

A Study on the User Acceptability of Smart Mobile Advertising in South Korea

Sung-Ho Park*

Department of Advertising and Public Relations, Honam University, South Korea; shpark@honam.ac.kr

Abstract

As a platform of advertising contents, the smart mobile devices accelerate the revolution of advertising market. The smart mobile advertising is expected to bring a new change to the advertising industries in South Korea. With the spread of the mobile devices, the smart phone and Tablet PC assimilate with the web, telephone, and television. Besides, the mobile advertising is integrated with the web-based contents in these smart mobile devices. However, the mobile advertising has failed to perform as sophisticated as the smart devices carried out. In spite of varying attempts on advertising including Location-based services, Augmented Reality and Image Recognition, it results mere attraction on limited users without any remarkable success. In this respect, this study is designed to figure out the current situation and foresee the user acceptability of smart mobile advertising in South Korea. In conclusion, this study demonstrates that the motivation should be increased, and the cost of access should be reduced to increase the user acceptability of smart mobile advertising which is one of the most important tools for integrated marketing communication. Moreover, this study points out that the rapid change of the advertising environment needs the regulations for the protection of private information, establishment of reasonable price systems, enlargement of transmission capacity, providing of enjoyable and useful content, credibility and security for user, etc.

Keywords: Augmented Reality, General Cost, Location-Based Services, Mobile Advertising, Mobile Devices

1. Introduction

According to Gartner³, the propagation of smart phones brought recently the diffusion of mobile advertisings. And the mobile advertising use rate of smartphone user will be expected to be increased from 85% in 2012 to 95% in 2017. The subscribers of smart phones have passed 38 millions by December 2013 in South Korea¹³. Due to the rapid proliferation of smart phone, the domestic mobile advertising market has grown rapidly. In other words, the smart phone leads the diffusion of the smart mobile advertising.

The mobile advertising market is growing fast in Korea. But there is a chance that mobile advertising would be end up at the second spam-advertising because of the difficult of access to mobile content and one-sided

presentation of mobile advertising. In specific, the foreign mobile market is well-organized by various advertising and platforms through App Store of i-phone and Android Market. But, compared to the overseas markets, South Korean mobile advertising market only focuses on "SMS promotion marketing"⁶ which would be considered as a spam mail and unwanted ads. Therefore, it is necessary to develop the mobile advertising solutions and to seek for a detailed remedy in order to retain the competitiveness in mobile market which is growing rapidly through various smart media.

This study aims to figure out the characteristics of mobile advertising and to seek for the acceptability and satisfaction factors of mobile advertising by conducting a survey. The study begins with the understanding of current situation, characteristics of smart mobile advertising.

*Author for correspondence

The contents of this research are composed of literature investigation, survey, research on the legal and institutional improvement for the enhancement of smart mobile advertising.

2. The Definition and Characteristics of Smart Mobile Advertising

The smart devices are used as a communication tool not only for social activities but also for the commercial relationship and marketing. For example, the smart phone functions as a medium of several aspects with regard to social interactions, information, commercials, and entertainment. Also, considering the way smart devices are used, there are different evaluations on those media. Most users of Video clips appreciate the smart phone for the entertainment, and cultural function, while others who only use simple information evaluate that the smart phone functions only for surveillance and social interaction.

The technology of mobile devices is advancing day by day. Without a doubt, it has reached a point where it is more proper to say “innovation” rather than just improvement. The advent of smart phone made possible what had been hardly imaginable with a conventional mobile system by blurring the boundary between mobile devices and computers. Some mobile devices are already made a noteworthy progress in mobile advertising. The mobile advertising, however, disappointingly have failed to perform as sophisticated as the smart devices carried out. In spite of varying attempts on advertising including location-based services, augmented reality and image recognition, it resulted mere attraction on limited users without any remarkable success. Unlike the speed the smart media technology shows, the smart advertising technology could not catch up even its own pace. Some studies indicate that every mobile advertising technology has its own shortcomings hindering further development in mobile advertising. In this manner, if such defects are fully reported, it would enable much more refined advertising on mobile devices. The current technology of smart mobile advertising including augmented reality, image recognition, and location-based service needs to be integrated to address their weaknesses while maximizing their strength. Furthermore, fast internet access, fast and

optimized search and more advanced image recognition are also required¹².

The smart mobile advertising is non-personal communication conducted by an identified sponsor through the smart mobile devices such as smartphone, Tablet PC, etc. to persuade and influence the audience¹¹. Smart mobile advertising is in rapid evolution accompanying media technological progress, and it is quite different from existing PC web advertisement. The existing PC web ad usually involves search ads and banner ads. Whereas the mobile ad Involves Applications Advertisement (In-App-AD), Location-Based Service Ads (LBS Ads), QR (Quick Response) Code ads, AR (Augmented Reality), SNS (Social Networking Service) combined with tailor-made advertisement, etc. Smart mobile ad is expanding from simple text to multi-media complex formations; furthermore it has not only offering information but also several of entertaining formation. Specially, smart mobile ad that present in smartphone is very excellence, because it can make the best use of smartphone's characters like LBS and AR function. However, it is not freely on advertising performing by restriction of privacy agreement, and then it can't reflect characters of smartphone. Therefore, it is not different in form and function but only different in media condition.

The characteristics of smart mobile advertising are as follows^{10,12}: First, the smart mobile ad has various merits and strengths as an advertising media (Table 1). Thanks to those advantages, the smart mobile advertising is possible to encroach other advertising market. Second, the interactive communication is possible in smart mobile advertising. The customers are able to access limitless information freed from temporal and spatial limitations. Third, it is easy to measure the exposure and effectiveness of advertising. Fourth, the direct marketing is possible due to the interactive function of e-mail. Fifth, it is easy to choose a target audience through evident trails of customers which show customer tastes in websites and mobile applications. Eventually, these characteristics and strengths of mobile ads would affect the user acceptability.

3. Current Situation of Mobile Advertising in South Korea

Recently, the appearance of Apple i-phone and Samsung Galaxy series brought the diffusion of smartphone. The subscribers of smartphones are expected to be over than

Table 1. Forms of Mobile Ads evolving

Ads forms	Formats	Strength	Weakness
Message	SMS, MMS	Low-price	Limited expression
Search Ads	Text and exposure	Exposure in exploring	Low-quality of search
Banner	Image, Rolling Image	Various form and position	Low-attention rate
Application	Application (In-App-AD)	Active participation	Limited targets
QR Code	Distribution of QR Code	Varieties of positions	Limited actions
SNS Ads	Facebook, Twitter	Communication	Risk of privacy
Video Ads	Flash Video	High attention rate	Video of low-capacity and quality

39 millions by December 2014 in South Korea². The propagation of the smart phone results in the diffusion of the smart advertising. The smart mobile advertising market is growing from 0.5 billion Korean Won in 2010 to 9,820 billion Korean Won in 2013 with the annual growth rate of 192% in South Korea (Table 2). The advent of smart advertising has changed the patterns of advertising, paradigm, and ecological system of advertising. The smart mobile advertising has more privileges with its various merits and strengths compared to existing mobile advertising such as low price, exposure in exploring, high attention rate, active participation of customers, variety of position, etc¹¹.

The mobile advertising is continuously improving and reforming through Tablet PC, smartphone and also changing from banner and search ads to AR ads, LBS ads, and virtual ads in the new paradigm of advertising taking on interactive communication, customization, mobilization, convergence, relationship, and personalization. Moreover, the market of mobile advertising is reorganized to the integrated advertising market based on the applications embracing advertising, public relations, sales promotion, etc. The role of integrated advertising extends to a customer complaints center, an idea bank and an information supply center for improving products and services.

Table 2. Growth change of mobile advertising market in South Korea (Unit: 100million Won)

YEAR		2010	2011	2012	2013
Total Advertising Market		86,207	95,606	97,706	98,016
	Market scale	5	762	2,159	4,159
Mobile Advertising Market	Growth rate (%)	-	1,524	283	192
	Share (%)	-	0.8	2.2	4.2

Source: Jeil Communication⁴.

4. Acceptability of the Smart Mobile Advertising

According to the results of the survey which examined two hundreds people who use smart phones¹, it is desirable to improve customer-centric self-control and enhance the interactivity such as personalization and interactive communication in order to promote the mobile advertising effectiveness. Smart phone users have higher involvement compared to the feature phone users in terms of the consumer cognitive-behavioral perspective. From this point of view, the advertising effectiveness would be maximized, if the existing mobile advertising which involves only search ads, banner ads and applications ads develops to include Location Information, QR Code, AR, OOH (Out of Home), SNS and also to combine with tailored advertisement and contextualization.

Another study on the influence of Use-Diffusion factor and perception of interactivity on the user acceptability for smart mobile advertising demonstrates that personal inclination for innovation, desire for cognition and attitude toward advertising affects on the user acceptability of smart mobile advertising¹. Especially, the personal inclination for innovation related variables of innovativeness and diverse usage is very important for the user acceptability of smart mobile advertising. The results show the desire for cognition, the personal inclination for innovation and attitude toward advertising influence on the user acceptability of smart mobile advertising. As a

result, the advertising acceptance study is noteworthy for the utilization of smart mobile ads such as QR Code, AR, and OOH media in the manner of Use-Diffusion.

In addition, the study on the “propensity to communicate” via Internet advertising indicates that the motivation to use and general costs for accessing Internet advertising are related to the effectiveness of advertising which would be explained by the user acceptability and satisfaction⁹. In other words, the user acceptability of mobile advertising is described by Lewin’s value system⁷: “Every act can be accomplished while the benefit should be more than the cost.” As a result, a mobile device user would not access an advertising content with costs that exceed the benefits it provides (Figure 1). Moreover, the result of the Focus Group Interview (FGI) for advertising experts shows that the protection of privacy, reasonable price system and reliability of advertising would contribute to increase the user acceptability of mobile advertising¹¹. In general, the user acceptability of mobile advertising is limited by the inconveniences and difficulties of using it, which include inaccessibility, waiting for loading, clutter, old information, expensive communication fare (data fee), privacy risk, phishing, smishing, etc.

In fact, smart mobile advertising is different from advertising in the major media. It is not simply advertising, but is also a customer service window that pursues maximum satisfaction of customers. In other words, smart mobile advertising is one of the most important tools for “Electronic Customer Relationship Management”

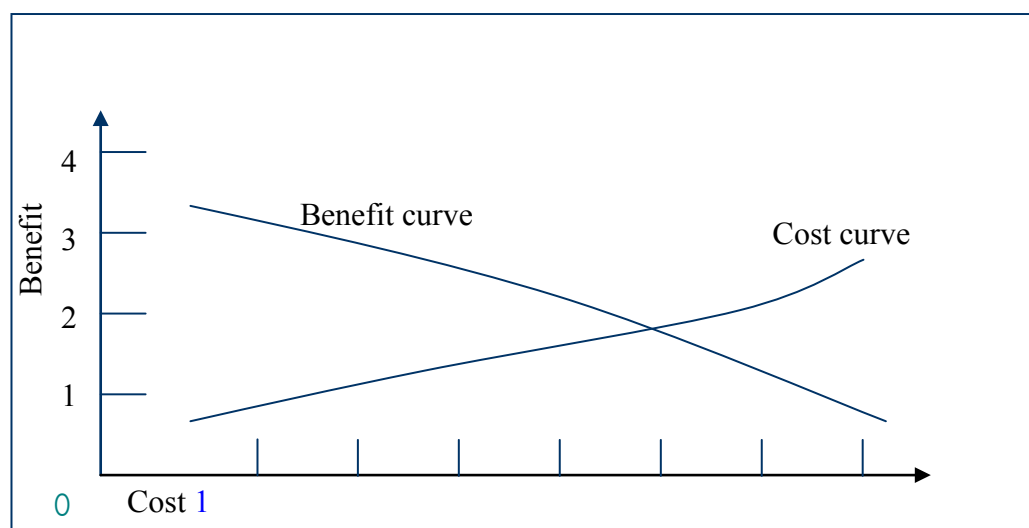


Figure 1. Acceptability Curve for mobile advertising.

(eCRM), which is a customer management system that emphasizes the relationship between company and customer. Moreover, most established forms of advertising are converging on smart mobile advertising. For example, e-mail (SMS, MMS) advertising is an electronic form of established “Direct Mail” (DM). Mobile video advertising (display ad) is another form of television advertising. The smart mobile advertising is not only an advertisement, but also a public relations (PR) tool. In other words, it integrates marketing communication tools, and corresponds with the notion of “Integrated Marketing Communication” (IMC), which includes advertising, publicity, PR, DM, Events, Research, Counseling, etc. In conclusion, the smart mobile advertising would be a center of IMC such as a customer complaints center, an idea bank and an information supply center for improving products and service. And the user acceptability of smart mobile advertising is directly related with the “propensity to communicate” which is decided by motivation (benefits) or difficulties (cost) of access to the center of IMC.

5. Research Questions and Results of Survey

5.1 Research Questions of Mobile Advertising

The following three research questions drive this study: (1) The user acceptability of mobile advertising could be developed by increasing the usefulness (information or content useful to the consumer), adequacy (content that

users want), enjoyment (enjoy surfing the ads), appearance (design, color, fancy), and believability (reliable information or content) of smart mobile advertising. (2) The user acceptability of mobile advertising could be decreased by the “General Cost of Accessing” (GCA) to mobile advertising. According to psychosocial communication theory of Abraham Moles⁸, this GCA is composed of price (communication fee, data fee), time (waiting time), physical effort (fatigues, trouble), cognitive effort (spiritual investment, psychological effort), and risk (error, privacy infringement, criminal acts). (3) The motivation could increase the user acceptability of mobile ads. But on the other hand, the general cost of accessing could decrease the user acceptability of mobile ads.

To address these questions, a survey was practiced from 20 to 31 October 2014. The survey was used to verify the user acceptability for mobile advertising. In addition, the survey method was used to analyze users’ motivation.

5.2 Results of Survey

The survey was conducted for 300 students majoring in media and communication at a university in Southwest Korea. There were 300 completed questionnaires, from 164 female (54.6%) and 136 male (45.3%) respondents (plural response). In terms of frequency of smartphone use, 95.7% of the sample used the smartphone at least once a day.

The results of the survey revealed that the main motivation for accessing mobile advertising was usefulness (35.2%), appearance (20.2%), enjoyment (17.3%), adequacy (13.3%), believability (9.1%), and others (4.9). (cf.,

Table 3. Motivations for accessing to mobile advertising (Unit: %)

	Usefulness	Appearance	Adequacy	Enjoyment	Believability	Others	Total
Share (%)	35.2	20.2	13.3	17.3	9.1	4.9	100

Table 4. Difficulties (CGA) of mobile advertising (Unit: %)

	Risk	Waiting Time	Cognitive Effort	Monetary Cost	Physical Efforts	Others	Total
Share (%)	39.5	25.6	22.2	8.6	3.3	0.8	100

Table 5. Preference for mobile advertising (Unit: %)

	Search Ad	Banner Ad	In-App Ad	SNS Ad	QR Code Ad	Video Ad	Others	Total
Share (%)	32.3	23.5	15.2	8.9	7.5	6.8	5.8	100

Table 3). The main barrier to using mobile advertising was risk (39.5%), waiting time (25.6%), cognitive effort (22.2%), monetary cost (8.6%), physical efforts (3.3%) and others (0.8) (Table 4). And the preference for mobile advertising shows search ad (32.3%), banner ad (23.5%), In-App ad (15.2%), SNS ad (8.9%), QR Code ad (7.5%), video ad (6.8%), and others (5.8%) (Table 5).

6. Conclusion

This study was based on the problems of the mobile ads which have failed to perform as sophisticated as the smart devices carried out in South Korea and on the “tragedy of the commons” which needs the government’s regulations for the protection of consumers, because the exposure to ad is vulnerable to the protection of user in the age of advertising overload⁵. In specific, the foreign mobile market is well-organized by various advertising and platforms through App Store of i-phone and Android Market. But, compared to the overseas markets, South Korean mobile ad market only focuses on “SMS promotion marketing” which would be considered as spam-ads⁶. In addition, there is a chance that mobile ad would be the second spam-ad because of the difficulties of access to mobile content and one-sided presentation of mobile advertising. In spite of varying attempts on advertising including location-based services, augmented reality and image recognition, it resulted mere attraction on limited users without any remarkable success.

To address these questions, a survey was conducted for the user acceptability of mobile advertising. The result of the survey revealed that the user acceptability is related directly to the “propensity to communicate” of mobile advertising which was estimated by motivations of use or “general costs for access” to the mobile advertising. These motivations or general costs for access could be settled by either advertiser creativity or advertising policies such as enlargement of internet transmission capacity, providing

of enjoyable advertising, useful information, abundant images, credibility of advertising, low-prices in use (date fee), security for users (privacy, phishing, smishing), etc. Besides, this survey elaborates that the user acceptability should be estimated carefully to improve the communicational effectiveness of mobile advertising. And this emphasizes that motivation should be provided more and general costs for access should be reduced more for the improvement of its effectiveness.

In conclusion, the study suggests that the propensity to communicate for mobile advertising should be increased to improve the user acceptability. And it also emphasizes the proper resources and policies made to revitalize the mobile advertising market in South Korea through the scientific measurement of advertising effectiveness, the protection of privacy for target ad, standardization of advertisement, the development of various forms of advertisements, professional manpower training, etc. Finally, it would be contributed to induce the popular use of smart media and help policy making to enhance the quality of smart mobile advertising.

7. References

1. Choi MW. A study on the determinant of the acceptance intention of smart phone Ads. *Journal of Outdoor Advertising*. 2011; 8(3):71–105.
2. Digital Times. Smart mobile ads in Korea. 2014 May 9.
3. Gartner. Forecast: Mobile advertising, Worldwide 2010-2017. 2013.
4. Jeil Communication. Year Book 2013 of Advertising. 2013
5. Jung WJ. Trend and Outlook of Mobile Advertising Market. *Trend*. 2014; 26(11):18–25.
6. KISDI Premium Report. Impact of Online advertising market of Smart device. KISDI Report(10-07). 2010.
7. Lewin. *Dynamic theory of personality*. McGraw Hill; 1935. p. 120–2.
8. Moles A. *Theorie structurale de la communication et societe*. Paris: Masson; 1986.

9. Park SH. A study on the propensity of internet advertising to communicate: To improve the effectiveness of communication in internet advertising. KJCS. Special English Edition. KSJCS; 2001. p. 221–40.
10. Park SH. An exploratory study on the current situation of smart advertising and its activation plan. Journal of Digital Policy. 2013; 11(3):33–40.
11. Park SH. The practical ecosystem of smart advertising and policies for its activation in South Korea. IJACT. 2013; 5(11):365–70.
12. Park SH. Smart Mobile Advertising and user acceptability in South Korea, ICDPM 2015. The Society of Digital Policy and Management. Bangkok, Thailand; 2015 Jan 21–24. p. 15–16
13. Statista. Countries ranked by the number of smart phone subscribers in 2013, 2014. Available from: <http://www.statista.com>