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# MASTER OF BUSINESS ADMINISTRATION

An Exploratory Study on the Consumer Attitudes toward Mobile Advertising Targeted to College Students in Klang Valley, Malaysia

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#### **Abstract**

The rapid explosion of mobile phones along with the technological development has created a whole new marketing medium named mobile advertising. This research investigates the (1) attitudes of college students toward mobile advertising, (2) perceived risks of mobile advertising to college students, the (3) effectiveness of mobile advertising to college students, (4) responsiveness of college students, and the (5) categories of product advertising that are more acceptable to be delivered via mobile.

The results, conducted on 300 college students in Klang Valley, Malaysia, showed that college students have generally (1) negative attitudes toward mobile advertising, while (2) entertainment, informativeness, credibility, and perceived risk in mobile advertising affects their attitudes; however, (3) irritation is not influential, (4) credibility is the most important attribute affecting consumer attitudes toward mobile advertising. Besides that, the results indicate that consumers with a more favorable attitude toward an advertisement are more able to recall it than those with a negative attitude. Generally, respondents are not responsive towards mobile advertising.

**Key words:** Mobile advertising, consumer attitudes, effectiveness, responsiveness, product categories, college students, Malaysia

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My family deserves warm thanks for all the love and faith they have shown me. I wish to thank them for raising me to respect hard work.

And so it ends.

Tan E Teng August, 2011

# Declaration

"I hereby declare that this research project is of my own effort except for those summaries and information of which the sources are clearly specified"

11<sup>th</sup> August 2011

Tan E Teng

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# **List of Abbreviation**

SMS : Short Message Service

MMS: Multimedia Messaging Service

SPSS: Statistical Package for Social Science

# Chapter 1

#### Introduction

## 1.0 Chapter Summary

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This chapter begins with the background of advertising and a brief introduction to mobile phone, followed by background of mobile advertising. Specific discussion on the surfacing of mobile advertising in Malaysia and the population of mobile advertising among college students are included. Incidentally, problem statement, research questions, research objectives, significance of the research, research assumptions, research limitations, scope of the research, operational definitions, and outline of the research are enclosed in this chapter.

#### 1.1 Background of Advertising

Advertising is believed to emerge in the early history of humankind. It could be treated as the largest industries around the world (Belch G. & Belch M., 2009). Although advertising in conventional media, such as newspaper, magazine, radio and TV is still major, the Internet and mobile phone has emerged as a fashionable development of new advertising medium which promises to change people's lives in the future (Vantharith, 2006).

#### 1.2 An Introduction to Mobile Phone

From the radio transmitter using Morse code for maritime applications developed by Guglielmo Marconi in the 1890s, to "walkie-talkie" developed for the US Army during the World War II by Motorola's (Fatim & Stuart, 2007), to second generation of mobile phones (so-called 2G) with the introduction of data services, SMS (Short Message Service) text messaging was the first of such service, and finally to the current third generation of mobile phones for the consumer which so-called Smartphone (MMA, 2011), a long journey has been made. Nowadays, mobile phones have become ubiquitous; they are seen everywhere from urban area to sub-urban area (Fatim & Stuart, 2007). This communication channel have gone beyond just being a function-based communication tool which is talk, listen and dial, but more towards served as a fashion item, a status of symbol, and an effective channel for individuals to convey themselves (Sultan & Rohm, 2005; Phau & Teah, 2009).

# 1.3 Background of Mobile Advertising

Recently, the mobile phone has emerged as a new potential channel for marketing communications, this has brought huge concern from both marketers and consumers to mobile marketing (Smutkupt et al., 2010). One path of mobile marketing that is growing in popularity is mobile advertising. Since the first mobile text advertising or so called SMS was done in Scandinavia in 1997, mobile advertising has grown consistently (Becker, 2005). In year 2010, Japan has the highest mobile advertising revenue which broke one billion (USD) with South Korean market worth 270 million, followed by China at 180 million (Figure 1.0).

It shows that these three markets are the flag bearers for mobile advertising not only in Asia, but globally. As a region, Asia has a huge population of 4.05 billion

people with forecast shows that mobile subscribers will surpass 2.27 billion by 2010 (Lane, 2010; Higginbotham, 2009), as such the statistics suggest a market penetration of 66.7 percent. Overall, mobile advertising will exceed 11 billion by 2011 as compared to almost 1 billion in 2007 (Leek & Christodoulides, 2009) worldwide.

Mobile Advertising Spend 2010

1000
800
600
200
Japan South USA Chins Turkey UK India Kores

Figure 1.0 Top 7 regions by Mobile advertising spend

Source: Mobile Marketer, 2010

# 1.4 The Emergence of Mobile Advertising in Malaysia

The penetration and adoption of mobile is almost 100% in many Western and Asian countries (Basheer & Ibrahim, 2010). According to the latest IDC's report (2011), smart phones outsold PCs for the first time ever in Q4 2010 (100.9 million smart phones vs. 92.1 million PCs sold worldwide).

As Q3 of year 2010, Malaysia has a 111.6% penetration rate of mobile phones per 100 Malaysians, or 34.674 million subscribers in total (Malaysian

Communication and Multimedia Commission, 2010). From the statistics, it shows that each Malaysian may own more than one mobile phone, which created the opportunity for a new medium of advertising. Besides that, the unique characteristics such as convenience, personalization and interactivity have influenced the penetration rate enormously, particularly among young subscribers, who account for more than 30% of the total of mobile subscribers in Malaysia (Ng et al., 2010).

According to Gerry Purdy, a notable mobile industry analyst, "probably the most important medium for advertising in the 21st century is going to be the mobile phone, not print media, not billboards..." (SMS Marketing, 2006). Same as to leading industry analyst Frost and Sullivan Malaysia (2010), "the future of advertising is in the mobile phone segment". As the number of mobile phone users in Malaysia grows significantly, mobile data services are likely to grow and the market is expanding with more users especially youngsters and college students (Norshuhada & Syamsul, 2009) who are demanding for mobile services, therefore more channels which used to deliver advertisements over the mobile phone will be opened up. Thus, in turn will drive the adoption of mobile advertising in Malaysia which provides opportunities for advertisers to deliver their advertising message to consumers.

According to BuzzCity's latest Global Mobile Advertising Index (2011), mobile advertising revenue in Malaysia shot up by 218% during Q4 2010 compared to the same period last year. The mobile advertising industry in Malaysia has grown much faster than expected and is expected to rise remarkably in coming years. The growth in Malaysia was due to first, those companies perceived that investing in mobile medium was value for money and worth for further investment, hence larger advertising budgets was allocated. Second, marketers observe that the mobile medium as an increasingly valuable and effective one, especially in the era of increasing popularity of feature phone and Smartphone usage in Malaysia.

For the year 2011 and beyond, more retailers will turn to platform specific smartphone applications to deliver enhanced experiences and push marketing communications such as coupons and offers that are based on the customer's current location and personal preferences or SMS and Multi Media Service (MMS) advertising; which are used to gather instant feedback (Unni & Harmon, 2007). Moreover, Quah and Lim (2010) argue that the push model will dominate mobile advertising since it saves consumers' time and money compared to browsing content. Generally, mobile advertising in Malaysia is at the emerging stage; but there are interesting applications such as coupons, location-based and promotional SMS and MMS being involved. At present, mobile advertising is still more towards pull-based display advertising in Malaysia (Goh, 2011). However, for the upcoming years, a lot of advertising will be push-based (Universal McCann Malaysia's chief executive, Kumar, 2011) in Malaysia, which is embraced with the effect of push marketing as a trend on mobile advertising worldwide.

# 1.5 The Population of Mobile Advertising among College Students

Generally, young people are heavy users of mobile services. It is a necessity in the young consumers' lifestyles, not only as a form of fashion statement but a portal to keep a "presence" and connection to peer networks (Carroll, 2007). These groups of people are more likely to be an innovators as well as early adopters of new technologies (Sheena & George, 2009) which have shown the highest incidence rates of cell phone usage and mobile content adoption, according to Hanley and Becker (2008). Aggregated data from Mobile Marketer (2010) indicates that younger users are more receptive to mobile advertising as compare to older users. Although old user also positive about mobile advertising, but they are more prudent (Haghirian & Madlberger, 2005). According to the "Digital Directions" survey (2010), the study expected college students to respond most readily (79.7 percent), followed by teenagers (75.2)

percent), males 18-34 (62.2 percent) and youth (58.1 percent). Hence, college students are an ideal target to examine young consumers as they fall within the age group of 18-35, which is the segment of largest mobile phone and SMS users (Phau & Teah, 2007). By the way, targeting college students via mobile is not something new since students are known for avid mobile usage.

At present, the perception of college students towards mobile advertising as an effective and realistic advertising medium was due to the unique characteristics inborn in the mobile medium such as ubiquity; personalization; localization and timeliness (Smutkupt et al., 2010). According to Haig and Matt (2005), mobile advertising has brought along both opportunities and threats to advertisers. It is needed to be handled with cautions in order to become a successful advertising medium which targeted to the public especially youngsters.

#### 1.6 Problem Statement

In fact, youngsters group is a group of people that have very unique characteristics (Norshuhada & Syamsul, 2009). As such, it is unclear how college students in Malaysia feel about advertising messages on their mobile phones and how their attitudes affect their response (Tsang et al., 2004). In any event, if marketers want to fully utilize the communication channels that mobile media provide, they need to understand how mobile consumers perceive and evaluate mobile devices as a source of advertising (Parissa et al., 2005).

By the way, young consumers might not show their interest on every categories of product advertising from the advertisers. Therefore, mobile advertisers need to be prudent on the strategies adopted. While the college audience is an attractive prospect, using mobile advertising could backfire. Clearly, if advertisers are to engage the college audience, they will need to find a way to

reach college students with something that actually interests them, instead of bombarding them with unwanted advertising (Wurzelbacher, 2010).

However, the growth of mobile advertising has opened a new area for research. There are potential risk that advertisers should aware of while conducting mobile advertising in Malaysia, as it might not be well accepted by the young consumers while it is still in the emerging stage in Malaysia (Ng et al., 2010).

Furthermore, since the mobile phone is a relatively new channel for advertising, academic research in this field has been inconsistent and fragmented (Leppaniemi, 2006). However, mobile advertising has recently attracted academic and practitioners' attention (Greenberg, 2000; Scharl et al., 2005; Drossos & Giaglis, 2010).

Although mobile marketing has matured rapidly in several developed and developing countries such as Korea, Japan, China, U.S and Europe, it is still infant in many emerging countries. Malaysia as a developing country, which has a high penetration rate of mobile phone and high mobile advertising revenue, should be further explored the potential of mobile advertising within the country.

#### 1.7 Research Questions

Despite the increasing importance of mobile device as advertising channel, as yet there is relatively little academic research support for it. Thus, this study reports the results of a survey that was designed to address four (4) research questions: -

- 1. What are the attitudes of college students towards mobile advertising?
- 2. How was the effectiveness of mobile advertising to college students?



- 3. How does attitudes of the college students influence on the effectiveness of mobile advertising?
- 4. Which categories of products advertising that are more acceptable to be delivered via mobile to college students?

#### 1.8 Research Objectives

In line with this, the objective of this study is six-fold (6): -

- 1. To assess college students' attitudes toward mobile advertising.
- 2. To identify the perceived risks of mobile advertising to college students.
- 3. To examine the effectiveness of mobile advertising to college students.
- 4. To examine college students' responses to mobile advertising.
- To examine college students' attitudes toward the effectiveness of mobile advertising.
- 6. To examine the categories of products advertising that is more acceptable to be delivered via mobile.

#### 1.9 Significance of the Research

Leppaniemi (2008) claimed that mobile devices are the most critical media of personalization; and the most potential business activity of the future is mobile advertising. Because of this trend, mobile advertising is increasingly valued by academia and businesses. In addition, this research is significant due to advertisers could have a better understanding on the effectiveness of product advertising through mobile and crafting relevant and targeted advertising to reach college students (Unni & Robert, 2007). Somehow what, the organization could determine which categories of products advertising were preferable among college students to be delivered via mobile. Besides that, the economic

value of youngsters towards mobile advertising is confirmed as majority of this group of people pay more attention on their looks and reputations; and therefore spends most of their monthly allowances on lifestyle products such as physical appearance (e.g. clothing and personal care), entertainment and electronic gadgets like mobile phone (Singapore Business Times, 2010), as compared to working adults which spend most of their disposable income on car installment. housing loan or cost of living (Koeman, 2008). Thus, the exclusive spending habits of youngsters have made them a potential and attractive market for the advertisers to further look into. Furthermore, advertisers need to understand the fear and phobia of mobile users in responding to mobile advertising that might be perceived as a risk. As a consequence, customers may develop negative attitudes toward the advertisement and the brand being advertised (Smutkupt et al., 2010) and provide no response to the message at all due to the lack of confidence to the advertising channel which eventually affects the effectiveness of mobile advertising. Hence, advertisers need to restructure the advertising strategy in order to make it more effective to the target market.

Furthermore, this study helps to fill up the research gap. Generally, most of the previous studies have examined mobile advertising in countries such as Haghirian and Madlberger (2005) study in Australia, Choi et al. (2008); Koo (2010); Campbell (2007); Hanley and Becker (2008); Perlado and Barwise (2005); Greenberg (2000); and Leppaniemi (2006) studies in United States of America (USA), Garroll et al. (2007) research in New Zealand, Kim and Heo (2010) study in South Korea, Lee and Chan (2008) study in Japan, Liu et al. (2009); Chen and Liu (2008) and Wang and Sun (2010) studies in China, Khurana and Chaudhary (2010) research in India, Smutkupt et al. (2010) Thailand study, Tsang et al. (2004) Taiwan study, and Radder et al. (2010) study in South Africa. However, little attention has been paid to the investigation of developing countries in some part of the Asia and Middle East world. More specifically, there is no study conducted in Malaysia. Furthermore,

the study of the relationship of mobile advertising with product categories has not been studied in any great depth worldwide.

Table 1.0 Summary of the previous studies of mobile advertising in various countries

Countries	Researchers
Australia	Haghirian and Madlberger (2005)
USA	Choi et al. (2008); Koo (2010); Campbell (2007); Hanley
	and Becker (2008); Perlado and Barwise (2005);
	Greenberg (2000); and Leppaniemi (2006)
New Zealand	Garroll et al. (2007)
South Korea	Kim and Heo (2010)
Japan	Lee and Chan (2008)
China	Liu et al. (2009); Chen and Liu (2008) and Wang and Sun
	(2010)
India	Khurana and Chaudhary (2010)
Thailand	Smutkupt et al. (2010)
Taiwan	Tsang et al. (2004)
South Africa	Radder et al. (2010)

## 1.10 Research Assumptions

This research takes in two (2) assumptions: -

Firstly, the researcher assumes that all the respondents are mobile users who have had some experience on receiving mobile advertising previously. Secondly, we study on both public and private universities and colleges as we assume that public universities and colleges represent students from low and middle income families; while private universities and colleges represent

students from middle and high income families. Hereby, different income class of students could effectively represent the overall categories of respondents.

#### 1.11 Research Limitations

This research encompasses four (4) limitations: -

Firstly, the survey results were based on students at general public and private universities and colleges which representing major college students in Klang Valley in Malaysia, there might be an inaccurate on the survey results because it only covers small portion of the students in the country.

Secondly, the study is limited by the fact that a relatively small sample of participants (n=300) were selected. This limitation makes it difficult to generalize and apply the findings of this study to the entire population of young Malaysia college students (Waldt et al., 2009).

Thirdly, the findings are based on the use of self-administrated survey data, which may be affected by response biases such as misunderstand of the question or some human errors.

Finally, researcher investigates only elements which link to effectiveness of mobile advertising. Additional significant factors might be neglected. Thus, the results might be interest but not conclusive.

#### 1.12 Scope of the Research

This research focuses on the attitudes toward mobile advertising targeted to Malaysia college students. It looks at the "attitudes", "perceived risk", and an exploratory research on "effectiveness of mobile advertising", "response", and "product categories". By the way, college students are one of the major consumers and key players in the mobile advertising industry. Hence, this study is based on this group of target population. In addition, "recall method" is used to assess the effectiveness of mobile advertising.

#### 1.13 Operational Definitions

This section will provide readers with definition of important or used terms in this study.

#### **Attitudes**

Attitudes are generally considered an individual's inclination to respond to specific situations (Chowdhury et al., 2006). Relative to advertisements, attitudes are individuals' dispositions toward specific objects or ideas, including positive or negative reactions to commercial messages (Chakrabarty & Yelkur, 2005).

#### Mobile advertising

Mobile advertising is a commercial message transmitted to target consumers through a handset (MMA Global, 2008).

College/University students

A student enrolled in a college or university (Princeton University, 2008)

Short Message Service (SMS)

SMS is a service offered to mobile subscribers to send and receive text messages (Novak & Svensson, 2001) not exceeding 160 characters (MMA Global, 2008).

Multimedia Messaging Service (MMS)

MMS is an advanced version of SMS used to send and receive multimedia messages (e.g., text, images, video, and audio) to compatible mobile phones (Mostafa, 2002; Novak & Svensson, 2001).

#### 1.14 Outline of the Research

This research consists of five chapters, it is organized in the following manner: -

#### Chapter 1 Introduction

This chapter begins with the background of advertising and mobile advertising and the surfacing of mobile advertising in Malaysia as well as the population of mobile advertising among college students. Problem statement, research questions, research objectives, significance of the research, research assumptions, research limitations, scope of the research, and operational definitions are enclosed in this chapter.

## **Chapter 2 Literature Review**

This chapter reviews prior-studies which are related to the attitudes toward mobile advertising among college students. Additional research on effectiveness of mobile advertising, response, and product categories is included. Hypotheses are established in this chapter, a theoretical framework is also developed in this study.

#### **Chapter 3 Research Methodology**

The chapter presents the methodology and discusses the overall research design. Research framework is presented. Sample size, target population and sampling method are talk over. Statistical methods are demonstrated in this chapter as well.

#### **Chapter 4 Findings and Discussions**

This chapter talks about hypotheses results for this study and the overall findings of data collected based on the research objectives. Reliability and validity test is proved. Discussion of the findings is presents as well.

## Chapter 5 Conclusions, Recommendations and Personal Reflections

This chapter presents the conclusions of the findings, with the study's recommendations and suggested future research. Personal reflections are included as well.

# Chapter 2

#### Literature Review

#### 2.0 Chapter Summary

This chapter explores the concepts, theories and findings of previous studies on the factors such as "attributes of advertising" and "perceived risk" which affecting consumer attitudes toward mobile advertising. Furthermore, determinants of effective mobile advertising are explained and discussed including "recall", "response", and "product categories", go after by proposed hypothesis for each variable. In the end of this chapter, the theoretical framework is demonstrated accordingly.

#### 2.1 Concepts of advertising

Advertising is a way of marketing that provides information about the product, service and the business itself (Barnes, 2002). The main purpose of advertisement could be stated as building a product image and motivating direct purchase from people (Park et al., 2008).

Kotler (Kotler, 2003; cited by Parissa & Maria, 2005) defines advertising as "any paid form of non-personal presentation in order to promote ideas, goods or services by an identified sponsor". While the definition of advertising provided by the American Marketing Association (2011) is as follows: "The placement of

announcements and persuasive messages in time or space purchased in any of the mass media by business firms, non-profit organizations, government agencies, and individuals who seek to inform and/ or persuade members of a particular target market or audience about their products, services, organizations, or ideas".

Advertising has evolved over long periods of time, adapting social changes in order to survive itself. The evolution of advertising emerges from advertising in conventional media, such as newspaper, magazine, TV and radio (Wallage & Hegarty, 2006). Then in late 20<sup>th</sup> century, the appearance of Internet as an advertising medium was started, this has enabled millions of people to go online and enjoy another new dimension of lifestyle (Belch G. & Belch M., 2009), so-called electronic advertising or interactive advertising (Mobile Squared, 2010). As time passes and technology advances, people are keen to communicate via mobile phones while they are on the move. Hence, advertising has to change and adapt the mobile channel (Fatim & Stuart, 2007). Obviously, consumers are making a shift to digital media and personalization that changes the relationship between advertisers and consumers (Andersson & Nilsson, 2010).

## 2.2 Introduction to Mobile advertising

In this paper, mobile advertising is defined as "the usage of interactive wireless media such as mobile phones to transmit advertising messages to consumers in the form of time and location sensitive, personalized information with the overall goal to promote goods and services (Parissa & Maria, 2005)".

Leppaniemi (2004) and Smutkupt et al. (2010) proposed one common definition of mobile advertising as "any paid message communicated by mobile media with the intent to influence the attitudes, intentions, and behavior of those

addressed by the commercial messages". Unlike other definitions, this one place emphasizes on both technology and the essence of the traditional advertising concept.

Another definition of mobile advertising is the "distribution of advertising messages to the targeted demographic handsets in the formats of music, graphic, text or voice in order to reach advertisers' goals as well as to gather consumers' feedbacks" (Ovum, 2000; cited by Lee & Park, 2009). According to the Interactive Mobile Advertising Platform (2003) which cited by Dimitris and George (2006); mobile advertising is defined as "the business of encouraging people to buy products and services using the wireless channel as medium to deliver the advertisement message".

Conversely, Mobile Marketing Association (MMA, 2006), defines mobile marketing as "the use of wireless media as an integrated content delivery and direct response vehicle within a cross media or standalone marketing communications program".

After combining all of the different definition from past researchers, mobile advertising could be summarized as "Mobile Advertising equals to: - Mobile Technology plus Advertising Media (Vantharith, 2006)".

Mobile advertising holds strong promises to become the most highly targeted advertising medium offering personalization, interaction and instant ways to target messages to users (Vatanparast, 2010) with a range of mobile advertising options, including SMS, Wireless Application Protocol (WAP- is a kind of web browser), mobile application display advertising (static banners across the top and bottom of the screen), search advertising, rich media that often include interactive graphics, audio, or video and push notifications (Mathew & Dambal, 2010).