

СЕКЦІЯ 1

ТОРГОВЕЛЬНЕ ПІДПРИЄМНИЦТВО ТА ЛОГІСТИКА: СТРАТЕГІЇ ТА ТЕХНОЛОГІЇ

INNOVATIVE LOGISTICS TECHNOLOGIES AT THE WALMART TRADE NETWORK EXAMPLE

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Walmart is a company that does not lose its leadership positions during its many years of supply chain management experience to reduce costs and optimize the customer experience.

The foundation of Walmart's successful logistics strategy is an efficient supply chain management system.

An innovative approach to supply chain management has become a key factor in Walmart's success at the current stage of development.

Supply chain trends in technology are transforming the way business is conducted, and they will continue to evolve well into the future. As a result, emerging technologies are making a significant impact on Walmart approach to finding apt supply chain solutions [1].

In 2016, Walmart released an app called My Productivity to increase flexibility in the daily tasks of store employees.

In response to the challenges it was facing in the backroom storage areas of its brick-and-mortar shops, Walmart put technology directly into the hands of employees to get things done more effectively [2].

Thus «accessing real-time data and sales trends, restocking specific items, answering customer questions, and even responding to customer surveys was now possible. All of this and more was now at the fingertips of every in-store manager» [2].

Artificial Intelligence (AI) now creates countless opportunities to predict demand, manage stock levels, optimize the supply chain, and free up time for associates so that they can serve customers. In addition, Internet of Things (IoT) allows retailers to provide a curated purchase experience, informed service engagements, and drive efficiency to transform the retail industry [1].

Cloud computing is another critical technology currently being scaled up across the supply chain. According to industry estimates, over 50% of businesses expect their operations to be in the cloud over the next three years. In addition to cloud, innovative use of AI across the supply chain lifecycle is poised to benefit organizations significantly in improving efficiency and profitability through better-managed operations [1].

Big Data, too, is a frontrunner in helping organizations transform their supply chain performances manifold. The analytics from the data is helping them deliver maximum benefits by assisting them to take a systematic approach [1].

All these technologies are becoming highly pervasive. As technology evolves, it provides opportunities for Walmart to find new and innovative solutions [1].

Walmart uses AI to enhance daily supply chain workflows, helping anticipate cycles in demand, especially amid peak or unexpected events in customer traffic [3].

AI shapes that catalog of items by analyzing a host of inputs, including customer trends, shopping trends, seasonality and in-demand items. Once third-party sellers add items into the company's Marketplace offering, AI and ML support logistics. Using AI to forecast demand supports the company through sizable sales spikes [3].

Three-quarters of retailers say AI is essential to supply chain operations and management, according to IDC's Industry AI Path report published last year [6].

As the survey results showed «digital autonomy is all set to be the future of supply chains in the future. 52% of executives say that the autonomous supply chain (e.g., robots in warehouses and stores, driverless forklifts and trucks, delivery drones, and fully automated planning) is either here or will be here by 2025» [1].

In the short of 2023's 10 most innovative logistics companies Walmart takes first place [4].

As confirmation of such results, «in January 2021, Walmart began the process of converting some of its stores into small «market fulfillment centers»—for staging local deliveries and online-order pickup. The program expanded throughout 2022, culminating in Walmart acquiring the robotics automation company that custom built the bots for the retailer originally» [4].

At the same time, «Walmart continues to build out its drone delivery network, in six states via partnerships with DroneUp, Flytrex, and Zipline, enabling to have tens of thousands of items weighing under 10 pounds delivered in as little as 30 minutes» [4].

Moreover, in September 2022, «Walmart opened its first next-generation fulfillment center in Joliet, Illinois. It integrates people, robotics, and machine learning to accelerate fulfillment, including an automated storage system that collapses a 12-step manual process into five steps» [4].

So, the Walmart is creating the future of supply chain – a modern system that pairs the latest in software and automation technologies, with a highly trained and specialized workforce of company’s associates [5].

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THE USE OF QUALITY FUNCTION DEPLOYMENT METHODOLOGY IN ENTERPRISE’S LOGISTICS SYSTEM

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Customer service has emerged as an important strategic issue over the past decade for a number of reasons. First, the power of the brand gradually decreases, making products almost undifferentiated in terms