Studying Brand Equity in Terms of Beliefs Shaping Consumers' Attitudes on Advertising through Mobile Phones

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Abstract
Any innovation creates new opportunities and in recent years, advertising has experienced radical changes due to technological progresses. Mobile phone is a type of such technological changes which has converted into an important advertising channel. Regarding such importance, present study is conducted to promote three aims. The first aim of this research is to identify beliefs which shape audiences' attitudes on mobile advertising. The second aim is that this research evaluates the impact of those identified beliefs which shape an attitude on mobile advertising on a general attitude on advertising. The ultimate aim is to study the impact of the attitude on advertising on brand equity. Present study is a survey which uses questionnaire to collect data. To achieve the aims of this research, 384 users of Irancel's products and services who were exposed by mobile advertising as the sample. To analyze data and to test research hypotheses and model, structural equation modeling (SEM) and confirmatory factor analysis (CFA) were used. Research findings show the significant impact of such beliefs as "being informative", "good for economy", "hedonism", "annoyance factor", "validity", "personalization" and "permission" in mobile advertising on "attitude on advertising" and the significant impact of "attitude on mobile advertising" in "brand equity".
Keywords: Advertising, Mobile Advertising, Attitudes on Mobile Advertising, Brand Equity

1. Introduction

Any innovation creates new opportunities and in recent years, advertising has experienced radical changes due to technological progresses (Richards and Curan, 2002). Mobile phone is a type of such technological changes which has converted into an important advertising channel (Brawise and Strong, 2002). Manufacturers use advertising to introduce new products, to recall current products and to aware consumers and they spend high costs to this end. However, a challenging issue is the impact of such costly advertising on customers. The impact of advertising on customers depends highly to consumers' attitudes on advertising since it is believed that a strong attitude on advertising impacts on consumers' behavior (Wells et al, 2000). Preliminary researches to answer the issue of customers' attitude on advertising are tested (i.e. Muehling, 1987; Shavitt, 1989).

Initial studies on attitude on advertising were conducted in 1940s and 1950s. Based on such probes, customers' general attitude on advertising was evaluated positively (Bauer & Greyser, 1968). That is, advertising impacted positively on the attitudes and consequently, shopping by consumers. Despite of such researches, studies conducted in 1960s resulted in contrary findings and showed that consumers' general attitude on advertising is negative (Andrews, 1989; Mauhling, 1987). Such results show that at the beginning of shaping professional advertising, they had positive impacts on consumers' attitudes while overtime, advertising lost its trust among consumers and now consumers' attitude on advertising is negative.

Conducted studies in recent years indicate that consumer's attitudes on all types of advertising especially TV and online advertisements are getting worse and negative (Burns, 2003; Pyun & James, 2009). On this basis, one of the most challenges against advertisers is to return consumers' trust to advertising and to create a positive attitude. A guideline to face with this challenge is to use proper context and media for advertising and mobile phone is a proper context for advertisements which has grown amply in recent years. Mobile advertising consists of all advertisements sent and rendered by mobile phones including SMS and MMs (Salo and Tahtinen, 2005).

As advertising tool, using mobile phones is increasing day by day and due to its penetration rate, replacing fixed phones and easy access, mobile phone is considered as a media among advertising actors and as a communication channel (Richards and Curan, 2008). Nowadays, a very important and attractive research topic is to assess the effectiveness of mobile advertising (Lyberger and McCarthy, 2001). Authors have tested the effectiveness of advertising (particularly mobile advertising) based on two "recall" and "recognition" indices (Stotlar and Bennett, 2000; Turley and Shannon, 2000). In fact, one of the main reasons of the importance of effective advertising is its potential in promoting brand equity. Effective advertising creates a proper context for shaping and growing brad equity. Advertising through mobile shapes beliefs and, consequently, attitudes of consumers to advertising more positively and more favorably (Buil et al, 2011). Such positive attitude on advertising will be a proper ground for developing brand equity.

Despite of the high importance of advertising through mobile in returning audiences' trust to advertising, few researches are conducted on this field and one can almost claim that there is no research on advertising through

mobile and its impact on promoting brand equity of the companies. To this end and to fill the current gap in the literature, present study plans to identify those beliefs which shape consumers' attitudes on advertising through mobile and then to measure the impacts of such beliefs on consumers' attitudes on advertising and, finally, to measure the impact of consumers' attitudes on advertising on brand equity. To this end, some aspects of those beliefs which shape consumers' attitudes on advertising on advertising namely being informative, hedonism, annoyance factor, validity, personalization and permission are used (Pyon and James, 2009; Ducofee, 1996; Gallup, 1959; Tsang et al, 2004). To measure brand equity, Aaker aspect are used namely perceived quality, brand awareness, brand association and brand loyalty.

With its huge investments in advertising through mobile and as a well-established brand in telecommunication industry, Irancel Telecommunication Service Company is selected for present study.

2.   Research background

In their study, Brawise and Strong (2002) studied the consumers' attitudes on advertising through mobile phone is positive and 81% of cutomers read the messages.

In a research conducted in Taiwan, it was found that society's attitude on mobile advertising is negative and four factors namely being informative, annoyance factor, validity and hedonism have a direct relationship with consumers' attitude (Tsang et al, 2004). In a research to supplement previous researches, the author added personalization to above – mentioned four factors and then he confirmed only their factors of hedonism, validity and personalization through a field study conducted in China. In this research, society's attitude on mobile advertising was reported as negative (Xu et al, 2008).

In a research conducted in Iran, good for economy was added to society's attitude on Iran toward mobile advertising (Sadegh Vaziriy and Khodad Hosseini, 2011).

In a research conducted in China by Xu, the direct relationship between consumers' attitudes and their intentions were determined (Xu, 2007).

Chaudhuri et al (2006) conducted a study in Bangladesh and found that except than affecting factors on consumers' attitudes toward advertising through SMS, there is also an important relationship between credibility and attitude.

Based on researches by Enpocket Company, 78% of consumers were satisfied on receiving advertisements on their interests.

In the New Zealand, Carroll et al (2007) found that such factors as permission, message content and the frequency of sent messages have an important impact on accepting advertising through mobile phones.

Muk (2007) found a positive relationship between the attitude, opinion and intention of US and Korean consumers and their propensity to contribution in advertising through SMS.

In his M.S. thesis in Al-Zahra University, Saeedi (2009) studied affecting factors on accepting advertising through SMS by students in Universities of Tehran.

Since we face with such issues as belief and attitude as well as mobile advertising and mobile marketing, we explain the differences of these two concepts.

3.   Differences between belief and attitude

Most often, belief and attitude are used as a single concept (Eagly & Chaiken, 1998). Based on the Expectancy Value Theory by Fishbein (1963), attitudes are roles of beliefs; in fact, beliefs can be the causes of attitudes. In this theory, it is assumed that the strongest beliefs have the highest impact on an individual's attitude (Fishbein, 1963). For instance, when people are watching a football match through television in home, they are highly exposed by paramount advertisements in stadium. Someone may have a favorable attitude on advertisements in stadium due to valuable information on new goods while someone else may have a positive attitude on advertisements since they are attractive. Although both have similar (favorable) attitude on advertisements in stadium, their effective beliefs on their attitudes are different (they have different attitudes despite of their similar attitudes). On the other hand, people may have similar beliefs on an aim but they have different attitudes on the same aim (Fishbein, 1967). For example, someone may like a football team because of its stars while someone else may do not like this team due to the same reason.

In present study, there is such difference between belief and attitude and although beliefs and attitudes are related each other, they are independent. A belief is a descriptive opinion expressed by someone about something which can be based on information, idea and loyalty while an attitude is evaluations, feelings and relative sustainable propensities of an individual on a commodity or a thinking method. It is the attitude which makes someone to be interested or hated something. Any attitude is the result of some beliefs.

4.   Mobile advertising and mobile marketing

Mobile advertising and mobile marketing are not defined clearly and it seems that such different terms point out an identical phenomenon. For instance, Kalakota and Robinson (2002), used mobile advertising when they point messages and promotions.

In addition to conceptual diversity and applications, the relations with used terms with other concepts are not clarified. It seems that in many researches, mobile marketing refers to a limited act rather than marketing concept (Salo and Tahtinen, 2005). For instance, Kalakota and Robinson (2002) have defined mobile marketing as dissemination of any message or promotion which added value for customer and to enhance income for the company.

4.1. Mobile advertising definition

Mobile advertising is a type of marketing, advertising and promotion which targets customers and is implemented through mobile channel. Encouraging people to buy products and service through mobile channel is considered as a media to advertise the message (Karjaluoto et al, 2004). Advertisements are sent to a mobile phone and showed on its screen (Salo and Tahtinen, 2005).

4.2. Mobile marketing definition

It is to disseminate messages or promotions which add to the value for customer Barnes, 2004). It is an innovative method of commercial and personal communications based on location. (Baure et al, 2005).

5. Beliefs which shape attitude toward advertising through mobile

Various factors impact on attitudes toward any phenomenon including mobile advertising. Below, we investigate them.

5.1. Being informative

Being informative is in fact the capability of advertising in providing updated, on times and accessible information (Phau and Teah, 2009). Information quality in advertising through mobile has a direct relationship with consumers' perception on a company and its products. According to Kotler (1997), companies advertise for three aims (to aware, to convince and to recall). Awareness is one of the most important aims. Advertising may involve high volume of information which clarifies many points about products for consumers. More quality of information and awareness of advertising would lead into consumers' better decision making (Alwitt and Prabhaker, 1992). Product information leads into more efficiency of market and makes is possible for consumers to adopt their needs and demands to manufacturers (Pollay and Mittal, 1993). In fact, an informative advertisement is one that aware you on new information about products. Most people believe that information is the main reason of propensity to advertising. Besides, relevant and fruitful information leads into positive attitude of people on advertising (Schlosser et al, 1999). Advertising provides you with what you need to know or tend to know. Informative advertising may provide information about new products and services or new information about current services and products. The important point is that advertising helps you to select among options by providing necessary information (Pyon and James, 2011). The initial role of advertising is to create awareness on products. On this basis, Kotler (2006) believes that one of the aims of advertising is to aware people such as giving information on new products, new application suggestions, informing the market on price changes, explaining how to use the product, describing current services, correcting wrong perceptions and removing the rumors, decreasing consumers' concerns and fears and to create a positive image for the company (Roosta et al, 2002).

Hypothesis 1: the belief of being informative of mobile advertising impacts on general attitude toward advertising positively.

5.2. Validity

Validity refers to customers' perception on right and believable advertising. The credibility of sent messages by mobile phone impacts on consumers' attitudes toward advertising positively (Onal et al, 2011). The credibility of advertising is defined as customers' general perception on truthfulness and believability (Mackenzie and Lutz, 1989).

Validity is an affecting factor on attitude discussed in scientific texts. Seriously, Validity impacts on attitudes toward advertising or put it more clearly is considered as an important predictor on attitude toward advertising. Validity is defined as "customer's general perception on truthfulness and believability" (Mackenzie and Lutz, 1989). The Validity is impacted by factors the most important one is company's credit (Goldsmith et al, 2000). The credit of the company is so important that customers believe that a company can design products and services which can meet their needs.

Hypothesis 2: the belief of validity impacts on general attitude toward advertising positively.

5.3. Personalization

Due to its uniqueness, personalization is highly paid attention. Personalization makes it possible for marketers to access potential consumers personally. Therefore, it keeps the relations between marketers and customers (Xu 2007). Personalization – based advertising differs from annoying traditional campaigns since messages on products, services or contents are only sent to people who are their potential customers. For instance, advertisements on expensive goods should not be sent to low income individuals since they are not certainly the potential customers of such products.

Hypothesis 3: the belief of personalization impacts on general attitude toward advertising positively.

5.4. Hedonism

Hedonism is an important indicator of positive and negative attitudes which shows how people react to a product and message. According to hedonism, TV advertisements are expected to attract their audiences and customers by scoffing (Wells et al, 2005). On this basis, hedonism is a belief which shows that to what extent advertisements are attractive and amazing or how well they are planned (Bauer & Greyser, 1968). In fact, when advertisements are more attractive and shape hedonism belief in their consumers, they can create a more positive attitude among their consumers toward advertising. Previous researches have also confirmed the important role of hedonism in consumers' attitudes on advertising (Mehta, 2000; Schlosser et al, 1999). On this basis, mobile can be used as an important tool to add hedonism and attractiveness to advertisements. Mobile is changed to an important media for hedonism and in mobile hedonism industry; one can find such services as music, game, gamble, watching TV, video and sport matches. Undoubtedly, hedonism through mobile is an important stimulant of the market (Barutcu, 2007). It is said that hedonism accompanied with advertising plays the greatest role in general attitude toward advertising (Xu, 2007). Hedonism is a vital factor since it should be scoffing in order to fascinate the consumer (Xu, 2007). Scoffing in advertising creates a positive feeling toward it (Brawise and Strong, 2002). The results of a research revealed that advertising hedonism has a close relationship with perceived value of the advertising (Ferrazzi et al, 2003). Advertised messages can be accepted more enthusiastically if they are sufficiently interesting and sensitive (Clemens, 2003). Those customers, who use hedonism elements, would use them severally so they see the advertising repeatedly and a positive image will be created in their mind (Poustchi and Wiedemann, 2006).

Being brief, profitable and amazing, are, *inter alia*, the traits of an advertisement (Xu, 2007). In fact, hedonism indicates customers' satisfaction on messages.

Hypothesis 4: the belief of hedonism impacts on general attitude toward advertising positively.

5.5. *Good for economy*

Bauer & Greyser (1968) emphasized that consumers' beliefs on economic impact of advertising shape their attitude on advertisements. When there is a close relationship between economic advantages of advertising and personal interests, they will be more interested in responding such advertisements (Elliot and Probhaker, 1992). One of the economic advantages of advertising for consumers is to save the time and costs (Korgaonkar et al, 1997). One can easily acquire economic interests of advertising through mobile. Customers show more propensities to products and brands which get familiar with them through mobile advertising and they are encouraged to buy them. Attracted customers through mobile advertising can help economic survival of local and global markets (Pollay and Mittal, 1993). Consumers' perception on economic costs and interests through mobile advertising impacts on their general attitude toward advertising positively.

Hypothesis 5: the belief of good for economy impacts on general attitude toward advertising positively.

5.6. Annoyance

Some techniques used by advertisers to attract audiences can annoy them (Xu, 2007). Annoyance is the only negative aspect of consumers' attitude toward advertising through mobile phones. Concerning low cost of advertising through SMS, companies send paramount messages without paying attention to the personal information of receivers. One outcome is that people are annoyed and angry due to use this marketing technique wrongly (Rittippant et al, 2009). Annoyance of the advertising is an important factor which impacts on audiences' attitude and it is an advertisement which annoys people and makes them unhappy (Yuan, 2004). Mobile advertising can provide the receiver with diversified information which confuses them or sinks them in information which finally leads into their negative reaction (Xu, 2007).

In a research conducted in 1996, it was found that the main reason of dissatisfaction from advertisements is their annoyance (Bauer, 1996). To this end, it should be noted that annoyance can mitigate the effectiveness of advertising.

Noteworthy, Leather et al (1994) found that liking advertising impacts on sale. Evidences indicate that annoyance decreases audiences' trust to advertisers Greyser, 1973).

Hypothesis 6: the belief of annoyance factor impacts on general attitude toward advertising negatively.

5.7. Permission

Permission before sending an advertisement is an important factor which impacts on consumers' attitudes toward advertising. In this line, consumers permit marketers to advertise (Weng and Tang, 2008). Rick and Digrauo said that mobile advertising is profitable only when it is based on permission.

In his research in 2004, Tsang (2004) found that general attitude on mobile advertising is negative and he said that is not a good idea to sent advertisement to potential customers before their permission or in other words, he suggested permission – based advertising. Consumers should be able to control advertising through their mobile phones (Carroll, 2007). To this end, a guideline discussed and suggested by scholars is permission – based advertising.

Permission – based advertising is an agreement between advertiser and receiver by which it is decided when and how much amount of information should be sent for receiver (Michael and Salter, 2006). On this basis, messages on goods and services are sent to certain people who have announced their propensities to receive such

information clearly. Permission – based advertising are focused on mitigating consumers' annoyance (Tsang et al, 2004) and it is too important that it is said mobile advertising is effective only when it is based on permission. Sent messages without customers' satisfaction are considered as unwanted ones and are even illegal in some countries. For instance, according to EU regulations, one should acquire necessary permission to send mobile advertisements (Salo and Tahtinen, 2005).

Hypothesis 7: the belief of annoyance factor impacts on general attitude toward athletic advertising positively.

6. Attitude on advertising and brand equity

Advertising is one of the most obvious activities of marketing. Lutz defines attitude on advertising as "a favorable/unfavorable tendency to respond a certain advertisement exposed in special conditions". Generally, writers assume that advertising is an effective factor on building customer – oriented brand equity. Through influencing over individuals' attitude on advertising, companies impact on their buying decisions and motivate them to purchase their products (Pyun and James, 2011).

Many authors have found that individuals' attitude on advertising can play a vital role in impacting on brand equity (Keller and Lehman, 2006; Bravo et al, 2007; Sriram, 2007). Advertising is a powerful tool to develop brand emotional and functional values (De Chernatony, 2010). An important strategy in advertising which impacts on individuals' attitude on advertising positively is its creativity. By a modern and innovative advertising strategy, organizations are likely more able to attract consumers' attention and, consequently, attracting customers' attention can highly aid brand equity development (Boyel et al, 2011).

Hypothesis 8: general attitude on advertising impacts on brand equity positively.

7. Brand equity and its aspects

Marketing connoisseurs have provided various definitions on brand equity concept. Some authors have defined it as a set of brand – related assets and debts as well as the name and symbol which increases or decreases the value of provided product or service to customers. Others have defined it as the certain impact of brand knowledge on consumers' response to brand marketing. Some authors have defined brand equity as the power brand acquired in market through name, symbol or logo. However, the simplest definition of brand equity is the added value or award of a product to customers which is attributed to brand (Yoo et al, 2000; He, et al, 2011). If a customer is convinced that there are remarkable differences among brands and it leads into an important part of information in shopping decision, the extent of customers' reliance to brand – based decision making will be increased. Brands especially those with high value are considered as the most valuable and strongest assets of an organization.

Brand equity is seen in both marketing and financial literatures. By brand equity in present study, we mean "customer – based brand equity" indicated in marketing literature. Customer – based brand equity looks at brand value generation resources in terms of customer so that brand power is hidden in what customers have seen, heard and felt overtime and through their experiences about brand. Brand generates value for both customer and organization and the main source of such value is hidden in customers and their mindsets would determine actual value for beneficiaries. Aaker (1991) believes that brand equity is based on four aspects namely "brand perceived quality", "brand awareness", "brand association" and "brand loyalty". Awareness refers to the capability of people in identifying a trademark or name which provides a certain product category. Mental image originates from consumers' varied perceptions in their mind toward the brand. Quality indicates the quality of provided services or products by brand. Brand loyalty is shaped due to positive feelings and perception to a brand and causes shopping repetition (Martinez et al, 2009).

Based on background, literature and research hypotheses, provided model in this research is shown in figure 1.
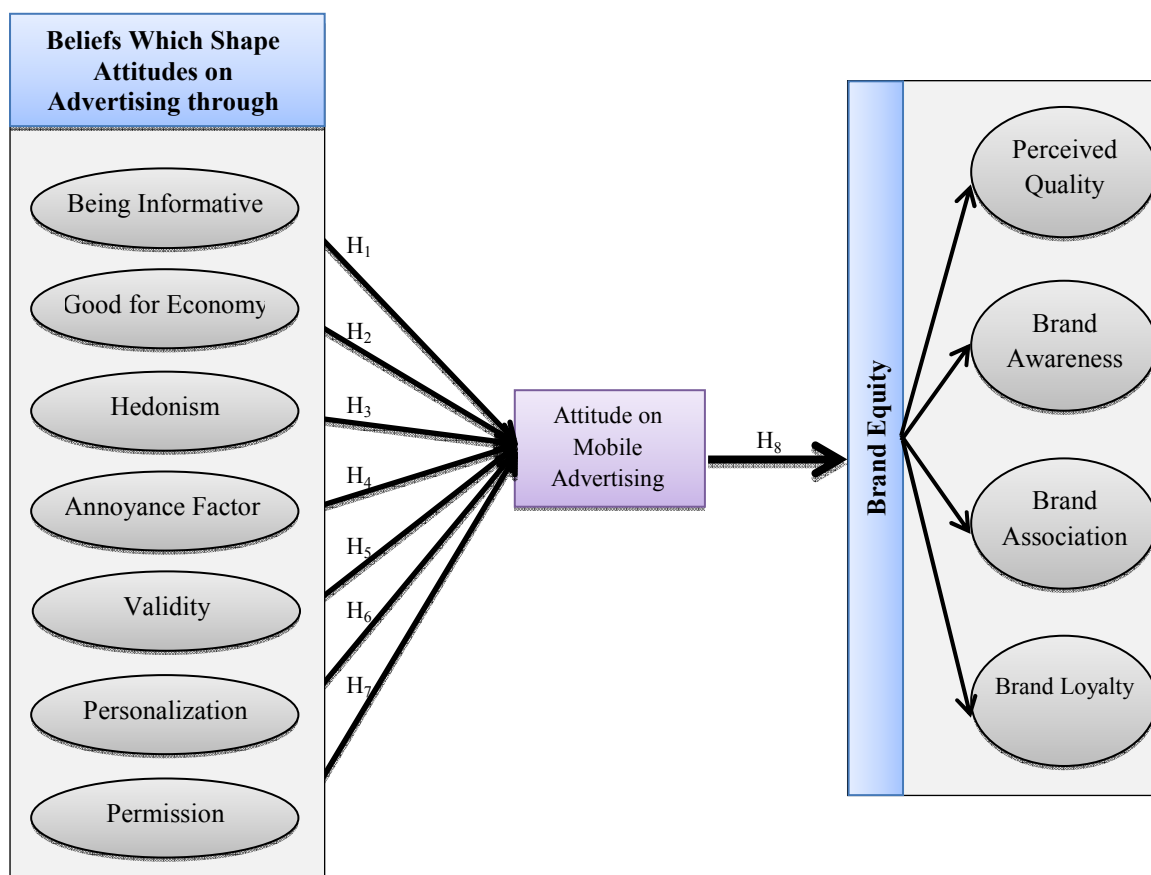
Figure 1: Conceptual Model of Brand Equity Based on Those Beliefs Which Shape Attitude on

8. Methodology

8.1. Research

In present study, we look for studying and identifying those beliefs which shape attitudes on Irancel mobile advertising and the impact of such factors on audiences' general attitude on advertising and brand equity. In terpums of rpose and the nature of the problem, this is an applied research and it is a survey in terms of data collection method. In terms of methodology, it is a descriptive study. To collect data, questionnaire tool is used. The questions were in Likert five – scale range (fully disagrees, disagree, relatively agree, agree and fully agree). The questionnaires were distributed among respondents.

8.2. Measures

Present study includes 9 variables namely "being informative", "good for economy", "hedonism", "annoyance factor", "Validity ", "permission", "personalization", "attitude on advertising", and "brand equity". All mentioned variables are measured by measuring variables.

To measure being informative, 3 items are used and there are 3 items for good for economy, 2 items for hedonism, 3 items for annoyance factor, 2 items for Validity , 2 items for permission and 2 items for personalization. To measure attitude on advertising, three items by Boyel et al (2011) and to measure brand equity, 14 items developed by Boyel et al (2011), Aaker (1991) and Kimpakorn and Tocquer (2010) are used. On this basis, research questionnaire consists of 34 items shown in table 1. Some demographic items were added to the end of the questionnaire and are explained the research findings sector.

8.3. Data analysis method

To analyze data and to test research hypotheses, Structural Equation Modeling (SEM) is used. SEM is a very strong multivariable analysis in multivariable regression category which helps author to test a set of regression equations simultaneously. To study model reliability, Chronbach's α Value and to measure model fitness and questionnaire validity, Confirmatory Factor Analysis (CFA) is used.

8.4. Research Statistical sample and community

Present study is conducted to study the impact of those beliefs that shape attitudes on Irancell mobile advertising on the attitude on advertising and brand equity of this telecommunication service company in Tehran Metropolitan. Since only the holders of Irancell SIM cards are exposed by mobile advertising, so, the statistical population of this research consists of all people in Tehran who are exposed by Irancell mobile advertising.

Since the statistical population of the research is indefinite, the volume of the research sample was considered as 384 by Kokaran relationship. To access considered sample and more random sampling method, the authors went in different times to various places in the city and asked their questions randomly. To keep a safe margin, 400 questionnaires were distributed of which 384 questionnaires were confirmed.

8.5. Questionnaire reliability and validity

To analyze internal structure of the questionnaire and validity of the results, CFA and Average Variance Extracted (AVE) are used. To this end, Standardized Factor Loading and AVE are computed for all items and indicators of variables shown in table 1. The validity is seen when all Standardized Factor Loading (SFL) relevant to each measuring variable and AVE relevant to each main variable are greater than 0.5 (Fornell and Larcker, 1981). As seen in table 1, the rates of Standardized Factor Loading and AVE are greater than 0.5. So, one can conclude that the questionnaire enjoys plausible validity. To measure reliability, Chronbach's α Value is used. For a plausible reliability, Chronbach's α Value should be greater than 0.7. All Chronbach's α Values shown in table 1 are greater than 0.7.

Table 1: the rates of Standardized Factor Loading, Chronbach's α Value and AVE

Items	SFL	Chronbach's α Value	AVE
Being informative		**0.73**	**0.52**
Irancell mobile advertising provides the traits of its products and services.	0.58		
Irancell mobile advertising helps me to aware (update) its brand products and services.	0.89		
	0.74	**0.71**	**0.61**
Irancell mobile advertising a good source of information about its brand products and services.	0.79		
Good for economy	0.63		
Irancell mobile advertising usually helps the economy of other countries.	0.89	**0.71**	**0.53**
Irancell mobile advertising usually helps local economy.			
Irancell mobile advertising helps to increase life standards.	0.60		
Hedonism	0.51	**0.76**	**0.56**
Irancell mobile advertising is often fun and amazing.			
Sometimes, Irancell mobile advertising is more enjoyable than the content of other advertising media.	0.83		
	0.69		
Annoyance factor	0.58	**0.74**	**0.53**
Irancell mobile advertising is often clamoring and creates annoyance.			
Irancell mobile advertising is often long.	0.68		
Irancell mobile advertising is ridiculous.	0.73	**0.70**	**0.56**
Validity			
Irancell mobile advertising is adaptable to its traits of its products and services.	0.80		
Irancell mobile advertising is believable.	0.83	**0.72**	**0.50**
Permission			
Irancell mobile advertising sender has already acquired my permission.	0.56		
Irancell mobile advertising has determined that how I can prevent receiving next advertisements.	0.77	**0.73**	**0.57**
Personalization	0.85		
Personally, I select Irancell mobile advertising.	0.78		
Irancell mobile advertising relates to my necessary needs.	0.58	**0.72**	**0.50**
Attitude toward advertising			
Irancell mobile advertising is creative.	0.45		
Irancell mobile advertising is niche.	0.69		
Irancell mobile advertising is distinguished from its rivals (other telecommunication service firms).	0.56		
	0.67		
Brand equity	0.56		
Irancell supplies very high quality products and services.	0.75		
Irancell improves the quality of its products and services regularly.	0.83		
Irancell provides trustable products and services.	0.69		
Irancell provides products and services with excellent characteristics.	0.68		
When I think about telecommunication services, Irancell brand is one of the brands comes to my mind.	0.73		
	0.51		
Irancell brand is one I recognize it well.	0.83		
I can distinguish Irancell brand from the brands of its rivals.	0.53		
The reason of selecting Irancell brand is the type of its services.	0.45		

Always, I have a good experience in using Irancell products and services. Always, I remember the brand's attractive advertising. Upon hearing the name of Irancell, I remember its logo in my mind. I am loyal to Irancell. In telecommunication service industry, Irancell is my first choice. Because of Irancell products and services, I will not buy the products and services of other companies.	Total (0.87)	

9. Findings

9.1. Research descriptive findings

For better identification of the nature of the used population in this study and more familiarity with research variables, it is necessary to describe statistical data before analyzing them. As mentioned, in present study, 384 respondents were studied of whom 139 were male and 245 were female. Additionally, 222 individuals were less than 25 years – old, 130 were between 25 – 45 years – old and 32 were over 45. In terms of education, 35 were less than high school diploma, 145 individuals had high school diploma, 88 had associate of arts, 88 had bachelors' and 28 had masters' and higher degrees. The results of demographic data are depicted in table 2.

Table 2: research demographic data

Variable	Age	Quantity	%	Aggregated percentage
Sex	Male	139	36.19	36.19
	Female	245	65.81	100
Age	-25	222	57.81	57.81
	25 - 40	130	33.85	91.66
	+40	32	8.34	100
Education	Lower than Diploma	35	9.11	9.11
	Diploma	145	37.76	46.87
	Associate of Arts	88	22.91	69.78
	B. A.	88	22.91	92.69
	M. A. and higher	28	7.31	100

Meanwhile, descriptive data on independent and dependent variables are outlined in table 3. As seen, average, minimum, maximum and standard deviation of research variables are mentioned in below table.

Table 3: descriptive data on research variables

Research variables	Quantity	Minimum	Maximum	Average	Standard deviation
Being informative	384	1	4.69	3.1350	0.8741
Good for economy	384	1.28	5	2.6414	0.80312
Hedonism	384	1	4.60	3.0082	0/82142
Annoyance factor	384	1	5	2.680	0.85478
Validity	384	1	5	2.8600	0.75648
Personalization	384	1.25	5	2.8786	0.77206
Permission	384	1.5	5	2.5275	0.88405
Attitude on advertising	384	1	4.43	3.3668	0.97001
Brand equity	384	1.50	4.56	3.1488	0.69119

9.2. Model fitness test

To determine provided model fitness by CFA, various goodness of fit indicators are used as shown in table 4. Overall, each acquired indicator for model is not itself the reason of fit or unfit of the model; rather, such indicators should be described along with each other. Both X^2 and secondary fitness tests show that the model is adequately proper and they move toward the factors of the model and we focus on such factors. Table 4 indicates the most important indices and depicts that the model enjoy proper fitness. All indices indicate that the model is fit to observed data. Model fit indices show the appropriateness of measuring model since Chi 2 ratio on freedom degree is less than 3, RMSEA is less than 0.9 and other indices are also plausible. In other words, the overall model is significant and admirable.

Table 4: model goodness for fit		
Index	**Ratio**	**Allowed level**
$^2\chi$	1590	
df	1037	
χ^2/df	1.53	> 3
GFI	0.88	< 0.9
RMSEA	0.051	> 0.9
CFI	0.91	< 0.9
AGFI	0.82	8< 0.
NFI	0.91	< 0.9
NNFI	0.90	< 0.9

9.3. Testing model hypotheses

Initially, Pearson correlation ratio test was used to study the relations between the variables of each hypothesis. The results are shown in table 5. As seen, the relationship between attitude on advertising with such variables as product information, social role and image, hedonism, annoyance factor, good for economy and brand equity in

Table 5: the relationship between the variables of hypotheses

relations Indices	Correlation (R) coefficient	(Sig)	**Test result**
Being informative and attitude on advertising	0.345**	0.000	Significant relationship
Good for economy and attitude on advertising	0.143**	0.011	Significant relationship
Hedonism and attitude on advertising	0.396**	0.000	Significant relationship
Annoyance factor and attitude on advertising	-0.235**	0.014	Significant relationship
Validity and attitude on advertising	0.238**	0.000	Significant relationship
Personalization and attitude on advertising	0.143*	0.035	Significant relationship
Permission and attitude on advertising	0.116*	0.032	Significant relationship
Attitude on advertising and brand equity	0.673**	0.000	Significant relationship

*Significant in confidence level as 95%
**Significant in confidence level as 95%

confidence level as 99% and the relationship between attitude on advertising and such variables as materialism, falsity, reputation and popularity in confidence level as 95% are significant. Concerning the significance between the variables of research hypotheses, we test them:

The results of testing research hypotheses based on SEM are shown in table 6. As seen, based on t statistic, all hypotheses are confirmed. Hypotheses 1, 2, 3, 4, 6 and 8 are supported in confidence level as 99% and hypotheses 5 and 7 in confidence level as 95%. So, one can conclude that being informative, hedonism, good for economy, annoyance factor and personalization in confidence level as 99% and Validity and permission in confidence level as 95% impact on attitude toward mobile advertising significantly and Attitude toward advertising also impacts on brand equity in confidence level as 99%.

According to path ratios, one can conclude that the impact of such variables as being informative, good for economy, hedonism, Validity, personalization and permission on attitude toward mobile advertising and the impact of attitude mobile advertising on brand equity is linear, positive and straightforward; that is, one percent improvement in independent variables will increase dependent variables as one percent and vice versa. For instance, by one percent improvement in being informative variable, attitude toward advertising will be likely (99%) improved by 0.22. The impact of annoyance factor on attitude toward mobile advertising is linear, positive and direct; that is, increase in independent variable decreases dependent variable and vice versa. For example, by one percent decrease in annoyance factor, attitude toward mobile advertising will be likely (99%) improved by 0.14. so, this hypothesis is supported. The ratios of other hypotheses can be described similarly.

The amount of determined ratio regarding the impact of all beliefs on advertising is 0.56. It shows that independent variables namely being informative, good for economy, hedonism, Validity , personalization and

permission can forecast 56% of changes in attitude toward advertising dependent variable and remained 44% is due to forecasting error and it can include other influencing variables over attitude on advertising.

The amount of determined ratio regarding the impact of attitude toward advertising on brand equity is 0.22. It shows that attitude toward advertising can forecast 22% of changes in brand equity and remained 78% is due to forecasting error and it can include other influencing variables over brand equity.

Table 6: testing research hypotheses

Hypothesis / Indices	t	(β)	(r^2)	Result
1. the impact of being informative on attitude toward advertising	3.73*	220.		Confirmed
2. the impact of good for economy on attitude toward advertising	3.46*	710.		Confirmed
3. the impact of hedonism on attitude toward advertising	4.18**	0.25		Confirmed
4. the impact of annoyance factor on attitude toward advertising	3.45**	-40.1		Confirmed
5. the impact of validity on attitude toward advertising	2.76	0.17	0.56	Rejected
6. the impact of personalization on attitude toward advertising	3.63*	0.15		Confirmed
7. the impact of permission on attitude toward advertising	2.85*	-0.23		Confirmed
8. the impact of attitude toward advertising on brand equity	.757**	0.63	0.22	Confirmed

*Significant in confidence level as 95%
**Significant in confidence level as 95%

10. Discussion and conclusion

Today, audiences' confidence to advertising is highly decreased as the result of marketing efforts and people consider reputation as a tool to deceit them and to sell products of companies. Although advertising is one of the most tangible marketing activities with a long record and companies spend huge budgets with the hope of a miracle, such costs are wasted without any result since consumers are not trusting to advertising. Therefore, one should look for an initiative to attract consumers' trust to advertising. A guideline to campaign this challenge is to use a proper context and media for advertising. Advertising context is a channel for advertising through which customers are communicated and its influence over audiences will be also improved. A proper context for advertising which has highly grown in recent years is mobile. Due to its high penetration rate, replacing fixed phone and easy access e by all people, mobile is getting a very important advertising context for many companies. By improving audiences' attitude on advertising through mobile, companies' brand equity will be also developed. To this end, present research studied the impact of those beliefs which shape attitude toward mobile advertising on general attitude toward advertising and, consequently, the impact of attitude toward advertising on brand equity.

In present study, those beliefs that shape audiences' attitude on mobile advertising are initially studied and identified and then the impact of such beliefs on audiences' attitudes on advertising (not simply mobile advertising) of Irancell Telecommunication Service Company is measured. Finally, the impact of attitude toward advertising on brand equity is also measured. After studying existing literature, "being informative", "good for economy", "hedonism", "annoyance factor", "Validity", "personalization" and "permission" were identified as beliefs which shape attitude on mobile advertising and then the impact of these seven variables on attitude toward advertising were measured.

The results from analyzing collected data indicate that ""being informative", "good for economy", "hedonism", "annoyance factor", "Validity ", "personalization" and "permission" impact on audiences' general attitude on advertising significantly. "Annoyance factor" impacts negatively and "being informative", "hedonism", "validity" and "personalization" impact positively. Additionally, the results show that the impact of "attitude toward advertising" on "brand equity" is also significant. On this basis, one can conclude that by improving information and hedonism, weakening annoyance factors, sending advertisement for potential customers, permission before sending advertisements would make audiences' attitude toward mobile advertising more positive and such positive attitude toward advertising will lead into brand equity improvement and enhancement.

11. Recommendation

Concerning the findings of present study, following recommendations are provided to increase the impact of mobile advertising in promoting brand equity for marketers and advertising industry actors.

This study is conducted in Telecommunication service industry and only in Tehran. So it is necessary to test it in other industries and regions in order to extend its results. Second, identified beliefs have been able to clarify a few changes in attitude on advertising and there may be other influential beliefs which can increase the ability of clarifying and forecasting attitude on advertising and futures authors should identify them. Likewise, one can study customers' attitude toward varied media (Internet, TV, Radio, etc) and affecting factors on creating a positive attitude in such media.

Another recommendation is used methodology. In present study, quantitative methodology is used to measure and model mental structures (such as belief and attitude). It is proposed that other researchers use qualitative methods and techniques such as in-depth interviews, contributive observance and so on to model and theorize in this regard. Therefore, following recommendations are provided to idealize mobile advertising more:

1. To personalize advertisements based on customers' files by setting databases.
2. Messages should be relevant to customers' interests and needs and, if possible, their content and time should be determined by audiences.
3. Mobile advertising should involve information on new goods/services, price changes, etc.
4. Advertisement should be in brief and clear to prevent audiences' annoyance.
5. If possible, messages should carry scoffing contents, voice, video and music.

References
1. Aaker, D. A. & Bruzzone, D. E. (1981). "Viewer Perceptions of Prime-Time Television Advertising". Journal of Advertising Research, 21(5), PP. 15–23.
2. Aaker, D. A. (1991). "Managing Brand Equity, Capitalizing on the Value of Brand Name", New York: the Free Press.
3. Aaker, D.A., Bruzzone, D.E. (1985). "causes of irritation in Advertising" journal of marketing. Chicago. Vol. 49, iss. 2; p. 47
4. Aaker, D.A., Kumar, V., & Day, G.S. (2001)." Marketing Research" , 7th., john wiley Operations research,. & sons, New York 51(4), 509-518
5. Alwitt, L. F., & Prabhaker, P. R. (1992). "Functional and Beliefs Dimensions of Attitudes to Television Advertising: Implications for Copy testing". Journal of AdvertisingResearch, 32(5), PP. 30–42.
6. Andrews, J.C. (1989). "The Dimensionality of Beliefs toward Advertising in General". Journalof Advertising, 18(1), PP. 26–35.
7. Barutçu ,S. (2007). "Attitudes Towards Mobile Marketing Tools: A Study Of Turkish Consumers". Journal of Targeting, Measurement and Analysis for Marketing. London. Vol. 16, no. 1; p.26
8. Barwise, p., & strong, c. (2002). "permission-Based Mobile Advertising". Journal of Interactive Marketing, vol. 16. No. 1. 14-25.
9. Bauer, H.H., Barnes, S.J., Reichardt, T. & Neumann, M.M. (2005). "Driving consumer acceptance of mobile marketing: a theoretical framework and empirical study". Journal of Electronic Commerce Research, Vol. 6, No. 3. 181-192
10. Bauer, R.A., & Greyser, S.A. (1968). "Advertising in America: the Consumer View". Boston:Harvard University Press.
11. Bravo, R., Fraj, E. & Martinez, E. (2007). "Family as a Source of Consumer-Based Brand Equity", the Journal of Product and Brand Management, 16(3), PP. 188–99.
12. Buil, I., Chernatony, L. D. & Martinez, E. (2011). "Examining the Role of Advertising and Sales Promotions in Brand Equity Creation", Journal of Business Research,
13. Buil, I., Chernatony, L.D., & Martinez, E. (2008). "A cross-national validation of the consumer-based brand equity scale". Journal of Product & Brand Management, 17(6), 384-392.
14. Bulander, R. Decker, M. Schiefer, G. & Kolmel, B (2005). "Comparison Of Different Approaches For Mobile Advertising". Proceedings Of The 2nd IEEE International Workshop On Mobile Commerce And Services, July 19, 2005, Munich, Germany.
15. Burns, K.S. (2003). "Attitude toward the Online Advertising Format: A Reexamination of the Attitude toward the Ad Model in an Online Advertising Context". Unpublished Doctoral Dissertation, University of Florida, Gainesville.
16. Carroll, A., Barnes, S. J., Scornavacca, E., & fletcherf, K. (2007). "Consumer perceptions and Attitudes towards SMSAdvertising: recent Evidence from New Zealand .
17. Chaudhuri, A. & Holbrook B. M. (2001). "The Chain of Effects From Brand Trust and Brand Affects to Brand Performance: the Role of Brand Loyalty", Journal of Marketing, 65, PP. 81-93.
18. De Chernatony, L. (2010). "From Brand Vision to Brand Evaluation. The Strategic Process of Building integrated brands, From Brand Vision to Brand Evaluation", (Third Edition), PP. 81-110.
19. De Reyck, B; Degraeve, Z. (2003). "Broadcast Scheduling For Mobile Advertising", Operations Research, Vol: 51, No.4. 509-517

20. Ducoffe, R. H. (1996). "Advertising Value and Advertising on the Web". Journal of Advertising Research, 36(5), PP. 21–35.
21. Eagly, A. H., & Chaiken, S. (1998). "Attitude Structure and Function". In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), the Handbook of Social Psychology (Pp. 269–322).New York: McGraw-Hill.
22. Ferrazzi, K., Chen, J., & Li, Z. (2003). "Idea: playing Games with customers". Harvard business review. 81 (4), 21.
23. Fishbein, M. (1963). "An Investigation of the Relationships between Beliefs about an Object and the Attitude toward the Object". Human Relations, 16, PP. 233–240.
24. Fornell, C., & Larcker, D. F. (1981). "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error". Journal of Marketing Research, 18(Feb.), PP. 39–50.
25. Gallup organization. (1959). " Astudy of public attitudes toward Advertising". Princeton: Princeton university press.
26. Goldsmith, RE; Lafferty, BA; Newell, SJ. (2000). "The impact of corporate Credibility and Celebrity Credibility on Consumer Reaction to Advertisements and brands", Journal Of Advertising, Vol: 29, NO:3 . 43-54
27. Greyser, S. (1973). "Irritation In Advertising Journal of Advertising Research", New York: Vol. 13, Iss. 1; p. 3.
28. He, H. Li, Y. & Harris, L. (2011). "Social Identity Perspective on Brand Loyalty", Journal of Business Research, 65(5), PP. 648-657.
29. Kalakota, R., Robinson, M. (2002). "M-business: The Race to Mobility" .McGraw-Hill, New York.
30. Karjaluoto, H., Lehto, H., Leppaniemi, M., Mustonen, T. (2007). "Insights in to the Implementation Of MobileMarketing Campaigns", International Journal of Mobile marketing, VOL. 2 NO. 2.
31. Keller, K. L. & Lehmann, D. R. (2006). "Brands and Branding: Research Findings and Future Priorities", Marketing Science, 25(6), PP. 740–59.
32. Kimpakorn, N., & Tocquer, G. (2010). "Service Brand Equity and Employee-Based Brand Commitment", Journal of Service Marketing, 24(5), PP. 378-388.
33. Korgaonkar, P. K., Karson, E. J., & Akaah, I. (1997). "Direct Marketing Advertising: the Assents, the Dissents, and the Ambivalent", Journal of Advertising Research, 37, PP.41–55.
34. Kotler, Philip & Keller, Kevin Lane., (2010), " Marketing Management", 14 Edition, New York: Prentice Hall.
35. Leather, P , McKechnie, S , Amirkhanian, M. "The Importance Of Likeability As A Measure Of Television Advertising Effectiveness . International Journal of advertising. Eastbourne: Vol. 13, Iss. 3; p. 265.
36. Lyberger, M. R., & Mccarthy, L. (2001). "An Analysis of Volume Consumption, Consumer Interest and Perceptions of Sport Sponsorship as They Relate to the Super Bowl", International Journal of Sports Marketing and Sponsorship, 3(4), PP. 429–448.
37. Mackenzie, S. B. , Lutz, R. J. (1989). "An Emprical Examiniation of the structural antecedents of attitude toward the Ad in an advertising pretesting context". Journal of marketing, 53 (2), 48-65.
38. Martínez, E. Montaner, E. & Pina, J. M. (2009). "Brand Extension Feedback: the Role of Advertising", Journal of Business Research, 62(3), PP. 305–313.
39. Michael, A., Salter, B. (2006). "Mobile marketing: Achieving competitive advantage through Wireless Technology", Elsevier Ltd, Oxford, United Kingdom.
40. MMA UK. (2003). "MMA Code for responsible mobile marketing. A code of conduct and guidelines to best practice". www.mmaglobal.co.uk.
41. Muehling, D.D. (1987). "An Investigation of Factors Underlying Attitude toward Advertisingin General", Journal of Advertising, 16(1), PP. 32–40.
42. Muk, Alexander. (2007), "Consumers' Intentions to Opt in to SMS Advertising: A Cross-National Study of Young Americans and Koreans", International Journal of Advertising, 26, 2, pp.177-198.
43. Phau, Ian. And Teah, Min (2009), "Young Consumer's Motives for using SMS and Perceptions towards SMS advertising", direct Marketing: An International Journal, 3, 2, pp. 97-108.
44. Pollay, R. W., & Mittal, B. (1993). "Here's the Beef: Factors, Determinants, and Segments in Consumer Criticism of Advertising", Journal of Marketing, 57(3), PP. 99–114.
45. Pousttchi, K., Wiedemann, D.G. (2006). "Contribution to theory building for mobile Marketing: CategorizingMobile Marketing Campaigns through Case Study Research". Proceedings of the International Conference on Mobile Business. Copenhagen, Denmark.
46. Pyun, D. Y. & James, J. D. (2009). "Enhancing Advertising Communications: Developing A Model of Beliefs About Advertising Through Sport", International Journal of Sport Communication, 2, PP. 1-20.
47. Pyun, D. Y. & James, J. D. (2011). "Attitude toward Advertising through Sport: a Theoretical Framework", Sport Management Review, 14, PP. 33–41.
48. Richards, j., Curran, c. (2002). "Oracles on advertising: searching for a definition". Journal of advertising, vol. XXXI, no. 2, 63-77

49. Rittippant, Nattharika., Witthayawarakul, Jedsada., Limpiti, Patchrabhon. and Lertdejdecha, Nathadej. (2009), "Consumers' Perception of theEffectiveness of Short Message Service (SMS) and Multimedia Message Service (MMS) as Marketing Tools", Proceedings of World Academy of Science, Engineering and Technology, 41, pp.815-821.

50. saadeghvaziri, F, khodadad hosseini, H (2011). Mobile advertising: An investigation of factors creating positive attitude_in Iranian customers, African Journal of Business Management Vol. 5(2), pp. 394-404, 18 January, 2011

51. Sahin, A., Zehir, C. & Kitapaci, H. (2011). "the Effects of Brand Experiences, Trust and Satisfaction on Building Brand Loyalty; an Empirical Research on Global Brands", Procedia Social and Behavioral Sciences 24, PP. 1288–1301.

52. Salo, j., Tahtinen, j. (2005). "retailer use of permission-based mobile advertising" in: advance in electronic marketing, Hershey: idea group publishing. 139-155.

53. Schlosser, A. E., Shavitt, S., & Kanfer, A. (1999). "Survey of Internet Users' Attitudes toward Internet Advertising", Journal of Interactive Marketing, 13(3), PP. 34–54.

54. Stotlar, D. K., & Bennett, C. A. (2000). "An Analysis of In-Game Advertising for NCAA Basketball", the Cyber-Journal of Sport Marketing 4(1).

55. Tsang, Melody M., Ho, Shu-Chun. And Liang, Ting-Peng. (2004), "Consumer Attitudes Toward Mobile Advertising: An Empirical Study", International Journal of Electronic Commerce, 8, 3,pp. 65–78.

56. Turley, L., & Shannon, J. (2000). "The Impact of Effectiveness of Advertisements in a Sports Arena", Journal of Service Marketing, 14(4), 323–336.

57. Unal, Sevtap., Erics, Aysel. And Keser, Ercan (2011), "Attitudes towards Mobile Advertising", Procedia Social and Behavioral Sciences, 24, pp. 361-37.

58. Wells, W.D., Burnett, J., & Moriarty, S. (2000). |Advertising: Principles and Practice", Upper Saddle River, NJ: Prentice Hall.

59. Wong, Mandy M.T. and Tang, Esther P.Y. (2008), "Consumers' Attitudes Towards MobileAdvertising: The Role of Permission", Review of Business Research, 8, 3, pp.181-187.

60. Xu, DJ. (2007). "The influence of personalization in affecting consumer attitudes Toward Mobile Advertising In China", Journal of Computer Information systems. Stillwater: Vol. 47, Iss. 2; p. 9.

61. Xu. DJ., Liao, SS., Li, QD. (2008). "Combining Emprical Exprimentation and modeling Techniques: A desighn research Approach for personalized mobile advertising application", decision support system. Vol: 44, Iss. 3.710-724

62. Yoo, B., Donthu, N. & Lee, S. (2000). "An Examination of Selected Marketing Mix Elements and Brand Equity", Journal of the Academy of Marketing Science, 28(2), PP. 195-211.

63. Yuan, S.-T., Tsao, Y.W. (2003). " A recommendation mechanism for contextualized mobile advertising". Expert systems with applications, VOL. 24.399-414.