



# **Ten Steps to Superior S&OP**

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# Objective

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

# Agenda

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- **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.*

**Demand**



**Orders  
Forecast**

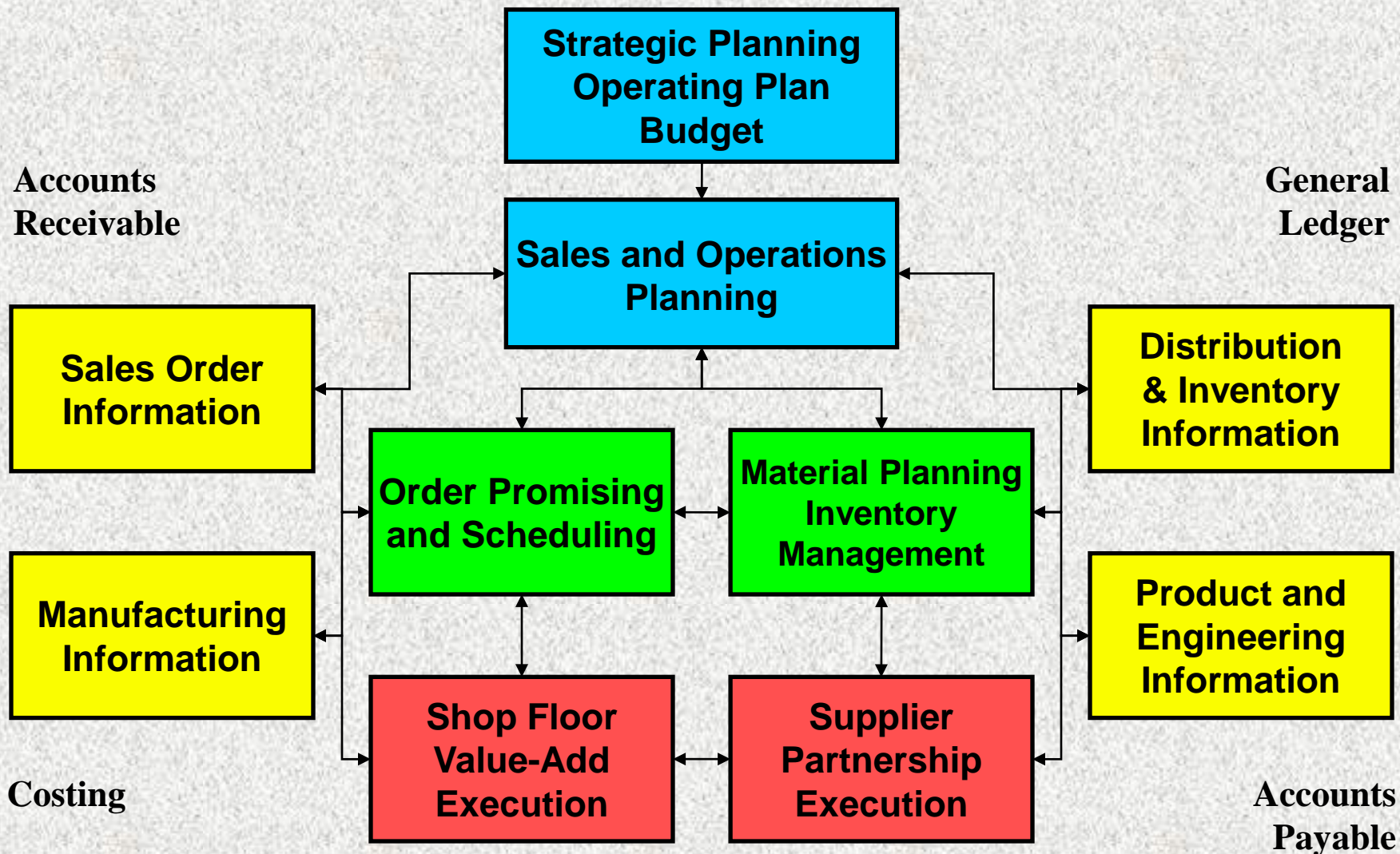
**Supply**



**Inventory  
Capacity**

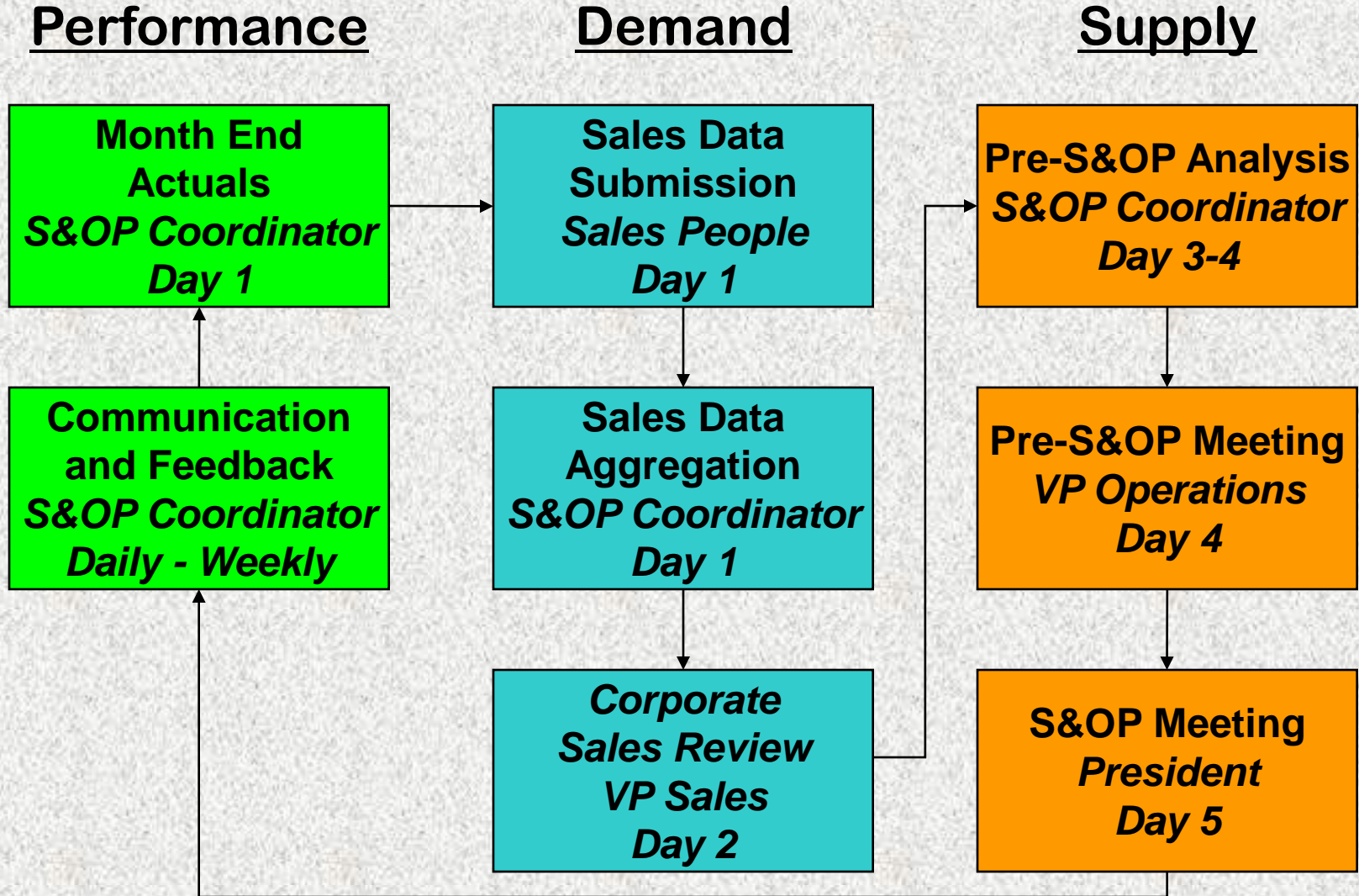


# Business Enterprise Model





# Eight Process Steps





**All Players** ■■■■

**SHOW UP!**





**All Players** ■■■

**LEARN IT!**

# Questions for Everyone

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- **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)?**

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# Who Is Doing the Asking? and Who Is Being Asked?

# Step 1A – Decide To Investigate It

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- **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

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- 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

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- **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)

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- **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



| <u>Period End</u> | <u>Wks</u> | <u>Period Actuals</u><br><b>Joe Smith</b> | <u>Sales Data By Noon</u><br><b>Jim Brown</b> | <u>Sales Review 1:00 - 3:00</u><br><b>Jim Brown</b> | <u>Pre S&amp;OP 2:00 - 4:00</u><br><b>John White</b> | <u>S&amp;OP Meeting 1:00 - 3:00</u><br><b>Bob Jones</b> |
|-------------------|------------|---|---|---|--|---|
| 31-Jan            | 5          | 3-Feb                                     | 3-Feb   | 4-Feb   | 6-Feb  | 7-Feb   |
| 28-Feb            | 4          | 3-Mar                                     | 3-Mar   | 4-Mar   | 6-Mar  | 7-Mar   |
| 28-Mar            | 4          | 31-Mar                                    | 31-Mar  | 1-Apr   | 3-Apr  | 4-Apr   |
| 2-May             | 5          | 5-May                                     | 5-May   | 6-May   | 8-May  | 9-May   |
| 30-May            | 4          | 2-Jun                                     | 2-Jun   | 3-Jun   | 5-Jun  | 6-Jun   |
| 27-Jun            | 4          | 30-Jun                                    | 30-Jun  | 1-Jul   | 3-Jul  | 4-Jul   |
| 1-Aug             | 5          | 4-Aug                                     | 4-Aug   | 5-Aug   | 7-Aug  | 8-Aug   |
| 29-Aug            | 4          | 2-Sep                                     | 2-Sep   | 3-Sep   | 4-Sep  | 5-Sep   |
| 26-Sep            | 4          | 29-Sep                                    | 29-Sep  | 30-Sep  | 2-Oct  | 3-Oct   |
| 31-Oct            | 5          | 3-Nov                                     | 3-Nov   | 4-Nov   | 6-Nov  | 7-Nov   |
| 28-Nov            | 4          | 1-Dec                                     | 1-Dec   | 2-Dec   | 4-Dec  | 5-Dec   |
| 26-Dec            | 4          | 29-Dec                                    | 29-Dec  | 30-Dec  | 5-Jan  | 6-Jan   |

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

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

# Step 3A – Design the S&OP Document



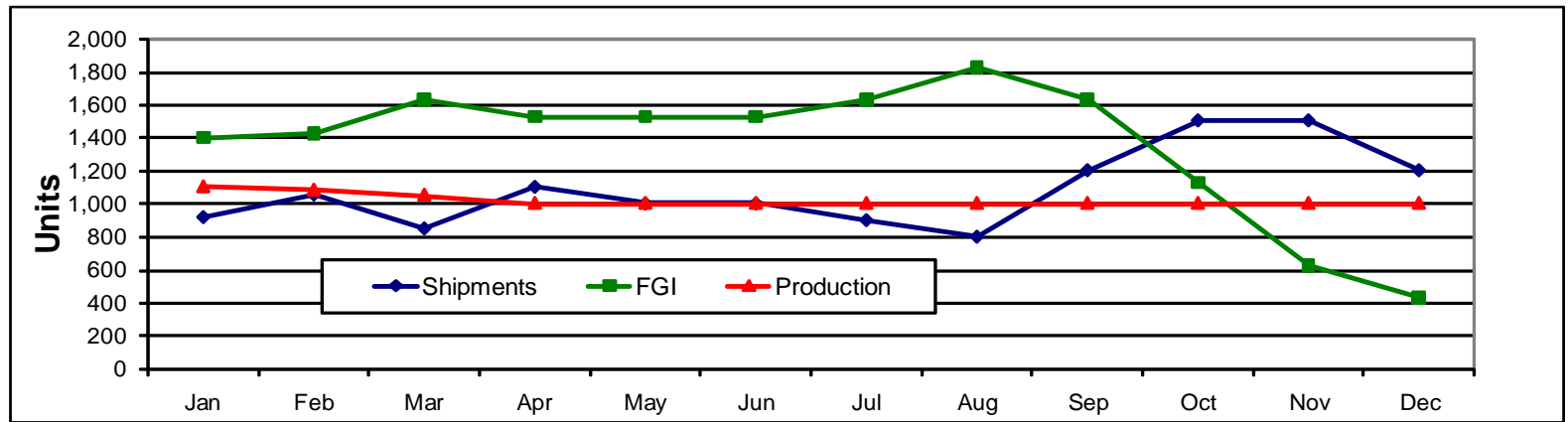
- **The document design will depend on:**
  - The nature of your business (MTS or MTO).
  - The nature of your customers.
  - The tool that you use (Excel, purchased bolt-on software, write your own application).
  - The level of desired detail.
  - The functionality desired: sales, backlog, shipments,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

# One Page of Many (3A)



## Product C - S&OP - Any Company, Inc.

|            |          | Jan       | Feb       | Mar       | Apr       | May       | Jun       | Jul       | Aug       | Sep       | Oct       | Nov       | Dec       | Total       |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|
| Bookings   | Units    | 1050      | 900       | 825       |           |           |           |           |           |           |           |           |           |             |
|            | Dollars  | \$231,000 | \$198,000 | \$181,500 |           |           |           |           |           |           |           |           |           |             |
| Backlog    | Units    | 400       | 246       | 221       | 200       | 21        |           |           |           |           |           |           |           |             |
|            | Dollars  | \$88,000  | \$54,120  | \$48,620  | \$44,000  | \$4,620   |           |           |           |           |           |           |           |             |
| Shipments  | Units    | 918       | 1,054     | 850       | 1,100     | 1,000     | 1,000     | 900       | 800       | 1,200     | 1,500     | 1,500     | 1,200     | 13,022      |
|            | Dollars  | \$201,960 | \$231,880 | \$187,000 | \$240,000 | \$220,000 | \$220,000 | \$198,000 | \$176,000 | \$264,000 | \$330,000 | \$330,000 | \$264,000 | \$2,862,840 |
|            | Bus Plan | \$200,000 | \$200,000 | \$200,000 | \$250,000 | \$250,000 | \$250,000 | \$200,000 | \$200,000 | \$300,000 | \$300,000 | \$300,000 | \$300,000 | \$2,950,000 |
| FGI        | Units    | 1400      | 1,426     | 1,626     | 1,526     | 1,526     | 1,526     | 1,626     | 1,826     | 1,626     | 1,126     | 626       | 426       |             |
|            | CGS      | \$224,000 | \$228,160 | \$260,160 | \$244,160 | \$244,160 | \$244,160 | \$260,160 | \$292,160 | \$260,160 | \$180,160 | \$100,160 | \$68,160  |             |
| Production | Units    | 1,100     | 1,080     | 1,050     | 1,000     | 1,000     | 1,000     | 1,000     | 1,000     | 1,000     | 1,000     | 1,000     | 1,000     | 12,230      |
|            | Plant 1  | 600       | 580       | 600       | 600       | 600       | 600       | 600       | 600       | 600       | 600       | 600       | 600       |             |
|            | Plant 2  | 400       | 400       | 450       | 400       | 400       | 400       | 400       | 400       | 400       | 400       | 400       | 400       |             |
|            | Plant 3  | 100       | 100       | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         | 0         |             |



# Saels reView



| Sales | Q1       | Q2       | q3       | Q4       | Totle   |
|-------|----------|----------|----------|----------|---------|
| Joe   | 320456   | 453857   | 537243   | 374854   | 1686410 |
| Ralph | 23954.00 | 73649.00 | 48594.00 | 38764.00 | 184961  |
| Susan | 635243   | 948373   | 374632   | 836434   | 2794682 |
| Deb   | 63745    | 69685    | 48365    | 49865    | 231660  |
| Total | 1043398  | 1545564  | 1008834  | 1299917  | 4897713 |

# Sales Review



| <u>Sales</u> | <u>Q1</u>       | <u>Q2</u>       | <u>Q3</u>       | <u>Q4</u>       | <u>Total</u>     |
|--------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Joe          | \$320,456       | \$453,857       | \$537,243       | \$374,854       | \$1,686,410      |
| Ralph        | \$23,954        | \$73,649        | \$48,594        | \$38,764        | \$184,961        |
| Susan        | \$635,243       | \$948,373       | \$374,632       | \$836,434       | \$2,794,682      |
| <u>Deb</u>   | <u>\$63,745</u> | <u>\$69,685</u> | <u>\$48,365</u> | <u>\$49,865</u> | <u>\$231,660</u> |
| Total        | \$1,043,398     | \$1,545,564     | \$1,008,834     | \$1,299,917     | \$4,897,713      |

# 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)

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- 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

Family

SKU

Line

**DD-GGF**

**1245**

**345-964**

**453-985**

**5432**

**994-374**

**743-856**

**6632**

**636-835**

**737-009**

**8874**

**997-331**

**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

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- 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

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- **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

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- **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.**

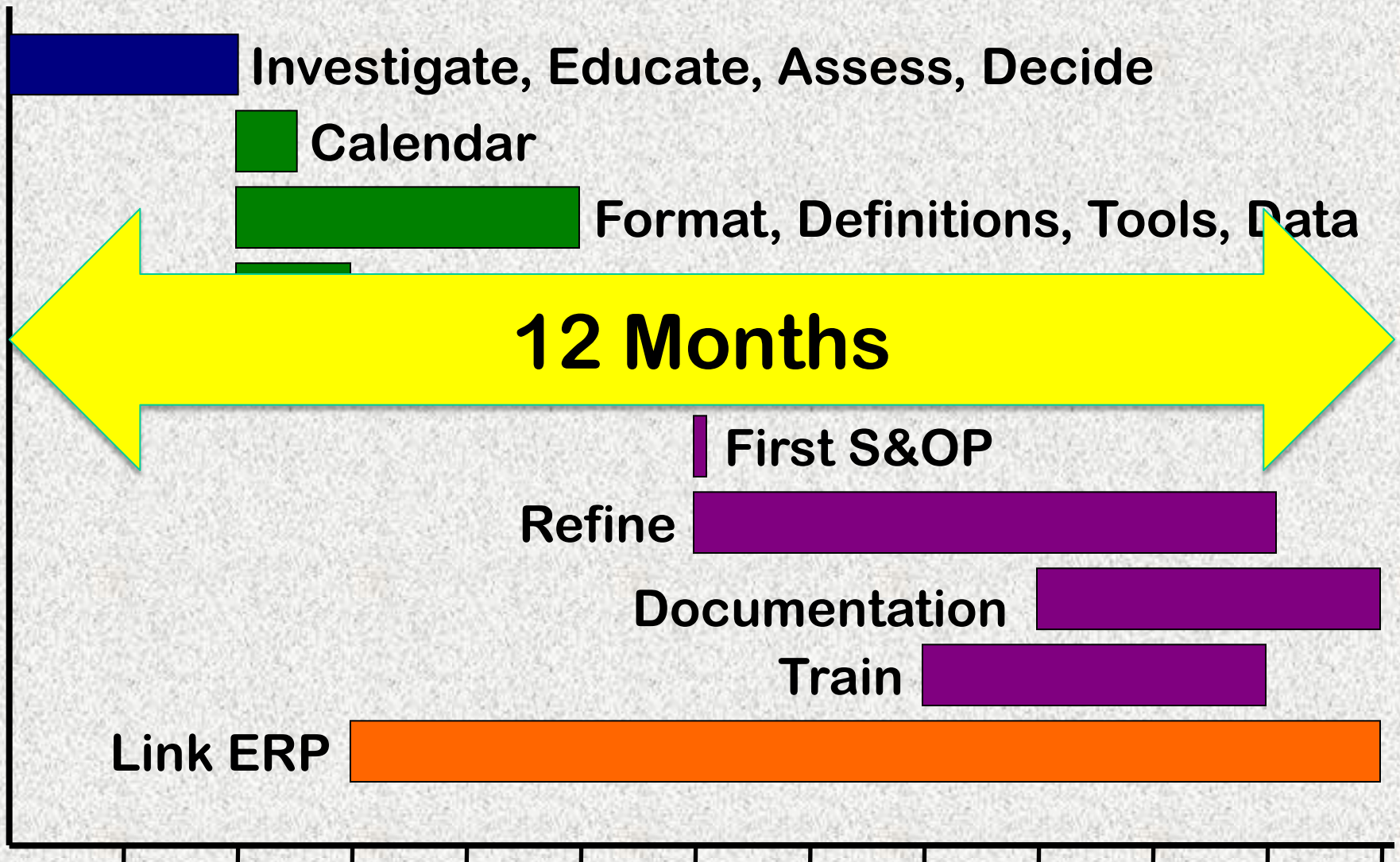


# Step 10 – Link S&OP to ERP



- **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



# Questions? Comments?

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