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FINAL QUALIFICATION WORK

«REMOTE BANKING SERVICES AND PROSPECTS OF ITS DEVELOPMENT IN THE REPUBLIC OF UZBEKISTAN»

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«Our focus continues to be in the issues of deepening and expanding the scale of reforms in the banking and financial system»

I.A.KARIMOV

INTRODUCTION

The relevance of the research. The constant increase of competition in the sector of banking and aggressive growth of subsidiaries of foreign banks, specializing in various services of residents, as well as being the consequence of the above factors in lower fees and interest income from customer service, make commercial banks in the world to find new, more promising and cost-effective ways to increase the density and quality of interaction with customers.

Territorial expansion of the branch cannot be infinite, and in the era of rapid development of information technology, banks' being in an effort to get closer to the customer are trying to increase development not by building extensive networks of other offices, instead of this through the introduction of advanced science and technology, implemented in various methods of remote banking services (RBS) customers.

As the President of the Republic of Uzbekistan Islam Karimov noted in his report at the meeting of the Cabinet of Ministers, dedicated to the socio-economic development in 2013 and the most important priorities of economic program for 2014, "Our focus in the past year were the development and reform of the banking system. Significantly expanding and strengthening banks' resource base, improving the quality of their services. The total volume of loans to the real sector of the economy in 2013 is increased by 30 percent. Over the past year the total capital of commercial banks increased by 25 percent, as compared with the year 2000 - more than 46 times. As a result, today the capital adequacy ratio of banks is 24.3 percent, which is 3 times higher than the requirements of the Basel Committee on Banking

Supervision, which are taken at the level of 8 percent. Liquidity of the banking system exceeds 65 percent, which is 2.2 times higher than the internationally accepted evaluation “high”. Domestic sources account for about 80 percent of the total loan portfolio. Special recognition deserves the availability of banking services. Thus, 100,000 of the adult population falls in 49.7 banking institutions, and 1,000 bank accounts opened to 1028, according to international standards that corresponds to the estimate "high". I would like to take this opportunity to note with satisfaction that almost all commercial banks in the country have received from leading international rating agencies rated "stable". “[1]

For further development of the banking sector of the country, and output it to a global level of quality, it’s necessary to develop new banking technology, look for new ways to attract customers.

The proliferation of mobile communication devices and the Internet among the population, the development of network infrastructure in the regions, improvement of legislation, the growth of financial literacy and income - all this contributes, on the one hand, to increase confidence in the banks and demand for retail banking services, and the other - the possibilities of credit institutions seeking to meet the demand of its customers, introduce himself, and constantly expand the ranges of long-distance service.

Operations on remote channels are beneficial for both parties: customers and banks. First get the opportunities to perform a wide range of operations at any time at any place using the available resources (computer connected to the Internet or mobile phone, ATMs and self-service kiosks, etc.) at a high level of security. Credit institutions benefit from a cost savings arising from the traditional method of service to attract more customers and increase their loyalty and, consequently, increase competitiveness. The above determines **the relevance of the research topic**, as well as the goals and objectives.

[1]Report of the President of the Republic of Uzbekistan Islam Karimov at the meeting of the Cabinet of Ministers dedicated to the results of socio-economic development in 2013 and the most important priorities of economic program for 2014
January, 18, 2014

The aim of the research is to determine the characteristics and prospects of remote services in general, and with the help of Internet banking in particular, the development of proposals on the development and improvement of channels remote access to banking services in Republic of Uzbekistan.

The following **objectives** contribute to achieve the goals:

- Exploring the concept and essence of modern remote banking;
- Generalizing and systematizing the experience of providing remote services to people abroad and in the Republic of Uzbekistan;
- Uncovering of existing channels of remote access to banking services and their features;
- Identifying the types of market segmentation of Internet banking and advantages of remote services;
- Identifying the shortcomings of the legal regulation of this segment of banking activities;
- Evaluating the effectiveness of the introduction of Internet banking;
- Analyzing the advantages, identifying trends and patterns, to assess the prospects of development of remote retail services in modern conditions of Uzbekistan.

The subject of the research is the various forms of remote banking (RBS) in general, and Internet banking in particular.

The object of the research is foreign and local bank credit organizations that provide customers with remote control of their own accounts in real time via the Internet. As the formation of the Uzbek market of Internet banking is at an early stage, internet banking is considered in the Russian market environment in the qualification work.

The qualification work was executed on the basis of the **theoretical and practical workouts** of leading economists, studying the relevant legislation of the Republic of Uzbekistan and distance service of foreign and domestic banks.

The research itself is the **scientific novelty** of the banking market in the field of Internet banking, as this direction of the modern banking world is not known until the end and is considered promising.

The practical value of this qualification work is revealed activity of leading foreign banks. At one time, through the introduction in the package of online banking, these banks have moved to a high-quality, modern and forward-looking way of development, the correctness of which is visible to this day. In addition, banks appeared completely online, not having their real office which brings customers and workers only through the Internet. As shown by their practice, this approach of banking gives a positive result, and these banks are thriving.

The qualification work consists of introduction, three chapters and conclusion.

CHAPTER I. THEORETICAL FOUNDATIONS OF REMOTE BANKING SERVICES

1.1. The concept, essence and history of remote banking

In the struggle for competitive advantages the largest banks and foreign countries seek to diversify their activities. One of the most promising areas of the commercial bank is the market for retail financial services.

Currently there is a trend in Uzbekistan borrowing from foreign countries in the mid 90s of last century. First, increasing growth of the number of services offered by banks to their customers, which are due to the pressure of competition from other financial institutions, increasing customer's literacy technological change.

Second, growing the cost of funds attracted by the bank deposits. Third, Uzbekistan's accession to various international trade organizations and signing international economic acts pose to the banking system of the country a number of significant risks, including dumping decline in interest rates and the relative loss of reputation of commercial banks compared to foreign. That is why the banking system of Uzbekistan should be sufficiently prepared for such risks.

Fourth, beginning consolidation of small and medium-sized banks, as well as geographic expansion both within the country where founded and operates the bank and beyond. The main factor in the consolidation of banks and their output in other regions is the desire to effectively use automation and other technological innovations due to the scale of business.

With increased competition between the major players in the market for retail financial services is necessary to apply new ways of creating competitive advantages and increase the efficiency of the bank.

One of the important factors for future success of Uzbek banks is their ability to control costs and their opportunity to reduce through the introduction of new technologies and methods of customer service. The most effective technologies that are available for banks to compete are the introduction of various forms of

remote customer service (RBS).

RBS allows financial institutions, using various channels of communication with customers to provide them with not only traditional banking services sold in any branch of the bank, but also new products that enable a completely different level of quality to meet the financial needs of customers.

Remote banking services are legitimately to call providing products/services to the client's request without direct customer's interaction with the bank.

Let's consider the nature of remote banking.

In a general sense, as the name implies, remote banking - is not provision of banking services in the banking office by direct contact the customer and the bank employee, but at home, in the office of the client, i.e. wherever it is convenient to last. It should be added that if the system is fully automated, often it is available around the clock seven days a week, unlike the bank that operates on a strict schedule.

There are four main types of remote banking: Internet-banking, PC banking, telephone banking and video banking.

Under PC-banking (PC banking), as a rule, involves an access to the account using a personal computer, implemented through a direct modem connection to the banking network and not via the Internet. This provides the client with special software to work with the bill.

Video banking is, in fact, a system of interactive customer communication with the staff in the bank, a kind of video conferencing. Usually in video banking is used devices called "kiosk". This touch screen cell phones, allowing a client to access to a variety of information, as well as "live" to communicate with employees of the bank and use it to hold almost anything. These devices are installed, of course, not at home but in supermarkets, universities or other public places. Often "kiosks" combined with ATMs (ATM - automatic teller machine).

The most popular variety of remote banking services today remains on the phone (telephone banking) - by power of the prevalence of and accessibility of

telephone terminals. In this case, the operations are performed using the touchtone. Telephone banking is still the most advanced system in terms of mobility, as if you have a handy phone - so you can have an access to banking services. Additional features offered by the using of phones with display (screen-phone). On the other hand, the phone - is originally a means of oral communication, and adapted bad to carry out banking operations, so the number of banks and their clients, working with the Internet is constantly growing.

In the West, the use of global banks, the World Wide Web for customer service was a logical development of home banking technology. Remote banking services at home began in the 1980s. with telephone banking. Then remote service using a personal computer and a direct connection to the bank's server came (PC-banking). And in 1995 there were the first banks to offer customers PC-banking to a new level, allowing fully maximize use the most convenient ways for a person to work with information (text, graphics, sound, video) and providing affordable mobility and accessibility of services to everyone who uses communication and service capabilities of the Internet, - internet-banking.

At the same time, and the phone, and PC-banking were widely spread due to the high demand for banking services from both corporate and private clients. Thus, internet banking got on fertile, fertile soil. And although in the West of home banking services for individuals most widespread form remains phone service, internet banking system are considered the most promising.

History and development of remote banking services for customers. Competition among Western European banks for providing banking services to its customers "at home" made particular glow in the early 80 -ies of XX century. In November 1982, Nottingham Building Society, the Bank of Scotland and the British telephone company British Telecom introduced a system of Home link, which was launched in mid-1983. Then other credit institutions began to create similar systems

First option to purchase banking services offered exclusively by phone English bank First Direct (First Direct was the first and remains one of the most

successful banks, serving its customers through electronic channels in 1989).

Electronic banking boom began in the U.S. in 1995, and their appearance was due mainly to the existing restrictions on U.S. banks opening branches in other states, as well as the advent of online banking. The first fully electronic U.S. bank that did not have a single office to work with clients became the Security First Network Bank (1995).

In total there are more than 500 banks offering a full online service that provides electronic money turnover and concomitant virtual exchanges. Together with the pace of increase in the number of Internet users, which according to the statistics, in developed Western countries, there are between 45-50 % of the total population continues to grow rapidly online banking service. According to the report known rating and analysis of Fitch IBCA, 10% or 500 thousand people are shares of clients in major European banks, using pure Internet banking.

Along with the development of virtual banks many large financial firms and banks have started to introduce electronic channels as the first form of service to their customers. Most well-known foreign banks are shown in Table - 1.

Table - 1

Foreign banks that use Internet banking in their activities[2]

Countries	«Virtual» banks	Large banks that use remote channels in their activity
USA	Telebanc, Net.B@nk, X Bank, Wingspanbank, First Internet Bank of Indiana	Bank of America, Wells Fargo, Citigroup, Bank One, First Union
Europe	Egg Bank, Smile Advance Bank, Bank Girotel, Comdirect, Diba, First-e, Santender	HSBC, ING (ING Direct), Barclays, Deutshe Bank, Credit Suisse, Lloyds TSB, Rabobank
Asia	OUB, Dah Sing, State Bank of India	ICICI, HDFC, Citibank, HSBC
Latin America	Banco 1	Banco de Crédito e Inversiones (BCI), Banco Bilbao Vizcaya (BBV)

In Russia, remote banking for individuals began to develop in the 90s. "Inkom- Telebank" became one of the pioneers with the system Inkom. But after the 1998 crisis, the most active players of the creation of systems for remote access

[2] www.bankir.ru

were AvtoBank Guta Bank (now Bank Uralsib and VTB - 24, respectively). Founder of virtual banking in Russia should be considered "AvtoBank" (Uralsib Bank), which already offered its customers this type of service in May 1998.

Also, since November 19, 1992 Bank24.ru was the first (and currently only) completely "virtual" bank - working on the market of the Sverdlovsk region. This bank is positioning itself as an automated bank, working around the clock, with special attention to quality of service, and brand marketing.

Development of Internet banking in the Republic of Uzbekistan is currently at developmental stage. In 2007, "Ipak Yuli Bank" became the first commercial bank in the Republic, implement remote customer service.

The analysis shows that the most common services of remote maintenance technology are Internet banking, "Bank-Client", SMS-banking and mobile banking. In 2011-2012, mobile banking got dynamic development. The share of "mobile" technology in remote banking services was 60.5 % in the total volume of Uzbek banks customers using modern payment system. According to the Central Bank of Uzbekistan, on January 1, 2014 the total number of users of remote banking services amounted to 149,023, which is 37.4 % more than at the beginning of the year (108,496). Of these, 106,925 customers (or 71.8 %) - users of mobile banking (including SMS-banking), 42,098 (28.2%) - use the services of Internet banking (including the system "Client-Bank"). The three leaders in the number of users of remote banking services included National Bank of Foreign Economic Activity (63,470) JSIB "Ipoteka-bank" (37662) and POJSC "Asaka bank" (28,336). Currently, almost all banks of the Republic of Uzbekistan have their own remote systems.

1.2. Types of market segmentation of Internet banking and advantages of remote services

Understanding what actually should be attributed to the service "Internet Banking". More often than not it is identified with the client providing opportunities direct access to your bank account via the Internet using an ordinary computer, and using a standard browser.

In other words, Internet banking - is the ability to perform all the standard operations that can be performed by the client at the bank (except for cash transactions) via the Internet.

Internet banking service includes features that allow to:

- Providing all utilities, pay bills for communication and other services;
- Making money transfers, including foreign currency, on any account in any bank;
- Transferring funds to pay bills for goods;
- Buying and selling foreign currency;
- Replenish / withdraw funds from the account of a plastic card;
- Opening different types of accounts and transfer funds to them;
- Obtaining information about the status of the account for a certain period in a variety of formats;
- Receiving information about payments in real time;
- Using other additional services (meaning, for example, brokerage).

All of these actions were available before the advent of the global world of the Internet, when the Bank rendered services to PC-banking. Using a computer and modem client could connect with a special banking system to manage his account. In this case, it is necessary to install software to client's computer.

Internet banking has several advantages than PC-banking. Besides the fact that the client gets new features when working with account via the Internet, rather than through a direct modem connection, this activity becomes a lot easier and more affordable. The client does not have to dial a modem pool bank, enough to have

access to the Internet, and most importantly, the client does not need to install any special software on his computer. He can perform all necessary operations and payments using the browser when completing the standard web-forms (sometimes it can be used by Java- applets).

Currently, the concept of Internet banking covers a range of software products, which can be divided into the following groups:

- The managing system of customers' accounts (the "Internet bank customer" or short - "Internet - Client");
- Billing and payment systems, including those in which the Internet is used only as communication medium;
- Card processing system (they can be a part of the payment system);
- The system of online trading of securities;
- Interface modules for interfacing with external e-commerce systems (for example, modules that implementing communication "bank - Internet store" - they can also be seen in the quality of the payment systems).

Meanwhile, in practice, more and more often complex solutions, such as "payment system + account management + interface of the online stores and processing company" - which, incidentally, are widely known as payment system CyberPlat. And the application that automates utilities can interact with the system as account management and the complex processing of plastic cards.

With the development of mobile forms of Internet, more and more banks offer their customers the opportunity to access the bank account with the help of cell phones that support the protocol WAR. Currently, most banks only provides access to information about the cash flows on the accounts, much less - to make payments on the specified list of correspondents, to transfer funds to the card accounts, make payments on accounts within the bank.

Consider the types of market segmentation of Internet banking. There are two segments of Internet banking: corporate and personal segments.

What is happening in the corporate segment, the market for Internet banking

is a natural evolutionary development of technologies that will change the structure of remote banking services. So, if at the end of last year the number of clients served by the "direct dialing" was estimated at 80-90%, respectively, and over the Internet - 10-20% of the total number of customers using remote banking service, the current number of clients served through the global Internet world, approaching 50%. These dynamic shows changing preferences of customers who use various forms of remote banking services.

Such an intensive supply growth in the corporate segment is not observed in the Personal segment of Internet banking

In this case a particularly negative impact on the market is not even what the banks themselves do not take the proper development efforts in this direction. Significantly the following circumstances worsen the situation: the developers of Internet banking systems do not give the creation of ready solutions, service-oriented individuals, at least the same attention as the system for legal persons. And it constrains the development of the market. Corporate segment is actively developing largely through the efforts of software companies that promote their system, apply significant amplification, urging bankers in the usefulness of new Internet technologies. This is the case when an intense bid forms and stimulates demand.

In the absence of external offers of ready solutions, banks are forced with attempt to create their own systems. Thus, banks are still implementing a strategy of gradual entry into the market for Internet services.

There are several channels through which the client can gain remote access to banking services at the moment: internet banking, telephone banking (service via call-center and IVR), mobile banking, and service through ATMs and self-service kiosks.

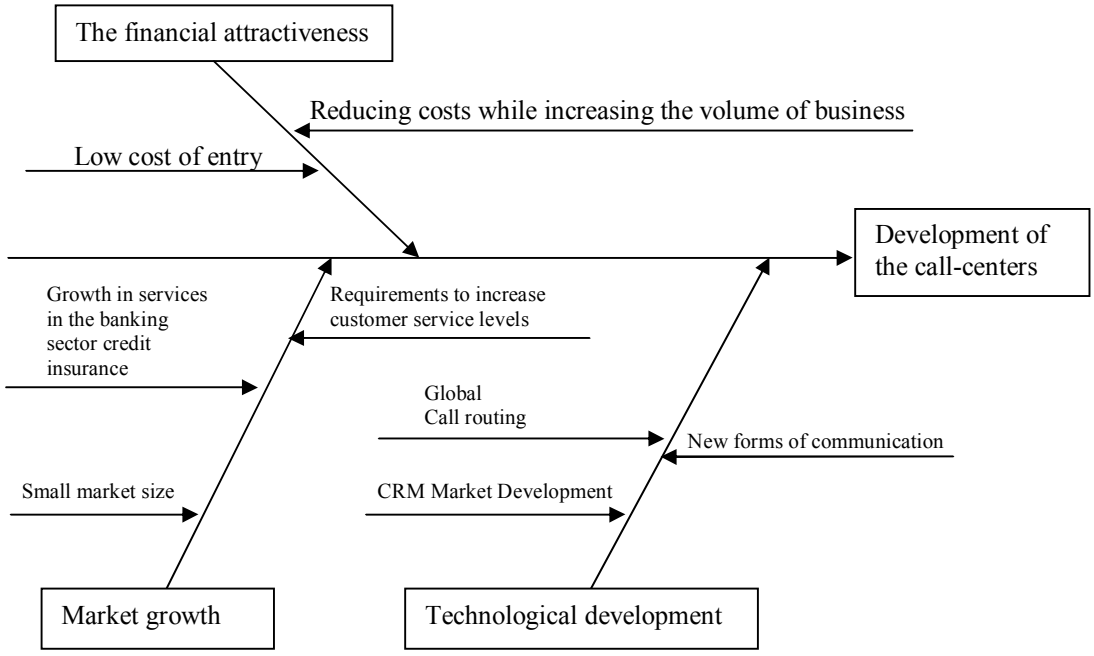
Telephone banking - banking services in managing their account through the use of features touch-tone phone service. The administration instructions and information systems is possible in two cases: First, when communicating with the

operator of the bank by phone (call- center) and second, using interactive voice response (IVR).

Under the call- center (call center) understand organized space operators (agents) running hardware and software system that allows for automated receiving and processing a large number of simultaneous telephone calls, as well as to mass outgoing calls. Synonymous with call- center are: Call Center (CC), call center, contact center (a broader concept includes not only the processing of the messages on the phone, but also via fax, e-mail, SMS, etc.). Call center (usually means easy call- center that provides services not offered the classic commercial call- center and only process model calls).

The factors hindering the development of the market call centers include low awareness of potential customers, the risk of information leakage and low activity of small and medium banks.

Development of the call centers due to many reasons outlined in Picture 1



Picture 1. Factors contributing to the development of the market call-centers[3]

www.marketing.rbc.ru
"RusBusinessConsulting"

The factors hindering the development of the market call centers include low awareness of potential customers, the risk of information leakage and low activity of small and medium banks.

Flexible customization of the automatic voice service (Interactive Voice Response System, or IVR) allow clients to access the services of the bank by phone - mobile or landline with the ability to tone dialing, as well as get answers to the most common and simple questions unattended.

Currently, according to the State Tax Committee of Uzbekistan, the technology of internet banking offers 26 banks of Uzbekistan. It should be noted that, according to the adopted program for the further reform and improve the stability of the banking system in the country, by 2015 all commercial banks of Uzbekistan will provide services using the technologies of Internet banking.[4]

According to the results conducted by Genesys Telecommunications Laboratories, 68% of employees of call centers consider IVR essential services in the contact center, and 74% of customers have confirmed that the IVR system considered by them as a viable alternative agent clock support from the bank. About 21% of the banks use automatic telephone services.

During the implementation of IVR it's desirable to remember that this service is a significant component of certain image and influence in shaping the overall impressions of the bank. So there must be high-quality of recording voice messages by professional announcers in several languages.

The efficiency of the implementation of telephone banking. During construction of a multifunctional call center costs are reduced to attract new customers, particularly by reducing the cost of creating client databases, searching for information about client preferences for segmenting consumers. Increased income and by increasing the number of contacts that are made with less time and labor costs - employees of marketing services, sales, service, maintenance, often communicate with their customers and get a better return. However, the

[4]Kommersant.uz

effectiveness of the planned project may be quite at variance with the actual performance received. The reason may be fuzzy formulation of the problem, changing requirements, inadequate funding.

Since the main component of the cost of ownership of the call center operators is salary and the cost of renting premises. Monitoring, reporting, training and records of negotiations are used to optimize the work of operators. Through these measures, income from the call center is increased by 20-35%, costs are reduced by 15-25 %, and the quality of service constantly grows.

Call-centers have the following problems:

1. Incomprehensibility of their organization to the customers. Some banks have a single reference phone which is hidden somewhere in the depths of the site, so simply nobody knows about it (except those who have a plastic card, which necessarily listed phone helpdesk support).
2. Line failure or inability to reach. Connection with the operator should occur immediately (or as fast as possible). According to research company Finist, specializing in research and consulting of the financial market, and call-center "Hot line" in the Russian Federation to dial in banks, compared to a survey conducted in January-April 2007, it is becoming easier and easier. Number of successful dialing the first time or with little expectation on the line is increased by 24 %, reaching 57% of the total number of test calls.
3. The level of training of operators. The majority of these people are not from the banking environment and pay is low. Being an employee of the call center is not too prestigious and nervous and tense as a result - turnover operators. Therefore, many banks are hesitant to deeply educate such employees - do not want to raise frames to competitors. Many banks simply dial inexperienced students, who are offered training surface. In this case, neither the modern call center nor advanced technological solutions will save the client from poor quality services.
4. Perception of call-center not as a business - unit, but as an expense.

Mobile banking - services related to banking transactions and payment of

various services using a mobile phone.

Offering mobile banking services, banks increase customer loyalty, reduce maintenance costs and expand sales channels. Clients also have access to their accounts at any time anywhere where there is mobile, and thus save huge amounts of time. Supporters of the settlement believe that mobile phones will eventually replace the traditional checks, cards and cash while shopping through POS-terminals.

From a consumer perspective the procedure for connecting to mobile banking should be simple enough, but the service itself - have a comfortable and intuitive format. The development of this service implies the use of new high-tech software, which is becoming more user-friendly and simple interface for hiding increasingly sophisticated technology and solution based on data protection.

There are several types of mobile banking. Mobile banking in its classical form quite clearly different from access to online banking using a mobile terminal via GPRS / EDGE (so-called WAP-banking).In the first case there are at least four ways to access such service, and in the future there is only two of them. In the second case, a user with a mobile terminal accesses the remote service and all work is based on the model of "thin client" - the subscriber has only a limited set of commands that it can comply with the help of his cell.

1. The “oldest” model of mobile banking – is **"pure" SMS-banking**. SMS-banking – is the direction of banking which allows remote services to individuals through the exchange of SMS-messages. This service has evolved from a service for the elite in a mass product.

Reduction of tariffs of mobile operators and the cost of mobile phones, along with the introduction of time-based charging for the use of fixed telephones, contributes to the rapid spread of mobile phones among the population. Currently the owners of mobile phones exceed the number of cardholders, personal computers, automobiles in the country.

In fact, it is limited to inform the client about the banal performed

operations: for each event (it can be set independently), the user receives a text message on his mobile terminal. Safety of plastic card payment suggests that their holders check their credit card bill, which provides the banks monthly. However, not every holder is able to keep track of which operations he carried out a plastic card. To facilitate the monitoring of financial flows bank sends cardholders extract as SMS- message coming to a mobile phone in a few seconds after the transaction.

In the case of SMS-messages about the transaction that the client did not commit, he can immediately block the account (including via SMS).

- receive notification of deposit of funds into the account;
- request and receive a statement of recent transactions;
- Obtain information about the current account balance as using SMS-request; and in the mode of the regular notification (alert frequency selected by the customer);
- Receive notification of overdraft or a threshold account balance;
- Notification of the date and amount of payments on loans, the expiration of the deposit or its prolongation.

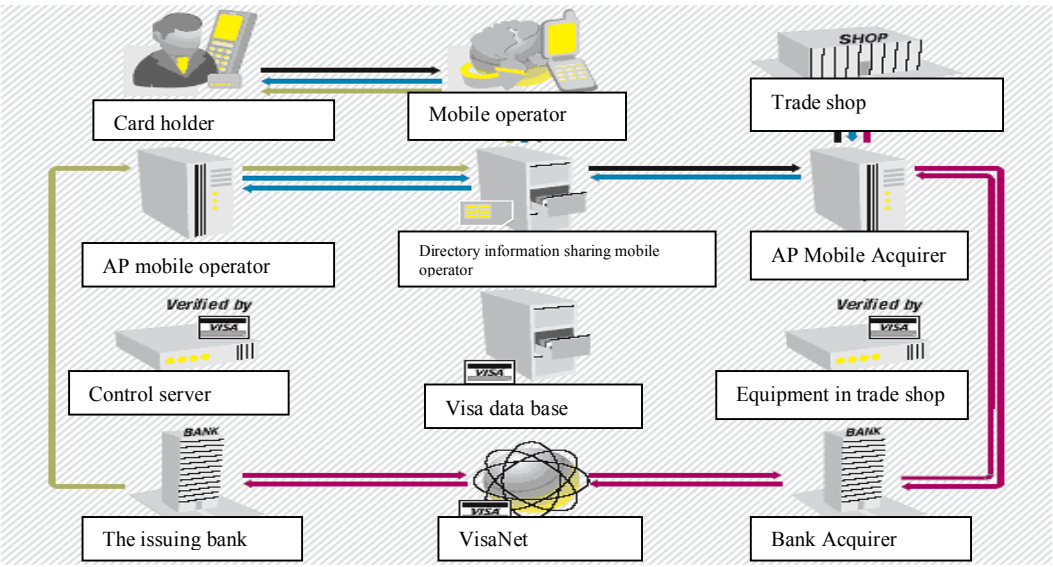
SMS-services are usually paid. You have to pay a service provider for its outgoing requests and the bank - for sending messages (it can be a fixed monthly fee or for each message - a certain amount).

2. The second option of mobile banking - is **SMS-banking Advance**, i.e. advanced SMS-banking. The key difference from the previous service - two-way communication is established, in which the customer can not only see what's going on in his accounts, but also to give orders to conduct certain operations (transfers between your accounts, pay utility bills, recharge electronic mobile phone accounts, pay for services of satellite TV, etc.). Well, if this is allowed - only addition to the internet banking system as a pure SMS-banking is not doomed to failure, then very limited success. SMS-type long commands (at least opcode, specifying parameters, the amount confirmation code) is very tiring, even if they are stored in the SMS-templates in a cell phone, and a way to fill the payment order at all unrealistic. So,

of course, it's limited application services.

3. The third option - **STK-banking** - has a significant advantage over the other two. In this case, the financial institution providing the service is valid only in conjunction with the service provider, which is unable to provide adequate protection of the transmitted information and write a special application on the SIM-card mobile phone (most active projects in this area carries Russian "MegaFon": project " Mobile Bank –Verified by Visa", the technology of which is represented in the diagram - 2). As a result, the menu of a cellular terminal serves the client an additional item, using functional and which he performs various payment for goods or services.

4. The fourth option, which is also seen for a promising future - is **Java-banking**. Here, the control program in the form of Java-based applications "bound" not to SIM-card user, and to its terminal. As a result, mobile phone there is a special menu for banking operations.



Picture 2. All the participants of mobile payments and emerging relationship between them[5]

[5] www.visamobile.ru

The fourth option, which is also seen as a promising future - is Java-banking. Here, the control program in the form of Java-based applications "bound" not to SIM-card user, and to its terminal. As a result, mobile phone there is a special menu for banking operations. Install a program like this, anyone can, at least once having established a gaming application on your mobile device, and functionality of the program allows you to perform most banking operations implemented. Due to the fact that all of the additional "window" and system notifications are already present in the client program, the user can save on data transmission over GPRS / EDGE or SMS - set in its tube the application communicates with the server only small bank in terms of service teams. Also, unlike the STK-banking amount of such applications can be much more than a few tens of kilobytes - up to 1 MB, which allows you to create maximum visual impact with a graphical and intuitive interface.

As an example, you can select the system of mobile payments SimMP - for its work on the SIM-card is placed additional payment application that is accessed over the cellular network which only bank has. For making payment, you must inform the seller your mobile phone number to get SMS- transaction request and confirm the operation with the help of personal "bank" PIN- code.

Issues of security and reliability of the banking systems on mobile devices are solved separately for each project - as long as there is no standard for this recommendation. Participants cost of commercial is considered as encryption software, built-in capabilities of data communication protocols. By these means they are trying to solve three global tasks.

The first – is ensuring privacy. Most of technological solutions in this area rely on a strict mechanism multifactor mutual authentication. Transaction systems "mobile wallet" can be completed only when the system is sure that the request from the subscriber is true that it has not been altered during transmission over the WAN and that the subscriber has sufficient funds to make the payment, and the bank is willing to accept payment from these parameters. Usually the login used login and password, and to confirm the transaction - one-time password or PIN that cannot be

transmitted over the network: a special applet that is installed in the user's mobile device (Java-banking or STK-banking) checks its own built-in algorithm to correct and gives the central system response that the operation confirmed by customer. Information used by the applet to perform encryption and signature generation, is located in a special secure storage on the SIM-card or the memory card device that eliminates the possibility of obtaining data on the user's keys. Loading and storing keys applet and run in accordance with the specification Security Domain, and thus, an hacker will not be able to steal key information by scanning the memory device during its operation.

The second problem – is data protection. All sent information using SMS-messages (as long as it is the main transport all such systems), is encrypted using the key bank which is recorded in secure storage in the mobile phone, and is not available to any person other than the recipient - including employees of mobile operator connection. Of course, the presence of certain software and such information can be "split", but you need to get at your disposal SIM-card with all the information that is present in it, which in itself is not easy. It should also be noted that all the communications in the payment transactions contain a digital signature that authenticates the sender and message integrity.

Finally, the third objective – is the protection of information on the actions of the user. Such cases when cell phones lie on the user's workplace unattended, and when they are left in airplanes, trains, ships and taxis, gyms and restaurants. Given this, the majority of banking institutions cannot afford to confidential information stored in the memory of smart phones or phones of their customers, and therefore the entire user session should be held in a mode on-line. When the user stops communicating with the bank, most of the information from his mobile phone is removed. For example, it will be able to access for viewing and storing the last 5 - 10 banking operations, but identification data won't be stored in the memory cards (full number, expiration date), there will not be. To protect against viruses and ban preservation PIN-code on a mobile device - a combination of digits user will

memorize. In any case, the introduction of this innovative service is always a danger that the using of multiple safety functions vested in the phone, have a negative impact on the usage of the service. If the subscriber will need to enter for safety 10 - 12 - digit dialing letters or numbers on the phone, in which each button has to three letters, and also need to memorize the combination with system keys or work with a virtual keyboard, many subscribers simply cease to follow such dogmatic instructions that will offer them a bank. Users would suit a simple execution of operations by pressing two or three buttons.

Customer service through ATMs and self-service kiosks. Banks are actively expanding the network of points of retail customers, but even small business office rarely cheaper than 100 thousand dollars. Therefore, lenders tend to use other methods to increase the retail distribution of network, including various kinds of ATMs installed. Self offices, which is employed several devices (depositor, ATMs and automated kiosk) the average cost of $ 1 million, and a separate ATM, through which you can make payments and receive money from the card - in the range of $ 10 thousand

ATM - is uncrackable banking protective means for emitting and receiving cash; drafting for transactions using bank cards; issuing account information; cashless payments, etc. ATM is equipped with a processor, display, keyboard and a reader for reading information from the card. For user identification card is placed in the reader and keyboard input personal identification number (PIN), and then spends the ATM authorization session and, if it succeeds, commit operation. However, ATMs has certain limitations. There are many fraud schemes with their usage, so for the protection of credit card holders funds set standards for the amount and timing of withdrawals.

Promising direction is the development on the basis of ATM of video banking in which special devices are provided with a television monitor to communicate, and which allow the client to live chat with an employee of the bank and use it to conduct the necessary operations.

Self-service kiosks. In the banking sector particularly successful to use self-service kiosks, providing customers with fast access to the full range of information on banking products. Unlike conventional ATM, modern terminals (kiosks) allow you to perform most of the sought-after retail banking operations: design of fixed deposit, interest payments on the loan, payment for communications services and utilities.

Self-service terminal is a terminal of client's access to information and operational resources of the bank. They are installed in offices and regional branches of the bank to better organization of informational and operational customer service, including increasing the proportion of acts done by clients in the full or partial self- service for the corresponding acceleration and reducing the load on the personnel operating.

Highlight the main *advantages* of using RBS channels for customers in *the bank.*

1. Reduced operating costs for customer service, including saving time. According to crime-research.ru[6], payment of services to the client (individual) over the Internet costs $ 0.01, using vending machines - to $ 0.27. Providing services on the phone - is $ 0.54, and the provision of services in the cash box – costs $ 1.07. The cost of an operation carried out in the bank, is 16 times higher than the cost of the operation mode of RBS. RBS recoups its price in about 18 months.

2. Solved the problem of maximum development of points of presence of different scale and specialization to ensure the availability of banking services anytime and anywhere.

3. Reduces the cost of the client's transaction, and minimized costs associated with capacity points of presence.

4. Operational risks of the bank.

5. Increases the rate and level of customer service, accelerating the process of making payments, reducing the amount of paper documents.

[6] crime-research.ru Date of publication 2013.06.13

6. Expanding access to the most promising individual clients.

In other words, the efficiency of the bank is increasing by entering new customer segments that the bank did not cater to the introduction of online of channels. It must be emphasized that the work of the new segment requires serious marketing policy, which involves the development of the bank's management of marketing programs and making appropriate of budget expenditure.

Using remote channels, bank *customers* receive certain *advantages* compared to the service through a traditional bank branches. We allocate the main ones:

1. Convenience - compared to branches of a bank, electronic bank channels are never closed, and are available to customers 24 hours a day, 7 days a week, and there are enough skills to own fixed or mobile telephone to use them, portable computer, ATM, self-service kiosks or the Internet;
2. Availability - the customer gets access to his account, and as a consequence - to their money, from anywhere, including from another country;
3. Speed transactions - transactions are committed and executed almost instantaneously;
4. More cost-effective and the price of financial services costs on the bank 's branch network due to lack of maintenance;
5. Security of transactions;
6. Persistent counseling of information.

1.3. Regulatory framework and the main problems of remote channels in the Republic of Uzbekistan

Currently, legal support of remote electronic payment systems based on the following key documents:

- The Civil Code of the Republic of Uzbekistan;
- Law of the Republic of Uzbekistan dated on 25.04.1996 "On Banks and Banking Activity";
- Law of the Republic of Uzbekistan dated on 11.12.2003 No. 562 -II "On

electronic digital signature";

- Law of the Republic of Uzbekistan dated on 29.04.2004 No. 613 -II "On electronic commerce";
- Law of the Republic of Uzbekistan dated on 29.04.2004 No. 611 -II "On electronic documents";
- Law of the Republic of Uzbekistan dated on 16.12.2005 No. 13 "On electronic payments";
- Decree of the President of the Republic of Uzbekistan dated on July 8, 2005 PD-117 "On additional measures to further development of information and communication technologies";
- Normative documents of regulating banking activities;
- State licenses and certificates of conformity of the bank in providing electronic banking services;
- State licenses and certificates of conformity trading floor of the safety and security of the electronic document;

Adoption of the Law of the Republic of Uzbekistan dated on 11.12.2003 No. 562-II "On electronic digital signature" was intended to create legal conditions of use EDS under which EDS in the electronic document will be equivalent to the handwritten signature on a paper document, as well as the regulation of relations in the usage of digital signatures.

In order to develop and promote e-commerce in Uzbekistan the Central Bank has developed a draft law “On Electronic Commerce” in a new edition.[7]

The main purpose of the draft law is to create favorable conditions for the effective functioning of e-commerce as well as establishment of legal mechanisms for the implementation and protection of participants’ rights in electronic commerce.

In comparison with the current edition this draft law has following features:

– Firstly, mandatory requirement for digital signature on an electronic document for individuals involved in e-commerce has been cancelled and a one-

[7] Cbu.uz Date of publication 17.03.2014

time signature identifier or other analogue of a handwritten signature has been allowed to use. This will simplify drawing up an electronic transaction and integrate bank cards payment mechanisms working via the Internet.

– Secondly, composition of information brokers (telecommunications networks operators; paying agents; persons engaged in the organization of electronic trading and providing services of electronic documents depository storage) that provide e-commerce subjects with the services of conducting electronic transactions has been expanded.

– Thirdly, taking into consideration the peculiarities of conclusion of contracts using electronic documents (messages) and the conclusion characteristics of contracts in electronic form additional requirements for an offer sending procedures, acceptance of commercial offers and contract terms in electronic commerce have been established.

– Fourthly, a regulation in the draft law on the possibility of invoice registration and other documents in electronic form have been introduced. Currently when goods (works, services) are sold it is required by law to sign invoices and other documents on concluding contracts in paper form, that creates additional barriers to the implementation of e-commerce via the Internet.

– Fifthly, rules on state regulation in this sphere by the authorized body have been introduced and its authority has been established in order to create favorable conditions, design a strategy for e-commerce development in modern conditions, and adopt an approach to solve organizational, technological and legal issues.

The draft law of the Republic of Uzbekistan “On Electronic Commerce” in the new edition will be widely discussed with the interested ministries and departments as well as members of the public.

Decree of the President of the Republic of Uzbekistan PD No. 1989 "On measures for further development of the National Information and Communication System of the Republic of Uzbekistan" dated on June 27, 2013 draft of the Central Bank "*On clearing payment system of retail payments in real- time based on further*

integration with billing systems of supplying services"[8] included in the list of projects for complex information systems "Electronic Government" and determined the timing of the system.

In pursuance of this Regulation adopted Instruction of the Central Bank of Uzbekistan No. 710 on June 29, 2013, which determined the composition of the Working Group, comprising senior officials CB and commercial banks, also approved the Action Plan for implementation of the Clearing System.

It was developed and approved by the Republican Commission for implementing a comprehensive program for the development of the National Information and Communication System of the Republic of Uzbekistan for 2013-2020 Network Diagram creation Clearing System and based on it is developed and approved by the First Deputy Prime Minister of Uzbekistan Network project schedule.

Also it was developed and approved implementation schedule and Technological Directions of Clearing System interaction with information systems STC Uzbekistan, "Uztransgaz", "Uzbekenergo" and commercial banks, signed a general agreement with "Uztransgaz" and "Uzbekenergo" STC on the functioning of the system.

One of the most promising projects of information and communication system of our country is the single interactive state services portal my.gov.uz. It operates starting on July 1, 2013 and serves as a convenient and effective tool for interaction with public authorities and public business entities.

This project was implemented in accordance with the State Program "The year of wellbeing and prosperity" and the Cabinet of Ministers "On measures for further improvement of the governmental portal of the Republic of Uzbekistan on the Internet, taking into account the provision of online public services" from December 30, 2012. Creation of a single portal was the next step in the formation

[8] Cbu.uz Date of publication 21.05.2014

and development of "e-Government" in our country. Currently, you can get more than 170 interactive services for more than 20 destinations through a single portal.

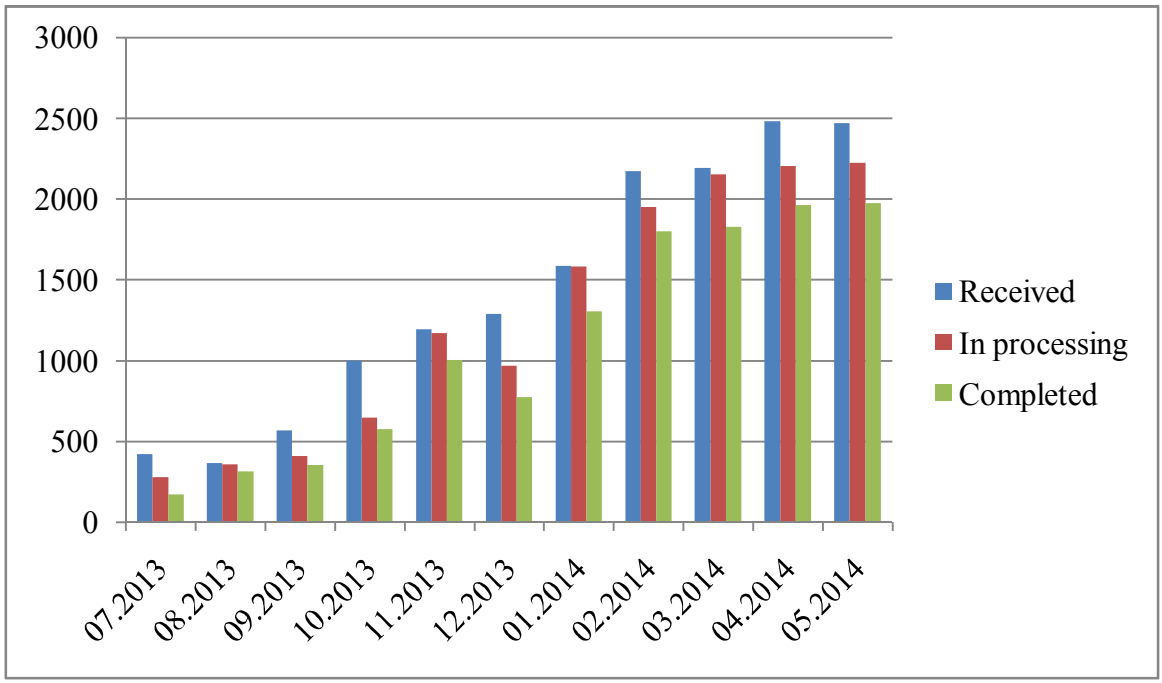
Particular attention is paid to the agencies dealing with applications of the population. Through it, individuals and business entities may apply to the state and economic management, public authorities in the field. You can also find background information; using the module "Statistics", which allows users to find their pending applications and appeals by public authorities.

State organizations are connected to the portal areas and cities of the Republic of Karakalpakstan, regions and Tashkent city. Citizens can submit their treatment in the community, allowing more to resolve issues of local character. This was made possible thanks to the organizational activities undertaken by regional State organizations and the Council of Ministers of the Republic of Karakalpakstan, together with centers of computerization to involve leaders of districts in the "Electronic Government ".

A special mobile app on the Android platform was developed for users of Single portal for the administration of appeals to state bodies. On the status of its consideration of treatment they can learn through SMS-notifications, coming to a mobile phone. Particularly noteworthy activity information service of a single portal: its experts not only provide information on the use of interactive services, but also take the complaints of citizens on the phone and send them to the appropriate government agencies.

Currently, the single interactive state services portal allows mobile phones to pay for a range of telecommunications services provided by "Uzbektelecom". In the near future users will be able to pay for real-time services as well for "Uzbekenergo". In addition, the specialists of the State Committee for Communication, Information and telecommunication technologies together with the Central Bank of the Republic of Uzbekistan and other ministries and agencies are working on issues of online payment of state fees and other charges.

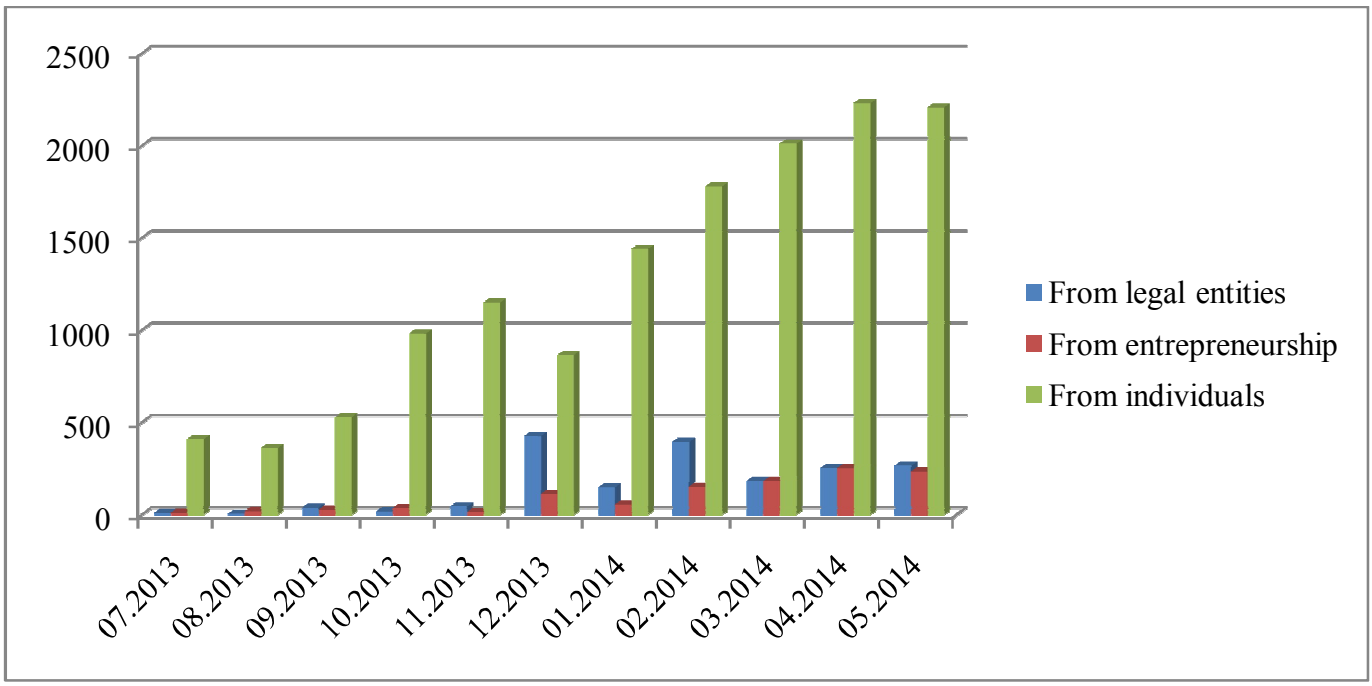
The single interactive state services portal - is a prime example and obvious result of rapid development of information and communication technologies in our country. Consistent efforts to improve the portal leaves no doubt that in a short time all the organs of state power and control will interact with citizens and legal persons in real time.[9]



Picture 3. Received, processed and completed applications by the single interactive state services portal[10]

The picture above illustrates the amount of received, processed and completed applications for the period of June, 2013 and May, 2014. We can clearly see that comparing to last year, this year there were received almost five times more applications than the last year. It means, the popularity of the single interactive state services portal is increasing very quickly and its future is bright. Particular attention is paid to the agencies dealing with applications of the population. Through it, individuals and business entities may apply to the state and economic management, public authorities in the field.

[9] My.gov.uz Date of publication 23.04.2014
[10] The picture was done by the student on the basis of my.gov.uz



Picture 4. Types of subjects submitted applications to the single interactive state services portal[11]

The picture above shows the main amount of applicants. We can clearly see that big amount among them shares individuals. In May, 2014 there were received over two thousand applications by them, and this index has risen almost four times than last year.

But still, our remote management has many normative legal based problems. It concerns remote banking services too. We can determine the following problems:

- Equivalent transactions conducted electronically and by traditional methods are not legally recognized;
- Lack of a common standard for electronic and financial documents and contracts for internet banking;
- Complexity of cryptographic systems certification information in government agencies;
- Lack of standardization and certification of software used for electronic payments;

[11] The bar chart was executed by student on the basis of the data of my.gov.uz

- The absence of legal rules on encryption when exchanging confidential information;
- Lack of law enforcement for resolution of disputes at an electronic service, including banking;
- Tax status of transactions conducted via the Internet is not defined;
- A system of certification authorities is not developed.

Based on the above, we can identify the main problems of DBS channels in Uzbekistan:

1. *Mentality of citizens of the Republic*.

Unpopularity and underdevelopment of cashless payments among the population. Customers of Uzbek banks used to direct visual contact with the tellers, as well as documentary evidence receivable transactions.

2. *Customers distrust in banks*, low incidence of banking services among the population and the risk of passing the security of financial information via electronic communications

Confidence in banks regularly measures the government organizations. According to them, citizens' confidence is underdeveloped in our banking system. But in fact most of the people keep their savings "under the mattress".

Mistrust must be overcome through promotion and education programs for existing banks and potential customers

The reason for the weak demand for banking services by the population is that same physical entity operates in cash. People will not carry cash to the cashier of the bank, to turn them into non-cash, and then pay, for example, cellular phones. This service can be paid directly from the operator. Legal entities required by law to keep a bank account, while citizens - no. And we need a very strong case that they use the account in a commercial bank.

3. *Low income of population.*

From 15 to 30 % of the population are below the poverty line, ie 1/3 of the population objectively have nothing in the bank.

4. *Low level of financial literacy.*

Many banks, in practice, faced with the fact that customers poorly versed in the nuances of the proposals. Thus, a number of banks have to cut a wide range of products to several standard offerings. This applies, for example, contributions and suggestions on plastic cards.

In Russia, in order to eliminate financial illiteracy Russians in 2008 it is planned to adopt federal program of the Government to improve the financial literacy and experience borrowed from the World Bank. On the program the state will allocate 80-100 million over 5-9 years. Uzbekistan is also planning such a program in the future.

5. *Technical illiteracy.*

Average bank customer frightened from all automatic, the development of any technical device cause him difficulties. Besides banks are improve and complicating their products. For example, multi-stage transitions in the IVR menu, or complex interfaces to Internet banking. Therefore it is necessary to simplify the user application, otherwise banks will have to wait until "advanced" users grow up and come to them.

6. *Lack of attention to the promotion of long-distance service from the bank.*

The fundamental error of banks' managers in promoting remote channels is that not all banks are positioning these services as a complete product: instead consider branchless banking as a convenient form for the customer interaction with the bank, they tend to position it as a secondary service. At the same time observed and lack of attention of the promotion of Internet banking by the banks themselves. Many banks have long mastered the technology for businesses, buying technical products for RBS individuals not being able to use them. Some banks even after the introduction of printed booklets and generally does not inform customers about new ways of service. One of the main reasons for such failures is that development, formation, promotion of business as well as customer support is entirely entrusted to IT professionals, which is wrong. Certainly, the technical side of the problem should

be provided exclusively by highly IT professionals, but customer support should be assigned to a specially trained staff. Important not the technology itself, but how these technologies are offered to customers.

7. *Legislative restrictions.*
8. *Underdeveloped communication infrastructure in the regions.*

Electronic channels in long distances are not developed. Offline solutions are heavily used in the regions. We need good communication infrastructure to implement the ideas of remote banking channels that is not yet available through most of Uzbekistan.

9. *Dearness of introduction of RBS.*

System of remote service - accessible through the Internet, telephone and services of mobile operators, designed to serve 1 million customers is worth about $ 5 million, but banks usually bought much more modest projects: it estimates of the complex project almost never exceed $ 250,000. Creating an own systems bypassed altogether cheaper than - $ 15 000-20 000.

10. Unavailability of payees, primarily utilities, taking large amounts of non-cash payments, often caused by *lack of appropriate arrangements* with banks these services.

This is primarily due to economic reasons - namely, the low level of remuneration for the services of the bank to receive utility bills compared to the operating costs of the bank.

CHAPTER II. INTERNET BANKING – IS THE MOST PROMISING DIRECTION OF REMOTE BANKING SERVICES

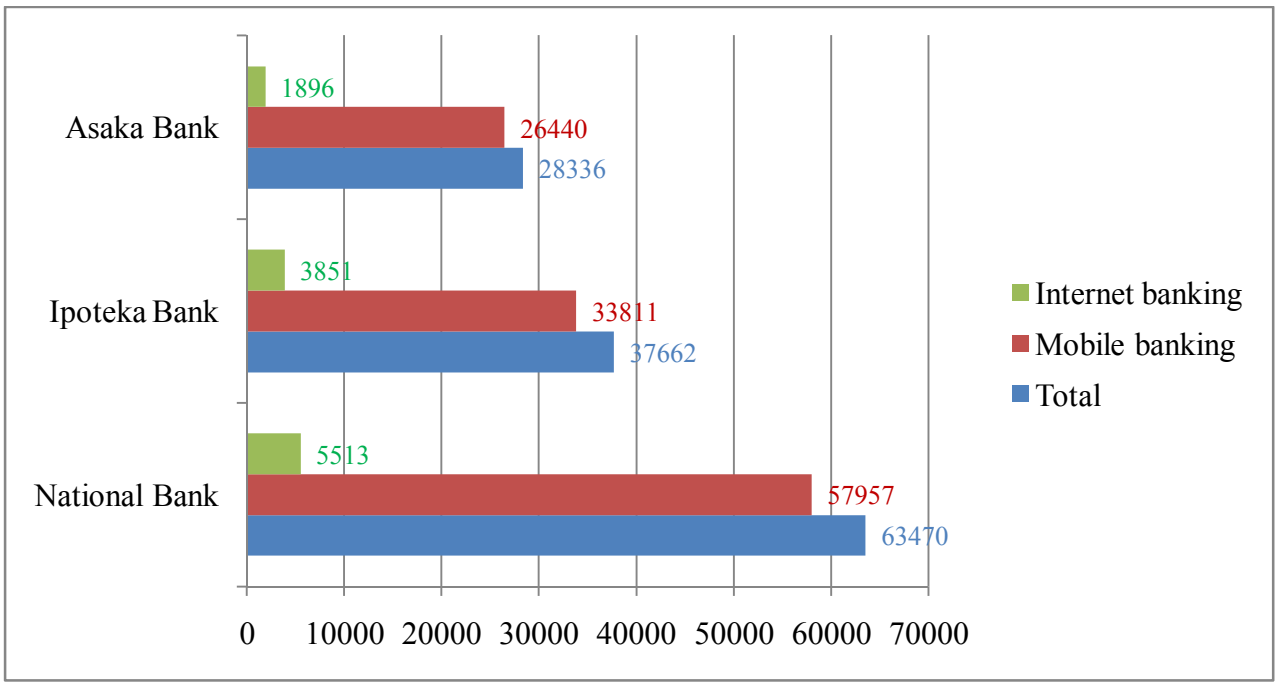
2.1. Analysis of the market of Internet banking services

The standard list of transactions that can be accessed using remote access to their finances, is usually divided into the base (one that can be obtained by default in almost all banks) and advanced (individual package of services, content of which depends on the specific financial institution).

The standard list includes the request account statements, monitoring the status of accounts in real-time, currency conversion between the accounts, payments to third parties (including credit and communication services in real-time) and the users of the same system in the bank.

Optional - account management of pension savings, mutual funds, personal accounts of "Online- broker" (a play on the Forex market or stock exchange), the ability to send transfers through popular type systems Western Union. Some banks are willing to consider application for a loan in virtual mode – for it, credit organization fills the site with the necessary documents, and after some time the potential borrower receives a response from the credit expert. Other financial and credit institutions allow their users to receive information on available bank loans and terms nearest mandatory payment of the loans.

Internet banking is gaining popularity, foreign bankers have not yet spoken about the boom, but noted the continued and significant (an average of 40% per year or more) increase in customer base. Summary statistics for all banks do not have, but the number of users of the virtual banking that can be judged on the basis of the fact that the three major players in the Uzbek banking market (National Bank, Ipoteka Bank, Asaka Bank) accounted for more than 130 thousand users. Maybe not every second, but every third participant of the market offer Internet banking today. Banks have become aware of the necessity for this service and understand that it is beneficial for them.



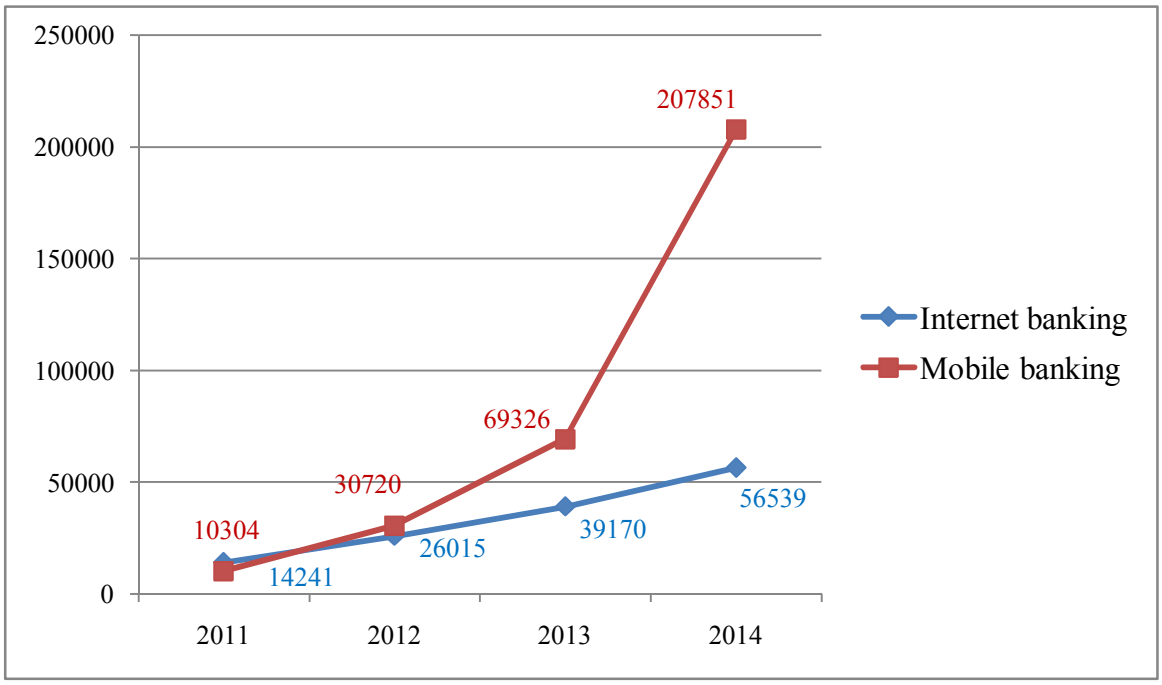
Picture 5. Classification of the number of RB users in three big banks of the Republic of Uzbekistan in 2014[12]

The picture above demonstrates us the trend of users of remote services in three big market players of the Republic of Uzbekistan, i.e. National Bank of Uzbekistan, Ipoteka Bank and Asaka bank. The total amount of RB users of National bank is almost 65000 clients, 5513 of them prefer internet banking while 57957 customers use mobile services for bank. The next bank, Ipoteka Bank has almost 38000 customers who use RB services, 3851 of them use internet banking and 33811 clients prefer mobile banking services. Final bank, Asaka bank performs remote services to almost 29000 clients of the bank; the number of users of internet banking is 1896, so the number of customers who prefer mobile services is 26440.

Bankers' views on mandatory set of virtual services are not much different, but if internet banking is introduced in the form of a whole range of service, while others are not in hurry to fill it with the contents of the various programs. Most market participants of internet banking fulfill the role of a reference in which they can learn the balance of the account or card and get a statement with a history of operations. In a typical model for today active virtual banking services are presented

[12] The bar chart was done by the student on the basis of the data of Cbu.uz

in minimal and usually limited to the possibility of transferring funds between their accounts and payments to the ISPs or mobile operators.

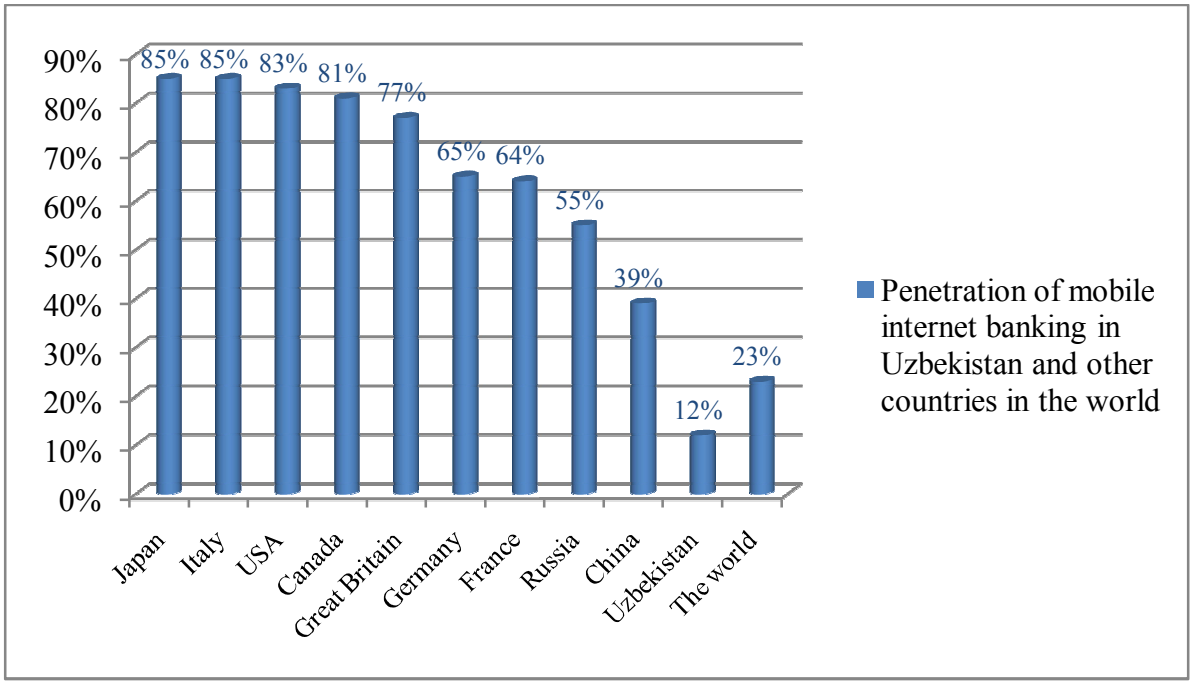


Picture 6. The tendency of remote services, Internet banking and Mobile banking particularly, of Uzbek banks in recent years[13]

The picture above shows the tendency of remote services, Internet banking and Mobile banking particularly, of Uzbek banks in recent years. We can clearly see that the users of Mobile banking has been risen almost 20 times for recent 3 years, and represents 207851 users in 2014, the users of Internet banking has risen 3 times and now its index is 56359. The popularity and necessity of remote services are growing and spreading through the population very rapidly. For further development banks should create special competitive market for remote services.

With the development of credit bureaus and practice of digital signature, as well as the improvement of legislation, most banks will be able to lend in a mode on-line, open / close the deposits, as well as meet other integrated customer needs, such as online trading, access to the international currency market Forex, the possibility of doing multiple accounts in a single system of electronic banking services, even accounts in different banks.

[13] The bar chart was done by student on the basis of the data of Cbu.uz



Picture 7. Comparison of penetration of Remote services in Uzbekistan and other countries in the world[14]

This picture demonstrates us the penetration of Remote services in Uzbekistan and other countries in the world. This comparison shows us how remote services are common in most developed countries and in Uzbekistan. Our index is much lower than theirs but there are still positive trend that allows us to think about bright retail and remote business in our Republic.

Currently, we know that the Internet is one of the important parts of our business. Today, with the Internet is connected all areas of modern industry and the market, starting with agriculture, water maintenance, transport, Military system, mass media, up to the banking sector and in particular for remote banking.

In this case a particularly negative impact on the market is not even what the banks themselves do not take the proper development efforts in this direction. Significantly the following circumstances worsen the situation: the developers of Internet banking systems do not give the creation of ready solutions, service-oriented individuals, at least the same attention as the system for legal persons. And

[14] The bar chart was done by the student on the basis of the data of J'son & Partners Consulting

it constrains the development of the market. Corporate segment is actively developing largely through the efforts of software companies that promote their system, apply significant amplification, urging bankers in the usefulness of new Internet technologies. This is the case when an intense bid forms and stimulates demand.

Table- 2

Internet users by countries (2014)[15]

Rank	Country	Internet users	1 year growth %	1 year user growth	Total population	1 year population change %	Country's share of the World Internet users
1.	China	641,601,070	4%	24,021,070	1,393,783,836	0,59%	21,97%
2.	USA	279,834,232	7%	17,754,869	322,583,006	0,79%	9,58%
3.	India	243,198,922	14%	29,859,598	1,267,401,849	1,22%	8,33%
4.	Japan	109,252,912	8%	7,668,535	126,999,808	-0,11%	3,74%
5.	Brazil	107,822,831	7%	6,884,333	202,033,670	0,83%	3,69%
6.	Russia	84,437,793	10%	7,494,536	142,467,651	-0,26%	2,89%
7.	Germany	71,727,551	2%	1,525,829	82,652,256	-0,09%	2,46%
8.	Nigeria	67,101,452	16%	9,365,590	178,516,904	2,82%	2,30%
9.	United Kingdom	57,075,826	3%	1,574,653	63,489,234	0,56%	1,95%
10.	Mexico	50,923,060	7%	3,423,153	64,641,279	1,20%	1,74%
...	...	...	...	...	...	...	...
38.	Uzbekistan	11,914,665	12%	1,229,670	29,324,920	1,35%	0,41%

Currently, we know that the Internet is one of the important parts of our business. Today, with the Internet is connected all areas of modern industry and the market, starting with agriculture, water maintenance, transport, Military system, mass media, up to the banking sector and in particular for remote banking. In the absence of external offers of ready solutions, banks are forced with attempt to create their own systems. Thus, banks are still implementing a strategy of gradual entry into the market for Internet services.

[15] www.internetlivestats.com Date of publication 24.02.2014

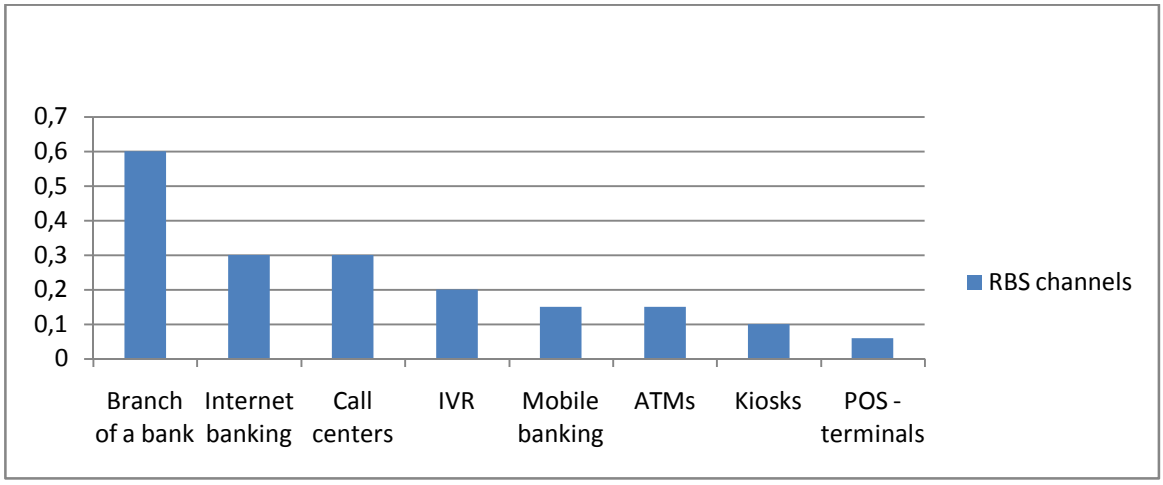
2.2. Evaluation of the effectiveness and implementation of internet banking

There are many different remote service systems, and each of them has its own financial characteristics: the size of the initial investment, cost of ownership for a period of breaking even, payback period, etc. In addition, you can use the purchase or develop appropriate software yourself.

We can identify several indicators by which we can judge the effectiveness of the introduction of Internet banking:

1. Demand for this type of service end-users. Here much depends on correct positioning of service and quality of its promotion.
2. How quickly customers are switching to this channel, preferring the traditional online service, services, and rates of increase in the list of remote services used by the customer.
3. Specifications and features of Internet banking.

Ergonomics solutions and the degree of security provided a positive impact on the end user experience and yet are not determinative in assessing effectiveness.



Picture 8. Coefficient of popularity of RBS channels[16]

Despite the attractiveness of internet banking (bar chart 3) financial benefit from its implementation is far from obvious. But perhaps, to introduce a system of

[16] CNewsAnalytics, «OTR» 19.01.2014

online banking for individuals and unprofitable investments should be directed towards the discovery of additional office?

To select a strategy services to individuals bank must determine the direction of development of the RBS. Although the financial performance of individual areas seem one of the most important selection criteria, currently the choice of Internet banking in the Uzbek commercial banks are rarely calculated. This is partly due to the fact that, according to experts, most banks do not measure the effectiveness of work with individuals on a scale of individual bank branches. But RBS, in fact, is the same additional bank branch, only virtual.

Therefore, it is important to compare the efficacy of internet banking with a "classic" the customer service in department of the bank.

Speaking on effectiveness evaluation, usually distinguish two trends: a comparison of planned and achieved economic effect (for example, profit from the use of the system for a given period of time) and the assessment of the current overall performance (cost of customer service, profitability, etc.).

Estimating the net profits from the internet banking system – is a difficult task because, as a rule, the main income of the system brings indirectly. Direct revenue (system usage fee) usually has little or no, although it depends on the particular bank client policy. In addition, the approach to assess of the effectiveness of earnings is generally unacceptable for Internet banking systems, operating in the information mode, in other words, providing customers with free services. Profitability of such systems is caused by savings in costs of other units, but there is no profit from it.

There are the following steps with operations through Internet banking:

1. Filling in the blank document.
2. Sending it to the bank.
3. Checking the document.
4. Unloading document ABS.
5. Holding a document in ABS.

If "classical" service in the department:

1. Filling in the blank document.
2. Transfer of processing operator.
3. Checking the document.
4. Retyping it in the form of a document ABS.
5. Holding a document in ABS.

Table - 3

Comparison of the cost of operations[17]

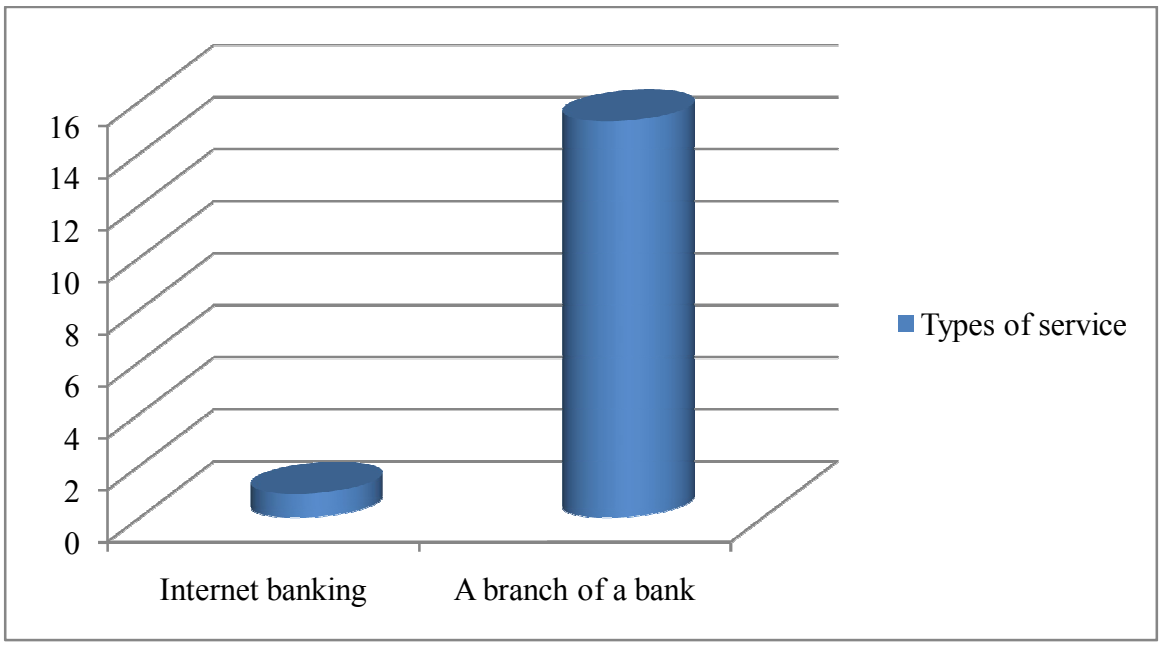
	Description of operation	Cost in internet banking	Cost in a branch of a bank
1	Filling in the blank of document	0	0
2	Sending to the bank / transfer processing to operator	0	0
3	Checking the document	0	At least 1 operator
4	Unloading / reprinted in ABS	0	At least 2 operators
6	Holding a document in ABS	0	0

For comparison, the direct cost of their operations is in table 2. Replicated industrial internet banking system individuals developed a specialized company immeasurably more economical and more convenient than traditional methods of service.

Particular interest is a comparison of the costs of the bank on the performance of a single client operation in the case of Internet banking and the "classical" service.

Thus, the operation cost in the case of Internet banking is 16 times lower than in the conventional client service department, as shown in the diagram - 2. Holding payment document requires constant involvement of human and material resources.

[17] The table was compiled by the student.



Picture 9. Cost of operations carried out by traditional and remotely[18]

The use of the automated system of online banking is economically justified: as require smaller monthly costs and lower investment. The introduction of internet banking – is a contribution to improving business efficiency, bringing noticeable dividends.

Replicated industrial internet banking system for individuals developed by specialized company is immeasurably more economical and more convenient than traditional methods of service. Besides a number of intangible benefits that are important to the bank's customers (time savings, ease of calculation, a minimum of effort to make payments, accuracy and control of operations, etc.), they improve the economic efficiency of the bank, thus providing it with a direct financial benefit.

For calculation of cost of operation in the case of "classical" service method is used TD ABC (Time-Driven Activity-Based Costing):

$$C_{branch} = t_{on} + C_t, \text{ where}$$

C_t - operational time;

t_{on} - cost of 1 hour of working time in the office

[18] The diagram was compiled by the student.

Example of practical calculation:

The number of clients (10,000), the presence of 30 banking products in system and the efficiency of use of the system (here 0.5, so as for one month the system uses only half of the clients) get:

$$C_{IB} = \frac{4746,67}{1000 \cdot 30 \cdot 0,5} = 0,032 \text{ USD}$$

Through "classic" services:

$$C_t = \frac{7500}{5 \cdot 22 \cdot 8 \cdot 80\%} = 10.65 \text{ USD}$$

When the operation time 3 min:

$$C_{branch} = \frac{3}{60} \cdot 10.65 = 0,53 \text{ USD}$$

Exploring different concepts of remote banking services were made the following conclusions. System for remote access to banking services are implemented through the provision of these services to the client's request without direct interaction with an employee of the credit institution through various channels: using a computer with Internet access (Internet banking), stationary (telephone banking) and mobile phone (mobile banking), ATMs and self-service terminals.

Certain layer of the banks' customers, for which remote communications are becoming more common means of communication with the credit institutions, has already appeared. None of them is very old and very young, as a rule, these are people from 20 to 50 years, formed a positive opinion about the convenience and security of mobile and internet communications for financial transactions.

2.3. Problems and prospects of internet banking, security systems in various Webs

Based on the statistics today 50-60 thousand people in Russia are fully using Internet banking. For comparison, Wells Fargo (U.S.) serves 4.2 million people through the Internet, Swedbank (Sweden) - 1.5 million, Nordia (Finland) - 1.2 million in First direct (UK) - Just over 1 million "ING Direct"- a brand of remote servicing bank ING (Netherlands) at the output of the UK market for 6 months acquired 250 thousand new customers. Compared with these banks it can be said that in Uzbekistan internet banking doesn't exist. What is the cause of such discord in numbers? Because the benefits from internet banking are visible with the naked eye. Internet banking allows individuals at any time of day, seven days a week, 365 days a year from anywhere in the world to make the majority of banking operations: conduct cashless intra-and inter-bank payments, open accounts, make utility payments, to buy and sell currency, allocate available funds on time deposit, receive account statements and usage of other services. For example, in the Russian Bank of Moscow a traveler's check can be booked over the Internet, and Citibank acquainted with individual payment schedule for the loan. There is no need to embarrass, usually, time to go to the bank branch, fill out by hand and standing payment order in the general queue. But despite the general objectives and principles in different banks online service is different.

What hinders to the development of Internet banking for private clients in the CIS countries in general and in Uzbekistan in particular? It is considered that the development of Internet banking undermined by a number of factors, including: lack of trust in banks, low income, technical illiteracy and lack of internet penetration. But analysts of international calculations show that only in Moscow - not less than 700 thousand Internet users are with an income of $ 1,500. Coverage of at least 20% of them would bring millions of dollars annually to banks and more risk-free profits from commission operations, maintenance fees, as well as cross-selling other bank services, the need for which arises from customers already in the service process.

In fact, there are other, more important factors for restraining the development of Internet banking: low attractiveness of services to customers and lack of attention to the promotion of Internet banking by the banks themselves. Many online banks are no templates for utility bills, have not been established contractual relationships with popular companies - the recipients of retail payments, after the introduction of new services simply did not printed booklets and not properly informed customers. A simple example: the Russian market over the past two years, the owners of bank accounts can make cashless payments for goods and services without the sales tax, but no one, except, perhaps, Guta Bank, not to bring the benefits of this important information to their online customers.

As indicated above, in a household under the understanding Internet banking refers to conduct banking transactions without the customer's visit to the bank (based on instructions transmitted from a distance). Modern forms of remote banking, which will be discussed below, began to develop relatively recently with the advent of personal computers, new means of telecommunications and various other technologies.

Services through mobile technology in the bank attract a large number of new customers. This is due to the emergence of trust in banks, offering wide range of services, including remote control account. Instead of "Client- Bank" which is used for a long time in the banking market, there are such products as customer service via telephone (including mobile), and the global Internet.

The term "Internet Bank" refers to systems that deliver banking customers access to accounts and general information on banking products and services with a personal computer or other device to the processor. Products and services "Internet Bank" can include wholesale products for corporate clients as well as retail products for individual consumers. Ultimately, the products and services provided through the "Internet Bank" can duplicate the products and services provided by other delivery channels of the bank.

Currently, there are three basic kinds of "Internet Banking", which are used

in the CIS:

Basic level of "Internet Banking" - *informational*. This is a common case: the bank has marketing information about banking products and services on a dedicated server. The risk is relatively small, since the bank server and the internal network are not connected. This level can be provided by a bank or charged to an outside firm, so you need to implement control procedures to prevent unauthorized changes to the contents of the bank's server or Web site;

Communicational system type of "Internet banking" that allows for interaction between the banking system and the client. This interaction may be limited to e-mail asking about the status of the account, apply for a loan or updating of static data (change of name or address). Since these servers may have access to internet bank risk in this configuration is higher than at the information level. It needs appropriate control to monitor and prevent any unauthorized attempts to access the internal computer systems and networks in the bank;

Transactional level of "Internet banking", allowing customers to perform transactions. Since, as a rule, between the server and the internal network of the bank there is a connection, this structure is the most risky and should be monitored intensively. Clients' transactions may include access to the accounts, pay bills, transfer funds, etc.

Each newly created system has its own problems. In Internet banking, of course, these problems are more than enough. Part of them related to the specific banking, part is due to uniqueness of the Internet. Among these problems it has organizational, financial, technical, human, legal, and even social and psychological. We will discuss only on some of them.

Legal problems of Internet banking were discussed in the first chapter of the thesis.

Technical problems. Several major technical problems.

The first is the implementation. By the usual difficulties are added those which associated with the choice of instrument and software technology. There are a

lot of debates on what to prefer: Java, ActiveX. HTML or something else? Yet at the forefront should be placed not "advanced" product, and the convenience of customers, otherwise why do this entire garden fence. Old proven technology no longer meet the requirements of today (HTML - the most glaring example), forcing manufacturers to seek and try out new tools. Secondly, the creation of the desired configuration. The difficulty lies in a huge variety of software system for Internet systems. This is also the problem of choosing a Web server, proxy server, firewall, mail server, FTP- server, etc., etc. Add to this the number of companies - manufacturers of similar tools and you will understand that the task of installing and configuring required operating the equipment and software is not trivial. Because of this, they are usually begun to dominate the human and financial approaches: preference for systems that are either familiar to employees of departments of automation, or will be easier to learn, or specialists who will manage the bank cheaper. By the way, why software company Microsoft has a good chance, because we know that experts in the field of Unix are less common and the labor market are more expensive.

Security problems in the Internet banking system. For electronic services offered by the Internet, the issue of security is a high priority communication. Modern cryptographic technology allows us to reduce the risk to almost zero.

Security system "Internet Banking" is guaranteed as the hardware and in software. Through the use of certificates it becomes possible to use the protocol SSL 3.0 (Secure Socket Layer), which guarantees the highest degree of safety. All data is encrypted and forwarded: as information sent by the client to the bank and the bank forwards the client. In this case, the communication technology used asymmetric cryptography (public-private key length of 1024 bits). Security is, in turn, provide the most advanced technology of symmetric cryptography: Use session key (unique for each session) with a length of 128 bits.

Establishing a secure connection can be presented in a simplified form as follows:

- A server of a bank sends its certificate to the client's computer;
- The client's computer authenticates the certificate of the bank;
- The client's computer receives the certificate of the public key of the bank;
- As bank certificate contains information that is used in protocol SSL, the client's computer selects a 128-bit encryption algorithm;
- The client's computer generates a session key that will be used to encrypt messages;
- The client's computer encrypts the session key with the public key of the bank (obtained from the certificate) and transmits it to the bank server;
- The server of the bank uses its private key to decrypt the session key.

In order to understand the principle of asymmetric encryption using keys, asymmetric and symmetric cryptography should be compared with cryptography, symmetric key using the method that has been used for centuries and is used now. Symmetric Cryptography suggests that there is some secret code (key), which serves both to encrypt and decrypt messages.

This method, however, is not perfect:

- There must be a way to secure the transmission of a secret key, because if the key will no longer be a secret, all correspondence will cease to be safe;
- Both parties must trust each other and be sure that none of them will not give the key in the wrong hands;
- There is no way to check whether this cryptic message came from the sender.

The system is constructed in this manner that it has many advantages. So, there will not be any problems with secure key transmission and storage of its secret: who has the public key can only use it to encrypt messages. Its owner with the public key cannot decrypt any message intended for the owner of the key and he cannot send a message to another recipient, posing as the owner of the public key.

Inconvenience asymmetric cryptography (method public - private key) is its complexity and, consequently, low productivity. Therefore, modern cryptography uses a mechanism that combines the advantages of both methods. Connect using

asymmetric cryptography technology (closed - open key length of 1024 bits). Thus, encrypted and forwarded to the 128-bit session key (unique for each session), which serves to further secure the transmission of messages are encrypted using symmetrical cryptography.

Practical work security. A client using a standard browser (eg, Microsoft Internet Explorer 6.x, 7.x), comes to the bank server with the system "Internet Banking". As configured appropriately server has a certificate (for example, VeriSign), specifies the connection method using a 128-bit session key. The server checks the client's certificate issued by a bank. The client chooses from a list of certificate, which he would use (it may be several certificates issued by different organizations) and enters the PIN-code. Certificate data is transmitted to the bank, where they are compared with the data stored in the database.

After successful verification and security communication channel page will be loaded for registration - the ID and password. After the encryption password is sent to the bank and there will be compared with the password stored in the database. After successful verification password client gets access to information about their accounts.

All packets transmitted coded disposable 128-bit session key, and each transaction is signed by electronic signature contained in the client's certificate. In the case of triple input incorrect data (ID and password) access to the system "Internet Banking" is locked and requires a personal touch with the appropriate branch of the bank to release the lock.

Based on the foregoing, we can confidently say that the protection systems of this class is very reliable and "hack" it is not possible. However, after the introduction of this system in the bank should restrict the access for bank employees for classified information, register in their job descriptions of rights and responsibilities, manage the system and its administration.

Choosing a system for Internet banking of a developer, it is important to get acquainted with the system laid down in the structure and the using technology.

That technology defines the key performance indicators of the system, including financial. Below we will consider the general principles of Russian technological systems "Client-Bank" used to provide Internet banking services.

There are three main solutions for the implementation of the transaction between the customer and the bank's database using Internet technologies.

1. "Naked Web" - this scheme falls under the definition of "Cranky customer". The interface is implemented on the basis of HTML, as Protocol - HTTP over SSL. The client uses an ordinary Web browser. The bank installed Web server to execute Web applications, which, on the one hand, dynamically generates HTML- pages for clients, and the other - communicates with the database server.

2. "Web + Software" - to solve the problems described above, many developers began to offer customers special programs or modules for Plugin-specific version of the Internet browser. This creates new challenges: conducting installation and configuration of specialized software on the client and the need for periodic updates of the software. As a result - the creation of a group of employees in the bank for customer support and the additional costs of the bank for the provision of such Internet banking. As a result of Internet banking turns into conventional "thick" "Client-Bank" through the Internet.

3. Application of Java-applet - a function of the client's program executes Java- applet loaded in the Web browser of the client. The entire user interface is implemented in Java-applet, on-screen and printed forms of documents, reviewing the final documents, secure communication protocol with the database server, data encryption, mutual authentication, the generation of crypto mechanism EDS financial documents and exchange of financial documents with automated accounting systems. All that the customer needs to have to work in the system is a computer, a browser and Internet access. To reduce the load time of Java-applet it can be used the built- in Web browsers with mechanism SoftUpdate.

Recently, for the most user-friendly interface for that is applied technology Microsoft ASP (Active Server Pages). Dimensions ASP- pages in most cases

measured in kilobytes, and the functional capacity of the system is achieved by adding new pages to the Web site.

No matter what scheme is used to implement the client side, the entire Internet banking system typically consists of the following modules:

- *Client part of the system* - an Internet server installed in a bank that "attend" the bank's customers to perform transactions in the system and where the protocol is implemented for secure communication, encryption and digital signature mechanism;
- *Back office - the database server* stores all documents and public EDS keys of clients, all the information about clients and directories. Usually allowed to use any modern industrial database server - Oracle 8, MS-SQL 7, Progress, IBM DB2. Back-office within the existing terminology systems “Client-Bank" is part of the banking system, where the initial registration of clients’ accounts definition, authority and where there is the data of repository containing detailed information about the client, as well as directories used by the client at the work;
- *Gateway to the automated banking system (ABS)*, which provides data exchange between systems. Usually supported by work with ABS in batch mode, real-time and the combined use of these modes. The most common form of interaction with the ABS is exchange text files predetermined format.

Internet banking has two basic forms: passive and active management of information. In the first case, the client receives one or another information of bank account, but cannot manage them. Active management involves operate the account in real time.

To work with the customer service is readily available - enough to connect a desktop or laptop computer with any modern operating system (Windows, Linux, MacOS, etc.) and any Web- browser (PC, Mac, Sun, etc.). Requirements for Internet channel are minimal - for comfortable work need only Dial Up (Internet access via modem or a dedicated channel) or GPRS- connection.

We should be very careful about the content of the contracts for internet

service. They should be carefully and meticulously described the responsibility of the parties, for example, in cases of loss of customer orders during data communication channels due to the failure of various technical devices.

Advantages and prospects of development of Internet banking are obvious. As the head of an Internet project Bankir.ru M.Lapushinsky "Internet banking - one of the clearest examples of the application of new technology, which lets banking services to a new level. Significantly faster, more reliable, safer and more convenient than before. Particularly relevant and in demand becomes internet banking in the development of retail services. Generally the pace of life is accelerating so quickly that many bank customers feel the need to have round the clock access to the management of their finances. I think in the near future this technology will advance rapidly in the banking business"[19].

Based on the foregoing, we can identify the following advantages of internet banking for commercial banks.

1. Saving and optimization of costs

- Consolidation of all customers (as the head office and all branches) within a single Internet banking system, installed, usually in the parent bank, reduces the cost of equipment, system software, IP- security facilities, Internet channels, administration and maintenance service;
- Reduction of cost of retail operations 5-10 times: the cost of the transaction through a branch of the order of 3-4 dollars, and online - no more than $ 0.5;
- reduction in costs associated with the protection and collection of cash, rent and maintenance, the necessity disappears;
- Making payments by the bank in favor of third-party providers are compensated at a rate of 2 - 3% of each transaction.
- Growth in fee income, which consist of fees for money transfers to the third parties outside the bank and internal transfers, charges for connection to the system and maintaining accounts for issuing cards with disposable keys;

[19] www.bankir.ru Date of publication 2013.03.02

- Reducing the time required to process a document with operator online. Instead of 8 minutes spent with operator - about 1 minute through online banking.

2. Growth in the number of users of Internet banking increases in average balances on customer accounts, as it is unprofitable for users immediately "reset" plastic card account after receiving the salary, because it can be carried out quickly enough her current payments.

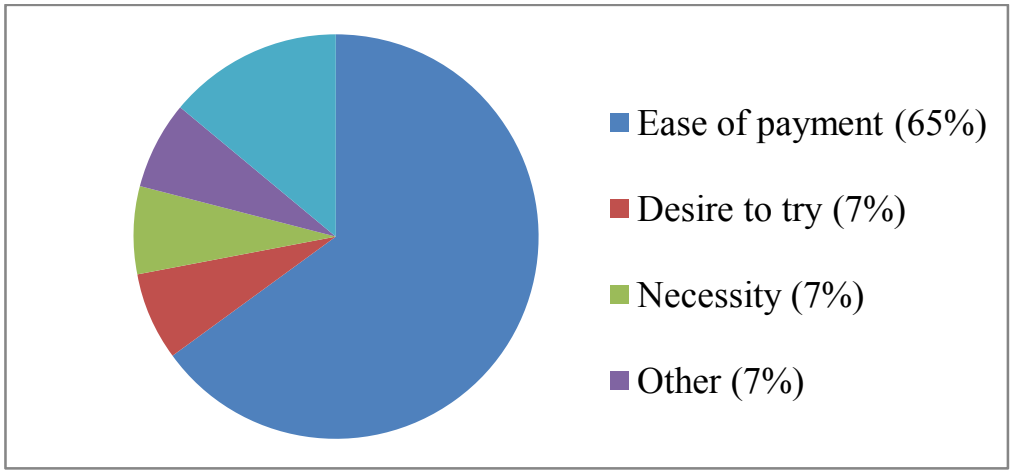
3. Online users are more loyal than "classic" client - caller, once to join a particular remote service (provided that he likes it), in the future is almost impossible to give it up and go to the service to a competitor.

4. This service gives an opportunity to a young and dynamic bank to carry out transactions even without creating a branch network on behalf of clients and expand this customer base as well as the list of services.

The benefits of internet banking for customers of a bank:

1. Working with the accounts around the clock;

2. Fully automated, standard operation (no necessity to introduce additional parameters of the recipient of the service charges, for example, for mobile services - only the phone number and amount). Reasons to use internet banking are shown in the pie chart - 1.



Picture 10. Motives for users of Internet banking, %[20]

3. Saving time by not having to spend it in queue, as well as time-saving

[20] www.bankir.ru, «Financier»

reference for issues that customers are staying in queue more often to a call-center bank (operations are grouped into groups, intuitive and simple interface, watertight);

4. Ease tracking of operations with bank cards (full payment history from the time of activation, the list of planned transactions, information outlets and ATMs, which debited) - any purchase immediately reflected in account statements, thereby increasing the degree of control the client;

5. Lack of territorial restrictions - the ability to make transactions from any computer, anywhere in the world where there is access to the Internet;

6. Low fee: connection to the internet service is free. In some cases, banks charge a fee for connectivity (USB- key, map variables codes), but as a rule, the price is low. The subscription fee is either absent or is a symbolic amount. Fee for some services (utilities, providing communication) may also not be applied;

7. Possibility to use the services of online stores both in the country and abroad on a completely safe level: it is enough to transfer the required amount of money on the card via internet banking system, and then use this card to pay for any service or product at online store;

8. Security of operations:

- Security system as a whole consists of several components: 1) authentication and authorization (confirmation that the user of the system is really is who he says he is, and check the user's rights to commit any of the operations, 2) data encryption, 3) usage of EDS or other analogue of a handwritten signature (transaction confirmation of authorship and the integrity of its data, as well as acts committed by a particular user), 4) the registration of all transactions in special journals and audit of the bank;
- Access to the personal page protected by a unique customer ID and password that is provided after registration for access to on-line - services which is carried out by an additional password (PIN2) and passphrase known only to the client.

CHAPTER III. ANALYSIS OF REMOTE BANKING SERVICES IN DIFFERENT COUNTRIES, AND WAYS OF IMPROVEMENT OF INTERNET BANKING IN THE REPUBLIC OF UZBEKISTAN

3.1. Features of Internet banking in the developed countries and the CIS

One of the fastest growing RBS channel operating on-line is the distribution of products and services via the Internet.

Internet banking does not change the essence of the banking business - attraction and allocation of financial resources. Changing and improving the only form of service delivery. His appearance helped the development of new technologies that allowed commerce to penetrate the Internet. Quite logical after the onset of online shopping and Internet portals that provide a wide range of services, was the creation of online banks.

There are two possible implementation of this type of activity: first - a classic bank, which has its offices and operating rooms and enables clients to manage their accounts via the Internet. The second – so called "virtual" bank, which operates only in the global computer network. The principal difference between them is that the "virtual" bank attracts and serves customers exclusively through the network, and the client is completely deprived of contact with his front office.

Currently in the world of online business exist following models: Internet division of a traditional (off-line) of the bank branch network, supplementing the call centers; internet bank, established offline bank as a separate legal entity with its own brand, a virtual bank (analog internet Bank organized a non-banking company - mostly insurance or technological); aggregator electronic financial supermarket (bank performing web- selling both its own and other financial institutions offered services).

All payments are held in chains between the seller and the buyer, in one way or another are connected with the banking institutions. Strictly business opportunities remittance from one subject to another and is the first function of

banks. Initially in Russia to provide this service in Internet banks have set up special systems that serve such means of payment as a plastic card (eg, CyberPlat, Instant!). Recently, for the organization of payments between the parties banks provide clients with access to their accounts directly through the Internet.

Banks activity is limited with not only payment organizations through the internet. Some of them provide brokerage services (Internet Trading) and allowed to obtain a loan directly through the Internet. And it already belongs to the second function of banks - financial intermediation of the first type. With regard to the third function of banks, financial intermediation of the second type, when the banking organization acts in the role of issuing paying agent or underwriter, here is theoretically possible presence of banks in the Internet. Namely, the dissemination of information about the IPO and the organization of the primary market sales of shares through the network.

Opportunities and working principles of the various systems. In considering each system in this review we will focus on three basic characteristics:

- Functionality of the system, i.e., operations that may make the client;
- Security system;
- System of usability (user interface) and connection conditions.

Users' surveys and analysis by experts show that these three factors play a major role for choosing of the system of one or another bank.

Internet banking is associated with the emergence of the Russian **Autobank**. This bank was the first to offer its clients access to their account through the Internet in May 1998. System for providing Internet banking is a private development of specialists of Autobank - system "Home Bank". It was organized for service exclusively to individuals and provided the client with the following features:

- Buy and sell currencies;
- Pay for utilities (except accounts Mosenergo MMT);
- Transfer money to their accounts in rubles and foreign currency;
- Make interbank payments in rubles;

- Pay bills for providers, cellular and paging;
- Allocate funds to deposits in rubles;
- Allocate funds on deposit in U.S. dollars;
- Charge account cards;
- Receive statements for all of your accounts for any period of time;
- Monitor and manage the funds received on account.

To work with the client system we need access to the Internet. It is required to use MS Internet Explorer 5 (or the latest versions) as a browser. The client software is a component MSIE5, which is installed automatically the first time a user accesses of the server system. For identification of the client a key element of memory "Touch memory" is used, which is read by the adapter, connected to computer via COM or LPT port. This element contains information about the client's - name, password to enter the system and the information needed to work with EDS, - cryptographic keys.

To get started in the "home bank" you should open an account in Autobank (this can be done at any branch). Then you need to pay for an adapter and a memory element, which total value is 570 rubles. Equipment can be gotten in the central office in Moscow Autobank within two hours after the payment, or in any other department within two days. All transactions in the system are free of charge, except for interbank payments, the value of which are 0.1 % of the amount and credited to the account of non-cash ruble funds - 0.5 % of the amount. Purchase / sale of foreign currency using the exchange rates of currencies Autobank's discount is 0.3%. The annual fee is 400 rubles.

The second bank to offer Internet banking was Guta Bank (**http://www.guta.ru/**). Telebank system using to provide this service was developed in 1997. Initially the client could manage his account by phone and through the operator -hour online service, then the opportunity to access their account via the Internet. The main aim was to create convenient mechanisms for clients to pay for utility and telecommunication bills. The system is oriented to

individuals. The main attention was paid to the development of the system simple and easy to carry out operations.

Telebank system allows you to:

- Conduct all utilities;
- Pay bills for communication - Intercity (MMT), MTS, BEE LINE, MCC, SONET, Mobile Telecom, MTU Intel, PTT Teleport, Data Force Ai Pi, Elvis Telecom, and others;
- Pay for services - satellite TV (NTV+, Space TV), security, parking, intercom, training, etc.;
- transfer funds to pay bills for goods, including those purchased through online shops;
- to make remittances, including in foreign currency;
- buying and selling foreign currency;
- allocate funds in fixed deposits account in the System Telebank;
- replenish your plastic card account in the System Telebank;
- transfer funds from the account of plastic cards in the system Telebank;

To register in the system Telebank, the client must have an account in Guta Bank. Paperwork for opening an account can be made at the office of the bank, and using mail. Then the customer must pre-register for UNK - filling the registration form and registration of necessary documents (documents submitted to the site) that the client sends to the Bank by registered letter. Afterwards the installation of software will be held to generate a digital signature. The client downloads the software from Web-site, providing your UNK generates a secret key and file a request for a certificate request file transfers in the processing center Telebank. In turn, the bank sends the client certificate, on which will be identified the user in the future.

To work with a digital signature is used a program "Inter-PRO" Company "Signal -Com". This program is based on the protocol SSL, which is complemented by domestic cryptographic algorithms. Program "Inter-PRO" provides strong

authentication (authentication) client and server bank, strong encryption and integrity of the transmitted information. Also, the program "Inter-PRO" enables customers to certify their own digital signature financial documents submitted to the HTML- form.

Registration in the system is free, subscription fee - $ 1 per month. Holding payment of all bills is free as well; foreign exchange and money transfers to other banks will be performed - in accordance with the tariff plan.

Development of Internet banking systems **in the West** was a logical continuation of the development of technology home-banking (which is not the CIS countries - developing PC-banking and Internet banking, we are almost parallel). Home banking service in Western countries appeared in the early 80s, while bank customers were able to give orders for transactions by telephone. Then they began to provide the services for remote management account using a personal computer, which is connected with the back-office of the bank through a direct modem connection. Building up their higher-interest Bank of the West Choice Money Market Savings account balance with recurring monthly transfers from customers' accounts at other institutions. Conveniently transfer money directly to customer Banks of the West account from their accounts at any other bank

The first systems to manage the account via the Internet appeared in 1995. In the same year opened the first virtual bank. October 18, 1995 was established American bank SecurityFirstNetworkBank, which had no physical office to work with clients. Opening a bank account and is accessed only through the Web-site of the bank. During the first half year of existence of the bank average capital gains of 20 % per month, assets grew to $ 40 million, was discovered more than 10 thousand customer accounts.

In Europe, the first virtual bank was AdvanceBank, a subsidiary of banking group Dresden (Germany), which began operations in 1996. Below is a list of all virtual banks, which are registered in the United States.

Table – 4

List of major virtual banks in the U.S. [21]

№	The name of a Virtual bank	Date of creation
1.	BankDirect	1999
2.	CompuBank	1998
3.	DeepGreenBank	2000
4.	directbanking.com	1999
5.	E*TRADE Bank	1997
6.	ebank	1999
7.	everbank.com	1999
8.	FirstInternetBank	1999
9.	First-E	2000
10.	giantbank.com	2000
11.	JustBankIt.com	2000
12.	Lighthousebank.com	2000
13.	MilleniumBank	1999
14.	Moneywise-bank.com	2000
15.	MyBankUSA	2000
16.	NationalInterBank	1999
17.	nBank	1996
18.	NetBank	1996
19.	NexityBank	2000
20.	PresidentialOnlineBank	2000
21.	SecurityFirstNetworkBank	1995
22.	UmbrellaBank	2000
23.	USAccessBank	1999
24.	VirtualBank	2000
25.	WingspanBank	1999

At the moment, Internet banking service in the West is one of the most dynamic segments of e-commerce. Even now we can talk about the formation of this market sector services - about 80 of the 100 largest banks have Internet banking

[21] The table was compiled by the student on the basis of data online.

service. Total in the world today there are more than 1,500 banks offering their customers the ability to access their account via the Internet. According to the report of the analytical company Fitch IBCA share of customers of the largest European banks using internet banking services, more than 10 %: SE Banken (Sweden) - 380,000 customers (25 % of total customers), MeritaNorbanken (Finland / Sweden) - 1,030,000 (15%), DeutscheBank (Germany) - 650,000 (8 %), Barclays (UK) - 540,000 (4 %), BSCH (Spain) - 500,000 (2%). In the U.S., almost all major banks have Internet banking service, including Citicorp, BankofAmerica, WellsFargo, BankOne, FirstUnion.[22]

Virtual doors of the first Internet bank were opened on October 18, 1995. The Bank is a fully virtual in the sense that it has no physical separation to work with clients, all banking operations are conducted through the Internet. The only exception - is the communication of the client and the bank personnel, using phone in an emergency.

Web- site **Security First Network Bank (http://www.sfnb.com/)** is the main and the only branch of the bank. The site provides information about the bank and its services, which provide information that may assist the client reasonably choose the type of service. The most convenient way, particularly financial calculator is configured using the CGI- technology. Calculator to input information (time, and the amount of the required yield, the initial amount, etc.) can calculate the nominal and real yield, the optimal solution for the accumulation of funds, etc. It is also possible the provision of information in a graphical form (graphs of different functions).

SFNB provides the same services as a regular bank, including the granting of loans, the ability of mortgage and lease lending. The bank's client can open any account: demand deposit, time account, savings account, card account (debit and credit), certificate of deposit, and others. Each of the products of the bank set aside a separate section of Web- site, where the client can get acquainted with the services

[22] www.fitchratings.com Date of publication 2013.22.09

provided, to obtain the corresponding rates and if you want to purchase this product (to get a bank loan, open a bank account, etc.). To obtain a loan customer you must fill Web-form, which states the borrower's personal information, social security number, and the data relating to the transaction - the amount, period, in the case of security for a loan or mortgage lending leasing. Usually to confirm the transaction, the customer must phone to the bank staff. To open an account you need to fill in Web- application and transfer money to the account.

Wells Fargo (http://www.wellsfargo.com/) Bank was founded in 1863 and is currently seventh in the list of the largest banks in the world. Since early 1998, the bank became actively provide online services.

Web- site of the bank consists of four main sections: services for individuals, small businesses, medium and large, the information about the bank. With regard to the last two sections are presented here only information resources. In the first two sections of the Web- site visitor can perform all banking operations.

For individuals, the bank provides the ability to open different accounts via the Internet: demand deposits, savings, brokerage account, and time account - issuance of certificate of deposit. Opening an account takes about 10 minutes, during which the prospective client answers the questions, fill Web- form - the type of account (You can open more than one), personal information, social security number and driver's license, place of residence, place of employment, annual income and more more. After opening the account, the client receives a login and password to access the Internet banking system. In addition, the Web- site of the bank customer can apply for a loan. There is the possibility of getting a simple loan, line of credit, mortgage lending and leasing, etc. To do this, fill out Web- profile, and for its design the client can calculate various indicators through financial calculator.

Internet banking system contains four main sections. The first displays general information about the status of the account, cash flow statement for the period. These data can be exported to a client program for managing personal

finances Microsoft Money and Quicken. The second section (paying bills) provides the ability to pay for different types of accounts: utilities, communications, training, insurance. To transfer funds to any account, the customer must enter it into their database, and then selecting it, and specify the amount of the personal account from which the transfer will be made. Accounts shall be free of charge for a minimum contribution that is assigned to each client account. The third section of the system allows you to make transfers between customers' accounts - simply specify the two accounts and the amount. The fourth section is settings. Here the customer can change the password, open a new account, etc. All of these actions are carried out by filling the usual Web- forms.

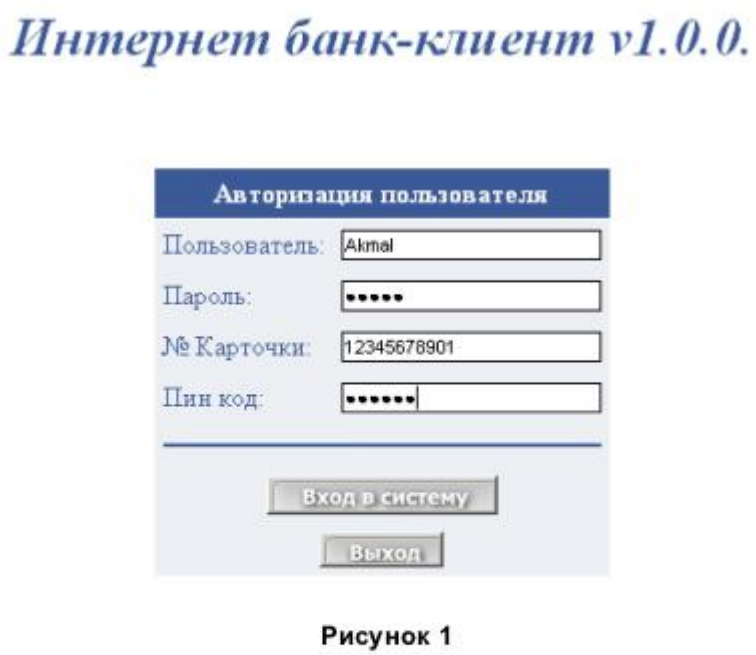
In the section designated for small businesses, legal entities can take advantage of online banking services: open an account and get a different kind of loan. Lease financing may consist in the fact that on the Web- site of the bank to the customer the opportunity to purchase computer equipment and software with partial payment. In the Internet-banking entity can perform the same operations as the physical, except to export data to Microsoft Money and Quicken. The system also makes it easy to pay taxes. Login can be adjusted to different levels of users with different features.

The Open Joint-Stock Commercial **"Aloqabank" (www.aloqabank.uz)** was established by the Ordinance of the Cabinet of Ministers of the Republic of Uzbekistan under No. 502 of the 12th October 1994, purposed to provide economic support to the enterprises of the Uzbek Communications Agency and small- and medium-scale business entities**.** OJSC "Aloqabank" together with the company «CLICK» allows cardholders of the bank to pay for various services in real time via the system "CLICK". With this system you can make payments via mobile phone (via USSD\SMS- portal) or the Internet (via the Web \ Web-mobile) services for mobile operators and Internet service providers, transfer money to other individuals, trade and service enterprises (purchases in supermarkets, restaurants and payment in the cinema); do online shopping in online stores directly from your bank account.

OJSC "Aloqabank" implements project financing of investment projects directed to the construction of new and enlarging, modernization, extension of production (including acquisition of equipment, materials, and samples of new items, other tangible properties and technologies). Bank finances economically perspective, cost efficient projects.

The uniform server of remote bank service provides:

- Uniform mechanisms of integration, constant integration and compatibility of systems at change of versions is regulated by long-term agreements between Bank and Client;
- High efficiency and reliability, including due to own system of loading distribution.



Picture 11. Login to the system of "Aloqabank"[23]

[23] www.aloqabank.uz

Internet banking - convenient service from "Aloqabank" allowing to pay for services from any computer at home or office, thus saving the time to visit bank branches. Many payments are instantly and without commissions, which saves money and more.

- With ready-made templates of the bank you can pay for the services of mobile operators online mode and without commissions;
- Television services and landline phones;
- Internet providers;
- Utilities and mobile operators.
- View detailed information about the status of the account:

Рисунок 3

Также можно просмотреть всю историю платежей, для этого в левой части экрана, выберите в меню, пункт «Движения». На экране отобразиться форма в виде отчета (рис. 4.).

Рисунок 4

Также тут можно выбрать период интересующих вас платежей. Для этого заполните поля «Дата с ...», «Дата по ...», выберите «Счет клиента» из выпадающего списка и нажмите кнопку «Показать».

Picture 12. View the status of the account[24]

- Information about all receipts and payments made by internet account

[24] www.aloqabank.uz

- Information about the deposit and loan products.
- You can always enter internet banking with mobile phone - Mobile Banking,
- You can save your payments as templates;
- You can get free advice from specialists of the bank.

OJSC "Aloqabank" offers its clients a modern service of remote bank account via your mobile phone. This system allow without having to visit the Bank, regardless of location, as well as at any time convenient for you to receive current information about the status of the account, as well as to conduct banking transactions on the account.

"MBank" Mobile banking - this service allows you to monitor and manage your accounts anywhere via mobile phone without using cash.

At the National Press Center Central Bank of the Republic of Uzbekistan organized a press conference on "Prospects for the development of modern banking services". Widespread adoption of innovative technologies has enabled the creation of the national payment system as soon as possible. The new system, realizing payments between entities in real time, ensures the stability of the financial market. Along with this, the system has a significant impact on the effectiveness of monetary policy, as well as the implementation of national and international payments and cash flow management as a whole. Commercial banks, applying advances in information technology based on a powerful, reliable, high-performance platforms, create new programs, thus continuing to improve IT infrastructure technologies. These processes enhance the competitive environment between credit institutions, enhancing the quality of traditional banking services, and stimulate the introduction of new electronic services. Banks in order to attract new customers, constantly expanding and updating the range of services, becoming a kind of "supermarket" for providing various financial services. With the expansion of market relations, commercial banks have diversified list of services, including developing the retail operations, and increasing the quantity and quality of services offered to customers. Banks are unanimous that modern information technology is

one of the main factors the emergence of new banking services and retail business development.

Remote maintenance is impossible to imagine without ATMs and kiosks. Today, ATM its convenience of use displaces traditional chat client and cashier, acting as a kind of mini- office bank. Currently, not only from ATMs you can withdraw cash, but they can be used to implement various payments for goods and services. In order to convenient for the customers, ATMs are connected to a single information network that allows customers to use their various banks. Currently, throughout the country ATMs and self-service terminals are in the amount of 1466 pieces. Currently, all commercial banks created their own web-sites on the Internet. On these sites is a constant updating of information, including the new services offered and their conditions as well as other information of interest to customers. Through the web-site of the Central Bank provided public online services. Widespread use of mobile population spurred commercial banks to provide modern banking services such as mobile banking (WAP-banking) and SMS-banking. Currently, about 107,000 customers of the banks use this service. In the first quarter of this year, the number of data users of banking services has grown by 50 percent.[25]

The Government of the Republic of Uzbekistan showed prospects for remote banking and adopted measures to promote e-commerce in the country in general, and Internet banking in particular. According to news agency Uzbekistan Today, successful implementation of this government initiative will allow domestic virtual trade move from infancy to larger changes.

First of all, the government approved measures to promote trade with the use of modern computer technology will be used to improve the system of payment of coupon payments and the implementation of the retail and wholesale of electronic commerce. At the same time the focus will be on the introduction into this field of modern technology and advanced IT technologies.

[25]Cbu.uz Date of publication 2013.05.22

Among the trends of development of the RBS in the world are the following. First, the growing activity and the role of developers of specialized hardware and software for remote maintenance needs of individuals, both CIS companies specializing in banking automation and Western developers entering our market. Secondly, the development of the RBS is either in conjunction or in parallel with the development of the same banks from e-commerce organization - payment and trading systems on the Internet. Third, the development of each of the areas of remote maintenance alone and in conjunction with other areas.

Currently, almost all banks in Uzbekistan are developing remote services to individuals in the form of Internet banking or SMS- banking and in the future, their share will grow. After constantly expand the branch network is impossible, and expensive. Therefore, it is the development of network infrastructure and virtual communications will allow banks to territorial expansion.

To date, Internet banking is one of the most promising directions for further development of electronic banking services. One of the important aspects of the use of the Internet is the further development of capital mobility for all types of clients.

The main trends in the development of remote banking services in the Republic of Uzbekistan in the coming years are the introduction into practice of commercial banks' Internet banking, a steady increase in the number of users of Internet banking, increasing the intensity of their use, as well as growth in demand for mobile banking and other types of RBS.

With the development of credit bureaus and practice of digital signature, as well as the improvement of legislation, most banks will be able to lend in a mode on-line, open / close the deposits, as well as meet other integrated customer needs, such as online trading, access to the international currency market Forex, the possibility of doing multiple accounts in a single system of electronic banking services, even accounts in different banks. As additional online services banks will offer advice in the field of investment, minimize risk investments, contracts of insurance.

The plans of most banks - support development of mobile platforms (mobile banking services for PDAs, smart phones).

The main ways of organizing mobile payments using a personal cell phone or smart phone can be divided into two large areas. On the one hand, it will be projects where users will be able to use near field communication technology, which enables mobile phones to work also as "electronic purses", paying with their help, goods and services in retail stores and vending machines. To do this, you just need to bring the machine to a special reader, similar to the POS- terminal cards.

On the other hand, this is full service bank account management using a mobile communications device. After all, in order to remain in direct contact with consumers, modern banks are not enough to have an extensive network of ATMs, branches and voice telephone systems. At the moment, it will be important for users to be able to use the cellular terminal to carry out any operations with your money. Ideally cell should become a universal means of payment, working around the clock in real time.

Statistics show that few leave the house without taking a cell phone, PDA with Wi-Fi or other communications device (and often - a few). More and more people rely entirely on the reliable operation of their mobile devices, so their functionality is growing and they are coping with a growing number of tasks. Mobility becomes very important attribute in people's daily lives, and these "mobile" people want to be able to combine the management of their finances with their habitual way of life - a similar trend is observed not only in the West but also in major cities of the CIS countries.

Promotion of mobile services - the next stage of strengthening the position of the retail business in the financial services industry is going through a period of extensive expansion of Uzbekistan.

3.2. Ways of improvement of the prospects and development of Internet banking in the Republic of Uzbekistan

In order to develop and promote e-commerce in Uzbekistan, development of a draft law "On Electronic Commerce" in a new edition, implementation of one of the most promising projects of information and communication system of our country, the single interactive state services portal my.gov.uz., which is started to operate on July 1, 2013 and implementation of remote banking services to all banks of Uzbekistan illustrate that interactive remote services are bright future of the market economy and one of the main part of our life.

The single interactive state services portal - is a prime example and obvious result of rapid development of information and communication technologies in our country. Consistent efforts to improve the portal leaves no doubt that in a short time all the organs of state power and control will interact with citizens and legal persons in real time.

First of all, the government approved measures to promote trade with the usage of modern computer technology that will be used to improve the system of payment of coupon payments and the implementation of the retail and wholesale of electronic commerce. At the same time the focus will be on the introduction into this field of modern technology and advanced IT technologies.

To promote and installation of clear rules in the new business sector, a new procedure for taxation and accounting retailers offering e-commerce was developed. A procedure of compulsory registration in the Treasury contracts is used in e-commerce for budgetary organizations which is involved in the new trading system.

Despite the fact that Uzbekistan still has a very small percentage of people employed in e-commerce, the positive experience of its implementation in Uzbekistan is already available. So, initiated by the Government on the implementation of the Uzbek Republican Commodity Exchange (UZEX) a single electronic exchange trading system not only led to a marked increase in the turnover of stock trading in the whole country (1.3 times in 2012), but also showed that the

entrepreneurs receive greatest benefits from the introduction of e-commerce through regions of the country: the volume of trade increased almost twice.

According to UNDP experts, the creation of an electronic commerce system will allow the state get the experience of foreign countries, from 20 to 40% of budget savings by reducing overhead and other expenses, as well as reducing the purchase price by 15-20% due to competition.

As for the service of remote banking, as we discovered, involves enabling customers to manage their own accounts through Internet access via secure channels. You can do this would be like with a personal computer and mobile phone.

Absolutely all banks have launched internet banking system in their websites, the websites of some banks can now apply for a loan online, and many banks offer conferencing and interactive services to their websites.

To provide modern and innovative services to customers, as well as increased non-cash settlement "Uzbek Industrial and Construction Bank" has introduced a new service "Mobile municipal inspector"[26].

With the help of the "Mobile communal inspector" bank provides opportunity to pay for electricity, gas, hot and cold water, utilities and other required tax payments directly to the home via their cashiers, which are equipped with mobile devices and terminals.

Immediately after payment of utility services with the customer receives a receipt through thermal printer, confirms the transaction. At the same time accepted payments from the public electricity, garbage and tax fees immediately comes to the client's account. The remaining payments are credited to the transit account of the bank branch, which receives payment.

The following table demonstrates us the number of RB users in our banks and their amount through Internet banking and mobile banking:

[26] News.mail.ru Date of publication 28.05.2014

Table - 5

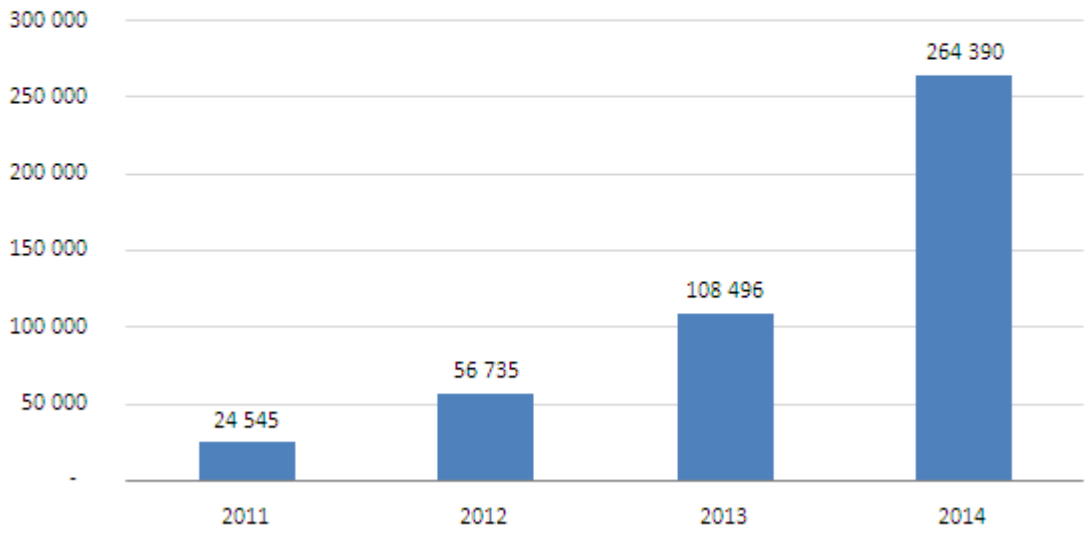
Below is the number of RB users in the banks of Uzbekistan[27]

№	Bank	Internet banking & Bank-Client	SMS banking & mobile banking	Total
1	National Bank of Uzbekistan	5 513	57 957	63 470
2	Uzpromstroybank	2 286	1 664	3 950
3	Agrobank	2 657	858	3 515
4	Ipoteka Bank	3 851	33 811	37 662
5	Mikrokreditbank	3 152	16 094	19 246
6	Khalk Bank	2 980	15 243	18 223
7	Savdogarbank	519	491	1 010
8	Kishlok Kurilish Bank	1 395	10 642	12 037
9	Turon Bank	1 484	2 344	3 828
10	Hamkorbank	7 563	5 532	13 095
11	Asaka Bank	1 896	26 440	28 336
12	Ipak Yuli Bank	3 439	10 042	13 481
13	UT Bank	183	143	326
14	Trustbank	1 765	1 171	2 936
15	Alokabank	1 951	7 766	9 717
16	KDB Bank Uzbekistan	341	582	923
17	Turkiston Bank	320	45	365
18	Saderat Iran Bank	7	11	18
19	Samarkand Bank	6 181	385	6 566
20	Universalbank	562	458	1 020
21	Kapitalbank	3 415	12 721	16 136
22	Ravnakbank	356	83	439
23	Davr-Bank	1 326	293	1 619
24	Invest Finance Bank	1 523	892	2 415
25	Amirbank	22	3	25
26	Asia Alliance Bank	964	1 227	2 191
27	Hi-Tech Bank	318	88	406
28	Orient Finans Bank	570	865	1 435
	Total	**56 539**	**207 851**	**264 390**

Table shows that all banks of Uzbekistan introduced the system of online banking, and only banks. Number of users of Internet banking and "Bank-Client" is

[27] Cbu.uz Date of publication 04.02.2014

56,539 and SMS-banking and mobile banking 207851, for a total distance of all services was 264390 users.

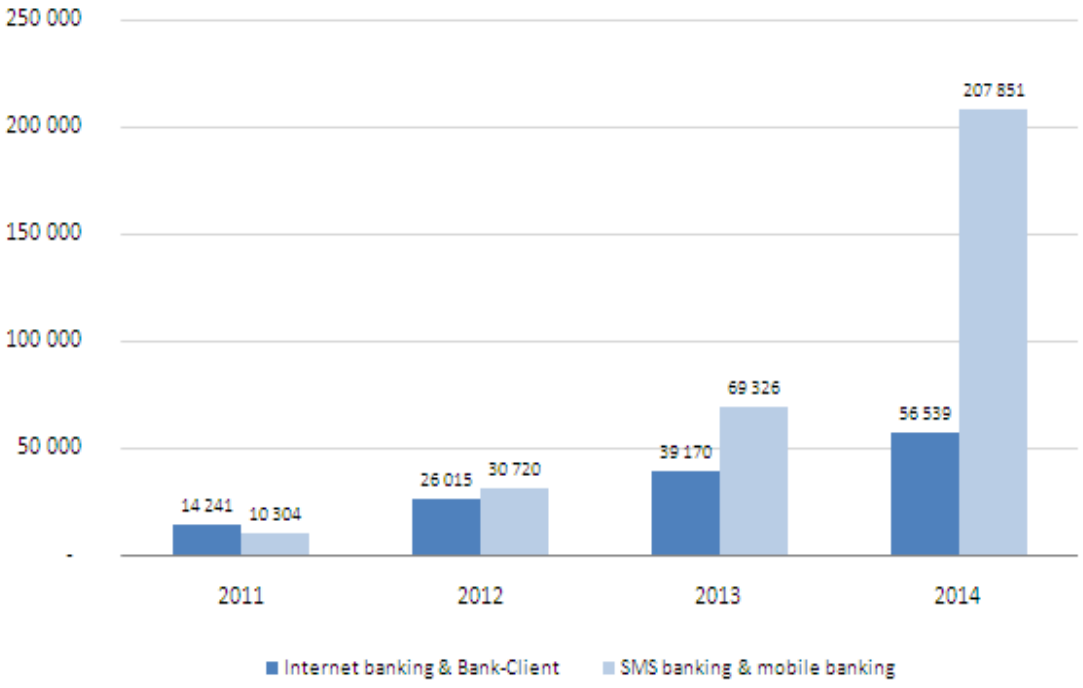


Picture 13. The following diagram shows the number of RBS users[28]

In this bar chart, we can clearly see that in the interval 2011-2014, the RB index users increased by almost 10 times, and on January 1, 2013 was 264,390. This bar chart fully demonstrates that great development tendency of RBS is in our Republic. In order to achieve these indicators was the policy of introducing innovative technologies in the country.

Consumers of banking services especially appreciate the live chat and reliability of the information, so the banks are investing in the development of call centers and IVR, which allow to serve their clients, analyze requests, promote new banking products, collect customer information for marketing research, evaluate and adjust the PR and advertising policy.

[28] Cbu.uz Date of publication 04.02.2014



Picture 14. The following diagram shows the number of RB users by type of systems[29]

This bar chart illustrates the trend in the number of users on 2011-2014 data for online banking system, "Bank- Client" and SMS-banking and mobile banking. In 2011 the amount of Internet banking and Mobile banking were almost equal. But starting from 2012 Mobile banking started to spread among the population rapidly and in 2014, 56,339 people use Internet banking and 207,851 people use Mobile banking.

Clients appreciate RB primarily convenience, affordability and work in real time, and banks - cost savings, as close as possible to the customer, regardless of the region of the country, and the availability of additional competitive advantages.

After analyzing the market for electronic banking services of commercial

[29] Cbu.uz Date of publication 04.02.2014

banks in Uzbekistan, we can allocate the following trends:

- Improvement of the quality and accessibility of call centers;
- Expansion of the range of opportunities through the Internet;
- Expansion of the range of Internet banking services;
- Conquest for online stores in near future.

But problems such as lack of access to telephone service during peak hours, the low qualification of operators, incomprehensible hierarchical IVR and high maintenance costs encourage banks to retain customers to improve the quality of call center is also using outsourcing Call Center.

Prospects of the development of remote banking services in the Republic of Uzbekistan.

We can allocate the followings among the trends of development of the RB in the world. First, the growing activity and the role of developers, specialized hardware and software for remote maintenance needs of individuals, both CIS companies specializing in banking automation and Western developers entering our market. Secondly, the development of the RB is either in conjunction or in parallel with the development of the same banks from e-commerce organization - payment and trading systems on the Internet. Third, the development of each of the areas of remote maintenance are separate and in conjunction with other areas.

Currently, online banking is one of the most promising directions for further development of electronic banking services. One of the important aspects of the use of the Internet is the further development of capital mobility for all types of clients.

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Promotion of mobile services - the next stage of strengthening the position of the retail business in the financial services industry is going through a period of extensive expansion of Uzbekistan.

CONCLUSION

Analysis allows us to draw conclusions that the remote service in general and Internet banking in particular - is the most promising direction of the retail banking business.

Currently, accurately determine the volume of services provided by banks cannot be deleted, there are only indirect estimates, the growth of customers who manage their account remotely, are 20-30% per year.

Exploring different concepts of remote banking services were made the following conclusions. System for remote access to banking services are implemented through the provision of these services to the client's request without direct interaction with an employee of the credit institution through various channels: using a computer with Internet access (Internet banking), stationary (telephone banking) and mobile phone (mobile banking), ATMs and self-service terminals.

Certain layer of the banks' customers, for which remote communications are becoming more common means of communication with the credit institutions, has already appeared. None of them is very old and very young, as a rule, these are people from 20 to 50 years, formed a positive opinion about the convenience and security of mobile and internet communications for financial transactions.

For the improvement of the quality of customer service in remote mode, we can offer commercial banks of Uzbekistan the following **recommendations:**

1. Territorial expansion, not only in the geographical sense. Not just opening costly and sometimes ineffective offices but search the entire complex solutions to approach each potential client as close as possible - to its place of work, life and leisure. This is the concept of branchless banking, using all possible channels of communication and technical equipment, including cell phone and laptop. This mobile unit’s of front office may be self-service kiosk, ATM cash-in (which is not yet in the arsenal of banks), or even one person, agent, and the experience of insurance companies. And insurance groups of agents can offer their customers

access to a remote service, for example, to pay for insurance through internet banking.

2. It is necessary to conduct competent marketing, to attract bright images in advertising, educate users positive examples, and not to tell instead of "advanced technology data" and "cryptographically strong security transmit financial information" which is scary, boring, unclear and as a result - is not necessary. You cannot just leave the person alone with the web- site or mobile phone - essential living and friendly people who at any time of the day and night come to help our clients and answer all his questions, both on the phone and on the Internet, including the special forums. To assist the client in the development of Internet banking and other remote services we should use animations, clearly explaining the technology connection or transactions, or even better - animation assistant (as in Microsoft Word when you call for help comes "clip Assistant"), which will advise customers in the form of text and voice instructions.

3. Expand the range of services offered, such as booking air and rail / train tickets, payment for purchases on the Internet, subscription to your favorite media, insurance payment, etc. Or monthly contributions to the salary amount to repay car, education or mortgage.

4. Creating a new service on the specification of expenses, preparation of monthly expense report. This service is very effective especially for the following distribution of income for individuals, since they do not make monthly, quarterly reports, as legal entities do. With this service you can spread on what products / services you spent the most money, and it is possible to plan future expenses.

5. Connecting the system to all state agencies, to the State Customs in particular. This helps the customers of banks to checkout all customs documents related to the bank faster. With this exporter / importer will avoid any delays or losses of any documents, card entry, GTE, certificate of arrival of goods, etc. This will speed up implementation time and reduce paper worries. To implement such a service Internet banking system should be connected to The Single Electronic Information

System of Foreign Trade Operations and confirm file approved by the Customs via the Internet. The essence of this service is to save time and improve control over entrepreneurship.

6. Create security system identified as special complex of passwords. For each client will be created a complex of 100 passwords and each of them will be under a certain number from 1 to 100. For each new operation will be requested a new password. With this the system will be provided with reliable protection. If the client loses complex of passwords, a new complex of passwords will be immediately sent to the customer through email. It is very new, difficult for hacking and very simple for customers. It saves customers time, money and nerves.

We should say that the fastest growing modern channel of RBS operating on-line is the distribution of products and services via the Internet. The main advantage of Internet banking is convenience, because client can manage their accounts remotely through an ordinary computer or laptop with access to the worldwide network, not limiting themselves neither geographically nor in time, while saving money and nerves.

Basic services which are now available for customers online are the followings:

- Information service for providing information and statements on current and card accounts, sending alerts of transactions, news;
- Payment service for regular and arbitrary payments (ranging from transfers between your accounts, and ending payments for utilities, cellular and virtual link, etc.);
- Services to work with current, deposit and card accounts;
- Services to work with the bank loan products (in the near future it is planned to obtain online loans, opening / closing of deposits, etc.).

Most likely in the future, "basket of additional services" to expect the same approach, which demonstrate the Western banks that have made in this direction a big step forward - the closer integration of the different channels RBS among

themselves and with electronic payment systems - creating the so-called contact centers. There will be a transformation of the classical individual channels of online banking centers in the side who can work with the client through the usage of a variety of means and methods of communication - telephone, SMS, MMS, Internet, e -mail, chat, etc.

Nevertheless for Uzbek banking business this is still far away, because the provision of a broad credit institutions interactive services in real time is hampered by many factors, among which are: the low level of trust and popularity of banking services among the population, low level of financial literacy and technical culture of citizens, a lack of quality promotion of remote services of the bank, inadequate communications infrastructure in the regions and legal restrictions.

However, positive trends are present: this ubiquitous distribution of Internet and mobile communications among the population, the growth of activity of ABS, development of banks, improvement of the legal framework, and expansion of the range of services online banks. And who knows, maybe it is not far off when a traditional bank building as a meeting of bankers with their customers, in the end, step back into the past and will be superseded by electronic means of communication.

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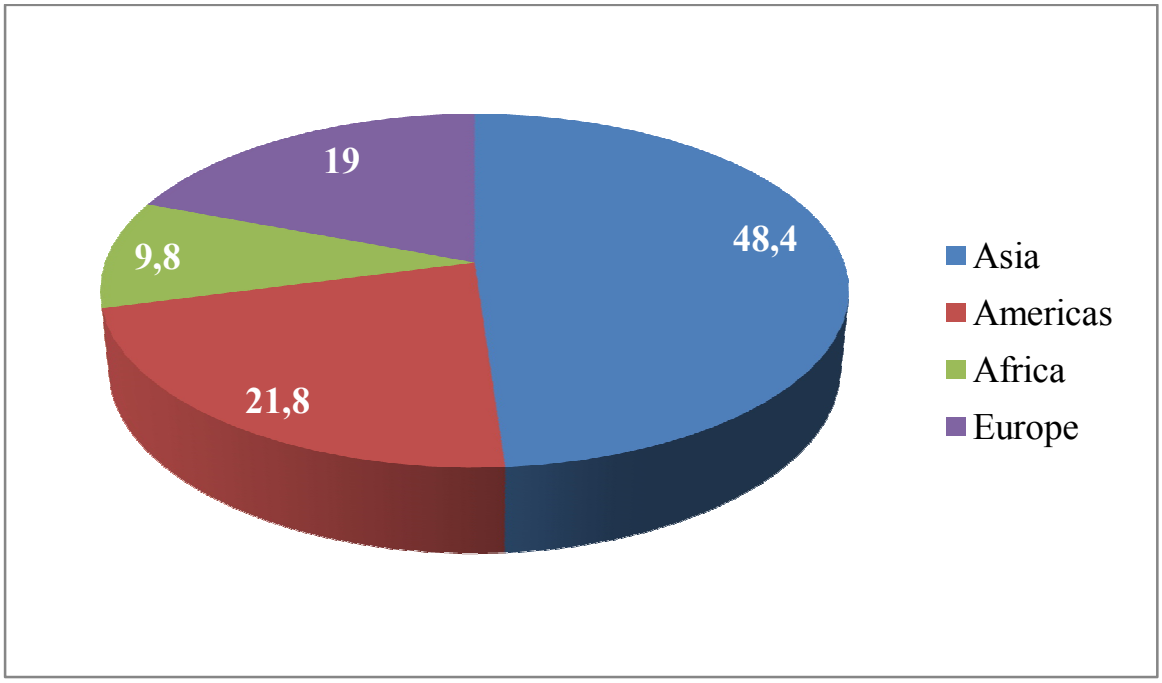
Appendix 1

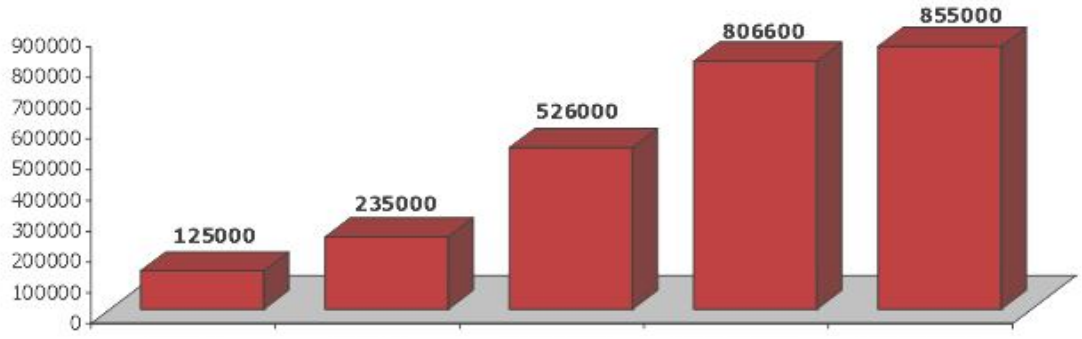
INTERNET USERS BY REGION (2014)[30]



[30] www.internetlivestats.com

Appendix 2

Dynamics of the growth of regular Internet users[31]



[31] www.internetlivestats.com