APICS Introduction to Sales and Operations Planning (S&OP)

26 Feb 2015 Vancouver PDM

Robert McPhail
Introductions – Presenter

Introduce yourself!

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Educator/Consultant
25 plus years in SCM
Master CSCP Instructor
Certifications
CPIM, CIRM, CSCP, CDDP, PMP
Presentation Agenda

- S&OP Definition
- S&OP process overview
- What, where, how, when and why
- Attributes and objectives of S&OP
- S&OP implementation challenges
- Foundation components for successful S&OP
- Benefits of S&OP
- Resources
Sales and Operations Planning (S&OP) Definition

A process to develop tactical plans that provide management the ability to strategically direct its businesses to achieve competitive advantage on a continuous basis by integrating customer-focused marketing plans for new and existing products with the management of the supply chain. The process brings together all the plans for the business (sales, marketing, development, manufacturing, sourcing, and financial) into one integrated set of plans.

*APICS Dictionary*, 14th edition
S&OP – A Balancing Act

This process will help develop policies
Demand and Supply and Volume and Mix

S&OP Processes

- Product/Brand Plan
- Marketing Plan
- Sales Plan

Demand Forecast

Demand Management

S&OP

Demand Planning

Supply Planning

Production
- Production Plan
- Master Scheduling
- Detailed Planning and Scheduling

Resources
- Facilities Planning
- Labor Planning
- Machine Planning

Inventory
- Investment Targets
- Channel Distribution
- Shipment Plan

Distribution
- Transportation
- Warehousing
- Labor and Equipment
Major Attributes of S&OP

- Connects business planning to tactical planning
- Balances supply and demand at the product family level
- Plans at the volume level using aggregate time buckets, not the individual end-product mix level
- Enables in a better understanding of the customer and market opportunities and company capabilities
- Involves sales, marketing, manufacturing, logistics, finance, and other departments
- Is a demand- and strategy-driven process
Objectives of S&OP

1. Supports and measures the business plan
2. Ensures that the strategic plans are realistic before being passed to tactical planning
3. Enables the organization to effectively manage changes to plans
4. Provides for the effective management of finished goods inventories and order backlog to support customer service
5. Enables performance measurement to identify when actual performance has deviated from the plan
6. Enables the organization to be *focused, aligned*, and *engaged*.
Why Plan?

What is one thing most companies have to do once a year?

- To anticipate and prepare for the future
- To ensure adequate available resources
- Customer service
- To focus on being proactive
- To avoid problems

BUDGETING!!!
What’s the Alternative?

- The only alternative to planning is NOT planning
  - NOT planning means difficult to control
  - NOT planning means difficult to manage
  - Expediting is the opposite of planning

- Companies that plan will win vs those who don’t.
How to set up

- Determine your families
  - Groups of sku’s
  - Usually linked to budgeting
  - Assembly groupings
  - Marketing aligned or Supply Aligned

- Determine your Unit of Measure
  - $
  - Tons
  - Cases
  - 1000’s of Litres
  - Thousands of pallets
  - Trucks
  - KSM 1000’s of sq meter
How - S+OP format

<table>
<thead>
<tr>
<th>Example A</th>
<th>ACME WOMANS FASHION SNEAKER LINE</th>
<th>uom=pairs of shoes</th>
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<tbody>
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The Monthly S & OP Process

1. Run sales forecast reports
   - Statistical forecasts
   - Field sales worksheets

2. Demand planning
   - Management forecasts
   - First pass spreadsheets

3. Supply planning
   - Capacity constraints
   - Second pass spreadsheets

4. Pre S&OP Meeting
   - Recommendations & Agenda for Exec. S &OP

5. Executive S&OP Meeting
   - Single Company-wide Game Plan

Visual • 14  © APICS Confidential and Proprietary
We got a new forecast- work out a plan!

### Example A

**ACME WOMAN SNEAKER LINE**

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### Example B

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© APICS Confidential and Proprietary
## New Inventory Plan B

**example B**

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Planned Sales

Planned Inventory (starting 700)

Planned Production

Aggregation of all safety stocks = 500

Max monthly capacity = 1300

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How does this affect Sales Thinking?

Able to get 100 more subcontracting July & Aug
### Example B-1

**ACME WOMANS FASHION SNEAKER LINE**

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**Aggregation of all safety stocks = 500**

**Max monthly capacity = 1300**
S&OP Maturity Level

- We have overcome challenges and are seeing significant results: 46%
- We have stalled or are proceeding very slowly: 36%
- We had a smooth implementation of S&OP and follow best practices: 8%
- We plan to start again, learning from challenges from our past efforts: 8%
- We have no plans to implement S&OP at this time: 2%

Common S&OP Implementation Challenges

- Lack of strategic coordination among departments: 58%
- Insufficient interaction and involvement among groups: 58%
- Lack of common vision or purpose: 51%
- Lack of commitment from top management: 49%
- Lack of technology and belief in existing business systems: 42%
- Inadequate communication and soft skills: 37%
- Insufficient training or skill in data analysis: 33%

Foundations of Successful S&OP

S&OP

Tiered Planning Horizon
Integrated Sub-Process
Leadership Accountability
Deep Analytics
Performance Metrics
Grids and Graphs

Change Management

Continuous Improvement
#1 – Tiered Planning Horizon

Strategic
Long-range plans, aggregate financial data

Tactical
Medium-range plans, product family volume data

Operational
Short-range plans, detail product mix data for day-to-day planning

Key benefits:
• Linkage of strategic corporate goals to S&OP processes
• Build coordination and alignment of demand and supply management functions and corporate business objectives
• Provide ease of consensus building between corporate goals, demand objectives, and supply objectives
• Ability to step away from day-to-day management and see the big picture
#2 – Integrated Sub-Processes

Corporate Plan

Demand Plan
- Inventory/Brand Plan
- Marketing Plan
- Sales Plan
  - New products/services, new market segments, price/promotions, demand forecast, Internet sales, brands

Supply Plan
- Production Plan
- Resource Plan
- Logistics Plan
  - Production strategy, capacity planning, inventory targets, distribution channel design, logistics plan

Sub-processes

S&OP Process
#3 – Leadership Accountability

Executive S&OP team

Makes decisions on critical issues, authorizes spending for production, reviews financial plan to business performance

Executive

Sets top management expectations, authorizes necessary resources, and clears obstacles

S&OP process owner

Leads the monthly S&OP planning process, manages conflict, and guides the S&OP teams toward consensus

Demand planning team

Determines the sales forecast, pricing and promotions.

Supply planning team

Researches the marketplace, manages sales, products, and customer service

Pre-S&OP team

Sets production plan to meet demand, details production rates and capacities, validates resource availability

Makes decisions on demand and supply balance, resolves problems, identifies issues, develops alternatives, sends findings to executive S&OP

Leadership accountability answers the question “Who are the owners of the S&OP process.” Without effective process governance S&OP process planning, control, execution, and improvement will fail.
#4 – Deep Analytics

The data and the application of analytics is at the heart of S&OP

Analytics-based reporting tells the S&OP planning teams:

- Where they are
- What actions need to be taken and driven down into tactical and operations S&OP processes
- What results and trends are emerging from their decisions
- What corrective steps do the S&OP planning teams which to take
#5 - Performance Metrics

Performance metrics drive accountability and ownership for S&OP objectives

Performance metrics make the S&OP process rigorous, disciplined, and factual so executives gain confidence in the integrity of the S&OP process

Tiered approach: supply chain performance example

Tier 1:
- SC cost (%COGS)
- Forecast variance

Tier 2:
- Logistics costs
- Inventory carrying costs
- Resource utilization
- Production plan execution (%)

Tier 3:
- Fill rates
- Days of inventory on hand
- Obsolescence cost
- Material, labor, & overhead costs
## Past Periods

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Promotional Sales

Machine Down

Forecast
Actual Sales
Prod Plan
Actual Prod
Inv Plan
Actual Inv
Target Inv
#7 – Change Management

“An S&OP project is 60 percent change management, 30 percent process development, and 10 percent technology”*

Effective drivers of change management:

- Effecting acceptance towards ownership and restructuring of roles and responsibilities
- Developing necessary adjustments to company culture and capabilities
- Training employee’s around the appropriate changes
- Winning support of employees with persuasiveness about the appropriateness of the adjustments

#8 – Continuous Improvement

“A never-ending effort to expose and eliminate root causes of problems: small-step improvement as opposed to big-step improvement.” APICS Dictionary, 14th edition

Continuous improvement is important because:

1. Ideas for process improvement come from the S&OP team participants – hence more realistic

2. S&OP enables continuous monitoring, feedback, and sharing of improvement ideas

3. Once S&OP teams see their ideas are heard, they will continually seek ways to improve their own performance

4. Encourages employees to take ownership and reinforces team working, thereby improving level of motivation
Benefits of Sales and Operations Planning

• Establishes operational plans consistent with the business plan
• Continually updates the production, financial, and sales plan
• Provides for cross-functional planning
• Establishes regular meetings with senior executives to resolve demand versus supply trade-offs
• Checks availability of resources to validate the production plan
• Increases teamwork and collaborative skills
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Additional Resources
Resources to Learn More

- APICS S&OP Folios  www.apics.org/sopfolio
- APICS Principles of S&OP Seminar  www.apics.org/seminars
- Best of the Best S&OP Conference  www.apics.org/best
- APICS 2015  www.apicsconference.org
- www.oliverwight-americas.com/inspiring-business-excellence
- Wallace and Company  www.tfwallace.com
  www.tfwallace.com/home/free_downloads.html

- Software
  - Logility  http://www.logility.com/
  - DemandCaster  http://demandcaster.com/
  - Excel  www.microsoft.com
Congratulations!

- Participation in today’s session qualifies for one content hour (SOPE1) toward the APICS S&OP certificate.

- Download the transcript to track your progress and learn how you can qualify for the remaining hours at www.apics.org/sop.
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Thank You For Attending!

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We will put these slides on Apics Vancouver Website