

How a leading shoe retailer unlocked \$21.4M in sales with AI-powered inventory optimization

Key Results

8.8%

enhanced on-shelf
availability

11.95%

reduction in lost
sales

Case Study

About the customer

Number of stores: 980

Number of employees: 15,478

Number of countries: 23

Solutions

Forecasting
Allocation
Replenishment
Transfers

Background:

A retail giant with a complex supply chain

A leading European shoe retailer sought to enhance its operational efficiency and boost sales revenue for its core offering of shoes and a diverse range of bags and accessories. With a large brick-and-mortar store network and over 90 e-commerce platforms, the company had a strong presence but faced significant operational complexity in its supply chain and inventory management system.



Challenge:

Manual systems led to missed sales and operational strain

The shoe retailer heavily relied on manual inventory management systems, as no existing tool could meet its complex business needs. However, this labor-intensive and inflexible approach led to lost sales due to poor product availability, causing a direct increase in gross sales and income generated. When managing store replenishment and inventory transfers, the retailer struggled with shipment constraints, package prioritization and balancing costs of goods sold with sorter capacity.

These challenges drove the retailer to seek an advanced, customized solution that would improve effective inventory management, enhance sales forecasting and decrease lost sales. Additionally, the company aimed to improve workforce efficiency through automated store replenishment and inter-store transfer procedures, ultimately optimizing its working capital.

Solution:

AI-driven forecasting and replenishment at scale

The retailer selected invent.ai, a global retail planning solutions provider that delivers measurable sales revenue formula improvements to large retailers. Through a collaborative effort to identify and address core pain points, invent.ai and the retailer implemented two customized, AI-driven solutions: Store Replenishment and Transfers.

The replenishment optimization solution ensures real-time product availability in the right quantities and locations, streamlining retail inventory and enhancing the customer experience. Meanwhile, the transfer optimization solution strategically manages the number of units sold between stores, ensuring demand is met while minimizing lost sales and excess stock.



Results:

AI-driven forecasting and replenishment at scale

The leading shoe retailer client implemented AI-driven streamlined inventory management and saw results within six months, including:

- **On-shelf availability by enhanced 8.8%**
- **11.95% reduction in lost sales**
- **Boost in cash flow**

With optimized transfers, the client saw:

- **4% increase in additional sales rep unit ratio**
- **total additional sales revenue of \$21.4M**

Furthermore, automated processes **significantly improved workforce efficiency**, enhancing the company's bottom line.

Both solutions were deployed within six months, and the retailer achieved immediate improvements. AI-driven streamlined inventory management enhanced on-shelf availability by 8.8%, resulting in an 11.95% reduction in lost sales and a boost in cash flow. Optimized transfers generated a 4% increase in additional sales rep unit ratio, contributing to total additional sales revenue of \$21.4M. Furthermore, automated processes significantly improved workforce efficiency, enhancing the company's bottom line.

By leveraging technology tailored to its unique operational landscape, the retailer completely transformed retail inventory management within a short timeframe—highlighting how intelligent automation and strategic collaboration can drive measurable success in the competitive retail industry.

Today, the leading shoe retailer continues to benefit from real-time solutions that evolve in sync with its needs and industry changes, ensuring ongoing success in managing its product line and sales data.



About invent.ai

Invent.ai is a multi-agentic AI-decisioning platform that enables retailers to turn data into real-time decisions and automated actions across inventory, pricing and merchandising. Powered by a multi-agentic AI architecture, the platform predicts outcomes, refines strategies and executes merchandising decisions at scale —driving measurable sales, revenue and margin performance. By combining advanced AI with deep retail expertise, invent.ai helps retailers across the globe navigate dynamic markets, improve operational efficiency and achieve sustainable financial outcomes.

Invent.ai is recognized in the Gartner® Market Guide for Retail Forecasting, Allocation and Replenishment Solutions and for Retail Unified Price, Promotion and Markdown Optimization Applications – Short Life Cycle. The company has also received the RetailTech Breakthrough Awards' Customer Experience Award, SupplyChainBrain's Great Supply Chain Partner recognition and Supply & Demand Chain Executive's Top Supply Chain Projects award. With SOC 2 and ISO 27001 certifications, invent.ai ensures security and data protection across all AI-powered solutions.



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