IMPACT OF PERSONAL FACTOR ON INTENTION TO ADOPT I-BILL PAYMENT: THE MODERATING EFFECT OF INFORMATION VALENCE

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IMPACT OF PERSONAL FACTOR ON INTENTION TO ADOPT I-BILL PAYMENT: THE MODERATING EFFECT OF INFORMATION VALENCE

By

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ABBREVIATIONS

Abbreviations used in this study are as follows:

ATMs	Automatic Teller Machines
BOT	The Bank of Thailand
CDMs	Cash Deposit Machines
CRI	Consumer Resistance to Innovations
DOI	The Diffusion of Innovations
POV	Predicted Outcome Value Theory
SCT	The Social Cognitive Theory
SSBTs	Self-Service Banking Technologies
SSTs	Self-Service Technologies
TAM	Technology Acceptance Model
TPB	Theory of Planned Behaviour
TRI	The Technology Readiness Index
URT	Uncertainty Reduction Theory

IMPAK FAKTOR-FAKTOR PERIBADI TERHADAP NIAT UNTUK MENGAMALKAN PEMBAYARAN BIL MELALUI TALIAN: PENGARUH VALENCE MAKLUMAT SEBAGAI MODERATOR

ABSTRAK

Peningkatan dalam pengenalan teknologi perbankan layan diri (SSBTs) di kalangan pelanggan sektor perbankan telah menyumbang kepada kepentingan untuk memahami faktor-faktor yang mempengaruhi keputusan penggunaan pelanggan. Kajian ini bertujuan untuk mengkaji faktor-faktor yang boleh mempengaruhi persepsi niat pelanggan di kalangan bukan pengamal pembayaran bil melalui talian. Selaras dengan matlamat keseluruhan, kajian ini mencadangkan faktor-faktor peribadi bagi meramalkan niat untuk mengamalkan pembayaran bil melalui talian di kalangan pelanggan bank. Kajian ini juga mengkaji peranan pengaruh maklumat positif dan negatif sebagai moderator terhadap hubungan di antara faktor-faktor peribadi dan niat untuk mengamalkan pembayaran bil melalui talian. Teori kognitif sosial telah digunakan sebagai asas untuk membentuk model konseptual. Kajian ini menggunakan soal selidik berstruktur dan data telah diperolehi daripada 516 pelanggan bank di Thailand dan dianilisis dengan menggunakan perisian SPSS. Dapatan hasil kajian menunjukkan semua kempat-empat faktor peribadi mempengaruhi niat pelanggan untuk mengamalkan pembayaran bil melalui talian. Secara turutan pengaruh faktor-faktor peribadi tersebut adalah seperti berikut: keperluan peribadi, keupayaan peribadi, inovasi peribadi dan hubungan peribadi. Maklumat positif dan maklumat negatif bertindak sebagai moderator di antara faktor-faktor peribadi dan niat untuk mengamalkannya. Kajian ini diakhiri dengan dapatan serta perbincangan, batasan kajian , implikasi teori dan praktikal kajian.

IMPACT OF PERSONAL FACTOR ON INTENTION TO ADOPT I-BILL PAYMENT: THE MODERATING EFFECT OF INFORMATION VALENCE

ABSTRACT

The increasing in the introduction of self-service banking technology (SSBTs) among the banking customers enhance needs need to understand the factors that influence customer adoption decisions. This study aims to investigate the factors that may influence customer intention to adopt i-bill payment from non-adopter customer perspective. In line with its overall aim, this study proposes personal factors as factors that predict the intention to adopt i-bill payment among bank customers. This study also examines the moderating role of information valence on the relationship between personal factors and the intention to adopt i-bill payment. The social cognitive theory was used as the foundation to form the conceptual model. The survey research used structured questionnaires to collect data from 516 bank customers in Thailand, which were tested using SPSS. The findings of the current study found that all four personal factors significantly influence customers' intention to adopt i-bill payment. The sequence of the importance variable are as following personal needs, personal ability, personal innovativeness and preference personal contact respectively. orientated information and risk orientated information acted as moderator role between personal factors and intention to adopt. This research concluded with further discussion findings as well as the limitations, theoretical and practical implications of the study.

CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter provides an overview of this study. It starts with the background of the study, overview of banking with highlights on the problem statement, research questions and research objectives are also presented. After that, the expected theoretical and practical contributions are discussed. Finally, the scope of the study, the definitions of key terms, and organization of the thesis are presented at the end of the chapter.

1.1 Background to the Research

The advent of the Internet has created many new opportunities and challenges for businesses Ramayah, Chin, Suki and Ibrahim (2005); for example, electronic commerce (e-commerce), electronic payment (e-payment) and electronic banking (e-banking). The exponential increase in online business transactions, the online payment system has gained in popularity because vendors and creditors realize its growing importance as a foundation to improve their information infrastructure and to achieve "paperless" operating efficiency (He & Mykytyn, 2007). E-banking is seen as one of the most successful business-to-consumer applications in e-commerce (Laukkanen, 2007; Pousttchi & Schurig, 2004).

In the context of banks, the changes in the banking environment, including globalization and deregulation, have made the banking sector highly competitive (Srivastava, 2007). The aggressive increase in service competition among the banks is the main issue for those banks to find various solutions in order to improve and

upgrade their service. One such option for banks is self-service technologies (SST). Self-service banking technologies (SSBTs) are the technologies offered to customers to increase the service channels besides counter services.

Self-service banking technologies (SSBTs) are the technologies that allow consumers to use a service in their own time and independent of direct service employee involvement (Meuter, Ostrom, Roundtree, & Bitner, 2000). Many banking service providers throughout the world have begun to introduce/offer a wide range of SSBTs, such as automatic teller machines (ATMs) and cash deposit machines (CDMs). Meanwhile, the development of the Internet has led to the birth of online SSBTs as Internet banking and mobile banking services. The SSBTs not only bring benefits to customers by increasing the flexibility and convenience for customers (Laukkanen,Sinkkonen & Laukkanen, 2008; Poon, 2008; Walker & Johnson, 2006), but these new service channels also bring benefits for banks in terms of cost reduction and increased productivity as well as enhancing efficiency in the long run (Laukkanen et al., 2008; Proença & Rodrigues, 2011; Walker, Craig-Lees, Hecker, & Francis, 2002).

Although banks want their customers to use SSBTs, which would result in considerable savings in operating costs for banks in the long run (Poon, 2008), however not all consumers have adopted SSBTs with quite the same level of enthusiasm. Some consumers tend to avoid or do not adopt self-service technologies. If the adoption process is slow, the bank has to keep its labour force intact as well as pay for the high cost of technology, which means that the savings or benefits of SSBTs cannot be realized until almost all customers embrace and use self-service technology. Therefore, studying customer intention to adopt and examining the

factors that influence intention among the bank customers who do not currently use SSBTs needs to be enhanced.

The development of electronic banking services via multiple electronic channels has made it possible to provide new kinds of added value for customers, which today include the option for multiple service transactions conducted via the Internet, mobile phone, automatic teller machines (ATMs), or cash deposit machines (CDMs). There are many types of transaction option that can be done through electronic banking channels, such as money transfer (between customer accounts or between third parties with accounts at same bank and other banks),international fund transfers(transfer of expenses for education overseas, transfer of money to relatives or family with permanent residency in another country), check the status of own mutual fund investments, redeem or switch orders for mutual fund units, view a summary of current balance as well as detailed transaction records of several items including their registered deposit accounts and credit card balance, and make bill payments online (bills issued by bank for credit card, mortgage; and bills issued by third party, such as utility provider or retailer).

I-bill payment is one mode of online transaction option that banks offer to their customer via Internet banking. Paying bills via the Internet is one of the most rapidly growing forms of e-invoicing (Ramayah et al., 2005). Every month customers have to pay bills for different products and services, such as credit cards and public utilities like water, telephone, electricity, etc. Internet bill payments provide the advantage of no crowds, no transportation costs, no traveling time, no physical movement for paying money, no parking problems and no queuing for paying money; bills can be paid in the blink of an eye (Ramayah et al., 2005).

Customers can make bill payments from anywhere at anytime that is convenient to them if they use Internet banking and can also set payment dates in advance to avoid forgetfulness to pay bills when they are due. Meanwhile, increased transactions via electronic channels for e-bill payments, etc., will lead to economies of scale that bring down the unit cost of service for the bank (Payment Systems Policy Department, 2011, 2012). In general, the cost of operating can be reduced if their customers pay bills via Internet banking instead of paying at branch service counters, which incur higher costs including labour, space cost and management utility costs. However, before the success of this bill payment service can be determined, it is essential to understand whether it would be well accepted by the potential users and what influences their decision making. Therefore, this study investigates the factors that may influence the intention to use Internet banking for bill payment (i-bill payment). A large majority of the population around the world are altering their bill payment mode to Internet banking. However, this innovation is not accepted by all the population in every country in line with the efforts of the providers. Therefore, the factors that may influence the adoption of i-bill payment need to be identified in order to encourage the consumers to widely adopt this mode of bill payment.

Initially the previous research about e-banking focused on consumers' attitudes, intention and adoption of some particular channels, such as automated teller machines (ATM) and telephone banking, whereas, in recent years, the research on electronic banking has focused on Internet banking, which, today, includes the option for multiple service transactions conducted via the Internet and mobile phone (Laukkanen, 2007). For example, Githui (2011) studied mobile money transfer in Kenya; Ramayah et al. (2005) studied the determinants of intention to use an online

bill payment system, He and Mykytyn (2007) studied the decision factors for the adoption of an online payment system.

Therefore, the major aim of this research is to identify the factors that influence the intention to adopt i-bill payment among bank customers in Thailand. Having a clear understanding of the factors that influence the intention of bank customers to adopt Internet banking for bill payments will enable bank managers, other finance providers and policy makers to develop their strategy to directly encourage customers to practice bill payment via Internet banking.

1.2 Overview of Thai Banking

Thailand has 15 commercial banks, which can be classified into three groups using certain criteria – the share of total assets of Thailand's commercial banking sector – i.e., large banks, medium-sized banks and small banks group, as shown in Tables 1.1, 1.2 and 1.3.

Table 1.1
Large Banks in Thailand

	Large Banks
1	Bangkok Bank Public Company Ltd.
2	Krung Thai Bank Public Company Ltd.
3	Siam Commercial Bank Public Company Ltd.
4	Kasikorn Bank Public Company Ltd.

Note: Large banks include banks with a market share of 10% of the total assets.
Source: Bank of Thailand (2010)

Table 1.2
Medium Banks in Thailand

	Medium banks
1	Bank of Ayudhya Public Company Ltd.
2	TMB Bank Public Company Ltd.
3	Siam City Bank Public Company Ltd.
4	Thanachart Bank Public Company Ltd.

*Note:*Medium-sized banks include banks with total assets of market share from 3 per cent but less than 10% of total assets.
Source: Bank of Thailand (2010)

Table 1.3
Small Banks in Thailand

	Small banks
1	CIMB Thai
2	United Overseas Bank (Thai) Company Ltd.
3	Standard Chartered (Thailand) Bank Public Company Ltd.
4	Tisco Bank Public Company Ltd.
5	Kiatnakin Bank Public Company Ltd.
6	ACL Bank Public Company Ltd.
7	Mega International Commercial Bank

Note: Small banks include banks that have a market share of less than 3% of total assets.
Source: Bank of Thailand (2010)

The Bank of Thailand (BOT), as the central bank, plays an important regulatory role in the banking sector. As one of the key policy objectives is to facilitate an orderly reduction in the usage of cash and cheques, and increase the use of electronic payments that are less costly for the overall economy, the bank promotes greater usage of electronic payments instead of cash (Payment Systems Policy Department, 2012). The BOT provides the financial infrastructure to serve the needs of business and the financial sector. In respect of Internet banking, the BOT has revised the notification requirements for commercial banks concerning their use of the Internet for commercial banking business and has expanded the areas of

permissible use of the Internet for consumer banking. Being aware of the importance of electronic transactions for the future economic growth of the country, commercial banks in Thailand have been allowed, since November 2000, to provide the same kinds of transactions online as they do in branches (Jaruwachirathanakul & Dieter, 2005).

The banking innovations developed gradually through the use of technology. Awareness that technology is vital to competition in banking began when Bangkok Bank introduced inter branch online services in 1970. However, proactive competition through the use of information technology to improve services across the banking industry did not occur until the emergence of the ATM service in the smart automation regime. The introduction of the ATM service in 1983 and Internet banking in 1999 by Siam Commercial Bank triggered the banks to invest in technology and build up their technological capabilities. In other words, it was a technology push that pressurized all the banks to enter into a high degree of technology usage to survive the competition in the banking industry (Wonglimpiyarat, 2007).

The Asian recession of 1997 changed the banking environment, i.e., the increased role of specialized financial institutions, the rise of non-bank financial institutions, and increased heightened competition from foreign banks. As a result, the Bank of Thailand(Bank of Thailand, 2009)relaxed the foreign ownership rules, which facilitated the entry of major international banking groups into the market (Jaruwachirathanakul & Dieter, 2005). Attempting to become more efficient and competitive, especially after the economic crisis in 1997, Thai Banks invested heavily in information technology to provide better services to their customers with

the hope of reducing operating costs and generating higher long-term profits (Rotchanakitumnuai & Speece, 2003). Although most Thai banks have actively facilitated the use of ATMs, as well as mobile and Internet banking, the growth is still small (Nakornthab, 2007). Samphanwattanachai (2007) reported that the Internet banking service in Thailand is still at an early stage with only a small number of users. The experts who came from Thai commercial banks, university lecturers of financing and marketing fields agreed that Internet banking is an important retail banking distribution channel in Thailand and that the growth needs to be increased.

1.2.1 Internet Banking in Thailand

Over the years, more customers in Thailand have become Internet literate. Internet users in Thailand increased rapidly between 1999 and 2009. In 2009, the number of Internet users was 18.30 million compared to 16.10 million in 2008, which shows a 13.66 percent increase(Internet Information Research Network Technology Lab, 2011). Although more customers in Thailand have become Internet literate, the use of Internet banking is still low (Electronic Transactions Development Agency, 2013; National Electronics and Computer Technology Center, 2010). The Electronic Transactions Development Agency (2013) reported that only 13 per cent of Internet users in Thailand do banking transactions via the Internet.

Nowadays, Thailand's commercial banks have their own Internet banking websites in order to let the customers execute their bank transactions via the Internet, as shown in Table 1.4. Internet banking is a new channel of banking that makes it possible to perform the banking transactions through the World Wide Web and lets customers access their bank accounts from wherever they have a connection to the Internet and fulfil all their needs on a 24-hour basis. Banking services offer many

options for the customers to check bank account balances, execute fund transfers between accounts, and order electronic bill payments.

Banks have invested in the Internet because it is a new channel for contacting customers, the customers can expedite the time required to interact with the bank and it is convenient for them. In return, the banks can gain benefit from Internet Banking services in terms of reducing the operating and fixed costs (Samphanwattanachai, 2007). For example, the cost of fund transfers via the counter service in banks is about 30 baht per transaction; the cost of fund transfers via Automatic Teller Machines (ATMs) is about 9.5 baht per transaction; the cost of fund transfer via telephone banking is about 1 baht per transaction while the cost of fund transfer via the Internet is only 0.25 to 0.50 baht per transaction.

Table 1.4
Thailand's Commercial Banks Internet Banking Websites

	Thailand's commercial banks	**Internet Banking websites**
1	Bangkok Bank Public Company Ltd.	www.bangkokbank.com
2	Krung Thai Bank Public Company Ltd.	www.ktb.co.th/
3	Siam Commercial Bank Public Company Ltd.	www.scb.co.th/
4	Kasikorn Bank Public Company Ltd.	www.kasikornbank.com/
5	Bank of Ayudhya Public Company Ltd.	www.krungsri.com/
6	TMB Bank Public Company Ltd.	www.tmbbank.com/
7	Siam City Bank Public Company Ltd.	www.scib.co.th/
8	Thanachart Bank Public Company Ltd.	www.thanachartbank.co.th/
9	CIMB Thai	www.cimbthai.com/
10	United Overseas Bank (Thai) Company Ltd.	www.uob.co.th/
11	Standard Chartered (Thailand) Bank Public Company Ltd.	www.standardchartered.co.th/
12	Tisco Bank Public Company Ltd.	www.tisco.co.th/
13	Kiatnakin Bank Public Company Ltd.	www.kiatnakin.co.th
14	ACL Bank Public Company Ltd.	www.icbcthai.com/
15	Mega International Commercial Bank	www.megabank.com.

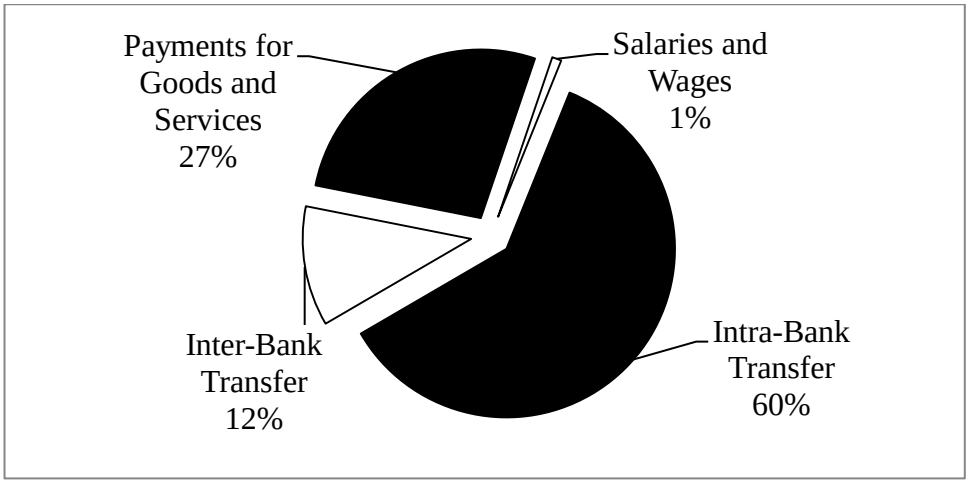
Over the period of five years (2007-2011), the growth in the number of Internet banking agreements and value of Internet banking transactions has not been stable. In 2008, the number of Internet banking agreements increased 28percent from 3.14million agreements in 2007 to 4.00 million agreements. In addition, the overall volume of Internet banking transactions increased 48 percent to 31.39 million transactions from 21.22 million transactions in 2007, while the total transaction value increased 39 percent to 6.82 trillion baht transactions from 4.90 trillion baht in 2007. However, in 2009, the number of Internet banking agreements decreased 21 per cent from 4.00 million agreements in 2008 to 3.17 million agreements and the overall value of Internet banking transactions dropped by 17 per cent from 6.82 trillion baht in 2008 to 5.69 trillion baht. Nevertheless, the volume of Internet banking transactions in 2009 rose 57 per cent from 31.39 million to 49.36 million. In addition, in 2010 and 2011 it continued to increase from 2009, and in 2011 the number of Internet banking transactions increased by 38 per cent from 60.79 million transactions to 83.84 million transactions. In turn, the total value of transactions rose by 11 percent, from 7.82 to 8.78 trillion baht, as shown in Table 1.5.

Table 1.5
Number of Agreements, Volume and Value of Internet Banking Transactions

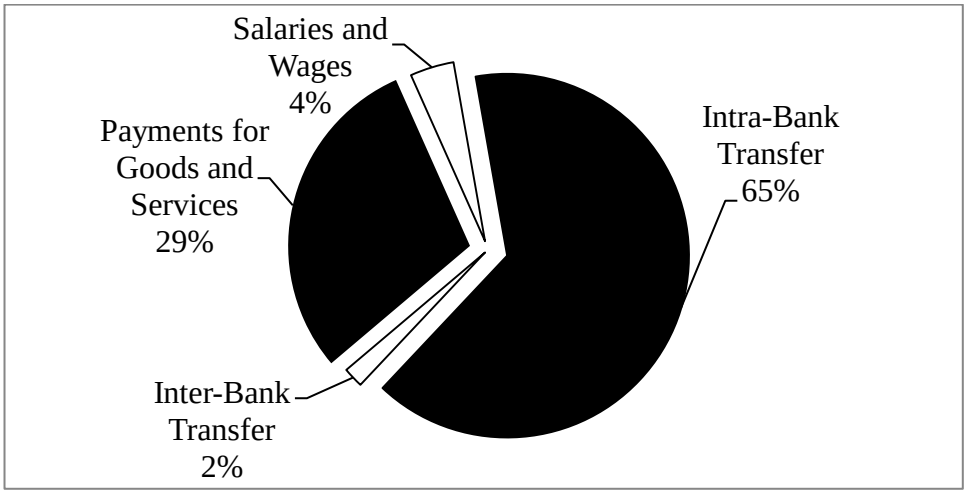
Internet banking	**2007**	**2008**	**2009**	**2010**	**2011**
No. of agreements	3,135,502	4,009,907	3,165,663	4,822,947	5,626,233
Volume of transactions	21,220,469	31,391,638	49,368,820	60,793,740	83,841,394
Value of transactions (billion baht)	4,897	6,819	5,692	7,892	8,780

Source: Payment Systems Policy Department,(2012)

According to usage type, intra-bank transfers accounted for 60 and 65 per cent of all transactions in terms of volume and value, respectively. Payments for goods and services registered at 27 and 29 per cent in terms of volume and value, respectively. Inter-bank transfers were 12 and 2 per cent in terms of volume and value, respectively. Finally, payments of salaries and wages were 1 and 4 per cent in terms of volume and value, respectively, as shown in Figure 1.1 and Figure 1.2.



Source: Payment Systems Policy Department,(2012)
Figure 1.1 Volume of Internet Banking Transactions, 2011



Source: Payment Systems Policy Department,(2012)
Figure 1.2 Value of Internet Banking Transactions, 2011

1.2.2 Banking Channel for Mode of Bill Payment in Thailand

Bank customers can pay bills, such as for utility charges, Internet, credit cards and loans, insurance, rental and leasing, and for goods and services, etc.via many channels that are provided by the Thai bank –counter service, direct debit payments, kiosk machines (CDMs, ATMs), mobile banking, Internet banking and phone banking – as shown in Table 1.6.

The channels for payment of goods and services provided by banks include:

(1) Bank branches, through which the customer can pay bills at the bank branches on business days.

(2) Direct Debit is a service by which the bank is authorized by its customers to automatically take funds from their savings account or current account with the bank to pay for goods or services on each merchant's due date.

(3) Kiosk machines, such as Automatic Teller Machines (ATMs), Cash Deposit Machines (CDMs) and Auto Deposit Machines (ADMs),deliver services to the customers. These machines provide certain banking services to the customers on a 24-hour basis.

(4) Internet banking and mobile banking, a new channel of banking that makes it possible to perform the banking transactions through the World Wide Web and the customers can access their bank accounts from wherever they have a connection to the Internet and fulfil all their needs on a 24-hour basis.

(5) Phone banking, customers call the bank call centres and press the number for bill payment and follow the system process for payment.

Table 1.6
Bank Channels Mode of Bill Payment Provided by Banks in Thailand

	Counter service	**Direct Payment Debit**	**CDM**	**ATM**	**Internet Banking**	**Mobile Banking**	**Phone Banking**
Bangkok Bank	/	/	/	/	BualuangiBanking	/	/
Siam Commercial Bank	/	/	/	/	SCB Easy Net	/	/
Kasikorn Bank	/	/	_	/	K-Cyber Banking	/	/
Krung Thai Bank	/	/	/	/	Internet Banking	/	/
Bank of Ayudhaya	/	/	_	/	Krungsri Online	/	/
TMB bank	/	/	_	/	Internet Banking	/	/
Siam City Bank	/	/	_	/	SCIB i – Net	_	/
Thanachart Bank	/	/	/	/	_	_	_
CIMB Thai	/	/	_	/	Internet Banking	_	/
United Overseas Bank (Thai)	/	/	/	/	Cyber Banking	/	/
Standard Chartered (Thailand) Bank	/	/	/	/	Internet Banking	_	_
Tisco Bank	/	/	_	/	_	_	_
Kiatnakin Bank	_	_	_	_	_	_	_
ACL Bank	_	_	_	_	_	_	_
Mega International Commercial Bank	_	_	_	_	_	_	_

The most popular channel for the payment of goods and services is the bank counter service. In 2011, the number of transactions for bill payments for utilities and purchases of goods and services through the bank counter service reached a volume 80,957 thousand with a value of 5,439 billion baht, as shown in Table 1.7. Beside counter services, banks also offer a new channel for the customer as SSBTs channel. Normally, the fees for bill payment via SSBTs are cheaper than the fee for counter service. It is also convenient in respect of time and place, with no need to line up and queue for the counter service. It is also designed for payment of goods and services with 24-hour/7 day access via SSBTs.

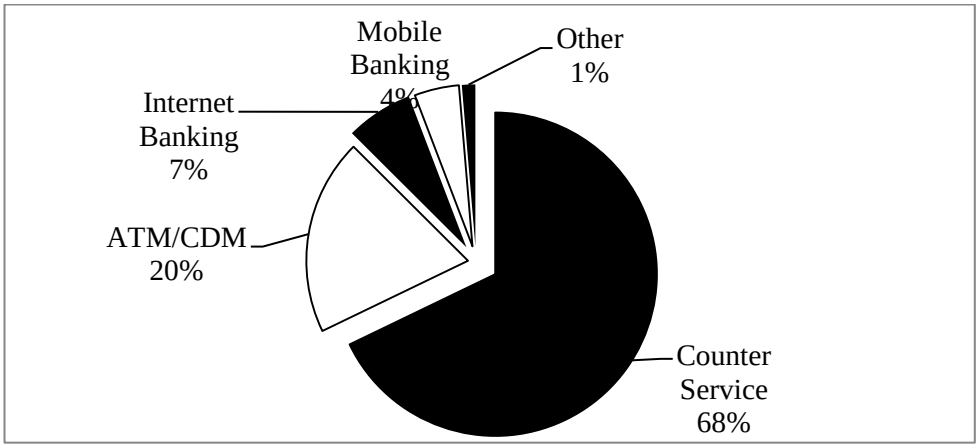
Table 1.7
Bill payments at Bank Counters, Volume and Value of Transactions

Value of transactions	2007	2008	2009	2010	2011
Volume of transactions (in thousands)	72,372	77,309	84,352	81,700	80,957
Value of transactions (billion baht)	5,069	6,093	4,714	5,296	5,439

Source: Payment Systems Policy Department, (2012)

1.2.3 Bill Payment Transaction via Internet Banking in Thailand

In Thailand, bill payment transactions via Internet banking represent a small proportion when compared with the popular channel of bank counter services, which account for 68 per cent of the total volume of usage. This is followed by payment through ATMs and CDMs, which accounts for 20 percent. Meanwhile, the proportion of bill payment transactions via Internet banking was only7 per cent of the total volume of usage, as shown in Figure 1.3.



Source: Payment Systems Policy Department(2010)

Figure 1.3 Volume of Bill Payment Transactions via Bank's Channel, 2009

From the overview of Thai Banking, it can be seen that although Internet banking is being increasingly accepted among bank customers, intra-bank and inter-bank transfers accounted for a large percentage of the use of Internet banking in 2011 (72 per cent) while the use of Internet for payment of goods and services accounted

for 27.10 per cent. However, the most popular channel for payment goods and services is through the bank counter service (The Payment Systems Policy Department, 2012). It can seen that although the use of Internet banking is increasing in Thailand, very few people use it for i-bill payment. As mentioned, if consumers adopt SSBTs the banks could reduce the number of consumers who use the counter for making their transactions at the bank, which, in turn, would reduce the operating costs for the banks and create the effectiveness of SSBTs. Therefore, all the online banking services offered by the bank should be utilized by the customers satisfactorily. Since this is not the case, more studies need to be conducted to identify the factors that influence Internet banking adoption among bank customers in Thailand. This study intends to address that gap.

1.3 Research Problem

Many research have showed that internet banking are being used to support various self-service technology such as such hotel online booking (Sparks & Browning, 2011), airline online reservation (Law & Leung, 2000), banking service as monitoring accounts, balance enquiry, printing statements and online payment (Nasri & Zarai, 2014). However, there are researches which indicated that self-service technology are not being used extensively by a group of potential customers (Alalwan,Dwivedi & Williams, 2014; Nasri, 2011). One of the example is the lack in the use of internet banking for i-payment (Karjaluoto, 2002b). This problem has been highlighted in Thai context when the banks in Thailand regret that although Thai commercial banks spent millions of baht on building Internet banking systems in order to reduce cost in the long run, however, reports showed that potential users still pay their bill through the bank counter service. Payment at the counter has become the main and popular channel for payment for goods and services. Internet

banking services can offer many options for the customers such as check bank account balances, execute fund transfers between accounts, and payments for good and service. The payment made via internet banking not only creates convenience for the customers but it can save cost for the banks (Laukkanen et al., 2008; Proença & Rodrigues, 2011). The banks can reduce the cost of operating by limiting the number of counters and frontline cashier to handle the customers physically. As an effort to ensure all the customers will use and utilized the internet banking services for all the online transaction activities, it is important to understand the reason behind why the potential customers are not using the internet banking services.

Numerous studies have been undertaken to examine the adoption of various banking channels, for example, bank branch channel, ATM channel and, Internet banking channel, in a generic context (Kesharwani & Bisht, 2012; Liljander, Gillberg, Gummerus, & Riel, 2006; Poon, 2008; Yiu,Grant & Edgar, 2007; Zhao, Koenig-Lewis, Hanmer-Lloyd, & Ward, 2010). However, there is a lack of studies specifically on the adoption of internet banking as SSBTs for particular payment services (e.g., bill payment, money transfer). Studying the adoption of internet banking to support the payment as SSBTs is important since these practices does not only facilitate the customers and the bank but it also benefits the third parties' service fees collection process. For example the customer may get the utility services from various other service providers. When they made the payment online via internet banking, the bank get benefits for changing transaction fees without investing much on the physical facilities of the bank while the third parties' managed to collect their fees without much hazels for setting up fees collection counters or kiosk. Due to lack of confidence with the auto debit service and prior poor experience with the auto debit services such as long and complicated procedure for terminating the services

many people are still prefer to make payment by themselves. And it is very important to direct these groups to make payment online via using internet banking services rather that paying at the counter or via the ATM machine. This study intend to address this gap by exploring the factors that hinder the customer for not using the internet banking services to support their internet payment activities. The payment activities here referred here as i-bill payment.

Reviews of prior studies on internet banking specially as SSBTs have frequently focused on the group of people who have already adopted internet banking as SSBT (Kesharwani & Bisht, 2012; Lin,Yeh & Chen, 2009; Polasik & Wisniewski, 2009; Wan,Luk & Chow, 2005; Yousafzai & Yani-de-Soriano, 2012). Most of their studies found a difference between the adopters and non-adopters (Proença and Rodrigues, 2011). For example, Raman et al. (2008) reported that Internet banking adopters and non-adopters have different expectations concerning the e-service preferences. Similarly, Rotchanakitumnuai and Speece (2003) found that adopters of Internet banking seem to have more confidence in the system, whereas non-Internet banking adopters are much more service conscious, and do not trust financial transactions made via Internet banking. Laforet and Li (2005) reported that adopters and non-adopters of online banking significantly differ in terms of confidentiality and security. Security concerns, hackers and fraud were identified as the main concerns for not using online banking services. Adopters were found to be less price-sensitive than non-adopters. Not many studies have purely investigated the factors that influence the decision of non-adopters for not using the Internet banking technology by centring the cause on customers instead of the technology or the service. Thus, the customer orientated factors need to be investigated to figure out the reason behind not adopting the internet banking as SSBT to support their

transaction activities. Additionally the customer orientated factors can be investigated based on what information customer received about the service and how the customer process the information. Thus this study focused on the personal factors and received information by the non-adopters.

The existing studies on Internet banking adoption have looked at the factors that influence the technology adoption in a broader context. A review of the factors that influence the adoption of Internet banking can be grouped into four dimensions, namely, personal factors, provider factors, technology orientated factors and environmental factors. However, in most of the studies these factors were studied together to investigate their influence on Internet banking adoption. For example, Laukkanen et al. (2008) studied five barrier factors investigate on resistance to adopting internet banking. Three barrier factors (value barrier, risk barrier and image barrier) focus on technology orientated factors and two barrier factors (usage barrier and their tradition barrier) focuses on personal factors. Püschel, Mazzon and Hernandez (2010) proposed eleven independent factors investigate the adoption intention of mobile banking. Seven factors focus on technology orientated factors (relative advantage, compatibility, image, results demonstrability, trialability, visibility, ease of use). Two factors focus on personal factors (self-efficacy and their norm) and two remaining factors focus on environmental factors (resource facilitating condition and technology facilitating condition). Most of the existing studies on internet banking have conducted integrated investigation to predict interest of internet banking adoption.

Little attention has been given to examining the influence of personal factors attributes on Internet banking adoption. Although several studies have revealed that personal attributes, such as personal ability (Guriting & Ndubisi, 2006; Ramayah,

Jantan, Mohd Noor, Razak, & Koay, 2003), personal needs (Lin et al., 2009; Ndubisi & Sinti, 2006), personal innovativeness (Gerrard,Cunningham & Devlin, 2006; Lassar, Manolis & Lassar, 2005; Parasuraman, 2000; Yiu et al., 2007) are important to SSBTs adoption but little study have been centred on customer sphere. Customer-dominant logic suggests that more research should be conducted to understand the customers' behaviour and response from customer shape (Heinonen et al., 2010). Understanding how the customer analyzed the information that they gained from the service provider and environment is important to understand the customer form their point of view. Understanding the customer such as customer goal, customer need and customer's life, what customer need is and how the service can accomplish their own goals. Some information that may favour to one customer may not favour another customer. Sometime customers are more triggered for the known benefits of using the service while sometime they concerned for the risk of not using the service. Adoption of a service results from what customer determiner as fit between a service and a customer's life. The ultimate goal for service should be to facilitate value for the customer (Grönroos, 2008) but customer can set the goals from benefit of using or risks of not using perspective. However, the attributes or components of personal factors and process of analyzing information they received may become important factors to predict the intention to adopt i-bill payment and this has not been adequately investigated in service context specially in banking context. More studies should be conducted to understand the influence of personal factors or user-centric factor on the intention of individuals to adopt i-bill payment. Thus, the purpose of this study focuses on the personal factor: the four dimensions of personal factors that will be studied in this study are personal innovativeness, personal needs, personal culture and personal ability.

Based on the review of the literature, it is widely accepted that information is one of the important cause for adopting technology (Anderson & Newell, 2004; Roger, 1995). However, most studies only view one side of information, either positive information or negative information (Ashtiani & Iranmanesh, 2012; Huang, Rau & Salvendy, 2010). The information can be positive information or negative information. People can adopt a new technology when they know the benefits of adopting the technology. This basically reflects the advantage they can gain when they adopt the technology. At the same time people also can adopt a new technology when they come to know the risk and losses they will experience if they don't adopt the technology. Studying the value and the risk for not adopting the technology together is classified as valence. There is a lack of studies that analyse the different characteristics of information in a form of valence in a single framework. Studying the two dimensions of persuasive information and pressure based information, which is the positive and negative information can influence the adoption of technology.

Since customers do not have experience to use a new service via Internet banking, there are difficulties in making the correct decision on the service. Thus, customers want sufficient information and form a mental evaluation based on the information that they received in order to then make decisions to maximize utility. For this reason, the information that they received, both positive and negative information, has an important in processing on consumers' decision to adopt the new service. Positive information reflects the benefits or value of using the technology while the negative information reflects the disadvantages or risk of using the technology. Based on the review of the literature, there is a gap in understanding how the information characteristic influences potential customers' perception of the intention to adopt technology. However it has not been studied with the information

valence as a moderator. Therefore, in line with the recent thought to predict service adoption, this study adopt the approach of customer dominant logic (Heinonen et al., 2010) to predict how the customer formed the value about the technology in relation to the information they received. The information they received are to be process as information valence which reflect the negative and positive information they received. This study aims to investigate the moderating role of information valence on the relationship between personal factors and the intention to adopt i-bill payment among bank customers in Thailand.

Most studies about internet banking that include its role as SSBTs have been studied in developed countries and in a Western context (Gerrard et al., 2006; Laukkanen et al., 2008; Lee, McGoldrick, Keeling, & Doherty, 2003; Lichtenstein & Williamson, 2012; Maenpaa, Kale, Kuusela, & Mesiranta, 2008; Polasik & Wisniewski, 2009). There is little published work about the use of internet banking for SSBTs, particularly among developing countries in the dynamic Asian region. Although Thailand is behind the more developed Asian countries, such as South Korea, Japan, Hong Kong and Singapore, the viewpoint on the use of SSBTs by Thai banks is expected to lead to cost reductions and improved competitiveness (Rotchanakitumnuai & Speece, 2003). In addition, the Central Bank of Thailand has one key policy objective to reduce the usage of cash and cheques and increase the use of electronic payments, which are less costly for the overall economy (Payment Systems Policy Department, 2011, 2012). At present, Thailand's proportion of cash transactions remains quite high, hence, formulating a strategy to increase the use of electronic payments, which are more efficient and cost-saving, is a challenge (Payment Systems Policy Department, 2012). Thus, to gain a deeper understanding of the issues in SSBTs adoption among developing countries, more specific studies

need to be conducted among the population of developing countries like Thailand. Furthermore, the new banking channels, such as i-bill payment in Thailand, have noticed some resistance among consumers. The bank counter service is still an important channel for bill payment and has the major proportion, 68 per cent, of the total volume of usage (Payment Systems Policy Department, 2010). This is a different pattern with developed countries, such as Finland, in which bill payment via electronic channels is more popular constituting some 85 per cent of the bill payment with only 15 per cent of payments being made through paper (Karjaluoto, 2002b). Therefore, it is necessary to examine the factors that influence the non-adopters decisions towards bill payment via Internet banking. This study intends to target the perceptions of Thai bank customers concerning Internet banking adoption for the purpose of bill payment.

In conclusion, this study aims to fill the gap and highlight research among a particular bank consumer segment, that is, the non-adopters, concerning how the personal factors influence their intention to adopt Internet banking for bill payment. The moderating role of information valence on the relationship between personal factors and the intention to adopt i-bill payment among bank customers in Thailand is also investigated. Understanding the personal factors and information valence would be useful for bank managers and policy makers in formulating strategies and more effectively reaching the consumer to encourage an increase in the adoption rate of Internet banking for bill payment.

1.4 Research Objectives

Based on the background of the study, the specific objectives of this study are as below:

1. To investigate the influence of personal factors (personal innovativeness, personal needs, personal ability and preference personal contact) on the intention to adopt i-bill payment.
2. To examine whether value orientated information moderates the relationship between the personal factors (personal innovativeness, personal needs, personal ability and preference personal contact) and the intention to adopt i-bill payment.
3. To examine whether risk orientated information moderates the relationship between the personal factors (personal innovativeness, personal needs, personal ability and preference personal contact) and the intention to adopt i-bill payment.

1.5 Research Question

The research questions this study address, which are in line with the above research objectives, are as follows:

1. What is the relationship between personal factors and the intention to adopt i-bill payment?
2. Does value orientated information moderate the relationship between the personal factors and the intention to adopt i-bill payment?
3. Does risk orientated information moderate the relationship between the personal factors and the intention to adopt i-bill payment?

1.6 Significance of the Study

This study seeks to add to the body of marketing knowledge from both the theoretical and practical perspectives. The specific expected practical contributions for researchers, bank managers and policy makers are discussed following the theoretical contributions.

1.6.1 Theoretical Contribution

This study has the following major theoretical contributions. First, the research tests the influence of the personal factors on the intention to adopt i-bill payment. The findings of this project contribute to the understanding of the role of personal factors (four personal factors, namely, personal needs, personal innovativeness, personal culture and personal ability) on the intention to adopt. The study expects to extend the body of literature on personal factors.

Second, this study provides enrichment to the existing literature on information by studying information valence (positive information and negative information) instead of information. Moreover, this study intends to extend the body of information valence literature by investigating the moderating role of information valence on the relationship between personal factors and the intention to adopt. The study expects to provide useful insights that will add to the literature concerning adoption in respect of how information valence can effectively influence the adoption intention.

Third, this study provides in-depth understanding concerning the adoption of technology literature for a different segment of consumers, those who are currently non-adopters of the technology but who could become adopters in the future. Rather than under take the common study of identifying the reasons that make the adopters