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A Fresh Look
At Sales and
Operations Planning



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EXECUTIVE SUMMARY

For companies up and down the consumer packaged goods (CPG) value chain, now is the time to take a fresh look at sales and operations planning (S&OP) processes. Although S&OP is a well-established, proven tool in the CPG industry, nearly a quarter of companies still do not use it, and many others could be realizing greater benefits than they do today from their S&OP efforts. Increased complexity in the value chain is putting pressure even on well-run S&OP processes, making accurate forecasting and planning more difficult. Booz & Company advises CPG industry participants to keep in mind seven key parameters when refreshing their S&OP approach: Match objectives to processes; adopt an integrated value chain perspective; reflect tailored business streams in policies; leverage technology; get closer to demand; account for unpredictable elements in new product and promotion cycles; and align to harmonized key performance indicators.

MERITS OF SALES AND OPERATIONS PLANNING

Sales and operations planning, a well-documented and mature process, is a vital tool to increase communication, improve service levels, decrease costs, and better plan capacity in all parts of a supply chain. However, even companies that have been using S&OP for years may not be reaping all the benefits it can offer. Furthermore, given the ever-increasing challenges engendered by complexity within the CPG industry value chain, S&OP is becoming harder, requiring a new look at the level of granularity

and the analytics needed to determine accurate and meaningful forecasts and analyze business trade-offs. There are a number of steps that the CPG industry can take to make sure that S&OP not only brings stronger results to individual companies but also makes use of newly available point-of-sale (POS) data and the tailored business streams operating model to better integrate a collaborative network of retailers, manufacturers, and suppliers.

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TRADITIONAL S&OP: THE FUNDAMENTALS

Nearly a quarter of U.S. companies do not use S&OP, and they do not intend to try it in the foreseeable future, according to AMR Research. In a business environment that is increasingly global and in which quick turnaround of products and services is more important than ever, companies need not only to integrate all of their parts in decision-making processes, but also to involve major suppliers and customers in those discussions. For the retailers, manufacturers, and suppliers coordinating so many moving parts, overlooking the necessity of S&OP could be fatal. Even those companies that have used S&OP for years need to take a fresh look at their programs.

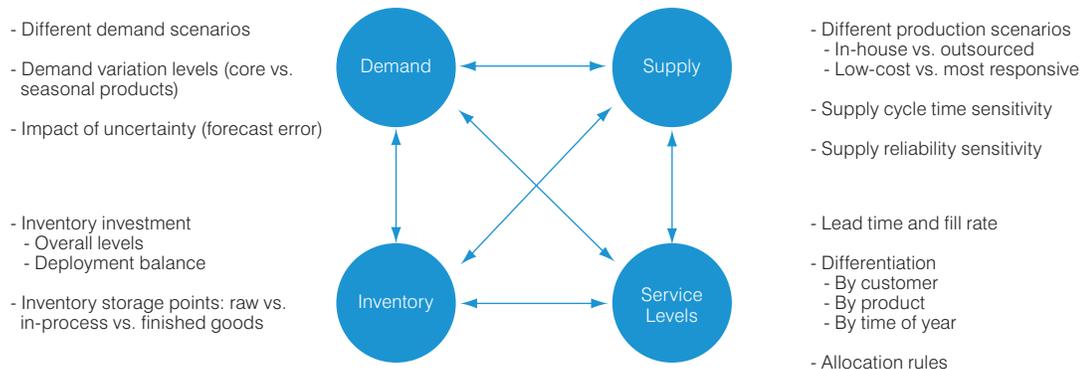
In its most basic form, S&OP dictates that sales, marketing, operations, finance, research and development (R&D), and information technology (IT) not only should know what the other departments are doing, but should discuss how to better integrate each of their strategies, capabilities, and goals. For example, the sales organization may be able to generate leads that could result in selling 150 units a month, but if manufacturing operations can only make 120 units, there is a supply–demand mismatch. S&OP serves as a “brokering” process to allocate products by aligning policies and processes that take into account trade-offs across different functional groups and financial objectives. Even better, if done correctly, S&OP helps alleviate such shortfalls in the first place by proactively managing supply and demand.

In terms of how the S&OP process actually works, cross-functional executives from sales, marketing, operations, finance, R&D, and IT meet every month (or even more fre-

quently) and, at the very least, align marketing and sales programs with operations production and capacity plans. To continue our example, if the operations group determines that it can produce only 120 units, the S&OP process could evaluate and decide which customers or products should get priority.

The S&OP process is aimed at making decisions that are best for the business, balancing customer service, inventory, and cost-to-serve (see Exhibit 1). S&OP sets policies in place and aligns the company toward making more integrated decisions. It gives the organization a disciplined process for focusing promptly on tough choices. The process empowers the cross-functional team to make binding decisions through clear decision rights, metrics, and incentives. When it’s run well, S&OP becomes a vehicle for senior management to steer the business to desired outcomes. It may seem simple, but such planning is critical to ensuring supply and fulfilling demand at the shelf.

Exhibit 1
Balancing Customer Service, Inventory, and Cost-to-Serve



Source: Booz & Company

IMPACT OF GREATER COMPLEXITY ON FORECASTING AND PLANNING

Traditional S&OP processes offer clear benefits in terms of reduced costs, an increase of in-stocks, and more efficient operations. However, increased complexity in the value chain is putting pressure even on

well-run S&OP processes, making accurate forecasting and planning more difficult (*see Exhibit 2*).

And this complexity is manifested in multiple forms—products, lead times, manufacturing technologies, promotions, and consumer requirements. Can we make fashionable red sandals in the summer and weather-resistant brown shoes in the winter? What lead times do we need? Can our assembly lines change quickly enough to do that, and what costs will we incur? Can we really afford to run marketing promotions and campaigns knowing that we will not be able to make enough product? What happens at

the end of the season—should we run promotions to clear out inventory rather than deeply discount or sell at a loss? Due to the increasing complexity of these decisions, companies require information from both sales and operations to implement their strategies correctly. The time to react in the marketplace is constantly getting shorter. A competitor may come up with a new product in two months, two weeks, maybe even two days. Meeting every three or four months to decide what the next season will look like may no longer be enough. Timeliness is everything.

Exhibit 2
Growing Complexity Challenges Affecting S&OP Process Accuracy

Element of S&OP	Drivers of Increased Complexity
Product Lines	- SKU proliferation - Increased product launches
Value Chain	- Global value chains (sourcing, outsourcing) - Multiple value chains for different products
Lead Times	- Reduced lead times - Variable lead times across retailers
Service Requirements	- More pressure to provide greater services - Increased customization of products and services
Data Granularity	- Customer and consumer segmentation - POS availability by item, by store, by day

Source: Booz & Company

BUILDING CAPABILITIES FOR ADVANCED S&OP: A FRESH LOOK

A fresh look at S&OP goes beyond holding meetings more frequently and involving more groups in the process. Rather, there are critical step-change capabilities that companies need to consider in order to overcome industry complexity and collaboration challenges. There are seven key parameters to keep in mind when refreshing the S&OP approach.

1. Match Objectives to Processes. Given the changing complexities in

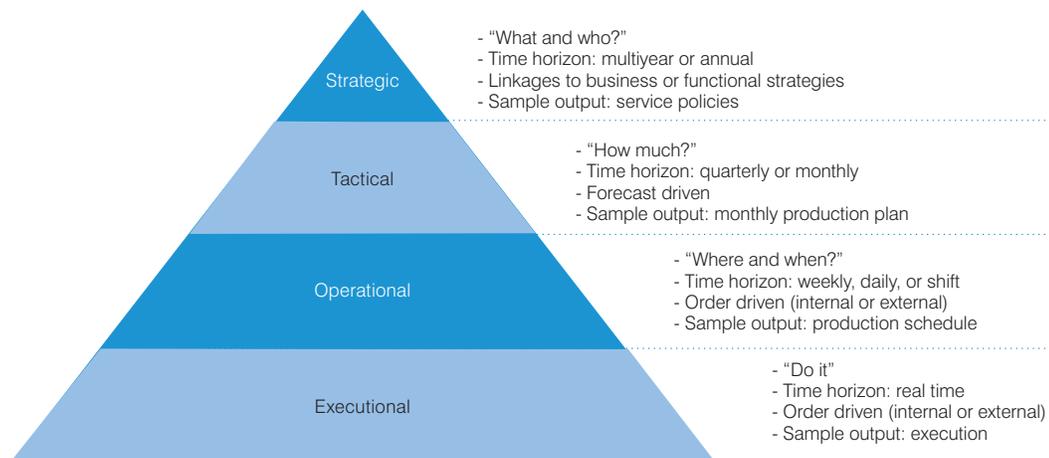
the CPG industry, companies need to examine their S&OP processes and revamp them as necessary to align with company objectives. Even companies that already use S&OP should review how they use it and whether there are more efficient or more inclusive methods that could improve results. Traditional S&OP starts by developing long-term strategies and policies but often ends up as a primarily reactive process that responds to crises, which managers try to resolve on a monthly basis. In contrast, S&OP should marry all four levels of decision making: strategic, tactical, operational, and executional (see Exhibit 3).

2. Adopt an Integrated Value Chain Perspective. In today's global and integrated value chain, advanced S&OP processes need to be inclusive within a company and between companies involved in the value chain.

Within the manufacturer, the cross-functional group should span all relevant functional layers horizontally, including R&D and IT. Additionally, the team must include the management layer necessary for decision making and execution. Beyond the manufacturer, it is critical to include suppliers and retail players to identify facts accurately and to align processes to plans and expectations. S&OP allows improved trade-off decisions by taking into account total cost-to-serve across the entire value chain, including the costs of customization, cost to deliver to the shelf, and supplier impacts.

3. Reflect Tailored Business Streams in Policies. Tailored business streams are a necessary operating model to manage complexity. Therefore, S&OP policies need to reflect the number and types of different business streams and the policies associated

*Exhibit 3
Architecture for S&OP Decisions*



Source: Booz & Company

with each. For example, Company A may have a 98.5 percent service-level requirement for non-promotions and a 100 percent level for promotional items. Varied service levels, business connections, degrees of information sharing, and collaborative processes can be determined for different customers, brands, or stock keeping units (SKUs), based on strategic importance.

4. Leverage Technology. In the past, S&OP processes were primarily managed using nothing more advanced than Excel spreadsheets. Today's vast amount of more accurate data is leading companies to analyze businesses at ever more detailed levels. Incremental growth is being driven

at the shelf and order levels. Data, including POS data, is more granular, is primary in nature, and is available more easily and in a more timely fashion. Therefore, companies are moving beyond Excel, enhancing their analytics capabilities through tightly integrated uses of technology with supply chain processes (see Exhibit 4). The technology is adapting to offer real-time, decision-based information, linking suppliers to manufacturers and to retailers.

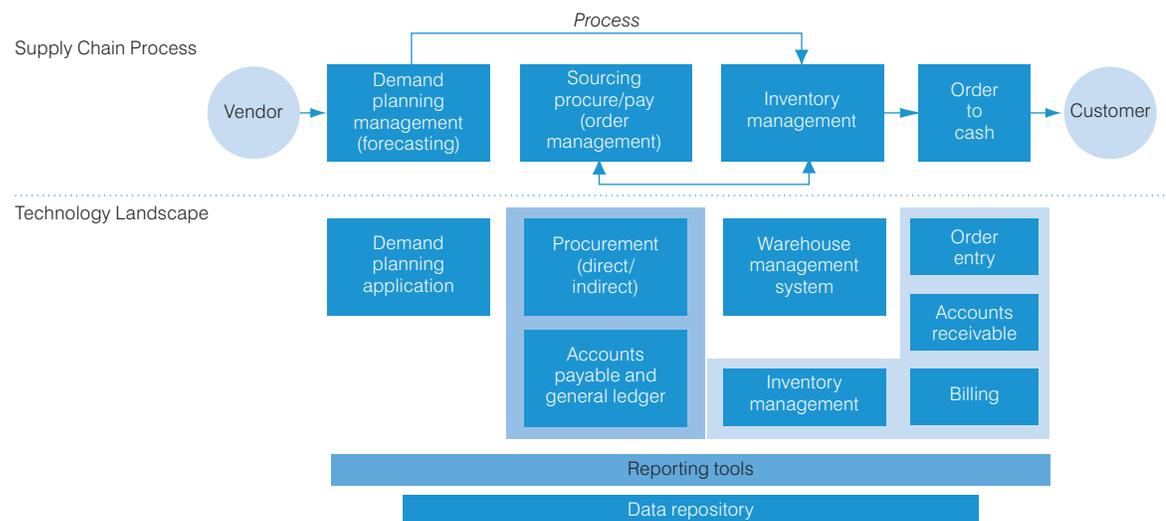
5. Get Closer to Demand. In the past, S&OP data was mostly historical, relying on high-level averages that were based on regional sales for the previous month, broken down by category; manufacturers forecasted

shipments to retailers based on past shipment history. With more granular data available, S&OP can improve forecasts by assessing and dealing with the drivers of variability in the supply chain.

6. Account for Unpredictable Elements in New Product and Promotion Cycles. One of the ways companies are reacting to changing customer needs is to step up their innovation engines, bringing more products to market in an effort to differentiate and capture more value. However, due to competitive dynamics, the newness lasts for a shorter time before the product is upstaged by another "new and improved" product. This practice of placing

Exhibit 4
Integrating Technology into the Supply Chain

SUPPLY CHAIN PROCESSES AND SUPPORTING TECHNOLOGY



Source: Booz & Company

many bets in hopes of a few wins causes significant upheaval in planning and decision-making processes.

There is much we can learn from the media and fashion industries, both of which deal with this unpredictable environment on a regular basis and use their innovation capabilities not only for new products but also for promotions that come with similar levels of unpredictability. Advanced companies are investing in capabilities that let them identify triggers—and understand when a particular product or promotion is a win or not. In book publishing, for instance, the first few days of actual customer sales are a strong predictor for annual sales. More sophisticated analytical models and quick access to initial data help to predict medium- and longer-term trends more accurately.

In parallel, a sound understanding of economic trade-offs helps prepare the supply chain to react to these predictive inputs. Understanding the relative nature of lost sales (and margin) to the incremental costs of overproduction helps to define the levels of risk that can be taken at every stage.

Advanced S&OP processes are integrating predictive models to simulate the impact of various supply and demand scenarios, including the

impact of pricing and merchandising decisions. In addition, more companies are looking to situations that are the exception rather than the norm, managing these circumstances with exception alerts and policies focused closer to near-term consumption.

7. Align to Harmonized Key Performance Indicators (KPI).

Historically, companies have relied on a disparate set of metrics across different functions. This has had the disadvantage of encouraging departments to make decisions based on reaching their individual targets rather than thinking about what would be best for the company as a whole. For example, manufacturing might face the decision of whether to make a difficult, but more profitable, new product or a product that's easy to make but that earns less money. The traditional metrics for manufacturing's function, based on volume produced, service level, and schedule adherence, would lead the group to choose the easier product, even though that decision does not optimize results for the company. For many years, companies have searched for the holy grail—a single metric that can be used to align multiple parts of the organization. In our experience, using a single corporate measure tied to a major strategic push, coupled with clearly linked and related

functional metrics, can allow companies to drive the right behaviors and also measure them. For example, a company could measure its cash conversion cycle on a daily basis as a single metric to focus everyone on the speed of moving things along the supply chain—a common theme that would impact the functional metrics of inventory, service levels, lead times, and quality.

Increasingly, more companies are ensuring that performance metrics and targets are aligned not only across functions within the company but across different companies in the value chain. For example, one CPG company thought its “on-time performance” for Retailer A was 99 percent—one of the best performances for a CPG company. However, Retailer A thought the CPG company was only at 88 percent, which made it one of the worst in its competitive set. It turned out that the two companies measured on-time performance differently; the CPG company measured it by when the truck checked into the retailer's distribution center, but the retailer measured it by when the truck was unloaded. The CPG company used its newfound understanding of the gap in KPI definitions to collaborate with the retailer to reduce the normal wait time at the customer distribution center.

S&OP Success Stories

- A major U.S. food products company had a strong stable of brands and low production costs overall. However, it had higher inventory levels than competitors and lower service levels, marked by poor fill rates, late deliveries, and a frequent need for expedited shipping. A recent restructuring had created a longer and more complex supply chain. A new S&OP process standardized the service and supply policies, used consumption data to drive forecasting rather than react to historical data, introduced regular cross-functional management meetings for key decisions, and drove home the importance of the initiative by linking supply chain KPIs directly to management incentives. As a result, the company cut inventory levels by US\$40 million (25 percent), improved customer service levels from the mid-90s to more than 98 percent, and reduced overall manufacturing and distribution costs by more than 20 percent.

- A global fashion apparel manufacturer had myriad supply chain issues: Lead times were too long; inventories were in chaos, with products not in the right place at the right time; and demand forecasts were often in error. As a result, the company spent too much time fixing what was wrong instead of delivering properly. Using S&OP, it developed a cross-functional collaborative approach to forecasting, made better decisions on production sourcing and inventory by taking service and lead time trade-offs into account, and recast the warehousing of products with better use of SKU data. Additionally, it began shifting the entire supply chain from a forecast, or “push,” model. Seasonal goods remained on a forecast basis while core products used a demand-driven “pull” model. As the program gained traction, revenues and profits increased as inventory costs plummeted.

- A major housewares company, after two years of multiple acquisitions, was near crisis in its cash flow and customer service because of excess inventory at all stages of production, from raw materials to the finished product. It was having severe difficulty managing an increasingly complex U.S. and Asian supply chain. It implemented an S&OP system; developed a demand-driven operating framework for its supply chain; trained its sales force to look at the total cost to serve, rather than focusing only on making the largest sale; and improved sourcing efforts to achieve cost reductions. The result was an initial inventory reduction of about 20 percent, better lead times for vendors and customers, price reductions of up to 15 percent for sourced products, and a fully coordinated planning process.

- A multibrand durable goods manufacturer with a presence in all major markets was incurring significant costs because it carried extreme excess inventory due to a lack of organizational structure and analytic tools to inform its inventory decisions. The introduction of S&OP brought about regular cross-functional meetings to coordinate sales forecasts with production plans at the tactical level, and encouraged a strategic approach to aggregate volume planning. The company also developed inventory management tools, including forecasting, inventory targets, and production planning. Within five months, the company reduced inventories by 30 percent, cutting operating expenses by \$25 million.

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CONCLUSION

A fresh look at S&OP can be of equal benefit to companies that are implementing it for the first time and companies that have had it in place long enough for it to get stale. S&OP is more than a series of policies that support a highly functional tool. Rather, it allows companies to define and implement their own strategies and then to take those strategies beyond the company walls to share them with strategic partners. S&OP therefore needs to be frequently refreshed based on the changing realities of customer demand and value chain structure. With complexity increasing, companies need to build advanced capabilities to ensure that ongoing critical trade-offs can be made to efficiently and optimally drive growth and profit across the value chain (*see “S&OP Success Stories”*).

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