FEATURES OF THE ORGANIZATION OF INTERNATIONAL CARGO DELIVERY IN A DIGITAL ECONOMY

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Summary. The relevance of the research of digital economy problems and related concepts is determined by the fact that the share of industries that rely on digital technologies is constantly growing. There are processes of penetration of digital technologies into other spheres of society, in particular, into international trade and the organization of international deliveries on the basis of digital technologies, which radically change their technological structure. Some activities have already been completely transformed under the influence of digital technologies. It is to be expected that e-commerce will soon dominate at the household level, and approaches to the organization of trade itself will change greatly. At the same time, the dynamism of the digital economy and the diversity of its manifestations are the reason why many areas of the economy and the impact of digitalization on them remain poorly understood. One of such areas is the organization of international cargo delivery. This explains the choice of the topic of scientific research, the relevance of which does not require additional argumentation, because it is obvious.

Keywords: international delivery, digital economy, electronic commodity-transport invoice, transport portal, effect, transport exchange

The problems of organizing the international delivery of goods have been the subject of research by many scholars. In particular, the works of A.S. Galkin [1,2], A. Gorbenko [3], K.G. Kozina [4], OO Karpenko [5,6], V.P. Levada, Yu. A. Davidich, S.V. Smerichevskaya [7] and others are devoted to the organization of international transportation. Peculiarities of the formation of the digital economy are actively considered by many other authors, in particular S.M. Veretyuk [8], V.G. Voronkova [9], T.P. Romanenko, V.V. Pilinsky and others. But, unfortunately, there is still too little research on the organization of international cargo delivery in a digital economy.

Urgency of the research is due to the fact that the main task of the system of international freight delivery by road in a digital economy requires a clear definition of strategic directions for the transformation of traditional approaches to the organization of international freight delivery and the introduction of a fundamentally new model of competitiveness.
So, the goal of the work is to develop theoretical and methodological justification of the strategic directions of digitalization of the process of organizing the international delivery of goods.

Methodology and methodological foundations of the research based on the basis of a comprehensive and systematic approach, using general scientific and economic research methods, in particular: methods of scientific logic, grouping, comparison and generalization, methods of tabular and graphical analysis, methods of structural-factor and economic-mathematical analysis, project forecasting method.

International transport services are sold and purchased in international transport markets, which vary depending on the modes of transport, cargo transported, and regional characteristics. International transport can be direct (without transhipment operations), mixed (using two or more modes of transport), direct mixed (using different modes of transport, but on the same transport documents).

International transport services include not only direct transport activities, but also a number of related operations (delivery of goods to the nearest cargo terminal - port, railway junction, etc.; loading, reloading, unloading of transported goods or luggage; temporary storage at intermediate points, reissuance of documents, and sometimes insurance).

The costs associated with the payment of trunk modes of transport and related operations, are the transport costs of the cargo owner.

In the international transport process involved the company-owner of the goods and companies-carriers, which enter into a contract of carriage.

In addition to cargo owners, stevedoring firms (freight terminal operators) with which a service contract is concluded and freight forwarders (in some countries freight forwarders are called freight agents, commission agents, brokers, etc.) are involved in transport operations.

Under the freight forwarding agreement, the cargo owner instructs the freight forwarder to perform precisely defined operations - loading and unloading of his cargo, their storage, registration of cargo and customs documents, settlements with carriers and stevedores, protection of their commercial interests in courts and arbitration, etc. In this case, the owner of the goods may enter into contracts directly with freight forwarding companies or a contract with the general freight forwarder, which is entrusted with the organization of transportation as a whole.

The modern transport network and the structure of transport transportation have developed in the process of world economic development and the international division of labor, they, in turn, have a very strong influence on these processes. The general trend is that international freight is growing more slowly than international trade, as the volume of raw materials transported, especially oil, grows slightly or not at all, and material-intensive production moves to sources of raw materials.

The transport network is expanding, but unevenly across different modes of transport. The share of transport in world GDP and especially in the GDP of developed countries is declining, the same applies to the size of the transport component in the price of goods.
International transport infrastructure, including transport terminals, is often created and controlled by the state. The presence of private railways and highways does not contradict the general rule.

However, vehicles are usually privately owned, and the transport services market is operated almost exclusively by private companies. It should be added that international transport and international transport routes are not separated from domestic and the same transport companies can engage in both domestic and international transport.

International traffic is governed by multilateral agreements at the regional and global levels. Numerous (about 100) intergovernmental organizations operate in this field, including specialized UN bodies: the International Maritime Organization and the International Civil Aviation Organization.

As already mentioned, the world transport network is constantly growing, but unevenly by mode of transport. This unevenness reflects scientific and technological progress in transport and changes in the structure of freight. Thus, according to the UN, in the second half of XX century, the network of railways and inland waterways has shrunk, the length of roads has increased almost 2 times, and airways - 3 times. At the same time, the length of oil pipelines increased 4.2 times, and the main gas pipelines - 6.5 times.

Transport services differ depending on the type of transport, the subject of the transport operation (cargo, passenger, luggage), transport characteristics of the goods, the frequency of transportation.

The transported goods are divided into dry or bulk (coal, ore), bulk (grain, cement, fertilizers), bulk (oil, petroleum products, etc.) and general (finished products).

The main direction in the development of the world transport system is the synchronization of different types of transport, their joint functioning in mixed transport. Transportation of goods in containers and general cargo in general is growing especially intensively. Comprehensive provision of such transportation on an international scale is practiced in the creation of transport corridors.

In the digital economy, the transport and logistics sector of the economy, as well as other industries, is undergoing significant changes, and, like any change, they are associated with risks and opportunities: new customer expectations, new market participants, new technologies, new business models, new requirements for staff competencies, etc.

According to research by the international company PricewaterhouseCoopers (PwC), which has a 160-year history and is one of the so-called four world leaders in audit companies, 68% of managers of transport and logistics companies expect that the change in basic production technologies and services in the world, will dramatically affect their business. 65% of managers believe that the need to significantly change the model of their business will also be affected by innovative changes in sales channels [7].

According to PwC analysts, a number of key factors influencing the development of the transport and logistics industry today can be identified (Fig. 1.):

- digitization;
- changing the dynamics of domestic markets;
changes in international trade;
changes in the main processes in connection with the introduction of new software or new technology.

Fig. 1. Factors influencing the development of the transport and logistics industry today
[Compiled by the authors]

In the first place in this list of factors influencing the development of the transport and logistics industry, as we see, is the digitalization of the economy. Therefore, we will analyze the impact of digitalization on the expected transformation of the transport and logistics industry.

The impact of digitalization can already be seen in changes in administrative, production and commercial processes.

Digital solutions have already gone beyond information and communication technologies (ICT) or ERP systems and allow the development of new business processes and models, including integrate the entire value chain. New technologies make it possible to switch sales and other important elements related to service delivery to the digital environment. Digitization of most corporate processes is essential for the implementation of the concept of Industry 4.0.

According to the survey, 54% of companies expect an increase in revenue due to digitalization. Digitization in the near future will not only significantly simplify basic business processes, but also significantly affect the change in the range of services, products and business models. In addition, digitalization, paradoxically, solves the problem of lack of specialists. Digitization is expected to change consumers’ approach to business interaction. Changes can already be observed in the processes of online and mobile ordering and payment for transport, including in the provision of taxi, car-sharing and public transport services.

Unfortunately, few companies today are serious about how the cooperation and composition of participants in the supply chain will change as a result of the
digitalization of the economy. Although each individual company must be ready to re-evaluate and find their new role in the supply chain in the new environment.

In the age of digital technology, speed is more important than ever. As a result, companies need to create a flexible supply chain network that allows continuous monitoring of development and provides rapid adaptation in this changing environment. And higher education institutions that train specialists for the transport and logistics sector should not only urgently review the content and structure of educational and professional programs, but also radically change the conceptual and methodological approach to training for the economy.

Conclusions. The study clarifies the essence of the interpretation of the digitalization process as an economic phenomenon and a synthetic economic category; identified technological trends in the formation of the digital economy (development and practical application of mobile technologies, business intelligence, the use of cloud computing and social networks); identified and characterized the main elements of the digital transformation of the economy, the priority of bridging the digital divide in Ukraine and the principles of economic transition to the technology of "4.0".

References: