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Consumer Attitude toward Mobile Advertising

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ABSTRACT

Delivering relevant information to the right person, at the right time and in the right place is always an idea marketing strategy. With the highly personalized and ubiquitous accessing features of mobile computing, it is expected to have a huge impact on many ways of marketing activities. The technology to deliver a personalized and locationalized advertisement on a mobile device is feasible nowadays. It is easily to understand that if the advertising message is not relevant to customers, the acceptance of mobile advertising declines quickly. This is the reason why this paper describes a research project in progress that studies the mobile advertising effectiveness through examining consumer attitude toward mobile advertising. This research is expected to present important implications for both practitioners and researchers.

Keywords

Consumer Attitude, Mobile Advertising, Mobile Commerce

INTRODUCTION

The well coverage of mobile telecommunications infrastructure, the high mobile penetration rate, the advances in wireless technology and the tremendous growth of mobile messaging/Internet usage produce a new form of electronic commerce (e-commerce), which is mobile commerce (m-commerce). M-commerce refers to the conduct of e-commerce via wireless devices. It is the commercial application of mobile computing, which is computing using mobile devices and done primarily by wireless networks (Turban et al., 2004). According to a recent study titled "Mobile Commerce Takes-Off: Market Trends and Forecasts" from Telecom Trends International released on 1st April 2004, it showed that the number of m-commerce users were 94.9 million in 2003 and will grow to 1.67 billion in 2008. In addition, revenues from m-commerce will grow globally from \$6.86 billion in 2003 to over \$554.37 billion in 2008 (Telecom_Trends_International, 2004).

M-commerce has a unique device-independent identification feature by retrieving subscribed information contained within a SIM card (subscriber identity module) instead of a mobile device. Indeed, allowing user to switch physical devices without changing identities can help mobile service provider to provide an extra value-added personalized and relevant services to the end user. Because of these unique features of mobile services application (e.g., personalization) and the emergence of location-based services (LBS), marketers believe that mobile device provides them a new opportunity to place effective and efficient advertisements based on a user's location and identity (Kalakota and Robinson, 2001). Many analysts are pointing out that using location-based advertisements will be the leading mobile application (Durlacher_Research, 2002, Zabala, 2000). According to a study by the Ovum market research institute, published in January 2001, mobile advertising will ultimately generate USD16.4 billion, serving over 500 million users world-wide by 2005 (Nelson, 2000). Also, location-based advertising message are expected to create 5 to 10 times higher click-through rates compared to Internet advertising messages (Kingsland et al., 2002).

Measuring advertising effectiveness has long been an important research area in the marketing literature. Previous studies on traditional media advertising show that favorable attitude toward an advertisement is positively related to brand attitudes and purchase intention (Stone et al., 2000), and thus it can be used as an indicator of advertising effectiveness (Aaker and Stayman, 1990, Brown and Stayman, 1992). Similarly, studies on Internet advertising (e.g., Goldsmith and Lafferty, 2002) also suggested that consumer attitude is an important component of Internet advertising effectiveness. Mobile advertising is a rather new concept and there is still a lack of understanding in consumer attitude toward this new advertising medium. Therefore, the aim of this study is to examine consumers' attitudes toward mobile advertising and identify the components making up these attitudes.

LOCATION-BASED MOBILE ADVERTISING

Mobile advertising is among the first trial application of location-based services due to its promising revenue potential as well as its direct links to m-commerce activities. By 2005, 33% of a mobile service provider's revenue will be generated from mobile advertising and payments and commissions from m-commerce activities (Kingsland et al., 2002). Like the Web medium, mobile advertising can be categorized into two basic types: pull and push. Providers can take the form of pull-based (user request information and services based on their locations) or push-based (location-sensitive content is automatically sent to users based on their location) advertising (Wallace et al., 2002). There is no significant push-application on the market, which makes use of mobile user's identity. The most common one is some mobile operators promote their services by sending SMS (short message service) text messages to users according to their location. Push advertising without any filtering is something like spam e-mail which might be perceived as annoying or irritating. Pull advertising is something like the end user is interested to receive certain type of advertising information or looks for specific information. A pull campaigns attract the customer to order further information and other content through the mobile device. For example, customers can receive discount mobile coupons (m-coupon) by sending their contact information via their mobile device.

With the advent of 3G-transmission network and the MMS (multimedia messaging service) features, mobile advertising is no longer delivered in the form of text. Mobile service providers can take advantage of these technologies to promote multimedia advertisements to a wide range of MMS-enabled mobile devices. It is believed that MMS message will follow the SMS path to be a major communications format.

RESEARCH MODEL

Public attitudes toward advertising have long been a focus of research in the marketing literature. Alwitt and Prabhakar (1992) emphasized that studies on consumer attitude toward advertising remain important, as consumer attitude is likely to influence consumer's attention and reaction to individual advertising. In particular, their attitudes toward advertising can enhance their brand attitudes and increase the likelihood of purchasing (Stone et al., 2000). Schlosser et al. (1999) found that research on traditional media advertising consistently measured consumers' attitudes toward advertising in terms of perceptions of advertising's trustworthiness, offensiveness, informativeness, entertainment value, effect on product prices and value, and attitudes toward regulatory issues. Many of these perception factors evaluating traditional media advertising are also found important in consumer attitude toward Internet advertising. Chen and Wells (1999) showed that consumer perception of the entertainment value, the informativeness, and the organization of the website lead to a positive attitude toward the website. Ducoffee (1996) found that entertainment, informativeness, and irritation influence attitude toward web advertising.

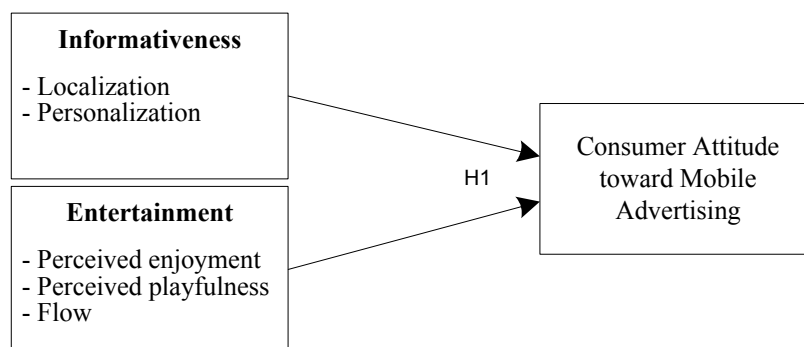


Figure 1: Consumer Attitude toward Mobile Advertising

Based on the literature, a research model for this investigation is developed and predicted in Figure 1. The research model suggested that consumer attitude toward mobile advertising is impacted by the beliefs about the informativeness and entertainment value of mobile application. These relationships are consistent with the attitudinal models, affective (entertainment) and cognitive (informative) experiences contribute to people's judgment and attitude. We hypothesize,

H1a: The greater the perceived informativeness, the more likely one possesses a favorable attitude toward mobile advertising.

H1b: The greater the perceived entertainment, the more likely one possesses a favorable attitude toward mobile advertising.

Informativeness

The informativeness of advertisements is the core consumer belief underlying its inherent economic benefits (Craig, 1989). It refers to the ability of advertisements to effectively convey and pass the information to the targeted consumers (Ducoffe, 1996). In the context of e-commerce, (Negash et al., 2003) suggested that informativeness should include information accuracy, relevance, timeliness, convenience, and completeness. In the mobile advertising, informativeness not only build on top of these features but also fully utilize the characteristics of mobile computing – localization and personalization. Localization, which was not originally designed to implement in e-commerce, describes the ability to locate the position of a mobile user. Personalization is considered a key factor for mobile services, because the mobile device can act as a personal assistant and offer unique opportunities such as real-time adaptation of services to the dynamic user environment. Localization and personalization of mobile advertising result in providing relevant and accurate information to the potential customers. End-user computing literature (Doll and Torkzadeh, 1988) suggested that relevant and accurate information are important components of user satisfaction (favorable attitude). We also believe that relevant and accurate information enhance consumers brand attitude and facilitate them to make competent and informed decisions about a product, service, or purchase in the mobile environment.

Entertainment

Entertainment refers to the ability of the mobile advertising medium to fulfill consumer needs for enjoyment or emotional release. Former study showed that entertaining advertising can fulfill audience needs for enjoyment, and thus, have a positive impact on consumers' attitudes toward the advertising and correspondent brands (Mitchell and Olson, 1981). In recent years, there is a growing interest in IS researchers to investigate the role of intrinsic motivator (e.g. perceived playfulness, perceived enjoyment, flow) in IS acceptance (Lee et al., 2003). Mobile advertising can be delivered in the form of MMS. MMS is a rich communication media that allows advertising messages in multiple rich media formats (e.g. video, audio and text). Because of the richness of this media, we believe that the mobile advertising messages can be easily delivered in a fun and enjoyable format, and in turn, draw consumers' attention to the brand and enhance their feelings toward mobile advertising.

RESEARCH PLAN

A research design is the detailed blueprint used to guide a research study towards its objectives. The research methodology of this study consists of three main parts, they are: (1) Instrument Development, (2) Data Collection, and (3) Data Analysis.

Instrument Development

There is a need to develop measurement instruments with a high degree of reliability and validity, that can serve as a prerequisite to cumulate knowledge in the IS discipline. Multiple items will be used for the operationalisation of each construct in the model, following standard psychometric scale development and validation procedures (Moore and Benbasat, 1991). The items on each scale will be generated on the basis of similar previous measures in the literature, and interviews with mobile phone users. Three focus groups (with 15 mobile phone users in each session) will also be conducted for initial item generation and content validity purposes. The items will be measured on a 7-point Likert-type scale, which is suitable for the measurement of perceptions. The resulting questionnaire will be pilot-tested with at least 50 users to assess consistency, ease of understanding, question sequencing, and clarity. The resulting refined instrument will then be administrated to a random sample of 500 mobile phone users in Hong Kong. The measurement will be tested using both classical and modern approaches (Cheung and Lee, 2001). The measures will be tested for reliability (through calculating Cronbach's Alpha) and validity (through principal component factor analysis). The psychometric properties of each measure will also be tested using confirmatory factor analysis using LISREL VIII (Joreskog and Sorbom, 1993) to gain further confidence in the reliability and validity of the measurement scales.

Data Collection and Data Analysis

A field survey approach will be used for data collection to achieve good validity and generalizability of the results. The theoretical model will also be analyzed through Structural Equation Modeling (SEM) techniques, which are particularly suitable for analyzing complex behavioral models.

EXPECTED CONTRIBUTIONS

The objective of this study is to investigate the mobile advertising effectiveness through examining consumer attitude toward mobile advertising. This research presents important implications to both practitioners and researchers. On the practical side, this research enhances our understanding of the characteristics of mobile advertising and its relationships with consumer attitude toward this particular mobile application. The results of this investigation will inform practitioners on how they can manipulate attributes of mobile application to enhance consumer favorable attitude toward mobile advertising. On the theoretical side, this research is one of the very few attempts to investigate consumer attitude toward mobile advertising. In so doing, this research incorporates the attitudinal models and identifies key attributes affecting consumer attitude toward mobile advertising. The results of this study will help clarify and enrich the relevant theories and extend their boundaries.

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