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DEPARTMENT OF COMMERCE
PhD PROGRAMME

ADOPTION OF M-MARKETING IN TOURISM INDUSTRY OF MYANMAR

KHIN THET HTWE

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Supervised by

Dr. Soe Thu

Professor and Head of Department

Submitted by

Khin Thet Htwe

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Department of Commerce

Yangon University of Economics

CERTIFICATION

I hereby certify that the contents of this dissertation are wholly my own work unless otherwise referenced or acknowledged. Information from sources is referenced with original comments and ideas from the writer himself/ herself.

Khin Thet Htwe

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ABSTRACT

Mobile devices have become increasingly important marketing channel in recent years for all kinds of organization. The study explores consumers' adoption of m–marketing in the context of Myanmar tourism industry. The key objectives are to identify the factors affecting on m-marketing adoption of customers in tourism industry, to determine the relationship between each of the antecedents and the adoption of m-marketing in tourism industry and to analyze mediating effects of independent and dependent variables. The study proposes a model for the prediction of m-marketing adoption, drawing upon Technology Acceptance Model (TAM) with the inclusion of individual characteristics, perceived risk and trust. The model identifies the structural relationships among the eight constructs (i.e. perceived usefulness, perceived ease of use, innovativeness, involvement, opinion leadership, perceived risk perceived trust and adoption), which were examined through multiple linear regression and path analysis. A sample of 384respondents who had adopted m-marketing in tourism industry. The descriptive results present a profile of m-marketing customer in tourism industry. The results explicitly clarified several key contributions to marketing theory and for the tourism industry. Path analysis revealed

that mediating effects of trust, usefulness and risk between ease of use and adoption, the mediating effects of trust and risk between involvement and adoption, the mediating effects of risk between trust and adoption and the mediating effects of usefulness between risk and adoption. The analysis was carried out by regressing the propensity to adopt a dependent variable with the seven independent variables. The results of this study contributes to understanding of how internet facilities can be embraced by tourism industries, and also how these facilities contributes to the development of online tourism for customers in Myanmar.

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LIST OF ABBREVIATIONS

B2B	Business to Business
B2C	Business to Consumer
CI	Consumer Involvement
DOI	Diffusion of Innovation
DTPB	Decomposed Theory of Planned Behavior
EU	European Union
E-Banking	Electronic Banking
E-Mail	Electronic Mail
E-Retailers	Electronic Retailers
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IDT	Innovation Diffusion Theory
IS	Information System
IT	Information Technology
ITC	Item Total Correlation
M-Commerce	Mobile-Commerce
M-Marketing	Mobile -Marketing
OL	Opinion Leadership
OPAC	Online Public Access Catalog
PDA	Public Displays of Affection
PEU	Perceived Ease of Use
PU	Perceived Usefulness
PI	Personal Innovativeness
PR	Perceived Risk
PT	Perceived Trust

SEO	Search Engine Optimization
SPSS	Statistical Packages for Social Science
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UTAUT	Unified Theory of Acceptance and Use Technology
WTO	World Trade Organization
WWW	World Wide Web

Chapter 1

Introduction

In the recent past, information and communications technology (ICT) has evolved dramatically and has become a part of everyday life for most people in modern society. The development of ICT has had a major impact on most industries, especially the tourism industry, one of the largest and fastest growing industries in the world. The tourism industry, along with the financial industry, has been one of the largest internet users in terms of marketing and distributing its services (Lexhagen & Nysveen, 2000).

The development of information technology (IT) has had a particular impact on the travel industry, as it provides unique opportunities for interaction between partners, suppliers and customers, no matter how distant they may be (Buhalis, 2000). The internet presents a great opportunity for travel marketers to use this medium to sell their products. This has had a major impact on the development of many areas of tourism, such as hotels, airlines and travel agents. Many tourism companies in Myanmar use the internet to market and distribute their travel services and this has affected the way consumers interact with the company. Various travel companies such as airlines, hotels and tourism organizations offer the possibility of booking and purchasing their services over the internet.

As the use of mobile phone technology has become increasingly common in everyday life, there has also been a rapid expansion of services using mobile phone technology as the primary delivery platform. Over the past few years, m-marketing has generated an increasing interest among academics and practitioners. The rapid proliferation

of mobile phones along with the consumers' adoption and usage has created new m-marketing opportunities to business industry and customers. These new technologies and communication devices emerged as new ways of conducting business known as m-marketing. M-marketing allows consumers to access products and services conveniently. The birth of the internet had an enormous impact on the

tourism industry, with consumers adopting online travel tools to plan and manage their trips. Now, mobile technologies act as a catalyst influencing the consumer travel journey, particularly as travel and mobile devices go hand in hand. Mobile allows travelers to be constantly connected, up-to-date and one step ahead in the planning and managing of trips while on-the-go.

Tourism industries have widely adopted information technology (IT) to enhance operational efficiency, and most importantly to improve service quality and customer experience. The intense competition in today's business environment means that tourism and hospitality businesses have to work hard to maintain and develop their competitiveness. The success of a business, to certain extent, depends on its ability to acquire and utilize updated information to assist its management and marketing processes. Hence, Information technology (IT) helps to meet the demands for timely and accurate information by customers and the IT diffusion in the tourism and hospitality industries has recently increased at an unprecedented rate (Connolly & Lee, 2006,Connolly, D. J.& Lee, S.2006).

The advancement of the technology, which associated, with the development of the internet during the 1990s has moved the marketing activities to new era. During the last twenty years, the internet as a global communication and exchange medium has witnessed huge growth Webster, F E (2002). The growth in the sales will be driven by the growth of mobile application and the improvement of mobile and tablet technology. In the long term, the m-marketing is expected to surpass other traditional and non-traditional marketing methods internet Retailers.

The huge development of mobile technology has created a new marketing channel for marketers. Marketing through mobile devices allows for innovative forms of customer relationships and is expected to lead to the development of numerous m-commerce-based services Kaplan, A.M. (2012).M-marketing are characterized by some unique features such as being personal and always carried by the users. Further, the new mobile or smart phone built in payment systems and it is available at the point of creative inspiration and provides accurate audience measurement. Furthermore, the m-marketing can capture the social context of media consumption. All these features provide the m-marketing with unique advantages.

The most important advantages of m-marketing are the cost saving, instantaneous results, convenience to use, tracking response, mass communication made easy and mobile payments**.** M-marketing is cheaper than web marketing. It provides instant results and it is easy to work with. It enables marketers to use it conveniently and provides the ability to send direct marketing message. Huge viral potential and mass communication along with niche and micro blogging benefits and easy payment methods are all the advantage of m- marketing. The benefits of m-marketing are that marketers are able to directly send pictures or videos of products and to answer customer questions and queries, marketers are able to access several consumers at anytime, marketers are able to establish close relations with consumers and this helps to influence purchase. Similarly, Yours if asserts that while on the one hand m-marketing assists marketers to access consumers of various identities, locations, behavioral and social patterns, it also helps consumers to access a wide range of diverse information about varied products and services.

On the internet, travel services such as flight tickets, accommodation and holidays have becoming the most popular online purchases compared to other types of products. This is a growing trend and many companies want to invest in this kind of service. The tourism industry in Myanmar has grown rapidly since reforms began in 2011, with Ministry of Hotels and Tourism figures showing that the total number of foreign arrivals has soared from 1.6 million in 2012 to 4.68 million last year. Travel agents used to be the main providers of booking systems, but with the development of ICT, this trend has shifted and booking systems are now directly accessible to the consumers themselves. Because of this new development and the growth of self-service technologies, the customer has gained greater power and insight into the booking procedure (Inkpen,1998). Traditional customer behavior and attitudes have been affected by the new ways of doing business (Bitner, Ostrom, Round tree, & Meuter,2000); thus, their behavior is no longer predictable by marketers. Hence, this research sets out to fill the gaps in the current understanding of the potential of the online travel and tourism market and to illuminate how consumer behavior is influenced in such a market. This study converges from the backgrounds of tourism marketing and internet marketing. By identifying the primary drivers of m-marketing adoption for travel services, the study contributes to and extends the understanding of the internet as a medium for commercial use in the B2C arena as well as expanding the literature on new technology adoption.

1.1 Rationale of the Study

M-marketing services renders more customer benefits. There is a need, therefore, to understand the customer acceptance of m-marketing and identify the factors that influence their intention to use m-marketing (Luarn & Lin, 2005). A wide range of mobile services such as mobile phone instant messaging, mobile search and mobile music has become very popular among users. This service is mainly related to the application of the communications, information and entertainment. M-marketing is relatively new in Myanmar compared with other countries. It is a fact that m-marketing is still in its infancy. Therefore, there is the possibility that m-marketing is still not known to and used by the customer.

Today, consumers use mobile devices for downloading and playing quality video functions that are central to effective marketing communications (Manly 2006). Yet, despite wide spread evidence regarding the significant growth of the wireless market and its emerging role as a marketing communications medium as well as the challenges that the mobile industry faces, there is no empirical research on factors that influence m-marketing adoption among consumers in Myanmar. Consumers may feel empowered with greater access to social circles, mobile-based content, and information. Increasing numbers of consumers are willing to accept mobile advertising, provided they are given relevant content and sufficient incentives to do so. On the surface, the future looks bright for the mobile platform as a new way to forge consumer connections, especially among travel consumers who are active on the mobile platform. Yet, it remains unclear to what extent consumers in different service industry will accept and engage in m-marketing efforts. Numerous academic studies have noted the challenges confronting m-marketing communications acceptance, including feelings of intrusiveness as well as trust and privacy concerns among consumers. Hence, the extent to which consumers in global markets will accept commercial m-marketing efforts remains unclear. The numbers of mobile users in the world are increasing and so go to the m-marketing trend in the business world. Developing countries like Myanmar had enables their mobile phone to involve in tourism activities due to its convenience. However the acceptance level of mobile tourism is still at a marginal rate. Consumers are comfortable doing things themselves because m-marketing provide them with control and convenience. Through m-marketing, consumers can save time for shopping, have access product information

and are able to control the whole shopping process. The growth of m-marketing is obviously as a result of information and communication technologies. The geographical obstacles were cancelled out by using information and communication technologies which have affected the tourism industry in areas of supply and demand. On the supply side, the company operations become global, and they can reach remote customers easily by using information and communication technology, which means reduction in transaction costs, and fewer obstacles for entry to and exist from the market. On the demand side, information and communication technology has offered customers an access to the services of tourism industry. This gives the customers a much greater range of products and supplier options, alongside very low transaction costs. This study only focuses on the demand side of tourism industry.

Therefore this study is conducted in order to identify the factors that will influence the adoption of m-marketing in tourism industry and analyze the nature of relationship between each of the antecedents and the adoption of m-marketing in tourism industry. In this study, seven factors; perceived usefulness, perceived ease of use, perceived risk, perceived trust, consumer involvement, personal innovativeness, and opinion leadership that affects on m-marketing adoption are identified and analyze the nature of relationship between each of the antecedents and the adoption of m- marketing in tourism industry.

This study contributes to understanding of how internet facilities can be embraced by tourism customers, and also how these facilities contributes to the development of online tourism in Myanmar. The study confirms that the convenience of m-marketing attracts the consumers, as it enables them to shop at any time, from anywhere, as well as providing service information sources, lower prices and perceived control over purchase decision.

1.2 Problem Statement of the Study

This study mainly focuses on factors affecting on m-marketing adoption of customers in tourism industry. The factors include perceived usefulness, ease of use, perceived risk, perceived trust, consumer involvement, personal innovativeness, opinion leadership, and adoption. These factors are main influencing factors in adopting m-marketing in tourism industry. The advancement of Information Technology (IT) has changed the business landscape in many industries and

especially the tourism sector. The emergence of mobile technologies has created a new innovation for tourism industry by increasing the availability, frequency, and speed of communication between the company and their customers. In order to succeed in such a high intense competitive market, tourism industry faces new and innovative travel product and services. However not all new products and services are likely to succeed. Therefore, understanding the factors that influence customers to adopt new innovative technology, and understanding the travelers' acceptance to adopt mobile services (i.e. check-in, seat selection, flight information) with a higher level of uncertainty to evaluate the new services in advance, is predicted to be of a significant value for m-marketing customers.

The above problems have prompted the study to determine the factors influencing on m-marketing adoption, and to suggest the significance factors on adoption of m-marketing in the tourism industry of Myanmar.

1.3 Objectives of the Study

1. To examine the factors affecting m-marketing adoption of customers in tourism industry.
2. To analyze the mediating effects of trust, usefulness and risk between ease of use and adoption.
3. To analyze the mediating effects of trust and risk between involvement and adoption.
4. To analyze the mediating effects of risk between trust and adoption**.**
5. To analyze the mediating effects of usefulness between risk and adoption.

1.4 Method of the Study

Regarding the research method, analytical and descriptive methods were used. Path analysis model was applied to measure the direct and indirect effect of mediating variables between four independent variables: innovativeness, ease of use ,opinion leadership and m-marketing adoption and descriptive method was used to describe demographic background of m-marketing customers**,** consumer behavior in adopting m-marketing in tourism industry and analyze the nature of relationship between each of the antecedents and the adoption of m-marketing in tourism industry.

To identify the customers in tourism industry, by sex, age, education, marital status and income per month, descriptive statistics were conducted to describe the

demographic characteristics of respondents. Before the main analysis, both validity and reliability issues were addressed in order to ensure the trustworthiness of the data collected. Through SPSS version 23.0, multiple linear regression analysis and path analysis were employed to further analyze the data.

The simple random sampling method was used to collect the primary data of domestic customers who conduct inbound and outbound tours of tourism industry, to conduct literature review and obtain the adoption of m-marketing, the secondary data were used by collecting data from previous research journals.

1.5 Scope and Limitations of the Study

The study focuses on the adoption of m-marketing of Myanmar customers in tourism industry. Although, there are numerous m-marketing adoption practices in service industry such as banking, clinic and airline, this study focuses only on tourism industry due to the constraints of time and budget. In Myanmar, tourism industry and its customers who adopt m-marketing spread over the whole Myanmar, this study focuses only on customers in Yangon region. The study focuses on 384 customers. The overall population of m-marketing customers user or smart phone users takes part in this study. This study focuses on factors affecting of m-marketing customers in tourism industry. Therefore, this study fails to take into account of all factors effecting on m-marketing adoption.

1.6 Organization of the Study

The study is presented in five chapters. Chapter one covers the introduction, problem statement of the study, objectives of the study, scope and limitations of the study, and organization of the study.

Chapter two reviews the literature on the factors determining on m-marketing adoption on tourism industry. It provides theoretical review on m-marketing adoption consideration on m- marketing. It includes the concept of m-marketing, m-commerce, technological acceptance models, previous research models and conceptual framework of the study.

Chapter three provides the characteristics of tourism industry of Myanmar, role of m-marketing in tourism industry, channel of the tourism industry,

Current adoption of m-marketing in tourism industry.

Chapter four presents research methodology, the analysis of relationship of factors on m-marketing adoption based on survey results. It discusses the response rate, demographic characteristics of respondents and the factors influencing m-marketing adoption. It also presents descriptive analysis, reliability test and path analysis.

Finally, chapter five consists of the findings and discussions and suggestions. It also includes recommendations of the study and need for further study.

Chapter 2

Theoretical Background

This chapter describes the conceptual framework and the theoretical approaches used in this dissertation to gain an insight into factors affecting on m-marketing adoption. It then reviews the relevant academic studies regarding the use of m-marketing adoption by customers in tourism industry.

2.1 M-Commerce

M-Commerce is a type of e-commerce conducted through mobile devices such as mobile phones, personal digital assistant and other devices with a wireless connection. It is quite different from traditional e-commerce. This includes mobile phones, smart phones, smart watches, tablets and note books. M-marketing refers simply to marketing on or with a mobile device such as a smart phone or tablet.

M-commerce is a new innovation in business that will transform the way organizations conduct their business even between business and business (B2B) or between business and consumers (B2C) and change the relationships between stakeholders (Anckar & D'incau.,2003). Abdelkarim & Nasereddin (2010) showed that m-commerce is a subset of electronic-commerce where mobile devices are used to conduct business. They claimed that because of the wide spread of mobile phones; M-commerce services have a prosperous future. Traditional business processes caused in general delay in business transactions; companies try to reduce that delay by creating easier access to information in a real time environment and to explore new business opportunities. The researchers found positive attitudes toward m-commerce by Jordanians. Furthermore, Jordanians perceive m-commerce as highly useful and easier than the traditional methods of commerce. Chaffey (2009) illustrated five benefits that mobile or wireless connections offer to their users. Ubiquity: Information can be accessed from anywhere, at any location, and at any time. Reach ability: the users of m-commerce can be reached outside of their normal, or home, location. Convenience:

Mobile devices make it unnecessary to have access to a power supply or fixed-line connection. Security: Each user can be authenticated since each wireless device has a unique identification code enabling the commerce provider to tailor content based on the customer's location. Mobile devices also provide a degree of privacy compared with a desktop PC. Finally, instant access or being "always-on": There is no need to dial up a wireless connection with a mobile device. Je Ho & Myeong-Cheol (2005) found that attitude toward mobile internet is the most significant determinant followed by the perceived playfulness and the usefulness to use M-Internet. In turn, perceived ease of use was found to have critical significant influence in developing the perceived usefulness and playfulness.

Mobile commerce or m-commerce as "electronic transactions and communications conducted using mobile devices such as laptops, PDAs, and mobile phones, and typically with a wireless connection". Due to the spread, acceptance, adoption, and usage of the means of mobile communication in both the developed and developing countries m-commerce aims to increase the participation of merchandisers and shoppers. The rapid growth of m-commerce is associated with an increasing level of consumer's experience with mobile devices**.** According to Al-maghrabi Dennis,C& Vaux Hallida (2011), the emergence of the internet with its low cost offers a new powerful tool for communication with and information for customers and organizations. Electronic commerce and internet advances have reduced business borders and restrictions, as well as producing opportunities for organizations to contact their customers directly around the world. Furthermore, Rose, Hair, & Clark (2011) stated that new opportunities have been produced for organizations to interact with customers as a result of the emergence of the internet as communication and distribution channel. These interactions happen when a customer is searching for information about a product, or when a customer uses a banking service, or is involved in social networking. An extensive body of literature has been produced on electronic commerce in terms of website quality, online customer behavior activities (i.e. online research and online purchase), and online service experience (Rose Hair & Clark., 2011).

Nowadays, the emergence of mobile technology, and corresponding access to the internet through mobile handsets, has provided many opportunities for customers in the form of immediate information access, online purchases, downloading services, and various educational and entertainment services (Rose et al.,2011). The growth in numbers of mobile device users was a result to the advances in mobile technologies (Kim Ferrin, D.LRao, 2009). This has enabled consumers to do many activities via their mobile devices, such as making online purchases, downloading appropriate information, engaging in educational and

entertainment services, and communicating with each other (Rose et al., 2011). Also, mobile devices have increased the availability, frequency, and speed of communication (Scharlet, A., Dickinger, A & Murphy, 2005).

Mobile commerce, known as m-commerce, has been defined by Balasubramanian Peterson & Jarvenpaa (2002) as any business that occurs on the basis of anywhere and anytime. Others, such as Kalakota & Robinson (2002), defined mobile commerce as the use of wireless devices (mostly mobile phones) to perform electronic business transactions, such as product ordering, money transfer, and ticket purchasing. Abu Bakar & Osman (2005) also defined m-commerce as exchange of goods and services via wireless mobile phones, whilst Varshney & Vetter (2002) have seen m-commerce as an e-commerce over wireless devices. Gary & Simon (2002) referred m-commerce to any financial dealings done over mobile devices. In addition, Alsultanny (2012) argued that m-marketing, including airline ticket purchasing, hotel booking and reservation, and mobile banking, is a subset of electronic commerce. Khalifa&Shen (2008) argued that m-commerce is likely to experience a significant growth for a number of reasons, such as the wide spread adoption of mobile devices and the clear advantages of anytime-anywhere connectivity. Zwass (2003) stated that the strength of m-commerce is mainly due to the anytime anywhere connectivity of mobile devices, which presents massive opportunities for business process innovation and location-sensitive services.

Kim & Ferrin (2009) argued that m-marketing is becoming one of the most promising and profitable growth markets, with the main characteristics that distinguish it from other forms of e-commerce being mobility and reach as users can start real-time contact with commercial and other systems wherever they take place (mobility). With m-marketing, people can be reached at any time (reach). These are the same characteristics which Ngai & Gunasekaran (2007) identified when they stated that m-marketing applications have two major characteristics: mobility (or portability) which users can conduct business real time via mobile devices; and broad reach, which means that people can be reached at any time via their mobiles. Clarke (2001) demonstrated that m-marketing has four value proposition attributes over traditional e-commerce. These are convenience, personalization, ubiquity and localization. Moreover, the positive prospect of m-marketing is driven by its unique features and characteristics that can provide customers with added value (SiauEe-Peng & Sheng., 2001; Sharma & Deng, 2002; Tang & Veijalainen, 2001) that does not exist in traditional e-commerce. These features include ubiquity, anytime-anywhere access, personalization, flexibility, localization, and the ability to access the needed information.

Wang et al (2006) believe that delivering value-added, interactive and location-based features through mobile technology to customers is important for gaining a competitive place in the mobile market by strengthening relationships with customers. In addition, Lumpkin & Dess (2004) considered that value has been enhanced by mobile technology as it becomes more convenient and efficient. Leung & Antypas (2001) suggested that business efficiency can be improved through mobile commerce by distributing information to the staff remotely and by presenting new channels on which to interact with customers.

The study of Lubbe & Louw (2010) explored the perceived value for m-commerce, finding that it offers a direct channel of communication with consumers via a mobile device, at any time and at any place. Mobile devices produce an opportunity to distribute new services to present customers and to attract new ones. Firms should, therefore, perceive mobile communication and commerce as an innovative and more interactive technique of doing business. As innovation creates marketing opportunities and challenges, mobile media for example exceed traditional communication and support one-to-one, many-to-many, and mass communication (Hoffman & Novak, 1996; Jee & Lee, 2002). Bhatti (2007) sought to address factors that influence the intention of users to adopt m-commerce. The study revealed that subjective norms, perceived usefulness, perceived ease of use and behavioral control are strong factors of intention to adopt m-commerce. Khalifa & Cheng (2008) investigated the role of exposure in the adoption of m-commerce. Exposure, contains trials of new devices, communication and observation, the result found out that exposure and its subset have a considerable influence on customer's decision to adopt m-commerce.

Mallat, Rossi &Tuunainen (2006) investigated mobile ticketing services for public transportation. The study found that intention to use mobile services is influenced by use situation conditions, such as availability of alternatives and time pressure in the service use situation. This shows that the benefits of mobile services are dependent on the situation in which they are used.

Yang (2009), in his research, tried to explore how Singaporeans are influenced to adopt the m-commerce. The study implements the technology acceptance model (TAM) to examine factors affecting Singaporeans attitudes towards emerging mobile technology and applications. Singaporean students were surveyed. The study reflects consumer perceived usefulness influence attitude towards using m-commerce.

2.2 M-Marketing .

Yang (2005), in his research, tried to explore how Singaporeans are influenced to adopt the m-marketing. The study implements the technology acceptance model (TAM) to examine factors affecting Singaporeans attitudes toward emerging mobile technology and applications. 866 Singaporean students were surveyed. The study reflects consumer perceived usefulness influence attitude toward using m-marketing.

It is also found that consumer innovativeness, past adoption behavior, technology cluster adoption, age, and gender affect their adoption behavior. The majority of positive relationships between perceived usefulness, perceived ease of use, innovativeness, adoption behavior, and demographics are supported by the empirical data. Lee & Jun (2005), in their study, seek to predict the consumer acceptance of m-marketing by adding a new construct which is contextual perceived usefulness to the technology acceptance model. The findings of the study suggested that contextual perceived usefulness is an important factor in consumer acceptance of m-marketing, perceived usefulness has a significant effect on behavioral intention to use m-marketing, and perceived playfulness has a significant effect on behavioral intentions. Khalifa & Shen (2008) conducted a study in Hong Kong to examine specific factors related to the individual adoption of B2C transactional m-marketing by using the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB). Results showed the important role of perceived usefulness, self-efficacy, subjective norms, and individual characteristics variables which influence intentions to adopt m-marketing.

One of the earliest definitions comes from Siau, Ee-Peng & Shen (2002), who defined mobile marketing as “all the activities required to communicate with the customer through the use of mobile devices in order to promote the selling of products or services and the provision of information about these products and services”. This is indeed a very plausible definition for it, because not only it is fairly easy to comprehend and apply, it is also not too precise and limiting towards mobile marketing’s many dimensions. Another earlier example is given by Dickinger, Haghirian, Murphy & Scharl (2004), who characterize m marketing as “the use of interactive wireless media to provide customers with time and location sensitive, personalized information that promotes goods, services and ideas, thereby generating value for all stakeholders”. Three years later Varshney & Vetter (2002)

refined it as “the usage of mobile internet-based media to transmit advertising messages to consumers, irrelevant of time and location, with personalized information with the overall goal to promote goods and services”. It has to be noted however, that these definitions are created roughly ten years ago, and a lot has changed in the m- marketing scene since. This is a real challenge when researching the field, as most of the literature to date about the subject is based on mobile marketing practices using classic mobile phones, or feature phones, which had only very few and simple capabilities (Persaud & Azhar, 2012). On the other hand, m-marketing is sometimes strongly affiliated with traditional electronic commerce.

Ngai & Gunasekaran (2007) count m-marketing as a subset of e-commerce, where the differentiation comes in the device or channel used: in m-marketing all parties buy, sell and exchange information with mobile devices wirelessly, contrary to ecommerce which focuses on wired computing environment. Haghirian, Madlberger & Tanuskova (2005) have described the relationship between the two similarly, by stating that m-marketing is basically “e-commerce that is carried out via mobile devices such as mobile phones and involves an emerging set of applications and services people can access from their web-enabled mobile devices”. As the m- marketing has become more interesting research topic in recent years (Varnali & Toker, 2010), new definitions have begun to arise in hastier pace. Huang & Symonds (2009) identified m-marketing as a “process of delivering messages from business to consumers using permission-based and interactive communication services over mobile communication media”. Shankar & Balasubramanian (2009) gave m-marketing a much more general description -“two-way or multi way communication and promotion of an offer between a firm and its customers using a mobile medium, device or technology” which again emphasizes same three things as most other definitions do too: mobile technology, interactive network, and relationship between customer and business. Kaplan (2012) simplified the definition even more by stating that mobile marketing is just “any marketing activity conducted through a ubiquitous network to which consumers are constantly connected using personal mobile device”. He also noted, that while personalization is major advantage for mobile marketing, not all marketing needs to be done on a one-to-one basis.

Analyzing these definitions it can be identified that there are two distinct schools on the matter. Some researchers define m-marketing with highly specific, possibly business-centric ways, which often does lead to a focused research, but as a side effect can rule out some of the other dimensions or variables of m- marketing. Other researchers prefer the opposite and define m-marketing quite broadly, which enables various types of studies to be

conducted under the topic, but it can contribute to the fragmentation and inconsistency of the academic research in the field. A great example of the latter category can be found in the researches by Smutkupt, Krairit & Esichaikul (2010), & Karjaluoto (2010), who provide practically identical definitions by stating that m-marketing is "the use of the mobile medium as a means of marketing communications".

Smutkupt, Krairit & Esichaikul (2010) do however narrow this down later in their study by naming few very similar aspects of interest as some of the previously mentioned definitions do: "the major advantage of m-marketing lies in its potential to enhance communications by providing customized/personalized, timely and location- specific information without restriction of time and place". According to Karjaluoto (2008), despite all of the proposed definitions, still no one can say what m-marketing really means in the end, at least term-wise. Taking all this into account, m-marketing business follows the official definition, which comes from the umbrella organization of the industry, the M-Marketing Association (2009): "mobile marketing is a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through and with any mobile device or network".

One important thing to note right away is that despite the naming, telemarketing or telesales is not considered to be m-marketing, Kotler & Armstrong (2012) agree with this concept and say that "today marketing must be understood not in the old sense of making a sale "telling and selling" but in a new sense of satisfying customer needs." When comparing these customer needs between different marketing methods, it is obvious to spot the main difference which mobile marketing brings along: the customer's need is not necessarily bound to a place or time; it is spontaneous and has to be satisfied fast if company is going to convert the need into a sale. Mobile phones give buyers the power to search for products and services in the exact time of need, which means they react to companies marketing when they are ready to buy. This crucial difference makes the interaction between a company and a potential customer last only minutes or even seconds, which obviously is in totally different category than the time span of other, more conservative marketing methods. (Clarke, 2001.) Despite the differences, most of the usual marketing nuances are still present. Studying interactive mobile services does require theories and knowledge about consumer behavior, psychology and adoption - just like with any other marketing channel (Scharl, Dickinger & Murphy, 2005). But then again one has to take into account that for example the consumer attitudes, which reflect to other things such as adoption rates,

change relatively fast with new technological possibilities and trends emerging in the mobile field.

2.2.1 Definition and Background of M-Marketing

M-marketing, according to the Mobile Marketing Association is “a set of practices that enable organizations to communicate and engage with their audience in an interactive and relevant manner through any mobile device or network.”

Elements of M-Marketing

Take a look at that definition again and then check out the following, which pull out and refine the five key elements of the definition of m-marketing:

(1) Organizations: Organizations are commercial entities brands, agencies, marketers, non-profits enterprises (including individuals), and so on with products, services, and offerings they wish to deliver to the market. In other words, organizations are you and your companies. M-marketing works for any type of business.

(2) Practices: Practices consist of the many faces and facets of marketing activities, institutional processes, industry player partnerships, standards making, advertising and media placing and buying, direct response managing, promotional engagements, relationship management ,customer services, loyalty management, and social media stewardship. In other words, practices include all the things that you want to oversee and do to engage your customers. All types of marketing practices can be applied to m- marketing.

(3) Engagement: This is the process by which you and your customers interact in a two-way (push and pull) dialogue to build awareness, conduct transactions, support, and nurture each other. M-marketing is one of the most engaging forms of marketing because it’s done through and with such a personal device.

(4) Relevancy: Mobile interactions can provide information (for example, a user’s location, the time of day, activity, and so on). You can use this information to understand the context of your customer’s current environment in order to tailor and to create an appropriate experience that is closely linked (dare I say relevant) to his current context. For example, if someone in New York is doing a search on the mobile Internet for pizza, you want to show them listings for pizza shops nearby and not send them to Lima, Ohio, to get their pizza. M-marketing is highly relevant.

(5) Mobile devices and networks: These terms refer to any wireless enabled device regardless of form factor or network. Although certain types of devices have their limitations, you can execute some type of marketing campaign on every type of mobile devices

2.3 Adoption of M-Marketing by Customers

M-marketing is a new tactical marketing instrument of marketing communication using mobile communication techniques to promote goods, services and ideas, providing anytime and anywhere interaction, targeted addressing of consumers, and inherent measurement of campaign effectiveness**.** Delivering value-added, interactive, and/or location-based mobile services to customers seems to be increasingly important in gaining competitive edge by strengthening relationship with key customers.

2.3.1 Technology Acceptance Theories

Venkatesh, Morris & David (2003) argued that many challenging models have been described in information technology acceptance research with different acceptance determinants sets, which explained between 17 per cent and 53 per cent of the variance in user intentions to use information technology. There are eight particular models to be considered: the theory of reasoned action, the technology acceptance model, the motivational model, the theory of planned behavior, a model combining the technology acceptance model and the theory of planned behavior, a model of PC utilization, the innovation diffusion theory and the social cognitive theory.

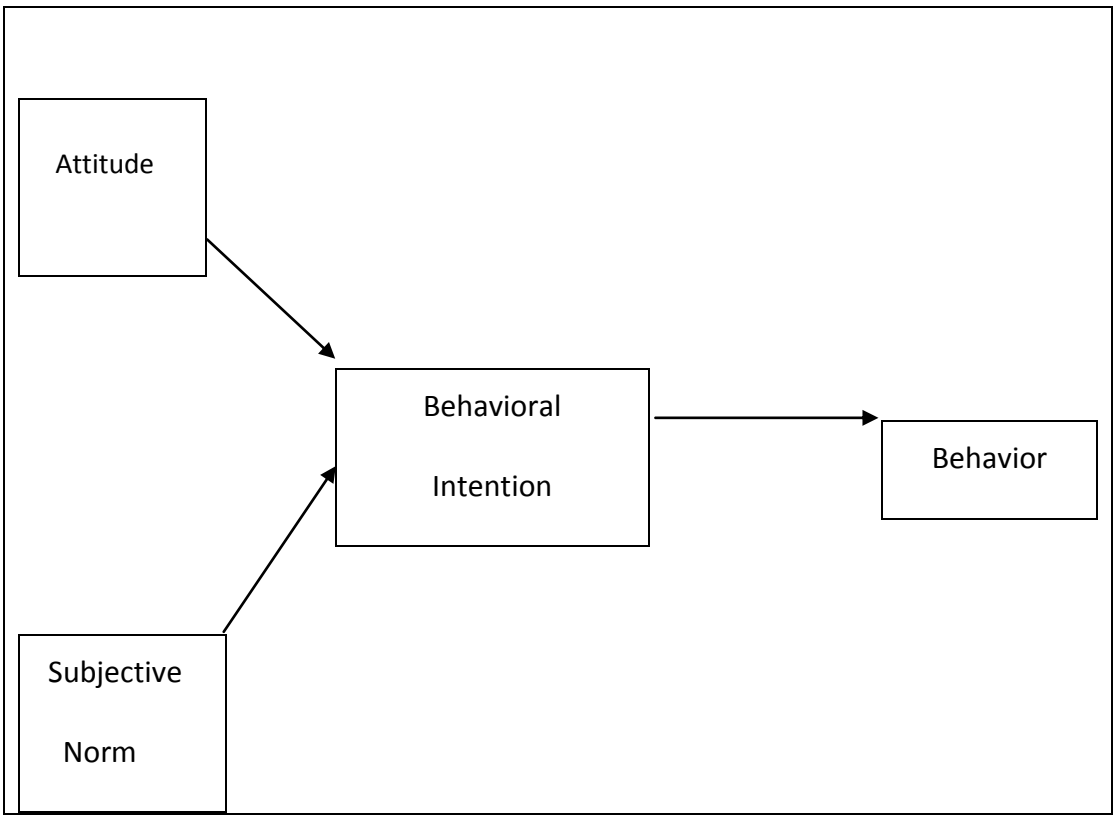
According to Wei, Marthandan, Chong, Ooi, & Arrumugam (2009), in order to clarify the factors or determinants influencing the acceptance of technology in the consumer context, a range of models and frameworks have been used in previous studies, the majority of which are based on theories such as technology acceptance model (TAM) (Davis, 1989), theory of planned behavior (TPB) (Ajzen, 1991), and diffusion of innovation (DOI) (Rogers, 1995).

In the information system field, research has resulted in several theoretical models that explain over 40 per cent of the variance in individual intentions to use technology. Researchers are faced with a variety of models and find themselves either opting for a preferabl e model or selection some of the constructs across the models (Venkatesh & Morris., 2003).

2.3.2 Technology Acceptance Model (TAM)

Davis (1989) introduced the technology acceptance model (TAM), which was derived from the theory of reasoned action (TRA). Fishbein & Ajzen (1975) stated that the theory of reasoned action (TRA) defines relationships between beliefs, attitude, intentions, and behavior. Figure (2.1) shows the two constructs of the theory of reasoned action: Attitude toward behavior: refers to the degree to which a person has favorable or unfavorable views of the behavior in question. Subjective norm: refers to the perceived social pressure to perform, or not to perform, the behavior.

Figure 2.1: Theory of Reasoned Action (TRA)



Source : Fishbein and Ajzen (1975)

Conversely, the technology acceptance model (TAM) predicts user acceptance of any technology, and is determined by two factors:

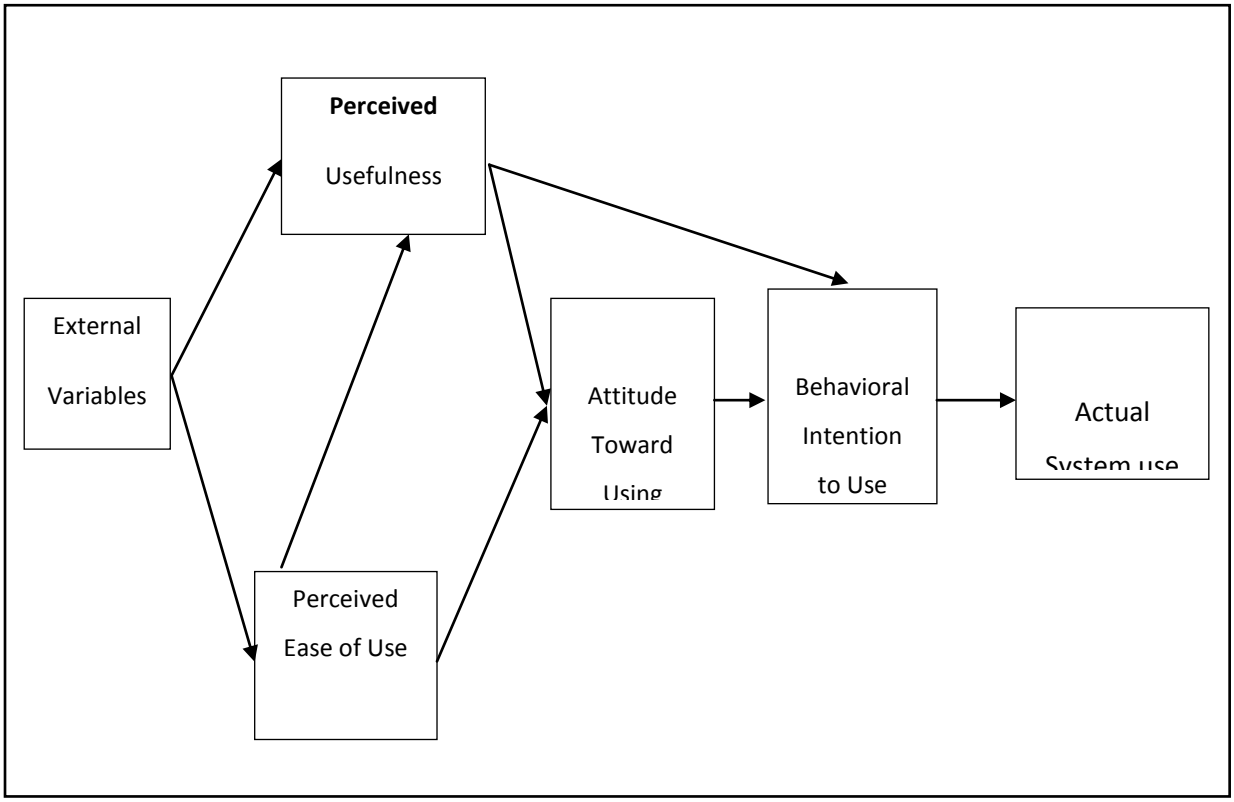
(1) Perceived usefulness: the degree to which a user believes that using the system will enhance his or her performance.

(2) Perceived ease of use: the degree to which the user believes that using the system will be free of effort.

According to Davis, Bagozzi & Warshaw (1989), a key purpose of the technology acceptance model is to offer an explanation for user behavior of computer acceptance, in general. Additionally, it provides a model that can predict user acceptance, so that the researchers and practitioners can recognize why a particular system may be unacceptable and follow appropriate corrective steps.

It is argued that computer usage in the technology acceptance model (TAM), as presented in Figure (2.2), is determined by behavioral intention (BI), and behavioral intention (BI) in turn is jointly determined by the person's attitude towards using the system (A) and perceived usefulness (U) (Davis et al., 1989).

Figure 2.2 Technology Acceptance Model (TAM)



Source: Davis, 1989

Furthermore, Davis et al. (1989) stated that the technology acceptance model (TAM) was developed to predict and explain the acceptance of computer technology by individuals.

They also claimed that the adoption of an application by individuals is due to two reasons: the performance and the function of the new technology, and how easy or difficult the system is.

The technology acceptance model (TAM) is the most popular theory amongst the models developed for predicting individuals' acceptance behavior because of its simplicity structure and acceptable explanatory power of 40 per cent in behavioral intention. It is, however, criticized for its failure to explain the remaining 60 per cent variance in behavioral intention Abbasi, Chandio, Soomro & Shah (2011).

2.3.3 The Technology Acceptance Model Measures

In the TAM, perceived usefulness (PU) and perceived ease of use (PEU) are indicated as fundamental and distinct constructs that influence an individual's decision to use information technology (or systems) (Davis, 1989). Since Davis (1989) introduced a detailed scale and items used to measure PU and PEU, much attention has focused on testing the robustness and validity of the scale. The TAM has been found to be extremely robust and has been replicated using different tasks and tools (Mathieson, 1991; Adams, 1992). They also extended it to different settings and samples; they demonstrated the internal consistency and replication reliability of the two scales. In a comparison of several models, Mathieson (1991) found that the TAM predicted intention to use a spreadsheet package better than alternative models. Szajna (1994) found that the instrument had predictive validity for intent to use, self-reported usage and attitude toward use. In another comparison of theoretical models, Taylor & Todd (1995) found that the TAM provided a good fit to data on the use of a Computing Resource Centre, explaining 34 percent of the variance in behavior, 52 percent of the variance in intention, and 73 percent of the variance in attitude. The TAM's value lies in its parsimony: the model is strongly grounded in existing psychological theory, yet is easy (and thus, cost-effective) to apply. Furthermore, it makes explicit links to the concept of usability via the ease-of-use construct. This indicates that the paths suggested by the TAM each explained a high degree of variance.

The theoretical constructs of this study were operationalized using validated items from prior research. These items, used to measure PEU and PU, are adapted from the scales used by Davis (1989) and Davis Bagozzi & Warshawp (1989), with appropriate modifications to make them specifically relevant m-marketing. From the original TAM scale, which consists of a fourteen items, each construct was carefully selected and adapted to assess PEU with a focus on whether the m-marketing system was easy to learn and PU with a focus on the

user's subjective probability that using the system will increase the shoppers' performance in shopping. Individuals were asked to indicate the extent of agreement or disagreement with all statements related to PU and PEU on a five-point Likert-type scale.

A significant number of researchers have confirmed the validity of the TAM scales and supported their use with different populations of users and different software choices. However, some research suggests that a limitation of the TAM lies in using a self-report behavioral measure for system usage. Although a subjective behavioral measure is generally accepted (e.g., Oliver& Bearden,1980;Davis et al, 1989; Beck & Ajzen,1991; Bagozzi DavisWarshaw.,1992; Igbaria, Guimaraes & Davis ., 1995), it should be supplemented with other objective measures (Straub .,1995). As a result, this study has integrated various scale dimensions in measuring the actual usage of the m-marketing. In addition, common method bias has been a recurring concern within IS research in general and in TAM research. Although some researchers report that this bias is not as severe as other researchers claim (Crompton& Wagner, 1994), the results of any TAM studies should be interpreted with this potential bias in mind. Thus, it may be concluded that even though PU and PEU are very powerful constructs in terms of their ability to determine consumer behavior towards new technology, they should be treated and adapted accordingly to ensure that the responses gathered reflect the actual experience and behavior of m-marketing adoption in tourism industry.

2.4 Factors Affecting M-Marketing Adoption

This study aims to analyze the different factors affecting the adoption of m-marketing by customers in tourism industry. Besides the factors of technology acceptance model (TAM) such as perceived usefulness and perceives ease of use, and other privacy concern factors, perceived trust, perceived risk, opinion leadership, consumer involvement and personal innovativeness have a great impact on the adoption of m-marketing.

(a) Perceived Usefulness

Davis (1989) defined perceived usefulness as "the degree to which a person believes that using particular system would enhance his or her job performance". In the context of m-marketing, usefulness refers to the benefits perceived by consumers in using m-marketing services more than its alternatives in their daily life. In fact, their main perceived usefulness compared to personal computers is during movement when a personal computer is not available. While traveling, it can be very useful to book a hotel or train/flight tickets. It can

also be useful if users have pressing needs and only have their cell phone available. What's more, its usefulness has been highlighted, for example in the case in which there is an urgency to make a purchase, not to lose a discount because of its approaching deadline or to quickly raise an e-bay auction, before time runs out. Furthermore, some people are more likely to use their cell phone instead of their personal computer. Seniors or people who do not use a personal computer can make their purchase directly online from their mobile. According to interviewees, usefulness has a positive effect on the intention to m-marketing. Several studies have validated the consequence of perceived usefulness on intention to use new technologies (Lin & Wang, 2005; Luarn & Lin, 2005). A study conducted by Wong & Hiew (2005) recommended that the usefulness of mobile services is a strong driver for m-marketing usage, including localization, ubiquities and personalization. Therefore, as (Ho & Kwok, 2003) demonstrated, this factor not only helps to enhance the individual's performance on a daily actions, it also can help the users to achieve effectiveness and efficiency.

(b) Perceived Ease of Use

Davis (1989) defined perceived ease of use as the level to which a person thinks that using a particular system would be free of effort. Wei, Marthandan, Chong & Arumgan (2009) stated that previous studies have considered perceived ease of use as a significant determinant in information technologies adoption, such as online banking (Jahangir & Begum, 2008; Guriting & Ndubisi, 2006), wireless internet Lu, Yu, Liu & Yao(2003), and m-commerce (Luarn & Lin, 2005; Wang & Barnes,2007; Mallat Rossi,&Tuunainen,Oorni,2006; Lin & Wang, 2005; Kurnia et al., 2006). As perceived ease of use means free of physical and mental effort, m-commerce should be easy to learn or to use (Wei et al., 2009).

(c) Perceived Risk

Perceived risk in this study generally defined as a perception of the risks inherent in the use of open internet infrastructure for the exchange of personal information, and it often operates as a multi-dimensional construct (Chen, C. 2015). Perceived risk is an important determinant of consumers' acceptance of online transactions. People perceive some risks when making online transactions. For example, they worry about unsafe payments, interception of credit cards, not receiving the paid products, lacking of confidence in websites, illegal activities and fraud. They think that personal computer have more powerful antivirus than mobile devices. The privacy concept is strictly related with perceived risk. In fact, interviewed people, perceive security problems like transparency of personal

information that can be diverted wirelessly. Furthermore, users perceive mobiles as being less safe than personal computers because technical issues. For example, the devices are not stable at the connection level compared to a desktop computer. The battery could discharge, impeding you to know if the purchase has been successful. Some people are stressed about the possibility that the device would steal them while they are making a purchase on the road.

Pavlou (2003) identified perceived risk as the belief of individuals about the probability of suffering a failure in achieving a target. It has been discussed that high perceived risk has a negative effect on the adoption of new technology, such as m-commerce (Wu & Wang, 2005). Evidence presented from previous studies has demonstrated that the individual's awareness of risk is a significant factor when adopting a new technology or service (Yang, 2009; Laforet & Li, 2005).Lovelock, Patterson & Walker (2001) presented the negative correlation between the willingness and the service technology adoption, where the highest adoption occurs when the using risk is low.

(d) Perceived Trust

Trust is a key to m-marketing success. Lewis, Agarwal, R & Sambamurthy (2003) define trust as "an individual's belief in, and willingness to act on the basis of, the words, actions, and decisions of another". The need for trust arises from our interdependence with others. Customers who trust the company are more likely to visit its "virtual location" and to recommend its products and services to other people. This means that trust increases both technology and mobile acceptance for marketing purposes. In order to obtain consumers' trust, marketers should create a dialogue with the consumer, rather than using the media as a promotional vehicle.

(e) Consumer Involvement

Zaichkowsky (1985) defines consumer involvement as the perceived relevance of the object based on their interests, needs or values. Involvement has been conceptualized as the interest, enthusiasm and excitement that consumers manifest towards a product category Goldsmith (1998). The model proposed by Lockshin Spawton & Macintosh(1997) suggested three dimensions of involvement: (i) product involvement (ii) brand involvement and (iii) purchase involvement. As m-marketing is a relatively new activity, purchase involvement is the most suitable dimension to adopt. In this context, consumers go through two types of cognitive evaluation before they engage in the actual purchasing decision: firstly, they need

to determine whether the travel services offered over the internet (e.g. types of holiday packages) are personally relevant to them; secondly, consumers have to evaluate whether their involvement in the purchasing process is stimulated or hindered by various motivational factors (e.g. boring vs. interesting, good vs. bad). As these two types of involvement are related but different states of being, it would be interesting to establish whether any of the above factors would be significant in predicting consumers' shopping behavior for travel services over the internet. The degree of personal involvement is the most important factor that shapes the type of decision making process and the subsequent purchasing behavior. Therefore, it is expected that consumer involvement levels might be influenced by trust in retailers and the reliability of the system. Eventually, the more consumers are involved in the m-marketing experience, the more trust they gain in the retailers and the transaction systems; also, the lower the risk perceived in relation to m-marketing adoption in tourism industry.

(f) Personal Innovativeness

Personal innovativeness is defined as the individual's willingness to attempt to adopt and use new technology or new information systems for achieving particular aims (Rao & Troshani, 2007; Bhatti, 2007). Further diffusion researches have reported that innovativeness is linked to the behavior of customer adoption (Bhatti, 2007). Citrin Sprott, Silverman, Stem (2000) reported, in their research, that consumer adoption of m-marketing is influenced by personal innovativeness. Rogers (1995) stated that highly innovative people are more able to deal with different levels of uncertain situations and may have greater positive intention to acceptance. This study incorporated this factor for the reason that it is predicted to affect the adoption of m-marketing by individuals.

(g) Opinion Leadership

Opinion leadership is a concept that was developed from the theory of two-step flow of communication advocated by Katz & Lazar, J, & Preece, J. (1999). This theory is one of several models that try to explain the diffusion of innovations. An opinion leader (OL) is an agent who is an active media user and who interprets the meanings of media messages or content for lower-end media users. Typically, the OL is held in high esteem by those that accept his or her opinions. Opinion Leadership tends to be subject specific: that is, a person who is an OL in one field may be a follower in another field. According to Rogers (1995), early adopters frequently serve as OLs who can persuade others to adopt the innovation by providing evaluative information. The highest number of OLs is found among early adopters,

who themselves do not rely on well-established references in making their buying decisions, preferring instead to rely on their own intuition and vision (Moore, 1999). Applying this to the present study, OLs will be more likely to be the consumers who first adopt travel m-marketing. In other words, the stronger the opinion leadership consumers have, the faster they adopt travel m-marketing adoption.

2.5 Relationship between Factors Affecting M-Marketing Adoption

Consumers are the receivers of marketing messages and are vital for marketing messages and are vital for m-marketing operations. M-marketing success significantly depends on consumers' satisfaction and acceptance, and the approach of obtaining user permission is a critical success factor for that acceptance. In this study, seven factors: perceived ease of use, perceived usefulness, perceived trust, perceived risk, consumer involvement, personal innovativeness and opinion leadership were studied.

2.5.1 Relationship between Perceived Usefulness and Adoption of M-Marketing

Since behavioral intent depends on cognitive choice, a potential m-marketing customer can either respond favorably or unfavorably towards engaging in online purchasing. Meaning, the "like/dislike nuance" would be based on whether the tradeoff is beneficial to the potential m-marketing customers opposed to other forms of retailing. Partly, this study believes that the power to attract m-marketing customers lies in the technology's usability and usefulness. This is in line with Davis (1989) who defines the latter as perceived usefulness (PU), i.e. the belief that using the application would increase one's performance. In this context, the performance would be centered in the benefits of purchasing a product through m-marketing minus the tradeoff of a physical retailing. Additionally, the m-marketing should be "free from effort", which reflects the former as the perceived ease of use construct in the TAM of Davis (1989). In the past, researchers (e.g. Koufaris, 2002) have validated the construct of PU and they were found to influence the intention of potential m-marketing customers. However, study on m-marketing from the TAM perspective is limited, nevertheless the PU construct still garnered tremendous support from many other technological applications. For example, Horton et al. (2001) asserted the existence of a positive influence of PU on intention in intranet media. Additionally, Agarwal & Prasad (1999); Chau & Hu (2002); Davis, et al. (1989); Hu & Bentler.(1999); Igbaria et al. (1995); Igbaria (1993); Mathieson (1991); Mathieson, Peacock & Chin. (2001) Moon & Kim

(2001); Ramayah et al. (2002); Venkatesh & Davis (2000) also reported that PU is significant and positively influences the behavioral intent.

2.5.2 The Relationship between Perceived Ease of Use and Adoption of M-Marketing

Perceived ease of use (PEU) plays a major role in m-marketing too. Although m-marketing is surmised to have beneficial outcomes, yet the hassle of engaging in the interaction medium (i.e. website) could prove to be daunting for some consumers. In short, the PEU is associated with the "user-friendliness" of the website. If the hassle proves to outweigh the benefit of purchasing through the net, then potential m-marketing customers would prefer to purchase through conventional channels. One of the factors that contribute towards the unfriendliness of some websites of internet retailers is long download times. Additionally, poorly designed forms might cause potential m-marketing customers to lose focus of their carts and purchases. In other words, these barriers reduces the perception on the ease of use of m-marketing, therein, allowing internet user's to develop a negative attitude.

In turn, this leads to m-marketing customers' unwillingness to engage in m-marketing relationship between service convenience and customer satisfaction. Along with the direct effect of service convenience on customer satisfaction, which has been empirically verified (Colwell et al., 2008), the mediating role of perceived service value in the relationship between service convenience and customer satisfaction should be considered, with perceived value as a key contributor to high levels of customer satisfaction Cockrill Goode, & Beetles (2009).

Perceived value has been defined as "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given" Zeithaml (1988). In other words, customers compare the benefits of the service received with the necessary sacrifice required to get the service Lee, Park & Moon

(2004). As Heinonen (2004) notes, many of the conceptualizations of perceived value involve quality as the benefit and price as the sacrifice. This interpretation emphasizes value as a monetary conceptualization (Sweeney & Soutar, 2001; Nasution & Mavondo, 2008).

Price is an important factor in customer satisfaction because customers tend to think of price whenever they evaluate the value of an acquired product or service (Martin-Consuegra Monila & Esteban., 2007). As discussed by McDougall and Levesque (2000), customers who perceive that they receive value for money are more satisfied than

customers who do not perceive that they receive value for money (Zeithaml, 1988). Thus, the give-and-get exchange process (Zeithaml, 1988), in addition to the factor of quality, works as an antecedent to service value as it is explored in previous studies (Lee et al., 2004; Wang & Luarn (2009). For this investigation, service convenience represented the get benefit in the service delivery process relative to the necessary sacrifice required to pay for the services in terms of monetary valuation. That is, if customers feel that they are receiving the best monetary value for the level of service convenience provided by a business, their positive perceptions of service value drive various positive behaviors (Chan Wan &Sin., 2007), including customer satisfaction and loyalty Heskett, Jones, & Loveman (1994); McDougall & Levesque, 2000; Wang ,Lin & Luarn., 2009). These positive behaviors are important in developing long-term customer relationships and increasing the customer's intention to repurchase (Patterson & Spreng, 1997). This argument suggests that perceived service value is a required mediating factor in the relationship between service convenience and customer satisfaction, which would, in turn, influence customer loyalty toward a business (as discussed above). While a direct link exists between service convenience and customer satisfaction, further study is needed to investigate whether varying degrees of perceived service value influence the convenience to satisfaction relationship Colwell, Aung & Kanetkar (2008). Thus, based on the above discussion, this study assumes that there is a significant mediating effect of customer-perceived service value in the relationship between service convenience and customer satisfaction.

Service convenience is a means of providing added value to customers to decrease the time and effort that they must expend on a service, thereby providing a holistic experience instead of separate dimensions of customer service convenience (Colwell Aung, Kanetkar & Holden, 2008). Brown (1990) has suggested that the benefit of service convenience is a psychological dimension that aims to add to a customer's comfort by saving a customer's time and effort. Thus, customers have to be aware of the convenience benefits being offered by service providers as intangible benefits (Lovelock, 1994). The intangible nature of service convenience "makes consumers being unable to experience the service offering prior to purchase and even the consumers often cannot evaluate it even after consumption" Levy, (1999) Accordingly, one means of reducing customer-perceived risk associated with the service is to increase customers' expectations regarding the level of service and enhance customer purchase intentions by signaling the organization's commitment to customers with a service guarantee (Wirtz, 1998).

This implies that if a customer is aware of the chosen business's guarantee that it will offer a high level of service, the customer may perceive a lower level of performance risk associated with that firm's service offerings (Tsaur & Wang, 2009). That is customers look to the guarantee for assurance that a high level of service quality will be delivered on a consistent basis (Marmorstein Sarel & Lassar., 2001).

A review of service guarantee-related studies reveals that most, if not all, service guarantees are seen as an effective tool for jump-starting quality improvements (Wirtz, 1998), which serve to increase expected service quality (Wirtz, Kum & Sheang Lee., 2000; Tsaur & Wang, 2009), and leading to enhanced consumer satisfaction (Tucci & Talaga, 1997).However, Hays and Hill (2006) argue that the service guarantee should not be represented with a "zero-one variable" indicating its presence or absence as an explicit written guarantee to customers.

2.5.3 Relationship between Perceived Risk and Adoption M-Marketing

Pavlou (2003) identified perceived risk as the belief of individuals about the probability of suffering a failure in achieving a target. It has been discussed that high perceived risk has a negative effect on the adoption of new technology, such as m-marketing (Wu & Wang, 2005). Evidence presented from previous studies has demonstrated that the individual's awareness of risk is a significant factor when adopting a new technology or service (Yang, 2009; Laforet & Li, 2005). Lovelock Patterson & Walker. (2001) presented the negative correlation between the willingness and the service technology adoption, where the highest adoption occurs when the using risk is low. A study conducted in mobile marketing by Wu & Wang (2005) found that perceived risk is statistically significant, affecting the intention to use m-marketing in Taiwan.

2.5.4 Relationship between Perceived Trust and Adoption of M-Marketing

The study conducted by Jayawardhena & Kutaertz (2009) found that institutional trust is the most influential variable in m-marketing but argued that personal trust and control were more prominent with men than women. Karjuluoto, Lehto, Leppaniemi & Jayawardhena (2008) further revealed that credibility, context, and subject norms had as substantial influence on consumers' acceptance of m-marketing. Persuad & Azhar (2012) conducted a study on innovative m-marketing via smart phones found that perceived value, shopping style, permission-base, and brand trust are significantly considered as predictors of

consumers intentions to use m-marketing. However, consumers have different views on the purchase and use of mobile devices. For instance, consumers are of the views that acquiring smart phones is not tied to participating in m-marketing, although few individual consumers may be motivated due to mobile coupons and mobile discounts Almunawar & Anshari (2015).

Consumers, however, considered their smart phones as personal devices for entertainment, status symbol and social networking (Sarwar & Soomro, 2013; King, 2012; Conti, Jennett, Maestre, & Sasse, 2012). The implication of these findings is that consumers are much worried about permission-based, and brand trust. They are further concerns about privacy and control related issues over when and how they will participate in m-marketing to enhance marketing of services by business organizations, an area that is critical to the success of m-marketing activities, satisfaction and loyalty. It is, therefore, imperative for business organizations to critically look into trust as this related to m-marketing and electronic marketing platforms that reduce physical interaction with the company's Watson, McCarthy& Rowley (2013) in their study consumer attitudes towards m-marketing in smart phone era argued that even though m- marketing can be used to strengthened customer relationship, its usage has been limited due to evidence based researches. This, therefore, means that the concern of consumers on privacy and trust are important aspects of m-marketing that should be critically examined both by the industry practitioners and academics.

Kim, Ferrin & Rao (2009) conducted a study on a trust based consumer decision-making model in electronic commerce revealed that a consumer's trust, directly and indirectly, affects a consumer purchase intention. The researchers argued that a consumer's trust has a strong positive effect on purchasing intention as well as a strong negative effect on a consumer's perceived risk. This goes to stress that consumers are sensitive to their feelings and beliefs, therefore, beliefs must match with a company's products and services. The revolution in communication technology has therefore not only makes the global markets more competitive but stress the importance of trust on service consumption by the consumers (Jha, Punia & 2014).

The study conducted by Lin & Wang (2006) emphasized that trust appeared in their study to be an essential factor that enhances customer representatives. Customer value creation may be important, but customers trust is imperative for the success of m-marketing. Chen, Yan, Fan & Gordon (2015) found that trust moderates the relationship

between perceived risk and overall satisfaction. Overall satisfaction with a company's products by the target markets, therefore, guarantee a firm stability and also encourages further recommendations on word-of-mouth by the loyal customers. Consumers' trust, therefore, becomes an imperative factor in m-marketing particularly in situations where consumers have little information about a company and its services.

Consumer perception, therefore, about trust and risk information influenced the adoption of m-marketing. This is because the individual consumer's personal risk propensity has a positive significant correlation with risk penetration of m-marketing devices (Hu & Liu, 1995). Consumers, for instance, with strong risk propensity will undoubtedly have less trust in a company's products that is questionable by other customers on the market. Product risk, technical risk, and environment risk, therefore, influences customer trust and impede privacy concerns that affect consumers' adoption behavior of a technology.

2.5.5 Relationship between Consumer Involvement and Adoption of M- Marketing

Compared to traditional media such as television or radio, the processing of message content on the web is largely determined by consumers' level of involvement or predisposed intention to become exposed. In addition, with thousands of sites that offer information on accommodation, online consumers must choose which ones to visit. This can be accomplished based on their previous experience with certain sites or search engines both of which require that consumers know how to search for the sites that are most likely to satisfy their needs at the time. All of these activities have the prerequisites of consumers possessing the necessary skills to navigate through the virtual environment. Since purchasing travel services over the internet is a relatively new activity, customers must go through two types of cognitive evaluation before they engage in the actual purchasing decision. Firstly, they need to determine whether the product category (i.e. a vacation product sold over the internet) is personally relevant to them. Secondly, consumers have to evaluate whether their involvement in purchasing behavior is stimulated or hindered by various motivational factors. As these two types of involvement are related but different states of being, it would be interesting to know if any of the above factors would be significant in predicting consumer vacation purchasing behavior over the internet. Thus, it is proposed in this study that innovative consumer behavior on the internet refers to both the affective-cognitive

aspects of involvement. When a person claims to be involved in something, he/she is not merely thinking about it, but is actively doing something with it. This research therefore aims to incorporate cognitive-affective involvement into a conceptualization of consumer involvement in m-marketing.

2.5.6 Relationship between Personal Innovativeness and Adoption of M-Marketing

Innovativeness is defined differently across multiple disciplines. A widely accepted definition among researchers was the degree of early acceptance of attitude and intention. Lu, Yao & Yu. (2005) found that while PU and PEU were strong variables in consumer willingness to adopt mobile technology, they concluded that variables such as personal innovativeness and social influence must also be considered in determining consumer acceptance. Innovativeness showed a direct effect on ease of use and usefulness, which in turn impacted the consumer's behavioral intention to adopt wireless internet services via mobile technology. Within the context of online shopping, an individual's innovative personality was explored as a concept of risk-taking tendencies, since innovative behaviors such as m-marketing involve unavoidable risk and uncertainty (Lee, Cheng & Cheng., 2007).

Specifically, m-marketing customers cannot ensure the degree of service quality when they make a purchase online. They tend to perceive m-marketing to be more risky compared to offline purchasing. M-marketing is more prone to be adopted by highly innovative shoppers, who have high levels of self-confidence about their online purchase behaviors. High personal innovativeness might allow consumers to take risks and to accept new information technologies or services more easily than others. Lian, Chen & Wang (2012) found personal innovativeness to have a strong moderating effect on attitude and intention to purchase. Ho & Wu (2011) defined personal innovativeness as a concept related to individual attitude toward new ideas and innovative decisions of other people's experience. With respect to attitude, Amoroso & Lim (2014) & Hill & Troshani (2009) found that consumer innovativeness and image or self-efficacy were significant in understanding online shopping behavior.

Lian et al. (2012) also found that personal innovativeness in the use of information technologies was tube and intention. Lu et al. (2005) found that while PU and PEOU were strong variables in consumer willingness to adopt mobile technology, they concluded that variables such as personal innovativeness and social influence must also be considered in determining consumer acceptance. Innovativeness showed a direct effect on ease of use and

usefulness, which in turn impacted the consumer' behavioral intention to adopt wireless internet services via mobile technology. Within the context of online shopping, an individual's innovative personality was explored as a concept of risk-taking tendencies, since innovative behaviors such as online shopping involve unavoidable risk and uncertainty (Lee et al., 2007). Specifically, online shoppers cannot ensure the degree of service quality when they make a purchase online. They tend to perceive online shopping to be more risky compared to offline purchasing.

M-marketing is more prone to be adopted by highly innovative shoppers, who have high levels of self-confidence about their online purchase behaviors. High personal innovativeness might allow consumers to take risks and to accept new information technologies or services more easily than others. Lian et al. (2012) found personal innovativeness to have a strong moderating effect on attitude and intention to purchase. Ho &Wu (2011) defined personal innovativeness as a concept related to individual attitude toward new ideas and innovative decisions of other people's experience. They found that personal innovativeness moderated customer satisfaction and loyalty.

With respect to attitude, Amoroso & Lim (2014) and Hill & Troshani (2009) found that consumer innovativeness and image or self-efficacy were significant in understanding m-marketing behavior. Lian et al. (2012) also found that personal innovativeness in the use of information technologies was strongly related to a positive attitude toward m-marketing, and ultimately increased behavioral intent to use an online store. Several studies found a strong and direct relationship between consumer innovativeness and consumer loyalty and repurchase intention. Chen (2008) found that innovativeness had a positive relationship to customer satisfaction and repurchase intention with self-service technologies. In the Jayasingh & Eze (2009) study conducted with respondents in Malaysia, the findings verified that consumer use of mobile coupons showed a direct relationship to consumer's innovativeness and repurchase intention to adopt mobile coupons. Zhang, Zhu & Ding. (2013) found a direct relationship between personal innovativeness and attitude toward using information technologies. Chen (2008) also found that personal innovativeness directly impacted a consumer's repurchase intention to use self-service technologies and as well their satisfaction with the applications related to online satisfaction. In sum, the literature presents consumer innovativeness to be a rich and multifaceted construct, where innovativeness could be defined as the innate tendency to early adopt, or to have self-confidence and self-efficacy, or to be risk-taking.

2.5.7 Relationship between Opinion Leadership and Adoption of M-Marketing

Identification of opinion leaders is a major concern for businesses because they have outstanding impacts on various stakeholders including the company, customers, and society in general. In order to speed up the adoption of new products, marketers search for ways to determine and target opinion leaders; they are highly connected to information sources, and they are constantly exposed to innovations (Goldenberg et al., 2009). Secondly, they rarely ignore the information that others have (Iyengar et al., 2011) which results in knowledge ability about a particular product (Grewal et al., 2000). Lastly, they are more involved in new products than others (Goldenberg, Han, Lehmann & Hong., 2009). Due to these, opinion leaders are more likely to adopt early. Revealing the mechanisms underlying the relationship between opinion leadership and new product adoption is an interesting venue for both marketers and academics. Companies attach great importance to maximizing the speed of new product adoption (Kotler & Zaltman, 1976).

To maximize the profit that leverages their marketing spending, marketers must identify and target the opinion leaders. Opinion leaders play an important role in the diffusion of innovations. Diffusion is defined as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 2003). In other words, consumers are becoming interconnected through various sorts of social networks, a trend that is facilitated by recent advances in electronic media and telecommunication such as Facebook and Twitter (Wuyts Dekimpe & Gijsbrechts., 2010). As more and more people explore social media, social networks have become one of the key elements for learning about products, organizations, and world events. Hence, it is very crucial to identify the opinion leaders that accelerate adoption of innovations. Thus, innovativeness and sociometric opinion leadership relationship needs further investigation to better explain the relationship between m-marketing adoption and opinion leadership.

2.6 Empirical Studies Relating to M-Marketing Adoption

There are previous research that examines the mediating effects on adoption of m-marketing in several service industries and the factors that influence the adoption of m-marketing. Brown**,** Davies, & Stroebel (2003) found that the mediating effects on m-marketing adoption in South Africa. According to Suoranta & Mattila (2003),age, and household income significantly influence m-marketing adoption. In this study, the postal survey method was used.

Laforet & Li (2005), studied attitude, motivation, and behavior theories. In this study, 300 respondents were randomly interviewed in the streets of six major cities in China. This study results show that awareness, confidential and security, past experience with computer and new technology are salient factors influencing m-marketing adoption. Luarn & Lin (2005) found that perceived self-efficacy, financial costs, credibility, easy-of-use, and usefulness had remarked influence on intention to adopt remarked influence on intention to adopt m-marketing. In this study, 180 respondents were surveyed at an e-commerce exposition and symposium in Taiwan

Laukkanen (2007) studied received benefits (i.e, location free and efficiency) are main factors encouraging people to adopt m-marketing. In collecting data, 20 qualitative in-depth interviews were conducted with a large Scandinavian bank customer in Finland. Amin (2008) found that perceived usefulness, easy-of-use, credibility, amount of information, and normative pressure significantly influence the adoption of m-marketing.

Cruze (2010) found that the cost barrier and perceived risk are highest rejection motives, following are unsuitable device, complexity, and lack of information. According to Requelme & Rios (2010), usefulness, social norms, risk influences the intention to adopt m-marketing. Puschel (2010) found that .relative advantage, visibility, compatibility, and perceived easy-of-used significantly affects attitude, and attitudes, subjective norm, and perceived behavioral control significantly affects intention to adopt m-marketing. Data were collected via online survey in Germany. Koenig-Lewis (2010) found that compatibility, and risk are significant factors, while perceived costs, easy-of-use, credibility, and trust are not salient factors. In collecting data, 155 consumers aged 18-35 collected via online survey in Germany.

Based on TAM and IDT theories, Sripalawat (2011) found that subjective norm is the most influential factor, the following is perceived usefulness and self-efficacy. In this study, factors affecting on m-marketing adoption namely perceived usefulness, perceived ease of use, perceived trust, perceived risk, opinion leadership and involvement are used. Perceived trust, perceived usefulness and risk are used as mediating variables between perceived ease of use and adoption. Perceived trust and perceived risk are used as mediating variables between consumer involvement and adoption. Perceived risk is used as a mediating variable between perceived trust and adoption. Perceived usefulness is used as a mediating variable between perceived risk and adoption. Summary of empirical studies on adoption of m-marketing, theories, sample and countries and main findings are summarized in table (2.1).

Table (2.1) Summary of Empirical Studies in M-Marketing Adoption

Authors	Theories	Sample and Countries	Main Findings
Brown et al. [2003]	IDT and DTPB	162 question collected from convenience and online sampling in South Africa	Relative advantage, trial ability, number of marketing services, and risk significantly influence m-marketing adoption.
Suoranta and Mattila [2003]	Bass diffusion model and IDT	1253 samples drawn from one major Finnish bank by the postal survey in Finland	Information source (i.e., inter personal word-of-mouth),age, and household income significantly influence m-banking adoption.
Laforet & Li [2005]	Attitude. Motivation, and behavior	300 respondents randomly interviewed in the streets of six major cities in China	Awareness, confidential and security, past experience with computer and new technology are salient factors influencing m-marketing adoption.
Luarn & Lin [2005]	Extended TAM	180 respondents surveyed at an e-commerce exposition and symposium in Taiwan	Perceived self-efficacy, financial costs, credibility, easy-of-use, and usefulness had remarked influence on intention to adopt remarked influence on intention to adopt m-marketing.
Laukkanen [2007]	Mean-end theory	20 qualitative in-depth interviews conducted with a large Scandinavian bank customer in Finland	Perceived benefits (i.e, location free and efficiency) are main factors encouraging people to adopt m-banking.

Authors	Theories	Sample and Countries	Main Findings
Amin et al. [2008]	TAM	156 respondents obtained via convenience sampling in Malaysia	Perceived usefulness, easy-of-use, credibility, amount of information, and normative pressure significantly influence the adoption of m-marketing.
Cruze et al. [2010]	TAM and theory of resistance to innovation	3585 respondents collected through an online survey in Brazil	The cost barrier and perceived risk are highest rejection motives, following are unsuitable device, complexity, and lack of information.
Requelme & Rios [2010]	TAM, TPB, and IDT	681 samples drawn from the population of Singapore	Usefulness, social norms, risk influences the intention to adopt m-marketing
Puschel et al. [2010]	IDT and DTPB	666 respondents surveyed on an online questionnaire in Brazil	Relative advantage, visibility, compatibility, and perceived easy-of-used significantly affects attitude, and attitudes, subjective norm, and perceived behavioral control significantly affects intention.
Koenig-Lewis et al. [2010]	TAM and IDT	155 consumers aged 18-35 collected via online survey in Germany	Perceived usefulness, compatibility, and risk are significant factors, while perceived costs, easy-of-use, credibility, and trust are not salient factors
Sripalawat et al. [2011]	TAM and TPB	195 questionnaires collected via online survey in Thailand	Subjective norm is the most influential factor, the following is perceived usefulness and self-

Authors	Theories	Sample and Countries	Main Findings
			efficacy.

Source : Own Compilation

2.7 Model Constructs

Based on the proposed research framework on the antecedents of consumer adoption of m-marketing, this section formulates a set of hypotheses which are defined from the previous literature review. This is to explore the relationships among the constructs of the study.

2.7.1 Perceived Ease of Use

Perceived ease of use (PEU) is the original TAM construct that refers to the belief that a particular technology would be applied with no effort (Davis, 1989; Fenech, 1998). Applying this to m-marketing, a shopping website that is perceived to be user-friendly will facilitate usage and will be more likely to be accepted by m-marketing customers. In the research model, PEU includes ease of: conducting the transaction, navigating, searching for information, and obtaining online help or support from travel agents' websites.

The past findings on TAM validate the positive relationship between PEU and perceived usefulness (PU). In some studies, PEU is found to have an influence on behavioral intention indirectly through PU (Davis et al., 1989; Davis, 1989; Chau, 1996; Chen et al.,2000; Pavlou, 2002) as well as reducing the perceived risk associated with online shopping(Feather man & Pavlou, 2003). If a technology is perceived to be too difficult to use, a person will also perceived it as a risky task, and will thus have less trust in the technology. On this basis, PEU is hypothesized to have a negative effect on perceived risk, but a positive effect on trust in shopping travel services online. Conversely, if the technology is perceived as easy to use, it will positively affect the PU and trust of travel as well as the adoption decision. Thus, the related hypotheses are:

2.7.2 Perceived Usefulness

Similar to PEU, perceived usefulness (PU) is also adopted from the original TAM. PU is defined as the degree to which a person believes that using a particular system would accelerate his or her personal growth and would enhance job performance (Davis, 1989). It is well documented and consistently proven in many studies to have a high impact on the behavioral intention to adopt technological products (Davis et al., 1989). The PU of using travel m-marketing is measured in terms of financial and time savings, increased flexibility, greater control of purchase decisions, and greater access to information about travel services.

PU is the most important factor influencing behavioral intention, especially when making an adoption decision. Most prior studies on PU have focused on the usage or adoption of information technology and the Web but not on the adoption of purchasing products online (Moon & Kim, 2001; Pavlou, 2001; Gefen & Straub, 2000 & 2003). The more useful it is perceived to be, the more positive the attitude and the greater the intention the m-marketing customers will have towards adopting travel m-marketing. Thus the hypothesis is:

2.7.3 Perceived Risk

Perceived risk (PR) is the uncertainty perceived by a consumer in a particular purchase situation. Adoption of a new technology will usually embody risks because there are uncertainties. Consumers generally associate a higher level of risk with non-store purchases as compared to store purchases (Akaah & Korgaonkar, 1988). Unlike offline consumers, online consumers are concerned with risks involved in buying online, Bhatnagar (2000); Heijiden (2003). Thus, relative advantage such as brand reputation, product trials and warranties are often used to reduce the risk perception of consumers (Roselius, 1971; Shimp & Bearden, 1982; Boulding & Kirmani, 1993).

The PR associated with m-marketing include: (i) performance risk, that is, whether the travel services delivered by the services providers will live up to customers' expectations;(ii) economic risk, that is, monetary losses when the services delivered fall short of customers' expectations; and (iii) transaction risk, that is, the risk and security associated with payment systems, booking systems, personal details and credit card details, which are considered as private by most consumers. PR is expected to affect the PU of online shopping and subsequently will influence the adoption decision. Therefore, PR is a vital construct to be included in the research model. PR is hypothesized to have a negative effect on both PU and the adoption of travel m-marketing.

2.7.4 Trust

Trust is an imperative element in any online transaction context, as it involves more uncertainties and risks when shopping in virtual settings. The impersonal and open nature of the electronic infrastructure brings about uncertainties and risks that necessitate a greater degree of trust in making transactions. Many customers do not trust web providers with their personal information, nor to engage in exchanges with them (George, 2002; McKnight et al., 2002). The notion of trust has been regarded as the main barrier to the widespread diffusion of online shopping among consumers, since there is a fundamental lack of faith on the web.

M-marketing involves a greater degree of trust than other online product transactions such as buying books because higher risk is foreseen by consumers. In this study, the trust towards travel m-marketing is based on two aspects: (i) trust in service providers or online travel agents (e.g. trust in the ability of travel e-retailers to deliver quality services, and their integrity to preserve the privacy of personal and financial information) and (ii) trust in the internet as a transaction medium.

In other words, the more customers trust the service providers and internet transaction, the lower PR they have regarding m-marketing, which will thus lead to greater intentions to adopt m-marketing. Likewise, the more trust consumers have, the higher the PU of travel m-marketing. In this connection, the trust construct influences m-marketing customers' behavioral intention directly or indirectly through PR and PU.

2.7.5 Consumer Involvement

Zaichkowsky (1985) defines consumer involvement as the perceived relevance of the object based on their interests, needs or values. Involvement has been conceptualized as the interest, enthusiasm and excitement that consumers manifest towards a product category (Bloch, 1986; Goldsmith &Flynn., 1998). The model proposed by Lockshin & Spawton (1997) suggested three dimensions of involvement: (i) product involvement (ii) brand involvement and (iii) purchase involvement.

As m-marketing is a relatively new activity, purchase involvement is the most suitable dimension to adopt. In this context, consumers go through two types of cognitive evaluation before they engage in the actual purchasing decision: firstly, they need to determine whether the travel services offered over the internet are personally relevant to

them; secondly, consumers have to evaluate whether their involvement in the purchasing process is stimulated or hindered by various motivational factors. As these two types of involvement are related but different states of being, it would be interesting to establish whether any of the above factors would be significant in predicting consumers' shopping behavior for travel services over the internet. According to Engel et al. (1995), the degree of personal involvement is the most important factor that shapes the type of decision-making process and the subsequent purchasing behavior.

Therefore, it is expected that consumer involvement levels might be influenced by trust in retailers and the reliability of the system. Eventually, the more consumers are involved in the m-marketing experience, the more trust they gain in the retailers and the transaction systems; also, the lower the risk perceived in relation to m-marketing.

2.7.6 Consumer Innovativeness

Innovativeness is a personality construct that is possessed to a greater or lesser degree by all individuals when adopting new products or ideas. Since consumer innovativeness (Cl) is closely related to the adoption of new products (Blythe, 1999; Rogers, 2003), this influences the speed with which the adoption takes place after a product enters the market (Goldsmith and Flynn, 1992). Thus Cl has a great impact on the adoption of m-marketing. There are two main types of consumer innovativeness: (i) open-processing innovativeness, and (ii) domain-specific innovativeness, which could be used to define and measure consumer innovativeness.

Most studies of innovativeness are conducted within a specific product field and thus the measures used are designed for this same level of specificity (Goldsmith et., al 1992).Domain-or product category-specific innovation reflects the tendency to learn about and adopt innovations within a specific domain of interest, and therefore taps a deeper construct of innovativeness that is more specific to an area of interest (Citrin et. al., 2000). This implies that consumers who are likely to adopt the latest new product in one field may be laggards in another (Goldsmith et al., 1998). With reference to m-marketing, it is likely that the domain of interest for travelling or vacations may influence m-marketing customers' innovativeness levels and hence influence the decision to adopt m-marketing.

2.7.7 Opinion Leadership

Opinion leadership is a concept that was developed from the theory of two-step flow of communication advocated by Katz & Lazar, J, & Preece, J. (1999). This theory is one

of several models that try to explain the diffusion of innovations. An opinion leader (OL) is an agent who is an active media user and who interprets the meanings of media messages or content for lower-end media users. Typically, the OL is held in high esteem by those that accept his or her opinions. Opinion Leadership tends to be subject specific: that is, a person who is an OL in one field may be a follower in another field.

According to Rogers (1995), early adopters frequently serve as OLs who can persuade others to adopt the innovation by providing evaluative information. The highest number of OLs is found among early adopters, who themselves do not rely on well established references in making their buying decisions, preferring instead to rely on their own intuition and vision (Moore, 1999). Applying this to the present study, OLs will be more likely to be the consumers who first adopt m-marketing. In other words, the stronger the opinion leadership consumers have, the faster they adopt travel m-marketing adoption**.**

2.8 Conceptual Framework of the Study

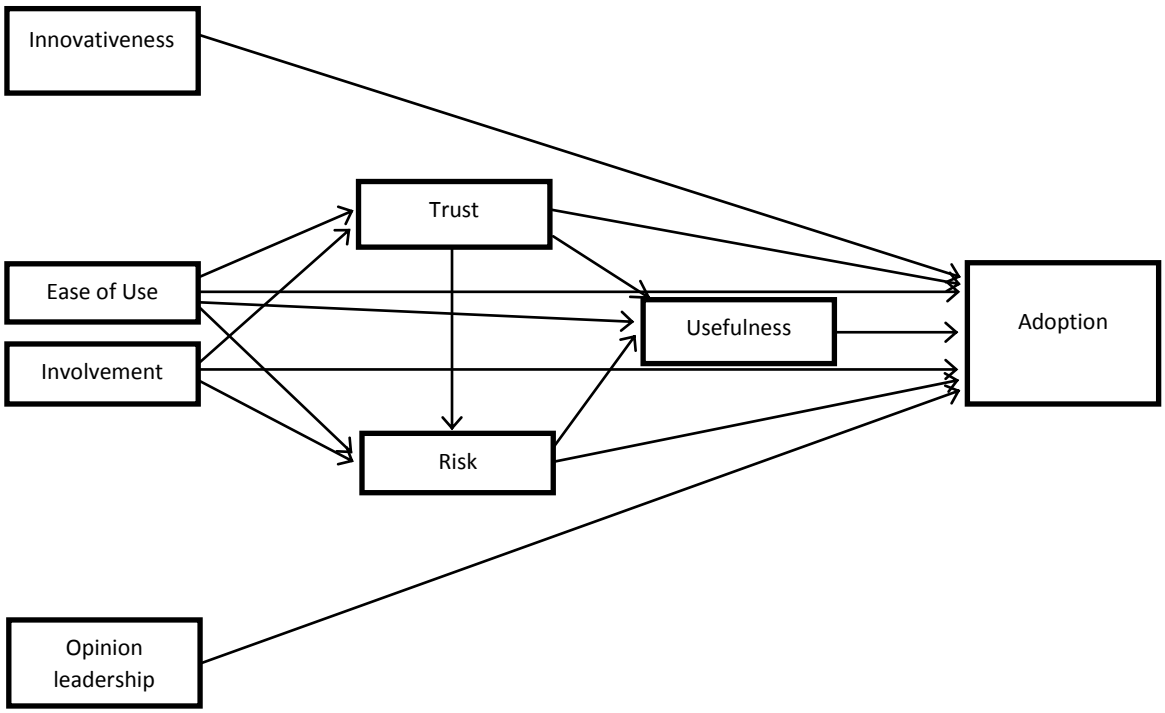
Synthesizing the theoretical foundations and the pertinent literature reviewed in the previous chapter, the research framework was developed to investigate the factors that influence the adoption of m-marketing within the context of tourism customers in Myanmar. The TAM was chosen as the basis for developing a conceptual model explaining consumers' m-marketing adoption due to its consistent capability to explain a substantial proportion of variances between behavioral intention and actual behaviors derived mainly from research into the purchase of technology related products (Davis et al., 1989; Mathieson, 1991; Adam et al., 1992). In particular, the proposed model seeks to take advantage of the validity and reliability of perceived usefulness (PU) and perceived ease of use (PEU) in the TAM by adding other constructs in order to improve explanatory and predictive power (Taylor & Todd, 1995; Igbaria et al., 1996; Jiang et al., 2000; Gefen & Straub, 2000).

Building upon the TAM model, which theorizes that acceptance behavior is determined indirectly by two cognitive beliefs, PU and PEU, through users' attitude toward using new technology (Davis et al., 1989) this research framework proposes that consumer adoption of m-marketing in tourism industry will be strongly influenced by: (i) PU and PEU, (ii) consumer involvement, consumer innovativeness and opinion leadership, and (iii) perceived risk and trust. In this study, the two most reliable models of the adoption of new technology were chosen and adopted. They are the Technology Acceptance Model and Theory of Reasoned Action which have formed the basis of the development of the

conceptual for the study. Thus the main focus of this study is to identify the factors affecting on m-marketing adoption of customers in tourism industry.

The conceptual framework which is illustrated in figure (2.3) describes the independent variables and dependent variables used in the empirical analysis of this study.

Figure (2.3) Conceptual Framework of the Study



Source: Own Compilation

As presented in the above figure, the proposed model maintains the relationship between perceived usefulness (PU) and perceived ease of use (PEU) but eliminates the

attitude construct. The elimination of the attitude construct is due to several reasons, as suggested by previous studies (Davis et. al, 1989; Szajna, 1996; Venkatesh & Davis, 1996).Amongst the reasons are:

a. The TAM relies on the premise that attitude factors are comprehensively included within the construct of PU. People may use a technology even if they do not have positive attitudinal affect towards it as long as it is useful or provides productivity enhancement (Davis et al., 1989).

b. Prior empirical studies support a non-significant effect of attitude on behavioral intention (Davis et al., 1989). On the other hand, PU was found to be the major determinant of behavioral intention, while attitudes illustrated a non-significant impact toward behavioral intention. Although PU has an important influence on attitude formation, it is possible that attitudes might not play a strong role in predicting behavioral intention after an individual has been exposed to the technology for long enough.

c. The elimination of attitude improves parsimony without significantly lowering predictive capability (Davis, 1985; Mathieson, 1991).

Since there is a strong correlation between intentions and behaviors, which has been empirically validated by a number of IS researchers (e.g. Davis et al., 1989; Taylor &Todd, 1995), the adoption construct in the research framework represents both actual adoption of m-marketing and intention to continue the adoption. The intentional behavior and actual usage constructs of the original TAM were included within the adoption construct in the model. Other constructs on the proposed model are consumer innovativeness, opinion leadership, consumer involvement, perceived risk and trust, which are added into the model. A detailed explanation of the model, its constructs and its hypotheses are presented in the following sections.

Chapter 3

Overview on M-Marketing in Tourism Industry of Myanmar

The ICT plays a significant role in tourism industry. The rapid development of ICT for the tourism industry has prompted customers in this sector to increasingly adopt these technologies. Myanmar possess great tourist potential and attractions in many fields by adopting m-marketing.This chapter describes the characteristics of tourism industry. Roles of M-Marketing in tourism industry, the channel of the tourism industry, and current adoption of m-marketing in tourism industry of Myanmar.

3.1 The Characteristics of Tourism Industry of Myanmar

The 'product' of tourism has been described in many ways, such as: a satisfying activity at a desired destination (Jefferson & Lickorish, 1991); and a bundle of benefits and an amalgam of attractions, transport, accommodation and entertainment (Heath & Wall, 1992). Tourism encompasses many businesses such as hotels, flights, trains, car rentals, entertainment tickets etc, each of which has different product characteristics. These products' characteristics need to be considered when embarking on marketing efforts.

Tourism products essentially consist of two parts (Gratzer et al.,2002). The first part includes transportation, accommodation and attractions. The producers of these services, including air, sea and railroad carriers, hotels and accommodation and the various forms of attractions such as skiing resorts, fun parks and natural attractions, are called the service suppliers. The second part includes the services sector of the industry, which is used to deliver these products to the consumer. The distribution channels of the tourism industry are very important, because the products of the tourism industry are invisible services, inaccessible to feel, smell, touch and inspection at the point of sale. Holloway (1994) provides a basic understanding of the nature, structure and organization of the tourist industry, while Schertler (1995) describes tourism products as perishable. They must be sold within a certain period of time or they become worthless.

3.2 Roles of M-Marketing in Tourism Industry

M-marketing refers to the use of the internet to advertise and sell goods and services. Internet marketing includes advertising, e-mail marketing, Search Engine Optimization (SEO), blog marketing, article marketing, etc. Initially, much of the literature concerning internet marketing was actually focused on advertising an

selling (Resnick & Taylor, 1994; Gonyea & Gonyea, 1996), rather than using the internet throughout the entire marketing process. However, this trend is changing as a large quantity of publications focusing on the integration of the internet into the overall marketing plan has been published recently (Hofacker, 2000; Sterne, 2001; Smith & Chaffey, 2001; Dave Chaffey et al., 2003). The internet's role in marketing is rapidly evolving over time. Marketing on the internet is affordable, dynamic and wide reaching. Many publications on the topic of m-marketing have pointed out its various benefits to both marketers and consumers.

First, the internet may be used to assist each step in the traditional marketing process, such as analyzing the external business environment, identifying target markets and promotion. In particular, provides increased access to information about competitors, current customers, prospective customers and even the marketers themselves (Ellsworth & Ellsworth, 1995).The internet has made it easier for businesses to see how their competitors are implementing their marketing strategies, and thus makes it easier for ideas and innovations to be copied (Kotler et al., 1996; Jobber, 2004). Furthermore, as a result of internet technologies, businesses are able to reduce certain operating costs, such as investment (setting up), ordering, personal selling, distribution and promotions (Jobber, 2004).

Second, the internet offers numerous advantages over traditional marketing channels that can improve a company's marketing activities (Keeler, 1995). The internet provides a channel for faster, easier and more direct communication, both internally and externally (Ellsworth & Ellsworth, 1995; Sterne, 2001). It enhances external communications and helps to eliminate barriers between companies and their customers (Marlow, 1997), and promotes disintermediation (Krantz, 1998), which refers to the elimination of the need for middlemen or intermediaries, such as travel agents, salespersons, etc. (Bishop, 1996). It saves time and shortens the marketing process from producer to end-user. This brings the company and the consumer closer together, enabling better relationships and greatly improving customer service (Ellsworth & Ellsworth, 1995; Bishop, 1996).

Third, the internet also offers unique opportunities to marketers to establish new forms of competitive advantage that include tailored and customized products, uninterrupted trading hours and more informed customer service (Jobber, 2004). Furthermore, product information on websites can be constantly updated, providing customers with the most current products, the correct prices, or the most up-to-date facts and figures. In addition, the interactive capabilities of the Web induce users to be intensely

involved with websites, thus increasing their recall and interest in these websites. Sterne (2001) strongly emphasizes the fact that a website is not something people read, it is something they do: visiting a website is an activity. Furthermore, internet marketing provides every business, large and small, with the opportunity to compete on a global stage, which can be accomplished in less time with a smaller marketing budget (Mathiesen, 1995).

Fourth, with regard to the consumers, the Internet enables them to take control of their buying process when shopping online (Keeler, 1995) as well as providing convenience, saving time and money and reducing hassle. They are provided with more choices and options, more information, more power, less discrimination and a better service (Ellsworth & Ellsworth, 1995; Keeler, 1995; Kotler et al., 1996; Sterne, 2001). For these reasons, more people are getting on the internet every day to do things that were not possible before (Marlow, 1997), such as grocery shopping, paying bills, or banking without leaving their homes. This provides companies with the possibility of creating new products and services that they had not imagined prior to the creation of the internet. The internet can be of great assistance in attracting consumers, especially those who are primarily convenience shoppers. They are more likely to shop online than those that seek social interaction. However, its effectiveness in attracting people to shop for travel services on the internet is still unknown and has yet to be examined in most travel research.

In spite of these advantages, internet marketing practices must be monitored more closely, because all the marketing stages happen at the same time (Bishop, 1996). Sterne (2001) suggests that the market segment of people who are on the Web and who might have an interest in it is a special segment and deserves some special attention. These consumers should be treated as individuals, and internet promotions should be created on a one-on-one basis (Ellsworth & Ellsworth, 1995). Hence, it has been an interest of this study to understand this special segment in terms of its profile and behavior while providing relevant recommendations to existing and future e-customers. The next section provides a brief description of the tourism industry in relation to marketing strategy.

3.3 The Channel of the Tourism Industry

Tourism service providers are a group of many different players, such as tour operators, travel agents, tourist organizations, airlines, hotels, etc. In distributing tourism products to consumers, these service providers may be connected to one another via electronic services. The electronic distribution alternatives, automated and non-automated tools are open to all types of travel marketers in reaching the customers. Tourism marketers apparently have many choices of interconnectivity combinations, involving private and public sector intermediaries, and a variety of automation devices. Although these have the potential to source valuable business, they are associated with increased transaction costs, imperfect technology access and limited visibility in the market place (Dietrich et al., 1997). Thus, it is considered vital that the travel marketers evaluate the degree to which the various connections enhance their product and are transactional in their target markets.

According to the literature, there are two main channels of distribution in the travel industry. The first channel is direct to the tourist via direct marketing, phone or fax, Web and advertising in different kinds of media. The second, more common way involves selling the products and services to the customers through intermediaries (Gratzer et al., 2002). For example, hotels companies can utilize many channels to sell their rooms directly to customers through their sales offices, call centers or own websites.

The indirect channels via intermediaries are also open to them, such as via conventional travel agents, online travel agents, online travel portals tour operators and consolidators. However, it is important to note that the difference between the tourism industry and other industries is the way profit is obtained by retailers. Travel agents do not buy travel services and do not mark up prices. They get paid a commission or a percentage of the selling price by the wholesaler or the supplier, such as airlines (Gratzer et al., 2002).

3.4 Current Adoption of M-Marketing in Tourism Industry of Myanmar

The ICT have emerged as a key technology to bridge the digital divide in the Union of Myanmar and as a mean to accelerate the diffusion of environmental information throughout the country. The introduction of ICT application, particularly those to support the administration of public and private activities to improve the provisions of services will require deployment of more advanced technologies and backbone networks, able to handle large amount of data at higher speeds. During the past two decades, the regulatory environment of IT and Telecommunications has undergone multiple transformations.

Although the patterns are diverse and vary from services to services and regions to regions, overarching global developments are visible and influence policy at the national level.

Today, innovations in information technology are having wide-ranging effects across numerous domain of the society. One of the most significant outcomes of the progress of information technology is probably electronic commerce over the internet, a new way of conducting business.

Myanmar's tourism sector barely developed prior to 2011, first as a result of restrictive visas and limited destination/transport options, and later as a consequence of a tourism boycott called for by opposition groups inside the country and in exile, prompted partly by the military government's declaration that 1996 should be Visit Myanmar Year. In 2011, after five decades of military rule, the government of Republic of the Union of Myanmar initiated political, social and economic reforms.

According to the report of Ministry of Hotels and Tourism, the tourism industry is becoming one of the fastest growing areas of the economy, with an income rise in 2013 of more than 70% compared with the previous year (USD 926 million in 2013 versus USD 534 million in 2012 and USD 319 million in 2011).Despite the choice of distribution channels available, most travel businesses have invested in IT development, particularly the internet. Travel businesses such as airlines, car rental companies and international hotel chains have been quick to grasp the potential of marketing and selling their services online. They have recognised the huge opportunities offered by m-marketing, such as selling their travel services directly to the customer. This is to make their products more accessible in an easy and inexpensive manner, and available to a variety of markets both domestically and internationally. While the majority of low cost airlines' sales are via their own websites, the sales of large airlines such as Air Bagan, Air KBZ, Air Mandalay, FMI Air, Yangon Airways are through both channels: their own website and online travel agents' websites.

Literally, a website refers to a site (location) on the www (Webopedia, 2005). Each website contains a homepage, which is the first document users see when they enter the site. The site might also contain additional documents and files. Each website is owned and managed by an individual, company or organization. On websites, customers could utilize a variety of internet marketing materials and tools to attract and make travel services tangible to potential customers. These materials include pictures, maps, animation, video, textual descriptions, catchy banners, pop ups, and sounds or music elements that are used to complement the images created by the visual elements. These elements mostly have

multimedia capabilities and, therefore, are valuable devices for creating images of travel services. Via websites, travel customers have more creative ways to market their services as well as attracting potential customers.

Most tourism industries currently offer facilities such as availability checking, immediate booking confirmation, seat reservations, online cancellations and payment. The website also allows customers to customize or self-build their travel packages. These Web features are meant to facilitate shoppers to navigate through the websites while providing a pleasant m-marketing experience.

In Myanmar, by using m-marketing users can access at low cost the general content of tourism industry such as ticket price, hotel reservation, car rental and tour guide. Innovative pricing schemes and services attract more users. The growth in the adoption and use of mobile phones is high in relative growth in m-marketing is very high. Myanmar m-marketing customers believe the services of m-marketing such as: personalization, speed, comfortable etc.

The next chapter discusses the analysis of adoption of m-marketing customers in tourism industry of Yangon.

Chapter 4
Analysis of M-Marketing Adoption in Tourism Industry

The aim of this study is to analyze the nature of relationship between each of the antecedents and the direct and indirect effect of mediating variables between four independent variables: innovativeness, ease of use, opinion leadership and adoption of m-marketing in tourism industry. The 384 customers who adopt m-marketing in tourism industry in Yangon are selected for the study. The primary data are collected using questionnaire set for this study. Then the primary data are analyzed with the aids of statistical methods. Descriptive analysis is performed in order to show the quality of data and path analysis is carried out to find out which the factors that influence most on m-marketing adoption.

4.1 Research Methodology

Research methodology includes research design, sample size determination, data collection methods and data analysis. The study analyzes the factors affecting on m-marketing adoption in tourism industry by using the sample of 384 m-marketing customers in this industry. In addition, the descriptive statistics of the general information of the respondents, the results of reliability and path analysis are calculated and presented.

4.1.1 Research Design

The study follows exploratory method to analyze on adoption of m-marketing in tourism industry. There are two main categories for the methods of collecting data, such as quantitative and qualitative. Besides that, research design can be classified into three types which are exploratory, descriptive and causal.

Quantitative research or survey is applied in this research paper. The core

purpose of adopting the quantitative research is to examine whether hypotheses tested is significant.

Descriptive research is being suitable for the study of identifies the cause of phenomena and describes the variability in different phenomena during the study. In addition, descriptive research is adopted to determine the variables of the study, such as perceived usefulness, perceived ease of use, perceived trust, perceived risk, consumer involvement, consumer innovativeness, opinion leadership and adoption. Therefore, the researcher is able to clearly define and know what should be measured on this research paper through the descriptive data.

4.1.2 Sample Size Determination

Since the main objective of this study is to identify the factors affecting m-marketing adoption in tourism industry, the population for this study is supposed to be m-marketing adopters in this industry whose degree of variability is not known. The target population for this study includes all customers who adopt m-marketing in Yangon. There are numerous m-marketing adoption practices in service industry. This study focuses only on tourism industry in Yangon. In this study, among many mobile devices used by customers, only mobile phones are studied. The study focuses on Myanmar m-marketing customers in tourism industry, who visit both domestically and internationally. To identify the sample size, the following formula of Cochram (1977) is applied.

$$n = \frac{z^2.p.q}{e^2}$$

$\geq$ 384 customers

n =sample size

z = table value for selected alpha level at 95% confidence interval (standard value of 1.96)

p = proportion of the population having the characteristics

q = 1-p

e = the degree of precision

4.1.3 Data Collection Method

The necessary data for the study were collected by using questionnaire survey. The primary data of m-marketing customers in tourism industry were collected from customers from tourism industry in Yangon with structured questionnaire, using simple random sampling. These questionnaire are designed with 5 point Likert scales in order to indicate the respondents opinion on m-marketing adoption. Secondary data were collected from reference books, electronic journals and electronic scholar articles.

4.2 Reliability and Validity

In this study, Cronbach's Alpha reliability test method is used to measure internal consistency of the variables. Reliability is an indicator of the measure's internal consistency. Internal consistency represents a measure's homogeneity or the extent to which each indicator of a concept converges on some common meaning and it measured by correlating scores on subsets of the items which making up a scale (Zikmundet, Babin, Carr & Griffin 2010). It is used to ensure the degrees to which measures are free from random error and therefore yield consistent results. The reliability of the data in the present study is assessed by Cronbach's Alpha. According to Sterne (2001) Cronbach's Alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. It is computed in terms of the average inter-correlation among the items measuring the concept.

In addition, Cronbach's Alpha is the range in value from 0, meaning no consistency, to 1, meaning complete consistency. Normally, the scales with a coefficient alpha between 0.80 and 0.95 are considered to have very good reliability. The scales with a coefficient alpha between 0.70 to 0.80 is considered as good reliability, while an alpha value between 0.60 to 0.70 indicates fair reliability. When the coefficient alpha is below 0.60, it is considered as poor reliability. As stated by Straub (1989) "high correlations between alternative measures are usually or large Cronbach alphas signs that the measures are reliable". There is no standard cut-off point for the alpha coefficient, but the generally agreed upon lower limit for Cronbachalpha is .70, although it may decrease to .60 (Hair et al., 1998) or even .50 (Nunnally,1978) in exploratory research.

Table (4.1) presents the initial reliability examination of the measurement scales. The Cronbach alpha coefficients were calculated in SPSS 23 along with item-to-total correlations (ITC). The Cronbach alphas of each construct are shown to be above 0.70, showing a high degree of internal consistency. The consumer involvement scale shows the highest alpha value at 0.901, while opinion leadership indicates the lowest alpha at 0.594. In order to make sure that constructs with low Cronbach alpha do not cause a problem, a more stringent test of reliability is taken.

Table (4.1) Results from Reliability and Validity Test

Factors	No. of items	Items Retained	Reliability Cronbach's Alpha	Validity	
				KMO	Bartletts's Test
Usefulness	9	8	.872	.892	.000
Ease of use	8	7	.854	.894	.000
Risk	7.	7	.894	.872	.000
Trust	8	7	.594	.872	.000
Involvement	9	9	.901	.903	.000
Innovativeness	5	5	.756	.721	.000
Opinion Leadership	4	4	.599.	.651	.000
Adoption	7	7	.840	.840	.000

Source: Survey data (2017)

The result of Cornbrash's alpha coefficient in survey study was shown in Table (4.1). It could be observed that the six factors of usefulness, Ease of Use, Perceived Risk, Involvement, Personal Innovativeness and adoption of m-marketing are more than 0.7. It could be observed that alpha value of perceived trust and opinion leadership are less than 0.7.Based on the Table (4.1) consumer involvement is the highest among factors at 0.901.

4.3 Respondents' Demographic Profile

This section provides a description of the demographic data based on some variables. In this section, characteristics of respondents who adopted m-marketing, gender, age, education, marital status, income and occupation are shown as follows. Each characteristic has been analyzed in terms of absolute value and percentage.

Table (4.2) Gender of the Respondents

Gender	Number of Respondents	Percent
Female	286	74.4

Male	98	25.6
Total	**384**	**100**

Source: Survey data (2017)

According to Table (4.2), there are 384 respondents. Out of 384 total respondents, 286 are female and 98 are male. The total sample is made up of 74.4% of female respondents and 25.6 % of male respondents. Most of respondents are female. As a reason, females are more interested in travelling than males.

Table (4.3) Age of the Respondents

Age(Years)	Number of Respondents	Percent
Under 18	3	0.8
19-25	158	41.1
26-40	192	50.0
41-60	31	8.1
Total	**384**	**100**

Source: Survey data (2017)

Table (4.3) shows age of the respondents are being classified into five categories which are under 18, 19-25, 26-40, 41-60 and over 60. Majority of the respondents are between the ages of 26-40which is made up of 50.0% (192 people) of total respondents. Followed by this category is age between 19-25 at 41.1% (158 people). Age under 18 is only at 0.8 % (3 people). Majority of the respondents fall in age group 26 to 40.According to the data, people whose age 26-40 are found to tend to travel too much.

Table (4.4) Education Level of the Respondents

Education level	Number of Respondents	Percent
High school or below	6	1.6
Diploma	25	6.5
Bachelor	351	91.4
Master	2	0.5
Total	**384**	**100**

Source: Survey data (2017)

Table (4.4) shows the education level of respondents. According to Table (4.4), majority of respondents are graduated amounting to 91.4 % or (351persons), followed by diploma holder with 6.5% (25 persons) of the total and high school with only 1.6% and master degree holders are only 2 persons.

Table (4.5) Marital Status of the Respondents

Marital Status	Number of Respondents	Percent
Single	309	80.4
Married	75	19.6
Total	**384**	**100**

Source: Survey data (2017)

Both married and single are included in the sample. Marital status of the respondents of the sample is illustrated in table (4.5). Table (4.5) indicates that out of 384 respondents, 309 (80.4%) are single and the rest (19.6%) are married.

Table (4.6) Income of the Respondents

Income	Number of Respondents	Percent
No income	24	6.2
Less than Ks 150,000	3	0.9
Ks 150,001-300,000	107	27.8
Ks 300,001-450,000	141	36.7
More than Ks 450,001	109	28.4
Total	**384**	**100**

Source: survey data (2017)

Table (4.6) shows income level of respondents. According to the table, people with income level of Ks 300,001-450,000 are found to be most interested in traveling, representing 36.7 % (141 persons). The most significant feature of the table is that the income of more than Ks 450,001 earners are at the second position with 27.8%. The third interested group is between Ks 150,001 and Ks 300,000 accounting for 27.8% (107people). No income customers seem to travel sometimes using mobile and another group less than Ks 150,000 is the least interested one (6.2% and 0.9% respectively).

Overall, it can generally be seen from the table that every income group is optimistic about travelling using mobile although there are some differences in the percentage.

Table (4.7) Occupation of the Respondents

Occupation	Number of Respondents	Percent
Civil Servant	12	3.1
Private Staff	317	82.6
Retired	7	1.8
Housewife	5	2.1
Student	24	6.3
Self- employed	19	4.9
Total	**384**	**100**

Source: survey data (2017)

Occupations of m-marketing customers in tourism industry are broadly grouped into seven. Table (4.7) shows occupation of respondents. According to table, private workers are the largest number (317 persons) representing 82.6%.It seems that private workers adopt m-marketing than others. The second largest m-marketing customers are students (24 persons) representing 6.3%. Self-employed customers adopt m-marketing at the third position (19 persons) representing 4.9%. Civil servants, housewife and retired customers adopt less m-marketing adoption. From this finding, it can be concluded that private workers adopt m-marketing more than others.

4.4 Descriptive Analysis of Measurement Scale

In this part, the descriptive results of the measurement scale for each of the constructs of the research model are presented. This study consists of eight constructs: perceived usefulness, perceived ease of use, perceived risk, perceived trust, consumer involvement, personal innovativeness, opinion leadership, and adoption.

Descriptive statistics is used in this study not only to express the demographic factors (age, gender, educational levels, etc.) but also to describe the mean values and standard deviation of the observed variables. The high average scores suggest that m-marketing customers have high adoption. The mean value of variables are categorized into the three level. Mean value of less than 2 are as low level, mean value between 2

and less than 3.5 are as moderate level and mean value of 3.5 or higher are as high level of perception toward a particular variable (Sckaran, 2003).

4.4.1 Results of Perceived Usefulness

The scale of perceived usefulness consists of 8 items reflecting the benefits and convenience perceived by consumers in relation to m-marketing adoption. The results of the descriptive analysis for PU are shown in Table (4.7). Respondents were asked to provide answers for each item, measured by a five-point Likert scale ranging from 1('strongly disagree)to '5' ('strongly agree*).* Based on the mean score for each item, m-marketing customers demonstrated rather strong agreement that m-marketing offered great convenience, enabling them accomplish more work and anywhere (Mean=4.22), as they had more enjoyable and they did not have to visit travel agent outlets to purchase travel services (Mean=4.17). Additionally, they also agreed that shopping for travel services online has enabled them to do more quickly (Mean=4.13), and save time (Mean=4.12), Mean= 4.08) make easier for customers to conduct travel services and receives a special prices and offers (Mean=4.07). Further, m-marketing customers agreed that adopting m-marketing services could make as smart customers (Mean=3.99). Further, m-marketing customers have allowed to choose several packages that desire (Mean=3.95).

The results of this section indicate that consumers shop for travel services online not only because it provides convenience but also because it offers better pricing and promotion as well as enabling them to control their purchase decisions without being influenced by sales people. However, it should be considered that m-marketing also has some negative impacts on shoppers; for example, their personal information seems to be shared by many parties, which could cause problems for the privacy and security of m-marketing customers.

Table (4.8) Respondents' Agreement Level on Usefulness

No	Statement	Mean
1	Enabling to accomplish travelling more quickly.	4.13
2	Increasing productivity (time saved).	4.12

No	Statement	Mean
3	Making more enjoyable.	4.17
4	Making it easier to conduct travel service transaction.	4.08
5	Accomplishing more work.	4.22
6	Making smart customer.	3.95
7	Allowing to choose several packages.	3.99
8	Enabling to buy travel services at special rates/ offers.	4.07
9	Enhancing effectiveness on job.	4.06

Source: survey data (2017)

4.4.2 Results of Perceived Ease of Use

Table 4.8 shows the results of the descriptive statistics of perceived ease-of-use. A total of 7 items were measured by a five-point Likert scale on agreement levels, similar to perceived usefulness. This measurement scale contains an explanation of m-marketing customers evaluations of the simplicity of using the internet to shop for travel services, particularly in terms of user interface issues such as navigation or searching tools and obtaining the skills required for shopping online, as well as technical aspects. Based on the mean scores, overall, the respondents in this study expressed strong agreement that buying travel services on the internet is not difficult and very simple (Mean=4.27). In particular, they felt that searching for travel information via the internet was uncomplicated and did what they want it to do (Mean=4.07). Furthermore, the respondents somewhat agreed that m-marketing is easy to learn and the skills required are easy to acquire; it is not confusing; instructions and menus are straight forward, and finally, it does not require advanced computing skills. These items scores were fairly high, with the mean ratings ranging between 3.88 and 3.96.

Thus, it can be generally interpreted that the m-marketing customers in this study exhibited relatively high agreement that shopping for travel services online is easy or simple to perform.

Table (4.9) Respondents' Agreement Level on Perceived Ease of Use

No	Statement	Mean
1	Making clear and understandable in conducting travel services transaction.	3.97
2	Not require a lot of mental effort.	3.96
3	Sending text messages via mobile phone is very simple.	3.91
4	Making easy to get m-marketing system.	4.07
5	Behaving in unexpected ways.	3.88
6	Interacting with m-marketing is very simple.	4.27
7	Using travel package (eg. Check in, booking, buying tickets) is convenient.	4.03
8	Taking too much time.	4.04

Source: survey data (2017)

4.4.3 Perceived Risk

The perceived risk of the m-marketing customers is measured by 7 items that consist of various issues related to risk creation in online shopping. The m-marketing customers were asked to indicate their level of agreement, ranging from 1 to 5, on issues related to online payment, reservation systems, transaction, privacy and security. As presented in Table(4.8), the m-marketing customers in this study tended to agree that, in general, adopting m-marketing for travel services on the internet is not risky compared to traditional

method(Mean=1.84). They also seemed that they do not worry personal information online travel services purchased from the internet (Mean=2.11). The loss of privacy did not really matter to them (Mean= 2.17). As a result, they were quite comfortable reliability of m-marketing adoption (Mean=2.20). However, they felt slightly uncertain about whether the level of benefits that they expected (Mean=2.21). Additionally, they appeared slightly worried about connection quality about conducting large travel-related transactions over the internet (Mean=2.43).

These results imply that m-marketing customers anticipate the various risks involved when adopting m-marketing. They are quite cautious with regard to the size of transactions conducted via the internet for travel purchases. The larger the amount of payment involved, the higher the risk they perceived, in spite of this, overall they demonstrated a low level of perceived risk, which indicates that they trust the new shopping medium.

Table (4.10) Respondents' Agreement Level on Perceived Risk

No	Statement	Mean
1	Worrying about the connection quality.	2.43
2	Worrying about safe transaction.	2.22
3	Worrying about personal information.	2.11
4	Worrying about reliability	2.20
5	Making afraid the level of benefits.	2.21
6	Making not safe to accept and rely on messages.	2.17
7	Making riskier than traditional method.	1.84

Source: survey data (2017)

4.4.4 Trust

The descriptive statistics regarding m-marketing customers' trust are reported in Table (4.10). A total of 7 items was measured by a five-point Likert scale examining agreement with various dimension of trust creation related to travel m-marketing. Higher mean scores

indicate greater trust in travel m-marketing. The mean scores of each item generally indicate that respondents tended to trust the internet is competent and effective in providing travel services (Mean=4.01) and (Mean=3.96) m-marketing is trustful in its dealing with customers. The respondents were trustworthy in using m-marketing (Mean=3.88).Specifically, items related to respondents kept commitment and best interest in mind (items 4 and 3) obtained fairly high means (3.86 and 3.87 respectively). Likewise, respondents showed moderate agreement that they trusted the benefits of decisions or m-marketing (Mean=3.78). They also tended to agree that m-marketing offer secure mobile services (Mean=3.74).

Thus, it can be interpreted that the respondents in this study have demonstrated relatively high trust in m-marketing, and specifically in the network systems dealing with transactions and bookings. The findings generally correspond with and support the level of perceived risk revealed in the previous section.

Table (4.11) Respondents' Agreement Level on Perceived Trust

No	Statement	Mean
1	Making trustworthy.	3.88
2	Making trust in the benefits of decisions.	3.78
3	Keeping customer best interest in mind.	3.87
4	Keeping promise and commitment.	3.86
5	Offering secure mobile services.	3.74
6	Making trustful in its dealing with customers.	3.96
7	Making competent and effective in providing travel services.	4.01

Source: survey data (2017)

4.4.5 Consumer Involvement

In Table (4.11), the results of the descriptive analysis of the consumer involvement construct are presented. A total of 9 items were adapted from the "Personal Involvement Inventory (Zaichkowsky, 1994) to measure levels of consumer involvement with regard to the adoption of m-marketing. Respondents were asked to indicate their agreement with each item, measured by five-point Likert scales. Higher mean scoresindicate that m-marketing customers have a more positive attitude to items concerning their experiences and feelings with regard to using the internet to shop for travel services. In other words, higher mean scores can be viewed as agreement with the given reasons why they adopt m-marketing.

From the results, m-marketing customers seemed to agree with most of the involvement measurement items. The m-marketing customers agreed that m-marketing is interesting (Mean=4.21); and important (Mean=4.02) as well as valuable (Mean=4.05). They also agreed that shopping for travel services from the web was wise, needed, relevant, appealing and involving. Furthermore, they thought it was quite exciting to shop for travel services online.

Consequently, m-marketing customers participating in this study have demonstrated a high degree of personal involvement. For them, purchasing travel from the web not only provides convenience and good offers, but also gives them an enjoyable shopping experience. The more they value the experience and feelings towards the web shopping for travel services, the higher their involvement will be.

Table (4.12) Respondents' Agreement Level on Consumer Involvement

No	Statement	Mean
1	Making important in conducting travel services transaction.	4.02
2	Interesting in conducting travel services transaction.	4.21
3	Giving relevant information in conducting travel services transaction.	3.99
4	Making happy in conducting travel services transaction.	3.85
5	Appealing customers in conducting travel services transaction.	4.03

6	Giving valuable information customers in conducting travel services transaction.	4.05
7	Making involve in conducting travel services transaction.	3.74
8	Making need in conducting travel services transaction.	4.04
9	Making wise in conducting travel services transaction.	4.03

Source: survey data (2017)

4.4.6 Consumer Innovativeness

Table (4.12) shows the results of the descriptive statistics for the consumer innovativeness construct. The measurement scale, adopted from the 'Domain Specific Innovativeness' scale by Goldsmithn & Hofacker (1991), contains five items. Respondents were asked to indicate their level of agreement based on a five-point Likert scale.

Of all the items, item 3 had the highest mean score (Mean=4.27), indicating that the m-marketing customers moderately agreed that not hesitant to try out new information technologies when searching for travel services. Similarly, they somewhat agreed (Mean=4.01) that they purchased travel services more compared to their peers, but slightly unsure about whether they had adopted new technology devices can trigger their creativity (Mean=3.94). Despite their innovativeness, the m- marketing customers indicated that they looked to experiment with new information technology (Mean=3.87) and how these people accepted the new technology when they heard about a new technology, they would looked for ways to experiment with it. (Mean=3.73).

Based on the overall results, m-marketing customers have demonstrated a moderate level of innovativeness, especially in visiting unknown websites to search for travel information. They nearly agreed that they had adopted and shopped for more travel services online compared to their circle of friends. Further, they somewhat agreed that their adoption of m-marketing was likely to be influenced by people around them.

Table (4.13) Respondents' Agreement Level on Consumer Innovativeness

No	Statement	Mean

1	Looking for ways to experiment with new technology.	3.73
2	Experimenting with new information technology.	3.87
3	Making not hesitant to try new information technologies.	4.27
4	Among peers, trying out new information technologies.	4.01
5	Making new technology devices can trigger creativity.	3.94

Source: survey data (2017)

4.5 Opinion Leadership

The descriptive statistics results for the opinion leadership construct are displayed in Table (4.14). This construct is comprised of 4 items measured by a five-point Likert scale. The highest mean score (Mean=3.97) of all items, which indicates that the respondents tend to use internet as a source of advice about shopping for travel services online. Likewise, they were quite agreed regarding their efforts to talk to their friends and neighbors about shopping for travel services via the internet (Mean=3.88) and being sources of advice relating to m-marketing (Mean=3.86) They were also slightly involved with giving information about m-marketing to a number of people about m-marketing for travel services in the past 6 months (Mean=3.8).

Hence, it can be fundamentally interpreted that the m-marketing customers in this study are not playing a major role as opinion leaders. In some ways, they did demonstrate the characteristics of opinion leaders, but this tendency is not marked. For instance, the amount of information they provide to their friends about m-marketing through word-of-mouth might be limited and not convincing. This might not fully influence others' decisions to adopt m-marketing.

Table (4.14) Respondents' Agreement Level on Opinion Leadership

No	Statement	Mean
1	Talking to friends and neighbors about shopping for travel services via the m-marketing.	3.88
2	Knowing friends convenience of using m-marketing ideas.	3.86
3	Among friends, m-marketing is used as a source of advice.	3.97
4	Talking a number of people about m-marketing.	3.8

Source: survey data (2017)

4.5.1 Adoption Behavior

Descriptive statistics for the adoption construct are reported in Table (4.15). A measurement scale comprised of 7 items is used to assess the actual level of adoption of adoption of m-marketing in tourism industry. Similar to the previous scale, the respondents were asked to indicate their level of agreement with each item on a five-point Likert scale. As shown in Table (4.15), the mean scores of the measurement items were between 3.88 and 4.24. The customers in this study indicated rather strong agreement (Mean=4.24) that they intended to continue adopting m-marketing. They also claimed that they were satisfied with m-marketing (Mean=3.96). Further, they predicted that they used the internet every time they need to purchase travel services (Mean=3.88). As for overall evaluation, they felt that they had adopted m-marketing (Mean=4.23) and were quite happy with the services provided by web retailers. However, they were less inclined to declare that they were frequent travel m-marketing customers (Mean=3.88) using the internet every time they wanted to shop for travel services.

From the results, it is clearly noted that the m-marketing customers who participated in this study are the actual adopters of travel services. 'Adopters', in this context, does not refer to purchasing travel services via the internet only; it also includes positive attitudes towards the technology such as liking it and using it on a regular basis. The results also imply that, generally, the m-marketing customers in tourism industry are satisfied with their travel purchases and the overall service they receive from web retailers they have dealt with. Thus, this might influence their decision to continue to use this shopping medium and increase their future usage.

Table (4.15) Respondents' Agreement Level on Adoption Behavior

No	Statement	Mean
1	Using m-marketing every time.	3.88
2	Continuing use in the future.	3.98
3	Expecting increase usage of m-marketing for travel services in the future.	4.10
4	Considering as a frequent m-marketing customers.	4.24
5	Adopting m-marketing for travel services.	4.23
6	Making satisfy for travel services via the m-marketing.	3.98
7	Evaluating the services provided by web are excellent.	4.20

Source: survey data (2017)

4.6 Factors Effecting Adoption of M-Marketing

Multiple regression analysis is an analysis of association in which the effects of two or more independent variables on a single, interval-scaled dependent variable are investigated simultaneously (G.Zikmund, J.Babin, C.Carrand & Griffin, 2010). The study uses multiple regression when there is more than one independent variable to explain the variance in a dependent variable. In addition, multiple regression analysis is the most commonly used tool to reveal possible interactions among the independent and dependent variables.

4.6.1 Influencing Factors on Usefulness

Multiple regression analysis was applied to investigate the factors that relate to perceived usefulness. In multiple regression model, usefulness is used as dependent variable and ease of use, trust and risk are used as independent variables. Perceived usefulness is expected to be affected by risk and ease of use.

Regression analysis is conducted with perceived usefulness as the dependent variable and ease of use, trust and risk are used as independent variables. The results of SPSS output analyzing effect of ease of use, trust and risk on perceived usefulness are shown in Table (4.16).

Table (4.16) Influencing Factors on Usefulness

	Unstandardized Coefficients		t	Sig	VIF
	B	Standard error			
Constant	11.192	1.515	7.387	.000	
Ease of Use	.591***	.055	10.677	.000	1.287
Trust	.062	.042	1.478	.140	1.195
Risk	-.144***	.034	4.219	.000	1.084
R Square	.289				
Adjusted R Square	.283				
F- value	51.481***			.000	
Durbin-Watson	1.797				

Dependent variable (Usefulness)

Source: SPSS Outputs (Appendix B)

Statistical significance Indicate *** at the 1% level ** 5% level and * 10% level

For the regression coefficient and significant level of each independent variable, it can be seen that the two variables, include ease of use and risk have a positive and negative relationship with usefulness (coefficient of .591 and -.144 respectively) at a statistical significance level of 1 percent.

Table (4.16) displays the multiple regression results, which can be interpreted as follows: R square is .289, explain that 28.9 % of the variance in usefulness is accounted by three independent variables**:** ease of use, trust and risk. Adjusted R square is .283. According to the results shown in Table (4.16), all other independent variables are constant, a unit increase in ease of use will lead to .591 unit increase in effect on

usefulness and a unit increase in risk will lead to .144 unit decrease in effect on usefulness. The regression coefficient of ease of use is .591 at 1 % significance level. This shows that there is direct relationship between ease of use and usefulness. . The regression coefficient of risk is -.144 at 1 % significance level. This shows that there is indirect relationship between risk and usefulness. The value of F test, overall significance of the model, is 51.481 and its significant level is at 1% (p-value = 0.000). The multicollinearity statistics by using variance inflation factors (VIF) are also checked and the value of (VIF) is less than 10. The Durbin-Watson statistics are used to check the autocorrelation. For 384 observations and 7 independent variables d_l is 1.734 and d_u is 1.796 at the 1 % significant level. The Durbin-Watson value (d) 1.797 is greater than 1.796. It indicates that it appears to be no autocorrelation. Therefore it can confirm that there are no autocorrelation problems.

The results suggest that perceived risk influence usefulness. Most consumers have shown reluctance to complete simple on-line purchase transactions, primarily due to risk concerns and therefore, perceived risk is similarly posited as a prominent barrier to consumer acceptance of m-marketing. In making information systems adoption decision when consumers face circumstances of decision create feelings of uncertainty, discomfort and/anxiety and psychological discomfort. In this study, the usefulness gains are potential increased task performance efficiencies, while the risk include possible task performance related problems and the uncertainty of the internet as an unsecured communication medium.

Among the three variables, the more influencing practices on usefulness is ease of use and risk according to Table (4.16).In Myanmar, the m-marketing customers believe that adopting m-marketing in tourism sector improve his or her performance and can access travel services ‘anytime, anywhere ‘ via mobile phones or other devices and wireless networks. The second influencing factor on usefulness is risk. High perceived risk has a negative effect on usefulness. Perceived risk was found to significantly influence perceived usefulness of m-marketing adoption in a negative direction. This implies that, m-marketing customers perceive adopting m-marketing to be high risk but they would have higher perception of the usefulness relating to this activity.

4.6.2 Influencing Factors on Trust

Multiple regression analysis was applied to investigate the factors of perceived trust. To develop the multiple regression model, perceived trust is used as dependent variable, and ease of use and involvement are used as independent variables. The results of effect of ease of use and involvement on perceived trust are shown in Table (4.17).

Table (4.17) Influencing Factors on Trust

	Unstandardized Coefficients		t	Sig	VIF
	B	Standard error			
Constant	8.702	1.779	4.891	.000	
Ease of Use	.466***	.062	7.520	.000	1.093
Involvement	.108*	.056	2,415	.016	1.093
R Square	.085				
Adjusted R Square	.078				
F-value	39.917***			.000	
Durbin-Watson	1.881				

Dependent variable (Trust)

Source: SPSS Outputs (Appendix B**)**

Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

For the regression coefficient and significant level of each independent variable, it can be seen that the two variables, include ease of use and involvement have a positive relationship with trust (coefficient of .466 and .108 respectively) at a statistical significant level of 1 percent and 10 percent respectively.

Table (4.17) displays the multiple regression results, which can be interpreted as follows: R square is .085, which indicates 8.5 percent of the variance in usefulness that is predicted by two independent variables, ease of use and involvement. Adjusted R square is .078. According to the results shown in Table (4.17), all other independent variables are constant, a unit increase in ease of use will lead to .466 unit increase in effect on trust and a unit increase in involvement will lead to .108 unit increase in effect on trust. This shows that there is direct relationship between ease of use and trust. The regression coefficient of involvement is .108 at 1 % significance level. This shows that

there is also direct relationship between involvement and usefulness. The value of F test, overall significance of the model, is 39.917 and its significant level is at 1% (p-value = 0.000). The multicollinearity statistics by using variance inflation factors (VIF) are also checked and the value of (VIF) is less than 10. The Durbin-Watson statistics are used to check autocorrelation. For 384 observations and 7 independent variables d_l is 1.734 and d_u is 1.796 at the 1 % significant level. The Durbin-Watson value (d) 1.881 is greater than 1.796. It indicates that it appears to be no autocorrelation. Therefore it can confirm that there are no autocorrelation problems. The results suggested that customer involvement has direct relationship with perceived trust. This means that the higher the level of involvement, the more trust customers in the adoption of m-marketing.

Table (4.18) Influencing Factors on Risk

	Unstandardized Coefficients		t	Sig	VIF
	B	Standard error			
Constant	20.671	2.263	9.136	.000	
Trust	.057	.063	.898	.370	1.210
Involvement	-.102*	.055	1.833	.068	1.110
Ease of Use	-.475***	.082	-5.811	.000	1.255
R Square	.085				
Adjusted R Square	.078				
F-value	11.706***			.000	
Durbin-Watson	1.844				

Dependent variable (Risk)

Source: SPSS Outputs (Appendix B**)**

Statistical significance Indicate *** at the 1% level * 5% level and * 10% level

For the regression coefficient and significant level of each independent variable, it can be seen that the three variables, include trust, involvement and ease of use. Ease of use and involvement have a negative relationship with risk (coefficient of .475 and .102 respectively) at a statistical significant level of 1 percent and 10 percent respectively.

Table (4.18) displays the multiple regression results, which can be interpreted as follows: R square is .085, which indicates 8.5 percent of the variance in perceived risk

that is predicted by three independent variables. Adjusted R square is .078.According to the results shown in Table (4.18), all other independent variables are constant, a unit increase in involvement will lead to .102 unit decrease in effect on risk and a unit increase in ease of use will lead to .475 unit decrease in effect on risk. This shows that there is indirect relationship between involvement and risk. The regression coefficient of ease of use is .475 at 1 % significance level. This shows that there is also indirect relationship between ease of use and risk. The value of F test, overall significance of the model, is 11.706 and its significant level is at 1% (p-value = 0.000). The multicollinearity statistics by using variance inflation factors (VIF) are also checked and the value of (VIF) is less than 10. The Durbin-Watson statistics are used to check autocorrelation. For 384 observations and 7 independent variables d_l is 1.734 and d_u is 1.796 at the 1 % significant level. The Durbin-Watson value (*d*) 1.844 is greater than 1.796. It indicates that it appears to be no autocorrelation. Therefore it can confirm that there are no autocorrelation problems.

The results suggested that customer involvement and ease of use has indirect relationship with perceived risk. This means that the higher the level of involvement, the lesser risk customers in adopting m-marketing and the higher the level of ease of use, the lesser risks in adopting m-marketing in tourism industry.

Table (4.19) Influencing Factors on Adoption

Dependent variable(Risk)	Unstandardized Coefficients		t	Sig	VIF
	B	Standard error			
Constant	12.972	1.562	8.304	.000	
Ease of Use	.088	.055	-3.168	.109	1.951
Usefulness	-.070	.044	-1.602	.110	1.570
Trust	.099***	.035	2.795	.005	1.295
Risk	-.094***	.030	1.951	.002	1.258
Innovativeness	.430***	.067	6.411	.000	1.559
Involvement	.049	.032	1.521	.129	1.305
Opinion Leadership	.165**	.085	1.605	.052	1.345
R Square	.336				
Adjusted R Square	.324				
F-value	26.936***			.000	

Durbin-Watson	1.821			

Dependent variable (Risk)

Source: SPSS Outputs (Appendix B**)**

Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

For the regression coefficient and significant level of each independent variable, it can be seen that the seven variables, include ease of use, usefulness, risk, trust, innovativeness, involvement and opinion leadership.

Table (4.19) displays the multiple regression results, which can be interpreted as follows: R square is .336, which indicates 3.36 percent of the variance in adoption that is predicted by seven independent variables. Adjusted R square is .324. According to the results shown in Table (4.19), all other independent variables are constant, a unit increase in trust will lead to .099 unit increase in effect on adoption and a unit increase in innovativeness will lead to .430 unit increase in effect on adoption. A unit increase in risk will lead to .094 unit decrease in effect on adoption and a unit increase in opinion leadership will lead to .165 unit increase in adoption. The value of F test, overall significance of the model, is 26.936 and its significant level is at 1% (p-value = 0.000). The multicollinearity statistics by using variance inflation factors (VIF) are also checked and the value of (VIF) is less than 10.The Durbin-Watson statistics are used to check autocorrelation. For 384 observations and 7 independent variables d_L is 1.734 and d_U is 1.796 at the 1 % significant level. The Durbin-Watson value (d) 1.821 is greater than 1.796. It indicates that it appears to be no autocorrelation. Therefore it can confirm that there are no autocorrelation problems.

The results suggested that trust, innovativeness and opinion leader consumer has direct relationship with adoption. This means that the higher the level of trust, innovativeness and opinion leadership, the more adoption in m-marketing in tourism industry. The results suggested that risk has indirect relationship with adoption. The lesser risk customers in adopting m-marketing, the higher the level of adoption.

4.7 Path Analysis

This study uses path analysis to examine the effects of adoption of m-marketing and mediating effects between independent and dependent variables. Path analysis is used to test whether direct, indirect and total effect between independent and dependent variables. Path analysis is a form of multiple regression analysis used to evaluate causal

models by examining the relationships between a dependent variable and two or more independent variables, For each dependent variable, a simple linear regression analysis predicts these affecting variables. The betas from these regression models are the path coefficients that are used to display the results of a path analysis (Pedhazur, 1982).

Path analysis is a good presentation tool for results of multiple linear regressions where there are intermediate variables and indirect effects because the causal variables are correlated.

4.7.1 Mediating Effects of Trust, Usefulness and Risk between Ease of Use and Adoption

To determine whether mediating effects of trust, usefulness and risk between ease of use and adoption, path analysis is used. The regression results for ease of use to adoption are shown in Table (4.20). These regression results are used to compute the magnitudes of the direct effects in the path models, and the method was also used to test the significance of the mediating effects. As mediating variables, trust, usefulness and risk are used. For this study, path analysis is used to find out mediating effect of these variables between ease of use and adoption. These mediating variables are expected to have effects on the relationship between ease of use and adoption.

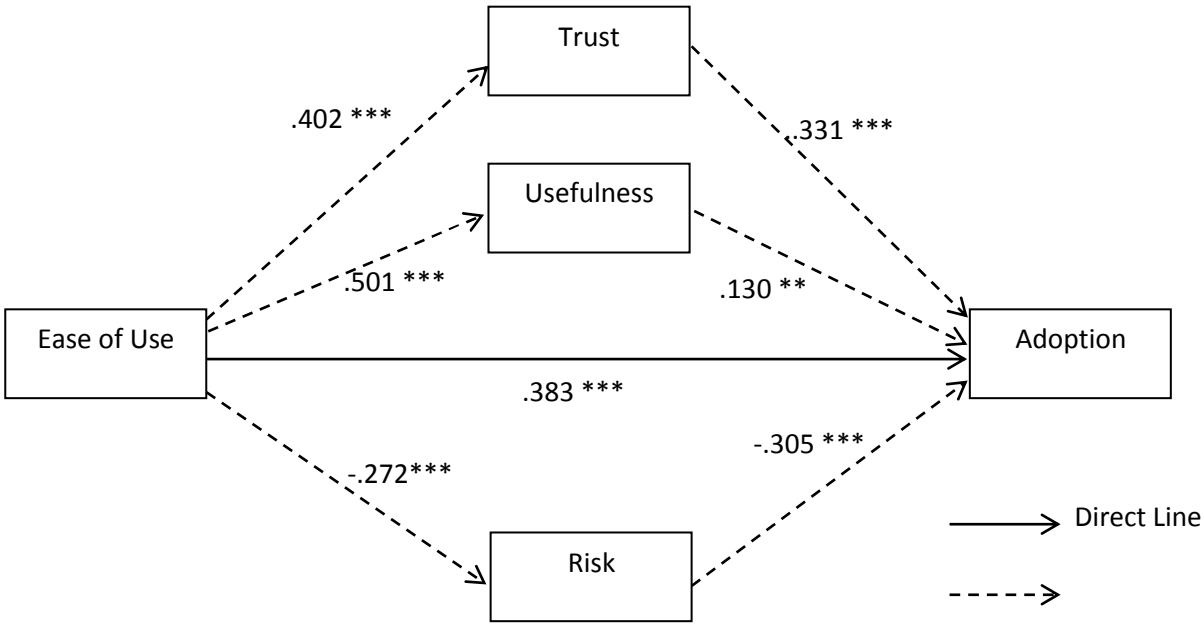
Table (4.20) Path Coefficients for Ease of Use to Adoption

	Coefficient	**t**	**R square**
Ease of use on adoption	.383 ***	8.058	.147
Ease of use on trust	.402 ***	8.548	.162
Ease of use on usefulness	.501***	11.244	.251
Ease of use on risk	- .272 ***	-5.503	.074
Trust on adoption	.331 ***	6.812	.109
Usefulness on adoption	.130 **	2.547	.017
Risk on Adoption	-.305 ***	-6.232	.093

Source: SPSS Outputs (Appendix B)

Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Figure (4.1) Path Model for Ease of Use to Adoption



Source: SPSS Outputs (Appendix B)

Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Ease of Use on Adoption

Ease of use shows a positive sign and high significance with adoption at 1 percent level. As shown in Table (4.20), the value of R square is nearly 15 percent. According to the results shown in Table (4.20), all other independent variables are constant and a unit increase in ease of use will lead to .383 unit increase in effect on adoption. Therefore, it is clear that ease of use has significant effect on adoption. The result shows that customers perceive ease of use as a factor which influences their adoption to use m-marketing during their travel. Thus, the result of the study proves that customers think using m-marketing would be free of effort.

Ease of Use on Trust, Usefulness and Risk

Ease of use shows a positive sign and high significance with trust, usefulness and risk at 1 percent level. But ease of use shows a negative sign on risk. These results show that an increase in ease of use will lead to increase in effect on trust and usefulness. According to the results shown in Table (4.20), all other independent variables are constant, a unit increase in ease of use will lead to .402 unit increase in trust, .501 unit increase in usefulness and .272 unit decrease in effect on risk. Therefore, it is clear that ease of use has significant effect on trust and usefulness and risk. Thus, if customers perceive ease of use, the need of trust and usefulness will increase and the risk will decrease.

Trust, Usefulness and Risk on Adoption

Customers' perceived trust, usefulness and risk effect on adoption. Trust and usefulness are positive and high significance in adoption at 1 percent and 5 percent level respectively. Perceived risk is negative and highly significant in adoption at 1 percent level. These results show that an increase trust and usefulness will lead to increase in adoption. According to the results shown in Table (4.20) that taking all other independent variables are constant, a unit increase in ease of use will lead to .383 unit increase in effect on adoption. According to the results shown in Table (4.20) that taking all other independent variables are constant, a unit increase in trust will lead to .331 unit increase in effect on adoption, a unit increase in usefulness will lead to .130 unit increase in effect on adoption and a unit increase in risk will lead to .305 unit decrease in effect on adoption. Therefore, it is clear that trust, usefulness and risk have significant effects on adoption. Thus, if customers perceive trust and usefulness will increase in m-marketing adoption and they perceive risk will decrease m-marketing adoption.

4.7.2 Mediating Effects of Trust and Risk between Involvement and Adoption

To determine whether mediating effect of trust and risk between involvement and adoption, path analysis is used. The regression results for involvement to adoption are shown in Table (4.21). These regression results are used to compute the magnitudes of the direct effects in the path models, and the method was also used to test the significance of the mediating effects. As mediating variables, trust and risk are used. For this study, path analysis was used to find out mediating effect of these variables between involvement and adoption.

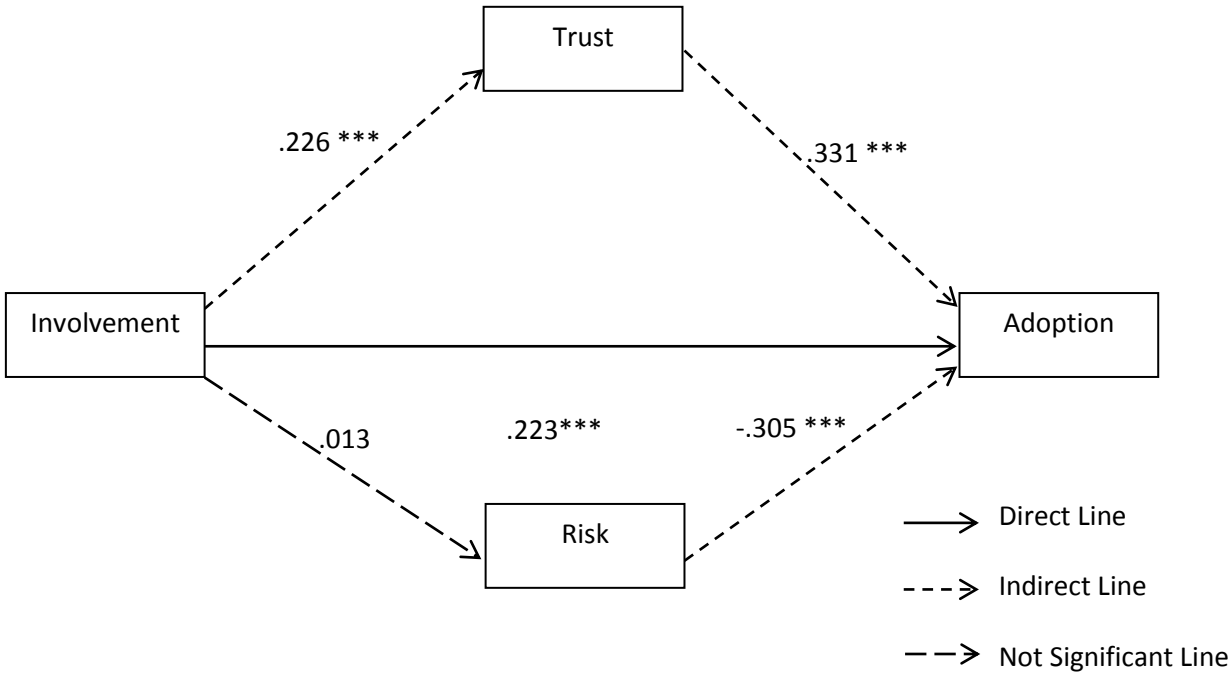
These mediating variables are expected to have effects on the relationship between involvement and adoption.

Table (4.21) Path Coefficients for Involvement to Adoption

	Coefficient	**t**	**R square**
Involvement on adoption	.223***	4.449	.050
Involvement on trust	.226***	4.505	.051
Involvement on risk	.013	.246	.000
Trust on adoption	.331***	6.812	.109
Risk on adoption	-.305***	-.232	.093

Source: SPSS Outputs (Appendix B**)**
Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Figure (4.2) Path Model for Involvement to Adoption



Source: SPSS Outputs (Appendix B)

Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Consumer Involvement on Adoption

Involvement shows a positive sign and high significance with adoption at 1 percent level. As shown in Table (4.21), the value of R square is 5 percent. According to the results shown in Table (4.21), all other independent variables are constant, a unit increase in involvement will lead to .223 unit increase in effect on adoption. Therefore, it is clear that involvement has significant effect on adoption. The result shows that customers perceived involvement as a factor which influences their adoption to use m-marketing during their travel. Thus, the result of the study proves that customers think that using m-marketing would be involvement.

Consumer Involvement on Trust and Risk

Consumer involvement shows a positive sign and high significance with trust at 1 percent level. But involvement shows a negative sign on risk. These results show that an increase in involvement will lead to increase in effect on trust and no effect on risk. According to the results shown in Table (4.21), all other independent variables are constant, a unit increase in involvement will lead to .226 unit increase in effect on trust. The increase in involvement by 1 percent will increase on trust by 21 percent. Therefore, it is clear that involvement has significant effect on trust. Thus, if customers perceive involvement, the need of trust will increase and the risk will decrease.

Trust, Risk on Adoption

Customers' perceived trust and risk effect on adoption. Trust is positive and risk is negative and both are high significance in adoption at 1 percent level. According to the results

shown in Table (4.21), all other independent variables are constant, a unit increase in trust will lead to .331 unit increase in effect on adoption and a unit increase in risk will lead to .305 unit decrease in effect on adoption. This result shows that although an increase trust will lead to increase in adoption and an increase in risk will decrease on adoption. Therefore, it is clear that trust and risk have significant effects on adoption. Thus, if customers perceive trust will increase m-marketing adoption and they perceive risk will decrease on effect on m-marketing adoption.

4.7.3 Mediating Effects of Risk between Trust and Adoption

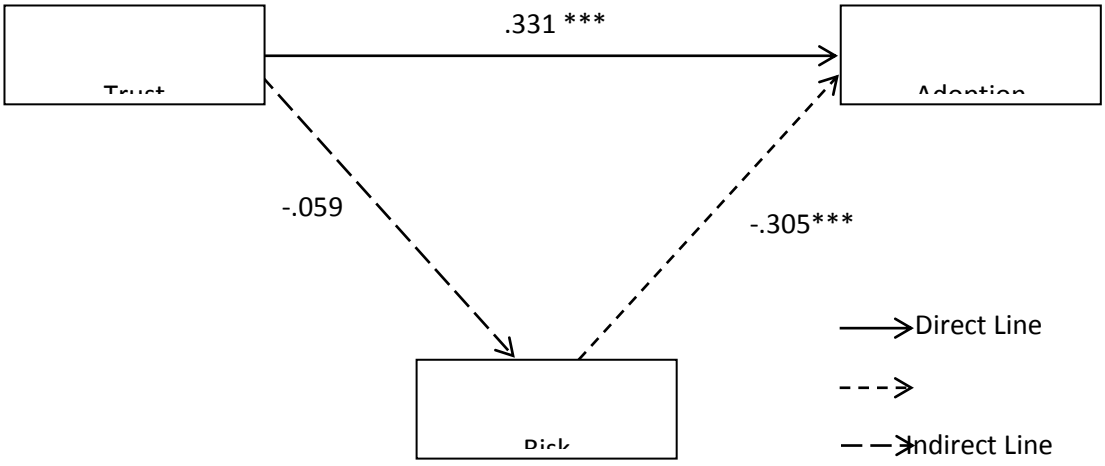
To determine whether mediating effects of risk between trust and adoption, path analysis is used. The regression results for trust to adoption are shown in Table (4.22). These regression results are used to compute the magnitudes of the direct effects in the path models, and the method was also used to test the significance of the mediating effects. As a mediating variable, risk is used. For this study, path analysis is used to find out mediating effect of risk between trust and adoption. The mediating variable is expected to have effects on the relationship between trust and adoption.

Table (4.22) Path Coefficients for Trust to Adoption

	Coefficient	**t**	**R square**
Trust on adoption	.331***	6.812	.109
Trust on risk	-.059	-1.146	.003
Risk on adoption	- .305***	-6.232	.093

Source: SPSS Outputs (Appendix B**)**
Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Figure (4.3) Path Model for Trust to Adoption



Source: SPSS Outputs (Appendix B)

Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Trust on Adoption

Trust shows a positive sign and high significance with adoption at 1 percent level. As shown in Table (4.22), the value of R square is nearly 11 percent. According to the results shown in Table (4.22), all other independent variables are constant, a unit increase in trust will lead to .331 unit increase in effect on adoption. Therefore, it is clear that trust has significant effect on adoption. The result shows that customers trust as a factor which influences their adoption to use m-marketing during their travel. Thus, the result of the study proves that customers think that using m-marketing would be trustful.

Trust on Risk

Trust shows a negative sign and no significant with risk and there is very little variation in risk. The result shows that trust has no effect on risk. Therefore, if customers perceive trust in using m-marketing is not related to risk.

Risk on Adoption

Risk shows a negative sign and high significance with adoption at 1 percent level. As shown in Table (4.22), the value of R square is nearly 9 percent. According to the results

shown in Table (4.22), all other independent variables are constant, a unit increase in risk will lead to .305 unit decrease in effect on adoption. Therefore, it is clear that risk has significant effect on adoption. The result shows that customers perceive risk as a factor which influences their adoption to use m-marketing.

4.7.4 Mediating Effects of Usefulness between Risk and Adoption

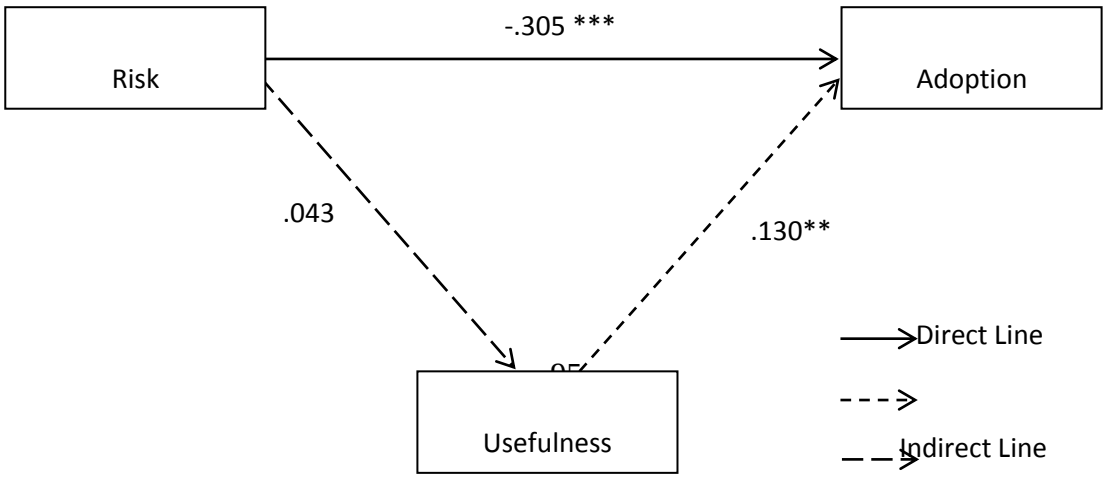
To determine whether mediating effect of involvement on adoption, path analysis is used. The regression results for ease of use to adoption are shown in Table (4.23). These regression results are used to compute the magnitudes of the direct effects in the path models, and the method was also used to test the significance of the mediating effects. As mediating variables, trust, usefulness and risk are used. For this study, path analysis is used to find out mediating effect of these variables between ease of use and adoption. These mediating variables are expected to have effects on the relationship between ease of use and adoption

Table (4.23) Path Coefficients for Risk to Adoption

	Coefficient	**t**	**R square**
Risk on adoption	-.305***	-6.232	.093
Risk on usefulness	.043	.836	.002
Usefulness on adoption	.130**	2.547	.017

Source: SPSS Outputs (Appendix B)
Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Figure (4.4) Path Model for Risk to Adoption



Source: SPSS Outputs (Appendix B)

Statistical significance Indicate *** at the 1% level,** 5% level and * 10% level

Risk on Adoption

Risk shows a negative sign and high significance with adoption at 1 percent level. As shown in Table (4.23) the value of R square is nearly 9 percent. According to the results shown in Table (4.23), all other independent variables are constant, a unit increase in risk will lead to .305 unit decrease in effect on adoption. Therefore, it is clear that risk has significant effect on adoption. The result shows that customers perceive risk as a factor which influences their adoption to use m-marketing.

Risk on Usefulness

Risk shows a negative sign and no significant with usefulness and there is very little variation in usefulness. The result shows that risk has no effect on usefulness. Therefore, if customers perceive risk in using m-marketing is not related to usefulness of m-marketing.

Usefulness on Adoption

Usefulness shows a negative **s**ign and high significance with adoption at 5 percent level. As shown Table (4.23), the value of R square is nearly 2 percent. According to the results shown in Table (4.23), all other independent variables are constant, a unit increase in usefulness will lead to .130 unit increase in effect on adoption. Therefore, it is clear that usefulness has significant effect on adoption. The result shows that customers perceive usefulness as a factor which influences their adoption to use m-marketing.

4.7.5 Total Effects of Trust, Usefulness and Risk on Adoption

Path analysis is used to assess the extent to which an association between two variables is mediated by a third variable. To measure mediation, it is needed to compare regression coefficients of the same variable across models with different mediating variables.

The difference in these coefficients measures the extent to which the variable's effect is mediated by the variable hypothesized to bring about the association of interest. In path analysis, the effect of a predictor variable on an outcome may be decomposed into two parts, one mediated by a control variable, z, another unmediated by z. the part mediated by z is called the indirect effect, while the part unmediated by z is called the direct effect. The sum of the indirect and direct effects is called the total effect, equal to the effect of x on y when the control variable is omitted. In Table (4.24), a description of total, direct, and indirect effects are presented.

Table (4.24) Total Effects of Trust, Usefulness and Risk on Adoption

	Direct effect	Trust		Usefulness		Risk	
		Indirect effect	Total effect	Indirect effect	Total effect	Indirect effect	Total effect
Ease of Use	.383	.1330	.516	.0651	.4481	.0829	.4659
Involvement	.223	.0748	.2978	-	-	-.0040	.2270
Trust	.331	-	-	-	-	.0179	.3489
Risk	-.305	-	-	.0055	-.2995	-	-

Source: Survey data (2017)

In Table (4.24), path coefficients are used to examine the total effect of antecedents of m-marketing on adoption and then, compared them with the direct effect of antecedents of m-marketing adoption. The indirect effect is calculated by multiplying contributing path coefficients. For instance, the indirect effect of ease of use on adoption through trust .1330 is obtained by multiplying the coefficient from ease of use to trust .402 by the coefficient from trust to adoption .331.The total effect .516 is the sum of the direct effect .383 and indirect effect .1330. In Table (4.24), the total effects of four independent variables: ease of use, involvement, trust, and risk on a dependent variable: adoption are presented. The total effect of ease of use on adoption through trust .516 is greater than direct effect of .383. It indicates that trust mediate the relationship between ease of use and adoption.

In Table (4.24), the indirect effect of ease of use on adoption through usefulness .0651 is obtained by multiplying the coefficient from ease of use to usefulness .501 by the coefficient from trust to adoption .130.The total effect .4481 is the sum of the direct .383 and indirect effect .0651. The total effect of ease of use on adoption through usefulness .4481 is greater than direct effect of .383. It indicates that usefulness mediate the relationship between ease of use and adoption.

In Table (4.24), the indirect effect of ease of use on adoption through risk.0829 is obtained by multiplying the coefficient from ease of use to risk -.272 by the coefficient from risk to adoption -.305.The total effect .0829 is the sum of the direct .383 and indirect effect .4659. The total effect of ease of use on adoption through risk .4659 is greater than direct effect of .383. It indicates that risk mediate the relationship between ease of use and adoption.

In Table (4.24), the indirect effect of involvement on adoption through trust .0748 is obtained by multiplying the coefficient from involvement to trust .226 by the coefficient from trust to adoption .331.The total effect .2978 is the sum of the direct .223 and indirect effects .0748.The total effect of involvement on adoption through trust .2978 is greater than direct effect of .223. It indicates that trust mediate the relationship between involvement and adoption.

In Table (4.24), the indirect effect of involvement on adoption through risk

-.0040 is obtained by multiplying the coefficient from involvement to risk .013 by the coefficient from risk to adoption -.305. The total effect .2270 is the sum of the direct .223 and indirect effect - .0040.The total effect of involvement on adoption through risk .2270 is greater than direct effect of .223. It indicates that risk mediate the relationship between involvement and adoption.

In Table (4.24), the indirect effect of trust on adoption through risk .0179 is obtained by multiplying the coefficient from trust to risk -.059 by the coefficient from to adoption -.305. The total effect .3489 is the sum of the direct .331 and indirect effects .0179.The total effect of trust on adoption through risk .3489 is greater than direct effect of .331. It indicates that risk mediate the relationship between trust and adoption.

In Table (4.24), the indirect effect of risk on adoption through usefulnes**s**.0055 is obtained by multiplying the coefficient from risk to usefulness.043 by the coefficient from usefulnes**s** to adoption .130.The total effect -.2995 is the sum of the direct effect .305 and

indirect effect .0055.The total effect of risk on adoption through usefulness -.2995 is greater than direct effect of -.305. It indicates that usefulness mediate the relationship between risk and adoption.

These results offer further insights into the relationship between independent variables: ease of use, involvement, trust, and risk and a dependent variable: adoption by exploring the mediating role of trust, usefulness, and risk. Consistent with the literatures, this study finds an indirect effect between independent variables: ease of use, involvement, trust, and risk and a dependent variable: adoption (Spencer et al,2009; Joiner et al,2009).

Chapter 5

Conclusion

This chapter presents the summary findings of the study. It also discusses he major theoretical implications and suggestions. The implications of findings, limitations and future directions of further research are put forward. The study focuses on adoption of m-marketing of tourism industry in Yangon. Frequencies, percentages, and means were presented in the data analysis. In order to infer the relationship between the variables, multiple linear regression and path analysis were applied. The findings based on the research objectives which guided the study are summarized below.

5.1 Findings and Discussions

The study examines the factors affecting m-marketing adoption of customers in tourism industry and analyze the mediating effects of perceived trust, usefulness and perceived risk. In order to meet those objectives, both secondary and primary data were used for analysis. To answer specified research questions, primary data were collected using sampling random sampling method. After choosing a sample of 384 customers, data were collected with structured questionnaires. The surveyed questionnaire consists of two main parts. The first part was about demographic and behaviors of consumers while the second was concerned with perceptions of consumers in adopting m-marketing in tourism industry. Based on previous studies, each factor was measured with different number of statements, and each statement was measured on five-point Likert scale.

Demographic characteristics of consumers were described by asking six main parts of questions: gender, age, education, marital status, income, and occupation. By analyzing of those data, it was found that female customers were more interested than male customers. The ages of m-marketing customers range from 7 years to over 60 years. Among these age

group, the age group between 26 and 40 years was the largest, accounting for about 50% of the sample. Marital status was simply divided

into single and married. It was found that single customers were about four times larger than married customers. The reason might be that single customers were more likely to travel than the married. In terms of education level, graduate consumers were larger than non-graduates in the sample. The results of occupation data show that the sample included more employed consumers than dependents. Regarding the results of income level, most m-marketing customers' income level was between fewer than kyats 450,000 and more than kyats 300,000. Income level had influenced on the adoption of m-marketing.

In contrast, most of the variables in management studies cannot be directly measured as they are often related to psychology, perception, attitude, emotion of human beings. Therefore, they are often quantified with indirect measurement scale. The most common measure of scale reliability is Cronbach's alpha values of all the Likert scales used in the survey questionnaires that were found to be very high reliable. As a result, the resulting data collected with current Likert scales can also be expected to be reliable.

In line with the first objective, factors affecting m-marketing adoption in tourism industry were examined. The research instrument consisted of the original TAM constructs (PU and PEU), external variables (consumer innovativeness, consumer involvement, opinion leadership, trust and perceived risk) and adoption of technology measure. Perceived ease of use did not influence the adoption of m-marketing. It indicates that unless user perceived m-marketing as being useful, ease of use has no effect on the adoption decision. This implies that the ease of use of m-marketing, which relates to individual skills, website navigation, online support and perceived complexity of m-marketing, has more significant effects on the perceived usefulness rather than on the adoption of m-marketing. In the regression models, perceived ease of use does not seem to have exhibited effect on the adoption of m-marketing in tourism industry. Likewise, perceived usefulness appears not to influence the decision to adopt m-marketing. Perceived trust appear not to influence on perceived risk and perceived usefulness. Consumer involvement does not seem to have exhibited effect on the adoption of m-marketing in tourism industry. From these results, it was determined that among seven variables, only three variables: perceived ease of use, perceived usefulness and consumer involvement may not be the antecedents of the adoption of m-marketing in tourism industry. It could be removed from the model to improve model parsimony, as it is insignificant in explaining the proposed model.

In order to fulfill the second objective, ease of use has significant effect on adoption. The result shows that customers perceive ease of use as a factor which influences their

adoption to use m-marketing during their travel. Thus, the result of the study proves that customers think that using m-marketing would be free of effort. Consumers can have access to thousands of online sites and purchase anything without travelling to a retail site and spending time at the retail store. Furthermore, m-marketing customers can view catalogues of different products/services and read extensive information detailing their features and performance, whereas information acquisition was time consuming and difficult prior to the outset of the internet. Therefore, this study proves ease of information searching, ease of booking, ease of using customer service. Thus, this study posits perceived ease of use as the antecedents of m-marketing adoption.

In order to fulfill the third objective, involvement has significant effect on adoption. Compared to traditional media, the processing of message content on the web is largely determined by consumer's level of involvement or predisposed intention to become exposed. The consumers seeking information regarding travel services are likely to visit travel-related websites or flight booking websites. In addition, with thousands of sites that offer information on accommodation, online consumers must choose which ones to visit. This can be accomplished based on their previous experience with certain sites or engines both of which require that consumer know how to search for the sites that are most likely to satisfy their needs at the time.

Despite the insignificant relationship between involvement and risk, consumer involvement demonstrates positive effect on both trust and risk. Therefore, this study proves that consumers with low product involvement are likely to perceive higher risk to adopt service activity. The results conclude that the more consumers are involved in their travel process and activities, the more trust they are likely to have adoption of m-marketing. Additionally, the more consumers are involved with m-marketing adoption, the lesser risk they are likely to perceive in relation to this medium.

In order to fulfill the fourth objective, although perceived risk has insignificant effect on adoption, perceived trust has significant effect on adoption. Although, the influence of risk on m-marketing indirectly affected the adoption decision, this could be explained by indicating that a trustful customer will still engage in risky activities. Therefore, this study proves that consumer could overcome their fear, derived from perceived risk or the uncertainty of m-marketing, by building up trust in a website. The more trust m-marketing customers have m-marketing adoption, the lower their risk perception will be.

In order to fulfill the fifth objective, both risk and usefulness has significant effect on adoption. Technology usefulness is the key to m-marketing customers' adoption of m-marketing. Therefore, this study found that consumers perceive m-marketing as usefulness because it allows home shopping, avoids shopping hassles, provides greater choice, enables shoppers to find and compare products and prices, and provides product customization and cheaper prices.

5.2 Suggestions and Recommendations

Based on the findings of the research, some relevant suggestions and recommendations for tourism industry and non-adopters can be made for the m-marketing adoption. Based on the findings of this study, it is found that the rapid growth of m-marketing is imposing profound impacts on tourism industry. On the supply side**,** the emergence of m-marketing is greatly changing the operation behavior of some retailers, and is increasing product internationalization due to its geographically unlimited nature. On the demand side, the pervasiveness of m-marketing affects how, where, and when consumers shop, and indirectly influences the way in which people live. However, the development of m-marketing is still at an early stage, and why consumers choose (or do not choose) m-marketing is far from being completely understood. To better evaluate and anticipate the profound impacts of m-marketing, therefore, it is vital to further refine the understanding of consumers' m-marketing behavior. The results of this study yield preliminary evidence that previous technology acceptance and diffusion research, and specifically the significant body of work based on the TAM, may serve as a foundation for much needed research into consumers' adoption of m-marketing related activities. Relationships among primary TAM constructs found in this research are largely consistent with those typical in previous TAM research. This study has also built on current knowledge and outlined a series of research propositions that could provide a more comprehensive understanding of consumers' adoption of m-marketing. The research framework explicitly considers consumer innovativeness, involvement, opinion leadership, perceived risk and trust as key drivers of consumers' adoption of m-marketing apart from TAM variables. The dimensions of the key drivers are carefully identified and analyzed. This study's theoretical framework provides an integration of existing research and a springboard for future systematic research in the area of online consumer behavior.

The findings suggest motivational reasons that make consumers adopting m-marketing and subsequently, the issues that constitute relative advantages of purchasing via the internet. Relative advantage is positively related to adoption as compared to other perceived adoption characteristics. It represents 'the degree to which an innovation is being perceived as better than the idea it supersedes. Generally, the research obtained very good and positive feedback on the advantages that the respondents gained in adopting m-marketing. However, the reasons for adoption varied depending on the types and nature of products, time, price, promotions and needs during the course of the buying process. M-marketing adopters felt satisfied that they could get the best bargains for the amount of time that they spent on gathering information and making comparisons of products and prices. Therefore, m-marketing adoption increase consumers' motivation to search for price information and are becoming more sensitive to price. The perceived depth of information on the site, the interaction between content and depth of information, the relative ease of the search process, and the range of available product and price options are likely to impact on price sensitivity. A better understanding is needed for the factors that influence online price searching. This is an important issue, as the ability to gather price information and making comparisons between sellers is viewed as one of the keys in defining and maintaining the competitive advantages of m-marketing. Thus, these attributes of convenience, which have long been important to consumers, are now found in the new innovation of m-marketing. In particular, web-based purchasing is the ultimate in time saving effort saving, availability and accessibility. All respondents have no doubt about the convenience of conducting transactions online. The groups of existing m-marketing adopters also suggested that convenience was also the reason why they shopped on the internet. M-marketing is perceived to be a potential source of inventory and references. Importantly, the m-marketing adopters see the web as a place where they expect to find selection and flexibility, or even product customization. On the other hand, accessibility of the travel services in terms of location and hours of availability was also found to be significant to this study. The fact that the m-marketing adopters fully utilize and enjoy the convenience of m-marketing has been observed.

5.3 Needs for Further Study

This section will attempt to explain the requirements of the future studies and the limitation of current study. In this study, the data are collected from customers of tourism

industry in Yangon. Hence the first recommendation is that the future research should be done by opening the survey to other locations in order to improve the generalizability of the finding of the study. By doing so, there will also ascertain lager sample size where questionnaire can be distributed to more customers of tourism industry in other important regions in Myanmar. So, the data obtained from the whole nation will generate the result more accurate and comprehensive picture to capture the nature of adoption of m-marketing in tourism industry from the respondents.

First, this study has attempted to include a wide range of variables to explain consumers' technology acceptance behavior. Future research could also seek to further extend models of technology acceptance to encompass other theoretical constructs relevant to m-marketing adoption in tourism industry. It would be interesting, for example, to explore the role satisfaction, shopping orientation, personal traits and social influences on the acceptance of m-marketing.

Secondly, the present research examined travel services as a single industry, even though it typically includes the hospitality, leisure and tourism destination businesses. Therefore, it would be potentially worthwhile for future research to validate the generalizability of this research model with regard to the different types of business or products within or outside the industry. Furthermore, as the present investigation was based on an aggregation of multiple travel services, it would be interesting for future research to replicate this study to validate the generalizability of the conceptual model based on specific travel services such as airlines, hotels etc. This would be a promising research avenue, because it is believed that all the measures used in this study are generally applicable to any travel service. It is envisioned that by embarking on research in a specific travel service context, consumer adoption behavior could be more explicitly identified and product/service strategies could be developed and precisely utilized to stimulate the greatest overall return from the performance improvements.

Finally, advanced research should be embarked upon to replicate and validate the model in order to determine the robustness of the current findings. Since the generalizability of the model is inherently limited to the travel services setting, the model and hypotheses should therefore be extended beyond the present context (e.g. to the e-banking industry and the insurance industry). By doing so, these replication studies could extend the generalizability of the findings derived from the current study. This research direction

appears to be potentially rewarding because the tourism industry is considered as the highest growth business on the internet.

APPENDIX A

Questionnaire for Adoption of M-Marketing in Tourism Industry of Myanmar

This survey is part of my PhD Thesis at Yangon University of Economics, this question is designed to understand customer adoption of mobile services in travels and tours industry. This survey will take approximately 15 minutes of your time.

Khin Thet Htwe

Lecturer

Department of Commerce

Section A: Profile of Respondents

1. **Name** ----------

   Phone no: ----------

   E-mail address ----------

2. **Gender**

   ☐ Male ☐ Female

3. **Age (in years)**

   ☐ <18 ☐ 19-25 ☐ 26-40 ☐ 41-60 ☐ >60

4. **Education**

   ☐ High school or below ☐ Graduated

   ☐ ☐

Under graduated Others

5. Marital Status

☐ Single ☐ Married

6. Income per month

☐ No income

☐ less than Ks 150,000 ☐ Ks 150,001-Ks 300,000

☐ Ks 300,001- Ks 450,000 ☐ more than Ks 450,000

7. Occupation

☐ Worker

☐ Civil Servant

☐ Private Staff

☐ Retired

☐ Housewife

☐ Student

Self-employed

Section B: Factors affecting m-marketing

Please tick the appropriate number against each statement indicating you rating of the Mobile Marketing Adoption.

1----Strongly disagree

2---- Disagree

3----Neutral

4----Agree

5----Strongly agree

8. Usefulness

	Statement	1	2	3	4	5
1	Using m-marketing enable me to accomplish travelling more quickly.					
2	Using mobile marketing for travelling increase my productivity (time saved) in conducting travel service transaction					
3	Using mobile marketing make more enjoyable in conducting travel service transaction					
4	Using mobile marketing makes it easier for me to conduct travel service transaction.					
5	Using mobile marketing accomplish more work in conducting travel service transaction					
6	Using mobile marketing makes me a smart customer in conducting travel service transaction.					
7	Using mobile marketing allows me to increase my ability to choose several packages that I desire.					
8	M-marketing enables me to buy travel services at special					

	rate/ offer.					
9	Using m-marketing enhances my effectiveness on my job.					

9. Ease of use

	Statement	1	2	3	4	5
1	I believe that when I use m-marketing, the process will be clear and understandable in conducting travel services transaction.					
2	Interaction with m-marketing does not require a lot of mental effort.					
3	The task of sending text messages via mobile phone is very simple.					
4	I find it easy to get mobile marketing system to do what I want it to do.					
5	M-marketing system often behave in unexpected ways.					
6	The task of interacting with m-marketing is very simple.					
7	Using m-marketing for travel (eg. Check in,booking, buying tickets) is convenient.					
8	Using m-marketing takes too much time from my normal duties.					

10. Perceived risk

	Statement	1	2	3	4	5
1	I worry about the connection quality on the mobile phones in my travelling situations.					
2	I worry about safe transaction on the mobile phones in my travelling situations.					
3	I worry about how my personal information might be used when I buy through mobile for my trip.					
4	I worry about how reliable mobile marketing be in my travelling situations.					
5	I am afraid that mobile marketing will not provide me with the level of benefits that I expected.					
6	It is not safe to accept and rely to mobile marketing messages via mobile phone.					
7	Compared to traditional methods, I believe that using mobile marketing is riskier in adopting travelling situations.					

11. Perceived Trust

	Statement	1	2	3	4	5
1	Using m-marketing is trustworthy.					
2	I trust in the benefits of decisions of m-marketing.					
3	M-marketing keeps customer best interest in mind.					
4	M-marketing keeps its promise and commitment.					
5	M-marketing offers secure mobile services.					
6	I believe that m-marketing is trustful in its dealing with me.					
7	Using m-marketing is competent and effective in providing travel services.					

8	I believe that m-marketing is trustful in dealing with me.					

12. Consumer Involvement

	Statement	1	2	3	4	5
1	I think using m-marketing is important in conducting travel services transaction.					
2	M-marketing makes me interesting in conducting travel service transaction.					
3	M-marketing gives me relevant information in conducting travel service transaction.					
4	M-marketing makes me happy in conducting travel service transaction.					
5	M-marketing appeals customers in conducting travel service transaction.					
6	M-marketing gives me valuable information in conducting travel service transaction.					
7	M-marketing gives me involve in conducting travel service transaction.					
8	M-marketing is needed in conducting travel service Transaction.					
9	I think using m-marketing makes me wise in conducting travel service transaction.					

13.Personal Innovativeness

	Statement	1	2	3	4	5
1	If I heard about a new technology, I would look for ways to experiment with it.					
2	I look to experiment with new information technology.					
3	In general, I am hesitant to try out new information technologies.					
4	Among my peers, I am usually the first to try out new information technologies					
5	I believe new technology devices can trigger my creativity					

14.Opinion Leadership

	Statement	1	2	3	4	5
1	I ever talk to my friend and neighbors about shopping for travel services via the m-marketing.					
2	In a discussion of m-marketing for travel services, I like to convince my friends of my ideas.					
3	Among my friends, I am often used m-marketing as a source of advice for travel services.					
4	In the past 6 months, I have told a number of people about m-marketing for travel services.					

15.Adoption

	Statement	1	2	3	4	5
1	I use the internet every time I need to purchase travel services.					
2	I want to continue using m-marketing for travel services in the future.					
3	I expect my usage of m-marketing for travel services in the future.					

4	I consider myself as a frequent m-marketing customer for travel services.					
5	Overall, I feel I have adopted m-marketing for travel services.					
6	Overall, I am satisfied when shopping for travel services via the internet.					
7	My overall evaluation of the services provided by web travel retailers is that they are excellent.					

APPENDIX B

Reliability Test

Usefulness

Cronbach's Alpha	**N of Items**
.872	**8**

Ease of Use

Cronbach's Alpha	**N of Items**
.854	**7**

Perceived Risk

Cronbach's Alpha	**N of Items**
.894	**7**

Perceived Trust

Cronbach's Alpha	**N of Items**
.594	**7**

Involvement

Cronbach's Alpha	N of Items
.901	9

Personal Innovativeness

Cronbach's Alpha	N of Items
.756	5

Opinion Leadership

Cronbach's Alpha	N of Items
.599	4

Adoption

Cronbach's Alpha	N of Items
.840	7

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.402[a]	.162	.160	4.00719

a. Predictors: (Constant), EoU

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	11.108	1.484		7.487	.000
	EoU	.510	.060	.402	8.548	.000

a. Dependent Variable: Trust

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.501[a]	.251	.249	3.37799

a. Predictors: (Constant), EoU

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.237	1.251		12.184	.000
	EoU	.565	.050	.501	11.244	.000

a. Dependent Variable: Useful

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.272[a]	.074	.072	4.95456

a. Predictors: (Constant), EoU

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.592	1.834		12.861	.000
	EoU	-.406	.074	-.272	-5.503	.000

a. Dependent Variable: Risk

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.383[a]	.147	.144	2.97296

a. Predictors: (Constant), EoU

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.230	1.101		14.745	.000
	EoU	.357	.044	.383	8.058	.000

a. Dependent Variable: Adopt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.331[a]	.109	.107	3.03713

a. Predictors: (Constant), Trust

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.260	.859		22.425	.000
	Trust	.243	.036	.331	6.812	.000

a. Dependent Variable: Adopt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.130[a]	.017	.014	3.19091

a. Predictors: (Constant), Useful

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	21.889	1.237		17.688	.000
	Useful	.107	.042	.130	2.547	.011

a. Dependent Variable: Adopt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.305[a]	.093	.091	3.06461

a. Predictors: (Constant), Risk

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	27.607	.445		62.060	.000
	Risk	-.191	.031	-.305	-6.232	.000

a. Dependent Variable: Adopt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.226[a]	.051	.048	4.26440

a. Predictors: (Constant), Involve

Coefficients[a]

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta		
1	(Constant)	17.012	1.494		11.390	.000
	Involve	.206	.046	.226	4.505	.000

a. Dependent Variable: Trust

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.223[a]	.050	.047	3.13708

a. Predictors: (Constant), Involve

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.177	1.099		18.364	.000
	Involve	.149	.034	.223	4.449	.000

a. Dependent Variable: Adopt

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.059[a]	.003	.001	5.14031

a. Predictors: (Constant), Trust

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.232	1.454		10.479	.000
	Trust	-.069	.060	-.059	-1.146	.253

a. Dependent Variable: Risk

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.043[a]	.002	-.001	3.89860

a. Predictors: (Constant), Risk

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.721	.566		50.753	.000
	Risk	.033	.039	.043	.836	.403

a. Dependent Variable: Useful

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