The Practical Approach to S&OP
Sales and Operations Planning (S&OP): A collaborative and cross-functional process that aligns an organization around a single sales, inventory, and production plan.

The purpose of the S&OP process is to set a realistic and profitable overall direction for a company. Sales and Operations Planning brings together all major operational departments—sales, marketing, inventory, procurement, manufacturing, and finance—to decide how best to manage company resources to profitably satisfy customer demand and pursue strategic initiatives, which may include new markets, new product introductions, acquisitions, and others.

While once the objective of S&OP was just to create a feasible plan that could be executed, today companies view sales and operations planning as a means to execute corporate strategy. A successful S&OP process aligns an organization strategically to execute tactically.

Often the biggest obstacles to S&OP excellence stem from complexity—it may be too difficult to gather data, there may be too many meetings, the process may be too hard to govern, and key data too difficult to analyze and report. Ultimately, the process may become too hard to execute. Leading supply chain teams have discovered that true S&OP success flows from practical thinking, guided by three principles: make it easy to implement, make it easy to execute, and make it easy to sustain.

By following an effective step-by-step S&OP methodology, implemented through an easy-to-use technology platform, companies should be able to achieve game-changing benefits. This paper presents a practical five-step approach to the tasks and analyses needed to drive outstanding S&OP results, and highlights how leading supply chain organizations use powerful collaborative software solutions to implement a sustainable process.
## Understanding the S&OP Journey

Outstanding S&OP processes do not appear overnight—it takes time and persistence to develop them. Obstacles can include limited technology enablers, lack of governance, rigid functional silos, lack of shared performance measures, and ingrained company cultures. Dividing the spectrum of S&OP sophistication into three proficiency profiles helps companies find their level of maturity and chart a path to success.

No matter where an organization starts, this journey is well worth the effort: according to AMR Research, a successful S&OP initiative can improve revenue by 2% - 5%, reduce inventory by 7% - 15%, and improve new product launch commercialization by 20%.  

---

### Key Element

<table>
<thead>
<tr>
<th>Objective</th>
<th>Developing</th>
<th>Performing</th>
<th>Leading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan components</td>
<td>Production</td>
<td>Demand, inventory, and supply</td>
<td>Demand, inventory, and supply</td>
</tr>
<tr>
<td>Ownership</td>
<td>Manufacturing</td>
<td>Supply chain planning</td>
<td>Profit center</td>
</tr>
<tr>
<td>Participation</td>
<td>Sales</td>
<td>Sales, marketing, and finance</td>
<td>Supply chain planning, sales, marketing, and finance</td>
</tr>
<tr>
<td>Collaboration</td>
<td>Limited</td>
<td>Within functions</td>
<td>Across functions</td>
</tr>
<tr>
<td>S&amp;OP system</td>
<td>Excel spreadsheets</td>
<td>Advanced Planning System (APS) heuristic</td>
<td>Comprehensive supply chain planning and optimization</td>
</tr>
<tr>
<td>Scenarios</td>
<td>N/A</td>
<td>Scenarios based on internal factors</td>
<td>Scenarios based on internal and external factors</td>
</tr>
<tr>
<td>S&amp;OP execution</td>
<td>Manually executed plans</td>
<td>Manually keyed into tactical planning and execution systems</td>
<td>Automatically integrated into tactical planning and execution systems</td>
</tr>
<tr>
<td>Reporting</td>
<td>Manually generated</td>
<td>Automatically generated using reporting tools</td>
<td>Dynamic reports in planning system</td>
</tr>
<tr>
<td>KPIs</td>
<td>Overall inventory levels, customer service, and manufacturing utilization (overall)</td>
<td>Category level forecast accuracy and bias, customer service, inventory DOS, manufacturing utilization, turns, revenue, profit</td>
<td>Category level forecast accuracy and bias, promotion performance, launch performance, customer service, inventory DOS, turns, manufacturing utilization, revenue, profit</td>
</tr>
<tr>
<td>Forecasting</td>
<td>Manually generated forecasts</td>
<td>Statistical forecasting with manual lift adjustments</td>
<td>Statistical forecasting with automated lift adjustments, attribute based forecasting, incorporation of POS</td>
</tr>
<tr>
<td>Demand Consensus</td>
<td>N/A</td>
<td>Manual consensus</td>
<td>Online collaboration</td>
</tr>
<tr>
<td>Supply Planning</td>
<td>Material Requirements Planning (MRP)</td>
<td>Distribution Resource Planning (DRP), constrained production planning</td>
<td>Optimized distribution (postponement, flow through, vendor direct) and production (alternate plants / suppliers) plans, procurement and load optimization, vendor minimum requirements</td>
</tr>
<tr>
<td>Inventory Planning</td>
<td>Single echelon rule of thumb</td>
<td>Single echelon statistically determined</td>
<td>Multi-Echelon Inventory Optimization (MEIO), postponement and time phased</td>
</tr>
<tr>
<td>Product Lifecycle Management</td>
<td>Limited planning</td>
<td>Incorporated into demand, inventory, and supply plans</td>
<td>Orchestrated with product development, customers, and suppliers</td>
</tr>
</tbody>
</table>

---

Table 1. Three S&OP proficiency profiles

---

The monthly S&OP process aggregates results from connected tactical planning processes. It allows executives to assess trade-offs between many interdependent business components: demand and supply market opportunities, customer service, inventory investments, production capabilities, supply availability, and distribution concerns. The ultimate goal is to determine how best to manage company resources to profitably satisfy customer demand.

The following five-step road map provides a field-tested approach to organizing the tasks and analyses needed to supply S&OP participants with the information they need to make tough decisions—decisions that will ultimately determine how well the company performs.

Figure 1. The Sales and Operations Planning process.

Source: Deloitte and Logility 2013
Step 1: Conduct Portfolio Review

What it is: Regular examination of current product plans, new product introductions (NPI) and product retirements.

- What products should be introduced to the market place?
- When should they be introduced?
- What products should be phased out or discontinued?
- Are there any issues with mature products in the portfolio?

Why it is crucial: With product lifecycles shortening and customer-specific requirements increasing, the ability to plan for a more dynamic product portfolio is critical, and the impact on sales, production, inventory, and finance must be understood.

Introducing new products is challenging because the lack of historical sales data often makes statistical forecasting inadequate. Often marketing dollars have already been allocated to the product, making stock-outs an expensive proposition. If sales fall short of expectation the company is left saddled with excess and obsolete inventory.
Advice from the pros: Give Portfolio Review prominence in the S&OP process, as often the success of S&OP hinges its effectiveness. Employ advanced techniques such as attribute-based planning, which allows a company to accurately forecast new products even when no direct prior sales history exists.

Technology enablers: Logility’s supply chain optimization solutions provide customizable views to review plans for new product introductions (validate sales projections, expected launch dates, consumption forecasts, pipeline fill), and for products that are phasing out (manage the depletion of inventory, transition to new products).

Leverage Logility’s cluster and Lifecycle Planning functionality to develop forecast profiles based on aggregate new product launch history.

Figure 2. Demand planning for the full product life cycle.

Source: Logility 2013
Step 2: Synchronize Forecast & Financial Outlook

**What it is:** Agreement on a consensus forecast that combines the sales plan, the marketing plan, and the customer plan, while taking into account any differences with the company’s overall financial objectives.

**Why it is crucial:** The baseline statistical forecast is a good starting point, but must be augmented with insights from sales, marketing and customer service personnel. This collaboration is critical and enables higher forecast accuracy.

**Advice from the pros:** While it is important to understand the differences between the operational forecast and the financial forecast, a common pitfall is to constrain the operational plan to the financial plan. This ultimately leads to biased and inaccurate forecasting. Best practices underscore that a demand plan should be unconstrained to understand true market demand.

Leverage multiple demand signals, such as Point Of Sale (POS), that assist in sensing changes in demand patterns. Early detection of differences and trends helps avoid shortages or over-production and can be used to adjust the forecast to bring it closer to actual demand.
**Technology enablers:** Leverage Logility’s interactive web-based views to input and collaborate on promotions, account plans, pricing changes, trend information, and budgets directly in the system. The customizable views can be set up to display plans in units and dollars and at the level of aggregation best suited to the business context.

Utilize simulation capabilities to develop and evaluate the impact of alternative demand scenarios in real-time.

*Figure 3. Logility’s S&OP demand review graphing tool.*
**Step 3: Synchronize Supply & Capacity**

**What it is:** Development of time phased inventory, production, and distribution alternatives to meet demand scenarios, including the financial implications (both top- and bottom-line).

**Why it is crucial:** The ability to analyze different supply alternatives is crucial to satisfying demand plans and to explore the impact of various factors on inventory investments, revenue, profit, capacity utilization, and service levels.

**Advice from the pros:** Focus on medium- to long-term supply plans (3-18 months) at an aggregate level, rather than on granular issues faced in the short term. While it's tempting to leverage the assembled group of decision makers to address immediate challenges, it is preferable to handle them through tactical planning and execution processes that have shorter (weekly, or even daily) planning cycles.

It is important to review alternative supply scenarios to confirm that critical parts and resources can be made available to support the different options. Given the ever-increasing complexity of production and distribution networks, alternative scenarios can best be reviewed through simulation and evaluation of metrics such as customer service, inventory levels, asset utilization, and production and logistics costs.
**Technology enablers:** Leverage Logility’s Global Supply Chain views to develop production, sales, and inventory graphs at multiple levels of aggregation, in units and dollars (both top- and bottom-line) to visually analyze plans.

Utilize simulation capabilities to understand the impact of different demand scenarios on the projected inventory levels and production capacity utilization.

*Figure 4. Logility’s Production, Sales, and Inventory graphing tool.*
**Step 4: Develop S&OP Plan**

**What it is:** Alignment on a comprehensive sales, inventory, and production plan; and identification of issues/risks and mitigation strategies to be escalated.

**Why it is crucial:** While the demand and supply teams have kept the company’s overall objectives in mind, it can be common for both optimistic and pessimistic biases to creep in. Bringing teams together in this step removes bias, synchronizes planning horizons, and aligns operational activities with corporate objectives. This is an especially crucial step to enhance collaboration within organizations that operate in functional silos.

It is also important during this step to balance key metrics against company financial objectives.

**Advice from the pros:** A key technique in boosting S&OP effectiveness is leveraging shared metrics. Shared metrics help the S&OP team work together to move the company toward its strategic goals and objectives. Companies that focus on a small manageable set of shared metrics at an appropriate level of aggregation have greater success. Examples of shared metrics include forecast accuracy at the product family level for a 90 day horizon, inventory turns, customer service levels, and profitability.

A common pitfall is to focus only on the supply side levers while ignoring the demand levers. Among the many options for resolving demand and supply imbalances are demand levers such as controlling the timing of promotions.

**Technology enablers:** Leverage Logility’s Global Supply Chain views to review the production, sales, and inventory graphs created in Step Three for each of the demand and supply scenarios. Having scenarios available for use during the S&OP discussions makes the decision process much more precise and allows the team to clearly understand the impact of its decisions.
Step 5: Conduct Executive S&OP Meeting

**What it is:** Executive review and completion of sales, inventory, and production plans, including integration to the tactical planning and execution systems.

**Why it is crucial:** Executive engagement in the process is critical to drive adoption and execution of the plan, and the long-term success and value of the S&OP process.

**Advice from the pros:** Project plans onto a screen from the planning system, rather than using handouts. Plans should be presented at an appropriate level of aggregation with the option to drill down into more detail as needed. Having information readily available, with the ability to analyze it in real-time, creates informed decisions, as opposed to “shooting from the hip.”

Ensure the final plan is easily executable. Capturing plans in spreadsheets and manually keying them in to tactical planning and execution systems requires significant manual effort, and is prone to error.
**Technology enablers:** Use Logility’s Performance Management dashboard to assess performance, track success, and align on the plan. The dashboard displays metrics based on saved planning data or data interfaced from other systems throughout the extended value chain. Exception-based alerts provide the ability to drill down and resolve specific scenarios and anticipated business conditions proactively.

Sales, inventory, and production plans that are reviewed by executives within Logility’s Global Supply Chain views are effectively aggregations of the tactical plans. Tactical plans are updated as they are finalized and can be acted upon immediately.

*Figure 5. Logility's home page displays alerts, KPIs, and more.*
Case Study
One Organization’s S&OP Journey

**Who:** A consumer products company serving retail and direct-to-consumer customers.

**Goal:** Coming out of a 5-year period of significant growth, the company sought to automate and formalize best practices, and to create a technology platform to support continued growth.

**Challenge:** A consistently growing product portfolio and a highly promoted and competitive environment exposed the limitations of their manual, spreadsheet-based planning processes.

**S&OP Solution:** The management team leveraged Deloitte strategy and S&OP implementation templates and implemented the Logility Voyager Solutions technology. They implemented a comprehensive and integrated planning capability covering tactical and strategic processes to drive measurable improvements across several key operational metrics.

**Scope:** The S&OP initiative included:
- Implementing world-class planning processes
  - Demand & Promotions Planning
  - Inventory & Replenishment Planning
  - Production Planning
  - Sales & Operations Planning
- Configuring and deploying Logility Voyager Solutions
  - Demand Planning
  - Life Cycle Planning
  - Inventory Planning
  - Supply Planning
- Defining and configuring reports and KPIs
- Data management and integration to legacy systems including all testing
- Project management
- Change management activities including organization assessment and redesign, and training.

**Results**

The team created a highly automated, collaborative, and sustainable sales and operations planning process. The new S&OP initiative pulls together major company functions once a month to collaboratively develop a company-wide plan for sales, inventory, and production. The plan incorporates the latest product, sales, and supply insights and strategies.

In just over one year, the company received outstanding tangible value:
- Reduced inventory levels by 6%
- Improved forecast accuracy by 7%
- Increased customer service level to 98%
- Streamlined planning of new product launches in collaboration with product development team
- Improved responsiveness of inventory and supply planning due to increased granularity of planning buckets and visibility to wholesale and point of sale demand signals
- Established a repeatable and sustainable S&OP process to support future more profitable growth
Successful Sales and Operations Planning is a journey of continuous improvement that aligns an organization strategically to execute tactically.

Smart companies evaluate where they currently reside along the S&OP maturity spectrum, matching their level of accomplishment against three proficiency profiles (Developing, Performing, and Leading). This encourages organizational awareness of the overall journey toward strategic best practices that lies ahead.

A truly practical approach to S&OP excellence should be guided by three principles:

- Make it easy to implement
- Make it easy to execute
- Make it easy to sustain

Commit to following a practical, repeatable, step-by-step S&OP methodology, consisting of five steps:

1. Conduct portfolio review
2. Synchronize forecast and financial outlook
3. Synchronize supply and capacity
4. Develop S&OP plan
5. Conduct executive S&OP meeting

Implement this five-step process on an easy-to-use technology platform that automates planning activities and delivers solid data on which the whole supply chain team can rely for “non-emotional” fact-based collaboration and decision-making.

With these elements in place, companies of all sizes across all industries can achieve the game-changing benefits (profitability, competitive advantage) that state-of-the-art Sales and Operations Planning provides.
Deloitte is one of the world’s leading professional services firms delivering supply chain planning strategy and implementation. Logility is a leading provider of collaborative best-of-breed supply chain solutions that help companies realize substantial bottom-line results in record time. Together, our partnership and combined experience can be leveraged to help organizations implement, improve, and manage an effective S&OP capability.

**How can Deloitte help?**

Deloitte works with clients to develop strategies, define future solutions built on leading capabilities, and implement process and technology solutions. We are as strong in helping clients execute a plan as we are in crafting it. Because of our experience and global reach, we don’t begin a project with a blank slate—rather we have tools, templates and we know which 40 decisions will drive 80% of the necessary work. Our unique Sales & Operations Planning Template provides the foundation for designing leading capabilities into your supply chain and accelerates the time to benefit. The template includes best practices for design and implementation, such as business processes, S&OP calendars, planning meeting agendas that align meeting focus on key issues, role definitions for participants, work prioritization and classification, and supply chain training on the key principles of S&OP management.

With a range of capabilities across consulting, financial advisory services, tax and risk management worldwide, taking an integrated approach that helps us see ways companies can use their supply chain operations to deliver more value across the business.
Building World Class S&OP Capability

**How can Logility help?**

The Logility Voyager Solutions™ suite is a comprehensive supply chain solution that accelerates and streamlines the sales and operations planning processes. Its Internet-based, collaborative framework incorporates performance management and configurable sales and operations planning (S&OP) templates to build rigor and repeatability while accelerating the S&OP process.

By transforming diverse information from sales, production, finance, marketing, transportation and procurement into one powerful central resource, Logility helps decision-makers evaluate alternatives based upon a more accurate assessment of the business, improve the effectiveness of mid-course corrections, and understand the impact of their decisions on corporate financial goals.

Continuous business plan alignment creates greater visibility of corporate performance, consistent accountability across the organization and more flexibility to adapt quickly to dynamic market conditions.

Companies worldwide rely on Logility solutions every day to provide supply chain visibility; demand, inventory and replenishment planning; supply and inventory optimization; manufacturing planning and scheduling, transportation planning and execution; and warehouse management.
For more information on how Deloitte and Logility can help with a practical solution for S&OP that incorporates best practice processes and technology that’s easy to implement and easy to execute, please reach out to us:

**Deloitte**

Vinder Sodhi  
vsodhi@deloitte.ca  
416.775.7449

**Logility**

Karin Bursa  
kbursa@logility.com  
800.762.5207  
info@logility.com