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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 in China, 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, many companies in China 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.*

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## 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.

*Even companies that have been using S&OP for years may not be reaping all the benefits it can offer.*

# TRADITIONAL S&OP: THE FUNDAMENTALS

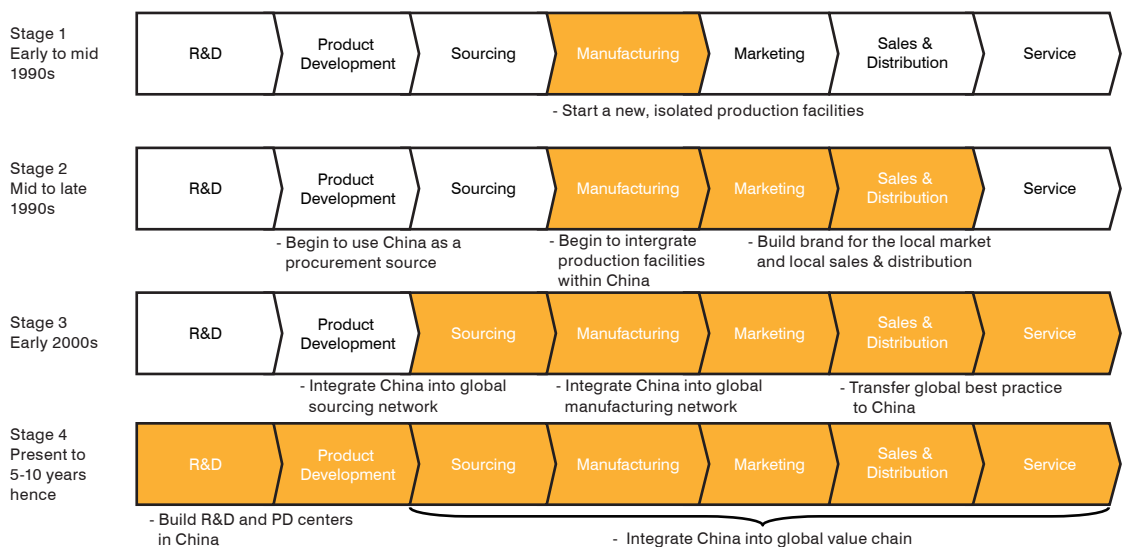
In 2009, Booz & Company conducted a study of multi-national manufacturing companies in China. Among others, different from previous years, we have identified two major trends. One is the continual emergence of duality strategy and the shift of focus to domestic market; the other one being the further emphasis of best manufacturing practices when many places in China are no longer “low cost”.

During the past five years, an intriguing shift in the “duality strategy” in China began, in which China serves as a hub for both domestic markets and exports to the Asia-Pacific region and beyond. However, in our 2009 study, it could be seen that the shift towards expansion in the domestic market has continued to grow. More than 80% of companies surveyed expressed that their primary motive for locating manufacturing operations in China was to provide products or materials for the Chinese marketplace. As a result of this shift, the market landscape has changed. Competition is becoming fiercer, as both multi-national and domestic companies are thriving to bring

increased variety of product offerings and service levels to customers from more fragmented segments. In addition, there is added complexity to the value chain as companies are evolving to have a larger span of their value chain presence in China (see Exhibit 1).

In addition, China is gradually parting away from being viewed as a low cost country. In 2009, the costs of labor and logistics, as well as labor availability, were viewed as less competitive in China than they were in 2008. To cope with the cost pressure, although some companies in China were upgrading their manufacturing processes to develop and capture economies of scale and scope, we warned that to be in a strong position to profit from sales in China, manufacturers must view China less as a low-cost country and more as a competitive manufacturing and sales environment. We also learned that, when companies compete on cost and performance, they are increasingly interested in implementing sophisticated long-term strategies to enhance product competitiveness and supply chain efficiency.

**Exhibit 1**  
*China's Growth Is Driven by the Global Integration*



Source: Booz & Company

Following the above identified trends, in a business environment that is increasingly challenging and in which the quick turnaround of products and services is more important than ever, companies need to not only integrate all of their parts in decision-making processes, but also to involve major suppliers and customers in those discussions. Unfortunately, from our assessment of companies that we have recently worked with, we found out that many companies in China are doing a poor job in managing their extended supply chain, which have by large resulted in increased cost and working capital, as well as unsatisfactory service levels. For the retailers, manufacturers, and suppliers coordinating so many moving parts, overlooking the necessity of S&OP could be fatal. Even 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.

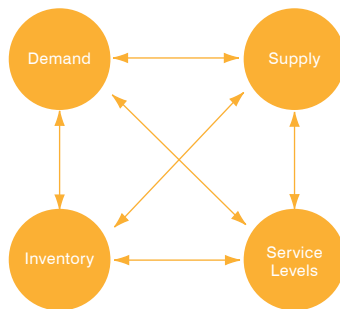
In terms of how the S&OP process actually works, cross-functional executives from sales, marketing, operations, finance, R&D, and IT meet every month (or even more frequently) and, at the very least, align marketing and sales programs with

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 2). 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 2**  
**Balancing Customer Service, Inventory, and Cost-to-Serve**

- Different demand scenarios
- Demand variation levels (core vs. seasonal products)
- Impact of uncertainty (forecast error)
- Inventory investment
  - Overall levels
  - Deployment balance
- Inventory storage points: raw vs. in-process vs. finished goods



- Different production scenarios
  - In-house vs. outsourced
  - Low-cost vs. most responsive
- Supply cycle time sensitivity
- Supply reliability sensitivity
- Lead time and fill rate
- Differentiation
  - By customer
  - By product
  - By time of year
- Allocation rules

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 3*).

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 3**  
*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

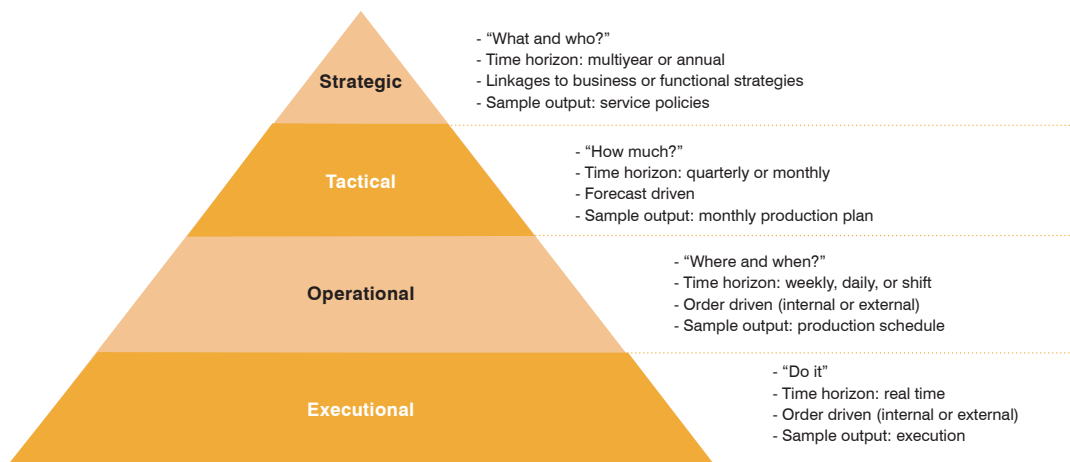
A fresh look at S&OP goes beyond holding meetings more frequently and involving more groups in the process. Rather, there are critical step-change capabilities that companies need to consider in order to overcome industry complexity and collaboration challenges. There are seven key parameters to keep 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 4*).

**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 with each.

*Exhibit 4*  
Architecture for S&OP Decisions



Source: Booz & Company

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 5). 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.

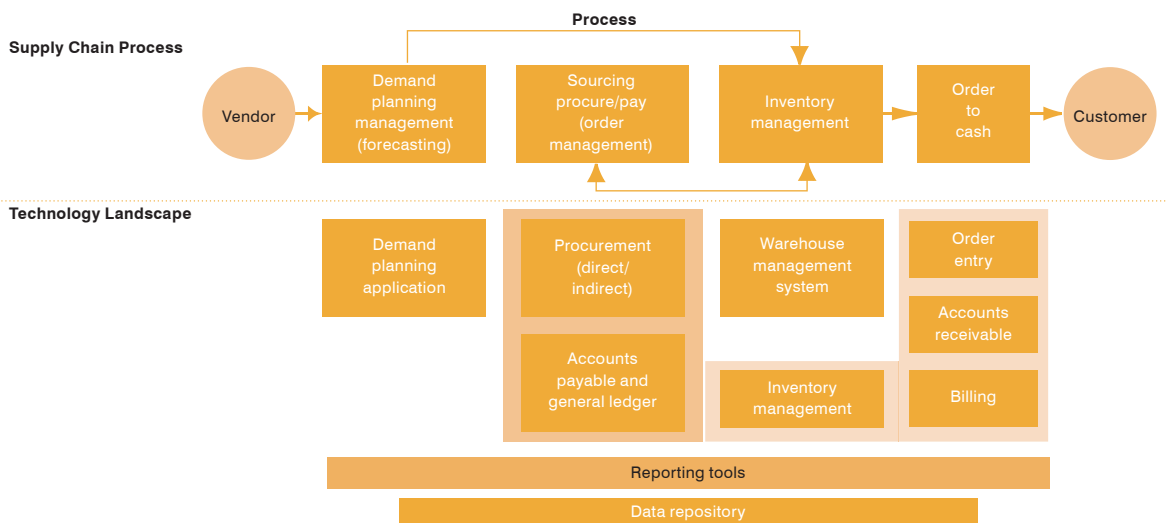
**6. Account for Unpredictable Elements in New Product and Promotion Cycles.** One of the ways companies are reacting to changing

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 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

**Exhibit 5**  
*Integrating Technology into the Supply Chain*

**SUPPLY CHAIN PROCESSES AND SUPPORTING TECHNOLOGY**



Source: Booz & Company

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.

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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.

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