# The Factors that Affect to the Overall Attitude toward SMS Advertising of Thai Mobile Phone Users

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Abstract—The aim of this study is to: (1) measure the overall attitudes of Thai mobile phone users toward SMS advertisements, and (2) identify demographic factors that affect the overall attitudes toward SMS advertisements of Thai mobile phone users. The sample in this study consists of 100 individuals who possess at least one mobile phone and who either live, work or study in Bangkok. Thirty-three respondents are male, while the other 67 respondents are female. The respondents are aged between 21 years and 45 years old. Convenient sampling technique was used in this study. The results of this study indicate that Thai mobile phone users in general hold negative attitudes toward SMS advertisements, and that negative attitudes prevailed in nearly all different demographic groups. The results also suggest that Thai mobile phone users find SMS advertisements irritating, but are indifferent as to whether SMS ads are informative, credible and entertaining as well.

**Keywords**—Credibility, consumer attitudes, SMS advertising, Thai mobile phone users.

#### I. Introduction

THE Short message service (SMS) is a communication I channel that allows the exchange of text messages of up to 160 characters, including spaces, between mobile phones and some other compatible devices. This is a popular technology with global usage growing steadily since it was introduced to the public. Despite the limitation in the amount of characters an SMS can contain, many of its characteristics still make SMS a promising advertising channel. To start with, SMS has the ability to reach a large audience, that is, anyone who has a mobile phone. Meanwhile, since users normally carry their mobile phones with them, SMS ads can reach audience almost anywhere and at anytime. Another advantage is that, knowing three signal towers nearest to a mobile phone user, advertisers can tell where the mobile phone user is and then send advertisements they think appropriate for the location. As mobile phone usage worldwide has been growing steadily, SMS ads are likely to reach an increasingly large number of people. While SMS has a high potential from the view of advertisers, the right execution is also needed in order to ensure SMS advertisements will yield desired results. Thus, it is necessary to know how consumers view SMS advertising. The aim of this study is to find out the attitudes toward SMS advertising of Thai mobile phone users [1].

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#### II. LITERATURE REVIEW

This section reviews the literature in three main areas, which are (1) Overview of Short Message Service (SMS), (2) Relevant Concepts, and (3) Relevant Research.

Overview of Short Message Service (SMS)

SMS technology was first introduced in 1991 as a part of the Global System for Mobile communications (GSM) standard, one of the second-generation mobile phone standards (2G) brought to the scene to replace their predecessors (1G) with improved security and the ability to provide non-voice services (such as mobile text messages). Although the SMS technology was first developed under the GSM standard, subscribers of other 2G mobile phone services are also capable of sending and receiving mobile text messages [2].

In Thailand, SMS technology was not available until the GSM standard arrived in 1994. Before that time, both mobile phone operators in Thailand, Advance Info Service (AIS) and Total Access Communication or TAC (now DTAC), offered mobile phone services under 1G technology. Thai mobile phone users were first able to send mobile text messages when AIS introduced its Digital GSM in October 1994 which was followed by TAC in the same year, launching its World phone 1800 GSM.

Mobile short messages are normally sent to and from mobile phones, but there are also other ways to send these messages. SMS may be sent from computers using special software or through websites that allow users to type messages on computer screens and send them to mobile phones. One can also send a mobile short message to a large number of receivers at the same time with help from a bulk SMS provider who will forward the message to all recipients on a given list, which could comprise of thousands of individuals.

Bulk SMS is usually used by organizations or companies as a means to communicate with the public or with their customers, such as when a company updates its customers about new services or products, or when governments send mobile text messages to alert their citizens of natural disasters like floods or earthquakes [3].

SMS ads are also considered bulk messages if they are sent to several receivers at the same time. Sometimes mobile phone users have to pay for the content to be delivered to them via SMS. Examples of this type of content are SMS news, updates on stock markets, horoscopes and sports results.

Application of SMS technology has become widespread nowadays. Some reality shows let viewers vote for their

favorite contestants via SMS. Many TV programs allow viewers to express their opinions by showing the messages sent in by viewers on TV screens. Some operators, such as credit card issuers and mobile phone carriers, use SMS to inform their customers about billing information. An example of a more advanced application is when Kasikorn Bank in 2008 launched a new service called ATM SIM, a service which allows bank transactions to be made via SMS [4].

# A. Relevant Research

The defined attitude toward advertising is as a "learned predisposition to respond in the consistently favorable or unfavorable manner to advertising" [6]. Several studies have been conducted on consumer attitudes toward advertising. The consumer attitudes towards advertising were found to be generally positive in early studies, but the trend later changed as consumers became overwhelmed with advertisements and advertisers used more aggressive approaches to compete for consumer attention.

Because of its high potential as a marketing tool, empirical studies on SMS advertising have become increasingly available. Most studies found consumer attitudes toward SMS advertising to be either negative or neutral. Interestingly, one study suggests that the attitude toward SMS advertising is more positive in a country where the telecom industry is more advanced. There were some research papers whose aims were to identify factors that affect the overall attitude toward SMS advertising. Based on a model proposed by Mobile advertising different stages of development, a cross-country comparison of consumer attitudes [10] found that the overall attitude towards SMS advertising was affected by its perceived entertainment, informativeness, credibility, and irritation. When similar studies were conducted in different populations, however, only some of these four factors were found to affect the overall attitudes toward SMS advertising

## B. Informativeness

Reference [7] defines ad informativeness as "the ability of ads to effectively convey and pass the information to the targeted consumers". To provide consumers with information is a key function of advertising, apart from persuading them to buy the products. The evaluation of spokesperson and vehicle source effects in advertising for current issues and research in advertising [6] define informative advertisements as those that provide consumers with information about the advertised products, such as prices, quality, availability, nutrition facts and guarantees or warrantees. The cell phone usage and advertising acceptance among college students' research [11] claims that one of the most important reason consumers would listen to advertisements is that ads provide them with information.

#### C. Entertainment

This refers to ad entertainment as "the reflection of whether an ad is perceived to be pleasant or likable" [11]. People's feeling of enjoyment associated with advertisements is claimed to play an important role in the overall attitudes toward them. Some suggest that entertaining ads are those that contain comedy, humor, memorable music, an intriguing storyline or exciting visual effects [6]. The literature review found that adding humor to advertising will enhance the response of consumers' in terms of brand recognition as well.

## D. Credibility

The credibility of advertising it means the positive recognize of the people regarding the fact of advertisement information about brand, product and services continued to emerge as the most reliable.

They suggest that advertisements will be perceived as credible if they come from reputable companies or organizations and do not contain exaggerated claims and some research define ad credibility as "the consumers' perception of the truthfulness and believability of advertising in general".[6] The corporate credibility plays an important role in consumers' reactions to advertisements. Ad credibility can also be increased by having experts or celebrities convey the messages.

### E. Irritation

Consumers' attitudes toward mobile advertising in an emerging market: An empirical study defines ad irritation as the "negative, impatient, and displeasing feeling of individual consumers caused by various forms of advertising stimuli" [6]. Ads are likely to be perceived as irritating when advertisers employ techniques that annoy, offend, insult, or are overly manipulative.

The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands summarized [8] that consumers would perceive ads as irritating if: 1) their content was untruthful, exaggerated, confusing, or insults the viewer's intelligence; 2) the ads were too loud, too long, or too large; and 3) consumers were exposed to too many ads or when the same ad appears too frequently. They also suggest that consumers would perceive ads as irritating if the ads interrupted them while they were pursuing their main goals. The consumer attitude toward mobile advertising in an emerging market summarized that ad irritation occurs when there was interference with one's privacy [6].

## F. Relevant Concepts

Two concepts that can be used to explain why consumer attitudes toward SMS advertisements are important are reviewed here.

## G. Theory of Reasoned Action

The theory of reasoned action proposes that the intention to perform a behavior is affected by: 1) the person's attitude toward that behavior, which is defined as beliefs about the consequences of performing the behavior multiplied by his or her valuation of these consequences; and 2) subjective norm, which refers to a combination of perceived expectations from relevant individuals or groups along with intentions to comply

with these expectations. To sum up, this theory suggests that people are likely to perform a particular behavior if they evaluate the behavior as positive and if they think their peers also value that behavior [8].

## H.Technology acceptance model

The Technology Acceptance Model (TAM) for cell phone usage and advertising acceptance among college students: a four-year analysis [11] tries to explain how users come to accept and use a technology. It suggests that when users are presented with a new technology, their decision about how and when they will use it is influenced by the technology's perceived usefulness and perceived ease of use. Perceived usefulness is defined as 'the degree to which a person believes that using a particular system would enhance his or her job performance'. The perceived ease-of-use is defined as 'the degree to which a person believes that using a particular system would be free from effort'. In conclusion, this model suggests that a new technology is likely to be accepted if users find it useful and easy to use [9].

#### III. METHODOLOGY

The instrument used in this study was a self-administered questionnaire that consisted of two parts containing a total of 26 questions. The first part of the questionnaire consisted of six questions inquiring into each respondent's gender, age, marital status, educational level, as well as occupation and monthly income. The second part asked the respondent to indicate his or her level of agreement with 20 statements using a 5-point Likert scale. This part was designed to find out the respondent's overall attitude toward SMS advertisements and how he or she viewed SMS advertisements in terms of their informativeness, credibility, entertainment and irritation. Four statements were provided for each aspect [10].

The research conceptual framework is shown in Fig. 1 below.

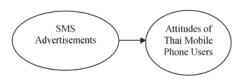


Fig. 1 Research Conceptual Framework

#### A. Data Analysis

The Statistical Package for Social Sciences (SPSS) program version 16.0 was used for data analysis in this study. Demographic data was analyzed using mainly frequency and percentage. The attitude scores on the Likert scale answers were analyzed using frequency, percentage and means.

## IV. FINDINGS

This part will present: 1) the demographic data of the respondents, 2) the respondents' attitudes toward SMS advertisements in terms of informativeness, credibility,

entertainment and irritation; and 3) the overall attitudes of respondents toward SMS advertisements.

#### B. Demographic Data

This part presents general information of the respondents, which are: gender, age, level of education, and occupation and monthly income [9].

TABLE I
FREQUENCY AND PERCENTAGE OF GENERAL INFORMATION

Gender	Frequency	Percentage
Male	33	33
Female	67	67
Total	100	100.0
Age	Frequency	Percentage
21-25	23	23
26-30	42	42
31-35	20	20
36-40	10	10
41-45	5	5
Total	100	100
Status	Frequency	Percentage
Single	90	90
Married	10	10
Total	100	100
Education	Frequency	Percentage
Educational Level	8	8
Below bachelor degree	67	67
Master degree	25	25
Doctorate degree	0	0
Total	100	100
Occupation	Frequency	Percentage
Business owner	2	2
Government Employee	6	6
Corporate Employee	78	78
State Enterprise Employee	2	2
Other	12	12
Total	100	100

The number of respondents in this study is 100. As shown in Table I, 33 respondents are male, while the other 67 respondents are female. Most respondents in this study (42%) are aged 26-30 years. The other 23% are aged 21-25 years, 20% are aged 31-35 years, and 10% are aged 36-40 years. The remaining 5% are aged 41-45 years. The average age is 29.8 years old (SD=5.5). Table I also shows that 90% of the respondents in this study are single, and the remaining 10% are married, while none of them are divorced or separated. Most of the respondents (67%) hold a bachelor degree, while 25% hold a master degree and 8% of the respondents have educational backgrounds below bachelor degree. Most of the respondents (78%) are corporate employees, while 6% of the respondents are government employees, and 2% are state enterprise employees and another 2% are business owners. The remaining 12% of respondents are either students or between jobs.

The results presented in Table II show the respondents' attitudes toward SMS advertisements in terms of their

informativeness. The results show that the respondents were undecided whether SMS contains essential details about the advertised products/services, as indicated by an average score of 3.12. For the following statements, the highest score was obtained when the respondents were asked if they thought SMS ads contained essential details about the advertised

products/services. The average score of 3.54 indicated that the respondents generally agreed with the statement. However, the respondents were undecided whether SMS ads provided them with information useful in making purchase decisions and generally found SMS ads irrelevant to them.

 ${\bf TABLE~II}$  Attitudes toward SMS Advertisement in Terms of Informativeness

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean
SMS ads contain essential details about the advertised products/services.	2	38	33	24	3	3.12
Most SMS ads are usually relevant to me.	1	9	34	43	13	2.42
SMS ads provide me with up-to-date information.	11	47	29	11	2	3.54
SMS ads provide me with information useful in making purchase decisions.	2	16	33	39	10	2.61

TABLE III
ATTITUDES TOWARD SMS ADVERTISEMENT IN TERMS OF CREDIBILITY

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean
SMS ads are credible	2	12	38	42	6	2.62
SMS ads contain reliable information	1	11	44	38	6	2.63
SMS ads provide me with truthful information without hiding some facts.	1	4	23	56	16	2.18
Most SMS ads come from credible product/service providers.	1	12	39	40	8	2.58

Table III shows the respondents' attitudes toward SMS advertisements in terms of their credibility. The results show that the respondents were undecided whether SMS ads were credible. For the following statements, the lowest score was obtained when the respondents were asked if they thought SMS ads provided them with truthful information without

hiding some facts. The average score of 2.18 indicated that the respondents generally disagreed with the statement. The respondents in general also disagreed that most SMS ads came from credible product/service providers, but were undecided whether SMS ads contained reliable information [14].

 $TABLE\ IV$   $Attitudes\ toward\ SMS\ Advertisement\ in\ Terms\ of\ Entertainment$ 

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean
Reading SMS ads is pleasing.	1	19	39	28	13	2.67
SMS ads usually contain humors.	1	18	45	25	11	2.73
SMS ads are fun to read.	0	12	50	27	11	2.63
Reading SMS ads is relaxing.	2	9	39	29	21	2.42

Table IV presents the results of the respondents' attitudes toward SMS advertisements in terms of their entertainment value. The average score of 2.67 indicated that the respondents were undecided whether reading SMS ads was pleasing. For the following statements, the respondents

disagree that reading SMS ads was relaxing as indicated by the average score of 2.42, the lowest score in the section. However, the respondents were undecided whether SMS ads usually contained humor and whether SMS ads were fun to read.

TABLE V
ATTITUDES TOWARD SMS ADVERTISEMENT IN TERMS OF IRRITATING

ATTITODES TOWARD SIND ADVERTISEMENT IN TERMS OF IRRITATING						
Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean
SMS ads are irritating	29	31	36	2	2	3.88
I am always disturbed by SMS ads.	25	38	31	3	3	3.79
I cannot concentrate on my works because of SMS ads.	27	45	25	1	2	3.94
My privacy is violated by SMS ads.	20	30	43	6	1	3.62

Table V presents the respondents' attitudes toward SMS advertisements in terms of their irritating characteristics. The respondents generally found SMS ads irritating, as indicated by the average score of 3.88. For the following statements, the

highest score was obtained when the respondents were asked whether they agreed that SMS ads made them unable to concentrate on their work. The average score of 3.94 indicated that the respondents generally agreed with the statement. The

respondents also agreed that they were always disturbed by and that their privacy is violated by SMS ads.

TABLE VI
OVERALL ATTITUDES TOWARD SMS ADVERTISING

Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean
I like SMS advertisement.	0	8	37	35	20	2.33
SMS ads are useful.	0	22	34	27	17	2.61
I am pleased to receive SMS ads.	0	11	37	32	20	2.39
I will be willing to receive SMS ads.	0	17	20	35	28	2.26

Table VI presents the respondents' overall attitudes toward SMS advertisements. The average score of 2.33 indicated that the respondents generally disliked SMS ads. The respondents were undecided whether SMS ads were useful, but the results showed that they were not pleased to receive them and would not be willing to receive SMS ads.

#### V. CONCLUSION

The results of the study of Thai mobile phone users towards SMS advertisements show that the overall attitude, in general, that they hold negative attitudes toward SMS advertisements [11]. The respondents were undecided whether SMS advertisements were useful. Most were not pleased to receive SMS advertisements and would not be willing to receive SMS advertisements in the future. With regard to perceived informativeness of **SMS** advertisements, respondents were undecided whether SMS advertisements were informative. They found most SMS ads to be irrelevant to them, but were undecided whether SMS advertisements provided them with information useful in making purchase However, respondents agreed that SMS advertisements provided them with up-to-date information. On the perceived credibility of SMS advertisements, the respondents were also undecided on whether SMS advertisements were credible. The respondents were also undecided whether the SMS ads contained reliable information, but found that SMS advertisements usually hid facts and that most SMS ads came from unreliable sources. On the perceived entertainment of SMS advertisements, the respondents were undecided whether reading SMS advertisements were pleasing. They were undecided whether SMS ads usually contained humor and if they were fun to read. However, they disagreed with the idea that reading SMS ads was pleasing. With regard to perceived irritation of SMS advertisements, the respondents in general found SMS ads irritating. They also felt they were always disturbed by SMS ads and that SMS ads made them unable to concentrate on work. Additionally, respondents agreed that that their privacy was violated by SMS advertisements [12].

### A. Overall Attitudes toward SMS Advertisements

The reason might be that, apart from being perceived as the causes of irritation, SMS advertisements also fail to illicit trust from mobile phone users and fail to provide them with the feeling of entertainment [13].

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