Aligning Supply and Demand with Sales & Operations Planning

Kamal D Soni, Sr Presales Consultant
Business Analytics Software, IBM India/SA
Business Challenges

• **Customer service pressures**
  – Customers are more demanding
  – Demand changes and fluctuations

• **Driving profitable, highly efficient supply chains**
  – Must manage extended lead times
  – Reduce cost of goods sold without sacrificing service levels

• **Managing supplier relationships**
  – Outsourced production leads to greater reliance on suppliers
  – Communication and synchronization challenges

• **Difficult to achieve both flexibility and predictability**
  – Consistent performance is key to success
  – Must remain flexible enough to adjust to changing demands
Customer Service Requires Total Supply Chain Visibility

- **Procure**
- **Produce**
- **Distribute**
- **Fulfill**
- **Sell**

**SUPPLIER**
- Materials
- Information & Funds

**MANUFACTURER**
- Materials
- Information & Funds

**DISTRIBUTION CENTER**
- Materials
- Information & Funds

**RETAILER**
- Materials
- Information & Funds

**Root cause is upstream**

**Breakdown identification point**
Customer Service Requires Total Supply Chain Visibility

Your supply chain impacts profitability, customer service and resource utilization.
The IBM Cognos S&OP Blueprint
Manufacturing Performance Management

**SCOR Metrics**

**Integrated Financial Plan**
- P&L
- Balance Sheet
- Cash Flow

**S&OP Executive Review**

**Operational Planning & Execution**
- **Sales & Marketing**
- **Production**
- **Distribution**

**Plan, Operational & Financial Data**
- ERP
- Inventory
- Supply Chain
- Logistics / 3PL
- Customer Sales
- MES
- Syndicated Data
- POS Data

**Analytic Infrastructure**

**Business Results**
- Go! Mobile

**Scorecards**

**Dashboards**

**Reports & Analysis**

**Event Notification**
Sales & Operations Planning

• Supply chains becoming more sophisticated & decentralized

• Changing market conditions require near real-time visibility, and constant plan review

• An effective S&OP process:
  – Links day-to-day operations with business goals, operational planning, and financial planning
  – Unites disparate sales, marketing, operations, and finance functions
  – Helps management model the effect of meeting demand on the company’s supply capabilities and financial goals
  – Provides visibility into the P&L impact of plans
  – Becomes the tool for senior executives to manage the business
S&OP Process Enabled by Cognos

Demand
- Demand Planners
- Sales
- Marketing
- Product Management

Forecast Demand

Fulfillment & Distribution Planning

Forecast Supply

Consensus

Supply
- Supply Chain
- Operations
- Engineering
- Logistics

EXECUTIVE REVIEW
- Resolve Issues
- Set Direction
- Determine Strategic Impact

Use IBM Cognos 8 BI to Analyze Results
Cognos S&OP Blueprint
- Re-Forecast
- Balance Production Plan to Fulfillment & Distribution Plan
- Consensus Meeting
- Executive Review & Linkage to Financial Objectives
Sales and Operations Planning (S&OP) Blueprint

- Reconcile sales and demand forecasts with supply plans
- Identifies capacity, labor, supplier, material and financial obstacles to meeting the demand plan
- Allows capacity, cost, and throughput modeling of multiple products across multiple plants, to determine the right combinations
- Helps plan product mix among various plant and contract suppliers
- Evaluates supplier capabilities when creating the supply plan
- Provide the views and detail appropriate to each role
  - Units, revenue dollars, labor hours, machine hours, etc.
- Monitor the plan on an ongoing basis using scorecarding and analytics, making ‘right-time’ adjustments as needed
- Model and assess the financial impact of supply/demand scenarios to create a multi-plant S&OP view
S&OP Blueprint
Baseline Module

- Considers sales volume and promotions to drive revenue and demand volume plans
- Helps plan product mix among various plant and contract suppliers
- Allows capacity, cost, and throughput modeling of multiple products across multiple plants, to determine the right combinations
- Evaluates supplier capabilities when creating the supply plan
- Identifies capacity, labor, supplier, material and financial obstacles to meeting the demand plan
S&OP Blueprint
Fulfillment and Distribution Module

- Compare S&OP supply plan to fulfillment and distribution capability
- Mid-level master planning exercise
  - Production receipts to supply chain constraints
    - Inventory Targets
    - Distribution Center (DCs) space constraints
    - Determine load versus capacity
    - Determine need for supply chain outsourcing – 3PL, WH/DC capacity
  - DC and Transportation Costs – based on variable and fixed cost drivers
  - Allocation of demand to warehouses based on historical analysis and assumptions of movement from production facilities to DCs
- Analysis by business unit and product category
- Multiple scenario analysis and comparison
S&OP Blueprint
Executive Review Module

- Conduct “what-if” analysis to simulate the effect of S&OP scenarios on Balance Sheet and P&L performance
- Measure plan versus actual performance for sales, revenue, cost of goods sold (COGS), inventory, customer delivery metrics, and gross margin
- Easily analyze and drive performance by category, division, geography, channel or for the entire enterprise
- Deliver consistent plan performance visibility across all functional units, improving collaboration and consensus planning across the organization
Thank You