

An affectability consumer's attitudes toward advertising based interactive installation in public transportation.

Changing outdoor advertisement on street by interactive bus shelter

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Abstract: As the development of technology such as flash, server-side language, RIA, etc. gives the advertiser more efficient, strong and attractive opportunity. There is no doubt that the market of advertising on the interactive installation will be increased. The effectiveness of interactive advertising such as in the Internet, interactive television and mobile devices already has been examined by a variety of researchers. Moreover, advertisers have thoroughly tested interactive installations as a new advertising medium. However, there are only a few studies about their effectiveness. Therefore, if advertisers know the factors affecting consumer's behaviors and the interrelation between these factors and advertising effects, they could be further developing their advertising strategies. This paper is focusing on the interaction with installation-based advertising and the interrelation between interaction and consumer's attitudes towards advertising in a public transportation. As a market place and consumer's daily life, it is the easiest of approach popularity as a public transportation about consumer's attitudes. As a result, consumers have positive attitudes toward installation-based, interactive advertising public transportation. Especially the affect dimension among the three dimensions of consumer's attitudes is influenced strongly.

Key words: *Interaction and installation-based advertising, Human Behaviors, Consumer Perception, Service design, Bus Shelter advertising*

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1. Introduction

Nowadays, there are lots of quite interesting and inventive things around our environment and most people are using the Internet, as a result, they are familiar with computer system and interaction with web site and web banner. The traditional media such as book, sound, or movie, etc. have been used for long times and still work but people started to be fascinated by new media. There can be found similar trend in the area of advertising. Traditional advertising media such as TV, Radio, Press, and Outdoor advertisements are losing their ability to transfer information and persuade people to buy products but interactive advertising media such as web site, banner, interactive TV and mobile devices are getting more powerful. There is no doubt that the use of interactive advertising will be increased in the future. How can we define advertising? 'Advertising' means 'drawing attention to something', or notifying or informing somebody of something.[10] Interaction with interactive advertising has been developed by the development of technology and it will be continued in the future. Interaction gives better opportunity to communicate between consumers and advertising media, therefore, effectiveness of advertising increases. The effectiveness of interactive advertising has been issued and examined

by a variety of researches. And nobody doubts that interaction is one of the key factors for interactive advertising. An interactive installation has been just considered as the monopoly of designers for long times but cannot an interactive installation be an effective medium for advertising? Advertisers have been interested in using interactive installations for advertising medium because of more attractive and interactive expressions compared to the other existing advertising media. In order to better understand its effectiveness, we explore its working process, examine effectiveness and identify some variables that influence effectiveness of advertisement, therefore, the possibility of using an interactive installation as advertising medium is investigated and analyzed critically.

This is started from the current state and will present the following ones. Firstly, how interactive installation used as an advertising medium will be explored. Secondly, how the feature of 'interaction' affects Consumer's attitudes toward advertising. Finally, current Consumer's attitudes toward installation-based Public transportation advertising will be surveyed and analyzed based on the first and second one.

According from starting point, it becomes necessary questions, which are; what features affect consumer's attitudes toward advertising? How are consumer's attitudes affected by interaction? The purpose of this research is to investigate these points. The specific objectives of this research are: 1. To identify key features influencing consumer's attitudes toward advertising. 2. To identify interrelation between interaction with installation-based public transportation advertising and consumer's attitudes. Based upon these objectives, following hypotheses are developed: H1 : Consumers will perceive various features of advertising differently. H2 : These feature influence Consumer's attitudes toward each advertising differently.

A survey was conducted to collect the opinions of interviewer living in city of central, Seoul. The questionnaires were divided into three sections; 1) Consumer's behavior about advertising, 2) attitudinal information and 3) demographic information. This exploratory study investigates the consumer's attitudes toward installation-based public transportation advertising, especially bus shelter that has not been researched mainly so far.

The goal of this research is, firstly, it will analyze using an interactive installation as advertising medium. Furthermore, the emergency of installation-based public transportation advertising and interaction with installation advertising will be studied. On the other hands, it will address Consumer's attitudes toward advertising in general and the interrelation between interaction and Consumer's attitudes will be analyzed. Representative examples also will be introduced. It will discuss and analyze key features influencing Consumer's attitudes toward advertising and interrelation between interaction with installation-based public transportation advertising and Consumer's attitudes. Finally, the document will conclude everything that was studied and analyzed and suggest further research.

2. Literature review

Nowadays, many studies related to advertising have been archived in a various way. Advertising can reach huge audiences with simple messages that present opportunities to allow receivers to understand what a product is, what its primary function is and how it relates to all the other similar products. This is the main function of

advertising: to communicate with specific audiences.[11] The object of advertising is usually to change or influence attitudes. It aims to persuade people to buy product A instead of product B, or to promote the habit of continuing to buy product A.[13] It is not simple to explain advertising. There can never be a single answer to the question 'How does advertising work?' because advertising as an idea, is as wide and varied as the concepts 'persuasion' or 'communication'.[9]

During the process of studying advertising, many aspects have been studied and analyzed too. Consumer's attitudes toward advertising are one of them which are over the past 60+ years, attitudes have become a central component in many theories of persuasive communication.[20] It has been studied and examined the relationship between consumer's attitudes and the effectiveness of advertising, as a result, they could find strong evidences about it. It is defined attitudes towards advertising as a learned predisposition to respond in the consistently favorable or unfavorable manner to advertising in general.[15] Advertising had important economic and social effects, and developed a set of belief items related to positive and negative outcomes of advertising in these two specific areas.[1] Likeability does have a persuasive effect, because it directly affects our feeling about a brand.[3] Consumer's attitudes toward each different advertising media also have been studied. The Attitude towards the ad or likeability has an important effect on the viewing of a commercial and so on its reach.[12] As a result, they found that advertising attitudes influence recall and buying interest and Consumer-related factors are important when evaluating how persuasive the advertising is. Furthermore, there have been various studies about each advertising media such as 'Consumer's attitudes towards online shopping in New Zealand'[32], 'Exploring the effectiveness of taxis as an advertising medium' [23] and 'Attitude toward Location-Based Advertising'[24].

Surely, there have been lots of studies and examinations in research area to compare traditional advertising and new media interactive advertising after appearance of new interactive media as advertising media. It takes a consumer's perspective and examines consumer's perceptions of different types of ads to understand the perceived differences between the Internet-based advertising and traditional advertising for both brand building and directional purpose. As a result, we believe that the Internet has the potential to better support goal-oriented consumers, thus providing a great potential for Internet-based directional advertising.[34]

The feature of 'Interaction' has been a hot issue since using interactive advertising, therefore, the effectiveness of 'Interaction' has been examined by various ways. Jefkins explained messages are said to be more readily seen than heard and visual messages have greater impact than those which require the effort of reading. This tends to make written and read information the hardest to accept and recall. It implies that press advertising has to overcome many problems, especially in multi-ethnic societies or where there is a low level of literacy [13]. Interactive media refers to a carrier of messages which provides for the possibility of interaction with messages conveyed in that medium. So, the internet including the Web is an interactive medium which provides for the possibility of interactive communication with messages.[29] Advertisers have tried to use multiple advertising media at the same time to increase the effectiveness of advertisements and there have been a lot of trials to add the feature of 'interaction' into traditional advertising media to maximize the effectiveness of advertising. Therefore, there have been lots of trials to add 'Interaction' into physical space. Physical characteristics greatly influence the activation of our attention, the decisive factor being the extent to which the stimuli stand out from other stimuli in their surroundings.[12] As researches about how each different feature influences consumer's

attitudes towards different types of ads. Therefore, it is necessary to confirm it. According to the research of MMS, percentage of top 20 advertisers using outdoor was 35 per cent at 1992 but it increased as 88% at 2004. Other cases, terminal posters can be very attractive and attention getting. Buss shelters often provide the advertiser with expanded coverage where other outdoor boards may be restricted.[2]

This study starts from the current state and will present the following ones. Firstly, how interactive installation can be used as advertising medium will be explored. Secondly, how the feature of 'interaction' affects consumer's attitudes toward advertising. Finally, current consumer's attitudes toward installation-based bus shelter advertising in Seoul will be surveyed and analyzed, based on the first and second one.

3. Installation-based bus shelter advertising

3.1. An Interactive Installation as Advertising medium

Over the past decade Installation art has achieved mainstream status within contemporary visual culture. Its ascendancy has given rise to many new terms, and has affected not only art, but also culture. An installation has opened the field more than ever to experimental strategies beyond the traditionally ones such as visual illustration. Installation art basically comes from traditional sculpture and many artists have tried to incorporate lots of media to create an experience, as a result, interactive installations could be found from the 1990s because of improvement of technology.[18] Especially using sensors has become essential for interactive installation to make communication from interactive installations to audiences. The development of new technology induced emergence of interactive installation, as a result, the use of it has expanded the domain from arts to commerce. Lots of showcases show the opportunity of using it as medium for advertising and promotion with traditional marketing medium. Consumers want more strong and interesting advertising, as a result, an interactive installation is considered as medium for advertising and promotion strongly. Many advertising agency started using an interactive installation, therefore, this new medium is appraised as taking advertising medium to a new level. Using an interactive installation is quite new trend at the moment but many famous companies such as Nokia, Yell.com, PRADA and DIESEL already have been used similar technology with design to promote their products. These kinds of trial became the foundation of an interactive installation.[22]

3.2. The Emergence of Installation-based Advertising

For many years, lots of media have been used as methods for advertising and promotion with developments of technology. Film or printing are very representative of traditional marketing methods and the Internet has being used by popular of using the Internet.

The effectiveness of traditional advertising media has been reduced after appearance of interactive advertising using new media, interactive television and mobile. The Internet seems to be the hottest medium after popularization of the Internet. Through the last decade, the number of Internet users by world region underwent explosive growth. Web advertising may take place through banners and promotion website that provide information about the company or products. Moreover, the development of technology such as flash, server-side language, RIA, etc. gives the advertiser more efficient, strong and attractive opportunity. There is no doubt about the market of advertising on the Internet will be increased. For example, Ford motor company reduced the percentage of magazine advertising from 23.5% to 21% but increased the percentage of the Internet advertising

from 3% to 3.5% at 2006. People reduce the time for newspaper, magazines and radio but spend more time for the Internet because people started to think the Internet as an integral part of our lives. The traditional advertising media including bus shelter advertising, therefore, are giving room to interactive advertising. The interactive installation has been adopted by many advertising agencies that recognized an infinite number of possibilities. The sexual aspects of the interactive installation can be explained as the following points that are *Increasing more emotionally rich experience, No limitation for using multiple media resources, Two-sides communication with physical action, and Making users to participate positively.* [2]

3.3. Interaction with Installation-based Bus Shelter Advertising

There have been many efforts to find out the feature of interaction to help the limitation of mass media that only communicate by one-way from 1950s. After this, many scholars have been researched and studied about it. The main difference between traditional advertising media and interactive advertising media comes from interaction. Traditional advertising media just communicate via one-way which means that they just give information and there is no interaction between advertising media and consumers. Consumers, therefore, become passive in the process of accepting information. But interactive advertising media use two-ways communication that means advertising media give consumers information basically and the contents are changed by the behavior of consumers, therefore, consumers can be more active for communication. For instance, consumers can get information of products from advertising of magazine by reading texts and visual images basically but promotion website not only give consumers basic information but also change contents by consumer's behaviors such as clicking menus and choosing items to see more detail information, therefore, consumers can find more information actively. Especially interactive installation is installed in physical space and use physical sensors to measure users' behaviors, therefore, installation-based advertising has loop of interactivity throughout consumer's behaviors and physical sensors. Online-based advertising just have interaction via mouse or keyboard normally but installation-based advertising can have interaction via more various type of consumer's behaviors. For instance, the distance measuring sensor can detect the distance of objects in front of it, as a result, it can be used for virtual touching screen which means that consumers can navigate by reaching out to a 'hot spot' instead of touching screen or pressing a button. Bend sensor can measure the amount of bend. It can be used for punch ball game. There are probably some consumers who simply do not want to see place-based media and ignore them whenever they can, no matter what kinds of information and entertainment are offered. The limitations of outdoor advertising that were *Simple Messages, No Guarantee of High Recall, High Cost and Limited Availability of Best Locations.* [19]

Bus shelter advertising cannot get consumer's attention effectively because of one-way communication but installation-based bus shelter advertising can do two-ways communication by using physical sensors or touch screen, therefore, it can give consumers more attraction by interaction. Consumers can play entertainments or get information which installation-based bus shelter advertising gives while they are waiting a bus and they have interaction with advertising naturally. Installation-based bus shelter advertising can give consumers information basically and persuade them to buy products effectively via interactivity.

4. Installation-based bus shelter advertising and consumer's attitudes

4.1. Consumer's Attitudes toward Advertising

Attitude is learned, not instinctive. It is not behavior; it is a predisposition toward a particular behavior. It implies a relationship between a person and an object. The formation of attitude, therefore, is based on experience with the object.[4] There has long history about definition and study of attitude. Attitudes have become a central focus of many persuasion theories because social scientists believe that attitudes guide and direct human behavior.[20] Especially the relationship between consumer's attitudes toward advertising and advertising effectiveness has been analyzed by many studies. The Consumer-related factors are important when evaluating how persuasive the advertising is.[28] Attitude can be considered as likeability in advertising and according to the research, advertising that is appreciated (i.e. likeable) is more effective than advertising that is not very likeable.[12] The Figure1, which is illustrated the relationship of attitudes towards the ad, brand attitude and purchase intention, therefore, attitude towards the ad affects brand attitude and this result affect purchase intention finally.[17]

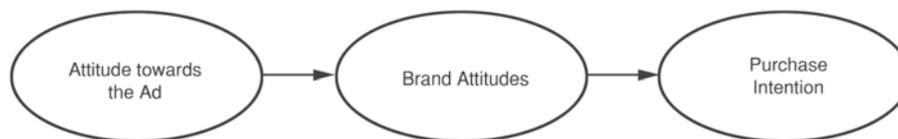


Figure.1 Attitude toward the Ad, Brand Attitude and Purchase Intention[17][5]

The study about consumer's attitudes toward advertising and brand has been done in various ways because consumer's attitude is interrelated with effectiveness of advertising. Attitude consists of cognition, affect and conation. The three components have relationship in a complex way. Purchase intentions relate to beliefs and brand evaluations, and likelihood of buying a brand has been shown to be influenced by attitudes towards advertising as well as attitudes towards brands. The three components, therefore, have been used to measure consumer's attitudes.[4] Blythe suggests about changing consumer's attitude toward advertising for more effectiveness of advertising as the following 4 ways: *Add a new salient belief, Change the strength of a salient belief, Change the evaluation of an existing belief, and Make an existing belief more salient.*[4] If the three components of attitude are in balance, it is difficult to change the attitude because the attitude becomes stabilized [4]. Advertisers have tried to change consumer's attitudes and it is one of the most important subject to them.

4.2. Interrelation between Interaction and Consumer's Attitudes

"Browsers and searchers, object interactivity will lead to more vivid mental images and thus higher purchase intentions than will passive content" [31].

The process of consumer's perception is on advertising. Motive affects the values on the six factors such as 'Entertainment', 'Informativeness', 'Irritation', 'Credibility', 'Interactivity' and 'Demographic' basically and each six factors affect attitude toward advertising. Interactivity is considered one of the most important values for interactive advertising.[34] There is no doubt that the interactive advertising provides more capabilities and thus more chances to consumers when it is compared to traditional media. For instance, the online-based banner ads can provide more interactivity than traditional media. In studying interactive media, Liu identifies a four-dimensional structure of the interactivity: active control, two-way communication, freedom of choices, and felt synchronicity. Consumers can do active control via two-way communication basically, have more freedom of choices between choices and thus feel synchronicity.[14] This specific of interactivity makes consumers to

participate actively and have positive attitude toward advertising. Physical characteristics greatly influence the activation of our attention, the decisive factor being the extent to which the stimuli stand out from other stimuli in their surroundings.[12] Installation-based advertising gives consumers the opportunity to experience of physical input and output by using physical sensors basically, as a result, consumers feel stronger motive compared to any other advertising media.

4.3. Representative Examples

Case I: Yell.com (2006, Agency: AKQA)

Client: Barbara Newman, head of communications and brand development, Yell.com

Yell.com launched digital six-sheets on the bus shelters that have interactive screens. Pedestrians can use it to find a map of the area and information of surrounding restaurants, pubs and bars, therefore, people can try to use their services instead of using via online and recognize the services naturally.[7]

Case II: Nokia Bus Stop Advertisement: Memory Game (2007, Agency: JCDecaux)

Nokia Bus Stop Advertisement that was installed at bus shelters was created to promote new mobile phone in London. The interactive installation has a custom built flat screen navigating with touch screen. The screen shows promotion video clips basically and when a user touches the screen then the interactive memory game starts, therefore, user experiences integrated services while waiting a bus. This advertisement was appraised as taking poster advertising to a new level.[33]

Case III: PUMA USAN Showcase + Music bus shelter (2008, Agency: IPDecaux)

PUMA launched a new running shoes brand 'USAN' at Korea that the advertisement was shown 103 posters at bus shelters in Central Seoul. The interactive advertisement was built at 10 bus shelters on the main street between June 2008 and August 2008 that has been built with touch screen. This campaign was customers could have second-experience for brand new product unless they visited off-line shop. Furthermore, it was noticed that the music in advertisement could be free download through website.[25][26]

Figure 2 Installation-based Bus Shelter Advertising

Case I: Yell.com (Source: Campaign 2006.)	Case II: Nokia (Source: YouTube 2008.)	Case III: PUMA USAN Showcase+Music bus shelter (Source: ADIC 2008.)
		

5. A survey on consumer's attitudes toward installation-based bus shelter advertising

5.1. Objectives

There have been various studies to identify key factors influencing effectiveness of advertising but there have been not enough studies about consumer's attitudes towards each advertisement. It is necessary to measure

consumer's attitude toward each advertising media to extend their effectiveness. This is the first study to have been conducted to investigate key features influencing consumer's attitudes toward advertising and interrelation between interaction and consumer's attitudes toward advertising in Seoul. Nowadays, advertisers are trying to use installation-based bus shelter advertising to maximize the effectiveness of bus shelter advertising instead of using normal posters. This study, therefore, becomes necessary. What features affect consumer's attitudes toward advertising? How are consumer's attitudes affected by interaction? The purpose of this research study is to investigate these points. The specific objectives of this research are:

1. To identify key features influencing consumer's attitudes toward advertising; and
2. To identify interrelation between interaction with installation-based bus shelter advertising and consumer's attitudes.

Based upon these objectives I develop the following hypotheses:

H1: Consumers will perceive various features of advertising differently; and

H2: These features influence consumer's attitudes toward each advertising differently.

5.2. Questionnaire

Dimensions of attitude that were mentioned by Jim Blythe were used to measure consumer's attitudes toward advertising.[4] Dimensions of attitude consist of cognition, affect and conation and they have been used widely to measure attitudes. To suit research objectives, several questions, three questions for cognition, five questions for affect and four questions for conation, were made for each dimension. The each items was rated by using five point by 1 = Disagree strongly and 5 = Agree strongly. The frequency of taking notice of advertising, furthermore, was measured by asking how often the consumers had notice of advertising in the most recent year by five category of very rarely, rarely, sometimes, often and very often. Four more questions were included to measure how each features, visual impact, creative idea, and information, interactive function, brand and other, affects consumer's attitudes toward advertising by putting a value of 1 to 6 for each feature. Finally three questions were used to ask personal details.

The questionnaire was divided into three sections, which were used to collect consumer's behavior about advertising, attitudinal information and demographic information.

5.3. Methodology

A pilot survey was conducted with three persons to check how well the questionnaire was designed and understood before starting survey. Some weaknesses in questionnaire were found during the process. The following points are indicated:

1. Some words are not easy or clear to understand by ordinary people.
2. Questions to check how each features influences consumer's attitudes are required.

The difficult or vague words, therefore, were changed basically. For example, each title of cognition, affect and conation were replaced as your thoughts, your preferences and your actions. The questions to check interrelation between each features of advertising and consumer's attitudes were added. A total of 70 questionnaires were distributed and 56 usable questionnaires were returned. Regular consumers (15+ years of age) who live in Seoul

are selected randomly on the street. Of these, 32 were female and 24 were male consumers. The structured questionnaire was used for consumer intercept survey.

5.4. Data Analysis and Results

From a marketing view of point it is important to profile the regular Seoul consumers before we start discussing the results of the data analysis. Business strategy decisions will be affected with this. The demographic features of regular Seoul consumers are exhibited in Table 1 below. Age is divided by 5 groups such as '15-24 years', '25-34 years', '35-44 years', '45-54 years' and '55+ years'. The areas of Seoul are divided by 3 sectors such as 'Central Seoul', 'nearby Seoul' and 'Others'. The percent of male and female are 43% and 57% respectively and 80% of total comes from 15-34 years old group. 44% of consumers live in Central Seoul.

Table 1. Sample Profile

	Categories	Count	Percentage
Q20. Gender	Male	24	43%
	Female	32	57%
Q21. Age	15-24 years	23	41%
	25-34 years	22	39%
	35-44 years	7	13%
	45-54 years	3	5%
	55+ years	1	2%
Q22. Address	Central Seoul	39	69%
	nearby Seoul	8	14%
	Others	9	17%

In order to identify key features influencing consumer's attitudes toward advertising and interrelation between interaction with installation-based bus shelter advertising and consumer's attitudes, exploratory factor analysis was employed. First of all, the respondents were asked to rate six variables, using a 6-point scale, which ranged from 1 (Worst) to 6 (Best) to measure key features influencing consumer's attitudes toward advertising in general. Secondly, 5-point scale, which ranged from disagree strongly to agree strongly, was used to identify interrelation between interaction with installation-based bus shelter advertising and consumer's attitudes. Finally, 5-point scale, which is ranged from very rarely to very often, was used to measure consumer's watching behavior. Table 2 shows the analysis of the consumer's watching behavior. 39% of consumers notice bus shelter advertising often or very often and 48% of them notice it sometimes. 67% of consumers notice interactive advertising at least sometimes and 50% of them have seen interactive bus shelter advertising. This analysis shows that most consumers notice bus shelter advertising and interactive advertising and bus shelter advertising has been exposed more than interactive advertising in general among regular Seoul consumers.

Table 2. Watching Behavior

Behavior Variables	Factors	Count	Percentage
Q1. In general, do you notice bus shelter advertising?	Very rarely	5	9%
	Rarely	2	4%
	Sometimes	27	48%
	Often	16	29%
	Very often	6	10%
Q2. In general, do you notice interactive advertising (Promotion website, Web banner, etc.)	Very rarely	6	10%
	Rarely	13	23%
	Sometimes	21	38%
	Often	13	23%
	Very often	3	6%

Q3. Have you seen interactive bus shelter advertising?	Yes	28	50%
	No	28	50%

In order to examine how consumer's attitudes toward advertising are affected by key features; in terms of stopping consumers to look at advertising, making consumers curious about advertising, making consumers recommend advertising to others and making advertising memorable for consumers; the mean scores for all factors have been compared. The findings of key features influencing consumer's attitudes are presented in Table 3. Each factor is labeled as visual impact, creative idea, information, interactive function, brand and other.

Table 3. Key Features Influencing Consumer's Attitudes

Attitude Variables	Mean of Factors					
	1	2	3	4	5	6
Q4. What features make you stop to look at advertising?	4.93	4.66	3.16	3.34	3.43	1.48
Q5. What features makes you curious about the advertising?	5.05	4.45	3.27	3.52	3.21	1.48
Q6. What features makes you recommend the advertising to others?	4.75	4.44	3.26	3.60	3.38	1.39
Q7. What features makes an advertisement memorable for you?	4.80	4.64	3.39	3.57	3.20	1.39
Overall mean	4.88	4.55	3.27	3.51	3.31	1.44

The factor of visual impact scored the highest at 4.88 overall and the factor of creative idea marked the second score at 4.55. The factor of interactive function was selected as third important factor at 3.51. This analysis shows that the factor of visual impact affects consumer's attitudes toward advertising most in general and the factors of creative idea and interactive function are also important but the factors of information and brand affects consumer's attitudes toward advertising less. As can be seen from the above table, the first hypothesis (H1) has been partially supported. The results showed that consumers perceive various features of advertising differently. In order to identify interrelation between interaction with installation-based bus shelter advertising and consumer's attitudes, attitude variables consist of three areas such as your thoughts, your preferences and your actions basically and each area has 3 variables, 5 variables and 3 variables in themselves respectively. The mean scores for all attitude variables have been compared. Table.4 shows the findings of consumer's attitudes toward installation-based bus shelter advertising. Overall mean of the three major factors was rated at 3.37 and each three factor was rated at 3.47, 3.54 and 3.09 respectively. This analysis clearly shows that consumers have good attitudes toward installation-based bus shelter advertising and interaction with installation-based advertising influences consumer's attitudes toward it. Especially, interaction with installation-based advertising has a great influence on consumer's preferences with a mean score of 3.54.

Table 4. Consumer's Attitudes toward Installation-based Bus Shelter Advertising

	Attitude Variables	Mean
Your thoughts	Q8. I think this interactive advertisement is reliable.	3.33
	Q9. I think this interactive advertisement is clever.	3.82
	Q10. This interactive advertisement makes me interested in the brand.	3.26
	Overall mean of Cognition	3.47
Your Preferences	Q11. I like this interactive advertisement a lot.	3.34

	Q12. I think this interactive advertisement is persuasive.	3.43
	Q13. I think this interactive advertisement is amusing.	3.70
	Q14. I think this interactive advertisement is attractive.	3.66
	Q15. I think this interactive advertisement has a strong appeal.	3.57
	Overall mean of Affect	3.54
Your Actions	Q16. I would enjoy with the interactive functions of this bus shelter.	3.25
	Q17. I would recommend this interactive advertisement to others.	3.11
	Q18. I would like to try the interactive functions again next time.	3.23
	Q19. I would like to buy the product advertised.	2.75
	Overall mean of Conation	3.09
Overall mean of the three factors		3.37

Firstly, the factor of your thoughts had a higher mean score of 3.47 than the overall mean score of 3.37. The attitude variable of 'I think this interactive advertisement is clever' had the highest score of 3.82 among three variables and the attitude variable of 'This interactive advertisement makes me interested in the brand' had the lowest score of 3.26. This result shows that interaction with installation-based bus shelter advertising has a good influence on the factor of consumer's thoughts. Secondly, consumers rated the factor of your preferences the highest mean score of 3.54. Especially, the attitude variables of 'I think this interactive advertisement is amusing' had a higher mean score of 3.70 than the other attitude variables in the factor of your preferences. This result implies that the factor of interaction makes consumers like this advertisement, persuade consumers, think this interactive advertisement is amusing and attractive and give consumers a strong appeal.

Finally, the factor of your actions had a lower mean score of 3.09 than the overall mean score of 3.37 but it still means that the factor had a good influence. Especially the attitude variable of 'I would enjoy with the interactive functions of this bus shelter' had the highest score of 3.25 among four variables. Consumers, as a result, pay attention this advertisement more during enjoying the interactive functions and this result has a great influence. As can be seen from the above table, our second hypothesis (H2) has been partially supported. The results showed that the suggested features influence consumer's attitude toward advertising differently.

The above-discussed all results provide empirical evidence to identify key features influencing consumer's attitudes toward advertising and interrelation between interaction with installation-based bus shelter advertising and consumer's attitudes.

5. CONCLUSION

5-1. The Result of Research and Summary

In this research, we reviewed installation-based advertising and analyzed to use it advertising medium, furthermore, the factor of interaction is also studied. In order to better understand the effectiveness of installation-based advertising, therefore, consumer's attitudes are also analyzed. To identify key features influencing consumer's attitudes toward advertising in general and interrelation between interaction with installation-based bus shelter advertising and consumer's attitudes, the survey with questionnaire was conducted. Three dimensions of attitude, cognition, affect and conation that were used in the questionnaire, therefore, the result shows the following facts. First of all, consumers notice bus shelter advertising and interactive advertising with positive attitudes. Secondly, the factor of visual impact and creative idea influence consumer's attitudes

toward advertising strongly in general, moreover, interactive function also affects consumer's attitudes. Finally, the fact of interaction affects consumer's attitudes toward installation-based bus shelter advertising, therefore, consumers have positive attitudes toward installation-based bus shelter advertising. Especially the affect dimension among the three dimensions of consumer's attitudes is influenced strongly. The fact of 50 per cent of respondents have not seen interactive bus shelter advertising is found by the survey and they feel interactive bus shelter advertising amusing, attractive and strong appeal after explanation. They, furthermore, think this interactive advertisement is reliable and clever. According to Web magazine of KFAA/ADIC[26], there has been considerable growth in the outdoor market of Seoul in recent years and the type of this format is running at more than 60 per cent of roadside inventory these days. There is no doubt that much more interactivity outdoor advertising will be continually important. But a decrease of creative quality has been pointed out and the fact that six-sheets may be to blame is warned. As a result, integrating digital technology into them has been tried in recent years and there have been successful results. Digital technology is not only for new media anymore and finding new ways to integrate digital technology into the traditional advertising media is one of the important challenges for advertisers. Academicians and advertisers need to do more contribute to the understanding of effectiveness of these new formats with various features of advertising.

5-2. Limitations and Future Research

As this is the first ever research conducted on Seoul data, it has set the groundwork for further research. This study has some limitations. First of all, only 6 factors were used to identify key features influencing consumer's attitudes toward advertising, therefore, more key features should be suggested to choose by consumers. Secondly, this study is only focused on interrelation between interaction and consumer's attitudes toward advertising, therefore, the study about effectiveness of advertising such as introducing products, persuading consumers to buy products and enhancing brand attitude. The interactive installation bus shelters are developing all the world. For instance, MIT will built 'EyeStop'[30] in Florence, Italy and city of Seoul already has 'MediaPole' which are based on multi-touch screen bus shelters. It has function of city information and entertainment such as ubiquests. Finally, the sample size of the survey was relatively small. A larger sample should be used to carry out any future research in this field.

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