

FACTORS OF CONSUMERS ATTITUDE TOWARD MOBILE ADVERTISING

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LIST OF ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
A/ATT	Attitudes
AVE	Average Variance Extracted
BI	Behavioural Intention
CFA	Confirmatory Factor Analysis
CR	Credibility
CR ¹	Composite Reliability
DV	Dependent Variable
EN	Entertainment
EOU	Perceived Ease of Use
GoF	Goodness-of-fit
GPS	Global Positioning System
H	Hypothesis
IDT	Innovation-Diffusion Theory
IN	Informativeness
IR	Irritation
IV	Independent Variable
MCMC	Malaysian Communications and Multimedia Commission
MMA	Mobile Marketing Association
MMS	Multimedia Message Service
p	p-Value
PBMM	Permission-based mobile marketing
PCI	Perceived Characteristics of Innovations Theory
PI	Purchase Intention
PLS	Partial Least Square
PLS-SEM	Partial Least Square-Structural Equation Modeling
Q ²	Q squares
R ²	R squares
SE	Standard Error
SMS	Short Message Service
SN	Subjective Norms
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
TAM2	Extended Technology Acceptance Model
TPB	Theory of Planned Behaviour
U	Perceived Usefulness
WAA	Wireless Advertising Association
Wi-Fi	Local Area Wireless Technology
β	Beta

ABSTRAK (MALAY)

Kajian in menunjukkan kesesuaian mengguna Teori Tindakan Bersebab (TRA), Teknologi Model Penerimaan (TAM) dan Web Model Pengiklanan untuk mengkaji bagaimana faktor-faktor teknologi dan model web iklan mempengaruhi sikap pengguna Malaysia terhadap pengiklanan mudah alih dan kesan terhadap niat pembelian pengguna. Soal selidik yang ditadbir sendiri telah direka menggunakan skala mantap. Satu kajian ke atas 124 responden telah dijalankan di negeri Pulau Pinang, Malaysia melalui kaedah e-mel, kaedah memintas di restoran dan universiti awam. *Statistical Package for the Social Sciences (SPSS)* dan *Partial Least Square (PLS)* telah digunakan untuk menganalisis data. Kebolehpercayaan adalah pengaruh faktor yang terkuat untuk mempengaruhi sikap pengguna terhadap pengiklanan mudah alih, diikuti oleh keganguan dan hiburan. Kesenangan mengguna peralatan mudah alih dan infomatif tidak mempengaruhi sikap pengguna terhadap pengiklanan mudah alih. Kajian ini adalah terhad kepada pengguna di negeri Pulau Pinang dan majoriti responden dikuasai oleh Cina Malaysia, ia tidak boleh dianggap secara umum di seluruh Malaysia. Kawasan geografi, budaya dan produk atau servis tertentu perlu menyiasat di masa depan. Kajian ini memberi kefahaman yang mendalam mengenai sikap pengguna Malaysia ke arah pengiklanan mudah alih. Hasil kajian boleh digunakan untuk membentuk strategi bagi ahli pemasaran atau ahli pengurusan, ahli akademik dan badan-badan kerajaan untuk membantu mengurangkan kes aduan dan penjenayah.

ABSTRACT

This study demonstrate the adaption of Theory of Reasoned Action (TRA), Technology Acceptance Model and Web Advertising Model to examine how technology-related factors and web advertising model influence Malaysian consumers' attitude toward mobile advertising and lead to consumers' purchase intention. A self-administered questionnaire was designed using establish scales. A survey on 124 respondents was conducted in Penang, Malaysia through email, restaurants and public university intercept methods. Statistical Package for the Social Sciences (SPSS) and Partial Least Square (PLS) were used to analyse the data. Credibility is the strongest factor influence consumers' attitude toward mobile advertising, followed by irritation and entertainment. Perceived ease of use on mobile devices and informativeness do not influence consumers' attitude toward mobile advertising. The findings are limited to Malaysian Chinese consumers which cannot generalize across the whole Malaysia. Other geographic area, cultural and specific product or service should be investigated in future research. The research provides an in-depth understanding of Malaysian consumers' attitude toward mobile advertising. The research findings can be used to formulate strategies for the marketers or managerial team, academia and governmental bodies to help diminish complaints and crimes.

CHAPTER 1

INTRODUCTION

1.1 Introduction

The research investigated the factors of consumers' attitude toward mobile advertising. It shows the importance of the factors determining the consumers' attitude thus behavioural intention. In this chapter will discuss about the background of mobile advertising and the evolution of mobile devices. Furthermore, the problem statements will be raised as well as the research questions and research objectives. Then, the definition of key terms and significance of this research will be compiled in this chapter as well. This study will beneficial to the marketers and organisations.

1.2 Overview of Mobile Advertising

Mobile Marketing Association (MMA) defined mobile marketing as “wireless media used as a direct response vehicle and integrated content delivery within cross-media or single marketing communications programme” (MMA, 2008). On the other hand, Wireless Advertising Association (WAA) defined wireless marketing as the use of mobile devices such as mobile phones and tablet PC through wireless network to send advertising messages (Chowdhury, Parvin, Weitenberner & Becker, 2006; Lee, Hsieh & Huang, 2011).

The Internet has been growing rapidly in recent years which offer many Web-based applications. These applications become a new medium for organisations to retain

customers as well as offering new products and services. Mobile technology is one of the newly developed technologies which mainly are smart phones and tablets. These devices run with operating system which has many types of application software which known as apps. Besides that, Wi-Fi, GPS, and Bluetooth capabilities were equipped in the mobile devices which allow connection to the Internet and mobile devices.

The Internet managed to eliminate distances and allow mobile users get connected easily even they are far apart from each other. They can make phone call or free video call to friends or family whom are miles apart. Companies connect with consumers using mobile devices through location-based marketing, interactive applications, and videos. The rapid development of mobile technologies has created a new channel for advertising. It builds customers' engagement with a brand, through mobile advertising, permission based marketing, text messages, the delivery of mobile content, user-generated content, and mobile commerce (Watson, McCarthy & Rowley, 2013).

In the early 2000s, mobile advertising via SMS (Short Message Service) and MMS (Multimedia Message Service) are introduced. MMS mobile advertising contains images, text, audio, and video, while SMS mobile advertising only contains text. According to Yang, Kim and Yoo (2013), push-based strategy is the marketing strategy that involves in SMS which “pushing” messages containing advertisements without user's permission and consumers are not allowed to voluntarily interact with advertisement content. Yet, it is still the most popular channel for mobile advertisement. It is innovated from traditional advertising to mobile advertising.

Nowadays, mobile advertising uses 3G technology is a pull-based strategy which allows consumers to voluntarily access the advertisements or contents that they need (Yang *et al.*, 2013). Moreover, personalised information that promotes goods, services and ideas, location and time sensitive are provided to customers. App-based advertising, push notifications, mobile web advertising, in-game mobile advertising and QR codes are types of mobile marketing for newly developed mobile devices with Internet access. These advances bring up new challenges for marketers, organisations and marketing researchers.

The research firm Strategy Analytics stated that smart phone industry is growing at a fast pace, there were 1.038 billion smart phones used in the third quarter of year 2012. By comparison, there were an estimated 708 million smart phones used worldwide in year 2011 showed that the usage of smart phones increased by 46.61 per cent from year 2011 to 2012 from a phone survey carried out by Malaysian Communications and Multimedia Commission (MCMC). According to MCMC (2012), the percentage of hand phone users of male is higher than female from year 2008 to 2012. In the year 2012, there was 56.5 per cent of male users and 43.5 per cent of female users, as shown in Table 1.1 below.

Table 1.1

Percentage of Hand Phone Users (by gender)

Gender	2008	2009	2010	2011	2012
Male	56.3	55.7	58.6	55.2	56.5
Female	43.7	44.3	41.4	44.8	43.5

Source: Hand Phone Users Survey 2012, MCMC.

Besides that, MCMC (2012) categorised the hand phone users by age. In the year of 2008 to 2012, the age group 20-24 showed the highest percentage. This is followed by age groups 25-29 and 30-34. In the year 2012, the highest percentage of hand phone users was age group of 20-24 with 17.3 per cent, and followed by age groups 25-29 and 30-34, with 15.8 per cent and 13.8 per cent respectively, as the table 1.2 shown below.

Table 1.2

Percentage of Hand Phone Users (by age groups)

Age classes for 2008-2011	2008	2009	2010	2011	2012	Age classes for 2012
Below 15	2.8	2.3	3.4	1.9	1.8	Below 15
15-19	12.3	12.4	10.9	10.4	11.4	15-19
20-24	18.8	20.0	17.3	17.6	17.3	20-24
25-29	15.8	15.9	15.9	16.5	15.8	25-29
30-34	13.3	14.2	13.5	13.4	13.8	30-34
35-39	9.4	9.3	10.1	9.8	10.8	35-39
40-44	9.9	8.1	9.2	10.3	9.2	40-44
45-49	6.3	5.9	6.5	6.6	6.5	45-49
50 and above	11.3	11.8	13.3	13.4	5.4	50-54
					3.3	55-59
					1.9	60-64
					2.9	65 and above

Source: Hand Phone Users Survey 2012, MCMC.

The year of 2012 was the biggest hit for smart phone. Statistics of hand phone users for year 2010 and 2011 showed that only 14 per cent and 12 per cent respectively of users were using smart phones. Overall, the smart phone demographics count more males than females with male users account for 15.5 per cent while female smart phone users make up of 10.6 per cent based in the survey carried out in 2012. It is also indicated that

smart phone users generally are younger, at average age of 29.3 years in 2010 and in 2011, the average increased to 34.4 years.

Table 1.3

Percentage of Hand Phone Users (by type)

	2010	2011	2012
Smartphone	14.0	12.0	26.0
Feature phone	86.0	87.3	74.0
Don't know	-	0.7	-

Source: Hand Phone Users Survey 2012, MCMC.

The purpose of this research is to investigate the consumers' attitudes and acceptances toward mobile advertising across the mobile users in developing country. According to Bloomberg's Top 20 Global Emerging Markets, Malaysia ranks sixth after China, South Korea, Thailand, Peru, and the Czech Republic. Since this research specifically target developing country, hence it will focus on the country Malaysia.

1.3 Problem Statement

In the era of mobile phones communication, consumers assume mobile phone as a part of their life (Rohm *et al.*, 2012). Thereby mobile advertising will be one of the effective marketing techniques which encourage organizations to communicate and share information with consumers through mobile device or network. Consumers have immediate access to timely, up-to-date, useful and clear information with mobile marketing techniques (Wells, Kleshinski & Lau, 2012).

Thereby, smart phone industry is growing at a fast pace, with a sharp increase by 46.61 per cent from year 2011 to 2012 globally. Although only 26 per cent of people are using smart phones compare to 74 per cent of feature phones used in the year 2012 (MCMC, 2012). It has jumped from 12 per cent to 26 per cent of smart phones in year 2011. The unit used of smart phone in Malaysia only increased by 14 per cent. In this case, the statistical showed that the smart phone industry in Malaysia grew slow and the adoption rate was low. Hence, the result of the researches in developed countries may be different in comparison with Malaysia as smart phone industry in other developed countries may grow rapidly.

According to the research of Sultan, Rohm, and Gao (2009) the sample of an emerging market, Pakistan and an established country, the United States are being selected to make comparison across the markets. In another research, China is being selected, tested and compared with the United States (established country) (Gao *et al.*, 2012), which indicate cross-market similarities are related to consumers' attitudes toward mobile marketing as well as differences.

Unfortunately, in year 2012, MCMC received 859 complaints which increased by 23 per cent compared to 697 complaints in year 2011 (MCMC, 2012). MCMC (2012) reported the complaints on SMS involve the service provider of mobile content, coverage service, misleading promotion by agents or advertising, false registration, unfair practices, postal and courier services, and disputes over the terms and conditions. Thus, receiving irritating messages may create negative impact on consumers' attitude toward

mobile advertising. Other than that, credibility and informative of mobile advertising received by consumers are the important concerns of Malaysians.

Table 1.4

Complaint statistics related to mobile content services for 2012

Types of Complaints	Total Complaints
Misleading SMS promotions	117
Receiving unsubscribed SMS	735
Billing Disputes	7

Source: Annual Report 2012, MCMC.

Besides that, MCMC also received complaints of cyber crime cases. Digital forensics in Malaysia is a new field in the area of information security. It can be categorised as few types, such as mobile device forensics, computer forensics, network forensics and data recovery forensics (MCMC, 2012). Mobile cyber crime is one of the common crimes, which attack smart phones and PC tablets by creating malicious and Trojanized applications (MCMC, 2012). These threats may affect the mobile computing and gather sensitive information, thereupon consumers may not perceive the mobile devices as useful and ease to use, consequently affect their attitude toward mobile advertising. In other word, perceived usefulness and ease of use of mobile devices are the crucial antecedents which may influence consumers' attitude toward mobile advertising.

Besides that, only few researches tested the emerging market in ASEAN countries. According to Tanakinjal, Deans and Grey (2011), Labuan, Malaysia was selected as the sample and applied Innovation-Diffusion Theory (IDT) in their study.

Other than that, the study of Noor, Sreenivasan and Ismail (2013) selected the samples from all states of Malaysia, including federal territories, West and East Malaysia, yet, the Theory of Planned Behaviour (TPB) applied to test on the impact of consumer attitudes toward mobile advertising. Additionally, theory of Permission Marketing was applied in the study too. Hence, both researches applied different theories and focused on different outputs. Conclusively, Technology Acceptance Model (TAM) and Web Advertising Model have not been tested in the context of Malaysia.

Consumers perceived usefulness and ease with their mobile phone for communication, accessing information and current news about companies are the technology acceptance model which directly influences their attitudes toward mobile marketing (Gao *et al.*, 2012). Moreover, the credibility of mobile advertising is one of the concerns in the context of Malaysia, as past studies took in the consideration of this element (Kim & Han, 2014; Yang *et al.*, 2013; Tanakinjal *et al.*, 2011; Ünal, Erciş & Keser, 2011; Lee *et al.*, 2011; Choi, Hwang & McMillan, 2008; Chowdhury *et al.*, 2006; Tsang, Ho & Liang, 2004; Brackett & Carr, 2001; Pavlou & Stewart, 2000). In response to these problems, this study proposes to investigate the attitudes of Malaysia's consumers toward mobile advertising.

1.4 Research Questions

The four research questions of this study are as below:

RQ1 Do perceived usefulness and perceived ease of use influence consumers' attitudes toward mobile advertising?

RQ2 Do informativeness, entertainment, irritation, and credibility influence consumers' attitudes toward mobile advertising?

RQ3 Do consumers' attitudes toward mobile advertising positively influence the consumers' purchase intention?

RQ4 Do subjective norms positively affect the consumers' purchase intention?

1.5 Research Objectives

The primary objectives of this research:

RO1 To determine the relationship of perceived usefulness, perceived ease of use and consumers' attitude toward mobile advertising.

RO2 To investigate the relationship of informativeness, entertainment, irritation, credibility and consumers' attitude toward mobile advertising.

RO3 To study the relationship of consumers' attitude toward mobile advertising and consumers' purchase intention.

RO4 To determine the relationship of subjective norms and consumers' purchase intention.

1.5 Definition of Key Terms

In order to have better understanding of the discussion, the following key terms' definitions are referred specifically as below.

1.5.1 Mobile Advertising

Mobile advertising transmit advertisements or message related to products, services and opinions via mobile devices by using pull- and push-oriented advertisements which normally for promotional purposes (Ünal *et al.*, 2011; Li & Stroller, 2007).

1.5.2 Perceived Usefulness (U)

In the theory of Technology Acceptance Model (TAM), perceived usefulness was defined as a person believes that job performance will be enhanced by using a particular technology (Yang *et al.*, 2013; Davis, 1989).

1.5.3 Perceived Ease of Use (EOU)

In the study of Yang *et al.* (2013) and Davis (1989), theory of TAM defined perceived ease of use as a person would be free of effort by using a particular technology.

1.5.4 Informativeness (IN)

The ability of advertising informs consumers about products in order to yield consumers' satisfaction (Kim & Han, 2014; Ducoffe, 1996).

1.5.5 Entertainment (EN)

Entertainment is an internal factor for consumers' approach to advertisements and as a positive psychological feeling (Yang *et al.*, 2013; Ducoffe, 1996).

1.5.6 Irritation (IR)

Irritation is representing consumers' avoidance of the advertising and a negative psychological feeling (Yang *et al.*, 2013; Ducoffe, 1996).

1.5.7 Credibility (CR)

According to Liu, Sinkovics, Pezderka and Haghirian (2012), credibility is defined as consumer perceives the advertisements to be believable and truthful.

1.5.8 Subjective Norms (SN)

Consumers obtain endorsement from the people around them about their behavioural attitude (Noor *et al.*, 2013; Pavlou & Stewart, 2000).

1.5.9 Attitudes (ATT)

According to Bagozzi (1981), Ajzen (1991) and Noor *et al.* (2013), consumer attitudes are a composite of consumer's feelings, beliefs and behavioural intention which demonstrate individual preference about advertisement content delivered via mobile devices (Yang *et al.*, 2013).

1.5.10 Purchase Intention (PI)

Purchase intention can be defined as consumers will buy to fulfil their needs and wants (Noor *et al.*, 2013).

1.6 Significance of Study

The main purpose to conduct this study is to examine factors impacting consumers' attitudes toward mobile advertising in Malaysia. The result of this study can further enrich the existing literature for the academic purpose which may enhance the understanding of the subject by providing evidence from an ASEAN country – Malaysia. However different cultures, religions, races and countries may reveal different results.

Additionally, this study aims to provide significant contribution and create new opportunities to the marketers and mobile phones or mobile devices industry. Mobile advertising is considered as a new marketing strategy that involves newly developed technologies. Organisations will then able to advertise and communicate with consumers effectively using mobile marketing. By understanding the factors influencing consumers' attitudes it then help to reduce irritation as advertisement messages that are well-designed and customised are able to meet customers' preference and interest.

Therefore, this study is important for managers to develop marketing strategies and programmes, such as implementing mobile advertising, targeting different segments and regions. Furthermore, this may help government in solving and overcome the mobile cyber crime issue with appropriate actions.

1.7 Organisation of Remaining Chapters

This study has five chapters in total. The first chapter presents an introduction of this study. The second chapter provides the review of literature that contain previous

researches which related to factors affecting the consumer attitudes toward mobile advertising that drive the consumer purchase intention, theoretical framework and the hypotheses development. Chapter three will indicate the data and variables in term of research design, sample collection, measurement of variables and the method of data analysis. Chapter four analyses the results of finding using both SPSS and Smart PLS software, focus on statistical analysis, descriptive statistic, validation analysis, reliability analysis and structural equation modelling analysis. Last but not least, final chapter will illustrate the overall findings and implications of the research, limitation of the study, suggestion for future research and conclusions.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this study, there are seven independent variables, namely, perceived usefulness (U), perceived ease of use (EOU), informativeness (IN), entertainment (EN), irritation (IR), credibility (CR) and subjective norms (SN), one dependant variable is consumers' attitude toward mobile advertising (ATT), and one outcome purchase intention (PI). Moreover, the hypotheses developed to test the effect of one variable over another variable. As a result, there are eight hypotheses and all result will be tested in Chapter 4.

2.2 Theories and Model

In this study, Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM) and Web Advertising Model are applied. According to the previous studies of Gao *et al.* (2012), Gao *et al.* (2013) and Yang *et al.* (2013), TRA and TAM theories are correlated when the study involved of technology. However, Yang *et al.* (2013) added in Web Advertising Model in the study of mobile advertising.

2.2.1 Theory of Reasoned Action (TRA)

The purpose of this study is to understand on consumers' behaviours that lead to purchase intention by using a theory that developed by past researchers and developed a more general framework.

Theory of reasoned action (TRA) is proposed by Ajzen and Fisbein's (1980) which consisted three constructs, consumers' intention to perform the behaviour or behavioural intention (BI), their attitude (A) toward the behaviour and their subjective norm (SN). The theory suggests that individual's behavioural intention (BI) is a function of individual's attitude (A) about the behaviour and subjective norm (SN), which mean $BI = A + SN$ (Ajzen & Fisbein's, 1980). The TRA (see Figure 2.1) has been employed extensively in the consumer behaviour literature.

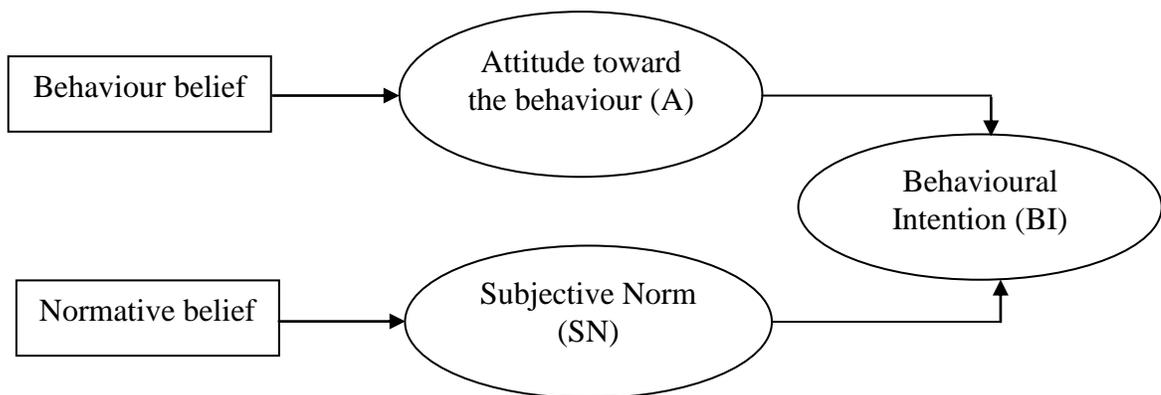


Figure 2.1: Theory of Reasoned Action, adopted from Ajzen and Fishbein (1980)

This theory was widely applied in marketing studies, mainly study on consumers' behaviour, attitude and intention. It postulates that users' beliefs impact on attitudes and intentions, which then affect actual behaviours (Yang *et al.*, 2013). The researches of Noor *et al.* (2013), Yang *et al.* (2013), Gao *et al.* (2012) and Ünal *et al.* (2011) applied TRA to test on consumers attitudes toward different types of marketing. Thereby, this research applies TRA for the purpose of studying consumers' attitudes and their behaviour.

2.2.2 Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) was introduced by Davis (1985). Its theoretical background originates from TRA (Yang *et al.*, 2013). The purpose of TAM is to explain on the determinants of computer acceptance and user behaviour across end-user computing technologies. It provides a basis for tracing the impact of external factors on internal beliefs, attitudes, and intentions (Davis, Bagozzi, & Warshaw, 1989). Most of the past researches of users' adoption a technologically based innovation has employed TAM framework, which is based on two elements: perceived ease of use and perceived usefulness. These two elements are predictive of intentions of technology adoption (Davis, 1989).

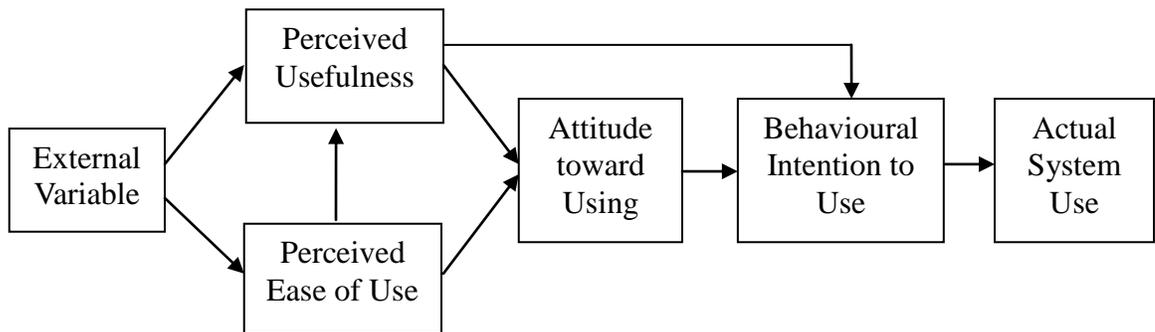


Figure 2.2: Technology Acceptance Model, adopted from Davis (1985).

The researches of Gao *et al.* (2012), Rohm *et al.* (2012), Soroa-Koury and Yang (2012), Yang *et al.* (2013), Gao, Rohm, Sultan and Pagani (2013) and Muk and Chung (2014) applied TAM in their study of mobile marketing and advertising. Thereby, this study applies TAM for the purpose of investigating the factors of consumers' attitudes and their behaviour on perceiving usefulness and ease of use of mobile devices.

2.2.3 Web Advertising Model

According to Ducoffe (1996), web advertising model is applied in the study. This model consist three elements, namely, informativeness, entertainment and irritation. In 90's, Web became a marketing channel where it allow customers to access all kinds of products and services' information immediately and conveniently (Ducoffe, 1996). Then, Brackett and Carr (2001) added two elements in this model, which are credibility and relevant demographic variables as shown in the Figure 2.2 below. They proved that these two elements are directly influenced the attitude toward web advertising. Web advertising model has applied in most of the web advertising studies (Ducoffe, 1996; Brackett & Carr, 2001; Tsang *et al.*, 2004; Lee *et al.*, 2011; Kim & Han, 2014; Choi *et al.*, 2008; Yang *et al.*, 2013; Ünal *et al.*, 2011).

This study applies web advertising model due to many advertisements, promotions and offers messages transmit via mobile devices with Internet access. Nowadays, SMS advertising (Ünal *et al.*, 2011; Muk & Chung, 2014) is not the only channel which is commonly used. Many advertisements also transmit via application software (apps) which installed in smart phones or tablet PC (Yang *et al.*, 2013; Kim & Han, 2014; Lee *et al.*, 2011) by using non-fixed network. As the earlier research by Tsang *et al.* (2004) found that this model is suitable to test in the study of mobile advertising.

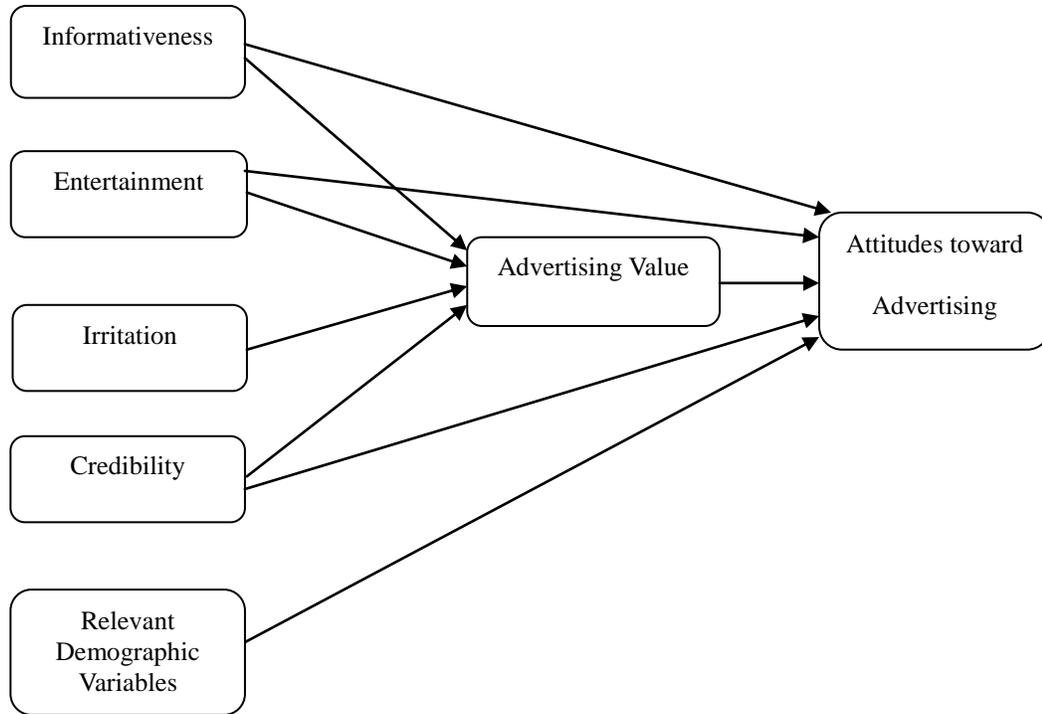


Figure 2.3: Web Advertising Model, adopted from Brackett and Carr (2001).

2.3 Consumer Attitudes toward Mobile Advertising

This research mainly study on consumers' attitudes toward mobile advertising, which defined respondents' feelings toward using mobile devices for accessing information such as promotion event and current updates of a company, and receiving incentives such as voucher from the company. According to Gao *et al.* (2012), the involvement of incentive-based model means consumers agree to accept advertising for free and mobile content is one permission-based approach which can successfully reach mobile users. Yet, most consumers worry about misuse of mobile data such as phone number, thus they are more willing to receive information from companies they trust (Watson, McCarthy & Rowley, 2013). TRA, TAM and perceived characteristics of innovations theory (PCI) (Moore &

Benbasat, 1991) were applied in the research of Gao *et al.* (2012) to test the model using data collected in the United States and China.

In the study of Wells *et al.* (2012), Gen-Y of China has positive attitude toward mobile marketing, however, Gen-Y of American and French are less favourable toward mobile marketing. Although the United States is a developed country, with better technological infrastructure, and uses incentive-based marketing and permission-based, the consumers' attitudes towards mobile advertising were negative (Altuna & Konuk, 2009). Hence, cultures difference may cause different attitudes toward mobile marketing. Consequently, conducting this research in Malaysia may have different result as compare to the results in China, America and France.

However, consumer attitudes toward mobile marketing will influenced by risk acceptance and personal attachment (Du, 2012). The researcher found that greater level of risk acceptance significantly influenced the youth consumers of China to engage in providing information and accessing content using mobile devices. Both mediators lead to the acceptance of mobile marketing. Meanwhile, greater degree of personal attachment influenced the youth to share and access content using mobile devices which may affect the acceptance of mobile marketing as well. Thereby, mobile marketing is targeting the younger consumers as they are highly mobile penetration.

The study of Tanakinjal *et al.* (2011) integrates innovation characteristics of the Innovation-Diffusion Theory (IDT), perceived risk, trustworthiness, and permissibility

constructs to investigate what affect user intention to adopt mobile marketing. Other than web advertising model, many other theories can be applied in the studies of mobile advertising or marketing. IDT is suitable for determining users' intention to adopt mobile marketing because mobile device is one of the rapidly innovated technologies.

Cengiz and Tetik (2010) studied the factors affecting consumer attitudes toward permission-based mobile marketing (PBMM) in Turkey. The survey consists of several perception factors (e.g: usability, acceptance, remembrance and interaction) that influence consumers' attitudes toward permission-based mobile marketing. The results showed that different drivers could affect consumer's attitude toward mobile marketing.

According to Chowdhury *et al.* (2006), only credibility has shown direct positive and significant influence on consumer attitude toward mobile advertisements in the results of proposed model. In additions, credibility is the most significant factors affecting respondents' attitude toward mobile advertisement. It showed negative attitudes to entertainment and informativeness about receiving mobile advertisements for the respondents. This might be due to the consumers in Bangladesh found that mobile advertisements were not entertaining and informative, or they have not been exposed to many entertaining or informative mobile advertisements, or caused by cultural factors.

Ünal *et al.* (2011) applied web advertising model in their study of mobile advertising. They aimed to study the difference between youth and adult consumers' attitudes toward mobile advertising in Erzurum and Turkey. However, this study only

focused on the mobile advertising using SMS and MMS. In the past three years, mobile technology grew rapidly and high penetration rate of mobile devices globally. Currently, the applications of mobile devices (e.g. Facebook, Line, Whatsapp, Wechat, KakaoTalk, et cetera.) are widely introduced and applied for marketing purposes.

Furthermore, consumers attitude toward mobile advertising is influenced by web advertising model which included the factors namely informativeness, credibility and irritation (Lee *et al.*, 2011). As well as mobile self-efficacy, consumers always perceived ability to use mobile devices will positively affect their attitude toward mobile advertising (Lee *et al.*, 2011). Unfortunately, in the study of Lee *et al.* (2011), respondents do not perceived mobile advertisement as entertaining though no clear indication were ever made on the sample selected and the country of origin.

Based on the Malaysian consumers and results produced by the measurement and structural model, the consumers' attitude towards mobile advertising is now changed. A better opportunity for many advertisers is offered to fully utilize the mobile advertising (Noor *et al.*, 2013). They believed that the latest advancement of smart phones and other mobile devices may changes in consumers' view.

A lately researches on mobile advertising measure the consumers' attitude based on the factors of TAM and web advertising model (Yang *et al.*, 2013). In their researches, there are two main construct namely acceptance of mobile technologies which influenced by technology-based evaluations (e.g. perceived usefulness and perceived ease of use)

and attitude toward mobile advertising which influenced by emotion-based evaluations (e.g. informativeness, entertainment, and irritation). At the same time, acceptance of mobile technologies and credibility affect consumers' attitude toward mobile advertising. Yang *et al.* (2013) stated that marketing on mobile devices allows the customers to obtain services, which regardless of location and time. Besides that, informative and entertainment aspects of advertising are satisfied by mobile devices. Hence, mobile advertising is a key to success in mobile commerce.

According to the study of Muk and Chung (2014), SMS allows marketers or organisations to interact directly with customers via mobile devices at specific times and locations. Based on the research, samples are selected from two countries, the United States and Korea and the results between two countries are different due to both are culturally distinctive countries. However, nowadays, various types of channels that use 3-G technology allows transmission of advertisements, promotion messages or current updates via mobile devices, other than SMS (Yang *et al.*, 2013).

2.4 Subjective Norms

In TRA, subjective norms are one of the variables that will influence consumers' behavioural intention (Ajzen & Fisbein's, 1980). Then subjective norms are highlighted in Theory of Planned Behaviour (Ajzen, 1991). TAM2 also known as extended TAM which developed by Venkatesh and Davis (2000) found that social norm is an important social influence variable. Social influence can define as the effects that others have on an individual's behaviour (Phau & Teah, 2009).

TRA specifies that subjective norm is an important reference in individual's social network which will directly influence consumers' purchase intentions (Kulwiwat, Bruner & Al-Shurid, 2009). Hence, in Chile, some social influences do affect intentions to purchase on the Internet (Andrews & Bianchi, 2013). However, a more cautious approach was recommended from the findings of online subjective norms in Latin American by extended the online environment to social media for commercial purposes (Andrews & Bianchi, 2013).

Soroa-Koury and Yang (2010) applied social norms theory in their research to study consumers' behaviour. In their point of view, social norms help in correcting misperceptions and examining the standards of acceptable attitudes and behaviour among the targeted community towards consumers' responses. Based on the study of Noor *et al.*, (2013), subjective norms are tested in the study of mobile advertising and it positively affects consumers' purchase intention.

Moreover, social influence is applied and tested in the research of Muk and Chung (2014), which has different results between two countries – the United States and Korean. Social influence has no significant influence on Korean consumers toward acceptance of SMS advertising. However, a positive relationship between American consumers' attitude and social influences is shown. In other words, different cultures or countries may have diverse results and perceptions. This is a good element for research across two or more markets reflect cross-market similarities or differences.

2.5 Purchase Intention

According to the previous studies of Davis *et al.* (1989) and Fishbein and Ajzen (1975), attitude towards certain behavioural intention can be defined as individual's positive or negative feelings about performing the targeted behaviour.

Theory of Reasoned Action was tested in Chile on consumers' Internet purchase intention (Andrews & Bianchi, 2013). Andrews and Bianchi (2013) found that consumers' attitude towards purchasing on the Internet is a crucial factor on purchasing intentions. In other words, for experienced participants, attitude is positively influence on intentions to continue Internet purchasing. Furthermore, online advertisements are effective in promoting product through website and social media platforms for Malaysians (Balakrishnan, Dahnil & Yi, 2014). They also found that Generation-Y's purchase intentions can be increased by sharing and giving their feedback or comment on products through social media.

According to the research findings of the study of Tanakinjal *et al.* (2011), relative advantage of mobile marketing is the strongest influence in consumers' intention decision to adopt mobile marketing. Besides that, a positive relationship with the consumers' purchase intention can be produced in the dimension of the attitude towards mobile advertising (Noor *et al.*, 2013).

In movie industry, Malaysians have positive intention towards purchasing after receiving movie mobile advertising and will continuously read the movie mobile