Analysis of Nowadays E-Commerce Tendencies for the Russian Federation^{*}

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Abstract. E-commerce applies achievements of scientific and technological progress in the field of telecommunications for business entities. It quickly solves the important task of finding a commercial partner without intermediaries and with minimal transaction costs, thereby increasing organization competitiveness. Also, it is a technology that has a high potential for growth of the national economy in modern conditions of business development. The article discusses the main tendencies in the development of electronic commerce for the Russian Federation accounting potential for its growth.

Keywords: E-commerce, Digitalization, Economy.

1 Introduction

In the practical aspect e-commerce is a diverse configuration of business processes in which there is the interaction between various business entities and suppliers in electronic form. Electronic commerce includes Electronic Data Interchange (EDI), Electronic Funds Transfer (EFS), e-trade, e-cash, e-marketing, e-banking, and e-insurance.

EDI is the term introduced by the Russian information society and enshrined in the national standard of the Russian Federation GOST R 52292-2004. It means any transfer of data using electronic information channels.

EFS is a way of monetary transactions from one bank account to another without any use of paper money.

E-trade is a purchase and sale transaction using Internet tools.

E-cash is the issuer's monetary arrangements submitted in electronic form, which are at the user's disposal on electronic media. In most cases, transactions that facilitate the circulation of electronic money are practiced when using computer networks, the Internet, payment bankcards, online wallets, and devices that work with payment cards, such

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as PayPass, POS terminals. E-marketing is the line of business aimed at attracting, retaining, and making a profit or other positive effects from an Internet user.

E-banking is a service that enables suppliers to manage and coordinate their bank accounts via the Internet.

E-insurance is a kind of insurance service that can be ordered using the Internet. In Russia, this technology was developed with other new areas of attracting and using capital only after 2010.

The article aims to make research on the analysis of tendencies that are common to mentioned kinds of e-commerce for the Russian Federation. It can be subdivided into tasks:

- 1. to make a description of basic tendencies for e-commerce development prospects;
- 2. to analyze statistical data on electronic commerce;
- 3. to suggest possible ways of the e-commerce improvement for the Russian Federation.

2 Materials and Methods

In the article, there were used general scientific and special research methods to solve the determined aim. There are a statistic, techno-economic, graphical, system and structural analyses, economic modeling, expert estimation. It was studied theoretical and applied papers on the research topic [1-21], also official statistics data.

3 Main content. Analysis of nowadays e-commerce tendencies for the Russian Federation

The description of basic tendencies for e-commerce development prospects. Nowadays the Russian Federation faces the digitalization of its economy. Online sales were 1.150 billion rubles there in 2018 (fig. 1). According to experts, the e-commerce market will grow there as well as throughout the world.

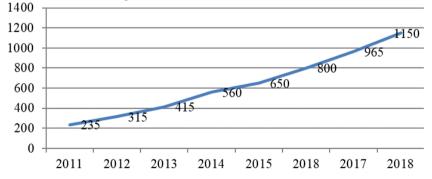


Fig. 1. Online sales in the Russian Federation (2011-2018) (billion rubles) (graphical interpretation by the authors)

Each year the growth in e-commerce increased: five years ago it grew by 100 billion rubles a year; in 2018 it enlarged by 185 billion rubles. If current trends continue by 2023 the market will grow two times to 2.4 trillion rubles with an average annual growth rate of + 16% (2019-2023) (fig. 2).

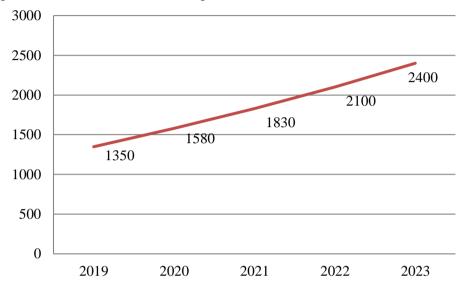


Fig. 2. Prospects on the growth of online sales in the Russian Federation (2011-2018) (billion rubles) (graphical interpretation by the authors)

Authors analyzed and systemized various tendencies of development prospects for electronic commerce in the Russian Federation. One of them is an advanced search for goods at online stores. It is the tool that saves time for customers, gives them multiply ideas of best-selling products and their various combinations based on clients' interests, besides increases volumes of cross sales. In stores customers can apply search by various options with keywords in names of goods, their complementarities, also there is sorting by popularity.

The other tendency is an online search for goods and then purchasing them offline. There is a statistical fact that 82 % of mobile users browse for nearby offline stores via the Internet and then 18 % of them buy what they were looking for within 24 hours. Searching online for further offline, purchasing makes new key performance indicators for online advertising campaigns. It is not easy to measure and improve effectiveness for these KPI but it is quite realistic with peculiar work with the modernization of mobile version for site, collaborate with social networks, applying CRM, payment and cash systems.

Social networks can also provide the great potential for e-commerce development. Today VKontakte, Facebook, Instagram, and Pinterest attract the highest sites' traffics in the Russian Federation. These sites are developing more commercial directions on their platforms by themselves without any intermediaries. Instagram started introducing shopping tags in 2018, groups and communities at VK allow creating real online stores. Nowadays targeted advertising on social networks becomes more popular and personalized that also contributes to conversion increasing.

Now offline shopping differs from online shopping with the presence of a consultant who quickly orients in assortment and helps to find the very good. Soon it may happen that when a person enters an online store he will meet a virtual consultant who performs the same functions. It works in the simplest form even now –one can easily filter out unnecessary products with help of smart tags, online consultants perform roles of virtual consultants.

According to Comscore prognosis, more than 50 % of all searches will be made on voice by 2020. Accordingly, to updates of search engines sites should be also changed. Google and Yandex already make sure that users get better results on voice requests. Therefore, this type of search is one of the most anticipated trends in e-commerce and it predicts a new era of optimization for search engines as well as the development of online stores must be focused on voice search.

Augmented Reality (AR) and Virtual Reality (VR) have a high potential for e-commerce. Face recognition in iPhones (and soon in Sberbank), colorful photo filters on social networks – these are where AR and VR are now developing the most actively. In addition, in 2019 AR and VR became one of the most progressive tendencies in ecommerce. Augmented reality helps to understand how products will look in a real environment. It turns out very clearly and helps to make purchasing decisions. The technology is successfully used today. A great example in this area is Lenskart. Here anyone can "try on" models as they like in 3D. A special program remembers the face and creates its virtual version. So the buyer can try on different glasses, and choose the most suitable ones at the site.

According to SearchEngineLand, almost 60 % of Google's total request numbers were made from mobile devices in 2019. For this reason, websites should have search engines that are more comfortable for mobile devices. Size and preferences of Internet audience in the Russian Federation (2019) are illustrated in fig. 3.

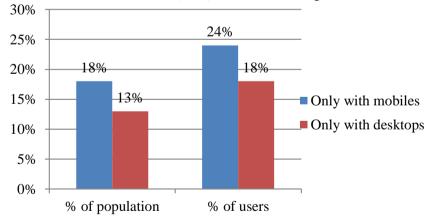


Fig. 3. Size and preferences of Internet audience in the Russian Federation (2019) (graphical interpretation by the authors)

Internet statistics show that now users view 286% more products via mobile applications than on sites. Therefore, large companies are promoting their applications in every possible way, and in the nearest future, it will be seen a tangible decrease in the use of browsers for e-commerce markets.

Practical methods of artificial intelligence (AI) such as machine learning, neural networks, and personalization already have a huge impact on business, including e-commerce. In this area programs allow the seller to predict the buyer's choice and offer him only the best goods. This is possible due to an analysis of the history of searching and viewing products and user's orders. This approach is especially important for e-commerce because each buyer has different preferences that should be taken into account. In offline stores sellers or consultants often know what to offer for their regular customers. And these buyers will return to the stores again because their contact personnel knows what to offer them. 45 % of Internet users prefer to buy on platforms that can provide personalized recommendations, 56 % of them will return to such platforms to place their orders again. Also, e-mails with personalized recommendations based on customer's behavior analysis can be sent to them.

Personalized ads (also known as interest-based ads) will become even more accurate in 2019. Google and Yandex are offering more ad formats that are more in line with users' preferences. Neural networks analyze the history of user queries then show more accurate offers and increase the conversion rate of customers. However, automation is still not enough – constant work is needed from specialists who carefully sets up the campaign and then engages in its conduct.

2019 became more efficient in image search. Google and Yandex have been working in this direction for a long time. Pinterest is doing a lot of work to improve the achieved results in this field. Also, visual search has already been implemented on some e-commerce platforms. For instance, buyers can find the product that they desire to have in the ASOS store using screenshots, photos from the Internet, or their own (the function works only with the mobile application).

Delivery on the day of the order was one of the most anticipated trends in e-commerce in 2019, which is a ponderable achievement in electronic commerce. Today some of the large online stores already promise next day delivery and offer several transportation options at once (for example, the OZON online store). Logistics is also improving, and every year trading floors become more flexible and adapting to buyers.

In the next years, it is expected a rapid increase in the number of trading floors such as Yandex. Market or Beru and accordingly their sellers will be multiplied. This is possible due to the relatively simple and low-budget launch of stores on such marketplaces. Also, sellers get ready-made trade catalogs that they only need to fill with their goods, mechanisms for working with orders and payments, and references for materials and reviews of other users about working with the site. And the most important fact is that buyers are already coming to the marketplace, so it's easy to start trading on the site: one just needs to figure out finished functionality, place goods, and start receiving orders.

One more tendency is chatbots applying. When developing the chatbot, machine learning technology is used, and as a result, the program can communicate to customers – answer questions, suggest solutions to problems, collect applications 24 hours a

day. Today such programs are created mainly on the platforms of:

- VK;
- Telegram;
- Facebook Messenger;
- Viber;
- WhatsApp.

These programs help automate some processes, and also more effectively capture the attention of users who spend a lot of time in social networks and instant messengers.

In 2019 56 % of B2B buyers completed more than half of their orders on online platforms. Moreover, more than 70 % of B2B buyers begin with a general search. This will affect the fact that sites will be focused not only on retail buyers but also on whole-salers.

The best way to explain all the benefits of one's product is to show it clearly. Therefore video content is becoming more preferable than static photos. When potential buyers get to the main page of the online store, a high-quality video about a product may interest them so much that they will not only watch it to the end but will also look at the product's card and quite possibly share the link with others. This can significantly increase the number of visits to a store and conversion rate.

4 Core statistical data analysis on the e-commerce development in the Russian Federation

Creation of relevant and detailed official statistics for electronic commerce is only at the stage of its formation in the Russian Federation, almost all the data are based on expert estimations and results of sociological and custom-made analytical researches.

The results of sociological research of J'son&Partners Consulting display that more than 35 % of the Internet users have already made purchases online at least once. Over the past five years, delivery times from online stores have been reduced by an average of 2-3 times.

According to experts of J'son&Partners Consulting, about 40 thousand online stores are currently operating on the market, while consultants of Data Insight estimate about 200 thousand online stores.

At the same time, only 5 % of online stores generate 90 % of the turnover, completing more than 10 orders per day.

In the Russian Federation, the bulk of revenues of online stores are mostly formed by Moscow (30.9%), Moscow region (5.8%), St. Petersburg, and Leningrad region (10.6%).

In authors' research were analyzed core data on markets of electronic commerce. The most significant countries there are:

- USA;
- Great Britain;
- Germany;

- India;

⁻ China;

- the Russian Federation;

– Brazil.

The share of e-commerce in GDP compared to Internet extension is illustrated in fig. 4.

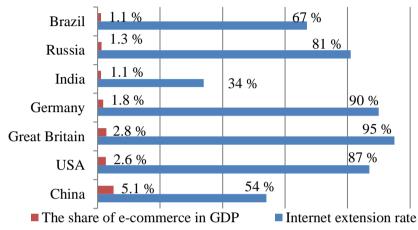


Fig. 4. The share of e-commerce in GDP compared to Internet extension (2019) (%) (graphical interpretation by the authors)

The Russian Federation has a rather high Internet extension rate -81 %, but the share of e-commerce in GDP is still insufficient -1.3 %.

The growth of e-commerce based on the data of Statista and Data Insight is illustrated in fig. 5 for the Russian Federation.

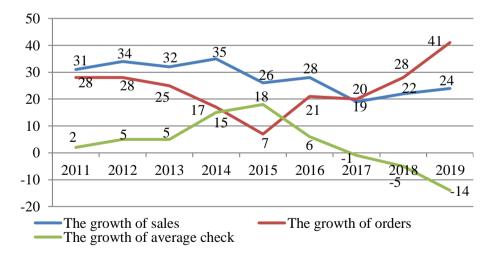


Fig. 5. The growth of e-commerce based on the data of Statista and Data Insight for the Russian Federation (2011-2019) (%) (graphical interpretation by the authors)

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The rate of import in e-commerce for Eastern Europe and The Russian Federation is 48 % in 2019. The structure of e-commerce sales export from the Russian Federation for 2019 is in fig. 6.

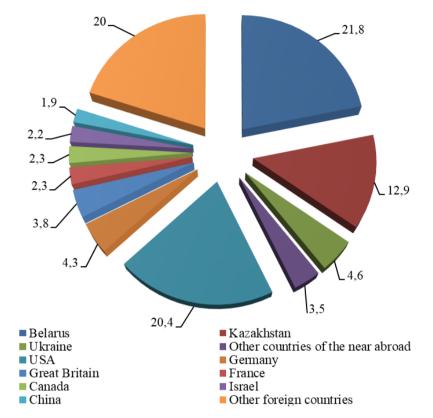


Fig. 6. The structure of e-commerce sales export from the Russian Federation for 2019 (%) (graphical interpretation by the authors)

The given indicators for the Russian electronic market reflect the positive economic effect of electronic commerce but some problems slow down the development of e-commerce progress.

5 Possible ways of e-commerce improvement for the Russian Federation

Authors suggest possible ways of e-commerce improvement for the Russian Federation as:

- development of an ecosystem of the Internet logistics market;

- ensuring the widest possible legal development of electronic commerce by increasing entrepreneurial activity and expanding private initiatives of entrepreneurs; - removing excessive prohibitions and resolving legal conflicts for electronic commerce that are absent in traditional trade;

– assisting in the implementation of objective assessment for areas of electronic commerce development by ensuring availability and completeness of open data related to e-trade as well as considering the possibility of using technologies that provide aggregation, processing, and analysis of data in the field of electronic commerce;

 – ensuring effective legal regulation for electronic transactions, improving payment systems for them, ensuring legal protection for the e-commerce participants (sellers, buyers, third parties);

 providing balanced business conditions for Russian online stores and foreign online stores that sell goods directly to individuals in the Russian Federation;

 – enhancing cybersecurity in the field of electronic commerce in the domestic market and the field of cross-border electronic commerce.

6 Conclusions

Mentioned e-commerce tendencies dictate the development of all online trading for at least the coming year. They encourage companies to come up with newer and more original ways to capture the attention of visitors to their sites and use different channels to increase conversion.

Statistic indicators for the Russian Federation show the positive economic effect of electronic commerce.

In the Russian Federation, it is necessary to create a set of favorable regulatory, organizational and technical conditions to stimulate the business activity of electronic commerce participants, to form a competitive environment, and develop a comfortable consumer climate for the population. The implementation of suggestions that are given by the authors will contribute to the creation and improvement of additional market mechanisms to ensure the growth and development of electronic commerce taking into account externals and internals and effective use of its resources and potential.

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