3 WAYS PREDICTIVE ANALYTICS IMPROVES FULFILLMENT

July 2023 • Inbound Logistics • Pete Zimmerman

Organizations need the technical tools to provide operational insights that lead to smarter decisions about automating inventory management, warehousing, and distribution processes. With improved operational visibility, businesses can strengthen their order fulfillment and supply chain processes while keeping pace with customer expectations.

Predictive analytics can go a long way toward future-proofing your supply chain. When integrated with artificial intelligence (AI) and existing enterprise resource planning systems, predictive analytics leverages historical and real-time supply chain data to increase visibility into operations and trends, resulting in informed decisions that improve operational efficiencies.

More specifically, predictive analytics can improve your organization's order fulfillment processes in several important ways.

Inventory Management
Without real-time inventory data, your organization may struggle to make smart purchasing decisions and form precise predictions about consumer shopping behavior.

When you leverage real-time data and AI, you can optimize stock levels and reduce the risk of stockouts or overstocking. For example, sensor technologies like Internet-of-Things (IoT)-enabled devices can alert employees to low inventory so you can restock products or reorder raw materials before they run out.

An AI-powered solution can also gather purchasing data and identify trends over time, leading to more accurate demand forecasting and inventory decision-making.

Warehouse Efficiency
Predictive analytics enables your organization to create efficient fulfillment workflows by considering factors such as the size and number of orders, number of operators needed to complete tasks, and the speed required for delivery.

In addition, the technology can support fulfillment workers during the picking process. The solution can determine the best container to pack products and estimate how long it will take to fulfill the order.

Your workforce can use these insights to pick and pack products more efficiently, so customers receive orders on time.

Delivery Optimization
Optimized trucking routes are key to making on-time deliveries, but unexpected events like accidents, traffic congestion, and extreme weather can hinder the delivery process.

An AI-powered solution, however, can take these possibilities into account and use historical data to provide real-time rerouting so you can complete deliveries

despite unforeseen challenges. In addition, the tool can predict the best delivery times and send alerts about potential delays.

EMPOWERING DATA-DRIVEN DECISIONS

In today's economic climate, companies need to invest in solutions that empower employees to make smart, data-driven decisions. To get your organization started on the path toward predictive analytics implementation, ensure leadership buy-in, pinpoint areas for improvement, and create an actionable plan.

From there, you can level up your fulfillment processes to keep customers satisfied and loyal for the long run.