

# *Digital innovatization tendencies of the payment services market in Russia and the Volgograd region*

Olga M. Korobeynikova

Volgograd State Agrarian University  
The Department of Economics  
Department “Economic security and economy in agribusiness”  
Volgograd, Russia  
korobeinikov77@yandex.ru

Dmitry A. Korobeynikov

Volgograd State Agrarian University  
The Department of Economics  
Department “Economic security and economy in agribusiness”  
Volgograd, Russia  
korobeinikov77@yandex.ru

Larisa V. Popova

Volgograd State Agrarian University  
The Department of Economics  
Department “Economic security and economy in agribusiness”  
Volgograd, Russia  
lvpopova@bk.ru

Tatiana A. Dugina

Volgograd State Agrarian University  
The Department of Economics  
Department “Economic security and economy in agribusiness”  
Volgograd, Russia  
deisi79@mail.ru

Svetlana A. Popova

Volgograd State Agrarian University  
The Department of Economics  
Department “Social and economic disciplines”  
Volgograd, Russia  
popova\_s\_a@mail.ru

**Abstract** — The payment market in Russia and the Volgograd region is not developed sufficiently either institutionally or organizationally; payment systems, as the main market participants, have heterogeneous characteristics, what gives the possibility to digitally form new fast-growing segments of the payment market in the symbiosis with other financial and non-financial market participants. Modern payment market is considered in conjunction with the financial technology market. The objective of the research is to justify the development trends of the Russian payment services market. The study applied general methodological scientific principles (the unity of theory and practice, the objectivity, the complexity), as well as the systematic approach in assessing the holistic picture of the money circulation current state and the payment market in the context of digital innovation trends. The consumer payment services market in Russia analysis showed the tendencies towards the separation of cards’ contact and contactless segments, as well as the restructuring of the market offer in favor of national issuers, the deregistration of the cash flow and substituting the traditional services with the innovative ones. Card payment instruments are a growing segment of the payment market both in Russia and in the Volgograd region. The key trend in card issuance is an increase in the number and volume of the “MIR” cards operations. The penetration rate and the frequency of contactless technologies usage are growing at the highest rates

compared to the traditional forms and instruments of payments. The main trends in the distribution of mobile payment retail services are: the increase in the total cost of communication services, the availability of modern communication facilities and the quality of services provided by mobile operators (digitalization level); the competitive market formation; the number of active communication subscribers increase; the Internet services receipt intensification; the transfer of merchant and bank acquiring networks to contactless payments. All totaled, the identified development trends reflect the digital nature of changes within the framework of the digital technological pattern.

**Keywords** — *payment market, payment services, payment systems, digital innovations, digital economy*

## I. INTRODUCTION

On the one hand, the payment market in Russia is traditional and insufficiently developed either institutionally or organizationally; on the other hand, payment systems, as the main market participants, have heterogeneous quantitative and qualitative characteristics, what gives the possibility to digitally form new fast-growing segments of the payment

market in symbiosis with other participants in financial and non-financial markets.

Modern payment market should be considered in conjunction with the financial technology market. Investments in financial and technological startups in Russia in 2016 amounted to about \$ 120 million, most of them are in the FinTech-industry: payment systems, crediting sites (P2P and online crediting), remote provision of products to customers in digital-channels, instant (fast) payment system, personal finance management and biometric identification. To regulate the FinTech-industry, the Bank of Russia monitors, analyzes and evaluates the potential use of promising technologies and innovations in the financial market; FinTech Corporation was created in order to test and provide the cooperation of financial and technological innovations. The prototype of “Masterchain” platform based on the blockchain technology (Ethereum) testing in cooperation with the largest banks, the development of legislation in the cryptocurrencies field, the implementation of the Unified Identification and Authentication System for bank customers (UIAS), the project to regulate new interaction models for credit providers and credit users (crowdfunding, P2P and P2B-crediting) turned out to be the main results of regulatory activities in the innovation area. Urgent startups have also been developed in Sberbank, Tinkoff Bank, Alfa-Bank, Moscow Exchange, QIWI and Yandex.Money payment systems, and etc., bringing the Russian market of financial technologies to a qualitatively new, competitive level ensuring relative sovereignty.

The Volgograd region is a constituent territory of the Southern Federal District of Russia with a population of about 2.5 million people (77.38% of whom are citizens) living in 33 administrative districts with an area of 112.9 thousand square kilometers. The payment market of the Volgograd region is served by 1 regional bank, 11 branches of non-resident and foreign banks providing digital payment services in the region.

Payment markets, payment services, payment infrastructure theory and methodology issues were considered in the works of Russian and foreign experts: M.L. Bech, C. Preisig, K. Soramaki [1], K. Ercevik, J. Jackson [2], Yu.I. Korobov, A.N. Orlova [3], [4], E.V. Travkina, S.B. Kovalenko [5], J.E. Stiglitz, A. Bhattacharya [6], H. Leinonen, K. Soramaki [7], and others.

Certain aspects of finance and payment markets innovation were developed by I.D. Anikina, A.V. Gukova, A.A. Golodova, A.A. Chekalkina [8], N.V. Baydukova, S.A. Vasilyev, D.A. Chepakov [9], O.N. Epifanova, D.D. Burkaltseva, A.S Tyulin [10], O.G. Semenyuta, N.O. Panchenko [11], Yu.A. Kozenko [12] etc.

Socio-economic problems of economic growth stimulation (including the digital economy opportunities overview) were solved in the works of Russian and foreign researchers such as: Diana Dmitrievna Burkaltseva, Olga Sergeevna Sivash, Oleg Valerievich Boychenko, Lyubov Vasilievna Savchenko, Tatyana Nikolaevna Bugaeva, Snezhana Anatolyevna Zotova [13], Diana Dmitrievna Burkaltseva, Oleg Valerievich Boychenko, Olga Sergeevna Sivash, Nicholas Maksimovich Mazur, Snezhana Anatolyevna Zotova, Aleksey Valeryevich

Novikov [14], R. Levine, N. Loayza, T. Beck [15], R. Nelson, E. Phelps [16], A.S. Razin, T.P. Nazarova [17], R.S. Shepitko, I.A. Koshkarev [18], R.Yu. Skokov [19], N.S. Zavivaev, E.A. Shamin [20].

Nevertheless, in the current profile literature there is no any unified understanding of the payment market structure or a justification of its development trends in the context of digital technologies introduction. In fact, the current situation shows that theoretical studies and analytics fall behind practice.

The objective of the study is to justify the Russian payment services market development trends.

The basic tasks of the study are: 1) the justification of Russian market of retail payment services for card tools trends development; 2) the identification of the payment market in Russia and the Volgograd region instrumental innovatization features.

## II. MATERIALS AND METHODS (MODEL)

The studies [21], [22] carried out by the authors and the current legislative practice in Russia show that the payment market and its subjects acquired qualities that characterize not only institutional readiness for embedding into the digital economy, but also the ability to transmit impulses of digital innovations throughout the payment chains from organizational and technical-technological subjects to the service users, creating conditions for internal (economic entities-users of payment services) and external (among the specified economic subjects) digital environments formation.

To study the financial aspects of the payment market functioning and to identify the trends it is necessary to reveal the approaches that allow to establish patterns and cause-effect relationships in their development and, basing on them, to form a holistic representation of payment market and payment services provided as economic phenomena. In order to reach this aim general methodological principles (the unity of theory and practice, the objectivity, the complexity) were applied in this study, as well as a systematic approach to assessing the holistic picture of the money circulation and the payment market current state in the context of digital innovatization trends.

## III. RESULTS AND DISCUSSION

### A. Cards Turnover Trends.

Cards payment instruments are a growing segment of the payment market both in Russia and in the Volgograd region (Fig.1).

Cards accounts of legal entities in the Russian Federation showed a more than 10-fold increase, according to individual holders, the increase in issued cards for 2010-2018 amounted to 142744 thousand units (about 1 unit per each inhabitant of Russia) it is 113.48%. The qualitative structure of the issued cards is also interesting: if at the beginning of 2010 the share of payment cards was 93.06%, and credit cards – 6.94%

(1 credit card accounted for 13.42 payment cards), then at the beginning of 2018 the share of payment cards decreased to 88.30% and credit cards, respectively, rose to 11.70% [24], what, in our opinion, characterizes the expansion of the cardholders' operational preferences, achieved due to the payment services innovative forms.

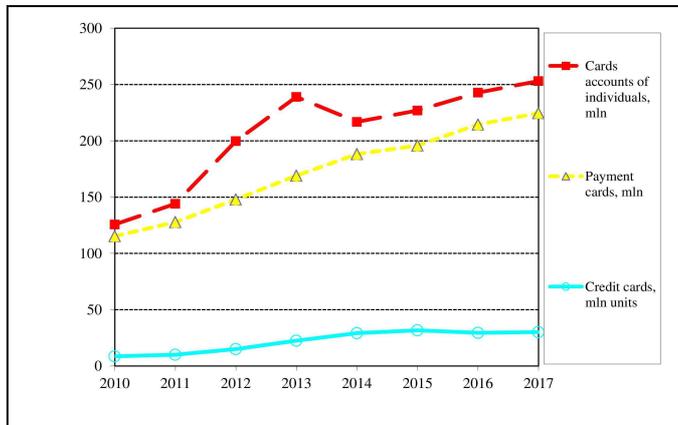


Fig. 1. Cards accounts opened in the banking system of the Russian Federation organizations (at the beginning of the year).

The data collected by the Bank of Russia shows that cards payments remain the preferential form of individuals payments, slowly entering the market saturation phase (Fig.2).

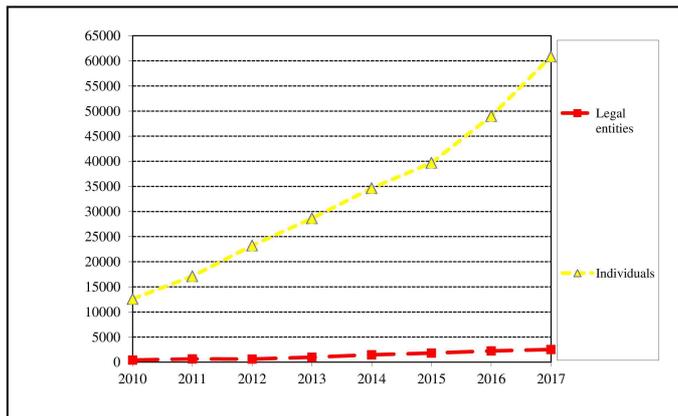


Fig. 2. Cards accounts opened in the banking system of the Russian Federation organizations operations (for the year), bln rub.

If the amount of cards transactions of legal entities ranged from 416 billion rubles in 2010 to 2524 billion rubles in 2017, then the similar volumes for individuals were estimated by the Bank of Russia at 12597 billion rubles in 2010 up to 60832 billion rubles in 2017 [24]. The dynamics of cards account transactions chronological growth is especially noticeable after the sequential commencement of the Federal Law "On the National Payment System". In 2010-2018 the total annual volume of legal entities cards transactions grew by 506.73%, and as for individuals, it grew by 382.91% [24].

Along with non-cash payments, bank cards are actively used to withdraw cash. With a general increase in the amount of cash being withdrawn on cards accounts, which for legal entities in this period amounted to 807.60%, and for

individuals – 136.04%, a multidirectional structural dynamic is detected. In the total amount of cards transactions, cash withdrawals in 2010 amounted to 41.83% (for legal entities) and 86.46% (for individuals), in 2017 the percentage amounted to 61.61% (for legal entities) and 42.26% (for individuals) [24]. The given structure, on the one hand, indicates the differences in motivation and targets for the cards accounts usage, and, on the other hand, the insufficiency of conditions for the cash in the calculations maximum rejection.

Issued cards are serviced by the subjects of the Russian Federation banking system – credit institutions, the number of which as a result of the rehabilitation of the Bank of Russia banking system from 2010 to 2018. decreased from 1058 units up to 561 units, including in the Volgograd region – in which it decreased from 5 units up to 1 unit (the number of branches of non-resident and foreign banks in this period decreased from 63 to 11 ones in the region) (as of the beginning of 2019, one commercial bank was registered in the region – JSC "NOKSSBANK"). However, the share of banks issuing and acquiring cards throughout the country increased from 66.16% of the total number of banks in 2010 (700 banks) to 70.41% of the total number of banks in 2018 (395 banks) [24], what indicates the market attractiveness of a card service payment market niche. The largest issuers of payment cards are Sberbank, VTB24, Alfa-Bank, Gazprombank, Rosselkhozbank, URALSIB, Rosbank, etc. The share of non-resident banks is less than 1% of Russian banks cards operations. In the Volgograd region, JSC "NOKSSBANK" issues and acquires Visa and Mastercard cards.

The key trend in card issuance is the rapid growth in the number of payment instruments of the national plastic card system (NPCS) — "MIR" cards, as well as the volume of transactions with their use, achieved due to the state protectionist activities. According to the NPCS report for 2015 (before the start of the "MIR" cards mass issue), by the end of the year, 49.9% of card products accounted for the Mastercard international payment system, 44.7% – for the cards of the Visa international payment system and only about 6% of the cards were issued by the Russian ("MIR", "Zolotaya Khorona", PRO100) and other foreign payment systems. Currently, about 35 million "Mir" cards have been issued, serving more than 90% of public sector employees in the Russian Federation and in the Volgograd Region in particular. In 2019, it is planned to issue at least 120 million of Russian "Mir" cards and take 30-40% of Russia payment cards market.

#### B. Contactless payments – payment market innovative trend.

Together with contact payments, the segment of the contactless payment market – cards (payment cards and loyalty cards) and mobile (smartphones and other wearable devices) – is actively developing; such payments are provided using the Internet and payment applications on mobile communication devices – Apple Pay, Samsung Pay, Android Pay and others.

The penetration rate and frequency of contactless technologies usage are growing at the highest rates compared

to traditional forms and instruments of payments. According to a poll by Visa international payment system, 41% own a contactless payment card, 38% use it, 52% of Russians intend to issue it, what confirms the contactless payments segment consumer loyalty. The respondents enumerated the motives for using payments of this type, they are: convenience (83%), transaction speed (56%), technology innovation (18%) [25].

If contactless card technologies have already become traditional, then mobile payment services have been available to the Russian market since 2016 (September 2016 – Samsung Pay, October 2016 – Apple Pay). This is facilitated by the increase in the number of POS-terminals with contactless payment (NFC-readers) to 1/4 of the total number of corresponding terminals. According to the data collected by Mastercard international payment system, Russia ranks first in the market using the Apple Pay technology. Russian users also rank first in the world by the number of cards attached to the Android Pay mobile payment service. It is known that a 10% increase in the use of mobile communications in the country leads to a 1.2% increase of the country's GDP [25].

Let us highlight the trends in the mobile (contactless) payments retail services distribution in Russia and in the Volgograd region.

First of all, with a frequent growth in the volume of paid services to the population in the first decade of the 2000s, when the market was saturated with modern means of communication, the total cost of communication services also adequately increases. If in 2000 the market was estimated at 67.5 billion rubles (or 464 rubles per capita of the Russian population), then in 2010 this value was already 929.8 billion rubles, or 6655 rubles per capita, and by the end of 2016, respectively, 1291 billion rubles and 8802.3 rubles (it is a more than 19-fold increase). The changes in the structural proportions of the services consumed are also indicative: at the beginning of the period under consideration, the share of communication services in the total amount of paid services was 11.21%, in 2010 – 19.23%, in 2016 – 14.95%, it means that, despite relative appreciation, these services became more available, more attractive, which explains the significant growth and potential of consumption level [26].

Secondly, a significant increase in the availability of modern means of communication (mobile technologies, Internet) and relevant services in comparison with the beginning of the 2000s attracts attention. The number of connected mobile communication terminals is growing (from 2.2 to 190.8 per 100 people), which indicates a qualitative expansion of the market with a lower subscriber density coverage of areas. The corresponding growth shows the number of mobile subscribers' devices from 3.3 million units up to 284 million units, which is 197.8 units per 100 people in 2016 [27] (as a rule, users own one device with the Internet access and one mobile service device). These circumstances indicate an increase in the quality of services provided by various mobile operators and the existence of a competitive market. The user base of the Internet is developing, which

covers the entire territory of the Volgograd region (located in the south of the country's European part), as well as an increasing number of settlements in remote territories, which indirectly characterizes the growth of virtual space accessibility.

Thirdly, there is a significant increase in the level of Russia digitalization and the elimination of the territorial imbalance in the modern digital communication networks coverage. The level of cities local telephone network digitalization for the years 2000-2016 increased in 2.61 times up to 92%, there is an underrun in rural areas – the same indicator increased only to 81.3% [26], which is explained by the large size of rural areas and their remoteness from regional centers. This underrun does not allow to use this resource fully as a basis for the payment systems development and building digital economy in rural areas.

Fourthly, the number of active communication subscribers is growing in proportion to mobile coverage and tool support. Since 2011, the number of fixed access to the Internet subscribers has increased by 52.78% and the number of mobile Internet subscribers has increased by 37.04%. As a result, at the end of 2016, the coverage of the Russian segment of the Internet amounted to 18.7% of the population with fixed access and 78.9% of the population with mobile access [27].

Fifthly, the growth of downloaded data amount from 5530.4 PBytes in 2010 to 22967.8 PBytes by 2015 (in 4.14 times) [27] indicates an increase in the intensity of this type of service receipt and indirectly an increase in the quality of the required data.

These conditions have led to the development of mobile contactless payments: parallel to contactless card payments, Russian banks are integrating with manufacturers of mobile Internet devices and mobile payment applications. Only at the initial stage of the Apple Pay payment service work out of 1 million Mastercard card holders issued by Sberbank, 125 thousand customers realized their ability to connect. The Samsung Pay service due to VTB24 bank cards for the first week of operation accumulated a turnover of 1.2 million rubles, 40% of these payments were made in the capital cities – Moscow and St.-Petersburg (the territorial statistics is similar for Alfa-Bank) [25]. In contrast to the aggregation of micropayments characteristic of the initial stage of mobile communication and mobile operators' services development, the average check for contactless mobile payments is 1,035 rubles (about 15 US dollars), this creates an additional competitive motivation for the struggle for this segment of the payment market both from banks and from mobile operators. Highly profitable expectations of mobile payment services implementation stimulate Russian banks to transfer merchant acquiring networks to support contactless payments. Sberbank has already transferred payment POS-terminals to receive contactless transactions, VTB24 plans to complete the transition by 2019.

#### IV. CONCLUSION

Thus, the analysis of the consumer payment services market in Russia showed the tendencies towards the separation of card contact and contactless segments, the restructuring of the market offer in favor of national issuers and systems, the deregistration of the cash flow, the replacement of traditional services with innovative ones. The considered segments of the payment services market demonstrate a steady growth due to the need for fast, safe and efficient payment mechanisms for goods and services.

Cards payment instruments are a growing segment of the payment market both in Russia and in the Volgograd region. The operational preferences of card holders are expanding within the development of the innovative forms of payment service offers. The key trend in card issuance is the rapid growth in the number of "MIR" cards, as well as the volume of operations with their usage, achieved thanks to the state protectionist activities.

The penetration rate and the frequency of contactless technologies usage are growing at the highest rates compared to traditional forms and instruments of payments. The trends in the distribution of mobile payment retail services are: the increase in the total cost of communication services, the availability of modern communication facilities and the quality of services provided by mobile operators (digitalization level); the competitive market formation; the number of active communication subscribers increase; the Internet services receipt intensification; the transfer of merchant and bank acquiring networks to contactless payments.

Taking all the above-mentioned into account, the highlighted trends in the payment market development reflect the digital nature of changes within the framework of the digital technological pattern.

#### References

- [1] Bech M.L., Preisig C., Soramaki K. Global Trends in Large-Value Payment. FRBNY Economic Policy Review. September 2008
- [2] Ercevik K., Jackson J. "Simulating the impact of a hybrid design on the efficiency of the CHAPS large-value payment system". The Quarterly Review of Economics and Finance, 2009, Vol. 49, pp. 1-25.
- [3] Korobov Yu.I. Razvitie bankovskoi sistemy: modernizatsiya ili transformatsiya? [The development of the banking system: modernisation or transformation?]. Nauka i obshchestvo [Science and society], 2015, № 3(22), pp. 39-41
- [4] Korobov Yu.I., Orlova A.N. Paradoksy bankovskoi sistemy Rossii [Paradoxes of the Russian banking system]. Finansy, den'gi, investitsii [Finance, money, investment], 2010, № 3, pp. 7-11
- [5] Travkina E.V., Kovalenko S.B. Nadzor Banka Rossii za deyatelnost'yu kommercheskikh bankov [Supervision of Bank of Russia behind activity of commercial banks]. Traditional and innovative science: history, modern condition, prospects. Collection of articles of International scientific-practical conference.- Ufa: "Aeterna", 2016, pp. 139-141
- [6] Stiglitz J.E., Bhattacharya A. "Underpinnings for Stable and Equitable Global Financial System". N.-Y.: World Bank, 1999
- [7] Leinonen H., Soramaki K. Optimizing Liquidity Usage and Settlement Speed in Payment Systems. Bank of Finland Discussion Papers, 1999, Vol. 16, pp. 1-55.
- [8] Anikina I.D., Gukova A.V., Golodova A.A., Chekalkina A.A. Methodological aspects of prioritization of financial tools for stimulation of innovative activities. European Research Studies Journal, 2016, Volume. 19. № 2 Special Issue. pp. 100-112.
- [9] Baydukova N.V., Vasilyev S.A., Chepakov D.A. Bankovskie sistemy i megaregulyatory na finansovom rynke: inostrannyi opyt i otechestvennaya praktika [The banking system and the megaregulators in the financial market: foreign experience and domestic practice] Izvestiya Sankt-Peterburgskogo gosudarstvennogo universiteta [Bulletin of Saint-Petersburg state University], 2016, № 1, pp. 17-26
- [10] Epifanova O.N., Burkaltseva D.D., Tyulin A.S. Ispol'zovanie tekhnologii blokchein v gosudarstvennom sektore [Use of blockchain technology in the public sector] Electronic currency in the light of modern legal and economic challenges proceedings of the International scientific-practical conference.- Simferopol, 2016, pp. 88-97
- [11] Semenyuta O.G., Panchenko N.O. Bankovskii sektor Rossii – osnova modernizatsii otechestvennoi ekonomiki [The banking sector of Russia – the basis of modernization of the domestic economy]. Finansy i kredit [Finance and credit], 2013, № 41 (569), pp. 2-7
- [12] Kozenko Yu.A. Perspektivy ispol'zovaniya tsifrovyykh platezhnykh sistem, obespechennykh zolotom [Prospects for the use of digital payment systems backed by gold]. Biznes. Obrazovanie. Pravo. Vestnik Volgogradskogo instituta biznesa [Business. Education. Right. Bulletin of the Volgograd business Institute], 2013, № 4, pp. 184-188.
- [13] Diana Dmitrievna Burkaltseva, Olga Sergeevna Sivash, Oleg Valerievich Boychenko, Lyubov Vasilievna Savchenko, Tatyana Nikolaevna Bugaeva, Snezhana Anatolyevna Zotova. Realization of Investment Processes in the Agricultural Sector of the Digital Economy. 2017. European Research Studies Journal, Volume XX, Issue 4B, pp. 366-379
- [14] Diana Dmitrievna Burkaltseva, Oleg Valerievich Boychenko, Olga Sergeevna Sivash, Nicholas Maksimovich Mazur, Snezhana Anatolyevna Zotova, Aleksey Valeryevich Novikov. The Construction of the Digital Organizational, Social and Economic Production Mechanism in the Agro-industry. European Research Studies Journal, 2017, Volume XX, Issue 4B, pp. 350-365
- [15] Levine R., Loayza N., Beck T. Financial Intermediation and Growth: Causality and Cause. Journal of Monetary Economics, 2000, Vol. 46 (1), pp. 31-77.
- [16] Nelson R., Phelps E. Investment in Humans, Technological Diffusion, and Economic Growth. American Economic Review, 1996, Vol. 56 (2), pp. 69-75.
- [17] Razin A.S., Nazarova T.P. Nekommercheskiy sektor v rossijskoj ehkonomike: traditsii i sovremennost' [non-Profit sector in the Russian economy: traditions and modernity]. Izvestiya Nizhnevolzhskogo agrouniversitetskogo kompleksa: nauka i vysshee professional'noe obrazovanie [Proceedings of Nizhnevolzhskiy agrouniversity complex: science and higher vocational education]. 2016, № 2(42), pp. 302-307
- [18] Shepitko R.S., Koshkarev I.A. Kategorial'naya protivorechivost' ehkonomicheskikh interesov hozhaystvuyushchih sub'ektov: ehvolutsiya, korrektsiya [Categorical contradiction of economic interests of economic entities: evolution, correction]. Izvestiya Nizhnevolzhskogo agrouniversitetskogo kompleksa: nauka i vysshee professional'noe obrazovanie [Proceedings of Nizhnevolzhskiy agrouniversity complex: science and higher vocational education]. 2012, № 1(25), pp. 201-206
- [19] Skokov R.Yu. Vvedenie v teoriyu rynkov «additivnykh blag» [Introduction to the theory of markets of "addictive goods"]. Sovremennaya ekonomika: problemy i resheniya [Modern economy: problems and solutions], 2013, № 5 (41), pp. 13–20
- [20] Zavivaev N.S. Shamin E. A. Gosudarstvennaya podderzhka kak faktor ehffektivnogo razvitiya informatsionnogo obshchestva [State support as a factor of effective development of the information society]. Izvestiya Nizhnevolzhskogo agrouniversitetskogo kompleksa: nauka i vysshee professional'noe obrazovanie [Proceedings of Nizhnevolzhskiy agrouniversity complex: science and higher vocational education]. 2015, № 4(40), pp. 233-239
- [21] Korobeynikova O.M., Korobeynikov D.A., Popova L.V., Savina O.V., Kamilova R.S. The current state of the payment infrastructure and development of payment systems in Russia and the Volgograd region// Espacios, Volume 38, Issue 62, 2017, Available at: <http://www.revistaespacios.com/a17v38n62/17386211.html>. Reference date: 29.12.2018

- [22] Korobeynikova O.M., Korobeynikov D.A. Problemy transmissii denezhnykh i kreditnykh resursov v kontekste provedeniya denezhno-kreditnoi politiki [The problems of the transmission of monetary and credit resources in the context of monetary policy]. Izvestiya Nizhnevolzhskogo agrouniversitetskogo kompleksa: nauka i vysshee professional'noe obrazovanie [Proceedings of Nizhnevolzhskiy agrouniversity complex: science and higher vocational education], 2015, № 2(38), pp. 246-251
- [23] Lamben Jean Jacques. Strategicheskij marketing. Evropejskaya perspektiva [Strategic marketing. European perspective. Per. French.]. SPb.: Nauka, 1996.- 589 p.
- [24] Official website of the Bank of Russia. Statistics. Statistics of the national payment system. [Electronic resource].– Available at: <http://www.cbr.ru/statistics/?prtlid=psrf>. Reference date: 11.02.2019
- [25] Rynok beznalichnyh platezhej Rossijskoj Federacii v 2016 godu: kratkij obzor [non-cash payments Market of the Russian Federation in 2016: a brief overview]. Available at: <http://www.plusword.ru/professionals/rynok-platezhnykh-kart-rossiyskoy-federatsii-v-2016-godu-kratkiy-obzor/> Reference date: 03.08.2018
- [26] Russian Statistical Yearbook 2017: Stat. book/Rosstat. – M., 2017 – 686 p.
- [27] Transport i svyaz' v Rossii. 2016 [Transport and communications in Russia. 2016]: Stat. book /Rosstat. – M., 2016. - 112 p.