

SMS Messaging – A Mobile Marketing Medium

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ABSTRACT

The term "SMS" is used for both the user activity and all types of short text messaging in many parts of the world. SMS is also employed in direct marketing, known as SMS marketing. SMS advertising, which is an area of mobile commerce, is a form of advertising that targets users of handheld wireless devices such as mobile phones and Personal Digital Assistants (PDAs). With the increase usage of mobile technology in India, it is believed that SMS is the new advertising medium and behavior of the consumer need to be understood. But this study intends to relate several of these scattered opportunities and threat to give a coherent understanding of the factors leading to growth of mobile advertisement, and its attitude towards the advertisement, thereby trying to fill a gap in the existing literature in Indian markets context. Moreover, since this study concentrated only on SMS advertising, future research could focus on how consumers perceive the other possibilities offered by the mobile phone and followed by implications and suggestions of the study.

Keywords: SMS marketing; SMS advertising; Mobile marketing.

1.0 Introduction

SMS marketing can be more cost effective than other media as its main cost is buying cell phone numbers. This is necessary if a company fails to convince customers to “opt-in”, or give their permission to receive wireless advertising. According to Forrester Research, the price for 1,000 numbers can be as high as 30\$ in comparison to 1\$ for 1,000 e-mail addresses. According to experts, SMS’ effectiveness in reaching target groups helps justify this higher price. The demand for mobile devices – equipment such as cellphones, PDAs, and digital music players that are typically used on an anytime, anywhere basis without being connected by wires – and services that use these mobile devices (mobile services) is growing rapidly worldwide. Furthermore, mobile services such as global positioning system (GPS) navigation, mobile email, and text and video messaging are growing at a significant pace.

Formally, we define mobile marketing as the two-way or multi-way communication and promotion of an offer between a firm and its customers¹ using a mobile medium, device, or technology. Because it involves two-way or multi-way communication, mobile marketing is primarily interactive in nature, and could include mobile advertising, promotion, customer support, and other relationship-building activities. Such interactive marketing activities are becoming increasingly important in the changing business landscape (Ancarani and Shankar 2003; Bolton and Saxena-Iyer 2009; Deighton and Kornfeld 2009)ⁱ. Research on mobile commerce has primarily addressed the role of technology in facilitating the growth of transactions through mobile devices. However, research on mobile marketing is nascent. Existing research has yielded some insights, but these remain scattered across disciplines.

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To better understand mobile marketing, it is useful to briefly review the key characteristics of mobile media and devices, and to compare mobile and mass marketing. The mobile channel – the marketing channel involving mobile devices – is growing rapidly in the multichannel environment (Neslin and Shankar 2009)ⁱⁱ. All mobile devices incorporate one or more of the following capabilities: audio, text/data, and video. Furthermore, the following properties of mobile devices have key marketing implications.

2.0 SMS Advertising – A Part of Mobile Marketing

SMS advertising is a part of mobile marketing that utilizes the SMS technology. It allows marketers to send messages to consumers through the use of a mobile device (Zhang and Mao, 2008) and is considered as a form of one-to-one marketing (Xu, 2006/2007). It enables marketers to promote goods, services, and ideas through personalized, context driven and relevant messages that are sent directly to individual consumers (Rohm and Sultan, 2005; Grant and O'Donohoe, 2007; Xu, 2006/2007; Muk and Babin, 2006). SMS messaging system has been predominantly used as a communication tool between friends, family, and peers. However, businesses have effectively implemented SMS advertising to update their customers, and track people and parcels (Leung, 2007). Furthermore, SMS advertising has also prompted marketers to send coupons to consumer's mobile phones (Xu, 2006/2007; Varshney and Vetter, 2002). For example, consumer brands like Adidas, Coke, and Dunkin Donuts have already implemented and developed mobile marketing communication campaigns targeted at the youth market (Grant and O'Donohoe, 2007). In addition, SMS advertising is also commonly used to reinforce other traditional media such as broadcast and print media (Zhang and Mao, 2008).

3.0 Consumer Attitude toward SMS Advertisement in General

Attitudes are conventionally regarded as an indicator of the effectiveness of advertising (Jun and Lee, 2007). According to Fishbein and Ajzen (1975), an attitude towards an object is defined as an individual's internal evaluation based on his or her beliefs. Similarly, consumer attitudes towards SMS advertising can be determined by the values that they attribute to SMS advertising (Ducoffe, 1995). As suggested by Jun and Lee (2007), when consumers are provided with benefits such as entertainment and information, they will perceive advertising in a more favourable light. In addition, SMS advertising is found to be attention grabbing, a source of information, interesting, and interactive (Maneesoonthorn and Fortin, 2004; Lee et al., 2006).

While SMS advertising is identified to be a more effective medium to generate consumer response, young consumers hold increasingly negative attitudes towards advertising (Zanot, 1984; Tsang et al., 2004). This could be attributed to the accumulated past negative experiences (Muk and Babin, 2006). High frequency SMS users also want to have control of the types of SMS advertising that they receive. Consumers may choose to switch service providers or delete the SMS ads without reading them if they find such ads personally intrusive (Carroll et al., 2007). It is therefore crucial to examine if attitudes towards SMS advertising would discourage

SMS usage frequency. As such, attitudes towards SMS advertising could in fact affect the behavioral outcome of using SMS (Jun and Lee, 2007).

4.0 Factors to Willingness to Accept SMS Advertisement

The audience's trust to advertising messages can be investigated in two dimensions. First is the real confidence that the audience has about advertising claims being made in the short message

advertising that in many studies has been named as validity instead of the term trust. In the second, the audience's trust in SMS advertising means that short message advertising that the user has received does not contain any risk for him. Thus the existence of such media for advertising, marketers are interested to know what factors affecting the audience trust to this type of advertising.

The audience's trust to SMS advertising is affected directly through his perception of the advertiser's company reputation, perceived size of advertiser corporate, perceived trustworthiness of the advertiser corporate, perception of privacy and perceptions about risks and benefits derived from SMS advertising.

Audience perception of advertiser corporate reputation and size is important factor because this factor can help audience to trust the corporate and provide guarantees for the ability, integrity and goodwill of other corporate sectors. A company's reputation, which include the buyers believe that the seller of corporate product is honest and concerned about the customer needs (Jarvenpaa & Tractinsky, 2000). Several studies have shown that perceived corporate reputation is a determining factor in trust to internet shopping (Chen *et al.* 2002; Koufaris, 2004). When the perceived reputation of the company is positive, consumers will have more confident to company advertisement. Customer perceived size of company is customer perception about the size of advertiser Company. Then customers believe that larger company more understands their interest which acts to its promises to the consumer. Apparently consumers believe a large company provides services for them and they will support consumer need and will be able to compensate defect of products (Koufaris, 2004).

Jarvenpaa and Tractinsky (1999) stated that the company size and reputation are likely interaction because it is more likely that a larger companies remains in the business longer and the larger and most famous companies are more trusted. If a consumer believes that the ability and motivation of advertiser's company to deliver goods and services is consistent with the expected quality, it can be said that there is trust (Jarvenpaa & Tractinsky, 2000).

Perceived privacy is a kind of self-concept that a user has in system that maintain the privacy of personal information. Topic of privacy in e-commerce and mobile commerce will affect consumer buying behaviour (Furnell, 2004). Violations of consumer trust according to an invasion of privacy or misuse of personal information will have negative effect on willingness to buy company's products (Monuwe *et al.*, 2004).

Mobile commerce like traditional shopping has the risks and benefits. Although somebody avoid m-commerce because of its risks but also there are those who use it because of the benefits that they have received of ecommerce. Risk represents potential that there is in desired outcome when a person is exposed to a SMS advertising message. Perceived benefits show the audience believes that when he/she receive a SMS advertising, led to comfortable him/her. These benefits include greater convenience, saving time and spend less time to select the product or service.

5.0 Objectives of the Research Study

- To identify consumers' perception and effectiveness on SMS advertisement.
- To identify major user's of SMS advertising.
- To understand Motives and attitudes towards SMS advertising

6.0 Research Design of the Research Study

The research design of in this research study was descriptive one in nature considering its rationale' objectives, and hypothesis as well as, sources of information, sampling decisions, data analysis and interpretation as well as in view of results, findings and limitations of the research study.

7.0 Data Preparation and Analysis

7.1 Reliability

Reliability tests were applied to determine how strongly the attitudes of mobile user's were related to each other to composite score. All dimensions of the structured questionnaire related with measurement of SMS' advertisement perception, attitude and effectiveness of SMS advertisement were tested for selected products and services. The Cronbach's alpha was 0.867 for overall statements. It confirmed internal reliability of the scale. (Naresh K. Malhotra, 2007; G.C. Beri, 2008).

The summary of Cronbach's Alpha score for all criteria is given in Table number- 5.7 as follows

Table 5.10: Overall Results of Reliability Testing for Mobile User's Opinion on SMS Advertisement (Overall)

Sr No	STATEMENTS	CRONBACH'S ALPHA
1	I feel SMS advertisement interrupt my normal use of the Mobile phone.	0.626
2	I like getting SMS advertisement via mobile phone.	
3	I think getting advertisement through SMS is good.	
4	I think SMS advertisement is reliable.	
5	I can get useful information from SMS Advertisements.	
6	I feel comfortable to get SMS advt. is easy.	0.910
7	Receiving SMS advertising easy.	
8	SMS advertising is easy to read.	
9	Getting timely information from SMS advertising is easy.	
10	Learning from SMS message is easy.	
11	SMS advertisement is useful for daily life.	
12	SMS advertisement is informative.	
13	Receive SMS advertisement make shopping easier.	0.642
14	I use SMS advertisement as a reference for purchasing.	
15	SMS advertisement fun to use.	
16	SMS advertisement exciting and interesting.	0.8
17	I feel that SMS advertisement is pleasant.	
18	I feel SMS advertising is not boring.	
19	I like to take chances for SMS advertisement than other Adt Media.	
20	I like to experiment with new way of doing things.	
21	SMS Advertisement is good source of product information.	
22	SMS Advertisement help me decide what to buy.	0.901
23	SMS advertisement good source of information.	
24	SMS advertisement is cumbersome.	
25	SMS Advertisement is annoying me.	0.647
26	SMS Advertisement is irritating me.	
27	I think SMS advertisement is less innovative.	
28	I think SMS advertisement does not suit personal need.	
29	SMS advertisement relayed at wrong time.	
30	I clutter as a result of too many ads.	
31	SMS advertisement caused disturbance at work.	0.748
32	Its time consuming to go through SMS Ads.	
33	I recall brands advertise thorough SMS advertisement.	
34	I find SMS advertisement relevant.	
35	I feel irritated to get SMS advertisement.	
36	I benefit from SMS advertisement giving promotional announcements.	
37	I think SMS advertisement is convincing.	
38	I consider SMS advertising not silly.	
39	I welcome permission based SMS advertisement.	

40	I consider SMS advertising of instructive nature.	
41	I feel SMS advertisement give clear message.	
42	I think SMS advertisement is worth remembering.	
43	I think SMS advertisement is not easy to forget.	
44	I like to take advantage of SMS advertisement.	0.783
45	I would like to improve knowledge.	
46	Would like to use for special promotions.	
47	Invasion of personal space.	
48	Marketing related to promotional scheme, are more interesting.	
49	I am interested in participating in SMS advt.campaign.	
50	I will use text messages in future too.	
51	There is risk of misuse of personal data due to use of SMS advt. & advt. service.	0.890
52	I would like to share SMS advt. to my friends.	
Overall Reliability		.867

From the above table it has been found that overall reliability of all statements which measure attitude and perception toward SMS advertising is 0.867. Which is in range of $0.6 \leq \alpha \leq 0.9$ and good (Low-Stakes testing). Internal consistency interpretation shown in table to know meaning of Cronbach's alpha value and its internal consistency result interpretation.

Table 5.11: Cronbach's Alpha and Internal Consistency Interpretation

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.7 \leq \alpha < 0.9$	Good
$0.6 \leq \alpha < 0.7$	Acceptable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Table 5.12: Overall Result of Reliability for Selected Products / Services

	List of Products / Services	Cronbach's Alpha if Item Deleted
PRODUCTS	Book cinema/ theater tickets through SMS	.860
	Book Travel Tickets Through SMS Information	.859
	Buy Electronic Product :SMS Advt Information	.860
	Make Micropayment in shop or elsewhere	.860
	Received and read news through SMS	.860
	New collection of garment information through SMS	.858
	New Collection of watch information through SMS	.858
SERVICES	Entertainment & Lifestyle	.858
	Games, Downloads & Application	.858
	Social Networking	.861
	Mail & Messaging	.859
	Devotional	.860
	Health	.859
	News & Finance	.858
	Travel & Transportation	.858
	Caller Management Services	.859
	Access and use transaction services/account balance information through SMS Advt.	.860
	Insurance Service SMS Advt. Messages	.859
	Online Education course offered SMS Advt.	.857
Overall Reliability		.865

To know SMS advertisement perception and effectiveness on selected products and service. Researcher has selected most popular products and services which is advertise by SMS marketing medium. Researcher had carried out Factor analysis and to know which products / services very much like by respondents to extract products / services set. Reliability analysis for product and service as follows. Overall reliability is 0.865 which is indicates as good (Internal Consistency).

8.0 Limitations of the Study

One of the limitations of this study was lack of enough related literary items about SMS ads. Another limitation was verifying the best method to choose sample group and determining sample size. In Iran, there are no permitted SMS ads, so we could not examine the effect of permitted/not permitted SMS ads on attitudes. Mobile marketing -and as particular, SMS advertising- is in new initiated way and needs more academic and empirical researches. Accessing large range of mobile phone users was considered.

By design, the study is limited in its scope. The same study can be done by companies that launch SMS advertising, which have access to both advertised companies and consumers. Further, the variables omitted from this study and the relationships which provide in modified model are clear candidates for future investigations. This result could be studied further by looking into the effect of push and pull marketing strategies discussed earlier. Previous research seems to agree that both push and pull strategies are used in mobile marketing (Scharl 2005; Rettie 2005; Salmenkivi & Nyman, 2007). However, there has been contradicting results as to which strategy is more effective. Quah and Lim (2002) argue that push marketing will be the dominant form in mobile marketing since consumers do not have to ask for the information that they need. Instead useful content is provided to them automatically. It would be interesting to conduct further research concerning the attitudes of these two groups toward all advertising in general. This would reveal whether positive attitudes toward mobile advertising are related to positive attitudes toward all advertising in general or is there some unique variable related to mobile advertising which causes a positive attitude. Kover (1992) and Mehta's (1995, 2000) research suggested that attitude toward advertising in general is channel dependent. Therefore it would be interesting to study how attitude toward advertising in general differs between different channels and how the mobile channel is situated in this context. Moreover, since this study concentrated only on SMS advertising, future research could focus on how consumers perceive the other possibilities offered by the mobile phone.

9.0 Implications of the Study

- Seeking an understanding of mobile phone users' attitudes towards and behavioural responses to SMS ads from a use-and-gratification perspective will help advertisers to design SMS messages that mobile phone users do not feel intrusive.
- The theoretical contribution of this study lies in outlining the key factors that influence consumers' attitudes, perceptions, and adoption of mobile advertising.
- For mobile advertisers and marketers, such intervention can prove beneficial to increase the adoption and effectiveness of mobile advertising.
- The present findings have implications for both researchers and marketers. It would be interesting to know what the factors which contribute to create these negative attitudes toward mobile advertising and how we can change it.
- SMS-based mobile advertisements and the relationships among attitude, intention, and behaviour. As the empirical data show, the respondents held negative attitudes about receiving mobile ads.

This may have been because they found mobile ads irritating, given the personal, intimate nature of mobile phones. Their attitudes were favourable if advertisements were sent with permission. This implies that permission-based advertising may become a major mechanism in the mobile environment in the future.

10.0 Suggestions of the Study

- The study demonstrated that most types of misperceptions predicted perceived usefulness of mobile advertising.
- On the other hand, mobile marketers and advertisers can also create misperceptions (or perceptions) to encourage mobile advertising adoption by shaping what consumers view what will be the norms in society.
- For advertisers as well as media and marketing professionals, the managerial implications of this study are to help them better understand mechanisms and factors leading to more effective mobile advertising campaigns.
- For mobile marketers and advertisers, it is important to understand that mobile advertising is a personal communication medium that empowers them to engage consumers in a one-on-one relationship.
- If mobile advertising is conceptualized as a permission-based, it is thus important to ensure that mobile users will accept mobile advertising as expected.
- Introducing new mobile programmes which enables consumers to download movie previews on their cell phone and forward this content to other consumers for free. Such offers stimulate interest and knowledge in not only a mobile service innovation but also the studio's latest new movies.

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