# Chinese Customers' Banking Habits and E-banking Barriers

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## Abstract

The purpose of this study was to investigate the Chinese customers' banking habits and the major barriers prevent them from participating in E-banking. The study was conducted in Chinatown area in New York City. There were 110 respondents completed the survey. The findings indicated that the Chinese customers did most of the banking transactions via teller stations. The Chinese customers' major concerns of online banking included security concern and the lack of bank staff support when they suffered from technical problems at home. The aging Chinese customers with low education and low income were less likely to participate in E-banking.

Keywords: Chinese customer, Banking, Habit, Barrier

#### Introduction

With the development of the Internet, more knowledge is accessible to people anywhere at anytime. Facilitating communication, data transmission, and global interaction, the Internet is a playing field unlike any other. Transcending the traditional barriers of time and space, the Internet is redefining the world of banking. The Internet has created new methods for carrying out a variety of financial transactions. With these developments, a new era of banking has emerged which has come to be known as "E-banking". E-banking encompasses an array of financial transactions, once done through the tangible exchange of information, now are done electronically. While the benefits of such advancements have been welcomed by most of the American customers, many Chinese customers are still uncomfortable with E-banking. The reason is that there are some drawbacks such as computer illiteracy, security, fraud, and theft have deterred Chinese customers from participating in E-banking. Many Chinese customers are still accustomed to tangible banking transactions. Some of the E-banking activities include the transactions of buying and selling goods, paying bills, transferring funds, and managing investments.

The psychological barriers involved with computer literacy, age, financial status, education, and the level of uncertainty avoidance are in relation to an individual's comfort level towards E-banking. The study was conducted in New York City Chinatown area to investigate the Chinese customers' banking habits and the major barriers which prevent them from participating in E-banking. It is important for the American financial institutions to understand the E-banking behaviors of the Chinese customers, because the Chinese population growing up fast in the United States. It is also important for the financial institutions in China to understand the local Chinese customers' E-banking behaviors, because the huge population with Internet access in China provides an attractive market for E-banking business. The findings in the study can help marketers understand more about Chinese customers' E-banking behaviors. It is obvious that the development of a successful E-banking system is based on the understanding of the banking customers' behaviors.

# **1. Literature Review**

Today, the Internet is providing unlimited access to resources with real-time quality. More and more people are using the Internet to carry out actions that would have otherwise been done in person. "The online procurement industry is reportedly at least doubling in size every year" (World Almanac & Book of Facts, 2001). In efforts to keep up with technological advancements, banks all over the world are offering E-banking as an appealing alternative to the traditional styles of banking with the intentions of luring potential customers. "Internet banking appears as a response both to the technical drawbacks of previous Home banking systems and to the growing demands of consumers" (Giannakoudi, 1999, p. 205). Despite the barriers associated with E-banking and the Internet, the advancements and benefits of E-banking to consumers as well as banking institutions is irreplaceable. From the consumer's perspective, E-banking has provided them with the ability to pay bills, manage accounts, and shop all from the convenience of their homes. This alternative has also reduced cost for the banking institutions that offer the service, "an online transaction costs the bank much less than a face-to-face interaction with a bank's teller" (World Almanac & Book of Facts, 2001). With less paperwork to process every month and the money that is being saved, banks have been able to concentrate their efforts on improving other aspects of their organization.

As technology infiltrates the financial market, banks are anxious to capitalize on the spoils of technological

advancements. Initially, banks implemented new systems internally improving communication and fostering standardization between branch offices. Later, banks began to use technology externally to promote interaction and increase transactions with customers. The developments of automated systems allow banks to more efficiently and effectively conduct common banking practices. With the introduction of Automated Teller Machines (ATM), the time-honored tradition of going into the bank to withdraw money or transfer funds, for example, becomes a method of the past. Through the use of ATMs, customers carry out activities such as withdrawing, transferring, or even depositing funds without having to speak to a teller. This self-service machine was a first step in the development of electronic banking.

As customers become more accustomed to ATMs and the variety of functions they can conduct on their own, the appeal for self-service automation grows. The Internet brings the bank to the customer replacing the old ideals of the customer needing to go to the bank. Customers are not the only beneficiaries from the transition to point and click banks. With the Internet in full swing, the banking sector is taking advantage of the new possibilities introduced to them. Norway is the first country in the world to offer Internet banking services (Ebersohn & Henning, 2001). After this, the rest of the world follows, making Internet banking a worldwide phenomenon. A recent study by the American Bankers Association (ABA) and Grant Thornton found that nearly 20% of bankers believe the Internet will the dominant banking channel by the year 2005 (Poquette, 2002).

With increased appeal to offer services on the Internet, banks are seeking out and finding clients in many areas of the world. The Internet has provided banks with limitless freedom in offering services and establishing partnerships. While opening a branch in a foreign market can be a surefire way to make its presence known, a bank could loose a considerable amount of its investment if the branch is not successful in generating business. The freedom banks are experiencing in their attempts at cross-border banking is what Goutzinis (2001) calls a freedom of establishment and the freedom to provide services through the Internet.

This freedom, however attractive and beneficial, may present some challenge. Although the Internet has opened new possibilities for private and commercial banks, it also has opened the door to some challenges. Banks are becoming increasingly advanced and interconnected offering a variety of self-service banking options online and subscribing to a global payment systems and global structures. In an attempt to remain on the cutting edge in the evolutionary world, banks and bank managers are challenged by the new technology and software systems used to make the finance world run smoothly (Stewart, 2000). With constant upgrades and improvements, banks are having difficulty keeping up with the latest trends and technologies, while remaining competitive in the global marketplace. The second challenge Stewart points out is deciding what services to provide. In an effort to remain competitive in the global payment system the banking world now operates in, banks are challenged in deciding if they want to offer simple, traditional services or something completely new and radical to gain and retain customers. Often driven by corporate visions and organizational structures, banks are finding that they need to revise these strategies and cooperate with one another, working towards common interests in a cross-border situation to deter nontraditional competitors from penetrating the market. The third challenge Stewart cites is the bank's ability to manage a complex new variety of business relationships coupled with the organizational and cultural differences that will make these relationships more difficult. Stewart questions how a bank will deal with newly formed nonbank competitors, new technology partners, and an array of service providers. He advises banks to seek partnerships and alliances in the emerging cross-border banking systems.

While banks are responding to one of Stewart's challenges by deciding what services to offer, customers are familiarizing themselves with these very same services. Whether it is the traditional options such as account management or balance inquiry, or the more elaborate options such as loan applications or automated clearinghouse transactions, customers have a responsibility to know what options are available to them. Balance inquiry and account management are two of the more basic options available to an online customer. Balance inquiry refers mainly to watching the overall balance of an account and checking the daily balance. Account management implies the handling of assets such as transferring funds between accounts and general account maintenance such as balancing checkbooks and maintaining savings accounts. According to Poquette (2002), check balances (90.6%), cash management (81.1%) and wire transfers (73%) are the most popular of the 19 reviewed services offered to small-business customers. In addition to these common and traditional services, bill presentment and payment are two other common elements found in the online banking package (Spiotto, 2001).

Not only are customers finding new ways to pay their bills, they are able to pay them from different places. Wireless or mobile banking has put banking transactions on the move. People are checking e-mail, receiving real-time stock quotes, and conducting conversations all with one little handheld device. With its convenience and utility, cellular phones have optimized the flow of banking information for wireless users (West, 2002). The impact that wireless phones with Internet access have on remote banking channels can be seen through the increasing improvements and

new features being offered to cellular customers, while also targeting those customers who would conduct their finances from a wireless or Internet-based medium.

The benefits that Internet banking have brought to the modernized world does not come without a price. In the increasingly interconnected marketplace, anyone can have access to nearly anything from anywhere. People who engage in these online practices are vulnerable to a myriad of risks. The emergence of a whole new category of crimes has given both, the banking industry and customers something, to think about. Many problems affect one side of the partnership more than the other. Some of the more common problems include, but are not limited to, unauthorized access and the redirection of websites or e-mail, identity theft, credit card fraud, and phony organizations. These technology risks, as well as several others, have prompted the development of a category of safety measures for Internet transactions. Both banks and customers are expected to maintain certain levels of safety in addition to following and implementing procedures that help keep them safe. With customers accessing their money and making transactions from new places and spending in new ways, e-banking has taken them to new levels in their financial pursuits and abilities. Resulting from these new transactional capabilities is great responsibility (Jain, Hong, & Pankanti, 2000).

Other problems facing e-banking customers are vulnerability to hackers and viruses and knowing with whom they are communication when they logon to a website. Many personal computer users are familiar with and have experienced viruses. These pathogens come from a multitude of sources, through e-mail, file downloads, and illegitimate software programs. They can cause damage in a variety of ways, weakening a computer and allowing a hacker access to personal information stored on the hard drive (Katyal, 2001).

In everyday life, credit cards fraud is an issue of concern. Verifying signatures and identification is a relatively common practice for in-store purchases, but what about online? While this is a somewhat effective technique for in-store purchases, credit card fraud still continues despite all efforts to the contrary. Credit cards fraud becomes increasing more possible and extremely easier to carry out (Bruno, 2001). With online shopping, the most common way to "check out" of a website is by using a credit card to purchase the selected items and complete the transaction. Mills (2002) reported that "One recent report says credit card fraud is now 12 times higher online than in-store, while another report pegs online fraud at four times as frequent as the oldfashioned kind" (p.7). Another result of credit card fraud online is identity theft. Using a stolen credit card number, the defrauder pretending to be the cardholder steals and assumes the victim's identity, passing off his or her actions as those of the cardholder.

Though there are several security concerns that the consumer must take into consideration to ensure their safety on the Internet, the burden to provide a safer online environment lies more so in the banking industry's hands. Banks are faced with the responsibility of making e-banking a safe venture, not only for themselves, but for their consumers as well. Key elements for establishing a security plan include reviewing intrusion detection systems, maintaining well-trained staff to handle any computer issues and protect the integrity of the data, and employee verification, including background checks if necessary. Since a customer can manage nearly all of their finances online, banks are faced with the obligations, as service providers, to guarantee their clients' security. Banks must the risk involved the consumer assess to and the companies, establish a plan for security, and analyze possible solutions and monitor their implementation to alleviate security concerns about e-banking. Banks, however are not perfect entities, and like their customers, they may make mistakes. There are generally seven management and security shortcomings that are attributed to a bank's security problems (Levitt, 2001). Carlson, Furst, Lang, and Nolle (2001) explain that this lack of consumer confidence can not only lead to large financial losses, but the lack of confidence in the security measures can lead to the slowing of company development.

## 1.1 Successful E-banking Strategies

#### 1.1.1 The Internal Banking Strategies

The responsibility for safety lies heavier in the hands of banking institutions. Since they are the service providers in most cases, they have equal if not more responsibility in making their websites, databases, and networks safe for the Internet and handing e-commerce transactions. Banks should subscribe to certain requirements and prevent themselves from falling into the most common pitfalls. Some of these problem areas include the potential of internal threat and minimizing the importance of small network problems that if ignored may become larger and more damaging (McCarthy & Campbell 2001). Some suggestions made by Pray and McCoppin (2001) for regulating internal security include staying away from passwords that are linked to an employee's name, address, or social security number, and programs that offer to store a password for easy, repeat access.

#### 1.1.2 The External Liability

Another area for concern is the use of third party providers. Increasingly, most large banking institutions contract 4

with third party service providers to handle issues outside their realm of knowledge. Banks should verify the integrity and identity of the companies they are dealing with, and address any and all concerns when dealing with these agencies.

# 1.1.3 Technological Developments for Safety

Authentication, identification, and authorization are three big areas that information technology developments have profoundly affected. Other security concerns that compose banks' strategies for a safer banking environment are encryption and the use of tangible identification methods. Messages that travel over the Internet are susceptible to interception by someone other than the individual at the intended destination. For this reason, sending sensitive information such as bank account numbers and credit card numbers over the Internet is troubling for some consumers. Encryption techniques exist to counter these security weaknesses. In another effort at customer security, some banks are using techniques such as tangible devices, or something a customer possess to ensure their safety (Middlemiss, 2002).

## 1.1.4 Legislation

The absence of territorial boundaries in cyberspace is causing challenges for legislation that depends on the well-defined perimeter of time and space and separation of agencies and people (Shanmugam, Suganthi, & Balachander, 2002). Banks have the responsibility to maintain a set of goals attained through well designed security measures or a "security architecture" which provides the roadmap to an organization's strategic safety vision (Patilla, 2001). This roadmap should lead to compliance with government regulations, their best interests, and the needs of their customers to provide and promote a safe E-banking atmosphere. To that end, protecting the consumer is of vital importance for services such as e-banking and e-commerce which are dependent on continuous customer interest and usage. While it is important that a customer take responsibility for their own safety, consumers must be made aware and educated, if necessary, about the levels of security protection available to them. Customers should understand their rights and obligations as Internet users, costs they may incur and risks they may be vulnerable to by participating in actions such e-banking (Giannakoudi, 1999).

E-banking is popular in the United State today. Both the banks and the customers take the advantages of E-banking. The United State is a country with diverse cultures. People with different cultural backgrounds might have different behaviors. According to the encyclopedia Wikipedia (2006), the Chinese population in the United States is more than 3.5 millions, some of them are American-born-Chinese, and some of them are first generation of immigrants. Most of them are located in some big cities such as New York, Los Angeles, San Francisco, Boston, Washington DC, and Philadelphia. The study was conducted in New York City to investigate the Chinese customers' banking habits and the major barriers which prevent them from participating in E-banking.

# 2. Methodology

The overall purpose of this study was to investigate the Chinese customers' banking habits and the major barriers which prevent them from participating in E-banking. The findings of the study can help marketers understand more about the Chinese customers' banking behaviors, and can help financial institutions implement effective strategies to attract and serve the customers.

The respondents in the study were contacted at bank branches in Chinatown area in New York City. The data collection activities were permitted by the bank branch managers. Convenient sampling technique was applied in the study.

The instrument used in this study was questionnaire. The survey was comprised of two questions and the respondent's demographic information. These data were used to determine the respondents' banking habits and the major barriers which prevent them from participating in E-banking.

## 3. Findings

The survey was conducted at six bank branches in Chinatown area in New York City during fall 2007. Two branches were Citibank branches, two branches were Chase bank branches, and two branches were HSBC branches. Totally, there were 110 questionnaires had been completed and submitted. Table 1 shows the respondents' demographic information.

Regarding the question "With what medium do you do most of your banking transactions?" There were 62 (56%) respondents reported they did most transactions with teller station, there were 32 (29%) respondents reported they did most transactions with ATM, and there were only 16 (15%) respondents reported they did most transactions with Internet (shown in table 2, table 3, and table 3).

Regarding the question "What are the major barriers prevent you from participating in E-banking?" There were 99

(90%) respondents reported "security concern", there were 64 (58%) respondents reported "without technical assistance from bank staffs", there were 21 (19%) respondents reported "computer illiteracy", and there were 8 (7%) respondents reported "without computer or Internet access" (shown in table 5). The 99 "security concern" respondents and 64 "without technical assistance from bank staffs" respondents were from any gender group, any age group, and education level group, and any income level group. The 21 "computer illiteracy" respondents were from at least one of the following two groups: "over 50 years old" group and "high school dropout and high school diploma" group. All the 8 "without computer or Internet access" respondents were from "annual income under \$25,000" group.

#### 4. Summary and conclusions

The study shows most of the Chinese customers in New York City still prefer to do banking transactions with teller station, irrespective of their gender, age, education level, and income level. A couple reasons account for this phenomenon. First, many banks set branches in Chinatown area in New York City. It is very convenient for customers to do banking because of the location. Second, customers prefer the high-touch service channel, because they can request services or ask questions when they need. Third, customers consider on-site banking is more secure. Hofstede (1980) identified four cultural dimensions that could differentiate countries; one of the dimensions was weak versus strong uncertainty avoidance. Many Chinese customers are strong uncertainty avoidance oriented.

Compared to the on-site banking (56%) and the ATM banking (29%), there are only 15% of the Chinese customers prefer the online banking. Most of these 15% customers are featured with relative young age (under 30 years old), relative high education (college level education), and relative high income (annual income ranges from \$25,000 to \$50,000). Those customers, featured with relative old age (over 50 years old), relative low education (high school dropout and high school diploma), and relative low income (annual income under \$25,000), account for only a small portion of the group prefer online banking. The findings indicate that aging people with low education and low income are less likely to participate in online banking.

Fall in the middle between on-site banking and online banking, there are 29% of the Chinese customers prefer ATM banking. The reason accounts of this phenomenon could be: ATM banking combines the features of relative convenience (the location), relative high tough service channel (customers can ask bank staffs for assistance if they need during the business hours), and relative safety (security).

Regarding the major barriers which prevent Chinese customers from participating in E-banking, the "security concern" is the single most important barrier. There are 99 (90%) respondents report that they consider the safety of the online banking. The second most important barrier is "without technical assistance from bank staffs". The findings indicate that when the Chinese customers participate in online banking, they consider the security issue and technical issue. They are afraid that their information is obtained by third party or misused by the financial institutions; and they are afraid that they can not get assistances from bank staffs when they suffer from computer technical problems at home. The "computer illiteracy" is an online banking barrier for those aging and low-educated Chinese customers, especially those aging customers. The "without computer and Internet access" is an online banking barrier for those low income Chinese customers. It is surprised that only 8% respondents report "without computer and Internet access", while 25% respondents report "computer illiteracy". That means there are 17% of the respondents who own computers but they are computer illiteracy. The reason is that other family member(s) rather than the respondent uses the computer at home. For example, it is the respondents' spouses, the children, or the grandchildren who use the computers.

It doesn't make sense for financial institutions to promote the E-banking to those customers without computer or computer illiteracy. On the contrary, the computer-skilled customers with Internet access are the financial institutions' target market of E-banking. The major task for the financial institutions is to remove the online banking barriers and convince customers to participate in E-banking. How to protect customers' information and how to set up call center to support customers are the two major concerns for many financial institutions.

Although the study was conducted in New York City, however, all the respondents were Chinese. The findings are useful for financial institutions which try to promote E-banking to Chinese customers in China. It is estimated that, by 2007, there are 162 millions Chinese people with Internet access in China, it accounts for more than 12% of its population (Miniwatts Marketing Group, 2007).

The major limitation of the study is the sampling. The nonprobability sampling technique and the relative small amount of samples prevent the findings from being generalized. Although all the respondents in the study are China, however, the first generation of Chinese immigrants might have different characteristics as the American-born-Chinese generation does. It is believed that the first generation of Chinese immigrants is more Chinese culture oriented, while the American-born-Chinese generation is more American culture oriented. The

researcher didn't identify the generation difference of those respondents created another limitation of the study.

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Gender	Age	Education	Annual Income	Total respondents
Male 62	< 30 years : 41	High school level:	< \$25,000: 25	110
Female 48	30-50 years: 38	34	\$25,000 to	
	> 50 years: 31	College level: 62	\$50,000: 65	
		Professional	> \$50,000: 20	
		school level: 14		

Table 1. Respondents' demographic information

Gender	Age	Education	Annual Income	Total numbers of
				respondents and
				percentage
Male: 35	<30 years: 15	High school level:	< \$25,000: 15	62 (56%)
Female: 27	30-50 years: 22	20	\$25,000 to	
	> 50 years: 25	College level: 35	\$50,000: 37	
		Professional	> \$50,000: 10	
		school level: 7		

# Table 2. I do most teller station transaction: respondents' demographic information

# Table 3. I do most ATM transaction: respondents' demographic information

Gender	Age	Education	Annual Income	Total numbers of
				respondents and
				percentage
Male: 17	<30 years: 16	High school level:	< \$25,000: 8	32 (29%)
Female: 15	30-50 years: 12	10	\$25,000 to	
	> 50 years: 4	College level: 18	\$50,000: 19	
		Professional	> \$50,000: 5	
		school level: 4		

# Table 4. I do most Internet transaction: respondents' demographic information

Gender	Age	Education	Annual Income	Total numbers of
				respondents and
				percentage
Male: 10	<30 years: 10	High school level:	< \$25,000: 2	16 (15%)
Female: 6	30-50 years: 4	4	\$25,000 to	
	> 50 years: 2	College level: 9	\$50,000: 9	
		Professional	> \$50,000: 5	
		school level: 3		

# Table 5. barriers of using online transaction

Security concern	Without technical	Computer	Without computer	
	assistance	illiteracy	or Internet access	
99	64	21	8	Number of
				respondents
90%	58%	19%	7%	Percentage of
				respondents

## **Appendix: Survey Instrument**

Welcome to my survey! The purpose of the survey is to investigate the Chinese consumers' banking habit and the major barriers which prevent them from participating in E-banking. If you are Chinese, please complete this survey. Thank you very much for your cooperation!

Indicate your gender.

- Male
- Female

Indicate your age group.

- Under 30 years old
- 30 50 years old
- Over 50 years old
- Indicate your level of education.
- High school dropout or high school diploma
- Some college or bachelor degree
- Master or doctor degree

Indicate your annual income.

- Under \$25,000
- \$25,000 \$50,000
- Over \$50,000

1. With what medium do you do most of your banking transactions? Choose only one.

- Teller station
- ATM
- Internet

2. What are the major barriers prevent you from participating in E-banking? Choose all apply.

- Security concern
- Without technical assistance from bank staffs
- Computer illiteracy
- Without computer or Internet access
- Others Please specify: \_\_\_\_\_\_