

INTI UNIVERSITY COLLEGE

MASTER OF BUSINESS ADMINISTRATION

Factors Affecting the Use of Internet Banking Services among the Existing Users in Guangzhou, China

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Abstract

The research is conducted to examine the factors that affect the use of Internet Banking (IB) services among existing IB users in Guangzhou, China. Based on a detailed literature review, research constructs and a proposed model is developed. Questionnaire survey is conducted to collect data and the SPSS 16.0 is employed to test the hypotheses in accordance with the research objectives. Results reveal that perceived security, perceived privacy and perceived compatibility has significant positive effect on IB usage, while perceived ease of use, perceived usefulness and perceived convenience has insignificant impact. Besides, users' prior Internet experience is positively related to the use of IB. Results also indicate that user's prior Internet experience has a positive influence on the factors affecting the use of IB, expect the perceived usefulness. Recommendations to IB service providers and discussions for future study are provided.

Keywords: Perceived ease of use, Perceived usefulness, Perceived convenience , Perceived security, Perceived privacy, Perceived compatibility, Prior Internet experience, Internet Banking usage, Guangzhou, China

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Chapter 1

Introduction

1.0 Chapter Summary

This chapter begins with a background of the research topic. It describes the development, implications and trends of Internet Banking (IB), followed by the concept of IB and IB environment in China and Guangzhou. Subsequently, the research problem is identified and discussed, and the significance of this study is also explained. It presents the research questions and objectives, followed by the research assumptions and limitations. Finally, an outline of each chapter is included at the end of this chapter.

1.1 Background of the Study

The development of information technology (IT) and the popularization of Internet have had a profound impact on the banking industry worldwide. The introduction of Internet Banking (IB) has fundamentally changed the ways in which banks implement their business and consumers carry out their daily banking activities in many parts of the world (Sayar and Wolfe, 2007; Eriksson *et al.*, 2008). Today, IB is changing the traditional definitions of bank's services/products, market and customer base and the distribution structures as well as utilization of financial products/services (Pyun *et al.*, 2002).

There are several reasons for the sharp growth of IB around the world. Firstly, customers today are demanding much more products and services in a higher level from the bank. They want more products and services that the traditional retail banks could not provide and more useful financial management tools (Tan and Teo, 2000). Besides, the rapid acceptance of e-commerce by the businesses and consumers is another factor that induces the demand of higher

level of convenient and flexibility of the banking transaction. Furthermore, the cost of transaction with IB is much lower compare to the cost of same transaction at the bank counter (Tat *et al.*, 2008). According to Pyun *et al.* (2002), the relative cost of traditional counter transaction is \$1.07, as compared to one and one-half cents for IB in America. Eriksson *et al.*, (2005) also provided the relative cost data of Estonian banks, if an estimated cost of providing the office transaction is 100 per cent, then the cost of IB transaction is 11 per cent. Therefore, IB is the cheapest channel for attracting and retaining customers (Pyun *et al.*, 2002; Polasik and Wisniewski, 2009). Lastly, the emergence of IB has significantly lower the costs of entry into the banking industry. The approximate cost to build a traditional retail bank in America is about \$25 to \$30 million, but only \$6 million to set up an IB (Pyun *et al.*, 2002).

However, the rapid growth of IB has accelerated the competition among banks and competition between banks and other financial institutions. IB is now being perceived as a strategic weapon for long-term survival and a competitive necessity for staying profitable by most of the banks (Tan and Teo, 2000). In particular, many banks from developed countries are adopting IB as an opportunity for international expansion, competition and consolidation.

1.1.1 Internet Banking (IB)

IB can be defined as a form of banking transaction conducted through the Internet (Tan and Teo, 2000). IB allows registered IB users to inquire about account balance, pay bills, transfer funds, generate summary report of bank transaction histories, and manage investments and personal information. IB has evolved into a "one stop financial products and services unit" that delivers huge benefits to both banks and customers.

From the viewpoint of banks, IB contributes in reducing operation cost and increasing efficiency. IB reduces the bank's overhead expenditures in relation to staffs, marketing and maintenance of the physical branches. IB provides better services to customers who increasingly desire "24 hours/ 7 days" banking

services. Besides that, the provision of IB can improve the banks' financial performance by charging fees, selling additional fee-based banking services/products and online advertisements (DeYong, 2005; Hasan *et al.*, 2005; Hernando and Nieto, 2007).

From the customer's perspective, IB provides anytime, anywhere access to bank's financial services and customer services with computer. Customers do not have to drive to the bank branches, wait in a queue at the counters, or be constrained by the operational timings. Besides that, many banks offer discount fees for luring customers into using IB services. Furthermore, customers can benefit from the specific features of IB, such as access to the current information, faster payment transaction and complete control over the account (Black *et al.*, 2001).

With all the apparent benefits of IB for banks and customers, IB is forecast to grow substantially in the next few years, affecting the competitive advantage gained by the traditional retail banks (Tan and Teo, 2000). Ho and Ko (2008) also claimed that IB will be the mainstream banking function in the near future.

Figure 1-1 demonstrates a simple IB model (Johns and Perrott, 2008). IB mainly involves the bank, the Internet and the user's computer.

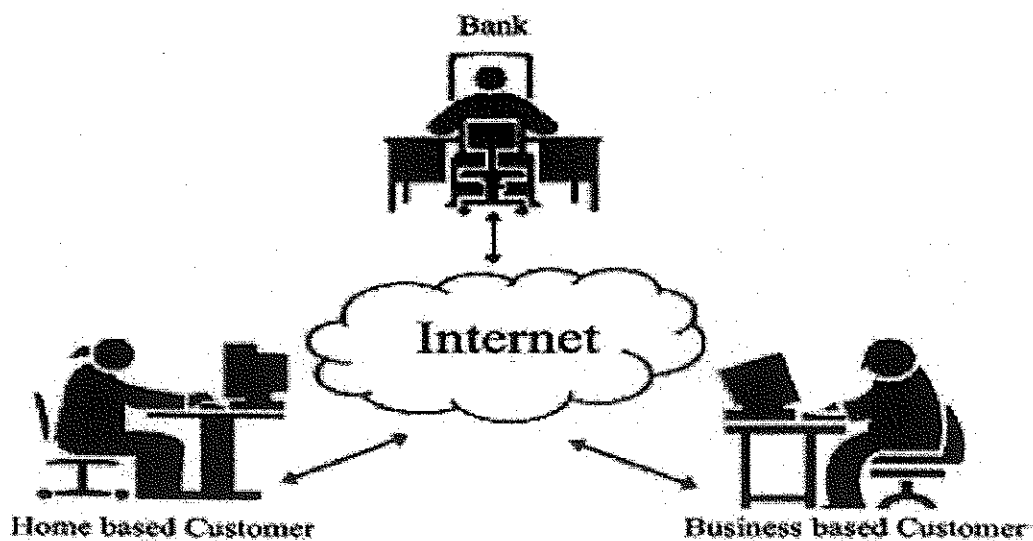


Figure 1-1: Internet banking model (Source: Johns and Perrott, 2008)

1.1.2 IB in China

In year 1998, the Bank of China (BC) is the first bank to set up its website and to provide banking services through the Internet. Subsequently, Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), and Agricultural Bank of China (ABC) have launched their IB services too (Iresearch, 2009). After nearly 12 years of development, IB has become an important distribution channel in China's banking industry. In year 2006, among the top 50 commercial banks in China, 37 of them have their own websites, out of which 25 are providing IB services (2006-2007 Annual Report on China's IB Market).

China's IB market has developed rapidly. IB transactions have achieved explosive growth in recent years. According to the data provided by Analysis International (2009), the number of IB users increased 54.7 percent and IB trade volume increased 100.8 percent in year 2008. By the end of year 2009, there were 189 million registered IB users and the total trade volume of IB market exceeded 400 trillion Yuan.

The rapid economic development, gradual improvement of government policies, and continuous change of consumer attitudes reflects the fast-growing trend of IB in China. At the same time, the rapid growth in the number of Internet users provides a solid base for the future development of IB. China Internet Network Information Center (CINIC, 2010) reported that China has the largest population of Internet users in the world and the number of Web surfers grew to 384 million with a penetration rate of 28 per cent in year 2009. The online shopping users reached 108 million. In year 2009, China Internet user spends an average of 18.7 hours per week online (ChinaInternetWatch, 2010). Therefore, it is believed that the growth of Internet usage and online way of life will increase the proportion of IB users among the Internet users.

1.1.3 IB in Guangzhou

Guangzhou is located in the southern part of mainland China. As the capital city and sub-provincial city of Guangdong Province, it is the most populous city in the province and the third largest metropolitan area in China, behind Shanghai and Beijing (worldmapfinder, 2009).

In year 2010, the number of Internet users reached 46.8 million in Guangdong Province and it is the region which has the largest number of Internet users in China (see Figure 1-2). Guangdong is also one of the top five (5) regions with the highest Internet penetration (see Figure 1-3).

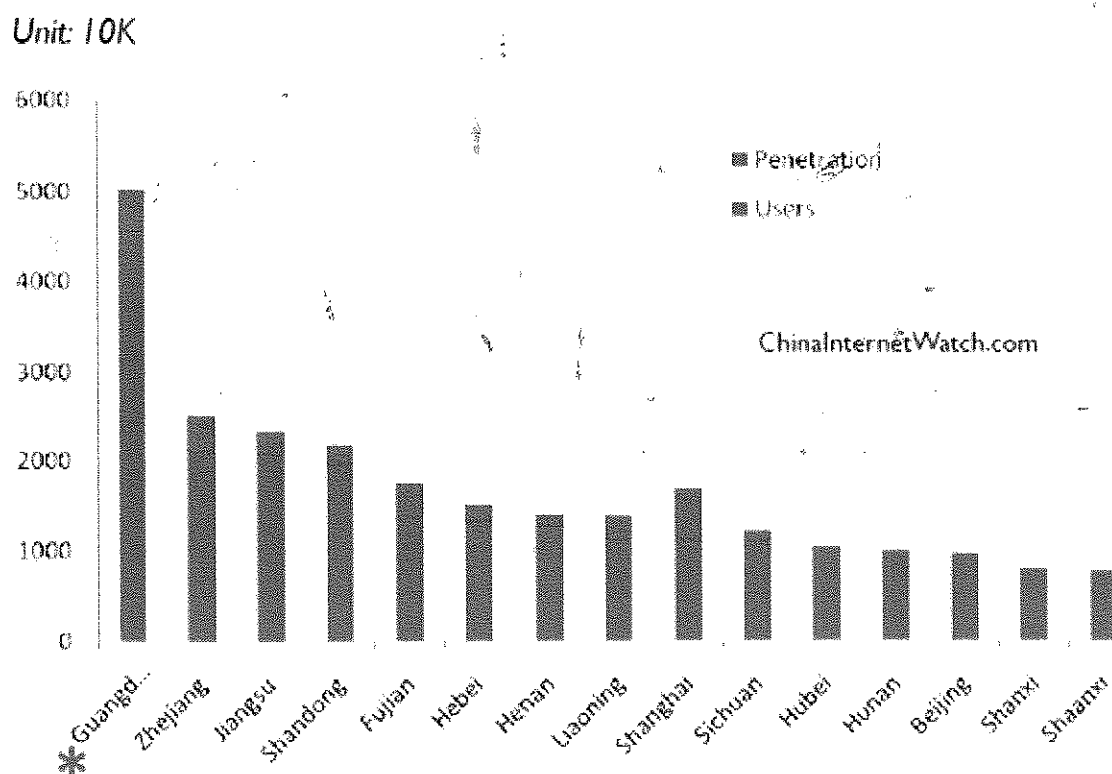


Figure 1-2: Top 15 China regions by number of Internet users

(Source: www.chinainternetwork.com)

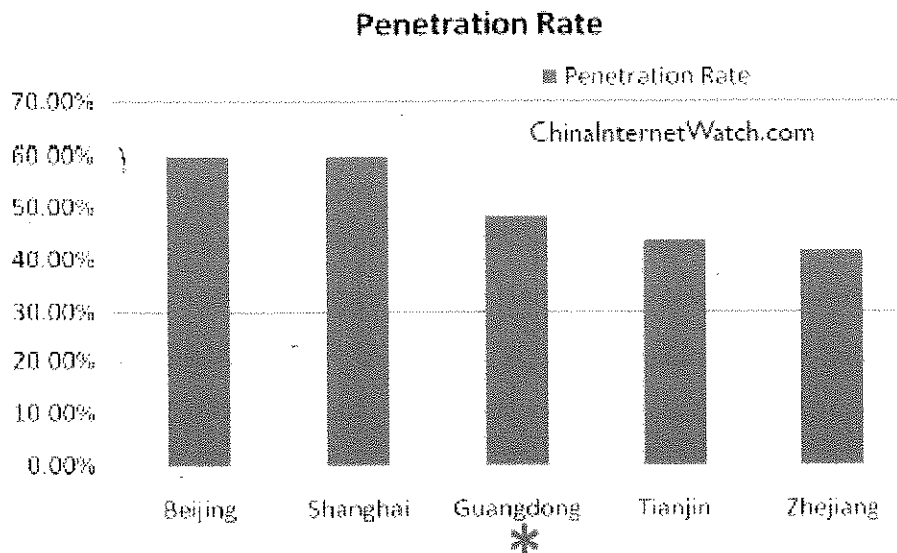


Figure 1-3: Top 5 regions by Internet penetration rate
(Source: www.chinainternetwatch.com)

In the landscape of competition, the four large state-owned banks in China, namely BC, ICBC, CCB, ABC and other commercial banks are currently offering similar IB products and services in Guangzhou (Information time, 2010). The competition among these domestic banks has become increasingly intense. Correspondingly, they are also facing powerful competition from the foreign IB providers after China opens its financial sector in year 2006 (China Daily, 2006). Guangzhou is the favorite choice of many established foreign banks such as Standard Chartered Bank and Citibank (Information time, 2007). Thus, a diversified competitive landscape has emerged in Guangzhou's bank market. According to a local market research, approximate 40 percent Guangzhou citizens choose foreign banks to carry out their financial management (Guangzhou Daily, 2007). Therefore, the entry of foreign banks has a significant impact on the domestic banking industry. IB certainly has been perceived as a strategic weapon for Guangzhou domestic banks to deliver better customer service, generate more market share and acquire stronger competitiveness to better compete with those multinational banks.

1.2 Problem Definition

Based on the above discussion on the complex and dynamic IB environment in Guangzhou, attracting new customers and retaining existing customers in order to increase the usage of IB is very important to the domestic banks. Customer acquisition and retention cannot be achieved without a good appreciation of the understanding customer expectations and developing more effective marketing strategies (Lovelock and Wirtz, 2007). Therefore, it is crucial for the IB providers to understand factors affecting the use of IB services among their existing customers in order to improve and enhance their services to retain these current users and to compete for new customers.

Continuous improvement on their website and IB system is essential for the banks to stay competitive. The IB website designers should understand the effects of users' Internet experience based on their feedbacks on their perception and usage of IB services in order to design website and IB system that enhance the experience and overcome the fears of the IB users.

1.3 Research Questions

This study focuses on the usage of IB services among Guangzhou customers and aims to gain a deeper understanding of the factors that affect the use of IB. The main research questions are formulated as:

- i. What are the factors that affect the use of IB services among the existing IB users?
- ii. Does the users' prior Internet experience have an influence on their use of IB services?
- iii. Is there a relationship between the user's prior Internet experience and the factors affecting the use of IB?

1.4 Research Objectives

- i. To examine factors that affect the use of IB among the existing IB users
- ii. To determine the relationship between the user's prior Internet experience and the use of IB services
- iii. To determine the relationship between the user's prior Internet experience and the factors affecting the use of IB

1.5 Significance of the Study

This study provides deeper understanding of the factors affecting the use of IB. The findings are beneficial to the banking industry in developing and improving their website and IB system designs to expand their customer base with this distribution channel. By understanding the factors affecting the use of IB, banks can better formulate their marketing strategies to convert their potential customers to IB users and retain their existing IB users. Similarly, the findings on effects of users' prior Internet experience on the use of IB and the factors affecting IB usage can help the website and IB system designers to develop and design webpage and IB systems which are effective in increasing IB usage. From another perspective, this study also provides information on the existing users' expectation, hence banks can then make improvement on their current IB services and ultimately, the beneficiary is the customers. And most importantly, this research is helpful to the regulatory authority to develop a regulatory framework on the associated risks of using IB, such as fraud and improper disclosure of users' personal and financial information in order to better protect the IB users' interests.

Moreover, this study also helps to fill up research gaps. Firstly, IB services have been extensively investigated in many countries, such as Daniel's (1999) study in United Kingdom (UK), Sathye's (1999) research in Australia, Tan's and Teo's (2000) Singapore study, Wang *et al.*'s (2003) in Taiwan, Kolodinsky *et al.*'s (2004) research in United States of America (USA), Guriting's and Ndubisi's (2006) and Poon's (2008) studies in Malaysia, Jahangir's and Begum's (2008)