

# **CUSTOMERS' ATTITUDE TOWARD SMS ADVERTISING: A STRATEGIC ANALYSIS ON MOBILE PHONE OPERATORS IN BANGLADESH**

**Md. Ibrahim Khalil, National University**

**Md. Khairul Alam Rasel, National University**

**Mst. Khadijatul Kobra, Daffodil International University**

**Farhana Noor, Daffodil International University**

**Nurul Mohammad Zayed, Daffodil International University**

## **ABSTRACT**

*The aim of the study is to bring out how customers react to the SMSs sent by the mobile phone operators and which factors influence their attitude toward SMS advertising activities by those operators to assist them formulate effective strategies to grab market. This study is descriptive in nature as the purpose of this research is to better understand the situation of SMS advertising activities of the operators and consequent response and perception of the targeted customers. To conduct this study, both primary and secondary data have been collected and analysed with Microsoft Excel and statistical tool. The result of this research revealed that most of the subscribers to the mobile phone operators perceive negatively with the long SMS and SMS at unusual time, and they become angry with the frequent SMS. It is also found that the subject matter of SMS, SMS in Bangla using English letter, voice or text SMS and credibility of SMS are not the important determinants of customers attitudes of the subscribers to the operators in Bangladesh. It is also recommended that prior to sending SMS; the operators should seek permission from their customers. This study will assist the mobile phone operators to take policy decisions regarding the SMS advertising.*

**Keywords:** SMS, Advertising, SMS Advertising, Media, Mobile Phone Operators, Customers' Attitude, Strategy Formulation.

## **INTRODUCTION**

In the 21<sup>st</sup> century, with the advancement of technology, the use of mobile devices is growing day by day all over the world. At the same time, the number of mobile subscribers is increasing with the same pace. Bangladesh is a country of more than 160 million people and there are 150.945 million mobile phone subscribers (BTRC, 2019a). In the last three years, the numbers of subscribers have been increased by about 19%. There are four mobile phone operators which are providing the services to the large number of subscribers maintain a good relationship with their customers through different media. SMS is one of the easiest and convenient way by which the operators can notify their services and other information to the subscribers with minimum cost. The subscribers sometimes become happy getting informed about the offers and services through SMS within least time. But most of the time they feel uncomfortable receiving irrelevant SMS and/or SMS at unusual time or frequent SMS (Small, 2015). Though the main purpose of the operators is to build up rapport with their customers, they

sometimes fail to achieve the ultimate goal and even it may produce downbeat results. In the financial year 2017-18, the total number of subscribers has been increased from 137.399 million to 150.945 million (BTRC, 2019a). In this country, the mobile phone subscribers include business persons, job holders, rural people, students, farmers etc. Because of the differing attitude of customers toward SMS advertising by the operators in Bangladesh, responses also differ. Therefore, it is mandatory to know the concrete attitudes of the subscribers towards the SMS they are receiving. Hence, in this study it was tried to find out how the subscribers accept the SMSs frequently sent by the mobile phone operators in Bangladesh considering time, geographic location, level in the society and other demographic information to articulate proper tactics so that benefits from SMS advertising can be attained properly (Ward, 2018).

## LITERATURE REVIEW

Communication is mainly a two-way process of connecting two or more participants. In the present world, people can have access to different services by using mobile phones. SMS is one of the common services provided by the mobile operators. This SMS is a kind of mobile advertising. Doherty (2014) opined SMS stands for “*Short Message Service*” which is a text or audio message sent to a receiver from a mobile phone. She further added that SMS can be used as marketing means for informing large number of customers about the available offer of a company very easily within a shortest possible time by using an online platform (Doherty, 2014). SMS is the easiest way of sending messages, news etc. to recipients. Businesses use the SMS services for their promotional activities. Businesses think that this helps them to maintain a good relationship with customers and thus increase their revenues. As a result they spend money for increasing promotional activities through SMS advertising. Business organizations spend huge amount of money for media advertising in which SMS advertising is one of them (Bose et al, 2010). The mobile operators in Bangladesh are also taking advantages of SMS advertising to build up a good relationship with customers. But for the SMS advertising, they need to incur little cost as there are only operating costs related to that advertising. Advertising is a marketing communication tool that may be in the form of audio or visual. Hence, advertising may be triggered by adopting any one or several of the following goals. “*Advertising is any paid-for communication overtly intended to inform and/or influence one or more people*” (Groucutt et al., 2004). Sometimes, it may be very expensive and it may not be more effective than personal communication by sales people (Kotler & Armstrong, 2010). SMS advertising is a well-known component of mobile marketing. James (2015) defined SMS marketing as a technique to circulate promotional messages to consumers by using a technique called permission-based text messaging. SMS advertising is so popular among all the mobile operators in Bangladesh because of the insignificant cost association of SMS. Hossan et al. (2015) rightly said that business people are highly attracted by SMS advertisement for promoting their brands and products because of its nature of being very much cost effective. Currently four mobile phone are operating their activities in Bangladesh i.e. Grameen Phone Ltd. (GP), RobiAxiata Limited (Robi) [airtel is independent product brand of Robi], Banglalink Digital Communication Limited (Banglalink) and Teletalk Bangladesh Ltd. (Teletalk). There are total 148.769 million subscribers in Bangladesh. Among the subscribers GP belong to 66.466 million, Robi 45.595 million, Banglalink 32.720 million and Teletalk 3.988 million (BTRC, 2019b). The mobile operators in Bangladesh are communicating with their customers through SMS. They send SMSs to the mobile devices about their promotional activities, news, awareness information etc. The research on SMS advertising is abundant but research on attitudes of the customers towards the SMS

advertising made by the mobile operators is very few. Therefore, there is huge need for the research to understand the attitudes of the customers on SMS advertising of the mobile operators in Bangladesh.

### Objectives

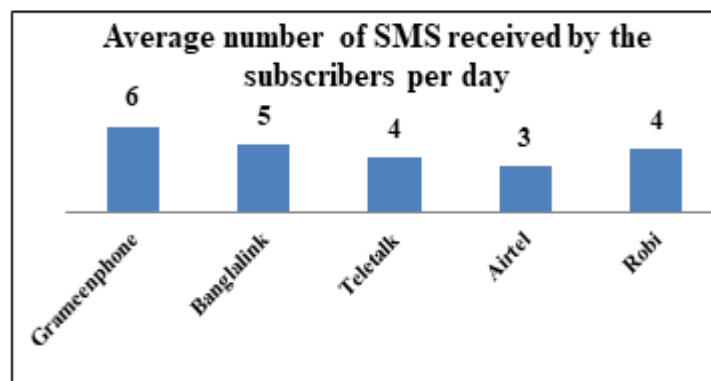
The broad objective of the study is to identify the customers' attitude toward SMS advertising of the mobile operators in Bangladesh. Few other specific objectives are: to bring out the correlations among the determining factors of customers' attitude toward SMS advertising of the mobile operators in Bangladesh, to find out significance of each determining factors and to determine the ways, modes and strategies to improve the customers' attitude toward SMS advertising performed by the mobile operators in Bangladesh.

## METHODOLOGY

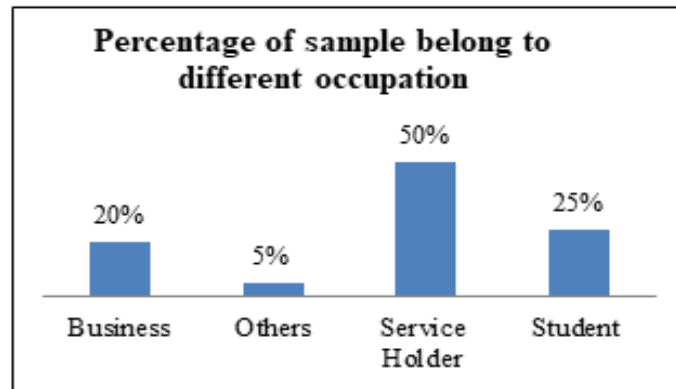
The study is descriptive in nature where primarily qualitative research was done to bring out variables contributing in determining customers' attitude toward SMS advertising by mobile phone operators in Bangladesh and then quantitative research was conducted to collect the data from a sufficient volume of customers to conduct statistical analysis. People who are educated and tech oriented as well as concerned in using mobile phone wisely are the population. The sample size is 195 subscribers of mobile phone operators residing across the country. The authors have used convenience sampling. Convenience samples are those samples which are the easiest member of the population from which information can be obtained (Kotler& Armstrong, 2010). From the pool of samples, rigorous judgment is applied in order to select the best possible member to collect desired data. Therefore, firstly the convenience sampling technique was used to make a pool of samples, and then judgment sampling technique was used to bring out prospective member out of the pool for collecting the information. A structured questionnaire was developed on five point Likert Scale ranging from Strongly Disagree (1) to Strongly Agree (5). Microsoft Excel and SPSS were used to analyze the data.

## RESULTS AND DISCUSSIONS

It is evident from the below Figure 1 that on an average, Grameenphone users receive 6 SMS per day. Likewise, on an average, Airtel subscribers receive 3 SMS per day.



**FIGURE 1**  
**AVERAGE NUMBER OF SMS RECEIVED**



**FIGURE 2**  
**SAMPLE'S OCCUPATION BY THE SUBSCRIBERS PER DAY**

Figure 2 shows that maximum of our respondents belong to service holder category. Students and Business man hold a representable majority.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.787 <sup>a</sup>	0.545	0.389	0.82413

The multiple correlations (Table 1) among the variables are specified by R and the strength of association in between dependent and independent variables is measured by  $R^2$ . The value of  $R^2$  in our study is 0.545 which indicates that there is a moderate association in between dependent and independent variables. This is to be mentioned when the value of  $R^2$  crosses 0.5 that suggests a moderate association in between dependent and independent variables. The value of  $R^2$  in our case indicates that 54.50% variation in the dependent variable is explained by independent variables.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	47.169	7	6.738	9.921	0.000 <sup>b</sup>
	Residual	89.653	132	0.679		
	Total	136.821	139			

The value of the F test is 9.921 (Table 2) which is significant at 0.05 levels. Therefore the null hypothesis is rejected. That is to say, the independent variables do not impact the dependent variable (customer attitude toward SMS advertising) is rejected.

Standardized coefficient (Table 3) shows the percentage of variation in the dependent variable caused by each independent variable. The above table signifies that SMS in unusual time, Frequent SMS and Long SMS are important determinant of customer attitude toward SMS advertising by the mobile operator. This is mainly because the standardized beta coefficient value of independent variables like SMS in unusual time, Frequent SMS and Long SMS are 0.384, 0.349 and 0.320 respectively which are significant at 5% level. Therefore, independent

variables like Subject matter of SMS, SMS in Bangla using English letters, Voice or text SMS, content of SMS are not important determinant of customer attitude toward SMS advertising.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.464	2.359		1.293	0.198
Subject matter of SMS	0.032	0.08	0.036	0.4	0.69
Frequent SMS	0.281	0.064	0.349	4.38	0
SMS in Bangla using English letter	-0.012	0.065	-0.014	-0.188	0.851
Long SMS	0.12	0.192	0.32	0.713	0.031
SMS in unusual time	0.406	0.085	0.384	4.778	0
Voice or Text SMS	0.125	0.094	0.129	1.326	0.187
Credibility of SMS	-0.081	0.084	-0.079	-0.955	0.341

However using the values from the coefficient table, we get the below mentioned regression model:

$$\begin{aligned}
 \text{Attitude} = & 3.464 + 0.036 (\text{Subject matter of SMS}) + 0.349 (\text{Frequent SMS}) \\
 & - 0.014 (\text{SMS in bangla using English letter}) + 0.320 (\text{Long SMS}) + 0.384 (\text{SMS in unusual time}) \\
 & + 0.129 (\text{Voice or Text SMS}) - 0.079 (\text{Credibility of SMS}) + e_i
 \end{aligned}$$

Variables	V1	V2	V3	V4	V5	V6	V7
V1	1	-0.317	-0.043	-0.071	-0.209	0.197	-0.181
V2	-0.317	1	0.17	0.379	0.417	0.221	0.496
V3	-0.043	0.17	1	0.349	0.275	0.145	0.107
V4	-0.071	0.379	0.349	1	0.599	0.192	0.187
V5	-0.209	0.417	0.275	0.599	1	0.338	0.307
V6	0.197	0.221	0.145	0.192	0.338	1	0.216
V7	-0.181	0.496	0.107	0.187	0.307	0.216	1

Source: Primary data analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.659
Bartlett's Test of Sphericity	Approx. Chi-Square	204.097
	df	21
	Sig.	0

The correlation matrix (Table 4) shown above specifies that variables are correlated with each other, so multicollinearity is a problem. Factor analysis can solve this problem. The approximate chi-square statistic is 206.097 with 21 degrees of freedom, which is significant at the 0.05 level. The value of KMO statistic is 0.659 (Table 5) which is greater than 0.5. Thus, the factor analysis may be considered a good technique for analysing the correlation matrix.

Factor	Eigenvalue	% of Variance	Cumulative %
1	2.587	36.958	36.958
2	1.261	18.013	54.971
3	1.021	14.592	69.563
4	0.736	10.514	80.077
5	0.606	8.66	88.737
6	0.47	6.709	95.446
7	0.319	4.554	100

Source: Primary data analysis

Three factors, whose eigenvalues (Table 6) are above 1, have contributed to make 69.563% variance of the total variance. Factor 1 contributes to make 36.958% variance of the total variance; factor 2 contributes to make 18.013% variance of the total variance and factor 3 contributes to make 14.592% variance of the total variance.

Factor	Eigenvalue	% of Variance	Cumulative %
1	2.587	36.958	36.958
2	1.261	18.013	54.971
3	1.021	14.592	69.563

In this study (Table 7), the authors have used eigenvalue and percentage of variance to decide the number of factors. In this method, factors having eigenvalue more than 1 are taken. Thus, there are three factors identified in the study. As there is only three factors whose eigenvalues are above 1.

	Factor		
	1	2	3
SMS in unusual time	0.800	0.107	-0.128
Frequent SMS	0.744	-0.304	0.227
Long SMS	0.210	0.721	-0.369
Credibility of SMS	-0.257	0.600	-0.509
Subject matter of SMS	-0.311	0.795	0.213
Voice or Text SMS	0.447	0.472	0.579
SMS in Bangla using English letter	0.466	0.282	0.539

The rotated matrix (Table 8) presents three types of rotated factors. In the above Table 8, it is evident that SMS in unusual time, Frequent SMS are correlated with factor 1, long SMS, Credibility of SMS and Subject matter of SMS with factor 2, finally Voice or text SMS and SMS in Bangla using English letter with factor 3. Factor 1 can be labelled as SMS in bulk volume, factor 2 as redundant subject explanation; finally factor 3 can be termed as formation of the SMS.

## CONCLUSIONS AND POLICY RECOMMENDATIONS

The most important issue is that the companies must know if the customers are eager to receive SMS and the types of SMS. They may follow different process, such as, conducting survey, receiving feedback, communicating when they visit customer centres etc. The mobile operators should ask for permission of the subscriber whether message should be sent to the subscriber or not. This could be one of the effective processes. In that case, a realistic approach might be to send them voice SMS and asking their permission about sending SMS to the subscriber. If the subscriber responds positively, only then mobile operators should send SMS. Responding negatively to a marketing stimulus does not mean that he/she highly dislike it. Human being has swinging mood. Sometimes mood determines which one to accept and which one to reject. Thereafter, operators may ask for permission to those subscribers who respond negatively one time. But operators have to make sure they again ask it with a certain interval. There are subscribers who respond positively while asking permission about sending SMS. In that case, mobile operators should also ask for tolerable limit of the subscriber. Mobile operators may ask for number of SMS and the subject matter of SMS that subscriber like to receive in a day or in a week and preferable time of sending SMS through voice SMS. Mobile operators can make a pool of subscribers who like to receive SMS at different manner within a week or within a day. However mobile operators should also remember that people do not like to receive Long SMS. Thereafter, operators should send precise SMS containing the real merit of it. However, more researches can be done by taking optimum number of sample size to represent accurate results. The researchers can also conduct research works based on the appropriate marketing strategies which may be adopted by the mobile phone operators.

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