

Маркетинг Marketing

Original article
DOI: 10.14529/em220114

A REVIEW OF THE DEVELOPMENT OF ELECTRONIC COMMERCE IN RUSSIA AND ITS IMPLICATIONS FOR SMALL BUSINESSES

M. Olumekor, S.N. Polbitsyn

Ural Federal University, Yekaterinburg, Russia

Abstract. This article provides a detailed review of the literature on the development of electronic commerce in Russia from its origins in 1997. The article reveals some very important milestones in Russia's electronic commerce adoption, including the creation of Russia's first electronic bookstore, the invention of Russia's first e-payment system, and the start of Russia's first fully e-commerce store. It also provides an analysis of the initial struggles of electronic commerce in Russia, and how the market has grown to become a 2.7 trillion ruble industry in 2020, making up 21 % of overall Russian retail. The implications of all of these on small businesses was also analyzed.

Keywords: E-commerce, small business, electronic commerce in Russia, e-commerce development in Russia, origins of e-commerce, Russian economy, Russian e-retail, E-payment development

For citation: Olumekor M., Polbitsyn S.N. A review of the development of electronic commerce in Russia and its implications for small businesses. *Bulletin of the South Ural State University. Ser. Economics and Management*, 2022, vol. 16, no. 1, pp. 143–148. DOI: 10.14529/em220114

Научная статья
УДК 339.371.5
DOI: 10.14529/em220114

ОБЗОР РАЗВИТИЯ ЭЛЕКТРОННОЙ ТОРГОВЛИ В РОССИИ И ЕЕ ПОСЛЕДСТВИЙ ДЛЯ МАЛОГО БИЗНЕСА

М. Олумекор, С.Н. Полбицын

Уральский федеральный университет, Екатеринбург, Россия

Аннотация. В этой статье представлен подробный литературный обзор на тему развития электронной торговли в России с момента ее зарождения в 1997 году. В нем освещаются важные вехи российской электронной коммерции, включая создание первого электронного книжного магазина, первой системы электронных платежей и первого полностью электронного магазина. Также представлена беспристрастная оценка первоначальных трудностей электронной коммерции в России и того, как рынок вырос до 2,7 трлн рублей в 2020 году, составив 21 % всей российской розничной торговли. Также были проанализированы последствия всего этого для малого бизнеса.

Ключевые слова: электронная коммерция, малый бизнес, электронная коммерция в России, развитие электронной коммерции в России, истоки электронной коммерции, российская экономика, российская электронная розничная торговля, развитие электронных платежей

Для цитирования: Olumekor M., Polbitsyn S.N. A review of the development of electronic commerce in Russia and its implications for small businesses // Вестник ЮУрГУ. Серия «Экономика и менеджмент». 2022. Т. 16, № 1. С. 143–148. DOI: 10.14529/em220114

© Олумекор М., Полбицын С.Н., 2022

Introduction

Electronic commerce, also known as e-commerce, online commerce or digital trade, has become an increasingly dominant part of the Russian and global economy. Chaffey (2007) defines electronic commerce as all “types of transactions between organizations and stakeholders whether they are financial transactions or exchanges of information or other services”, while Holsapple and Singh (2000) synthesized the several disparate aspects of electronic commerce to produce a seamless definition which takes into account the “trading view, the information exchange view, the activity view, the effects view, and the value chain view” of electronic commerce. Applegate et al. (1996) argued that electronic commerce involves more than simply buying and selling over the internet, and it also includes “all sorts of presale and postsale efforts”, and a number of other factors including “market research, generation of qualified sales leads, advertising, product purchasing and distribution, customer support, recruiting, public relations, business operations, production management, knowledge distribution, and financial transactions”.

However, perhaps the most comprehensive definition of electronic commerce was presented by Rolf T. Wigand (1997), who explained electronic commerce as any form of economic activity conducted through electronic connections. He further argued that electronic commerce covers a wide spectrum including electronic markets, electronic hierarchies, electronically supported entrepreneurial networks and electronic networks. He also included commonly available services in tourism, finance, insurance, product distribution and customer services as part of electronic commerce (Wigand, 1997). Today, electronic commerce has also come to include digital advertising, social media commerce, online gambling and online brand development, among others.

The global electronic commerce market has grown exponentially over the past several decades. It is now a multi-trillion-dollar industry which has become pivotal to the economies of many countries around the world. In the Russian Federation, the electronic commerce sector has experienced astronomical growth and technical progress over the past 10 years, and both Business to Consumer (B2C) and Business to Business (B2B) e-commerce sales have reached historic levels. Furthermore, Russia also prominently features cross-border e-commerce transactions with dominant players like Aliexpress and ASOS, among others. Electronic commerce has not only become vital to the Russian economy, it has also played an important health role in the last few years, as the world grappled with the Covid-19 pandemic. Russian consumers, including vulnerable groups such as the elderly, turned to e-commerce to maintain social distancing/restrictions, while continuing to buy essential products. This behavioural change, fuelled by the Covid-19 pandemic, has resulted in the further extraor-

inary growth of electronic commerce stores and marketplaces in Russia in the last 2 years (Olumekor & Polbitsyn, 2021).

This article explores the development of electronic commerce in Russia by examining relevant literature and data on the subject.

Importance of E-commerce

The global e-commerce sector was a \$1.3 trillion industry in 2014, and by 2020 it had almost quadrupled in size with a revenue of \$4.28 trillion. It is expected to continue its huge growth into the future with revenues of \$5.4 trillion in 2022 and \$6.5 trillion in 2023 (Statista, 2020). According to research from Data Insights (2021b), the Russian e-commerce market grew by 78 % in 2020, making Russia one of the fastest growing e-commerce markets in the world.

The importance of a thriving e-commerce market to the economy of a country has been well documented by several scholars, including Liu (2013), who argued that e-commerce can be a vital tool to growing the economy of a country, and Molla and Heeks (2007) who extolled the role e-commerce could play in improving the economies of developing nations. Furthermore, e-commerce also has the ability to improve trade for countries (World Trade Organization, 2013), to help business increase sales especially in moments of crisis (Yun et al., 2020), for business expansion (Xia & Zhang, 2010), for education (Goldsmith & McGregor, 2000; Olumekor, 2021) and to help small and medium enterprises become more competitive (Grandon & Pearson, 2004; Karagozoglu & Lindell, 2004; Kurnia et al., 2015; Lucking-Reiley & Spulber, 2001; Min & Galle, 1999; Subba Rao et al., 2003).

Development of Electronic commerce

The history of modern e-commerce can be traced back to the development of computers going back to the late 1940s and early 1950s (Smith, K.T. 2008). According to the Smithsonian Magazine (2015), the world's first genuine e-commerce transaction occurred when Dan Kohn, founder of NetMarket sold a CD of Sting's “Ten Summoner's Tales” to his friend in Philadelphia, who paid \$12.48 plus shipping, and “used data encryption software to send his credit card number securely”.

Development of Electronic Commerce in Russia

In Russia, e-commerce began in 1996 after ‘Symvol Plus’, the Russian book publishing company, created its electronic store to sell books in all of Russia. It was created to mirror Amazon, the American bookstore which was created two years earlier in 1994. In 1997, Symvol Plus changed the name of its electronic store to ‘Books.ru’, a website which still sells books till today. About one year after the creation of Books.ru, Ozon.ru – also simply referred to as Ozon – was created to also sell books via the internet. However, unlike Books.ru which has largely remained an online bookstore, Ozon expanded into selling electronics, toys, CDs and DVDs, and eventually many

Table 1

Some major milestones in the development of internet and e-commerce

Year	Milestone
1946	The first computer was developed by the University of Pennsylvania
1958	ARPA – The Advanced Research Projects Agency is created in the United States of America
1969	ARPANET, the precursor to the modern internet is created
1970	The adoption of Electronic Data Interchange begins.
1972	The first internet transaction between students at Stanford University and MIT
1974	ARPANET is commercialised by Bolt Beranek and Newman, and Telnet is created
1982	Transmission Control Protocol (TCP) and Internet Protocol (IP) are created and the term “Internet” becomes widely used
1989	The internet reaches 100000 users
1992	The World Wide Web (www) is formally released.
1994	Dan Kohn conducts the first fully e-commerce transaction using data encryption software
2000	The internet reaches 360 million global users
2014	E-commerce sales surpass \$1.3 trillion globally
2021	The Internet surpasses 5.1 billion users

Sources: Smith K.T. (2009), Smith et al. (2010), Smithsonian Magazine (2015), Internet World Stats (2021), Statista (2020).

other products (Hawk, 2002). Today, Ozon is a fully fledged e-commerce company selling almost every type of consumer good, and in 2020 it completed its Initial Public Offering with a valuation of over \$6.2 billion (Bloomberg, 2020).

The case of Ozon is not an outlier in global and Russian e-commerce. According to Statista (2021), 2.14 billion people are expected to buy goods and services over the internet in 2021. That represents an extraordinary amount of growth compared to 2016, when 1.66 billion were e-commerce customers. Various scholars argue about the different reasons fuelling the growth of e-commerce; however, it is undeniable that growth in e-commerce has coincided with the growth in the number of internet users, especially the astronomical growth in mobile internet usage. According to Kemp (2021), as of January 2021, there were 226.6 million mobile connections, and data from the World Bank (2020) show more than 82.6 % of the Russian population used the internet in 2019, compared to just 49 % in 2011. During the same time pe-

riod, e-commerce sales increased from just 89 million orders in 2011, to over 830 million orders in 2020 (Data Insights, 2021b).

Further research from Data Insights (2021b) show the current size of the Russian e-commerce sector to be 2.7 trillion rubles, while the share of electronic commerce has risen to 21 % of overall retail sales in Russia, compared to just 11 % in 2018.

However, similar to the experiences of other countries, e-commerce in Russia faced some initial challenges during its infancy. The first major challenge was how to handle payment for goods bought electronically. Due to the low usage of credit cards between 1997 and 2001 in Russia, e-commerce stores adopted a system of enabling customers to either pay cash on delivery or pay via bank wire transfer. The complexity of this system led to the rise of Russia's first electronic payment system, CyberPlat. Cyberplat was created by Platina bank in 1998 and completed its first electronic commerce transaction in August of the same year (Kommersant, 2000). The invention of

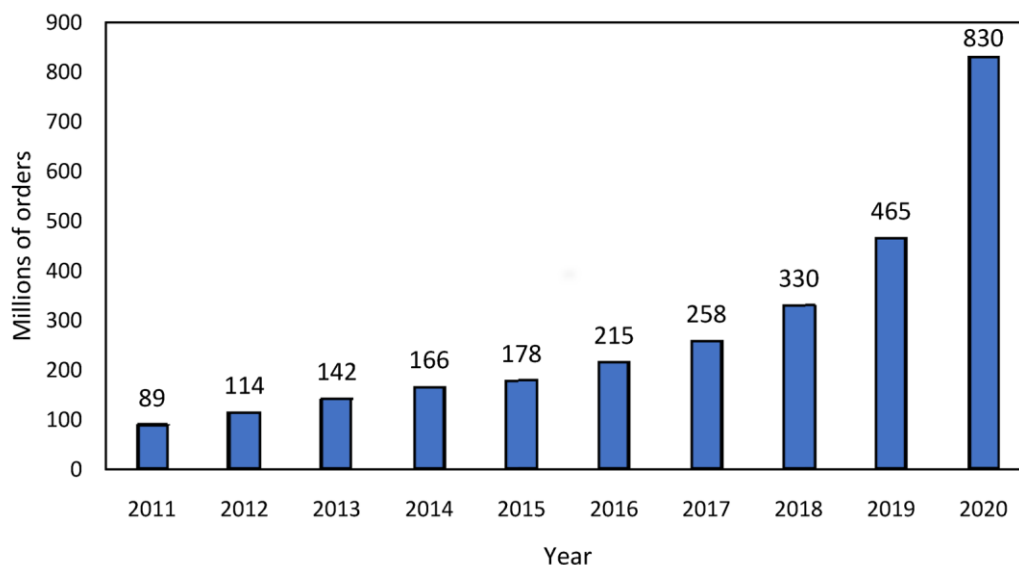


Figure 1. Number of Orders in electronic commerce in Russia
Data Source: Data Insights, (2021b)

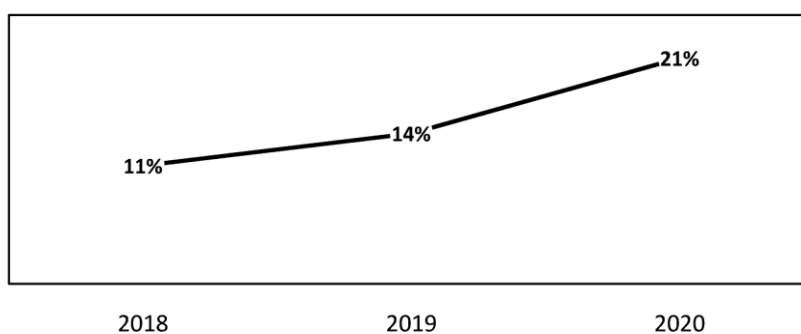


Figure 2. Share of E-commerce in Russian retail
Data Source: Data Insights, (2021b)

Cyberplat – and subsequently other e-payment solutions like WebMoney – was a significant milestone in the development of electronic commerce in Russia (Hawk, 2002). Furthermore, another initial challenge during the early periods of e-commerce in Russia, was how to handle logistics and product delivery. Russia is famous for its vast terrain, and delivering goods all over the country all year round – including during the harsh winter season – proved to be difficult (Hawk, 2002). Nevertheless, electronic commerce companies overcame this problem by building their own logistics and delivery systems.

Most major stores in Russia currently offer some form of opportunity for customers to buy their products online. Figures from Data Insights (2021a) show the leading e-commerce company in Russia to be Wildberries with a revenue of 413 billion roubles in 2020, this represented about double its revenue in 2019. Furthermore, Wildberries has also expanded its operations beyond Russia and the Commonwealth of Independent States. It now has a presence in Poland,

Ukraine and Israel, and it has also just begun to enter the European Union and American markets (East-West Digital News, 2021). Ozon is the second leading e-commerce company in Russia. It also reported an extraordinary increase in its 2020 profits, with a revenue growth of over 144 % from 2019. The exceptional revenue growth of Russian e-commerce companies in 2020 was primarily driven by the Covid-19 pandemic (Olumekor & Polbitsyn, 2021). Citilink, DNS-Shop and Mvideo complete the top 5 companies in Russian e-commerce (Data Insights, 2021a).

Implications for small businesses

As more industries and customers in the Russian economy accelerate their movement towards electronic commerce and economic digitalisation, it is important to note that the initial stages can be highly disruptive for small businesses in particular. In an extensive study of the effect of electronic commerce and overall digitalisation, Scholz et al. (2020) found that businesses could be vulnerable to digital threats and proposed a method to quantitatively analyse and overcome this. Furthermore,

extensive studies on different areas of electronic commerce and overall digitalisation have been linked to future unemployment, and challenges for businesses and the larger economy (Arntz et al., 2017; Frey and Osborne, 2017; Sorgner et al., 2017).

However, the overwhelming body of research suggests that electronic commerce can be beneficial to small businesses in the long run (Subba Rao et al., 2003; Chen & Zhang, 2015; Tan & Ludwig, 2016; Grandón & Ramírez-Correa, 2018; Nathan et al., 2019). For small businesses in Russia, the opportunity to reach customers in any part of the country regardless of season, operating cost reduction, targeted digital marketing, customer flexibility, data collection and analysis, supply chain optimisation, and improved customer satisfaction are some of the reasons to adopt e-commerce. However, while e-commerce has improved its share of overall retail to 21 %, there remains room for improvement. Recent research on the reasons why some small businesses choose to use electronic commerce while others refuse have shown that factors like risk perception, online trust, and innovativeness, among others, are significant influencers (Nathan et al., 2019; Grandón & Ramírez-Correa, 2018). In particular, a study of small businesses in Malaysia and Singapore revealed online trust to be the biggest influencer of small business electronic com-

merce adoption. To increase online trust and to make small businesses more competitive, (Chen & Zhang, 2015) recommended investment in IT infrastructure. Their research found that it leads to significant competitive advantage for businesses.

Conclusion

This article provides a detailed review of current literature on the development of electronic commerce in Russia from its origins in 1997 to today. We traced the development of e-commerce in Russia from its founding in 1997, to the 2.7 trillion ruble industry that it is today. We uncovered many noteworthy milestones including the creation of ‘Symvol Plus’ in 1997 which became Books.ru, to the creation of Ozon which became Russia’s first general e-commerce store, and the creation of CyberPlat, which provided Russia’s first e-payment service and helped ease a lot of challenges with financial transactions in the early periods of Russian electronic commerce. As electronic commerce accelerates in Russia, we analysed its implications for small businesses

The main limitation of this study is that it is limited in scope and does not cover the changes in investments and governmental policies – including taxes – which have increased the growth of electronic commerce in Russia. Therefore, additional research on the topic is highly encouraged.

References

- Applegate, L. M., Holsapple, C. W., Kalakota, R., Radermacher, F. J., & Whinston, A. B. (1996). Electronic commerce: Building blocks of new business opportunity. *Journal of Organizational Computing and Electronic Commerce*, 6(1), 1–10. <https://doi.org/10.1080/10919399609540264>
- Bloomberg. (2020). *Online Retailer Ozon Has Best Russia IPO Debut Since 2011*. www.bloomberg.com. <https://www.bloomberg.com/news/articles/2020-11-25/online-retailer-ozon-has-best-russia-ipo-debut-since-2011>
- Chaffey, D. (2007). *E-business and e-commerce management : strategy, implementation and practice*. Financial Times Prentice Hall. <https://dl.acm.org/citation.cfm?id=1213572>
- Data Insights. (2021a). *TOPI-100 2019*. Top-100 2019. <https://www.top100.datainsight.ru/>
- Data Insights. (2021b). *E-commerce in Russia 2020*. In *Data Insights*. https://datainsight.ru/sites/default/files/DI_Ecommerce2020_eng.pdf
- East-West Digital News. (2021, May 28). *In 2020, Russian e-commerce recorded one of the world's highest growth rates*. East-West Digital News. <https://www.ewdn.com/2021/05/28/in-2020-russia-recorded-one-of-the-worlds-highest-e-commerce-growth-rates/>
- Goldsmith, E., & McGregor, S. L. T. (2000). E-commerce: consumer protection issues and implications for research and education. *Journal of Consumer Studies and Home Economics*, 24(2), 124–127. <https://doi.org/10.1046/j.1365-2737.2000.00150.x>
- Grandon, E. E., & Pearson, J. Michael. (2004). Electronic commerce adoption: an empirical study of small and medium US businesses. *Information & Management*, 42(1), 197–216. <https://doi.org/10.1016/j.im.2003.12.010>
- Hawk, S. (2002). The development of Russian e-commerce: the case of Ozon. *Management Decision*, 40(7), 702–709. <https://doi.org/10.1108/00251740210438535>
- Holsapple, C. W., & Singh, M. (2000). Electronic Commerce: From a Definitional Taxonomy Toward a Knowledge-Management View. *Journal of Organizational Computing and Electronic Commerce*, 10(3), 149–170. https://doi.org/10.1207/s15327744joc1003_01
- Internet World Stats. (2021). *World Internet Users Statistics and 2019 World Population Stats*. [Internetworldstats.com](http://internetworldstats.com). <https://www.internetworldstats.com/stats.htm>
- Karagozoglu, N., & Lindell, M. (2004). Electronic commerce strategy, operations, and performance in small and medium-sized enterprises. *Journal of Small Business and Enterprise Development*, 11(3), 290–301. <https://doi.org/10.1108/14626000410551555>

- Kemp, S. (2021, February 11). *Digital in Russia: All the Statistics You Need in 2021*. DataReportal – Global Digital Insights. <https://datareportal.com/reports/digital-2021-russian-federation>
- Kommersant. (2000, May 25). *CyberPlat отпустили на волю*. [Www.kommersant.ru](http://www.kommersant.ru). <https://www.kommersant.ru/doc/148818?query=cyberplat>
- Kurnia, S., Choudrie, J., Mahbubur, R. M., & Alzougool, B. (2015). E-commerce technology adoption: A Malaysian grocery SME retail sector study. *Journal of Business Research*, 68(9), 1906–1918. <https://doi.org/10.1016/j.jbusres.2014.12.010>
- Liu, S. (2013). An Empirical Study on E-commerce's effects on Economic Growth. *Proceedings of the 2013 Conference on Education Technology and Management Science*. <https://doi.org/10.2991/icetms.2013.260>
- Lucking-Reiley, D., & Spulber, D. F. (2001). Business-to-Business Electronic Commerce. *Journal of Economic Perspectives*, 15(1), 55–68. <https://doi.org/10.1257/jep.15.1.55>
- Min, H., & Galle, W. P. (1999). Electronic commerce usage in business-to-business purchasing. *International Journal of Operations & Production Management*, 19(9), 909–921. <https://doi.org/10.1108/01443579910280232>
- Molla, A., & Heeks, R. (2007). Exploring E-Commerce Benefits for Businesses in a Developing Country. *The Information Society*, 23(2), 95–108. <https://doi.org/10.1080/01972240701224028>
- Olumekor, M. O. (2021). A Comparative Study of Higher Educational Institutions in Russia and England: Analyzing the Fulfilment Levels of Students. *Lecture Notes in Networks and Systems*, 2(1), 1011–1019. https://doi.org/10.1007/978-3-030-80485-5_113
- Olumekor, M., & Polbitsyn, S. (2021). COVID-19 AND CONSUMER BEHAVIOUR: A REVIEW OF RECENT LITERATURE. *Bulletin of South Ural State University Series "Economics and Management,"* 15(3), 183–189. <https://doi.org/10.14529/em210319>
- Smith, K. T. (2008). An Analysis of E-Commerce: E-Risk, Global Trade, and Cybercrime. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1315423>
- Smith, K. T., Smith, M., & Smith, J. L. (2010, December 13). *Case Studies of Cybercrime and its Impact on Marketing Activity and Shareholder Value*. [Papers.ssrn.com](https://papers.ssrn.com). <https://ssrn.com/abstract=1724815>
- Smithsonian Magazine. (2015, November 30). *What Was the First Thing Sold on the Internet?* [Smithsonian](https://www.smithsonianmag.com); [Smithsonian.com](https://www.smithsonianmag.com). <https://www.smithsonianmag.com/smart-news/what-was-first-thing-sold-internet-180957414/>
- Statista. (2020, November 30). *Global Retail E-Commerce Market Size 2014-2021*. [Statista](https://www.statista.com); [Statista](https://www.statista.com). <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/>
- Statista. (2021). *Digital buyers worldwide 2021 | Statistic*. <https://www.statista.com/statistics/251666/number-of-digital-buyers-worldwide/>
- Subba Rao, S., Metts, G., & Mora Monge, C. A. (2003). Electronic commerce development in small and medium sized enterprises. *Business Process Management Journal*, 9(1), 11–32. <https://doi.org/10.1108/14637150310461378>
- WIGAND, R. T. (1997). Electronic Commerce: Definition, Theory, and Context. *The Information Society*, 13(1), 1–16. <https://doi.org/10.1080/019722497129241>
- World Bank. (2020). *Individuals using the Internet (% of population) - Russian Federation | Data*. [Data.worldbank.org](https://data.worldbank.org). <https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=RU>
- World Trade Organization. (2013). *WTO | Publications*. [Www.wto.org](http://www.wto.org). https://www.wto.org/english/res_e/publications_e/ecom_devel_countries_e.htm
- Xia, Y., & Zhang, G. P. (2010). The Impact of the Online Channel on Retailers' Performances: An Empirical Evaluation. *Decision Sciences*, 41(3), 517–546. <https://doi.org/10.1111/j.1540-5915.2010.00279.x>

Information about the authors

Michael Olumekor, a doctoral student, Ural Federal University, Yekaterinburg, Russia, molumekor@urfu.ru

Sergey N. Polbitsyn, a Professor of Innovation Management and Entrepreneurship, Ural Federal University, Yekaterinburg, Russia, s.n.polbitsyn@urfu.ru

Информация об авторах

Олумекор Майкл, аспирант, Уральский федеральный университет, Екатеринбург, Россия, molumekor@urfu.ru

Полбицын Сергей Николаевич, д.э.н., профессор, Уральский федеральный университет, Екатеринбург, Россия, s.n.polbitsyn@urfu.ru

The article was submitted 23.12.2021

Статья поступила в редакцию 23.12.2021