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INFORMATION IN LOGISTICS DEVELOPMENT AND THE ROLE OF TECHNOLOGY

Islamov Farkhod Rakhmatullayevich,
Head Teacher., Tashkent State Agrarian University, TSAU, Uzbekistan

Abstract
This article discusses the possibilities of using information technology in the development of logistics in Uzbekistan. The development of logistics creates additional opportunities and conveniences for the state, the population and, most importantly, companies. Today, enterprises in all industries are introducing digital technologies and changing their models based on new trends in digital transformation. Digital transformation in logistics and transport will help network companies take advantage of new technologies and be competitive in an ever-expanding market. The possibilities of using information technology in the development of digital logistics are organized and scientific, methodological and practical proposals and recommendations are presented.

Keywords: Digital economy, logistics, digital technologies, globalization, digital transformation, efficiency, digital logistics, strategy, digital technologies, competition, transport system, digital platform, concept.

Introduction

In recent years, in our country, great attention has been paid to the acceleration of comprehensive digitization of the economy, including the transport and logistics sectors. In this regard, our President Sh.M. Mirziyoyev's decree No. 6079 on the approval of the strategy "Digital Uzbekistan - 2030" (Decree, 2020) and measures for its effective implementation is of great importance. It is known that the Digital economy is rapidly entering the economy of many countries of the world today. The rapid development of digital technologies has led to the acceleration of the processes of globalization of the economy.

In our country digital the economy active developments, all networks and comprehensive measures are being implemented in the areas, first of all, in the economic areas, for the wide introduction of modern information and communication technologies. In fact, a number of decrees and decisions on the formation of the digital economy are being adopted in our republic. To these, the President of the Republic of Uzbekistan on February 19, 2018 "Measures to further improve the field of information technologies and communications" "about". (Decree, 2018) and 2020-year March 2 "2017-2021 Action strategy on five priority areas of development of the Republic of Uzbekistan "Science, enlightenment and digital the economy development in the year done to increase We can give an example of the Decree on the state program.

In accordance with the decree on the approval of the strategy “digital Uzbekistan – 2030”, which is being carried out in recent years in our country, and measures for its

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effective implementation, it is planned to carry out comprehensive work on the active development of the digital economy in our country. Currently, logistics is one of the digital industries both in the world and in Uzbekistan. finding the opposite. Most of the new trends in the field of logistics cannot be realized without innovations in the development of digital technologies in the field of logistics. At the same time, the use of modern digital technologies in the field of logistics is a target factor for increasing the country's economic competitiveness (Farmon, 2020).

At the current stage of the development of our country, innovation is becoming the main factor in the development of mankind and economic growth. The constant development of the digital economy in the process of globalization has a serious impact on the change of humanity and social life. Modern techniques and technologies have a great impact on production and modernization of all sectors. Effective economic activity determines not only the production strategy, but also the strengthening of the country's economic potential. In particular, based on innovations in the field of logistics material and information currents movement faster is being provided. In addition, digitized, automated modern tools are widely used in the field of transport, which helps in the organization of international cargo circulation. Between countries transport connections development while from before nations merge, was one of the main means of economic development and mutual enrichment of cultures.

Since ancient times, transport routes are one of the main sources of state income. Over time, transportation has become an integral part of our lives. Nowadays, we cannot imagine any moment of our life without logistics and transportation. Modern software tools, digital technologies are not widely used in the logistics and transport system of our country, the distribution of oldness still exists, the optimization process is not optimally organized, and the logistics tracking system is not developed. The reasons for almost all of these and their solutions and suggestions are the main issue of this article. Logistics and its specific features, the issues of using digital technologies in logistics have been researched by several foreign economists-scientists and currently the world scientists in the middle hot from mazuz one is considered Including Uzbek scientists have expressed many valuable opinions. Although the scientific research of the above authors is related to the topic chosen as research to one degree or another, in none of them the issues of development of logistics and transport at the country level were not set and studied as an object of research. New ideas - new Uzbekistan. under the motto, it is necessary to radically reform all spheres, in particular, to introduce innvovations in the field of logistics and transport. For example, in the delivery of goods, the organization of a holistic online shell, which can control the condition, quality of the cargo up to the specified place in full, timely, on the basis of appropriate algorithms, foiled by various modern ingenious technical achievements.

An increasingly strategic role for digitization in logistics and supply chain systems plays; big information collects and analysis to do ability, fast and reliable of data visibility and connectivity along with a physical network with delivery capabilities improvement logistics productivity and supply chain networks significant has an effect.

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Deconstructing the emergence, adoption and manifestation of digitization in the logistics and supply chain system provides a broader understanding of institutional and industrial processes and changes. As a result of globalization, growth in trade and regulation of transportation worldwide, logistics is gaining importance. Today, many companies are outsourcing their logistics services to logistics firms so that they can focus on their core business and take advantage of opportunities to reduce costs and improve flexibility. From an economic perspective, two macro factors appear to drive the globalization trend (Frankel, 2000). The first is the reduction in barriers to the flow of goods, services and capital that has occurred. The second factor is technological changes, mainly in recent years, dramatic changes in communication, information processing and transportation technologies.

Muller, (2004), The Crucial Link, a Global IT Network Using the Internet has been the world information system create that emphasizes. Information technology system is supported by conventional and mobile phone network through satellite connection. Lianguang and Hertz (2017) information according to "Logistics field logistics will continue to grow due to the growth of firms and mergers in the market. Some logistics firms even these days in the world the biggest firms to the line enters". From this it seems that it is noted that the Internet is one of the main factors for the development of logistics. Europe scientists Flint, Larsson, Gammelgaard and Mentzer's (2011) to the articles according to logistics field behind mold gone that to be considered main reasons one this "logistics studies, innovation, modern of concepts almost careless that he left". His technological when updating continue doing the world market enterprises the news forced to look for new methods. From a strategic point of view, organizations (more precisely logistics organizations) need to learn better and faster than their competitors "by properly coordinating with the environment. As the concept of industry has evolved, so has the concept of logistics.

The logistics industry emphasized the development of key features of "continuously increasing manufacturers' demands for higher efficiency and continuously increasing customer demands for higher levels of service" (Maslaric, Nikolicic, 2016). In practice and it is necessary to develop a new concept of logistics organizations facing future industrial practices. The solution may be in a new operational, organizational and management standard - the Internet. These points are the main idea of Benalt Montreville (Economic Academician of Laval University, Canada). This theory suggests that logistics organizations need to digitize their business models. Digitization of business models can allow logistics companies to work in tandem to achieve a mutual goal.

Transport, indeed, plays an important role in connecting different import and export markets, as well as connecting the operations of organizations spread across the globe. The global economy has changed significantly in recent times; Globalization is becoming a new logistics "Logistics" day by day. Globalization has not only created opportunities to engage with new markets, but has also affected the competition of established players as they vie for the trust of those customers.

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Today, porters they demand the appearance of their business to change the borders of their country and regulate their expenses in order to survive the choice of violence. Shipping has been an important human activity throughout history, with prosperity largely dependent on international and interregional trade. In fact, transport has been called one of the four foundations of globalization, along with communication, international standardization, and trade liberalization (Kumar and Hoffmann).

Logistics supply refers to the combination and storage of goods related to information flows from the beginning to the end of the chain. There are a lot of foundations in logistics, such as the management of goods, materials, the processing strategy plan and the collection, storage and search of similar information, reliable and economically profitable transport system integrated logistics. It is clear how firms integrate transportation and distribution systems to improve their efficiency in a global competitive environment there are methods. Transport logistics systems, however, vary depending on the environmental and production types of the unprocessed materials, components and finished products market, with the main objective of different strategies. The general goal is to get the right product to the right place in time, so that the storage costs are reduced.

According to the results of 2020 in the annual world digital competitiveness rating published by the Institute of Management Development (IMD World Competitiveness Center) high in ten USA, Singapore, Denmark, Sweden, Hong Kong, Switzerland, The Netherlands, South Korea, the United Arab Emirates, Norway and Finland are leading the way. The Republic of Kazakhstan was the only one of the Central Asian countries to take part in the ranking, occupying 35th place at the end of 2022. In recent years, a number of measures have been implemented in our country for the wide introduction and development of the digital economy. It should be noted that the Decision of the President of the Republic of Uzbekistan dated July 3, 2018 "On measures to develop the digital economy in the Republic of Uzbekistan" No. PQ-3832 was the "cornerstone" of the development of the digital economy in our country. In the decision, a number of important tasks for the development of the digital economy in our republic were defined given being of them "numbered the economy more development for ensuring close cooperation of state bodies and business entities in the field of introducing innovative ideas, technologies and developments" 8 remains one of the most urgent issues today (Decision, 2018).

The total cost of 5759.9 mln. in order to finance the projects to be implemented in order to further develop the transport sector in 2021-2023. 311.8 million dollars of investments are planned to be absorbed. dollar commercial bank loans organize is enough.[1] These processes own in time and good quality done increase while depends on the financial stability of business entities operating in the field and the ability to repay loans on time. In addition, the further development of the activities of several business entities providing transport and logistics services and ensuring high growth rates also

[1]*The 2021 IMD World Competitiveness Ranking. https://www.imd.org/centers/world-competitiveness-center.*

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depends on the amount of loans allocated to them. In particular, in 2020, our republic is commercial in the field of transport and communication banks by 4336.4 billion soum loans separation this field requires the introduction of modern methods of assessing the creditworthiness of enterprises. The role of the banking system, which is considered an important branch of our national economy, is extremely important in the development of the digital economy. After all, bank loans are also important in the development of all sectors and branches of the economy in our republic

Today, companies in all industries are implementing digital technologies and reformulating their models based on new trends in digital transformation. Companies continue to propose new processes or modify existing ones. In addition, the creation of a new corporate culture and even the introduction of a new customer experience to meet the changing needs of consumers and the market, customer requirements. In particular, digital transformation in the field of logistics and transportation will help network companies to use new technologies and be competitive in an ever-expanding market. In recent years, companies have experienced significant changes in logistics and supply chain management tools and technologies. Companies began to move towards large-scale automation of corporate information systems and became participants in e-commerce platforms and e-commerce services, forming their own virtual databases.

Many American scientists consider innovations in the digitalization of transport and logistics to be of great importance. However, according to the analysts of the well-known McKinsey international management consulting company (Geneva, 2020), information is the main element in the digitalization of the logistics sector, and the ability to use it represents the level of digitalization of companies.

Digital innovations logistics to the participants efficiency increase and it allows to reduce costs and also to look for new business opportunities. This transformation leads to a new paradigm called "Logistics 4.0" based on four main trends.

Category	Digital innovations
Information	Data collection and again work
	Logistics control tower
	Expanded truth
Physical of transportation new methods	Without a driver load cars/vehicle
	Robots manage
	Drones
Digital platforms market	Big cross-border platform
	General transport opportunity
	General warehouse volume

Figure 1. Logistics 4.0 Digitization period

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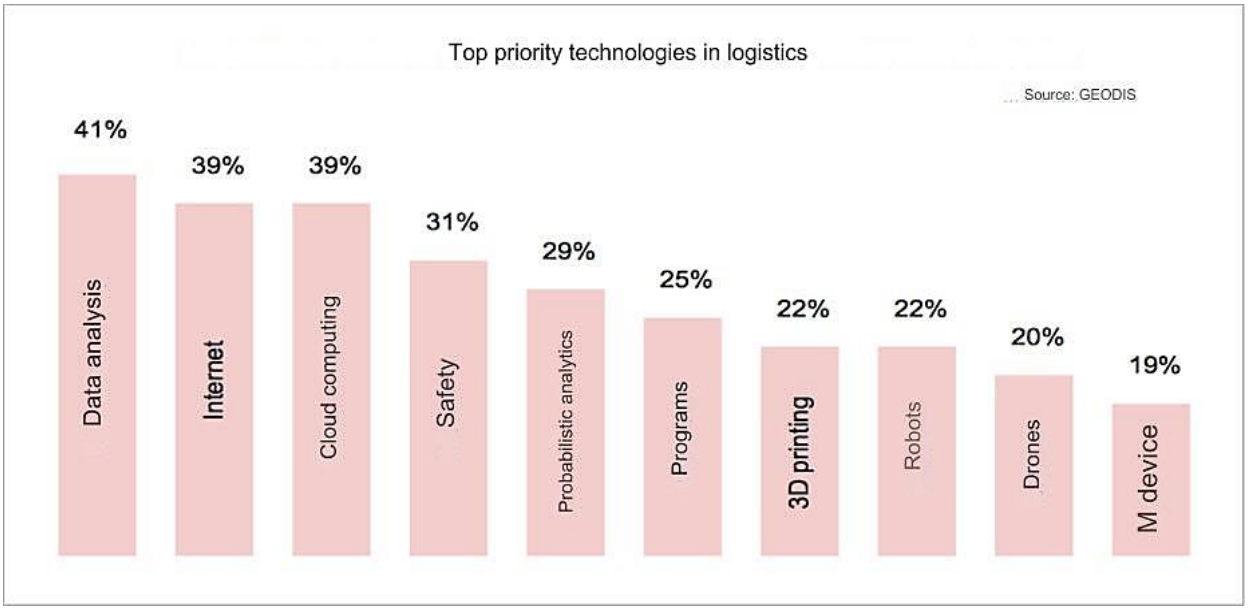

Figure 2. In logistics priority important have has been the best technologies

Taking the United States logistics market as an example, it is no exaggeration to say that this market is currently witnessing a huge digitization. For example, large suppliers such as Amazon, JB Hunt and ch. Robinson uses digital technologies, drones and cloud technologies in his activities. These are all efforts to meet consumer demand. Logistics industry as a whole the world across 4 trillion from the dollar more than is a huge revenue-generating market that affects a variety of business sectors, from e-commerce to manufacturing and high-tech. Currently, the introduction of a number of modern technologies in the digitization of logistics is gaining urgent importance.

The diagram above shows that the logistics system is considered as a complex integrated system formed by using a number of modern technologies and a complex database formed by the flow of information. If we pay attention, the main resources in the digitization of logistics are the analysis of economic data and special programs created by its Internet providers. In addition, the goal is to further improve the quality of service to consumers, for example, to provide goods with high-quality, various programs, robotics tools and drones are widely used to ensure timely, reliable delivery within the specified period.

Automation. Work release and services automation transport requires it to be one of the main solutions for digitization of the field.

Mobility as a Service (MaaS) combines various forms of transportation services into a single mobility service that can be used on demand (Hudkins, 2021). A MaaS operator facilitates a diverse menu of transport options to meet customer demand. MaaS creates the best service for users by meeting their mobility needs and helping to solve the

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inconvenient parts of individual journeys and the entire system of mobility services. In other words, many participants in the transport sector interact in various processes. For example: when a customer orders, buys, or delivers cargo online, they simultaneously interact with various organizations to monitor the safe delivery of cargo to its destination. Digital platforms, integration programs and communication technologies will ensure full and reliable communication. The figuure below shows exactly this kind of digital integration mobility.

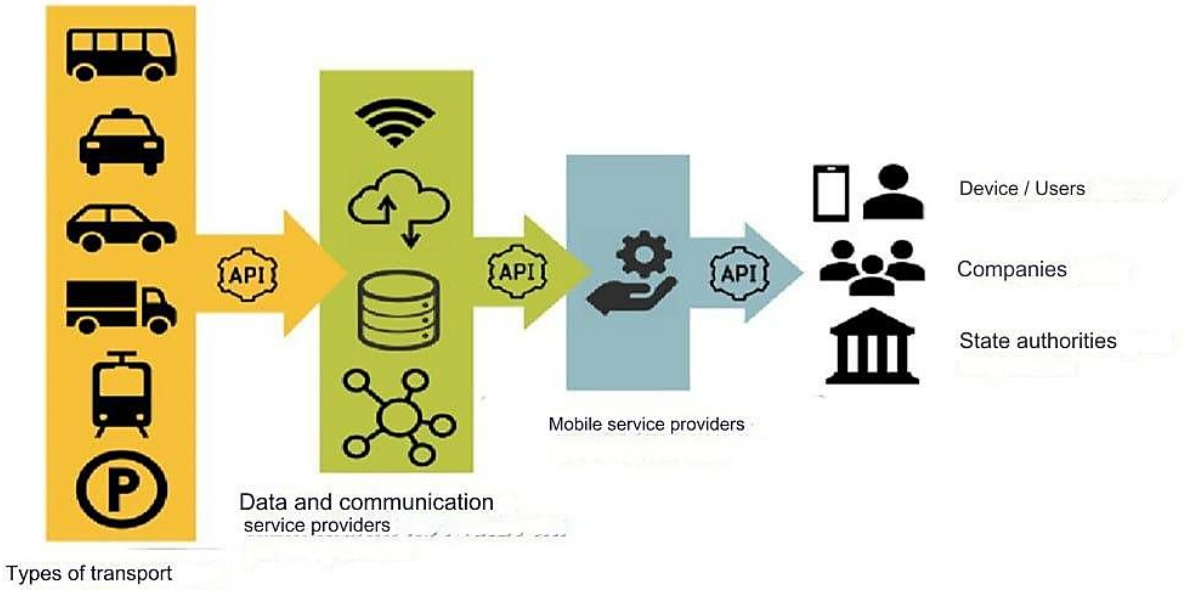

Figure 3. Modern mobility integration

In addition, it is no exaggeration to say that digitization is in full swing in all economic spheres in developed countries. A clear example of this is the Netherlands Port of Rotterdam can be cited. This port is known as "the most advanced port in the world" because the port is a leader in adopting modern technology. The port's fully automated container terminals use computer-programmed cranes to unload cargo, increasing throughput, improving throughput and reducing labor costs. According to the Wall Street Journal, the automation will allow the Dutch port to increase overall productivity by 30 percent.

Summary and Suggestions

In the summary part of the article, a proposal and general conclusions on the radical reform of the logistics and transport system of our country, digitization on the basis of modern techniques and technologies, innovative ideas are presented, and recommendations are given on the stages of its implementation.

Logistics and transport digitization today because of serious experience change is forgiving Digitization level a lot in terms of operations speed, determines the accuracy

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and provides opportunities to develop the flexibility and adaptability of the supply chain. This leads to new perspectives for companies and their customers:

In the creation of innovative transport-logistics systems in our country, it is proposed to implement step-by-step work on the formation of innovative transport-logistics systems based on a single digital platform. These stages of work are being studied by the authors of the article as a basis for creating an innovative transport-logistics system based on modern digital technologies.

Looking at developed foreign countries, we can see that the processes mentioned above were fully implemented several decades ago. In particular, the transport sector is fully automated in the United States, Germany, France, England, Turkey, Singapore, UAE, China, Malaysia, Korea, Japan and other countries. Thanks to this, we can see that the transport industry has been developing in every possible way over the years, processes are carried out through digital technologies. Currently, we can see that these countries are moving to a new level using artificial intelligence based on the Smart City concept.

So, our country developed countries to the line wants to put if we first of all each we can solve problems and achieve set goals only by developing one area separately. There are many challenges in the country such as the absence of a single digital platform in road transport, railways and air transport, which creates the need for further acceleration of digitization.

So, if we want to put our country among the developed countries, first of all, we can solve problems, achieve the set goals, only by developing each area separately. There are many problems in the country, such as the lack of a single digital platform for road transport, rail and air transport, which makes it necessary to further accelerate digitalization.

The introduction of such promising developments as digital infrastructure, intermodal services in the transport system of our country in the current period and in the near future will significantly affect economic stability, increasing the volume of passenger and freight traffic. Because, in the favorable geographical and transit location of our country. Taking into account the fact that we do not have waterways and transport is only on land, the importance of Railways and Road Transport in our country will continue to increase on its own, and the problems that arise will have to be eliminated.

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