JOURNAL OF

BUSINESS FORECASTING

2010 | FAII

VOLUME 29 LISSUE 3



Executive Sales & Operations Planning: Cost And Benefit Analysis

And Benefit Analysis
Tom Wallace

18 Supporting Complexity and Risk

Larry Lapide

Next Generation of S&OP: Scenario Planning with Predictive Analytics & Digital Modeling

Gregory L. Schlegel and Peter Murray





ou may vividly remember the hard work that went into implementing your Sales and Operations Planning process—consensus building, designing, report writing, and/or training. Perhaps you also remember the time you spent fixing the S&OP process you inherited. Despite all that effort, people are losing interest in the process, or are finding that it is just not delivering to expectations. What can you do about it?

We all know that improving S&OP is a continuous process. The definitions and versions of S&OP have varied widely across the organizations that I have consulted with. Those at the forefront have tightly defined the process that includes a calendar-driven series of product-family level meetings that integrate medium- to longerterm operational, sales, and financial planning. These S&OP meetings link the business plan on one end with the more detailed supply chain planning processes and subsequent execution on the other. Some mistakenly call anything having to do with supply chain planning S&OP. To avoid this confusion, the term "Executive S&OP" is emerging (perhaps introducing some confusion with the Executive S&OP meeting), others are branding new terms such as "Integrated Business Planning".

OVERVIEW OF S&OP

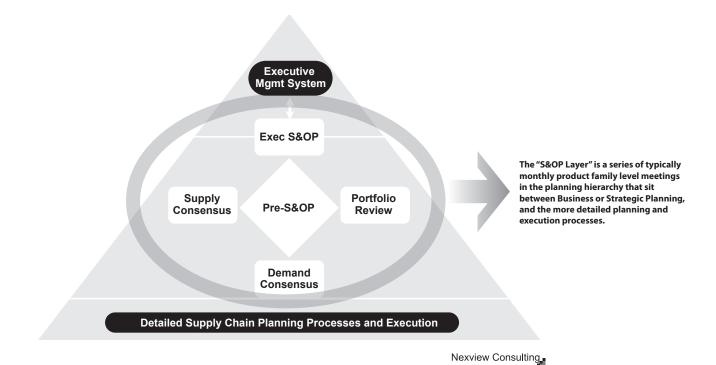
An extended discussion of the S&OP process and its components is not the subject of this article; however, I will provide a brief overview. S&OP is a series of meetings, typically held monthly, that bring together the sales, operating, and financial plans and functions of the company. These plans and the discussion around them should be at a product-

family level over a rolling planning horizon, which is typically 12 to 24 months (in some cases even longer). The length of the planning horizon is driven by the longest lead time item and the horizon required for financial planning at the product family level. Some characteristics and benefits of S&OP include:

- The same plans are used throughout the organization;
- A structured collaborative framework provides clear accountability for the various components, and the results of underlying planning processes;
- Senior Management leads the process;
- · Discussions are exception based;
- Financial gaps are managed while there is still time to do something about them;
- Discussions and decisions are aligned across functions and fit with the strategic direction of the company;
- Business performance is managed across the enterprise;
- Results are typically delivered by focusing on the underlying planning processes or supply chain execution;
- Provides a platform for continuous improvement; and
- Cultivates leaders and enhances team work.

While each situation is different, implementing or improving an S&OP process can produce improvements of 5% to 25% in such areas as working capital reduction, reduction of obsolete inventory, transportation, production and material costs, time to market, and sales growth.

Where S & OP Fits



The monthly S&OP cycle typically comprises the following components (See Figure 1):

- Portfolio Review: This is especially important for those companies with many SKUs or rapidly changing product portfolios. The objectives here are to examine the fit of the product portfolio with company goals and to ensure changes to the product portfolio are coordinated with demand management and throughout the supply chain. Concerns are recorded and discussed later in the S&OP process. A Vice President of Marketing often owns this review.
- Demand Consensus (or Review): This is a confirmation of unconstrained demand at the product-family level and a meeting that identifies and discusses plans to close sales gaps relative to financial or budgetary commitments. A Vice President of Sales often owns this meeting.

- This review uses the unconstrained demand plan from the Demand Review and confirms that the supply plan meets demand, or if not, identifies constraints. These constraints are held as exceptions to be discussed in Pre-S&OP. A Vice President of Operations often owns this meeting.
- Pre-S&OP: This is the meeting where the rolling 12 to 24+ month operating plan comes together and exceptions are resolved across functions. The operating plan is usually a consolidated view of sales, production, and inventory by month on a volume and dollar/currency basis. Analysis of exceptions, alternatives, scenarios, and financial implications is completed prior to this meeting, so that the issues can be dealt with effectively.
- Executive S&OP: This meeting is held with the top management of a

company (or division management in larger companies). This meeting reviews and confirms the overall plan proposed by the Pre-S&OP team, and is often rolled up to the company or division level. It also addresses decisions that require executive approval due to their nature or financial implications. The meeting is owned by the CEO or General Manager and is often worked into a monthly executive meeting.

Today, many companies have implemented some form of S&OP, but few can say that their S&OP process is functioning as effectively as they'd like. Nexview Consulting conducted a survey of companies varying in size across manufacturing industries (Consumer Products, Life Sciences, Automotive, High Tech, Chemicals, and Other Manufacturing) and found that meeting effectiveness was the top challenge across the categories shown in Figure 2.

KEY LEVERS FOR REVITALIZING THE S&OP PROCESS

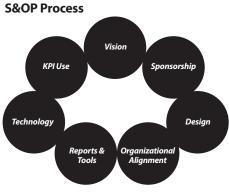
A concerted effort to examine a few key levers can go a long way in getting your process back on track for serving as your company's primary platform for integrated business planning and continuous improvement. The levers we'll examine are shown in Figure 3.

Vision

Aligning people behind a commonly understood vision is a critical component to any improvement effort. As there are many misconceptions about what S&OP is and is not, it's important that constituents understand what S&OP can and cannot deliver. For an S&OP leader, a clear definition of the vision can help to manage the scope and expectations of key stakeholders. The vision could be a carefully worded statement of your desired goals or could be a set of six to ten statements that characterize what you want to achieve with S&OP. In a recent project with a major consumer goods manufacturer, the project team created a vision consisting of statements such as the following:

- We understand that S&OP is an aggregated and coordinated planning layer above the detailed supply chain planning processes. We will identify several key gaps in the underlying processes, but won't address them as part of this project. (This statement helped us control scope.)
- All business units will participate in S&OP.
- We agree that we will use a consistent process and set of tools.
- We agree that we will have a viable and sustainable way to aggregate data at the brand level and will produce a rolling 18-month plan.
- The S&OP process will be the key input into the budgeting process.
- S&OP will be used to stabilize the organization's roles and define accountabilities.

Figure 3 | Key Levers to Revitalize Your

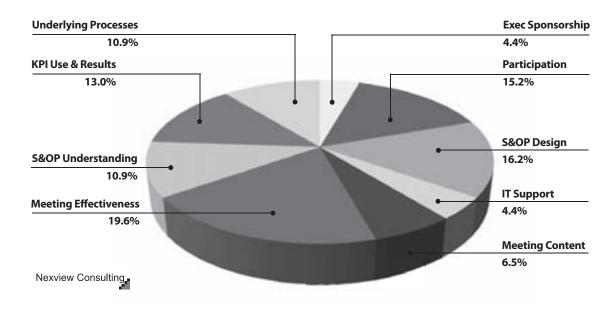


Nexview Consulting

 We will measure operational KPIs (Key Performance Indicators) in the S&OP meetings to drive performance improvement.

I suggest that you also encompass business results within your vision. Creating a vision with statements such as these will help to measure success along the way and define success at the endpoint you specify. The vision also





helps to rally people around a set of common goals and outcomes.

Sponsorship

An executive sponsor is critical for a successful S&OP process. Without executive sponsorship, your process will be led by middle management and likely will not be the true decision-making process that drives the business. Your executive sponsor should:

- Help to communicate the vision of the S&OP process—what it should be and how it will benefit the company;
- Ensure S&OP receives executive attention and resources throughout the company;
- Leverage S&OP to clarify accountability;
- Coach and mentor the S&OP leader/ coordinator and challenge the working team to continually improve the process and business results;
- Help to align with other regions and aid the flow of the regional information to the global process (if the process is an input to the global process); and
- Coordinate (and/or require) the integration and promotion of S&OP at the regional level (if your process is the global process).

A question that often comes up is who would be the best executive within an organization to champion the S&OP process. Several could play this role, some thoughts are below.

CEO, President, or General Manager: Sure, easy to point to and say the CEO should be the sponsor. He/she leads the executive team across the functions, so it seems logical that this person should champion the process. This is great if the top leader is inclined to take on this role. Many times, the top leader will delegate the official sponsorship of S&OP to someone on his/her staff, but support it in the background. If your top leader doesn't support S&OP, then it's probably best to live today and fight the S&OP battle another day.

Chief Financial Officer: Often this is a great choice. More and more CFOs are regarded as the CEO's right-hand person and are leading cross-functional performance improvement across the company. Since S&OP is integrated with financial planning, the CFO becomes a good choice.

VP of Sales or Marketing: Often the hardest executive to get on board and dedicate time to S&OP. If your leader here has a good cross-functional orientation and is a fit, you're ahead of many in this game.

VP of Supply Chain: This is certainly a natural choice if your organization has this role. Make sure that he/she has the necessary influence with the commercial side of the business.

VP of Manufacturing/Operations:

A traditional sponsor in many organizational structures, and perhaps a good fit. Remember though that this leader will likely already be on board with the process, and if you pick someone else, you'll have at least two strong supporters. One caution here is to ensure that S&OP is not seen as an "Operations Thing".

Chief Information Officer: CIOs often have all the business tools to go along with the technology piece, just make sure he/she has the influence across the business. S&OP can't be seen as an "IT Thing".

Other Executive (e.g., Engineering): In rarer cases this could be appropriate on a case by case basis if the person has crossfunctional experience and influence across the business.

A person in any of these roles could be a good fit, provided that he/she has a broad experience and a good understanding of all aspects of the business, is well respected, and has influence across the business.

DESIGN AND ORGANIZATIONAL ALIGNMENT

The S&OP process should be aligned to the organizational and financial reporting structure. If you feel some awkwardness due to misalignment of your process with these items, or if you have had recent structural changes in your organization, you likely need to revisit your design, how

the meetings flow, and who owns them.

Some key design considerations include:

 Do we have all the components of S&OP that are right for our business, such as Portfolio Review, Demand Review, Supply Review, Pre-S&OP, and Executive S&OP?

 Is the monthly calendar or time between the meetings aligned? It can be a challenge to make sure that the next group in the sequence has enough time to incorporate the output of the prior meeting.

- Do we have the right people leading the meetings and the right people participating in each meeting? Does everyone have an active role? You may consider having the facilitator of the next meeting in the room to give him/her a heads up as to what is coming. For example, you may want to have the meeting facilitator from the Supply Review in your Demand Review meeting so that he/she knows in advance what is coming.
- Should we have a single meeting with multiple divisions or parallel meetings that deal only with one division? There are pros and cons of both approaches. What you don't want is more than one meeting sponsor. If production facilities support multiple commercial units, you may want to have a demand review for each commercial unit, but a common supply review.
- Pre-S&OP can often be the most difficult meeting to structure and execute. There are lots of participants (often too many), lots of opportunity to go down the rabbit holes, lots of opportunity for a long meeting, and lots of opportunity to lose people. Here are some ideas that may be appropriate in your organization to liven up the Pre-S&OP meeting:
 - Aside from the core group, invite only those who are needed to address exceptions. They should come wellprepared to resolve the issues as opposed to talking about them in the meeting, then wanting more time to investigate.
 - Rotate groups in and out of the meeting so they are only present for their relevant parts. Rotate business units or other delineations that make sense.
 - Discuss an ad-hoc improvement

- topic that is going on in the company. I don't mean to turn this into a project status, but giving someone 5-10 minutes of visibility may be a booster for them and informative for the others, plus there may be integration points where help is needed throughout the supply chain. If you do this, it must be tightly managed (i.e., no working the problem in this meeting).
- Have a rotating executive attend this meeting periodically. Perhaps he/she can give an executive update or insight into something the group is interested in. This will show executive support to your Pre-S&OP team and will allow your executive to see more of the process in action. Perhaps use it as an "upward educational opportunity" if necessary.

Remember, all the S&OP meetings are exception-based and senior-level

meetings. There isn't time or tolerance to work issues on the fly or delve into SKU level or order level details. Preparedness is the key for all the S&OP meetings. Exceptions need to be analyzed and scenarios developed before the meeting.

Examine how well the Executive S&OP is integrated into the overall executive management system of the company. I often suggest that Executive S&OP be integrated with the monthly executive staff meeting, where the management team addresses other topics in addition to the planning and management of the business. While the business may not always need an S&OP-related executive decision, you always have a need to confirm the summary level operating plan and have a need to review the top level KPIs.

If one thing isn't working, try something else; don't expect a different result by continuing to do the same thing.

REPORTS

When reviewing the S&OP process for areas to improve, take a critical review of reports currently used. Many reports can be overly complex and difficult to understand. S&OP best practice reports should include:

- A consolidated view of sales, production (or supply), and inventory (make to stock environment);
- Monthly buckets that cover a reasonable amount of history and the rolling planning horizon forward;
- Product family level and usually one level higher (such as region, division, or company) for Executive S&OP;
- A row that shows the original budget;

- Exceptions highlighted, or perhaps the full operating plan reports are only used for back-up and a quick view of totals, and a separate report is generated to highlight only exceptions (e.g., imbalances in supply and demand such as negative inventory, inventory above a threshold, or deviations from budget exceeding some programmed threshold)
- Volume and currency versions of reports.

The use of a Meeting Charter and Action Log can also make meetings more effective. The Meeting Charter is a simple written document that specifies such things as meeting objectives, owner, facilitator, attendees, inputs, outputs, and a typical agenda. The Action Log, states who is supposed to do what by when, and could outline the key decisions of the meeting. A good Action Log gets to the heart of the matter and can be more effective than pages of minutes that are time consuming to produce and often not read.

Use of Technology

The basic IT requirements for S&OP include:

- Capability to report at all levels of the product hierarchy and report by S&OP meeting structure and financial reporting structure
- Data of high integrity that people trust
- Report historical actuals with goforward plans on a monthly rolling basis (see reporting section above)
- Exception reporting or identification
- Capability to produce monetized versions of volume plans
- KPI reporting

If your team is spending an inordinate amount of time assembling reports for S&OP, your process will be painful and your staff will spend time on data aggregation rather than analysis. This situation is tolerable for an initial period during an implementation, but manual brute force reporting is not sustainable.

There are several systems out there that are becoming much more cost effective, not only aiding in the aggregation of data and reporting as described above, but also in more fully automating the preparation steps between the meetings and providing additional analytical capabilities. These functions include items such as electronic workflow and scenario modeling/decision support.

Key Performance Indicators

Most are using KPIs throughout their S&OP meetings and organizations, however, the question becomes how effective are they? First of all, you might revisit which KPIs are mapped and managed across the S&OP meeting flow. While you certainly want to assign accountability for KPI performance and manage the KPIs with the individuals that can impact them, this can sometimes be difficult for KPIs that require crossfunctional coordination and execution, such as on-time-in-full or inventory turns. These KPIs could be managed at Pre-S&OP and Executive S&OP, where there

is more cross functional representation. Just as operating plans roll up from product lines to business unit and then to company, so can KPIs. Thus you could look at inventory turns by product line or business unit in a Pre-S&OP level KPI scorecard, then look at inventory turns at the company level in Executive S&OP. These are not duplicative, just different views for different audiences.

Secondly, your KPIs should all have a "baseline" (perhaps a historical average), a "target" (some value to be reached several months into the future), and a month by month "plan" or stair step to get from your baseline to your target. KPIs I see in many organizations often do not have a baseline, or a stair step plan that shows how they will incrementally reach their target over a defined period of time.

Lastly, be active in your management of variances. Root cause analysis should also be done offline and summarized during the KPI review. You should be recording actions that improve KPI performance. I always advise clients to ask, "When will it be on track?" and "What do we have to do to make sure it doesn't happen again." Results are what will seal support for this process and if you're not measuring them, then you're missing a large part of the value that S&OP brings to the company.

S&OP MATURITY MODEL

As stated at the outset, improving S&OP is a continuous process. S&OP Maturity can be measured over a period of time and be used a tool to implement your S&OP Vision. Figure 4 shows a summary of Nexview's S&OP Maturity Stages on a 1 to 5 point scale with some

representative characteristics of each stage. Figure 5 shows a sample format on 0 to 4 point scale of what a calendar-driven plan for maturity improvement should look like.

The exact characterization of what constitutes a "3" or "4" or what you

call the categories, or whether it's a 4 or 5 point scale is not important. The point is to layout the characteristics of maturity as you see fit and measure against them. The implementation of simple tools such as these helps add some objectivity to peoples' opinion as

to whether or not S&OP is improving and driving business results. Whether you are implementing or revitalizing, your maturity system should measure use of best practices, behaviors, and results. Focusing on the levers above will certainly help you improve your process. It's the combination of preparedness, the mechanical elements discussed above, a skilled team with clear role definitions,

and performance-oriented behaviors that will improve the effectiveness of your meetings, drive business results, and Revitalize Your S&OP. Keep at it. (info@ibf.org)

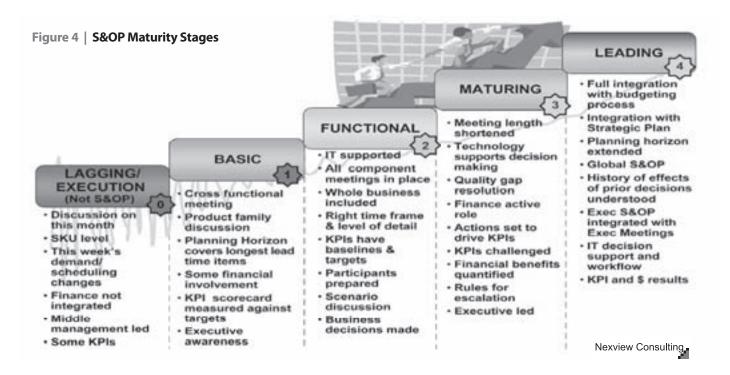


Figure 5 | S&OP Maturity Stages

