

loop.ai AI AGENT FOR RETAIL CHAIN DEMAND FORECASTING



BUSINESS CHALLENGE

The retail chain previously relied on manual analysis and historical sales to forecast demand for non-food products, a task complicated by niche items with location-specific demand. This approach frequently led to overstocking or stockouts, driving customers to competitors or clogging valuable store space with excess inventory.

The client developed an AI agent for product demand forecasting and ordering, blending historical and real-time sales data with geolocated factors. Tailored to each store, it predicts demand accurately and places orders autonomously, adapting to market changes. This cuts waste, optimizes stock, and keeps products available where and when customers want them, boosting efficiency and satisfaction.

COGNITIVE SOLUTION

The AI agent developed on the Loop Cognitive Platform processes and acts on historical and real-time sales data and Inventory Management System.

Dark data used for training:

Historical sales data and geolocated data.

Dark data used for inference:

Real time sales data and geolocated data.

Industry: Retail

EUROPEAN RETAIL LEADER

A leading European non-food retailer operating over 900 stores.

RESULTS

93% FORECAST ACCURACY
compared to 60-75% of manual method

11% INCREASE IN SALES
improving product availability and reducing stockouts

13% REDUCTION EXCESS INVENTORY
preventing losses from unsold or outdated items

100% PROTECTION OF LEGACY SYSTEM INVESTMENT
the AI agent operates within the existing systems, authorizations, and interfaces used by humans, requiring no changes to the client infrastructure