

Development of the electronic banking services in Romania

Ph.D. Associate Professor Magdalena Rădulescu
Faculty of Economic Studies, University of Pitesti
Pitesti, Romania

magdalenaradulescu@yahoo.com

Ph.D. Lecturer Luminița Șerbănescu,
Faculty of Economic Studies, University of Pitesti
Pitesti, Romania

luminitaserb@yahoo.com

Abstract

Launching in Romania the banking products and services with long-distance access was based on image motives for the Romanian banks, domestic institutions or foreign banks branches. In this way, banks wanted to be innovative and they didn't address necessarily to their clients' needs. Once the long-distance payment instruments diversified and once the clients became aware of the benefits of such services, the electronic banking services corroborated with the new technologies seduces the clients with their expected benefits: comfort, promptness and accessible costs. As an alternative to the classic payment system, the fees attached to the virtual access are regularly smaller than the fees of the classic services.

Strong development of the Internet and mobile telecommunications is fortunately also met in Romania, so some of the industries can benefit of the major advantages offered by the new technologies. So, banking industry lunched on the market in the last years the electronic banking services as a viable alternative for classic banking services which assume the client's presence at the banking desk.

In the last years, Internet became a popular distribution platform for electronic banking. Consumers of the electronic banking had easier access to their accounts in every moment. Still with this comfort, the e-banking adopting rates were very low in many countries. In Romania, of 39 banks that operate in the Romanian market, 21 offer their clients 28 long-distance payment instruments of which 14 are Internet Banking solutions, 12 are Home Banking solutions and 2 are Mobile Banking solutions.

This paper aims to present the types of the electronic banking services in Romania comparative to other countries, their development in the recent years, their benefits for banks and customers, their costs and risks and their risk management.

Keywords: electronic banking services, security banking risks, Internet Banking.

1. Introduction

In the present, a lot of banks have created advertisement – at the beginning under the form of web-sites with information, and then they've created interactive web-sites and ulterior transactional web-sites. However there are a number of banks that haven't offered there banking services through internet, but they announced their clients on web-sites that they will offer this kind of banking activities in the future.

General, electronic banking represents some kind of “umbrella” that covers the whole process through which a client can realize electronic banking transactions without the need of visiting the bank.

Banking services through internet have, generally, operational and transactional costs cheaper than usual banking services. These banking services aren't limited at only one physical location (psychical site); sometimes there are Internet banks without them having in a physical way a branch office such as, for example, Telebank (Arlington, Virginia) and Banknet (UK). Moreover, in some cases, the bank's web-sites aren't restrained to realize their transactions within national frontiers and have the capacity of performing transactions that involves large sums of money.

Against traditional channels through which banking services are offered through the agency of branch offices, e-banking uses the Internet to deliver their clients traditional banking services, like: creating banking accounts, funds transfer and electronic payments of the bills.

At first, the introduction of banking services with remote access in Romania has active bank's image reasons on Romanian territory, even if they are domestic banking institutions or abroad unites. This way, banks were desired to be innovating and weren't necessarily addressing to a bank clients' needs. Once the diversification of supply, of instruments of payment with remote access and of the benefits of this type of services were made, electronic banking services in collaboration with new technologies, seduces the patronage with the fact that they offer some unexpected benefits – convenience, promptness, accessible costs etc (Cechin, 2004).

As alternative to the classic system of payment, the fees attached to the virtual access are usually cheaper than the ones of the classic services (with 10% in case of BRD, 15% at Romextera, 25% at Libra Bank and till 50% at Raiffeisen Bank and at HVB Țiriac. At BCR there are no differences from classic services).

A major part in convincing clients in using remote banking services is being held by *the inclusion of demo applications on banking institutions sites* which simulates the mode in which transactions are progressing.

Such modalities of onset of the patronage have the advantage of offering a plus of confidence for the potential user and at the same time, it keeps him away from the unpleasant situation of observing on his own expense that the bank's application is maybe too complex or too hard to use, and so the initial expectations are only partial satisfied.

The main questions that we try to answer in this paper are: which is the actual stage of e-banking services development in Romania comparative to the other countries worldwide, what are the main factors that influence the actual development in Romania and how can be the risks implied better administrate?

The research methodology used here is mainly descriptive and analytical. We presented the results of the studies realized by the Romanian Minister of Communications and Information Technology in this area, we analyzed and interpret the available data and we proposed some solutions for a better use of the electronic banking services and for reducing the risks implied by those services.

Second section describes the impact of the electronic banking services on the traditional ones and the third part describes the access canals used by e-banking. The fourth part presents the management and control risks in the e-banking area and the fifth section is about the types of electronic banking services in Romania and worldwide. Section 6 shows the advantages offered to banks and customers and section 7 concludes.

2. The impact of electronic banking on traditional banking services

Before deepen e-banking services, we must think at the revolution that e-banking could create in the future. Actually, when it's used "e", we think at everything that is electronic, wherever it's the Internet, television, telephone or all at the same time.

One of the current problems of e-banking is being represented by the impact of these services to traditional banking players.

The fact that Internet revolutionized the economy is a truth that can be proven by the following arguments (Danila, 2004):

- E-banking services are much cheaper than the ones unfold through branch offices or even through phone.
- E-banking services can be performed without difficulty after the install of the informatics applications.
- The providers will be able to attract the most significant part of the banks profits.
- The products will be distributed through individual lines. This way, traditional banks will be abandoned and wouldn't perform payments and discounts.

The start of e-banking presumes very high prices. Obtaining a confident brand is very expensive and presumes costs for the commercial ad and plus high costs for buying the technology needed.

In the present, the supervisors of the financial-banking market have to focus their attention on the impact of e-banking on traditional banks, focusing on things like:

- Strategy
- Client's level
- Finances and expenses
- Expenses with the commercial ad
- Profit margins.

In England, for example, this market is supervised by Financial Supervisory Authority - FSA. In the view of performing banking supervision, a banking law was adopted and after that a new legislation (Financial Services and Markets Bill) offers in plus legislative frame through which it promotes financial system for a better understanding. At the same time, law promotes the necessity of protecting the client; it offers, at the same time, the base for achieving the financial-banking education of the client, which represents a major instrument in the battle with the client's risks (Cetina, 2005).

And so, in England, there is no special regime for e-banking activity and the supervisors consider that they can authorize any new activity for e-banking that satisfies the minimum standards of banking discretion. Basel Committee E-banking Group considers that "*they have to realize the international surveillance of the entire community through the distribution of a set of lines with a view to electronic banking*".

There is necessary to offer an intern settlement package for supporting the client's and the bank's

education. In a global way, this kind of guide would participate at realizing international cooperation and would be a fundament for coherence surveillance of e-banking activity.

So it would facilitate the achievement of international activity of e-banking through the rise of client's confident in healthy banks that have as base different regimes of surveillance and settlement.

The group has identified the next problems on which it should focus their activity in the future:

- Authorization
- Prudential standards
- Transparency
- Professional secret
- Money washing

3. Access channels used by e-banking

E-banking's remote access can be done within many access channels, being based on fix phone, mobile phone and on the personal computer. Through these channels holds the dialog between clients and banking service and are received messages and facts provided by the service.

The easiest and at the same time the most general access channel at electronic banking services is through fix or mobile phone, through which the client accesses a special bank number that is answered by a human operator from the Call Center of the bank – this is a channel with vocal access.

The client identifies himself, the operator looks him up in the date base and verifies his identity, after which the client asks the desired service: information or funds transfers and payments, which the operator executes immediately using the access he has at the central data base of SBI's of the bank.

To obtain the services of e-banking through your home computer you can choose between two methods:

- Wiring the PC to the Internet , using a navigator and accessing a specialized page from the bank's site
- Wiring the PC that has a modem and an application provided by the bank, directly (through dial-up) at the bank's server (PC Banking).

This last method is less used in the present but is more secure and it addresses especially to companies.

Internet Banking is being used ore and more often especially because it can take place in conditions of high safeness and can offer the complete range of banking services.

At the moment of registration on e-bank, using electronic services, the client can get, in some cases, beside username and password, an application (on a CD, through E-mail or downloaded and installed automatically at the first connection on the bank's website), that is being installed on your PC and which you can have access at the offered services.

Electronic banking services can be obtained through a mobile phone (Mobile Banking) in two modalities:

- Using TEXT messages
- Accessing the Internet through WAR protocol.

It can be used special mobile phones with the SIM (Subscriber Identity Module) chip extended as a function, resulted after collaborating between bank and operator of mobile telephony which provides the machine (with the extended SIM) or normal mobile phones that don't require any modification. In order to use Text messages we must dial up a special mobile number of the bank and for the WAP access we must write an Internet addressee of the bank's site or of a mobile operator server, which is connected with the bank.

Usually, through Text messages are being received different information referring at the balance on current account and on the history of the last transactions, and through WAP access are being received sites with the same information at which it can be added general banking information, viewing the errands, rates, current appreciation of currency, the bank's ATM network and others.

4. Establishment, management and control risks in the e-banking area

Determining risk is a continuous process which involves the following three stages:

- The bank is committed in an analytical process of identifying the risks and where possible, of commensuration them. In case risks can't be commensurate, the administration of the bank settles the potential risks than could appear, steps to follow in these cases and the impact they could have over the bank.
- The settlement of the risk means for the bank the determination of the bank tolerance, thing that means the settlement of loses that the bank can afford in case of some unexpected events.
- The administration of the bank can compare the tolerance of the risk with the settled magnitude in case of lose to see if that risk can be tolerated or not.

After setting the risks and their tolerance, the administration of the bank must administrate and

control them. This part of the risk management includes activities like (Balaure, 2000):

- *Coordinating internal communication,*
- *Introduction of protection measures against risks from the outside,*
- *Control and management of them,*
- *Instruction of the clients in using the services etc.*

Banks increase their ability in monitoring and managing internal risks in any activity when all these procedures are established by and are to grasp the entire staff..

The management and control risks include:

- *Politics and security measures* .Security represents a combination of systems, practical applications and intern control , used to take cover of the integrity, originality and confidential of the dates and operational procedures. Security politics announce the intention of the firm's management to back up the information's security, gives an explication about organizing the security of a bank, specifies the main directions that define the tolerance of a security risk in a bank. Policies outlines the responsibilities for moderation, and implement measures to strengthen security information, it may establish procedures for assessing the results of policy, to strengthen disciplinary measures and for reporting security violations. Security measures include encryption, pass wording, detect viruses, etc.
- *Internal communication.* Leadership must communicate with staff Attributions key as the bank electronic systems and electronic money intended to support the general goals of the bank. At the same time, technical staff must clearly communicate how management systems are designed to work, the strengths and weaknesses of the system. To ensure adequate internal communications, all procedures must be provided in writing. In order to limit operational risk, the need to adopt a common policy on continuing education of personnel with knowledge of technological novelties. Evaluating products and services before they can be placed on a large scale, may limit the risks of operational and reputation.

Testing validates that the equipment and systems and produce desired results. Pilot programs or prototypes can also aid in the development of new IT applications.

In order to reduce the risks listed it is required for all "e" activities to regulate, establishing an adequate infrastructure and an indication of which must authorize and oversee these activities. Like any trade, e-commerce needs a specific infrastructure.

In this case, it consists of three elements: thermal infrastructure, interface with the essential components of classical and specific legal system.

- Thermal infrastructure consists of the hardware, software and network communications. It actually is and which resulted in the emergence and development of electronic commerce.
- It is also necessary to interface with the major systems of classical trade. The key element is the bank, because any commercial operation is a means of money. The insert of a bank in an electronic trading commerce implies a connection between the bank and the user, through which can be carried out operations in real time.
- To create the legal framework for the member countries of the European Community, the European Parliament adopted a directive that regulates this specific area of interest, current exchange rates, the network of ATM of the bank and other.

5. Types of electronic banking services in the world and in Romania

a. Mobile banking

Mobile banking is a service which permits accessing on more financial-banking information using only the cell phone, without going to the bank, at a banc mat or using the Internet, at day and any hour. Some of the Romanian banks offer the option of obtaining some information about card account.

More specific you can find out the sum of money on your card, the last 50 transactions that have been made using the payment instrument, there can be realized funds transfers between debit cards.

Mobile Banking is a service that allows access to more financial information using only your mobile phone, without going to the bank, at an ATM or using the Internet, no matter day or hour. Specifically, you can find the amount of money on the card, last five transactions that were carried out with the help of payment may be made transfers of funds between accounts, debit card, receive alerts for all transactions conducted at bank machines and magazine. Mobile banking services can be accessed through messages written protocol or WAP, depending on the type of terminal that we possess the user. Access to information on the account can be

obtained only from the telephone number that was stated in the signed contract for this service with the bank, and access to services-type browsing, the user must be authenticated by user name and password.

Mobile phones of tomorrow wouldn't be just simple banking terminals; they tend to become a complete centre of communication, with functions that could replace cash transactions.

As an Internet access portal, mobile phones are destined to boom the way in which banking transactions shall take place.

Using new technologies, safer and easier to use, mobile banking becomes reality and WAP (Wireless Access Protocol) is the key to this reality. Still, of all the commercial applications which had become possible, the attention is focused on mobile banking.

The experts are waiting for mobile terminals to rule this market, replacing PC's as the main transaction mean. Having the possibility to directly access clients, the new mobile access solution in virtue of WAP promises to offer an alternative working channel for banks and savings banks.

This application shall allow WAP mobile terminals owners to sell or buy shares, to check their shares portfolio, to receive diagrams, news and many others.

The WAP technology (*WAP, with its navigation micro – programs shall constitute “the mobile ticket” for connecting to the Internet. It is already possible to learn about stock exchange shares or to place orders from WAP terminals to the German brokers company Consors*) is about to change the mobile phone into the main commercial instrument of the future.

To support our affirmation, according to which mobile terminals are the real business instruments, are modern mobile banking services, made through mobile phones.

Regarding the mobile phone number of users, this has reached 14.900.000 on the 30th of June 2006, which represents a growth with 11,3% compared to the 31st of December 2005. Consequently the mobile phones services penetration rate has increased, at the same date, with 7 percentage points compared to the end of 2005 (according to “*The report regarding the electronic communications sector within Romania for the 1st of January – the 30th of June 2006*” published at the end of 2006 by the *National Authority for Communications Regulation*).

Especially, for electronic banking services, the risk associated to the product and the electronic distribution channel is larger than consumer goods and so it increases the importance of such innovating character. Ensuring security and confidentiality must be assured before any banking activity which regards important information take place.

Of all the factors mentioned above, the relative advantage, compatibility, testing possibility and observance are positively correlated to adopting innovation, while the complexity and risk are negatively correlated.

Relative advantage refers to the extent to which an innovation is perceived as being better than the idea of a product that it replaces. The measure of the relative advantage is often expressed through economic profitability, social prestige, saving time and effort, immediate reward or decrease discomfort.

In the case of Mobile-Banking relative advantage is perceived related to the element of mobility for the new medium of distribution (for example, use this service to consumers while walking on the street).

- Complexity-unfolding banking mobile phone is about reverse consumer's experience regarding technology in general.

-Compatibility refers to the extent that an innovative channel, as the mobile phone is compatible with past experience of the individual, and values seem to have a significant impact on adopting availability.

-Visibility-describes the extent to which an innovation is visible to other members of the social environment. Intangibility of the banking services can create some problems, even if in case of Mobile Banking-discovery, the distribution of the service-mobile phone - can improve the physical evidence innovation.

-The possibility of testing – the ones that will be allowed to experiment innovation will feel more comfortable with these services and more willing to adopt. In other words, if consumers are allowed to try innovation, the fear of the unknown and the inability of use disappear.

b. Tele-banking

This service permits the reception of information, necessary from any angle, at distance, through phone. For this is enough to phone at informational centre of the bank.

Tele-banking service gives the following services:

- Receiving information about the current rate of exchange of BNM and of the subsidiaries of the Bank.
- Receiving information about the current sold in the account or about the other days and of course when receiving a fax.

- Receiving information about banking services: about credits, deposits, banking cards, transfers with money, services payments.
- Receiving information about the bank.

Telebanking has entered into force in the 70's once with the mechanization of payment instructions and sending information regarding accounts current. Within this system the data is changed through files transfer regarding credit transfer orders, debit transfer or cheques or through introducing online transfer instructions.

It is accessible to economic agents who have large payments to make and who have an automatic integrated accountability system, which allows them to have an electronic link to the bank and in this way it is made transfer instructions exchange without using papers.

The number of clients who shall make payments and who shall use phone banking shall reach in 2011 to 103,9 million worldwide. For this year, the number of such services users shall only be of 32,9 million. The payment methods made with mobile phones are defined by paying some products or services using mobile technology (SMS, wireless applications – WAP, etc.). So far, SMS is the most popular and dominant payment method, and Gartner analysts are expecting things not to change until 2011.

Mobile payment methods can bring high material opportunities to couriers and, eventually, to banks, if they are properly used.

Nevertheless, these payment services are more suitable for couriers, than for bankers. All the same, banks can justify their investments through this payment system, if they use mobile services as an extension of the already used channels. At the same time, the Gartner research director noticed that mobile payment method is easier to apply on emergent markets than developed ones, where they are seen, especially, as already existent services alternative methods.

Of all the regions worldwide, Asian Pacific area has the most users to mobile payment chapter (28 million in 2008), owning 28% of the total number of users, revealed the Gartner research.

The most important two reasons for which the Asian zone is leader are the following:

- Mobile payment services was launched recently in this part of the world and so attracts the curiosity of a large number of people;
- Some countries are very developed in Asia, like China or India, where the number of people

using mobile phoning is very high, and the methods of payment and banking services aren't so well known and used by those people.

For the Western Europe it has been estimated the number of users to 499.000 this year and for North America – one million users. Services of this type will not know too many users in these parts of the world, especially because of the incertitude that they have when it comes to the security of their personal dates (Wenniger, 2004).

c. Internet banking

The Internet has become a very popular platform of distribution in the last years for electronic banking. Electronic banking consumers had been offered an easier access to their accounts 24 hours of 24, seven days a week. Even though there is such convenient way, electronic banking adopting rates in most countries had been very low.

It is appreciated that, due to recent Internet progress, electronic banking services could significantly extend. Decreasing the computer prices, together with Internet services quality, of large operational speed, offered to more accessible prices, through cable or telephone connections; make possible a fundamental change of ordering and operating monetary transfers.

The evolution of these services shall depend also on the banks technical ability and setting the procedures to ensure participants protection. The distance payment instrument of internet banking type is that payment instrument having distance access which is based on Internet technology (World Wide Web) and on issuers of the informational systems.

Internet banking represents a package of solutions intended for the remote interaction between client and bank, which permit clients to access their information to accounts and generate transactions through an Internet connection.

Internet banking is a service available to all persons, through whom you can make banking operations 24 hours a day, seven days a week, from any part of the world where there is an Internet connection, offering mobility and comfort.

On international plan there are at least 2 modes of onset of banking services offered by Internet:

1. The model exclusively through the Internet, in which a bank is deploying the activity exclusively online, without offering classic banking services within a branch office or an agency. This kind of institutions can't be found in the Romanian bank landscape.

2. The model of traditional banks, that offer's to there clients classic services and also electronic ones with remote access.

The main things that clients can do through the help of the instruments of Internet Banking are:

- The possibility of opening accounts and credit cards;
- The possibility of transferring funds between the accounts of the client (card, deposits, current accounts);
- The possibility of realizing payments in any currency using, inclusive the exchange;
- Finding out the details about the situation of the personal accounts.

To ensure a high level of safety, Internet-type services are developed on infrastructure that respects the international standard of safety on information. From the moment of connecting the authorized clients, any date exchange is made under a secure protocol, using keys and encryption algorithms. Some banks available to customers' special devices physic security attached to the computers.

The authentication of a client can be achieved on levels:

- User name and password
- Digital certificates (for example the electronic signature used by some commercial banks)
- Hardware tokens (strong authentication mechanisms).

Internet banking systems besides the fact that can be accessed from any corner of the world, provided you have an internet connection, does not require relocation specialists bank for the connection and assembly but only the existence of a personal computer that the client can use.

Transactions take place online and in real time enjoying the same degree of protection granted by the bank's own system. Security of transactions conducted via the Internet is a main aspect that should interest the client. At Banc Post and HVB-Țiriac Bank the client has provided an additional security device named Digipass, its identification is based on the following dates: Pin code, name of the client and a bidirectional authentication assured by an exchange of key security between the bank and customer.

Another security measure is valid for a single session of the password recognition, a new connection being generated to another sequence of passwords. In the vast majority of internet banking services for individuals are offered at no charge by

banks. Internet banking is for both individuals and legal entities as an instrument of payment without the cash, thing that helps customers to save time and money because they no longer have to go to the bank and can perform their normal operations from the comfort of their home office from any computer 24 hours a day in the country and abroad. Of the three distribution channels of electronic banking services, Internet Banking will have the largest share in the future, followed by Mobile Banking due to increasing number of mobile users (Vasilache, 2004).

Nevertheless, the bank branch, especially in Romania, is still the main "connection way" between banks and their clients, newer distribution channels such as internet banking or mobile banking being far from being well approached by clients. This is actually the result of a market research made by GFK Romania and according to which internet banking is one of the most reduced used of financial services within Romania.

Only 1% of the users of financial services within Romania currently use internet banking. Most of the users of financial services use current accounts in lei (39,54%), term deposits (29,77%) and cards for taking cash from ATM's (27,36%). According to the quoted source, per ensemble of the over 15 years population, 64,41% of the persons don't use any financial service, 14% use current accounts, 10,5% - term deposits and 9,7% - cards for taking cash from ATM.

Still, near the bank branch, an important role in promoting bank products and services, but also for making transactions, shall have, according to the market researches, automatic banks or call – centers (phone lines where clients can get information regarding the bank offers and can make banking operations). Regarding the bank's distribution channels, we think that the main shall be the branches and agencies network. And internationally, after a few years in which it had been thought that the Internet shall replace the network, the market reconsidered the role of bank units.

6. Advantages offered to banks and customers

Advantages offered to banks:

- Transactions and information are protected at the highest security standards currently.
- Transactions are done in real time.
- Almost unlimited possibilities for expansion: Interface type Web Services, that allows automatic access to Internet Banking functions of accounting applications, ERP and portals for large customers, e-commerce applications for on-line sellers, electronic transfer of money etc.

- May be established packages of services depending on the category of clients such as: individuals and legal entities.
- System is implemented, heard and functional now.
- Full interoperability.
- System is configurable and allows for easy operation with the existing central system (core-banking).
- System is configurable and allows operation in banking load-technology at any level: server web, plaction servers or date base server.
- Implementation support for negotiating the exchange rate exceeding a certain value, submitting an application for credit, exchanging messages between client and bank operator and customer notification of the result of analysis of demand for credit.
- Internet banking information can be exported in several types of files: PDF, XLS, and HTML.
- Ability to import payment orders simple and direct from Treasury files: XLS or predefined DBF.
- Avoid stress, crowding and bureaucracy.
- Increase business customers by making online payments to suppliers on time and with a good organization funds.
- Information access even in the moment where is needed, by consulting the transactions in a real time.
- Decrease the time of disconnection between clients and beneficiaries of payments as a result of trust between the partners and managers can focus on business without take care payments and incomes.

Low cost of implementation and maintenance (TCO) (Odobescu, 2003):

- Operational costs dedicated to processing transactions are reduced and workers are credited reduced operations for the benefit of customers calling to them.
- Licensing policy and gradual implementation, Internet Banking Licenses can be used in an outsourcing regime, without initial costs, based on a service contract.
- The solution is scalable. To increase processing capacity is sufficient to add additional servers.

Advantages offered to customers:

- Reducing costs through the benefit of lower commissions and use the time gained in carrying out financial operations.
- Access customers may be from any location with Internet access both in the country and abroad.
- The product has a friendly interface with the customer that makes it very easy to use.
- Offers the possibility of task deployments in an accountant department depending on components of the company.
- There is the possibility of consignment documents of more authorized people before making itself a transaction.
- Large companies can manage multiple branches or subsidiaries.
- Documents obtained after the transactions are available in PDF or HTML format can be sent to clients via e-mail.

Security at the highest level:

- The solution permits to select items for customer authentication based on costs. Besides name and password we can opt for eToken USB with digital certificate device, only for digital certificates or token hardware VASCO/DIGIPASS devices.
- Security is increased through multi-level architecture that allows security levels between the firewall equipment.
- Ensure non-repudiate, authenticity and confidentiality through digital signature transactions transmitted by clients.
- The communication client-bank is crepitated using SSL 3.0 128 bits protocol.
- Bank-client authentication is done via digital certificates issued by the bank and recognized, and for the exchange of keys is used for RSA encryption algorithm with key of 1024 bits.
- Communication message is encrypted using the 3DES algorithm with key of 128 bits.
- USB eToken or DIGIPASS devices are protected by a PIN code
- Access is based on a username and a password for access

Technical user requirements are minimal and involve:

- a PC minimum Pentium II 450 MHz, 64MB RAM.
- Internet access by LAN network or a modem and telephone line
- Windows 98 or better, Internet Explorer 6.0 or better.

Previous experience with technology, in particular on computers, is an important factor of adopting the Internet Banking. The consumer experience on

how technology is greatly to better understand new technologies and ramifications of themselves.

7. Conclusions

E-banking can be offered, mainly, through two ways. First, an existing bank that has physically offices, can establish a website to offer online and electronic banking services to its customers or through Internet. One of the main problems that e-banking is facing is the security. Without clients' confidence in the security of such services, they do not want to use a public network like the Internet, and to view financial information online and to perform financial transactions. Some security threats are theft and violating individual information privacy. Banks using e-banking is offering more ways to ensure a high level of security (Golosoiu, 2003):

- identifying and authentication: using your username and password to access accounts;
- coding: even if the information is intercepted, the hacker was not able to view a firewall (barriers to protect their servers and databases of banks).

In general, electronic banking services can be classified into two categories: providing information and making transfers of funds and payment.

a) The bank provided the bank are electronic information on the bank account and financial information-general banking, such as the exchange rate, interests or commissions current network of ATMs, the general utility. Information on account refers to the current history of transactions made in account statements of account status. Using Internet Banking service is influenced by reference groups of consumers (family, friends, etc.). Even if you use this service initiation was determined by a specific group of reference, its continued use depends on other factors, mainly consumer perception of the technology.

b) Transfers of funds in the account may be inter-banking transfers (the receiver is in the same bank account). Payments ordered may be made by an interchange (between banking clients), by a bank or another by the Treasury, in the domestic currency or in other foreign currency. So it can be ordered the sale or purchase the foreign currency. A company can order the wages to its employees from an employee of the company to a list of providers of employees' accounts.

Even if the e-banking activity is risky, there are also opportunities such as tax benefits and potential customers, banks and for those regulating the field. From the banks' viewpoint, they should:

- have a clear strategy and well distributed to kick off the top and to consider the effects of e-

banking activities, along with continuing the process of measuring actual performance.

- consider the effect that the legal provisions conduct e-banking can have on risk exposures, as well as proper management of these risks.

One of the most important challenges for Internet Banking refers to consumers' security. Insurance necessity has proven to be one of the biggest barriers in adopting Internet Banking. Demographic factors influence was considered to be significant for the adoption of the Internet Banking. Sex person is also considered as an important factor of adopting Internet Banking. According to the studies, the adoption service is dominated by male.

Developing a strong Internet and mobile telecommunications did not shun, fortunately, Romania, such as a series of industries can benefit from major new technologies. Thus, banking industry has come in recent years with a new market: the launch of electronic banking services, an alternative to classic banking services, which involve the customer at the bank counter. Electronic banking services are divided into three categories: Internet Banking, Mobile and Tele-banking Banking. These work permit realizing of banking transactions using computers connected to the Internet (Internet Banking) or phone (Mobile Banking).

Thus, through the Internet Banking, the user has the option of doing banking operations in lei and/or foreign currency, online, from a distance. In addition, through an informatics application provided by the bank, can perform a series of banking transactions without the need movement from bank headquarters. Through mobile banking, banks offer customers financial and banking information, private or public, or the opportunity to make some transactions, directly from the mobile phone. This service is provided by the bank in partnership with one or more telecommunications operators to provide mobile stone Romania (Orange, Conenex and Zapp).

The number of users of payment instruments with remote access doubled during the year, a Ministry of Communications and Information Technology (MCIT). Of the 39 banks active on the Romanian market, 21 available to customers 28 instruments Payment with remote access, 14 of which are solutions for Internet Banking, 12 Home Banking and Mobile Banking 2 received opinion in compliance with the order 218/2004, following that on the basis of the same legal act be issued notices to 10 other Such solution after evaluating the documentation submitted. Over 2 billion euros and over 230,000 billion lei were traded by banks instruments of payment online. In present, there are almost 28,000 users of at least one type instruments Internet banking, home banking or mobile banking

front of 14,000 in the second quarter of last year, said the Minister of Communications and Information Technology.

The whole range of instruments of payment to the remote allow the user direct access to its funds, making payment or transfer of funds, with these instruments can be achieved information regarding accounts and operations made by the user.

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