Optimize Inventory Levels with Enterprise Data and Analytics-Driven Insight

The Best-Run Businesses Run SAP™

Manage complex supply chains with greater precision

What's the best way to improve supply chain performance so you can tighten control of corporate inventories? You need tools that work with your enterprise data and enable advanced analytics, giving you the insight to make smart decisions that optimize your inventory levels.

The SAP® Enterprise Inventory Optimization application by SmartOps helps you more effectively plan and manage inventory levels at every stocking location throughout your global supply chain. By using this software, you can analyze crucial inputs and signals, model the impact of decisions on global inventories, and balance inventory levels – all while upholding service levels.

You can use the application to analyze and model data from your existing SAP software landscape, or you can use it on a stand-alone basis. Create a comprehensive, cross-enterprise management process that lets you optimize, manage, and monitor inventory stocking levels to achieve a desired outcome, such as running a more lean operation or improving service levels. And the option for analytics gives executives a laser-focused view of supply chain performance.

Take stock of your supply chain management processes with SAP Enterprise Inventory Optimization.

Establish the right inventory size

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Make better multistage inventory decisions

Master supply chain complexity

Improve visibility into your supply chain dynamics

Be descriptive, predictive, and prescriptive

Carrying excess inventory has been the traditional buffer for coping with both supply chain uncertainties and periods of high demand. But adding inventory into the supply chain is no guarantee that the right products are available when and where they are needed.

SAP Enterprise Inventory Optimization draws on data from across your multistage global supply chain, providing advanced analytics that deliver better demand, supply, and production intelligence. This application gives your planners the data they need to clearly understand the "what, why, where, and when" of inventory placement.

The software estimates the need for safety stock, cycle stock, prebuild stock, and in-transit inventories. Then it helps you determine optimal inventory targets. It analyzes and optimizes interdependent relationships among inventories, service levels, capacity, and costs across all stocking locations and stages, from suppliers to manufacturing to customers. With this degree of insight, you can accurately quantify demand, protect against supply variability, and mitigate the risks of chronic underproduction.

Maintaining safety stock wastes precious company resources. SAP software helps you know what you need and where.

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SAP Enterprise Inventory Optimization offers inventory visibility at the item, location, and time-period level of detail. The software leverages advanced supply-and-demand analytics and a proven, scalable, multistage stochastic optimization model. This model processes large-scale, complex levels of data simultaneously to reveal optimal inventory targets. As a result, planners can make dynamic inventory deployment decisions based on a clear understanding of all items, locations, and stages in multitier manufacturing and distribution supply chains.

To help you achieve service-level goals, the software incorporates all of your product supply chains and relationships into the planning. You can coordinate inventory plans across all nodes, from your primary manufacturing, packaging, and warehousing locations through all market distribution stages. The software updates these comprehensive inventory plans as changes occur in conditions across your operation.

Multistage inventory planning and optimization functionality lets you dynamically link current and future inventory targets to service-level goals. This functionality helps you increase service levels, optimize product availability, and enhance customer satisfaction while improving asset utilization and increasing total inventory turns.

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Planners can use the software to execute decisions that reduce the working capital tied up in inventory, without compromising the ability to meet customer expectations. Using the software, they can collaborate with everyone involved in your supply chain, from sales and production to customer service. It's the simplest way to continuously fine-tune your supply network and respond to variability in demand and supply.

What's more, planners can set and manage targets – such as for safety stock levels – more frequently and at a granular level. The result: leaner processes that can lower the amount of working capital required to run your supply chain.

Less is more. Trim your inventory levels and reduce working capital requirements.

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Ready to reduce your management burden and free up critical staff? SAP Enterprise Inventory Optimization can help.

Using integration with the SAP NetWeaver® Business Warehouse component and the SAP ERP and SAP Supply Chain Management applications, and the multistage stochastic optimization model, the software provides real-world, time-varying details about your most complex supply chains. You can rapidly calculate millions of time-varying inventory targets while also accounting for the changes that occur across multiple stages for bills of materials and different periods between reviews and lot sizes.

This feature helps you anticipate seasonal trends. The software also takes into account lead-time uncertainty, time-varying demand, and time-varying manufacturing capacities of your product lifecycle.

An intuitive planning and analytics dashboard helps you run what-if scenarios and identify the costs and potential benefits of various projects and options. This way, you can adapt to changing supply chain variables while increasing the efficiency of your global supply chain.

Global supply chains are complex.
Managing them shouldn't be.

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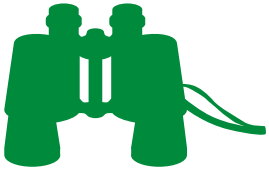
The option for analytics offers a new way to view and report on supply chain data and performance. It uses SAP BusinessObjects™ business intelligence solutions with a preconfigured data semantic layer to populate executive dashboards and generate reports for common workflows, including sales and operations planning, supply chain performance monitoring, and ad hoc reporting.

With these analytics solutions, planners can track granular supply chain measures, using flexible data filtering and visualization capabilities to drill down to root causes. This preconfigured, preoptimized data semantic layer can help you reduce the IT resources needed for custom development and implementation tasks.

See what you've been missing. Reduce inventory stock-outs with the transparency only analytics can deliver.



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To help enhance your supply chain operations, the option for analytics offers both new insight and guidance. An intuitive mechanism describes the current state of supply chain performance, predicts future outcomes, and prescribes the best actions to meet your strategic goals.

By using SAP Enterprise Inventory Optimization, you can improve demand planning by providing planners with critical feedback to identify and prioritize adjustments to forecasting models and processes. Use the target performance dashboard to gain a unified view of demand, inventory, and supply performance; and compare historical trends, planned-versus-actual performance, and future projections.

By taking advantage of the insight enabled by this software, you can proactively identify and act on excess or shortage signals in your supply chain. A scenario comparison dashboard lets you visualize and analyze the impact of alternative supply chain strategies by using a side-by-side comparison feature. You can also predict outcomes and prescribe actions to help refine your supply chain strategy.

SAP Enterprise Inventory Optimization: It's like a crystal ball for your inventory shelves.

Realize the rewards of streamlined inventory processes

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SAP Enterprise Inventory Optimization helps you gain a clearer picture of all inventory items across locations and stages in multitiered manufacturing and distribution supply chains. By leveraging this enhanced insight and the ability to make dynamic inventory deployment decisions, your organization can realize considerable business benefits, including:

- Lower inventory levels for every item – including raw materials and components, intermediates, and finished goods – for every location and stage and for all relevant planning periods
- Reduced operational costs through continuous insight and mitigation of inventory cost drivers
- Improved customer service by calibrating for the inherent variability in supplier lead times, forecasts, and production capacities
- Increased planner productivity through systematic, dynamic inventory targeting
- Faster return on investment through integration with your current SAP software environment
- Better visibility into supply chain trends and performance through descriptive analytics
- Ability to synchronize demand, inventory, and supply planning processes with predictive planning targets
- Enhanced risk management through prescriptive strategic analysis capabilities

Summary
The SAP® Enterprise Inventory Optimization application by SmartOps helps you optimize inventory levels at every stocking location throughout your supply chain. You can analyze and model data from your existing SAP software to identify changes in demand, supply, and network alignment. The option for analytics helps you provide executives with a focused view of supply chain performance. Together, these insights allow you to make decisions for achieving optimal inventory levels, freeing working capital, and improving customer service.

Objectives
- Set inventory targets across a multistage supply chain network
- Meet working capital and inventory goals
- Improve customer service levels

Solution
- Demand and supply intelligence to protect against supply variability
- Inventory optimization to link inventory targets to service-level goals
- Stochastic optimization model to synchronize inventory deployment
- Planning and analytics dashboard to enhance visibility

Benefits
- Increase sales by determining optimal inventory targets
- Realize higher margins by coordinating supply chain variables
- Improve customer service through better order fill rates and on-time deliveries
- Free working capital by balancing service levels and inventory investment

Learn more
Call your SAP representative, or visit us online at www.sap.com/solutions/solutionextensions/enterprise-inventory-optimization/index.epx.

CMP20100 (12/06)
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