

Technological innovation offers an exciting future for international trade in the face of current uncertainties and, if properly managed, will pave the way for more inclusive and effective trade growth in the years ahead.

Sarvary Renata Dzhanovna

Polotsk State University, the Republic of Belarus

Scientific supervisor: Zyankova Inga Vladimirovna, PhD, candidate of economic sciences,
associate professor

«Modern IT-solutions in the International Trade»

Scientific approach:

Modern technologies in the International Trade

Modern research in the field of international trade reflects the importance of technological innovation to achieve sustainable economic development of the country. A competitive environment appears with the introduction of innovative technologies in the field of international trade, that allows us to regulate supply and demand in the market, as well as create additional precedents for the development of an entrepreneurial initiative. These actions push the business of various lines of trade to refine themselves in search of a unique market supply, as well as go deeper into consumer demand research. According to Schumpeter¹, economic development is a dynamic process resulting from industry and trade. In our opinion, there are various reasons for economic development in the field of international trade, such as: introducing a new product quality or new use (functionality), a new production method, opening a new market niche, and also a change in the organization of the economy. As a result, technological innovations can be represented as a process (method) or a physical product that allows you to radically change the way you sell products or services that play a significant role in the international trade and economic development. The author notes that the innovation is technological development implemented on the market (i.e., released to the market for purchase). Until then, technological development is only the embodiment of the creator's ideas on paper. An

¹ Technology in New Institutional Economics – Comparison of Transaction Costs in Schumpeter’s Capitalist Development Ideology [Electronic resource]: China-USA Business review, February 2016, Vol. 15, No. 2, 64-93 — NY, USA, 2015. — Mode of access: <http://www.davidpublisher.com/Public/uploads/Contribute/5714a829f1888.pdf>. — Date of access: 21.03.2020.

example of technological innovations in the field of trade (both domestic and international) can be the telematic services market.

Telematics is a field of information technology covering telecommunications. Based on the author's professional experience, the products of this business allow trade organizations to save on fleet maintenance, as well as the logistics business, to reduce the cost of transporting goods in international trade. All of the above mentioned can demonstrate the process of how innovative technologies in the Fourth Industrial Revolution transform trade, making processes more inclusive and effective. Thus, one of the reasons for economic and technological development in the field of trade is the introduction of a new quality product and its use, as well as reducing production costs in order to optimize business processes.

In practice, a telematic product for international trade is a system (program, software) that allows you to regulate trading processes, as well as processes in the supply chain through many functional capabilities and tools. For instance, the Wialon, system of the Belarusian IT company Gurtam¹. The company has been on the market for 18 years and during this time has created a hosting solution for GPS tracking (monitoring) of objects. The solution can be used in various areas of business, logistics, transportation, international trade, as well as financial and personal monitoring. Wialon is a computer program for the operation of which the circuit is used: monitoring object-GPS-tracker-SIM-card-Internet-Satellite. Using satellite tracking and the ability to transmit data about a dynamic unit, international traders and their clients can track the status of goods, location, regulate the work of drivers, as well as the quality of deliveries. And if a GPS-device and a SIM-card with the Internet are enough to track the location of a car with a load, then other tools are used to monitor the state of the load and the quality of work of drivers, such as video monitoring, temperature and motion sensors, optical character recognition (OCR) for reading container numbers, radio frequency identification (RFID) and QR codes to identify and track deliveries, tachographs to track driver dynamics and control, as well as basic digitization of sales documents, and much more.

According to McKinsey Global Institute international research² in 2019, this technology group can reduce delivery and customs clearance times by 16–28%, and also potentially increase total trade by 6–11% by 2030 compared to the base level, which will amount to about 4.7 trillion US dollars in annual turnover. In addition, a decrease in trade costs of 1% may lead to an

¹ Wialon – the platform for GPS tracking and IoT [Electronic resource]: Gurtam.com. — Minsk, 2020. — Mode of access: <https://gurtam.com/en/wialon>. — Date of access: 13.04. 2020.

²Next-generation technologies and the future of trade [Electronic resource]: CERP Policy Portal, 2019. — Mode of access: <https://voxeu.org/article/next-generation-technologies-and-future-trade>. — Date of access: 12.03.2020.

increase in trade flows by 0.4%¹. Thus, the growth of the global telematic market is justified as a driver for the development of international trade. This dynamic is presented in the Figure 1. It is expected that in 2022 the global market for telematics vehicles will have a size of about \$ 103 billion².

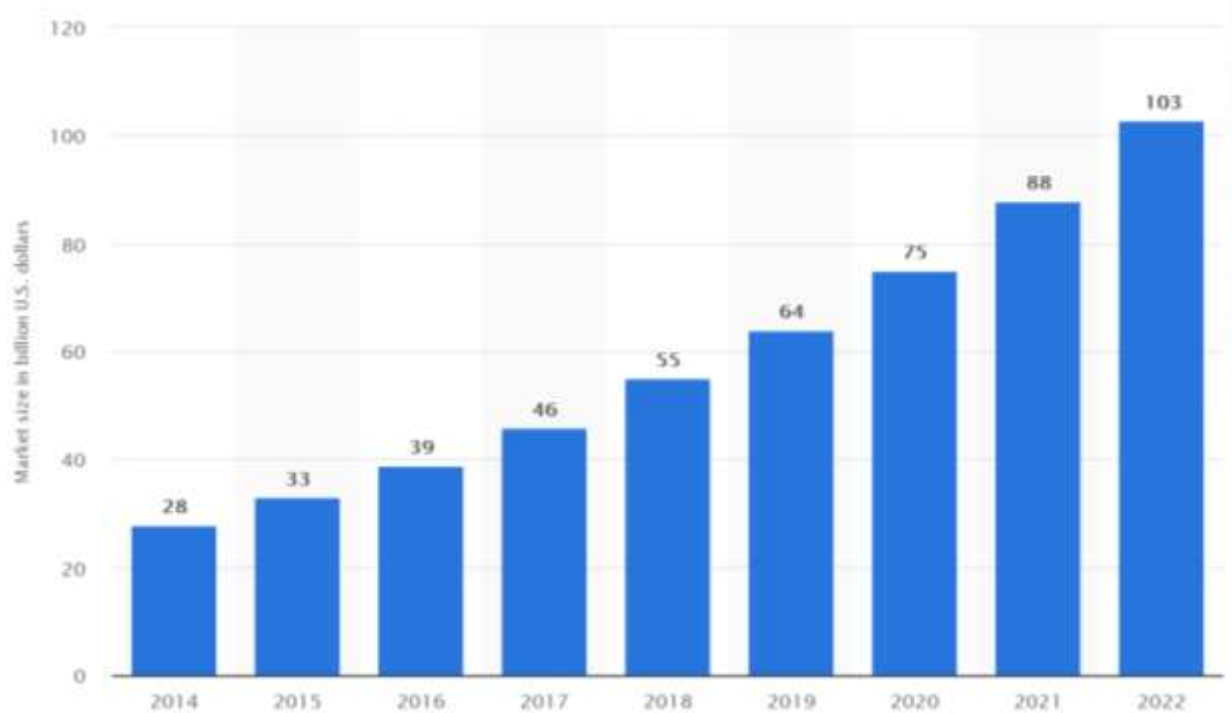


Figure 1 — Volume of Global market of telematics services 2014-2022, USD

Summarizing the advantages of telematics solutions for international trade, we emphasize their importance for tracking cargo and shipments, which increases operational efficiency, allows for real-time configuration and makes logistics systems more secure. For example, the Internet of Things (IoT) sensors can reduce global trade costs by improving transport efficiency. Firstly, they reduce the amount of goods lost during transportation. Secondly, shipping tracking systems allow companies to optimize routes for the efficient use of shipping containers. On average, shipping containers have a utilization rate of only 20 percent, because companies often ship goods to different world locations. Tracking each container using IoT technology can improve container usage by 10–25 percent and reduce annual container costs by nearly \$ 13 billion by 2025³. The practical experience of Belarusian companies also shows that the introduction of

¹ Djankov, S, C Freund and C S Pham (2010), “Trading on time,” *The Review of Economics and Statistics* 92(1).

² Global Telematics Market report (2014-2022) [Electronic resource]: Market Research report Store, 2019. — Mode of access: <https://www.marketresearchreportstore.com/reports/123839/global-telematics-market#description>. — Date of access: 14.04.2020.

³ The economics of how digital technologies impact trade [Electronic resource]: World Trade Report, 2018. — Mode of access: https://www.wto.org/english/res_e/publications_e/wtr18_3_e.pdf. — Date of access: 10.03. 2020.

telematics solutions in the field of logistics for international trade reduces the cost of refrigerated transport by 60%, and the cost of servicing fleets and labor costs by 35%¹.

Sazanets Victoryia Alekseevna

Belarusian State University of Transport

The research advisor: Morozova Oksana Vladimirovna, PhD in Economics, Associate Professor

«Export control as a tool of national security»

Research Field:

Current issues of border protection

Export control is a measure of non-tariff regulation of foreign economic activity. Nowadays the application of export control is very relevant due to existing armed conflicts, outbreaks of war and other hotbeds of tension throughout the world. The purpose of export control as an instrument of national security is to eliminate risks that can do harm to States security.

States should apply export control measures and develop relevant legislation so that there are no obstacles to civilian goods but has exercised strict control of goods that may constitute a threat at the national and international levels.

The goals for creating the Eurasian Economic Union (EAEU) are innovational development, cooperation and improvement of national economies' competitiveness as well as creating conditions for the stable economic development of the Member States in order to improve the living standards of the population². In accordance with these goals the unified measures are used to regulate foreign trade in goods with third parties, a unified regime of trade in goods is applied to third countries and a single customs regulation is carried out.

According to the EAEU the law export control is included in the system of prohibitions and restrictions on foreign trade in goods along with measures such as non-tariff and technical regulations, sanitary-epidemiological, veterinary and quarantine phytosanitary requirements. All

¹ Wialon helps to control ice cream transportation in Sri Lanka [Electronic resource]: Gurtam.com, 2020. — Mode of access: <https://gurtam.com/en/case-studies/wialon-helps-to-control-ice-cream-transportation>. — Date of access: 10.04.2020.

²Treaty on the Eurasian economic Union [Electronic resource]: [Signed in Astana on 29.05.2014] // ConsultantPlus. Russia / ZAO "Consultant Plus". - Moscow, 2016.