

Prioritization of Factors Affecting Consumer attitude towards Mobile Advertisement: A Study of Pakistani Youth

Irfan Haider

Department of Business Administration, University of Sargodha, Sargodha, Pakistan

Abstract: *Corporations are working under changing environment. To cope with these changes marketers are continuously involve in finding new ways to communicate their products and services. People have too many choices and too less time so communication becomes very critical. Changes in technology open a new door as mobile devices are common now days. Mobile advertisement is the most attractive channel to reach much targeted consumers. Mobile phones help marketers to directly communicate marketing campaigns with the potential customers regardless of geographical boundaries. Marketing through mobile devices is a key media to overcome clutter and to build personal relations with the customers. Mobile advertisement supports one-to-one marketing, personalized marketing and relationship marketing. The usage rate of cellular devices is increasing dramatically over the decades. Today even average income and some low income people use cell phones as a means of communication and the rate will increase with the passage of time. This shows how important this media is for communication. This research is conducted on mobile advertising because it has great impact on the performance of business. In this study, we scrutinize the attitudes of customers of Sargodha city (Pakistan) towards mobile advertising applications. We initiate and launch mobile message advertising applications as companies knows the importance of this channel in close to future and when companies devote more in adopting and mounting mobile media as a channel of communication. More precisely in this study we examine different factors that affect consumer attitude towards mobile advertising. A set of 200 questionnaires was distributed among respondents of Sargodha city in a survey. The results revealed that message contents of advertisement strongly affect consumer attitude towards mobile advertising.*

Keywords: Advertisement, Credibility, mobile advertising attitude, Informativeness, Mobile advertisement (MA), Entertainment, Irritation.

1. Introduction

Technological innovations and new tactics of marketing have altered advertising dramatically over time (Richards and Curran, 2002). Traditional Marketing promotional tools include advertisement, publicity, public relation and face to face marketing. Strauss and Frost (2001, page.220) concluded that, marketers can use these tools as different components of their e-marketing strategies. Rapid penetration of internet and wireless devices has created mobiles a new media for advertising and marketers are keen to take advantage of that channel. The extension of mobile devices is increasing in Pakistan on a huge rate. According to Pakistan tele-communication Authority, Pakistan have 125 million mobile users and its penetration is rapidly increasing. The usage of SMS/MMS has a high growth rate as it provides a new media for marketers to interact with the customers. This shows the importance of mobile advertisement as a new communication channel. Now a day's mobile advertisement is an integral part of companies promotional mix strategies. Several researchers founded numerous factors affecting consumer attitude towards mobile advertisement among western countries [1,2,3]. Tsang et al. (2004) founded that entertainment, informativeness and credibility has positive impact on consumer attitude towards mobile advertisement while irritation negatively influence consumer advertising attitude. The study of Waladt and Colleagues reported that African youth has pessimistic attitude towards mobile advertisement while other factors has significantly correlated. The study of Chowdhury et al. (2006) conducted in Bangladesh, concluded that only perceived credibility has positive impact

on consumer attitude while other factors have insignificant correlation with the consumer attitude towards mobile ad. These studies shows that researches take different factors and conclude different results based on selected factors. These at hand studies motivated us to capture previous researchers pertaining factors in this research. The focus of our study is to highlight factors that affect mobile advertising attitude in Pakistani consumers. Marketers can take advantage of this study to better strategies marketing programs by understanding these factors. The other implication of our study is to highlight importance of understanding mobile advertising attitude and open a door for marketer for investment by understanding mobile applications. The sequence of our research paper is divided into four parts: (1) The author briefly explain the relative importance and developments of mobile advertisement (2) The proposed operational framework and research items based on previous literature (3) Research methodology to check the relationship between dependent and independent variables. (4) Author present research findings and discuss practical implications of those findings. Further we express boundaries of research and recommend future directions. The main objectives of this research are:

- To investigate consumer attitude towards mobile advertising.
- To judge the importance of cellular phones as a channel of communication in marketing.
- To identify key factors that influence consumer attitude towards mobile advertisement in Sargodha.
- To assist e-marketers by providing different factors to shape a message effectively.

2. Literature Review

2.1 Mobile Market

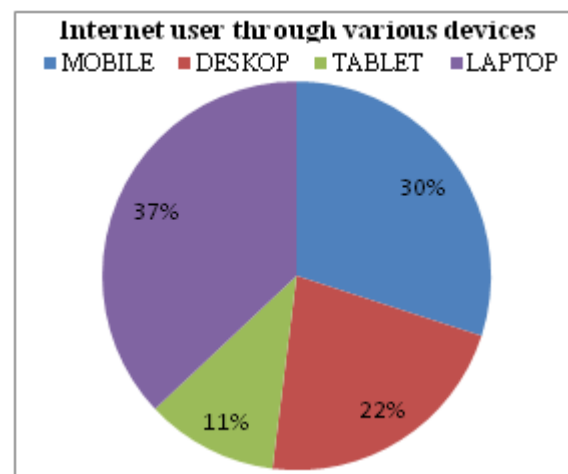
The presented cellular phones are the outcome of expansion in radio technology that on track in the late 1800s. Marconi research is the central figure in the radio-based technology (Farley, 2003). In 1876, a remarkable progress was observed in the ground of technology as land-line phones were invented that give new interface in the tangible form (Katz & Aakhus, 2002). The era of 19th century was observed as technological breakthrough time period. The efforts were observed in the field of technology as fixed telephones were emerged but the invention of wireless-phones was most dominating in this era. The first mobile phone was used by Swedish in 1946 for official use and called it as "portable cell-phone". The first cell phone was manufactured by Motorola Company in 1983 (cited at: www.tech-faq.com). Mobile usage penetration rate was increased with the passage of time. Literature shows that after the discovery of cellular phones there were 1 billion users of this technology within 20 years but the interesting thing is that one billion users are accumulated just in 40 months (cited at: www.Mobilephoneviews.org.com). According to one survey in 2011 there were six billion mobile subscriptions which are 87% of entire world's population. Consequently, the mobile subscription rate in 2009 was 4 billion and in 2010 it was 5 billion that shows a tremendous acceptance of this technology. In BEM'S markets (India, China) the demand for cell phones is escalating. At the end of 2011, in developing countries the mobile subscription rate was 76% which was 79% now. Africa has lowest mobile subscription rate as 53% in the world (cited at: www.mobithinking.com). The portio study on excellent free mobile fact book (2012) concluded that the rate of mobile subscription may reach to 6.5 billion in 2012 and may increase up to 6.9 billion, 8 billion at the end of 2013 and 2018. The number of mobile phone subscription has reached 4 billion all over the earth and estimated that it may reach up to 6 billion in 2013 (Mika, 2009). These evidence shows that how important this sectors for a marketer to use as a channel for communicating with the consumers.

2.2 Pakistan Mobile Market and Use:

In Asian business markets, mobile industry has intense future. In the ranking, Pakistan holds 8th position in cellular market. Pakistan has 119,860,799 mobile phone users and overall population is 178,854,781. It means 68.60% of population is using cellular phones (cited at: www.wikipedia.org.com). According to one survey, 44% people use mobile phones for messaging, 9% users use mobile phones for watching videos and 6% people use this technology for internet purpose (www.e.jang.com.pk). This indicates that text messaging is an important factor and potential segment for marketers to use it for advertising. The technological development starts after 1980 regarding mobile phones but the user rate is increasing day by day. The international recession in business cycle does not affect the mobile sector but in reaction consumers acquire cheaper cell phones (Medford, 2008).

2.3 Advertisement via Mobile phones

Kotler defines advertising as, the presentation and communication of goods and services to consumers which is done by an identified sponsor and also in paid form is called advertisement [page, 50]. The promotion of goods and services through interactive digital media such as wireless phones, cellular phones, gps, pda's and mobile portals is called advertisement via mobile phones [4]. Many terms are founded for mobile phones advertising such as wireless advertising (Krishnamurthy, 2003) advertising messaging through wireless media (petty, 2003). Overall, Mobile advertisement is done through SMS (De Ryeck, 2003). Mobile advertisement is a unique channel through which marketers can send customized message to consumers according to their attributes. Managing long term relationships with customers is the essence of marketing management (Houston, 1987) and mobile advertisement helps to achieve these goals. Mobile advertisement helps marketers in various ways because it allows interactive and reciprocal communication between targeted buyer and the marketer. The perceived worth of the advertising is advanced through dispatching audio, video clips, images for each consumer according to user belief, mind-set and character traits (Vetter 2002, p:188). According to the survey of International program of U.S census Bureau Pakistan ranks at 27 with total of 18,960,037 internet users out of which 30% people use internet on their cell phones. In future mobile advertisement is a good foundation of income for mobile operators (De zoysa, 2002). According to recent data collected by Pakistan Tele Communication Authority the country has 125 million mobile users 30% use internet on their mobiles which reflect its importance as a channel.



2.4 Attitude towards advertisement

The significance of attitude in marketing study dated back to 1960, as respondent inner assessment about any object or product. Consumer mind-set can be distinct as, a predilection tendency of human beings in the direction of anything (Fishbein). MacInnis & Hoyer in 1997 characterize attitude as, an individual moderately universal and lasting estimation of an entity, individual or deed. The concept of attitude is important for two reasons. First, alike to MacInnis & Hoyer description Ajzen and Fishbein (1975) states that consumer mind-set are often measured as, literally stable

and durable inclination for buyer to proceed in a certain mode. Therefore, attitude is a considerable forecaster of consumer overall behavior towards advertisement. Second, literature founded numerous hypothetical frameworks about attitude in social sciences particularly in the course of Fishbein research (1975) that have enthused attitudinal study in advertising. Kotler define attitude as, a person stable adverse and constructive beliefs, emotional judgments, and exploit tendency toward any idea or an object. Advertising attitude is an imperative concept because it links with the general attitude of people and can influence people's constructive feelings towards broad body of advertisement (El-adly 2010 & Mehta 2000). Zanot, although, founded that consumer mind-set in the direction of promotion is negative after 1970 [6, 7]. But early investigations assemble positive results of buyer mind-set in the direction of advertisement. A survey of Gallup founded that consumer has positive attitude towards advertisement and consider it as informative mechanism [8]. The study of Greyser and Beuer concluded that respondents have more positive attitude toward advertisement than negative [5].

2.5 Attitude towards Mobile advertisement

Advertising attitude can be distincited as, a cultured inclination of human beings to show positive or negative mental thoughts more consistently towards any idea or object (Lutz & Mackenzie, 1989). According to this context, attitude towards advertising is not limited to a specific ad or device but it covers the whole exposure of advertising broad institution. Overall, attitude can be distinct as, mental thoughts or phenomena of human beings of how they perceive environmental changes and also how they respond it (Kumar & Aker 1995). Greyser & Bauer in 1968 explores that there is a positive correlation between entertainment, enjoyment, credibility and attitude of respondents. They also investigate that respondents perceive advertising negatively which is against their attitude or annoying termed as irritation. Previous researcher's shows positive significant correlation between attitude and the factors affecting that attitude. See below table.

Table 1: Previous studies on mobile advertising

Study	Researcher Name	Findings
Consumer attitude towards advertisement through mobile devices (A study of Austrian users)	Herghirian, Parissa	Consumer has significant attitude Via mobile advertisement.
Prioritization of factors affecting consumer attitude towards MA (Emerical investigation among Iranian consumers)	Morvarid Haghighi javid, Abolfazl Tajzadeh Namin, Mahmood Noorai	Customer attitude towards MA is favorable that is consumers like mobile advertisement.
Consumer attitude towards MA. (A study of Dutuch youth)	Kristen Evelien kamphuis, Manishka chaya Ramnarain	Dutuch youth focus on originality, interactivity and entertainment as favorable as Compared to traditional advertising
Attitude of consumers towards MA and its Behavioral Implications	Ranaswamy Nandagopal, Huang Ha,	Consumer's have +ve attitude towards MA.

(A study of Indian consumers)	Rengasamy natarajan Balamurugan	
Empirical study of factors affecting Iranian consumer's attitude toward MA.	Faraz saadeghvaziri, Hamid khodadad Hosseini	Antecedents of mobile message ad have +ve effect but irritation factor has -ve effect on consumer
Notes: This literature emphasize that consumers are more conscious towards advertising through cell phones.		

3. Research Framework

The operational framework of this research is constructed from the previous researcher's frame works which they used in advertising in general and advertising through web [9, 10]. In 2001 Brackett and Carr constructs a model for mobile advertisement based on the Ducoffe model of advertising through internet. The model of Ducoffe (1996) consists of informativeness, entertainment and irritation as independent variables. This is furthermore the base of our study with an additional variable entitled as credibility. This is also the variable of advocating in general [10]. This framework was also used by previous researchers to check the respondent's attitude towards advertisement via mobile devices [11, 12]. In our study, Perceived entertainment, informativeness, credibility and irritation are used as independent variables while attitude towards advertisement via mobile devices is used as dependent variable. Brackett and Carr in their research highlight some demographic factors that also have an impact on consumer attitude towards mobile advertisement. These factors include gender, age, income level of respondents and occupation [9]. But we will focus on four factors which are shown in below fig.

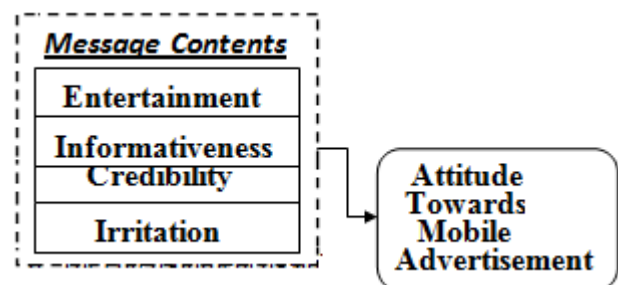


Figure 1: Operational Framework

Source: Tsang .et al., 2004

3.1 Entertainment

The stance of cheerfulness and pleasure in individuals is called entertainment. It plays a vital role in overall value of advertisement (Shavitt. et al., 1998). To capture the respondent favorable attention, message should be amusing and brief (Robinson. 2002). It is suggested that advertising message should be base on SMS. In future MMS is the right loom to capture positive intentions of consumers. MMS is the best approach to capture consumer favorable attentions as it contains video clips, images and sounds. It emerges as superlative approach because the mobile technologies shift from 2D to 3D (Pietz, 2007). Entertainment generate favorable stance and also increase the perceived value of advertisement (Haghirian, 2007). It is constructed that perceived entertainment is positively associated with the

worth of customary advertising (Ducoffe, 1995). We formulate hypothesis for entertainment as;

H1: The entertainment has positive impact on consumer attitude towards mobile advertisement.

3.2 Informativeness

The main focus of advertisement is to create awareness among people & also how the competing products and services are differ from each other (soberman, 2004). Providing information's about new products and new features among existing products and also information's about price changes is the essence of advertisement (Kotler & Keller, 2006). Informativeness is the key factor which has an immense impact on Bulgarian consumers and marketers should account the power of informativeness in advertisement (Petrovici & Marinov., 2007). The study of Pasadeos (1990) explores that, when consumer receive ads containing useful information than they feel less irritation and less avoidance of ad occurs. The research findings of Flores and Salaun concluded that, the advertisement which contain superiority information elicit positive response of consumer towards the ad. Perceived entertainment and informativeness are the imperative predictors of advertising value and are crucial to efficacy of advertising through web (Ducoffe. 1996). Entertainment is sturdily connected with the attitude towards advertising when done through customary media (Ducoffe, 1995). Thus it is suggested that informativeness is positively correlated with the attitude towards mobile advertisement. The purposed hypothesis for informativeness is;

H2: Informativeness positively influence consumer attitude towards mobile advertisement.

3.3 Credibility

Credibility in mobile advertisement is the important factor to increase the value of advertising. Credibility of advertisement refers to the customer acuity about the honesty and believability of advertisement (Mackenzie & Lutz, 1989). Perceived credibility is influenced by various factors but most prominently influenced by corporation own credibility (Goldsmith. et.al, 2000). Credibility also prejudiced by the medium through which the message is sent. Such as, the message on the internet has not as much of credibility unless the message is sent in printed form by a powerful brand. Perceived Credibility distincited as, " The believability of consumer about the advertisement that offerings of a company will satisfy their needs & wants and also has direct positive effect on respondents attitude towards any ad or brand" (Choi & Rifon., 2002). As the credibility of advertisement decreasing day by day marketers are looking for other innovative channels of communication. Conventional marketing provide solutions to lack of credibility by using time and attention technique but mobile marketing cope this challenge with a reduction of expenditures. As we have no empirical evidence about the credibility of mobile advertisement. We formulate hypothesis on the base of above findings as;

H3: Credibility positively influence consumer attitude towards mobile advertisement.

3.4 Irritation

Consumer experience of embarrassment being addressed by advertiser has an enormous impact on consumer attitude towards mobile advertisement (Haefner & Shavitt, 1998). Irritation can be distincited as the tactics used by marketers in advertisement that are annoying or against the consumer attitude or may insult consumer dignity. It is perceived negatively by customer or irritates consumer (Ducoffe., 1996 page.23). Advertisement through mobile devices provides a range of overlapping information's that confuses the consumer and may disturbing to consumer attitude (Stewart & palvou, 2002). Other characteristics of irritation in mobile advertisement include surplus messages that are annoying to consumer attitude (Dickinger et.al, 2004). The survey of Bauer and Greyser (1968) conducted on American consumer concluded that consumer shows negative response to advertisement that or annoyance or cause the irritation. The effect of irritation can be decreased by taking permission from consumer for advertisement (Permission Marketing). This permission based strategy can overcome irritation and solve privacy issues because of control that consumer want in advertisement. We can differentiate the traditional irritation with the permission based on factor that only send messages to those consumers that are keen to accept information about the product and services of a specific company (Tsang et al., 2004). Advertising is valuable only when it is permission based (De Reyck, 2003). Mobile ad should be brief to overcome the irritation effect (Scharl et al, 2005). The projected hypothesis based on preceding literature is as under;

H4: Irritation has negative effect on consumer attitude towards mobile advertisement.

4. Research Methodology

Methodology can be defined as, the reasoned array through which researcher plan is executed. On the other hand the relation connecting methodology and the scenery of research is distincited as research design. But depiction information from target respondents is called survey and it is the requirement of present study. Methodology contains different steps and these steps also include sub-steps. These steps assist researchers at every stage of the work and also help in evaluating the research. Methodology has a rational conception otherwise it is a straightforward prescription. Methodology has a chain of actions concerning to the tasks of scheme and it is generalized from a good practice. Generally, methodology works as guidelines not as a portrayal and that follow comprehensive structure (cited at: www.blurtit.com). The adoptive methodology for this research includes research design, population and data collection techniques, sampling procedures and finally analysis of data through SPSS.

4.1 Research design

The purpose of our study is to examine the different factors that affect consumer attitude towards mobile advertisement. This study is conducted through structured questionnaire thus called quantitative research in nature. Data collected from respondents is tested to check the validity. Statistical

tools and figures are used to analyses the data collected from respondents. Analysis is based on diagrams and statistical tools. This research is based on primary and secondary data collection but secondary data is used only for conceptualization and does not facilitate in achieving our research goals. Thus this study is based on collection of cross sectional primary data through questionnaire.

4.2 Data Collection

Data assemblage process of our study includes both prime and lesser facts and figures. Prime facts and figures are assembled through questionnaire. Secondary facts and figures encompass publications reconsider connecting to preceding investigations conducted on the identical topic.

4.3 Population

Component	Initial- Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.094	25.589	25.589	4.094	25.589	25.589	3.287	20.544	20.544
2	1.851	11.571	37.16	1.851	11.571	37.16	1.843	11.516	32.06
3	1.412	8.828	45.988	1.412	8.828	45.988	1.816	11.348	43.408
4	1.219	7.618	53.605	1.219	7.618	53.605	1.395	8.72	52.128
5	1.092	6.823	60.429	1.092	6.823	60.429	1.328	8.301	60.429
6	0.975	6.094	66.522						
7	0.81	5.061	71.584						
8	0.76	4.747	76.331						
9	0.682	4.262	80.593						
10	0.632	3.952	84.545						
11	0.522	3.263	87.808						
12	0.478	2.988	90.795						
13	0.467	2.918	93.714						
14	0.359	2.241	95.955						
15	0.346	2.165	98.12						
16	0.301	1.88	100						

The widespread universe through which the sample is taken is called population (Reinard, 1994). According to Neuman (2007) a multiplicity of cases as of sample is taken by the researcher to depict it in operational framework is called population. In this cram the universe is both male and female students of university of Sargodha. The first phase of methodology is to decide on unit of analysis for further tasks. The unit of analysis for this study is the students of university of Sargodha who utilize mobile phones as a means of communication and for other purposes.

4.4 Methodology of sampling

Reliability of findings is the key purpose of every researcher that's why it is the need of researcher to choose the whole population for research. In contrast, the reality is different it is difficult to select the whole universe. Sampling consists of respondents who have the same characteristics as the overall population. Sampling is a very supportive tool for pretesting the items and other work (Wimmer & Dominick, 1983). The sampling methodology of this study is based on random sampling technique. The sample is selected from Sargodha city and the major requirement is that the respondent must have a cell phone and can use internet and be inherent in Sargodha city. Both female and male are selected form the population to overcome the criticism of gender imbalance. Sample contains both male and female of aging 18 to 25.

Primary data includes structured questionnaire contained information's regarding to variables shown in our frame work. The questionnaire also contained consumer personal information's relating to demo graph and behavioral intentions of consumers towards mobile advertisement. The collection of data is done through survey questionnaire but some questionnaire send through e-mail. This process includes (1) Designing questions on 5 points likert scale (2) distribution and filling of questionnaire through e-mail and using survey team. The data collected from respondents is stored in a file and held for further data analysis. A set of 200 questionnaire is distributed and only 150 are received confidently.

5. Data Analysis & Discussion

Statistical package for social sciences (SPSS, 20) tool is used for data analysis. SPSS is used for the analysis of quantitative data and also behavioral data.

5.1 Factor Analysis

Factor analysis is a statistical mechanism used to trim down the data. Factor analysis less moderate redundancy and repetition among a set of variables. The basic purpose of this analysis is to structure factors of variables which are independent of each other. Prior to come to the core analysis the factor analysis is ended to identify the factors that affect the consumer's attitude towards mobile advertising. Respondent scores are verified on Varimax rotation to crush multicollinearity and also to advance the reliability of data composed from respondents. Sixteen items are concentrated to five factors which explain 60.429% variance of inventive principles which is radiant captured.

Table 2: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.779
Bartlett's Test of Sphericity	Approx. Chi-Square	590.28
	Df	120
	Sig.	0

The table 2 indicates that KMO & Bartlett's test is experiential at (0.779) and that defeat the mandatory value of 0.50. This test shows that in our statistics there is no error of 0.779% and the left behind (0.221) may contains errors. From this test we explore that there is strong relationship between variables. It provides good foundation to proceed forward.

Table 2 shows the value of Approx. Chi Square test (590.281) that is more than the value of significance level (0.000). The value (0.000) signifies the rejection of all null hypotheses. The Extraction method for our study is Principal Component analysis, from which we observe that the Eigen value of each factor from factor 1 to 5 is diminishing as we expect (see below table).

From above table researcher observe that factor 1 has variance (4.094) which is 25.589% of overall variance. The variance of factor 2 records (1.851) which is 11.571% of the entire variance. Furthermore, factor 3, 4 record variance of (1.412) and (1.219) the total of 8.828% and 7.618% of entire variance respectively. The variance of factor 5 is (1.092) which is 6.823% of the total variance. The 16 items are reduced to 5 factors which accounts the cumulative variance of 60.429% which exceeds the required significance value of 60%. From above table researcher also indicates that all 5 factors have Eigen value greater than 1.000 (Eigen value>1.000). Factor 1 (Eigen value=4.094, Alpha α =0.828) Factor 2 (Eigen value=1.851, Alpha α =0.701) Factor 3 (Eigen value=1.412, Alpha α =0.64) Factor 4 (Eigen value=1.219, Alpha α =0.73) Factor 5 (Eigen value=1.092, Alpha α =0.648). High scores on all these factors indicate that these factors have strong significant relationship with each other.

Researchers face difficulty in seeing all the loaded values among unrotated factors. To overcome this difficulty and to make interpretation easy values below (0.4) are suppressed which is excellent as the mandatory level is (0.30).

Table 5: Factors Table

Factor 1:
V1: I feel that receiving MA is enjoyable and entertaining.
V2: I feel that receiving MA is pleasant.
V3: I feel receiving MA make me happy.
V4: MA is a source of happiness for me.
V5: When, I feel boring MA make me happy.
Factor 2:
V 17: I use MA as a reference for purchasing.
V 19: I use MA as first source when I go for shopping.
V 20: I feel MA helps me in understanding characteristics of products.
Factor 3:
V 6: I feel that MA is a good source for timely information.
V 8: MA provides me information about my products.
Factor 4:
V 12: I feel MA is irritating.
V 13: I feel that MA is almost everywhere.
V 14: Contents in MA are often annoying.
V 15: Contents in MA are against my attitude.
Factor 5:
V 25: I do not like MA.
V 28: I usually get depressed after receiving the message.

The components matrix is used to make factors. From factor table we visualize that 16 items of questionnaire are loaded on 5 factors. The items of independent variable entertainment are loaded on factor 1.

From component table, investigator visualize that items V1, V2, V3, V4, V5 are affiliated with the reliant variable mind-set and strongly effects buyer mind-set. This supports our hypothesis H1. The component 2 includes v17, v19, and v20. This displays that these items are powerfully associated with each other and support our hypothesis that credibility positively affect buyer attitude (H3) of MA. It means these factors have significant relationship with consumer attitude towards MA. The items (v6, v8) are loaded on factor 3 that support informativeness strongly effect consumer attitude of Mobile advertising (H2). From table 5 we also visualize that items v12, v13, v14, 15 are loaded on factor 4. It means these items of our variable irritation has strong association and support our hypothesis that irritation negatively influence consumer attitude of cellular phone advertisement (H4). Factor 5 includes v25, v28 items. It explains that these items of consumer attitude are associated with other items of independent variables. In this study 28 items are used and only 16 items are included and others are excluded. In table 5 components are laden according to their connection with the variables. General, coefficient is taken among the variables and connected standards according to the declarations moving the factor.

5.2 Regression Analysis

To investigate the assumption of serial correlation among residual values Durbin-Watson rule is used. It means the residual of one case is not related with other case. The Durbin-Watson rule suggests values ranges from 0 to 4. It is a general rule that if the value is 2 than the residuals are uncorrelated. A value close to 0 shows strong positive correlation while value 4 shows strong negative correlation. The below table shows the Durbin-Watson value of (1.873) for our study indicates that there is no serial correlation.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.293 ^a	0.086	0.06	0.78756	1.873

The table of ANOVA revealed under indicates that the model is consequence since the value is less than (0.05). As a result, there is a significance affiliation among the variables of our model. The dependent variable of this research is attitude of consumer towards MA.

ANOVA^a

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.425	4	2.106	3.396	.011 ^b
	Residual	89.935	145	0.62		
	Total	98.36	149			

Dependent Variable: Attitude

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.932	0.446		6.576	0
	Entertainment	0.863	0.087	0.125	1.376	0.001
	Informativeness	0.386	0.084	0.764	9.621	0
	Credibility	0.345	0.085	0.459	4.901	0.017
	Irritation	0.259	0.101	0.209	2.566	0.011

Dependent Variable: Attitude

The on top table indicates that there is a strong significance relationship among irritation and informativeness with consumer mobile advertising attitude and credibility also affects consumer attitude. The above coefficient table also indicates that entertainment have positive influence on consumer attitude as the sig value is (0.01) while it is less than significance level of 0.05. The perceived informativeness has sig value (0.000) and it defeats the standard value 0.05. Furthermore, consumer perceived credibility and irritation strongly effects consumer mobile advertising attitude as their significance values (0.17 and 0.11) are less than (0.05). The hypotheses H1 proves through evidence that entertainment has significant effect on consumer attitude towards MA as the β value is (0.863) and significance level is 0.01. This accepts the hypotheses of (Brackett & Carr, Ducoffe, 1996) that proves entertainment strongly influence consumer attitude towards web-advertisement. Informativeness strongly influence consumer attitude towards MA (H2) is proved as β value is (0.386) and sig level is (0.000). This is also proved by Stewart & Pavlou (2002). Our third hypotheses (H3) states that credibility strongly influence attitude of consumers towards the MA. This hypothesis is accepted as β value of credibility is (0.345) while sig level is (0.17) and it support Chi and Rifon's research work in 2002 suggest that credibility significantly effects attitude of consumers. It means consumer consider credibility as influencing factor. Hypothesis (H4) indicates that irritation has strong negative effect on consumer attitude of mobile advertising. This hypothesis is accepted as β value of irritation is (0.259) and sig level is (0.011) that defeats the standard level of (0.05). Same considerations of irritation also indicated by Ducoffe in 1995. It means perceived irritation can be offset by quality of message. These all results indicate that message contents have strong contingent effect on consumer attitude towards MA.

6. Concluded Remarks

The resolved remarks of on hand study paper contend that the antecedents of Cellular promotion message influence consumer attitude of MA and furthermore it include the last judgment of the investigator. In this study powerful efforts are putt up to explore the components effecting buyer attitude of MA in Sargodha. It was explore that almost youth in Pakistan uses mass media especially cell-phones devices. Overall, comparative analysis reveals that mobile phone industry a blurring sector for business. The analysis shows that people tend to accept mobile marketing at a favorable rate. In this regards, study findings fully support our hypothesis of interest. present study shows that people tend to accept MA as a source of information while it also

support that irritation is negatively influence consumer attitude of MA. The entertainment also has significance effect on respondent's attitude. The perceived credibility also has strong contingent effect on consumer attitude. The empirical evidence shows that antecedents of a mobile messages contents have strong effect on attitude of consumers in terms of mobile advertising. Hence this study helps managers to well design advertising campaigns through cell phones to achieve desired results.

References

- [1] Leek, S. & Christodoulides, G. (2009). Next-Generation mobile marketing: How young consumers react to Bluetooth-enabled advertising. *Journal of Advertising Research*, 49(1), 44-53.
- [2] Ma, J., Suntornpithug, N. & Karaatli, G. (2009). Mobile Advertising: Does it work for everyone? *International Journal of Mobile Marketing*, 4(2), 28-35.
- [3] Okazaki, S. (2009). The tactical use of mobile marketing: How adolescents' social networking can best shape brand extensions. *Journal of Advertising Research*, March, 12-26.
- [4] Xu, J. D. (2007). The influence of personalization in affecting consumer attitudes toward mobile advertising in China. *Journal of Computer Information Systems*, 47(2), 9-19.
- [5] Zanot, E.J. Public attitudes toward advertising. In H.H. Keith (ed.), *Advertising in a New Age: American Academy of Advertising Proceedings*. Provo, UT: American Academy of Advertising, 1981.
- [6] Zanot, E.J. Public attitudes toward advertising: The American experience. *International Journal of Advertising*, 13 (1984), 3-15.
- [7] Bauer, R.A., and Greyser, S. *Advertising in America: The Consumer View*. Boston: Harvard University, Graduate School of Business Administration, Division of Research, 1968.
- [8] Gallup Organization. *A Study of Public Attitudes Towards Advertising*. Princeton: Princeton University Press, 1959.
- [9] Brackett, LK. and Carr, BN. (2001). Cyberspace advertising vs. other media: consumer vs. mature student attitudes. *J. Advertising Res*, 41(5): 23-32.
- [10] MacKenzie, SB. and Lutz, RJ. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *J. Mkt*, 53(2): 48-65.
- [11] Haghiri, P., Madlberger, M., and Tanuskova, A. (2005). Increasing advertising value of mobile marketing – An empirical study of antecedents. Paper presented at the Proceedings of 38th Hawaii International Conference on System Sciences, 2005. Retrieved August 20, 2009 from IEEE database: 1-10.
- [12] Tsang, Melody M., Ho, Sh. Ch. and Liang, T. (2004). Consumer Attitude Toward Mobile Advertising: An Empirical study, *International Journal of Electronic commerce*, 8(3): 65-78.
- [13] Bauer, R. A. and S. A. Greyser (1968). *Advertising in America: The Consumer View*. Boston: Harvard University.
- [14] Brackett, L. K. and B. Carr, N. (2001). *Cyberspace Advertising vs. Other Media: Consumer vs. Mature*

- Student Attitudes. Journal of Advertising Research, 41(5), 23 - 32.
- [15] De Reyck, B. and Z. Degraeve (2003). Broadcast scheduling for mobile advertising. Operations Research, 51(4), 509-518.
- [16] DeZoysa, S. (2002). Mobile Advertising Needs to Get Personal. Telecommunications International, Feb 2002),
- [17] Dickinger, A., P. Haghirian, J. Murphy and A. Scharl (2004). An Investigation and Conceptual Model of SMS Marketing. 37th Hawaii International Conference on System Sciences (HICSS-38), 31.
- [18] Ducoffe, R. H. (1996). Advertising Value and Advertising on the Web. Journal of Advertising Research, 36(September/October), 21 - 36.
- [19] Goldsmith, R. E., B. A. Lafferty and S. J. Newell (2000). The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands. Journal of Advertising, 29(3), 43-54.
- [20] Kotler, P. (2003). Marketing Management. Upper Saddle River, New Jersey: Pearson Education.
- [21] Krishnamurthy, S. (2001). A Comprehensive Analysis of Permission Marketing. Journal of Computer Mediated Communication, 6(2), <http://www.ascusc.org/jcmc/vol6/7issue2/krishnamurthy.html>.
- [22] Petty, R. D. (2003). Wireless advertising messaging: Legal analysis and public policy issues. Journal of Public Policy & Marketing, 22(1), 71-82.
- [23] Mika, N. (2009, February). Number of mobile phone connections tops 4 Billion: PC Magazine.
- [24] PTA History, 2005, Pakistan Telecommunication Authority, Available from
- [25] http://pta.ires.com/index.php?cur_t=vnormal&option=com_content&task=view&id=3
- [26] 58&Itemid=320&bold=p [Accessed 12 April 2007]
- [27] Report of 30-Nation Study Indicates Meeting and Creating Information Needs of Young and Upscale Consumers Can be Instrumental to Growth of Wireless Internet.. Cellular Online, June 1, 2002.
- [28] Farley, T. 2003. "Mobile telephone history." <http://www.privateline.com/PCS/history.htm>. 22 Feb. 2003.
- [29] Katz, J. E. and Aakhus, M. 2002a. Introduction: framing the issues IN: Katz, J. E. and Aakhus, M. (eds.) Perpetual Contact: Mobile Communication, Private Talk, Public Performance. Cambridge: The Press Syndicate of the University of Cambridge.
- [30] Medford, C. (2008, November 18). Mobile phone industry to weather economic woes: Red Herring, 6.
- [31] Choi SM, Rifon NJ (2002). Antecedents and Consequences of Web Advertising Credibility: A Study of Consumer Response to Banner Advertisements. J. Interact. Advert., 3(1): 14-24.
- [32] Pakistan goes from 300,000 to 90 million cell phone users in under 8 years. Retrieved on January 11, 2011, from <http://www.techlahore.com/tag/mobile-penetration>. International Telecommunications Union (ITU) (2002), "Asia's Biggest Growth is Yet to Come: Telecommunications Epicentre Shifting to Asia-Pacific Region," Press Release, (December 2) [30]-<<http://www.itu.int/newsarchive/press-releases/2002/32.html>> (accessed on 6/24/2004).
- [33] www.gallup.com.pk/News/Media%20Cyberletter.pdf
- [34] www.mobithinking.com
- [35] History of cell phone. Retrieved on January 03, 2011, from <http://www.tech-faq.com/history-of-cell-phones.html>
- [36] <http://www.pta.gov.pk/index.php>
- [37] www.wikipedia.org.com

Author Profile



Irfan Haider was born in Layyah, Pakistan in 1989. He did his B.com IT and MBA Marketing (Continue) from university of Sargodha in 2011 and 2014 respectively. Currently, He is the student in Department of Business Administration in University of Sargodha, Pakistan. His area of interest is Marketing Research.