SAP Solution BriefSAP Supply Chain Management
SAP Advanced Planning & Optimization

Supply Chain Planning: Save Time and Money, and Satisfy Customers



Quick Facts

Summary

Synchronizing supply and demand is essential to successfully competing in volatile world markets, and SAP offers a number of applications to make that easier. These include the SAP® Supply Chain Management (SAP SCM) application and the SAP Advanced Planning & Optimization (SAP APO) component. In addition, you can be up and running in a matter of weeks with rapid-deployment solutions for demand planning, global available-to-promise check, and advanced production scheduling.

Business Challenges

- Respond effectively to real-time customer demand
- Reduce inventory and safety stock levels
- Forecast, model, and optimize resource usage

Key Features

- Demand planning and forecasting –
 Anticipate demand for products using state-of the-art forecasting algorithms
- Safety stock management Determine optimal levels of safety stock to satisfy unexpected demand
- Supply network planning Simulate market conditions and implement tactical planning and sourcing decisions
- Vendor-managed inventory Work directly with partners to reduce inventory buffers
- Production planning and detailed scheduling – Create feasible, optimized production schedules that consider real-time material and capacity constraints
- Global available to promise –
 Determine the best promise date for customers' orders

Business Benefits

- Enhanced profitability from lowering operational expenses and improving coordination with partners
- Stronger customer loyalty due to higher satisfaction levels for order fulfillment
- Better match of supply to demand through improved forecasting, planning, and visibility
- Higher demand accuracy with dynamic synchronization of demand-driven planning, logistics, and supply network execution
- Lower inventory levels through visibility into demand, leading to reduced inventory buffers

For More Information

Call your SAP representative, or visit us on the Web at www.sap.com/scm or www.sap.com/solutions /rapid-deployment/index.epx.



Today's fast-paced business environment places increasing pressure on companies to balance the push and pull of supply and demand. Accomplishing this requires an adaptive supply network driven by real-time customer demand and 24x7 supply monitoring.

Your supply chain must meet the highest levels of demand accuracy and customer satisfaction and fully support order, product and execution tracking as well as logistics. Your fulfillment and transportation operations must be smoothly synchronized. You can balance gracefully on that tightrope between push and pull by ensuring the most profitable match possible between supply and demand.

The SAP® Supply Chain Management (SAP SCM) application brings you that balance through a responsive supply network that facilitates interaction among customers, suppliers, and partners. The solution links business partners and processes with real-time information, enabling dynamic synchronization of demand-driven planning, logistics, and supply network execution. Through integration, automation, and comprehensive functionality, SAP SCM transforms supply chains from sets of linear processes into responsive supply networks. Customer-centric, demand-driven companies share knowledge, adapt intelligently to market conditions, and respond proactively to shorter, less predictable product lifecycles.

GREATER ACCURACY AND PROFITABILITY THROUGH PLANNING

The SAP Advanced Planning & Optimization (SAP APO) component of SAP SCM enhances your existing supply network by delivering full planning functionality –

strategic, tactical, and operational. It can support demand-, forecast-, calendar-, event-, or order-driven supply chain process models. Now you can accurately match supply-and-demand leads; reduce inventory levels; and optimize in-stock positions, inventory turns, profitability, and productivity. You can model your existing supply network; set goals; and forecast, optimize, and schedule time, materials, and other resources. You can also synchronize logistics, transportation, and fulfillment operations with front-end demand gateways and backend supply sources to facilitate demanddriven manufacturing and fulfillment processes. Demand-driven replenishment produces a lean, efficient supply network, reduces inventory carrying costs, and lets you fulfill orders more quickly to enhance customer satisfaction.

Demand Planning and Forecasting

SAP APO uses state-of the-art forecasting algorithms to anticipate demand for products or product characteristics, helping you plan product introductions and trade promotions. You can also plan response to anticipated external events that affect demand, or collaborate closely with your customers to exchange demand data.

To help you achieve faster time to value, SAP delivers the SAP SCM rapid-deployment solution for demand planning, giving you the essential demand-planning functionality you need as well as prepackaged analytics.

The rapidly deployed solution for demand planning helps you generate demand plans based on historical figures using automatic forecast models. You can then adjust these generated plans manually to get the best results. The solution provides a role-based planning approach for local and central planners that helps call your attention to exceptional or uncommon problems through an efficient alert system. You can then use dashboards to efficiently analyze historical and future plans for comparison purposes.

Your rapid-deployment solution integrates with SAP ERP in your system landscape or with functionality in SAP APO for supply network planning, production planning, and detailed scheduling.

Safety Stock Planning

You can determine the optimal levels of safety stock to satisfy unexpected demand and set those levels across the entire supply network. This saves you the expense of maintaining excessive safety stock.

Supply Network Planning

With the integration of purchasing, manufacturing, distribution, and transportation plans into an overall supply picture, you can simulate various market conditions and implement comprehensive tactical planning and sourcing decisions based on a single, globally consistent model. The model can include heuristics-based material and capacity planning, cost-based optimization, and multilevel supply-and-demand matching.

Distribution Planning

You can also determine which demands can be fulfilled by existing supply elements. This lets you plan the best shortterm strategy to allocate available supply and replenish stocking locations intelligently.

Production Planning and Scheduling

With thorough production planning, you can create feasible, optimized production schedules that take into account real-time material and capacity constraints. Optimized scheduling helps ensure a fast, flexible approach to engineering changes and evolving customer requirements.

SAP helps you get up and running quickly with the **SAP SCM rapid-deployment** solution for advanced production scheduling. This solution provides essential, preconfigured software functionality that can be deployed within a matter of weeks for a rapid return on your investment. Advanced production scheduling lets you fully combine your existing material requirements planning in the SAP ERP application with sophisticated detailed scheduling in SAP APO without unnecessarily replicating the master data in SAP APO. As a result, you graphically optimize the production plan, leveraging the production planning board while continuing to safeguard your investment in the SAP ERP application.

Order Fulfillment

Advanced planning functions let you manage orders based on availability of goods under transport and at distribution centers, production sites, and storage locations. Tightly optimized fulfillment adds to your profitability and customer satisfaction.

With the SAP SCM rapid-deployment solution for global available-to-promise (global ATP) check, preconfigured software functionality is available for your productive use within a few weeks. You quickly benefit from global ATP functionality, which enables more accurate commitments when responding to customer order requests. Global ATP helps ensure that the stocks and requirements situation is transparent across your entire supply chain and thus supports the decision process for:

- · Product availability check
- Product allocation check
- Rules-based ATP (product substitution or location substitution)
- Back-order processing

Vendor-Managed Inventory

SAP APO takes full advantage of Webbased collaboration functionality that improves mutual visibility into demand. You can work directly with partners to reduce inventory buffers, improve customer service, and increase revenues.

Alert Monitor

SAP APO uses a powerful exception message protocol to support exception-based planning. You have a clear drill-down path from each alert to help you solve the underlying problem.

Real-Time and Standard Integration with SAP ERP

SAP APO is integrated at a core level with the SAP ERP application, receiving transaction and confirmation data on inventory, sales, receipts, and production in real time, so that you always have the latest information for planning. You can update planning results from SAP APO to SAP ERP in real time or periodically.

FIND OUT MORE

For more information on how SAP supply chain planning applications can help your enterprise synchronize supply and demand to boost profitability, contact your SAP sales representative or visit us on the Web at www.sap.com/scm or www.sap.com/solutions /rapid-deployment/index.epx.

SAP SCM can help transform a linear supply chain into a responsive supply network in which demand-driven companies share knowledge, intelligently adapt to changing market conditions, and proactively respond to shorter, less predictable lifecycles.



