

DIGITALIZATION AS A MODERN LOGISTICS TREND

Shauchenka Y. A., student
Bazulka D. V., student
Scientific supervisor – Ladutska N. F., senior lecturer
English language department №1
Belarusian National University of Technology
Minsk, Republic of Belarus

Modern international logistics is experiencing an era of significant changes caused by globalization, technological innovations and changing consumer preferences. In the context of the rapid development of e-commerce, increasing volumes of international trade and the complexity of supply chains, companies are forced to adapt to new realities in order to remain competitive. Digitalization of logistics is the introduction of IT technologies into various logistics industries to improve business productivity and the level of interaction with partners. Mobile applications, artificial intelligence, machine learning, digital platforms, robots, automation, and much more are key technological areas that are changing modern logistics [1].

Companies strive to implement modern warehouse management systems (WMS) and transport systems (TMS). Such systems provide the ability to more accurately control the processes of delivering goods by road and organizing the transportation of goods by rail across Belarus. These technologies can significantly reduce delivery times, minimize delays, increase customer satisfaction. Major players in the logistics market are focusing on the implementation of innovative solutions, such as smart satellite monitoring. This technology is used to closely track cargo in real time, monitor its safety throughout the entire journey, and even evaluate the driver behavior [2].

Along with this, electronic platforms that are designed for interaction between carriers and customers of their services do not lose their relevance. Platforms allow tenders to be held and simplify the process of selecting contractors. They are a tool for reducing the time spent on searching and selecting the necessary services, making the process more dynamic and efficient. A vital component of digitalization in logistics is also the use of big data and analytics. Collecting and ana-

lyzing information about consumer preferences, seasonal fluctuations in demand, as well as the state of transportation helps companies make informed decisions and build more accurate forecasts. The integration of analytical tools ensures the identification of bottlenecks in supply chains, optimizes warehouse stocks and minimizes costs [1].

Multifaceted AI-based solutions are very popular in the industry. One of the striking examples is the use of artificial intelligence in inventory management in warehouses. For example, in order to modernize its inventory process in their warehouses, L'Oreal has started using drones. First of all, it improves the safety of employees who have to work at heights.

Secondly, it results in the quality improvement as 100% palettes are scanned and photographed. Thirdly, in order to reduce the number of potential shipping disruptions it is possible to shorten inventory time by using drones. The success of this drone inventory opens a huge opportunity to start a rotating inventory that can take place during the working day, and also on nights or weekends since the drone is self-driven [3].

Based on the above, digitalization in logistics is becoming complex and profound, covering many aspects - from process automation to the use of analytics and monitoring. The industry is becoming more flexible, responsive to changes in market conditions and able to provide a high level of service. Ultimately, more sustainable and efficiently functioning logistics systems are being created that are able to meet the growing needs of markets in future.

References

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