Identifying Factors Affecting Mobile Advertising Based On Consumer Attitude

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Abstract Mobile advertising can be defined as the transmission of message related to products, services and opinions for promotional purposes via mobile devices. The study aims to review ten different models of mobile advertising based on consumer attitude in different scopes. A discussion was developed by authors based on findings to make a clear image about the factors that affect consumer attitude towards mobile advertising and for this purpose a classification of the factors affecting consumer attitude towards mobile advertising was proposed. A number of papers were selected by authors that cover different models. Specific criteria were followed when looking for the papers, since the models should focus on mobile advertising. Apart from that, the papers must be written in English language and discarded other papers which written in other languages.

Keywords: Mobile advertising, Consumer attitude, Mobile commerce.

1. INTRODUCTION

Nowadays, nearly everything is influenced by the information technology (IT). IT formed the commerce and the marketing strategy for the companies. One side of the marketing that is affected by IT is the advertising. Advertising through mobile devices (mobile advertising). Mobile advertising is adopted by many big organizations such as Procter & Gamble, Microsoft, Disney, Coca-Cola, Sony Pictures, and McDonalds. According to Wang, Zhang, Choi, and D’Eredita (2002), when the value of the advertising is very small, it is simply ignored by consumers. Furthermore, the advertisers have worries about the factors that possibly subscribe to successful advertising since the expenses of the media are high. Therefore, regarding the mobile advertising and the Short Messaging Service (SMS) in specific, understanding these factors and draw a clear picture about the factors that affect the attitude positively and those affect the attitude negatively can help increase the rate of reading the messages in full. A mental inclination shaped after obtaining an advertising message, and then starting a psychological reaction and cognitive thought are the things that can refer to as a consumer attitude towards advertising. The attitude towards product brand and the desire for purchasing can be influenced by this tendency (MacKenzie & Lutz, 1989), therefore, reviewing the factors that affecting the consumer attitude towards mobile advertising is very important for marketing.

2. MOBILE COMMERCE

Based on Durlacher’s study, mobile commerce or M-commerce is defined as “any transaction with a monetary value that is conducted via a mobile telecommunications network” (Müller-Veerse, 1999). The concept of having a much newer e-commerce function gave birth to “mobile commerce” (Varshney & Vetter, 2002). In the light of e-commerce, mobile commerce is acknowledged as a modern reform (C. H. Leung, Chan, & Chan, 2003), which is e-commerce through the mobile phone (Mennecke & Strader, 2003), that has increased the range of distance, location and availability of e-commerce (Keen, Mackintosh, & Foreword By-Heikkonen, 2001).

3. MOBILE ADVERTISING

The acceptance of text messaging service (SMS) has significantly increased, that has resulted in the increase of the mobile advertising trend (James, Griffiths, Smyrnios, & Wilson, 2004). Jin and Villegas (2008) argue that the cell phone has great possibility of providing advertisements due to its large transmission rate. Actually other advertising means cannot be taken everywhere by people unlike this type they can. The space and the time of the old advertising means can be extended by using mobile phones (Muk, 2007). Mobile advertisements could be sent to customers without restrictions regarding space and time. Simply, mobile advertising could be defined as the ads that can be delivered or obtained on mobile devices like (PDA) or Personal Digital Assistants or mobile phones.
Generally, the definition of message marketing and mobile advertising can be used interchangeably, wherever advertising messages are delivered via cell phones in format of text. That is possibly because advertising via SMS is typically the most used kind of portable marketing (Scharl, Dickinger, & Murphy, 2005). Nevertheless, several choices are offered by mobile advertising for utilizing advertising campaigns. For instance Multimedia Messaging Services (MMS) enable the marketer to deliver material such as for example images, audio or as well as animations to picked target groups.

Idean (2009) stated that along with advertising through SMS, a number of other kinds of mobile advertising were identified such as Infrared or Bluetooth along with marketing with search services and games. Idean, nevertheless, comments that these ways are not vital, and thus, classifies mobile marketing as customer relation communication and mobile advertising. In mobile advertising, customers receive advertisements via the methods previously stated, while in customer relation communication, customers and stakeholders obtain these advertisements in various messaging methods directly from companies and authorities.

4. ATTITUDE

The study of Solomon, Bamossy, skegaard, and Hogg (2010) defines the attitude as “A lasting general evaluation of people (including oneself), objects or issues”. Another definition is given by the research of Fishbein and Ajzen (1975) which says that the attitude is “a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object”.

5. LITERATURE REVIEW

In this study, looking at several different models whether which studied the attitude toward mobile advertising in a direct way or indirect way, which means even the studies that focus on mobile advertising based on consumer attitude as a part of their research were investigated.

A survey conducted by Sabokwigina, Malima, and Mpogole (2013) investigates how customers react to SMS advertising based on various elements. This survey was carried out on students of University of Tanzania who use mobile phones. Furthermore, an “integrated Web advertising attitude model” designed by Brackett and Carr (2001) was used, and figure 1 demonstrates this model, which was designed based on four factors: perceived informativeness, entertainment, credibility, and irritation. It shows how customers are influenced by advertisements during the evaluation. Personalization and appropriate demographic variables are also incorporated.

In Zabadi, Shura, and Elsayed (2012) study, the key goal of the study was to find out if there was a relationship between consumer overall attitude based on SMS ads and the perceptions of the value of Informativeness, entertainment, credibility, and irritation in Jordan. Thus they tested their hypothesis by using the model adapted from (Brackett & Carr, 2001).

In researching the contrasting outlooks between adults and youth towards advertising using mobile devices, a study was performed by Ünal, Ercis, and Keser (2011). They specifically looked at the factors affecting customers' attitudes towards mobile advertising and if there is a connection between intention and acceptance-rejection behavior.

Mir (2011) stated that mobile advertising is growing fast as a marketing tool. This is especially encouraging when advertisers receive consent from their customers to send
mobile advertisements direct to their mobile phones. These same customers are usually more receptive towards these personalized and innovative messages. Hence, advertisers should always take innovation, informativeness and entertainment into consideration when sending out mobile advertisements. Figure 4 is their proposed model of mobile advertising.

Figure 4: Proposed Model of m-advertising (Mir, 2011)

A study to identify whether consumers had a more positive outlook when receiving mobile advertisements with previous factors as well as monetary benefits was conducted amongst Iranian users (Saadeghvaziri & Hosseini, 2011). Figure 5 shows the factors that they investigated in their research.

Figure 5: Factors affecting consumer attitude toward mobile advertising (Saadeghvaziri & Hosseini, 2011)

A “mobile self-efficacy construct assessment” technique was designed and authorized in order to examine the mobile advertising based on consumer attitude (Lee & Hsieh, 2009). Convergent validity, construct reliability, and discriminant validity are found to be significant in mobile self-efficacy, and highly affect how consumers react to mobile advertising. Figure 6 illustrates the research model for this study.

Figure 6: (Lee & Hsieh, 2009) research model

A practical research carried out in Japan and Austria to study the attitudes of consumers in two different market types – advanced and less advanced – reveals that, albeit not having similar relationship strengths, consumers are highly affected by whether the mobile advertisement is entertaining or informative (Haghirian, Madlberger, & Inoue, 2008). A research model of Consumers’ attitude towards mobile advertising is shown in Figure 7.

Figure 7: Research model on Antecedents of attitude towards Mobile advertising (Haghirian et al., 2008)

How the mobile advertising can influence the consumers’ attitude, as well as the connection between attitude and behavior are examined using a developed measuring tool (Tsang, Ho, & Liang, 2004). It is indicated that consumers are more positive and receptive of advertisements after they have agreed to receive them, and that there is a clear connection between their attitude and behavior towards mobile advertising. Hence, getting customers’ prior consent is vital. Figure 8 depicts their research framework.

Figure 8: (Tsang et al., 2004) research framework

Figure 9 indicates customers’ attitudes and factors relating to this through a research on the influence of mobile advertising (F. Leung & Cheung, 2004).

Figure 9: Consumer attitudes toward mobile advertising (F. Leung & Cheung, 2004)
The effects of mobile advertising on customers' attitudes were studied by Haghirian and Madlberger (2005), based on Austrian consumers. It is revealed that customers are affected by four main points; the value of the advertising, the content of the message, the demographics of the consumers, and frequency of exposure. Figure 10 illustrates this model.

![Figure 10: Antecedents of Attitude Toward Advertising via Mobile Devices (Haghirian & Madlberger, 2005)](image)

6. COMPARISON BETWEEN MODELS

A glance at the table 1 illustrates that entertainment, credibility, informativeness, irritation, and personalization are the most factors used in most of the models. After that the factors of demographic variables, permission and advertising value have been used moderately in some models, while the rest of the factors have been rarely investigated such as mobile self-efficacy, monetary benefit, message content, frequency of receiving SMS, and attitude towards privacy. Actually, the researchers found that some models use superior terms for some factors such as in the study done by Haghirian and Madlberger (2005), the term message content used to combine (entertainment, informativeness, irritation, and credibility) together, while in the most of the other studies, these factors are found individually mentioned. Additionally, Sabokwigina et al. (2013) mentioned to the frequency of receiving SMS individually, but it can be under irritation, since the high frequency of receiving SMS can irritate the consumers. In other words, entertainment, informativeness, irritation, and credibility are contained implicitly in other factors, and this leads to the fact that these factors are important in this field of study. In addition to these factors the personalization factor is essential too. Therefore, these five factors are the most important and the most used in the studies concerning the attitude at the mobile advertising.

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Since the numbers in table 1 refer to models as follow:
1 -(Sabokwigina et al., 2013)
2 -(Zabadi et al., 2012)
3 -(Ünal et al., 2011)
4 -(Mir, 2011)
5 -(Saadehghavaziri & Hosseini, 2011)
6 -(Lee & Hsieh, 2009)
7 -(Haghirian et al., 2008)
8 -(Tsang et al., 2004)
10 -(Haghirian & Madlberger, 2005)

7. FACTORS AFFECTING CONSUMER ATTITUDE TOWARDS MOBILE ADVERTISING

A glance at the studies mentioned above depicts that some of the factors are shared by some studies while the others are different. The following are the factors in the above studies:

7.1 Entertainment

It is one of the common factors between the studies in the field of mobile advertising based on consumer attitude. According to Altuna and Konuk (2009), the consumer’s sense of leisure associated to messages is expressed by entertainment. In this case, visual applications, music, games and social media are used in numerous publicizing applications. While in the study conducted by F. Leung and Cheung (2004) revealed that entertainment concerns the potential of the mobile promulgation medium to satisfy the clients by meeting their needs of amusement and pleasure that are related to relaxation or emotional release. The research of Lee and Hsieh (2009) refers to the entertainment as the capability of advertising to comply with shoppers’ yearning to fulfill
7.2 Informativeness

Another significant factor is the informativeness, which means “the ability of advertising to inform consumers of product alternatives so that purchases yielding the greatest possible satisfaction can be made” (Ducoffe, 1996). Usefulness, timeliness, and accuracy are standard characteristic that needs to be conveyed to the consumer through the mobile device like any other data or information (Stiau & Shen, 2003). Besides, clients look for an easy and speedy access to the information (s)he demands for an actual guidance (Zabadi et al., 2012). In addition to the above definitions, Ducoffe (1996) refers to the informativeness the potential of advertisements to successfully deliver and transfer the information to the desired clients.

7.3 Irritation

“When advertising employs techniques that annoy, offend, insult or are overly manipulative, consumers are likely to perceive it as unwanted and irritating influence” (Ducoffe, 1996). Companies usually advertise by sending whether short messaging service (SMS) or multimedia messaging service (MMS) without even paying attention to people’s personal information, because of the reasonable low prices of SMS and MMS. Consequently, the majority of individuals are irritated and annoyed by these non-focused marketing strategies (Ritiprapt, Wirthayawarukul, Limpit, & Lertdejdecha, 2009). Lee and Hsieh (2009) claim that the irritation touch on any harmful reaction arouses because of advertising and affecting clients, together with transgression, temper, emotional aversion or detestation.

7.4 Credibility

Advertisement credibility has been defined by MacKenzie and Lutz (1989), as “the extent to which the consumer perceives claims made about the brand in the ad (advertisement) to be truthful and believable.” Brackett and Carr (2001) define advertising credibility as “consumers’ perception of the truthfulness and believability of advertising in general”, whereas Stewart and Pavlou (2002), refer to it as “predictability and fulfillment of implicit and explicit requirements of an agreement”. Credibility of ads is affected by various factors, but the most important factors are the message’s carrier and the company’s credibility (Goldsmith, Lafferty, & Newell, 2000). Advertising credibility is typically the consumer’s belief linked to ads’ credibility and correctness (MacKenzie & Lutz, 1989). In the study of Lee and Hsieh (2009), they refer to the credibility as the level to which advertising motivates trust, belief, and confidence in clients.

7.5 Demographic variables

As assumed in the study Zabadi et al. (2012), the attitude towards advertising as well as the perceived advertising value can be influenced by the demographic parameters. Examples used in the research of demographic variables are; age, gender, and education.

7.6 Advertising value

It is defined as “a subjective evaluation of the relative worth or utility of advertising to consumers” (Ducoffe, 1995). Value can be described as “an enduring belief that a specific conduct or state is personally-psychologically or socially-culturally preferable to a converse mode of conduct or an opposite end state of existence” (Levy, 1990).

7.7 Personalization

According to Jingjun Xu (2006), to make advertising via mobile devices personalized, delivering messages should be established on four main factors which are user preferences such as preferred product, content such as brand name, user demographics like income, and finally the context such as user activities and location.

7.8 Permission

Permission-based mobile advertising is done by initially obtaining customers’ permission to send advertisements of products and services to their mobile devices. The benefit of permission-based advertising is that customers are more receptive of the advertisements and less annoyed (Ispir & Suher, 2009).

7.9 Mobile self-efficacy

Lee and Hsieh (2009) define mobile self-efficacy as the level of ability to utilize technology applications available on the mobile phones. An individual’s behavior is affected by that because it refers to how the individual perceives himself in achieving a goal (Bandura, 1982).

7.10 Monetary benefit

Money is a driving force that attracts people to direct marketing programs (Milne & Gordon, 1993). The study done by Pietz and Storbacka (2007) revealed that customers who have given their permission to accept advertisements via their mobile phones receive monetary rewards. This is known as Incentive-based advertising.

7.11 Frequency of receiving SMS

It is related to how often the consumer receive the SMS, and this can influence the attitude towards mobile advertising as mentioned in Sabokzugina et al. (2013) study. In this study they resulted in that increasing of receiving SMS can lead to decreasing the favorable attitude regarding the SMS’s advertising.
7.12 Message content

It focuses on the information that the message contains. According to Haghirian and Madlberger (2005), the message content consists of four factors which are: entertainment, informativeness, credibility, and irritation. It was shown in the same study that the message has to be of value to consumers because it is an important factor to produce positive attitudes toward mobile advertising.

7.13 Attitude toward privacy

The privacy is a reason of concern of many people, and many consumers have the fear of losing privacy on their phone as a result of the advertising they would receive on their mobile phone. In the study done by Haghirian and Madlberger (2005), the outcomes of their study revealed that individuals who contemplate privacy very essential are less inclined to feature a high value and a favorable attitude toward mobile advertising.

8. DISCUSSION AND CONCLUSION

For better understanding of the attitude by consumers toward mobile advertising, the study has explained the concepts of attitude and advertising, starting from the mobile commerce, mobile advertising, and the attitude. The researches then have discussed the related models in order to understand the factors that can affect the mobile advertising based on consumer attitude.

Several studies have been conducted to examine the attitude toward mobile advertising in different perspectives. In Sabokwigina et al. (2013) study focuses on the SMS-based advertising by examining the factors and the attitude toward it, as well as the relationship between them. What different in Zabadi et al. (2012) is that they studied the antecedents of consumer attitude in the same context (SMS-based advertising) and the variables influencing it. However, in Tsang et al. (2004) research, the relationship between the attitude and behavior was investigated. In the study of Ünal et al. (2011), they determined the differences between adult and youth toward mobile advertising. Identifying the elements make up the attitudes was the work of F. Leung and Cheung (2004). Another research studied the message content, consumer permission, and personalization (Mir, 2011), while comparing between advanced and developed markets was done in Haghirian et al. (2008) research. The significance of the research of Lee and Hsieh (2009) was that their study of self-efficacy for the mobile concerning the consumers. What is remarkable in Saadeghvaziri and Hosseini (2011) research is the monetary benefit that they explored related to the factors affecting the attitude toward mobile advertising. Last but not least, the attitude of the consumers toward mobile phones advertising and its relevance to the content of the message, the value of advertising, the demographics of the consumers, and the frequency of exposure were studied in Haghirian and Madlberger (2005) research. The studies that are mentioned above were conducted in different scopes. Nevertheless, they share some factors in common such as entertainment, informativeness, irritation, and credibility.

By investigating the current studies about the consumer attitude towards mobile advertising, the researcher found that some models use superior terms for some factors such as in the study done by Haghirian and Madlberger (2005), since the term message content used to combine (entertainment, informativeness, irritation, and credibility) together, while in the most of the other studies, these factors are found individually mentioned. Additionally, Sabokwigina et al. (2013) mentioned to the frequency of receiving SMS individually, but it can be under irritation, since the high frequency of receiving SMS can irritate the consumers. According to the current studies and this discussion, the factors can be divided into two groups. One group is related to the message which contains (entertainment, personalization, credibility, informativeness, irritation, frequency, permission, monetary benefit, and message content), and the other group is related to the consumer which contains (demographic variables (age, gender, and education), mobile self-efficacy, advertising value, and the attitude toward privacy). Figure 11 illustrates this classification.

![Figure 11: Factors affecting consumer attitude towards mobile advertising.](image)

9. REFERENCES


