INTERNET ADOPTION AMONG ARABIC STUDENTS IN MALAYSIA

A Thesis Submitted in Partial Fulfillment of the Requirements for The Degree of Master of Science of Management

By

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Declaration

I declare that all the work described in this thesis was undertaken by myself (unless otherwise acknowledged in the text) and that none of the work has been previously submitted for any academic degree. All sources of quoted information have been acknowledged through references.

AHMED MUKT ABDHAMID ABUSEF
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ABSTRACT

This study seeks to examine empirically the internet adoption among Arabic students in Malaysia by applying the conceptual theory of technology acceptance model (TAM). The respondents comprise of 148 Arabic students. A questionnaire was designed to tap into the students' perception on perceived usefulness of the internet, perceived ease of use of the internet, and perceived credibility on technology, and adoption of the internet itself. Four hypothesized relationships were tested in the research model. The data was analyzed using multivariate technique to test the causal effects amongst variables. From the analysis, the hypotheses succeed to be supported ($p<.05$). The findings support the TAM theory extremely well. The finding is discussed in the context of internet adoption among Arabic students in East Malaysia.

Keywords: Internet Adoption, Perceived Usefulness, Perceived Ease of Use, Perceived Credibility

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Praise and gratitude be given to Allah the Almighty for putting forward me such a great strength, patience, courage, and ability to complete this project.

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I would like to present my thanks to all my family, the soul of my father (Muktar), to my dear mother, to my siblings especially my brother (Abd Hamid) who has always been there for me. I would also like to acknowledge my brother and my sister. My thanks also to my friends and colleagues at college of business of University Utara Malaysia.

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CHAPTER 1

INTRODUCTION

1.1 Background of The Study

The Internet has become the most common communication and research tool for most people worldwide. The attractive display of materials on the Internet motivates individuals to explore and use it in their daily lives. A quick look at the content on the World Wide Web gives a clear picture of the variety of information resources and communication applications it contains. These resources and applications cover millions of multipurpose Web sites including images, sounds, and graphical user interfaces which allow users to interact positively with the contents. In addition, the Internet makes the publishing, access, retrieval, and distribution of information from resources not only possible but also easy for any user regardless of their location. Browner, Pulsford, and Sears (2000) attributed scholarly interest in the Internet to the following reasons:

1. The Internet is an enormous, in some way unique, academic resource. In many important aspects, the Internet is a new kind of library, an electronic library of libraries, with text, pages, books, collections of books, and collection of collections.
2. The Internet is immediately accessible, quite easy to search, and easier to use than the typical university library. For some kinds of information, the

> Internet is much the quickest route; for other kinds, which are on the increase, the Internet is the only source available. (p.158)

Harmon and Jones (1999) divided research activities using the Internet into three categories: use as a resource locator, use to complete demographic survey, and use for empirical investigation. Therefore, Web-based research has been found to be very accommodating for academic purposes. The Web has been popular among researchers because of the convenience it affords in collecting and tracking information from different forms of sources such as educational blogs, professional listservs, and electronic journals. According to Ahern (2005), university faculty members now find this type of research not only useful to search for information or communicate with colleagues but also valuable for interviewing, reaching vulnerable population, validating instruments, and conducting virtual focus groups.

At a societal level, the Internet has an equalizing potential (Clinton, 2000; Pruijt, 2002) and supports collective action (Postmes & Brunsting, 2002). At an individual level, adoption of Internet technology results in personal transformations of identity, education and community contributing to personal empowerment and individual cyberpower, defined as the effect of online activity on power (Alkalimat & Williams, 2000; Bier, Gallo, Nucklos, Sherblom & Pennick, 1997; Masi, Suarez-Balcazar, Cassey, Kinney & Piotrowski, 2003). For

people to reap these benefits of the Internet requires access to a computer with Internet service and a conscious decision to adopt the technology.

Prior studies on Internet and computer technology adoption have focused on participants who have voluntarily made the decision to adopt the technology in their homes (Hoffman, Kalsbeek & Novak, 1996; Katz & Aspden, 1997, 1998; Novak & Hoffman, 1998; NTIA, 1999). Other studies targeted persons who were required to adopt technology in their work environment (Adams, Nelson & Todd, 1992; Prescott & Conger, 1995; Rubinyi, 1989; Straub, Keil & Brenner, 1997), or were in environments of higher learning, positioned to gain more knowledge and skills about computers (Jackson, Ervin, Gardner & Schmitt, 2001; Parker, 1997; Wells & Anderson, 1997; Wilson & Daubek, 1992). In each of these studies and corresponding contexts, obtaining access to technology and the decision to adopt the technology are treated as one event. For the purposes of the present study, securing access to the technology and adoption of the technology will be defined and treated as two separate events. There are various venues that provide Internet access, including coffee shops, airports, and universities.

To bring internet and other related technologies to the doorstep of the youth of today in order to bridge the digital divide; there is the need for a lot of investment by government and the international donor community. Given the present economic situation of the country, it will still take decades before government

could provide the needed environment. The educational reform that has been put in place has not yet been successful because of the lack of basic infrastructure, logistics and instructors.

There is a need for the promotion of Internet access and education in ICTs in schools and learning centers for disadvantaged youth as well as establishing and promoting a broad-based global understanding through partnerships among students and youth internationally**.**

The Second Al-Shaam International Conference on Information Technology, held in Syria in 1999, affirmed the importance of the Internet and its growth in the Arab world. According to this conference, one of the many advantages of Internet technology is the access to online newspapers and radio and web casting for Arabs living abroad, where they may not have access to Arabic newspapers and other media. These World Wide Web features have "dramatically enhanced the diversity of news available to people in the Middle East" (www.igc.org). Many factors determine the extent of a country's Internet connectivity. They include government policies toward censorship, the public's access to affordable hardware and software for their computers, Internet and phone connections, and the quality of the country's telecommunications infrastructure, such as the international connection's bandwidth and telephone lines per capita (www.igc.org).

Kuwait is in the Middle East, one of the regions that has been slowest in the world to adopt Internet technology. Some factors which may have hindered Internet development, or have caused negative perceptions of this medium in Kuwait, include military and internal security services and Islamic clerics. As this technology grows worldwide, its influence is felt more and more by Kuwaiti students. Many of these students may have their first experience of Internet use at foreign educational institutions, or private American or English schools in Kuwait.

Kuwait, along with many Arab nations, is faced with conflicting messages regarding the importance of globalization and the adoption of the Internet versus cultural and governmental restrictions. There is a well-developed, modern infrastructure, yet there is no strong educational emphasis in the country to promote Internet literacy. Kuwait's Ministry of Communications announced in May 1996 that Internet service providers have the responsibility to act in order to prevent pornographic or "politically subversive" material from being transmitted. The Ministry also has the right to license Internet service providers, and the right to "block access to certain information." The Ministry does realize, however, that public usage is "low level" and, at least for the present, there is no Internet-specific legislation in place. Kuwait is the only country in the region, and perhaps in the entire Islamic world, to offer unrestricted, free Internet access to its university students (Wheeler 1998).

Generally, the flow of Arab students in Malaysia has increased steadily since 1996, when various higher education reforms were introduced to facilitate the entry of Arab students into higher education institutions. Malaysia's target is 100,000 Arab students by 2010. Currently, international students represent less than 5 per cent of all tertiary enrolments in Malaysia. Although the percentage is small but it is an important factor in the internationalization of higher education in Malaysia. The impact of September 11 has seen a decreasing number of new applications from Middle Eastern countries to the United States (US).

1.2 Problem Statement

Although the Internet is becoming more popular among faculty members, there is still no evidence of the nature and intention of that adoption. Universities come in here as potentially some of the largest consumer segments of the internet in most countries. Not only are they often large in number (students and staff), but also because the nature of their activities demands an active communication and information exchange that can be best supported by this technology. As suggested, an educated population is crucial for the adoption of internet (Mansell and Wehn, 1998). The onus of developing an academic community, undertaking research, creating and maintaining standards lies largely with the universities. This means that these institutions must not just be seen to ride the waves of change, but must be seen to be influencing the direction of these changes.

Kuwait is in the Middle East, one of the regions that has been slowest in the world to adopt Internet technology. Some factors which may have hindered Internet development, or have caused negative perceptions, include military and internal security services and Islamic clerics. As this technology grows worldwide, its influence is felt more and more. Many of these students may have their first experience of Internet use at foreign educational institutions. This particular situation has a similar setting with almost Middle Eastern who spent their education abroad.

Kuwait, along with many Arab nations, is faced with conflicting messages regarding the importance of globalization and the adoption of the Internet versus cultural and governmental restrictions. There is a well-developed, modern infrastructure, yet there is no strong educational emphasis in the country to promote Internet literacy. Like Kuwait, many Middle Eastern face their adoption to the internet in their daily in Malaysia. As one of the requirement in their study, using internet is a must. The problem addresses to this process is somehow the adoption level of Arabian students to the internet, is it high, moderate or low level of accepted.

Furthermore, the dynamism of Arab students in Malaysia has increased steadily, when various higher education reforms were introduced to facilitate the entry of Arab students into higher education institutions. Currently, international students represent less than 5 per cent of all tertiary enrolments in Malaysia. Although the percentage is small but it is an important factor in the internationalization of

higher education in Malaysia. In general view, the improvement to the internet adoption of Middle Eastern students is one of the interesting parts in the process of academic world. State and private university in the right position to do some enhancement to them.

Universities' administrations have the motivation and desire to provide all faculty members with the Internet regardless of their disciplines (Alshawi, 2002). Yet, the awareness of the significance of Internet content and applications for research and instructional purposes seems to need more investigation to spread Internet utilization among all faculty members.

1.3. Research Questions

1. Somehow the internet adoption process among Arabic students in Malaysia?
2. To what extend the perceived usefulness has an influence to the internet adoption?
3. To what extend the perceived ease of use has an influence to the internet adoption?
4. To what extend the perceived credibility has an influence to the internet adoption?

1.4. Research Objectives

1. To investigate the internet adoption process among Arabic students in Malaysia.
2. To examine the perceived usefulness has an influence to the internet adoption?
3. To determine the perceived ease of use has an influence to the internet adoption?
4. To examine the perceived credibility has an influence to the internet adoption?

1.5. Significant of the Study

Research activities and conducting new studies have always relied on new innovations that are used to store and deliver information. Communicative technologies and electronic resources are common means of obtaining current information. Thus, researchers often use these sources to find new ideas to study. Today, Internet technology, with its multiple integrated features and applications, allows people to conduct research more quickly and more conveniently. The Internet, as a means to collect information for research purposes, can be faster than any other type of information source to track and distribute new ideas. Additionally, information on the Internet can be accessed more easily and faster as compared to other traditional sources such as libraries.

Moreover, the findings of this study can be used to increase the role of research organizations, educational institutes, and libraries by providing them with essential information to spread awareness and training among non-adopters.

1.6. Scope of the Research

Arabic student in Malaysia would be the respondents of the present study. Their perception about each variable of the acceptance model examined through the research model that proposes in this research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The general purpose of this study was to find out whether a relationship between perceived usefulness, perceived ease of use, perceive credibility and internet adaption. The concept of technology acceptance model as underpinning theory in this study would discuss in detail.

2.2 Technology Acceptance Model (TAM)

Understanding why people accept or reject new information or communication technology has been one of the most challenging issues in the study of new technologies (Swanson, 1988). Among the various efforts to understand the process of user acceptance of information systems, the Technology Acceptance Model (TAM) introduced by Davis (1986) is one of the most cited theoretical frameworks. The model aims not only to explain key factors of user acceptance of information systems but also to predict the relative importance of the various factors in the diffusion of technological systems (Davis, Bagozzi, & Warshaw, 1989). According to Davis, Bagozzi, and Warshaw (1989), the model is an attempt to derive "the determinants of computer acceptance that is general, capable of explaining user behavior across a broad range of end-user computing technologies and user populations, while at the same time trying to be parsimonious and theoretically justified".

The TAM is theoretically rooted in the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), which has been applied to predicting and explaining user behaviors across a wide variety of domains. According to the theory of reasoned action (TRA), a person's performance of a specified behavior is determined by his or her behavioral intention to perform the behavior, and behavioral intention is jointly determined by the person's attitude and subjective norm concerning the behavior in question (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Following the logic of the TRA, the TAM explores the factors that affect behavioral intention to use information or computer systems, and suggests a causal linkage between two key variables—*perceived usefulness* and *perceived ease of use*—and users' attitude, behavioral intention, and actual system adoption and use (Davis, 1986). **Perceived usefulness** is defined as "the prospective user's subjective probability that using a specific application system will increase his or her job performance within an organizational context," while **perceived ease of use** refers to "the degree to which the prospective user expects the target system to be free of effort" (Davis et al., 1989, p. 985).

In addition to these two main determinants, the TAM suggests that external factors can have significant effects on users' adoption as they are mediated through these two perceptions. TAM is a path model that identifies the impact of external factors such as system design characteristics, user characteristics, task

characteristics, nature of the development or implementation process, political influences, organizational structure, and so on (Ajzen & Fishbein, 1975). The TAM suggests that information system usage is determined by behavioral intention, which is viewed as being jointly determined by the user's attitude toward using the system and perceived usefulness (Davis et al., 1989). It is notable, however, that perceived ease of use has only an indirect effect on behavioral intention to use.

Although the original TAM suggested that "perceived ease of use operates through perceived usefulness" (Davis, 1989), some studies have questioned the variable's direct effect on actual use (e.g., Keil, Beranek, & Konsynski, 1995), and in fact some of the studies have proved that perceived ease of use could have a direct effect on actual system use (e.g., Gefen & Straub, 2000).

Since Davis' (1986) introduction of the model, many studies have been conducted applying it in a variety of information technology usage settings, testing its appropriateness and modifying it in different contexts. Past research on the TAM has largely focused on personal computer usage or relatively simple software applications such as e-mail, word processing programs, spreadsheet software, and the Windows operating system (e.g., Chau, 1996; Davis, 1993; Davis et al., 1989; Doll, Hendrickson, & Deng, 1998; Mathieson, 1991).

Recently, in line with the development of the Internet and Internet-based technologies, applications of the TAM have been made in the areas of: organizational contexts (e.g., Hu, Chau, Sheng, & Tam, 1999; Igbaria, Zinatelli, Cragg, & Cavaye, 1997; Venkatsh & Davis, 1996), e-commerce (e.g., Jiang, Hsu, & Klein, 2000), telemedicine (e.g., Chau & Hu, 2002; Karahanna, Straub, & Chervany, 1999), and digital library systems (e.g., Davies, 1997; Hong, Thong, Wong, & Tam, 2002; Thong, Hong, & Tam, 2002). These studies taken as a whole have concluded that the TAM is not only a powerful and parsimonious model for representing the determinants of system usage but also a valuable tool for system planning, since the system designers can have some degree of control over ease of use and usefulness (Taylor & Todd, 1995).

2.2.1 Perceived Usefulness

Perceived usefulness is defined here as "the degree to which a person believes that using a particular system would enhance his or her job performance". This follow from the definition of the word useful: "capable of being used advantageously". Within an organizational context, people are generally reinforced for good performance by raises, promotions, bonuses, and other rewards (Pfeffer, 1982; Schein, 1980; Vroom, 1964). A system high in perceived usefulness, in turn, is one for which a user believes in the existence of a positive use-performance relationship.

Davis et al. (1989) used TAM to explain user acceptance of information systems. The causal linkages between two key beliefs (perceived usefulness and perceived ease of use) and users' attitudes, intentions, and actual usage are founded on TRA. Behavioral intention may be defined as a measure of the strength of one's intention to perform a specific behavior (Fishbein & Ajzen, 1975); that is, use an information system. Petty, Cacioppo, and Schumann (1983) suggested that the argument for change must contain well-supported explicit facts to influence one's beliefs about the perceived usefulness of the system. The TAM model has been tested across a wide range of computer settings and has been shown to be a robust predictor of computer use Taylor & Todd, 1995; Venkatesh & Davis 2000).

2.2.2 Perceived Ease of Use

Perceived ease of use is defined as to which a person believes that using a particular system will be free of effort. Among the beliefs, perceived ease of use is hypothesized to be a predictor of perceived usefulness. Both types of beliefs are influenced by external variables e.g. computer self-efficacy.

There is a significant effect of perceived ease of use on usage intention, either directly or indirectly through its effect on perceived usefulness (Davis et al., 1989; Venkatesh, 1999, 2000; Venkatesh and Davis, 1996). In order to prevent the "under-used" useful system problem, Internet banking systems need to be both easy to learn and easy to use. ITs that are easy to use will be less threatening to the individual.

2.2.3. Perceived Credibility

Perceived credibility is defined as to which one partner believes that the other partner has the required expertise to perform the job effectively and reliably (Ganesan, 1994). This is to say that trust based on a partner's expertise and reliability focuses on the objective credibility of an exchange partner: expectancy that the word or written statement of the partner can be relied on (Lindskold, 1978).

Furthermore, threat has pushed many users to opt out of various forms of participation in the Internet (Hoffman et al., 1999). Perceived credibility refers to the two important dimensions – security and privacy.

1) **Security** - The protection of information or systems from unsanctioned intrusions or outflows.

2) **Privacy** - The protection of various types of data that are collected (with or without the knowledge of the users) during users' interactions with the Internet banking system.

2.3 Internet Adoption

The present study will examine Arabic students as faculty members affecting universities who utilize the Internet in their research and academic tasks. To provide a background for the topic, conducting a review of the related literature is vital for gaining insight into the situation of diffusion of Internet adoption among faculty members.

The present decade has been dubbed as the information age. While this concept is not a new phenomenon especially when viewed against its historical perspective, the revolution in Information Technology (IT), and particularly the internet, is exerting profound effects on information-based services. The future of universities greatly hinges on their ability to embrace and leverage the potentials of these emerging technologies at all levels of their business activities and strategies.

Universities that fail to do so stand to lose to others that do so. It has been noted that as users increasingly demand for advanced methods of data acquisition, manipulation, and application, they show active preference for universities with greater access to IT-based resources (Breen et al., 2001; Claudine, 1998). Considering projections that the internet will have even more pervasive effects on reengineering education in the coming future (Claudine, 1998), universities, and particularly their libraries, must take a more proactive response to these technologies.

The proliferation of new technologies opens a number of challenges for higher institutions of learning. Notable among these are those associated with the adoption and institutionalization of these emerging technologies in teaching, learning, and research. As a result, in the last few years, there have been many initiatives to enhance developing countries capacity to harness this technology in reshaping their educational sectors in ways that are consistent with current knowledge societies.

Since the discovery of the internet as a new communication medium it has became a part of the strategy of firms. The internet has been largely used in management: it works as an advertising medium for firms to include in their campaigns, as a distribution channel and as a source of information. Internet application to the development of diverse firm strategies is a practice that has come to be called e-commerce.

Basically, the internet added-value resides in its ability to contribute to cost reduction associated to communication and transaction (Boyd and Spekman, 2001; Porter, 2001; De Boer et al., 2002). The internet allows the access to a great amount of information with lower costs of time and money than those derived from the use of other tools (Boyle and Alwitt, 1999; Min and Galle, 1999; Avlonitis and Karayanni, 2000; Tang et al., 2001), both inside and outside the organization. Inside the firm, the development of the intranet can greatly facilitate the transmission of information among its members (Goles and Hirschheim, 2007; Osmonbekov et al., 2002).

The Internet has become the most common communication and research tool for most people worldwide. The attractive display of materials on the Internet motivates individuals to explore and use it in their daily lives. A quick look at the content on the World Wide Web gives a clear picture of the variety of information resources and communication applications it contains. These resources and

applications cover millions of multipurpose Web sites including images, sounds, and graphical user interfaces which allow users to interact positively with the contents. In addition, the Internet makes the publishing, access, retrieval, and distribution of information from resources not only possible but also easy for any user regardless of their location. Browner, Pulsford, and Sears (2000) attributed scholarly interest in the Internet to the following reasons:

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2. The Internet is immediately accessible, quite easy to search, and easier to use than the typical university library. For some kinds of information, the Internet is much the quickest route; for other kinds, which are on the increase, the Internet is the only source available. (p.158)

2.4 Perceived Ease of Use, Perceived Usefulness and Perceived Credibility toward Internet Adoption

The theoretical importance of perceived usefulness and perceived ease of use as determinants of diverse lines of research. The impact of perceived usefulness on internet adaption was suggested by the work of Schultz and Slevin (1975) and Robey (1979). Behavioral intention may be defined as a measure of the strength

of one's intention to perform a specific behavior (Fishbein & Ajzen, 1975, p. 288); that is, use an internet. Petty, Cacioppo, and Schumann (1983) suggested that the argument for change must contain well-supported explicit facts to influence one's beliefs about the perceived usefulness of the system. The TAM model has been tested across a wide range of computer settings and has been shown to be a robust predictor of computer use (Taylor & Todd, 1995; Venkatesh & Davis 2000).

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empowerment and individual cyberpower, defined as the effect of online activity on power (Alkalimat & Williams, 2000; Bier, Gallo, Nucklos, Sherblom & Pennick, 1997; Masi, Suarez-Balcazar, Cassey, Kinney & Piotrowski, 2003). For people to reap these benefits of the Internet requires access to a computer with Internet service and a conscious decision to adopt the technology.

CHAPTER 3

RESEARCH METODOLOGY

3.1 Introduction

This chapter discusses the research method employed in this study. Research method is defined as techniques that are used for conducting research such as in data collection, data analysis, and evaluation of the accuracy of the research results (Sekaran, 2003). The discussion proceeded with population of the study, sample of the study, data collection, questionnaire design, the measurement instrument, and measurements of validity and reliability of the questionnaire through a pilot test. The final part of this chapter discussed the statistical techniques used to analyze the data.

3.2 Research Design

This section describes the research methods used to test the hypothesis developed in the second chapter. The sampling procedure, data collection, questionnaire and data analysis will employ. Quantitative research method will employ to determine the interaction of variables in the research framework. The relationship and level of variable influence through survey method to the respondents will explain.

It is widely accepted that research is the collection of specified information according to prescribed procedures for a given objectives (Sekaran, 2003) and is guided by a set of beliefs and feelings. In the context of the present study, the objective was to investigate the relationship between perceived ease of use and perceived usefulness to behavior and also to examine factors that could influence the relationship.

This means that the present study was correlational in nature and therefore, a survey method was employed. The researcher strongly believed that survey method is the best option to obtain information on individual beliefs, feelings, and perceptions (Sekaran, 2003).

It is worth mentioning that survey is a research technique in which information is gathered from a sample of people using a questionnaire or interview (Hair et al., 2006) or a method of data collection based on communication with a representative sample of individuals (Zikmund, 2003). Moreover, a survey was employed because it provides quick, inexpensive, efficient, and accurate means of assessing information about the population (Zikmund, 2003). Furthermore, the survey as a primary data collecting approach does not require a visual or objective perception of the information sought (Hair et al., 2006). Descriptive survey design is most useful research method when researcher falls into the discussion of specific characteristics of existing phenomena to redefine problems and objectives within the primary data collection through a set of standardized or structured

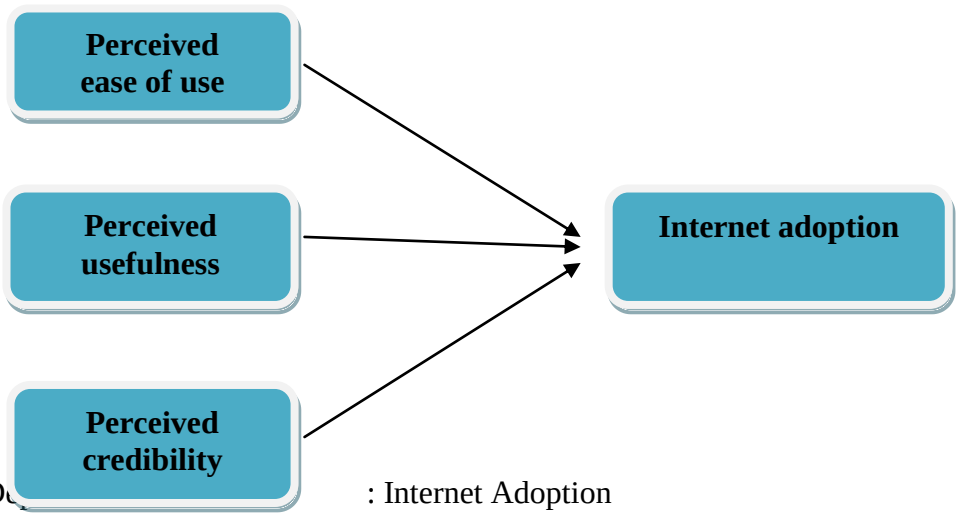
questions from the large population and quantitative analysis in nature (Hair et al., 2006).

According to Cohen (1988), studies may either in nature or descriptive, or may be conducted to test hypotheses. The quantitative study with survey research is undertaken when not much is known about the situation at hand, or no information is available on how similar problems or issues have been solved in the past. A descriptive study is undertaken in order to ascertain and to describe the characteristics of the variables of interest in a situation (Sekaran, 2000).

Studies that use hypotheses testing explain the nature of a relationship or the differences among groups or the independence of three factors in a situation. This study will use a combination of the three methods discussed, that is, survey, descriptive, and hypotheses –testing (Hair et, al., 1998).

3.3 Research Framework

Figure 3.1 Research Framework
Internet Adoption among Arabic Students in Malaysia



Dependent Variables : Internet Adoption

Independent Variables : Perceived Ease of Use

: Perceived Usefulness

: Perceived Credibility

3.4 Hypotheses

H1. *Perceived ease of use has an influence on behavior of internet adoption.*

H2. *Perceived usefulness has an influence on internet adoption*

H3. *Perceived credibility has an influence on internet adoption.*

H4. *Perceived ease of use, Perceived usefulness and Perceived Credibility has an influence on behavior of internet adoption*

3.5 Measurement of Variables

The variables in the questionnaire are categorized into the groups according to the theoretical framework of this research. The variables are measured in some ways that will be able to test the hypotheses; however, in attempt to reduce the scale bias, Likert kinds of scales are used to measure the dependent and independent variables (Sekaran, 2006).

A questionnaire using a seven-point scale was employed to collect the data for the constructs of the research model. Items from previous studies were modified for adaptation to the internet behavior context. The measure using a five-point Likert-scale ranging from “1” (strongly disagree) to “7” (strongly agree). Likert scales are by far the most common type of survey item, in which the usual response categories are "strongly agree," "agree," "neutral,", "disagree," and "strongly disagree."

These values are interval within any given Likert item but sets of Likert items are not necessarily ordinal with respect to each other (Hair et al., 2006). Sets of Likert items can be used to form indexes. Researcher also insists such sets pass the Cronbach's alpha or some other test of intercorrelation to confirmized all items in the research variables construct (Sekaran, 2003).

3.6 Population and Sample

The population is Arabic students in Malaysia as they expected to come from the various personal backgrounds, which may represent better sample distribution. To identify the sample, sample will be select based on the Stratified Random Sampling Technique as recommend from Sekaran (2000). The sample will select based on the above technique to represent every Arabic students in all universities in Malaysia. Some of our samples have been working in different sectors, and they are in Scholarships at the expense of their organizations, or leave for study.

3.7 Data Collection Technique

The observation made on the event that recorded in the form of Questionnaire, and choosing an appropriate study design with adequate sample sizes. Analyzing the data with appropriate methods and producing a final report that includes all the important details about the study (Sekaran, 2003). This study focuses on the relationship between perceived ease of use, perceived usefulness and user behavior to computerized information system.

The primary objective of this research is to test the research hypotheses, based upon the conceptual framework of this study. Questionnaire is designed and distributed to the sample of the research. This study used quantitative research approach and survey the user on computerized management information system acceptance. Questionnaire is designed and distributed to the sample of the research.

The questionnaire is serves as the primary data-gathering device for this research survey and has been developed accordingly to the problems and objectives of research by this researcher (Hair et al., 2006). The variable items in this questionnaire have been drawn up through the reviewing of the previous research studies or articles that related the behavior of user to the computerized information system.

To design the questionnaire and minimize the biases, this research has considered on three areas: first concerning is the wording of the questions, second is the planning of how the variables will be categorized, and third is referred to the general appearance of the questionnaire (Sekaran, 2003).

3.8 Data Analysis Technique

The statistical software SPSS was employ to ensure the relevant issues was examined in a comprehensive manner. Statistical tools and methods used where appropriate for analyzing the relationship among the variables and the model. Multivariate statistical analysis performed for the data analysis for this study. The final part of this chapter discusses on how data are analyzed, that is using descriptive statistics and inferential statistics. Finally, how analysis of data is performed using the Statistical Package for Social Sciences (SPSS) version 16.00.

3.9 Summary

This chapter has generally discussed how the study will be carried out. It has talked about the research framework, how the hypotheses are derived from the research framework, and the research design employed in this study. The chapter has also discussed on how sample are selected from the population using stratified random sampling. Also included in this chapter is discussion on data collection, specifically on how the questionnaire is designed, the instrument, and how the instrument has a measurement test to test for its validity and reliability.

CHAPTER 4

RESEARCH FINDINGS

4.1 Introduction

The findings are obtained from the statistical analysis using SPSS version 16.0. They are presented according to the proposed analysis techniques that are mentioned in chapter 3. All findings are linked with the research questions and objective.

4.2 Profiles of Respondents

Questionnaires were distributed to Arab students in Malaysia. Utilize the internet product of respondents were. Educational sector of the respondents was as follow; 3 (2%) diploma, 25 (16.9%) bachelor degrees, 91 (61.5%) master degree and 29 (19.6%) doctorate degree. There were 117 (79.1%) male and 31 (20.9%) female.

The category of applied accounting software were (1) 7 (17.5%) communication system, (2) 5 (12.5%) transactional system for accounting finance, marketing, (3) 4 (10%) decision support system for accounting, finance, marketing, (4) 21 (52.5%) enterprise system, (5) 1 (2.5%) interorganisational system and (6) 2 (5%)

other. The breakdown of respondents age was as follow (1) 28 (70%) 26-35 years, (2) 5 (12.5%) 46-55 years and (3) 7 (17.5%) above 56 years.

A total of respondents have professional qualification 22 (55%) and the rest do not have professional qualification. 37 (97%) respondents involve in audit service and the rest involve in other services. Table 4.1 summarizes the above information in details.

Table 4.1: Profiles of Respondents (N=148)

Variable	Frequency	Percent
Internet Product:		
Electronic mail	75	50.7
Document transferring	26	17.6
Financial: paying bills, salaries, invoicing, etc	20	13.5
Marketing	15	10.1
Submitting tenders to customers	6	4.1
Making order information available to customers	3	2.0
Voice/Audio communication (VOIP)	3	2.0
Education Sector:		
Manufacturing	6	4.1
Retail Government	39	26.4
Public Services	12	8.1
Banking/Finance	22	14.9
Insurance	12	8.1
Construction	20	13.5
Health/Pharmaceutical	11	7.4
Education Services/IT Education services	3	2.0
Other	23	15.5
Gender:		
Male	117	79.1
Female	31	20.9

Applications use for study:		
Desktop suites (e.g. Word processing,	77	52.0
productivity)	17	11.5
Communication systems (e.g. groupware, e-mail)	12	8.1
Transactional systems for accounting finance, marketing, etc.	17	11.5
Decision support systems for accounting, finance, marketing, etc.	4	2.7
Interorganisational Information systems (EDI, Electronic Education)	21	14.2
Other		
Education Background:		
Diploma	3	2.0
Bachelor Degree	25	16.9
Master Degree	91	61.5
PhD Degree	29	19.6
Spending of Capital in your Education:		
≤RM500	3	2
>RM500–1000	2	1.4
>RM1000–2000	92	62.2
>RM2000–5000	44	29.7
>RM5000–10000	7	4.7

By obtaining the above results, this research achieves the first objective of this research that is to understand demographic information of the respondents. The next section will discuss how the second and third objectives are achieved.

4.3 Reliability Result

The researcher undertook reliability analysis to assess the dimensionality of the measurement scale. Only items with a high factor loading and no cross loading greater than 0.70 were retained. Reliability scale was assessed in term of items-to-total correlation and Cronbach's alpha to determine internal consistency of the measurement scale. Table 4.1, 4.2, 4.3 and 4.4 highlight reliability statistics of perceived ease of use, perceived usefulness, perceived credibility and internet adoption respectively.

Table 4.2: Reliability Statistic of Perceived Ease of Use (N=148)

Item	Cronbach's Alpha
PU1	.948
PU2	.938
PU3	.945
PU4	.935
PU5	.936
PU6	.940
Perceived Ease of Use	**.950**

Table 4.3: Reliability Statistic of Perceived Usefulness (N=148)

Item	Cronbach's Alpha
EOU1	.870
EOU2	.881
EOU3	.884
EOU4	.874
EOU5	.892
EOU6	.898
Perceived Usefulness	**.901**

Table 4.4: Reliability Statistic of Perceived Credibility (N=148)

Item	Cronbach's Alpha
CRE1	.905
CRE2	.849
CRE3	.828
CRE4	.830
CRE5	.840
CRE5	.876
CRE6	.905
Perceived Credibility	**.878**

Table 4.5: Reliability Statistic of Internet Adoption (N=148)

Item	Cronbach's Alpha
ATT1	.647
ATT2	.670
ATT3	.660
ATT4	.665
ATT5	.765
ATT6	.695
ATT7	.639
ATT8	.721
Internet Adoption	**.714**

Tables 4.2, 4.3, 4.4 and, 4.5 indicate that the items in each construct can be considered as internally consistent (Sekaran, 2003). This is evident from a high level of coefficient alphas ranging from 0.91 to 0.95, which are exceeding the acceptable level of 0.70 (Cohen, 1988) in all cases. Therefore, all measures were considered reliable for hypothesis testing among independent and dependent variables.

4.4 Correlations among Variables

Correlation test was used for inferential statistics. In this case, Pearson correlation was used to measure the significance of linear bivariate between independent and dependent variables; thereby, achieving the objectives of this studies (Sekaran, 2003). Variable association refers to a wide variety of coefficients which measure

the strength of a relationship. Correlation is a bivariate measure of association (strength) of the relationship between two variables. It varies from 0 (random relationship) to 1 (perfect linear relationship) or -1 (perfect negative linear relationship). It is usually reported in terms of its square (r^2), interpreted as percent of variance explained (Hair et al., 2006).

Table 4.6 shows that perceived usefulness were significantly correlated in a strong positive correlation (0.90) whereas, perceived ease of use variables were significantly correlated in a strong positive correlation (0.94) and perceived credibility were significantly correlated in a strong positive correlation (0.95).

Pearson correlation among independent variables and dependent variable was confirmed the direct positive relationship among independent as predictors to the dependent variable. Results of the correlation analysis confirmed the highest association (P = 0.955) between internet adoption and perceived credibility. Perceived usefulness and perceived ease of use also ranging in the high relationship with internet adoption. Detail of the relationship among variables determine in positive correlation (Table 4.6).

Table 4.6 Correlations among Variables

		Usefulness	Ease of Use	Credibility	Internet Adoption
Usefulness	Pearson Correlation	1	.870**	.822**	.900**
	Sig. (2-tailed)		.000	.000	.000
	N	148	148	148	148
Ease of Use	Pearson Correlation	.870**	1	.948**	.949**
	Sig. (2-tailed)	.000		.000	.000
	N	148	148	148	148
Credibility	Pearson Correlation	.822**	.948**	1	.955**
	Sig. (2-tailed)	.000	.000		.000
	N	148	148	148	148
Internet Adoption	Pearson Correlation	.900**	.949**	.955**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	148	148	148	148

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

4.5 Descriptive Frequency of Variables

Descriptive statistics such as mean and percentage were used to measure the percentage of variables and to describe the mean of independent and dependent variables. Table 4.7 illustrates that the mean for internet adoption is 4.46, perceived usefulness is 4.67, perceived ease of use 4.71 and perceived credibility is 4.62.

Table 4.7: Descriptive Statistics of Variables

	Variable Name	No of Items	Mean	Std. Dev
Y1	Internet Adoption	8	4.4673	1.10394
X1	Perceived Usefulness	6	4.6745	1.01581
X2	Perceived Ease of Use	6	4.7117	1.00933
X3	Perceived Credibility	6	4.6267	1.04083
	Total			

Table 4.8 shows the means, standard deviations based on education background of Arab students in Malaysia in adopt internet.

Table 4.8: Descriptive Statistic of Education Background

Measure	Education Background	N	Mean	Std. Dev
Usefulness	Diploma	3	3.3889	.34694
	Bachelor Degree	25	4.6600	1.11646
	Master Degree	91	4.4634	1.12431
	Doctoral Degree	29	4.4253	1.10394
Ease of Use	Diploma	3	4.1667	1.04083
	Bachelor Degree	25	4.9000	.94035
	Master Degree	91	4.6172	1.02304
	Doctoral Degree	29	4.6745	1.01581
Credibility	Diploma	3	4.5000	1.60728
	Bachelor Degree	25	4.8400	.93105
	Master Degree	91	4.6282	.99693
	Doctoral Degree	29	4.8851	1.07377

4.6 Results of Hypothesis Testing

4.6.1 Hypothesis 1: There is Relationship between Internet Adoption and Perceived Ease of Use

Pearson's ($r^{2)}$ is the percent of variance in the dependent explained by the given independent when (unlike the beta weights) all other independents are allowed to vary. The result is that the magnitude of r^2 reflects not only the unique covariance it shares with the dependent, but uncontrolled effects on the dependent attributable to covariance the given independent shares with other independents in the model. A rule of thumb is that multicollinearity may be a problem if a correlation is > .90 or several are >.7 in the correlation matrix formed by all the independents.

Table 4.9 Correlation between Internet Adoption and Perceived Ease of Use

		Internet Adoption	Perceived Ease of Use
Internet Adoption	Pearson Correlation	1	.949**
	Sig. (2-tailed)		.000
	N	148	148

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

Table 4.9 shows that internet adoption and perceived ease of use variables were significantly correlated in the strong positive correlation (0.949).

Table 4.10 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.949[a]	.901	.901	.32794	.901	1334.768	1	146	.000

a. Predictors: (Constant), Internet Adoption

R^2 is 0.90, therefore 90% of the cases will be correctly predicted by the regression equation and 10% not. **R^2**, also called *multiple correlations* or the *coefficient of multiple determinations*, is the percent of the variance in the dependent explained uniquely or jointly by the independents. R-squared can also be interpreted as the proportionate reduction in error in estimating the dependent when knowing the independents**.**

Table 4.11 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.548	1	143.548	1334.768	.000[a]
	Residual	15.702	146	.108		
	Total	159.250	147			

a. Predictors: (Constant), Perceived Ease of Use

b. Dependent Variable: Internet Adoption

Table 4.12 Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	.079	.127		.622	.535					
Ease of Use	.973	.027	.949	36.534	.000	.949	.949	.949	1.000	1.000

a. Dependent Variable: Internet Adoption

Linear regression was conducted to identify how ease of use can influence internet adoption. The results (table 4.10) were statistically significant F (1, 14) = 1334.768, p< 0.000. The identified equation in table 4.11 to understand the relationship was: *Internet Adoption = 0.079 + 0.973 Ease of Use + ε.* The adjusted R squared value was 0.90. This indicates that 90 % of the variance in career commitment was explained by the ease of use variable **(Hypothesis 1 Accepted).**

4.6.2 Hypothesis 2: There is Relationship between Internet Adoption and Perceived Usefulness

Table 4.13 Correlation between Internet Adoption and Perceived Usefulness

		Internet Adoption	Perceived Usefulness
Internet Adoption	Pearson Correlation	1	.900**
	Sig. (2-tailed)		.000
	N	148	150

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

Table 4.13 shows that internet adoption and usefulness variables were significantly correlated in the strong positive correlation (0.90).

Table 4.14 Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.900[a]	.809	.808	.45613	.809	619.432	1	146	.000

a. Predictors: (Constant), Perceived Usefulness

R^2 is 0.80, therefore 80% of the cases will be correctly predicted by the regression equation and 20% not. **R^2**, also called *multiple correlations* or the *coefficient of multiple determinations,* is the percent of the variance in the dependent explained uniquely or jointly by the independents. R-squared can also be interpreted as the

proportionate reduction in error in estimating the dependent when knowing the independents**.**

Table 4.15 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	128.874	1	128.874	619.432	.000[a]
	Residual	30.376	146	.208		
	Total	159.250	147			

a. Predictors: (Constant), Perceived Usefulness

b. Dependent Variable: Internet Adoption

Table 4.16 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.838	.157		5.343	.000					
	Usefulness	.848	.034	.900	24.888	.000	.900	.900	.900	1.000	1.000

a. Dependent Variable: Internet Adoption

Linear regression was conducted to identify how usefulness can influence internet adoption. The results (table 4.14) were statistically significant F (1, 12) = 619.432, p< 0.000. The identified equation in table 4.15 to understand the relationship was:

Internet Adoption = 0.838 + 0.848 Usefulness + ε. The adjusted R squared value was 0.90. This indicates that 90 % of the variance in career commitment was explained by the usefulness variable **(Hypothesis 2Accepted).**

4.6.3 Hypothesis 3: There is Relationship between Internet Adoption and Perceived Credibility

Table 4.17 Correlation between Internet Adoption and Perceived Credibility

		Internet Adoption	Perceived Credibility
Internet Adoption	Pearson Correlation	1	.955**
	Sig. (2-tailed)		.000
	N	150	150

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

Table 4.17 shows that career commitment and job characteristic variables were significantly correlated in the strong positive correlation (0.955).

Table 4.18 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.955[a]	.912	.911	.31004	.912	1510.712	1	146	.000

a. Predictors: (Constant), credibility

R^2 is 0.91, therefore 91% of the cases will be correctly predicted by the regression equation and 9% not. **R^2**, also called *multiple correlations* or the *coefficient of multiple determinations*, is the percent of the variance in the dependent explained uniquely or jointly by the independents. R-squared can also be interpreted as the proportionate reduction in error in estimating the dependent when knowing the independents

Table 4.19 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	145.215	1	145.215	1510.712	.000[a]
	Residual	14.034	146	.096		
	Total	159.250	147			

a. Predictors: (Constant), Credibility

b. Dependent Variable: Internet Adoption

Table 4.20 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.013	.122		-.107	.915					
	Perceived Credibility	.985	.025	.955	38.868	.000	.955	.955	.955	1.000	1.000

a. Dependent Variable: Internet Adoption

Linear regression was conducted to identify how job characteristic can influence career commitment. The results (table 4.19) were statistically significant F (1, 14) = 1510.712, p< 0.000. The identified equation in table 4.16 to understand the relationship was: *Internet Adoption = -0.013 + 0.985 Perceived Credibility + ε.* The adjusted R squared value was 0.91. This indicates that 91 % of the variance in internet adoption was explained by the perceived credibility variable **(Hypothesis 3 Accepted).**

4.6.4 Hypothesis 4: There is Relationship between Internet Adoption and Perceived Ease of Use, Perceived Usefulness and Perceived Credibility

Using **multiple regression** (table 4.21), one can see how most variance in the dependent can be explained by one or a set of new independent variables, over and above that explained by an earlier set. Of course, the estimates (b coefficients

and constant) can be used to construct a prediction equation and generate predicted scores on a variable for further analysis.

Table 4.21 Model Summary of Multiple Regressions

				Std. Error	Change Statistics				
Model	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.949[a]	.901	.901	.32794	.901	1334.768	1	146	.000
2	.900[b]	.809	.808	.45613	.809	619.432	1	146	.000
3	.955[c]	.912	.911	.31004	.912	1510.712	1	146	.000
4	.977[a]	.954	.953	.22462	.954	1004.110	3	144	.000

a. Predictors: (Constant), Perceived Ease of Use
b. Predictors: (Constant), Perceived Usefulness
c. Predictors: (Constant), Perceived Credibility
d. Predictors: (Constant), Perceived Ease of Use , Perceived Usefulness ,Perceived Credibility

Presented in table 4.21 suggest that the combination of ease of use, usefulness and credibility contribute most predicting internet adoption. The adjusted /r squared value was 0.95; this indicates that 95% of the variance in internet adoption was explained by the model **(Hypothesis 4 Accepted).**

Table 4.22 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	151.984	3	50.661	1004.110	.000[a]
	Residual	7.265	144	.050		
	Total	159.250	147			

a. Predictors: (Constant), CRE, PU, EOU

b. Dependent Variable: IA

Multiple regressions (table 4.22) were conducted to determine the best linier combination of compensation, training and development, job characteristic, supervisor support and promotion for predicting career commitment. The combination of independent variables significantly predicted career commitment, F (3.14) = 1004.110, p< 0.000, with all three independent variables significantly contributing to the prediction.

Table 4.23 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.109	.089		-1.229	.221					
	Ease of Use	.159	.067	.155	2.389	.018	.949	.195	.043	.075	13.303
	Usefulness	.293	.034	.311	8.606	.000	.900	.583	.153	.243	4.113
	Credibility	.570	.058	.553	9.837	.000	.955	.634	.175	.100	9.960

a. Dependent Variable:
Internet Adoption

The identified equation in table 4.23 to understand the relationship was: ***Internet Adoption = -0.109 + 0.159 Ease of Use + 0.570 Credibility+ ε.***

4.7 Summary

This chapter discusses the findings of this research. The findings are obtained from descriptive, linear regression and multiple regression analyses. The reliability of variables and measurement is also provided. Each finding is linked with research questions and objectives. Being discussed the findings of this research but not their relationship with the practical setting, the next chapter will discuss the finding from the practical perspective.

CHAPTER 5

DISCUSSIONS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Discussions

The questionnaire sees a complete picture of the way different things are connected, what to focus on and measure, together with direction and clarity. The TAM variables (ease of use, usefulness and credibility) of representation in used seems to look up the capacity to make things appear to be connected, making a kind of wholeness or optimum solution. It seems to generate a perceived relevance to UUM.

The result of correlation, the regression and multiple regressions in assessing the variables or the empirical relationship between ease of use, usefulness and credibility contribute were positively related to internet adoption as hypothesized. The positive association between independent variables eases of use, usefulness and credibility to the internet adoption of student was supported.

Furthermore, the significant positive relationships between perceived ease of use, perceived usefulness, perceived credibility and internet adoption offer a clear indication of the importance of features to one feeling about the system and one's intention to use the system. The result of correlation, linear regression and multiple regressions in assessing the variables or the empirical relationship between perceived ease of use and perceived usefulness contribute were positively

related to behavior as hypothesized. The positive association among all independent variables to dependent variable (adj. r^2=95%) was supported.

The main objectives of this study to investigate the relationship between perceived ease of use and perceived usefulness to behavior intention were achieved. Perceived ease of use (adj. r^2=90%), perceived usefulness (adj. r^2=91%) and perceived credibility (adj.$r^{2=}$95%) has a significant positive direct influence to internet adoption. These changes include the independent variables as the predictors in the research framework. At the end, it found answer to all research questions and research objectives and found evident to all hypotheses formulated. This study confirmed the influence of between perceived ease of use, perceived usefulness, and perceived credibility to internet adoption.

5.2 Limitation of Study

As with any study, the findings obtained in the thesis display some shortcomings, these limitations need to be recognized when interpreting the findings of this thesis while also recognizing the opportunities they present for further research. The sample that was employed in this thesis has limited generalizability because of the sampling plan used since the questionnaire distribution was conducted only at four universities in Malaysia.

5.3 Recommendation

Previous studies found individual characteristics (e.g gender) influence consumers' information processing (e.g Meyers – Levy and Maheswaran, 1991), technology decisions (e.g Davis *et al*., 1989; Vankatesh *et al*., 2005). By investigating the moderating role of individual characteristics, future research is expected to provide more insightful guidelines to consumer research as well as practitioners.

5.4 Conclusion

The internet is one of the more recent developments in communication and information transfer. It is considered a technology asset because of its ability to disseminate large volume of information quickly and efficiently to all types of stakeholders, including employees, costumer, stakeholders and student (Violino, 2006).

As the conclusion, the present study confirmed that perceived ease of use, perceived usefulness and credibility with internet has a direct positive influence to user adoption. Lecturer, staff and student are in the right position to run every movement related to the improvement of the system. Academic and management system are main items in the performance. The acceptance level of user will influence the success of the system. The present study confirmed that through the survey to user directly has an effect to their knowledge improvement. Overall, each level in college has an active interaction with system and this is shows a dynamic performance.

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APPENDIX 1:
QUESTIONNAIRE

Internet Adoption among Arabic Students in Malaysia

Dear Respondents,

I would appreciate if you could spare some time and thought in completing the survey questionnaires. I hope that you would co-operate in completing the questionnaire with the best of your ability.

This questionnaire consists of two part/section. Part one consists of questions about your demographic profile; continue with part two about the internet adoption among international postgraduate Students. Your response will be treated as confidential and used for research purposes only. There is no right or wrong answer.

Thank you for your willingness to participate in this study.

You're sincerely,

Ahmed Mukt Abdhamid Abusef

SECTION A : Respondent Profiles

(This section intends to get information the respondents' demographic background).

(Tick the box which answers is best describing you).

A. ***What does your study utilize the Internet product for?***

1. Electronic mail
2. Document transferring
3. Financial: paying bills, salaries, invoicing, etc.
4. Marketing
5. Submitting tenders to customers
6. Purchasing raw materials, books, journals, supplies, etc.
7. Making order information available to customers
8. Interaction with government
9. Voice/Audio communication (VOIP)
10. Video conferencing

B. ***Your Education sector?***

1. Manufacturing
2. Retail Government
3. Public Services
4. Banking/Finance
5. Insurance
6. Construction
7. Health/Pharmaceutical
8. Education Services/IT Education services
9. Other

C. ***Your Gender?***

1. Male
2. Female

F. ***What level of applications is you use for your study?***

1. Desktop suites (e.g. Word processing, productivity)
2. Communication systems (e.g. groupware, e-mail)
3. Transactional systems for accounting finance, marketing, etc.
4. Decision support systems for accounting, finance, marketing, etc.
5. Enterprise systems (ERP, CRM)
6. Interorganisational Information systems (EDI, Electronic Education)
7. Other

H. ***Please state your age?***…….

I. Your Education Background?

a. High School
b. Diploma
c. Bachelor Degree
d. Master Degree
e. Doctoral Degree

K. Please tick on the blank space to identify the spending of capital in your Education:

1. ≤RM500
2. >RM500–1000
3. >RM1000–2000
4. >RM2000–5000
5. >RM5000–10000

Perceived Ease of Use

Code	To what extend do you believe the following statements are valid in your Education	Strongly Disagree	Slightly Disagree	Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
EOU 1	Learning to utilize internet would be easy for me	1	2	3	4	5	6	7
EOU 2	I would find it easy to use internet to obtain decision-making information	1	2	3	4	5	6	7
EOU 3	My interaction with the internet was clear and understandable	1	2	3	4	5	6	7
EOU 4	I found the internet to be flexible to interact with	1	2	3	4	5	6	7
EOU 5	It would be easy for me to become skillful at using internet.	1	2	3	4	5	6	7
EOU 6	I found the internet easy to use	1	2	3	4	5	6	7

Perceived Usefulness

Code	To what extend do you believe the following statements are valid in your Education	Strongly Disagree	Slightly Disagree	Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
PU1	Using the internet in my study would enable me to accomplish tasks more quickly.	1	2	3	4	5	6	7
PU2	Using internet would improve my study performance	1	2	3	4	5	6	7
PU3	Using internet would increase my productivity	1	2	3	4	5	6	7
PU4	Using internet would enhance my effectiveness on the study	1	2	3	4	5	6	7
PU5	Using internet would make it easier to do my study	1	2	3	4	5	6	7
PU6	I would find internet useful in my study	1	2	3	4	5	6	7

Perceived Credibility

Code	To what extend do you believe the following statements are valid in your Education	Strongly Disagree	Slightly Disagree	Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
CRE1	Internet has privacy	1	2	3	4	5	6	7
CRE2	I feel confident in my activities with internet	1	2	3	4	5	6	7
CRE3	When using internet, I am sure that certain managerial and technical procedures exist to secure all the data on this system	1	2	3	4	5	6	7
CRE4	Internet has a good security system	1	2	3	4	5	6	7
CRE5	I feel safe in my transactions with internet	1	2	3	4	5	6	7
CRE6	When using internet, I am sure of the consistency of information processing on this system.	1	2	3	4	5	6	7

Internet Adoption

Code	To what extend do you believe the following statements are valid in your Education	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Agree	Strongly Agree
IA1	The internet now day is prominent strategy	1	2	3	4	5	6	7
IA2	The internet is safe	1	2	3	4	5	6	7
IA3	The internet saving cost and time	1	2	3	4	5	6	7
IA4	The internet applications supporting the education processes	1	2	3	4	5	6	7
IA5	How much would you say your earn of your Education through internet each month?	*Nothing*	*Less that RM500*	*RM500 to RM1000*	*RM 1000 to RM 2500*	*RM 2500 to RM 5000*	*RM 5000 to RM 10000*	*More than RM 10000*
		1	2	3	4	5	6	
IA6	I have been using internet for:	*Less than 6 month*	*6 month to 12 month*	*1 to 3 years*	*3 – 5 years*	*5 - 7 years*	*7 – 10 years*	*More than 10 years*
		1	2	3	4	5	6	7
IA7	How many days in a week you use internet?	None	1 day	3 days	4 days	5days	6 days	Everyday
		1	2	3	4	5	6	7
IA8	How many types of transaction you frequently Using internet services in a month?	None	Less than 5	6 to 10 times	11 to 50 times	51 to 100 times	101 to 150 times	More than 150 times
		1	2	3	4	5	6	7

APPENDIX 2:
STATISTICAL DATA ANALYSIS RESULTS

A

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Electronic mail	75	50.7	50.7	50.7
	Document transferring	26	17.6	17.6	68.2
	Financial: paying bills, salaries, invoicing, etc	20	13.5	13.5	81.8
	Marketing	15	10.1	10.1	91.9
	Submitting tenders to customers	6	4.1	4.1	95.9
	Making order information available to customers	3	2.0	2.0	98.0
	Voice/Audio communication (VOIP)	3	2.0	2.0	100.0
	Total	148	100.0	100.0	

B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manufacturing	6	4.1	4.1	4.1
	Management	39	26.4	26.4	30.4
	Public Services	12	8.1	8.1	38.5
	Banking/Finance	22	14.9	14.9	53.4
	Physic/Chemistry	12	8.1	8.1	61.5
	Construction	20	13.5	13.5	75.0
	Health/Pharmaceutical	11	7.4	7.4	82.4
	Education/IT	3	2.0	2.0	84.5
	Other	23	15.5	15.5	100.0
	Total	148	100.0	100.0	

C

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	117	79.1	79.1	79.1
	Female	31	20.9	20.9	100.0
	Total	148	100.0	100.0	

D

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Desktop suites (e.g. word processing, productivity)	77	52.0	52.0	52.0
	Communication systems (e.g. groupware, e-mail)	17	11.5	11.5	63.5
	Transactional systems for accounting finance, marketing, etc	12	8.1	8.1	71.6
	Decision support systems for accounting, finance, marketing, etc	17	11.5	11.5	83.1
	Interorganizational Information systems (EDI, Electronic Education)	4	2.7	2.7	85.8
	Other	21	14.2	14.2	100.0
	Total	148	100.0	100.0	

E

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 - 25 years	49	33.1	33.1	33.1
	26 - 30 years	49	33.1	33.1	66.2
	31 - 35 years	44	29.7	29.7	95.9
	36 - 40 years	6	4.1	4.1	100.0
	Total	148	100.0	100.0	

F

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	3	2.0	2.0	2.0
	Bachelor Degree	25	16.9	16.9	18.9
	Master Degree	91	61.5	61.5	80.4
	Doctoral Degree	29	19.6	19.6	100.0
	Total	148	100.0	100.0	

G

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< RM500	3	2.0	2.0	2.0
	> RM500 - RM1000	2	1.4	1.4	3.4
	> RM1000 - RM2000	92	62.2	62.2	65.5
	> RM2000 - RM5000	44	29.7	29.7	95.3
	> RM5000 - RM10000	7	4.7	4.7	100.0
	Total	148	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PU	148	1.00	6.50	4.4673	1.10394
EOU	148	2.50	7.00	4.6745	1.01581
CRE	148	2.50	7.00	4.7117	1.00933
IA	148	1.75	7.00	4.6267	1.04083
Valid N (listwise)	148				

Correlations

		PU	EOU	CRE	IA
PU	Pearson Correlation	1.000	.870**	.822**	.900**
	Sig. (2-tailed)		.000	.000	.000
	N	148.000	148	148	148
EOU	Pearson Correlation	.870**	1.000	.948**	.949**
	Sig. (2-tailed)	.000		.000	.000
	N	148	148.000	148	148
CRE	Pearson Correlation	.822**	.948**	1.000	.955**
	Sig. (2-tailed)	.000	.000		.000
	N	148	148	148.000	148
IA	Pearson Correlation	.900**	.949**	.955**	1.000
	Sig. (2-tailed)	.000	.000	.000	
	N	148	148	148	148.000

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

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.949[a]	.901	.901	.32794	.901	1334.768	1	146	.000

a. Predictors: (Constant), EOU

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	143.548	1	143.548	1334.768	.000[a]
	Residual	15.702	146	.108		
	Total	159.250	147			

a. Predictors: (Constant), EOU

b. Dependent Variable: IA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.079	.127		.622	.535					
	EOU	.973	.027	.949	36.534	.000	.949	.949	.949	1.000	1.000

a. Dependent Variable: IA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.900[a]	.809	.808	.45613	.809	619.432	1	146	.000

a. Predictors: (Constant), PU

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	128.874	1	128.874	619.432	.000[a]
	Residual	30.376	146	.208		
	Total	159.250	147			

a. Predictors: (Constant), PU

b. Dependent Variable: IA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.838	.157		5.343	.000					
	PU	.848	.034	.900	24.888	.000	.900	.900	.900	1.000	1.000

a. Dependent Variable: IA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.955[a]	.912	.911	.31004	.912	1510.712	1	146	.000

a. Predictors: (Constant), CRE

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	145.215	1	145.215	1510.712	.000[a]
	Residual	14.034	146	.096		
	Total	159.250	147			

a. Predictors: (Constant), CRE

b. Dependent Variable: IA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.013	.122		-.107	.915					
	CRE	.985	.025	.955	38.868	.000	.955	.955	.955	1.000	1.000

a. Dependent Variable: IA

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.977[a]	.954	.953	.22462	.954	1004.110	3	144	.000

a. Predictors: (Constant), CRE, PU, EOU

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	151.984	3	50.661	1004.110	.000[a]
	Residual	7.265	144	.050		
	Total	159.250	147			

a. Predictors: (Constant), CRE, PU, EOU

b. Dependent Variable: IA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-.109	.089		-1.229	.221					
	PU	.293	.034	.311	8.606	.000	.900	.583	.153	.243	4.113
	EOU	.159	.067	.155	2.389	.018	.949	.195	.043	.075	13.303
	CRE	.570	.058	.553	9.837	.000	.955	.634	.175	.100	9.960

a. Dependent Variable: IA

Reliability Statistics

Cronbach's Alpha	N of Items
.884	6

Item Statistics

	Mean	Std. Deviation	N
EOU1	4.74	1.285	148
EOU2	4.82	1.299	148
EOU3	4.67	1.214	148
EOU4	4.34	1.307	148
EOU5	4.61	1.226	148
EOU6	4.87	1.326	148

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EOU1	23.31	25.808	.742	.856
EOU2	23.23	26.083	.707	.862
EOU3	23.38	27.203	.669	.868
EOU4	23.71	26.670	.650	.871
EOU5	23.43	27.077	.671	.868
EOU6	23.18	25.534	.735	.857

Reliability Statistics

Cronbach's Alpha	N of Items
.907	6

Item Statistics

	Mean	Std. Deviation	N
PU1	4.38	1.392	148
PU2	4.35	1.423	148
PU3	4.37	1.295	148
PU4	4.34	1.308	148
PU5	4.58	1.245	148
PU6	4.78	1.344	148

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PU1	22.43	31.443	.672	.901
PU2	22.45	29.311	.814	.880
PU3	22.43	31.023	.774	.886
PU4	22.46	30.549	.803	.882
PU5	22.22	31.753	.753	.889
PU6	22.03	32.122	.653	.904

Reliability Statistics

Cronbach's Alpha	N of Items
.882	6

Item Statistics

	Mean	Std. Deviation	N
CRE1	4.80	1.292	148
CRE2	4.70	1.205	148
CRE3	4.44	1.346	148
CRE4	4.71	1.252	148
CRE5	4.82	1.289	148
CRE6	4.80	1.249	148

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CRE1	23.47	25.951	.688	.862
CRE2	23.57	26.926	.664	.866
CRE3	23.83	25.760	.666	.866
CRE4	23.56	25.826	.729	.855
CRE5	23.45	25.338	.746	.852
CRE6	23.47	26.618	.659	.867

Reliability Statistics

Cronbach's Alpha	N of Items
.915	8

Item Statistics

	Mean	Std. Deviation	N
IA1	4.43	1.341	148
IA2	4.61	1.313	148
IA3	4.85	1.327	148
IA4	4.76	1.292	148
IA5	4.70	1.280	148
IA6	4.62	1.231	148
IA7	4.49	1.412	148
IA8	4.56	1.321	148

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
IA1	32.59	52.244	.789	.898
IA2	32.41	52.569	.790	.898
IA3	32.16	52.967	.756	.901
IA4	32.26	54.260	.704	.905
IA5	32.31	54.923	.673	.907
IA6	32.39	55.927	.646	.910
IA7	32.53	52.156	.745	.902
IA8	32.45	54.794	.654	.909