

# Modern Trends of Internet Banking Market in Supply Chain of Russia

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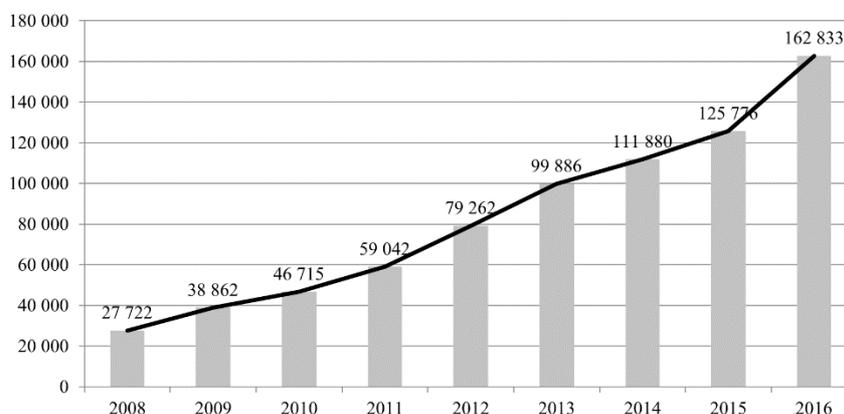
**Abstract** - Nowadays modern economic system and banking system in particular is defined as a globally developed and integrated system. Internet banking gained particular interest as a kind of remote banking, which is the most progressive direction of banking system development. It is one of the most dynamic and rapidly developing sectors of the e-Commerce market. The issues of strategic development determine the interest, attracted to the development of internet banking. Practice shows that investments in such projects begin to make a profit only after a certain period of time necessary for training and adapting the system to specific conditions. Investing in software, computer and telecommunications equipment and creating a base for the transition to new computing platforms, provide banks with ability to reduce the cost of services, accelerate the payments transactions through the banking system and reduce the complexity of banking services. The largest banks provide the richest set of internet banking services abroad. Internet banking in supply chain of Russia is at the stage of formation. In order to reach the modern level of development of the banking sector, it is essential for supply chain of Russia to form a national market for internet banking. The development of remote banking services based on Internet banking technology will give a new impetus to the development of electronic banking services in banking.

**Key words:** Banking, Information, Technology, Electronic, Supply Chain.

## 1. Introduction

Modern Internet banking is one of the types of technologies of remote banking services, which makes it possible to access accounts and cards, as well as to perform various operations on them from any computer

that is connected to the Internet in a way that is convenient for the user (the Bank's client). Any browser is suitable for making a transaction, i.e. it is not necessary to install the client section of the Bank's system software [1], [2], [4]. Internet banking has grabbed much attention due to the fact that this banking product has developed e-Commerce. This service enables users to perform the following operations: make statements on users' bank accounts, get information on the status of funds on the card and deposits; get up-to-date information on Bank products; apply for opening or blocking deposits, debit and credit cards, loans, etc.; make internal transfers from one bank account to another or transfer money between accounts at different banks; use funds conversation tools (currency exchange) [3]. In 2014 the government of Russia set the task for all the banking organizations to increase availability of banking services for both city dwellers and people in rural areas. The task was officially defined in the Government decree establishing the state program "Information society (2011-2020)". Thus, the imbalances in customer service caused by inability of a third of the country's population to use the services of banks led to prioritizing business digitizing in supply chain of Russia. Remote banking servicing (RBS) is the cheapest and most effective way of enter the hard-to-reach markets, due to the reduction in the cost of one transaction when it is made through electronic delivery channels [5], [9]. The Bank of Russia website statistics analysis confirms the growing popularity of RBS, shown in figure 1. It demonstrates the number of opened accounts with remote access, and over the past eight years it has increased by 5.87 times.



Pic. 1. Number of accounts with remote access opened in credit institutions in 2008-2016, as of January 1 of the corresponding year.

It is noteworthy that the initial fairly high annual growth rate (about 40%), which has been steadily declining for several years, is now stable for two years already at 12% level compared to last year. However, there was a new surge of interest in remote services in 2015 (29% growth), which experts attribute to the increasing popularity of smartphones and cheaper tariffs of mobile operators in terms of Internet access. The conducted research of the market of remote banking in supply chain of Russia makes it possible to understand that the domestic market of banking products and services has a tendency to expand in the retail segment [8]. It happens partly due to the long-lasting interaction of banks with legal entities, whereas new corporate clients' attraction in the banking organization is quite a difficult task. Previously, Internet banking positioned itself as a service for funds transfers between companies, but today this technology is transformed into a full-fledged way of online cooperation of the Bank with the client. Remote servicing provides the opportunity to pay for cellular

services, housing, to repay debts, so that there is no necessity to visit the Bank. Competition for the client leads to the constant implementation of new technologies and development of existing technologies. In 2015, banking organizations switched to providing customers the service of payments from a mobile phone by sending one SMS-message to a short number. In addition, clients have more rights to open Deposit accounts, processing priority loan applications and to use other services without visiting the Bank. The list of new financial services and products that are implemented in Internet banking technologies is growing, which contributes to the promotion of credit institutions. The presented passive signs of implementation the clients' access to their accounts via the Internet do not give a ground for the full assessment of the development prospects, therefore it is necessary to pay attention to the active signs. Moreover, it is crucial to analyze the statistics on the number and volume of transactions carried out on electronic payment documents, table 1.

Table 1- Information on electronic form payments

Year	Number of payments, mil	Growth compared to the previous year, %	Volume, bil. rub	Growth compared to the previous year, %
2015	2 738,2	5,3	470 331,7	0,8
2014	2 600,7	17,1	466 727	21,4
2013	2 221,2	–	384 447,3	–

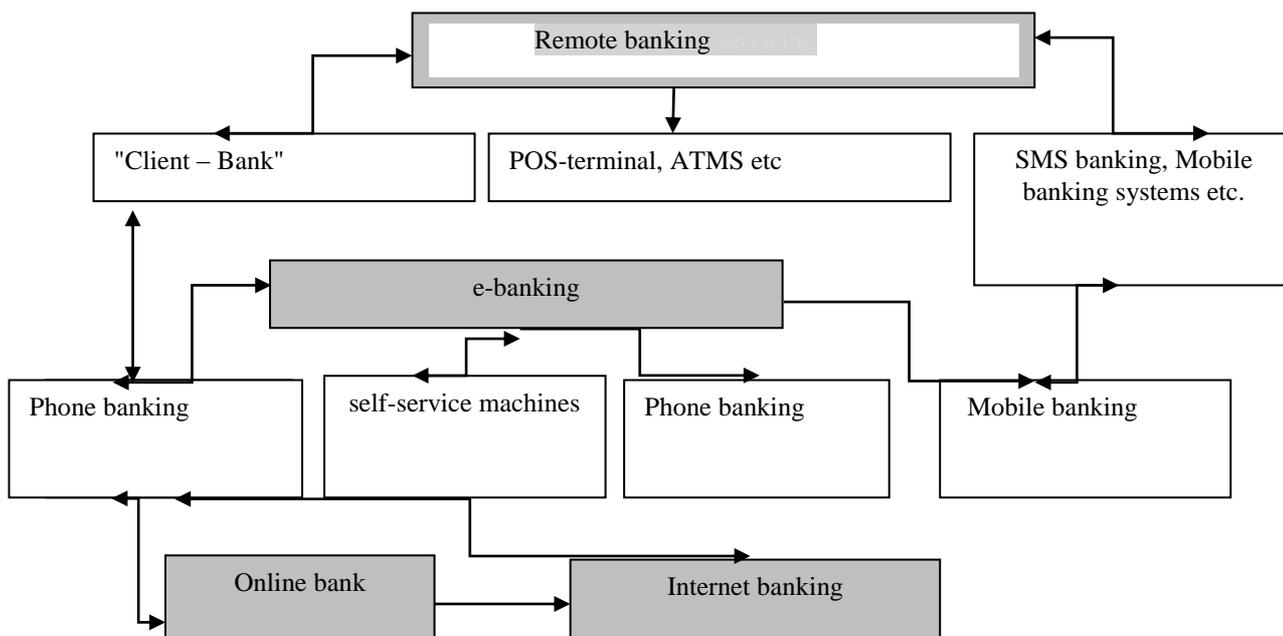
As Table 1 shows, the active development of this service has been observed since 2014. This is the sign of the solution of the acute problem by banking organizations – reducing the burden on operational offices and, thus, reducing human flows. Over the past two years, the multidirectional dynamics of the growth rate of the volume of payments and their number indicate that in 2014 the Bank's customers did not fully trust the technology of remote banking – perhaps due to its lack of security or vulnerability of the entire banking system. That situation directly affected the Bank's commission income and entailed an increase in costs of the technology service. A year later, a noticeable increase in the number of opened accounts with remote access compared to the volume of payments on accounts. Along with the dynamic growth in the popularity of remote banking services in supply chain of Russia, the real level of development of this segment is losing to its Western analogues. There are several main reasons for this, according to [2]:

- Customers' distrust to implemented Internet services in terms of security of banking operations;
- Partly inconvenient network connection;
- Negative attitude towards large transactions;
- Partly unclear interface of the website or Internet banking software.

The structure of remote servicing under the current legislation includes:

- 1) Internet banking;
- 2) Services involving the use of plastic cards through an ATM;
- 3) "Client – Bank" system.

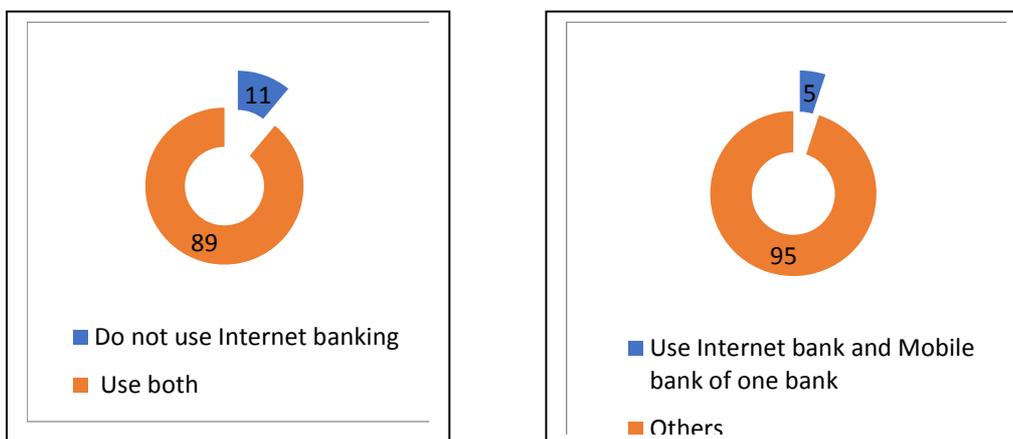
Systematization of the results of the analysis of the regulatory framework, scientific literature and publications concerning the subject of study makes it possible to consider RBS as a system that includes several elements, picture 2.



Pic. 2. Types of remote banking services

According to the analytical Agency Markswobb Rank & Report, the most popular remote banking channel is Internet banking. 35.3 million People or 64,5 % of Russian Internet users prefer the channel. The popularity of Internet banking is explained by its

versatility. It enables the client to conduct most of the operations without visiting bank's office. The intersection of Internet banking and mobile banking applications audiences is shown in Picture 3.



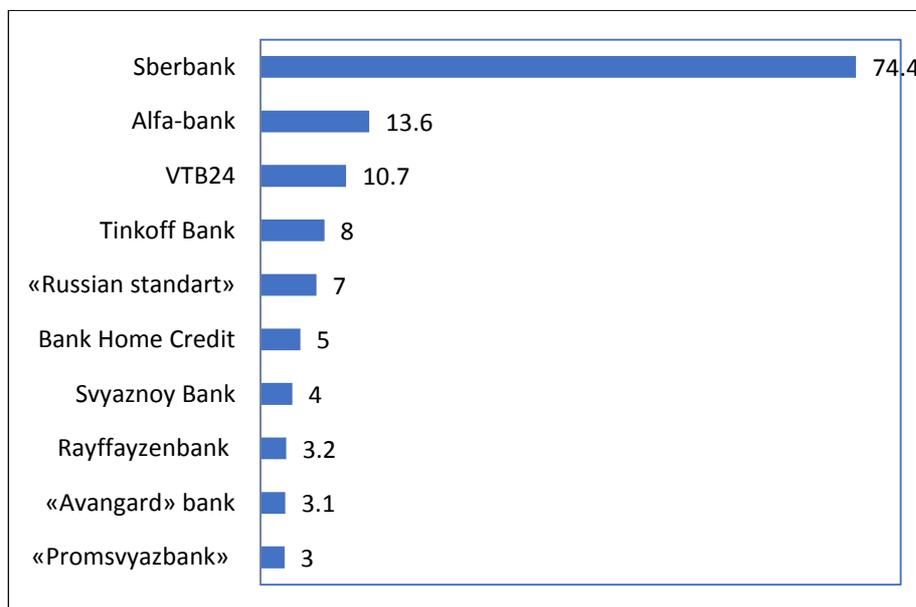
Pic. 3. The intersection of different audiences of Internet banking users in 2015, %

Only 89% of the RBS clients use Internet banking, 95% of them also use the mobile bank of the same institution [6]. The interconnection of these services explains such an activity - the access to Internet banking, as a rule, is carried out through a mobile bank. In most cases, the login is confirmed by an SMS-password, which is generated by the bank technologies automatically. It is unique, one-time and limited in

time. The largest number of clients in supply chain of Russia – almost three quarters of the participants of the domestic Internet banking use the Internet Bank "Sberbank Online" [7]. Together with four other most popular Internet banks ("VTB-24 Online", "Alfa-Click", "Tinkoff Bank", "Russian standard"), it serves 87% of all Russian Internet banking consumers, Pic. 4. as shown in Pic. 4, more than 40% of remote banking

users in Russia use two or more Internet banks. At the same time, if we ignore the "Sberbank Online", it turns out that for the majority of Russian Internet banks, the

share of users who simultaneously use at least one more analogue is 80-90%.



Pic. 4. Top-10 Russian Internet banks according to number of users, relative to the entire audience of Internet banking in supply chain of Russia, %

The classification of remote banking services based on the conducted study is presented in table 2. Moreover, according to the study the following definition of remote banking services can be formulated: a technology for providing remote banking services to individuals and legal entities from, involving the transmission of information via communication

channels through messages using mobile phones, smartphones, personal computers and smartphones using the Internet or conducting it offline.

Table 2 - The classification of remote banking services

Classification attribute	Type of RBS	Characteristics
Level of configuration	Minimum	It implies getting account statements and (or) information about transactions
	Standart	It includes operations with deposits, credits, money transfers, information messages
	Complex	It includes all or almost all of the services listed
Type of services	Informational	Providing users with financial information, such as statements, data on recent transactions, SMS-messages about each transaction, bank news, exchange rates, etc.
	Transactional	Financial transactions made by the client themselves, as a result of which funds are credited or debited
	Consulting	Using real-time secure (client identification) consulting services without visiting bank's office
Type of clients	Corporate clients	Required technologies - PC banking, Internet banking, Telebanking
	Private individuals	Required technologies - Internet banking, Mobile banking

Concept	Offline systems	There is a time gap between the moment of the transaction by the client and its execution by the Bank. These systems can be fully or partially automated.
	Online systems	Real-time, fully automated system with no need to provide the work of Bank employees. Transactions are carried out instantly and get the instant reflection on the balance of the client.
Type of telecommunication channels	«Clien – Bank» system	Include technologies that involve installing software on the user's computer or using a traditional Internet browser
	POS-terminal,	Software and hardware devices for receiving payment cards by means of communication with the Bank's server
	Systems of SMS banking and Mobile banking	Provide information to corporate and private customers through e - mails, SMS-messages, applications installed on mobile phones

## 2. Summary

Domestic banking organizations today are not inferior to their Western counterparts in terms of WAP banking development - remote account management via a mobile phone equipped with special software based on wireless data protocol. Another service provided by banks to owners of cell phones is SMS banking. With the help of short message service (SMS), which is available to any mobile operator, the client will be able to get all the information about the status of current accounts (account balances), as well as account statements for the required period. According to experts, this service has much more prospects than WAP banking. There are several reasons for that. Firstly, the cheapness of the service. Secondly, the greater speed of data transmission – SMS banking service is ten times faster. The habit of Russian population to store savings in cash at home rather than in financial institutions has formed the main national feature of the Internet banking promotion. As a result, potential competitors to attract funds of the population act as partners in supply chain of Russia [10]. In fact, here comes the development of a new market with its own infrastructure and, thus, the solution of common problems. Finally, it is clear that the demand for new services is forming. It is beyond the power of even the largest banks, especially if they act alone. Active Internet banking usage has led to the situation when largest European banks as Deutsche Bank and ABN AMRO Bank have already faced the problem of redundancy of the branch network. However, there are problems related to Internet banking common to all Russian banks:

- Lack of the existing legal framework;
- Security issues;
- Lack of mass financial services consumption, especially online services.

In supply chain of Russia, there is practically no coherent legal system that would regulate legal relations in the field of e-Commerce in general and in the sphere of financial services in particular. At the same time, the current legal provisions still allow to build the right contractual relationship between the

seller and the consumer of Internet services with certain efforts of parties. As security is a traditional problem related issues are the most crucial in the development of online service systems and in decision-making on the beginning of commercial operations. The problem of security often becomes dominant, disrupting the development of Internet services. Problem solution requires sober assessment and risk accounting associated with it rather than abandoning promising initiative. Another very important problem is the low level of even traditional financial services consumption in supply chain of Russia. The solution to this problem may take a long time. However, it has long been noted that the pace of accessing to new technologies is growing with the advent of new developments. Thus, the intensity of the promotion of Internet services is ahead of television. Therefore, the spread of new high-tech services can bring more benefits than the promotion of traditional services. Service providers, not consumers, hold the initiative and create a mass culture of financial services consumption and Internet banking.

## 3. Conclusion

The following trends has been observed in the current Russian Internet banking sector:

- MOST of the existing systems clearly do not cover the whole range of banking operations, and some systems are purely informational, without the possibility of the client to carry out any transactions;
- Electronic banking systems are not integrated enough: there are examples when the Bank has both Internet banking and Internet trading systems, but they are practically not connected with each other;
- Most banks do not want to introduce complex Internet banking systems for servicing both individuals and legal entities.

These problems are specific to the supply chain of Russia. Generally, the trends in the development of Russian Internet banking are similar to the global ones. Internet Bank is one of the most popular services that are actively used by Internet users in the Russian

Federation. It is important to note that this service is high demand among individuals due to the fact that it provides both great simplification of daily transactions and convenient daily service [11].

#### 4. Acknowledgment

The authors of the article express their deep gratitude to the scientific Department of the KFU for advice, assistance and active support in the publication of materials.

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