# Research on the Influence of New Media Content Marketing on Consumer Interaction Intention Based on Regression Analysis Algorithm

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**Abstract.** New media content marketing is very important for operators to grasp and stimulate consumers' willingness to participate in interaction. Understanding it can not only better meet consumers' needs, but also help businesses get feedback and make decisions. This paper builds a model based on the S-O-R theory, uses SPSS21.0 software to analyze correlation algorithm and regression analysis algorithm, and draws the conclusion that consumers' willingness to participate largely depends on the type and quality of content, and puts forward relevant countermeasures and suggestions, namely, increasing the practicality, knowledge, pertinence, high quality and timeliness of content marketing, and enhancing the interest of content to form emotional communication with consumers, Focus on consumer value perception to form a relational community.

Keywords: New Media, Content Marketing, Interaction Propensity, Algorithm Analysis.

## 1 Introduction

After the information technology revolution, the endless emergence of content information is full of challenges for new media marketers <sup>[1]</sup>. Whether consumers are willing to interact with information content determines consumer satisfaction and the enthusiasm and quality of the content produced by marketers <sup>[2]</sup>. Therefore, we should deeply analyze the influencing factors of consumers' willingness to interact. This study uses validity algorithm, correlation algorithm and regression analysis algorithm to analyze the four dimensions of information content, entertainment content, information value and information professionalism to explore whether they have an impact on consumers' willingness to interact.

## 2 Model building and assumptions

#### 2.1 Model building

In the study of the impact of new media content marketing on consumers' willingness to interact, with the help of the SOR theory as the research direction guidance [3], build a model and use SPSS21.0 software for empirical analysis. In the SOR (stimulus-organism-response) theoretical model, this study regard the media econtent as an external stimulus, and the presentation of different content information of the media is used to study the impact on

consumers' willingness to interact. This paper also perfects the research from the perception perspective of consumers themselves, and constructs the model from the following two perspectives.

## 2.1.1 Consumer perspective

From the perspective of consumers, establish two research dimensions of information perceived value and information perceived professionalism <sup>[4]</sup>. The information perceived value refers to that consumers will perceive the value of information according to their own experience, education, age and other attributes <sup>[5]</sup>. The information perceived professionalism refers to the consumer's perception of the image of the information content publisher, whether it is professional or amateur <sup>[6]</sup>.

#### 2.1.2 Media perspective

The media weaving information is divided into information content and entertainment content. Informative content is characterized by practicality, knowledge, pertinence and timeliness, which can help them understand the concept of things and make behavioral decisions <sup>[7]</sup>; Entertainment content has the characteristics of unique, interesting and emotional communication <sup>[8]</sup>.

Comprehensively from the two dimensions of media perspective and consumer perception perspective, using SOR related theories will stimulate consumers' willingness to interact from both the external media perspective and the internal consumer perspective of content marketing to build the following research framework, as shown in Figure 1.

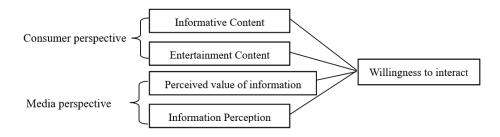


Fig. 1. Research framework.

#### 2.2 Research hypothesis

For information publishers on new media, it is crucial whether the attributes of content can satisfy consumers or bring benefits to consumers [9]. This paper speculates that informational conten and entertainment content will affect consumers' willingness to interact, and puts forward the following two assumptions:

H1 Informational content has a significant impact on consumers' willingness to interact

H2 Entertainment content has a significant impact on consumers' willingness to interact

Regarding the perception of information value and information professionalism, the reason why we separate them here is that we consider them from different perspectives. The

perception of information value here focuses more on consumers' own feelings. For consumers, the information professionalism of information publishers, that is, their image evaluation of these publishers may also Influential<sup>[10]</sup>. Therefore, the following assumptions are proposed:

H3 Consumers' perception of information value has a significant impact on their willingness to interact

H4 Consumers' perception of information professionalism will have a significant impact on their willingness to interact

#### 2.3 Data sources

In this study, a total of 244 questionnaires were collected, with an effective recovery rate of 93.8%. The main contents of this questionnaire include: the basic information of consumers; the behavioral attitude towards information content, entertainment content, information value, information professionalism and willingness to interact online.

# 3 Empirical analysis

## 3.1 Model inspection

#### 3.1.1 Reliability Analysis

The results in table 1 show that the Cronbach's Alpha coefficient of the scale of each research dimension is above 0.70, indicating that the scale used in this questionnaire has high reliability and good reliability.

Facet Number of items Cronbach's a Informative content .787 4 Entertainment content .766 .764 Information value 3 Information Professionalism 4 .757 5 Interaction willingness .831 20 .933 Questionnaire population

Table 1. Results of variable reliability test.

## 3.1.2 Validity Analysis

Through the validity algorithm analysis shown in the following table 2, we can see that the KMO value of the following scales is greater than 0.7 except for the information value item of 0.686, and Sig (P value) is less than 0.01. Therefore, each variable has a good correlation, and factor analysis can be done.

**Table 2.** Different item s ' KMO and Bartlett's test.

	Bartle	Bartlett's sphericity test		
	Approximate Chi-Square	df	Sig.	KMO
Information item	154.236	6	.000	.702

Entertainment item	116.994	6	.000	.764
Information Perceived	91.829	3	.000	.686
Value Item				
Information Perception	112.635	6	.000	.754
Professionalism				.734
Interaction Willingness	217.745	10	.000	.807

# 3.2 Algorithm analysis of model estimation results

#### 3.2.1 Informative Content and willingness to interact

As shown in the table 3, since the significance value is less than 0.01, it can be seen that there is a correlation between them, and the Pearson correlation value 0.637 is positive and between 0.6-0.8, which is a strong correlation.

 Table 3. Correlation Analysis of Informative Content and Interaction

 Intention.

		Informative content	Interaction willingness
Informative content	Pearson correlation Significance (bilateral)	1	.637** .000
	N	244	244
Interaction willingness	Pearson correlation Significance (bilateral)	.637** .000	1
2	N	244	244

<sup>\*\*.</sup> There was significant correlation at the level of. 01 (bilateral).

We do regression analysis with informational content as independent variable and interaction intention as dependent variable for the purpose of studying topic relevance. As shown in the table 4, Sig value of informational content is less than 0.01, which shows that informational content of independent variable has a significant difference to interaction intention of dependent variable. From the values in the table, we can see that the coefficient after regression is 0.630, From the mathematical statistics, it is shown that the interaction intention will increase by 0.630 units for each additional unit of information content.

Table 4. Regression Analysis of Informative Content and Interaction Intention

coefficient <sup>a</sup>					
	Denorn	nalization	Standard coefficient	t	Sig.
Model	В	Standard error	Trial version		
(Constant)	1.272	.230		5.54	.000
Informative Content	.630	.070	.637	9.04 8	.000

a. Dependent variable: willingness to interact

# 3.2.2 Entertainment Content and willingness to interact

**Table 5.** Correlation Analysis of Entertainment Content and Interaction Intention.

	Entertainmen	t Content	Interaction willingness
Entertainment	Pearson correlation	1	.635**
Content	Significance (bilateral)		.000
	N	244	244
Interaction	Pearson correlation	.635**	1
willingness	Significance (bilateral)	.000	244
	N	244	244

<sup>\*\*.</sup> There was significant correlation at the level of. 01 (bilateral).

The correlation analysis of entertainment content and interaction intention in table 5 shows that there is a correlation between them from the significance P value less than 0.01, and the Pearson correlation value 0.635 is positive. It can be seen that the correlation is strong positive.

With entertainment content as the independent variable and interaction intention as the dependent variable, the regression analysis is conducted. As shown in table 6, From the entertainment content Sig value is less than 0.01, it can be seen that the independent entertainment content has a significant difference to the dependent variable interaction intention. From the values in the table, it can be seen that the coefficient after the regression is 0.621. From the mathematical statistics, it shows that every additional unit of entertainment content, the interaction intention increases by 0.621 units.

Table 6. Regression Analysis of Entertainment Content and Interaction Intention

coefficienta						
	Denorm	nalization	Standard coefficient	t	Sig.	
Model	В	Standard error	Trial version			
(Constant)	1.329	.225		5.917	.000	
1						
Informative Content	.621	.069	.635	9.003	.000	

a. Dependent variable: willingness to interact

## 3.2.3 Perceived value of information and willingness to interact

**Table 7.** Correlation Analysis of Perceived value of information and Interaction Intention.

	Perceived value	e of information	Interaction willingness
Perceived	Pearson correlation	1	.638**
value of	Significance (bilateral)		.000
information	N	244	244
Interaction willingness	Pearson correlation Significance	.638**	1
	(bilateral)	.000	
	N	244	244

<sup>\*\*.</sup> There was significant correlation at the level of. 01 (bilateral).

Table 7 shows that there is a correlation between information value and interaction willingness from the significance P value less than 0.01, and the Pearson correlation value 0.638 is positive. It can be seen that there is a strong positive correlation between them.

With information perceived value as the independent variable and interaction intention as the dependent variable, the regression analysis is conducted. The Sig value corresponding to information perceived value is less than 0.01, which shows in Table 8 that the independent variable information perceived value has a significant difference to the dependent variable interaction intention. It can be seen that the coefficient after regression is 0.638. From a mathematical statistical sense, it shows that the interaction intention increases by 0.638 units for every additional unit of information perceived value.

Table 8. Regression Analysis of Perceived value of information and Interaction Intention

coefficienta						
Model	Denorm	alization	Standard coefficient	t	Sig.	
	В	Standard error	Trial version			
(Constant)	1.202	.236		5.087	.000	
1 Informativ e Content	.638	.070	.638	9.081	.000	

a. Dependent variable: willingness to interact

## 3.2.4 Information Perception professionalism and willingness to interact

The results of correlation analysis on information perception professionalism and interaction willingness are shown in table 9 below. If the significance P value is greater than 0.01, there is no significant impact on information perception professionalism and interaction willingness, while the value of Pearson correlation is only 0.116. Therefore, it is believed that information perception professionalism has no significant impact on interaction intention. It is no longer meaningful to do regression analysis to observe its change.

**Table 9.** Correlation Analysis of Information Perception professionalism and Interaction Intention.

	Inform	ation Perception professionalism	Interaction willingness
Information	Pearson correlation	1	.116**
Perception	Significance (bilateral)		.039
professionalism	N	244	244
Interaction	Pearson		1
willingness	correlation	.116**	
	Significance		
	(bilateral)	.039	
	N	244	244

# 4 Conclusion and Proposal

#### 4.1 Conclusion

Table 10. Analysis Conclusion.

Research	Assumptions	Result
Hypothesis		
H1	Informative content has a significant impact on consumers' willingness to interact	support
H2	Entertainment content has a significant impact on consumers' willingness to interact	support
Н3	Consumers' perception of information value has a significant impact on their willingness to interact	support
H4	Consumers' perception of information professionalism will have a significant impact on their willingness to interact	nonsupport

From the results in table 10, we can find that information content, entertainment content and consumers' perception of information value will significantly affect their own willingness to participate in interaction. The regression coefficients of their data on interaction intention shows that consumers are more pursuing their inner self perception of external information in terms of their willingness to interact. In terms of types, the survey data indicating that consumers will prefer more information content with practical, knowledgeable and targeted features. However, the impact of information professionalism perception on consumers' willingness to interact is not supported. it can be found that consumers' perception of the image of the information publisher will not have a great impact on their participation in online interaction of the content. The reason for this phenomenon may be the information screening ability of consumers'.

## 4.2 Proposal

Based on the above conclusions, this study puts forward the following suggestions: First, increase the practicality, knowledge, pertinence, high quality and timeliness of content marketing and targeted satisfaction of consumers' needs to improve consumers' willingness. Second, diversified entertainment content marketing methods to form emotional communication with consumers, so as to narrow the distance between professional information and consumers. Third, focus on consumer value perception and form a relationship community. Marketers should promote the unity of consumer information value and enhance customer stickiness by establishing communities such as knowledge interaction, experience exchange, educational learning and consumption experience.

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