

Research on the Influence of Advertising on Online Purchasing Behavior of Consumers in Hanoi

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Abstract: Research on the shopping behavior of Vietnamese online shoppers is crucial for the successful formulation of effective online business strategies from the outset. Therefore, driven by the aim of comprehending the behaviors and influencing factors that shape the online shopping habits of Vietnamese consumers, the author embarked on a research journey to delve into the online shopping dynamics of Vietnamese consumers, specifically focusing on the youth demographic in Hanoi. Drawing from existing theories, this article introduces a novel theoretical model that delves into the intricate interplay of different elements within the advertising realm. The independent variable in this model is advertising content, which refers to the information, entertainment and irritating of the advertisements. The dependent variable is the online purchase behavior, which represents the decision of consumer to buy the product or service. The mediating factor in this model is the consumer emotions, which reflects the emotional response elicited by the advertising content.

Keywords: Advertising content; Consumer online purchasing behavior; Consumer emotions; Brand value.

1. Introduction

During the era of industry 4.0, the global e-commerce sector has witnessed rapid growth, and Vietnam is no exception. This growth has been particularly pronounced during the two peak years of the COVID-19 pandemic. The pandemic has served as a catalyst for the acceleration of e-commerce in Vietnam, as consumers increasingly turned to shopping online due to movement restrictions and social distancing measures. This surge in e-commerce activity can be attributed to factors such as widespread smartphone usage, affordable internet access, the emergence of online marketplaces, and government initiatives aimed at fostering e-commerce development. Consequently, the e-commerce industry in Vietnam has witnessed remarkable growth, granting consumers effortless accessibility to an extensive array of products and services. By 2023, Vietnam's retail e-commerce markets are projected to reach a substantial value of US\$20.5 billion, an increase of about 4 billion USD (equivalent to 25%) compared to 2022. This growth in the e-commerce market highlights the increasing importance of online retail in Vietnam's economy.

The social media advertising videos has emerged as a powerful marketing tool in the digital landscape. Fink et al. (2020)[1] Companies tend to launch more marketing campaigns on social networking platforms; this shows that companies use social networks as an effective marketing tool because they provide many marketing opportunities for businesses. Therefore, social media marketing activities are business-oriented activities aimed at positively influencing consumer purchasing behavior (Kim & Ko, 2010). In recent years, social media advertising has emerged as a rapidly expanding and innovative form of marketing. Scholars such as Alalwan et al. (2017)[2] have highlighted the significance of advertising content in social media marketing, particularly in its ability to anticipate and influence consumer behavior within interactive online environments.

2. Literature Review

2.1. Definition of advertising content

A foundational starting point for research on attitudes toward advertising is the work of Ducoffe (1995, 1996)[3,4], which explored perceptions of traditional media and online advertising. However, Ducoffe's 1996 study focused solely on the online landscape, a time when internet capabilities were rudimentary. The advancements in technology, such as smartphones, widespread internet access, social media platforms, and sophisticated forms of online advertising like personalized ads and videos, were not yet prevalent. Despite this, Ducoffe's use of a content measurement scale and the consideration of advertising value as a mediating factor offer a valuable theoretical framework for expanding his original model to align with the current landscape of internet advertising communication.

Drawing on three key factors related to advertising content, Ducoffe (1996) developed a unique model of advertising value, defining it as the "subjective assessment of the worth or usefulness of advertising to consumers," with value serving as the foundation for actions, attitudes, and judgments in advertising (Beatty et al. 1985). The perceived value of Internet advertising plays a crucial role in shaping attitudes toward online advertising (Ducoffe 1996) and mobile advertising (Haghirian, Madlberger, and Tanuskova 2005). This model posits that undervalued advertising can elicit negative consumer reactions, while highly valued advertising tends to generate positive responses that, in conjunction with other factors, contribute to the cultivation of favorable attitudes toward advertising. Moreover, it is suggested that the emotional responses triggered by advertising form the basis of these attitudes, with cognitive assessments further enhancing the perceived value of advertising. This will have an impact on consumer behavior.

2.2. Research on Consumer Emotions

Broadly speaking, emotions are chronological sequences: a state of mind that arises when an individual is exposed to a

stimulus that causes the individual to exhibit an externally visible behavior or emotional output. Cognitive psychology suggests that emotions are derived from an individual's perception of his or her appraisal of some event or circumstance in which he or she is involved, and generally include happiness, anger, sadness, joy, worry, contemplation, grief, fear, and surprise. Mehrabian and Russell (1974)[5] proposed a three-dimensional model of emotion (PAD) that evaluates the state of emotion more accurately in terms of the dimensions of pleasantness, activation, and dominance. Izard (2013)[6], in his book *Human Emotions*, classified emotions into three categories: positive emotions (including pleasantness and excitement), negative emotions (including sadness, anger, disgust, contempt, fear, shyness, and guilt), and neutral emotions (including surprise). Watson and Tellegen (1985)[7] proposed a two-factor model of emotion, which categorized human emotions into two dimensions: positive emotions and negative emotions (no distinction was made between "emotions" and "moods" in the earlier studies). "The Positive and Negative Affect Schedule (PANAS), developed by Watson et al. in 1988, has been used in subsequent research. (PANAS) developed by Watson et al. (1988)[8] has been widely used in subsequent research. The PANAS is a 20-adjective scale that describes human emotions on two dimensions: positive and negative.

2.3. Research on consumers online purchasing behavior

The evolution of the Internet has provided consumers with a convenient alternative to traditional shopping, catering to those who find shopping tedious or time-consuming. Gültaş & Yıldırım (2016)[9] highlight the growing importance of studying consumers' online purchasing behavior as the number of online shoppers continues to rise. According to Nguyen Hoang Viet (2011), customers' decision to purchase goods online is influenced by a variety of factors. The factors that influence customers' decision to purchase goods online can be categorized into three main groups. The first groups is environmental factors, which include technological factors and socio-cultural factors such as information overload, privacy concerns, time constraints, personalization, and the trend of multi-channel shopping. The second category consists of factors related to the customer's personality, characteristics, and personal resources, which play a role in their online buying behavior. Lastly, the third category includes source factors such as the cost of money, the effort involved in the online purchasing process, and the shopping psychology of online customers.

According to Bai et al. (2015)[10], the influence of reference groups' recommendations on consumers' online shopping behavior cannot be overlooked. Research has consistently shown that individuals are more likely to make a purchase online if it comes highly recommended by their reference groups, such as friends, family, or online communities. This social influence plays a significant role in shaping consumers' perceptions and attitudes towards online shopping.

3. Theoretical Models and Research Hypotheses

3.1. Advertising content and consumers' online purchasing behavior

Based on the aforementioned scholars' research, it is evident that advertising content exerts a notable influence on consumers' online purchasing behavior. Consequently, we can formulate the following hypothesis:

H1: Advertising content has a positive impact on consumers' online purchasing behavior.

3.2. Advertising content and consumer emotions

Drawing from neurological and evolutionary insights (Grisevicius et al., 2009)[11], experts in the field of advertising have consistently emphasized the crucial role that emotions play. Achar et al. (2016)[12] An important differentiation in the examination of emotions in advertising lies in the comparison between integral emotions and incidental emotions. The deliberate and strategic elicitation of emotions through embedded messages is what characterizes integral emotions in advertising, with the aim of influencing consumers. For instance, advertisers may appeal to the emotion of guilt to encourage donations to a charitable cause. On the other hand, incidental emotions are unrelated to the specific decision at hand but can still impact decision-making processes.

Based on the above review of previous literature, the following hypotheses are proposed:

H2: Advertising content has an impact on consumer emotions.

3.3. The mediating role of consumer emotions

Derbaix (1995) replicated Edell and Burke's (1987) research in a natural setting, revealing positive and negative emotional factors based on a preliminary study. Steenkamp et al. (1996) investigated the connections between arousal potential, arousal, and ad evaluation, with the need for stimulation as a moderating factor, drawing on Mehrabian and Russell's (1974) arousal scale.

Therefore, consumer emotions may have a mediating effect between advertising content and consumer online purchasing behavior. Therefore, this article proposes the following hypotheses:

H3: Consumer emotions have a mediating impact between advertising content and consumer online purchasing behavior.

4. Regression Analysis

During the formal research phase, questionnaires were administered online via Google Forms. The main target audience is students, young people, and working people; this group is the main target of advertising and the main force in the domestic consumer market, which is consistent with the purpose of this study. After more than a month, out of the total 420 questionnaires distributed, 403 were deemed valid after careful evaluation. This indicates a commendable effective recall rate of 96% for the questionnaires. After classifying all collected data, SPSS26.0 software is used to process the data.

4.1. Descriptive analysis

Table 1. Model fitting index

Common indicators	χ^2	df	p	Chi-square freedom ratio χ^2/df	GFI	RMSEA	RMR	CFI	NFI	NNFI
Criterion	-	-	>0.05	<3	>0.9	<0.10	<0.05	>0.9	>0.9	>0.9
Value	555.475	309	0.000	1.798	0.911	0.045	0.072	0.958	0.910	0.952
Other indicators	TLI	AGFI	IFI	PGFI	PNFI	PCFI	SRMR	RMSEA 90% CI		
Criterion	>0.9	>0.9	>0.9	>0.5	>0.5	>0.5	<0.1	-		
Value	0.952	0.891	0.958	0.744	0.801	0.843	0.055	0.038 ~ 0.050		

Default Model: $\chi^2(351)=6182.116, p=1.000$

TLI, IFI, PGFI, PNFI and PCFI all meet their own criteria, which further supports the fitting quality of the model. The criterion that the SRMR value is 0.055, less than 0.1, once

again confirms the good fitting of the model.

4.2. Correlation analysis

Table 2. Pearson correlation-standard format

	Average value	Standard deviation	advertising content	Consumer emotions	Consumer online purchasing behavior
Advertising content	3.182	0.903	1		
Consumer emotions	3.184	0.938	0.396**	1	
Consumer online purchasing behavior	3.214	0.943	0.479**	0.570**	1

Based on the table above, it can be seen that the correlation coefficient between the variables is 0.479 and 0.570, a p-value below 0.01, pointing to a positive significant correlation between the all variables.

4.3. Regression analysis

4.3.1. Regression analysis of advertising content on consumer online purchasing behavior

Table 3. Results of linear regression analysis (n=403)

	Non-standardized coefficient		Standardization coefficient	t	p	Collinear diagnosis	
	B	Standard error	Beta			VIF	tolerance
Constant	1.621	0.151	-	10.710	0.000**	-	-
Advertising content	0.501	0.046	0.479	10.940	0.000**	1.000	1.000
R 2				0.230			
Adjust R 2				0.228			
F				F (1,401)=119.691,p=0.000			
D-W value				2.001			

Dependent variable: Consumer online purchasing behavior

* p<0.05 ** p<0.01

The coefficient obtained from the regression analysis for "Advertising content" is 0.501 (t=10.940, p=0.000<0.01), indicating a strong positive influence of "Information advertising content" on "Consumer online purchasing

behavior". Hypothesis H1 is true.

4.3.2. Regression analysis of advertising content on consumer emotions

Table 4. Results of linear regression analysis (n=403)

	Non-standardized coefficient		Standardization coefficient	t	p	Collinear diagnosis	
	B	Standard error	Beta			VIF	tolerance
Constant	1.875	0.158	-	11.900	0.000**	-	-
Information advertising content	0.411	0.048	0.396	8.638	0.000**	1.000	1.000
R 2				0.157			
Adjust R 2				0.155			
F				F (1,401)=74.617,p=0.000			
D-W value				2.022			

Dependent variable: Consumer emotions

* p<0.05 ** p<0.01

From the data presented in the table, it is evident that "Information advertising content" serves as the independent variable, while "Consumer emotions" is designated as the dependent variable in the linear regression analysis. The model's equation is $\text{Consumer emotions} = 1.875 + 0.411 * \text{Information advertising content}$, with an R-square value of 0.157, indicating that approximately 15.7% of the variation in Consumer emotions can be elucidated by Information advertising content. The model successfully passed the F-test ($F=74.617$, $p=0.000<0.05$), confirming that "Information

advertising content" indeed exerts an influence on "Consumer emotions".

In the conclusive examination, it is evident that the regression coefficient for "Information advertising content" is 0.411 ($t=8.638$, $p=0.000<0.01$), indicating a substantial positive influence of "Information advertising content" on "Consumer emotions". Hypothesis H2a is true.

4.3.3. Regression analysis of the mediating role of consumer emotions

Table 5. Mediation test-horizontal format

item	Symbol	Meaning	Effect value effect	95% CI		Z value /t value	P value	Conclusion
				Lower limit	Upper limit			
Advertising content => Consumer emotions => Consumer online purchasing behavior	a*b	Indirect effect	0.092	0.050	0.128	4.554	0.000	
Advertising content => Consumer emotions	a	X=>M	0.260	0.161	0.360	5.126	0.000	Partial intermediary
Consumer emotions => Consumer online purchasing behavior	b	M=>Y	0.354	0.273	0.435	8.553	0.000	
Advertising content => Consumer online purchasing behavior	c'	Direct effect	0.200	0.115	0.285	4.601	0.000	
Advertising content => Consumer online purchasing behavior	c	Total effect	0.292	0.202	0.381	6.391	0.000	

The indirect effect value of "Advertising content" is 0.092, which shows that "Advertising content" further affects "Consumer online purchasing behavior" by affecting "Consumer emotions". Because the direct effect and indirect effect are significant, this is a partial mediation. Hypothesis H3 is true.

5. Conclusion

In order to examine the impact of advertising on consumers' online purchasing behavior in Hanoi city, this study employs a mixed-method approach that integrates document research with a survey. By integrating these two research methods, a holistic and thorough comprehension of the subject matter can be achieved. After comprehensive analysis and rigorous testing, the following conclusions are drawn:

(1) Advertising content and consumer emotions has a positive impact on consumer online purchasing behavior.

By employing information and entertainment content, advertisers can effectively communicate essential details to potential customers, ensuring they have a clear understanding of the product's basic functions and attributes. Besides, entertainment in advertising content will attract more viewers and bring them positive emotions. During the process of selecting and purchasing a product, it serves as a convenient and effective method for consumers to swiftly acquire the necessary information. This allows them to make informed decisions and streamline their decision-making process. Consequently, incorporating information and entertainment content in advertisements is more likely to leave a lasting impression on consumers, thereby stimulating their desire to make online purchases. As for irritation content in advertising, it can easily cause negative emotions in viewers, thereby affecting the ability to absorb information as well as the need to learn about the product in the advertisement.

According to the verification results of hypothesis H2, from an emotional standpoint, advertising content primarily taps into consumer emotions by evoking feelings of joy, happiness, curiosity, are commonly referred to as positive emotions. By leveraging these positive emotions, advertisers can effectively shape and influence consumers' purchasing desires. This emotional connection serves as a powerful tool in guiding consumer behavior and motivating them to fulfill their needs through purchasing the advertised product. By doing so, it can successfully evoke emotional resonance among consumers, leading to increased brand and product recognition and preference.

(2) Consumer emotions have a mediating impact between advertising content and consumer online purchasing behaviors.

The results of testing hypothesis H3 show that consumer emotions have an intermediate effect between advertising content and consumer online purchasing behavior. The significance of evoking positive emotions in consumer becomes evident through this outcome, emphasizing the crucial role it plays in crafting effective advertising content. By tapping into positive emotions, advertisers can establish a strong connection with consumers, fostering a favorable response towards the content. This finding underscores the importance of creating advertising materials that elicit positive emotions, as it can greatly influence consumer perception and ultimately drive desired outcomes. The emotions that consumers gain after viewing an advertisement will influence and even determine their intention and next purchase decision.

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