the overall reliability of the sample was good. Confirmatory factor analysis showed that the item factor load ranged from 0.813 to 0.945, average variance precipitation (AVE) was higher than 0.6, and KMO was greater than 0.7, indicating that the sample aggregation validity was good and suitable for factor analysis.

Table 2. Reliability and validity results

variable	Factor loading	Cronbach's α	KMO	AVE	CR
<i>Usefulness</i>	Q1.1 (0.928) Q1.2 (0.945)	0.973	0.826	0.604	0.821
<i>Fun</i>	Q2.1 (0.854) Q2.2 (0.814)	0.976	0.864	0.633	0.838
<i>Interactivity</i>	Q3.1 (0.898) Q3.2 (0.893)	0.972	0.783	0.604	0.820
<i>Flow experience</i>	Q4.1 (0.813) Q4.2 (0.831)	0.924	0.882	0.623	0.846
<i>impulse buying</i>	Q6.1 (0.665)	0.981	0.805	0.685	0.865

B. Correlation and collinearity

Through the matrix in Table 3, we know that there is a significant correlation among all variables, which is basically strong correlation.

Table 3. Correlation Coefficient Matrix

	<i>Usefulness</i>	<i>Fun</i>	<i>Interactivity</i>	<i>Flow experience(Pleasure)</i>	<i>Flow experience(Focus)</i>	<i>impulse buying</i>
<i>Usefulness</i>	1					
<i>Fun</i>	0.813**	1				
<i>Interactivity</i>	0.824**	0.815**	1			
<i>Flow experience(Pleasure)</i>	0.806**	0.784**	0.813**	1		
<i>Flow experience(Focus)</i>	0.824**	0.833**	0.822**	0.815**	1	
<i>impulse buying</i>	0.817**	0.795**	0.824**	0.802**	0.825**	1

1) Note: ** means significant at a confidence level of 0.01

C. Analysis of regression

1). Regression analysis of UGC characteristics on consumers' impulse purchase intention

We can conclude that the direct impact of usefulness on consumers' impulse purchase intention is obvious and positive (B=0.328, t=6.365, P<0.05), which verifies the hypothesis H1a. The direct influence of interest on consumers' impulse purchase intention is obvious and positive (B=0.220, t=7.035, P<0.05), which verifies the hypothesis H1b. The direct impact of interactivity on consumers' impulse purchase intention is obvious and positive (B=0.16, t=4.554, P<0.05), which verifies the hypothesis H1c. The direct influence of comprehensive usefulness, interest and interactivity on consumers' impulse purchase intention is obvious and positive which verifies hypothesis H1.

Based on the above analysis and the results of SPSS regression analysis, the quantitative relationship between consumers' impulse purchase intention and usefulness, interest and interactivity (regression equation) is as follows:

$Y=0.528+0.328X1+0.220X2+0.350X3$, where Y represents consumers' impulse purchase willingness, X1 represents usefulness, X2 represents fun, and X3 represents interactivity. As show in table 4 to 5.

Table 4. Regression Analysis of UGC Characteristics on Consumers' Purchase Intention

<i>Impulse Buying</i>			
	<i>B</i>	<i>VIF</i>	<i>t</i>
<i>Usefulness</i>	0.328	3.815	6.365***
<i>Fun</i>	0.220	3.660	4.554***
<i>Interactivity</i>	0.350	3.860	7.035***
<i>F</i>		358.998	
<i>DW</i>		1.866	
<i>Adjusted R</i>		0.751	

2) Note: ** means significant at a confidence level of 0.01

2) Regression analysis of UGC characteristics on flow experience

Table 5. Regression Analysis Results of Flow experience s on Consumer's Purchase

	<i>Flow experience(Pleasure)</i>			<i>Flow experience(Focus)</i>		
	<i>B</i>	<i>VIF</i>	<i>t</i>	<i>B</i>	<i>VIF</i>	<i>t</i>
<i>Usefulness</i>	0.352	3.815	6.048***	0.311	3.815	6.069***
<i>Fun</i>	0.232	3.660	4.263***	0.360	3.660	7.494***
<i>Interactivity</i>	0.379	3.860	6.740***	0.288	3.860	5.802***
<i>F</i>		323.897			413.797	
<i>DW</i>		1.964			1.882	
<i>Adjusted R</i>		0.731			0.776	

From the above data, it can be seen that H2, H2a, H2b and H2c hypotheses are valid. Based on the above analysis and the results of SPSS regression analysis, the quantitative relationships between flow experience (pleasure) and flow experience (focus) and

usefulness, interest and interactivity (regression equation) are as follows: $T1=0.184+0.352X1+0.232X2+0.379X3$. $T2=0.238+0.311X1+0.360X2+0.288X3$, where T1 represents flow experience (pleasure), T2 represents flow experience (focus), X1 represents usefulness, X2 represents fun, and X3 represents interactivity.

3) Regression analysis of flow experience on consumers' impulse purchase intention. As show in table 6.

Table 6. Mediation Model Data of UGC Features on Purchase Intention

	<i>Impulse Buying</i>		
	<i>B</i>	<i>VIF</i>	<i>t</i>
<i>Flow experience(Pleasure)</i>	0.355	2.977	8.126***
<i>Flow experience(Focus)</i>	0.355	2.977	10.746***
<i>F</i>		482.108	
<i>DW</i>		2.012	
<i>Adjusted R</i>		0.729	

3) Note: ** means significant at a confidence level of 0.01

3 CONCLUSION

(1) UGC features of social e-commerce platforms have a significant and positive impact on consumers' impulse purchase intention. (2) UGC features of e-commerce platforms have obvious and positive impacts on flow experience. (3) Flow experience (pleasure and focus) has an obvious and positive impact on consumers' impulse purchase intention.

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