Development of digital banking services in Russia today

Kotova O.V.
Ural State University of Economics
Yekaterinburg, Russia
olgav1969@mail.ru

Novikova N.Yu.
Ural State University of Economics
Yekaterinburg, Russia
olgav1969@mail.ru

Frolova A.S.
Ural State University of Economics
Yekaterinburg, Russia
frolova_as@usue.ru

Abstract — The article discusses the features of banking service, defines the difference between banking accommodation and banking service. Its components are analyzed, as well as the importance of each of them for the consumer. The concepts of "digitalization" of the economy, "factory of the future" and its types, "customization" are defined. The types of Internet banking services are considered. Their key role in the system of cashless payments has been revealed. The advantages of Internet banking are structured for both the bank and the client. The authors conducted a comparative analysis of the Internet banking services of the most advanced banks. Also, the issues of improving the security systems, implementation of security rules for customers when using bank services are highlighted. A tendency towards personalization of banking services is noted. In conclusion, the authors identified problems in the field of Internet banking, the main one of which is ensuring information security.

Keywords — banking service, banking accommodation, Internet banking, two-factor authentication, digital economy, digitalization, factory of the future, smart bank, customization.

I. INTRODUCTION

The development of banking services takes place in conditions of economic volatility, accompanied by an increase in the requirements of business entities and the population for consumer characteristics of banking operations and services, built on mutually beneficial conditions. Results of the study and their discussion. The conditions of fierce competition in the financial sector are forcing banks to use new ways to create competitive advantages and find ways to improve the bank's efficiency. Two important factors that ensure the success of Russian banks can be distinguished: the ability to reduce costs and the ability to increase customer loyalty through the introduction of new customer service technologies. Due to the growing demand for comprehensive banking services, many banks form “complex packages” that include a set of integrated products aimed at the rapid development of the client’s business. Demand for a comprehensive banking service forms the competitiveness of the banking infrastructure, and depends on internal and external factors. The banking community interest for the issues of application and implementation of banking services in practice is relatively new, but these services are instantly developing and improving.

Credit organizations independently, sometimes intuitively, develop banking service regulations, come up with new convenient products that meet business demand. The purpose of the banking service is determined by its place in the activities of a credit organization. The main task is to satisfy the current needs of consumers as a result of banking, the client should be satisfied with the service.

Research methods and organization. When writing this work, we used methods of analyzing literature on the topic of research, generalizing the ideas of scientists, researching statistical data, classification methods, generalizing and systematizing. As the research information base, the data of the Central Bank of the Russian Federation were used.

According to the interviewed experts of the information agency Banks Inform Service [8], rapid development of digital banking technologies is noted. This process is connected with the fact that clients began to evaluate not only banking products, but the level of digitalization of banking services and the possibility of their daily use are important for customers. The introduction of innovative services allows banks to significantly increase their customer base. Their practical use shows that it is real and effective. For example, the introduction by Absolut Bank of a digital platform for issuing mortgages in the spring of 2018 allowed the bank to increase the volume of mortgage loans in the Sverdlovsk Region by 105% over 11 months of 2018 compared to the same period last year. [7].

II. DIGITALIZATION OF THE ECONOMY AND THE BANKING SECTOR

The 21st century is inconceivable without digital technology. Digital technology is present in all areas of our lives. This process is called “digitalization” and has become a determining trend in the development of the economy over the coming decades.

The term “digitalization of the economy and society” is understood as the reform of the socio-economic sphere by
introducing digital technologies for searching, processing, forming the exchange and transfer of information.

In the digital age, it is already difficult to imagine your life without the Internet, as well as without the introduction of new innovative products that have a huge impact on the development of the global economy, the global financial system and, as a result, progressing and improving the population's standard of living.

Smart factories (factories of the future) are becoming real. Their main features are a high level of automation and robotization, which exclude the human factor and the associated errors leading to various losses.

The Factories of the Future can be called a special type of organization of the business process system, which have the following characteristics:

- creation of digital platforms, advanced digital technologies. Based on the analysis system and big data, this approach allows you to combine geographically distributed participants of these processes, increase the level of flexibility and “customization” taking into account the requirements of consumers;
- "Customization" (English: customize - to change something, to configure...) is the process of individualizing products to specific needs, the desires of specific consumers by making changes at the final stages of production;
- development of digital models of new designed products and production processes;
- Digitalization of the entire product life cycle (from a concept idea, design, production, operation, maintenance to disposal). The later the changes are introduced, the greater their cost will be, and therefore the center of gravity is shifting towards the design processes, within which the characteristics of global competitiveness or high consumer requirements are laid.

Digitalization has affected the banking sector. The practice of smart factories operating can be transferred to the banking sector, taking into account the specifics of the banking product (service).

The accumulated practice of creating and operating smart factories in the manufacturing sector allows us to distinguish three types of factories of the future: digital, smart, virtual.

Digital Bank aims to design a new generation banking product from the research and planning stage, when the basic principles of the service are laid down, to the stage of creating a digital layout of banking services, a digital double and a prototype. Digital Bank reduces costs by 10-50%, production time by 20-70%, which leads to an increase in profit by 10-50%.

Smart Bank is focused on the production of a new generation banking product from a single service to a finished product. The implementation of the Smart bank leads to 2-4-fold reduction in the production time of a banking product and a two-fold increase in profits.

Virtual Bank integrates digital and smart banks into a single network for the production of a banking product, from analyzing the needs of a banking product (service), creating a digital layout of banking services and further customizing them for the real needs of the end consumer, to launching a finished banking service for a mass audience of bank customers. The Virtual bank provides 2-4-fold increase in productivity, reducing costs by 40%.

Foreign experience in the creation and functioning of smart banks has shown their significant effectiveness both for the banking sector and for end users of the banking product, who get the maximum benefit from meeting their needs. All this affects the improvement of the quality of banking attendance and banking services.

Consider some aspects of the concept of banking service.

III. THE ESSENCE OF BANKING IN THE MODERN ECONOMY

In Russian, the word service is interpreted as attendance. As an economic category, banking services are being studied relatively recently. Moreover, in many sources, the authors' concept of banking service is mixed with the concepts of banking services and banking operations. The authors of the article consider the banking service as a separate category of relations between a bank and a client and defines it as a set of services provided by a bank and relationships arising between entities as a result of their provision. Today, there is an interest in remote banking products. It’s very difficult to impose any service for a client since competition among banks is quite high, the portfolio of services is about the same, their cost is also not very different in various banks, and has a tendency to reduce the cost of new products. At this moment, a category such as banking service appears, which consists of 2 stages (levels): attraction and support. The base of potential consumers of remote service for legal entities is in demand and is formed according to a number of criteria, such as type of activity, turnover, tax system, etc.

As previously noted, banking service is a broader concept than banking service, therefore, we will analyze it into its components. According to the authors, this can be represented in the form of a diagram in Figure 1.

Fig. 1 Components of a banking service

Clients, choosing the bank in which they will be serviced, consider each of these factors or their combination. Moreover, for various business segments, each of these factors has a different weight.
The trend towards personalization of banking services today is the most relevant. The next component, services, has the smallest share among others, since today banks have approximately the same set of services, and customers can be segmented into groups based on the type of activity, the requests of which will also be approximately the same. The quality of the services provided is the component that turns a particular banking service into a popular one and allows the Bank to combine a number of services into one service (banking service). The quality includes such stages as the attraction and maintenance of the service. At the stage of attraction, a portrait of a potential client and a set of services that are highly likely to be given to this client are not only interesting, but necessary. At the stage of saturation of the banking market with services, it is important that the attraction is not too intrusive and as productive as possible. At the stage of support of the service, until the moment of its receipt, the client must provide comprehensive information about the costs that they will incur, and about the privileges that they can receive. The speed of providing this service is also appreciated. Internet banking is a common name for remote banking technologies, as well as access to accounts and transactions (through them), provided at any time and from any device with Internet access. To access the Internet Bank, the client is provided with account information: login and password. Additionally, two-factor authentication is carried out when logging in. It's a method of identifying a user in a service (usually on the Internet) by requesting authentication data of two different types, which provides two-layer, and therefore, more effective protection of the account from an unauthorized logging in. It is known that remote banking services are convenient not only for customers, but also for the banks themselves. They allow you to reduce the cost of maintaining the network of branches and reduce the number of staff. Many banks today develop remote banking services. Separately, one can distinguish such a type as a mobile bank, when access to an account can be obtained from a mobile device that many users have.

IV. INTERNET BANKING AS A MODERN BANKING SERVICE, CHARACTERISTICS AND PROBLEMS

Internet banking services include:

1. Providing information on a variety of banking products (deposits, loans, plastic cards);
2. Internal transfers between the client’s current accounts within the framework of the commercial bank in which they are opened;
3. Payment for purchases, various services and utilities, including automatic payments;
4. Interbank financial transactions - transfers to and from accounts opened with other banks;
5. Internal and external transfers involving currency conversion;
6. Money conversion directly on an open bank account;
7. Blocking, applying for re-issue and unblocking cards;
8. Limiting the use of funds stored on the client's current account;
9. Checking the balance and gaining access to information regarding completed payment transactions.

Depending on the software and technical solutions used at the stage of developing the platform, Internet banking allows you to perform passive (checking the balance and account history) and active (order for transfer, opening a term deposit) operations. Thus, electronic banking is a key element of banking for performing cashless payments, including the international level ones [3].

To use Internet banking, you must have the Internet access. Large commercial banks also provide this opportunity by developing mobile applications.

Like all forms of RBS Internet banking has its advantages. There is a number of advantages for both the bank and the client.

Despite all the advantages and disadvantages, Internet banking has problems, the main one of which is the issue of information security. This task is a priority for banks, because banks want to protect the personal data of their customers and provide them with the best quality of their services without any incidents. Security depends on both the client and the bank itself. Banks are constantly improving their security systems and use world-class security and encryption to effectively store personal data of customers. In order to safely use the banking services, the client has to follow some rules:

1. To use the official website of the bank;
2. To use a strong password;
3. Not to give anyone the password for logging in;
4. To use antivirus.

There are 5 main advantages of Internet banking for a bank:

![Fig. 2 Benefits of Internet Banking for a Bank](image)

You can also distinguish 5 main advantages of Internet banking for customers:
Fig. 3 Benefits of Internet Banking for a Client

Markswebb Consulting Agency conducted a study in the field of Internet banking for 2019 and made a rating. Most of banks are already solving the basic tasks of clients at the proper level, a certain “ceiling” has been outlined in the development of this direction. Nevertheless, the market as a whole was developing actively, participants added payment functions, security settings, improved the interface and information search [1].

To assess the effectiveness of Internet banking, two business models are used: Daily Banking and Digital Office. In 2019, 24 banks were included in the rating, each of which passed 5 different tests, on the basis of which they were rated.

Each model uses its own criteria to evaluate effectiveness. Daily Banking has 400+ criteria, and Digital Office has 200+. In addition to the final grade, Daily Banking also calculates the functionality and convenience of online banking.

The rating for 2019 is presented in Tables 1 and 2. This year, Daily Banking compiled a rating of Internet banks for daily tasks, and Digital Office compiled a rating of Internet banks by the level of digital office.

According to the results of the study, Tinkoff Bank occupies a leading position in both ratings, which is not surprising since initially the bank was conceived as an Internet bank. Its client could solve any problem using the Internet, and the bank, apparently, succeeded in this. The second place in both studies was taken by Bank Levoberezhny.

Many banks have made changes and improved the quality of service and customer service over the past year.

At Tinkoff Bank, all transfers by phone, inside or outside the bank, are now combined in one form. There is no need to focus on what system the transfer will go through - it is not important for the client.

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<tr>
<th>Place</th>
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<th>Final Score</th>
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<tr>
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<tr>
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<td>3</td>
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<td>9-11</td>
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<td>13</td>
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AK Bars Bank updated the interface and added new features. Now you can check and pay taxes, penalties and utility bills in the AK Bars Bank online banking, as well as add auto payments. A new contact center chat appeared and there is a separate chat for investment advising, online requests for banking products and loans.
Sberbank and Tinkoff Bank personalize payments. The “My Operations” section of these banks analyzes the payments of a particular client and all clients, and displays suitable forms in the first place. Also, Sberbank now has an identity confirmation for other services: Sberbank ID is a single entry tool for the services of Sberbank and its partners. For example, with the help of Sberbank ID, you can log in to the website of Litres, Globus Gourmet and, of course, the services of the bank itself - for example, Dom.Klik. The larger the network of such services, the greater the value for the bank’s client is.

Some banks go even further and improve the user experience of obtaining a credit: Alfa Bank increases the cash withdrawal limit within 30 days after crediting the money, Raiffeisenbank gives the client time to consider the offer, and Home Credit Bank offers to transfer credit funds to the card of any bank.

At Promsvyazbank, chat operators help you find the right product. The operator takes the course of the conversation, asks questions about the needs in order to advise the right product. Such a consultation is more likely to be converted into a sale.

You can quickly conclude an agreement with a management company in the Internet Banking service of Pochta Bank and invest in mutual funds. After completing the application, the fund is displayed in the list of products, you can buy shares and view the history of operations, monitor the value of the portfolio and its profitability.

V. SUMMARY OF THE STUDY

In conclusion, it should be said that Internet banking is becoming a priority type of service for bank customers and is one of the most developing and widespread products in the banking sector, allowing you to conveniently work with various banking services. Consumers’ distrust for bank's Internet services and as researchers say, including V.V. Polyakov: “The use of banking services for most consumers is a forced, not voluntary decision” [3]. Another problem for the user in Russia is the lack of convenient and understandable guides built into the Internet banking interface. To solve this problem, consultant robots (robotic advisers) can be used, which are increasingly popularized on world stock markets.

References