

Research on the Influence of Customer Perceived Value on FMCG E-WOM Communication

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Abstract. E-WOM(electronic word-of-mouth) has gradually replaced traditional WOM(word-of-mouth) as an important factor affecting consumer shopping due to the popularization of the Internet and the fast growth of e-commerce. Therefore, e-WOM communication is crucial for developing potential consumers. This paper focuses on FMCG(fast-moving consumer goods) product consumers to explore how their perceived value, including social value, functional value and sentimental value, affects product attitudes and further influences e-WOM. The results show that perceived value positively affects both product attitude and e-WOM, and product attitude mediates the relationship between perceived value and e-WOM. Finally, according to the research results, the paper presents some marketing suggestions for network merchants.

Keywords: Perceived Value · Social Value · Functional Value · Sentimental Value · Product Attitude · E-WOM Communication

1 Introduction

WOM (word-of-mouth) is an important influencing factor for consumers' purchase intention. Consumers rely on WOM to quickly understand product quality and user experience and spread WOM based on perceived value. WOM becomes a significant factor in product promotion and consumer purchasing decisions. In recent years, e-commerce has developed rapidly based on information technology, providing opportunities for Internet marketing, and consumer communication behaviour has changed, replacing traditional WOM [1]. Some platforms with e-WOM content are listed as follows (Fig. 1).

FMCG (fast-moving consumer goods) products, as a necessity used in human life, are sold in a huge volume globally. In the study on the change of FMCG consumption habits of Indian consumers under COVID-19, it was found that the consumption habits of consumers towards FMCG have changed, and 85% of respondents agreed that

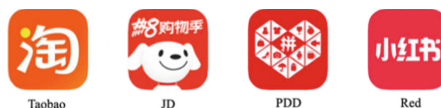


Fig. 1. Platforms with E-WOM Content (Photo credit: Original)

e-commerce would be the future of FMCG [2]. Therefore, studying the e-WOM communication of FMCG products in an e-commerce environment is of great significance. In this paper, we focus on the impact of the perceived value of consumer attitudes towards products during the purchase process, which changes the whole process of e-WOM.

The structure of the paper is as follows: First, there are literature reviews on perceived value, product attitude and e-WOM communication. Next, research methods to address the research objectives were identified. In the next two parts, the research results are given and analyzed. The last part concludes the study with the major findings and implications for the following research.

2 Literature Review

2.1 Perceived Value

Perceived value is an important condition for consumers when making purchase decisions. Consumers' purchase decisions generally depend on the perceived value of the product, that is, the overall evaluation of the product's utility [3]. In a study on upcycled products, perceived value was found to positively affect both product attitudes and purchase intentions [4]. The perceived value measurement varies according to research contexts and product characteristics. In recent years, perceived value has been classified into functional value, sentimental value, aesthetic value, social value, self-expressive value, etc. [5][6][7]. In our research, we take FMCG customers as the research object and divide the perceived value in the consumption process into social, functional, and sentimental value. Among them, social value refers to consumers feeling their image and recognition have been improved after owning the product. Functional value refers to consumers' belief that the product has certain advantages in attributes, quality and functions. Sentimental value refers to the good experience consumers have during the purchase process. Thus, we have proposed:

H1: Social value has a positive effect on product attitude.

H2: Functional value has a positive effect on product attitude.

H3: Sentimental value has a positive effect on product attitude.

2.2 Product Attitude

Product Attitude refers to the degree of thought and belief of consumers toward products [8]. Product attitude will affect consumers' purchasing behaviour to a certain extent. When shopping online, profit-centred information positively impacts consumers' attitudes toward products [9]. When consumers perceive the brand image positively, their buying behaviour will be positively influenced [10]. Therefore, hypothesis 4 was proposed in this study.

H4: Product attitude has a positive effect on e-WOM communication.

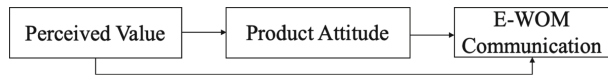


Fig. 2. Research Model (Photo credit: Original)

2.3 E-WOM Communication

Word-of-mouth can contribute to one of the factors of brand social value, which positively impacts brand equity value [11]. With the continuous development of E-commerce, consumers’ communication behaviour has changed, and e-WOM has gradually taken the place of WOM. e-WOM also provides a platform for information sharing so that consumers can understand the quality and risks of products before making decisions [1]. A larger percentage of consumers check product reviews online and express trust in e-WOM before making a purchase [12]. Therefore, brands need to be aware of the impact of e-WOM when conducting e-marketing. In conclusion, we proposed the following hypotheses.

- H5: Social value has a positive effect on e-WOM communication.
- H6: Functional value has a positive effect on e-WOM communication.
- H7: Sentimental value has a positive effect on e-WOM communication.
- H8: Product attitude mediates between social value and e-WOM communication.
- H9: Product attitude mediates between functional value and e-WOM communication.
- H10: Product attitude mediates between sentimental value and e-WOM communication.

3 Methodology

3.1 Model

Based on the above analysis, this paper takes online FMCG product shopping as the background to study how perceived value affects product attitude and thus e-WOM communication. At the same time, the mediating role of product attitude between perceived value and e-WOM communication is studied, and the theoretical model is as follows (Fig. 2).

3.2 Research Method

The measurement items in the questionnaire were extracted from the previous article and appropriately adapted to the study, which is reliable and practical. In addition to demographic data collection, the questionnaire required the subjects to recall their last purchase of FMCG products and to assess the social, functional and sentimental values obtained from the purchase (4 items for each construct), as well as their attitudes toward products and their willingness to spread WOM on the Internet (3 items for each construct). The questionnaire was quantitatively measured using Likert’s 7-point method.

Before the formal survey, we used the pilot to improve the questionnaire to ensure its usability. At the same time, the questionnaire requires respondents to answer according to their situation.

Table 1. Sample Characteristics (N = 244) (Photo credit: Original)

Category		Frequency	Percent
Sex	Male	83	34.0%
	Female	161	66.0%
Age	Gen Z	129	52.9%
	Gen Y	105	42.0%
	Gen X	10	4.1%
Number of online purchases of FMCG products per year	1–5	66	27.0%
	5–10	97	39.8%
	> 10	81	33.2%

4 Data Analysis

4.1 Descriptive Analysis

Before the empirical analysis, we conducted descriptive statistical analysis on the 244 samples to account for the respondents in terms of age, gender, and online shopping experience, as shown in Table 1.

As can be seen from the table above, in terms of gender, 34.0% of the total sample were male and 66.0% were female. Regarding age, Generation Z, Generation Y and Generation X accounted for 52.9%, 42.0% and 4.1%, respectively, indicating that respondents are generally younger and more receptive to new things such as online shopping. In terms of the online shopping experience, 73.0% of the respondents bought FMCG products online more than five times a year, indicating that the respondents have a rich online shopping experience, which is representative.

4.2 Reliability Analysis

To evaluate the consistency and stability of the measurement scales, we used Cronbach's alpha values for the reliability measures. The test results are shown in Table 2. Generally, Cronbach's Alpha value greater than 0.7 is attained, and the reliability of all variables in this paper is greater than 0.7, showing high reliabilities.

4.3 Factor Analysis

We use four indicators to assess each independent variable and three indicators to assess each dependent variable.

The social, functional, and sentimental value of perceived value are analyzed. The KMO value is 0.921 with a significance value of 0.000, indicating that the data is very suitable for factor analysis. Consistent with the questionnaire design, three factors were extracted from twelve indicators. The KMO for the dependent variable is 0.901 with a significance value of 0.000. Two factors were extracted from six indicators consistent with the questionnaire design.

Table 2. Results of Reliability Test (Photo credit: OriginalPhoto credit: Original)

Variable	Items	Cronbach's Alpha
Functional Value	4	0.822
Sentimental Value	4	0.851
Social Value	4	0.890
Product Attitude	3	0.851
E-WOM Communication	3	0.855
Overall Questionnaire	18	0.952

4.4 Regression Analysis

To verify hypotheses, we developed multiple linear regression equations to analyze and test the correlation between the independent and dependent variables.

4.4.1 Regression Analysis of Perceived Value on Product Attitude

Multiple linear regression analysis was conducted with product attitude as the dependent variable and three dimensions of perceived value: social value, functional value and sentimental value as independent variables. As shown in Table 3, the regression standardized coefficients of the impact of sentimental value, functional value and social value on product attitude are 0.449 (sig = 0.000), 0.298 (sig = 0.000) and 0.203 (sig = 0.000), respectively. All three dimensions of perceived value positively correlate with product attitude, supporting hypotheses H1, H2 and H3.

4.4.2 Regression Analysis of Product Attitude on e-WOM Communication

The regression analysis was conducted with product attitude as the independent variable and e-WOM communication as the dependent variable. As shown in Table 4, with the significance value less than 0.01, the regression effect was significant, verifying hypothesis H4, indicating that product attitude positively correlates with e-WOM communication.

4.4.3 Regression Analysis of Perceived Value on E-WOM Communication

The results of the multiple linear regression with social value, functional value and sentimental value as independent variables and e-WOM as dependent variables are shown in Table 5. The standardized coefficients of the regressions for sentimental value, social value and functional value on e-WOM communication were 0.366, 0.339 and 0.205, respectively, with significance values less than 0.01, verifying hypotheses H5, H6 and H7.

Table 3. Regression analysis of perceived value on product attitude (Photo credit: Original)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.821	.232		3.543	.000
	SV	.854	.040	.807	21.253	.000
2	(Constant)	.240	.235		1.024	.307
	SV	.585	.057	.552	10.259	.000
	FV	.374	.060	.337	6.259	.000
3	(Constant)	.184	.226		.813	.417
	SV	.475	.060	.449	7.881	.000
	FV	.330	.058	.298	5.663	.000
	SOV	.178	.040	.203	4.433	.000

Table 4. Regression Analysis of Product Attitude on E-WOM Communication (Photo credit: Original)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.419	.281		1.489	.138
	PA	.896	.049	.764	18.410	.000

4.5 Intermediary Effect Analysis

To conduct the mediation analysis, Hayes (2017) PROCESS (model 6) was implemented, including a 95% confidence interval and 5,000 bootstrap samples were used to measure the indirect effect of perceived value on e-WOM mediated by-product attitude. In terms of analyzing the results, if the confidence interval does not include zero, then the mediation is said to be statistically significant. Table 6 shows a significant indirect effect of functional value on e-WOM through the mediation effect of product attitude (0.5747, 95%CI [0.3961, 0.7254]), supporting H9. Likewise, indirect effect of sentimental value and social value on e-WOM are significant through the mediation effect of product attitude (0.4703, 95% CI [0.2894, 0.6017]), (0.3696, 95% CI [0.2491, 0.4925]), supporting H10 and H8. Therefore, it is assumed that H8, H9, and H10 are valid, and product attitude is mediating in the influence of perceived value on e-WOM.

Table 5. Regression Analysis of Perceived Value on E-WOM Communication (Photo credit: OriginalPhoto credit: Original)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.256	.308		.833	.406
	SV	.923	.053	.744	17.298	.000
2	(Constant)	-.007	.283		-0.026	.980
	SV	.622	.065	.501	9.642	.000
	SOV	.379	.053	.369	7.079	.000
3	(Constant)	-.400	.299		-1.338	.182
	SV	.454	.080	.366	5.705	.000
	SOV	.348	.053	.339	6.576	.000
	FV	.266	.077	.205	4.456	.001

Table 6. Analysis of the Mediating Effect of Product Attitude on the Relationship Between Perceived Value and E-WOM Communication (Photo credit: OriginalPhoto credit: Original)

IV	M	DV	Effect	95% CI
FV	PA	EC	0.5747	[0.3961, 0.7254]
SV	PA	EC	0.4703	[0.2894, 0.6017]
SOV	PA	EC	0.3696	[0.2491, 0.4925]

5 Conclusion

This paper analyzes the influence of perceived value on e-WOM communication through product attitudes. In this chapter, we will summarize the results of this study, discuss its contributions, and explain its limitations of the study.

After the empirical research, all the hypotheses have been proved. Firstly, the three values perceived by customers in the purchase process of FMCG goods have a positive influence on customers' product attitudes, with the degree of influence ranging from sentimental value, functional value, and social value. Secondly, product attitudes positively influenced e-WOM communication. Thirdly, the three values perceived by customers in purchasing FMCG products positively influenced e-WOM communication, from sentimental value, social value and functional value, and product attitudes played a mediating role.

The above findings also provide some references for businesses to do digital marketing. Online merchants can pay attention to the communication of sentimental value in marketing according to product attributes, meet consumers' sentimental needs, and enhance consumers' sentimental shopping experience. For example, telling a good brand

story, setting up exclusive customer service and providing perfect after-sales service will be good methods. At the same time, attention should be paid to the important role of electronic WOM communication in attracting potential consumers. Net businesses should pay attention to the content of product evaluation and try to eliminate the negative influence of e-WOM.

However, several limitations should be acknowledged. The limited number of respondents and geographical concentration may lead to an incomplete conclusion. More respondents are needed to participate in the survey. In addition, due to the limitations of online research, respondents' answers to the questionnaire are subjective, and their understanding of the three dimensions of perceived value may deviate from the definition when conducting the question set, which can be changed to an interview-based survey in future research.

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