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HOW TO BE EFFICIENT AND INNOVATIVE IN LOGISTICS

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Logistics plays a key role in the modern economy. It ensures the efficiency of long-distance transport of goods and cargo. The introduction of modern technologies and innovative solutions helps to improve the shipping and transport process and optimization costs. High-quality logistics allows you to increase the efficiency of transportation, reduce costs and, as a result, make prices more favorable for the buyer [1].

In this article we will consider current innovative technologies in logistics, their application and development prospects.

Internet of Things (IoT) is one of the key innovations widely used in logistics. It allows you to collect data on the location and condition of cargo, vehicles, warehouse stocks and other elements of the logistics chain in real time. Thanks to this, companies can track the movement of goods, control storage and transportation conditions, optimize delivery routes and manage inventory more efficiently. The client can also track the location of his cargo, its condition and receive operational information about a particular product in warehouses. The use of drones and unmanned vehicles in logistics also presents significant potential for improving delivery processes. With autonomous vehicles, companies can shorten delivery times, reduce transportation costs and improve customer service. Drones can be used to deliver small parcels to hard-to-reach areas, while unmanned vehicles can be used to transport large shipments over long distances. It is also a great advantage that the delivery will go directly from the sender to the recipient along the shortest routes. Consequently, such delivery will be the fastest, most comfortable and safe [2].

Artificial intelligence (AI) technologies are playing an increasingly important role in logistics, helping companies automate decision-making processes, optimize delivery routes, forecast demand and manage inventory. Machine learning systems and optimization algorithms can analyze

large amounts of data, identify patterns and trends, and make decisions based on predictions. This helps to reduce employee costs and eliminate human error, such as calculation errors or inattention. It can also offer the most suitable offer for each client [2].

Digital platforms and online marketplaces also play an important role in modern logistics, enabling efficient interaction between producers, suppliers and consumers. Electronic trading platforms, warehouse and transport management systems, and digital services optimize ordering, shipping and tracking processes, improving customer service and reducing time and costs. Today, it is the most popular and efficient way to transport goods from suppliers to consumers. Online marketplaces are at the very top of the market as they offer the most convenient selection of goods from anywhere you are and the most convenient payment and delivery [1].

One of the promising areas of innovative technologies in logistics is the use of augmented reality (AR) and virtual reality (VR) to train personnel, plan delivery routes, and create interactive tools for managing warehouse operations. AR and VR make it possible to visualize data on cargo, stock and transport in real time, improving decision-making and increasing the efficiency of staff work, eliminating the human factor and inattention.

Another prospect for the development of innovative technologies in logistics is the use of robotic systems to automate warehouse operations. Robot forklifts, automatic sorting systems, unmanned vehicles - all this allows companies to increase the productivity of warehouse operations, reduce labor costs and shorten order processing time [2].

In conclusion, innovative technologies provide companies with a competitive advantage and improving supply chain efficiency and reliability. The application of technologies mentioned above allows optimizing logistics processes, reducing time and financial costs, improving customer service and creating new opportunities for business development.

References

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