

I Hereby Confirm That I Have Examined This Project Paper Entitled:

Investigating Factors Influencing Intention To Use E-banking System Among Internet Users
At University Teknikal Malaysia Melaka (UTeM)

By

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I hereby acknowledge that this project paper has been accepted as part fulfillment for the
degree of Bachelor of Technology Management (Hons) in Technology Innovation

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INVESTIGATING FACTORS INFLUENCING INTENTION TO USE E-
BANKING SYSTEM AMONG INTERNET USERS AT UNIVERSITY
TEKNIKAL MALAYSIA MELAKA (UTeM)

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Report submitted in fulfillment of requirement for the degree of Bachelor of
Technology Management (Hons) in Technology Innovation

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I declare that this project is the result of my own research except as cited in the references.

The research project has not been for any degree and is not concurrently submitted in candidature of any other degree.

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DEDICATION

My dedication is for my mother, Laila Binti Ahmad and my father, Md Aris Bin Mahadi who always give the spirit, support, wishes and constantly motivated to me. Not forgotten for brothers that always motivated me during throughout of my study. To my classmate thank you for the full of cooperation, gives an opinion and understanding during period of my studies here. Without their love and support, this project would not have been made as possible.

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ABSTRACT

The introduction of the Internet technology nowadays causes the development of the e-banking system become a tremendous technology trend in the world. The e-banking system is one of the medium used by the Internet users for e-banking purposed. This study involved in discovering how the selected factors influence intention of use e-banking system among internet users at University Teknikal Malaysia, Melaka (UTeM). The factors that had been chosen are perceived usefulness, perceived ease of use, social influence, beliefs, cost and security to the users. Those factors had been determined from the previous studies. This project used the quantitative method for the analysis of the data. The 100 of respondents are chosen among the student, staff and the lecturer at University Teknikal Malaysia, Melaka (UTeM). From the findings of this study the selected factors have the significant relationship with the intention to use e-banking system among Internet users at University Teknikal Malaysia, Melaka (UTeM).

ABSTRAK

Pengenalan kepada teknologi Internet pada hari ini menyebabkan perkembangan sistem e-perbankan merupakan salah satu trend yang terbesar terhadap perkembangan teknologi terkini di dunia. Pendekatan penggunaan sistem e-perbankan merupakan salah satu medium kepada pengguna Internet untuk menggunakan perkhidmatan sistem e-perbankan. Kajian ini melibatkan faktor-faktor yang telah dipilih mempengaruhi niat untuk menggunakan sistem e-perbankan dalam kalangan pengguna Internet di Universiti Teknikal Malaysia, Melaka (UTeM). Faktor-faktor yang telah dipilih adalah kebergunaan, mudah untuk digunakan, pengaruh sosial, kepercayaan, kos and keselamatan. Faktor-faktor tersebut diambil berdasarkan kajian yang lepas. 100 orang responden telah dipilih iaitu dalam kalangan pelajar, kakitangan dan pensyarah di Universiti Teknikal Malaysia Melaka (UTeM). Berdasarkan penemuan dan hasil dalam kajian ini menunjukkan bahawa setiap faktor yang telah dipilih mempunyai kaitan dengan niat untuk menggunakan sistem e-perbankan dalam kalangan pengguna Internet di Universiti Teknikal Malaysia Melaka (UTeM).

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CHAPTER 1

INTRODUCTION

The first chapter represents the background of the study, problem statement, research question, research objective, scope and limitations, assumption review and the importance of the study.

1.1 Background of The Project

Nowadays the usage of e-banking technology has become more popular, especially for retailing in logistics, business, investment, banking and others. The usage of e-banking in Malaysia have been more popular nowadays because of the development of new technologies (Hing, 2009; Hamisah & Samsudin, 2008; Suruhanjaya Communication and Multimedia, Malaysia (SKMM), 2006; Munirah, 2003; Mahmud, 2003; Amir, 2001).

Most of the developed countries had started practicing using e-banking technology. E -banking technology has been used as one of the mediums for industry approach (Joseph, 2006; Karakaya & Charlton, 2001). Even though the usage of e-banking technology still in the medium level, but in Malaysia shows that there is significant improvement about it in each year (Hamisah & Samsudin, 2008; Munirah, 2003).

This research will identify the several factors that stimulate the internet users to use the e-banking technology. Among the factors that had been identified are perceived usefulness, perceived ease use, perceived social influences, perceived of belief, perceived of cost and perceived of safety. This research also will look into whether those of the factors are related to with the users desire to use the e-banking or otherwise in University Teknikal Malaysia Melaka (UTeM).

1.2 Problem Statement

The problem that was examined in this research was to investigate the factors influencing intention to use e-banking system between the Internet users at University Teknikal Malaysia Melaka (UTeM).

As we know, the perceived usefulness of using the e-banking system is one of the important factors for the users to use e-banking system. In many instances, a simple mistake like clicking a wrong button may create a big problem to the users. So, many users continue to worry and wonder if they have properly executed the transactions while availing the online banking facility (Moon & Kim, 2001). Besides that, the perceived usefulness of the users to conduct the banking transaction

through the e-banking is really important factors that create the intention to use e-banking system (Lai & Li, 2004).

The perceived ease of use factors is related to with the user approach to use e-banking system when doing their financial activity. Davis et al (1989) determined that the interaction of e-banking system with the users sometimes did not clear and understand. It makes the users feel difficult to use e-banking system when manage their financial accounts. Therefore, the users feel stressed with the e-banking technology system and will keep using the conventional approach of banking transactions.

Belief is the descriptive thought a person holds about something. The belief factor is about the knowledge, faith and opinion of the users use of e-banking system. Although many benefits that users can get from internet banking facilities offer by institutional banking users need to have some basic knowledge about computers, Internet and use the e-banking service (Mayer et al. 1995). It causes them to make activity with the bank use the old way which they prefer to go to the bank to make some transactions.

The social influence problems for the users in this study are there less people willing to introduce the e-banking system to their family or friends. This research, the social belief factor will indicate the people that introduced the e-banking system will teach the users to use e-banking system. It also wants to look whether the users satisfy with the suggestion to use e-banking system. It is based on Ahmadi Mia N. A. (2013) stated that the creation and development of e-banking requires a certain appropriate economic and social influence surrounding from the people to create the intention to use e-banking system.

The Internet banking cost is cheaper than physical channels. This estimate is based on studies by Bhattacharjee, A. (2001) a simple transaction cost for non-cash payment at a branch is likely to cost the bank as much as 11 times more than over the Internet. The cost savings come about through the combined effects of reduced and better utilization of the workforce, equipment, more economic usage of space and operational savings. This research will investigate the cost factors that influence the intention to use e-banking system among Internet users at University Technical Malaysia, Melaka (UTeM).

While banking through the Internet, the users need to be careful about the security of the internet bank account. Chung and Paynter, (2002) stated that the security of user account depends to a great extent of the security of the computers and the passwords. If the information regarding to the users' passwords or the pin number, and the banking transactions are leaked, hackers could access to the account. This can lead to the unauthorized and criminal transactions being conducted without user knowledge.

1.3 Research Questions

E-banking is transacting or facilitating the payment through the Internet access or automated teller machine (ATM). By using the e-banking, the consumers could buy and sell products and services over the World Wide Web. As we see, the trends using the e-banking among the internet users nowadays is growing from one time to another. Because it is based on the development of the technology today, it makes the e-banking become one of the main technology choices among the Internet user.

Through this research, the intention of choosing e-banking among Internet users at University Technical Malaysia, Melaka (UTeM) will be investigated. It is based on the various selected factors that had been determined. The different intention to use e-banking will give the different results through the various selected factors given. The level of relationship between various selected factors with the intention to use e-banking among Internet users will be studied. This research will be conducted at University Technical Malaysia, Melaka (UTeM).

To achieve the level of relationship between various selected factors with the intention to use e-banking among Internet users at University Technical Malaysia, Melaka (UTeM), research question need to be possesses.

Below are the research questions to be answered through on this research:-

1. What is the factor to use e-banking system among internet users at University Technical Malaysia, Melaka (UTeM)?
2. What is the relationship between various selected factors with the intention to use e-banking system among Internet users at University Technical Malaysia, Melaka (UTeM)?
3. Why the selected factors are considered important with the intention to use e-banking system among Internet users at University Technical Malaysia, Melaka (UTeM)?

1.4 Research Objectives

The objective of this research is to investigate the level of relationship between various selected factors with the intention to use e-banking among Internet users in University Technical Malaysia, Melaka (UTeM). It is whether the various selected factors can create the levels of relationship. The intention among the Internet users to use e-banking also will be investigated based on the factors that had been selected.

The objectives of this study:-

1. To determine the factor to use the e-banking system at University Technical Malaysia, Melaka (UTeM).
2. To examine the relationship between various selected factors with the intention to use e-banking system among internet users at University Technical Malaysia, Melaka (UTeM).
3. To investigate the factors the selected factors are considered important with the intention to use e-banking system among Internet users at University Technical Malaysia, Melaka (UTeM).

1.4 Scope and Limitations

The scope and limitations of the study are about:-

1. This study is conducted in University Teknikal Malaysia Melaka (UTeM).
2. This study is to explore the level of the various selected factors that influence the Internet users to use e-banking at University Teknikal Malaysia Melaka (UTeM).
3. This study is to determine whether there is a correlation between the intentions to use e-banking among Internet users with the various selected factors.
4. The respondents in this study are the students, the staff or the lecturers at University Teknikal Malaysia Melaka (UTeM).
5. This study will only take less than six months to complete.

1.5 Importance Of Study

1.5.1 Academic

The aim of this study is to get to know well about the factor that influences the intention to use e-banking among internet user. This is because, based on the internet user, it can be seen on how the selected factor will create the correlation with the intention to use e-banking among internet user in University Technical Malaysia, Melaka (UTeM). The study is based on the various selected factors that had been selected.

Besides that, based on this study also, we will know how the level of various selected factors creates the correlation with the intention to use e-banking among internet users in University Technical Malaysia, Melaka (UTeM). It is regarded on the elements of the selected factors that had been chosen and the intention to use e-banking. So, the correlation of the both elements can be evaluated based on the results given at the end of this research.

1.6 Summary

From this study, the factors influencing the intention to use e-banking system can be investigated. It is based on the problem statement as an issued to be solved. It is also indicated from the research questions and research objectives that needed to be answered. The e-banking system is developed to the users especially to the Internet users to make them easier to access the virtually banking system without they go directly brick the mortal of the bank institution to settle up their financial management. Through this study, the Internet banking is one of the IT applications used by Internet users and it is rated the sixth application besides the use of email, searches, travel, education and health.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This study is to determine the correlation between various selected factors with the intention to use online e-banking system among Internet users in University Technical Malaysia, Melaka (UTeM). Related to the purpose of this study, the scope of this study is based on the various selected factors that had been determined from the past research. It is also related with the intention to use the online banking system among the Internet users at University Technical Malaysia, Melaka (UTeM). This chapter will explain about the theoretical background used to make the understanding the concepts and the relationships about this study. The concept is separated based on:

1. Online banking
2. Factors influencing e- banking system:
 - i. Perceived usefulness
 - ii. Perceived ease of use
 - iii. Social influence
 - iv. Belief

- v. Cost
- vi. Security

3. Intention to use e-banking system

2.2 Definition of Terms

2.2.1 Online Banking

Electronic banking is the process from the customer that may perform through the banking transactions electronically or pay the bills without go and visit a brick and mortal institution banking. Online banking also known as an Internet banking or e-banking, has experienced growth in recent years. Others term refers to one form or another of electronic banking which is a personal computer (PC) banking, virtual banking, home banking, remote electronic banking and phone banking. PC banking and Internet or online banking is the most frequently used by the customer. The terms used to describe the various types of electronic banking system.

One of the recent channels of distribution to be used in the financial services industry is electronic banking, which was introduced in the mid 1990s and it is thereafter steadily becoming more important (Allen et al., 2001). From the 1990s onwards, electronic banking has become a major distribution channel for financial institutions (Karjaluoto et., al 2001). Indeed, most institutions now offered their customer access to majority of their services through this channel. In its very simplest form, electronic banking can mean the provision of information of about the bank and its products via a page if the World Wide Web (WWW). A more developed service is one that provides customers with the opportunity to gain access

to their accounts and executes transactions to buy products online via the Internet (Daniel, 1999).

Online banking allows the customer to conduct their financial transaction through the secured website that operates by the banking institution to build the society. To access the online banking system, the customer needed to have a personal internet to register with the institution for the service. The customer needed to set up their password for the verification process. With the proliferation of internet expansion and computers usage, the electronic delivery of banking service has become ideal for banks to meet customer's expectations. Compatible with the revolutionary components of the electronic marketplace, Malaysia has actively developed e-banking services since mid 2000.

Online households are a growing major lifestyle trend in Malaysia. With a strong hype on broadband services and multimedia super corridor, these have changed the life style of the consumers, and more business-to-business (B2B) transaction using the online potential. This has been further reinforced by the government tax rebate incentive for the purchase of a PC every five years. In 2005, the usage of online household was 1.9 million, with 11.09 million internet users, 21.1 thousand ISDN subscribers and 26.4 PC penetrations per 100 households. However, some may not use the e-banking systems in spite of their availability. Besides that, mobile devices have also offered internet access using WAP, GPRS or 3G features.

Moving towards an industrialized nation with knowledge economy as the backdrop, the PC and online way of life is growing in Malaysia. Public awareness of e-banking among users has been increased and thus people are ready to migrate to technology applications. It causes the development of using online banking systems become increasing nowadays. E-banking provides a higher degree of convenience that enables customers to access internet bank at all times and places. Apart from that, the accessibility of computers is perceived as a measure of relative advantage (Devlin,

1995; Daniel, 1999, Black *et al.*, 2001; Polatoglu and Ekin, 2001; Gerrard and Cunningham, 2003). Therefore, it is hypothesized that convenience and accessibility have positive effect on consumer adoption of e-banking.

2.2.2 Factors Influencing E-banking System

i. Perceived usefulness

Based on Davis (1989), perceived usefulness is the extent to which a person believes that using a particular system will enhances his or her performance. Through the usage of new technology which is electronic mail (e-mail) and the level of acceptance from the consumer of that system are based on the two factors. The two factors are based on the variables that connected with the Acceptance Model of Technology which is perceived usefulness factors and perceived ease of use factors. The results of the research show that the perceived usefulness contain strong significant level to the usage of the e-mail system. Moreover, this factor influenced the intention of the consumer to use the new technology (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989).

Research from Chi, Grant and Edgar (2007) also find perceived usefulness factors have the strongest relationship through the acceptance of Internet banking in Hong Kong. They added that another factors such as perceived ease of use factors, the risks through the Internet banking and the personal new technology information (IT) also have the positive relationship with the acceptance of using the Internet banking. Lee (2009) had been determined that the variables of

perceived usefulness has the positive relationship that will influence the usage of Internet banking in Taiwan.

The “usability” or the effort required to use a computer system as defined by case-law et al., (2007) is the banking website can also influence a customer confidence in it. It has been found that increased usability reduces the likelihood of error, increases predictability of the web site’s behaviour, and creates a comfortable environment which would positively influence customer disposition towards the web site. Other studies also purport that the factors of perceived usefulness and perceived ease of use of web site function in the same way as a salesperson’s personal attributes in the creation of trust traditional retailing (Koufaris and Hampton-Sosa, 2004; Hampton-Sosa and Koufaris, 2005).

ii. Perceived ease of use

Besides that, results from other research also show the perceived ease of use factors gives effect to the consumer intends to purchase through the online or through the offline (Kloping & McKiney, 2004). It shows that the consumer would identify or tries to use the application that had been prepared, whether it is easy to use or otherwise and furthermore will influence the other consumer to tries or use of that system or to stop it. Perceived ease of use is the most important factors that will cause the direct effects to the consumer whether they want to buy through the online or otherwise (McCloskey, 2004). Researchers argue that perceived ease of use is the extent to which a person accepts as true that using an exacting method would be at no cost to that individual (Davis et al., 1989). At first, Rogers (1962) affirmed ease of use is the term that represents the degree to which an innovation is perceived not to be difficult to understand, learn or operate.

According to Koufaris and Hampton-Sosa (2005) the perceived ease of use is the consumer perception that banking on the internet will involve a minimum an effort. Phone (2008) affirmed that the drivers of growth in electronic banking are determined by perceived ease of use, which is a combination of convenience provided to those with ease internet access, the availability of secure, high standard electronic banking functionality and the necessity of banking services.

iii. Social influence

From the past research results, Fan, Saliba, Kendall and Newmarch (2005) discovered that the users more like to give the suggestion and the recommendation something about the facilities that been use from other users if they didn't satisfied with the facilities given. They usually will tell and recommends to their close friends that will try and use the banking system.

Social influence refers to the perceived influence of social networks and other important factors against certain behaviours. The justification is that an innovation such as Internet banking services that creates uncertainty about the expected outcomes for the potential customer. Social influence also will give the deeper effect to the user acceptance to the e-banking system (Wei, Marthandan, Choong, Ooi & Arumugam, 2009). This shows that actually the social influence has the deeper effects to the acceptance of the application like m-commerce. Venkatesh et al., (2001) stated that of social influence, they meant the degree to which an individual perceives that other ones are important to him/her in using a new system. Constructs a subjective norms (rational action theory, planned behaviour theory and technology acceptance model).