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**FACTORS AFFECTING THE INTENTION TO ADOPT
MOBILE BANKING. A STUDY IN KLANG VALLEY,
MALAYSIA**

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ABSTRACT

This study aims to investigate the factors that affect the intention to adopt mobile banking in Klang Valley through the integration of the renowned framework of Technology Acceptance model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT) model and three other factors. Self-administered questionnaires were developed and distributed around Klang Valley, Malaysia targeting Malaysian at the age of 18-60. This study reflects the perception of users and non-users of mobile banking services. Out of the 400 questionnaires distributed, only 377 useable questionnaires were being used for analysis purposes. The analyses were done using the SPSS and SmartPLS software and results show out of the six independent variables, five factors, perceived credibility, perceived ease of use, perceived usefulness, perceived enjoyment and social influence were found to have a positive relationship with the intention to adopt mobile banking while perceived risks were found to be negatively associated with the intention to adopt mobile banking services. The results of this research are believed to be able to provide useful insights and important implication to financial institutions, academicians and the society as a whole in yielding higher adoption level of mobile banking. Several implications and recommendations are being discussed in Chapter 5.

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DECLARATION

I declare that this thesis, which I submit to INTI University for examination in consideration of the award of a Masters degree in Business Administration, is of my own personal effort. Where any of the content presented is the result of input or data from a related collaborative research programme this is duly acknowledged in the text such that it is possible to ascertain how much of the work is my own. I have not already obtained a degree in INTI University or elsewhere on the basis of this work. Furthermore, I took reasonable care to ensure that the work is original, and, to the best of my knowledge, does not breach copyright law, and has not been taken from other sources except where such work has been cited and acknowledged within the text.

18 November 2013



WONG SI'JIE

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List of Abbreviations

3G	- Third Generation
AVE	- Average Variance Extracted
BI	- Behavioural Intention
FAQ	- Frequently Asked Questions
FOREX	- Foreign Exchange
GPRS	- General Packet Radio Service
IRPP	- Initial Research Project Proposal
IT	- Information Technology
M2U	- Maybank 2 u
PA	- Perceived Enjoyment
PC	- Perceived Credibility
PDA	- Personal Digital Assistant
PEOU	- Perceived Ease of Use
PLS	- Partial Least Square
PR	- Perceived Risks
PU	- Perceived Usefulness
SI	- Social Influence
SMS	- Short Messaging Services
SPSS	- Statistical Package for Social Science
TAM	- Technology Acceptance Model
UTAUT	- Unified Theory of Acceptance and Use of Technology
WIFI	- Wireless Fidelity

Chapter 1: Introduction

1.1 Background of the Study

The technology development has changed the way people live in the current era. People are no longer bound physically by the brick and mortar that surround them. Instead, people are able to retrieve information and conduct businesses at anywhere and anytime just at their finger tips.

Internet in Malaysia traces back to year 1990 where the internet age began (Apnic, 2004). Following the introduction of internet, various sectors have made use of the internet to improve their operations and services. Since then, internet connection has been a daily necessity to every individual who are keen in staying connected with news and people.

Banks are one of the examples of institutions that adopt the internet in Malaysia. Banks started with the adoption of internet in their operations within the bank. Soon, in year 2000, according to BNM (2000), the central bank of Malaysia has officially allowed banking institutions in Malaysia to offer internet banking services which includes the following:-

Non-transactional tasks:

- Check balances in own accounts
- View recently transacted amount
- Download statement of current or savings account
- Order cheque books
- Download account statements according to time period
- Download applications for M-banking, E-banking etc.

Transactional Tasks:

- Transfer of funds within the same users' account
- Funds transfers to third parties

- Bill payment
- Telegraphic transfers
- Purchase of investment or sale of it
- Application for loans
- Financial institution administration

Internet banking has brought a lot of convenience to users and also to the banking institution as compared to the physical branch banking as customers can perform banking transactions at their own home, office or anywhere with internet connection and a computer. However, there is a technical disadvantage of internet banking, which is being restricted to performing transactions only at places with a computer and internet connection. This has led to the introduction of mobile banking in 2002 to address the limitation of internet banking (Maybank, 2009). Maybank in Malaysia was the first bank to offer mobile banking services but in the form of Short Messaging Services (SMS) in 2002. According to Gustke (2013), there is a possibility that the number of people using mobile banking will reach 45 million in 2014.

In 2006, Maybank introduced the M2U mobile application which is a more sophisticated form of mobile banking for customers with a GPRS/3G mobile phones (Maybank, 2009). According to Maybank2u.com, the M2U mobile application is not only convenient to use due to its user friendly menus and instructions, but also saves time and money. Users can perform banking transactions anytime from anywhere using their mobile phones (Maybank2u.com, n.d.).

Mobile banking is the ability to conduct banking related matters via a mobile device (Drexelius and Herzig, 2001). Mobile devices refer to cell phone as well as portable handheld computers such as Personal Digital Assistant (PDA), iPad and Tablets. The financial transactions that can be carried out using a mobile device is similar to those that can be done via internet banking as mentioned above. As for M2U mobile application, the services available are Account

Summary check, Funds Transfer, Payments, Prepaid Top-ups for mobile phones, Purchase of movie tickets and viewing foreign exchange (FOREX) and deposit rates (Maybank2u.com, n.d.).

There are many advantageous to the use of mobile banking to consumers, such as good security, convenient access, and plethora of applications for smart phones (Gustke, 2013). The president of Javelin Strategy, Mr James Van Dyke from California said the best thing about mobile banking is that the user will have more control over their money as there could be no internet connection everywhere but there is mobile connection.

Although Mobile banking is costly to implement, it does not only benefit the customers, but also to the financial institutions as it helps lowering costs of hiring more staff for the counter-services as well as tele-banking purposes (Marry, 2013). On top of that, Marry (2013) also mentioned that mobile banking helps improve customer relationship management and is able to provide better services and customization to different customers which are highly beneficial to the banks.

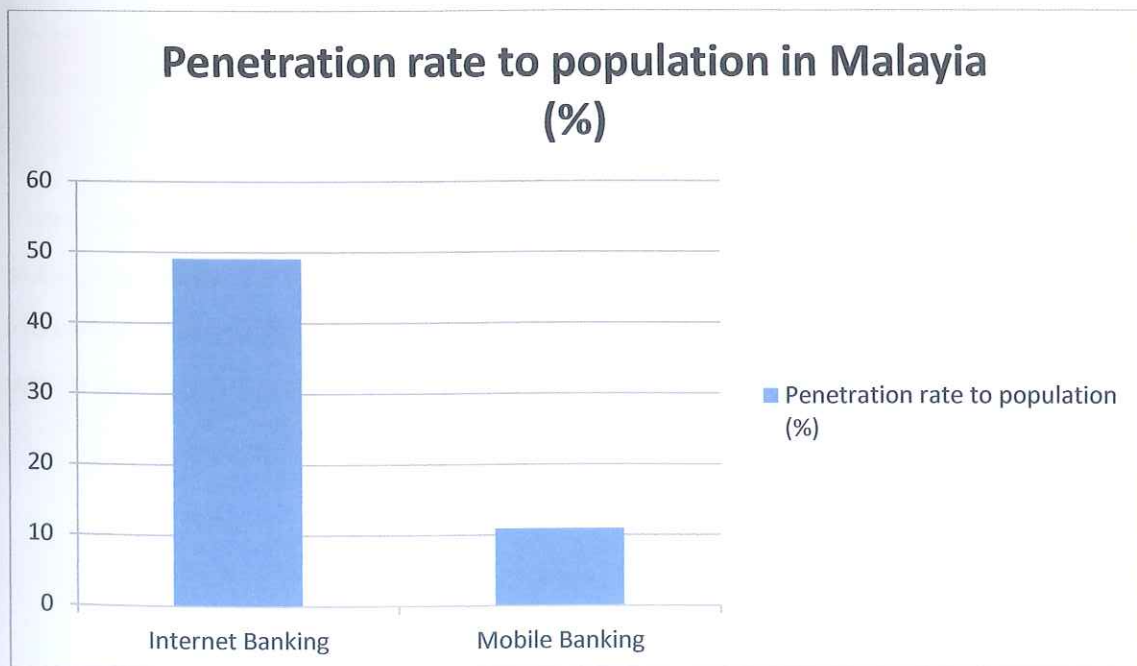
With the use of the mobile banking application, customers are able to save time, energy and hassle in performing their respective banking transactions. Customers can perform banking transactions faster and conveniently as long as they have a mobile device and internet connection, be it WIFI or 3G. Bank Futura (2012) reported that consumers most commonly use mobile banking to check balances of account and recent transactions. Other than that, transfer of money, receiving alerts and paying bills are also the popular uses of mobile banking services (Bank Futura, 2012). According to Winch (2013), by year 2022, cell phones would be used for a total of 1.5 billion transactions annually, a significant increase from the current 356 million.

1.2 Problem Statement

Goodridge (2013) mentioned in his article that people are becoming more mobile with approximately 590 million mobile phone users worldwide using their mobile devices to perform banking transactions and it is projected that in year 2017, the total will exceed 1 billion. This significant amount put financial institutions in a serious consideration to improve the usage of their mobile banking applications and services by customers.

Despite the various advantages associated with mobile banking, the adoption of mobile banking is still at its infancy stage (Donner and Tellez, 2008). According to Bank Negara Malaysia (2013), the usage of mobile banking is still very low at 10.9% as compared to the use of Internet Banking which is at 49.1% penetration rate to population as of June 2013 as shown in Figure 1.1. The penetration rate to mobile subscriber is only 7.6% of the total mobile phone subscription which is recorded at a total of 42,392,500. Various measures have been taken by the central bank to raise awareness of the availability of mobile banking but the customers are still using more of the traditional methods as well as the internet banking facilities instead of mobile banking.

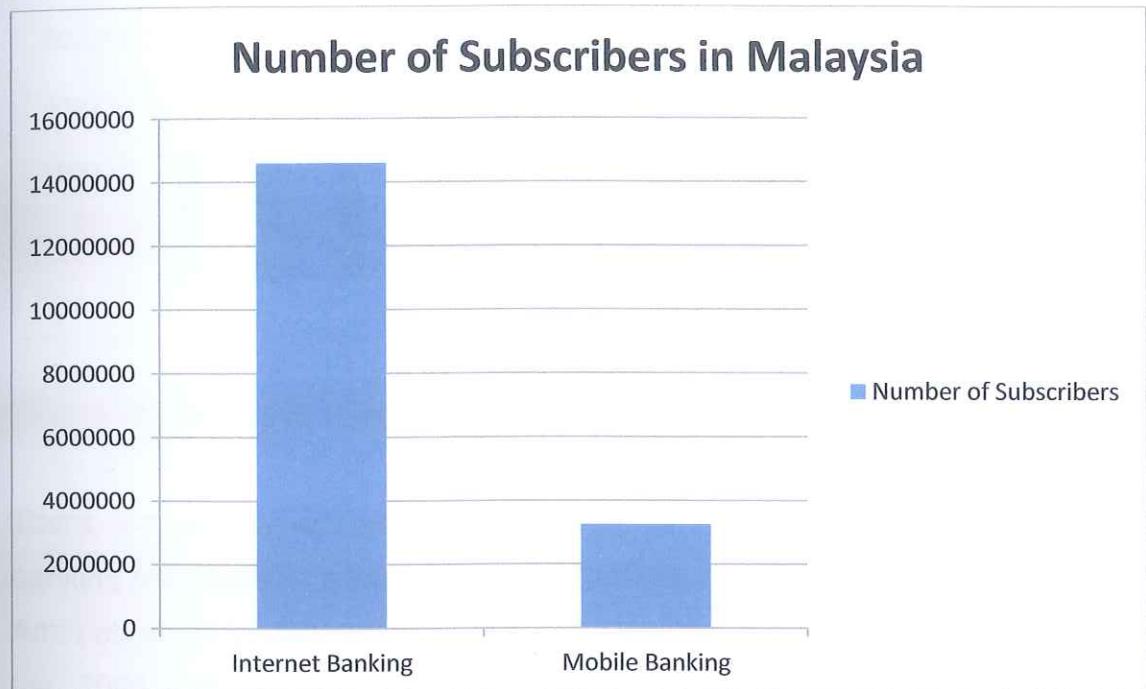
Figure 1.1 Penetration rate to population in Malaysia



(Source: Bank Negara Malaysia, 2013)

Figure 1.2 shows the total number of mobile banking subscribers at 3.25million as compared to the total number of internet banking subscribers at 14.6million which comprises of 14.3million individuals and 300,000 corporate sectors as shown in Appendix 1. The number of mobile banking subscribers is significantly lesser than the internet banking subscribers which raises a need to find out the reason on the significant lesser amount of mobile banking subscribers.

Figure 1.2 Total numbers of subscribers in Malaysia (June 2013)



(Source: Bank Negara Malaysia, 2013)

From Figure 1.3 below, it can be seen that the number of mobile banking subscriber is on an increasing trend from Year 2005 to June 2013 (BNM, 2013). However, the number is still far below the internet banking subscribers' rate which raises an alarm.