Placing a lens on supply chain planning

Sales and Operations Planning (S&OP) is becoming a necessity for successful supply chain execution. With globalization of sourcing and manufacturing, shifting resources, facilities and inventories across the world, more and more companies are relying on effective supply chain planning to truly synchronize supply, based upon actual and forecasted demand. Keys to success include a dedicated governance model, an integrated, networked and formal S&OP process from sales and marketing to the supplier base, with an added “spicing” of innovation and vision.

IBM Global Business Services completed the 2006 Supply Chain Planning Survey in conjunction with APQC and the Supply Chain Management Review magazine. This survey was designed to identify leading practices by capturing significant trends and operational performance benchmarks in the areas of demand and supply planning, sales and operations planning, and inventory management.

To combat global market complexities, manufacturers and retailers are shifting from a “push” business model (premised upon planning, developing and marketing products pushed into the marketplace) to a “pull” business model that relies upon forecasted and actual demand signals to generate production plans, material plans and supply requirements.

The desire to become demand-driven is expanding the market for sophisticated, agile solutions at every juncture along the supply chain. Collaboration and visibility (internal and external, local and global) are becoming top priorities.

Collaborative S&OP – a key differentiator

The vision of S&OP is to establish an integrated planning process that enables and supports a common framework and a demand-driven supply chain, while still hitting target service levels and optimizing total costs through the balancing of supply and demand (see Figure 1). Supply chain excellence may be characterized as:

- **Consumer-driven** – Replenishing stocks to product demand
- **S&OP planning** – Making decisions on the same, accurate information
- **Synchronized** – Matching supply and demand with little inventory
- **Reliable** – Enabling each network component to perform consistently and as planned
- **Flexible** – Enabling each network component to be responsive and act quickly
- **Collaborative** – Allowing trading partners to work together to achieve common goals
- **Visible** – Making fresh, accurate and specific information available.

Synchronizing demand and supply planning

Developing a demand-driven supply network with an integrated S&OP framework requires discipline, endurance and adherence to these key principles:

1. Develop a common vision for the customer-driven supply chain and integrated S&OP framework including demand and supply planning, operational constraints, global sourcing considerations.
2. Develop a common management governance that respects differences in individual business units and allows for flexibility when necessary.
3. Take a holistic approach and consider organization, process, trading relationships and enabling technologies when developing the final vision and solution.

4. Implement organizationally integrated collaborative planning processes (such as sales and marketing, supply chain operations, finance and IT) with key customers, suppliers and service providers.

5. Develop specialized and differentiated supply chain strategies based on customer segmentation, customized service levels and product/service mix.

6. Improve the underlying demand and supply planning information: use actual customer demand commitments, supply commitments and constraints, and service capabilities.

7. Think realtime information. Model, optimize and simulate. Implement decision support tools that enable fast and effective evaluation of supply chain trade-offs.

8. Proactively manage the change, securing organizational and partner buy-in and commitment to the S&OP framework.

9. Integrate decision making: end-to-end and event by event.


Most organizations can benefit significantly from innovating their supply chain planning processes. The goal is to create a highly responsive global supply chain environment that can react with speed and flexibility to the non-synchronized world of supply and demand.

Authors
Karen Butner, Supply Chain Management Lead, IBM Institute for Business Value
David Spade, Partner, Supply Chain Planning Leader

FIGURE 1. Integrated S&OP processes and planning horizons.