# Factors Affecting the Use of Internet Banking; the Case of Northern Cyprus

## Özlem Altun

Submitted to the
Institute of Graduate Studies and Research
In Partial Fulfilment of the Requirements for the Degree of

Master of Science in Banking and Finance

Eastern Mediterranean University September 2012 Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research	

	Prof. Dr. Elvan Yılmaz Director
I certify that this thesis satisfies the r of Science in Banking and Finance.	requirements as a thesis for the degree of Master
	Assoc. Prof. Dr. Salih Katırcıoğlu Chair, Department of Banking and Finance
	esis and that in our opinion it is fully adequate in degree of Master of Science in Banking and
Prof. Dr. Hüseyin Araslı Co-Supervisor	Asst. Prof. Dr. Bilge Öney Supervisor
1. Acces Drof Dr. Nagrin Örgetes	Examining Committee
1. Assoc. Prof. Dr. Nesrin Özataç	
2. Assoc. Prof. Dr. Salih Katırcıoğlu	
3. Asst. Prof. Dr. Bilge Öney	

**ABSTRACT** 

The purpose of this study is, investigating the affecting factors of adopting

individuals' internet banking with adding trust and perceived web security variables.

For this purpose nine hypothesis has developed as part of research model. To collect

data survey form has been prepared and has been applied in Turkish. Useable data

has been attained from 199 acquired surveys. Acquired data have been analysed with

SPSS 18.0. In accordance with the statistical analyse results; it is determined that

perceived ease of use upon perceived usefulness, perceived usefulness upon trust and

in addition trust, perceived usefulness, perceived ease of use and perceived web

security separately upon intention to use have an positive and meaningful effect. As a

result of the analysis is a customer satisfaction positive effect to word of mouth.

**Keywords**: Word of mouth, customer satisfaction, internet banking.

iii

ÖZ

Bu çalışmanın amacı, KKTC' deki bireylerin internet bankacılığını benimsemesini

etkileyen faktörleri araştırmaktır. Bu çalışma Doğu Akdeniz Üniversite öğrenci ve

öğretim üyelerine yönelik anket çalışması yapılarak incelemeye alınmış ve analiz

yapılmıştır. Araştırma modeli çerçevesinde 9 hipotez geliştirilmiştir. Veri toplamak

için anket formu hazırlanmış ve Türkçe olarak uygulanmıştır. Uygulanan anketlerin

199' undan kullanılabilir veri elde edilmiştir. Elde edilen veriler SPSS 18.0 veri

analizi ile analiz edilmiştir. Analiz sonuçlarına göre algılanan kullanım kolaylığının,

algılanan kullanışlılık üzerinde ve algılanan kullanışlılığı ve güvenin müşterilerin

başkalarına tavsiye etmesi üzerinde anlamı ve pozitif etkisi olduğu görülmüştür.

Ayrıca çalışmada güven, algılanan kullanışlılık, algılanan kullanım kolaylığı ve

algılanan web güvenliği değişkenlerinin tavsiyeyi etkilediği sonucuna varılmıştır.

Anahtar Kelimeler: Müşteri memnuniyeti, kullanım kolaylığı, güven, tavsiye,

internet bankacılığı( e-bankacılık).

iv

## **ACKNOWLEDGMENTS**

I would like to thank Asst. Prof. Dr. Bilge Öney and Prof. Dr. Hüseyin Araslı for they continuous support and guidance in the preparation of this study. Without his invaluable supervision, all my efforts could have been short-sighted and I consider myself blessed to be under their supervision.

I am thankful to the entire staff in the department especially the Department Chair, Assoc. Prof. Dr. Salih Katircioglu for his continuous guidance and support in the preparation of this thesis. I would also like to thank Assoc. Prof. Dr. Nesrin Özataç for her continuous support and guidance in the preparation of this study.

Finally I want to thank everyone who help me in the preparation of this study. I would love to dedicate this study to them as my sincere love and an indication of their significance in this study as well as in my life.

It should be mentioned that my thesis is dedicated to my husband. Their support has been given through all my life and guided me all the way. So thank you Ayer Altun.

# TABLE OF CONTENTS

ABSTRACT	iii
ÖZ	iv
ACKNOWLEDGEMENTS	vi
LIST OF TABLE	X
LIST OF FIGURES	xi
1 INTRODUCTION	1
1.1 Background of the Study	1
1.2 Definition of internet banking	2
1.3 The Aim of the Study	4
1.4 North Cyprus and Its Banks.	4
1.5 Structure of the study	7
2 LITERATURE REVIEW	8
2.1. Banking and Bank Services.	8
2.1.1 Traditional Retail Banks.	9
2.1.2 Services and Products of Retail Banks.	10
2.1.3 Changes in the Banking Sector	11
3 INTRODUCTION INTERNET BANKING	14
3.1 History of Internet banking.	14
3.1.1 History of Internet banking in Turkey	15
3.2 Internet Banking Transaction.	16
3.3 Internet banking from the customer perspective	17
3.4. Factors Affecting Customer Preferences.	19
3.5 Features of Internet Banking	20

3.6 Source of Internet Banking	20
3.7 Characteristics of Internet Banks	22
3.7.1 Brick-to-Click banks	22
3.7.2 Virtual banks	23
3.8 Real Internet Banking	23
3.9 Websites of Bank	24
3.9.1 Transactional Webpages.	25
3.9.2 Communicative Webpages	26
3.9.3 Informational Webpages	27
3.10 Disadvantages of Internet Banking	27
3.11 Advantages of Internet Banking	29
3.12 Goals of Internet Banking Channel	31
3.13 Banks	32
3.14 Consumers	33
4 INTERNET BANKING AND CUSTOMER SATISFACTION	34
4.1 Customer satisfaction	34
4.2 Word of mouft	35
4.3 Security	39
4.4 Retail Internet Banking Service.	40
4.5 Performance on Banks.	42
5 CONCEPTUAL MODEL, RESEARCH HYPOTHESES AND METHO	DOLOGY
5.1 Conceptual Model.	44
5.2 Hypotheses	45
5.3 Psychometric Properties of the Instrument	46
5.4 Data and Methodology	46

5.4.1 Why Eastern Mediterranean University	46
5.4.2 Methodology	48
6 RESULTS	50
6.1 Frequencies and Descriptive Analysis	50
6.2 Regression Models	57
7 CONCLUSION	64
7.1 Conclusion and Managerial Implications	64
7.2 Limitations.	66
REFERENCES.	67
APPENDIX / APPENDICES	75
Appendix A: Turkish Version of the Questionnaire	76
Appendix B: English Version of the Ouestionnaire	79

# LIST OF TABLE

Table 1: North Cyprus Banks	6
Table 2: The advantages of Internet banking.	31
Table 3: Demographic characteristics of Internet Banking user and non user	
population surveyed	51
Table 4: What is the reason for not using internet banking?	52
Table 5: What are the factors that influence time you use internet banking?	53
Table 6: Usage of services via Internet banking	54
Table 7: Which banks are using internet banking?	56
Table 8: Internet banking of this bank is good	57
Table 9: Results of Multiple Regression Analysis	59
Table 10. Depent variable Customer Satisfaction.	59
Table 11: Results of Multiple Regression Analysis.	61
Table 12: Dependent Variable: Positive Word of Mouth (POW)	61
Table 13: Results of Multiple Regression Analysis.	62
Table 14: Dependent Variable: Positive Word of Mouth (PWM)	63

# LIST OF FIGURES

	12
Figure 2: Percentages of institutions' Internet banking facilities used	55

## Chapter 1

## **INTRODUCTION**

#### 1.1 Background of the Study

The Internet is an international computer network connecting people and organizations around the world. This technology has profoundly impacted society, culture, employment, communication and even the global economy. The Internet, together with e-commerce, is reshaping how businesses deliver value to customers. Online financial activity has increased steadily as more Internet-capable households use Internet banking. Internet banking can be defined as accessing and manipulating financial information via the Internet using personal computers and Web browsers.

The adoption and usage of information technology is becoming an essential feature in today's development, especially in the banking sector. The use of Internet banking allows customers to access their accounts, make necessary enquiries and undertake banking transactions. Due to the increased use of personal computers to access the Internet and World Wide Web, the Internet has provided an easy channel for accepting orders and become a handy medium for delivering products and services to the entire customers. This innovation has been increasing radically in recent times. This kind of banking is commonly known as Internet Banking (RBI, 2001).

#### 1.2 Definition of Internet Banking

For electronic banking and Internet banking, products and services can be defined as the bank distribution channel. The definition of Internet Banking varies according to the given subject and researchers (Daniel 1999). Mobarek (2007) states that electronic and interactive communication channels, both new and traditional, transfer banking products and services directly to customers through an automatic distribution and "is defined as electronic banking, a new distribution channel for banking services by electronic banking (Mols 1998). Electronic banking definitions vary amongst researchers partially because electronic banking refers to several types of services through which bank customers can request information and carry out most retail banking services through computer connected network, television or mobile phone" (Mols 1998). In line with this, Kolodinsky et al (2004) mention that electronic banking could also be defined in several different platforms as follows:

- Internet banking or online banking
- PC banking or offline banking
- Telephone banking
- Mobile phone banking
- TV-based banking

Internet banking via the mobile phone is considered fast and reliable. Studies states that Internet banking or online banking transactions is achieved with the Internet connected to a network and is said to be a safe and useful way to conduct banking. Electronic banking services can be done at home without the stress of going to the bank to perform the same operations, such as office

account balances or funds transfers, bill payments, money transfers and online shopping transactions. Online banking services and products include account access, account statements, fixed deposit inquiries, money transfers, credit card payments, invoices, payments and checkbook requests. As more people embrace the Internet, online banking is expected to grow. This expected growth will also affect people's income and education levels. Research has been done on the adoption of Internet banking and the banks' performances. Research for internet banking is less than the effect of scientific investigations (Daniel and Storey 1997). Banks began offering Internet services in 1995 (Sullivan 2000). Although the speed of Internet banking system expansion has slowed,, most users are still determined to see further development. More users are starting to become familiar with the use of personal computers, and mobile phones and the Internet use, so there is a rising hope that modern technology (Internet) in the banking sector will adopt the use of serious tests. Existing customers these days only want to do online transactions, in every case, they use the desired text and e-mail messages, while all kinds of activities and financial accounts need to be used to get financial updates.

In the increasingly competitive banking environment, Internet banking is seen as a useful tool to help reduce paper usage. It is now very difficult to maintain and keep paper records, which are being destroyed. Virtually all financial institutions with millions of customers have replaced paper records with online computer networks. Some customers still ask for receipts and paper records even though such records can be kept in their own mobile phones and personal computers, which are connected to their bank (Sullivan 2000)

#### 1.3 Aim of the Study

Previous research has been extensivily done in analyzing Internet banking features and performences in different economic sectors. Internet technology continues to develop rapidly; therefore, the aim of the present thesis is to investigate factors that affect the use of Internet banking from the points of view of university students and academics. The research is important in the sense that university students are potential customers of banks and academics are the most qualified segment of the population to evaluate this issue. Therefore, the results of this research will be important to provide policy lessons for commercial banks and their administrations.

#### 1.4 North Cyprus and Its Banks

Cyprus is the third biggest island in the world, spanning 9,250 square kilometres in the Mediterranean Sea. Its position between the East and the Western world has often attracted interest and attention from powerful outside forces. Cyprus has had many names due to several power struggles in its turbulent past, but its current name is believed to have come from the word "copper", which the island possessed and could still possibly possess today. In 1974, the island was divided into two states: the Turkish Republic of Northern Cyprus (TRNC) mostly made up of Turks and South Cyprus, made up of Greeks. The TRNC makes up 36% of the island covering 3,355 kilometers square and the Greeks inhabit 59%. The rest of the island in under the control of the United Nations and the United Kingdom. TRNC was established on November 15, 1983, and has a population of 188,662 according to the 1996 census. This figure increases by 1.1% every year. The financial services market in Northern Cyprus is unique in many aspects and it is developing fast. The controversial history between the Turks

and the Greeks could be seen as positive or negative depending on the viewer's perspective.

The Turkish banking structure appears in the northern part of Cyprus. Therefore, in terms of its method of operation, it is the same as all the activities carried out in everyday transactions. It also strongly depends on Turkey. The island experienced serious setbacks for years due to political instability. Then, after its independence in 1983, the island experienced growth in the tourism sector and its economy increased as a result. This growth in the last few years reflected on the island's banks, personal computers and Internet access to electronic banking applications, and it enhanced the availability of modern structures that embrace change and proposed reforms to the banking system (Jenkins 2006).

Table1: North Cyprus Banks

Ownershi p Structure	Name of the E	Banks
Public Banks	Kıbrıs Vakıflar Bankası Ltd	
Private Banks	Kıbrıs Türk Kooperatif Merkez Bankası Ltd.	
	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	Kıbrıs İktisat Bankası Ltd. Creditwest Bank Ltd. Asbank Ltd. Türk Bankası Ltd. Limasol Türk Kooperatif Bankası Ltd. Denizbank Ltd. Yakın Doğu Bank Ltd. Şekerbank (Kıbrıs) Ltd. Akfinans Bank Ltd. Yeşilada Bank Ltd. Universal Bank Ltd. Kıbrıs Continental Bank Ltd. Viyabank Ltd.
Foreign Banks	1. 2. 3. 4. 5. 6. 7.	Türkiye İş Bankası A.Ş. HSBC Bank A.Ş. Türkiye Halk Bankası A.Ş T.C. Ziraat Bankası A.Ş Ing Bank A.Ş Türk Ekonomi Bankası A.Ş. Türkiye Garanti Bankası A.Ş.

Source.www.kktc.merkezbankasi.org/

## 1.5 Structure of the study

The thesis is organized as follows: Chapter One discusses the introductory path of the study; Chapter Two highlights some literature reviews in line with this study; Chapter Three discusses Internet banking in detail; Chapter Four deals with the customer perspective and its importance to Internet banking, it considers Northern Cyprus banks in general and also looks at some findings based on the activities; Chapter Five consists of conceptual models and research hypothesis; Chapter Six discusses the type of data used and the sources, and concludes with the research methodology applied in the study, as well as the managerial implications and limitations from the outcome of the study.

## Chapter 2

## LITERATURE REVIEW

#### 2.1 Banking and Bank Services

People are willing to invest their money in financial organization like banks. Banks in the future will save for people who want to consume and invest in productive resources. Thus, businesses have to offer an efficient intermediary between those who want to achieve this. Alternatively, individual savers will have to be analyzed, managed and monitored, thus these businesses can collect their investments (Benston 2004). Retail, corporate and financial institutions are the three main market segments into which many universal customers can be separated (Chang et al, 1997). Personal and corporate banking institutions offer services and products to institutional and retail markets, while financial institutions and non-banking financial institutions set sales of product groups. In this section, retail banking products and services will be discussed.

Some literature has focused on Internet banking in Northern Cyprus (TRNC) with regard to its adoption, growth and customer satisfaction; for example, Jenkins (2006). Work factors influence the adoption of Internet banking services at domestic commercial banks. Only two foreign banks exist in the state and HSBC is the only one that offers Internet banking. Local banks in TRNC do not provide Internet banking services. This is not durable as the use of expansion of Internet banking in Northern Cyprus has a lot of scope. In North Cyprus, twenty

three private and foreign commercial banks have been examined prospectively and only 85,000 Internet users are applicable (Abeido 2004). It is clear that there is a potential market for Internet banking services in North Cyprus. A 10% market penetration was seen in the Internet banking services. However, the potential number of users increased by allowing more room for new analysis and inference. In 2006, the number of new banks increased by 8.7% and in 2004 it increased by 30%. To provide a more familiar Internet banking experience to its customers, Internet banking needs to continue to grow.

#### 2.1.1 Traditional Retail Banks

The technological developments have changed but the nature of retail banking has also changed. As early as the 1800s, people have held their money in banks. These banks set up businesses, called branches, in the cities. These bank branches are known as the traditional banking sector (or brick and mortar) and continues to be strong today. Those services are traditionally provided by banks; retail banks offer all components such as intermediation and payments services offered to individuals and small businesses. However, it has become increasingly difficult to determine the nature of a retail bank. Many banks now combine both retail and wholesale activities. Technological advances allow banks to supply customers with a wide range of retail financial services. Traditionally, retail banks, provide the public with deposits and other accounts, collect deposits and provide loans to facilitate payments for reimbursement, but the bank must be backed up by an important branch network. Growth has been seen in the number of automated teller machines (ATMs) and telephone banking, mail accounts, and retail bank branches closer to the widespread use of new types of Internet banks, provided that there is no need for extensive investment. To make sense of the progress in the field of retail banking over other processes, it is useful to see retail banking as a series of institutions.

#### 2.1.2 Services and Products of Retail Banks

Buckle and Thompson (1998) clarify that the products and services provided by retail banks to individuals and small businesses are:

- 1. Intermediation services
- 2. Payments services.

They perform some services in general, according to Mandaci and Soydan (2002):

- Financial advise to customers who use credit and have savings
- Providing credit by discounting commercial loans
- Providing security brokerage services through buying stock, bonds and other securities
- Providing mutual funds, which usually provide higher returns than those offered on bank deposits
- Safekeeping of customer valuables
- Carrying out currency exchanges
- Selling insurance policies, such as life and non-life

Increasingly, retail banks are becoming financial supermarkets with a wide range of insurance products, brokerage services, stock and retirement options.

#### 2.1.3 Changes in the Banking Sector

The banking and financial sector is a fast growing industry. Financial markets are increasing with improved training, cooperation, competition and change, globalization and the convergence of key elements. Gaining new strategies to attract customers and changing consumer preferences and means to protect the most fundamental change in profit are also factors that led to a rise in the sector. The consumer experience in traditional branch banking has been more of a solitary one. In other words, private Internet banking on computers, by telephone or on mobile phones are a move towards using electronic distribution channels (Karjaluoto et al, 2002).

Technological innovations have reduced both geographic and economic barriers to competition, and created an added dimension of uncertainty within the industry. Automated teller machines (ATMs) have significantly reduced geographic barriers and helped banks to better serve their customers. Other advances facilitated an increase in the number of products that banks provide, most of which are "system-dependent," which means they are "fundamentally different from older, traditional products" and are "all vitally linked to systems technology". Increasingly, banking products are information products. However, information technology fails to provide most banks or their customers what they need: value-rich content, rather than speed of transaction processing (Nelson, 1999).

Banking, which has been characterized by "tried and tested" processes of service deliveries, is greatly affected by environmental change (Bradley and Stewart 2003).

The banking sector is subject to both internal and external forces. Jayawardhena and Foley (2000) point to external factors, such as political, economic, social and technological changes (see Figure 1). Categorized under the broad business environment, they are likely to have major implications for the sector. By definition, these developments are beyond the control of businesses. However, the success or failure of managing and forecasting these changes depends on how well we can react (Jayawardhena and Foley 2000).

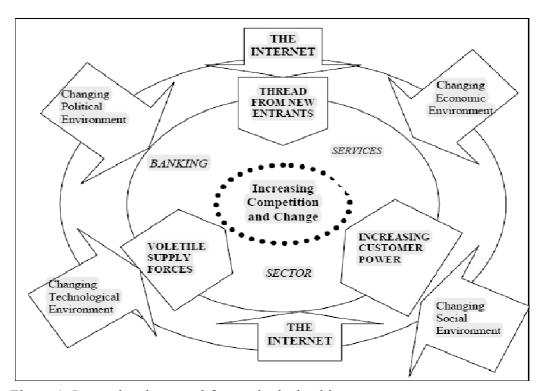


Figure 1: Internal and external factors in the banking sector.

Source: Jayawardhena and Foley (2000).

Figure 1 provides a clear indication of the internal and external factors that have led to what has been a notable change in the financial services sector in recent years. Given this dramatic change within the banking industry, traditional financial services providers are now finding themselves in a situation where they

have to work even harder to retain customers they once had the luxury of taking for granted (Ibbotson and Moran 2003).

## Chapter 3

## INTRODUCTION INTERNET BANKING

The Internet and the World Wide Web (www) provide banks with a new channel to reach their customers. Customers benefit from this new channel of delivery, which will be discussed in this chapter.

## 3.1 History of Internet banking

Internet banking, or electronic banking, is an extension of the development of banking and is used as the platform for opening network systems, as well as individual and commercial banking services and transactions. Banks are set up in a virtual environment and the non-branch services are presented as an alternative distribution channel.

The idea of Internet banking and telephone banking emerged in the 1980s with the increase in the use of the Internet at home (Cartwright 2000). In the 1980s, banking and financial institutions in Europe and the United States began to embrace "home banking" as a concept of research and programs. Initially, far more advanced computers and the Internet helped customers contact machines and telephones (Sarel and Marmorstein 2003).

The United States "NetBank" was the first Internet banking application and in 1996 "Atlanta Internet Bank" was founded. Citibank and Wells Fargo established their Internet services in 2001 (Gefen and Straub 2005). A Gartner

Group report in 2009 states that, "47% of adults in the United States and 30% of adults in the United Kingdom use banking" (Batchelor 2010).

DBS Bank granted financial services over the Internet for the first time in Singapore in 1997. It was followed by UOB, OCBC and then other banks (Gerrard et al, 2006). In the 1990s, Turkish banks began the continuous expansion of its worldwide automation standards with new technology. Turkiye İş Bankası Ltd., Turkey's first private bank, offered customers electronic banking in 1987 and laid the foundation for ATMs (Polatoğlu and Ekin 2001).

#### 3.1.1 History of Internet banking in Turkey

Internet banking started for the first time in Turkey in 1997. Garanti Bank also implemented the same procedure in 1997. Then Ottoman Bank, Pamukbank, Esbank, Akbank and StructureCredit Bank presented their Internet banking services to customers. Akbank Internet banking began for individual customers in 1999. Today, Job Bank, Garanti Bank, Akbank, Vakıfbank, Denizbank, Koçbank, HSBC and other banks in the Turkish financial markets provide Internet banking services. Since 1997, services have expanded due to increased computer literacy, regulation of financial sectors, desire of bank customers to have more convenient electronic services and reduce their transaction costs under the watchful eye of the Turkey Commercial Bank, which is perceived as an alternative distribution channel. However, security concerns and the slower than expected spread of Internet banking in Turkey have hampered progress. As of March 2009, the number of customers increased to 11.793 million. According to the previous year, an increase of 1.791 million people occurred. The total

number of individual customers who logged in to the system last year was 6.344 million (http://www.finansgundem.com, 09.28.2009). In 2009, between January and March, 4.838 million individual customers performed at least one Internet banking procedure, which amounts to 41%. This shows the use of Internet banking in Turkey was lower than developed countries in Europe and Asia, but when compared to the developing countries, the use of Internet banking was higher than in Asia (http://www.kho.edu.tr, 23.7.2010).

#### 3.2 Internet Banking Transaction

Chou and Chou (2000) point out the importance of the following basic items in Internet banking:

- View account balance and transaction summary
- Pay an invoice
- Transfer funds between accounts
- Request credit card and credit card transactions
- Social Security
- Tax payments
- •Monitoring of foreign exchange trading and foreign exchange rates,
- Investment account transactions (repo, auto repo, government bond trading, mutual fund trading, foreign investment fund operations, monitoring of fund buy-sell orders, stock transactions)
- Account opening procedures

• An authorization process banking sector to adapt and compete with developments in the world of Internet banking following new conditions that are constantly regulating services.

#### 3.3 Internet banking from the customer perspective

The previous literature suggests that the following factors are important:

- (1) Perceived relative advantage
- (2) Perceived relative compatibility (with one's values about living and working)
- (3) Perceived security and privacy risk of Internet banking.
- (4) Prior experience with the Internet.
- (5) Need for a delivery channel like the Internet, which is easily accessible and convenient.
- (6) Trial ability of Internet branches

These are collectively important factors for customers to consider when making their decision to adopt Internet banking. Suh and Han (2002) add "trust" to these six factors. Since Internet branches are considered as alternatives to other distribution channels, customer satisfaction regarding these channels is also important. Low service quality and greater satisfaction with branch services is likely to have a negative impact (Centeno 2004). Additionally, inappropriate opening hours of regular branches have a positive impact on the Internet branches as well as the insufficient number of regular. Branches with a fee structure are also a deterrent (Devlin and Yeung 2003).

In addition, non-branch distribution channels such as ATMs and telephone banking add to the experience of Internet branches. Devlin and Yeung (2003) contribute to the positive trend in user satisfaction. However, Walker and Johnson (2005) cite the relationship with the customer service provider, who is always willing and happy to use Internet banking but not regularly. The size of its customer base is an incentive for banks to consider adding Internet branches to enhance security, accuracy, processing speed, ease of use and user involvement. The expectations of each individual is determined by the terms of convenience and all these are "perceived usefulness" components (Liao and Cheung 2002). When choosing a bank for Internet banking, the prestige offered by the bank is the most important factor (Tan and Teo 2000).

This is followed by the size of the bank and the bank ownership. The majority of studies on Internet banking show that the biggest concern is safety. Security has always been a problem, but people are more concerned with the scope of the financial loss than with privacy concerns. The financial sector strives to be proactive in creating ways to protect customers against these threats. At the same time, specialist technology companies are working on ways to improve the high safety ratings. White and Nteli (2004) state that in the United Kingdom, customers find the most important factor to be "service delivery response" followed by "ease of use," "bank credibility" and "variety of product." The study participants were divided between ""traditional bank" customers and "non traditional bank" into two clusters. It is more important to analyze the clustering results in sets that consider "security" for the four clustered drops. Turkish

Internet banking users, based on research by Akinci et al. (2004), consider safety, reliability and privacy as the most important factors.

#### **3.4 Factors Affecting Customer Preferences**

Knowing the factors affecting the adoption of Internet banking willcontribute to an increase in the use of Internet banking. In addition, in the selection of a bank, the most important factors are the diversity of the services offered and the bank's reputation.

McKechine (1992) states that convenience and ease of operation make online banking more accessible. Banking services at any time dictate that two major factors affect the use. With the development of Internet banking, a change has occurred in customer trends. According to Ekin and Polatoğlu (2001), one of the most important advantages of Internet banking transaction is low cost.

Vrechopoulous and Atherinos (2009) mention that the design of the banks' website has an effect on Internet use, so it's imporant to take into consideration the design preferences and recommendations of customers who use Internet banking.

For Internet banking to benefit customers, it is important that they believe it is safe. Ekberg, Li and Cod (2007) studied the four largest banks in Sweden to find out the best principles in deciding which Internet banks to use. Passwords used to provide security are not sufficient unless the biometric method is used, reports Zhu (2009). Three separate factors related to Internet banking determine

security: messages between the bank and the customerto be sure of the requirement (reality); financial information sent to customers via the Internet that no one else is able to see (privacy and integrity); processing of a person after performing this movement to identity. In this study, Zhu (2009) ensured that the environment was devoid of modern mobile phones and computers with large screens.

#### 3.5 Features of Internet Banking

The era of bank users having to go to a branch to complete their transactions or inquire about services is over. The advancement of online or Internet banking has brought about an enormous transformation to the entire financial industry.

Bankers view online banking mechanisms as an additional means of attracting and retaining new customers. The online banking activities of banks are helping to reduce expensive paper transactions and front teller exchanges in a rising competitive banking setting (Basics 2003).

#### 3.6 Source of Internet Banking

The popularity of the Internet and the advent of personal computers have presented both an opportunity and a challenge for the banking sector. For years, financial institutions used a powerful network of computers to automate millions of daily transactions that usually ended with a paper record and a customer's receipt. Now that customers are connected to the Internet through personal computers, banks can have similar economic advantages by adapting to the same internal electronic processes.

A strong and increasingly competitive banking environment has helped to eliminate costly paper handling and teller interactions. Some devices used in connection with online banking system may also be connected again in order to reach its intended target. A workstation, a keyboard and a television set or a monitor connected to a telephone line can be used to access the banking system. In the United States in 1981, four major banks started to offer online services: Chase Manhattan, Citibank, Manufacturers Hanover and Chemical.

They were able to achieve this using a home banking service called Videotex systems. "Interactive Videotex", known as Videotex, was an "end-user information system" that became a fast success. In 1970, a PC-like form of the Videotex system was initiated in the form of text messages to users on a screen to convey information.

Banks started to provide services via the Internet in 1995, yet the spread of Internet banking has been slow, but the expansion has been steady and continuous. Today, many banks exist only as Internet banks with no physical stores. These Internet only banks, unlike bricks and mortar banks, provide banking services all over the world without any branches. What differentiates them is that they provide the best online banking features. Sullivan (2000) states that they offer higher interest rates and quality service.

#### 3.7 Characteristics of Internet Banks

Two types of Internet banking are presented. The first type is creating your own website to offer online financial services and the second are "bricks and mortar" banks. The most common in Internet banking is called the transition. Bricks and mortar banks do not provide the full range of Internet services and are considered ordinary banks. Their respective services, say Furst et al (2002), depends on the physical branches.

#### 3.7.1 Brick-to-Click Banks

More or less all online banking, all major public sector banks, cooperative banks, credit unions, and even regional banks, are mainly offered by depository institutions. Home banking is defined as providing PC banking, Internet/electronic banking or just some type of online banking. These kinds of banks are usually known as "brick to click." Virtual banks like "brick to click" are used by banks. The old "bricks and mortar" banks are still the traditional ways of banking. The bricks and mortar banks survive by taking advantage of the differences separating them and their customers from Internet services. Citibank is an example of such a leading financial institution in the United Kingdom. The bank is represented everywhere in the UK and there are only four physical locations. However, there are countless numbers of its customers in London. This is because the platform is a well connected Internet network that can be accessed through online banking, which is well regulated (Furst, et al 2002).

#### 3.7.2 Virtual banks

Virtual banks do not have the physical location of the second "virtual" banks. Banks have a physical location called Land Banks. Customers have no physical or direct contact with banks of this kind.

Virtual banks don't have any kind of physical structure, or brick, from the customer's point of view because they are fully available on the Internet. The same range of services as banks offer to other types of virtual banking system is with a very good online package and the same federal regulatory body, sticks to traditional banks. Virtual banks in their own banks, have a difficult problem, Furst, et al (2002) mention that there are physical complaints. Eliminating the costs associated with bank branches, banks are directly based on higher interest rates on their products and traditional competitors offer lower service fees.

Murthy and Venugopal (2008) state that the idea of virtual banking emerged in the 1970s after the first installation of ATMs. ATMs, including the additional mechanized systems, began to extend banking services, telephone banking, Internet and Internet banking, and also the use of smart cards, and all these factors turned around the banking sector.

#### 3.8 Real Internet Banking

The Real Internet banking mechanism is the online Internet banking system only, without bricks and mortar branch access. Of course banks must provide their websites to be able to reach their customers online. Nath et al (2001) define two basic models of Internet banking in the banking system. The first model (e-bank) is to represent a banking institution that exists on the Internet-based

platform only, and the second model (e-branches) is the traditional bricks and mortar banks that offers Internet banking services to their customers. Grosse (2009) states in his book that there are two fundamental models of virtual banking systems. The electronic substitution of already existing bank services by the use of Internet or telephone is the first and the second involves the banks giving new services that were not offered in virtual form formerly. Almost all forms of virtual banks have no physical or substantial infrastructure whatsoever and exist only over the Internet.

#### 3.9 Websites of Banks

Having a website does not necessarily mean that the bank offers Internet banking services. Instead, simple and user friendly websites ensure that stakeholders will use the site. Display or site tour direction also assists website guests (Swanick and Berish 1999). A clear function detail information on the website homepage is used as a sieve to allow users to decide whether to visit the site or not. Well organized and good websites will positively enhance the services being presented by banks. Eccher et al (2005) propose that a bank's website ought to at least contain a well defined purpose for which they were created; otherwise, the banks would not invest in non-profitable ventures like Internet banking. Stakeholders' visit bank websites because of the relevant information contained in those websites and there are no specific regulations guiding good content of a website because every website has its own different assignment entirely (Bakos 1997) mentioned.

As mentioned by Perumal and Shanmugan (2004), there exist three types of Internet banking platforms or websites that are being employed in the market place. They are:

- Transactional websites
- Communicative websites
- Informational websites

#### 3.9.1 Transactional Webpage:

This is the real Internet banking system. In this model, all kinds of transactions that involve cash take place. Multitudes of informational, administrative, transactional and portal services are performed with this kind of website and consumers expect this kind of bank website to protect personal information by using secure privacy policies. Cronin (1997) states that transactional websites are capable of performing some financial transactions such as:

- Account to account transfers
  - bill payments, wire transfers
  - creating new financial account
  - applying for a loan, etc.
- Funds transfers between a customer's own transactional account and savings accounts
- Financial educational information
- Payments to third parties, including payments of bills and wire transfers
- Investment purchase or sale

- Loan applications and transactions, such as repayments of enrollments
- Interest rate quotes and current bank news
- Corporate services like (Online brokerage and insurance services)
- Provides links to local businesses, community information and search functions.

Higher risk is attached so it must have the strongest controls. Relative to the informational and communicative websites, this system possesses the highest level of risk and needs to have the strongest control measures against hackers and attackers. Features that are usually distinct to Internet banking are: individual financial management support, like importing data into individual accounting software: some online banking policy support account collection to allow customers to monitor all of their accounts in one place whether they are with their main bank or with other institutions (Cronin 1997).

#### 3.9.2 Communicative Websites

Communicative sites allow you to get information, they are also allowed to submit information for feedback. This type of interaction between the banking system and Internet banking customers is called communicative serves well when the website out of operation.

According to Perumal and Shanmugan, (2004), customers could only do the following:

- Access their online statements, cheque links, co-browsing and chat
- View their latest transactions
- Loan applications
- View images of paid cheques.
- Set last 3 monthly transactions
- Take account summary
- Download bank statements, for example in PDF format

Website design carries a higher risk than the old system. For this reason, monitoring the website is an appropriate measure to thwart hackers. Under this platform, the bank users or customer banks then request a response via e-mail (Perumal and Shanmugan 2004).

#### 3.9.3 Informational Websites

Customers who browse an informative website of a bank canobtain sufficient information about the functioning mode. Internet banking is the main phase of the website, which is simple and informative. All bank services and products marketing information (credit or deposit interest rates and banks, such as information about information about the benefits) are exhibited in a stand-alone server.

# 3.10 Disadvantages of Internet banking

The disadvantages of Internet banking are listed as stated by Basic (2009). These are also based on consumer perspectives.

**Start-up may take time**: Bank for online program registration, and to ensure the identity of a bank branch is probably going to have to sign a form. Online with you and your partner, you want to view and manage their own assets will show all of the shares of the bank with a lawyer before you may have to sign a durable power.

**Bank site changes**: Even the big banks adding new features in unfamiliar places, periodically upgrade their online programs. In some cases, you may need to re-enter your account information.

**Security:** To ensure ease of access to Internet technology, many customers believe that is open and therefore not safe.

**Learning curve**: Banking sites can be difficult to navigate at first glance. A little time and / or investment plan is needed to read tutorials for virtual lobby to be relaxed

The trust thing: For many people, the biggest hurdle to online banking is learning to trust it. I went through the process? Did you press the transfer button once or twice? All of these inquiries and to avoid doubt, the best bet, only to appear on his personal web site, print receipts, bank records and to keep always. Internet banking, because of the huge benefits provided by all banks today, the bank itself, make their own actions rather than their customers increasingly are encouraged to use their online services. This is all offered for online banking customers to eliminate these drawbacks, customers money and time helped to save energy. The difficulty for online banking customers in the banking industry

cheered learn how to use the system in such a way that the design of this new service channel, and finally to get this as I have complete confidence.

**Dissatisfaction with the low speed of Internet banking response**: Low speed of response to dissatisfaction with Internet banking, Internet communications network infrastructure deficiencies to cause a slow response to feedback and slow process. Rotchanakitumnuai more disturbing physical response was slow and Speece (2003) is perceived.

**Complex web sites**: You can find a very complex and time consuming customer banking websites. A few sites, forcing customers' own bank officers, to provide adequate customer service (Mescon et al 2002).

## 3.11 Advantages of Internet banking

The benefits mentioned by various authors, Internet Banking user-friendliness, ease of use, time saving, cost savings, control over service delivery, and even technology. Curran and Meuter (Ho and Ko, 2008, 2005) use the entertainment. Annual online publishing Basics (2009) based on consumers' perspectives on some of the listed advantages and disadvantages of online banking

#### There details are discussed below:

**Ubiquity**: Ubiquity is a coach or official, or the base is off on a trip, the customer is faced with a monetary problem. Ubiquity, needs to be done with log in from another account and a capital transfer of the Internet and take care of their own personal needs and business.

**Transaction speed/Cost reduction**: Transaction speed / cost reduction internet banking instigates for an immediate transactions and they are very cost effective and is generally quicker than the transactions conducted at the ATM's or at the bank

**Efficiency**: Efficiency in the sense that it allows free access, free managements and control all people's bank accounts, including CDs, Individual Retirement Accounts, or even securities, from one's secure site.

**Convenience**: Different from the usual simplicity of traditional physical banking, online banking sites are always there. They are available 24 hours a day, seven days a week and 365 days a year to the position. Processing is done with just a click of the mouse.

**Effectiveness**: Effectiveness is Internet Banking helps in managing one's money, investment, bank accounts without having the problem of going to the bank, receive email and wireless alerts on the transactions completed. At the same time it is easier to pay bills online to receive the statements, and finally it is a free service makes it easy to transfer all the money.

Table 2: The advantages of Internet banking

#### The Bank

- Improved market image-perceived as leaders in new Technologies implementation
- Decrease transaction costs
- Better and quicker response to the market evolution
- Increased market penetration-the online banking service can be accessed all over the world
- The use of the Internet site to advertise/sell new financial products

#### The İndividual client

- Decrease costs in accessing and using the banking services
- Increased comfort and time-saving-transactions can be made 24 hours a day, without requiring the physical interaction with the bank
- Speed of transaction
- Better administration of funds-the history of a transaction is registered on digital support and can be analyzed before a new transaction is initiated

#### The institutional client

- Decrease costs in accessing and using the banking services
- Quick and continuous access to information
- Increased comfort and time saving-transactions can be made 24 hours a day, without requiring the physical interaction with the bank
- Speed of transaction
- Better administration of funds-the history of a transaction is registered on digital support and can be analyzed before a new transaction is initiated

Source: Gurău (2002).

Online banking presents various advantages to banks, individual clients, as well as institutional clients as can be seen in the Table 2.

## 3.12 Goals of Internet Banking Channel

Most Banking practices provide consulting and goals of Internet-banking sites which are much different today than a decade ago. The following is the summary of what Internet Banking sites should aim at achieving today declared (Calent 2009). This is based on Banks perspective.

- Ensure cost reduction.
- Enable independent revenue generating means
- Harmonize revenue generation with other channels
- Guarantee customer retention
- Provide new mechanisms and strategies
- Build a brand, nurture the built brand and improve it
- Provide offline to online migration

#### **3.13 Banks**

Developing Internet banking for customers use requires that banks need to make a serious improvement that addresses consumers' anxieties. Sequel to this, it would prompt financial institutions to increase their knowledge of some major issues which may alter consumers interest for adopting Internet banking (Lichtensten et al 2006). Banks provides Internet banking services to consumers through different channels like, ATM, POS etc. Banks also have two major roles which they play:

- provide access to conventional banking products over the Internet
- aid in the development of new product that would make Internet banking possible.

#### 3.14 Customers

Customers, stakeholders participate in Internet banking services which is one of the main users. Internet banking sector is the customers. These suppliers, retail customers, employees, shareholders, government and local communities, companies, organizations, Beauchamp and Bowie (2004) may be. Due to the ongoing competitive nature of today's banking industry environment, consumers demand for high values in their banking activities. Cho & Kim (2002) describe the relative benefit or value of high stands as the degree to which an innovative technology seemed to be much better than the common technology and the one that provided stakeholders with something of greater value or their equity. Jenkins (2006) states that consumers are most probably eager to move over to online financial services if the conveniences and effectiveness involved with online services is greater than the personalized branch network service. Mann (2003) in line with Jenkins, proposes that the rise of the person-to-person (P2P) technology such as, PayPal and the daily rise in Internet billing as a medium of replacing paper payment and checks have contributed to customer's value. Online payment of bills is convenient to stakeholders, and stakeholders who used checks for paying their bills in the past saved money on mailing and postage

# **Chapter 4**

## INTERNET BANKING AND CUSTOMER SATISFACTION

#### 4.1 Customer satisfaction

Pleased to have fulfilled their own expectations of a performance (or outcome) is experienced by a person. Satisfaction levels are therefore a function of expectations and perceived performance. The expectations then are under the same or similar circumstances, friends, and other partners on the basis of past experience and statements made by the tender organization. Kotler and Clarke (1987) He or more satisfying levels including the level of consumption and has a satisfactory taste (Oliver 1997). The customer may have more satisfying levels including the level of consumption and satisfactory taste.

The quality of a product or service satisfaction or dissatisfaction with the actual performance is more than a reaction. Prior expectations about the level of quality is affected by this. According to expectancy disconfirmation model, consumers are often the products and \ or simply a certain quality level of communication about the product on the basis of previous experience created beliefs about the product performance.

One thing performs the way we thought about it, we might not think too much about it. On the other hand, fail to live up to expectations, or, a negative effect may occur. If this happens to exceed the expectations of our performance, we are satisfied and happy (Solomon, 1996).

Buying behavior (behavioral, and customer loyalty in size) is found to be positively and significantly associated with customer profitability. This result is the method to determine the number of results for sales and customer profitability as the best predictor of the order value which is also confirmed by some of the t-statistics. Customer satisfaction is a positive correlation with customer profitability, however, it does not statistically claim into what happened, accept and approve this variable and therefore customer satisfaction (a mental state) has a direct impact on customer profitability. Thus, this results in satisfaction, then is a certain level of trust and customer loyalty, customer behavior confirms the hypothesis. (Fournier and Mick 1999) and (Oliver 1999). It can be an affect on the profitability.

#### 4.2 Word of mouth

In today's very competitive market, creating demand for products the industry has been recognized as one of the biggest challenges faced by marketers. In order for the competitors to sell more, industrial marketers have developed a variety of communication strategies to increase sales market. These communication strategies designed to increase the number of customers, the amount of dollars spent by each customer per purchase (higher prices and / or large orders) and to increase customer to increase the frequency of purchase (Silverman 2001).

Advertising, sales promotion and public relations: Traditionally, industrial marketers are three types of communication strategies, especially busy. The purpose of these marketing strategies are all aimed at building demand. Although it remained a very important traditional market communication

strategies where dominance decreased (Kotler and Armstrong 2006). There are several reasons for this trend.

Advertising includes heavy spending. Kotler and Armstrong raise awareness and customer attempts to make new products that often have large advertising budgets. In a market with many competing brands and high advertising clutter, the heavier should be declared to be noticed above the noise," (Kotler and Armstrong 2006).

In addition, the advertising, especially on consumer advertising, primarily based on television and the proliferation of TV channels enterprises, reduce the likelihood that consumers exposed to a specific advertising message noticed. In terms of sales promotion, Kotler and Armstrong (2006) weakens the ability to trigger immediate purchases and Armstrong (2006), "encourage the increased use of sales promotion resulted in clutter," he noted. Limited and scattered use of public relations and trademarks Kotler and Armstrong (2006) require to create a work-in-hand in hand with advertising. Today, companies, mass-market applications, traditional market communication strategies create demand for a revision and are looking for other more effective approaches to market communications. Searching for new marketing tactics have become a problem for industrial marketers.

More narrowly defined market trends and micro-market, Kotler and Armstrong (2006) designed to establish close relationships with its customers. Market-oriented mode of communication programs to change their marketing communications strategies for the mass market have pushed the industry

marketers. Companies serving the needs of the market communication activities by communicating with customers and clients have recognized the need to appeal to customers. "In today's increasingly heterogeneous customers, and certainly they do not fit the traditional stereotype categories 'mass market' approaches do not respond," (Sisodia and Wolfe 2000). Market-oriented communications programs, help to make the purchasing decisions of customers close to the target consumers and emphasize marketing communication. Developing technology help reach specific customer groups and provide them with more tailored messages provided new ways of communicating.

There are two types of communication channels, non-personal channels of communication and personal communication channels. Non-personal communication channels are newspapers, magazines, radio or television, online services and websites such as these media convey messages without personal contact, and includes feedback. Product environments are designed to buy the orientations of the receiver which is used to create or to strengthen the nonpersonal communication (Kotler and Armstrong 2006). Personal communication channel-focused marketing strategy will help. In personal communication, they contact each other directly, including face-to-face meeting of two or more people, speaking by telephone or mail exchange more recently, an Internet "chat" conversation can occur between groups. A firm's personal salesforce will be an example of personal communications strategy. Kotler and Armstrong (2006) allow for personal addressing and feedback effective personal communication channels.

Word of mouth tactics is a particular type of personal communication. More general terms, word of mouth communication, friends, neighbors and family members occur. In the context of a marketing, word of mouth communications company, Silverman (2000) states that in an environment independent of the effects, regardless of the company providing the product or service consumers about products and services is defined as an informal communication. It has an important effect on product and service marketing.

Natural or spontaneous word-of-mouth communication about a product or service can have a remarkable impact on product or service demand. The following findings highlight the importance of spontaneous word of mouth communication:

- Face-to-face information received, such as printed materials, the less the information presented in a lively manner to be more accessible to more buyers, word of mouth communications often have a major impact on product evaluation (Herr, Kardes, Kim 1991).
- A higher level of advertising stimulates positive word of mouth, which enhances firms' market share by taking advantage of the effect of word of mouth (Bayus 1985).
- Word of mouth recommendation had more impact on brand choice than advertising in 16 out of 23 cases in consumers' selection of service providers. Fifty-nine percent of respondents found their dentists by word of mouth recommendations" (East et al 2005).

• "An improvement in a book's review [by word of mouth evaluation] [at Amazon.com and Barnesandnoble.com] leads to an increase in relative sales at those sites" (Chevalier and Mayzlin 2006).

Industrial marketers through word of mouth carry a great power of personal influence to the target audiences notice. Thus, a new trend has emerged in the field of marketing. Industrial marketers create demand for their products to potential buyers and knowledgeable expert to help you achieve the users make it easy to talk to. Facilitated by mouth to such tactics, well-informed decision-making process of people to shorten / make a statement in order to accelerate the target buyers. Similar opportunities to competitors Silverman (2001) states that before reaching the customer decided to short-cycle, other industrial customers, vendors, and "turn those customers into ardent supporters" will have to obtain a better opportunity. Oral conversations make it easier to use personal influence to create demand for business marketers to take steps.

# 4.3 Security

Data privacy and security, non-regulated intermediaries in a new introduction by the provision of e-financial services and global character of the difficulties are faced by financial regulators and the financial services sector. Online environment sensitive to external and internal threats leaves all transactions in a financial services company. Processing and data security privacy issues increasingly worldwide concern for regulators. Furthermore, such can exist as an internal organization of the threats. Continuous training for pre-employment screening and security, and even more about today's technology-intensive environment with the click of a mouse in which an employee can receive large

amounts of information in an e-mail. For example, a rogue trader acting without supervision by a recent announcement, sent shock waves across Europe this month and the world, thus the line losses were \$7.2 billion.

Outsourced operations and the non-financial services company make sure the seller must follow the application running on the same security rules. Combining hardware and software tools must employ security measures to combat internal and external attacks. These measures, intrusion detection, encryption, password protection, firewalls, include virus controls. Therefore, companies must have a plan to update their systems regularly.

## 4.4 Retail Internet Banking Services

Retail customer is always there, or more precisely, it improves the daily financial operations which will continue to demand for better services to their own banks. As determined by the use of the individual, more or less holding cash, check and time consuming because now I do not like using a check or cash (Saunders 2008). On the contrary, they prefer to use the retail-oriented online payment technology. Internet banking network technology is the use and cost greatly reduce the cost of electronic processing had a room for a better determination. Saunders (2008) highlights many of the main retail payment product reforms as follows.

#### • Automated Teller Machine (ATMs)

Automatic teller machine without requiring human interface is designed to give bank customers a computerized cash machine. ATMs are to provide a 24-hour access to customers' deposit accounts in the banks. Customers can do many types of process like electricity bills, cash withdrawal, and payment of credit cards.

#### • Point-of-Sales (POS)

The pos machine is available everywhere in such banks, and this device allows you to trade. Theis is cash to make the purchase. Customers do not like keeping credit card or check. Moreover, goods or services purchased or sold in a physical POS and customer payment information are captured at the point. With a debit card instead of money paid to the carrier/receiver at a later date instead of having to pay back the money, the merchant account holder's bank account is credited.

#### Home Banking

Instead of the main banking branch locations to perform banking transactions from home is an application that can be done. Personal computer via a secure Internet facility through personal funds, connects customers to access account data and other banking service.

## • Telephone Banking.

Telephone banking allows you to make any cash transfers directly from one account to another bank to its customers. Standing orders and with voice command, or an account holder can be done by making a call to the banks.

## Online Banking

Online banking offers many benefits to bank customers. It is the performance of banking activities via the Internet. Retail banking and investment services to customers via the Internet allows you to carry presented online banking.

#### • E-mail Billing

This service to its customers via the Internet provides a tool to make and receive payments of invoice. This kind of service decreases paper wastage and mailing time.

#### Overdraft and Credits

Overdraft and credits, wage slips, direct deposit or bank accounts of these companies consists of firms. This application also provides the opportunity for payments of bills and also mortgage payments.

#### • Smart and Debit Cards

Smart and debit cards offered to customers are mainly in the form of tape storage mechanisms chips which are different opportunities to spend money to have the cards, and it allows you to keep using. It can be used virtually anywhere, without restrictions.

#### 4.5 Performance on Banks

Many research studies are done by different researchers on the adoption of Internet banking. But the impact of Internet banking, according to the performance of their scientific research still has a very small number of more or less. In addition, the researchers took various opinions among the impact of Internet banking which is a critical performance issue.

Most typically, a bank offering Internet banking service is non-profitable (Furst et al 2000). This durable, but also non-interest (fee) income tends to produce in large quantities (Furst et al 2000). Feedback on performance differences between

the difficulty of determining the effect of online banking could be traced. Internet activities related to the value of the costs and earning revenue and expenses in the amount produced by a bank different from the other departments cannot be explained. However, there are some exceptions to the above claim. According to DeYoung (2001), the average one-year-old Internet-only bank earned significantly lower profits than the average one-year old branching bank. This is because of the low business volumes and high non-interest expenses being experienced in banking. In a follow up study, DeYoung (2005) also mentions that Internet-only banks are potentially viable, but its limited market share will lead to low average level of profits.

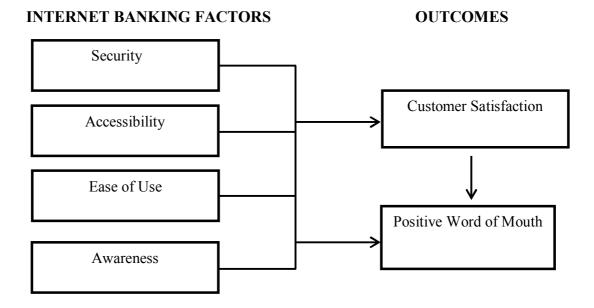
# Chapter 5

# CONCEPTUAL MODEL, RESEARCH HYPOTHESES AND METHODOLOGY

The conceptual model is presented and research hypotheses of the study are provided based on the literature review; therefore, firstly, conceptual model and then hypotheses regarding this model will be described in this chapter.

## **5.1 Conceptual Model**

Present study develops and tests a model that examines the effects of security, accessibility, ease of use, service awareness on the customer satisfaction and positive word of mouth of the university students and academicians in Northern Cyprus. Conceptual model of the present research is described in Figure 2:



There are questions measuring each dimension of conceptual model in Figure 2. These questions can be seen in the questionnaire instrument of the present research which is added to the appendix of the thesis. Internet banking factors are mainly divided into four categories: Security perceptions, accessibility perceptions, ease of use perceptions, and awareness. These factors are expected to have positive influence on customer satisfaction and word of mouth of university students and academicians as also advised in the relevant literature. The interactions between these factors in Figure 2 will be estimated by statistical analyses. Therefore, in order to proceed with those analyses several hypotheses have also been developed in this thesis. These hypotheses are described in the next section.

## **5.2** Hypotheses

In order to investigate the relationship among Internet banking factors, customer satisfaction, and word of mouth of university students and academicians, the following hypotheses have been developed in the present research:

H1: Security has a significant positive effect on customer satisfaction.

H2: Accessibility has a significant positive effect on customer satisfaction.

H3: Ease of use has a significant positive effect on customer satisfaction.

H4: Service Awareness has a significant positive effect on customer satisfaction.

H5: Security has a significant positive effect on word of mouth.

H6: Accessibility of customers has a significant positive effect on word of mouth.

H7: Ease of use has a significant positive effect on word of mouth.

H8: Service Awareness has a significant positive effect on word of mouth.

H9: Customer satisfaction has a significant positive effect on word of mouth.

In order to test the above hypotheses, various statistical analyses will be carried out in this thesis. These techniques will be described in the following chapter; but prior to statistical analyses, psychometric properties of the instrument should be considered. This is provided in the next section.

## 5.3 Psychometric Properties of the Instrument

Prior to carrying out empirical analysis by using the instrument, items (factors) in the questionnaire instrument should be validated in statistical sense. In order to achieve this, various statistical approaches are available in statistical theory. Two popular are (1) overall reliability and (2) factor analyses. Therefore, both these approaches will be implemented in the present study in order to test the validity of the instrument. The overall reliability coefficient as measured by Cronbach alpha coefficient is 0.976 for the whole instrument, which is quite satisfactory. Furthermore, Cronbach alpha values for individual dimensions are also 0.975 (for security), 0.874 (for accessibility), 0.863 (for ease of use), 0.783 (for awareness), 0.873 (for customer satisfaction), and 0.772 (for word of mouth). All of these show that instrument of this research is suitable for further statistical analysis and estimation (See Nunally, 1967).

## 5.4 Data and Methodology

# 5.4.1 Why Eastern Mediterranean University

Eastern Mediterranean University established in 1979, Eastern Mediterranean University offers programs fully recognized by Council of Higher Education in Turkey. Having completed its physical infrastructure, the campus spreads over an area of 2200 acres. The University owns unprecedented campus facilities, and creates a multicultural environment with students coming from 68 countries and

highly qualified faculty members from 35 different nations. There is a perfect harmony and dialog between the students and the faculty. Thanks to the modern understanding of education shared by all, students are trained as individuals thoroughly learned and endowed with excellent research skills, who can generate new knowledge, who are aware of and meticulous about environmental issues, who are creative, confident and ready to compete with the world youth. In addition to the in-door and out-door sport complexes, the variant of student clubs and the fully-equipped offices they own where all club activities are planned, and the on-campus dormitory facilities reflect the student oriented educational philosophy of Eastern Mediterranean University. Eastern Mediterranean University took its well-deserved place within the best 1500 universities in 2011 Webometrics Rankings of World Universities. EMU, which was previously placed as the 1704th university in Webometrics Rankings, has made a considerable progress as it has been ranked as the 1421th university based on the Webometrics evaluations which included 20,000 universities and took 16 universal criterion as their basis. According to rankings by Webometrics, which is centered in Spain, among 160 universities in Turkey, Eastern Mediterranean University has been ranked as the 18th university among the ones with Faculty of Medicine, the 8th among those without Faculty of Medicine and the 4th among private universities (foundation universities) in Turkey. Based on 2011 rankings, EMU continues to carry the title of 'the top ranking university' in Northern Cyprus as other TRNC universities have been ranked as the 3793th and 9088th by Webometrics. It is also worth mentioning that one of the leading institutions of higher education, Middle East Technical University, ranked Eastern Mediterranean University as the 1695th university in METU University Rankings by Academic Performance (URAP), which also

included a considerable number of state and foundation universities both in Turkey and throughout the world. Eastern Mediterranean University is proud to have produced more than 32.000 graduates from different cultures and countries. www.emu.edu.tr

## **5.4.2** Methodology

Data survey is collected from the Eastern Mediterranean University students and instructors in Northen Cyprus. A sample of 232 students and 68 instructors completed the questionnaires concerning the use of the Internet banking and the factors affecting the use of Internet banking. The survey consists of four parts. In the first part of the participant gender, age, profession, education level and marital status, and demographic information, is located.

In the second part using an Internet banking, reasons for using Internet banking that influence cause of not using the Internet banking service to more than influential factors in choosing the bank with their bank and Internet. Thirdly, and the most important part, the transactions of the banking 1.strongly disagree-5. strongly agree likert scale with the thoughts of respondents with Internet banking is intended to measure the expression. In this section, in the beginning expression, evaluated, and in Internet banking access, service, satisfaction, security, and ease of use and learning concluded that five factors, including lifestyle.

In the fourth and final section of the survey, participants were asked about their views about Internet banking in TRNC. Performed with the SPSS, 18 package programs to the data obtained in this study various data analysis methods were included.

The questionnaires include four parts: A, B, C, D. Part A asks participants personal information such as gender, age, marital status, nationality, status in the education sector. Part B includes Internet banking factors affecting the use of Internet banking services from customers' point of view. Part C asks which of the banks are used and also explains expectations and perceptions of participants about banks from strongly disagree to strongly agree. Part D 2 is open ended questions. Questionnaire of this research is presented in the appendix of this thesis.

# Chapter 6

# **RESULTS**

This chapter presents results and discussions on empirical findings from the research that include a demographic breakdown of survey participants, descriptive analysis and regression analysis. Firstly, frequency distributions and descriptive analysis of results will be presented.

## **6.1 Frequencies and Descriptive Analysis**

The demographic characteristics of the sample can be summarized as follows:

- 22.7 % instructors, 66.3 % undergraduates, 11 % graduate students.
- 44.03 TRNC citizens, 46.03 TR citizens, 9.3 other countries' citizens.
- 15% aged 18-20 years, 57% aged 21-25 years, 16% aged 26-35 years,
   9.7% aged 36-45 years, 1.7% aged 46-55 years, 0.7% aged 56 and over years.
- 46.7% females, 53.3% males.
- 16.7% married, 80.7% single, 2.7 other.
- 66.3% were Internet banking users, 33.7% were non-Internet banking users.

Table 3: Demographic Characteristics

	aphic Characteris Frequency	Percent	Valid Paraant	Cumulative
Types of			Percent	Percent
Respondents				
<b>Education</b>				
Instructor	68	22,7	22,7	22,7
Undergraduate	199	66,3	66,3	89,0
Master studt.	33	11,0	11,0	100,0
<u>Nationality</u>				
Kktc	133	44,3	44,3	44,3
Те	139	46,3	46,3	90,7
Other	28	9,3	9,3	100,0
<u>Age</u>				
18-20	45	15,0	15,0	15,0
21-25	171	57,0	57,0	72,0
26-35	48	16,0	16,0	88,0
36-45	29	9,7	9,7	97,7
46-55	5	1,7	1,7	99,3
56-over	2	,7	,7	100,0
<u>Gender</u>				
Female	140	46,7	46,7	46,7
Male	160	53,3	53,3	100,0
Marital Status				
Married	50	16,7	16,7	16,7
Single	242	80,7	80,7	97,3
Other	8	2,7	2,7	100,0

The other findings have also been obtained as frequencies. These are provided in the following tables:

Table 4: What is the reason for not using internet banking?

Table 4. What is	Frequency	Percent	Valid	Cumulative			
Percent Percent Reasons for not using Internet banking							
No computer knowledge	4	1,3	4,0	4,0			
No Internet knowledge	2	,7	2,0	5,9			
Unawareness of Internet banking	25	8,3	24,8	30,7			
Preference of branch banking	31	10,3	30,7	61,4			
Finding transactions insecure over Internet	33	11,0	32,7	94,1			
Finding Internet banking hard to use	6	2,0	5,9	100,0			

According to the 33 respondents who were non-Internet banking users, "insecurity of transactions over Internet" was the most important factor for not using Internet banking. The most unimportant factor, which was ranked sixth, was "no computer knowledge". So, we can say that respondents who are not users of Internet banking avoid this distribution channel especially because of insecurity; despite the fact that they may be computer literate.

Table 5: What are the factors that influence time you use Internet banking?

What are the factors that	Freque	Perce	Valid	Cumulativ
influence time you use Internet banking?	ncy	nt	Percent	e Percent
The visual appeal of sites	16	5,3	8,0	8,0
Variety of products	26	8,7	13,1	21,1
Site Functionality	60	20,0	30,2	51,3
Ease of use	23	7,7	11,6	62,8
Incentives offered by banks	6	2,0	3,0	65,8
Banking transactions can be made more quickly and easily	33	11,0	16,6	82,4
Eliminate the waste of time	30	10,0	15,1	97,5
Measures to improve security of the site	1	,3	,5	98,0
Necessity	2	,7	1,0	99,0
Other	2	,7	1,0	100,0

In the present research, various Internet banking services offered to bank customers were evaluated with a view to their usage of Internet banking services (see Table12). Customers were asked to mark the Internet banking services that they use. Of the 199 respondents who banked online, 40.7% used the service for viewing account balances and transaction histories, 7% transfer funds between accounts 6.3% requests credit card advances, 6% paying bills and 3.3% for foreign currency.

Results of other Internet banking services and their usages are given in the Table 6:

Table 6: Usage of services via Internet banking

Usage of ser	Frequency	Percent	Valid	Cumulative
services via			Percent	Percent
Internet				
banking				
Viewing account	122	40.7	61,3	61,3
balances and transaction				
histories				
Paying bills	18	6.0	9,0	70,4
				, , ,
Foreign currency	10	3.3	5,0	75,4
Selling/buying	7	2.3	3,5	78,9
stock, bond				
Transferring funds	21	7.0	10,6	89,4
between accounts		7.0	10,0	05,1
Requesting credit	19	6.3	9,5	99,0
card advances				
Paying school	1	,3	,5	99,5
	1	,5	,5	77,5
fees				
Using daily	1	,3	,5	100,0
services such as	_	,-	,-	
getting				
information about				
sectors products				
and services				
T 1	100	66.2	100.0	
Total	199	66,3	100,0	

In order to give some clues about the banking sector of Northen Cyprus in the context of Internet banking, we asked the respondents which institutions' Internet banking facilities they used.

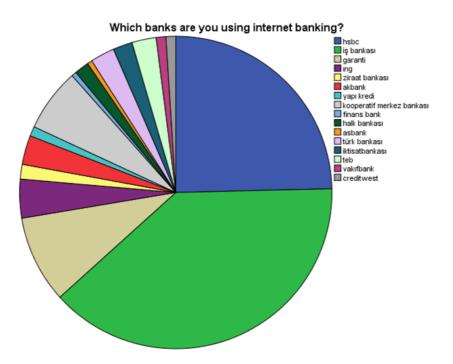


Figure 2. Percentages of institutions' Internet banking facilities used

The findings were not surprising. Isbank was the first bank to start using Internet banking services, also HSBC appeared as more people got used to Internet banking services. Figure 2 shows usage percentage of institutions' Internet banking facilities exhibited.

Table 7: Which banks do you use for internet banking?

	n banks do you use			
Name of	Frequency	Percent	Valid	Cumulati
Bank			Percent	ve
				Percent
Hsbc	49	16,3	24,6	24,6
Tc. İş Bank	77	25,7	38,7	63,3
Garanti	18	6,0	9,0	72,4
Ing	8	2,7	4,0	76,4
Ziraat Bank	3	1,0	1,5	77,9
Akbank	6	2,0	3,0	80,9
Yapı Kredi	2	,7	1,0	81,9
Kooperatif Merkez Bank	13	4,3	6,5	88,4
Finansbank	1	,3	,5	88,9
Halk Bank	3	1,0	1,5	90,5
Asbank	1	,3	,5	91,0
Türk Bank	5	1,7	2,5	93,5
İktisat Bank	4	1,3	2,0	95,5
Teb	5	1,7	2,5	98,0
Vakıfbank	2	,7	1,0	99,0
Creditwest	2	,7	1,0	100,0
		66,3	100,0	
Total	199	33,7		

Table 8: Internet Banking of this bank is good.

I perefer this bank	Frequency	Percent
Internet banking is		
a good		
Yes	107	53,8
No	92	46,2
Total	199	100,0

Of the 199 respondents, 107 people state that online banking at the banks they use is good while 92 people find them not good.

## **6.2 Regression Models**

Various regression models have also been estimated in order to investigate how important Internet banking factors are for customer satisfaction and word of mouth of customers.

#### Model 1:

Below are the first regression models whose parameters are also defined:

$$Y = a + b1(X1) + b2(X2) + b3(X3) + b4(X4) + E$$

Y = Dependent variable, "Customer Satisfaction"

A = Intercept or constant value

B1 = Coefficient (slope) of the independent variable one

X1 = Independent variable one, "Security"

B2 = Coefficient (slope) of the independent variable two

X2 = Independent variable two, "Accessibility"

B3 = Coefficient (slope) of the independent variable three

X3 = Independent variable three, "Ease of use"

B4 = Coefficient (slope) of the independent variable four

X4 = Independent variable four, "service awareness"

E = Standard Error

Results of Model 1:

In the initial stage of Model 1 t-ratios are given to see if parameters are statistically significant.

Y = 1.037 + 1.69(security) + 3.04(accessibility) + 4.15(ease of use) + 4.34(awareness) + 0.37

As it is given in the results, four of the t-values are greater than 2, which can be interpreted that we are 95% confident that a significant relationship exists between these four variables. The difference between calculated R square (0.79) and adjusted R square (0.78), which is only 0.01, shows a good sign. It means that if another independent variable would be added to the aforementioned equation, there would not be an important change in the R square value, which is a positive outcome of the equation.

In this equation, all the independent variables; Security, Accessibility, Ease of Use and Awareness explain 79% of the variance in the customer satisfaction (CS). Remaining percentage of the variance can be explained by factors other than these ones. F-ratio of the first model is also statistically significant at 0.01 level.

Table 9: Results of Multiple Regression Analysis

Multiple R= .882	R Square= .791	Adjusted R= .783
Standard error= .36150	F= 110.321	P<.001

Independent variable: Security, Accessibility, Ease of Use and Awareness

Table 10: Dependent Variable: Customer Satisfaction

	1			
Equation 1		Beta	T-value	P-value
(Constant)		.086	1.036	.300
Security		.083	1.697	.092
Accessibility	y	.154	3.048	.004
Ease of Use		.337	6.158	.000
Awareness		.349	6.344	.000

a.Dependent variable: Customer satisfaction

The above table shows estimations of regression coefficients along with their t-ratios and prob values. It is clearly seen that perceptions on security, accessibility, ease of use and awareness have a positive and statistically significant effect on customer satisfaction. Therefore, hypotheses H1, H2, H3, and H4 of the present research have already been validated.

#### Model 2:

In the second model, Internet banking factors will be regressed on positive word of mouth. Model components can be described as follows:

Y = Dependent variable, "Positive Word of Mouth"

A = Intercept or constant value

B1 = Coefficient (slope) of the independent variable one

X1 = Independent variable one, "Security"

B2 = Coefficient (slope) of the independent variable two

X2 = Independent variable two, "accessibility"

B3 = Coefficient (slope) of the independent variable three

X3 = Independent variable three, "ease of use"

B4 = Coefficient (slope) of the independent variable four

X4 = Independent variable four, "awareness"

E = Standard Error

Results of Model 2:

Below again are t-ratios of beta coefficients in the second model.

$$Y = 0.722 + 3.11(Security) + 0.34(Accessibility) + 0.68(Ease of use) + 0.98(Awareness) + 0.40$$

As the results show in the second model, it is only t-ratio of "security" that is statistically significant. The others are not statistically significant. R-square is 0.777 which is high. F-ratio is also statistically significant.

Table 11: Results of Multiple Regression Analysis

Multiple R= .882	R Square= .777	Adjusted R= .769
Standard error= .40614	F = 100.840	P<.001

Independent variable: Accessibility, ease of use and awareness explained 77% of the variance in the POW (positive word of mouth).

Table 12: Dependent Variable: POW(positive word of mouth)

Equation 2	Beta	T-value	P-value
(Constant)	066	722	.471
Security	.166	3.111	.002
Accessibility	019	341	.733
Ease of Use	041	688	.492
Awareness	.059	.986	.325

a. Dependent variable: Positive Word of

Mouth (POW)

To summarize, regressions results suggest that it is only "security" factor as perceived by customers that exerts positive and statistically significant effect on positive word of mouth of customers. The other factors have not been found statistically significant for word of mouth; therefore, hypothesis H5 is validated (accepted) while H6, H7, and H8 are rejected in the present research.

Model 3:

Finally, the effect of customer satisfaction on positive word of mouth of customers will be estimated by regression analysis. The third model is described below:

Y = a + b1(X1) + E

Y = Dependent variable, "Positive Word of Mouth (POW)"

A = Intercept or constant value

B1 = Coefficient (slope) of the independent variable one

X1 = Independent variable one, "customer satisfaction"

E = Standard Error

Results of Model 3:

Below are t-ratios of the third model which regress customer satisfaction on the word of mouth:

Y = 5.776 + 19.57 (Customer satisfaction) + 0.58

It is clearly seen that t-value is highly significant and positive. R-square is 0.566 and F-ratio of the model is statistically significant again. Almost 56.6% of variation in word of mouth of customers can be explained in terms of the variation in their satisfaction levels.

Table 13: Results of Multiple Regression Analysis

Multiple R= .718 R Square= .566 Adjusted R= .534 Standard error= . 0.58943 F= 381.269 P< .001

Independent variable: Customer satisfaction

Table 14: Dependent Variable: Positive Word of Mouth (PWM)

Equation 3	Beta	T-value	P-value
(Constant)	.645	5.781	.000
Customer satisfaction (CS)	.755	19.526	.000

Dependent variable: Positive Word of Mouth

It is concluded that customer satisfaction has a positive and statistically significant impact on the positive word of customers; therefore, hypothesis H9 is also validated in the present research.

# Chapter 7

### CONCLUSION

# 7.1 Conclusion and Managerial Implications

This research has investigated the interaction between Internet banking factors, customer satisfaction, and positive word of mouth in the case of university students and academicians in Northern Cyprus. Results suggest that perceptions on security, accessibility, ease of use and awareness have positive and statistically significant effects on customer satisfaction and on their positive word of mouth. Customer satisfaction also has a positive and statistically significant impact on the word of mouth of university students and academicians.

The other results can be summarized as follows: Overall, the Internet banking system quality delivers the service a customer needs take place at the heart of service delivery. The security, accessability, true Internet ease of use and awareness in the environment are determined to measure Internet banking quality. Internet banking users, as the most important factor for not using Internet banking, "insecurity of transactions over Internet" ranks first. The most unimportant factor is "no computer knowledge". So, we can say that respondents who are non users of Internet banking avoid this distribution channel especially because of insecurity, despite the fact they may be computer literate. Internet

banking users use the service for viewing account balances and transaction histories, transfer funds between accounts, request credit card advances, paying bills and ordering foreign currency. Internet banking users think that domestic banks are not sufficient, so they prefer to foreign banks.

The factor analysis shows that security, accessability, ease of use and awarness were explanatory variables in predicting customer satisfaction for university staff and students. Among security, accessability, ease of use and awarness dimensions of the scale heed the highest impact on overall customer satisfaction for customers. Also, security had the highest influence on positive word of mouth of the customers. That means banks give way to promotions of the services they are providing. Its services explain benefits and make the system case compare to other banks. Then customers will be satisfied with their Internet banking system and they will go one step further by recommending the bank to other people. Schelesinger and Heskett, (1991) state that it is always better to find new customers than it is to retain existing ones. The banker according to this research need to increase customer satisfaction levels by improving their security of their systems such as protecting transactions data entered, preventing risk resulted from carrying money on them.

The study findings show that customers are looking for Internet banking systems that give them confident, timely and realized services. Also, they want the websites to be attractive with different products, and they want the system to give opportunities like accessing individuals for accounting information, paying, invoice, exchanging foreign currency and credit card payments. Their customers also stated that they want to do their jobs faster and easier. Since their study did

not aim to compare students and instructors opinions on the efficiency of Internet banking systems, the date collected is evaluated as a total. However, the banks need to increase their customer satisfaction metrics and include the opinions of other social shareholders into new service quality assessment systems.

#### 7.2 Limitations

The main limitation of this study was the difficulty of conducting interviews with customers who were either students or instructors. This may also influence the generalizations since only academics and students from one organization joined this research. Future research may also be directed to front-line employees and other corporations that use Internet banking services in North Cyprus.

# REFERENCES

Aldrich, T., Turk, V., Kuhndt, M., Alakeson, V., and Geibler, J. V. (2003).

The environmental and social impacts of e-banking: A case study with Barclays plc.

Final Report Barclays Plc., study within the Digital Europe project, London.

Al-Hawari, M. and Ward, T. (2006), "The effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction", Marketing Intelligence & Planning, Vol. 24 No. 2, pp. 127-47.

Benston, G. J. (2004). What's special about banks?. The Financial Review, No. 39,pp. 13-33

Buckle, M. and J.L. Thompson. (1998). The UK Financial System. Chapter 3. Third edition, Manchester University Press.

Bradley, L. and Stewart, K. (2003). A Delphi study of Internet banking. Marketing Intelligence & Planning, Vol. 21 No. 5, pp. 272-281.

Bakos, J.Y. (1997, December). Reducing buyer search costs: Implications for

Electronic Marketplaces. Management Science, 43 12, 1676-1692.

Bayus, B. L. (1985). "Word of Mouth: The Indirect Effects of Marketing Effects." Journal of Advertising Research, 25(June/July)

Bloemer, J., de Ruyter, K. and Wetzels, M. (1999), "Linking perceived service quality and service loyalty: a multi-dimensional perspective", European Journal of Marketing, Vol. 33 Nos 11/12, pp. 1082-107.

Ceren Sayar Internet banking market performance: Turkey versus the UK International Journal of Bank Marketing Vol. 25 No. 3, 2007 pp. 122-141

Chang, Z.Y., Chan, J. and Leck, S.L. (1997). Management of market quality for correspondent banking products. International Journal of Bank Marketing, Vol. 15 No. 1, pp.32–35.

Chevalier, J. A. and D. Mayzlin (2006). "The Effect of Word of Mouth on Sales: Online BookReviews." Journal of Marketing Research, Volume XLIII (August): pages 345-354.

Cristobal, E., Flavian, C. and Guinaliu, M. (2007), "Perceived e-service quality (PeSQ):measurement validation and effects on consumer satisfaction and web site loyalty", Managing Service Quality, Vol. 17 No. 3, pp. 317-40.

Cronin, Mary J. (1997). Banking and Finance on the Internet, John Wiley and Sons. ISBN 0471292192 page 41 from Banking and Finance on the Internet

Daniel, E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. International Journal of Bank Marketing, Vol 17 No. 2, pp. 72-82.

Daniel, E. and Storey, C. (1997). On-line Banking: Strategic and Management Challenges. Long Range Planning, Vol. 30, No. 6, pp. 890-898.

DeYoung, R. 2001. "The Financial Performance of Pure Play Internet Banks." Federal Reserve Bank of Chicago, Economic Perspectives 25(1): 60-75.

Eccher, C., Hunley, E., & Simmons, E. (2005). Professional web design: Techniques and templates (2nd ed.). Hingham, MA: Charles River Media

Furst, Karen, William W. Lang, and Daniel E. Nolle, (2002), Internet Banking: Development and Prospects, Program on Information Resources Policy Research, Harvard University

Gurău, C. (2002). Online banking in transition economies: the implementation and development of online banking systems in Romania. International Journal of Bank Marketing, Vol. 20 No. 6, pp. 285-296.

Hatice Jenkins, (2006) Article, Adopting internet banking service in a small island state: Assurance of bank service quality. A case Study of North Cyprus banks, vol. 17, No. 5, 2007.

Herr, P. M., F. R. Kardes, and J. Kim (1991). "Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective." Journal of Consumer Research, 17(March): pages 454-462.

Ibbotson, P. and Moran, L. (2003). E-banking and the SME/bank relationship in Northern Ireland. International Journal of Bank Marketing, Vol. 21 No. 2, pp. 94-103.

Jayawardhena, C. and Foley, P. (2000). Changes in the banking sector - the case of Internet banking in the UK, Internet Research: Electronic Networking Applications and Policy, Vol. 10 No. 1, pp. 19-30.

Karjaluoto, H., Mattila, M. and Pento, T. (2002). Factors underlying attitude formation towards online banking in Finland. International Journal of Bank Marketing, Vol. 20 No. 6, pp. 261-272.

Kolodinsky, J.M., Hogarth, J.M. and Hilgert, M.A. (2004). The Adoption of Electronic Banking Technologies by US Consumers; International Journal of Bank Marketing. Vol.22, No.4, 233 – 241.

Kotler, P. and G. Armstrong (2006). Principles of Marketing, Pearson Prentice Hall, Upper Saddle River, New Jersey 07458

Loshin, P., Vacca, J., & Murphy, P. (2001). Electronic commerce on-line ordering and digital, money (3rd ed.). Hingham, MA: Charles River Media.

Mann, R, J. (2003). Regulating internet payment intermediaries. Pittsburg, PA: ICEC.

Mols, N. P. (1998). The behavioral consequences of PC banking. International Journal of Bank Marketing, Vol. 16 No. 5, pp. 195–201.

Mandaci, P.E and Soydan, H. (2002). Capital Markets. Literatur Yayincilik: Istanbul

Mescon, Michael H., Bovee, Courtland L. and Thill, John V. (2002). Business Today. 10th E., Prentice Hall, New Jersey.

Nath, R., Schrick, P., and Parzinger, M. (2001), Banker's Perspectives on Internet Banking, e-Service Journal, Indiana University Press vol. 1, 21-36

Nelson M. R. (1999). Bank marketing and information technology: a historical analysis of the post-1970 period. International Journal of Bank Marketing, Vol. 17 No. 6, pp. 265-273.

OPPapers (2008) Prime Bank Internet Banking – Essay submitted by Monami on 02.19.2008, available at <a href="http://www.Oppapers.com/essays/prime">http://www.Oppapers.com/essays/prime</a>

Ribbink, D. van Riel, A. and Streukens, S. (2004), "Comfort your online customer: quality, trust and loyalty on the internet", Managing Service Quality, Vol. 14 No. 6, pp. 446-56.

Rotchanakitumnuai, S. and Speece, M. (2003). Barriers to Internet banking adoption: a qualitative study among corporate customers in Thailand. International Journal of Bank Marketing, Vol. 21 No. 6, pp. 312-323.

Saunders, A. and Cornett Marcia M. (2008) Financial Institution Management: A Risk Management Approach. McGraw-Hill International Sixth edition, 458-465.

Schelesinger, L.A. and Heskett, J.L. (1991), "Breaking the cycle of failure in services", Sloan Management Review, Vol.32, pp. 17-28.

Silverman G. (2000). How to Harness Word-of-Mouth in the Pharmaceutical Industry. Reprintand partial revision of an article in the Medical Marketing and Media, Market Navigation, Inc. Retrieved June 10, 2007 From:http://www.mnav.com/pharma/H2HarnWORDOFMOUTHpharm.htm

Silverman G. (2001). The Secrets of Word-of-mouth Marketing – How to Trigger Exponential Sales through Runaway Word-of-Mouth. AMACOM, AmericanManagement Association, New York, 2001.

Sisodia, R. S. and B.W. David (2000). "Information Technology: Its Role in Building, Maintaining, and Enhancing Relationships." Chapter 20, Pages 525 – 563, in Handbookof Relationship Marketing, edited by Jagdish N. Sheth and Atul Parvatiyar. SagePublications, Thousand Oaks, CA.

Sullivan, R.J. (2000), How has the adoption of Internet Banking Affected Performance and Risk at Banks? A look at internet banking in the TenthFederal Reserve District, Financial Industry Perspectives, Federal Reserve Banks of Kansas City, December.

Swanick, P. J. & Berish, J. T. (1999 summer ). How Key Corp integrates all delivery channels. Journal of Retail Banking Services, 21(2), 7-14.

# **APPENDIX**

Bu anket, KKTC'de ki, Internet Bankacılığında kullanıcıların seçimlerine etki eden unsurlar ile ilgili üniversite öğrenci ve öğretim görevlileri' ne yönelik bir yüksek lisans

Tezinde kullanılmak üzere hazırlanmıştır. Verilen cevaplar kesinlikle gizli tutulacaktır. Katılımınız için teşekkür ederim.

<b>Eğitim sektöründe k</b> ( )Öğretim Görevlisi	<b>d yeriniz ve hizmo</b> ()1 ile 3 yıl ()3	e <b>t yılınız?</b> ile 5 yıl ()5	ile 7 yıl	()7 yıl üzeri
()Lisans Öğrencisi	()1.sınıf	( )2.sınıf	( )3.sını	ıf ()4.sınıf
( )Yüksek Lisans Öğı	rencisi			
Hangi ülke' den gele	diğinizi lütfen beli	irtiniz?		
Yaşınız? ()18-20 ()21-25	5 ()26-35	( )36-45	( )46-	-55 ()56 üstü
Cinsiyetiniz? ()Kadın	( )Erkek			
Medeni Haliniz? ( )Evli	( )Bekar	(	)Diğer	
( )EVET ( )HAY  2) Internet bankacılığın şekilde, 1'den 6'ya kada Bilgisayar kullanmayı bilmi Internet kullanmayı bilmi Internet bankacılığı hakkı Banka şubesinde işlemler Internet üzerinden işlem yı Internet bankacılığının ku  3) İnternet bankacılığı k ( )Sitelerin görsel çekicili	i kullanmıyorsanız non sır sıralayınız) miyorum iyorum inda bilgim yok rimi yapmayı tercih ediyapmayı güvenli bulmı ıllanımının zor olduğun	iyorumuyorumnu düşünüyorum	()	) ) ) )
()Ürün Çeşitliliği				
( )Sitelerin işlevselliğini hesap özeti bilgilerine ul- işlemleri işlevselliğin bire	aşma, kredi kartı borcı			
( )Kullanma kolaylığı (il hale getirilmesinden ibare ( )Bankaların sunduğu t alınmaması gibi.)	ettir.)	,		ŕ
( )Bankacılık İşlemlerinir	ı daha hızlı ve kolay ya	apılabilmesi		
( )Zaman kaybını ortadan	kaldırması			
( )Hizmet sağlayıcılarını paylaşmaları	n site güvenliğini arttı	rıcı önlemler al	maları, bu ön	ılemleri müşterilerle
()Zorunluluk (Belirtiniz,	maaşımı aldığım banka	a olduğu için gib	oi.)	

()Diğer
<ul> <li>4) Aşağıdaki internet bankacılığı hizmetlerinden en fazla kullandıklarınızı öncelik sırasına göre 1 2 3 4 numaralandırınız.</li> <li>( )Hesap bakiyelerimi inceleme ve bilgi alma</li> </ul>
( )Fatura Ödemeleri
( )Döviz İşlemleri
( )Hazine Bonosu İşlemleri
( )Yatırım Hesabı İşlemleri
()Repo İşlemleri
( )Para Transferi yapma
()Kredi Kartı İşlemleri
( )Hisse Senedi İşlemleri ( )Harç Ödeme işlemleri
( )Hizmet ve Ürünler Hakkında Bilgi Alma
5)Hangi banka(lar)nin Internet hizmetlerinden faydalanıyorsunuz?         1
6) İnternet Bankacılığı iyi olduğundan dolayı bu bankayı tercih ediyorum.  ( )EVET ( )HAYIR  Aşağıdaki internet bankacılığı ile ilgili ifadelere ne derece katıldığınızı seçtiğiniz şıkkı yuvarlak içerisine alarak lütfen belirtiniz.  İnternet bankacılığı,  7) Kullanımını öğrenmenin kolay olduğunu düşünüyorum  ( )1 Kesinlikle Katılmıyorum ( )2 katılmıyorum ( )3 Emin Değilim ( )4 katılıyorum  ( )5 Tamamen Katılıyorum
8) Bankaların internet sitelerinin kullanımı kolay ve anlaşılır olduğunu düşünüyorum  1 2 3 4 5  9) İşlemler için gerekli sürecin basit ve anlaşılır olduğunu düşünüyorum.  1 2 3 4 5  10) Hayatı kolaylaştıran bir uygulama olduğunu düşünüyorum.  1 2 3 4 5  11) İşlem sırasında girdiğim kişisel bilgilerimin korunduğunu düşünüyorum  1 2 3 4 5  12) Bankaların güvenlik önlemlerini yeterli buluyorum.  1 2 3 4 5  13) Güvenlikle ilgili kaygılar kullanımımı etkilememektedir.  1 2 3 4 5  14) İşlemlerin güvenliğinden endişe etmiyorum.  1 2 3 4 5  15) İnternet Bankacılığı güvenilirdir, hesap bilgilerim kötü amaçlı kişilerin eline geçmeyecektir.  1 2 3 4 5
16) Nakit para taşıma riskini ortadan kaldırdığı için uygun buluyorum  1 2 3 4 5  17) 24 saat ulaşılabilir olduğu için şube bankacılığından daha etkin buluyorum.  1 2 3 4 5  18) Zaman tasarrufu sağladığı için şube bankacılığından daha etkin buluyorum.

19) Bankacılık işlemler	inin süresini kısalttığını d	lüşünüyorum.		
1 2 3	4 5			
20)Şube de işlem yapmı	ak dan daha stressiz oldu	ğunu düşünüyoru	ım.(sıra bekle	mek,vs)
1 2 3	4 5			
21)Şubeye gitme zorunl	luluğunu ortadan kaldırd	lığı için uygun bul	uyorum.	
1 2 3	4 5			
22) Rankacılık işlemler	inin gerçekleştirilmesini l	zolavlastırdığını d	liisiiniivorum	
1 2 3	4 5	xolaylaştıl diğili ü	iuşunuy or um.	
	lan bankacılık işlemleri y	anılahildiği icin u	vgun huluvori	ıım.
1 2 3	4 5	apmasmag. iyin a	ygun buruyor	
24) Sağladığı favdalar l	hakkında yeterli bilgiye sa	ahibim.		
1 2 3	4 5			
25) İnternet bankacılığ	ını nasıl kullanmaya baş	sladınız?		
()Banka Broşürü	()Banka Çalışanı	()İnternet	()Arkadaş T	avsiyesi
()TV reklamı	()Gazete Reklamı			-
26) İnternet bankacılı	ğını kullanmaktan mem	nunum arkadaşl	arıma ve yak	an çevreme
tavsiye ediyorum.				
()Çok memnunum	()Memnunum	()Kararsızım	()Memnun	değilim
	emnun değilim			
	ını kullanmış olduğum	bankadan memn	unum arkada	aşlarıma ve
yakın çevreme tavsiye e	·			
()Çok memnunum	()Memnunum	()Kararsızım	()Memnun	değilim
	emnun değilim.			
	nı kullanımındaki memn			
()Çok memnunum	()Memnunum	()Kararsızım	()Memnun	değilim
	emnun değilim.			
	nı Başkasına tavsiye etmo			
	yorum ()Tavsiye ediyoru	m ()Kararsızım	()Tavsiye	etmiyorum
	ikle tavsiye etmiyorum			
30) Kredi kartınız var ı				
()EVET	()HAYIR			

KKTC de ki, İnternet Bankacılığı Hakkındaki görüşleriniz:

Internet Bankacılığında hangi özelliklerin olmasını isterdiniz? :

This survey is implemented in the TRNC, based on Internet Banking relating on factors affecting users' choices of University students and academician' for what is intended to be used in a graduate thesis. The answers given will be kept strictly confidential. Thank you for your participation.

The place and year of service in the education sector?

() Academician ()1 - 3	years ()3 - 5 y	years ()5 - 7 ye	ears ()Up	to 7 yeras
( ) Undergraduate student	( )1.year	()2.year	( )3.year	( )4.year
()Graduate student <b>What is your Nationality</b>	?			
Age? ()18-20 ()21-25 ()26-	-35 ()36-45	( )46-55	)Up to 56	
Gender? ( )Female ( )M	Iale			
Marital Status? ( )Married	()Single		()	Other
1) Do you use Internet ban ( )YES ( )NO	king services?	,		
2) What is the reason for from 1 – 6 accordingly. I do not use a computer I do not use the Internet I do not know about Internal would prefer to make transpond find it safe to transpond I think that is difficult to ut (1) The visual appeal of the	net banking nsactions to th act through the se internet ban	e bank branch E Internetking .		() () () ()
() Product variety				
( ) The functionality of payments, account summa card debt, money transfer, the functionality.)	ary informatio	n in the proces	s of reaching	g off credit
() Easy to use (handy for and easy to use.)	getting the m	nenus of the pag	e consists of	f a practical
( ) Incentives offered by transactions made Remitta	*		iternet, such	as fees for

() Banking transactions can be made quicker and easier.

( ) Eliminate time wasting			
() Service providers take measures to increase the security of the site, these measures are shared with clients.			
() Necessity (Specify, as my salary is at that bank.)			
()Other			
<ul> <li>4) Rank the most important priorities of internet banking from the selection below ranking them from 1 – 6.</li> <li>( ) Statements of account analysis and information retrieval</li> </ul>			
() bill payments			
( ) Foreign Currency Transactions			
( ) Treasury Bills Operations			
( ) Investment Account Transactions			
() repo Transactions			
( ) Making Money Transfers			
( ) Credit Card Processing			
( ) Equity Transactions			
( ) Tuition payment processing			
() Getting Information About Products and Services			
5) Which banks are taking advantage of Internet services?			
1			
6) Internet Banking prefer this type of bank because it is good.  ( )YES ( )NO			
The following quotes on internet banking to what extent do you agree, please specify your chosen taking into embodiment round. Internet banking,  7) I think that it is easy to learn and use.  ( )1 Strongly Disagree( )2 Disagree ( )3 I am not sure ( )4 agree ( )5 Strogly agree			
<ul> <li>8) Think it is easy to use and understand the websites of banks</li> <li>1 2 3 4 5</li> <li>9) Transactions are necessary process because it is simple and straightforward.</li> <li>1 2 3 4 5</li> <li>10) Think it is an application that makes life easier.</li> <li>1 2 3 4 5</li> <li>11) During the process, I entered my personal data protected</li> </ul>			

12) Banks find adequate security measures.
1 2 3 4 5
13) Does not affect my use of security-related concerns.
1 2 3 4 5
14) I'm not concerned about the security of transactions.
1 2 3 4 5
15) Internet Banking is safe, shall not exceed the account information into the
hands of malicious persons.
1 2 3 4 5
<b>16)I</b> find it convenient to carry cash to eliminate any risks
1 2 3 4 5
17) Find it more effective because it is accessible 24 hours a day branch
banking.
1 2 3 4 5 18) Find it more effective because it provides time-saving branch banking.
1 2 3 4 5
19) I think it shortens banking transactions.
1 2 3 4 5
20) Branch to make the process more non-stressful (Waiting in a queue, etc.)
1 2 3 4 5
21) I find it convenient to go to the branch to eliminate the need.
1 2 3 4 5
22) think the realization of banking transactions easier.
1 2 3 4 5
23) I find it convenient banking transactions can be carried out without the
constraint of space.  1 2 3 4 5
24) I have enough knowledge about the benefits.
1 2 3 4 5
25) How do I start using internet banking?
() Bank Brochure () Bank Employee () Internet () Referred by a friend
() TV advertising ()Newspaper Advertising
26) I'm glad my friends and I would recommend the use of Internet banking
close to buddylist.
() Very satisfied () Satisfied () I () I'm Satisfied () Not at all satisfied
27) I am m glad that I have used internet banking bank and I would recommend
it to my friends.
() Very satisfied ()Satisfied ()I an not sure () I'm not Satisfied ()Not at all satisfied
28) Satisfaction degree, the use of Internet Banking.
() Very satisfied () Satisfied () I () I'm Satisfied () Not at all satisfied
29) Internet Banking degree to recommend to someone else.
() I definitely recommended () Recommended () I am not sure() I do not
recommend () definitely do not recommend
<b>30)</b> Do you have credit card?
()YES ()NO
Your comments on Internet Banking in the Northen Cyprus:
What features of Internet Banking would be valuable to you?: