



Digital Transformation of Marketing Activities as a Factor in the Development of International Trade

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Abstract

Digital technologies are transforming international relations, diplomacy, foreign policy, and trade. Considering systems, such as politics, law, social sphere, or economics at any level (the functioning of an individual enterprise or international economic relations), it can be argued that the development of information and communication technologies has a significant impact on these areas. The transition to a digital economy is the most important factor in developing national and global economies. Gradually, there is a transition from the targeted introduction of various digital technologies (artificial intelligence, the Internet of things, etc.) to the integrated construction of an international digital ecosystem. The research discusses the prerequisites, features, and prospects for the development of international trade in the context of the formation of a global digital economy. The active and widespread use of digitalization significantly speeds up export–import transactions, allows new participants to be involved in international relations, and expands the range of resources used in cross-border turnover.

Keywords

Digital economy • International relations • World trade • Marketing activities • Information and communication technologies • Digitalization • E-commerce • Internet platforms • Artificial intelligence

JEL Codes

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1 Introduction

World trade can be considered the most ancient form of international economic relations. The transcontinental delivery of goods does not seem to be something special and intricate in the era of globalization of all aspects of life. In his book “The Magnificent Exchange,” the well-known American economist William Bernstein wrote that trade interests worked wonders: they discovered new lands and continents, helped conquer and destroy empires, and built bridges between peoples and civilizations (Bernstein 2014). The development of international trade that led to the emergence of the world market in the middle of the nineteenth century was also a form of international economic relations. Moreover, it was one of the driving forces of globalization, which, on the one hand, brought countries closer together, making them interdependent and vulnerable, and, on the other hand, increased the importance of the search for reserves and competitiveness of countries in the world arena.

Competences in the area of international trade allow people the following:

- to analyze world markets and understand the interests of the country and the company in these markets;

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- to know and be able to use the mechanisms for promoting a product or service in world markets;
- to protect the national interests of the country on the world stage;
- to calculate the effectiveness of trade transactions;
- to work with customs, migration authorities, and trade missions;
- to attract financial resources;
- to engage in consulting;
- to work with international organizations;
- to participate in international negotiations;
- to engage in international procurement activities;
- to trade on stock exchanges;
- to engage in monitoring and control of the implementation of tasks in the field of global development and strategic partnerships;
- to carry out international payments;
- to work on the foreign exchange market, etc.

Nowadays, international trade is characterized by the constant development of these processes, the improvement of market methods and technologies used, and the constant satisfaction of the growing needs of people in the global space. Digitalization is one of the main contemporary tools that can solve these problems.

2 Materials and Method

The totality of statistical-economic, calculation-constructive, balance, graphical, and economic-mathematical methods, as well as the analysis of literary sources, constitutes the content of the methodology of economic research of processes occurring in international relations and foreign trade. The research is based on a structural analysis of the impact of digitalization and digital transformation on the costs of traditional and new forms of international trade in goods and services.

When conducting the research, the authors relied on the following works:

- research by Vasilenko, who considers the potential of digitalization in the development of international trade (Vasilenko 2021);
- research by Volodina actualizes the role of digital technologies in the recovery of the world economy after the COVID-19 pandemic (Volodina and Podolskaya 2021);
- research by Gorodnova describes the importance of using artificial intelligence (AI) in economic diplomacy and international trade (Gorodnova 2021); research by Potapova, Poteeva, and Shklyaruk focuses on developing a strategy for the digital transformation of the economy (Potapova et al. 2021);
- research by Strelets assesses the scale, forms, and consequences of the digitalization of world trade (Strelets and Chebanov 2020);
- research by Voronov, Gorlachev, and Mirzoeva considers the role of social and ethical marketing in improving the sustainable development of international business (Voronov et al. 2022).

3 Discussion

The digitalization of life, business, government, and international relations is precisely the phenomenon that explains the importance and expediency of using soft power, especially the importance of digital diplomacy, considering new world scenarios for developing international trade.

The main area where people seek to use all the benefits of digitalization in Russia and other countries is the economy, which is gradually becoming digital everywhere. Nowadays, all data is processed and transmitted mainly only in digital ways. The manifestations of the digital economy that have simplified international trade transactions are the development of online services, Internet trading, electronic payments and acquiring, crowdfunding as a way of collective financing of projects, Internet advertising, electronic document management, etc.

As digital tools become more widespread and adopted by an increasing number of state and non-state market players, strategies and tactics to use them more effectively are rapidly evolving. Therefore, the digital component of business becomes more relevant and important for the successful implementation of international transactions.

Modern advances in the area of information and communication technologies (ICT) have led to significant changes in the process of international relations. Nations began to communicate with each other in a different way than it was in the “pre-digital” era. The entry into the digital age has allowed governments, as never before, to communicate with each other to solve international problems, for interethnic mutually beneficial interaction. But at the same time, digital transformation has increased the degree of possible risks associated with international online relations (cyberwars, industrial espionage, and other unscrupulous practices due to the digitalization of all aspects of life).

For people and organizations, whose activities are directly or indirectly related to international trade relations, it’s important to understand and remember that the Internet and modern information and communication technologies have simplified communication between countries, but have also given rise to new methods of abuse in cyberspace, which must be taken into account in the process of implementing export–import operations. As communication

technologies continue to evolve, it needs to keep pace with these transformational processes in order to form a proactive response to the threats posed by people, who seek to misuse innovation.

Digitalization is changing the global economic division of labor and working conditions worldwide. The presence of digital technologies in every aspect of human society is rapidly changing the way people, organizations, businesses, governments, and cultures interact. Digital tools can improve the efficiency of institutional efforts to deliver public and collective services, including by facilitating exchange and collaboration over long distances. However, they also create new challenges and risks.

We live in an era of rapid changes in international trade. Digitalization creates ample opportunities and prerequisites for effective control and monitoring of the protection of the interests of participants in international transactions. The COVID-19 pandemic has exacerbated the need to assess a country's e-commerce readiness and develop or optimize appropriate supporting strategies.

Governments and other stakeholders in this area must prioritize the following points (Fig. 1).

Digitalization of business in recent years is not just a trend but a necessary condition for the company's survival and sustainable development. Nevertheless, the essence of this process is still not clear to everyone. Digitalization is the transformation of company processes using innovative technologies and gradually replacing outdated ways of doing business with the latest digital tools. The meaning of digitalization lies in improving the quality and efficiency of business processes to make most operations automatically without the direct participation of a person. Digitalization is made possible by the so-called breakthrough technologies—revolutionary solutions that change the world and the life of every person, as the invention of electricity did once. These technologies include big data, AI, blockchain, cloud systems, the Internet of things, and virtual and augmented reality (VR/AR tools).

Nevertheless, it should be remembered that digital transformation isn't just about buying new hardware and

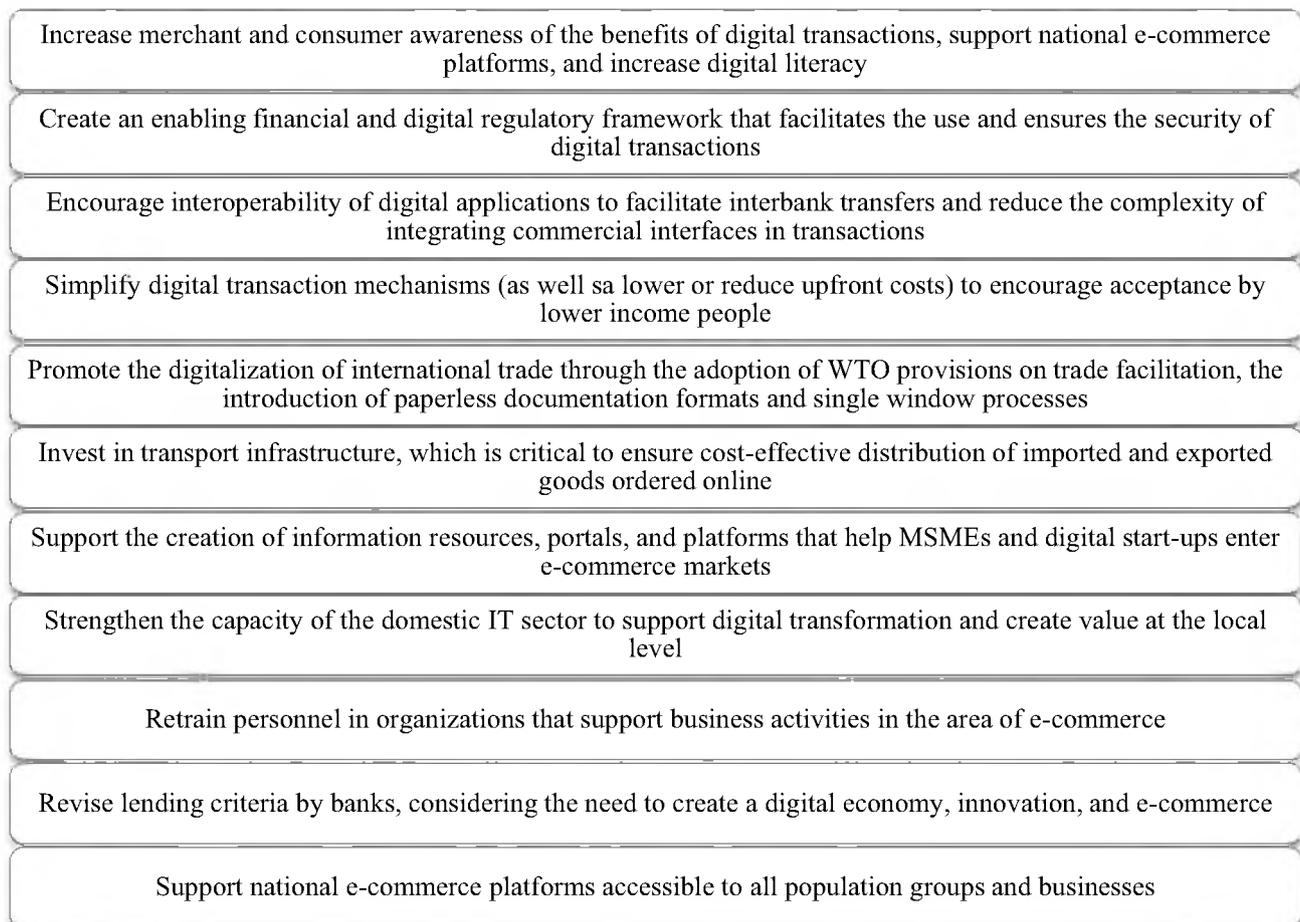


Fig. 1 Mechanisms for ensuring the digital transformation of international trade. *Source* Compiled by the authors

software. Not all of its processes are related to technology; many of them are related to the change of culture, thinking, motivation, and goal setting. In the digital transformation process, the company's structure, business processes, products and methods of their promotion, customer interaction practices, internal and external communications, and corporate culture are changing. Digitalization will fail in a company with rigid subordination, bureaucratization, conservative management models, and a long decision-making process. It is necessary to create a new digital corporate culture. Its values include the ability to apply digital technologies, adaptability and readiness for constant change, understanding the principles of behavior in the digital environment, strong horizontal connections, lifelong learning, and customer-centricity (focusing not on the product but on the convenience of clients and their needs).

4 Results

In 2021, the volume of world trade reached 28.5 trillion, which is a quarter more than a year earlier. Much of this growth is driven by rising commodity prices, the easing of pandemic-related restrictions, and the recovery in demand associated with economic stimulus measures. Globally, the merchandise trade grew by \$200 billion to \$5.8 trillion. Trade in services is back to pre-COVID-19 levels, rising by \$50 billion last year to a total of \$1.6 trillion. Russia is an equal participant in international trade. Table 1 demonstrates

data on the volume of exports and imports of goods in 2021 in the Russian Federation, including by category of goods.

Table 2 presents data on the foreign trade balance of the Russian Federation, including with the CIS and non-CIS countries.

Based on the data presented in Tables 1 and 2, the following conclusions can be drawn regarding the participation of the Russian Federation in international trade:

- The largest share (54.3%) in the structure of Russia's exports is occupied by goods of the fuel and energy complex. The volume of their export from the country increased by 159.3% compared to the previous year and amounted to \$267,035 million.
- In the structure of goods imported into the territory of the Russian Federation, products from the category "machinery, equipment, and vehicles" prevail—49.2% (\$144,299 million). The growth rate in relation to 2020 was 130.8%.
- The main partners in international trade with Russia in 2021 were non-CIS countries (87.8%). Last year, the share of transactions with designated countries accounted for \$689,078 million.

It's obvious that the use of the achievements of the scientific and technological revolution, where digital technologies are indispensable companion of progress, contributes to the maintenance, development, and simplification of international relations.

Table 1 Exports and imports of the most important goods in the Russian Federation in 2021

	2021			Including December 2021		Reference 2020	
	million \$	in % by 2020	in % of the total	million \$	in % by November 2021	in % by 2019	in % of the total
Export, including:	491,580	145.8	100	56,815	119.1	79.4	100
• Fuel and energy products	267,035	159.3	54.3	31,148	118.0	63.7	49.7
• Metals and products	51,125	146.5	10.4	5534	164.6	92.9	10.3
• Machinery, equipment, and vehicles	32,631	129.9	6.6	4548	124.9	89.7	7.5
• Products of the chemical industry and rubber	37,837	158.1	7.7	4604	117.9	88.2	7.1
• Wood, as well as pulp and paper products	16,985	137.4	3.5	1525	102.5	96.6	3.7
• Food products and agricultural raw materials	35,905	121.4	7.3	3968	100.3	119.1	8.8
Import, from it:	293,420	126.7	100	29,428	109.8	94.8	100
• Machinery, equipment, and vehicles	144,299	130.8	49.2	14,251	110.5	97.8	47.6
• Food products and agricultural raw materials for their production	33,940	114.1	11.6	3350	102.3	99.3	12.8
• Products of the chemical industry and rubber	53,741	126.7	18.3	5469	104.5	88.6	18.3

Source Compiled by the authors based on foreign trade turnover of Russia according to customs statistics for 2020–2021 (Federal State Statistics Service of the Russian Federation 2022)

Table 2 Foreign trade turnover of the Russian Federation with the main trading partners in 2021

	2021			Reference 2020		
	million \$	in %		million \$	in %	
		by 2020	of the total		by 2019	of the total
Foreign trade turnover, including:	785,000	138.0	100	568,773	85.0	100
• Foreign countries	689,078	139.2	87.8	495,189	84.3	87.1
• Which include: EU countries	282,047	146.6	35.9	192,374	...	33.8
• CIS member countries	95,922	130.4	12.2	73,585	90.4	12.9

Source Compiled by the authors based on foreign trade turnover of Russia according to customs statistics for 2020–2021 (Federal State Statistics Service of the Russian Federation 2022)

The twenty-first century is called the era of innovation, in which digital metamorphoses have become one of the most discussed topics. In fact, business digitalization is already inevitable. The main result of the digitalization of society is changes in the behavior and demands of consumers under the influence of the widespread introduction of information technologies into human lives. Nowadays, almost every person uses gadgets, social networks, and digital services. New ways of consuming products and services have emerged. In the new digital reality, it would be strange to assume that companies can operate according to the old business model while maintaining the same efficiency.

The digitalization of society has led to the fact that if business today does not use digital technologies and cannot meet the new high demands of consumers, it will be difficult for them to compete in the market. This is especially relevant when the business represents the international trade market. The role of digitalization in the current turbulent world cannot be overestimated. It brings the company to a completely new level of service and creation of a product or service and allows continuing working even in the most difficult economic conditions with constant and unexpected changes.

Digitalization allows automatically performing such operations as assistance in selecting goods and placing an order, answering customer questions, and filling out electronic documents. This facilitates the work of staff and reduces the organization's need for a large number of employees. Communication with customers goes to a completely different level. The processing speed of all applications and offers is increased. Omni-channel provides opportunities for seamless communication with clients on any platform convenient for them (e.g., social networks, chatbot, company website, and messenger). Additionally, digital technologies make it possible to collect the most detailed information about each user and use this data to personalize marketing communications.

Digitalization makes it possible to provide customers with fundamentally new goods and services or new ways to access them: marketplaces, food delivery services, taxi aggregators, and online banking. AI, machine learning, and predictive analytics help predict demand and allocate goods and resources in advance. Digital transformation requires large investments that will not pay off immediately. However, in the long run, it is more profitable than keeping legacy technology up and running. Digital tools make it possible to quickly develop and bring new products to the international market and promptly respond to any changes in the external environment. Adaptability to new realities and challenges is also increased.

5 Conclusion

After decades of growing inequality, polarizing trends, and the pandemic, economic recovery presents an opportunity to rebalance income distribution across countries. Restoration is unthinkable without a reorientation to the digital format of interstate interactions. The COVID-19 pandemic was the driver for the rapid growth of the pace of digitalization in Russia and in the world. With the closure of offline stores, it became necessary to restore the destroyed chains of interaction. The value of digital sales channels and communication with customers (website, mobile application, social networks, and instant messengers) has increased many times over. During quarantine, this has become the only opportunity to conduct business. The demand for tools and ready-made digitalization solutions has grown.

World trade is increasingly immersed in a digital reality. Now, all countries are involved in "global e-commerce," and all goods and services (which previously belonged to the category of "non-tradable" cross-border) are now included in international exchange. All this became possible thanks to the widespread introduction of platform technologies.

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