Research on the Influential Factors of Mobile Advertising User Adoption

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Abstract. With the development of mobile social networking platform and Internet advertising, the problems like that flush spam and lower user acceptance have gradually emerged. Based on the research of references about mobile social advertising and user adoption and some others, the paper constructs a model of mobile social platform advertising user adoption based on UTAUT. We use the SPSS and AMOS software to analyze the questionnaire and interviews data, and the model was tested empirically. The results show that among those 15 users’ acceptance models, 13 of them embrace hypothetically tenable relationships between the model variables. Those 13 models can provide optimized solutions and the suggestion of creative show forms for mobile advertisement providers.

1. Introduction

Mobile social networking platform (MSNS) is a new kind of media which combines mobile communication technology with social networks in recent years [1]. This new media is not only just a simple communication tool, but also a comprehensive mobile platform facilitating with communication, mobile social networks, financial service and other functions. Advertising is one of those functions of the platform.

Mobile social platform advertising breaks the traditional way of “forward link only”. Comparing with traditional advertising, this kind of advertisement has low cost, high accuracy and user acceptance. Nowadays, enterprises still employ the traditional way of website advertising, and they can not understand the individual differences of every single client. Those problems that how to control the operational key, how to classify the mobile advertising resources scientifically, and in which way that the mobile advertisement content can be adjust to be more innovative are needed to be solved immediately. In view of this, this article using the structural equation model (SEM), analysis the connotation of mobile social platform advertisement, analysis the relationship between customer demand and users’ satisfaction to provide the oretical support and practical guidance for scientifically launching of mobile social platform advertisement.

2. Literature Review

2.1 The definition of mobile social platform advertisement

Mobile social network (MSN) refers to a new Social Networking Services where the users use the wireless mobile terminal to access to social networking sites to realize information transmission and interactions with friends. Guofeng-Zhao pointed out that mobile social network was the compound of social service network and online mobile social. It combines social computing with mobile computing [2]. Hongyan-Liu, Shenglan-Fu pointed out that the mobile social platform advertisement showed that when accessing to mobile social applications or web- pages by MSN, via mobile devices [3].
2.2 Factors affecting user’s adoption

Advertisement, as a marketing tool, is required to possess a higher preciseness and practical effectiveness. DROSSOSDA believes that in the digital society, in which all enterprises pursue the high efficiency, low cost, and high return on marketing strategy. The advertisement model can achieve the personalized recommendation which will be entrusted with higher marketing mission in the age of 4G [4]. LEECC in the study of the mobile terminal learned that the mobile terminal is personal, and it can count the accurate number of audience through interactions [5]. With the technical advantages, firmly promote the developing value of mobile advertisement, namely, low cost, great effects, high return, and finally change the inherent defects of traditional advertising media. And the users will feel doubt and distrust with mobile Internet advertising to some extent which will be one of the difficult points for users to accept.

3. Model Structure

3.1 Assumption of acceptance and usage model based on Integrated Technology

The UTAUT model is the frame foundation of the study on the influencing factors of consumers’ acceptance. The main body of the design model is to explore the Consumer’s Usage Intention. This thesis refers to the mobile social networking platform, or mobile advertising for short. The research model retains four core dimensions which are performance expectations, effort expectations, social influence and facilitating conditions of the UTAUT model and four control variables which are gender, age, experience and willingness. The four dimensions are not only an important part of the UTAUT model, but also an important factor affecting consumer purchase decisions.

H1a: Effort expectations have a positive impact on the willingness to use mobile advertising.
H1b: Effort expectations have a positive impact on the performance expectations of mobile advertising.
H1c: Effort expectations have a positive impact on the consumer experience of mobile advertising.
H2a: Social influence has a positive impact on the willingness to use mobile advertising.
H2b: Social influence has a positive impact on the use behavior of mobile advertising.
H3a: Facilitating conditions have a positive impact on the willingness to use mobile advertising.
H3b: Facilitating conditions have a positive impact on the use behavior of mobile advertising.
H4a: Performance expectations have a positive impact on the willingness to use mobile advertising.
H4b: Performance expectations have a positive impact on the use behavior of mobile advertising.

3.2 Assumption based on new variables

Mobile advertising is different from traditional information technology in some respects. UTAUT can’t fully reflect the special environmental factors of mobile advertising. This article combines with the status of mobile advertising and user influence factors. And we add 5 new variables, including personal innovation, advertising innovation, consumer experience, advertising accuracy and perceived reliability. As a result, we make the following hypotheses:

H5: Consumer experience has a positive impact on the willingness to use mobile advertising.
H6: Advertising accuracy has a positive impact on the willingness to use mobile advertising.
H7: Perceived reliability has a positive impact on the willingness to use mobile advertising.
H8: Personal innovation has a positive impact on the willingness to use mobile advertising.
H9: Advertising innovation has a positive impact on the willingness to use mobile advertising.
H10: Effort expectations have a positive impact on the consumer experience of mobile advertising.
4. Research Design

4.1 Research objects and locations

The object of this study is the main user groups of mobile social platform 18-60 years old people. In addition, considering the different levels of economic, social development and the impact of cultural differences between regions, we conduct the in-depth field research in Zhejiang Province, which involved Lishui, Wenzhou, Jiaxing and other places. The questionnaire was carried out under the combination of online and offline methods.

4.2 Design of questionnaire

The questionnaire used in this study is divided into two parts. The first part of the questionnaire is basic information. The second part uses the Likert five point scale to design the factors that influence the adoption of mobile social advertising about nine variables: consumer experience, advertising precision, perceived reliability, personal innovation, advertising innovation, performance expectations, enabling factors, effort expectancy and social influence. SEM method was used to verify the correlation between these variables. All the observed variables were measured by Likert five point scale.

In this study, a total of 860 questionnaires are distributed, and the effective questionnaire is 823. The effective rate is about 85.7%. The range of age in women group using mobile social platform is more extensive about 15-28 years of age. 53% of people have often seen on the mobile social networking platform advertising experience. But 43.3% people said they would not adopt such ads while 52.2% of the customers believe that the advertising push did not arouse their desire to buy. Later, Moreover the questionnaires are grouped and numbered, and then the data are analyzed by SPSS and AMOS.

5. Data Processing

5.1 Analysis of reliability and validity

Reliability is the characteristic of a test score and the result of a measurement. In this research, we take advantage of the Likert scale method and alpha value to test the reliability. The 0.7 value recommended by Peterson is the standard of inspection.

The overall alpha value is 0.762, each part is above 0.6, which shows the stability of the whole
This research uses the SPSS21.0 software to construct the validity analysis, using LUNDSTROM and OLIVER that experts advise to construct the validity based on the analysis of individual and population. First, we choose KMO measure value and Bart's test of sphericity to determine whether the data is suitable for factor analysis; then the factor structure matrix of each item is obtained according to the factor analysis comparing with the test value. In this research, the nine variables are consistent with the relevant standards of validity test, and the factor loading value is above 0.5, which indicates the validity of the questionnaire.

5.2 Model fitting analysis

In this study, the chi square value and the degree of freedom, the modified fitting and the goodness of fit index were used to analyze the model’s fitness. The supposition and theory model was confirmed and revised by structural equation model (SEM). The main evaluation index have reached the acceptable and above level, indicating that the fitting degree of model and data is good. We can take the next step of hypothesis testing.

5.3 Correction model

The effort expectancy, performance expectancy, favor conditions, consumptive experience, accurate advertisement and individual innovation among the model have no significant effect on the willing of use; favor conditions and performance expectancy have a little work on using behavior; effort expectancy has no significant effect on consumptive experience. Therefore, by using the method of excluding insignificant variable to modify the model, and verify the re-construct structural equational model.

![Figure 2. Conceptual model modified.](image)

In order to analyze the effect of variable behavior better, this research is based on the direct or indirect effect of each variable on the use of the behavior, and calculates the impact of various independent variables on user adoption, the rank as follows: consumptive experience, effort expectancy, perceived reliability, accurate advertisement, advertising innovation and performance expectancy.
6. Management Inspiration

Based on the above analysis, the dissertation proposes the following suggestions to improve the behavior of mobile advertising adoption, including the user’s psychological and emotional aspects. (1) Increase opportunities for users to participate in and put the consumer experiences into an important role; (2) simplify the operation flow and attract potential customer; (3) take efficient measures to guarantee the reliability, availability and security of users’ data; (4) using APP positioning to realize intelligent matching; (5) using a variety of methods to promote the development of new forms, content, and innovative ways and ideas; (6) enhance the word of mouth among users to form a better social impact.

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