Chapter 1:

Introduction

1.1 Introduction

Today's world is world of technology. Everyday a new technology is introduced that can assist people in order to do their daily works easily and finally increase the quality of their life. These new technologies help their users in different aspects of their life, by saving time, doing works faster and better with lower level of error. The rapid development of information technology has brought unprecedented influence on the life of millions of people around the globe. Various activities were handled electronically through the adoption of IT in the workplace or at home, for example, e-mail, ecommerce and e-government (Guriting and Ndubisi, 2006). One of these technologies that effects most people around the world is Internet, which was born in the last years of 20 century and rapidly broke boundaries, time and place. It brought more easily communication ways from usual daily activities to high level official activities. Online shopping and paying is a symbol of developing internet technology. People can stay at home, be at their work place, or their car or any other place, and order their food, clothes, shoes and pay online and receive their orders without spending time for going to the shopping center or finding parking .so online paying helped its users saved their time and their money. Next generation of online paying is internet banking, which means doing transactions online without going to the bank, staying in long queues, and without direct face-to-face interacting.

The terms of PC banking, online banking, Internet banking, and mobile banking refer to a number of ways in which customers can access their banks

without having to be physically present at a bank branch. PC Banking relates to every banking business transacted from a customer's PC. This can be done through online banking, in which bank transactions are conducted within a closed network, or via Internet banking, which permits the customer to perform transactions from any terminal with access to the Internet. Mobile banking is the implementation of banking and trading transactions using an Internet-enabled wireless device. (Mobile phones, PDAs, handheld computers, etc.). Thus mobile banking (m-banking) is a subset of Internet banking, I banking, (Hazell and Raphael, 2001)

The banking industry is using the new communication media to offer its services to the customers with convenience. Using Internet banking and its nearest technology, mobile banking, is increased during these years around the world. Malaysian penetration of Internet banking and mobile banking, as the base infrastructure for this paper, is mentioned as below:

	Internet banking				Mobile banking			
as at end of period	2006	2007	2008	1Q 09	2006	2007	2008	1Q 09
No. of individual subscribers (million)	3.2	4.6	6.2	6.4	0.2	0.3	0.5	0.6
Penetration of subscribers to population (%)	11.9	16.6	21.8	22.7	0.9	1.3	1.9	2.1
Penetration of internet banking/mobile banking								
Subscribers to Internet/mobile subscribers (%)	67.8	89.8	100.8	101.9	1.3	1.5	2.0	2.1

Table1.1

Source: Bank Negara Malaysia, Department of Statistics, Malaysia

In all five continents, penetration of internet and mobile banking are rapidly increasing. Especially in most developed countries, trend of internet banking is increasing, also using mobile banking, is increasing. Most of Europe has embraced GSM (Global System for Mobile Communications) as a format for wireless technology. This more standardized wireless telecommunications infrastructure has yielded a higher level of acceptance and penetration, which has led to speculation that Europe will drive innovations in wireless communications, this technology can use to do both internet banking and mobile banking. Although still need time to adapt the mobile banking. In most countries this service is available but Because of its price and some uncertainty about its security, mobile banking is not popular yet. North America represents the flip side of the European situation. Wireless communications, though far from rare, lag behind Europe's penetration levels, while participation in the wired Internet is the highest in the world. The North American wireless infrastructure is not as widespread as standardized as its European counterpart. In the Middle East, has secured 15 wireless infrastructure contracts in regional markets over the last 12 months, most recently in Kuwait. Motorola's work in Kuwait involves a \$14 million contract with wireless GSM operator MTC to implement a countrywide capacity enhancement. The "dual-band" network implementation will enable cell phones to utilize the most efficient network route and frequency, thus optimizing network performance.

In spite of the fact that internet and mobile banking has rapidly growth in all countries, but still there are people from developing countries that do not interest in use this facility. People of these countries are concerning about their personal information, privacy and security, and these are factors that will

increase their uncertainty level of using internet banking(East African and West African countries in Malaysia interviewing). This anxiety can refer to their cultural background. culture can refer to the customs and beliefs of a nation that stay with people for years, and changing of fundamental of this culture is not possible easily. So culture of a country can affect the culture of subsocieties in that country, such as organizational culture, educational culture and etc. So each nation and country has especial fundamental in order to go to the technology world and use technology as an assistant in their life.

1.2Statement of the Problem

According to the previous discussion, although there is rapidly increasing in internet banking penetration but still there is some unsafe feeling towards it. That means there are factors that can affect acceptance and adaption of a technology, beside existing factors such as usefulness, ease of use, subjective norm and etc.

While essential research has been directed toward understanding the adoption and diffusion of IT (Prescott and Conger, 1995), there have been a few studies that specifically examine possible cultural effects on the adoption and dispersion of new information technologies (Raman and Wei, 1992). Research on the impact of corporate culture on IT acceptance provides a useful viewpoint (Cooper, 1994; Kydd and Jones, 1989) but ethnic or national culture research undoubtedly has a special character.

The problem to be investigated is that there is no enough research that works on the effect of national culture on acceptance a technology. Thereafter

This study examines the role of culture on technology acceptance model (TAM) adaption and tries to give an in depth view of Hofstede Cultural Dimensions towards acceptance of a technology (Power distance index:PID, Individualism/collectivism, Uncertainty avoidance).

It is hoped that conclusions can be drawn and opened a window for managers and all who want to bring world of technology to their life and work.

1.3 Research Objective

1. The main aim of this paper is finding the role of culture in acceptance a new technology. That can be interpreted to culture role on the Technology Acceptance Model.

Beside the main objective this study pursues following objectives:

2. Giving the overall view of Hofstede Cultural Dimensions in different countries base on their Power Distance Index, Individualism/Collectivism and Uncertainty avoidance

3. Opening a new window for all who work in IT and IS implementing, to bring technology in multinational and international organizations.

4. Handling the problem that faced in multi-cultural society according to each person cultural background.

1.4 Research Questions

Main question can be draw as below:

> Is there any effect by Hofstede cultural dimensions (PDI, IND/CLV,

UAI) on TAM

This main question can be expended as below:

- Is there any effect by Hofstede cultural dimensions (PDI, IND/CLV, UAI) on Perceived Usefulness (PU)?
- Is there any effect by Hofstede cultural dimensions (PDI, IND/CLV, UAI) on Perceived Ease of Use (PEOU)?
- 3. Is there any effect by Hofstede cultural dimensions (PDI, IND/CLV, UAI) on Subjective Norm (SN)?
- Is there any effect by Hofstede cultural dimensions (PDI, IND/CLV, UAI) on Perceived Behavioral Control (PBC)?
- Is there any effect by Hofstede cultural dimensions (PDI, IND/CLV, UAI) on Behavioral Intention(BI) to use internet banking?

1.5 Scope of the Study

In order to achieve the best results in finding different attitude towards technology acceptance (Internet banking) among different people from different nations, student of four universities in Malaysia have been selected to administer the questionnaire in order to examine attitude towards internet and mobile banking. Because of large scope of this study and necessity of collaboration of more than 30 countries from the five continents in Malaysia, embassy of ten countries and their referees took part in this research by filling up questionnaires that was distributed by hand and by e-mail, also staffs of some international organizations in Malaysia cooperate in this research, and the last one, social networks such as facebook came to assist this paper by finding the different others countries communities in Malaysia.

1.6 Significance of the Study

As firms internationalize, there is a growing need to understand how cultural factors might affect a multinational organization's ability to adopt and utilize IT. Further studies may lead to knowledge that will help IT researchers and practitioners in improving the technology transfer process. Such knowledge will be worth to practitioners, because it could spell the difference between achievement and collapse in implementing IT. In the movement toward globalization of markets and corporate multinationalism, the value of more cross-cultural research is clear (Cash, McFarlan, McKenney and Applegate, 1992). In a large survey of information systems more than half of the respondents felt that global IT issues were keys to their firms' future success (Ives and Jarvenpaa, 1991). As firms grow their operations in the international arena, there is a need to exploit the power of IT to communicate among these widespread locations and to coordinate activities both within and across countries. Hence, it is important for the managers of these firms to learn, as much as they can, about the cross-cultural adoption and use of IT (Couger, 1986; Kumar and Andersen, 1990) Such understanding can make the distinction between success and failure in executing information technology and system. The study will be clear the differences and similarities between countries cultures, and will give nations attitude towards technology acceptance. This study will be the first one that combines culture and TAM across the five continents. The result can assist managers and technology developers around the world in order to apply IT through international organization. The unique results of this study can be a base for future research and open a window to work on TAM as viewpoint of culture.

1.7 Summary and Organization of the Remaining Chapters

The main part of the dissertation is divided into five Chapters, which will be briefly introduced:

Chapter1: Introduction

The introduction section a projects a brief overview of the study is provided.

Chapter 2: Literature Review

In this section, selected academic literature related to Technology acceptance model, related theory and Hofstede cultural dimension and its related academic literatures. Then conceptual framework and steps to developing the hypothesis are discussed.

Chapter 3: Methodology

The methodology section critically examines a range of research approaches and techniques. Sample and the size of samples, also one of the most important for this study, finding the sample from different countries who stay in Malaysia for study or work. The research technique that is selected for this study is Design of Experiment.

Chapter 4: Analysis and Results

In the analytical section, the research findings are explained briefly according to the data collection and analysis.

.Chapter5: Discussion

In discussion section the further interpretation and explanation the findings is provided and comparisons is made between the findings with other literature in the area of the study. Then the findings are summarized; recommendations for future research and the practicing manager are made.