Ten Steps to Superior S&OP

John E. Boyer, Jr.

J. E. Boyer Company, Inc.
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Objective

Provide at least one idea that will help your S&OP process immediately.
Agenda

- S&OP Overview – 8
- 8-Step S&OP Process – 7
- 10 Steps to Successful S&OP – 45
  - Calendar example handout
  - Meeting agenda example handout
- Typical Timeframe – 10
- Questions – 5

35 Slides
Top Management’s Handle on the Business

It is the activity for effectively balancing demand and supply on a regular and formal basis.
Business Enterprise Model

Strategic Planning
Operating Plan
Budget

Sales and Operations
Planning

Accounts
Receivable

Sales Order
Information

Order Promising
and Scheduling

Material Planning
Inventory Management

Manufacturing
Information

Shop Floor
Value-Add
Execution

Supplier Partnership
Execution

Distribution
& Inventory
Information

Product and
Engineering
Information

Accounts
Payable

Costing

General
Ledger
Eight Process Steps

Performance

Month End Actuals
S&OP Coordinator
Day 1

Demand

Sales Data Submission
Sales People
Day 1

Supply

Pre-S&OP Analysis
S&OP Coordinator
Day 3-4

Corporate Sales Review
VP Sales
Day 2

Communication and Feedback
S&OP Coordinator
Daily - Weekly

Sales Data Aggregation
S&OP Coordinator
Day 1

Pre-S&OP Meeting
VP Operations
Day 4

S&OP Meeting
President
Day 5
All Players ...!

SHOW UP!
All Players ....

LEARN IT!
Questions for Everyone

- What did we say we were going to do (this month’s forecast)?
- What did we do (month’s actuals)?
- Why the difference (analysis)?
- What are we doing about it (action plan)?
- What are we doing moving forward (the updated forecast)?
Who Is Doing the Asking?
and
Who Is Being Asked?
Step 1A – Decide To Investigate It

• Who has decided to investigate S&OP?
• Name other key players needed to drive the investigation?
• What is your plan for getting the initial key people on board and getting the initial budget?
• Do you have a budget for the first three steps?
• The right champion is the single make it or break it key.
Step 1B – Educate

• Typically, a two-day S&OP class for the top management team and the key process players is a good start.

• Education puts the team in a knowledgeable position for properly taking the next steps ... if a “go” is agreed upon.
Step 1C – Assess the Current Process

• Does the company have a fundamental understanding of what S&OP is and why it is important to the company?
• What pieces of the S&OP process are in place today? Documented?
• What are the tools used for S&OP today?
• Are all of the required players participating appropriately?
Step 1D – Decide To Do It

• Form the design team:
  – About six people … cross functional.
  – Design all details of the eight process steps.
  – Refine the process.

• Form the ongoing process teams:
  – Sales forecasting and corporate sales review.
  – Operational analysis and pre-S&OP.
  – S&OP meeting players.

• Select the “S&OP Coordinator”

• Establish a budget.
S&OP Coordinator (1D)

- Responsible for providing data/information in a “fit-for-use” condition for the sales and operations planning process. Specific duties:
  - Ensure that all month-end actuals are collected.
  - Perform the Pre-S&OP analysis.
  - Conduct the Pre-S&OP meeting(s).
  - Coordinate the S&OP calendar.
  - Provide the S&OP meeting package.
  - Ensure that all players are trained in the S&OP process.
- Must have marvelous interpersonal skills, full command of the business system, detailed working knowledge of Excel, considerable knowledge of customers and products, and must know all of the players well.
- Should have an authority position reporting either to the president or a vice president.
Establish a Budget (1D)

• What is your budget (time and money)?
  – Education and training?
  – Outside help?
  – Additional software and/or hardware?
  – IT support?
  – Visiting other companies that are doing it?
  – People power for process design and conduct?

• TIME will be more of a test/challenge than money … even though you will think the opposite initially.
Step 2 – Create the S&OP Calendar

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<th>Period Actuals</th>
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<th>S&amp;OP Meeting 1:00 - 3:00</th>
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It Enables “Show Up”

S&OP Coordinator

**Joe Smith**

Sales and Marketing

Sue Williams
Jack Kemp
Marvin Alred
Wally Unseld
Mary White
Jim Brown

Sales and Marketing

Sue Williams
Jack Kemp
Marvin Alred
Wally Unseld
Mary White
Joe Smith
Jim Brown

Production and Materials

Wendy Ward
Joe Vecheck
John White
Randy Urbana
Sue Williams
Joe Smith
Jim Brown

Top Management

Bob Jones
John White
Jim Brown
Joe Smith
Gary Pike
Vince Winter

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Step 3A – Design the S&OP Document

• The document design will depend on:
  – The nature of your business (MTS or MTO).
  – The nature of your customers.
  – The tool that you use (Excel, purchased bolt-on software, write your own application).
  – The level of desired detail.
  – The functionality desired: sales, backlog, shipments, inventory, supply, capacity (including staffing).

• Are the pages product or functional?
## Product C - S&OP - Any Company, Inc.

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**Graph:**
- **Shipments** (blue line)
- **FGI** (green line)
- **Production** (red line)

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### Sales Review

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Step 3B – Agree on Basic Definitions

• When is an order an order? (Bookings)
• When is a shipment a shipment?
  – Shipment or invoice?
• What comprises backlog?
  – Can it be aged?
  – Can the three dates be used?
• When is production production? (Supply)
• When is finished goods finished goods?
Step 3C – Choose the System Tools

• What tool will be used for sales forecasting?
  – Existing ERP capability?
  – Excel?
  – Access or some other database application?
  – A “bolt-on” forecasting tool?

• What tool will be used for the S&OP analysis and presentation?
  – Unlikely that it will be your ERP system no matter what “they” say.
  – Unlikely that it will be a third party product.
  – Will likely be Excel.
  – Will it be a home-grown application?
Data Elements (3C)

• Once the document format is designed and the tools are specified, data element engineering can begin.

• The hierarchy is critical:
  – Product group -> family -> SKU
  – Sales person -> key customer -> product group -> family -> SKU
  – Don’t forget “other”!

• Each SKU generally has several data elements for grouping (mapping items).
Mapping Items – (3C)

Group
- DD-GGF

Family
- 1245
- 5432
- 6632
- 8874

SKU
- 345-964
- 453-985
- 994-374
- 743-856
- 636-835
- 737-009
- 997-331

Line
- Line AVB
- Line WWR
- Line JJH
Step 4 – Define Performance Metrics

• A year from now, someone will ask “what has this S&OP process done for us”?

• Typical “results” performance metrics are:
  – On-time shipment performance.
  – Total inventory dollars and/or inventory turns.
  – Total manufacturing cost and/or cost per unit.

• Typical “enabling” performance metrics are:
  – Sales forecast accuracy by person, customer, group, family, and/or SKU.
  – Production forecast accuracy.
  – Inventory forecast accuracy.
Step 5 – Design the Process Steps

• This is the step where all of the eight process steps defined earlier are fully developed.

• Each step includes:
  – The players and the expected role of each player in the process.
  – The date, time, and place.
  – The agenda.
  – The tools, documents, and formats used.

• For the process to work properly, each process step must be engineered to perfection ... leave nothing to interpretation!
Step 6 – Conduct the First S&OP Cycle

• At the start of the process, draw a line in the sand and say “on this date we will do the first S&OP cycle.”
• Scheduled progress is better than delayed perfection.
• But you’ve got to calendar it NOW … people just have too many demands on their calendar.
• Your first test will be to see if all of the scheduled players show up.
Step 7 – Refine the Process

• It will take you about 6 complete cycles for all the players to “get it” and for the data to be really workable.

• Watch out for:
  – Constant sales finger pointing.
  – Multi-plan processes.
  – Data trauma.
  – Lack of preparation.
  – Attendance problems.
  – Top management opting out.
  – A million and 1 reasons why S&OP isn’t a good idea.
Step 8 – Document the Process

• Documentation helps you teach it, repeat it, bring new people into the process, and most importantly … understand it!
• ISO format is a popular option.
Step 9 – Train all of the Users

• The first “stupid simple” thing to do is to make sure that all process players and users know how to access the document:
  – Navigation path (there is a filing technique for this).
  – Password.

• Then make sure they understand how S&OP affects their daily business decisions.
Step 10 – Link S&OP to ERP

- Fundamental questions?
  - How is demand presented? Orders? Shipments? Production?

- What time buckets will be used?
  - S&OP is normally monthly.
  - The ERP system is normally daily.

- How will shipments, production, and inventory be validated?
  - In other words, the detail must match the aggregate!
  - This is done using “roll-ups” for sales, inventory, and production/supply.
S&OP 10-Steps Timeframe

12 Months

- Investigate, Educate, Assess, Decide
- Calendar
- Format, Definitions, Tools, Data
- First S&OP
- Refine
- Documentation
- Train
- Link ERP

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Questions? Comments?

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