SALES AND OPERATIONS
PLANNING—
THE FUNDAMENTALS
FOR SUCCESS

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Many companies are currently struggling to digitalize their Sales & Operations Planning (S&OP). While digital tools are undoubtedly the future of S&OP, not all companies currently upgrading their S&OP processes are likely to see major improvements because of digitalization. In our experience, going digital may lead to disappointing results if the fundamentals are not robust. It is not a “silver bullet” that could somehow magically fix existing issues, but a powerful enhancement that must work hand in hand with a strong S&OP process.
Sales and operations planning (S&OP) is a powerful approach that seeks to synchronize demand, capacity, and inventory. When implemented well, S&OP is an efficient process that ensures cost and inventory optimizations while improving service levels. If done successfully, it is the backbone of a company’s operations and an essential contributor to efficient sales.

In a wide range of businesses, S&OP has successfully fostered collaboration between various functions, in particular supply chain, production, purchasing, sales and marketing, as well as finance and control. It enables the integration of the many separate plans into a single shared and consistent process that can meet evolving business priorities.

Unfortunately, S&OP has often failed to live up to its promise. According to research, around 50 to 70 percent of businesses have been struggling to reap its full benefit.

A poorly implemented S&OP process can trigger a vicious cycle in which existing failings in the process are exacerbated over time, leading to a further deterioration of key S&OP performance indicators.

This should not suggest that S&OP is a failure. When done well, it produces major process improvements. The trouble is in the implementation. So, where does digital S&OP fit in? Can it fix the current issues? Digital S&OP promises much by automating workflows and improving decision making. But can it deliver what it promises?

A STRONG S&OP PROCESS IS INCREASINGLY RELEVANT

S&OP is here to stay. However, growing complexity is being driven by four major trends. Our research shows that due to the growing complexity of predicting supply and demand, S&OP will play an even more critical role in the coming years.

• Ever-increasing service expectations from clients in terms of delivery schedules and flexibility.
• Greater diversity in the product portfolio and the multiplicity of client, channel, and product-specific segments.
• Evermore complex supplier network footprints, with diverse lead times and specific issues, combined with macroeconomic events that carry supply risks.
• Disruptive new players, which push expectations ever higher and regularly change the rules of the game.
S&OP will play an even more critical role in the coming years. Our research shows that due to the growing complexity of predicting supply and demand, S&OP is here to stay. However, growing complexity is being driven by four major trends.

- **CUSTOMERS**
  - Rising expectations in terms of service process, lead times, and flexibility
  - Frequent short-term customer order changes requiring production rescheduling
  - Growing demand volatility in many sectors

- **PRODUCTS & CHANNELS**
  - Increasing product portfolio complexity
  - Reducing time to market for new products
  - Growing number of segments and sales channels

- **COMPETITORS**
  - Arrival of disruptive and agile competitors increasing industry standards through tailored and enhanced service levels
  - Overall raising speed of innovation (products and services)

- **SUPPLY NETWORK**
  - Rising complexity of supplier networks (diversity, footprint, and lead times)
  - More frequent, unexpected geopolitical, and climatic events disrupting supply chains

These forces produce significantly increased complexity in the supply chain, with the data density growing daily in this environment. This, in turn, results in the evermore frequent need for operations managers, when faced with apparently contradictory demands, to juggle inputs and objectives. Common undermining pitfalls are for instance seen in processes that lack sufficient collaboration between functions, use poorly segmented data baselines for products, channels and clients. This is often compounded by poor leadership, with the supply chain being left to stand on its own, being held solely responsible for the process’s success or failure.
S&OP FUNDAMENTALS HAVE TO BE ADDRESSED IN PARALLEL TO DIGITALIZATION

All too often companies have embarked on digitalization without also addressing the cornerstones of a strong S&OP process. Not to do so is a mistake, one that can prove costly. Parallel to embarking on the implementation of digital S&OP, companies need to ensure three fundamentals are in place:

- The process clearly defines appropriate ways of working and who is responsible for what.
- The governance of the process ensures that all those engaged with S&OP have the requisite mindset.
- The data and analytics are of high integrity and are appropriate to the process.

Here it is important to stress that these three tasks are complementary, and are all necessary for success.

Exhibit 2: Successful S&OP is based on solid workflow fundamentals, the right governance, and a well-defined, shared data baseline

<table>
<thead>
<tr>
<th>WORKFLOW</th>
<th>GOVERNANCE</th>
<th>DATA &amp; ANALYTICS</th>
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<tbody>
<tr>
<td>- In line with company strategy</td>
<td>- A core company process</td>
<td>- One unique data baseline (high accuracy in line with participants)</td>
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<td>- Optimized inputs: portfolio and segments</td>
<td>- Supply chain drives the process but it is a collaborative approach between sales/marketing, production, finance, and supply chain</td>
<td>- Nurturing of the data baseline in a consistent way all along the process without disruption</td>
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<td>- Adequate frequencies, horizons, and granularities</td>
<td>- A connected process from forecast to scheduling and procurement</td>
<td>- Strong and efficient data processing capabilities driving decisions</td>
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<tr>
<td>- A connected process from forecast to scheduling and procurement</td>
<td>- Adaptability of the process in case of volatility, launches, or promotions</td>
<td>- Shared performance indicators</td>
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<td>- SLAs between functions, with suppliers and with clients</td>
<td>- Top management support</td>
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<td>- Feedback loop with constant improvement</td>
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WORKFLOW
S&OP is first about ensuring efficient cross-functional collaboration. This requires well-defined roles and responsibilities. Marketing/sales and production will not only need to collaborate fully but should do so in a systematic manner. Supply chain will need to animate and support the process, while finance must arbitrate on figures. However simple this level of cooperation might appear at first sight, the reality demonstrates just how tough it is to break down “silos” and trigger true internal partnerships. Service level agreements (SLAs) are an essential piece in solving this puzzle, helping to frame the underlying rules about how all the partners (both internal and external) are expected to cooperate with each other. Another sticking point is ensuring effective arbitration on the process priorities. This requires focusing on aspects such as predictability, strategic importance, or risk of obsolescence and for instance, if relevant, product introductions and promotions, which are often not easy to handle. Similarly, the process needs to take account of the most appropriate frequencies, granularities, and time horizons of the workflow. Eventually all steps of the process need to be connected without information or system breaches. Each of these aspects needs to be defined with care and should be consistent; pragmatism plays a vital role here.

GOVERNANCE
The mindsets of all those involved will have to evolve into the new ways of thinking if the required ways of working and responsibilities outlined above are to actually work in real life. It’s not about functions anymore but about the company’s success. The new ways of thinking are fundamental.

S&OP is not just a “supply chain process,” as we so often hear, but a core company process that all necessarily have a stake in.

The ultimate target of S&OP is not only to reduce costs and optimize inventories but also to drive up sales and raise client service performance levels. Our recommendation is that, from the very outset, companies should define S&OP as a core company process to ensure top management support during its deployment. This will help avoid the risk of long-lasting and often counter-productive conflicts of interest between the various functions involved in the process. Achieving this new mindset often requires significant change management.
DATA AND ANALYTICS

Having the right data is essential. Beyond that, it is all about having the same baselines in common and sharing this data among participants. It is also about maintaining an efficient data baseline along the entire process. This means eliminating the reintroduction of new data components from uncontrolled or inconsistent sources. Our experience shows that achieving this is often a real challenge for companies. They struggle with diverse systems, issues of accuracy, and the multiplicity of different baselines. This challenge is all the greater where these are not held in common between functions (often resulting in differing understandings of the underlying data). It is also necessary to define the appropriate performance metrics: These need to be properly constructed (based on company priorities and linked to actionable results), explained, shared, and reviewed by top management, as well as with all the other participants in the process.

The nature of the challenges outlined above makes it essential that S&OP implementation should be led by senior management. The high-level responsibility for implementation starts with the need to outline the vision for S&OP as a core strategic company process that is designed to have deep impact on costs, inventory, and commercial performance.

Without strong leadership, it is highly unlikely that the fundamental changes required within the organization – such as setting a consistent baseline and achieving the desired shift in thinking – will take place. More often than not their absence results in sub-optimal “shadow” practices that often undermine S&OP.

HOW CAN DIGITALIZATION SUPERCHARGE S&OP?

S&OP offers the opportunity to introduce digital tools at each stage of the process to automate and enhance different tasks, allowing managers to focus on strategic thinking (as machines can’t yet take a step back and continue to have difficulties in connecting the dots between issues). It also leaves more capacity for reviewing and critical decision making, for instance, when trade-offs need to be made that are not self-evident, or when specific “erratic” flows are at stake.

*Digital S&OP offers companies three distinct areas of opportunity for improving their operations: increased integration, greater accuracy and speed, and improved productivity.*
DIGITAL S&OP CAN ADVANCE INTEGRATION

Forecasting or demand planning, capacity planning, and scheduling present the most obvious opportunities, though connected activities, such as procurement and inventory management, are also within scope. Once the company is confident of its digital capabilities, it should also consider extending the scope of its digital S&OP along the entire supply chain, including those elements beyond its internal boundaries, connecting supply and operations end to end. This will enable, for instance, the integration with higher precision of supplier capabilities and real customer needs. While improving company performance is good, enhancing the collaborative performance of the company’s ecosystem is much better.

DIGITALIZED S&OP PROCESSES ARE ABLE TO PROVIDE GREATER ACCURACY AND SPEED

They can do so firstly because they can combine and leverage data from multiple sources beyond those of traditional S&OP systems. They do this by making use of the enhanced number of data points provided by the Internet of Things, or by correlation with a variety of macro-economic indicators, or with social media information for instance. Furthermore, they extract data and analytics that are better targeted and tailored to the real needs and priorities while significantly reducing the manual workload and “ad-hoc” analysis. It is important to note that this accuracy will improve over time as the algorithms used in the system compare discrepancies between the plan and reality. These improvements include the ability to determine which data sets and calculations work best for a given reference, product, supplier, client, or flow.

DIGITAL S&OP CAN CREATE SIGNIFICANT PRODUCTIVITY GAINS THAT HAVE AN IMPACT ON DIRECT COSTS, INVENTORY, AND SERVICE LEVELS

It can deeply improve the management of very complex tasks often related to errors and costly consequences such as new product introductions, promotions, weather-related influences, or seasonality parameters. It can act as an enabler for risk reduction by focusing on specific components or goods, ensuring improved reliability and quality of supply. Frequent and precise client communication, and adjustment of logistic flows, for instance, are possible resulting operational enhancements. Through its positive impacts on the process, digitalization can also facilitate the integration of promising new technologies such as 3D printing.
THE SECRETS OF SUCCESS WHEN IMPLEMENTING DIGITAL S&OP

In the final analysis, the level of impact that digitalization has on S&OP performance correlates with the degree of automatization. Just how far companies are prepared to go varies widely, from no further than a proof of concept in a specific business unit all the way to full implementation of artificial intelligence (AI) in numerous components of the process.

Whatever the level of commitment to digitalization, it always has the potential for significant impact on S&OP performance, even where it is only partly digitalized.

Our experience suggests that a possible opportunity in these cases is centered on advancing specific machine learning-related capabilities that can significantly improve the accuracy of complex forecasting tasks depending, of course, on the level of maturity at the start of the process.

It is important to emphasize four aspects that are critical to its successful implementation:

• **Digitalization of S&OP should be part of an overall digital supply chain strategy and aligned with the company strategy:**
  Our experience shows that digital transformations are much more effective when they are not done one piece at a time – as in business unit by business unit or region by region – but when a holistic vision sets the overall direction and degree of ambition to ensure the coherence of every action. This is especially true for S&OP, which is usually one of the most collaborative and interconnected processes within any given company.

• **The S&OP baseline should be “clean”:**
  It can be counterproductive to digitalize an underperforming S&OP system, feeding it with additional data and machine-related process steps. In all probability, this will ultimately result only in additional complexity. Our conviction is that the key to improvement is to set solid process fundamentals in parallel to digitalizing its components.

• **Human intervention remains critical:**
  The system requires strategic thinking and strong business insight and support, especially when it comes to managing tricky situations when faced with new challenges or exceptions. S&OP is all about identifying the difficult decisions and trade-offs. Managerial support is not only essential for paving the way but for controlling and monitoring the ongoing process.

• **Moving to digital will trigger further evolution of the supply chain operating model:**
  Processes are becoming less sequential and more automated, and manage much more information than before. Consequently roles and responsibilities, as well as priorities and performance indicators, will change. The necessary new competencies for digital S&OP include modeling and data management. While being well versed in strategy, supply chain professionals will also need to become even more agile, moving from operations tasks to becoming a catalyst for sales within an instant. Managerial flexibility and a holistic understanding of business dynamics will be increasingly expected from supply chain professionals.
Digitalization of S&OP provides COOs and CEOs with the potential to make a major step change in the supply chain, with impacts on cost, inventory and service levels.

To achieve this goal requires clear strategic vision for the role of digitalization within the supply chain and, beyond it, solid S&OP fundamentals. The development of new working modes and competencies is essential to ensure sustainable success.

Already digitalized or not, we encourage COOs and CEOs to treat S&OP as a core company process with top priority, as it is the backbone of operations and an essential trigger for more focused and optimized service levels. Digitalization offers the possibility to further enhance what should already be a reality: Supply chain drives costs but also revenues.
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