

# The impact of mobile advertising on Vietnamese consumer buying decision

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## ***Abstract***

Mobile advertising is one of the most popular tools among varied types of electronic commerce, the form of advertising messages in particular. The purpose of this study is to define the factors affecting Vietnamese consumer attitude toward mobile advertising and to investigate the subsequent impact on consumer buying decision. Quantitative questionnaire is used to distribute to 293 respondents. The method of this study includes reliability, factor analysis, regression, t-test, one way analysis of variance. The finding shows that four factors related to attributes of advertising including entertainment, informativeness, irritation and credibility have significant impacts on consumer attitude toward mobile advertising. Additionally, the informativeness is the most important factor. The study also demonstrates a positive relationship between Vietnamese consumer attitudes toward mobile advertising and their buying decision. For managerial implication, this study suggests that marketers should send advertising messages with consumers' permissions.

***Keywords:*** mobile advertising; attitudes of mobile advertising; buying decision; Vietnamese consumer

## The impact of mobile advertising on Vietnamese consumer buying decision

### 1. Introduction

A large increase in using either a mobile phone or portable device has led to the development of researching how to build up a positive relationship between companies and consumers (Javid, Namin, & Noorai, 2012). A total number of 3.6 billion unique mobile subscribers and 7.1 billion SIM connections all over the world were reported in 2014 according to GSMA Intelligence 2015. Cambridge, Mass.-based Forrester Research Inc. forecasts that U.S. marketers will spend more than \$103 billion on digital marketing by 2019, social media and mobile marketing are expected to see the biggest budget increases (Gimbel, 2015). Particularly, in Vietnam, there were nearly 39.8 million internet users and 128.3 million active mobile subscriptions at the end of 2014 (Wearesocial, 2015). It is said that mobile market growth, especially in developing countries, directly affects the local and national economies by contribute a net benefit through employment growth leading to increased labor productivity, the wages, tax revenue and Gross Domestic Product (GDP) (GSM World, 2006).

Rettie et al. (2005) have argued that majority of consumers feel less annoyed and more willing to methods of advertising by mobile phone than traditional marketing, as consumers have the right to decide the appropriate time and whether to read a message. What makes mobile advertising different from traditional ones is that traditional marketing campaigns are aimed to reach a target number of group while mobile advertising is aimed at each single one (Salo & Tähtinen, 2005). In comparison with the traditional media, the mobile phone achieves at space-time and increasing approach ability, frequency and the speed of communication. Base on consumers' different social status, individual preferences, time and location, the advertisements can be sent via the mobile phones to them at the right time. And it seems that consumers would rather use only one way to receive advertisements (Merisavo et al., 2007; Haghirian & Madlberger, 2005). Besides, Muk (2007) has assessed the advantage of delivering advertising by mobile phones due to its high rates of people who reply to the advertisements and omnipresence.

Other researchers have examined consumer attitudes toward short messaging service advertising (Carroll, Barnes, Scornavacca, & Fletcher, 2007; Cheng, Blankson, Wang, & Chen, 2009; Rettie, Grandcolas & Deakins, 2005; and Tsang, Ho, & Liang, 2004), but different attitudes on mobile advertising can affect consumer involvement toward mobile advertising depending upon message content. This current study determines Vietnamese consumer attitude toward mobile advertising by examining how entertainment, informativeness, irritation and credibility affect consumers. However, there is a lack of using the factor consumer buying decision to determine the influence of attitudes toward mobile advertising by previous studies. Therefore, studying the effects of advertising attributes on consumer attitudes toward mobile advertising is an important issue. The findings expand and develop previous studies by doing a research on consumer buying decision. One of the major contributions of this study is that it is the first to look into how attitudes toward mobile advertising influence Vietnamese consumer buying decision. The hypotheses of Vietnamese consumer attitudes toward mobile advertising and buying decision are investigated, then, additional findings regarding to market of Vietnam mobile users are proposed as well.

#### 1.1 Objective of study

With the increasing widespread use of mobile, mobile advertising attracts more attentions today and mobile messaging is used as one of the most non-voice processing means worldwide (MMA Global, 2014). From the related literature of previous studies, the primary purposes of this study aim to determine the elements affecting Vietnamese attitudes toward mobile advertising. Specifically, this study implements the understanding of how mobile advertising and which factors contribute to successful mobile advertising. And it will help marketers maximize the potential of this marketing communication medium to apply it in Vietnam. Besides, the

relationship between attitudes toward mobile advertising and consumer buying decision is also determined. In addition, it provides an overview of the global mobile phone industry and mobile advertising markets, particularly in Vietnam. Finally, the findings contribute useful information that can be used to plan strategy and make decision appropriately.

## 2. Literature Review

### 2.1 Mobile advertising

Dickinger et al. (2004) define mobile marketing as “using interactive wireless media to provide consumers with time and location sensitive, personalized information that promotes goods, services and ideas, thereby generating value for all stakeholders”. Mobile marketing is aimed to deliver information to consumers via SMS (Short Message Service) or MMS (Multimedia Message Service) (Kavassalis et al., 2003). SMS and MMS are divided into two subgroups with different modalities of working. SMS messages contain only a limited maximum number of 160 characters to text, but MMS messages are advanced version that allowed to insert images, audio and video to SMS.

In the context of this study, mobile advertising is defined as “*short messages which transfer business-to-customer (B to C) messages to a wireless device*” (Okazaki & Charles, 2008). Mobile advertising is aimed to transfer messages to target consumers through a handset. Okazaki (2005b) has confirmed that SMS mobile advertising contributes to strengthen companies’ brand identity, especially in integrated marketing communication strategies. SMS also helps identify varied consumers’ responses to advertisement in order to promote improvement on brand attitude and behavior attention (Rettie et al., 2005). While, mobile advertising should be combined with traditional advertising tools to enhance effect of each other (Kavassalis et al., 2003). A good explanation for this supplementary is that both mobile marketing and mobile advertising are still the fresh notions for the commercial operation of enterprises. Thus consumers probably have to take time to get their own integrated approach to mobile phone technology and their readiness for arrival of mobile advertisements (Bauer et al., 2005).

### 2.2 Attitude toward mobile advertising

Attitudes are mental conditions like feelings or opinions of a person about something or someone; and also his/her reaction or behavior toward those certain ideas, objects, persons or situations (Chowdhury et al., 2006). Toward advertisements Chakrabarty and Yelkur (2005) defined attitudes as consumers’ predisposition to respond toward a specific message positively or negatively. The attitudes are related to both mobile advertising and the approach used for delivery (Chowdhury et al., 2006). Some scholars have described mobile advertising as permission-based, incentive-based, and location-based (Zoller, Housen, & Matthews, 2001; and Tsang et al., 2004). If consumers are ready and reach agreement about receiving message, it is called permission-based mobile advertising. Incentive-based advertising messages offer consumers a specific amount of monetary value. And location-based advertising is applied to deliver messages to specific designated consumer locations like mobile phone (Wanmo Koo, 2010). Simultaneously, it is indicated that consumers commonly show negative attitudes toward mobile advertising except that “*they have specifically consented to it, and there is a direct relationship between consumer attitudes and consumer behavior*” (Tsang, Ho, & Liang, 2004). Since messages from consumers’ service providers are evaluated more highly and trustworthy than from others, it is necessary for the providers to focus on selecting, defense as well as guarantee for their consumers (Carroll, Barnes, Scornavacca, & Fletcher, 2007).

### 2.3 Entertainment

McQuail (1983) defines entertainment as “*the ability to fulfill an audience’s needs for escapism, diversion, aesthetic enjoyment, or emotional enjoyment*”. Entertainment advertising functions as social messages to make a

positive impression on consumers (Shavitt, Lowrey, & Haefner, 1998). Entertainment is generally shown in an action, event or activity which is meant to entertain, satisfy and attract one or more users (Daily Heritage, 2014).

Entertainment plays an important role in mobile marketing (Katterbach, 2002). Indeed, it is suggested that companies had better catch consumers' interests with succinct and hilarious messages (Katterbach, 2002). In mobile advertising entertainment is shown as a sensation of pleasure regarding to messages consumers have (Unal, Erics, & Keser, 2011). Similarly, Tsang et al. (2004) claimed that entertaining advertising messages also have an influence on consumers' attitudes toward mobile advertising. The entertainment value in mobile advertising was well perceived as one of the most crucial factors affecting consumers' attitudes toward advertisements by Unal et al. (2011). In mobile advertising it has been indicated that a positive relationship between entertainment and consumers attitude does exist and is considered to be the most important factor that helps identify attitude toward mobile advertising (Xu, 2007; Haghbiran et al., 2005; Tsang et al., 2004; Zabadi et al., 2012). However, in contrast to these findings there was also a study stated that entertainment did not affect attitude significantly (Christensen, 2013). Therefore, it might be said that entertainment is culture-dependent but the other variables also might be the factors making these happen.

#### 2.4 Informativeness

In the context of this study, informativeness can be defined as "*the ability of advertising to inform consumers of product alternatives so that purchases yielding the greatest possible satisfaction can be made*" (Ducoffe, 1996). The informativeness notion is briefly capability of advertisements in which companies can transmit updated, timely and easily approachable information to consumers (Altuna et al., 2009). Moreover, quality of information in a company's mobile advertisement impacts directly on consumers' perceptions of the company and its products and services (Usta, 2009). In advertisement informativeness plays a significant role; indeed, it helps not only transmit valuable and practical information but also provide useful offers (Daugherty et al., 2008; Okazaki, 2005a). Furthermore, Ducoffe (1996) considered informativeness of advertisements a feature affecting consumers' satisfaction and their buying decisions. Similarly, in Wong et al. (2008) indicated that informativeness was accepted as a basic element for advertisement. Informativeness of advertising information is also closely associated with advertising value when the message is sent via traditional media vehicles (Ducoffe, 1995; Zabadi et al., 2012).

Tsang et al. (2004) concluded that perceived informativeness does have an impact on consumers' attitudes toward mobile advertising in general. In more details, perceived informativeness is found to affect consumers' attitudes positively toward advertising (Blanco et al., 2010). The research of Milne and Gordon (1993) has shown that consumers prefer the messages of which customized mobile content is relevant to them. Thus the more appropriateness of advertising content the message has the higher information quality and thereby perceived informativeness it increases.

#### 2.5 Irritation

An advertisement is called irritation when it only causes consumers nuisance, dissatisfaction and illiberality (Aaker & Bruzzone, 1985). Irritation refers to consumers' attitudes which including only negative aspects toward mobile advertising (Altuna et al., 2009). Besides, according to psychological reactance, a theory of freedom and control, people tend to respond negatively when realizing their freedom is threatened or lost (Wong, 2008). Thus Ercis (2011) considers irritation one of the most crucial causes that make consumers censure advertisements. Consumers in general and recipients in particular can be confused about loads of information that mobile advertising provides and it can be considered invasion of mobile users' privacy (Stewart & Pavlou, 2002). And when people are addressed by advertisements, humiliation they get will cause a very significant impact on their attitudes toward mobile advertising (Shavitt, Lowrey, & Haefner, 1998). In addition, one of reasons makes consumers perceive advertisements unpleasantly and uncomfortably is using unattractive, offensive, disrespectful and unscrupulous advertising techniques (Ducoffe, 1996). There is still another type of mobile

advertising that annoys people and it is unwanted messages, normally called spam (Dickinger et al., 2004). Spam is perceived as annoyance because it clearly intrudes into the others' private affairs and holds back consumer acceptance. In conclusion, according to Tsang et al. (2004) and other scholars, perceived irritation of mobile advertising does affect consumers' attitudes toward mobile advertising. In details, once advertisements are realized irritating or annoying, consumers will change their attitudes negatively toward the products which are advertised (Wong, 2008).

## 2.6 Credibility

In advertising credibility is defined as the extent of consumers' belief in what retailers advertise their brands (Mackenzie & Lutz, 1989). Credibility is identically about consumers' reliance on truthfulness and verisimilitude of company's advertisement in definition of Chowdhury et al., (2006). Furthermore, when making a decision consumers will evaluate if the service or product is trustworthy or not by adopting credibility first before using information based on their experience they had with the advertising channel in the past (Christensen, 2013). In addition, in advertising credibility is a crucial dimension which enhances web advertising (Brackett & Carr, 2001). In other words, the higher credibility consumers perceive, the higher advertising value increases (Islam, Kang, & Yang, 2013). It is also reported that credibility plays an important part in mobile advertising. According to Haghirian et al. (2005), there is a positive relationship between credibility and consumers' perceived value of mobile advertising. A positive correlation between consumers' perception of credibility of advertisement and consumers' attitudes toward advertisement has been verified in the research of Zabadi et al. (2012). Likewise credibility has been also found in several findings to affect positively attitude toward mobile advertising and for the advertisements that are not given approval credibility is the only significant factor to evaluate (Zabadi et al., 2012; Tsang et al., 2004; Haghirian & Madlberger, 2005).

## 2.7 Consumer buying decision

**Consumer buying behavior** - According to Armstrong and Kotler (2003), "*consumer buying behavior refers to the buying behavior of final consumers, individuals and household who buy goods and services for personal consumption*". The consumer market is an assemblage of all buyers who are termed as final consumers with varied purchasing power of products and services. These final consumers refer to both human beings and other non-living entities from all over the world with different age, income, educational level, gender and tastes (Chaipradermsak, 2007). A large number of buying decisions are made every day. To research a consumer's decision-making process of buying, the basic requirement for the marketers is aimed to find out the questions of what consumer buy, where they buy, how and how much they buy, when and why they buy (Armstrong & Kotler, 2003). In marketing in general and in studying consumer behavior literature in particular, consumer purchase decision process plays a major role that attracts most of researchers (Constantinides, 2004). They have pointed out that there are a number of factors affecting consumers' online buying process which are divided into two groups; one contains the factors that are out of control of marketers, they are listed as demographic, social, economic, cultural, psychological and other personal factors. (Dibb et al., 2001; Jobber, 2001; Boyd et al., 2002 & Kotler, 2003); another one is a combination of factors that can be controlled like marketing strategies and website user experience (Constantinides, 2004).

**Consumer buying decision making** - The vital key process that has a direct influence on consumer decision making includes activities in which consumers will integrate all the knowledge about products so that they compare two or more different behaviors and then just decide to choose one. The final result of this process is called a choice, which is intellectually considered a behavioral behavior. A behavioral intention is defined as "subjective probability that he or she will engage in a given behavior" (Committee on Communication for Behavior Change in the 21st century, 2002). Consumers are able to make many different decisions because there are a number of various products with many choices in every market. Despite different buying decisions, each buyer decision process contains five stages: need recognition, information search, evaluation of alternatives, purchase decisions and post-purchase behavior (Armstrong & Kotler, 2003). Companies should do research on

not only the purchase decision but also the whole included process. According to the figure, consumers will pass all the stages of the buying decision; however, in fact consumers are possible to miss or invert some stages, and there are some steps that are so important that consumers need to follow carefully and marketers need to focus on (Armstrong & Kotler, 2003).

***The influence of attitude on consumer buying decision*** - Dreezens, Martijn, Tenbult, Kok, and De Vries (2005) define attitude as a predisposition or a tendency to reflect the way a person thinks or feels about a specific object or activity negatively or positively. Specifically, according to Huang, Lee, and Ho (2004) attitude is defined as “a learned predisposition to respond in a consistently favorable or unfavorable manner toward a particular brand”. Attitude is also explained in a different way as “an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of our environment” (Hawkins, Best, & Coney, 2004). Additionally, according to Kim and Park (2003), by analyzing the related behavior we can clarify that a person’s attitude toward a behavior is positive or negative and his/her main confidence of perceived effectiveness of working behaviors is also included in their attitudes. A consumer’s attitude toward a specific behavior is used to realize her/his trust level of the possibility of liking or hating a result of an action (Rainbowlink, 2011).

### 3. Methodology

#### 3.1 Model of this study

The framework of the study is relied on the developed model of consumer attitudes toward internet, web or mobile advertising (Javid et al., 2012; Haghirian et al., 2005; Tsang et al., 2004 & Ducoffe, 1996). Ducoffe (1996) originally built a model showing the perceptual antecedent of entertainment, informativeness and irritation to specify consumer attitudes toward internet advertising. Then, Bracket and Carr (2001) have developed the model based on Ducoffe’s model to determine consumer attitude toward web advertising. The model has the same three factors that were indentified in the Ducoffe’s model. However, it comprises credibility factor that is an antecedent of consumer attitude toward advertising. Besides, Tsang (2004) argued that there was a positive relationship between consumer attitude and intention toward mobile advertising. In addition, Presad and Jha (2014) claimed that the more intention of buying products consumers have, the more it motivates them to come up with the buying decision. Therefore, the framework is developed from the previous studies and contains other additional factor namely consumer buying decision. In this study, four factors entertainment, informativeness, irritation and credibility will be used to test Vietnamese consumer attitudes toward mobile advertising, after that testing their buying decision by using those responses.

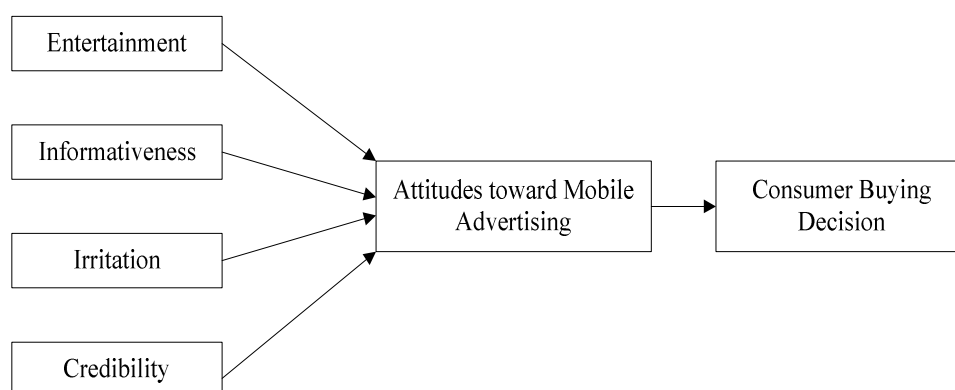


Figure 1. Conceptual model of the study

For this reason, a model of this study was made up of five hypotheses.

- Hypothesis 1: The perceived entertainment of mobile advertising has a positive effect on attitude toward mobile advertising.
- Hypothesis 2: The perceived informativeness of mobile advertising has a positive effect on attitude toward mobile advertising.
- Hypothesis 3: The perceived irritation of mobile advertising has a negative effect on attitude toward mobile advertising.
- Hypothesis 4: The perceived credibility of mobile advertising has a positive effect on attitude toward mobile advertising.
- Hypothesis 5: Consumers' attitude towards mobile advertising has a significant relationship with consumer buying decision.

### *3.2 Data collection and sampling*

This study used non-probability method to collect data, particularly snowball sampling. The questionnaires were distributed via online to respondents. The sampling of this survey included Vietnamese consumers who used the mobile phone and had knowledge about mobile advertising by the first question that "Do you use mobile phone?" The objective of the survey is that collecting the qualitative data to determine behavior of Vietnamese consumers when they receive advertising messages. Survey items were measured on a five-point Likert scale ranging (1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, 5 for strongly agree). 310 questionnaires of the survey were sent to consumers via online and 296 questionnaires were responded. There are 14 non-participants to answer. There was no incomplete and missing data of 296 questionnaires got back because all of questions were required to answer. However, some questionnaires were listed as unreasonable information such as all questions the respondents typed only "strongly agree" or "strongly disagree". After filtering, 293 questionnaires were used for this study. The collected data was checked for omission, legibility, and consistency and analyzed by using SPSS (Statistical Package for the Social Sciences). A set of statistical data analysis methods includes descriptive analysis, reliability analysis, factor analysis, Pearson correlation test, Regression analysis, *t*-test and analysis of variance (ANOVA).

## **4. Results and Discussion**

### *4.1 Description of Sample*

Descriptive statistics for demographics is based on gender, age, education, monthly income and occupation. The frequency of male and female respondents is almost the same. Among 293 respondents, 49.8% (n=146) were males and 50.2% (n=147) were females. The majority ages of the respondents were 18-24 years old which occupied of 77.1% (n=226) with more than ¾ of total respondents. Occupation classification was mostly distributed among the young generation, 66.6% of the sample at the students (n = 195). The graduated bachelor degree comprised the highest percentage 88.4% (n=259). Finally, in term of monthly income, about 63.1% (n=185) of the sample reported an earnings of \$100-\$250.

### *4.2 Factor Analysis*

Table 1 showed that the value of the KMO was .802 which was accepted for factor analysis. The value of Bartlett's Test of Sphericity is considered to be significant. Total of 18 items were classified into four factors with the accumulation percentage of variance being 66.878% which is considered acceptable. Therefore, factor analysis was considered appropriated for this study.

**Table 1**

*Percentage of variance explained and eigenvalues, KMO and Bartlett's Test*

Number of items	Accumulation percentage of explained variance (%)	Number of components extracted	KMO	Bartlett's Test Sig.
18	66.878	4	.802	.000

**Table 2**

*Factor analysis for independent variables, mean and credibility*

Factors	Variables	Item labels	Mean	Factor loading
1. Entertainment (Cronbach's $\alpha = 0.800$ )	E1	Mobile advertising is fun to use.	2.69	.806
	E2	Mobile advertising is entertaining.	2.45	.606
	E3	Mobile advertising is enjoyable.	2.62	.852
	E4	Mobile advertising is pleasing.	2.50	.594
	E5	Mobile advertising is exciting.	2.33	.742
2. Informativeness (Cronbach's $\alpha = 0.810$ )	I1	Mobile advertising supplies relevant product information.	3.34	.567
	I2	Mobile advertising is a convenient source of product information.	3.42	.652
	I3	Mobile advertising is a good source of up-to-date product information.	3.36	.847
	I4	Mobile advertising provides timely information.	3.23	.825
	I5	Mobile advertising makes sales information immediately accessible	3.10	.581
3. Irritation (Cronbach's $\alpha = 0.863$ )	R1	Mobile advertising is annoying.	3.60	.764
	R2	Mobile advertising is confusing.	3.16	.666
	R3	Mobile advertising is irritating.	3.52	.865
	R4	Mobile advertising is deceptive.	3.31	.820
4. Credibility (Cronbach's $\alpha = 0.862$ )	C1	I use mobile advertising as a reference for purchasing.	2.43	.716
	C2	I trust mobile advertising.	2.80	.839
	C3	The content provided by mobile advertising is credible	2.98	.843
	C4	Mobile advertising is convincing	2.66	.858

#### 4.3 Pearson correlation, regression

The table 3 showed the results of Pearson's correlations of six factors. All the values of sig. (2-tailed) are less than 0.05 ( $p < 0.01$ ). That means there is a statistically significant correlation between six factors. Five factors (entertainment, informativeness, credibility, attitudes toward mobile advertising and consumer buying decision) have the positive values of Pearson correlation. And the correlation of irritation is negative.

**Table 3**

*Pearson's Correlations*

Factors	(1)	(2)	(3)	(4)	(5)	(6)
(1) Entertainment	1					
(2) Informativeness	.415**	1				
(3) Irritation	-.265**	-.474**	1			
(4) Credibility	.211**	.187**	-.376**	1		
(5) Attitude Toward Mobile Advertising	.504**	.559**	-.423**	.346**	1	
(6) Consumer Buying Decision	.320**	.250**	-.205**	.269**	.533**	1

*Note.* \*\*.  $p < 0.01$



**Table 4**

*Multiple Regression Analysis*

Hypotheses	Independent variable	Dependent variables	Beta	t	Sig.	R <sup>2</sup>
H1	Entertainment	ATMA	.291	6.007	.000	0.452
H2	Informativeness	ATMA	.352	6.667	.000	
H3	Irritation	ATMA	-.112	-2.134	.034	
H4	Credibility	ATMA	.177	3.718	.000	
H5	Attitude Toward Mobile Advertising( ATMA)	Consumer Buying Decision	.533	10.743	.000	0.284

In table 4, R<sup>2</sup> value which is .452 means that around 45% of the variance in attitudes toward mobile advertising can be explained by four factors entertainment, informativeness, irritation and credibility. Besides, R<sup>2</sup> value is 0.284 that means around 28% of variance in consumer buying decision can be explained by factor attitudes toward mobile advertising. The F-test was significant ( $p < .01$ ), so the model of this study does fit and can be used. Hypotheses 1 to 4 identify factors having impacts on attitudes toward mobile advertising, and hypothesis 5 determines the relationship between attitudes toward mobile advertising consumer buying decision. Table 3 pointed out that four factors entertainment, informativeness, irritation and credibility were used as independent variables, and attitudes toward mobile advertising was used as dependent variable. The result presents that informativeness was the most significant factor of attitudes toward mobile advertising ( $\beta = .352, p < .05$ ) followed by entertainment ( $\beta = .291, p < .05$ ), irritation ( $\beta = -.112, p < .05$ ), and credibility ( $\beta = .117, p < .05$ ). Therefore, hypothesis 1 to hypothesis 4 was supported.

For testing hypothesis 5, attitudes toward mobile advertising were used as independent variable and consumer buying decision was used as dependent variable. Table 3 shows that the effect of attitudes toward mobile advertising ( $\beta = .533, p < .05$ ) was significant. It means that there is a significant relationship between attitudes toward mobile advertising and consumer buying decision. Accordingly, hypothesis 5 was supported.

*4.4 T-test and Analysis of Variance (ANOVA)*

The results from table 5 illustrate the relationship between gender and entertainment, informativeness, irritation, credibility, attitudes toward mobile advertising, consumer buying decision. Since all sig values are greater than .05, then all sig (2-tailed) as equal variances assumed are also greater than .05. It means that there is no significant influence between gender and entertainment, informativeness, irritation, credibility, attitudes toward mobile advertising, consumer buying decision. The gender has no significant influence on entertainment, informativeness, irritation, credibility, attitudes toward mobile advertising and consumer buying decision.

**Table 5**

*Independent Samples Test*

	Levene's Test Equality of Variances		t-test for Equality of Means	
	F	Sig.	t	Sig. (2-tailed)
Entertainment	1.692	.194	-.344	.731
Informativeness	1.117	.291	-.064	.949
Irritation	.044	.834	.094	.925
Credibility	.246	.620	.133	.895
ATMA	.146	.703	-1.266	.206
Purchase Decision	.131	.718	-.902	.368

**Table 6**

*The results of one-way ANOVA by personal profile*

Factors	Gender	Age	Occupation	Monthly income	Education
Entertainment	0.731	0.608	0.643	0.945	0.877
Informativeness	0.949	0.923	0.882	0.348	0.258
Irritation	0.925	0.362	0.869	0.113	0.680
Credibility	0.895	0.278	0.148	0.529	0.307
Attitude toward mobile advertising	0.206	0.458	0.754	0.314	0.221
Consumer buying Decision	0.368	0.171	0.281	0.051	0.680

The researcher used ANOVA to demonstrate the relationship between data variables at significant level of .05. Table 5 shows that the relationship between age, occupation, monthly income, education and entertainment, informativeness, irritation, credibility, attitudes toward mobile advertising, consumer buying decision. Since all Sig. values are greater than .05, it means that there is no significant effect of entertainment, informativeness, irritation, credibility, attitudes toward mobile advertising and consumer buying decision among respondents with age, occupation, monthly income and education. The personal information has no significant influence on entertainment, informativeness, irritation, credibility, attitudes toward mobile advertising and consumer buying decision.

#### 4.5 Discussion

This study is aimed to examine the impact of advertising attributes on Vietnamese consumers' attitude toward mobile advertising and the relationship between attitudes toward mobile advertising and Vietnamese consumers' buying decisions. The results of the research support some meaningful suggestions to marketers. This study confirmed that advertising attributes include entertainment, informativeness, irritation and credibility. Moreover, advertising attributes significantly affect Vietnamese consumers' attitudes toward mobile advertising. In particular, the finding supports the hypothesis that the role of entertainment had a positive and direct impact on attitudes toward mobile advertising. It means that when respondents receive an advertising message, they also consider the entertainment of the message. In a competitive market place, message advertisements need to be interesting, enjoyable, fun, exciting to attract consumers' attention. From previous studies, many authors suggested that entertainment played a significant role in attitudes toward mobile advertising (Xu, 2007; Haghiran et al, 2005; Tsang et al., 2004; Zabadi et al., 2012).

When considering informativeness in relation to attitudes toward mobile advertising, this study provides an additional insight to the findings that informativeness had a positive and direct effect on attitudes toward mobile advertising. This is consistent with some scholars who claimed that informativeness played a significant and positive role to attitudes toward mobile advertising (Zabadi et al., 2012; Javid et al., 2012; Wanmo Boo, 2010; Haghiran & Madlberger, 2005; & Tsang et al., 2004). Regarding the findings of this study, informativeness is one of the most significant factors affecting positively consumers' attitude toward mobile advertising. It presented that informativeness contributed positively and directly to consumers' beliefs when they received advertising messages. Informativeness was assessed as an indicator that affects consumer buying decision, thus it brought consumers the performance and clarity of advertising messages. However, from some previous studies, entertainment was the most significant factor which impacted on consumer attitude (Javid et al., 2012 & Tsang et al., 2004). In addition, credibility was the most important factor affecting consumer attitude (Chowdhury et al., 2006).

Through the research of the relationship between credibility and attitudes toward mobile advertising, the finding supported that the factor credibility had a positive and direct effect on attitudes toward mobile advertising. When consumers trust mobile advertising messages they receive, they tend to have perceptions

about the value of advertising and subsequent impact on buying decision. Similar finding has also been found in previous research done by Wang & Sun, 2010; Chowdhury et al., 2006; Tsang et al., 2004; Okazaki, 2004; Goldsmith, Lafferty & Newell, (2000). Credibility is one of the important factors in establishing the relationship between enterprises and customers.

Regarding to irritation, there is existence of negative thinking about mobile advertising. Advertising has been criticized for promoting needs and desires that consumers may not have recognized previously and for creating insecurity and greed in society (Wang & Sun, 2010). Previous studies have established that irritation had negative effects on advertising value and attitudes toward World Wide Web advertising (Liu, 2002 & Ducoffe, 1996) and attitudes toward mobile advertising (Javid et al., 2012; Tsang, 2004). In contrast, Chowdhury et al. (2006) found that the influence of irritation on attitudes toward mobile advertising was positive and insignificant. Moreover, a different finding has been found that the negative effect of irritation on attitude toward mobile advertising was not significant (Islam et al., 2013). However, this study provides the finding that the factor irritation has a negative effect on attitude toward mobile advertising. The irritation is a strong critical factor that affects negative attitude of consumer with highest mean 3.399. They have considered messages of mobile advertising irritating. They are confused and annoyed from receiving messages of mobile advertising. Moreover, they feel that messages of mobile advertising are deceptive.

While these previous studies are limited to determining the impacts of attitudes toward mobile advertising on purchase intention (Wanmo Koo, 2010 & Tsang et al., 2004); this study expands previous research by examining the impact of attitude toward mobile advertising on buying decision. For the last question, the finding also indicates that attitudes toward mobile advertising have positive and significant influences on Vietnamese consumer buying decision. It presents that they not only read the message but also their buying decisions are affected if the message is emphasized entertainment, informativeness, credibility and reduced irritation.

## **5. Conclusion**

### *5.1 Summary and contributions*

The mobile device is continuing to grow rapidly and plays a pivotal role in social and economic development in the world. Moreover, Asia Pacific is not only the world's largest mobile region but also one of the most diverse regions in terms of the levels of both economic and mobile market development. Mobile advertising and message in particular are more and more important and necessary to developing Vietnam economic today. The major aim of this study is determine factor impact on consumer attitudes toward mobile advertising. In addition, the effect of attitudes toward mobile advertising on Vietnamese consumer buying decision were analyzed and investigated.

This study confirmed that all four factors of attitudes (i.e., entertainment, informativeness, irritation and credibility) have significant effect on attitudes toward mobile advertising and among them informativeness is the most significant factor. While entertainment, informativeness, and credibility have positive effect on attitudes toward mobile advertising, irritation is negative related to attitudes toward mobile advertising. The findings also indicate that attitudes toward mobile advertising have positively effect on Vietnamese consumer buying decision. Demographic characteristics such as gender, age, education level, occupation, monthly income have no impact on Vietnamese customers' attitude toward mobile advertising and buying decision.

These findings from results extend the literature and support results of other studies (Javid et al., 2012, Wanmo Koo, 2010; Haghirian et al., 2005; Okazaki, 2005a; Tsang et al., 2004). However, the previous studies considered only the impact of attitudes toward mobile advertising on purchase intention. This study contributes to literature by investigating the four factors (entertainment, informativeness, irritation and credibility) of attitudes toward mobile advertising and subsequent impact on consumer buying decision. Attitude plays an important role in consumer behavior (Huang, Lee & Ho, 2004). Therefore, understanding consumers' attitude

needs to become essential, especially toward the potentially developing mobile industry in Vietnam. The finding of this study implies that positive attitudes toward mobile advertising may contribute a constructive suggestion in their marketing strategies planning.

## 5.2 Managerial Implications

Results of this study substantially contribute to managerial implications of consumer attitude toward mobile advertising in a developing country. With regard to information is the strongest predictor of positive influence on attitudes toward mobile advertising. It presented that consumers have strong perceptions of the informativeness of attitudes toward mobile advertising. Consumer disagreed that advertising messages supplied relevant product information (Waldt, Rebello, & Brown, 2009). Indeed, it is a truth of communication process to carry an informative and persuasive advertising content to a targeting audience. Marketers need to ensure that advertising messages only send relevant information to consumer, specially targeted consumers. Customers only pay attention to information related to their interests. So marketers need to determine necessary information according to purpose of mobile advertising. The content of messages should go straight to specific issues such as items, price, brand, country-of-origin, location, etc. Moreover, marketers can also create promotional message related to discounts, gifts to stimulate the curiosity of those who receive the advertising messages. Otherwise, a marketer implements state-of-art technologies of mobile advertisement for luring targeting audience's eyeballs and igniting his/her desire of need and buying decision.

On the other hand, the importance of other factors such as entertainment and credibility should not be ignored. Marketers need to increase the entertainment of mobile advertisements. Because mobile devices have small screen and SMS messages are limited by 160 characters (Choi et al., 2008). In order to overcome the limitation of SMS messages, marketers can use the MMS messages that allows for the inclusion of visual elements, such as music, images and video. Marketers can create more unique and entertainment of mobile advertisement through MMS messages. However, it requires that marketers must have more consumer information such as consumer attitudes, time working, the consumer who have MMS enabled mobile phones. Although MMS messages can contain more information, but costs of using MMS are high. That is why retailers often try to shorten the message size to reduce cost. Therefore, marketers should consider the value of the product or customer's object to use SMS or MMS reasonably.

There is a positive significant relationship between credibility and attitudes toward mobile advertising. Products or services advertised must be ensured as same as in advertising by marketers. Moreover, marketers need to create trust with customers from the reasonable prices and quality of products. For services, marketers should ensure the process of operation and completion on time. Advertisers should avoid the case of products and services to customers who are not true to what is posted on the advertising. Because the above problem happens, customers will lose trust for enterprise. And it is very difficult to regain the trust of customers. Therefore, marketers need to have a reasonable explanation and give a solution for consumer satisfaction. In conclusion, marketers should check the trust in advertising before delivering to consumer.

Irritation has a negative effect to Vietnamese consumer attitudes toward mobile advertising. It suggested that marketers should attempt to reduce consumer perceived irritation of mobile advertising to enhance efficiency of these messages. In particular, the factor irritation highlights the importance of permission-based marketing in building on trust of mobile advertising. To become efficient mobile advertising, it has to be allowed and solved problem with intrusion of privacy (Christensen, 2013). Therefore, marketers should ensure that advertising messages are distributed only current consumer or those consumers that are interested in receiving advertising information from enterprise because they need permission from their consumers and avoid those consumer that feel advertising messages as being annoying and irritating. Moreover, marketers need to target potential consumers at the right time and place so that it impulses perceptions for potential consumers in purchasing the advertised product. It helps enterprise get the benefit and cost effect. In addition, marketers also need to avoid using subjective expression such as "very", "extremely", and "best" in advertisement messages. Moreover, this

study suggested the most effective way to reduce the irritation of advertising messages is that strongly improve entertainment, informativeness and credibility. To achieve the success of mobile advertising strategy, it is necessary for marketers to receive the approximately permission of consumers before spreading advertising messages to them (Andersson & Nilsson, 2000; Kavassalis et al., 2003; Nysveen, Pedersen & Thorbjornsen, 2003).

The relationship between attitudes toward mobile advertising and consumer buying decision, suggests that when Vietnamese consumer have a positive attitude toward mobile advertising, they are willing to purchase the advertised products with reasonable price, quality. Therefore, marketers should focus on entertainment, informativeness, irritation and credibility, specially informativeness and irritation to ensure that Vietnamese consumers' have a positive attitudes toward mobile advertising.

### 5.3 Limitation and future research

There are some limitations and suggestions for future research. More specifically, consumer will collect and adopt more available information that affects their buying decisions/ buying decision making process. This study only focused on consumer attitudes variable. In the future research author can incorporate more variables and constructs to investigate/examine consumer buying behavior. The second limitation of this study concerns about the case of the mobile industry. The collectivism in Vietnam in the study is highly appreciated. However in the future research the data can be considered and collected from other countries with different cultures and a cross-cultural comparison of patterns should be considered also. Thirdly, a majority of the respondents in the study is students under 30 years of age. It may not present comprehensively the buying behaviors of Vietnamese consumers in all age groups. Thus, besides students, other subjects should be joined into the survey to expand and develop the model in other studies. Finally, none of particular product categories was mentioned and adopted in the research. Therefore, the issue of the study can be replicated in other industries in Vietnam in future research.

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