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DETERMINATION OF THE MAIN LOGISTICS TRENDS IN 2023

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With the development of technology, more and more new trends and requirements for logistics appear. Global logistics gravitates towards green solutions, robotics and digitization and automation of processes. In Ukraine, these trends are manifested in the automation of warehouse processes and operating systems, as well as the implementation of digitized and integrated solutions. Logistics trends for 2023 indicate more automated and digital warehouses. This helps businesses save time, resources, money and manpower. Thanks to advances in technologies such as digital twins and cloud computing, logistics operations are becoming more flexible, reliable and secure.

Simulation of composition. Simulation using digital double technology increases the competitiveness of companies. It consists in creating virtual copies of objects or processes to reproduce the behavior of their real counterparts.

In logistics, this virtual representation of processes allows you to simulate the layout of the warehouse, as well as the flow of operators and goods. Thanks to the 3D representation of the premises, you can visualize prospective logistics operations.

In addition, once the warehouse is in operation, the simulation helps identify inefficiencies and possible undesirable scenarios. It is also able to identify opportunities for improvement to facilitate strategic decision-making. For example, you can introduce new selection methods or predict how the room will work if other storage systems are installed.

Flexibility of logistics. Logistics flexibility was key in 2022 and will continue to be so this year. Factors such as omnichannel consolidation, product seasonality and returns management have forced many companies to implement flexible logistics to remain competitive.

Flexibility is essential at all stages of the supply chain. The presence of flexible logistics and production processes guarantees the availability of stocks for end consumers. At the same time, it limits production, storage and transportation costs. Businesses with elastic logistics can adapt their warehouses to unexpected changes without changing their productivity. It is also easier to maintain competitiveness in the face of supply chain disruption.

Flexibility also allows you to have a competitive advantage in order fulfillment, one of the most demanding logistics operations. Flexible order fulfillment is a strategy aimed at adapting order picking to complex demand so that goods can be delivered from any distribution center, warehouse or physical store.

Automation of robotic processes. Robotic process automation (RPA) technology – that is, the use of software robots to interact with programs in an automated fashion – will continue to play a key role in business processes in 2023. RPA is used to automate repetitive tasks. Such tasks include connecting to web applications, copying and pasting data, moving folders, and creating directories and folders, among other functions.

At the logistics level, RPA technology can improve product tracking and monitor order shipment status. RPA allows you to send notifications about delivery times, inform customers about possible delays and create an electronic delivery document using automatically generated notifications.

RPA also facilitates the execution of purchase orders based on automatic criteria such as price, quantity and frequency. It is also possible to use software to forecast supply and demand by automatically analyzing historical sales data and market indicators. This ensures the quantity of products needed to fulfill future orders and maintain the required amount of spare stock.

Conclusion

So, in 2023, the main goals of logistics companies are preserved. Namely, flexibility, competitiveness, completing tasks on time. To solve these problems, logistics companies are implementing new ones, such as warehouse modeling and robotic process automation, or improving old management methods, such as logistics flexibility. Also, the automation of robotic processes of collecting data on air waybill numbers on external web portals made it possible to significantly increase the efficiency of the process and significantly reduce the duration of its execution, as well as eliminate errors that a person could make due to the influence of a wide variety of subjective factors.

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