CONSUMERS' PERCEPTION TOWARDS EXTEND USAGE OF INTERNET BANKING IN MALAYSIA

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ABSTRAK

Pertumbuhan yang pesat dan inovasi dalam aktiviti perbankan dengan menggunakan perbankan internet semakin meningkat secara mendadak. Perkhimatan perbankan internet telah banyak digunakan oleh pelaggan individu dan korporat pada masa kini. Kajian ini bertujuan untuk mengkaji persepsi pengguna terhadap melanjutkan pengggunaan perbankan internet di Malaysia. Satu rangka kerja penyelidikan telah dibangunkan untuk mengenal pasti faktor-faktor yang mempengaruhi persepsi pengguna terhadap melanjutkan penggunaan perbankan internet. Analisis kuantitatif telah digunakan dengan mengedarkan soal selidik kepada individu yang bekerja di negeri Pulau Pinang, Malaysia. Data yang dikumpul diuji dengan menggunakan perisian computer SmartPLS versi 2.0M3. Keputusan menunjukkan bahawa accessibility internet, kualiti internet, keselamatan dan privasi, dan manfaat transaksi memainkan peranan penting dalam mempengaruhi penggunaan melanjutkan perbankan internet manakala factor amanah terhadap penggunaan melanjutkan perbankan internet adalah tidak signifikan dalam kajian ini. Hasil daripada kajian ini boleh digunakan sebagai garis panduan bagi bank untuk mengenal pasti dan menentukan penentu utama terhadap persepsi pengguna ke arah melanjutkan pengggunaan perbankan internet. Selain itu, kajian ini juga berguna kepada penyelidikan yang akan datang untuk terus menyiasat pemandu lain yang menpengaruhi penggunaan melanjutkan perbankan internet.

ABSTRACT

The rapid growth and innovation in conduct banking activities by using internet banking has increased dramatically. Internet banking services today has widely use by individual and corporate customer. This study aims to examine the consumer' perception towards extend usage of internet banking in Malaysia. A research framework was developed to identify factors that would influence consumers' perception towards extend usage of internet banking. Quantitative approach was used by distributing survey questionnaire to working individual in Penang, Malaysia. Data collected data is tested by using SmartPLS version 2.0.M3. The result indicated that internet accessibility, internet quality, security and privacy and transaction benefit play significant roles in influencing the extend usage of internet banking while trust factors on extend usage of internet banking is not significant in this study. The significance of this study is intended to serve as guideline for bank to identify and determine the key determinant of customer's perception towards extends usage of internet banking services. This study also useful for future researchers to further investigate on other drivers and factors of extends usage of internet banking.

CHAPTER 1

INTRODUCTION

1.1 Introduction

Chapter 1 presents the research outline of the study. It begins by introducing the background of the study and highlighting the problem statement of the study. It is then followed by the research objectives and research questions. Significance of the study also discussed in this chapter. Lastly, the chapter ends with the organization of remaining chapters.

1.2 Background

Internet banking is defined as the delivery of banking services to customers through the internet (Chi et al., 2007). Today, internet banking has become a popular channel for banks to provide banking services to their customers. The widespread of internet banking is probably due to its benefits. Furthermore, internet banking also allows customers to conduct banking transactions 24 hours a day, 365 days a year (Khalil et al., 2010).

Internet banking in Malaysia was introduced in 1996. Domestic banking institutions are allowed to establish transactional websites from June 1, 2000 while locally incorporated foreign banks are start to establish the web sites from January 1, 2001. According to The Star (2008) Malayan Banking Berhad (Maybank) is the first to offer online banking services in Malaysia, which provides several of products and services from consumer banking to e-business banking for commercial enterprise

includes banking enquiry functions, bill payment, credit card payment, funds transfer, and accounts summary as well as transaction history and et cetera. Major bank in Malaysia had provided internet banking services. There are total of 16 commercial banks offering internet banking services in Malaysia which consists of local banks and foreign banks (Bank Negara Malaysia, 2012).

Table 1.1

Internet Banking Subscribers (end of period)

Internet Banking

million	Number of Subscribers			Penetration to population (%)
	Total	Individual	Corporate	
2005	2.6	2.5	0.1	9.8
2006	3.2	3.2	0.0	12.0
2007	4.6	4.5	0.1	16.9
2008	6.2	6.1	0.1	22.5
2009	8.1	8.0	0.2	28.9
2010	9.8	9.6	0.2	34.4
2011	11.9	11.6	0.2	41.0
Jun-12	12.6	12.3	0.2	43.4
Mar-08	5.0	4.9	0.1	18.0
Jun-08	5.4	5.3	0.1	19.4
Sep-08	5.8	5.7	0.1	21.1
Dec-08	6.2	6.1	0.1	22.5
Mar-09	6.7	6.5	0.1	23.8
Jun-09	7.2	7.0	0.1	25.6
Sep-09	7.5	7.3	0.2	26.7
Dec-09	8.1	8.0	0.2	28.9
Mar-10	8.3	8.1	0.2	29.0
Jun-10	8.9	8.7	0.2	31.1
Sep-10	9.4	9.2	0.2	33.0
Dec-10	9.8	9.6	0.2	34.4
Mar-11	10.2	10.0	0.2	35.3
Jun-11	10.9	10.7	0.2	37.6
Sep-11	11.3	11.1	0.2	39.1
Dec-11	11.9	11.6	0.2	41.0
Mar-12	12.4	12.2	0.2	42.9
Jun-12	12.6	12.3	0.2	43.4

Sources: Bank Negara Malaysia

Table 1.1 shows the internet banking subscriber in Malaysia from year 2005 to Jun of year 2012. It shows that number of subscriber had increased year to year since 2005 to 2012. There are total of 12.6 million subscriber where 12.3million consists of individual while 0.2 million are corporate subscriber. This indicates that internet banking had widely used by the consumers to conduct banking activities, the number of users is expected to continue increased in the future.

Internet banking today had becomes a virtual banking counter that the individual and corporate customer to carry out. The developments in electronic banking are likely to have an impact on all banks, organization and consumer as well. It believes that a large part of banking industry in the 21st century will be conducted online. From the banks point of view, implementation of internet banking will lead to cost reductions, improve customer service, and create long term profit (Rotchanakitumnuai & Speece, 2004).

Goi (2006) state that there are several underlying forces coming together has caused the E-banking development in Malaysia. The development is mainly because of new marketing strategy especially to create E-customer Relationship Management (E-CRM) and to improve banking activities in Malaysia. The other reasons are development of technology, applications and tools, as well as supported by the government.

The development and revolution of Internet Banking has raised both positive and negative impact towards the banks, organization and consumers. For an example, an increased interest in online payment has pushed the development of online payment system. At the same time, online transactions also create certain security risks and increased potential for fraud.

The overall potential of internet banking towards society is significant and will be bringing effects to the banking industry. Once people continue to use internet banking services, bank can developed and implement better services for the community. Hence, studying the consumers' perception towards extend usage of internet banking will helps to understand the current issues regarding internet banking and the customers perception toward internet banking services. There are few factors that believe will bring the effect to the consumers' perception towards extend usage of internet banking which are internet quality, internet accessibility, transaction benefit, security and privacy, last but not least is trust.

1.3 Problem Statement

The internet banking is flourishing in today's banking issue. Most of banks nowadays had introduced their new and sophisticated feature on internet banking services. Changes in technology had led internet banking services shows a drastic development and achievements which provides more and more benefits for users, however it still cannot get away from problems (Mohamad, Hanudin, Suddin & Noren, 2007).

Lack of focus on the consumers' behaviour towards internet banking brings affect to consumer using internet banking. Most of the bank believes that provide the internet banking will reduce the transaction cost and make people to doing transaction easily. However, internet banking does not provide face to face interaction with customer; therefore banks that dealing with internet banking should provide more safety support and more information for consumers.

Apart from that, the reason that consumer restricts to continue using internet banking is because lacks of concern the impact of internet banking towards consumers.

Not all the bank provides proper benefits and facilities of their internet banking services. Besides, bank that do not provide user friendly or not proper internet banking web page will become difficult for people that not know well in using internet banking. Goi (2005) identified E-banking in Malaysia stated the opportunities and challenges that need to be faced by Malaysian banks. The study also highlight that Malaysia still has not reached a critical mass to ensure a sustained momentum, which can be achieved if the nervousness of trading via the Internet is overcome.

Today, all banks are tried to provide the most complete services in order to survive in this compete market. Internet banking has become popular because of its convenience. Lack of awareness of trust on internet banking usage which plays an important role for users will affect the use of internet banking. There are still areas of concern such as security and assurance that channels of information are secure, thus people tend to believe that they still need to face with the employees when doing some of the transactions with banks and et cetera (The Star, 2008).

Some of the people prefer visit to bank rather than using internet banking services. This can be caused by several reasons such as family background, lack of computer skill and also lack of banking knowledge and information. Government support can helps in giving the needed support to the people such as provide more comprehensive technology and infrastructure (Hanudin Amin, 2007). Although the number of people that registered for internet banking in Malaysia is the highest than other country in Southeast Asia, however, there are not indicates that all the users are really using internet banking services. Table 1.2 shows the online banking audience surges throughout the region.

Table 1.2

Online Banking Audience Surges throughout the Region

Online Banking Category Visitation by Market **January 2011 vs. January 2010** **Total Audience, Age 15+ - Home & Work Locations***			
	Total Unique Visitors (000)		
	Jan-2010	**Jan-2011**	**% Change**
Malaysia	2,360	2,746	16%
Hong Kong	1,304	1,543	18%
Vietnam	701	949	35%
Singapore	779	889	14%
Indonesia	435	749	72%
Philippines	377	525	39%

**Excludes visitation from public computers such as Internet cafes or access from mobile phones or PDAs*

Sources: comScore Media Metrix

From the table 1.2, it shows that across markets in Southeast Asia, visitation to online banking sites increased strongly in the past year, where it is growing by double-digits percentages across all six countries measured. Malaysia is the largest total number of online banking users in the study, climbed 16 percent to 2.7 million visitors in January 2011. Hong Kong's online banking audience grew 18 percent to 1.5 million visitors, representing 35.5 percent of the total online population and ranking as the most highly penetrated online banking market in the region while Indonesia posted the largest percentage increase, growing 72 percent to 749,000 unique visitors. This indicates

that Malaysia internet banking users status are still not ideal compare to other country such as Hong Kong. Besides that, Liau (2011) noted that the comScore report also pointed to Hong Kong as the most highly penetrated online banking market in the region, with online bank users representing 35.5 percent of its total online population. The online banking penetration rate in this region has yet to reach the level of markets in North America or Europe, such services are growing rapidly as more users turn to the convenience of online channels to conduct banking activities and transactions. Banks should continue to enhance and develop their site features, as well as improve the overall customer experience to continue to using internet banking.

Despite internet banking is widely used, our understanding of the drivers of customer perception with intention to use internet banking is limited. Research on determinants of user's perception towards extend usage of internet banking are relatively lack of study in Malaysia context. Previous studies are more concern the internet banking adoption and factors influence acceptance of internet banking for example Study of Manzano et al. (2009) concern the key drivers of internet banking use. Eriksson et al. (2005) study the customer's acceptance of internet banking services. Because of the differences between adoption and continue to use the internet banking. Thus, further research is necessary to understand the factors that influence customer perception in extend usage of internet banking.

1.4 Research Objectives

This study attempts to accomplish the following objectives:

a) To investigate the determinants of user's perception (internet accessibility, internet quality, security and privacy, transaction benefit, trust) towards extend usage of internet banking in Malaysia.

1.5 Research Questions

This research has been carried out to test general hypotheses of factors influencing consumers' perception towards extend usage of internet banking in Malaysia. Hence, this study is designed to answer the following research questions:

a) To what extent consumers' perception towards extend usage of internet banking in Malaysia.

b) Does the internet accessibility influence the consumers' perception towards extend usage of internet banking in Malaysia?

c) Does the internet quality influence the consumers' perception towards extend usage of internet banking in Malaysia?

d) Does the security and privacy influence the consumers' perception towards extend usage of internet banking in Malaysia?

e) Does the transaction benefit influence the consumers' perception towards extend usage of internet banking in Malaysia?

f) Does the trust influence the consumers' perception towards extend usage of internet banking in Malaysia?

1.6 Significance of the Study

The significance of this study is to further research towards internet banking in Malaysia. One of the most utilized model in studying information system acceptance is the technology acceptance model (TAM) developed by Davis (1989) in which system use is determined by perceived usefulness (PU) and perceived ease of use (PEOU) relating to the attitude toward use that relates to intention and finally to behavior. TAM has been tested widely with different samples in different situations and proved to be valid and reliable model explaining information system acceptance and used (Pikkarainen et al., 2004). It was found that previous study was mostly focus on adoption of internet banking. Therefore, this research will focus on factors influence consumers perception towards the extend usage of internet banking.

The objective to conduct this research is to identify the key determinants of customers' perception towards extend usage of internet banking in Malaysia. Understanding of factors or key determinants for users in extend usage of internet banking will provide benefits and increase the number of users in continue using internet banking services in the future.

In addition, this study provides benefits to bank since this research is to identify factors influence customers' perception toward the extend usage of banking channel which is internet banking. This research is useful to the bank to identify and determine potential customers in the future. Hence, it can assist banks increase performance as well. It also gives an opportunity to banks in discover what factors that needs to concentrate to the users. Besides, it also helps for bank customers to utilize the internet banking services.

Apart from that, promotional and communication issues are also important between the customers and internet banking. Banks should develop the belief of usefulness and ease of use by providing sufficient information on the benefits of internet banking services. On the other hand, the results of this study can be used by bank to improve the inadequacy internet banking facilities, banking system as well as utilize the information to provide the best services to the users.

Apart from that, the study on customer perception on extend usage of internet banking has not been extensively examined in the Malaysian context. This has pointed out the needs for research. Hence, a thorough examination of the factors influencing the extend usage of internet banking in Malaysia is deliberately essential for bank administrators.

1.7 Organization of Remaining Chapters

Chapter one deals with the problem statement, research objectives, research questions and significance of study. The main idea discussed in this chapter is the issues and the growth of internet banking in Malaysia. It is also discussed deeply in the aspect of internet banking and its role in the market. Internet banking services and types of banking also mention in this chapter.

Chapter two introduce the literature review of internet banking regarding the variables in this study. It attempt to provide evidence or information support in relations to all the variables involved includes internet accessibility, internet quality, security and privacy, transaction benefits, and trust. The relationship between independent variable and dependent variable are being to discuss and supported by the evidence from literature review. This chapter also deal with theoretical framework

that had been developed that shows the relationship between variables. The development of hypothesis also completed in this chapter.

Chapter three discusses about research methodology. This chapter contain methodology carry out this study and provide the method used to collect data of this research project. The sampling frame and procedure involved will also discuss in detail in this chapter. Besides, it also deals with questionnaire development and discussed in detail the questionnaire design.

Chapter four brings out findings and analysis of data collected followed by the summary of result. This chapter deal with the outcomes in term of validity and reliability of the data. This chapter attempts to review the objectives of this research. It also tries to answer the hypothesis that had been developed for this study whether it is accepted or rejected.

Chapter five is concerned discussion and conclusion. Summarization of the research study also deals in this chapter. Apart from that, this chapter review and interpret findings attempt to answer the entire research question. It also carried out the limitations of the study and some recommendation for the future researchers.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

There are many published literature and past studies on adoption of internet banking and its driving factors. This chapter review on internet banking and its factors that influence the consumer' perception towards extend usage of internet banking. These literatures are important as they provide strong support to this study and used as fundamental on building theoretical framework and methodology. This chapter end with the gaps identified from previous studies.

2.2 Variables of the Study

2.2.1 Extend Usage of Internet Banking

Internet banking in this study is defined as an internet portal, through which customers can use different kinds of banking services ranging from bill payment to making investments. Therefore banks' web sites that offer only information on their pages without possibility to do any transactions are not qualified as internet banking services (Pikkarainen et al., 2004).

Extend is to make something longer or wider, to make something last longer or to make an offer. Extend usage of internet banking can be defined as to continue use internet banking for a longer period (Yourdictionary, 2012). Adoption is the decision to use or accept a particular idea, method, law, or attitude (Macmillan, 2012).

In this study, determinants that influence consumer's perception on extend usage of internet banking will be investigated.

Gerrard and Cunningham (2003) states that adopters perceived internet banking as being more convenient and more compatible with the adopter's lifestyle. Non-adopters perceived the service as being more complex and requiring a higher level of computer technology skills. On the other hand, banking experiences play important roles for consumers in using internet banking services as well as extend usage of the services. Banking experience refers to the level of banking experience such as reliability and accessibility of using internet banking. Individuals who use internet banking were significantly more satisfied in terms of reliability and accessibility of the internet banking system.

According to Giglio (2002), it has been proved that online banking channel is the cheapest delivery channel for banking products once established. Besides that, time, cost savings and freedom from place have been found the main reasons underlying online banking acceptance (Giglio, 2002). Chi et al. (2007) conducted a study on the acceptance of internet banking in Hong Kong. The study found that the perceived usefulness, perceived ease of use, perceived risk on internet banking, and personal innovativeness in information technology have a positive relationship with internet banking adoption (Khalil et al., 2010). This indicates that benefits of internet banking is crucial in affecting consumers perception towards extend usage of internet banking.

Online banking offers many benefits to banks as well as to customers. Nonusers often complain that online banking has no social dimension for example you are not served in the way you are visit to the bank and get face-to-face services

(Mattila et al., 2003). According to Howcroft et al. (2002), customers not using or continue use the services as afraid of security issues. However, this situation is changing as the online banking channel has proven to be safe to use and no misuse has been reported by the media in Finland (Howcroft et al., 2002).

Thatcher et al. (2006) found that adoption of business-to-business electronic commerce is also influence by culture. Based on their analysis, they suggested that the nature of cultural influence on the adoption decisions is influenced by industry conditions. On the other hand, social influence plays an important role in the acceptance of the internet banking technology. Many influences are relevant to the subjective norms which are like other people's opinion, peer influences and others factors (Venkatesh & Morris, 2000). Study of Al-Gahtani et al. (2007) argued that in a high power distance society, individuals tend to accept a technology as they are influenced by others who are closed to them.

Consumers go through a process of understanding, knowledge and decision and before they buy or using a product or services. According to Polatoglu and Ekin (2001), as more and more banks offer internet banking, the greater is the awareness level among consumers and therefore the higher will be internet banking adoption. Many of the consumers' adoption of internet banking depend on the information that is available for the consumers and also understanding of the concept. Low awareness of internet banking itself is the crucial contributor that prevents consumer from accepting online banking (Pikkarainen, 2004). Therefore, consumers tend to continue using the services if they understand the overall concept of internet banking and their awareness toward the services.

Cheah, Sanmugam, and Tan (2005) presented the profile of the Internet Banking adopter in Malaysia based on a large-scale survey. The study highlight that financial institutions are able to construct the profile of their own customers. Knowledge of the customer profile or more generally the individual characteristics of customers is useful in many ways. By equipped with the information on the customers who had already using internet banking or likely to do so, banks will be able to identify the market segments that should be targeted. They can then introduce banking products and services that better suit the needs and wants of the customers in the segment. Hence, this can attract consumer to continue using the internet banking services.

2.2.2 Internet Accessibility

Accessibility can be defined as easily approached, entered or obtained (Dictionary of the English Language, 2009). In the context of internet banking, internet accessibility refers to the quality of being useful and convenient. It also refer as easy to use, flexible and availability to access.

Lichtenstein and Williamson (2006) analysed and identified several key findings from an interpretive study of Australian Banking consumers' experiences with the adoption of Internet Banking. They provide an understanding of how and why specific factors affect the consumer decision whether or not to bank on the internet, the findings shows that convenience is the main motivator for consumers to use internet banking. Nowadays, people prefer the easy and convenient services that enable them to save their time. Internet banking provides services that ease the consumer in doing their banking activities where they can perform transaction

anytime anywhere. This brings convenience to consumer and fulfilled the lifestyle of current busy life (Lichtenstein & Williamson, 2006).

According to Hulten, Nyberg, and Chetioui (2006), the customer's important concern of internet banking are increased accessibility to the bank service, lower service charges and avoiding waiting to be helped by a teller. The shortage internet accessibility can be a critical barrier to adoption. Consumer tend to get the easy way in using internet banking and their problems can be solved when they facing the problems. Implementing web technology as a business channel requires organizational ability and resources to utilize web technology such as software and hardware. The lack of experience and knowledge in using internet facilities can inhibit usage of internet banking (Hulten, Nyberg, & Chetioui, 2006).

Cost occurred in internet banking is relatively low, bank charge low fees or even cost free for the transaction. This encourage consumer to further using the internet banking services to do transaction as well as others different services involved in internet banking that provided by bank for them (Bughin, 2003). According to Uppal (2008), customer perception on acceptance of internet banking also depends upon on the cost involved behind using the services. There are many users consider use or not to use for internet banking because of the cost factors associated with it. Thus, consumer take decision to continue use of internet banking is related with the cost as well.

Internet banking provides flexibility, fast and easy in financial transactions. Rapid advances in the technology in terms of security and other features coupled with the decreased or low cost of the technology implementation and usage has the immediate effect on the usage of customer in internet banking. Especially services

that cost free have a great affect on the consumer's usage of internet banking. This gives a scope for gaining more customers for the use of internet banking services provided by bank. Besides, it also encourages customers to extend using internet banking with more transactions and different services involves in internet banking (Hanudin, 2007).

2.2.3 Internet Quality

Perceived service quality can be defined as a global judgment or attitude related to the superiority of a service (Parasuraman et al., 1988). In this study, internet quality refer to quality of information that provided by service provider. The quality of information should be relevant, related to customer needs, and interests for the customers as well as current, timely, up-to-date (Edmunds & Morris, 2000).

Lichtenstein and Williamson (2006) highlighted increasing risk acceptance by consumers in regard to internet-based services and the growing importance of offering deep levels of consumer supports for internet banking services. In terms of consumer support, quality information should be relevant, related to customer needs, and interests for the customers. Banks have to focus on relevant information which responds to customer needs and attract them to keep accessing the firm website and using the services provided for them. Apart from that, quality of the information has to be timely, up-to-date and current information must be provided (Lichtenstein & Williamson, 2006).

Many of the rural areas in Malaysia lack the opportunity to gain the advantages form the services provided by internet, they lack of information regarding the internet banking and people tends to prefer visit to bank and doing transactions

using traditional banking and not utilize the internet banking services although they have the online banking account (Weng, Elamvazuthi & Normaziah, 2001). Thus, awareness of information on internet banking and the knowledge about the technology will give the opportunity to attract consumer to using the services (Zhu & Chen, 2010). Hence people who are well served with computers and know well about the internet banking information tend to use more of the internet banking compares to those who are not.

On the other hand, quality of the internet connection will also give impact on customer's perception to use internet banking. People do not want to have any problem with the internet during doing internet transaction as any problem encountered will lead to affect the transactions. It might be not complete for the transaction (Pikkarainen et al., 2004). Thus, consumers are concerning the quality information and quality of internet on internet banking services. By providing an efficient and effective customer service with new technological advances, consumers can get the sufficient information on internet banking and tend to continue using the internet banking (Mohamad et al., 2007).

Reasons that cause consumers in neglecting or not to continue use of internet banking is the facilities provided by the banks on their web portal. Many people do not intend to use internet banking as they do not find the multi language support offered by most of the banks. Besides that, the information provided by bank is not sufficient. It had lead to negative impact on the continue usage of internet banking where this simple services can get more internet banking customer to the bank (Rotchanakitumnuai & Speece, 2004).

Attraction in use of the internet banking is the ability to access information more easily. Besides that if the online banking website is easily accessible, customers can access information faster and encouraging them to continue connecting back to banks' website. It will also enable the customers to check bank's information frequently (Lichtenstein & Williamson, 2006). The important of internet information bring the influences to the usage of internet banking. People are generally accept to continue using the internet banking services that provided the internet applications that satisfied and bring confidents to the people.

2.2.4 Security and Privacy

In the context of internet banking, internet banking services must provide security and privacy requirement that satisfy the consumer. Privacy refers to the ability to prevent the unlawful or unethical use of information or data. Confidentiality can be defined as the ability to prevent unauthorized parties from interpreting or understanding data (Damien & Matthew, 2003). Protection can be defined as the process through which customers are satisfied that their personnel information is sufficiently preserved by the entity collecting the information (Chellappa, 2001).

Cooper (1997) identified the level of risk as an important characteristic from a consumer's perspective in the adoption of innovation. An obstacle to electronic commerce adoption has been the lack of security and privacy over the internet (Bhimani, 1996). This has led many to view internet commerce as a risky undertaking. Thus, it is expected that only individuals who perceive using internet banking as low risk undertaking would adopt it.

Security and privacy on internet banking is crucial as it is important for customer in performing repeat transaction. Besides that, the level of security will brings effect to influences customer whether to continue using the services. Goi (2006) identified that many users are still not ready to accept the internet banking services due to the concern raised by various group, especially in the area of security and privacy. This shows that internet banking services has the potential of vulnerabilities regarding to the securities and this lead disadvantage of it (Goi, 2006).

Adel (2005) examined the applicability of online banking in Baharin. The study considered the important of trust and familiarity of internet as factors that increasing online banking acceptance between mature people (Adel, 2005). The results show that, upon their security concerns, mature customers are willing to adopt online banking if their banks provided them with necessary guidance. Thus, mature people as well as users of internet banking are concern the status or level of security and privacy that provides by bank.

Security is always the important challenges in consumers' decision for internet banking usage. This is because internet banking involved monetary transaction through online, thus customers fear higher risk in using internet for financial transaction. Studies performed by Yiu et al. (2007) concluded that security is always been seen as the main service barrier to the internet banking as it affects in the user acceptance towards such facilities.

Consumer always worried the security and privacy problems occur especially when they doing transaction online. The personal information and account information is the area concern by consumer where they afraid that the information might be obtain by other parties (Mohamad et al., 2007). Apart from that, the money

can be transfer out from the account when others getting login to the particular account. Thus, this issue always influence consumers' in making decision whether continue to using internet banking. Hulten et al. (2002) highlights the inherent problem of distance banking is security level. The problems encounter where a non-authorized person enters the banks internal account and a person can enter another person's account.

Customer protection is an issue in using internet banking. This issue cause deceptive practices by service providers, unauthorized access and usage by other such as hackers or other unethical groups of people (Mohamad et al., 2007). Banks are still lack behind in making secure transaction. Recently, there are many fraud emails that asking bank customer to update their information through online. This caused the email sender retrieved the account information when users login into account using their login username and password through online. Customers money had been transfer out form their account. According to Maybank (2008), bank had released security alert to warning consumer that do not be fool by the fake email that received by consumer. The email is intended to "phish" user's personal Maybank2u.com ID and banking information. If user login and provide personal information, users may soon discover that they are the victim of a financial scam and faced with loss of the savings (Maybank, 2008).

Thus, when bank able to provide high level of secure internet banking services with excellent secure system as well as protect privacy of users, consumers tend to continue using internet banking services.

2.2.5 Transaction Benefits

Benefit can be defined as an advantage or profit gained from something. In this study, transaction benefits refer to the advantages that provide to the users. The benefits include easier access for transaction; meet the needs of consumer, capabilities for information sharing and comprehensive services (Lederar et al., 2001). There are also transactional benefits, which can provide the ability to automate business function through the web and provide service to customers with lower cost and more responsiveness (Graeves et al., 1999) as well as the benefits of viewing transactions online and paying for bills (Beer, 2006). Benefit that provided by internet banking services has gone a step ahead and it is now characterized by additional services such as payment on loans and mortgages (Mohammed et al., 2009).

Paynter & Lim (2001) emphasized that the key to survival of bank to retention of customer's royalty is by offering VAS (value added services) according to their needs. Awareness of the services and the usage of the services provided by banks have a positive impact on the customer perception on extend usage of internet banking. Most of the people are not aware of the services that provided to them and do not have basic knowledge and hence do not show interest or do not continue using internet banking (Pikkarainen et al., 2004).

Yeap and Cheah (2005) conducted study that examines the level of retail internet banking services provided by foreign and domestic commercial banks in Malaysia over a period of two years. The study found that while foreign banks are marginally more sophisticated at the information provision level, domestic banks offer a significantly higher level of transactional facilities in both years. The services

include information provision, transactional facilities, online application and financial management. The more services provided by bank that meet the needs and requirement of consumers will lead them to using the internet banking services for the long period of time.

Ho and Ko (2008) found that self-service technology demonstrate a positive effects on customer value and customer readiness. They concluded that customer value and customer readiness significantly affect continued use of internet banking. When customer perceived the value from the services that provided for them, they intend to accept and continue using the services. Apart from that, internet banking is helpful in expanding the product offerings. Through internet banking, banks can provide as variety of services, which can gives positive information for the consumer to continue using internet banking services as well as attract more non-users to use the services. Besides that, it also can get more business from the existing customers when they continue to use internet banking (Ho & Ko, 2008).

The level of internet banking usage in a bank is higher if the bank continuously adopts different technological innovations. With respect to acceptance of internet banking, technological progress by banks and the level of benefits provided influence positively the behavior of consumes towards usage of internet banking. On the other hand, the trend of internet banking adoption is expected to continue in the future in credit union industry. The addition of internet banking services for credit unions and banks are benefits to each other in term of convenience and fast banking and costs thefts to customers (Dandapani, Karels & Lawrence, 2008). Thus, the more services provided to consumers in internet banking, the more probability that consumer have good perception toward extend usage of internet banking.

Consumers' perception on extend usage of internet banking affect by the benefits that provided by the service provider. Comprehensive benefits that provides by banks enable consumers to conduct banking activities during non working hour period. Furthermore, consumer can reduce the time use to visit bank by conducting the transaction online. Hence, by providing the internet banking benefits that meet the requirement and needs of consumer, it is believe that consumer tend to continue using internet banking in the future. The Star (2008) discussed about the internet banking services, which are available in Malaysian banks today. Apart from applying for housing loan, buy insurance, pay utility bills, checking account balances, transferring funds and requesting for statement and chequebooks, there are also other advanced services were provided to the public. Rhb Bank Bhd offer a service of IRB (Inland Revenue Board) account online, which allows employees to pay their worker's monthly tax deductions into IRB. Employees able to use Reflex eHR2, the bank's internet banking payroll solution, to forward the income tax deductions to the IRB account. Furthermore, CIMB Bank has become the second bank in the world to offer Western Union Money Transfer online. Available via CIMB Bank's internet banking portal CIMB clicks, the new service is an extension of the Western Union Transfer over-the-counter service, which has offered since 2000. Besides that, Citibank and Employee Provident Fund (EPF) launched Citi Connect EPF e-contribution facility and EPF Smart Kiosk to improve EPF transaction for corporate and retail customers. Through this service, a web-enabled financial service would allow employees to submit their employees EPF contributions in easiest manner.