

INVESTIGATION OF EFFECTIVE FACTORS IN USING MOBILE ADVERTISING IN ANDIMESHK

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Abstract

The purpose of this research is to identify effective factors in using customer of mobile advertising. The research model is consistent with the model adjusted MOPTAM for the adoption of mobile ads. Studies conducted by Wong Chin emphasized on effecting perceived ease of use, perceived usefulness, perceived conditions of social and facilitating on customers' behavioral intention to use mobile advertising according to demographic factors in Malaysia. In this study each of the variables is described by using descriptive statistical indexes. The results of the analysis showed that generally perceived usefulness, perceived ease of use, facilitating conditions, social conditions on the willingness of people to use mobile advertising is effective. In addition, a person's gender, education and her/his age affect in strength of this relationship.

Keywords: perceived ease of use, perceived usefulness, facilitating conditions, social conditions.

1. Introduction

The early twenty-first century technology of mobile communications has become a widespread phenomenon. Devices and systems based on Mobile established in our daily life and have affected previous methods our relationship and every day in number of people who come to the mobile network will be more. This case is caused that the business owners use different types of mobile commerce in business models.

The emergence of phenomena such as mobile commerce is the main result of developing the information technology and the concrete representations of information and communication technologies revolution in social and economic. In today's world, due to enter commercial to markets integrated that use wireless communication channel and portable communication devices such as mobile, is caused to more complexity and dynamics of the mobile business environment. In addition, new ideas and innovative in mobile commerce can provide methods of efficient and profitable in commercial transactions, especially in step identification of needs, advertising, and identification of services and its supplier, negotiate and agree [5].

On the other hand widespread use of mobile phones and its unique characteristics has led to increase using this media as a marketing tool, and in particular advertising. Marketing with Mobile bring new revenues for mobile operators that can reduce the costs of consumers in use of other services to operators. Mobile advertising opportunity that will provide mobile operators causes that they are facing with new revenue sources exception of payment their subscribers. Advertise with SMS is one of the branches of marketing with mobile which is currently used very limited. But with the accelerated expansion of mobile networks and

increasing the number of users in Iran is observed that this trend soon and quickly affect businesses and the markets in country.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Based on available data, the use of mobile technology has been higher than any other technology and this problem has made the mobile commerce in the form of world revolution that almost with same rate of occurrence in developed countries are also happening in the developing countries [1]. Considering increase of mobile users in the recent decade and its growing, offering Services and capabilities of mobile has dramatically increased. One of these services is advertising through mobile that In world different countries has been success and will increased day by day [6]. The main reason of welcome to mobile advertising is that this technology, new communication channels and powerful by unique features gives to the individual. In addition ease of use mobile phone anywhere and anytime, users can also listen to music, play games, or have access to the internet, so mobile as a medium for communicating with customers can be promotes efficiently and effectively products or services [8]. Currently mobile advertising has dedicated small share of 160 billion dollars into advertising market, but most predictions show significant growth in the use of this media for advertising. So what, according to a forecast E Marketer (2008) total cost conducted to mobile advertising for about 5/2 billion dollars in 2007 will be to more than 19 billion dollars in 2012. Based on the results of a European study, 40% suggested brands have already used SMS for advertisers and 18% MMS. Also based on this survey estimated at the end of 2008 AD, 89% of European brands may use SMS to communicate with their audience and almost one third these companies will use more than ten percent of budget related to their marketing in mobile channel. During 5 years will expected 52% companies between 5 to 25 percent of their marketing budgets can consume in this way. The other hand is widespread use of mobile phones in Iran. Although yet fully mobile service does not offer by operators in Iran, but according to a report use rate Iranian users from different mobile applications is more than regional global standards [7]. According to Iranian Telecommunication Company of Iran each Iranian user used a short message service sends an average of 2 messages per day and each day, an average of 60 million short messages will be exchanged between mobile users [7]. In order to enough exploit from interests of this medium is need to identify the role of major players in this field and success factors in its implementation of different aspects be determined. It has been done limited research in the field of the use and effectiveness of advertising through SMS marketing by university and research institute.

In this regard, recent literature shows that several researchers have examined the intention of using mobile advertising. Studies indicate that variables of perceived usefulness, perceived ease of use, facilitating conditions, social conditions can effect on intention of using mobile advertising. In this study is tried to describe the determinants of using mobile advertising intention through a descriptive model. The model used in this study is the modified model of MOPTAM¹ that is presented by Wang Chin Chin In 2009 that the variables of race, job, income, language, due to the characteristics of the study population have been removed. In above study, the following variables have been introduced as variables affecting in using mobile advertising.

¹ Mobile Phone Technology Acceptance Model

- *Perceived Usefulness*: This variable represents the amount of people belief that the use of these new technologies increases their performance [4].
- *Perceived ease of use*: This variable represents the amount of people belief that according to use of a particular system in terms of physical or mental effort to learn and do not require much effort. Systems that their learning and use is more difficult, is less likely to be widely used [4].
- *Social conditions*: people perception that Individuals associated with him, are imagine he should or should not do the behavior discussed [9]. In fact, this variable express being affected by family and friends [2].
- *Facilitating conditions*: it is helpful external environment users to overcome the obstacles and difficulties of using information technology [3].
- *Behavioral intention*: Behavioral intention has referred to amount of using mobile advertising by individuals. Measuring component of this variable is individuals' interest rates for getting, opening and reading all the advertising text [10].

Figure (1) is depicted the research model. In this model, the dependent variable is intention of using mobile advertising and perceived usefulness, perceived ease of use, facilitating conditions, and social conditions are the independent variables. Furthermore variables education levels, gender, age of the user were used as Modified variables.

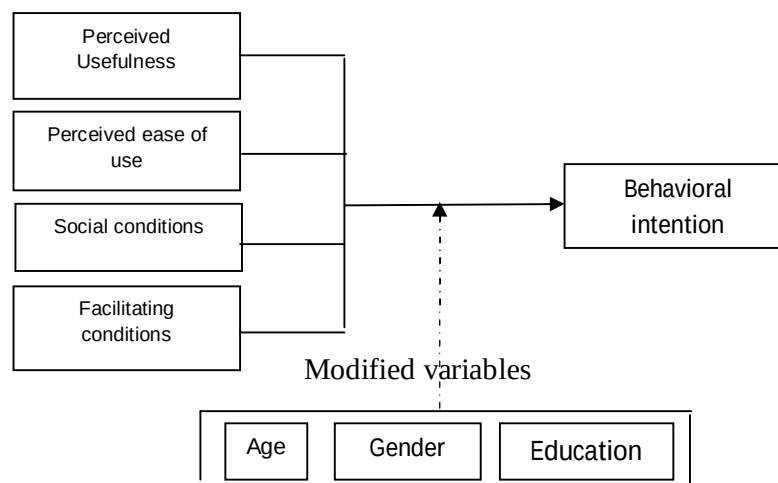


Figure (1) research model

Based on the above model, the hypotheses of this study are:

1. There is relationship between perceived usefulness and customer's behavioral intention according to their education, gender, age.
2. There is relationship between perceived ease of use and customer's behavioral intention according to their education, gender, age.
3. There is relationship between social conditions and customer's behavioral intention according to their education, gender, age.
4. There is relationship between facilitating conditions and customer's behavioral intention according to their education, gender, age.

3. RESEARCH METHODOLOGY

The present study is applied research in term of goal. In terms of methodology, this study is descriptive finally; in terms of data collection method is the field. Statistical population is the mobile subscriber in Andimeshk City. According to the statistical population are all mobile subscribers in Andimeshk and they are very large thus the following formula is used to determine the number of sample.

$$n = \frac{z^2 \alpha / 2 S_{\bar{x}}^2}{\ell^2} = \frac{(1/96)^2 (0/625)}{(0/05)^2} = 600$$

In this study was used questionnaire for the use of mobile phone subscriber's views and attitudes in Andimeshk. To measure questionnaire validity has been used Delphi method. Cronbach's alpha coefficient was used to determine the reliability of the questionnaire. Cronbach's alpha coefficient is obtained more than 70 % that it means the questionnaire is reliable. Data was analyzed by Pearson correlation and regression test.

4. DATA ANALYSIS

Result of Data analysis is express as follow:

1. Correlation coefficient of perceived usefulness and behavioral intention of using mobile advertising is 42% and sig = 0.000<0.05 thus there is significant relationship between perceived usefulness and behavioral intention. In the first step entry the first moderated variable means gender in result the relationship between perceived usefulness and behavioral intention has changed from 42 percent to 43 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and perceived usefulness. However, since a significant level (sig) has changed 0.92 >0.05 thus this relationship according to gender variable only is not significant. In next step is to enter second moderated variable means education to previous results, correlation coefficient has changed from 43 percent to 43.8 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and perceived usefulness according to gender of respondents. However, since a significant level (sig) has changed 0.023<0.05 thus It can be said that there is significant relationship between perceived usefulness and behavioral intention according to gender and education together. In final step is to enter third moderated variable means age to previous results, correlation coefficient has changed from 43.8 percent to 45 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and perceived usefulness according to gender and education of respondents. However, since a significant level (sig) has changed 0.005<0.05 thus It can be said that despite the entering gender the relationship between behavioral intention and perceived usefulness is not significant but this relationship is significant by entering of three moderated variables together. It means that there is relationship between perceived usefulness and customer's behavioral intention according to their education, gender, age and thus first hypothesis is accepted.

2. Correlation coefficient of Perceived ease of use and behavioral intention of using mobile advertising is 34% and $\text{sig} = 0.000 < 0.05$ thus there is significant relationship between perceived ease of use and behavioral intention. In the first step entry the first moderated variable means gender in result the relationship between perceived ease of use and behavioral intention has changed from 34 percent to 35.2 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and Perceived ease of use. However, since a significant level (sig) has changed $0.022 < 0.05$ thus this relationship according to gender variable only is significant. It can be said that there is significant relationship between perceived ease of use and behavioral intention according to gender of respondents. In next step is to enter second moderated variable means education to previous results, correlation coefficient has changed from 35.2 percent to 37 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and perceived ease of use according to gender of respondents. However, since a significant level (sig) has changed $0.004 < 0.05$ thus It can be said that there is significant relationship between perceived ease of use and behavioral intention according to gender and education together. In final step is to enter third moderated variable means age to previous results, correlation coefficient has changed from 37 percent to 39.4 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and perceived ease of use according to gender and education of respondents. However, since a significant level (sig) has changed $0.000 < 0.05$ thus It can be said that There is relationship between perceived ease of use and customer's behavioral intention according to their education, gender, age and thus second hypothesis is accepted.
3. Correlation coefficient of social conditions and behavioral intention of using mobile advertising is 51.8 % and $\text{sig} = 0.000 < 0.05$ thus there is significant relationship between social conditions and behavioral intention. In the first step entry the first moderated variable means gender in result the relationship between social conditions and behavioral intention has changed from 51.8 percent to 52 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and social conditions. However, since a significant level (sig) has changed $0.236 > 0.05$ thus this relationship according to gender variable isn't significant. In next step is to enter second moderated variable means education to previous results, correlation coefficient has changed from 52 percent to 52.6 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and social conditions according to gender of respondents. However, since a significant level (sig) has changed $0.023 < 0.05$ thus It can be said that there is significant relationship between social conditions and behavioral intention according to gender and education together. In final step is to enter third moderated variable means age to previous results, correlation coefficient has changed from 52.6 percent to 53.6 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and social conditions according to gender and education of respondents. However, since a significant level (sig) has changed $0.003 < 0.05$ thus It can be said that despite the entering gender the relationship between behavioral intention and Social conditions is not significant but this relationship is significant by entering of three moderated variables together. It means that there is relationship between social conditions and customer's behavioral

intention according to their education, gender, age and thus third hypothesis is accepted.

4. Correlation coefficient of facilitating conditions and behavioral intention of using mobile advertising is 25 % and $\text{sig} = 0.000 < 0.05$ thus there is significant relationship between facilitating conditions and behavioral intention. In the first step entry the first moderated variable means gender in result the relationship between facilitating conditions and behavioral intention has changed from 25 percent to 27 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and facilitating conditions. However, since a significant level (sig) has changed $0.012 < 0.05$ thus this relationship according to gender variable is significant. It can be said that there is significant relationship between facilitating conditions and behavioral intention according to gender of respondents. In next step is to enter second moderated variable means education to previous results, correlation coefficient has changed from 27 percent to 29 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and facilitating conditions according to gender of respondents. However, since a significant level (sig) has changed $0.004 < 0.05$ thus It can be said that there is significant relationship between facilitating conditions and behavioral intention according to gender and education together. In final step is to enter third moderated variable means age to previous results, correlation coefficient has changed from 29 percent to 33 percent. This change represents the impact of moderated variables on the relationship between behavioral intention and facilitating conditions according to gender and education of respondents. However, since a significant level (sig) has changed $0.000 < 0.05$ thus It can be said that there is relationship between facilitating conditions and customer's behavioral intention according to their education, gender, age and thus fourth hypothesis is accepted.

5. CONCLUSIONS AND RECOMMENDATIONS

The research results and recommendations are stated as follows:

1. The perceived usefulness has effect on perceived usefulness of mobile advertising. It is suggested that producers and users of advertising SMS offer accurate information about their advertised product in SMS.
2. Benefits related to the perceived usefulness have effect on mobile advertising. Thus it is suggested that producers and users of SMS advertising use discussed case in the following for more entertaining messages. SMS text can be designed accurately and funny or can be used games, prizes, and music videos, ringtones, logos or messages on answering machine.
3. Performance expectations have effect on perceived usefulness of mobile advertising. Thus it is suggested that producers and users of SMS advertising to improve performance of messages by creating a database of their customers and other potential customers attempt to send promotional messages proportional to the needs of their customers.

4. The expected result of the perceived usefulness has effect on mobile advertising. Thus it is suggested that advertising SMS providers and users to increase the speed of purchase use the following proposed cases.
 - Detailed information and need for customers about the product offer in their advertising.
 - Information how to buy and receiving the product offer in the message.
5. Ease of use influences on perceived ease of use in mobile advertising. Thus it is suggested that advertising SMS providers and users to increase users skills in the use of mobile advertising attempt to the public training through advertising and... .
6. Complexity of work has effect on Perceived ease of use in mobile advertising. Thus It is suggested that providers of advertising messages for achieving customers to their goals, in providing and sending of advertising SMS consider accurate and helpful information about products and easy access to the product.
7. Most important being among others has effect on social impact of mobile advertising. Thus it is suggested that SMS advertising providers and users with the introduction of this type advertising in society and to improve some entertaining features and credibility of Message prove the usefulness of its using in society.
8. Job position has effect on the social impact of mobile advertising. Thus It is suggested that producers and users of advertising SMS to inform people from the benefits of mobile advertising and Its useful aspects in the field of giving information in time and place, Saving time the person in aware from a product and some characteristics of this type of advertising entertaining increase its utilization rate and by new advertising technology in the field of mobile advertising, this will be noted that these types of advertising are used only by special people and all members of society cannot use it.
9. Knowledge and skills person in using has effect on facilitate conditions of mobile advertising. In this section will appear 2 concepts. First, individual knowledge in use of SMS That inability knowledge about it mostly can be seen middle-aged people and secondly, person knowledge in use of message and how to follow up to get more information or to buy a product, In both cases, extensive information can be very helpful in this field.
10. Telecommunications services has effect on facilitate conditions of mobile advertising. Thus it is suggested that suppliers of SMS advertising by providing true and accurate information in their ads can increase the amount of validity of this type of advertising in audience view.
11. Access to facilities has effect on facilitate conditions of mobile advertising. Thus it is suggested that advertising providers by market research in the field of users mobile models, types of messages select based on the most commonly used mobile in market.

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