

# Sales and Operations Management – A New Paradigm in Global Supply Chain Management

by Amer Rehman

Managing supply chain risk and achieving operational excellence is paramount in tough economic times. In the face of high market volatility, shrinking demand and limited visibility, companies must have strong planning processes that are capable of providing synchronized operational and financial plans and are backed by tight organizational alignment. One way to achieve this is through sales and operations planning (S&OP), a corporate planning process used to generate a consensus view of demand and supply between sales, production and finance.

Companies have been using S&OP for more than two decades to ensure that supply planning functions are synchronized with customer demand to meet overall customer service and productivity goals. The traditional S&OP process, however, has largely remained fragmented and non-responsive for most organizations. Moreover, the traditional approach is mostly ineffective given today's increased demand volatility, global network with supply risks, increased product proliferation and shrinking product life cycles.

The majority of the companies adopting S&OP utilize it as a rolling monthly planning process with a time horizon of 3-12 months. The level of planning granularity varies from SKU or item-level to aggregated product family level, depending on the audience. But, invariably in all cases, the goal of traditional S&OP has been focused more on generating a balanced supply-demand plan and less on execution of the plan and synchronization with overall corporate profitability objectives.

Upon careful examination, it is clear that traditional S&OP in most corporations suffers from some common limitations, which makes the process less valuable in today's business climate. These limitations include:

- **Inadequate synchronization:** The traditional focus has been on generating a plan by matching demand and supply to ensure fulfillment and production targets. However, closed-loop synchronization between plan and actual performance in the light of overall profitability and financial goals is not adequately addressed.

- **Non-value-added manual effort:** Corporations spend more time and effort collecting and aggregating data and less in planning or making decisions. Plan inputs typically reside in multiple sources and formats, challenging unified, timely visibility and rapid synchronization of plan adjustments.

- **Poor quality and timing of information:**

Outdated, incomplete or incorrect data and long S&OP cycles with little provision for adjustments within a cycle seriously limit a corporation's ability to detect market changes and assess any demand or supply shaping decisions.

- **Lack of structure and plan accountability:**

Lack of structured accountability leads to high variance in plan and finger-pointing. Also, misaligned priorities and process inefficiencies promote gaming and ad hoc execution.

## Sales and operations management: Bridging the operational and business performance gap

Today, the majority of the companies executing S&OP processes achieve lower than desired levels of success. The degree of synchronization and plan accuracy varies significantly across companies and most suffer from the limitations highlighted previously. A few leading manufacturers, distributors and retailers have realized the need for tight synchronization among all corporate functions to execute the plan. These companies have improved upon traditional S&OP processes by enabling tight integration between plan and execution and extending demand-supply matching to include reconciliation with financials. This closed-loop management of S&OP process allows monitoring for deviations from the overall business plan to enable proactive, synchronous response and continuous process refinement. This approach is called sales and operations management (S&OM). Companies are quickly realizing that S&OM can actually become a mission-critical element of an integrated business management strategy.

## Key capabilities required to realize a closed-loop sales and operations management process

Successful S&OM can enable complete business alignment between business planning and operational groups, allowing the entire organization to work as a synchronized unit and to better manage supply chain risk. A company using S&OM as a monthly planning process can detect market shifts and collaborate across functional groups and trading partners more quickly, as well as provide a comprehensive response that is in line with corporate objectives on an ongoing basis. Most companies, however, lack the necessary capabilities to execute S&OM. Doing so requires fundamental strength in five key areas.



## 1. Process Orchestration

A key limitation faced by many organizations is the inability to create a repeatable process for S&OM activities, making even monthly monitoring of adherence to the overall business plan impossible. Creating an overall plan, and identifying and correcting deviations from that plan, requires defined business processes to coordinate the necessary activities among business units. In addition, supporting these coordination efforts necessitates data collection activities, such as demand forecasting, pricing analysis, competitive research, and root-cause analysis. Without these business processes, companies cannot identify deviations and gaps in the overall plan on a regular basis.

S&OM differs from S&OP by also focusing on plan achievement through the plan-do-check-act (PDCA) paradigm of closed-loop management. The “plan” and “do” phases encompass the traditional planning and execution processes of S&OP, as well as additional supply chain planning functions, which create, operationalize and execute business plans. In the “check” phase, feedback is continuously collected and analyzed. Finally, in the “act” phase, adjustments are made on an ongoing basis to ensure all planning is maintained and executed accordingly through the use of process playbooks. Process playbooks are formalized decision trees for major events that provide a planned, repeatable process to evaluate the deviation of execution from the plan and action items to reduce or eliminate the deviation.

## 2. Corporate Accountability

Many companies do not have the framework in place to enable the level of organizational alignment necessary for S&OM processes. They are not structured in a manner that allows for the necessary accountability from all corporate stakeholders. Lack of organizational alignment could be the result of limited engagement at the executive level during the execution phase. A disconnect from the operational side could mean lack of participation from sales or finance. Without accountability, business units do not have the incentive to make a corporate-wide analysis of performance possible.

Executive involvement is fundamental to enabling S&OM. All corporate stakeholders must be involved in the creation of the overall business plan. To ensure accountability, tools such as dashboards or an audit trail are needed to track performance history. Sense-and-respond capabilities, which detect plan deviations and other events and then respond to close any gaps, are S&OM components that are also important to corporate accountability. “Sensing” requires an event framework that looks at various plan elements and can detect deviations on a continual basis. Once detected, deviations can be routed to the appropriate stakeholder for analysis and resolution.

## 3. “What-If” Scenario Analysis and Demand Shaping

Many companies are often either demand- or supply-oriented. They lack the “what-if” decision support capabilities to factor both demand and supply. Without the ability to understand the impact of demand, supply, and product mix decisions on revenue and margin, planning accuracy remains limited. The ability to weigh actions that can change demand to match available supply enables companies to optimize their decision-making process.

Over the past few years, scenario analysis and demand shaping have been introduced into the S&OP processes of major companies, allowing them to run scenarios for different demand and supply profiles, as well as “what-ifs” related to strategic, operational and tactical events. Each scenario may be evaluated by its financial impact and is incorporated into the monitoring of the overall business plan. Demand shaping is a mechanism that allows a company to introduce actions that change demand to match its available supply, including price changes and promotions. Scenario analysis and demand shaping also play an important role in deriving plans for process playbooks. Scenarios are run with different demand and supply profiles, and their impact on the company’s financials are evaluated.

## 4. Financial Plan Synchronization

Another obstacle faced by many companies is the lack of reconciliation between supply chain and financial data. Without this data synchronization, it becomes impractical to determine financial implications through various demand-supply scenarios. Additional financial considerations, such as global currencies and supplier financial data, are also key factors in the corporate decision-making process.

A financial plan is a core component of S&OM. Bidirectional integration between the financial plan and plans created through planning processes—such as constraint demand plans—are necessary for closed-loop management. Because profitability and revenue are key corporate indicators, assessing the immediate financial impact of planned changes, deviations and scenarios is critical in evaluating corporate performance. Therefore, the synchronization of all of a company’s business unit plans with its financial plan is crucial to achieving an effective S&OM process.

## 5. Master Data Management

S&OP processes within organizations require significant time for data gathering and management. The data collation process becomes an even bigger problem for companies working with a global S&OP initiative. Different data formats, levels of aggregation, varying information systems among regions, and integration of data from trading partners outside the enterprise create significant supply chain management challenges.



Companies today require a comprehensive master data management (MDM) strategy to reduce the lead time associated with data collation to support the S&OM process. MDM acts as a meta-data management layer that provides mappings and common data definitions for various dimensions of data, including organization, product and geography. This allows two different regions and organizations to map their data elements to one another and enables proper roll-up, roll-down, aggregation, disaggregation and allocation.

S&OM is a continuous process and not an annual or quarterly event. A committed management team is a prerequisite to institutionalizing a standard process across all business functions. Stakeholders, business processes and key performance metrics need to be clearly defined and managed and must be consistent with the overall corporate objectives. A well-structured S&OM process can facilitate complete business alignment between the strategic/business planning unit and the various operational groups so that the whole organization works as a synchronized unit.

The benefits of expanding and institutionalizing S&OM across the enterprise can be quite impressive. Measurable benefits typically include lower inventory and procurement expenses, reduced expediting and logistics costs, better forecast accuracy and more profitable production scheduling. From a qualitative standpoint, the benefits of implementing S&OM include increased supply chain visibility, improved customer service, and a better balance among demand, capacity and profitability across the enterprise. Taken together, these factors add up to significant improvements in overall business performance.

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## Sales and Operations Management Case Study – A Global Automotive Company

A global automotive company wanted to establish an S&OM process that would enable it to balance global demand with global supply, properly allocate supply based on margin, and make adjustments based on changing business conditions such as demand fluctuations, exchange rates and transportation costs. This company had global operations, but S&OP was performed by each region independently at a frequency mismatched with the market dynamics.

Data consolidation across various regions and countries of the world was a monumental challenge. Each region—assuming they were on the same systems—defined product, geography and other data elements differently. Furthermore, system and data sophistication varied widely from spreadsheet-based processes in emerging markets to standard ERP systems in mature markets. Business units spent most of their time trying to get data into a presentable and explainable format to support meetings. The effort required to obtain accurate information did not leave time for analysis and effective decision-making.

This company defined a global process for demand and supply balancing and put in place a managed, shared-service model to perform the required information consolidation for an S&OM process. This shared service model created and maintained data mappings and reports to support the global process. What once took weeks to execute now is being done in a matter of days, allowing planners and stakeholders to focus on value-generating decisions. This foundational capability has enabled the company to advance further in its S&OM efforts by implementing scenario analysis and demand shaping.

# Sales and Operations Management Solution Requirements

An S&OM solution needs to provide a functional technology foundation for complete information visibility, process repeatability, “what-if” game playing and analytics, and rapid decision making, thereby ensuring that operations are consistently aligned with overall financial and revenue plans. Here are some key solution priorities to be considered when putting together an S&OM process:

## Process orchestration

- Ability to setup a repeatable S&OM calendar and execute on it
- Approval hierarchy and editing cut-off dates to support process
- S&OM meetings driven by taking action items and tracking progress
- E-mail alerts with action-item details sent to responsible parties
- Alerts and exceptions-based approach to drive the execution process

## Rapid impact analysis

- Live planning engine capable of comprehending the entire demand-supply network and determining the impact of demand decisions on supply constraints
- Ability to understand the impact of demand, supply and product mix decisions on revenue and margin through scenario creation and comparison
- Predefined resolution options tied to exceptions using process playbooks

## Corporate accountability

- Audit trail for tracking quantitative and qualitative changes, including new value, old value, reason codes and comments
- Plan vs. actual performance tracking (e.g. forecast vs. point of sale) to monitor plan variance and adherence

- Live dashboards to monitor plan and track KPIs, enabling management by exception

## Dynamic plan consolidation

- Ability to consolidate into one system the point-of-sale data, inventory, forecast and supply plans
- Ability to consolidate and aggregate regional data views into a global view
- Ability to consolidate item information across different regions that currently have different part names for the same SKU

## Corporate adoption

- Easy-to-use user-interface workflows that provide editable pivot views for quick adoption across the enterprise
- Offline and online modes for sales organization adoption
- Low total cost of ownership by leveraging current desktop office productivity tools and solutions

## Technology architecture

- Services-based architecture, which enables flexible web-services-based solutions to coexist with company’s ERP and legacy infrastructure
- Ability to adapt solutions and workflows to changing business processes
- Ability to catalog workflows and process playbooks in a business content library. A business content library is an electronic library that contains XML-based workflow definitions and process playbooks that can be stored, retrieved, modified and executed as needed
- Ability to provide a structured data management environment along with the flexibility of common spreadsheet applications, such as Microsoft® Excel