

# **Supply Chain Planning**

Slingshot Software's patented advanced planning system provides unparalleled control and flexibility in a collaborative supply chain solution. Real time alerts give you unprecedented control.

Slingshot's supply chain planning module continuously synchronizes an enterprise's supply plan with the capabilities of its trading partners via the Internet. By enabling information sharing and collaboration in real time, your supply chain is always optimized.



A supply plan is maintained for every item in every location, incorporating current customer orders, supplier orders and sales forecasts. Changes to supply and demand trigger messages to a dedicated Internet server where the change is evaluated the entimal supply plan is adjusted and if pecessar

evaluated, the optimal supply plan is adjusted and if necessary, action is taken.

Slingshot's planning module responds to changes in planning rules, inventory levels, supply, demand and the sales forecast <u>instantly</u>, suggesting or taking action to ensure demands are met on schedule in sync with the requirement and capabilities of all trading partners. Continuous planning improves efficiency by eliminating "plan latency".

All calculations are "bucket-less" and forecasting periods are user defined – eliminating inefficiencies introduced by "bucket averaging".

#### Collaboration

By sharing information in real time across the entire supply chain, true "inter-enterprise" collaboration can be achieved. The Internet is used to continuously synchronize your supply plan with that of your trading partners. Orders can be released automatically, or through the intervention of a buyer, planner, or scheduler.

You are able to automatically communicate alert notices via e-mail, EDI or XML to any trading partner. For example, you can automatically alert your supplier when a receipt is past due and request a new arrival date. The supplier's reply automatically updates the receipt date and triggers plan recalculation.



Slingshot's Supply Chain Planning application enables synchronization of the entire supply chain in real time. This level of control enables your company to react instantly as supply and demand conditions change.

# **Accurate Supply Chain Modeling**

The comprehensive rules necessary to accurately model any supply chain are included as standard. Planning rules can be established for each product, supplier and location, including facility calendars, supply calendars, transportation calendars, sourcing rules (make, buy or transfer), lot sizing, order policies, safety stock policies and lead times.

Rules can be derived from "templates" minimizing the maintenance effort. Start and stop dates can be associated with future rule changes, so plans can smoothly adapt to seasonal or promotional requirements.

# Scalability - Support for Multiple Planning Servers

The planning environment can be spread across multiple servers. This allows you to efficiently model complex, multi-level supply chains. Slingshot's scalable architecture provides unlimited capacity for future growth.

# **Demand Forecasting**

Forecasts can be entered for each item at each location. When reviewing a forecast, the system displays the current forecast and three years of demand history for each forecasted period. You can then use a forecast model to create a new forecast, or you can enter one manually.

The forecast is created by applying multiple algorithms to the history and using the model that provides the "best fit" to create a forecast. The demand forecasting functionality is based on a Focus Forecasting Simulation Model method of forecasting. One of six forecasting algorithms may be used:

- Single exponential smoothing
- Double exponential smoothing
- Least Squares
- Moving Average
- Same Period Last Year
- Same Period Last Year Percent

The method producing the closest "fit" for that SKU is used to forecast future demand. This recommendation is displayed and can be adjusted manually before driving it into the Supply Chain Planner as the final forecast. Additional algorithms are easily implemented.

The forecasting process also calculates and stores the Variance and Standard Deviation of actual demand. This information can be used for "service level based" safety stock calculations in the Supply Chain planner. A separate feature allows you to keep promotional demand separate from non-promotional. This enables you to automatically determine the promotions that apply when the demand log record is created. The forecast review forms allow you to view both types of demand history and allow you to drill down to the specific promotions in effect.

Separate forecasts can also be entered for major customers. Customers can be given access to their forecast over the Internet. An internal review and approval process allows you to adjust the customer's forecast before using it for planning purposes.

As a default, the greater of forecast or actual demand is used to project the final plan. A "forecast fill-rate" is also tracked. If the fill-rate is outside of tolerance, the planner is prompted to review the forecast.

# **Manufacturing Planning**

When an order is indicated, the system creates a planned order, which can be a purchase, a warehouse transfer or an assembly work order. Work orders are exploded into demand for components and resources. This process uses a multi-level bill of materials and a bill of resources at each BOM level.

These orders can be automatically released, or manually viewed and released, as the planner desires.

# **Transportation Planning**

You can to view future transportation requirements across all points in your supply chain. These requirements consider both open and planned orders. Statistics include the number of loads, total weight, cube and number of pallets by week. A transportation planning capability also allows you to evaluate alternatives and cut costs.

#### **Graphical View of Material and Resource Plans**

Slingshot's Supply Chain Explorer lets you view thumbnail inventory projections for a product, product group, planner, warehouse or any combination of each. Color coded graphics highlight stock outs, shortages, excess or obsolete stock.

Click on a thumbnail to instantly display detailed graphics. Click again to drill down to supporting orders, forecasts and rules for the item. This graphical interface simplifies the process of resolving inventory shortages and evaluating "what if" simulations.

The Supply Chain Explorer provides a separate view for resources. A thumbnail resource projection is provided for each type of resource (labor, equipment, facilities). Here again, color-coding is used to highlight issues. Red indicates a resource shortage and green a resource excess. Click again on the thumbnail to view a detail graph. Click on the graph to drill into the underlying orders or resource scheduled.

#### **Link Demand to its Source (Pegging)**

Click on a plan folder and view supply and demand transactions for that product. When a shortage occurs, it is important to know the type of demand that is responsible for that condition. When this occurs, it is simple to review whether the shortage is due to actual customer orders, or if inventory is required to satisfy a forecast, or for lot sizing or safety stock requirements.

# **Planner Notices for Maximum Efficiency**

Slingshot's planning module automatically creates plan exception notices, including:

- Current Stock-out
- Overdue Shipment
- Projected Stock-out
- Overdue Receipt
- Should Open Supply Order
- Excess Inventory
- Forecast Review Required
- Obsolete Warning
- Should Expedite
- Should De-expedite

Each planner can easily create individual notice queries to streamline the process of monitoring all relevant conditions. These queries are defined on a simple "fill in the blanks" form. Once defined, the query can be executed with a single click.

To address a notice, the planner simply selects and views the default action, which can be taken or overridden. Multi-select capability allows multiple notice selection with one click. Actions that involve eCity orders (purchase order, material request, warehouse transfer, or work order) create or modify the order automatically.

#### **Integrated Load Building**

Actual or planned orders can be selected and grouped into inbound or outbound loads. The system keeps track of available capacity (volume and weight) as the load is constructed. Orders can be easily moved to balance loads and prioritize shipments. Multiple vehicle types and capacities are supported. Inbound load building can also be used to turn planned supply orders into open supply orders. This enables you to purchase full truckloads from suppliers to earn higher discounts, or transfer full truckloads between warehouses to minimize shipping costs.

Outbound loads can be constructed with multiple stops. When the load is complete, it is routed and released to the warehouse for picking and shipping. Manifests and load sheets are derived from the routing information entered.



Over the past 3 decades, Slingshot has helped companies just like yours achieve the next level of efficiency, growth and profitability.

Our innovative approach to ERP software development, implementation and ownership allows you to extend your ERP systems without programming.

This lowers your costs, ensures scalability, decreases time to return on your investment and lowers your overall risk.

When it comes to ERP software – we innovate.

Visit us online:

slingshotsoftware.com

#### **Slingshot Headquarters**

270 Bridge Street Suite 302 Dedham, MA 02026 781.329.1900 – Phone 781.461.2421 - Fax

#### Slingshot – Western Region

Xerox Centre 1851 East First Street Suite 900 Santa Ana, CA 92704 714.427.1170 – Phone 714.427.1177 – Fax

#### Sales

Toll-Free: 1.866.754.6474 sales@slingshotsoftware.com