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CUSTOMER'S PERSPECTIVES AND RISK ISSUES ON E-BANKING IN TURKEY; SHOULD WE STILL BE ONLINE?

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Abstract: *The advent and expansion of globalization and the development of new technologies forced the banks to launch new channels to gain competitive advantage, reduce their costs, improve their financial services, enlarge their customer databases, progress their financial positions through innovative products and boost their general customer loyalty. Today, banks are switching to multi-channel distribution of financial services through internet. This paper tries to assess electronic banking in terms of a multi-channel distribution technique.*

The objective of this research is to examine the progression of Internet-banking in an emerging market, namely Turkey. This is done through a survey among online customers of Turkish banks and the proposition of strategies to control and fight against the risky issues associated with electronic banking (e-banking) activities. The usage percentage of online banking, the awareness of customers about the online services and their expectations from online banking activities in Turkey are evaluated through a survey and in depth interviews with online customers.

This paper is organized as follows: the first part includes a brief literature review and examines previous research on the critical topics of "trends in global banking" and "risk issues in e-banking". Second part includes remarks on growth of online banking in Turkey. In the third part, the survey methodology is introduced and the results of the survey are analyzed. Fourth part concludes with some comments for further research.

Keywords: *Online Banking, Internet Banking, Electronic Banking, Turkey, Risk Management in Electronic Banking*

JEL Codes: *G21, M15, M10*

INTRODUCTION

Technological improvements employ innovations in our daily life in a rapid speed. One of the innovative products emerging from technological improvements is internet technology and has an expansive usage. Consumer spending via internet is increasing at a significant rate. Progressively more groups and organizations sense that internet can be used to facilitate development by taking advantage of its easy access to information and the transfer of technology. Increased competition in the banking sector and customer demand is forcing banks to provide their services online (Southard, P. & Siau, K., 2004, p. 99).

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Many firms adapt rapidly to changes in internet and technology. Many companies improve their business efficiency and service quality via new applications in the internet, and attracting new customers (Nath, *et al.*, 2001, p. 21) Therefore, it can be claimed that the emergence of the internet has changed the business model of many industries around the world as in the case of the banking industry. Banking industry is one of the major users of information and communication technologies in business life. The progressive achievements on technology, variation of customer's demand, increasing competitive environment and as a result decreasing profit margins put the banks the pressure to process new personnel administrations. Banks try to gain advantages in this aggressive atmosphere by transferring new technological developments in their area as soon as possible (Ozcan, 2007, p. 15). With increasingly easier access to internet, even in developing countries like Turkey over 17% of all banking customers already use Internet Banking actively. (Husain, *et al.* 2010) Today, banks in Turkey are competing aggressively to introduce new types of products and services that are driven mostly by technology. Internet banking is one of the most innovative technologies offered by the banks in Turkey.

According to internet banking comptrollers handbook(1999), *internet banking* or *online banking* refers to systems that enable bank customers to access accounts and general information on bank products and services through their personal computer (PC) or other intelligent devices such as mobile phones. In other words, according to some resources "E-banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution (Singh, 2000, p. 4).

Internet provides an ideal platform for commercial exchanges and financial transactions through Internet banking (or online banking); Telephone banking; TV-based banking; Mobile phone banking; PC banking (Luštšik, 2003, p. 25 and Calisir *et al.* 2008, p. 219).

LITERATURE REVIEW

Introduction and development of e-banking especially began in 1990s (Pikkarainen *et al.* 2004, p. 224). A research made in U.S in year 1999 stated that there have been huge increases in the use of e-banking in America. Examining the development of online banking in the world, one can say that the European countries are still the leader of the use of newest banking technologies and online banking (Pyun *et al.*, 2002, p. 73). According to a study, less than 15 percent of banks with transactional websites will realize profits directly attributable to those sites(Courchanne *et al.*, 2002, p. 354).

USA's first online banking service, the Security First Network Bank, was the first internet-only bank created in 1995. Before Security First Network Bank some banks had many different trials with a variety of systems for offering online banking. Usually this involved some kind of token that was placed in an account that could only be used on the Internet. The tokens were not protected by depositors insurance. Around the same time, Wells Fargo was the first brick-and-mortar bank to establish its online presence.

For most of the rest of the banks, however, online presence in the first few years often meant only having a corporative website. After creating many web pages the second evolution in internet technology for banks was the creation of new software applications that allowed their customers to access to their accounts, follow their positions and even to perform financial operations online. By the end of 2003, more than half of the commercial banks present in U.S. and Europe offered online-banking services to their customers (Roberto *et al.*, 2007, p. 2).

Internet and mobile Internet banking services are the most innovative and profitable banking services introduced by commercial banks in Turkey. According to Turkish banking Association's (TBB) statements Isbank offered the first internet banking service in 1997 to its customers and were followed by Garantibank in the same year. And for year 2004 it's reported that 22 banks in Turkey were offering internet banking services to their customers. According to a recent statistic about the Internet Banking usage in Turkey made by Turkish Banking Association, there are 15 million users registered for retail banking and approximately 1 million users for corporate banking. This makes 16 million for overall registered users of which are 17% active for retail banking and 47% for corporate banking.

E-banking has affected customers' expectations as bank's clients prefer to deal with banks that offer enhanced, well-organized, professional and innovative services. Banks have to bring improved quality services to their customers to survive in this vulnerable environment (Uppal, 2008, p. 64). There are many forces that have an effect on banks to develop their online banking services. One of them is to reduce the cost of their services. With the online channels, banks can eliminate costly transactions by reducing the number of branches. New physical locations have high starting up costs and online services and ATM banking reduces the need of new branches. The freedom of no time limitation and the benefit of low-cost services can be considered therefore the key reasons behind the development of online banking services (Robinson T, 2000, p. 104). Another important reason which triggers the development of online banking is globalization. Online banking enables customers to conduct banking activities across the borders. The need of electronic banking started with the improvements in electronic trade or in other words electronic commerce in which companies have conducted businesses through electronic networks. Electronic trade applications needed electronic money and electronic finance. E-money is a form of money to be used in internet shopping or trade; it's a prepaid payment mechanism. Electronic finance covers all electronic banking activities and other financial services and products including insurance and online brokering. E-banking, being an important section of the electronic finance provides banking products and services through electronic delivery channels and is composed of internet banking, telephone banking and other intelligent electronic delivery channels.

TRENDS IN GLOBAL BANKING

Advantages and Drawbacks of Internet Banking

Online banking provides a number of advantages for both banks and their customers. Internet banking has made life much easier and banking much faster and more pleasant,

for customers and the bank itself declares the SAS Institute AB (2000). Saving money and time are the most crucial advantages for both banks and the users. Besides, electronic banking removes geographical limitations for small and medium size banks, thereby international operations without limits can be operated. No or few time limitations for banking transactions are valid as users can perform most of the banking transactions throughout the day, week and from any place they can have access to Internet.

Following and managing the cash position for individuals and firms for interest optimization is possible via e-banking. It provides convenience in terms of the capital, labour, time and all the resources needed to make a transaction.

E-banking has enabled banks to increase their data collection, and management, efficient financial engineering that have improved the ability of assessing potential creditors, measuring the creditworthiness of potential borrowers and to price the risk associated with those borrowers through standardized mechanisms such as credit scoring (Zigi & Micheal, 2003, p. 248).

Taking advantage of integrated banking services bank, clients may compete in new markets, gain access to new customers and grow in their market share. Technological developments in banking make it much easier and cheaper for customers to compare and contrast products and to establish multiple banking connections (Carlson, 2000, p. 1-33), which could alter the purchasing, decision making process of the customer (Buhl, 1998).

Besides its benefits, electronic banking has its own draw backs as well. One of the main important disadvantages of electronic banking applications internationally is the lack of governmental policies that guides Internet banking operations across international borders (Kannan, 2004). While electronic banking can provide a number of benefits for customers and new business opportunities for banks, it exacerbates traditional banking risks. Even though considerable work has been done in some countries in adapting banking and supervision regulations, continuous vigilance and revisions will be essential as the scope of E-banking increases. In particular, there is still a need to establish greater harmonization and coordination at the international level. To understand the impact of E-banking on the conduct of economic policy, policymakers need a solid analytical foundation. Without one, the markets will provide the answer, possibly at a high economic cost. Further research on policy-related issues in the period ahead is therefore critical(Aladvani, 2001, 222).

Customers need access to a computer with internet which signifies that the access to a customer's account is solely dependent in technology in the case of online banking. A third party services is required by the bank to run the online banking services to their clients (SAS Institute AB, 2000).

Furthermore, online banking is subject to the dependability of other computers or web servers In case of any problem regarding safety or usage , a customer can not have access to his/her account. Online users have to know how to use a computer before he/she can carry out a transaction. The customers need to be aware and up-to-date with the

latest safety programmes such as firewalls, virus programmes. Hackers are still able to hack into the accounts and transactions of account holders to perpetrate atrocious activities. Such security lapse problem was recorded recently with SEB in Sweden, where some Russia Mafias were said to have deceived the bank large sum of money. It is not 100% safe, thus there is the need to exercise caution (Kephart, 2007). CIA Triad states that there are set of people e.g. older ones who don't want to follow the technological trend and continue traditional conventional branch banking, thus ignore to learn the new technologies due to lack of confidence and personal capability. In some ways they are right as the governmental policies that guide Internet banking operations across international border are not always efficient (Fojt, 1996, p. 79-81). But online usage of payments are sometimes inevitable in terms of using the services of a third party such as reserving and buying tickets from a ticket selling company or registrations on an international conference where many participants attend from different countries that use different currencies and need a common payment system which enables the payment transactions in an accurate and fast way. Internet makes payment facilities possible (Kannan, 2004).

RISK MANAGEMENT ISSUES IN ONLINE BANKING

Any decision to adopt e-banking into banking facilities is normally influenced by a number of factors. These include customer service enhancement and competitive costs, all of which motivate banks to assess their electronic commerce strategies (Georgescu, 2005, p. 4). However, the rapid development of e-banking capabilities carries risks as well as benefits.

The major problem with banks, which have already invested huge amounts in their online initiatives, is that their online offerings remain unprofitable. Though banks have enrolled some existing customers in their online programs, they are not getting customers in large numbers. This has made banks wonder whether there is any value in the online channel. Just enrolling customers for online banking may not be sufficient until and unless they use the site actively. Banks must make efforts to increase their site usage by customers and effectively co-ordinate the online channel with branches and call centers. Then only they will be able to derive maximum value that includes cost reduction, cross-selling opportunities, and higher customer retention(Bauer & Hein 2006, p. 1719).

Integrating the online channel with the rest of the bank is another important issue that banks must focus on. This importance comes from the fact that all the value of the online channel is realized offline - in cross sales completed in other channels and in cost reductions. An actively used online channel should also serve as a medium to sell banking services for the branch staff, the call center, and the relationship manager. Integrated channels working together are far more effective than a group of channels working without any coordination (Liou, Choung, 2002, p 288).

Managing the risks and implementing controls for internet banking initiatives follow the same principles as other risk management processes. The most dangerous thing is to consider risk management as a technical problem and leave it to IT management to manage.

As the previous enumeration of the risks has shown, risk management in IT is a general management issue which needs particular attention from senior management. A general framework of risk management is set by the Electronic Banking Group of the Basel Committee on Banking Supervision, Risk Management Principles for Electronic Banking.

The Basel Committee had summarized recently the assessed major risks linked with banking industry under eight main categories; namely, credit, market, interest rate, liquidity, operational, reputation, legal and strategic. The Basel Committee on Banking Supervision (1998) states that the agency recognizes that along with the benefits, electronic money and electronic banking activities carry risk for banking organizations. Kondabagil (2007) emphasizes clearly that, based on previous studies, the need for a special commission concentrated on risk management in electronic banking led to a new establishment in 1999, namely; the Electronic Banking Group (EBG) which was formed by central banks and bank supervisors. The Electronic Banking Group studied both the traditional banking risks and the new technological risks that may influence the electronic banking system.

Following is a review of some of the risks that are inherent in online banking by Kondabagil(2007) and the EBG:

Strategic risk: Strategic risk is one of the current and prospective risks which affect earnings and capital arising from adverse business decisions mainly associated with Board and management decisions. As the Board of Directors and senior management are responsible for developing the institution's business strategy and establishing an effective management oversight over risks, they are expected to take an explicit informed and documented strategic decision as to whether and how the bank is to provide e-banking services. The Board of Directors have the responsibility for ensuring that appropriate security control processes are used for e-banking, the substance of these processes need special management attention because of the enhanced security challenges posed by e-banking. Many senior managers do not fully understand the strategic and technical aspects of Internet banking. Encouraged by competitive pressures, banks may seek to introduce or expand Internet banking without an adequate cost-benefit analysis when the management doesn't plan for, manage and monitor the performance of technology related products, services, processes and delivery channels. Poor e-banking planning and investment decisions can increase a financial institution's strategic risk.

Operational-Transactional risk: Transactional risk is the current and prospective risk which is known also as security or IT risk usually affects earnings and capital arising from fraud, error, negligence and the inability to maintain expected service levels. A high level of transaction risk may exist with Internet banking products, because of the need to have sophisticated internal controls and constant availability. One of the key challenges encountered by banks in the Internet environment is how to predict and manage the volume of customers that the banks want to obtain. The structure and complexity of banking products, bank's processing environment, different types of services offered, the difficulty of understanding and implementing the new technologies increase the level of operational risk, especially when the institutions propose innovative services that are not yet standardized.

Compliance risk: E-banking is a new delivery channel where the laws and rules governing the electronic delivery of certain financial institution products or services may be ambiguous. Compliance risk is the risk that has an effect on earnings or capital arising from violations of, or non-conformance with, laws, rules, regulations and ethical standards. Compliance risk may lead to diminished reputation, actual monetary losses and reduced business opportunities. Banks need to carefully understand and interpret existing laws as they apply Internet banking and guarantee stability with other channels such as branch banking. This risk is amplified when the transactions are made internationally. In case of cross-border transactions the compliance function becomes more complicated due to the lack of jurisdictional clarity. Conflicting laws, tax procedures and reporting requirements across different authorities add new risks. The need to keep customer data private and seek customers' approval before sharing the data also considered as compliance risk.

Reputational risk: Reputational risk affects on earnings and capital arising from negative public opinion, which can include specific actions that may cause negative public image of overall bank operations. A bank's reputation can be damaged by poorly executed Internet banking services such as limited availability, buggy software, hacked or modified institutional websites and other security problems. Customers may change their bank according to their experiences and move to the bank which provides the simplest but safest internet services. Customers should be well educated against the risks involved in internet transactions before they start to realise their banking transactions online.

Information security risk: Information security risk is the risk that has negative effect on earnings and capital arising out of lax information security processes, thus exposing the institution to malicious hacker or insider attacks, viruses, denial-of-service attacks, data theft, data destruction and fraud. The most sensitive computer systems, such as those used for high value payments or those storing highly confidential information, tend to be the most comprehensively secured. However, while banks tend to have reasonable perimeter security, there is sometimes insufficient segregation between internal systems and poor internal security. The programmes and especially the virus and security systems must be up-to-date all times.

Credit risk: A customer's failure to meet his financial obligations is called as credit risk. Internet banking enables customers to apply for credit from anywhere in the world. Banks will find it extremely difficult to verify the identity of the customer, if they intend to offer instant credit through the Internet. Verifying collateral and if the customer is in another country in case of conflict different jurisdiction procedures may cause difficulties. Different accounting standards, inflation accounting techniques, lower standards of transparency, not developed credit reporting bureaus and non existing credit histories , absence of bankruptcy laws, different currency rates may cause difficulties in international banking transaction in terms of credit evaluation (Hughes, 2001).

Interest rate risk: Interest rate risk is the risk arising from fluctuations in interest rates. Differences between interest rates paid on deposits and gained from credits may cause enormous effects depending on banks' being assets or liability sensitive. An asset sensitive

bank will be positively affected from rising interest rates and a liability sensitive bank will be negatively affected from rising interest rates.

Liquidity risk: Liquidity risk distresses to earnings or capital arising from a bank's inability to meet its obligations. Internet banking can increase deposit and asset volatility, especially from customers who can move easily their actual accounts to another bank or in another format when they can get a better rate for their deposit accounts.

Price risk: Changes in the value of traded portfolios or financial instruments generate price risk. Banks may be exposed to price risk, if they create or expand deposit brokering, loan sales or securitization programs as a result of Internet banking activities.

Foreign exchange risk: Foreign exchange risk arises when assets in one currency are funded by liabilities in another. Internet banking may encourage residents of other countries to transact in their domestic currencies. Due to the ease and lower cost of transacting, using internet banking may also lead customers to take speculative positions in various currencies. Higher holdings and transactions in nondomestic currencies increase foreign exchange risk.

DEVELOPMENT OF ONLINE BANKING INTURKEY

Turkey as an emerging market had to adapt to the new trends and changes in the banking services and systems to be able to follow and compete with the rest of the world. Globalization, improved new technologies, deregulation process and increased competition forced the emerging countries and their banking systems in our case, Turkish banks to build up and execute new channels to increase the customer loyalty and satisfaction. Until 1987, banking activities in Turkey remained as traditional banking activities through branches. The first bank in Turkey which employed electronic banking is 'İş Bank' through ATM banking. Following the new tendency in Europe, Is Bank was the first bank to implement electronic banking in Turkey (polatoglu & Ekin, 2001, p. 157). Following the innovations in Is Bank, other Turkish Banks started to make use of internet banking in 1997. Because of the high start up costs in technological infrastructure, only big banks could introduce the online banking services in Turkey in the first years. The end of nineties was testing years for online banking facilities. Although the huge benefits of online banking for both banks and customers are identified, there are many restrictions in Turkey to the development of e-banking. The most important one is the inadequacy of the customers to use computer technology (Oztasiran, 2005, p. 3). Nowadays, the increased number of educated customers causes the increase in the use of internet banking in Turkey. We wanted to test the awareness, the usage and the general appearance of online users in Turkey in our survey.

RESEARCH DESIGN AND METHODOLOGY

The research survey was answered by a small but a mix group of people among the customers of the Turkish Banks. The survey was conducted through e-mails to a group of people and only 172 respondents filled in our survey that focused on gathering

information about awareness, usage of and expectations about the internet banking in Turkey.In this study convenience-sampling method is used, thus the respondents were randomly selected. The primary objective of this study is to investigate attitudes and expectations of internet banking users. Addition to this the usage frequencies of the specific internet banking services is also investigated.

In the questionnaire, with the first four questions the respondents are requested to give information about their demographic characteristics. In the fifth question respondents are inquired about whether they use the internet banking or not. Question six asks about which bank's internet branches are used by the respondents. In the seventh question respondents are asked about which factors affect their decisions to choose their bank. In the eighth question the respondents are asked about which internet banking services they use.Then in the tenth one they are posed to respond about their attendance to the judgment in the sentence about the internet banking.

RESEARCH FINDINGS

According to our analysis of the demographic characteristics of the respondents we can say that, 73% of the respondents are between the ages of 21 and 30. Another 19% is between the age of 31 and 40. Then the remaining 12% is either below 20 years old or higher than the 40 years old. Within the respondents 60% are female and remaining 40% is male. If we check the education level of the respondents we can say that, 6,4% is graduated from elementary school, 14,5% is graduated from a high school, 63,6% is graduated from the university, and the remaining 15,6% of the respondents is graduated from higher degrees. The last findings about demographic characteristics are related with the total net income of the respondents' family. 5,2% of the respondents have an income between the 501-1000 TL, 23,7% of them have an income between the 1001 and 2000TL, 28,3% have an income between the 2001-3000TL, then remaining 41,2% of the respondents have an income higher than 3000YTL. Education and income level makes an important difference in the usage of internet banking facilities.

From 120 of the respondents which contribute to our 69, 4% of respondents admit that they use internet banking. Examining the analysis of the relationship between the demographic characteristics and the usage of the internet banking in Turkey, we can say that there is no significant relationship between the age level of the users and the use of internet banking (the significance level is 0,005 in the chi-square tests). Findings also show that there is no significant relationship between the gender and the internet banking usage (the significance level is 0,963 so we assume null hypothesis). Nearly the usage percentages of the female and male respondents are same. 69,2% of the female respondents use internet banking and 69,4% of the male respondents also use internet banking.

According to the research there is a significant relationship between the education level and internet banking usage level as it is expected (significance level of the chi-square test is 0, so we reject null hypothesis). When we examine the total respondents who uses the internet banking, 50, 9% are graduated from university and 13,3% have a

master degree. Within the respondents graduated from university, 80% use the internet banking.

Then the usage percentages of the internet banking branches of the well-known Turkish banks are analyzed. Within the responses, the most used internet banking branch belongs to Ziraat Bank with 120 users. Second most used internet banking branch is Garanti Bank, then followed by Yapı-Kredi, Akbank, and HSBC come with 38, 26, and 20 users respectively.

According to the findings the most important factor which affects the choice of internet banking branch is "Because this bank is the bank which I have been using before" with a percentage of 58% attendance. The second factor which is the "Because the internet banking branch usage of this bank is easy and understandable", with a percentage of 28,6.

Then the usage frequencies of the specific internet banking services are investigated. From the 172 respondents only 119 of them answered this question. According to the answers, 100 users, the "transfer from one account to another" is the most used service of internet banking. Then within 99 attendances, the "EFT, electronic fund transfer" is the second mostly used service. In the third rank the "bill payments" activity comes with 93 users. The least used services are "buying and selling of treasury securities" and "application for personal loans" these transactions were used only by one user. "Social insurance premium payments", "tuition payments" functions haven been used only by two users. When we analyze the most beneficial online service preferred by customers, the answer is "bill payments".

In another question the respondents are asked to point out their attendance to the judgments in sentences. When they are asked whether they trust the security of the internet banking branches; 10,1% percent of the respondents strongly agree this judgment, 49,6% agree, 31,1% neither disagree nor agree, 8,1% disagree, and 0,8% strongly disagree to the judgment. So we can say that the most of the users believe that internet bank branches are safe.

In the second sentence the respondents are asked whether the use of internet banking bring them extra time. 82, 2% strongly agree this judgment, and 16, 2% agree. In the third sentence the respondents are asked whether it is complicated for them to use the internet banking or not. 51,3% of the respondents disagree with this judgment, and 41,9% strongly disagree with this judgment. In the fourth question the respondents are asked whether they believe or not if the personal information which is declared when using the internet banking is safe. 50% of the respondents agree to the judgment, and 33,9% neither agree nor disagree.

In the fifth sentence the respondents are asked whether they think that the internet banking branch's services are understandable or not. 37,3% of the respondents strongly agree with this judgment, and 58,5% only agree. Then the respondents are asked whether they hesitate or have fear to make mistakes when using internet banking services. 26,3% of the respondents agree with this judgment, 10,2% neither agree nor disagree, and

48,3% disagree with the judgment. In the next sentence respondents are asked whether they believe that it is difficult to correct the mistake which is made when using the internet banking services. 22,9% of the respondents agree, 22% neither agree nor disagree, and 42,4% disagree with the judgment.

In another sentence the respondents are asked whether the fee asked on fund transfer through internet banking is disincentive for them. 23,3% of the respondents strongly agree, 25% agree, 15,5% neither agree nor disagree, and 27% disagree with this judgment. In the ninth sentence the respondents are asked whether they appreciate the services submitted by internet banking branches. 22,9% of the respondents strongly agree with the judgment, 67,8% agree, 7,6% neither agree nor disagree with the judgment. In the last sentence the respondents are asked whether they think that telephone banking is safer than the internet banking or not. 21,2% strongly agree, 35,6% agree, 34,7 neither agree nor disagree, and 7,6% of the respondents disagree with this judgment.

The last question of the survey asks the respondents whether they decide to change their banks because of the inadequacy of that banks internet banking services. 37,3% of the respondents agreed to this question.

This survey is conducted through a group of students from Banking Classes in Marmara University that tried to gather information about awareness, usage of and expectations about the internet banking in Turkey. This research has some limitations. First, due to time constraint, a larger sample size was not obtained, for further research a larger sample is planned to be analyzed. But further research can make a regional and urban usage difference with a larger group of people.

CONCLUSION

In the study, internet banking branches of the Turkish banks are analyzed with regard to many dimensions. The findings show us that the internet banking usage rates have increased in the last years, depending upon to the increase of educated users. The usage rate of the internet banking is significantly related with the education levels. Education and also income level makes an important difference in the usage of internet banking facilities.

Our findings could not estimate any significant relationship neither the age level nor the gender of internet banking users in terms of internet banking practices.

Our findings show that the first bank which implements the internet banking technology in Turkey is not between the first five banks used by online customers. This finding indicates that the first errors made in the first years due to inexperience or complexity might have an effect on the customers to hesitate to use the services. Main risk in internet banking is confidence and easiness, it's easy to attract the customers to go online, but it's even easier to lose them when there is one inconvenience.

The most used internet banking service is the "transfer from one account to another", and the most important factor which affects the internet branch choice of the people is that the selected internet branch belongs to the bank which the people have an account

before. The preeminent and modern products and services offered by the most innovative banks are not the decision factor for online customers but their habits. Users prefer to use the internet banking services of the bank that they use in their daily transactions. Buying and selling securities or insurance products are the least used products in online services. Internet customers still need a personal touch in traditional branches with bank professional advisors to do their investment decisions.

The most significant factors that affect the choices are the simplicity of usage of the internet branch, and the security. By improving these points Turkish Banks can expand their customer base, and reduce the cost of giving service through classical branches. According to the survey results, Turkish Online users generally trust in the safety of online banking transactions. The online users trust more in internet banking services than telephone banking facilities.

The majority of Turkish online customers admit that they do believe that internet bank branches are safe, cheaper and understandable and saving extra time by using online branches is one of the main reasons that they prefer to do their operations online. It is an extraordinary result that the bank customers would not consider changing their banks in case of inadequacy of that banks internet banking services; this result illustrates how conventional and faithful the Turkish Banking customers are to their accustomed banks. The last outcome confirms that traditional branch banking and actively and face to face made marketing and financial facilities to find new customers and keeping the previous ones is still very important for a banks' future customer portfolio.

REFERENCES

Aladwani Adel M. (2001), "Online Banking: A Field Study of Drivers, Development Challenges, and Expectations", *International Journal of Information Management,* Vol. 21.

Bauer K., Scott E. Hein. (2006), "The Effect of Heterogeneous Risk on the Early Adoption of Internet Banking Technologies", *Journal of Banking & Finance,* Vol. 30.

Calisir F., Cigdem Altin Gumussoy (2008), "Internet Banking versus other Banking Channels: Young Consumers' view", *International Journal of Information Management,* Vol. 28.

Carlson, J., Furst, K., Lang, W. W., and Nolle, D. E. (2000), "Internet Banking: Market Developments and Regulatory Issues" "The New Economy: What Has Changed, and the Challenges for Economic Policy". *Society of Government Economists Conference.* Washington, DC.

Courchane M., David Nickerson , Richard Sullivan. (2002), "Investment in Internet Banking as a Real Option: Theory and Tests", *Journal of Multinational Financial Management,* Vol. 12.

Electronic Banking Group of the Basel Committee on Banking Supervision, Risk Management Principles for Electronic Banking, July, 2003.

Fojt, M. (1996), "Doing Business on the Information Highway", *Electronic Networking Applications and Policy,* Vol. 6 No. 2/3, pp. 79-81.

Georgescu, Mircea (2005), Some Issues about Risk Management for E-banking. Karvina: Silesian University available @ *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=903419*

Hughes J. and S. Macdonald (2001), *International Banking: Text and Cases,* Addison Wesley.

Husain, Jamaluddin and Demirdogen, Yaprakli, Osman Şükrü and Yilmaz, M. Kemal (2010), Customer Risk Perceptions of Internet Banking – A Study In Turkey. available @ *http://www.docstoc.com/docs/3858565/EABR-TLC-Conferences-Proceedings-Rothenburg-Germany-Customer-Risk-Perceptions-Of*

Internet Banking Comptroller's Handbook, Comptroller of the Currency, October 1999.

Kannan, R. (2004), "Project on Internet Banking – Report of RBI (Reserve Bank of India) available @ : *http://www.geocities.com/kstability/student/internet-banking/index.html*

Kephart, J. IBM Research, (2007), "E-commerce bottom" available @ *http://www.ciadvertising.org/studies/student/00_spring/interactive/horacio/public_html/391KPaper/documents/ecommercemain.htm*

Kondabagil, Jayaram (2007), *Risk Management in Electronic Banking Concepts and Best Practices*, John Wiley and Sons.

Liao Zigi and Michael Tow Cheung (2002), "Internet-based E-banking and Consumer Attitudes: an Empirical Study", *Information & Management,* Vol. 39.

Luštšik O. (2003), "E-banking in Estonia: Reasons and Benefits of Rapid Growth", *Kroon and Economy*, November 3.

Nath, Ravi and Schrick, Paul and Parzinger, Monica. Bankers (2001), Perspectives on Internet Banking, *E-Service Journal, 1-1.*

Ozcan, Zeynep Ozge(2007), Türkiye'de Elektronik Bankacılık: İnternet Bankacılığı Üzerine Bir Çalışma.

Öztaşıran, Neslihan and Kürkçüoğlu, "Gelişmekte Olan Ülkelerde Bankacılık Sektöründeki Online Hizmetler ve Geliþim Önerileri", 2005.

Pikkarainen, T., Pikkarainen, K., Karjaluoto, H. and Pahnila, S. (2004), Consumer Acceptance of Online Banking: An Extension of the Technology Acceptance Model, *Journal of Internet Banking and Commerce*, Vol. 14, No. 3.

Polatoğlu, V. N. and Ekin S. (2001), An Empirical Investigation of Turkish Consumers' Acceptance of Internet Banking Services, *International Journal of Banking*, Vol. 19.

Pyun, C. S., Scruggs, L. and Nam, K. (2002), Internet Banking in US, Japan and Europe., *Multinational Business Review*, No. Fall.

Roberto Fuentes Rubén Hernández-Murillo and Gerard Llobet(2007), Strategic Online-Banking Adoption, available@ *http://ideas.repec.org/p/cmf/wpaper/wp2008_0813.html*

Robinson, T. (2000), Internet Banking: Still not a Perfect Marriage, *informationweek.com.*, April 17.

SAS Institute AB. "SAS helps Sweden's Biggest Bank to Improve IT Governance", SAS Institute AB Newsletter. (2000).

Southard, P. and Siau, K. (2004). A Survey of Online E-banking Retail Initiatives. *Communications of the Act*, Vol.47, No. 10.

Turkish Banking Association: *http:// www.tbb.org.tr* access date: 2.10. 2010.

Uppal, R. K. (2008), "*Customer Perception of E-Banking Services of Indian Banks: Some Survey Evidence*", The Icfai University Press.

Yang, J. and Ahmed, K. T. (2009), 'Recent Trends and Developments in E-banking in an Underdeveloped Nation – An Empirical Study', *Int. Journal of Electronic Finance*, Vol. 3, No. 2.

Ziqi, L., Michael, T. C. (2003), "Challenges to Internet E-banking". *Communications of the ACM Archive: Mobile Computing Opportunities and Challenges.* Vol. 46, Issue 12.

RESULTS OF ANALYSIS

Appendix A

Table 1
Frequency Analysis of the Age level

		Frequency	*Per cent*	*Valid Percent*	*Cumulative Per cent*
Valid	0-20	2	1,2	1,2	1,2
	21-30	127	73,4	73,4	74,6
	31-40	34	19,7	19,7	94,2
	40 +	10	5,8	5,8	100,0
	Total	173	100,0	100,0	

Table 2
Frequency Analysis for the Gender

		Frequency	*Per cent*	*Valid Per cent*	*Cumulative Per cent*
Valid	woman	104	60,1	60,1	60,1
	man	69	39,9	39,9	100,0
	Total	173	100,0	100,0	

Table 3
Frequency Analysis for the Education Level

		Frequency	*Per cent*	*Valid Per cent*	*Cumulative Per cent*
	Primary school	11	6,4	6,4	6,4
	high school	25	14,5	14,5	20,8
	university	110	63,6	63,6	84,4
	master	27	15,6	15,6	100,0
	Total	173	100,0	100,0	

Table 4
Frequency Analysis for the Income Level

		Frequency	*Per cent*	*Valid Per cent*	*Cumulative Per cent*
Valid	501-1000	9	5,2	5,2	5,2
	1001-2000	41	23,7	23,7	28,9
	2001-3000	49	28,3	28,3	57,2
	3001 +	73	42,2	42,2	99,4
	6,00	1	,6	,6	100,0
	Total	173	100,0	100,0	

Table 5
Frequency Analysis for the Usage Rates of Internet Banking

		Frequency	*Per cent*	*Valid Per cent*	*Cumulative Per cent*
Valid	yes	120	69,4	69,4	69,4
	no	53	30,6	30,6	100,0
	Total	173	100,0	100,0	

Table 6
Crosstabulation for the Usage Rates According to the Gender

		s1		*Total*
		Yes	*No*	
Age	0-20	0	2	2
	21-30	93	34	127
	31-40	24	10	34
	40 +	3	7	10
Total	120	53	173	

Table 7
Chi-Square Tests for the Usage Rate According to the Gender

	Value	*df*	*Asymp. Sig. (2-sided)*
Pearson Chi-Square	12,737(a)	3	,005
Likelihood Ratio	12,211	3	,007
Linear-by-Linear Association	2,855	1	,091
N of Valid Cases	173		

a 3 cells (37,5%) have expected count less than 5. The minimum expected count is,

Table 8
Crosstabulation for Relationship between Gender and Usage Rates

			s1		*Total*
		evet	*hayýr*	*evet*	
Gender	woman	Count	72	32	104
		% within gender	69,2%	30,8%	100,0%
		% of Total	41,6%	18,5%	60,1%
	man	Count	48	21	69
		% within gender	69,6%	30,4%	100,0%
		% of Total	27,7%	12,1%	39,9%
Total	Count	120	53	173	
		% within gender	69,4%	30,6%	100,0%
		% of Total	69,4%	30,6%	100,0%

Table 9
Chi-Square Tests for the Relationship between Gender and Usage Rates

	Value	*df*	*Asymp. Sig. (2-sided)*	*Exact Sig. (2-sided)*	*Exact Sig. (1-sided)*
Pearson Chi-Square	,002(b)	1	,963		
Continuity Correction(a)	,000	1	1,000		
Likelihood Ratio	,002	1	,963		
Fisher's Exact Test				1,000	,550
Linear-by-Linear Association	,002	1	,963		
N of Valid Cases	173				

a Computed only for a 2x2 table
b 0 cells (,0%) have expected count less than 5. The minimum expected count is 21,14.

Table 10
Cross tabulation Table for the Relationship Between Age Level and Usage Rates

		s1		*Total*
		yes	*no*	*yes*
Yas	0-20	0	2	2
	21-30	93	34	127
	31-40	24	10	34
	40 +	3	7	10
Total		120	53	173

Table 11
Chi-Square Tests for the Relationship Between Age Level and Usage Rates

	Value	*df*	*Asymp. Sig. (2-sided)*
Pearson Chi-Square	12,737(a)	3	,005
Likelihood Ratio	12,211	3	,007
Linear-by-Linear Association	2,855	1	,091
N of Valid Cases	173		

a 3 cells (37,5%) have expected count less than 5. The minimum expected count is ,61.

Table 12
Crosstabulation for the Relationship Between Education Level and Usage Rates

			s1		*Total*
			yes	*no*	*yes*
Education	primary	Count	0	11	11
		% within education level	,0%	100,0%	100,0%
		% of Total	,0%	6,4%	6,4%
	High school	Count	9	16	25
		% within education level	36,0%	64,0%	100,0%
		% of Total	5,2%	9,2%	14,5%
	university	Count	88	22	110
		% within education level	80,0%	20,0%	100,0%
		% of Total	50,9%	12,7%	63,6%
	master	Count	23	4	27
		% within education level	85,2%	14,8%	100,0%
		% of Total	13,3%	2,3%	15,6%
Total	Count	120	53	173	
		% within education level	69,4%	30,6%	100,0%
		% of Total	69,4%	30,6%	100,0%

Table 13
Chi-Square Tests for the Relationship Between the Education Level and Usage Rates

	Value	*df*	*Asymp. Sig. (2-sided)*
Pearson Chi-Square	47,037(a)	3	,000
Likelihood Ratio	47,778	3	,000
Linear-by-Linear Association	38,797	1	,000
N of Valid Cases	173		

a 1 cells (12,5%) have expected count less than 5. The minimum expected count is 3,37.

Table 14
Cross tabulation for the Relationship Between Income Level and Usage Rates

			s1		*Total*
			evet	*hayýr*	*evet*
Income	501-1000	Count	4	5	9
		% within Income	44,4%	55,6%	100,0%
		% of Total	2,3%	2,9%	5,2%
	1001-2000	Count	20	21	41
		% within Income	48,8%	51,2%	100,0%
		% of Total	11,6%	12,1%	23,7%
	2001-3000	Count	30	19	49
		% within Income	61,2%	38,8%	100,0%
		% of Total	17,3%	11,0%	28,3%
	3001 ve ustu	Count	65	8	73
		% within Income	89,0%	11,0%	100,0%
		% of Total	37,6%	4,6%	42,2%
	6,00	Count	1	0	1
		% within Income	100,0%	,0%	100,0%
		% of Total	,6%	,0%	,6%
Total	Count	120	53	173	
		% within Income	69,4%	30,6%	100,0%
		% of Total	69,4%	30,6%	100,0%

Table 15
Chi-Square Tests for the Relationship Between Income Level and Usage Rates

	Value	*df*	*Asymp. Sig. (2-sided)*
Pearson Chi-Square	26,075(a)	4	,000
Likelihood Ratio	28,107	4	,000
Linear-by-Linear Association	23,881	1	,000
N of Valid Cases	173		

a 3 cells (30,0%) have expected count less than 5. The minimum expected count is ,31.