THE DETERMINANT FACTORS INFLUENCING YOUNG CONSUMERS' ACCEPTANCE OF MOBILE MARKETING

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DECLARATION

We hereby declare that:

(1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Equal contribution has been made by each group member in completing the research project.

(4) The word count of this research project is 14,546.

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DEDICATION

This research project is dedicated to our lovely and beloved supervisor, Mr. Garry Tan Wei Han, friends, and families. Without their sincere and boundless support, it would be impossible for us to achieve the completion of this project.

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LIST OF ABBREVIATIONS

BI	Behavioral Intention
DOI	Diffusion of Innovation Theory
DV	Dependent Variable
ESPN	Entertainment and Sports Programming Network
ICBSSR	International Conference on Behavioral and Social Science
IV	Independent Variable
MCMC	Malaysian Communications and Multimedia Commission
MMS	Multimedia Message Service
PC	Personal Computer
PDA	Personal Digital Assistant
PE	Perceived Enjoyment
PEOU	Perceived Ease of Use
PIIT	Personal Innovativeness in Information Technology
PU	Perceived Usefulness
SI	Social Influence
SMS	Short Message Service

SPSS	Statistical Package for Social Science
STV	Subject-to-variable
TAM	Theory Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
WAP	Wireless Application Protocol

PREFACE

Mobile devices are known as third screen communication and its rapid growth has offer a great opportunity for mobile marketing. Advertisers nowadays are more likely to use mobile marketing to share information as compared to email or direct mail since advertising through mobile phones is not restricted by time or space. Besides, information sent through SMS would not be filtered by system thus can directly reach target audiences. Mobile phones today no longer a good-to-have device but a necessity. It has changed many consumers' lifestyle, especially the younger generations. Youngsters with purchasing power and have extra knowledge on technology is more technology savvy and risk taking. This research project studies the prominent variables that affects acceptance of young consumers towards mobile marketing. This study is written for the benefit of three major groups, namely future researchers, mobile advertisers and the businesses which interest in implementing such technology in real future.

ABSTRACT

The introduction of mobile marketing has brought significant changes to the business world. It amplifies the importance of ubiquitous access to personalized messages anytime and anywhere. Although the benefits of adopting mobile marketing are tremendous, the adoption rate among young consumers are still at the infancy stage. Therefore, the study aims to develop a conceptual research framework to explore on the factors that determine the intention of young consumers to adopt mobile marketing, from the perspective of emerging markets like Malaysia. The study shall adopt the Technology Acceptance Model incorporated with two psychological science constructs: social influences and the personal innovativeness, and with an additional variable: perceived enjoyment. The integrated framework serves as a stronger predictor in the understanding on the adoption of mobile marketing. This conceptual research framework is beneficial for marketers who targeted at young consumers in order to communicate effectively and efficiently.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

In this first chapter will be consisting the overview of how the research project is being conducted. Research backgrounds, problem statement, research objectives, research questions, hypothesis, significant of the study, and chapter layout will be included and discussed.

1.1 Research Background

Rapid technology advancement has evolved the means and the number of people using mobile devices. As mobile devices are said to be third screen communication (Deans & Gray, 2010) and the advance of mobile technologies had enabled companies to expand their business wider and narrower. Mobile operators view new sources of revenues from mobile news services, mobile television, mobile commerce, mobile learning and mobile marketing.

Google has done statistics on US Mobile Smartphone User and confirmed mobile devices, the rival of PC, were the new gateway to the internet as 82% of those who used Smartphone notice mobile advertisements (Google Thinking Mobile, 2011). As in Malaysia, by the end of 31st December 2010, 55.6% penetration rate on broadband and 95.12% coverage for cellular population are achieved (Annual Report 2010 Universal Service Provision, 2010). Therefore, the target market is wide but to what extent the consumers can accept mobile marketing communications efforts are remained unclear (Gao, Sultan, & Rohm, 2010).

Marketers today are therefore making use of this opportunity to deliver information regarding their products and services in what is known as "mobile marketing" to their target market (Plessis, 2010). Based on Deans and Gray (2010) research, it is the evolution of e-commerce by using mobile medium as a form of marketing communications.

According to Pousttchi and Wiedemann (2006) study (as cited in Tanakinjal, Deans, & Gray, 2010) refer mobile marketing (m-marketing) as a "form of marketing communications which use mobile communication techniques in promoting goods, services and ideas". There are a variety of technological platforms that support mobile marketing applications, for example, short message service (SMS), multimedia message service (MMS), and the wireless application protocol (WAP) according to Carroll, Barnes, Scornavacca and Fletcher (2007) study (as cited in Marca, Shishkov, & Sinderen, 2010). In marketing, SMS holds the most popular mobile data application referring to Timpson and Troutman (2009) study (as cited in Plessis, 2010).

Mobile marketing often gets confused with the term named mobile advertising (Tähtinen, 2006). Mobile marketing is explained to be a wider concept including focal phenomenon meanwhile mobile advertising is said to be in a more interactive and personalize way. Many researches on mobile technology have been conducted and proved the wide usage of mobile devices in terms of accessibility and convenience, such as mobile learning (m-learning) and m-commerce. Ubiquitous access to information, anywhere and anytime are the advantages offered by mobile devices (Chong, Chan, & Ooi, 2011). According to Chong, Chong, Ooi and Lin (2011), e-learning own the power which learning can be widely accessible and available and so does m-commerce which brings huge impact on the business communities and industries compared to e-commerce (Chong et. al., 2011). In a

nutshell, mobile devices are the attractive media to communicate directly with consumers nowadays who have turn busier and harder to reach.

Consumers include young consumers which many research studies aim to understand their preferences as they will be subscribing mobile services with a longer time span. Mobile device is young adults' main source communication devices which has great access to social networks and information. Younger Americans are proved that in a year, their purchasing power is more than $200 billion, which account for half of total spending in the economy. Research shows that the persuasive voices of 82 million of Y generation make purchasing decisions on clothes, cars, food, and entertainments. The power of influence is enormous which provide challenges by turning the shopping experience upside down (Market Watch, 2006).

Youth create lifestyle and consumption habits that will influence other markets such as the widespread use of SMS language in text message (Mort & Drennan, 2007). Therefore, there are increasing numbers of companies targeting today's technology-savvy consumers; the "third screen" is expected to affect the way companies are reaching Generation Y consumers.

Young consumers are mainly early adopters of new technologies, always willing to try out new inventions and technology savvy. Based on past research, personal innovativeness has led an increasing rate in the adoption of mobile services (Revels, Tojib, & Tsarenko, 2010).This happens mostly on web users who are more familiar with the interactive technologies, which would be youngsters who are willing to try out new things, and so the acceptance of mobile marketing is higher among the others. Their attentions are easily attracted in this rapid change trend in mobile applications and they are much more easily to be prompted to subscribe new promotional package or service (Ng, Voges, & Goi, 2010).

Thus, brand managers view this as a platform to communicate with youngsters as Apple's iPhone has successful in using mobile devices as a mean of marketing communication. However, the other issue that needs to pay attention of is the feeling of intrusiveness like trust and privacy of consumers. Several brands like ESPN and Sprite have led to disappointing results after their mobile marketing efforts (Sultan, Rohm, & Gao, 2009)

1.2 Problem Statement

Mobile marketing is said to be accurate and can be executed anytime and anywhere. However, young consumers did not show enough enthusiasm in reality. What blocks the acceptance of mobile marketing (Han, Cheng, & Song, 2010)? The extent to which young consumers in Malaysia can accept this effort is needed to be clarified.

Firstly, the awareness on m-marketing has been questioned in Malaysia which is indirectly related to m-commerce. As according to hand phone users survey (2010), only 39.9% of respondents are aware of mobile commerce. Out of this 39.9%, the majority 91.2% have never made payments or purchased via mobile phones meanwhile the minority 8.8% have done so (Hand Phone Users Survey, 2010). Thus, Malaysian does not adopt m-commerce widely. This proves that the influence factors for adopting mobile related activities are not strong in Malaysia.

Traditional marketing is said to be inefficient in reaching target audience, thus, firms are facing challenges in finding out which path and which messages can they reach out to their target audiences. Mobile marketing is interacting in more personalized approach, however, consumers' profiles and preferences are inconsistent as a basis for targeting efficiently. Besides, in this fast and competitive environment with increasing numbers of failing products, target efficiently is crucial for firms to sustain their businesses especially their products have short life cycle.

On the other hand, even though consumers are overwhelmed with new innovations, many would perceive mobile advertisements as annoying and intrusive to their privacy. Thus, privacy issues have always been the challenge confronting the acceptance of mobile marketing. The other main concern falls on consumers' personal factors and technology plus infrastructure factors (Sultan et. al., 2009). Numerous research studies have emphasized on the issues on trust and privacy which concern the consumers on the intrusion of their private space such as mobile spam (Tanakinjal et. al., 2010).

Despite of other circumstances, youth market might act differently from the other age segments as mobile devices are essential to their lifestyles to connect with peer networks and gain or maintain peer acceptance according to Grant (2007) study (as cited in Plessis, 2010). Thus, their usage patterns and attitudes are varying to factors like technology literacy and social background (Grant, 2007), this will dictates the results of similar research topic with different age segments from previous studies.

Meanwhile, mobile marketing adoption and acceptance is said to be increasing Becker (2005), however, to generate constant positive returns, marketers own only little ability without a deep understanding of the factors affecting mobile advertising value in consumers perspective as cited in (Vantanparast & Butt, 2010). Therefore, we need to determine the factors which influence the young consumers' acceptance on mobile marketing.

1.3 Research Objectives

1.3.1 General Objective

In this study, we attempt to determine the factors that encourage more young consumers to engage in mobile marketing. The relationship between perceived usefulness, perceived ease of use, social influence, personal innovativeness in Informational Technology, and personal enjoyment relating to the behavioral intention towards adopting mobile marketing is examined.

1.3.2 Specific Objective

1.3.2.1 To determine the relationship between perceived usefulness and young consumers' intention to adopt mobile marketing.

1.3.2.2 To determine the relationship between perceived ease of use and young consumers' intention to adopt mobile marketing.

1.3.2.3 To determine the relationship between social influence and young consumers' intention to adopt mobile marketing.

1.3.2.4 To determine the relationship between personal innovativeness in Informational Technology and young consumers' intention to adopt mobile marketing.

1.3.2.5 To determine the relationship between perceived enjoyment and young consumers' intention to adopt mobile marketing.

1.4 Research Questions

Factors that determine more young consumers in relation to the behavioral intention to adopt mobile marketing are investigated.

1. How does perceived usefulness of young consumers influence their intention to adopt mobile marketing?

2. How does perceived ease of use of young consumers influence their intention to adopt mobile marketing?

3. How does social influence of young consumers influence their intention to adopt mobile marketing?

4. How does personal innovativeness in Information Technology of young consumers influence their intention to adopt mobile marketing?

5. How does perceived enjoyment of young consumers influence their intention to adopt mobile marketing?

1.5 Hypothesis of the Study

H1 There will be significant relationship between perceived usefulness and young consumers' intention to adopt mobile marketing.

H2 There will be significant relationship between perceived ease of use and young consumers' intention to adopt mobile marketing.

H3 There will be significant relationship between social influence and young consumers' intention to adopt mobile marketing.

H4 There will be significant relationship between personal innovativeness in Information Technology and young consumers' intention to adopt mobile marketing.

H5 There will be significant relationship between perceived enjoyment and young consumers' intention to adopt mobile marketing.

1.6 Significance of the Study

According to Handley (2006) the key to effective marketing is to understand the audience. Consumers will emphasize more on integrated marketing so marketers should focus more toward more integrated marketing communications (Ashraf & Kamal, 2010). Therefore, understanding their intention to adopt brings significant impact on communication industry as marketers create these technologies to be closer with them (Ng et. al., 2010).

Suppliers are pressurized by the diminishing product life cycle and from the consumers that are excited by the rapid innovations in the competitive environment. Thus, firms use the mobile technology such as mobile marketing, m-commerce, and mobile advertising to reach those technology savvy young consumers. Researchers think that generation Y is one of the groups that will influence the marketing landscape forever. Therefore, our studies can enforce marketers to reevaluate the media they use to reach young consumers, however, today's revolutionary mobile technologies causes the issues and opportunities to be carefully examined before deciding to invest.

Mobile marketing adoption has not been a preferred selection among consumers, based on Ng et. al. (2010) research, up to 92% of students was annoyed by unsolicited advertising messages and less likely to purchase products from the instant advertisement message. Besides, advertisements turn out to be cluttered thus it is harder to gain consumers' attention (Ng et. al., 2010). However, according to Ransford (2007), students who are technology oriented are more receptive to the ads messages if only after they were asked and would receive rewards from the communication. Thus, knowing essential steps for permission-asking would allow the firms to utilize mobile marketing communications.

Young consumers are tomorrow's customers with purchasing power which have extra knowledge on technology than today's adult, in which in Malaysia, the total number of mobile subscribers has reached around 30,379,000 (MCMC, 2010) with a penetration rate of approximately 106% due to multiple subscriptions (Ng et.al., 2010). Thus, reaching them efficiently through the correct path and messages would attract them more as young hold a big percentage on innovators and early adopters with higher willingness to try out new innovations.

Overall, our research study on mobile marketing want to bring significant impact to the marketers who wish to adopt mobile marketing or those who have already adopt it,

and so marketers would have more understanding on targeting young consumers. Mobile marketing's strengths will also outweigh the weaknesses as mobile offers several distinct advantages for marketers as well as consumers (Carter, 2008). Global brands such as Coca-cola, Burger King, and others have mobile marketing programs that allow consumers to access latest information communicate or receive coupons (Sultan et. al., 2009).

However, the failure cost of implementing project which is the lack of user acceptance can be high (Rosen, 2005). Higher acceptance would lead to higher profitability of an organization and mobile marketing growth will provide marketers with unprecedented ways and new opportunities to reach young consumers. Organizations should find out the best way to integrate mobile marketing into advertising budgets which is practiced with increasing trend nowadays (Carter, 2008).

Furthermore, this study will helps the business to save advertising costs as the recent financial crisis across the globe increases business expectations on the growth of mobile advertising and marketing for companies who turn to this medium by Geng (2009) study (as cited in Gao et. al., 2010).

1.7 Chapter Layout

The research study is divided into five chapters, in which the first chapter discusses the research background, problem statement, research objectives and questions, hypothesis of the study, chapter layout, and the relevant conclusion of chapter 1.

Subsequently followed by chapter 2 which includes literature review, relevant theoretical models review, proposed conceptual framework, development of hypothesis and the relevant conclusion of chapter 2.

Chapter 3 consists of the research methodology which research design, data collection methods sampling design, research instrument, constructs measurement, data processing, data analysis, and the conclusion of chapter 3 are included.

Chapter 4 will proceed on the descriptive analysis, scale measurement, inferential analyses, and the relevant conclusion of chapter 4.

The very last chapter 5 will include the summary of statistical analyses, discussions of major findings, implications of the study, limitations of the study, recommendations for future research, and final conclusion for chapter 5.

1.8 Conclusion

This chapter provides a foundation basis for further exploration to be conducted in chapter 2. It reveals the research overview and preliminary introduction relating to mobile marketing in this research study.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In Malaysia, mobile phone is viewed as an important communication tool and has become an essential component for the society. Malaysians are gradually using mobile phone rather than fixed line phone as communication tool to keep in touch with family, friends, colleagues and business associates (Sheeren & Rozumah, 2009). After the introduction of internet, mobile phone has become the most influential mediums for marketing (Hanley & Becker, 2008). Statistics provided by Malaysian Communications and Multimedia Commission (MCMC) in first quarter of year 2012 shows that there are more than 35 million mobile phone subscribers in Malaysia with penetration rate of 128.7%. This high penetration rate serves as the indicators of potential growth of mobile marketing in Malaysia.

Although we have a high penetration rate of mobile subscriptions, however acceptance towards mobile marketing services still remains uncertain. There are numbers of researches focus on single type of mobile services such as mobile credit card (Tan, Tan, & Ooi, 2011), mobile payment (Aw, Khalil, Emad, & Janejira, 2009) and mobile banking (Luarn & Lin, 2005), however there are lack of attention on acceptance of mobile marketing (Bauer, Reichardt, Barnes, & Neumann, 2005). Hence, in this paper, we are exploring the determinant factors that influencing young consumers' acceptance of mobile marketing.

Based on literature review, for emerging market like Malaysia, there are five independent variables (IV) that might affect the mobile marketing adoption, which are perceived usefulness (PU), perceived ease of use (PEOU), social influences (SI), personal innovativeness in information technology (PIIT) and perceived enjoyment (PE). While the dependent variable (DV) identified is the behavioral intention (BI) of young consumers to adopt mobile marketing.

2.1 Review of Literature

2.1.1 Dependent Variable - Behavioral Intention (BI)

Behavioral intention has been considered as a sign of an individual's readiness to perform a given behavior. According to Ajzen (2002) it is assumed to be an immediate antecedent of behavior and it is affected by consumer attitude.

Intention to use technology is a central concept in TAM (Davis F. D., 1989). Furthermore, intention to use a system can explain a large portion of a user's actual system usage. Intention has been studied in the context of the TRA (Fishbein & Ajzen, 1975), which finds an individual's attitude toward a behavior to be a driving factor toward that individual's actual behavior.

Many studies have been conducted to determine individual's behavioral intention to adopt technology system such as mobile advertising (Tsang, Ho, & Liang, 2004; Leppäniemi & Karjaluoto, 2005; Van der Waldt, Rebello, & Brown, 2009; Suher & Ispir, 2009; Keshtgary & Khajehpour, 2011; Lee, 2006). Likewise, study of Tsang et al. (2004) investigated the users' attitudes toward mobile advertising and the relationship between attitude and behavior in Finland. The result shows a direct relationship between user attitudes and user behavior. Therefore, behavioral intention serves as the dependent variable in this study.

2.1.2 1st IV - Perceived Usefulness (PU)

PU is one of the most widely studied variables in technology adoption such as in perspective of mobile learning (Chong, Darmawan, Ooi, & Lin, 2010), online banking (Tan, Chong, Ooi, & Chong, 2010), mobile commerce

(Safeena, Hundewale, & Kamani, 2011), mobile payment (Aw et. al., 2009) and mobile banking (Luarn & Lin, 2005). According to Ismail and Razak (2011) PU was also found to be important in predicting the intention to adopt mobile marketing in Malaysia.

PU is defined as the degree where a person believes that using a particular system would enhance (Davis F. D., 1989) and accelerates (Mathwick, Malhotra, & Rigdon, 2001) his or her job performance. In other words, it refers to the effectiveness, time saving and the relative importance of the system towards the individual's work (Joaquin, Carlos, Carla, & Silvia, 2009).

Knutsen, Constantiou and Damsgaard (2005) define PU as the degree to which mobile marketing services provide benefits to individuals better than its alternatives like direct mail and e-mail in everyday situation. Mobile marketing comprises various services such as news, information, promotional discount, internet services, music and entertainment, downloaded wall papers, etcetera. Therefore, the usefulness refers to how consumers perceive using mobile marketing services will benefit them in daily life.

PU is found to have strong direct effect towards intention of adopter to use the innovation (Davis F. D., 1989). The effect of PU towards usage intention has been validated in many existing studies including (Adam, Nelson, & Todd, 1992; Argarwal & Karahanna, 2000; Hu, Chau, Sheng, & Tam, 1999; Venkatesh & Morris, 2000). According to Nysveen, Pedersen and Thornjornsen (2005) study (as cited in Rao & Troshami, 2007), system which not helping people to perform jobs is not likely to be received favorably. Therefore in this study, mobile marketing will be more likely to accepted by users if it able to enhance users' productivity.

2.1.3 2nd IV - Perceived Ease of Use (PEOU)

According to Clarke (2000), PEOU is one of the significant factors that contribute to the general use of mobile devices and Davis F. D. (1989) defined PEOU as the degree where an individual believes that using a particular system would be free of effort. It is the degree to which individuals' associate freedom of difficulty with the use of mobile marketing services (Knutsen et. al., 2005) and believes that using m-services would be effortless.

The effort spent in using a system is an important predictor towards adoption and subsequent usage (Davis F. D., 1989). Researches such as Igbaria, Zinatelli, Cragg and Cavaye (1997), Luarn and Lin (2005),and McFarland and Hamilton (2006) have proven that the easier the system to be used, the better the system to be accepted. Assuming other variables are constant, the easier the technology to be used, the higher the possibility of users' acceptance.

The complexity of a particular system will discourage the adoption of innovation (Rogers, 1995) and the use of complexity technology will also influence user satisfaction (Huang, Soutar, & Brown, 2004). Therefore, ease of use plays an important role in determining the intention to use (Mao, Srite, Thatcher, & Yaprak, 2005; Ong, Lai, & Wang, 2004; Pijpers & van Montfort, 2005). In other word, when consumers experienced the simplicity of using m-services, they would promptly realize the benefits of their consumption; and the user friendliness of m-services would influence the usefulness of m-services (Venkatesh & Davis, 2000).

Besides PU, PEOU has also been validated as an important determinant towards adoption of information technologies such as mobile commerce (Safeena et. al., 2011), mobile banking (Luarn & Lin, 2005), mobile payment (Aw et al., 2009) and online banking (Tan et. al., 2010). It is anticipated that

the degree of customers' PEOU towards a technology will influence their acceptance on it.

2.1.4 3rd IV - Social Influences (SI)

SI is the degree to which an individual user perceived the importance of others believes he or she should use an innovation (Venkatesh & Morris, 2000). SI has been widely adopted in past technology adoption such as online banking (Tan et al., 2010), mobile credit card (Tan et al., 2011) and 3G (Chong et al., 2010). It is part of TPB and TRA (Venkatesh, Morris, Davis, & Davis, 2003) with three components which are image, subjective norm and voluntariness (Karahanna & Straub, 1999).

Image is the degree to which adoption and use of an innovation is perceived to enhance one's image or social status in his or her social system (Moore & Benbasat, 1991). Studies of Rogers (1995), and Teo and Pok (2003) have proven that the motivations for almost any individuals to adopt an innovation are the desire to gain social. They wanted to be perceived as technology savvy, trendy or social up-dated. In this study, it is hypothesized that individual are likely to have a positive attitude towards using mobile marketing services if they found that the adoption will enhance their image.

While subjective norm is the person's perception that people who are important to him think he should or should not perform the behavior (Fishbein & Ajzen, 1975). Influences from friends, relatives, superiors, peer groups even media such as television and interactive media might influence users' adoption towards mobile marketing (Lopez-Nicolas, Molina-Castillo, & Bouwman, 2008). SI plays an important role towards the intention to adopt new technology (Taylor & Todd, 1995; Karahanna & Straub, 1999) and it is

also likely to influence the adoption of mobile marketing. Therefore, we proposed that the higher the perception on SI will results a greater adoption towards mobile marketing.

2.1.5 4th IV- Personal Innovativeness in Information Technology (PIIT)

PIIT is a key individual characteristic variable towards the adoption and diffusion of innovation and is related to users' time of adoption of new technology (Rogers, 1995). According to Agarwal and Prasad (1998) PIIT is a trait reflecting individual's willingness to try new technology and the study of Lu, Liu, Yu and Wang (2008) has extended it on examining the behavioral of individual towards different IT or IS. According to Wood and Swait (2002) the conceptualization of consumer innovativeness has been used to investigate user behavior in the acceptance of new products and services.

Studies of Venkatesh and Davis (2000) and Rogers (2003) show that the innovative users tend to accept new technology positively. Besides, they also have a higher tendency in developing positive beliefs on new technology particularly when the beliefs are developed through merging of information from various media (Agarwal & Prasad, 1998). According to Lu and Su (2009) highly innovative users are active seeker and risk-takers in searching information to get new ideas. Simultaneously, research shown that innovative users perceived lower risk and much open-minded (Joseph & Vyas, 1984) and the users is more active in searching information to get new ideas (Lu, Yao, & Yu, 2005).

Besides, Lu et al. (2008) also postulate that individual with higher levels of innovativeness are expected to develop more positive perceptions about

intentions to use innovative IT. The result is similar when applied to the mobile context. For instance, Yang (2005) conducted a survey toward Singaporean students to examine their decision-making processes when adopting m-commerce and the results indicated that PIIT has significant positive effects on PU and PEOU. This can be explained that people with higher personal innovativeness may feel innovative services are even more useful when it incorporates a high degree of mobility. Thus, we proposed that the PIIT might have a positive significant relationship toward the adoption of mobile marketing.

2.1.6 5th IV - Perceived Enjoyment (PE)

Enjoyment is the intrinsic reward derived from the use of technology (Igbaria, Parasuraman, & Baroudi, 1996). PE can be defined as the extent which the usage of certain technology on activity is perceived to be enjoyable (Davis, Bagozzi, & Warshaw, 1992). According to Al-Gahtani and King (1999), and Davis et al. (1992), PE is the degree of enjoyment in using certain mobile marketing services and is an intrinsic source of motivation.

In the case of mobile services, consumers will experience enjoyment which derived from fun and playfulness while using such services (Hoffman & Novak, 1996). Likewise, previous studies revealed the positive relationship between PE and attitude towards using technologies (Cheong & Park, 2005; Lu, Zhou, & Wang, 2009; Hong, Thong, Moon, & Tam, 2008; Dickinger, Arami, & Meyer, 2008; Nysveen et. al., 2005) such as mobile services usage (Hoflich & Rossler, 2001).

These findings have proved that creating a fun, playfulness and enjoyable situation may help to create consumers' perceptions in contributing to the

usage of innovative technologies. Hence, we propose that consumers who have experienced enjoyment from using mobile marketing services are more likely to develop positive relationship toward using the technology.

2.2 Review of Relevant Theoretical Models

There are several frameworks used to explain the influence on users' acceptance toward new technologies like Theory Acceptance Model, TAM (Davis, Bagozzi, & Warshaw, 1989), Diffusion of Innovation Theory, DOI (Rogers, 1995), Theory of Reasoned Action, TRA (Fishbein & Ajzen, 1975) and Theory of Planned Behavior, TPB (Ajzen, 1985).

TAM developed by Davis (1989) explained that the usage of an information system is depends on user's belief and intention to use the system. Two determinants of salient belief are PU and PEOU. In other words, PU and PEOU are two important factors explaining user's adoption intention of technology. PU is the degree where a person believes that using a particular system would enhance his/her job performance; while PEOU refers to the degree which an individual believes that using a particular system requires little effort. According to Pavlou (2003) the decision whether to adopt an information system for a particular individual is rely much on PU and PEOU. Figure 2.1 shows the relationships between all the factors in TAM.

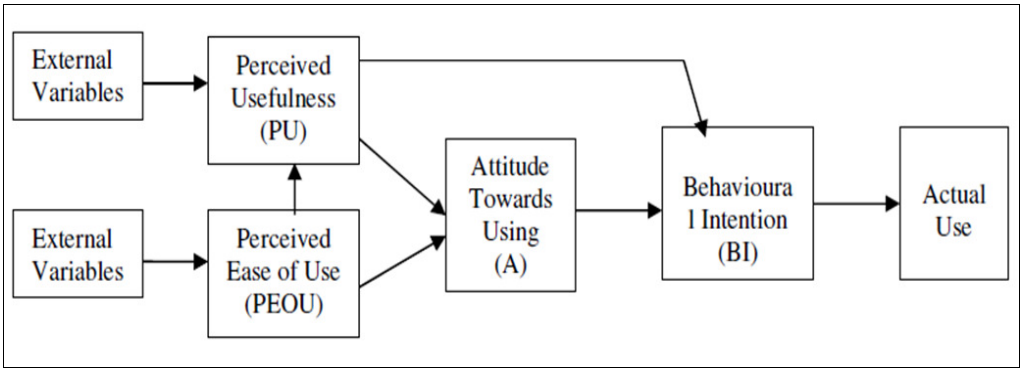
DOI is the pattern of adoption, method and assists in predicting the successful of new invention of technology (Rogers, 1995). The process in DOI shows innovation is communicated through certain channels over time among the members. According to Roger (1995) technology diffusion will go through five stages: knowledge, persuasion, decision, implementation and confirmation. This multi-stages analysis provides the insight of IT diffusion problems and how they can be solved. Besides, Brown (1999) proposed that the purpose of DOI is to provide individuals from any

discipline interested in diffusion of an innovation with a conceptual paradigm for understanding the process of diffusion and social change. DOI is constantly used by researchers to investigate the concepts and empirical results applicable to the study of technology evaluation, adoption and implementation. There are five categories of adoption which are innovators, early adopters, early majority, late majority, and laggards. Main intention of DOI is to provide an account of how innovation moves from early adoption to widespread use (Dillion & Morris, 1996). Figure 2.2 shows the relationship between all the factors in DOI.

TPB (Ajzen, 1985) is an extension of TRA (Fishbein & Ajzen, 1975) and is one of the theories broadly used in studies of technology acceptance. In TRA, individual's adoption behavior is explained by their beliefs toward the behavior that determined by individual's behavior intention. This intention is influenced by individual's attitude towards the behavior and subjective norms (Fishbein & Ajzen, 1975). In TPB, an additional factor called perceived behavioral control is added. TPB explained that an individual's behavior is jointly influenced by attitude, subjective norm and perceived behavioral control. Attitude refers to the degree where the person has favorable or unfavorable evaluation of behavior; subjective norm is the perceived social pressure of whether to perform the behavior; while perceived behavioral control is the individual's belief in the ease to execute behavior (Ajzen, 1985). Figure 2.3 shows the relationship between all the factors in TPB.

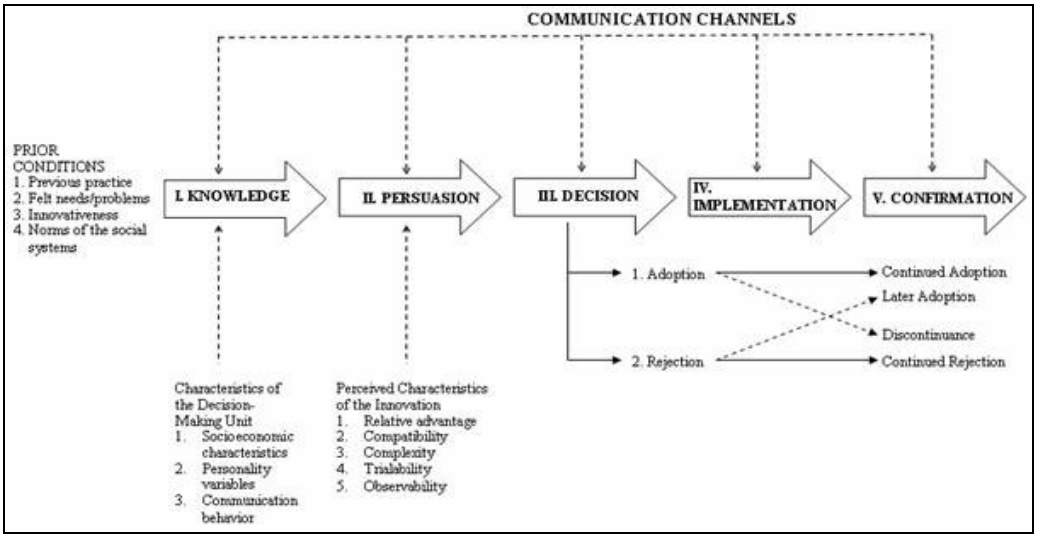
The frameworks above indicate both pros and cons. Research therefore applies methodology using modified TAM, DOI and TPB to have a more precise forecast on factors influencing young consumers' acceptance toward mobile marketing in Malaysia. As a result, TAM model was retained and we deliberately include three additional variables namely SI, PIIT and PE.

Figure 2.1: Theory Acceptance Model (TAM)



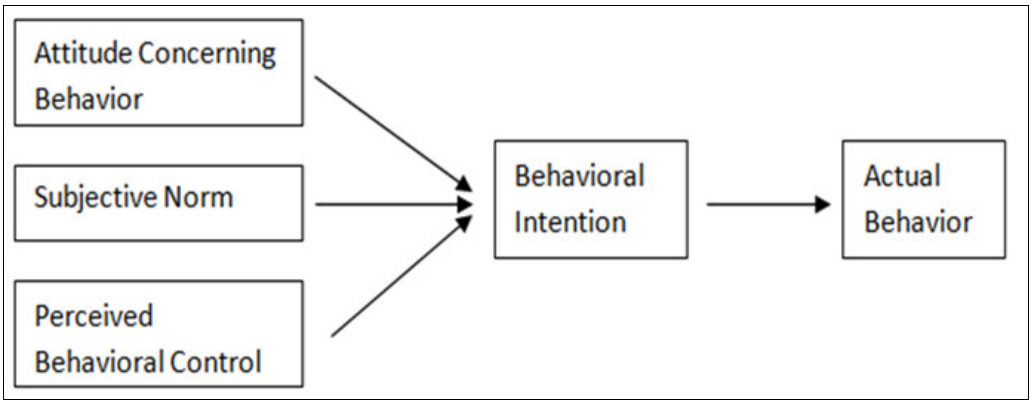
Source: Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982-1003.

Figure 2.2: Diffusion of Innovation Theory (DOI)



Source: Rogers, E. M. (1995). Diffusion of innovations. New York: *The Free Press*. (Original publication 1962)

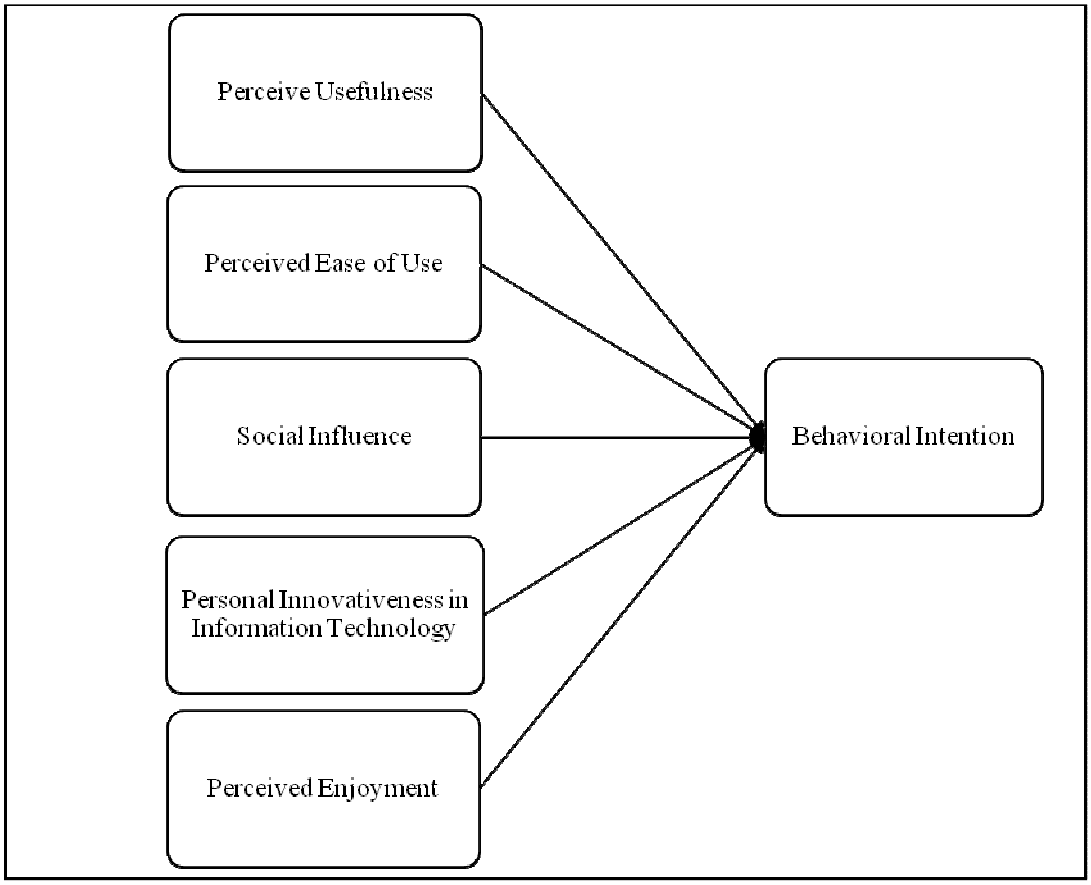
Figure 2.3: Theory of Planned Behavior (TPB)



Source: Ajzen, I. (1985). From intentions to action: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.) Action-control: From cognition to behavior, Heidelberg: Springer, 11-39.

2.3 Proposed Theoretical Conceptual Framework

Figure 2.4: The Research Model



Source: Developed for the research

The research model developed shows the conceptual framework served as foundation for this research project. The framework is developed from TAM, DOI and TPB model respectively proposed by Davis et al. (1989), Rogers (1995) and Ajzen (1985). The purpose of this study is to examine the relationship among the six variables of interest.

As a glance on research model, there are five variables classified as the independent variables which are PU, PEOU, SI, PIIT, and PE. Besides, the dependent variable, BI depends on the independent variables in relation to examine the relationship.
Based on the above relationship between the constructs, hypotheses were developed to be tested for investigating the relationship between independent variables and dependent variable.

2.4 Hypotheses Development

H1: Perceived usefulness may affect the behavioral intention of young consumer to adopt mobile marketing.

H2: Perceived ease of use may affect the behavioral intention of young consumer to adopt mobile marketing.

H3: Social influence may affect the behavioral intention of young consumer to adopt mobile marketing.

H4: Personal innovativeness in information technology may affect the behavioral intention of young consumer to adopt mobile marketing.

H5: Perceived enjoyment may affect the behavioral intention of young consumer to adopt mobile marketing.

2.5 Conclusion

The review of past studies was provided in this chapter. From the past studies reviewed, the research model and hypotheses were developed. The research methodology would then be provided in Chapter 3.

CHAPTER 3: METHODOLOGY

3.0 Introduction

In previous chapters, conceptual and theoretical framework and hypothesis are highlighted. In this chapter, focus will be on description of how research being carried out. A detailed methodology has been formulated to collect data needed to test the significances of hypotheses set.

3.1 Research Design

Research design is a roadmap to conduct marketing research project and a framework or blueprint that specifies the procedures necessary to obtain information needed to structure or solve the marketing research problem (Malhotra & Peterson, 2006).

3.1.1 Descriptive Research

Descriptive research or observational designs is a type of conclusive research that major objective is to find out the description of market characteristics and functions (Malhotra & Peterson, 2006). Descriptive research was employed in this study as researchers could survey a representative sample to find out what are the factors that affect acceptance of mobile marketing among young consumers. Besides, relationship among variables also being examine in this study.

3.1.2 Quantitative Research

Quantitative research is a research methodology seeks to quantify the data and typically applies some form of statistical analysis. Finding of quantitative research can be treated as conclusive and used to recommend a final course of action. This method is applied since the nature of study is to gather a representative data from targeted respondents and measure how many people think or feel in a particular way towards mobile marketing practice.

3.2 Data Collection Method

Data are divided into primary data and secondary data. Both will be used in our study to answer the hypotheses and research question. Questionnaire used to obtain primary data while online databases served as secondary data.

3.2.1 Primary Data

Primary data is originated by researchers for specific purpose of addressing research problem (Malhotra & Peterson, 2006). In our study, primary data is obtained through survey method. Questionnaires are given out to elicit specific information from respondents. Survey method is adopted since it able to accommodate large sample sizes at relatively low cost and simple to administer (Hair, Wolfinbarger, Bush, & Ortinau, 2006). 300 sets of questionnaires will be distributed to respondents from 14th June 2010 to 24th June 2012. Besides during the same period, respondents are also able to

respond through online survey by following this address (https://docs.google.com/spreadsheet/viewform?formkey=dG1lLVlHMWRfZkY3R2dzS1pfTlVTSnc6MQ).

Data is collected from a clustered sample of youngsters who aged 16-24 years old. According to MCMC (2012), age group of 20-24 years old have the highest subscription rate of mobile devices which is 17.3%. This shows that our targeted respondents own the basic equipment in order to take part in mobile marketing activities.

Based on Malaysia Labor Law, young adults who are 16 years old and have left school will be classified as young worker; those who aged 18 or above, will be entitle to enjoy the same employment rights as an adult (Directgov, 2012). This proved that our targeted respondents have the financial ability and purchasing power to respond towards mobile marketing activities. Meanwhile according to World Health Organization (2011), 16.7% of total employment in Malaysia is age between 15-24 years old and it shows the high potential of this group as they have a stable income with low financial burden.

3.2.2 Secondary Data

Secondary data is data which have been gathered and interpreted by someone. Secondary data such as academic journals have been used as a guiding in forming the framework of this study as well as in setting survey questions. These supporting academic journals were requires through online databases such as Emerald, ProQuest, EbscoHost and Science Direct. Relevant marketing research books are used as well to further support the theories or terminology applied in the study.

3.3 Sampling Design

3.3.1 Target Population

Target population is the entire group which researchers interested in studying or analyzing to gain particular results. Purpose of this study is to figure out young consumers' acceptance toward mobile marketing. Thus the targeted population is mobile users who age between 16-24 years old in Klang Valley.

3.3.2 Sampling Frame and Sampling Location

This study is conducted in Klang Valley. Based on Ministry of Federal Territories and Urban Wellbeing (2011) Klang Valley has a population of approximately 6 million which is 20% of national population contribution. High population density makes Klang Valley the best choice of sampling location. Besides, it has the highest density economic agglomerations within the conurbation and contributed about RM263 billion to the nation's gross national income in 2010. The fast changing and high competency in Klang Valley forced people to react fast and tend to have a higher acceptance towards new technology like mobile marketing.

Besides, Klang Valley which included 10 states (Kuala Lumpur, Klang, Kajang, Subang Jaya, Petaling Jaya, Selayang, Shah Alam, Ampang Jaya, Putrajaya and Sepang) has the most concentrated number of universities and colleges in Malaysia (Malaysia University Portal, 2009) and it is also the place where having the most concentrated number of our target respondents.

Merely in Kuala Lumpur, there are 52 universities and colleges (Malaysia University Portal, 2009). Besides there are also Monash University, Sunway University, Taylor's University Lakeside Campus and INTI International University in Subang Jaya; KDU, UTAR and KBU International College in Petaling Jaya; Universiti Tenaga Nasional, Universiti of Nottingham Malaysia Campus and New Era College in Kajang. High density of universities and colleges in Klang Valley make it the best place to undergo our study as the age group of tertiary study is exactly similar to our targeted respondents which is 16-24 years old.

3.3.3 Sampling Elements

Overall population of mobile users who age between 16-24 years old in Klang Valley will take part in the studies. Questionnaires will be distributed to all respondents who have the ability and experience of using mobile devices. Young consumers are chosen to be respondents since they tend to be more innovative and have higher openness towards new technologies. They are the upcoming generation with tremendous potential for becoming lifetime customers and have the spending power and ability to be trendsetters (Bush, Martin, & Bush, 2004).

3.3.4 Sampling Technique

Probability sampling technique served as tool to select the respondents into a sample. Advantage of using probability sampling is that it has less prone to bias and allows estimation of magnitude of sampling error, which able to determine the statistical significance of changes or differences in indicators.

Cluster sampling is used in this study as our respondents are chosen from people age between 16-24 years old in Klang Valley. Besides, it is the least costly type of probability sampling since prior development of sampling frame of all elements before selecting a sample.

3.3.5 Sampling Size

From the aspect of absolute number of cases, Hutcheson and Sofroniou (1999) recommend that the sample size should be at least 150-300 and Guilford (1954) suggests it should be at least 200. While according to Comrey and Lee (1992) sample size of 100=poor, 200=fair, 300=good, 500=very good.

Meanwhile from the aspect of subject-to-variable (STV) ratio, Bryant and Yarnold (1995), and Gorsuch (1983) suggest that STV ratio should not lower than 5; while Hair, Anderson, Tatham and Black (1995) propose a ratio of 20:1. There are 5 variables in our study, thus range of subject should more than 25 and 100.

Based on item-to-respond ratio, Hinkin (1995) suggest ranged from 1:4 to 1:10. Since we have 24 items, sample would range between 96 and 240.

Total sample size was planned at 400 with an expected 30% of non respond rate. Besides, due to there will be error in questionnaire as there will be some void in it and certain number of questionnaire will not be counted. Approximately 240 questionnaires answered will be taken into account to the research.

3.4 Research Instrument

The research instrument used is self-administered questionnaire. It is a data collection method where respondents read survey question and recorded his or her own answer without present of trained interviewer (Hair et al., 2006).

Questionnaire is used to generate responses from the respondents since it is a cheaper way to generate data from potentially amount of respondents. Besides, it can reduce the non-response bias to certain acceptable degree and low response rate problem. Meanwhile, standardization of the question makes the measurement more precise by enforcing uniform definitions upon the participants. As compared to other research methods, questionnaire is the most cost effective and efficient way.

Besides, online survey will be used as an aid-method to make the questionnaire reach most target respondent in relatively short amount of time and in a more environmental friendly way. Data from web-based questionnaire can also be automatically validated; for example, if data entered incorrectly, the web-based program will return an error message requesting the respondents to renter the data correctly and resubmit the questionnaire. It actually simplifies the researchers' work.

3.4.1 Questionnaire Design

Closed-ended/ structured questions were used since responses were standardized whereby it can ease the process of interpreting data from large numbers of respondents. The result will be more comparable, faster and higher in accuracy. Moreover, closed-ended questionnaire shortened the responding time since answers are provided and respondents would only rate the answer according to question.

Questionnaire is separated into 2 sections: Section A is demographic profile while section B is factors that affect young consumers' acceptance towards mobile marketing. Questions were adopted and modified from previous studies conducted by others researchers. Questionnaire is carried out in simple English to allow respondents easily understand question requirement and provide accurate answer. Brief introduction and purpose of study will be stated on the cover page. Each question is straight to the point to prevent confusing respondents.

3.4.2 Pilot Test

Based on Cooper and Schindler (2006), pilot test is a trial collection of data to detect weakness in design and instrumentation and provide proxy data for selection of a probability sample.

30 sets of questionnaire will be distributed on 11th June 2012 during pilot testing stage. Respondents are encouraged to comment on any questions or statements that they thought were ambiguous or unclear. Feedback was gathered in the clarity of the information and statement on how questionnaire can be improved.

After 30 sets of questionnaire been collected, reliability test will be conducted through SPSS software. Cronbach's alpha is used to examine the internal reliability of pilot test. Reliability is consider weak when alpha coefficient is below 0.6; moderate strong when scores between 0.6-0.8; very strong when alpha coefficient is between 0.8-1.0 (Malhotra & Peterson, 2006).

3.5 Constructs Measurement

3.5.1 Scale of Measurement and the Scaling Techniques

There are two sections in questionnaire. Section A which about demographic profile use nominal scale as scale of measurement, where options for the questions are separated to represent different group of categories. Section B

use interval scale where questions are designed by using 7-Likert scale. Respondents are required to specify degree of agreement/disagreement with each of a series of statement about a stimulus objects given.

3.5.2 Origin of Source of Measurement

Table 3.1: The Original Sources of Measurement

Construct	Adopted From
Perceive Usefulness (PU)	Tan, Chong, Ooi, & Chong (2010) Chong, Chong, Ooi, & Lin (2011)
Perceive Ease of Use (PEOU)	Tan, Chong, Ooi & Chong (2010) Aw, Khalil, Emad, & Sutanonpaiboon (2009)
Social Influences (SI)	Tan, Tan, & Ooi (2011) Chong, Darmawan, Ooi, & Lee (2010)
Personal Innovativeness in Information Technology (PIIT)	Safeena, Hundewale, & Kamani (2011)
Perceive Enjoyment (PE)	Ismail & Razak (2011) Revels, Tojib, & Tsarenko (2010)

Source: Developed for the research

3.5.3 Definition of Constructs

Table 3.2: The Operational Definition of Constructs

Multi-item Scale Measure	No. of Items	Sample Items
Perceive Usefulness (PU)	6	· I find mobile marketing useful in my daily life. · Accepting mobile marketing will enable me to receive updates news faster. · Using mobile marketing increases my productivity. · Using mobile marketing would enhance my effectiveness of purchasing great deals. · Using mobile marketing can help me to make better purchasing decisions. · Overall, I find mobile marketing advantageous.
Perceive Ease of Use (PEOU)	5	· I have the resources necessary to use mobile marketing. · Using mobile marketing does not require a lot of mental effort. · I find it easy to get news updates through mobile marketing. · I think I am able to use mobile marketing without the help of

		expert. · I think that I would find it easy to learn how to se mobile marketing.
Social Influences (SI)	5	· Friend's suggestion and recommendation will affect my decision to use mobile marketing. · Family/relatives have influence on my decision to use mobile marketing. · I will use mobile marketing if it is widely used by people in my community. · Mass media (e.g., TV, newspaper, radio) will influence me to use mobile marketing. · Mobile marketing will enable me to improve my social status.
Personal Innovativeness in Information Technology (PIIT)	4	· I think I would be first in my circle of friends to know the latest updates through mobile marketing. · I think I would be first in my circle of friends to use mobile marketing. · I think I know more about mobile marketing than my circle of friends. · I think I would starts using mobile marketing even if I did not know anyone who had starts using it.
Perceive Enjoyment (PE)	4	· The process of surfing

		advertisements from mobile marketing is enjoyable. · While accessing mobile advertisement, I have experienced pleasure. · Overall, I believe that viewing mobile advertisement is fun. · Purchase through mobile marketing is pleasant.

Source: Developed for the research

3.6 Data Processing

3.6.1 Questionnaire Checking

Questionnaire checking is initial step of data preparation and involves checking for completeness and interviewing quality (Malhotra & Peterson, 2006). This is a continuous process and begins as the first set of questionnaire is returned while field work is still in progress. Checking will be done before questionnaires are distributed in order to eliminate potential problems like question content, sequence, form and layout, question difficulty and instruction misunderstanding. Problem result from pilot test can be detected early and corrective action can be taken before surveys have been completed.

3.6.2 Data Editing

This is the process where raw data are checked for mistakes made by either interviewer or respondent during data collection activities (Hair et al., 2006). Besides, data editing is the review of questionnaire with objectives of increasing accuracy and precision. In this study, language mistake and some ambiguity words have been edited after receiving the feedbacks from pilot test.

3.6.3 Data Coding

It is a process of assigning numerical values to each individual response for each question on the survey (Hair et al., 2006). The code also indicates the column position (field) and data record it will occupy in the question. Codes should be simple and easy, i.e., "male" code as 1 while "female" code as 2. Advantage of using data coding is the simplistic storage of data with few-digit code and easier to category compared to lengthy alphabetical description.

3.6.4 Data Transcribing

Transcribing data involved transferring coded data from questionnaires or coding sheets onto disks or directly into computers by keypunching or other means (Malhotra & Peterson, 2006). However it is commonly used for drop-off surveys while not necessary to those data which was collected using computer since data were entered into computer when questionnaires were collected.

3.6.5 Data Cleaning

This method is used to make consistency checks and treatment of missing responses. The checks for questionnaires are more through and extensive than data editing. Consistency check is implemented using SPSS to identify data that are out-of-range, logically inconsistent or have extreme values. Moreover, missing responses might occur on this cleaning process.

3.6.6 Selecting a Data Analysis Strategy

Select a proper data analysis strategy based on the earlier steps of marketing research process while the insight into the data can be valuable. Besides, property of the statistical techniques is also important for examining difference in variables, assessing the relationship between variables and for making prediction. Background and philosophy of the researcher will also influence the choice of data analysis strategy.

3.7 Data Analysis

After data being collected from the field, coded and analyzed using SPSS, result then will be represented using graph display such as table, histogram, chart and other valuable information.

3.7.1 Descriptive Analysis

Descriptive analysis refers to transformation of raw data into form of easier understanding and interpretation to provide descriptive information. Descriptive statistics are shown as frequencies, measures of central tendency and dispersion. Frequency distribution analysis will provide summary information on demographic of the sample. In this study, descriptive analysis is used in Section A, demographic profile.

3.7.1.1 Frequency Distribution

Frequency distribution is a mathematical distribution with objective of obtaining a count of number of responses associated with different values of one variable to express these counts in percentage term (Malhotra & Peterson, 2006). Typically it shows variable name and description, frequency counts for each value of the variable and cumulative percentages for each value associated with a variable. As an example, frequency distribution of monthly income shows number of respondents who have the income of certain level.

Central tendency is the middle of frequency distribution. Mean or average is a measure of central tendency which used to analyze data collected in Section B. Means was commonly used to estimate the average when data were collected using interval or ration scale.

3.7.2 Scale Measurement

3.7.2.1 Reliability Test

Reliability test is used to determine the stability and consistency with which the research measures the constructs (Malhotra & Peterson, 2006). Relationship between each individual item in the scale can also be determined significantly. Cronbach's alpha is calculated by averaging the coefficients result from all possible combinations of split halves. Correlation coefficient value can range from 0 to 1. The higher the coefficient, the more reliable the item is. While value lower than 0.6 indicates unsatisfactory internal consistency reliability.

3.7.3 Inferential Analysis

3.7.3.1 Independent Sample T-test

T-test is an unvaried hypothesis test using the t-distribution rather than z-distribution (Zikmund, 2003). It being used when the population standard deviation is unknown and the sample size is small. T-test is typically used

when researchers want to compare the mean differences on dependent variable between two groups.

3.7.3.2 Cross Tabulation Analysis

It is a statistical technique which describes two or more variables simultaneously and results in tables reflect the joint distribution of two or more variables that have limited number of categories or distinct values. The clarity of interpretation provides stronger link between research results and managerial actions.

3.7.3.3 Pearson's Correlation Analysis

It is used to measure the relationship between or among two or more variables. Correlation indicates the strength and direction of linear association between two random variables. In this study, Pearson's correlation coefficient is used to measure the co-variation or association between dependent variable, BI toward mobile marketing among young consumers and the independent variables which include PU, PEOU, SI, PIIT and PE.

Coefficient (r) indicates both magnitude of linear relationship and direction of relationship. It ranges from +1.0 and indicates perfect positive relationship; however -1.0 indicates perfect negative relationship; while 0 means no linear relationship.

3.7.3.4 Multiple Regressions

It is a statistical technique which analyzes liner relationship between dependent variable and independent variables by estimating coefficient for equation for a straight line (Hair et al., 2006). To examine the relationship between two variables, it will be estimated by the following equation.

$$Y= a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5+ \ldots + bkXk$$

Equation:

$$ATMM= a + b1PU + b2PEOU + b3SI + b4PIIT + b5PE$$

Whereby,

ATMM= Acceptance towards Mobile Marketing
PU = Perceived Usefulness
PEOU = Perceived Ease of Use
SI = Social Influences
PIIT = Personal Innovativeness in Information Technology
PE = Perceived Enjoyment

Multiple regression equation enables researchers to have better understanding on which independent variables have greater impacts on dependent variable, vice versa.

3.8 Conclusion

Overall, chapter 3 discuss about research design, data collection method, sampling design, research instrument, constructs measurement, data processing and methods of data analysis that adopted in this study. While next chapter will be focus on presentation and analysis of result relevant to the research questions. Chapter 4 will provide a detailed analysis of data obtained through the use of the methodologies in chapter 3.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In this chapter, the outcome of questionnaire surveyed target respondents' data was analyzed. Before the actual survey, a pilot test for 30 targeted respondents was executed. SPSS version 18.0 was used to conducted in-depth analysis of data collected in term of descriptive analysis, scale measurement and inferential analysis.

4.1 Pilot Test

In order to reduce deficiency of questionnaire, we had conducted a pilot test by distributing 30 questionnaires to the targeted respondents. 30 sets of questionnaires have been analyzed through SPSS with confirmation of fulfilling the assumptions of reliability (>0.7) and table below shows the result of the pilot testing.

Table 4.1: Pilot Test's Reliability Test

Variables	Cronbach's Alpha	No of Items
PU	.947	6
PEOU	.907	5
SI	.924	5
PIIT	.886	4
PE	.925	4
BI	.901	3

Source: Developed for the research

4.2 Descriptive Analysis

Both online survey and paper-and–pencil method were used for data collection. Mixed methods applied helps to minimize coverage bias. Total 238 sets of questionnaires were returned and 84 sets online survey have been done. Out of 322 responses, 66 samples were excluded due to partial response and/or missing data. The remaining total response of 256 samples is subjected to the required statistical analysis that needs to be conducted in order to achieve the objectives of this research. The data of descriptive analysis and the sequence of data presentation refer to distributed questionnaire (Appendix I).

4.2.1 Respondents Demographic Profile

Demographic profile of surveyed respondents is presented in Appendix II. It includes gender, age, marital status, highest academic level, specialization, region, devices, experience, times and likelihood.

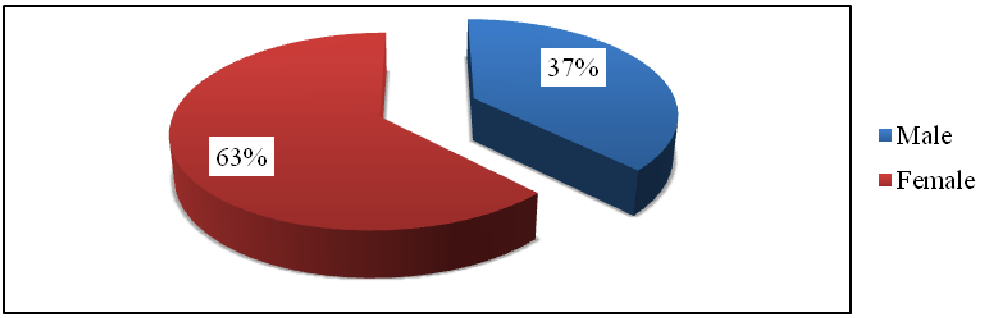
4.2.1.1 Gender

Table 4.2: Respondents' Demographic (Gender)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	96	37.5	37.5	37.5
	Female	160	62.5	62.5	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.1: Respondents' Demographic (Gender)



Source: Developed for the research

Figure 4.1 shows gender of respondents. Out of 256 respondents, 160 of them with percentage 62.5% are female; 96 people with 37.5% are male.

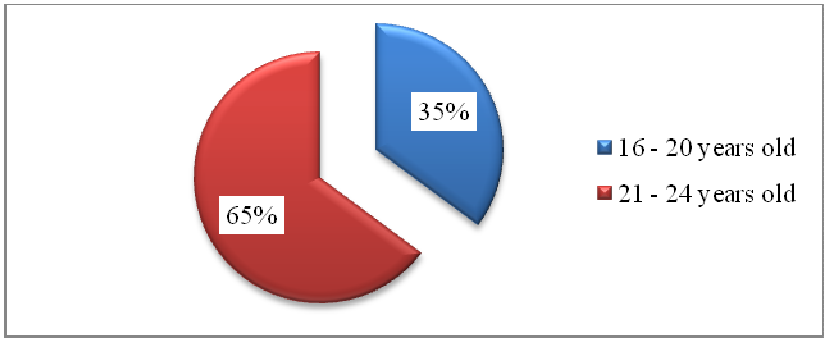
4.2.1.2 Age

Table 4.3: Respondents' Demographic (Age)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16- 20 years old	90	35.2	35.2	35.2
	21 - 24 years old	166	64.8	64.8	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.2: Respondents' Demographic (Age)



Source: Developed for the research

Figure 4.2 shows most respondents are age between 21-24 years old, which is 166 respondents; 35% which is 90 of them are age between 16-20 years old.

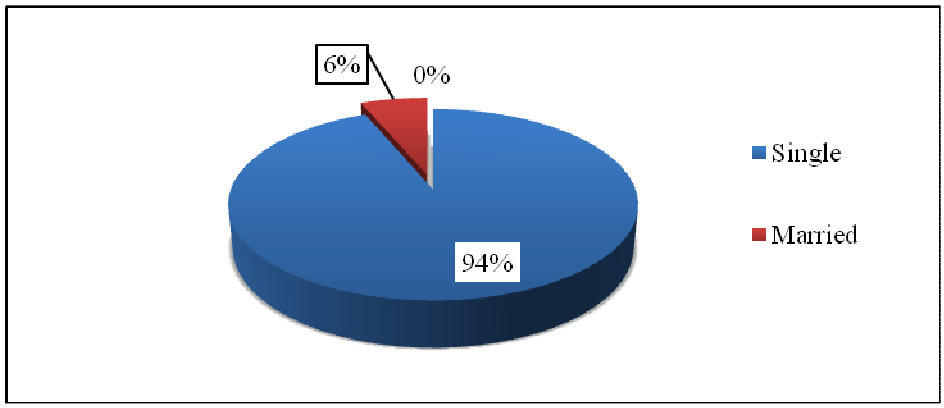
4.2.1.3 Marital Status

Table 4.4: Respondents' Demographic (Marital Status)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	240	93.8	93.8	93.8
	Married	16	6.3	6.3	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.3: Respondents' Demographic (Marital Status)



Source: Developed for the research

Majority of respondents are single which is 94% while there are only 16 of them (6%) are married.

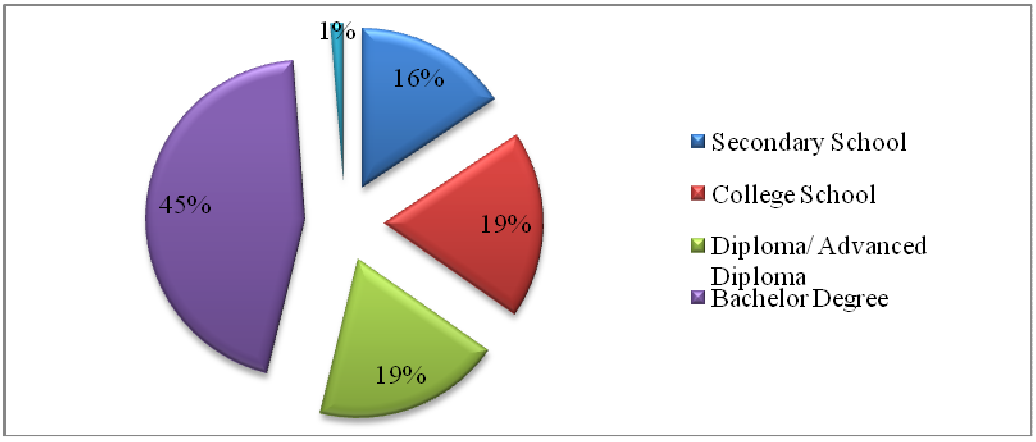
4.2.1.4 Highest Academic Level

Table 4.5: Respondents' Demographic (Highest Academic Level)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary School	40	15.6	15.6	15.6
	College School	49	19.1	19.1	34.8
	Diploma/ Advanced Diploma	49	19.1	19.1	53.9
	Bachelor Degree	115	44.9	44.9	98.8
	Master Degree	3	1.2	1.2	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.4: Respondents' Demographic (Highest Academic Level)



Source: Developed for the research

Majority of respondents are bachelor degree. 256 of them (44.9%) are bachelor degree holders; followed by diploma/ advanced diploma and college holder with 19.1% each. Remaining 15.6% is secondary school and 1.2% is master degree.

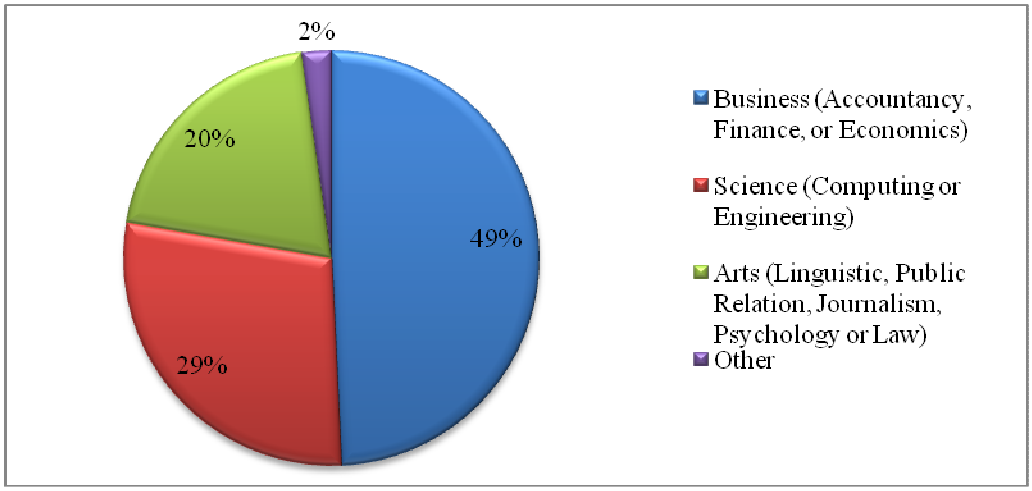
4.2.1.5 Specialization

Table 4.6: Respondents' Demographic (Specialization)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business	126	49.2	49.2	49.2
	Science	73	28.5	28.5	77.7
	Arts	51	19.9	19.9	97.7
	Others	6	2.3	2.3	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.5: Respondents' Demographic (Specialization)



Source: Developed for the research

Respondents are majority business specialization which is 49.2%; followed by science, 28.5%; arts 19.9% and lastly 2.3% are others.

4.2.1.6 Region

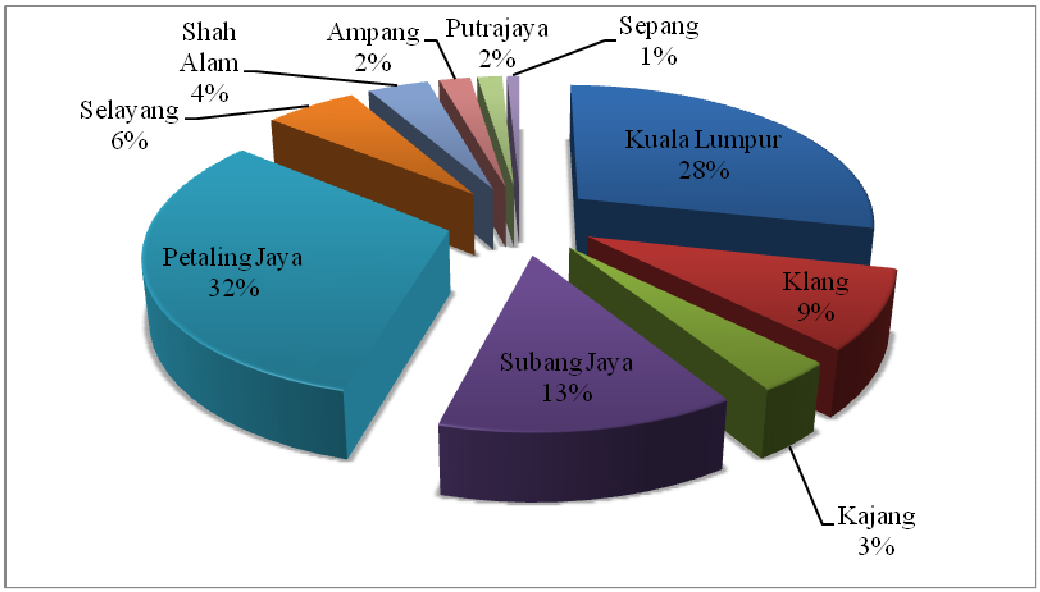
Table 4.7: Respondents' Demographic (Region)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Kuala Lumpur	73	28.5	28.5	28.5
	Klang	23	9.0	9.0	37.5
	Kajang	9	3.5	3.5	41.0
	Subang Jaya	34	13.3	13.3	54.3
	Petaling Jaya	81	31.6	31.6	85.9

	Selayang	15	5.9	5.9	91.8
	Shah Alam	10	3.9	3.9	95.7
	Ampang Jaya	5	2.0	2.0	97.7
	Putrajaya	4	1.6	1.6	99.2
	Sepang	2	.8	.8	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.6: Respondents' Demographic (Region)



Source: Developed for the research

Respondents are majority from Petaling Jaya with the highest percentage, 31.6%; followed by Kuala Lumpur 28.5%. The following included Subang Jaya (13.3%), Klang (9%), Selayang (5.9%), Shah Alam (3.9%), Kajang (3.5%), Ampang Jaya (2%), Putrajaya (1.6%) and Sepang (0.8%).

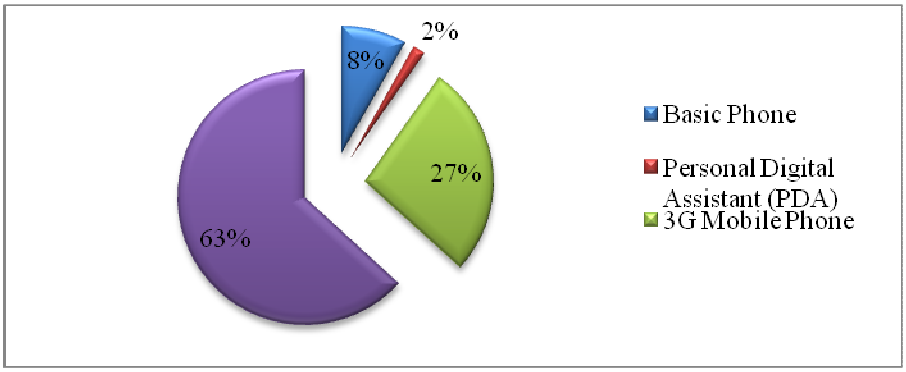
4.2.1.7 Devices

Table 4.8: Respondents' Demographic (Devices)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Basic Phone	21	8.2	8.2	8.2
	PDA	4	1.6	1.6	9.8
	3G Mobile Phone	69	27.0	27.0	36.7
	Smart Phone	162	63.3	63.3	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.7: Respondents' Demographic (Devices)



Source: Developed for the research

There are 256 respondents which is 63.6% using smart phone, 27% are using 3G mobile phone, 8.2% basic phone and 1.6% using PDA.

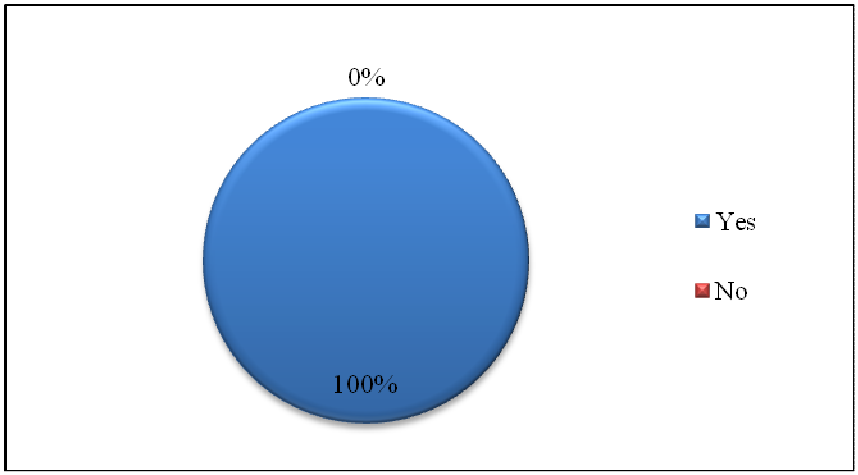
4.2.1.8 Experience

Table 4.9: Respondents' Demographic (Experience)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	256	100.0	100.0	100.0

Source: Developed for the research

Figure 4.8: Respondents' Demographic (Experience)



Source: Developed for the research

Since our study is focus on mobile marketing acceptance thus respondents' experience of receiving mobile marketing services are critical. Data cleaning has been done to filter out the nonviable respondents before data key in. Therefore, figure 4.8 shows 100% experience rate.

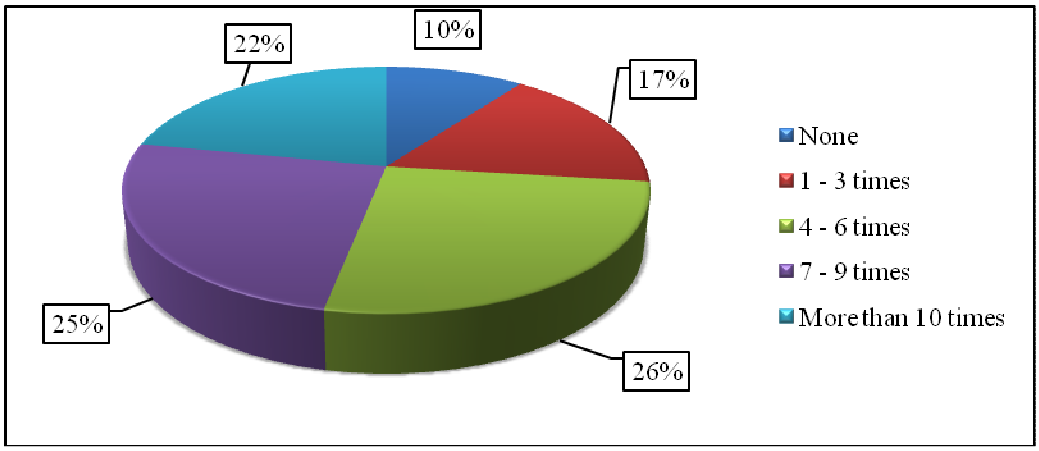
4.2.1.9 Times

Table 4.10: Respondents' Demographic (Times)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	26	10.2	10.2	10.2
	1-3	43	16.8	16.8	27.0
	4-6	67	26.2	26.2	53.1
	7-9	64	25.0	25.0	78.1
	≥10	56	21.9	21.9	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.9: Respondents' Demographic (Times)



Source: Developed for the research

256 respondents which consist 26% of total responds reacted 4-6 times towards mobile marketing in past one year. 25% reacted 7-9 times; 22% reacted 10 times; 17 % reacted 1-3 times while 10% did not ever react toward mobile advertisements.

4.2.1.10 Likelihood

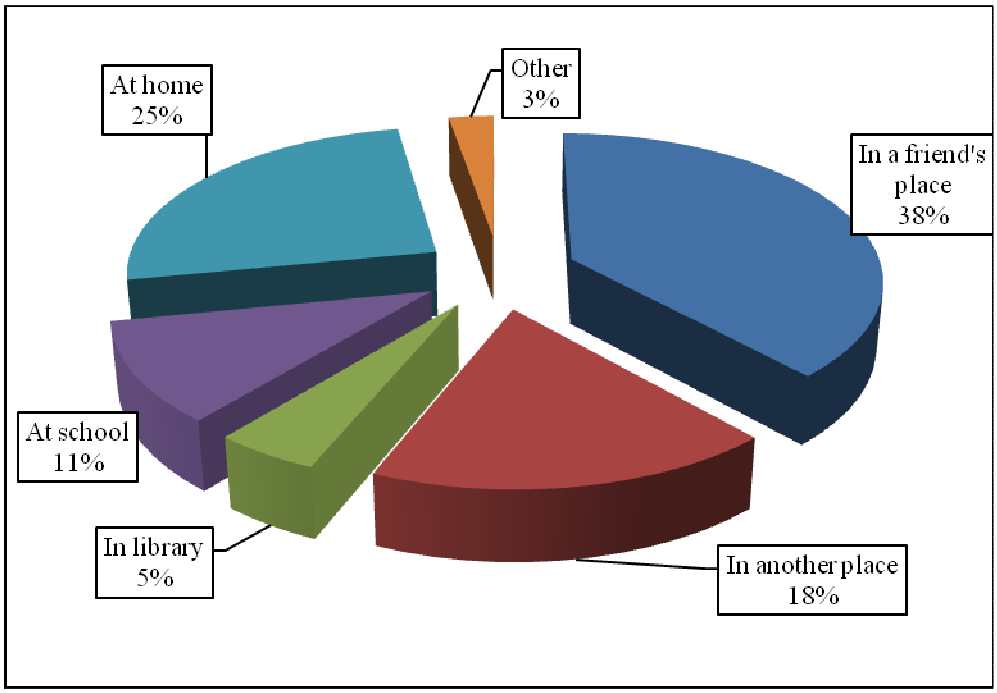
Table 4.11: Respondents' Demographic (Likelihood)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	In a friend's place	98	38.3	38.3	38.3
	In another place	46	18.0	18.0	56.3
	In library	12	4.7	4.7	60.9

	At school	28	10.9	10.9	71.9
	At home	65	25.4	25.4	97.3
	Other	7	2.7	2.7	100.0
	Total	256	100.0	100.0	

Source: Developed for the research

Figure 4.10: Respondents' Demographic (Likelihood)



Source: Developed for the research

Majority of respondents prefer reading mobile advertisement at friend's place (38%); followed by at home (25%) and at another place (18%). Remaining is at school, 11%; in library, 5 % and lastly is other place, 3%.

4.3 Central Tendencies Measurement of Construct

Table 4.12: Summary of Central Tendency for PU

		Usefulness	Fast update	Productivity	Effectiveness	Purchase decision	Advantageous
N	Valid	256	256	256	256	256	256
	Missing	0	0	0	0	0	0
Mean		4.8477	5.1094	4.7734	4.9297	4.7422	4.984
Median		5.0000	5.0000	5.0000	5.0000	5.0000	5.000
Mode		5.00	6.00	5.00	6.00	5.00[a]	5.0
Std. Deviation		1.11154	1.26015	1.19944	1.33833	1.34162	1.3135
Variance		1.236	1.588	1.439	1.791	1.800	1.725
Skewness		-1.025	-.966	-1.039	-1.028	-.738	-1.049
Std. Error of Skewness		.152	.152	.152	.152	.152	.152
Kurtosis		.941	.583	1.060	.770	-.038	1.148
Std. Error of Kurtosis		.303	.303	.303	.303	.303	.303
Range		6.00	6.00	6.00	6.00	6.00	6.00

a. Multiple modes exist. The smallest value is shown

Source: Developed for research

Referring to Table 4.12, “fast update” (5.109) score the highest mean among six items meanwhile “purchase decision” (4.742) scored the lowest among all.

Besides, “purchase decision” (1.342) has the highest standard deviation whereas “usefulness” (1.112) has the lowest score among six items. Plus, the six items were negatively skewed as the skewness in the construct is negative which indicates greater number of larger values. And these items in the constructs have positive Kurtosis values which have a shape flatter than normal except for “purchase decision” who own a negative value.

Table 4.13: Summary of Central Tendency for PEOU

		Resources	Mental effort	Easy update	Without help	Learn
N	Valid	256	256	256	256	256
	Missing	0	0	0	0	0
Mean		5.1484	5.1328	5.1680	5.1289	5.3516
Median		5.0000	5.0000	5.0000	5.0000	5.0000
Mode		6.00	5.00	5.00	5.00	6.00
Std. Deviation		1.24359	1.18070	1.16783	1.21872	1.04104
Variance		1.547	1.394	1.364	1.485	1.084
Skewness		-1.000	-.822	-.942	-1.022	-1.228
Std. Error of Skewness		.152	.152	.152	.152	.152
Kurtosis		.894	.708	1.080	1.417	2.803
Std. Error of Kurtosis		.303	.303	.303	.303	.303
Range		6.00	6.00	6.00	6.00	6.00

Source: Developed for research

For the perceived ease of use construct, “learn” (5.352) has the highest mean among five items while “without help” (5.129) has the lowest mean. In terms of standard deviation, “resources” (1.244) scored is highest with “learn” (1.041) scored the lowest among five items. Besides, the skewness in this construct is all negative, meanwhile all items have positive Kurtosis values which have a shape flatter than normal.

Table 4.14: Summary of Central Tendency for SI

		Friends	Family	Community	Mass media	Social status
N	Valid	256	256	256	256	256
	Missing	0	0	0	0	0
Mean		5.1406	5.0195	5.0938	5.0078	4.9727
Median		5.0000	5.0000	5.0000	5.0000	5.0000
Mode		6.00	6.00	6.00	5.00	5.00
Std. Deviation		1.24450	1.26940	1.32805	1.28029	1.29677
Variance		1.549	1.611	1.764	1.639	1.682
Skewness		-1.081	-.709	-1.085	-.602	-.569
Std. Error of Skewness		.152	.152	.152	.152	.152
Kurtosis		.984	.018	1.205	.042	-.042
Std. Error of Kurtosis		.303	.303	.303	.303	.303
Range		6.00	6.00	6.00	6.00	6.00

Source: Developed for research

According to Table 4.14, “friends” (5.141) scored the highest mean while “social status” (4.973) scored the lowest mean of all five items. Meanwhile, “community” (1.328) has the highest standard deviation and “friends” (1.245) has the lowest standard deviation in this construct. These five items are negatively skewed which indicates greater number of larger values. And these items in the constructs have positive Kurtosis values which indicate a shape flatter than normal except for “social status” who own a negative value.

Table 4.15: Summary of Central Tendency for PIIT

		First know	First use	Know more	Not know
N	Valid	256	256	256	256
	Missing	0	0	0	0
Mean		2.9102	2.9375	2.9805	3.4492
Median		3.0000	3.0000	3.0000	4.0000
Mode		3.00	3.00	3.00	4.00
Std. Deviation		1.14607	1.15640	1.12180	1.20675
Variance		1.313	1.337	1.258	1.456
Skewness		.177	-.031	.156	-.109
Std. Error of Skewness		.152	.152	.152	.152
Kurtosis		-.501	-.730	-.053	-.577
Std. Error of Kurtosis		.303	.303	.303	.303
Range		5.00	4.00	5.00	5.00

Source: Developed for research

Referring to Table 4.15, the highest mean is “not know” (3.449) while the lowest mean of all four items is “first know” (2.910). Meanwhile, “not know” (1.207) has the highest standard deviation and “know more” (1.122) has the lowest standard deviation in this construct. There are two items are negatively skewed which indicates greater number of larger values which are “first use” and “not know”. Meanwhile, “first know” and “know more” have positive value of skewness. Plus, four items scored negative Kurtosis values.

Table 4.16: Summary of Central Tendency for PE

		Enjoyable	Pleasure	Fun	Pleasant
N	Valid	256	256	256	256
	Missing	0	0	0	0
Mean		4.5313	4.5508	4.5508	4.5430
Median		5.0000	5.0000	5.0000	5.0000
Mode		5.00	5.00	5.00	5.00
Std. Deviation		1.39993	1.54836	1.42435	1.38554
Variance		1.960	2.397	2.029	1.920
Skewness		-1.145	-.779	-.723	-.585
Std. Error of Skewness		.152	.152	.152	.152
Kurtosis		.830	-.126	.057	.014
Std. Error of Kurtosis		.303	.303	.303	.303
Range		6.00	6.00	6.00	6.00

Source: Developed for research

Table 4.16 shows that “pleasure” (4.551) and “fun” (4.551) scored the highest meanwhile “enjoyable” (4.531) scored the lowest mean among four items in the construct. The highest standard deviation is scored by “pleasure” (1.548) and the lowest standard deviation is scored by “pleasant” (1.386). All four items in the construct are negatively skewed because the skewness was negative. The Kurtosis values are all positive as the shape is flatter than normal except for “pleasure” that has a negative value.

Table 4.17: Summary of Central Tendency for BI

		Future	Daily life	Frequently
N	Valid	256	256	256
	Missing	0	0	0
Mean		5.2422	4.9375	5.0742
Median		5.0000	5.0000	5.0000
Mode		6.00	5.00	5.00
Std. Deviation		1.21910	1.25401	1.27355
Variance		1.486	1.573	1.622
Skewness		-1.180	-.495	-.553
Std. Error of Skewness		.152	.152	.152
Kurtosis		1.617	-.219	.345
Std. Error of Kurtosis		.303	.303	.303
Range		6.00	6.00	6.00

Source: Developed for research

For the behavioral intention construct, “future” (5.242) own the highest mean score while “daily life” (4.938) own the lowest score among three items. Besides, “frequently” (1.274) holds the highest in standard deviation whereas “future” (1.219) holds the lowest of all three items. The construct are negatively skewed as the skewness is negative and the Kurtosis values are all positive as the shape is flatter than normal except for “daily life” that has a negative value.

4.4 Scale Measurement

4.4.1 Reliability Analysis

Table 4.18: Reliability Test

Variables	No. of Item	Cronbach's Alpha
Perceived Usefulness	6	0.921
Perceived Ease of Use	5	0.891
Social Influence	5	0.882
Personal Innovativeness in Information Technology	4	0.908
Perceived Enjoyment	4	0.924
Behavioral Intention	3	0.913

Source: Developed for the research

Internal consistency is measured using Cronbach's coefficient alpha which ranges in value from 0 to 1 whereby 0.7 is considered as an acceptable reliability coefficient. Table 4.18 indicates, all the reliability coefficients in this study are above 0.7, hence, this shows that our questionnaire is reliable to measure all construct consistently.

The highest level is perceived enjoyment with 0.924 and followed by perceived usefulness of 0.921. The third highest is personal innovativeness in informational technology with 0.908. Perceived ease of use has 0.891 and lastly, social influence has the lowest alpha coefficient of 0.882.

Overall, the internal reliability coefficients are considered strong to very strong and thus, the results are confirmed that the measures are internally reliable with a consistent tool, questionnaire.

4.5 Inferential Analyses

4.5.1 Pearson Correlation Analysis

Table 4.19: Results of Pearson Correlation Analysis

		PU	PEOU	SI	PIIT	PE	BI
PU	Pearson Correlation	1	.681**	.626**	.078	.701**	.846**
	Sig. (2-tailed)		.000	.000	.213	.000	.000
	N	256	256	256	256	256	256
PEOU	Pearson Correlation	.681**	1	.784**	-.145*	.434**	.740**
	Sig. (2-tailed)	.000		.000	.020	.000	.000
	N	256	256	256	256	256	256
SI	Pearson Correlation	.626**	.784**	1	-.133*	.387**	.685**
	Sig. (2-tailed)	.000	.000		.034	.000	.000
	N	256	256	256	256	256	256
PIIT	Pearson Correlation	.078	-.145*	-.133*	1	.202**	-.054
	Sig. (2-tailed)	.213	.020	.034		.001	.390
	N	256	256	256	256	256	256
PE	Pearson Correlation	.701**	.434**	.387**	.202**	1	.659**
	Sig. (2-tailed)	.000	.000	.000	.001		.000
	N	256	256	256	256	256	256
BI	Pearson Correlation	.846**	.740**	.685**	-.054	.659**	1
	Sig. (2-tailed)	.000	.000	.000	.390	.000	
	N	256	256	256	256	256	256

**. Correlation is significant at the 0.01 level (2-tailed).

		PU	PEOU	SI	PIIT	PE	BI
PU	Pearson Correlation	1	.681**	.626**	.078	.701**	.846**
	Sig. (2-tailed)		.000	.000	.213	.000	.000
	N	256	256	256	256	256	256
PEOU	Pearson Correlation	.681**	1	.784**	-.145*	.434**	.740**
	Sig. (2-tailed)	.000		.000	.020	.000	.000
	N	256	256	256	256	256	256
SI	Pearson Correlation	.626**	.784**	1	-.133*	.387**	.685**
	Sig. (2-tailed)	.000	.000		.034	.000	.000
	N	256	256	256	256	256	256
PIIT	Pearson Correlation	.078	-.145*	-.133*	1	.202**	-.054
	Sig. (2-tailed)	.213	.020	.034		.001	.390
	N	256	256	256	256	256	256
PE	Pearson Correlation	.701**	.434**	.387**	.202**	1	.659**
	Sig. (2-tailed)	.000	.000	.000	.001		.000
	N	256	256	256	256	256	256
BI	Pearson Correlation	.846**	.740**	.685**	-.054	.659**	1
	Sig. (2-tailed)	.000	.000	.000	.390	.000	
	N	256	256	256	256	256	256

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Developed for the research

Pearson correlations describe the relationship between BI and the outcome. By referring to Table 4.19, the significant correlations range from -0.054 to 0.846. The highest coefficient value (r) is PU (0.846) which is considered as strong, which 0.5 to 1.0 is considered strong. On the other hand, based on the rule of thumb, the coefficient value (r) between 0.41 to 0.60 indicates moderate degree of correlation (Stemler, N/A).

As the second highest, PEOU (0.740) has strong positive relationship and can lead young consumers' behavioral intention to adopt mobile marketing.

Followed by SI (0.685) and PE (0.659) has strong positive relationship with behavioral intention.

On the other hand, PIIT (-0.054) has a negative coefficient value. A negative value shows that increases in PIIT are associated with decreases in the BI (SA: Chapter 3 Pearson R Correlation Coefficient, N/A). Therefore, PIIT has a negative relationship associated with young adults' behavioral intention.

4.5.2 Multiple Regression Analysis

This analysis is to analyze the relationship between independent variables and dependent variable towards the acceptance of mobile marketing.

Table 4.20: Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1.	0.890	0.791	0.787	0.53159

a. Predictors: (Constant), PE, PEOU, SI, PIIT, PU

b. Dependent Variable : BI

Source: Developed for the research

According to the results in Table 4.20, the relationship between independent variables (PU, PEOU, SI, PIIT, and PE) and the dependent variable, BI are strongly correlated with R equal to 0.934 as based on rule of thumb, a correlation greater than 0.8 is considered very strong.

Meanwhile, the value of R Square is 0.791, which means our model accounts for 79.1% of variance in young consumers' behavioral intention by the factors of PU, PEOU, SI, PIIT, and PE. Thus, this implies that these 5 variables have reduced the error in predicting behavioral intention by 79.1%. However, the remaining 21.9% were influenced by other factors.

Table 4.21: ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	268.075	5	53.615	189.728	.000[a]
	Residual	70.647	250	0.283		
	Total	338.722	255			

a. Predictors: (Constant), PE, PEOU, SI, PIIT, PU

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	268.075	5	53.615	189.728	.000[a]
	Residual	70.647	250	0.283		
	Total	338.722	255			

a. Predictors: (Constant), PE, PEOU, SI, PIIT, PU

b. Dependent Variable: BI

Source: Developed for research

The ANOVA table above shows the F value is 189.728 at $p<0.05$.

Table 4.22: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.024	0.223		0.109	0.913
	PU	0.544	0.055	0.505	9.872	0.000
	PEOU	0.244	0.060	0.207	4.031	0.000
	SI	0.135	0.052	0.124	2.597	0.010
	PIIT	-0.095	0.035	-0.084	-2.734	0.007
	PE	0.163	.0.037	0.184	4.447	0.000

a. Dependent Variable: BI

Source: Developed for research

Based on the output of Table 4.22, the following equation is formed.

BI= 0.024 + 0.544 PU + 0.244 PEOU + 0.135 SI + (-0.095) PIIT + 0.163 PE

From the linear equation, there is a significant positive relationship between PU, PEOU, SI, and PE with behavioral intention towards mobile marketing.

According to the equation, PU (0.544) has the most powerful influence on behavioral intention towards mobile marketing at unstandardized coefficient value β = 0.505 which indicates PU would increase 0.505 unit in BI towards mobile marketing and thus, PU is the better predictor of BI towards mobile marketing. The higher the beta value would bring greater impact of the independent variables on BI.

The second powerful influence on BI on mobile marketing is PEOU with $\beta = 0.244$ and followed by PEOU $\beta = 0.207$. Meanwhile PE has value of $\beta = 0.163$ and lastly, SI has value of $\beta = 0.135$.

However, contrary to our expectations, PIIT has a negative $\beta = -0.095$ indicating there is an inverse relationship related to behavioral intention in accepting mobile marketing. The coefficient of PIIT is negative which the increase or decrease in PIIT towards behavioral intention in accepting mobile marketing will be significantly affected. Thus, the significant role of PIIT in shaping behavioral intention is said to be visible when a relationship between the PIIT and behavioral intentions are studied.

4.5.2.1 Test of Significant

T value and p values give a rough indication of the impact of each independent variable where big t value and small p value would have a large impact on BI.

First Hypothesis:

H0: There is no significant relationship between perceived usefulness and behavioral intention.

H1: There is significant relationship between perceived usefulness and behavioral intention.

Reject H0 if p< 0.05

From Table 4.21, the significant value for perceived usefulness is 0.000. This value is lower than the p value of 0.05. Thus, H1 is accepted and there is significant relationship between perceived usefulness and behavioral intention towards mobile marketing.

Second Hypothesis:

H0: There is no significant relationship between perceived ease of use and behavioral intention.

H1: There is significant relationship between perceived ease of use and behavioral intention.

Reject H0 if p< 0.05

From the Table 4.21, the significant value for the perceived ease of use is 0.000. This value is less than p-value of 0.05. Therefore, H1 is supported, which indicates that there is a significant relationship between perceived ease of use and behavioral intention.

Third Hypothesis:

H0: There is no significant relationship between social influence and behavioral intention.

H1: There is significant relationship between social influence and behavioral intention.

Reject H0 if p< 0.05

From the Table 4.21, the significant value for the social influence is 0.010. This value is less than p-value of 0.05. Therefore, H1 is supported, which

indicates that there is a significant relationship between perceived ease of use and behavioral intention.

Fourth Hypothesis:

H0: There is no significant relationship between personal innovativeness in informational technology and behavioral intention.

H1: There is significant relationship between personal innovativeness in informational technology and behavioral intention.

Reject H0 if p< 0.05

From the Table 4.21, the significant value for the personal innovativeness in informational technology is 0.007. This value is less than p-value of 0.05. Therefore, H1 is supported, which indicates that there is a significant relationship between personal innovativeness in informational technology and behavioral intention.

Fifth Hypothesis:

H0: There is no significant relationship between perceived enjoyment and behavioral intention.

H1: There is significant relationship between perceived enjoyment and behavioral intention.

Reject H0 if p< 0.05

From the Table 4.21, the significant value for the perceived enjoyment is 0.000. This value is less than p-value of 0.05. Therefore, H1 is supported, which indicates that there is a significant relationship between perceived enjoyment and behavioral intention.

4.6 Conclusion

In this chapter, this research study has certified that PU, PUOU, SI, PIIT and PE have significant relationship with BI towards mobile marketing. Descriptive analysis, scale measurement and inferential analysis have been conducted to prove the significant relationship. Demographic characteristics and interval scale on central tendencies is measured using 7 point Likert scale. Internal reliability test were done in measuring items of the constructs. Meanwhile, multiple regressions were to examine the relationship between independent variables and dependent variable. The proposed hypotheses were accepted and there's strong impact of independent variables on behavioral intention. Further investigation, recommendation and limitation will be discussed in details in next chapter.

CHAPTER 5: DISCUSSION, CONCLUSION, AND IMPLICATIONS

5.0 Introduction

The outline of this chapter is to examine the outcome from the test conducted on previous chapter of this study. The summary of statistical analyses will be discussed first and then followed by the major findings. Besides, the implications of the study on theoretical aspect and managerial aspect will be discussed. Lastly, limitation of this study and recommendation will be provided.

5.1 Summary of Statistical Analyses

5.1.1 Descriptive Analysis

In the summary of descriptive analysis for the respondent demographic profile, majority of the respondent are female which stands at 160 while there are sizeable minority male participated which consists of 96 respondents in the sample size. Most of the targeted respondent group is in age of 21-24 years old, which consist of 166 respondents. While another 90 targeted respondents are in age of 16-20 years old. From the total sample that we collected, the majority of the respondent is single which consisted of 240 respondents. As for the remaining are married which consists of 16 respondents.

Majority of the respondents' highest academic level were bachelor degree qualification. Bachelor degree qualification occupied 115 from the total 256 respondents. Second highest academic level was diploma/ advanced diploma and college school which consists of 49 respondents. As for remaining are secondary school with 40 respondetns and followed by master degree with 3 respondents. Most of the respondents are specialize in business which consists of 126 from the total respondents. Following by science consists of 73 respondents; arts with 51 respondents and lastly other specialization with 6 respondents.

In terms of region, most of the respondents are from Petaling Jaya with 81 respondents. Second highest is Kuala Lumpur consists of 73 respondents then followed by Subang Jaya (34 respondents), Klang (23 respondents), Selayang (15 respondents), Shah Alam (10 respondents), Kajang (9 respondents), Ampang Jaya (5 respondents), Putrajaya (4 respondents) and Sepang (2 respondents). The highest percentage of device own by 256 respondents was smart phone consists of 162 respondents followed by 3G mobile phone (69 respondents), basic phone (21 respondents) and PDA (4 respondents).

As data cleaning has been done to filter out the nonviable respondents before data key in. Therefore, there are 256 respondents are experienced to receive mobile advertisement. In terms of the frequency of the respondents reacted towards mobile advertisement in the past one year, the highest was 4-6 times (67 respondents) and followed by 7-9 times (64 respondents). Third highest frequency was respondents reacted for more than 10 times which consist of 56 respondents. The remaining are 43 respondents reacted for 1-3 times and 26 respondents did not react toward those mobile advertisements.

In addition, majority of the respondents like to read through the contents of mobile advertisement at a friend's place (98 respondents) followed by at home

(65 respondents) and at another place (46 respondents). As for remaining are at school consists of 28 respondents, in library with 12 respondents and lastly is other place with 7 respondents.

5.1.2 Scale Measurement

The scale measurement is measured using reliability test in which the reliabilities of five constructs consist of 27 items that were measured by the Cronbach's alpha test. According to the outcome, the highest level of Cronbach's Alpha is personal enjoyment (0.924), then followed by perceived usefulness (0.921), personal innovativeness in informational technology (0.908), and perceived ease of use (0.891). Finally, the lowest alpha value is social influence (0.882). In short, all independent variables are within the range of 0.882 to 0.924 which are considered as strong and reliable.

5.1.3 Inferential Analysis

5.1.3.1 Pearson Correlations

By referring back to the result generated from Pearson Correlation analysis, all independent variables show positive correlations among all the constructs except for PIIT with a negative value of -0.54. The highest correlation would be perceived usefulness (0.846) while PIIT has the lowest with a negative value.

5.1.3.2 Multiple Regressions Analysis

Furthermore, multiple regressions are conducted in inferential analysis with test of significance. The outcome of the correlation equation has stated as below:

BI= 0.024 + 0.544 PU + 0.244 PEOU + 0.135 SI + (-0.095) PIIT + 0.163 PE
Based on the linear equation, all dependent variables have significant positive relationship except for PIIT that have a negative (-0.095) strong relationship with behavioral intention in accepting mobile marketing among young consumers in Malaysia.

The strong relationship is determined via multiple regression analysis with 0.791 value of R square. The change of behavioral intention is caused by the 79.1% by the selected independent variables.

5.2 Discussions of Major Findings

In this study, the determinants of mobile marketing acceptance on young consumers are the main aim. Young consumers age between 21-24 years old consist of our main respondent which is because the targeted areas have high population of university students holding bachelor of degree qualification.

From the Cronbach's Alpha analysis, the highest level is personal enjoyment (0.924) which consumers are more motivated to engage in mobile marketing effort repeatedly especially since young consumers are mainly early adopters of new innovations, thus after getting their attention to engage and when they find it enjoyable, there will be repeat services.

Meanwhile, the results generated from Pearson Correlation analysis show the highest correlation which is perceived usefulness (0.846) while PIIT has the lowest with a

negative value. There are numbers of research studies mentioning the increasing inconsistency for the determinant assumptions, therefore, the assumed relationship between a person's innovativeness is not affirm as it depends on the research subject. Thus, our PIIT is unexpectedly having negative relationship with behavioral intention (Marez, Vyncke, Berte, Schuurman, & Moor, 2007).

Based on the results, PU is positively related to young consumers' acceptance in mobile marketing. This proved that PU has significant impact on behavioral intention and consumers' perceived that using mobile marketing services will provide benefit to them in their daily lives. This was supported by the study of Tanakinjal, Deans, & Gray (2010), in which users' relative advantage has a direct positive effect on BI to adopt mobile marketing.

Moreover, PEOU is also positively related to behavioral intention. It has a significant impact on BI. This was in line with the study by Revels, Tojib, & Tsarenko (2010), where they have proved that PEOU has a role to play in accepting mobile services in which young consumer associate freedom of difficulty with the use of mobile marketing services.

Besides, SI has positive relationship with behavioral intention which influence mobile marketing acceptance. Grant (2007) illustrated that its findings show more motivation among young people in value socially oriented uses. Therefore, agreed that the association between SI and BI is linked.

Meanwhile, similar positive results were obtained from past research in which personal innovativeness in informational technology is a significant impact on BI in accepting mobile marketing. This was resulted in the study of (Rosen, The effect of personal innovativeness on Technology acceptance and use, 2005), in which PIIT is a significant predictor of BI, above the effects of usefulness and ease of use. Likewise, Agarwal and Prasad (1998), and Lockett and Littler (1997) have proven that personal innovativeness has strong influence in determining technology acceptance, in perspective of mobile commerce (Hung, Ku, & Chang, 2003)and internet shopping

(Citrin, Sprott, Silverman, & Stem Jr., 2000).

A positive relationship between PE and BI is achieved as perceived enjoyment has the significant impact on young consumers' behavioral intention. One study claimed that PE play vital part in determining the BI to accept mobile marketing which evidenced in past studies (Sultan, Rohm, & Gao, Factors influencing consumer acceptance of mobile marketing: A two-country study of youth markets, 2009) indicate that personal attachment that has unique personalized features indirectly affect mobile marketing acceptance. This is mainly because young consumers view their mobile devices as their self-status in conveying personal identity, thus, this is one of the social influence in accepting mobile marketing.

5.3 Implications of the Study

5.3.1 Managerial Implications

The aim of this research is to study the impact of PU, PEOU, SI, PIIT and PE on the young consumers' acceptance towards mobile marketing. In view that the mobile marketing development cost is not cheap, it is important that consumers are actually accepting it.

The result shows that PU has a positive influence on the acceptance of mobile marketing among young adults. Mobile advertisers/marketers should focus on delivering the benefits which the adoption provides, including time and effort saving, convenience in term of receiving information and information privileges.

Likewise PEOU is also having a positive relationship in this study. Ease of use of devices is critical towards the acceptance rate in the long run. Mobile marketers should ensure that the information and the procedures of using mobile marketing are straight to the point and user friendly.

Meanwhile SI too plays an important role in this research. Service providers should encourage consumers to adopt mobile marketing by putting advertisements at popular places and websites. Besides, they can also adopt opinion leader, buzz marketing and word-of-mouth effects in their marketing strategies in order to enhance social influence.

However, PIIT is not significantly associated to young consumers' adaptation and the insignificant effect is quite unexpected. This can be explain by the respondents have less willingness to take risk in being the innovators to try out new innovations. It is supported by the positive effect of SI towards the adoption. Respondents tend to follow their social circle while dealing with new technologies.

In contrast, PE brings a positive influence on the acceptance. Mobile marketing which provides advertisements that have outside pleasure and satisfy intrinsic enjoyment would attracts higher attention of youngsters. Focus should be on offering intrinsic value and extrinsic motivations by organizing successful campaigns or events such as games, concerts, and competitions with attracting prizes and rewards.

5.4 Limitations of the Study

There are several limitations evidenced in this study. These limitations should be considered for future research and improvement. Firstly, regarding to this area of study, we found out that Malaysia has few research available and do not focus on young consumers' perspective. Thus, overseas' journal are adopted, however, the independent variables chosen might be inadequate in identifying the young consumers' behavioral intention to accept mobile marketing. Some other variables might be excluded in the study at which is important in the Malaysian context.

Besides, the sample collected of this study is collected within Klang Valley area whereby people from other parts of the country were excluded from the research due to time and cost constraints. Thus, the results cannot be generalized and representing Malaysia as a whole and other nationalities. As the perception of adopting and using

the mobile technology are highly differentiated across nation and countries. Sample size is another limitation of this study.

Thirdly, in this study, the measures of constructs are collected at the same point of time. Therefore, individuals' behavioral intention to accept mobile marketing may change over time because of an unremitting process as advancement of mobile technologies will enhance greater experience for the time being.

Fourthly, the concern on the accuracy of the surveys and questionnaires disadvantages as it might be inappropriate for young consumers who have low literacy and poor English level to understand the questions intended. Moreover, there is a risk where respondent answered quickly without devoting much thought into the responses. Besides, there are potential for positive biases as the respondents would respond intend to please the presenter.

Last but not least, we could not avoid the respondent's bias and errors throughout this study. Although clear instructions with explanations were provided, respondents might have the chances of not truly understand the questions or they might have answered it according to their interpretation and understanding in the survey.

5.5 Recommendations for Future Research

To have a positive impact on the research in future study, awareness should be enhanced to accept m-marketing among young consumers and so more research will be conducted in Malaysia with better accuracy of data collected and outcome.

Besides, sampling method in one geographical area and sample size are the limitations in this study. Hence, researchers may want to further research on different age groups or on multi-nationalities via expanding geographical areas for better

generalizations. And in the future, if this research was to be repeated, by increasing the sample size could test the moderation hypotheses in a better way.

To solve the potential biases and errors, careful question construction is recommended to obtain useful information. A degree of caution should be done to generalize findings according to the context and the nature of the respondents. A variety of ways is available to collect immediate feedback besides a written questionnaire such alternatives include a group discussion guided by detailed evaluation questions, observations of respondents' interactions, face to face interviews with respondents, or a videotape of the interview session.

Meanwhile, the individuals' behavioral intention in accepting mobile marketing may vary over time due to the advancement of mobile technologies, it is recommended to have a longitudinal research in future study to evaluate the mobile marketing acceptance at different points of time throughout the decision adoption process.

Many studies explored the acceptance in general, thus, future researchers should explore the impact of negative and positive messages on young consumer's acceptance in terms of innovations or examine responses based not in the consumer context but the organization or educational context.

5.6 Conclusion

As a conclusion, this study has conducted scale measurement with internal scale and inferential analysis that test the relationship between independent variables and dependent variables. The outcome of the results has indicated that all hypotheses are accepted and supported with past research. Thus, this study has achieved its objective from the first chapter. Besides, with these supported results, it can be a guideline for in research study and business field relating to young consumers' behavioral intention towards mobile marketing in Malaysia.

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Appendix I: Distributed Questionnaire

The Determinant Factors Influencing Young Consumers' Acceptance of Mobile Marketing

Survey Questionnaire

The purpose of this survey is pertaining to the factors that influencing young consumers' intention to adopt mobile marketing. Please answer all questions to the best of your knowledge. There are no wrong responses to any of these statements. All responses are completely confidential.

Definition: Mobile marketing refers to a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through any mobile device or network. Young consumers are referring to persons who are between 16 to 24 years of age.

Thank you for your participation!

Instructions:

1) There are *two* (2) sections in this questionnaire. Please answer **ALL** questions in ALL sections.

2) Completion of this form will take you approximately 10 – 20 minutes.

3) The contents of this questionnaire will be kept strictly confidential.

Section A: Demographic Profile

In this section, we are interested in your background in brief. Please tick your answer and your answer will be kept strictly confidential.

QA1: Gender

- ❑ Male
- ❑ Female

QA2: Age

- ❑ Below 16 Years Old
- ❑ 16-20 Years Old
- ❑ 21-24 Years Old
- ❑ Above 24 Years Old

QA3: Marital status

- ❑ Single
- ❑ Married

QA4: Highest academic level

- ❑ Secondary school
- ❑ College degree
- ❑ Diploma/ Advanced Diploma
- ❑ Bachelor Degree
- ❑ Master Degree
- ❑ PhD Degree
- ❑ Other (Please specify): _____

QA5: Specialization

- ❑ Business (Accountancy, Finance, or Economics)
- ❑ Science (Computing or Engineering)
- ❑ Arts (Linguistic, Public Relation, Journalism, Psychology or Law)
- ❑ Other (Please specify): _____

QA6: Region

- ❑ Kuala Lumpur
- ❑ Klang
- ❑ Kajang
- ❑ Subang Jaya
- ❑ Petaling Jaya
- ❑ Selayang
- ❑ Shah Alam
- ❑ Ampang Jaya
- ❑ Putrajaya
- ❑ Sepang

QA7: Do you own the following products?

- ❑ Basic Phone
- ❑ Personal Digital Assistant (PDA)
- ❑ 3G mobile phone
- ❑ Smart Phone

QA8: Have you received any mobile advertisement?

- ❑ Yes
- ❑ No

QA9: In the past one year, how many times have you reacted towards those mobile advertisements?

- ❑ None
- ❑ 1-3
- ❑ 4-6
- ❑ 7-9
- ❑ More than 10 times

QA10: I would like to read through the contents of mobile advertisement mainly

- ❑ At home
- ❑ At school
- ❑ In library
- ❑ In a friend's place
- ❑ In another place
- ❑ Other (Please specify): _____

Section B: Factors that influence you to adopt Mobile Marketing

This section is seeking your opinion regarding the factors that influence your intention to use mobile marketing. Respondents are asked to indicate the extent to which they agreed or disagreed with each statement using 7 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = disagree somewhat; (4) = undecided; (5) = agree somewhat; (6) = agree; (7) = strongly agree] response framework. Please circle one number per line to indicate the extent to which you agree or disagree with the following statements.

No	Questions	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
B1	Perceived Usefulness (PU)							
PU1	I find mobile marketing useful in my daily life.	1	2	3	4	5	6	7
PU2	Accepting mobile marketing will enable me to receive updates news faster.	1	2	3	4	5	6	7
PU3	Using mobile marketing increases my productivity.	1	2	3	4	5	6	7
PU4	Using mobile marketing would enhance my effectiveness of purchasing great deals.	1	2	3	4	5	6	7
PU5	Using mobile marketing can help me to make better purchasing decisions.	1	2	3	4	5	6	7
PU6	Overall, I find mobile marketing advantageous.	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
B2	Perceived Ease of Use (PEOU)							
PEOU1	I have the resources necessary to	1	2	3	4	5	6	7

	use mobile marketing.							
PEOU2	Using mobile marketing does not require a lot of mental effort.	1	2	3	4	5	6	7
PEOU3	I find it easy to get news updates through mobile marketing.	1	2	3	4	5	6	7
PEOU4	I think I am able to use mobile marketing without the help of expert.	1	2	3	4	5	6	7
PEOU5	I think that I would find it easy to learn how to se mobile marketing.	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
B3	Social Influence(SI)							
SI1	Friend's suggestion and recommendation will affect my decision to use mobile marketing.	1	2	3	4	5	6	7
SI2	Family/relatives have influence on my decision to use mobile marketing.	1	2	3	4	5	6	7
SI3	I will use mobile marketing if it is widely used by people in my community.	1	2	3	4	5	6	7
SI4	Mass media (e.g., TV, newspaper, radio) will influence me to use mobile marketing.	1	2	3	4	5	6	7

SI5	Mobile marketing will enable me to improve my social status.	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
B4	Personal Innovativeness in Information Technology (PIIT)							
PIIT1	I think I would be first in my circle of friends to know the latest updates through mobile marketing.	1	2	3	4	5	6	7
PIIT2	I think I would be first in my circle of friends to use mobile marketing.	1	2	3	4	5	6	7
PIIT3	I think I know more about mobile marketing than my circle of friends.	1	2	3	4	5	6	7
PIIT4	I think I would starts using mobile marketing even if I did not know anyone who had starts using it.	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

B5	Personal Enjoyment (PE)							
PE1	The process of surfing advertisements from mobile marketing is enjoyable.	1	2	3	4	5	6	7
PE2	While accessing mobile advertisement, I have experienced pleasure.	1	2	3	4	5	6	7
PE3	Overall, I believe that viewing mobile advertisement is fun.	1	2	3	4	5	6	7
PE4	Purchase through mobile marketing is pleasant.	1	2	3	4	5	6	7

No	Questions	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
B6	Behavioral Intention (BI)							
BI1	I intend to continue using mobile marketing in the future.	1	2	3	4	5	6	7
BI2	I will always use mobile marketing in my daily life.	1	2	3	4	5	6	7
BI3	I plan to continue to use mobile marketing frequently.	1	2	3	4	5	6	7

Thank you for your time and cooperation.

~The End~

Source: Developed for the research

Appendix II: Demographic Profile of Surveyed Respondents

		Frequency	Percentage
Gender	Male	96	37.5
	Female	160	62.5
Age	16 – 20 years old	90	35.2
	21 – 24 years old	166	64.8
Marital Status	Single	240	93.8
	Married	16	6.3
Highest Academic level	Secondary School	40	15.6
	College School	49	19.1
	Diploma/ Advanced Diploma	49	19.1
	Bachelor Degree	115	44.9
	Master Degree	3	1.2
Specialization	Business	126	49.2
	Science	73	28.5
	Arts	51	19.9
	Other	6	2.3
Region	Kuala Lumpur	73	28.5
	Klang	23	9.0
	Kajang	9	3.5
	Subang Jaya	34	13.3
	Petaling Jaya	81	31.6
	Selayang	15	5.9
	Shah Alam	10	3.9
	Ampang Jaya	5	2.0
	Putrajaya	4	1.6

	Sepang	2	0.8
Devices	Basic Phone	21	8.2
	Personal Digital Assistant (PDA)	4	1.6
	3G Mobile Phone	69	27.0
	Smart Phone	162	63.3
Experience	Yes	256	100
	No	0	0
Times	None	26	10.2
	1 - 3	43	16.8
	4 - 6	67	26.2
	7 - 9	64	25.0
	More than 10 times	56	21.9
Likelihood	In a friend's place	98	38.3
	In another place	46	18.0
	In library	12	4.7
	At school	28	10.9
	At home	65	25.4
	Other	7	2.7

Source: Developed for the research