

Inventory Optimization



JDA Software: Powering the Adaptive Supply Chain with Inventory Optimization

Achieve superior service levels, gain market share and reduce costs by optimizing inventory across your supply chain.



THE SUPPLY CHAIN COMPANY®

Real Results

Sample of JDA's Inventory Optimization Customers

Why do companies worldwide rely on JDA Software to deliver inventory optimization value? Real Results. Fast.

JDA Software helps the world's leading retailers and suppliers achieve tangible benefits through innovative inventory optimization. Here are some of the real results that our customers have achieved with JDA's Inventory Optimization solution*:

- Realized significant improvements in on-time performance and an \$8.8 million payback in the first year
- Achieved a 300 percent return on its inventory optimization investment while improving customer service levels
- Strategically positioned inventory ahead of demand to meet customer needs and timeframes
- Moved from a 100 percent manual inventory review to a prioritized, exception-based process, reducing end-to-end targets planning, review and approval times by 40 percent
- Lowered inventory costs, raised service levels and implemented flexible postponement strategies and inventory policies that dramatically adapt to business conditions
- Slashed inventory levels by 55 percent – for a cost improvement of \$17 million – coupled with a 20 percent reduction in stock-outs and a 20 percent reduction in excess inventory, in just 90 days
- Reduced inventory up to 40 percent, realized \$4 million in annual savings, and increased forecast accuracy to more than 85 percent
- Micro-segmented the entire product portfolio by volume, demand variability, lifecycle stage and margin resulting in higher profitability as well as better worldwide utilization of plant capacities, raw materials and other resources
- Implemented a system of bi-weekly parts forecasting – matched with daily replenishment planning – to ensure that spare parts inventory could be managed with greater agility and accuracy across the entire global supply chain
- Doubled inventory turns while realizing significant improvements in product availability and customer service metrics
- Created a new optimized postponement system in which work-in-process inventories are held strategically at various positions in the global supply chain, leading to reductions in overall inventory, cost and product assembly cycle times while ensuring high customer fill rates

* Represents actual results realized by JDA customers.

BlueLinX Holdings Inc.
Coats North America, Inc.
Constellation Brands, Inc.
Defense Logistics Agency
Exide Technologies
Fairchild Semiconductor International, Inc.
Foster's Group Limited
Gordon Food Service Inc.
H.J. Heinz Company
Mercedes-Benz USA LLC
OfficeMax Incorporated
ON Semiconductor Corporation
Paccar Australia Pty Ltd.
PepsiCo, Inc.
The Schwan Food Company
The Scotts Company LLC
Southwest Airlines Corporation
Swagelok Company
Texas Instruments Incorporated



Service Level Excellence

Challenge: Achieving Service Level Excellence, Growing Revenues and Minimizing Working Capital in the Face of Changing Market Conditions

Transforming the supply chain into a source of competitive advantage is challenging amidst enormous demand variability, elongated lead times, ever-shorter product lifecycles and constantly shifting logistics cost scenarios. To maximize supply chain performance, companies must continually manage a profitable balance among service levels, responsiveness, risk and cost. These performance factors are driven largely by how a company manages supply, production and distribution, and where and how it deploys inventory.

Inventory management, in fact, is perhaps one of the most important aspects of a successful and profitable supply chain. To create greater efficiencies, more and more companies are adopting a scientific approach to inventory optimization on an ongoing basis.

Solution: Continuous Closed-Loop Management Across Inventory Strategy, Tactical Inventory Planning and Inventory Execution

While many companies have attempted inventory optimization as standalone initiatives, the truth is that inventory is just one component of the new global supply chain. Instead of focusing on short-term results, a number of leading companies have leveraged JDA Inventory Optimization to create and leverage a long-term, sustainable competitive edge, by aligning day-to-day inventory plans with top-level goals on an ongoing basis – and turning this supply chain component into a powerful strategic advantage in a challenging economic climate.

Companies can achieve higher customer service with lower resource investment now. JDA's innovative Inventory Optimization solution provides end-to-end capabilities spanning inventory strategy, tactical inventory planning and management of inventory execution.

Make-to-stock or make-to-order, this solution can be deployed across industry sectors – from high-tech manufacturing, semiconductors, food and beverage, consumer durables, consumer electronics, apparel and fashion, to life sciences and aerospace and defense.

Optimizing Supply Chain Posture by Micro-Segment

Inventory policies and processes, working together across the global supply chain, define the overall supply chain posture – and also determine how the business will respond to changes in market and supply conditions. With both products and markets growing in diversity, the simple “80/20” or ABC rules are not enough to account for the real differences among inventory types – because there is a wealth of subtle distinctions that can't be recognized by such macro numbers. Using JDA Inventory Optimization, leading companies are now slicing and dicing their product portfolios along multiple dimensions, into new micro-segments that demonstrate the value and impact of each product for the global supply chain. Based on consumption patterns, criticality, velocity and other key attributes, products are governed by a set of highly customized “designer” inventory strategies that are tailored to each micro-segment.

Right-Sizing Inventory Across the Supply Chain to Balance Risk and Reward

Replace traditional statistics, safety stock and spreadsheets with JDA Inventory Optimization to redefine your supply chain inventory performance. The solution eliminates inconsistent, ad-hoc planning and subjective problem solving previously driven by individual planners by leveraging enterprise-level monitoring and optimization, best-practice algorithms and supply chain planning integration capability.

You will increase planning productivity, significantly decreasing manual analysis while also benefiting from a low-risk implementation – whether deployed as standalone or integrated to other JDA supply chain planning and optimization solutions.

Powerful optimization algorithms determine service levels and inventory targets for each product location leveraging demand forecast data, sales history, manufacturing and distribution assets, and transportation networks to consider the total landed cost of inventory – including transportation expenses, handling charges and holding costs – which can change dramatically and swiftly in today's volatile environment. Time-phased execution accounts for demand trends and seasonality effects. Additionally, the solution also considers existing multi-echelon network complexity, lead times, costs and constraints, as well as demand and supply variability.

Maximize Revenue

Free Working Capital

Managing Inventory Targets Integrated with Supply Chain Planning

JDA's approach is also distinguished by its inclusion of a rigorous, plan-do-check-act (PDCA) process that makes the inventory optimization process incredibly agile, while also monitoring the broader supply chain consequences of any inventory decisions. Because the business environment is continuously changing, adopting the right supply chain posture cannot be a one-time event. Instead, it must be an ongoing process that reflects and responds to changes in the business environment. JDA Inventory Optimization enables best-practice, process playbooks and weekly PDCA cycles that keep the inventory strategy on track.

The solution can be leveraged as standalone, or more extensively to handle your daily supply chain planning needs with integration as part of a comprehensive supply chain solution. JDA Inventory Optimization integrates with JDA® Demand, JDA® Fulfillment and JDA® Master Planning, combining to provide unsurpassed supply chain visibility and optimization, best practices and user-friendly analysis.

Improving Inventory Execution Performance through Continuous Learning

JDA takes the PDCA cycle to a new level by matching it with a learning cycle that captures lessons and incorporates this knowledge into future inventory planning efforts. JDA Inventory Optimization enables inventory managers to monitor inventory performance, triage inventory exceptions, drill into root causes of stock-outs and inventory excesses and then take corrective actions to eliminate or mitigate the root causes. Companies become true learning organizations that are equipped to make continuous, significant inventory improvements that build on one another.



JDA Delivers Innovative Network & Inventory Optimization that Reduces Costs and Drives Service, Revenue and Growth

Requirements	JDA Capabilities	Benefits
SKU Classification & Portfolio Micro-Segmentation	<ul style="list-style-type: none"> • Selects and classifies SKUs based on any combination of attributes, including historical sales revenues, forecast revenue, margin, cost, forecast variability, historical trend and lifecycle stage • Provides workflow-in-setting inventory policies and constraints based on SKU classification 	<ul style="list-style-type: none"> • Improves flexibility and accuracy for inventory management versus accounting purposes
Multi-Echelon Inventory Optimization	<ul style="list-style-type: none"> • Determines optimal service level versus working capital • Constrains service performance and inventory targets against the fiscal budget • Simultaneously optimizes inventory and economic ordering quantities (EOQ) • Provides intuitive inventory policy workbench and what-if scenario planning capabilities • Enables time-phased inventory planning and optimization • Features shared data model with JDA Demand, Fulfillment and Master Planning • Publishes optimized inventory targets to JDA Fulfillment and Master Planning for daily planning policies 	<ul style="list-style-type: none"> • Increases ability to consistently achieve 96-99 percent service level across all products while reducing inventory investment by 15-20 percent • Improves accuracy and performance of daily replenishment and inventory planning
Scenario Management	<ul style="list-style-type: none"> • Performs what-if analysis based on existing baseline or other scenario • Supports contingency planning and forward-looking strategic growth/expansion planning 	<ul style="list-style-type: none"> • Enables strategic, informed executive decisions
Tactical Inventory Targets Management	<ul style="list-style-type: none"> • Automatically reviews and updates targets as needed on an ongoing basis • Configures exception conditions by item-location and escalates for manual review • Automatically diagnoses root causes of why targets have changed 	<ul style="list-style-type: none"> • Enables low-touch, but agile inventory management
Inventory Early Warning & Performance Analysis	<ul style="list-style-type: none"> • Monitors inventory to anticipate stock-outs and excess exceptions • Drills down to reveal root causes of impending or recent exceptions • Supports adjustment of inventory plans and assumptions in response to exceptions 	<ul style="list-style-type: none"> • Reduces stock-outs and excesses • Enables continuous process improvement

Inventory Optimization

“The power in Inventory Optimization is that we can directly focus our inventory positions based on individual customers or individual products. It creates a true gain in market share because we can consistently satisfy customer request dates.”

*Ravi Vancheeswaran
Manager of Systems and Processes,
Supply Chain Management Services,
ON Semiconductor Corporation*



About JDA Software Group, Inc.

JDA® Software Group, Inc. (NASDAQ:JDAS), The Supply Chain Company®, is a leading provider of innovative supply chain management, merchandising and pricing excellence solutions. JDA empowers more than 6,000 companies of all sizes to make optimal decisions that improve profitability and achieve real results in the discrete and process manufacturing, wholesale distribution, transportation, retail and services industries. With an integrated solutions offering that spans the entire supply chain from materials to the consumer, JDA leverages the powerful heritage and knowledge capital of acquired market leaders including i2 Technologies®, Manugistics®, E3®, Intactix® and Arthur®. JDA's multiple service options provide customers with flexible configurations, rapid time-to-value, lower total cost of ownership and 24/7 functional and technical support and expertise.

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