

#### FACTORS AFFECTING THE VALUE OF ONLINE ADVERTISING AMONG VIETNAMESE YOUTHS

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#### ABSTRACT

The author's research bases on studies of Ducoffe (1996), Tsang, Ho and Liang (2002), Murat, Sibel and Ceyda (2016) and Firat (2019), proposed factors affecting the value of online advertising include informativeness, entertainment, credibility, irritation, and social interaction. Two hundred ninety valid answer sheets of young people aged 18 - 25 in Vietnam answered through Google Form are analyzed with SPSS 20 software to verify the reliability of Cronbach's Alpha, EFA, and regression correlation analysis. This research also uses the test of variance to determine whether there are differences between the demographic factors and the value of online advertising. The research results show that all five factors that affect advertising value, from the strongest to the weakest, are credibility, social interaction, informativeness, entertainment, and irritation. It is identical to the results of DUCOFFE (1996). Thus, the research shows that credibility has the most substantial influence on the value of online advertising, whereas some other studies have suggested that that factor is entertainment (TSANG, HO & LIANG, 2002; MURAT, SIBEL & CEYDA, 2016) or value information (CHO & CHOEN, 2004). Especially the study also discovered that the ability of social interactions also has the affection with the value of advertising. This result receives the similarity from Ko, Cho and Roberts (2005) research. Simultaneously, the results also discover that demographic factors such as gender, age, and income do not differ from the value of online advertising. In the practical, aspect the results can help advertisers have a suitable strategy and improve advertising effectiveness. So that enterprises could attract more customers.

Keywords: value advertising; online advertising; social interaction; youth

## 1. INTRODUCTION

Many studies around the world have studied the factors that can affect the value of advertising. Ducoffe (1996) proposed a model of perceptions of value and attitudes towards





online advertising, in which attitudes towards online advertising depend directly on advertising value, which also confirmed. Brown and Staymen (1992) on their attitudes towards advertising are reactive emotions to advertising. Brackett and Carr (2001) continue to inherit and confirm Ducoffe (1996) research results while adding two additional factors: reputation and demographic factors affecting value and user-level towards online advertising.

Research by Cho and Leckenby (1999) and Sukpanich and Chen (2000) suggest that interactivity also influences consumer perception of value and attitudes toward advertising. In Vietnam, many authors inherit Ducoffe (1996) model to study the factors affecting advertising value in many different ways.

Chau (2014) inherits the model to study factors affecting online advertising and attitudes towards fashion products; Xuan (2013) studied advertising on mobile phones, and Tao (2019) explores the impact of advertising on consumers' shopping intentions. Most Vietnamese authors focus on researching consumer attitudes and behaviors through types of advertising in a particular category or region.

According to statistics on internet users worldwide in Vietnam, the percentage of users is increasing. As of January 2020, Vietnam has about 68.17 million internet service users, increasing more than 10% compared to 2019 (Vnetwork, 2020). In 2016, online advertising revenue in Vietnam reached 390 million USD. According to Statista (2018), digital advertising revenue in Vietnam is estimated at 663 million USD, ranking 35th in the world with market share mainly through social media advertising (about 557 million USD).

Online advertising attracts 43% of Vietnamese users to access products through online advertising. This shows that online advertising is a very potential market in Vietnam through Google, Facebook, Zalo, Tik Tok, Instagram, Gmail, mobile devices, television, computer, and the most effective selling method businesses that want to sell products.

In general, online advertising is increasingly dominant and widely used by businesses. However, Vietnam currently does not have much research on online advertising to help advertisers have the appropriate view and improve advertising effectiveness. So that enterprises could attract more customers.

So how to create the best quality advertisement, attracting and delighting customers when viewing is a big question for businesses when advertising. With the above problems, researching the factors affecting the value of online advertising is a vital issue that can help





companies create the best quality, responsive advertisement needs and tastes of viewers in Vietnam.

### 2. LITERATURE REVIEW

#### 2.1. Online Advertising

According to Cooper, Schindler and Sun (2006), online advertising provides information, speeds up the transaction between buyers and sellers, customers can interact with an advertisement, can click on it in the online environment.

Online advertising plays a critical role in promoting a company's image and products. With the fast operation, easy access to users, and flexible content, online advertising promises to be the first business choice globally. See online advertisements such as email marketing, banner advertisement, pop-ups, video advertisement. Constantly appearing on interfaces, obscuring content, full of application memory makes them feel extremely uncomfortable, so the number of people blocking advertisements increases. Companies are looking for ways to change their marketing concept towards more user-friendly, more shareable, and attentive customer care.

#### 2.2. The concept of advertising value

Advertising value is a subjective measure of an ad's relative value or utility to a customer (Ducoffe, 1996). The concept is essential that helps advertisers understand the effectiveness of advertising and the importance of satisfying and satisfying customers. Although product value is a vital factor affecting shopping behavior and product selection, advertising value does not receive the same attention because businesses have to spend money to execute such advertising campaigns (Ducoffe, 1996). Therefore, following the current technology development enterprises should know how to exploit more content and images.

Thus, they can create the advertising more useful and attract customers to their products. Several studies worldwide have discovered that advertising value is formed from information value & entertainment value (Ducoffe, 1996; Tsang, Ho & Liang, 2002; Ko, Cho & Roberts, 2005; Murat, Sibel & Ceyda, 2016; Firat, 2019). Advertising credibility is also an aspect explored by authors that influences advertising value (Tsang, Ho & Liang, 2002; Murat, Sibel & Ceyda, 2016; Firat, 2019). Besides, Irritation is also one of the factors affecting the value of advertising (Ducoffe, 1996; Tsang, Ho & Liang, 2002; Murat, Sibel & Ceyda, 2016; Firat, 2019).





#### 2.3. Proposed research model and research hypothesis

This study uses the discovery platform from DUCOFFE (1996) on the website with advertising value. It consists of three scales of entertainment, informativeness, and irritation. The author's results have been recognized and gradually confirmed the correctness over time and in many other studies (Tsang, Ho & Liang, 2002; Murat, Sibel & Ceyda, 2016; Firat, 2019). Besides, the author inherits the prestige scale from the research model of Tsang, Ho and Liang (2002).

These research results have shown that the more trustworthy advertisements create for customers, the more valuable they are and make customers feel more confident and reassuring. Besides, a recent study by Ko, Cho and Roberts (2005) discovered that social interaction has a significant impact on a customer's decision to stay on the site. Also, the longer a customer stays on an advertisement or a website, the more valuable and valuable the advertising is. Therefore, interactivity is also a factor influencing the value of online advertising (Ko, Cho & Roberts, 2005).

The online environment support customers to interact, click on, share, and capture information of the advertisement. Believe acquaintances speak and comment on the advertising and products they refer to (Ko, Cho & Roberts, 2005). Therefore, interactivity is also a factor influencing the value of online advertising (Ko, Cho & Roberts, 2005). With the characteristics of the online environment, customers can interact with advertiments, click on advertiments, share advertiments, and capture information. Believe acquaintances speak and comment on advertisements and products they refer to (Ko, Cho & Roberts, 2005).

Therefore, the element of social interaction for the advertiment, if it is brought to the user, will contribute to enhancing the advertising's value because it will make customers feel like it and get more valuable when watching the advertiment. without getting bored or annoyed. From the above comments, we have a proposed model to study factors affecting online advertising value, including informativeness, entertainment, irritation, the advertising value of Ducoffe (1996); the credibility of Tsang, Ho and Liang (2002), and the social interaction of Ko, Cho and Roberts (2005).







Figure 1: Research Model

#### 2.4. Informativeness and advertising value

Informativeness (INF) is the ability to provide essential information to target customers (Ducoffe, 1996). According to Ducoffe (1996), an online advertising activity providing sufficient information about a product or service will positively affect attitudes and increase the likelihood of continuing to buy that product or service. Moreover, customers tend to evaluate the information they receive quickly, so the information provided should be short and concise (Kaasinen, 2003).

With the characteristics of the popular types of online advertising, today such as Display Advertising, Social Media Advertising, SEM, Video Advertising, Email Marketing ... businesses efficiently provide much valuable and diverse information to customers than other types of advertising. The more information an advertisement provides, the more it will increase its value (Ducoffe, 1996; Murat, Sibel & Ceyda, 2016; Firat, 2019). From the above bases, hypothesis (H1) can be proposed:

• H1: Informativeness has a positive impact on the value of online advertising

## 2.5. Entertainment and advertising value

Entertainment (ENT) acknowledges media value, and advertising is an integral part of media content (Ducoffe, 1996). An advertisement is said to have entertaining value when the images in the advertisement are beautiful, funny, and the music used or the content conveyed can touch the viewer's emotions. According to Korgaonkar, Silverblatt and O'leary (2001), the entertainment value of advertising is related to the enjoyment that consumers experience when exposed to an advertisement and is a prominent factor related to the emotion of consumers with marketing messages, thus affecting the effectiveness of advertising. The more entertaining an





ad is, the more it attracts customers to view it and makes it more valuable (Ducoffee, 1996, Firat, 2019). From there, we have hypothesis (H2) as follows:

• H2: Entertainment has a positive impact on the value of online advertising

# 2.6. Credibility and advertising value

Credibility (CRE) is defined as the trust that makes customers vulnerable to the veracity of online sellers after knowing their characteristics (Pavlou, 2003). Ads with creative content or eye-catching images without trust will never be highly effective and maintain long-term relationships with customers. The credibility of advertising is considered a reliable reference source for shopping, and the online channel is a reliable advertising channel (Tsang, Ho & Liang, 2002).

Besides, the online environment is considered a modern communication environment where the images, sounds, and effects of the advertisement are presented vividly and effectively, and it is not limited by time. Advertising should be persuasive and should be considered as a source (Murat, Sibel & Ceyda, 2016), the more reputable an advertisement is, the more valuable it is. We have the following hypothesis (H3):

• H3: Credibility has a positive impact on the value of online advertising.

## 2.7. Irritation and advertising value

Irritation is the annoyance that advertisers bring to users; offensive, objectionable content will negatively affect customer attitudes (Ducoffe, 1996). Simultaneously, online advertising displayed but the viewer is not willing or satisfied will cause annoyance and hostility to the advertised product (Dickinger et al., 2004). According to Wegert (2002), advertisements appear to make consumers feel compromised and abused by their existence.

Simultaneously, with the current types of online advertising or appear suddenly in the content being watched by users continuously, such as watching videos on Youtube or Facebook, using programs on apps, reporting or viewing information on the Website... interrupted viewing the customer's previous content. This Irritation will significantly reduce online advertising activities' effectiveness and distort the original message that businesses want to target (Ducoffe, 1996). Finally, we have a hypothesis (H4):

• H4: Irritation has a negative impact on the value of online advertising

## 2.8. Social interaction and advertising value





Social interaction is the degree of interaction between users with different types of advertising that partially changes consumers' perception when exposed to the kinds of advertisements (Rodgers & Thorson, 2000). According to Yaakop, Anuar and Omar (2013), social media influences every stage of the consumer decision-making process. For online advertising, sending highly interactive messages to social communities from influential individuals in the community will strongly impact customer attitudes when viewing advertising (Thanh, 2013).

With this interaction, many people feel incredibly excited while watching and sharing their views on products and services. Ko, Cho & Roberts (2005) stated that a website's social interactivity has a significant impact on a website's decision to stay. We can predict the more extended customers stay on ads when the advertisements are highly socially interactive. From the above analysis, we have the hypothesis (H5) that:

• H5: Social interaction harms the value of online advertising

## 3. METHODOLOGY

## 3.1. Research process

The authors' research is conducted through two phases: Preliminary research and Official research. At the preliminary research stage, the author applies qualitative research methods by interviewing experts who are lecturers in advertising to correct and supplement each variation of each scale. Then the author conducted a test interview on 50 customers aged 18 and over to ensure that the respondents could understand the question content and preliminary assessment of the scale.

After completing the first stage with the results of Cronbach's Alpha reliability coefficients are all higher than 0,6, the official research phase is conducted through a quantitative research method with a sample of 300 users from 18 age and up. SPSS software is used to test the reliability of Cronbach's Alpha, to analyze exploratory factors EFA (Exploratory Factor Analysis) as well as to test multivariate regression, and finally to perform T-test

## 3.2. Sample

This study uses the technique of distributing the survey sample using the nonprobability method conveniently through Google Form and by sending survey directly. The





sample size in this study, applied according to the requirements of exploratory factor analysis EFA and multivariate regression analysis is as follows:

- For exploratory factor analysis EFA, the ratio of the number of observed variables/measurement variable is 5: 1, every one measurement variable needs at least five observed variables (Hair et al., 2018). The formula for selecting the minimum sample size is N = 5\*n (n is the number of observed variables).
- For the multivariate regression model, the minimum sample size is calculated by the formula: N = 8 \* variable + 50 (Tabachnick & Fidell, 2007). N is the sample size, the variable is the number of independent variables included in the regression model.

Subjects are users over 18 years old who use Internet-connected devices in Vietnam. Survey results obtained 290 valid survey samples out of 301 samples collected from the survey. Of which, 11 samples are not valid due to lack of information.

Specifically, out of 290 valid samples, the male accounts for 57,6%, and the female is 42,4%. The age from 18 to 25 years old is 65,5%, from 26 to 49 years old is 29,7%, over 50 years old is 4,8%. The income from 5 - 10 million accounts for the highest rate of 35,5%, under 5 million accounts for 31,7%, the second-highest, the third-highest is the income from 11 - 15 million 18,6%, and the last one is the income level of over 15 million with the rate of 14,1%.

## 3.3. Scale model

The scale construction is based on previous studies, inherited from researchers such as: DUCOFFE (1996), KO; CHO; ROBERTS (2005), TSANG; HO; LIANG (2002); MURAT; SIBEL; CEYDA (2016); FIRAT (2019). The scales have been tested before, through the results of previous studies have an effect on the value of advertising.

Table 1: Scale model							
Factors	N of Items	Source					
Informativeness (INF)	4	DUCOFFE (1996)					
Entertainment (ENT)	4	DUCOFFE (1996)					
Credibility (CRE)	4	TSANG; HO; LIANG (2002)					
Irritation (IRR)	3	DUCOFFE (1996)					
Social Interaction (INT)	5	KO; CHO; ROBERTS (2005)					
Advertising Value (ADV)	3	DUCOFFE (1996)					

Table	<u>1:</u>	Scale	model

The questionnaire is built on a research scale and used as a survey. Each survey questionnaire has two parts: Part 1 is personal information about demographic factors, including gender, age, income. Part 2 is the evaluation and questioning about factors related to





the research. In which the levels of consent are shown as follows: [1] Totally disagree; [2] Disagree; [3] No comments; [4] Agree; [5] Totally agree.

To avoid the sample increase affecting the reliability of the survey, the Likert 5 scale should be used for measurement. Likert 5 scale, which helps describe human attitudes towards factors affecting online advertising value most accurately and reliably in measuring opinions, perceptions, and user behavior.

Factors	Code	Items Description	Source
Informativenes	INF1	Online advertising is a source of timely information about	
(INF)		products/services	
	INF2	Online advertising is the correct source of information about	
		products/services	Ducoffe (1996)
	INF3	Online advertising provides useful information about	
		products/services	
	INF4	Online advertising provides more diverse information than	Suggestion of
		other advertising types	the authors
Entertainment	ENT1	Online advertising offers much excitement	
(ENT)	ENT2	Compared to other forms of advertising, online advertising	$Ducoff_{2}(1006)$
		is more enjoyable	Ducone (1990)
	ENT3	Online advertising presents creatively, eye-catching, and	
		vividly, making viewers excited	Suggestions of
	ENT4	Online advertising helps viewers feel relaxed and	the authors
		comfortable	
Credibility (CRE)	CRE1	Online advertising as a reliable source for shopping online	
	CRE2	Online advertising is more reliable than traditional	Tsang, Ho and
		advertising	Liang (2002)
	CRE3	Online advertising is highly convincing	Suggestions of
	CRE4	Online advertising is valuable advertisement to watch	the authors
Irritation	IRR1	Online advertising is often annoying for me when it appears	
(IRR)	IRR2	Feeling that online advertising is a scam	Ducoffe (1996)
	IRR3	Online advertising is annoying by interrupting my viewing	Suggestion of
		of previous content	the authors
Social Interaction	INT1	Online advertising facilitates two-way communication	Suggestion of
(INT)		between businesses and their audiences	the authors
	INT2	Online advertising helps me share my opinion about the	
		product/service I am using with everybody	
	INT3	Through online advertising helps me know which	Ko, Cho and
		products/services people are interested in buying and using	Roberts
		the most	(2005)
	INT4	Know which products/services match your characteristics	
		through online advertising	
	INT5	I prefer online advertising because of its high interactivity	Conception of
			Suggestion of
			the authors
Advertising Value	ADV1	Online advertising is very helpful	
(ADV)	ADV2	Online advertising is very valuable	Ducoffe (1996)
	ADV3	Online advertising is very important	

## 4. ANALYSIS AND RESULTS

## 4.1. Cronbach's Alpha Analysis Results





The analysis results of the reliability of Cronbach's Alpha show that all observed variables of each scale are reliable, with the total Cronbach's Alpha coefficient is more significant than 0,6. This coefficient is more incredible than Cronbach's Alpha Delete coefficient of each of the observed variables. The Corrected item-total Correlation coefficient of each of these variables is higher than 0,3. Therefore, all observed variables of each scale are retained to continue the step of factor analysis to discover EFA. The following datasheet gives us a clearer view of this result:

	Item-Total Statistics							
	Scale Mean if Item	Scale Variance if Item	Corrected Item-Total	Cronbach's Alpha if				
	Deleted	Deleted	Correlation	Item Deleted				
Informativ	eness (INF) - Cronbach's	Alpha = 0,851						
INF1	11,13	3,761	,676	,817				
INF2	11,71	3,444	,635	,841				
INF3	11,36	3,519	,736	,791				
INF4	11,25	3,703	,736	,794				
Entertainm	nent (ENT) - Cronbach's A	Alpha = 0,820						
ENT1	11,33	3,155	,689	,760				
ENT2	11,40	2,788	,749	,724				
ENT3	11,11	2,756	,604	,800				
ENT4	11,66	3,118	,562	,810				
Credibility	(CRE) - Cronbach's Alpl	ha = 0,824						
CRE1	9,76	3,929	,727	,741				
CRE2	9,92	4,008	,671	,769				
CRE3	9,31	4,755	,557	,818				
CRE4	9,93	4,233	,647	,780				
Irritation (	IRR) - Cronbach's Alpha	= 0,816						
IRR1	7,50	1,801	,731	,696				
IRR2	7,85	1,552	,626	,807				
IRR3	7,33	1,750	,668	,746				
Social Inte	raction (INT) - Cronbach	's Alpha = 0,887						
INT1	15,19	4,791	,699	,868				
INT2	15,17	4,824	,757	,855				
INT3	15,32	4,909	,644	,881				
INT4	15,17	4,706	,810	,844				
INT5	15,23	4,670	,728	,862				
Advertisin	g Value (ADV) - Cronbac	ch's Alpha = $0,795$						
ADV1	6,12	2,702	,618	,761				
ADV2	6,45	2,041	,747	,601				
ADV3	6,87	1,965	,599	,792				

## 4.2. Exploratory Factor Analysis (EFA) of Independent variables

Conducted analysis with 20 observed variables of 5 independent factors: informativeness, entertainment, credibitlity, irritation, and social interaction; factor analysis results show that the KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) index is





0,857 > 0,5; this proves that the data used for factor analysis is entirely appropriate. Barlett's test result is 2947,250 with Sig's level = 0,000 < 0,05, so the variables are correlated with each other and meet the conditions of factor analysis.

usie 1. Hitte und Burtett 5 Test Result of Independent variable					
KMO and Bartlett's Test					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy. ,857					
Bartlett's Test of Sphericity	Approx. Chi-Square	2947,250			
	df	190			
	Sig.	,000			

#### Table 4: KMO and Barlett's Test Result of Independent variables

The total value of variance extracted reached 69,741% > 50% as satisfactory; 5 factors were drawn to explain 69,741% of the variation of the data. The Eigenvalues coefficient value of all factors is high (> 1), so it is kept for analysis; the fifth factor with the lowest Eigenvalues is 1,223 > 1.

		(	Componer	ıt	
	1	2	3	4	5
INT4	,855				
INT2	,803				
INT3	,771				
INT5	,766				
INT1	,761				
CRE4		,829			
CRE1		,821			
CRE2		,803			
CRE3		,627			
INF3			,801		
INF4			,772		
INF2			,741		
INF1			,723		
ENT2				,829	
ENT3				,793	
ENT1				,791	
ENT4				,676	
IRR1					,881
IRR3					,863
IRR2					,828
Extracted variance (%)	31,621	44,476	55,183	63,627	69,741
Eigenvalue coefficient	6,324	2,571	2,141	1,689	1,223

Table 5: Rotated Component Matrix of Independent Variable

The factors loading are all higher than 0,5, and there is no case of variables uploading both factors simultaneously with close coefficients. So the factors ensure convergent values and differentiate when analyzing EFA. Besides, one factor's question is not confused with the other's question without disturbance of factors. After factor analysis, the observed variables in each factor remain the same, and keep the old name of the scale to perform the following analysis.





#### 4.3. Exploratory Factor Analysis (EFA) of dependent variables

Factor analysis results show that the KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) index is 0,659 > 0,5; this proves that the data used for factor analysis is entirely appropriate. Barlett's test result is 312,878 with Sig's level = 0.000 < 0,05, so the variables are correlated with each other and meet the conditions of factor analysis.

uele el inite una Bullett	tore of minor and Barrott 5 rest result of Bependent farable						
KMO and Bartlett's Test							
Kaiser-Meyer-Olkin Measure of Sampling Adequacy. ,659							
Bartlett's Test of Sphericity	Approx. Chi-Square	312,878					
	df	3					
	Sig.	,000					

Table 6: KMO and Barlett's Test Result of Dependent variables

The total value of variance extracted is 72,350% > 50% meets the requirements; this factor can explain 72,350% of the variation of the data. The value of the factor's Eigenvalues is 2.170>1, so this factor is kept for further analysis. Besides, the factors loading are all higher than 0.5. There are no disqualified variables in the value of online advertising factor.

- ····································									
Component		Initial Eigenv	alues	Extraction Sums of Squared Loadings					
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %			
1	2,170	72,350	72,350	2,170	72,350	72,350			
2	,545	18,177	90,527						
3	,284	9,473	100,000						

Table 7: Total Variance Explained

#### 4.4. Regression analysis results

The regression analysis results show that the Adjusted R Square value of 5 independent variables affects 38,5% of the change of the dependent variable; the rest is 61,5%. Due to out-of-model variables and random errors in the survey process. In addition, the Durbin-Watson index is 1,420 with the number of observations n = 290 and k = 5, according to the shear coefficient model, dL = 1,718 and dU = 1,820. The valued = 1,420 < dL = 1,718 shows the first-order correlation in the model.

Table 8: Regression analysis results

	Unstandardized		andardized	Standardized			Collinea	rity
Coefficient		efficients	Coefficients			Statisti	cs	
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Const	ant)	,296	,349		,847	,397		
INF	7	,160	,068	,139	2,354	,019	,613	1,631
ENT	Г	,159	,068	,125	2,356	,019	,761	1,314
CRI	Ε	,389	,057	,364	6,880	,000	,759	1,317
IRR	ł	-,135	,053	-,118	-	,012	,979	1,021
INT	Γ	,258	,075	,196	2,542	,001	,667	1,498
					3,465			





The value of signing of the independent variables (< 0,05) proves that the variables INF, ENT, CRE, IRR, INT are significant in the model. Normalized regression coefficient  $\beta$  has an independent variable IRR and is negative, so the variable IRR harms the dependent variable ADV. The remaining variables INF, ENT, CRE, INT all have positive normalized regression coefficients  $\beta$ , so they positively affect the dependent variable ADV.

In which the CRE variable has the most influence on the change of the ADV variable, with the highest standardized regression coefficient  $\beta$  of 0.364 and the variable IRR having the slightest influence on the change of the ADV variable, with the coefficient coefficients the lowest normalized regression number  $\beta$  is -0,118. Simultaneously, the variance magnification coefficient (VIF) of each variable has a magnitude <10, so there is no sign of multicollinearity. According to HAIR et al. (2018), when the VIF exceeds 10, it is a sign of multicollinearity.

From the above data, we have the standardized regression equation as follows:

ADV = 0.139 \* INF + 0.125 \* ENT + 0.364 \* CRE - 0.118 \* IRR + 0.196 \* INT

In summary, all scales in the research model are accepted because there are sig <0.05, in which if the Informativeness, Entertainment, Credibility, and Social Interaction scales are positively affected ( $\beta > 0$ ) the Irritation scale is inversely affected ( $\beta < 0$ ) to the value of online advertising.

# 4.5. Examining differences in demographic characteristics to advertising value

## 4.5.1. Gender

	Tuble 9. Examining differences in gender to the value of online advertising									
		Levene	's Test							
		uality								
		of Vari	iances	t-test of Equality for Means						
Sig.						95% Co	nfidence			
						(2-	Mean	Std. Error	of the I	Diffence
		F	Sig.	t	df	talled)	Difference	Differnce	Lower	Upper
ADV	Equal	1,213	,272	,902	288	,368	,07634	,08463	-	,24292
	variances								,09025	
	assumed			,894	254,384	,372	,07634	,08537		,24446
	Equal								-	
	variances								,09179	
	not									
	accumad									

Table 9. Examining differences in gender to the value of online advertising

Levene's Test sig values are 0,272 > 0,05, so the variance between gender and ADV values is not different. We use assumed sig T-Test sig value from Equal variances assumed to





have a value of 0,368 > 0,05, showing no statistically significant difference in the value of online advertising with gender.

### 4.5.2. Age

Tabl	e 10: Examining di	ifferences in	age	to the val	ue of online advertis	sing		
	Test of Homogeneity of Variances							
	ADV							
	Levene Statistic	df1		df2	Sig.			
	3,175	3		286	,025			
	Robust Tests of Equality of Means							
	ADV							
		Statistica	df1	df2	Sig.			
	Welch	,625	3	37,691	,604			
	a. Asymptotically F distributed.							

The Sig result in Levene Statistic is 0,025 < 0,05, so the variance between the value of online advertising and the age variable is not equal. We proceed to analyze the results of the Welch test. Welch test results in the Roun Tests table have Sig = 0,604 > 0,05, so there is no statistically significant difference in the value of online advertising and age.

#### 4.5.3. Income

Test of Homogeneity of Variances ADV									
Levene Statistic	df1		df2	Sig.					
3,230	3	286		,023					
Robust Tests of Equality of Means									
ADV									
	Statistica	df1	df2	Sig.					
Welch	1,422	3	127,264	,239					
a. Asymptotically F distributed.									

Table 11: Examining differences in income to the value of online advertising

The Sig result in Levene Statistic is 0,023 < 0,05, so the variance between the value of online advertising and the age variable is not equal. We proceed to analyze the results of the Welch test. Welch test results in the Roun Tests table have Sig = 0,239 > 0,05, so there is no statistically significant difference in the value of online advertising and income.

From the above analysis results, we conclude that: There is no statistically significant difference in the value of online advertising and demographic variables such as gender, age, and income.

## 5. CONCLUSION





Specifically for this study, the Ducoffe (1996) discovery platform was implemented on a website with advertising value that was specifically designed for this purpose. The categories for this evaluation system are as follows: entertainment, informativeness, and irritation. The author has also inherited the credibility scale produced by Tsang, Ho, and Liang (2002). Social interaction is also inherited from Ko, Cho, and Roberts (2005) in online platform.

Thus, research model proposes five factors that influence the factors that affect the value of online advertising: information, entertainment, credibility, irritation, and social interaction with twenty observed variables of the independent factors and three observed variables of the dependent factor, in which no variables are excluded in the analysis process.

According to the multivariate regression results, it is concluded that the value of online advertising is influenced by five factors, in order from the strongest to the weakest: credibility, social interaction, informativeness, entertainment, and irritation. Simultaneously, demographic factors such as gender, age, and income have no statistically significant differences with the value of online advertising.

The research results show that credibility has the most substantial influence on advertising value. In contrast, some other studies have suggested that that factor is entertainment (Tsang, Ho & Liang, 2002, Murat, Sibel & Ceyda, 2016) or value information (CHO: CHOEN, 2004). The irritation affects the advertising value the least. This result also has similarities with the study of Tsang, Ho and Liang (2002), Ducoffe (1996) and Murat, Sibel and Cendy (2016).

Simultaneously, the order of impact from strongest to weakest factors: informativeness, entertainment, and irritation is identical to the results of Ducoffe (1996). In particular, the study also discovered that the ability of social interactions of customers also has a lot to do with the value of advertising (second most potent); this result receives the similarity of Ko, Cho and Roberts (2005), when studying the social interaction in the website, affect the website's value. At the same time, the findings suggest that demographic characteristics such as gender, age, and money have no influence on the value of internet advertisements.

The research results provide the necessary source of knowledge on the theoretical basis of online advertising and some practical knowledge for businesses. They will understand the factors that create the value of online advertising to improve efficient business results in the





future. Based on the research results, here are some contributions for each group of factors for businesses to contribute economic efficiency:

### 5.1. Credibility

Reputation has a positive impact and, according to regression analysis, is the factor that most influences the value of Online Advertising. However, Online advertising currently has not gained trust when compared to other types of advertising and makes customers feel that they are not valuable to watch. Today, businesses compete a lot with eye-catching images and user status on Newsfeeds, consumers are becoming familiar with this, and click-through rates drop dramatically.

They also often fall into the state of over-advertising, forgetting to explore, building relationships with customers, leading to not creating a long-term loyalty file. Therefore, businesses need to build a website that provides clear, transparent, specific information and images about the company, its products/services, or customer feedback on its products/services to create credibility in front of customers. Besides, the business should improve the quality of content and images in each advertising.

The content should be oriented to the essential needs of the target audience, impacting more on user psychology. This content will make the company's ads more authentic, convincing and create more value for users. Promote brand identity through online advertising activities such as developing the name, corporate slogan, logo are a meaningful offer for the company... They will be the factor to help customers know and believe business ideas in the process of purchasing products.

#### 5.2. Social interaction

Social interaction has a positive impact, and regression results have the second strongest impact on online advertising value. Therefore, to increase the value of online advertising, businesses need to create items to track the number of web visitors, the best-selling products, the number of people viewing this article or product like you on the website or fan page to users know what people are liking and buying the most products, so they can boldly make buying decisions.

In addition, businesses can create beautiful banners for customers to click on the website or fan page, create personal information registration forms to receive promotions, product review forms for customers after using the product. In addition, creating buyer





feedback channels by phone, social club flatform, or leave comments on articles about the product is the best solution for the company.

#### 5.3. Informativeness

Currently, a few businesses pay attention to both build content and provide provided information about the selling product. So that, most consumers feel confused and distrustful to shop. Therefore, businesses should improve in terms of images consist of refining more information, including short, easy-to-understand instruction, and clear proofs like quality accreditation papers from medical facilities, advice from experts, actual opinions of users...

Besides, businesses should also focus on researching and analyzing what customers need, thereby building advertising content accordingly. A comprehensive information campaign needs to be carried out through many different means to increase customer awareness: Email marketing, display advertising, search advertising, mobile advertising, advertising through social media channels ...

#### 5.4. Entertainment

Entertainment positively affects the value of online advertising. In particular, the score of the items "advertising helps the viewer feel relaxed and comfortable" is lower than other items, so it is necessary to improve this factor to increases the value of online advertising. Businesses should incorporate many different actions to create a quality scenario that can make an impression and stay longer in the customer's mindset.

The use of promotional videos can directly affect the psychology of the viewers with images, sounds, effects ... along with a meaningful message that touches the customer's emotional circuit, especially With the current psychology of reading advertisements lazy, using videos like this will be more appropriate and achieve business goals faster. In addition, the use of trending or rhyming statements, inviting celebrities to participate in advertising, creating promotions ... to make more attractive, novel, and interesting for customers.

#### 5.5. Irritation

The Irritation of customers negatively affects the value of online advertising. That means that customers have low value for an ad when it makes them feel uncomfortable. Specifically, according to this research, customers find it annoying that online advertising interrupts viewing of previous content. To limit this situation, businesses should limit the





appearance of spam advertising (spam) so that users do not feel bothered. Besides, should focus on advertising on the target audience, avoid annoying. In addition, Design the right size and position to avoid annoying viewers when the ad appears obscuring their previous content.

However, some limitations still exist in the study, which is the small sample size. Therefore, the following research direction can extend to sample size for data collection.

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