

Use of Remote Banking Technology

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Abstract—The article considers an important area of banking sector development in modern conditions - development of remote banking customer service systems which increase the level of banking service. Today, a bank client can get information about his accounts in a remote way and manage his accounts, perform various bank operations. For a bank, any remote banking service system contributes to the growth of its performance indicators, reduction of costs without decrease in product quality, and most importantly, increase the customer base which is important for banks in a competitive market.

Keywords—banking sector; remote banking services; electronic banking; internet banking; mobile banking; WAP banking

I. INTRODUCTION

One of the most important areas of development of the banking sector in modern conditions is development of remote banking systems. Creation and development of conditions for providing services remotely brings the bank to a completely new level of service. On the one hand, the rapid growth of the retail sector requires affordable and effective mechanisms for customer-bank interaction. On the other hand, high-quality services give a certain advantage in the highly competitive bank market.

Remote banking service is a system of services used by bank customers to perform various banking operations in a remote way. To do this, it is enough to use a computer or a telephone; it is not necessary to visit the bank branch. Remote technologies provide the client with maximum convenience in using banking services and require minimum time and financial costs.

For a bank, any remote banking service system contributes to the growth of its performance, reduction of costs without loss of product quality, and most importantly, significantly increases the number of customers which is important for banks in a competitive market. That is why today almost every bank has a system of remote banking services for legal entities and develops ways of remote interaction with individuals.

The basic principle of all remote banking service systems is the exchange of various information between the client and the bank at a distance. At the same time, the bank ensures an adequate level of security and confidentiality of such communication, because today a bank customer can get information about his accounts and manage them, perform various operations in a remote way. The client has a remote access to accounts, payments and transfers, opening deposits and a large amount of data (currency exchange rates or the location of nearby ATMs). To obtain these opportunities, a

client needs to have a communication channel (a telephone or Internet), a technical device (a computer or a telephone) and a specialized software product provided by the bank.

That is why remote banking services are referred to as electronic banking, Internet banking, mobile banking, WAP banking, SMS, etc. Let's analyze these directions.

II. BANKING VIA TELEPHONE

Telephony is the first communication means. It is a very widespread channel of communication. Clients could get any information about their accounts, as well as advice on products by calling the bank. This mechanism is used today but it is less widespread due to the use of the Internet which is less expensive. Banks had a lot of workers of call-centers and provided services via telephone, although they did not take any commission which caused high costs of their activities.

Payment inquiry terminals and ATMs are a one more channel for providing remote banking services. This type of remote banking services required high investment from the bank at the initial development stages: production and purchase of special equipment, creation of a technical base, development of the infrastructure and logistics. Despite this, ATMs are everywhere, and today large banks have extensive networks of these machines for the convenience of their customers. The list of services provided is also growing, safety is improving, and the most important advantage of remote banking services is that ATMs give cash money.

III. INTERNET BANKING

One of the most promising and rapidly developing channels of banking services is the Internet. The development of various information technologies has allowed banks to provide their customers with information and consulting services and a huge range of payments and transfers. They are produced by means of a personal computer or a mobile phone of a client who has an Internet access.

The peculiarity of this channel is the interaction of a bank with a client regulated by the standards of the Bank of Russia. Among others, there are clear provisions on the design of bank websites [8]: the full corporate name of the credit institution included in the Unified Register, the registration number assigned by the Bank of Russia; abbreviated company name in Russian, etc. shall be presented on the website page.

The Bank of Russia also monitors the security of remote banking services, so all customer operations are subject to various encryption methods. This is especially important for legal entities, because all their activities may be at risk.

"Client-Bank". Provision of remote banking services through a personal computer is called "Client-Bank". The bank often provides its customers with support in installing and using these systems which increase the level of bank service. This system is divided into two types:

- The Classic Bank-Client ("fat client") involves installing a special program on the personal computer of the client. All client data (payment orders, account statements, etc.) are stored on the computer.

- The Internet-Client ("thin client") involves interaction with the bank directly via the Internet through a browser. All information is stored on the bank's servers.

For smooth and efficient operation of the remote banking service system, it is necessary to use highly qualified specialists (financial experts, experts in information security, lawyers, etc.). It is important to organize the work of bank departments to prevent mistakes which can cause financial losses and reduce bank's advantages.

IV. REMOTE BANKING IN THE WORLD: TO THE BACKGROUND

For the first time, remote banking services appeared in the United States of America. The banking system of this state is one of the first and today it is the largest and most reliable in the world. Another reason for the development of Internet banking in America is restriction on opening bank branches which existed until the mid-1990s. Thus, in 1995, they opened the first bank providing services through the Internet – the Security First Network Bank.

In remote banking, the United States is a leading country in the world. Development of all areas of information technology contribute to this fact. Today, almost every second family in the United States has a computer and a telephone.

Currently, almost 90% of US banks provide remote services. They offer a diverse range of services (currency exchange, loan processing, deposit opening, deposit insurance, control over fund transfers, participation in stock exchange trading).

The main feature of the US remote banking systems is that the client receives the majority these services for free, and only for some of them the bank charges a small fee. Banks of America are proud of the fact that their security system is the most reliable.

Remote banking services became popular in Europe. Most transactions and the remote banking system itself were similar to the American model, but there are some innovations. It allows clients to pay for utilities and other mandatory services and plan financial costs.

In order to reduce costs and increase the speed of services, fundamental trends in the European development of remote banking services are the use of multi-channel services for individuals; transfer of remote customer service systems to outsourcing; creation of joint remote service systems; improvement of the quality of services and their safety; an increase in the number of available services.

V. REMOTE BANKING SERVICES IN MODERN RUSSIA

Compared with the United States and Europe, development of remote banking services in Russia is far behind. There are objective reasons for this. We should not forget that these systems are new for Russia. The Russian market has a lot of perspectives.

The analytical agency Markswebb Rank & Report presented the results of a survey of more than three thousand Russians using remote banking services. The main conclusions of the survey are as follows [22]:

- 41.6 million Russian citizens perform at least one Internet operation per month;
- 39.4 million Russians are active users of mobile and SMS-banking;
- 35.4 million Russians use Internet banking, of which 70% are Sberbank Online customers;
- 29 million people pay online;
- 17.5 million Russian are e-wallet owners.

Not all indicators are shown here, but the trend is evident. Russians are willing and ready for the further development of remote banking systems. They master modern technologies, increase their economic literacy and degree of trust in banks which is very important when performing remote financial transactions.

According to the data of J'son & Partners Consulting, the structure of payment through various RBS services varies considerably.

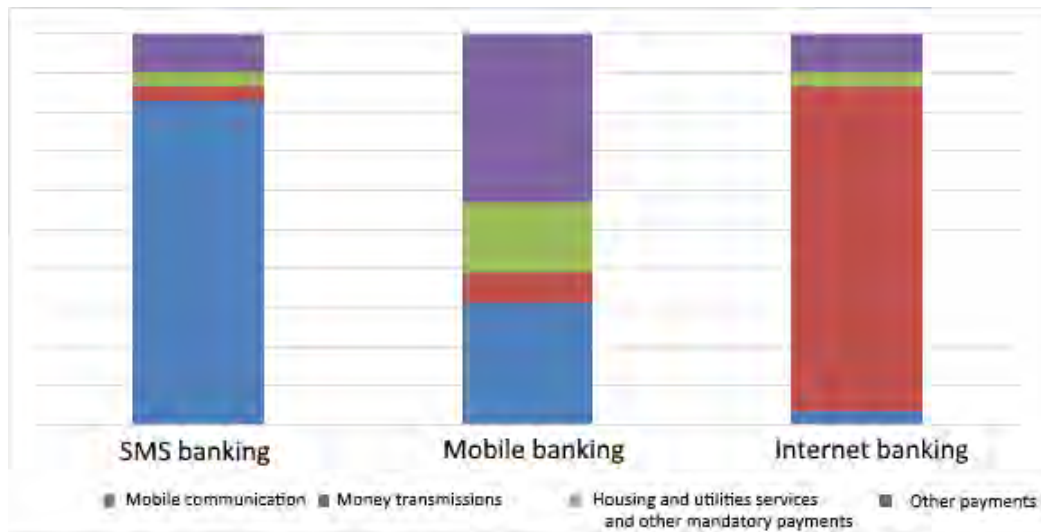


Fig. 1. Structure of payment through RBS services in Russia

Source: compiled by the author using the data [23].

According to Fig. 1, there are various payment structures. Thus, bank clients choose various forms of remote services to perform various bank operations. For example, Fig. 1 shows that customers pay for mobile communication mainly through SMS-banking (more than 80%) and mobile banking. Internet banking has a very small share of remote bank operations due to the convenience and simple performance of bank operations via SMS and Mobile banking. The phone is always at hand, this operation does not require additional confirmations, it is enough to send an SMS and indicate the amount of the deposit to your mobile number.

According to Rustelexcom, in the segment of individuals, the volume of the federal Internet banking market in 2016, compared with 2014, increased from 1.7 to 2.0 trillion rubles, and the number of transactions decreased up to 79.9 million. In the legal entities segment, the market volume for the same period increased from 351.4 to 392.5 trillion rubles, the number of transactions increased to 1044.7 million.

The situation is completely different when comparing the number of businesses and individuals - Internet banking clients (Fig. 2)

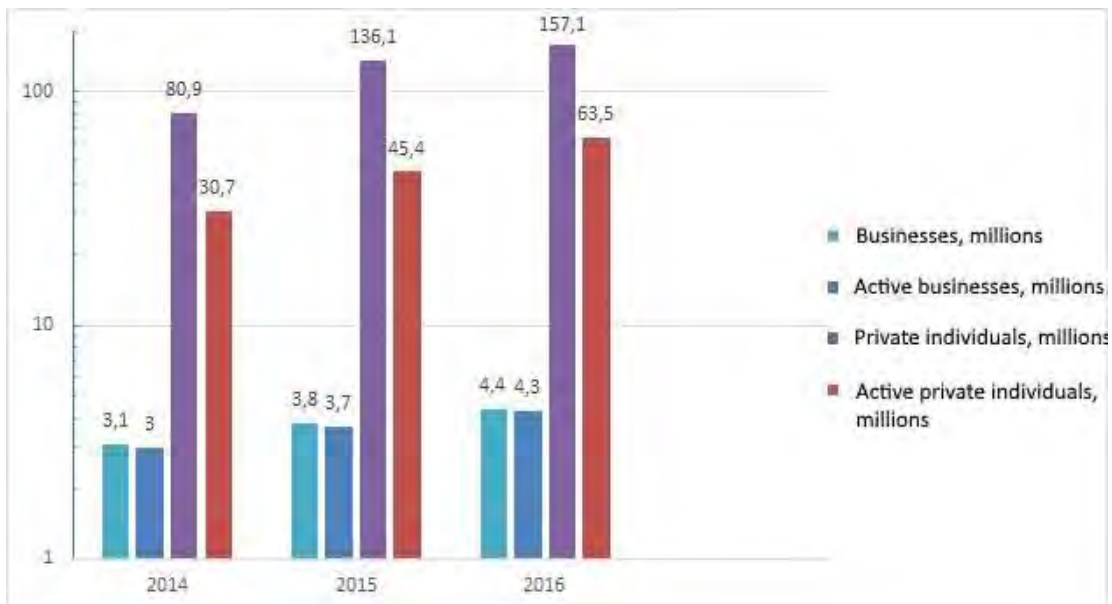


Fig. 2. Volume of the Internet banking subscriber base in Russia

Compiled by the author according to [23].

According to the Central Bank of the Russian Federation and calculations of Rustelecom, Fig. 2 shows the number of customers using the Internet banking: 4.4 million legal

entities and 157.1 million individuals. Their number is growing annually which indicates positive trends in the use of this service. The volume of active users is smaller.

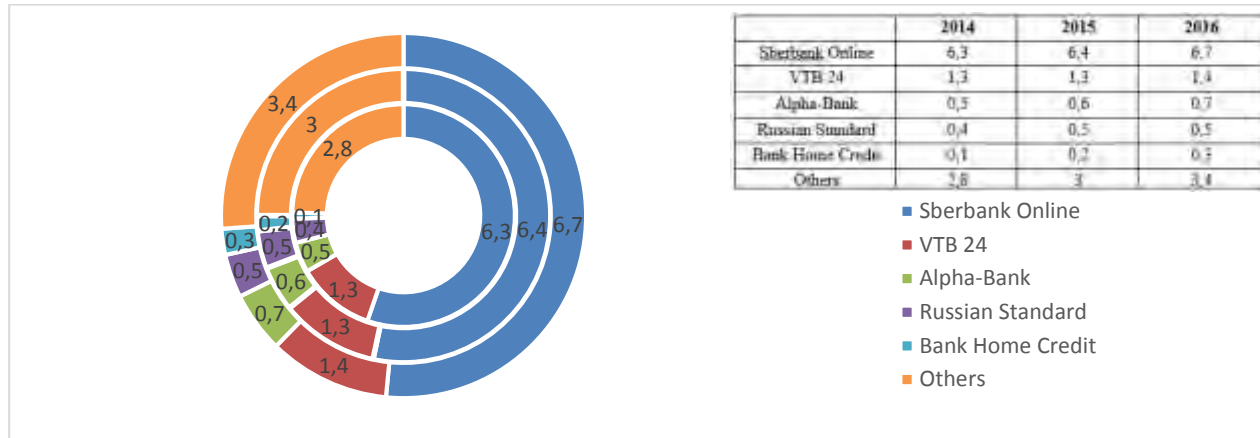


Fig. 3. Structure of the Russian Internet banking market by key participants, %

Source: analytical data [24].

Based on Fig. 3, it can be concluded that the shares of large banks practically reproduce the total volume occupied by a certain credit institution. Sberbank has the maximum coverage of the entire market, and all five major players take 75% of the volume in the B2C segment.

VI. CONCLUSION

To conclude, there is a rapid growth of mobile banking services in Russia. According to the Mobile Banking Rank survey, in 2016, 18 million people aged 18 to 64 were users of remote banking services. There are more and more remote banking services, an opportunity to pay fines and other obligatory payments, personal templates when performing similar operations. Call-centers are replaced by online chat rooms embedded in the interface of the mobile application in order to enable operational customer support. The applications are easier to use. They are convenient and require less time for performing bank operations.

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