IDC Manufacturing Insights

Modern Sales and Operations Planning in the Consumer Products Industry

WHITE PAPER

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IDC MANUFACTURING INSIGHTS OPINION

Sales and operations planning (S&OP) remains an area of particular interest to consumer products companies. It was the highest-prioritized application area in the IDC vertical markets IT survey in 2012 and has been a strong topic of discussion with IDC Manufacturing Insights clients in 2013. We continue to see robust interest in this marketplace, but clients are now wrestling with the question of implementing an S&OP point solution versus a broader, more integrated planning approach. While S&OP has in the past been largely the purview of smaller, niche software vendors, that's no longer the case, with market-leading options now available from the larger platform vendors. One consequence of this is the appeal, then, of the broader integrated planning platform as a way to better align demand and supply and come to a consensus view — rapidly and repeatedly.

IDC Manufacturing Insights surveys certainly support the fact that consumer products companies are identifying S&OP as a top priority. This is interesting given that the concept has been around for 25 years. While the reemergence of S&OP as a priority has to do primarily with the stress that the global recession put on so many businesses and the realization that in a volatile demand/complex supply business environment, all constituents in the planning process need to be aligned and focused around a consensus view of the business, it is also a function of the progress that technology vendors have made in modernizing S&OP applications and in better aligning these tools with the evolving needs of the consumer products company.

One can also make the argument that an effective S&OP process is as much about the business process as it is about the tools to facilitate that process. Further, as the external environment changes, so do the internal business processes, which in turn change the way that S&OP functions within the business. Particularly when businesses undergo the kinds of substantial changes that we have seen over the past few years — things like deeper outsourcing, globalizing supply networks, and higher levels of product customization — it heightens the need to reconsider and redefine S&OP.

The other factor driving the increased interest in S&OP is the need for greater agility in the business. Demand volatility is requiring companies to react more quickly to demand changes and, in turn, drive those requirements into the supply side of their supply chain. This has given rise to an "operational S&OP" that must iterate quickly and more frequently and support a business requiring higher levels of resiliency.

CURRENT SITUATION

The accelerating pace of the consumer products market is putting pressure on companies to be more agile and run the clock speed of their business more quickly. Many consumer products companies are facing sub-48-hour order lead times, often with poor supporting capabilities.

The requirement for a more agile business falls primarily on the shoulders of supply chains, which are expected to be more nimble and responsive; yet many of the things they do are at odds with this expectation. Indeed, consumer products supply chains continue to be affected by both internal choices and external forces relating to agility and responsiveness.

Internally, consumer products manufacturers are running complex and extended global supply networks as a consequence of globalization and the chase for "low cost" manufacturing:

- These businesses now experience significantly longer product lead times than ever before, driving a level of complexity in the supply chain that can prove problematic, particularly if agility and responsiveness are required.

- The supply side of the supply chain remains incented on metrics such as operational efficiency and capacity utilization that work against flexibility and agility.

Externally, consumer products companies are facing fundamental changes in consumer behavior, driving significantly higher levels of demand volatility that is at the heart of the accelerating pace of the marketplace. The "modern consumer" uses ubiquitous access to information to make more informed decisions and purchases:

- Mobility and social business connectivity are transforming the way that people interact with each other and with consumers, customers, and manufacturers.

- Traditional forms of outreach are quickly being augmented, and in some cases replaced, by these new ways of communicating, reporting, and promoting.

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- Peer reviews and recommendations are driving brand switching, and private label alternatives are becoming more popular.

- Modern consumers are increasingly intolerant of latency; once they make a purchase decision, they "want it now."

Although these internal and external pressures are not new, the extent to which they impact the consumer products business continues to grow. The role of inventory, for example, as a buffer between increasingly quick and volatile product demand and extended, complex supply simply isn't as effective today as it was even three years ago. The net effect of these realities, then, has been to put immense pressure on consumer products supply chain organizations to improve speed and responsiveness.

S&OP Defined

The S&OP process has been around, in one guise or another, for decades. It can be a short-term process, a long-term process, both, or something in the middle. It defies clear definition, and it ranges from involving a limited number of functional areas to a truly integrated enterprise activity. It is a business process that encompasses a large number of people and functional areas and a large amount of information and is often being repeatedly redesigned.

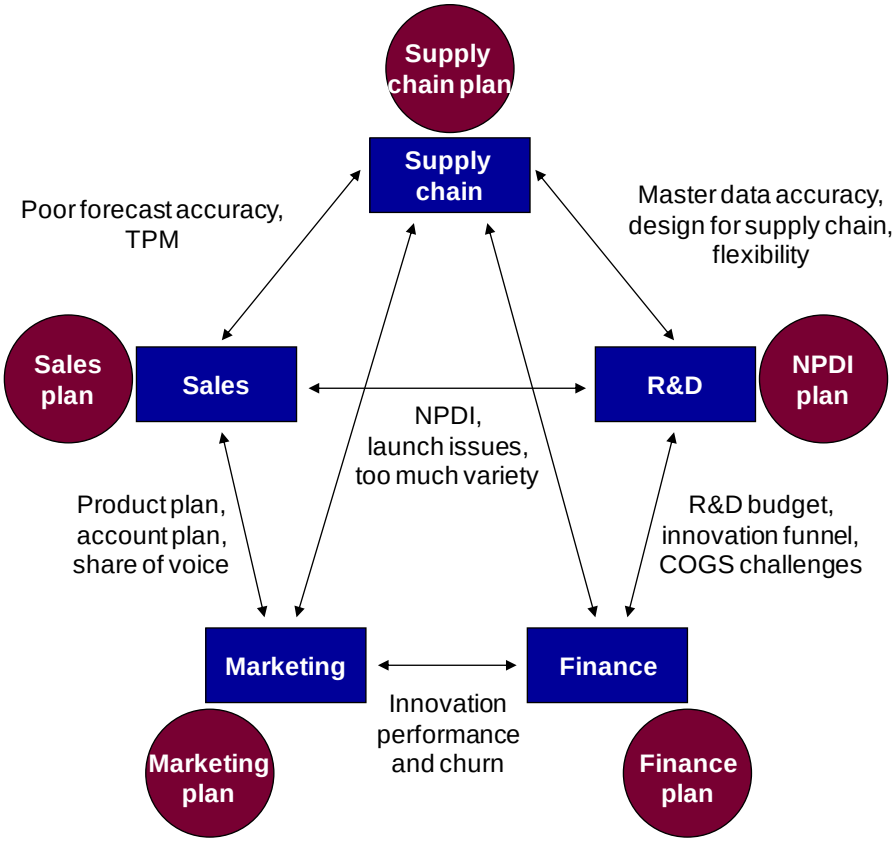
In many ways, consumer products companies have been the early adopters of S&OP — certainly among the innovators. The nature of demand variability and the challenges associated with improving demand forecast accuracy to better serve customers are at the heart of S&OP. As supply chain planning has risen in both profile and importance over the past 5–10 years so has the impact of a well-designed, technology-enabled, effective S&OP process. Companies have found significant benefit in automating and integrating both their supply-side and their demand-side planning processes and have seen dramatic improvements in business key performance indicators (KPIs) like demand forecast accuracy and customer service–level metrics.

At its core, the problem S&OP has tried to solve and continues to try to solve is a lack of coordination between business functions. Whether marketing, sales, R&D, finance, or supply chain, each has its different business requirements and unique inputs and outputs to deliver its particular function in achieving the strategic plan of the business. What has tended to happen, though, is that each of these functions, operating in silos, has its own "business plan" and asks the business to run off multiple "versions of the truth." This inevitably results in less-than-optimal achievement of KPIs (i.e., cost delivery or service-level delivery) and stresses the ability of the business to achieve its revenue and profit targets. In times of strong economic growth, this lack of coordination can be hidden, but when growth slows or product-mix

challenges emerge, as it has over the past few years, a better approach becomes critical. In Figure 1, we illustrate some of these inter-functional challenges and the preponderance of multiple plans.

FIGURE 1

Inter-Functional Challenges



Source: IDC Manufacturing Insights, 2013

… and Differentiated from Integrated Business Planning

Though the terms are often used interchangeably in discussions of S&OP, it is the view of IDC Manufacturing Insights that "sales and operations planning" and "integrated business planning" (IBP) are, in fact, two different things. Integrated business planning is the overarching, holistic process of supply chain planning, including demand planning and sensing, supply network planning, factory production planning, and S&OP. Sales and operations planning, while linked to both demand and supply planning, is ultimately distinct and separate as the process in which the consumer products company

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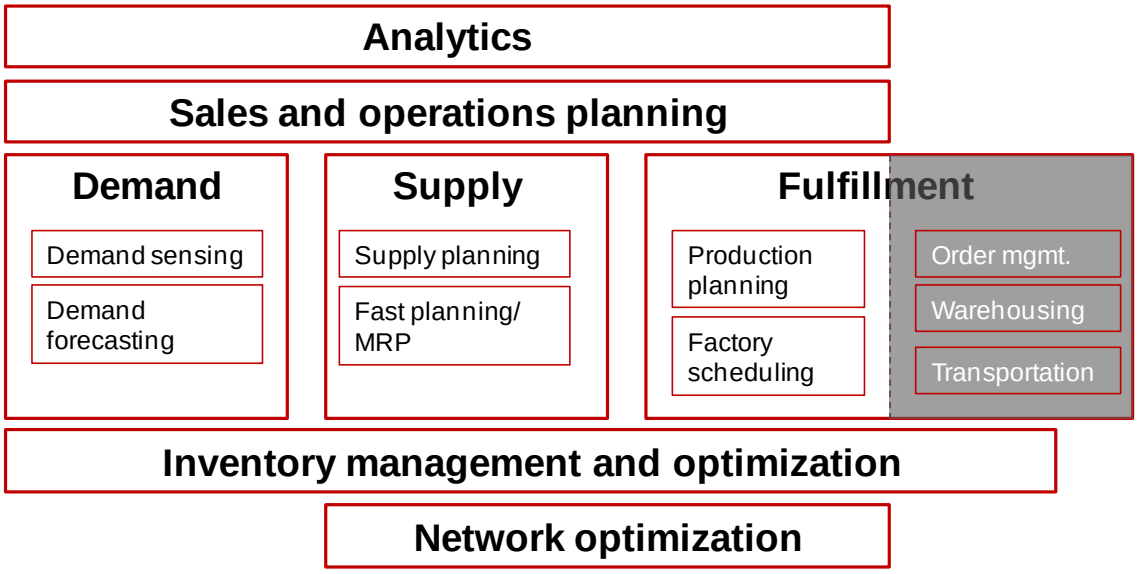
arrives at a feasible, consensus business plan shared across multiple constituents. The entirety of Figure 2, for example, constitutes IBP, even as S&OP plays a key orchestrating role.

FIGURE 2

Integrated Business Planning



Source: IDC Manufacturing Insights, 2013

The Trend for S&OP

Are consumer products companies just not able to get S&OP right, or does the very dynamic and changing nature of their businesses make regular redesign inevitable? While there are certainly examples of the former, it is our opinion that the breadth and complexity of the consumer products value chain simply necessitate an evolving process: *S&OP is more of a journey than a specific destination.* The ever-changing nature of S&OP also suggests that those companies that best leverage S&OP recognize the need for flexibility and adaptability — and resilience perhaps — in the underlying approach to the process.

It is the view of IDC Manufacturing Insights that the core component of S&OP, say 60%, should be fixed and established (i.e., how you develop a forecast, assess inventory positions), but the remaining 40%, which is about how the process works and how people interact, ends up evolving over time as new people or new market conditions emerge.

An evolving S&OP process might, for example, require greater key supplier and/or key customer involvement — particularly as the development and implementation of new products become ever more

important in a world of growing private label. Or it may be that the S&OP process needs to be more closely integrated with the longer-term strategic planning process.

Regardless of the reasons, best-in-class S&OP implementations must recognize the changing nature of the consumer products company's business and be able to adapt and easily support evolving interconnections and interactions.

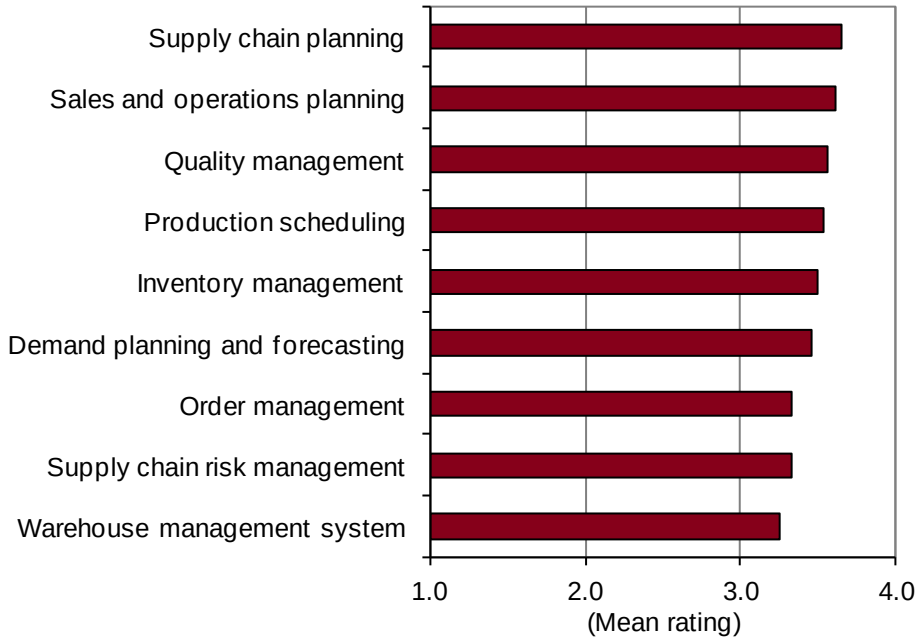
The Importance of S&OP in the Current Business Environment

The past five years have put enormous pressure on consumer products companies. These businesses may have been less affected by the global recession than some other industries, but they did not go unscathed. Low consumer confidence, and the desire for value, has put pressure on premium branded goods in favor of value or private label brands. The product-mix effect has created high levels of margin volatility and a renewed focus on cost efficiency. In this context, S&OP is critical.

In a recent survey conducted by IDC, manufacturing respondents indicated which applications they expected to invest in for 2013. Unsurprisingly, S&OP was in the top 4. Figure 3 illustrates the ranking.

FIGURE 3

Software Application Investment



n = 95

Source: IDC's *Vertical Group IT Survey*, 2013

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The Need for Resiliency

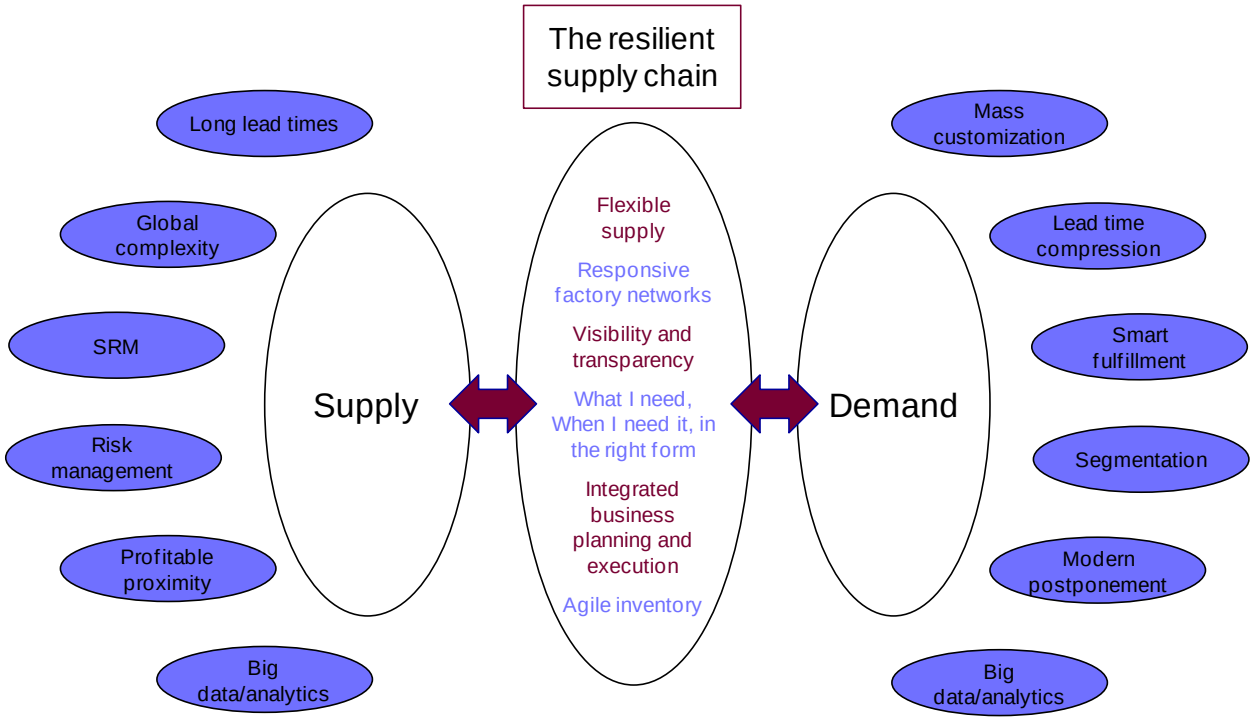
As we discuss S&OP, and the need for a more integrated supply chain planning capability, we have to consider the implications on the resiliency of that supply chain to respond to unanticipated changes in the demand side that affect supply and vice versa. At IDC Manufacturing Insights, we define the term *resiliency* as the capability of a manufacturing supply chain to ensure and preserve the continuity and consistency of product supply and meet business obligations for product delivery and service to customers in the face of both short-term operational and longer-term strategic disruptions. At the same time, resiliency is also about the ability to quickly adapt to changing business conditions while maintaining the core purpose and principles of the business. For example, for a consumer products company whose first principle for supply chain is to be the low-cost provider in its market segment, responding to business disruptions by increasing structural costs over an extended period of time would not be representative of a business that had high levels of resiliency. Likewise, a resilient business whose first principle was service would be able to adapt to disruptions without significant impact to service levels.

The manifestations of resiliency, as well as the drivers, will differ for different companies and relate differently to different processes. For some, it may be about improving inventory performance (getting to a more "agile" inventory); for others, it may be about visibility into mixed factory networks; and for still others, it may be about supplier diversification. Figure 4 is a depiction of these varied implications and inputs to the resilient supply chain. Supply chain resiliency is about both better managing inputs from the demand side of the supply chain and being more responsive on the supply side of the supply chain. For the consumer products manufacturer, the unpredictable nature of demand and the desire of customers and consumers for "personalization" will be principal challenges to resiliency, with a focus on demand sensing, S&OP, and factory production planning.

In the context of S&OP, resiliency means finding ways to manage supply chain planning in a more flexible way and at a more rapid pace. It also means better integrating the breadth of planning activities into a cohesive whole. We will touch on the notion of faster planning further in this white paper, and that is certainly part of being more resilient, but it is also about how the business approaches inventory and the form in which that inventory is stored. Using postponement techniques, for example, to hold inventory in a less "finished" form may allow the consumer products company to better meet volatile demand without major structural changes.

FIGURE 4

The Resilient Supply Chain



Source: IDC Manufacturing Insights, 2013

BEST PRACTICES

Consumer Products Companies' Approach to S&OP

This is partly a discussion of process maturity and partly a discussion of technology. If a consumer products company is relatively immature in S&OP, then the starting point must be to define both internal business processes and key external collaboration partners. Certainly, companies fit this description, but in the experience of IDC Manufacturing Insights, the majority of large enterprise manufacturers already have a defined process, and although the process is not perfect, they find themselves constrained by the lack of an effective IT tool to facilitate it.

Overall, S&OP is a complex process with many moving parts. The ability to have an effective process without technological enablement is increasingly difficult, particularly as it relates to real-time simulation/"what if" capabilities and cross-functional collaboration. The challenge of "big data" and practical analytics simply reinforces the need for IT capability and an S&OP application that can leverage

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the massive amounts of available data — both internal, downstream from retail and upstream from collaborating suppliers — to arrive at a better consensus view and, frankly, to do so in a timely enough fashion to be useful to the business.

As stated previously, demand volatility is requiring consumer products companies to react more quickly to demand changes and, in turn, drive those requirements into the supply side of their supply chain. This increases the need for embedded analytics and real-time simulation capabilities as well as an application that integrates analytics, a unified process model, collaborative processes, and process management capabilities to enable the most effective S&OP process.

Prerequisites and Key Steps Involved in Successfully Implementing S&OP

Implementing an effective S&OP program has proven to be challenging for many consumer products companies. This is partly because of the level of complexity that is inherent in bringing multiple functions together into a common process, but it can also be because the process often has unrealistic expectations — at least at first.

At IDC Manufacturing Insights, we've heard the comment "I've implemented S&OP, but frankly, I have not observed much change" many times from manufacturers, only to find that there was no common business process being followed, the process was being done exclusively through sales, or the IT tools necessary to support the endeavor were not supplied. Whatever the reason, it is important that when undertaking an S&OP journey, consumer products companies keep in mind a few simple rules:

- Companies need to ensure that a clearly defined project team is in place (executive champion, steering team, and process design team).
- Companies must be clear and pragmatic about the benefits to the business and how quickly they will accrue.
- To be effective, S&OP must be a cross-functional effort across sales, marketing, R&D, manufacturing, procurement, supply chain, and finance. For example, even if companies roll finance into the process in a second phase, they need to make sure that finance is involved in the up-front design and implementation process.
- As business complexity and the need for greater speed intensify, the old adage that S&OP is "80% process, 20% IT" seems to apply less and less. Companies should define the process first, certainly, but recognize that business complexity will be far better managed, and at a pace commensurate with the "speed of business," with a purpose-built S&OP application.

Ideal Breadth and Depth of Participation in the S&OP Process

In other words, who should be involved?

As a general rule, S&OP is most successful with the broadest participation possible. At a minimum, sales and supply chain should be involved, but where companies also involve finance, marketing, and/or product development, the positive results can be significant. This breadth of involvement doesn't have to start right from the very beginning, however, and anecdotal evidence suggests that consumer products companies may be better served by starting slowly — for example, with just sales and supply chain — and adding broader functional participation as the process matures.

The determination of the breadth and depth of participation will also depend upon the type and purpose of the S&OP process. Many companies, for example, run different levels of S&OP at different frequencies. An "executive S&OP" may be run quarterly, or even semiannually, and involve only senior leadership of the major functions. Conversely, an "operational S&OP" is run more regularly, certainly monthly or even weekly, as a company's fiscal year draws to a close, and participation will be both functionally broad and sub-functionally discrete. So, for example, the "operational S&OP" might include a sales director, supply chain planning manager, marketing manager, and product development manager as regular participants but also include purchasing or logistics representation when business issues dictate.

Ultimately, the purpose of the S&OP process is to develop a cross-departmental consensus business plan that is achievable, given the business aspirations and constraints, and ensures that every function and sub-function within the business is working to achieve the same goal. Leading consumer products companies do this most effectively by involving as many areas of the business as is practical.

Maturity of S&OP

When an S&OP process is properly implemented, the benefits can be extensive. There are the "hard," easily quantifiable improvements in customer service levels, reduction of inventory, more consistent supply production, and shorter supplier lead times — benefits that have been demonstrated by consumer products companies over and over again when implementing S&OP.

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But there are also the "softer," less easily quantifiable improvements that can affect key performance indicators in indirect, but impactful, ways. These improvements include better working relationships with other business functions, ownership in "achievable" targets, a sense of teamwork, a "can do" approach to delivering to the customer, and, of course, an agreed-upon and aligned plan across the company. Another soft benefit from S&OP is the ability to better anticipate future business changes through the regular process of consensus planning — that is, making better, faster decisions.

FUTURE DEVELOPMENTS

The Role of Technology

New and emerging technologies have certainly advanced the art of "the possible" with respect to S&OP. The extent to which "aspiration" had exceeded reality is now being regularly challenged with the advent of new technologies and new approaches.

Perhaps more so than any other business process, S&OP relies on the timely availability of data and information. The fact, then, that better and fuller data sets are available to the S&OP process — often in real time — makes the result of the process, the consensus plan, both more robust and more flexible. We all hear the term *big data*, and while the notion may resonate more with some readers than with others, the reality is that big data analytics capabilities are poised to significantly reduce the latency of analysis and improve the ability to facilitate better, faster decisions. It is commonplace, in the experience of IDC Manufacturing Insights, to see consumer products companies performing S&OP at a far higher, and faster, level than was previously possible.

Similarly, the availability of cloud-based S&OP applications provides the opportunity for consumer products companies to more quickly leverage evolving S&OP best practices and to collaborate within the application with both remote intracompany employees and select external partners — all within a common, easily accessed tool.

Next-Generation S&OP

So, what does the future hold for S&OP?

We have made the argument that S&OP is more critical than ever in unpredictable economic conditions, and the investment priorities for manufacturers seem to bear this out. Consumer products company value chains will not suddenly become simpler as increasingly available data sets make business planning and execution more — not less — complex.

At IDC Manufacturing Insights, we certainly expect to see leading consumer products companies push their S&OP process to be more collaborative and forward looking while integrating it with their multiple planning horizons. We have seen some of these companies run different "flavors" of S&OP, depending upon the level of decision making required. So a company, for example, may run an operational S&OP weekly but an executive S&OP monthly. Companies that do S&OP well view it as a way of doing business — no debate, this is the process that you will follow.

Regardless of these "flavors," for the S&OP process to be successful, all participants must be able to either directly benefit or see that the overall business benefits. In discussions with manufacturing companies running successful S&OP processes, we found that the claimed business benefits are quite consistent:

- Inventory reductions of 10–20%
- Significant improvements in NPDI, principally in lead time reductions of 15–25%
- Customer service improvements of 2–5 percentage points
- Revenue gains of 2–5%

Although revenue gains are difficult to accurately validate, it does seem reasonable that improved service levels and better business coordination will drive incremental business. But beyond these overall business benefits, successful implementations of S&OP also offer clear benefits at a functional level. Figure 5 illustrates some of these benefits.

IDC Manufacturing Insights believes that this approach of recognizing inter-functional benefits will help justify the business case for either continued or increasing investments in S&OP.

Analytics will be enhanced through the use of application tools so that senior executives have full visibility into the components of delivering profitability and business growth as well as into the risk in a given plan. It is critical to understand both the underlying assumptions and the upside/downside risk.

We would expect to see a core component of S&OP begin to standardize (certainly in terms of internal business processes and functional coordination) while retaining the flexibility to respond to changes in both the internal (people, stakeholders) and the external (suppliers, customers, consumers) marketplace. S&OP will not stand still and so will continue to be "redesigned" every few years — not because we didn't get it right but because it is a journey.

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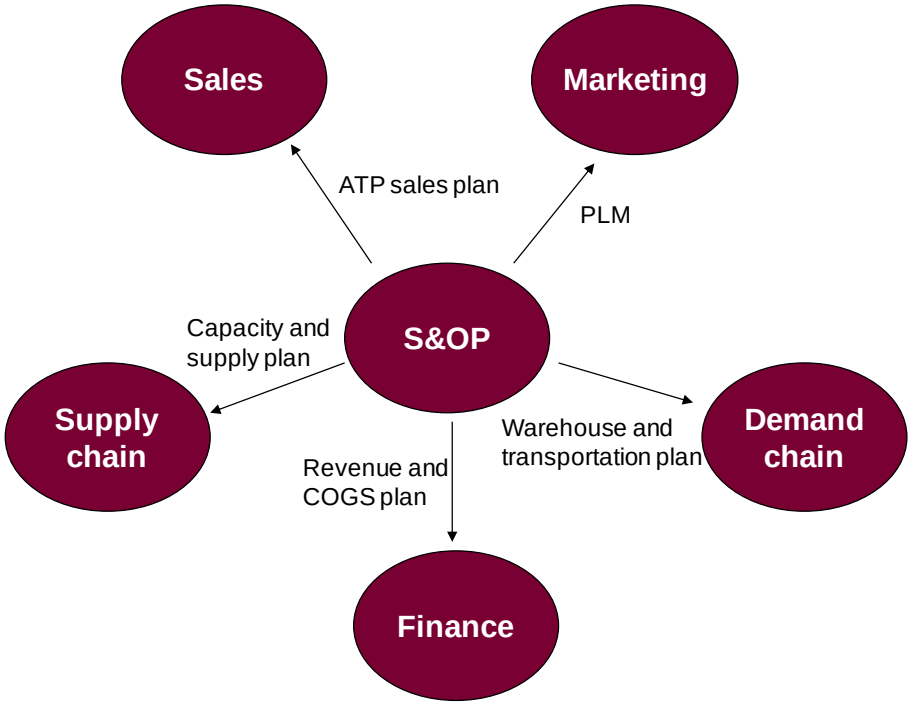
FIGURE 5

Inter-Functional Benefits



Source: IDC Manufacturing Insights, 2013

The "S" in S&OP

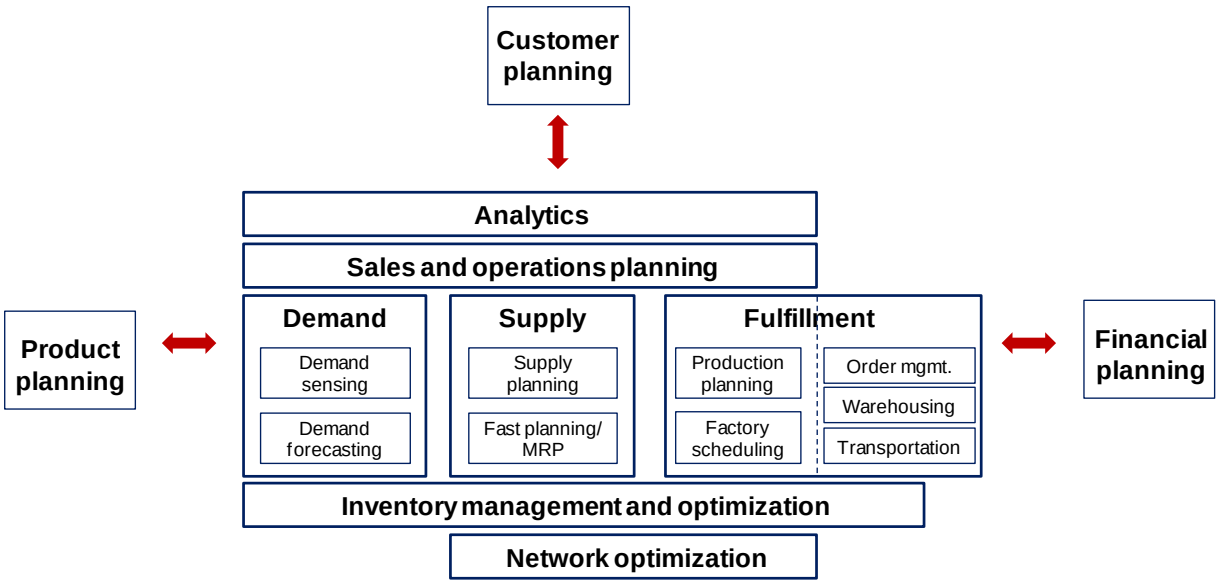
Sales and operations planning tends to be the responsibility of the supply chain in most consumer products companies — both when things go well and when they go badly. Yet the "S" in S&OP stands for sales, so it is a fair question to wonder about the role of the sales and marketing organizations in facilitating the process.

Certainly, the view of planning is changing in many organizations — moving from a disconnected set of individual activities to a continuous business process essential to the performance of the business. Although today a significant number of consumer products company supply chain organizations still operate planning capabilities characterized by multiple independent business processes and disconnected IT tools, resulting in extended planning horizons, poor interaction between the supply chain and sales organizations, and inadequate service delivery, this is changing. There seems little question that an integrated planning capability is likely to be more agile and have an inherently quicker clock speed than a collection of best-of-breed tools, and in 2013, we are seeing consumer products organizations increasingly recognize the appeal of a more integrated planning stack as a contributor to speed and overall business responsiveness.

An integrated supply chain planning capability is appealing from a supply chain perspective, certainly, but it is the ability to drive consensus planning (through the S&OP layer) beyond the supply chain that is so appealing. There has been a lot of discussion in the consumer products industry over the years about the importance of integrating supply chain, customer (sales), and financial planning, but it is the view of IDC Manufacturing Insights that integrated business planning offers the opportunity to also align with product planning — both the product "base" and innovation. That concept is illustrated in Figure 6.

FIGURE 6

Integrated Planning and the Role for S&OP



Source: IDC Manufacturing Insights, 2013

Indeed, while supply chain planning vendors continue to have principal discussions with the supply chain about integrated planning, the sales organization is quickly becoming an important second player — 1 and 1A, if you will — and is a key participant in many decisions. Some of these decisions are illustrated in Table 1.

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TABLE 1

Supply Chain/Sales Tasks

Responsibility	Task
Supply chain/sales	Perform a strategic assessment to determine the importance of speed and responsiveness in your business based on KPI priority
Supply chain	Do a capability assessment of your planning organization; clearly define areas where there are opportunities for better process and IT tools integration
Supply chain	Be clear about the maturity level of your planning organization and the extent to which best-of-breed versus integrated planning makes sense
Supply chain/sales	Invest in an integrated planning suite based on company priority and importance; consider one step at a time, beginning with the application area that drives the most immediate benefit

Source: IDC Manufacturing Insights, 2013

IDC Manufacturing Insights expects that consumer products companies will embrace the notion of an integrated planning suite and will invest accordingly. Indeed, we are already seeing traction from planning vendors in the SCM space in selling integrated planning capabilities to the marketplace — both to the supply chain and to sales.

Clearly, S&OP is not a magic bullet, and most companies have some form of the process, but there is also much progress that can be made. Although we will steer clear of a detailed maturity assessment in this document, it is useful to at least touch on some of the different levels of sophistication we see across the industry:

- A *basic* S&OP process tends to be informal, will maintain a functional perspective, and will likely not have broad business representation. It is not unusual to see just sales, marketing, and finance involved, with multiple plans in place. Frequency will be quarterly, perhaps monthly. The basic S&OP also tends to be more rearview-mirror driven rather than proactive. Companies at this stage may not have a centralized scorecard with joint KPI review.

- An *integrated* S&OP tends to be a more established, formal process with a cross-functional consensus focus to get to one plan. Functional representation will expand to include supply chain and perhaps R&D. Frequency will be monthly, perhaps even weekly, although the process does tend to still look backward.

- A *collaborative* S&OP is an established process, often with software tool facilitation. Full cross-functional consensus creates one playbook for the entire business. S&OP frequency is weekly, sometimes less than that if gap-closing measures are required, yet the process does not lose sight of longer-term planning horizons. What sets the

collaborative S&OP apart most distinctly from its less mature stages is the ability to look forward as well as backward and to perform both what-if evaluations for business trade-offs and risk-reward analysis to achieve business objectives.

The point of not losing sight of longer-term, or more strategic, planning horizons is also an important one. It is our contention that the S&OP process has largely operated in the operational decision-making realm, and at IDC Manufacturing Insights, we think this needs to change. In the current turbulent economic times, companies clearly must be iterating their S&OP process more frequently, ideally utilizing tools to facilitate the speed of the process. But they must also do a better job of linking the operational nature of short-duration S&OP decisions with the medium-term and longer-term nature of tactical and strategic decisions that are part of the annual or long-term plan development process.

ESSENTIAL GUIDANCE

IDC Manufacturing Insights has made the argument in this white paper that S&OP is no longer the niche, point solution that it was in the past but that it has evolved to become a truly integrated planning platform enabled to better align demand and supply and allow the consumer products company to come to a consensus view — rapidly and repeatedly. We believe that a "confluence of capabilities" — in terms of companies' ability to measure and differentiate demand and handle large volumes of data as well as the availability of comprehensive vendor IT solutions — can finally put the historical challenges of S&OP into the rearview mirror.

Putting an effective sales and operations planning process in place can have an enormously positive impact on the ability of a consumer products business to deliver its financial obligations. Particularly in the current uncertain business climate, S&OP can provide a powerful way to drive better functional coordination and synchronization.

You are not alone if your business has some of the following challenges:

- Multiple functional business plans
- Unrealistic or contradictory financial targets
- Limited participation from supply chain or finance in the business planning process
- Difficulty in accessing or consolidating data
- Inability to gain consensus to close business gaps

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- Failure to achieve innovation launch targets
- Poor demand forecast

If these problems sound familiar, your business needs to implement an S&OP process, reconsider the current process, or implement one of the application tools available in the marketplace.

For the consumer products company that is looking to better integrate the various elements of supply chain planning, is struggling with the lack of consensus around "the plan," or is anticipating making investments in facilitating technology, we suggest the following:

- Take a look at your S&OP process to see where you are in terms of process maturity — whether basic, integrated, or collaborative — and relate it back to the business pain point that you are experiencing. Particularly if the problems seem to come from multiple plans or from failures in communication between functions, then an improved S&OP process may make a significant difference.
- If you have no S&OP process in place, start with a basic process inclusive of marketing, sales, finance, and supply chain and try to arrive at a consensus plan. If you are already a bit further along in your S&OP journey, consider adding R&D and a key customer or key supplier. At this point, it also may be appropriate to look for application tools to facilitate data management. There are many different flavors of S&OP tools, so make sure to look at those designed to work with the complexity of the consumer products value chain.

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