

Stockout AI Agent for JD Edwards EnterpriseOne 9.2

Predict, Prevent, and Reduce Stockouts Across JD Edwards Supply Chain Operations

Stockout AI Agent is an AI-powered intelligence layer built around JD Edwards EnterpriseOne 9.2 to help enterprises identify shortage risks early, improve fulfillment reliability, and make faster replenishment decisions. The solution continuously analyzes inventory, demand, sales orders, procurement, manufacturing, supplier performance, and supply planning signals across JD Edwards. By combining predictive analytics with AI-driven exception management, Stockout AI Agent helps planners move from reactive shortage resolution to proactive supply chain execution.

Proven Impact

5 - 15%

Service level improvement

20 - 40%

Fewer stockouts

15 - 25%

Lower expedite freight

10 - 25%

Less excess inventory

The Business Challenge

Many JD Edwards planning environments continue to rely on static forecasts, fixed replenishment rules, periodic planning runs, and manual planner review. While these methods support core planning processes, they can be less responsive to sudden demand spikes, supplier delays, production changes, new product ramps, and broader supply disruptions.

This often creates operational pressure across the supply chain, including:

- Stockouts, backorders, and delayed customer shipments
- Excess safety stock and working capital tied up in inventory
- Emergency purchasing, expediting, and premium freight costs
- Planner dependency on spreadsheets and manual exception review
- Limited visibility into which shortage risks require immediate action
- Poor inventory visibility across items, warehouses, and locations

What Stockout AI Agent Does



Predictive Stockout Detection

Analyzes JDE inventory, demand, sales orders, forecasts, purchase orders, work orders, and planning data to calculate stockout risk by item, organization, subinventory, location, and time bucket.



Dynamic Replenishment Recommendations

Recommends replenishment quantities, order-timing adjustments, and updated safety stock levels based on demand patterns, supply position, lead times, and fulfillment priorities.



Planner Exception Prioritization

Shortage alerts are ranked by customer impact, revenue risk, fulfillment urgency, and supply chain constraints — so planners focus first on the exceptions that matter most to service levels and business continuity.



Closed-Loop Learning

Tracks actual stockout events against AI predictions and continuously improves recommendations using historical demand, supplier, fulfillment, and inventory behavior.

Key Capabilities

- AI-driven stockout risk prediction across items, locations, and planning time buckets
- Shortage risk alerts based on demand, supply, inventory, and procurement signals
- Recommended replenishment quantities and order timing changes
- Safety stock recommendations supported by scenario-based analysis
- Prioritized planner workbench for critical supply chain exceptions
- Continuous learning from actual stockout events and historical planning outcomes
- Integration with JD Edwards as the system of record

Business Benefits

Improve Service Levels

Reduce stockouts and backorders while improving fill rate, on-time delivery, and on-time in-full performance.

Service level +5–15% · Stockouts –20–40%

Optimize Inventory Efficiency

Improve safety stock decisions, reduce excess inventory exposure, and support stronger inventory turnover.

Excess inventory –10–25%

Reduce Supply Chain Costs

Lower expedite fees, premium freight costs, emergency purchasing, and manual intervention required to resolve shortages.

Expedite freight –15–25%

Accelerate Planner Decisions

Enable planners to act earlier with AI-driven recommendations instead of relying heavily on manual analysis, spreadsheets, and repeated planning reviews.

Less manual what-if analysis

Why Build Around JD Edwards

JD Edwards remains the system of record for item master, inventory, purchasing, order management, manufacturing, BOM, routing, planning, and financial data.

Stockout AI Agent does not replace JD Edwards. It augments the existing environment by adding predictive intelligence, proactive exception management, and AI-driven recommendations while preserving the customer's current ERP investment.

This creates a practical modernization path for JD Edwards customers looking to improve supply chain responsiveness without requiring a full ERP replacement.

ROI Measures

The business impact of Stockout AI Agent can be measured through:

- Reduction in stockout incidents and backorders
- Reduction in safety stock value
- Reduction in expedite and premium freight spend
- Improvement in fill rate and OTIF performance
- Improvement in inventory turnover
- Reduction in planner effort and exception resolution time

Stockout AI Agent is ready for scalable customer deployment — bringing JD Edwards customers from reactive shortage management to proactive, AI-enabled supply chain execution.