Enabling SC exchanges through ATP

Available to Promise (ATP) as defined by APICS is "the uncommitted portion of a company's inventory and planned production, maintained in the master schedule to support customer order promising."

Often one runs into a situation where something ordered is out of stock. This results in disturbing the entire production process, and can cost company millions of dollars. Consider manufacturing of a car, wherein tyres are sourced from tyre manufacturers, glass from glass manufacturers, steel from steel foundries, and so on. Placing an order for all of these has to be carefully timed to ensure necessary and sufficient stock maintenance- and that too, the right quantity (excess stock can lead to high inventory costs). Picture this; if the supplier of break parts were suddenly to tell the car manufacturer that they were out of stock, the entire production line would crash to a halt. Given the situation it has become highly critical for businesses to have up-to-date ATP (available to promise) information at every step of the supply chain.

The aim of ATP is to determine if an incoming order can be promised for a specified customer request date. ATP enhances the responsiveness of order promising and the reliability of order fulfillment. It directly links available resources, including both material and capacity, to customer orders and, thus enhances the overall performance of a supply chain.

Figure:

Related Links
www.strategis.ic.gc.ca
www.ise.ufl.edu
www.csdli.computer.org

About DecisionCraft Analytics

We provide decision-making solutions to improve operational efficiency and business responsiveness. Our consulting services employ our strengths in industry knowledge, conceptual rigor, and information technologies. Developed using concepts from decision theory; our solutions use robust optimization, simulation, and statistical engines adapted to our client's focus areas.

DecisionCraft Services

Business Diagnostics
We analyze business processes and transactional data to identify underlying patterns, unravel hidden relationships and recommend areas for improvement that can improve ROI and reduce costs.

Predictive Analytics
We use historical data intelligently to develop a view of future market trends
There exist different types of ATP’s capable of handling varied degrees of supply chains. Some ATP software offer immediate response and commitment to the orders received, while others collect orders over time interval and provide response for the batch of orders at the end of each time period. However, it should be noted that there are very few true real-time ATP systems operating today; most systems that give an immediate response (including most web-based retail sites) produce an initial "soft" promise, run a batch ATP later and then produce a "hard" promise.

Supply chain visibility as provided by ATP is one of the top priorities for modern Internet enabled organizations. ATP allows businesses to monitor and manage events across the supply chain to preempt problems and plan activities more effectively.

ATP plays a prominent role of linking customer order with enterprise resources and evaluates while minimizing the trade-off between front-end and back-end performance. Frequently, ATP engines also use optimization technique to maximize revenues and capacity utilization along with minimizing cost of supply chains. A feedback system is used in this case to apply recommendations of the ATP engine to drive decisions at the back-end. ATP, thus, can be used as a strategic weapon to achieve utmost service levels. With fewer missed orders and efficient order promising, customer satisfaction could be increased and the supply chain performance could be maximized.

Next Issue: Strategic Sourcing
Previous Issue: How to avoid marketing and supply chain conflict