

# THE MAIN DIRECTIONS OF DISTRIBUTION LOGISTICS DEVELOPMENT

Vinnitsia National Technical University

## **Анотація**

*В статті досліджено основні напрямки розвитку розподільчої логістики..*

**Ключові слова:** логістика, розподільча логістика.

## **Abstract**

*The article examines the main directions of development of distribution logistics.*

**Keywords:** logistics, distribution logistics.

## **Introduction**

Within the interconnected international of world commerce, distribution logistics is additional imperative than ever. The undetectable motor powers the clean drift of items from makers to shoppers, making sure that stock presently not least difficult accomplish their locations however finish that proficiently, securely, and on the correct time.

Whether it's making beyond any doubt that the advanced tech gadget is to be had on the shop rack, or your on line arrange arrives at your doorstep, distribution logistics is an necessarily portion of it.

## **Research Results**

Distribution logistics, as an imperative component of the supply chain, is continually advancing, adjusting to changing advertise needs and mechanical progresses. The most bearings of advancement of distribution logistics nowadays are: digitalization, development of online exchange, natural supportability, globalization and personalization.

Digitization incorporates the presentation of manufactured insights (AI) and machine learning (ML), the Internet of Things (IoT) and Big Data and analytics. AI and ML are utilized to estimate request, optimize courses, computerize warehouse forms, move forward energetic estimating and stock administration. IoT sensors collect data on the condition of merchandise, vehicles and warehouses, giving way better supply chain straightforwardness and the capacity to create more educated decisions. Analysis of expansive volumes of data (Big Data and analytics) approximately logistics operations makes a difference to distinguish wasteful aspects, optimize forms and move forward by and large efficiency.

The development of online commerce incorporates multi-channel logistics, omni-channel logistics and final mile delivery. Multi-channel logistics is characterized by guaranteeing uninterrupted delivery of orders from different deals channels (online, offline, versatile) and to different addresses (domestic, store, conveyance point). Omni-channel logistics is characterized by the integration of logistics forms with other viewpoints of the trade, such as showcasing, deals and customer service, to make a personalized involvement for clients. Last mile delivery optimizes the delivery of merchandise to end consumers, counting express delivery, same-day delivery and self-pickup.

Environmental maintainability incorporates decreasing the carbon impression, squander logistics and the circular economy. Decreasing the carbon impression is characterized by the utilize of naturally inviting vehicles, optimization of courses to diminish mileage, utilize of energy-efficient warehouses and packaging.

Reverse logistics is the viable administration of product returns, utilization and reusing of squander. The circular economy is characterized by the move from a straight "production-consumption-waste" show to a circular one, where resources are reused and the affect on the environment is minimized.

Globalization includes overseeing global supply chains, localization and international cooperation. Global supply chain management is characterized by the optimization of logistics forms for proficient delivery of goods around the world. Localization characterizes the situation of warehouses and generation offices closer

to deals markets to reduce delivery time and logistics costs. Universal participation is characterized by participation with logistics accomplices completely different nations to guarantee the smooth operation of the supply chain.

Personalization incorporates personalized delivery, supply chain flexibility and centralized logistics solutions. Personalized delivery is the delivery of goods concurring to the person needs and inclinations of clients. Supply chain adaptability is the capacity of a supply chain to rapidly adjust to changing advertise needs and client requests. Center-oriented logistics solutions are characterized by the development of logistics solutions that take into consideration the particular needs and characteristics of different client bunches.

### Conclusion

Advanced distribution logistics is powerfully creating, fortified by the changing needs of the showcase, mechanical accomplishments and the crave for natural supportability. Subsequently, it is vital to keep up with the world and execute the most recent mechanical solutions to make strides the image of the company.

### REFERENCES

1. AlgoRepublic. What Is the Importance of Logistics and Distribution. URL: <https://www.linkedin.com/pulse/what-importance-logistics-distribution-algorepublic-g0wff> (дата звернення: 17.05.2024).
2. Hedyła. The Evolution of Logistics from the Beginning of the 20<sup>th</sup> Century to the Present Day. URL: <https://hedyla.com/en/the-evolution-of-logistics/> (дата звернення: 17.05.2024).
3. Inbound Logistics. Distribution Logistics: Definition and Applications. URL: <https://www.inboundlogistics.com/articles/distribution-logistics/> (дата звернення: 17.05.2024).

**Перепелиця Анна Василівна** – студентка групи 2Л-22б, факультет менеджменту та інформаційної безпеки, Вінницький національний технічний університет, м. Вінниця, e-mail: [anny65anna89@gmail.com](mailto:anny65anna89@gmail.com)

**Науковий керівник: Слободянюк Алла Анатоліївна** – старший викладач кафедри іноземних мов, Вінницький національний технічний університет, м.Вінниця, e-mail: [a.allavin@gmail.com](mailto:a.allavin@gmail.com)

**Perepelytsia Anna V.** – student of Faculty of Management and Information Security, Vinnytsia National Technical University, Vinnytsia, e-mail: [anny65anna89@gmail.com](mailto:anny65anna89@gmail.com)

**Scientific Supervisor: Slobodianiuk Alla A.** – Senior Lecturer of the Foreign Languages Department, Vinnytsia National Technical University, Vinnytsia, e-mail: [a.allavin@gmail.com](mailto:a.allavin@gmail.com)