Strategically Leverage Inventory to Balance Cost and Risk Across Your Supply Chain

Coupa Inventory Optimization

Inventory Optimization is All About Striking the Right Balance

According to <u>Wall Street Journal</u>, inventory is the single largest investment in working capital for many businesses, making it a critical factor in financial health and operational resilience. For supply chain leaders, the challenge isn't just about cutting costs or mitigating risks—it's about finding the right balance between the two. Oversteering toward risk mitigation can lead to excessive inventory and increased obsolescence, while an extreme focus on cost-cutting may result in stock shortages and lost revenue opportunities. Despite the abundance of inventory optimization solutions on the market, your business may still struggle if your inventory strategy isn't aligned with your broader supply chain design strategy. Ongoing disruptions, unpredictable demand, and shifting supplier dynamics underscore the need for a holistic, multi-tier approach—and that's where Coupa can help.



inventory is wasted annually due to expiry or overproduction according to a study by <u>Avery Dennison</u>. **Inventory Optimization,** part of <u>Coupa Supply</u> <u>Chain Modeler</u>, enables businesses like yours to run inventory policy experiments and optimization scenarios to right-size inventory across the entire supply chain network balancing costs and risks.

Benefit From a Holistic Approach to Inventory Optimization

Coupa provides a comprehensive view of your inventory by integrating constraints across network design, supplier risk management, transportation, and production. Unlike traditional APS systems that operate within a fixed network, Coupa challenges constraints rather than accepting them—redesigning the network itself and optimizing inventory around it. Planners are empowered with the ability to conduct scenario analysis to fine-tune inventory targets and quickly run what-if simulations, assessing the impact of key factors such as demand patterns, lead times, production constraints, and supplier reliability on business performance. By optimizing all types of inventory—including cycle stock, safety stock, in-transit inventory, WIP, and pre-built goods—across systems, Coupa accounts for all landed costs, from operational and logistics to distribution. This approach uncovers hidden opportunities to reduce costs and mitigate risks.

Overview

Key Features:

Manage working capital through multi-echelon inventory optimization

Optimizing safety stock at each level of the supply chain—from raw materials to finished products at distribution centers and retail locations—can significantly reduce Days Inventory Outstanding (DIO), thereby freeing up valuable working capital. Multi-echelon inventory optimization (MEIO) achieves this by analyzing network lead times, replenishment frequencies, demand and supply variabilities, and service levels across all interconnected nodes. This comprehensive approach ensures alignment with global service level objectives, enhancing resilience amidst volatility.

Optimize service levels at every tier

Service level optimization helps identify the right service level mix at each echelon in order to meet an organization's business goals including budget constraints. For example, imagine a factory that makes 100 products split into sets A, B, and C with target service levels of 98%, 93%, and 88%. The model looks at the cost and value of each product in these sets and suggests strategies to either cut costs or boost profits—all while making sure the overall service level targets are met for each group.

Transfer stock to meet dynamic business conditions

Transfer stock between plants, warehouses and other locations in compliance with inventory policies tailored to each product-location combination. Plan transfers to minimize transfer costs and prevent stock shortfalls. These provide levers for businesses to utilize their warehouse capacity during times of lower demand and push products closer to customers during higher demand.

Stress test scenarios with inventory simulation

Evaluate recommended inventory policies using detailed daily, weekly, or monthly views to assess operational feasibility. Incorporate external risk factors in simulation to enhance resilience, ultimately driving greater adoption and boosting executive confidence.

Gain a Competitive Edge With Coupa Inventory Optimization



Create an inventory strategy that achieves tangible results A materials science and technology company struggled with excess inventory due to a manual, Excel-based planning process that failed to account for key supply chain factors like lead times, resulting in inaccurate replenishment calculations. To address this, they implemented an MEIO model that optimized inventory policies and time-phased safety stock targets using demand forecasts, in-transit stock, and lead times. This transformation allowed them to right-size inventory levels, ultimately saving approximately **\$16 million.**

Ready to get started? Request a tailored demo today.