



NUCLEUS
RESEARCH

The value of Zebra's Demand Intelligence Suite for enterprise retailers

ANALYST

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The Bottom Line

Analysts interviewed retailers that struggled with forecasting accuracy, inventory imbalances, and demand volatility, which led to excess stock, spoilage, and missed sales opportunities. After deploying Zebra's Workcloud Demand Intelligence Suite, these organizations were able to improve demand visibility, optimize inventory allocation, and enhance forecasting precision. Nucleus found that organizations deploying a solution from the Demand Intelligence Suite can expect at least a 5 percent decrease in inventory carrying costs and an average 14 percent increase in forecasting accuracy, leading to more efficient inventory management and better alignment between supply and demand. Specifically, one consumer goods retailer improved forecasting accuracy by 30 percent overall and 10 percent year-over-year. Analysts believe that organizations can maximize value by leveraging Zebra Technologies' Workcloud solutions with a Supply Chain Planning (SCP) system. This integration bridges long-term planning with real-time demand insights, leveraging the capabilities of the Demand Intelligence Suite to enhance forecast agility, optimize inventory, and improve operational responsiveness.

Overview

Companies with complex inventory requirements and fluctuating customer demand need more than a standard SCP solution to remain competitive. While SCP platforms provide demand planning capabilities based on historical sales and predefined parameters, they often lack the real-time adaptability needed to respond to rapid shifts in demand. Industries such as fashion, retail, and food and beverage face challenges like supply volatility, unpredictable consumer behavior, and granular inventory optimization at the SKU or store level. SCP solutions typically forecast demand in broader timeframes and at an aggregate level, making them less effective for real-time decision-making and precise inventory control.

The Workcloud Demand Intelligence Suite, offered by Zebra, goes beyond traditional forecasting by leveraging AI-driven demand sensing, real-time data inputs, and prescriptive analytics to optimize replenishment and inventory positioning dynamically. These solutions integrate real-time sales data, external factors like weather or promotions, and machine learning models to predict demand shifts and recommend actionable strategies. By combining an SCP solution for long-term planning with a demand intelligence solution for real-time planning, companies can reduce stockouts, minimize excess inventory, and respond faster to market changes, ensuring that their supply chain remains resilient and aligned with actual demand patterns.

Zebra

Zebra Technologies offers hardware and software solutions through its Workcloud Suite, including the Workforce Optimization, Enterprise Collaboration, Inventory Optimization, and Demand Intelligence Suites. The vendor's solutions are best suited to organizations with large workforces and complex operations, offering industry-specific solutions for customers' requirements in retail, banking, healthcare, manufacturing, and hospitality. The Workcloud Demand Intelligence Suite provides customers with forecasting and analysis, pricing and allocation, and inventory ordering functionality. The Forecasting and Analysis solution offers a library of algorithms tailored for retail use cases, enabling businesses to configure forecast models through no-code/low-code interfaces. Additionally, the Workcloud Pricing and Allocation solution connects in-season execution to maximize visibility, mitigate risks, and drive organizational collaboration, utilizing AI to optimize purchasing, placement, and pricing decisions across omnichannel operations.

Traditional SCP solutions provide long-term planning. However, companies facing fluctuating demand and inventory complexity need a demand intelligence tool to adjust forecasts and respond to real-time market shifts.

Typical Benefits

Upon evaluating multiple organizations' experiences with Zebra, Nucleus identified three typical benefits: improved inventory management, increased forecasting accuracy, and enhanced customer satisfaction.

Improved Inventory Management

Nucleus found that organizations deploying a demand intelligence solution can expect at least a 5 percent decrease in inventory carrying costs. This improvement is driven by better alignment between actual supply and real-world demand, allowing businesses to make data-driven inventory decisions. Zebra's Workcloud Pricing and Allocation feature helps refine inventory strategies by adjusting product placement and replenishment based on real-time consumer demand signals. This enables organizations to reduce excess stock, optimize price, and better manage markdowns, particularly in industries with short product lifecycles, such as fashion retail and footwear. By leveraging AI-driven demand insights, businesses can optimize stock levels at regional and store-specific levels, ensuring that products are available where and when needed while reducing unnecessary storage costs.

Increased Forecasting Accuracy

Nucleus found that organizations implementing Zebra's Demand Intelligence Suite typically realize an average 14 percentage point increase in forecasting accuracy. Unlike traditional SCP tools, which primarily integrate historical data with some external signals, Zebra's solution provides a more dynamic and precise forecast by incorporating real-time market trends, external factors, and AI-driven demand sensing. Zebra's Forecasting and Analysis module enables businesses to configure multiple AI-driven forecasting models tailored to specific product categories, regions, and sales channels, ensuring that demand planning remains adaptable to shifting market conditions. This level of granularity allows businesses to respond faster to demand fluctuations, reducing forecasting errors that lead to inventory imbalances. By complementing SCP solutions with more refined, real-time demand intelligence, Zebra enables organizations to enhance supply forecasting, improve SandOP processes, and create a more responsive supply chain strategy.

Enhanced Customer Satisfaction

Using Zebra's Demand Intelligence Suite, organizations can better align

Deploying a demand intelligence tool like Zebra reduces inventory carrying costs by 5% through AI-driven demand alignment, optimized replenishment, and minimized spoilage.

Organizations using Zebra typically see a 14-percentage point boost in forecasting accuracy by leveraging AI-driven demand sensing and real-time market insights.

inventory availability with customer needs by improving demand visibility and forecasting accuracy, enhancing customer satisfaction and loyalty. In retail and consumer-driven industries, ensuring the right products are in the right place at the right time is critical to meeting customer expectations. Zebra's ability to connect in-season execution with predictive allocation and pricing strategies enables businesses to anticipate demand shifts more accurately, ensuring that high-demand products are stocked proactively rather than reactively. Additionally, by leveraging AI to optimize replenishment and omnichannel inventory placement, businesses can enhance personalization efforts, reduce lost sales opportunities, and improve customer experience across multiple touchpoints. By minimizing availability gaps and optimizing the shopping experience, organizations can strengthen brand reputation, drive higher customer retention, and increase profitability through repeat sales.

A food and beverage retailer reduced waste, minimized returns, and optimized product freshness using Zebra's demand intelligence, dynamically adjusting forecasts to meet fluctuating demand and SKU constraints.

Highlighted Use Cases

Nucleus identified two enterprise retail use cases to highlight the value of Zebra for demand intelligence.

Food and Beverage Retailer

Operating within the fast-paced retail and food and beverage industry, the organization faced significant challenges in managing its extensive product portfolio and ensuring freshness across thousands of store locations, including major retailers like Walmart. With a product line exceeding 500 SKUs, some stores carrying 300 different items, and a short shelf life to maintain quality, the retailer struggled with forecasting accuracy and inventory management. Historically, frontline employees relied on rudimentary, manual forecasting methods, including handwritten logs and best-guess estimates, which resulted in inefficiencies and excess returns. Given that every percentage point in returns translated to \$30M in losses, the organization needed a demand planning solution that could enhance decision-making at the store level while integrating with its existing workforce. The company sought a vendor to provide superior forecasting and work collaboratively to tailor the solution for their frontline users, ensuring adoption and trust. After evaluating Zebra, SAP, Oracle, and Salesforce, the organization selected Zebra for its price-to-value advantage, deep understanding of retail distribution challenges, customizable forecasting models, and full-stack capabilities covering UI and backend integration.

The implementation process spanned one year from ideation to completion, though the project remains an ongoing investment in

refining forecasting models and UI enhancements. The solution has driven measurable benefits, significantly reducing waste and optimizing product freshness across the organization's vast retail network. Zebra's platform has enabled the food and beverage retailer to minimize returns, improve sales, and manage in-store product distribution by providing millions of SKU-store combinations for maximum freshness optimization. The solution's ability to dynamically adjust to holding power constraints, high-velocity product categories, and fluctuating demand patterns has helped the food and beverage retailer maximize sales opportunities while mitigating product spoilage, reinforcing the critical role of demand intelligence in a complex, high-volume retail environment.

Consumer Goods Retailer

This global beauty and cosmetics industry leader faced significant challenges in standardizing and optimizing inventory levels across its international operations. Six to seven years ago, the company operated highly regionalized, using SAP APO in some markets and an Accenture-based system in others, leading to fragmented and suboptimal inventory management. Given its \$17B annual revenue and complex SKU portfolio, the consumer goods retailer required a globally connected demand intelligence solution capable of providing real-time visibility and agility in forecasting. The company sought a standardized platform that could integrate AI-driven algorithms to adapt to regional nuances and evolving demand patterns, particularly for its ever-changing product lineup, where one-third of the portfolio shifts annually due to product innovation. In its search, the organization prioritized granularity, algorithm flexibility, and the ability to tailor the solution to different markets. After evaluating multiple vendors, Zebra was selected for its advanced AI-driven demand intelligence, flexibility in configuring algorithms for different SKUs, and ability to support the organization's highly volatile, global supply chain.

The implementation process spanned one year, followed by an additional year of training and adoption efforts to ensure full utilization across regions. One of the critical advantages of Zebra's solution has been its granularity in demand forecasting, allowing the retailer to improve forecasting accuracy by 30 percent overall and 10 percent year-over-year. The platform enabled the company to configure different forecasting models for distinct product categories and regional markets, ensuring tailored demand planning for high-growth, volatile emerging markets and stable, mature markets. Post-COVID, the retailer was on an upward inventory trajectory and sought to reverse this trend.

A global beauty and cosmetics retailer improved forecasting accuracy by 30% overall and 10% year-over-year with Zebra, stabilizing inventory levels and enabling real-time, AI-driven demand planning across markets.

Zebra's demand intelligence capabilities have helped stabilize inventory levels while enabling greater sell-through visibility. The ability to blend AI-driven forecasting with real-time sales data has proven instrumental in ensuring products are positioned correctly for optimal sales performance. By leveraging Zebra's solution, the organization has successfully transitioned to a touchless planning approach in stable markets while maintaining highly responsive, adaptive planning models for dynamic regions like Asia, reinforcing the importance of demand intelligence in a fast-changing, innovation-driven industry.

Successful deployment of a demand intelligence tool requires strong change management, data integrity, and leadership accountability, ensuring to drive adoption and maximize value.

Best Practices

Through end-user conversations, the following best practices have been identified for organizations deploying the Demand Intelligence Suite:

► **Prioritize change management**

Implementing a demand intelligence solution requires significant human intervention and coordination across multiple teams. Organizations should clearly define roles and responsibilities during the transition to ensure smooth adoption. Communicating the value of the change to all stakeholders is essential to encouraging engagement and minimizing resistance.

► **Ensure data quality and accessibility**

A successful demand intelligence solution relies on clean, structured, accessible data. Organizations should conduct data audits before implementation to assess data quality and identify gaps. Engaging external data experts or partners can provide an unbiased evaluation of data readiness and ensure accurate demand forecasting. Since data integrity is ongoing, continuous monitoring and improvement should be prioritized throughout implementation.

► **Build a dedicated Implementation team**

Establishing a dedicated team that understands business operations and technology is critical to driving the implementation forward. Organizations should assign cross-functional teams with supply chain, IT, finance, and operations representatives to ensure a well-rounded approach. Leadership sponsorship is necessary to drive accountability and maintain momentum. Identifying champions within regional teams can help facilitate local adoption and bridge communication gaps.

► **Hold leadership accountable**

Implementing a demand intelligence solution is not just a supply chain initiative; it transforms the entire organization. Senior management

must actively participate in decision-making and change management efforts to ensure alignment across all business units. Regional teams should be involved to ensure the solution adapts to different market needs. Establishing company-wide performance metrics will help track adoption progress and measure the ROI.

By following these best practices, organizations can successfully implement a demand intelligence solution, improving forecasting accuracy and inventory optimization and increasing business agility.