

Influencing Factors of Advertising Information Adoption on User's Purchase Intention: Evidence from China's Social Media

Jian Xue¹, Young-Chan Lee^{*2} and Hong-Lei Mu³

¹International Business Cooperative,
Dongguk University, 123 Dongdae-ro,
38066, Republic of Korea
976946404@qq.com

^{*2}Department of Information Management,
Dongguk Univesrity, 123 Dongdae-ro,
38066, Republic of Korea
chanlee@dongguk.ac.kr

³International Business Cooperative,
Dongguk University, 123 Dongdae-ro,
38066, Republic of Korea
434478018@qq.com

Abstract

Background/Objectives: The appearance of social media advertising has attract a lot of attention argued for analyzing the effectiveness of advertisements. The purpose is to investigate influencing factors that are probably influence user's purchase intention by adopting advertising information on social media and whether these factors are applied to adopt advertising information from social network platform. For the objective, research framework was presented by integrating Information Adoption Model (IAM) and related variables.

Methods/Statistical Analysis: This study verified the research model with users who use social media network aged from 18 to 29. Questionnaires were randomly sent out through the e-mail, SNS tools and finally, 300 valid data were collected. Amos 20.0 and SPSS 20.0 were employed to analyze the research model and results. The participants' information and the analysis results of the measurement model was demonstrated in this paper.

Findings: Results of this paper confirms that both of the source credibility and argument quality positively influence information usefulness, especially source credibility was found to have the greatest effect on information usefulness. In addition, interactivity also was proved to have positive effect on information usefulness. The relationship between information usefulness and information adoption, information adoption and purchase intention has been confirmed. However, the results indicated that there was no obvious positive relationship between social capital and information usefulness.

Improvements/Applications: According to the results, this paper provided a more valuable theoretical framework to demonstrate the important influence of characteristics of social media information on purchase intention. Practically speaking, this paper not only provided marketers a useful reference object to understand the important role of ads played under social media context, but also offered some appropriate marketing strategies.

Key Words : Social Media, Social Media Advertising, Information Adoption, Purchase Intention, Information Adoption Model (IAM).

1 Introduction

The rapid development of social networking sites (SNS) has transformed the traditional media into advertisement platform among business firms. Social media refers to online media that facilitates communication through the use of feedback engaging the users' activity in the generation and improvement of the content. It is opposed to the traditional media, which delivers content but does

not allow users to modify the content. Social media marketing not only produces word-of-mouth (WOM) advertising campaigns, but also increase brand awareness as well as sales revenue. Social media users will expose a mass of e-WOM information spontaneously. And according to previous literature reviews, such e-WOM can significantly influence consumer's purchase intentions. However, not all the e-WOM information that presented on the social media has a same influence on purchase intention. In other words, the level of influential can vary. Thus, the main purpose is to investigate determinants that are probably influence user's purchase intention behavior by adopting advertising information on the basis of Information Adoption Model (IAM).

2 Literature Review

2.1 IAM

For the purpose of understanding how information was internalized by people, previous studies have paid much attention on the information adoption process. Among those theories, [1] proposed the Information Adoption Model (IAM) by integrating TAM with the Elaboration Likelihood Model (ELM) [2]. IAM posits that people may be affected by an information in two ways, namely central and peripheral [1]. The IAM includes four parts: argument quality, source credibility, information usefulness and adoption. When the planning level is high, the argument quality can bring a critical impact on informational influence. Otherwise, the peripheral route have higher impact on information influence. The IAM was shown in [Figure 1].

Employing the Elaboration Likelihood Model (ELM), we can better understand the process of how information influence the individuals. The ELM was developed by [2], and it proposed that in different context, different information receivers will present in different ways in the extents to which they cognitively elaborate on an especial information. When an individual tend to demonstrate a persuasive communication in detail, the arguments which included in the communication will affect the influential degree [2]. Thus, ELM defines that argument quality can determine informational influence in the high elaboration context. When individuals

are unable to deal with the arguments presented in a social media site, peripheral cues tends to play a more important part in the influencing process. Source credibility is widely used as a positive personality that message providers have, and they would affect the acceptance level of message receivers [3]. [4] noted that source credibility means one attitude that the public have on the source. When this reaction which the receiver has from the media is applied on psychological cognition level of the receiver, it shows trust or distrust on this message.

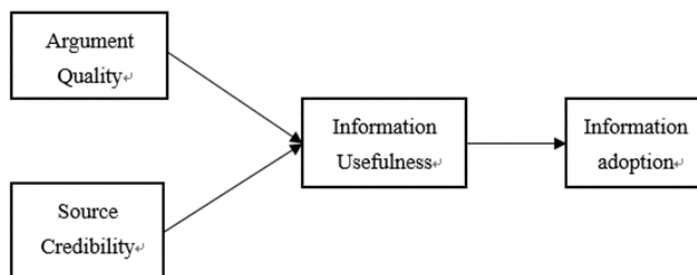


Figure 1: Information Adoption Model (IAM)

2.2 Interactivity

Interactivity refers to a psychological status underwent by a site user during individual's connection with the website [5], since it indirectly considers the cognitive process and involvement in the communication activity. Interactivity has an adverse effect on consumers' attitude toward websites. Because it verifies the idea that some users are relatively disgusted with the levels of interactivity that ask for too many demands during the cognitive process.

2.3 Social Capital

Social capital means the total of the actual resources and potential resources, which is available to the network of relationships presented by an individual [6]. Some researchers pointed out that social capital is not easy to excavate under online environment [7]. However, many other evidence conformably argue that social capital

could be obtained under the online environment since computer-mediated communication is in a predominance place. This construct can be classified into two categories: bridging social capital and bonding social capital. The prior one has some common features with weak tie, users acquire information from weak tie with little emotional supported. While on the contrary, bonding social capital exists in strong connection ties.

3 Research Model and Hypotheses

According to the previous studies, a research model was presented by adopting the Information Adoption Model (IAM), which is shown in [Figure 2].

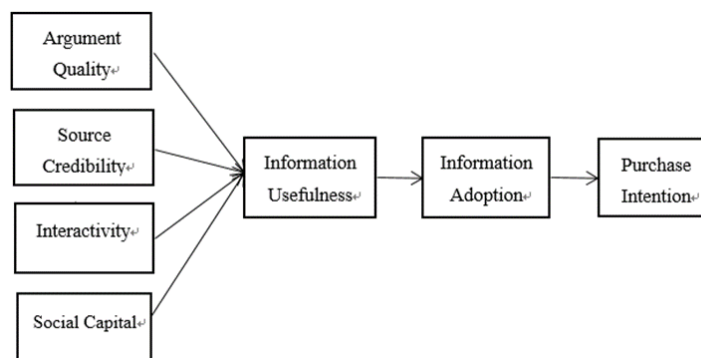


Figure 2: Research Model

3.1 Argument Quality and Source Credibility

IAM is used as the first step to understand how user's behavioral intentions formed toward an information they received. It answers questions such as what degree of a received information is in influencing an individual to adopt that advice. Or how people react in different ways when they receive the same information. Under which kind of context does the information have a primary effect? When an individual is most likely to overlook the quality of the arguments that others' made? IAM is useful in explaining how behavioral intentions formed toward adopting an information. Thus:

H1: Argument quality has a positive influence on the information usefulness.

H2: Source credibility has a positive influence on the information usefulness.

3.2 Interactivity

According to the previous literature reviews related to interactivity, high interactivity could result in high quality performance and time savings [8]. It is clearly that the higher the level of the perceived interactivity, the more they will perceive it as useful. Thus, this study will examine the relationship between interactivity and information usefulness when we see advertisements through social media platform.

H3: Interactivity has a positive influence on information usefulness.

3.3 Social Capital

Previous studies regarded bridging and bonding social capital as effective factors in influencing information usefulness. Communication and activities on social networking websites has facilitated relationship with people who around us, which is an important determinant of consumer socialization [9]. Information and resources that users obtained from weak ties, will lead to a weak relationship between social network users and advertisers who accomplish this kind of advertising. Users who are dynamic in bridging social capital could acquire more useful information and rare opportunities, since they are more frequently contact with members who have different knowledge and backgrounds. Accordingly:

H4: Social media users' social capital has a positive influence on information usefulness.

3.4 Information Usefulness and Information Adoption

Information usefulness means users think that using new and fresh information will enhance their performance. Information usefulness is regarded as a vital deterrent when considering whether to adopt

the information and whether to purchase [1]. People are inclined to adopt information which they think it is useful. Thus:

H5: Information usefulness has a positive influence on the adoption of advertising information.

3.5 Information Adoption and Purchase Intention

Both of the characteristics of information and users' behaviors toward information can influence information adoption. Furthermore, this study put forward that the characteristics of advertising information, along with user's behavior toward advertising information, both of them can influence social media advertising. Therefore:

H6: Adoption of advertising information has a positive influence on users' purchase intention.

4 Research Design and Results

The development of questionnaire is based on the previous research. This paper adopts a five-point Likert scale and participants were required to indicate their level of agreement. This new model was validated on surveys of 300 Chinese who use social media network, which is called "Weibo", aged from 18 to 29. The validated data were analyzed through AMOS 20.0 and SPSS 20.0. [Table 1] present the operational definition along with measurements of each construct.

As shown in [Table 2], each construct of the alpha value exceeds 0.7, which represents good reliability. All the C.R. results exceed 0.7 supporting good reliability. The AVE values exceed 0.5 indicates the discriminant validity. [Table 3] represents that the fit indices of the model exceeds the acceptance level indicating a good fit with the data collected. [Table 4] presents the final result of hypotheses test. All of the hypotheses were accepted. Finally, [Figure 3] demonstrates the path coefficients and R² of the variables. All the hypotheses are significant.

Table 1: Operational Definition and Measurements

Variable	Operational Definition	Measurements	References
Argument Quality (AQ)	When an individual tend to demonstrate a persuasive communication in detail, the arguments which included in the communication will affect the influential degree.	Advertising information provided in Weibo is good and excellent.	[1]
		Advertising information in Weibo is enough and affluent.	
		Advertising information provided in Weibo is new and fresh.	
		Advertising information provided in Weibo is trustworthy and credible.	
Source Credibility (SC)	An information receiver's perspective about the credibility of an information source, reflecting nothing about the information itself.	Information acquired from the advertising in Weibo is knowledgeable.	[1]
		Information acquired from the advertising in Weibo has high expertise.	
		Information acquired from the advertising in Weibo is trustworthy.	
		Information acquired from the advertising in Weibo is reliable.	
Interactivity (Inter)	Refers to a psychological status underwent by a site user during individual's connection with the website	I think that frequency of the Web site responded to my commands is high.	[10]
		I think that I could choose the information what I want.	
		I think that the advertising platform is effective in collecting users' feedback.	
		I think that the advertising platform processed my input very quickly.	
Social Capital (SCa)	Social capital means the total of the actual resources and potential resources, which is available to the network of relationships presented by an individual	I think that I can obtain some advertising information that I want without any delay.	[6]
		I think Weibo is a good place to be.	
		I am interested in what is going on in Weibo.	
		I think contacting with people in Weibo gives me a feeling like I am a part of this large community	
Information Usefulness (IU)	User's think that using new information will enhance their performance	I would like to spend time to support activities in Weibo.	[11]
		I think advertising information in Weibo is generally useful.	
		I think advertising information in Weibo is generally informative.	
Information Adoption (IA)	Refers to the decision making processes of people undergo when it is the first time to perform an activity.	I think advertising information in Weibo is generally helpful for my demand of product information.	[1, 11]
		Information in Weibo make it easier for me to make a purchase decision.	
		Information in Weibo make it more effective for me to make purchase decision.	
Purchase Intention (PI)	The possibility of a consumer buys a product.	Information in Weibo help me decide that if I want to make purchase decision or not.	[11]
		After checking the advertisement, I became interested in making a purchase.	
		I will be likely to buy a product.	
		I will definitely try the product.	

Table 2: Convergent Validity and Reliability Test

Factors	Item	Standardized Estimate	Cronbach's α	C.R.	AVE
AQ	AQ1	0.763	0.864	0.865	0.561
	AQ2	0.738			
	AQ3	0.696			

	AQ4	0.729			
	AQ5	0.815			
SC	SC1	0.707	0.809	0.810	0.517
	SC2	0.721			
	SC3	0.759			
	SC4	0.687			
Inter	Inter1	0.745	0.861	0.862	0.555
	Inter 2	0.735			
	Inter 3	0.742			
	Inter 4	0.786			
	Inter 5	0.714			
Sca	SCa1	0.742	0.839	0.839	0.566
	SCa2	0.766			
	SCa3	0.768			
	SCa4	0.733			
IU	IU1	0.858	0.888	0.888	0.724
	IU2	0.822			
	IU3	0.873			
IA	IA1	0.746	0.782	0.786	0.552
	IA2	0.677			
	IA3	0.800			
PI	PI1	0.658	0.790	0.793	0.563
	PI2	0.818			
	PI3	0.767			

Table 3: Fit Indices

Fit Indices		Model Indices	Recommended Value
Absolute Fit Indices	χ^2/DF	1.120	≤ 3.000
	GFI	0.922	≥ 0.900
	AGFI	0.905	≥ 0.800
	PGFI	0.761	≥ 0.600
	CFI	0.989	≥ 0.900
	NFI	0.909	≥ 0.900
	RMR	0.049	≤ 0.050
	RMSEA	0.030	≤ 0.080

Table 4: Hypotheses Test Result

Hypothesis		Estimate	Standardized Estimate	P-value	Result
H1	AQ→IU	.241	.225	***	Accepted
H2	SC→IU	.439	.357	***	Accepted
H3	I→IU	.336	.285	***	Accepted
H4	SCa→IU	.165	.142	.017*	Accepted
H5	IU→IA	.333	.401	***	Accepted
H6	IA→PI	.524	.590	***	Accepted

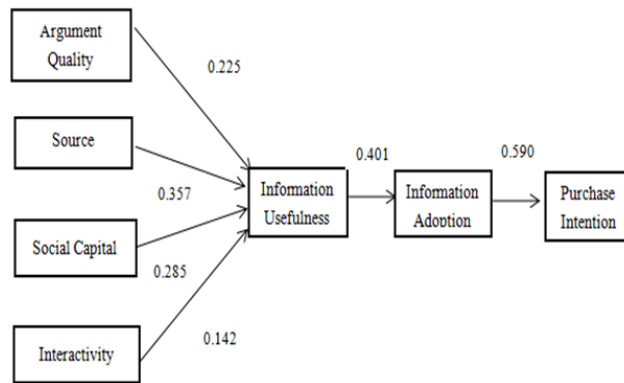


Figure 3: Research Result

5 Conclusion

5.1 Implications

This study examined the main factors of advertising information adoption intention and consumer’s purchase intentions under the context of social media. Results indicated that advertising information, social media platform characteristic, and social capital towards advertising have a significant effect on information usefulness. The model was based on IAM, however, it provided a more preciseness approach by means of considering advertising platform’s characteristics and social capital as well as the features of information in the model. And according to the results, women are more willing to spend time to pay attention one this type of advertising.

From the practical point of view, this study can provide a lot of reference data to some of the social media companies. At the same time, this study can also give advertisers more suggestions in doing and looking for advertising platform. Practically speaking, this paper not only provided marketers a useful example to comprehend the important role of ads played under social media context, but also offered some appropriate marketing strategies.

5.2 Limitations and Further Research

This paper certainly exists some limitations. First of all, all the respondents are ranging from 18 to 29 years old, which will affect the result of questionnaire and survey reliability. Second, most of the survey collections are from the Internet, such as Wechat, QQ, and Weibo, there are lots of respondents who are not serious about the questionnaire so that the result of the survey may not that accurate. Third, information usefulness has been proved by a lot of papers. Thus, future studies should combine information usefulness with consumers' behavior, such as attitude, requirements. Finally, the research is examined only from the perspective of customers. Future studies should focus on more people, for example, advertisers, since they are also the users of social media platform.

References

- [1] Sussman, S. W., & Siegal, W. S. (2003). Informational influence in organizations: An integrated approach to knowledge adoption. *Information Systems Research*, 14(1), 47-65.
- [2] Petty, R. E., & Cacioppo, J. T. (2012). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, 10(2), 135-146.
- [3] Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorser's perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39-52.
- [4] Gunther, A. C. (1992). Biased press or biased public? Attitudes toward media coverage of social groups. *Public Opinion Quarterly*, 56(2), 147-167.
- [5] Wu, G. (2006). Conceptualizing and measuring the perceived interactivity of websites. *Journal Current Issues and Research Advertising*, 28(1), 87-104.
- [6] Napapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *The Academy of Management Journal*, 23(2), 242-266.

- [7] Wasko, M. M., & Faraj, S. Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, 35-57.
- [8] Cross, R., & Smith, J. (1996). *Consumer-focused strategies and tactics*. Interactive Marketing: The Future Present, 5-27.
- [9] Zhang, J., & Daugherty, T. (2009). Third-person effect and social networking: Implications for online marketing and word-of-mouth communication. *American Journal of Business*, 24(2), 53-63.
- [10] Johnson, G. J., Bruner II, G. C., & Kumar, A. (2006). Interactivity and its facets revisited: Theory and empirical test. *Journal of Advertising*, 35(4), 35-52.
- [11] Erkan, I., & Evans, C. (2016). The influence of e-WOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behavior*, 61, 47-55.

