Sales & Operations Planning



Simpler, Better, and Needed More than Ever

by Robert A. Stahl

PREVIEW.

With this issue, we introduce a new column that will be a regular feature in Foresight. Sales and Operations Planning (S&OP) has become perhaps the most significant innovation of this generation for forecast process improvement, bringing demand people and supply people together in a structured series of steps. But the effective uses of

S&OP are not widely understood, and while practitioners need to hear what is working, it is imperative for them to learn what is not working, and why, and how companies are correcting the problems. In this inaugural column, Bob Stahl lays the foundation for understanding what the executive component of S&OP is – and where it fits in the organizational hierarchy.

INTRODUCTION

A number of years ago, a mentor told me that the ultimate sophistication was simplicity – that's because simple things work, while complex things get studied, and then studied again. Sales and Operations Planning, in its evolution, has become simpler and simpler, which has made it better and better – a powerful combination.

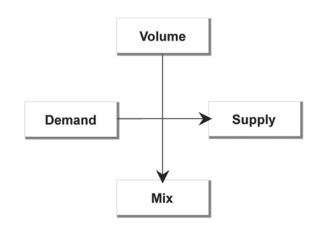
Because it is simpler and better, AMR, Aberdeen, the Gartner Group, and other supply-chain research outfits have found that S&OP is one of the most common pursuits of manufacturing companies. The effective use of S&OP is foundational for a business to remain competitive and financially sound, especially in a widening and ever more perilous economic landscape. S&OP may have even become a component of survival.

The benefits that companies have achieved today using S&OP are measured in more than numeric terms – S&OP has given top-management people the control they need in these troubled times that enables them to be masters of their own destiny, rather than victims of circumstance. As one executive put it, "Executive S&OP gives us a better understanding of demand and capacity constraints. Communication . . . has improved dramatically, along with a consistent forward vision."

A problem exists, however. The common acceptance of the term has brought about a shift from its initial definition to now include tools and techniques that operate at lower and more detailed levels, including individual products and customer orders. In this broader definition, it has become less attractive to the people who have to make it work – executive management. In my series of columns, I will be using the term Executive S&OP to refer to that function as originally conceived, which resides at the top of the supply chain, where executives steer the ship. The proper use of S&OP may not be what you hear and understand.

PREDICT, PERHAPS...BUT PREPARE ALWAYS

Balancing demand and supply is not only fundamental to a manufacturing company, it is essential. Not much else matters when demand and supply are out of balance, because either customers, or owners, or both are unhappy with performance. It's only when demand and supply are in balance that good things can happen.



The first part of keeping this balance is to predict future demand as accurately as you can. The second part is to prepare on the supply side for that demand and its intrinsic variability. At the Forecasting Summit in Orlando in February 2009, David Orrell, the keynote speaker, noted that ". . . the aim [of forecasting] is less to predict the future than to prepare for it." This can't be done without managing demand and supply as a set. To endeavor to predict the future and not bother to prepare for it and its uncertainties is, in a very real way, to miss the entire point of forecasting—and of S&OP. It's the objective of Executive S&OP not only to predict the future, but to prepare for it – in other words, to see and correct imbalances while there's time to deal with them in a cost-effective manner.

The concept that demand and supply need to be in balance is right up there with Mom and apple pie. The real question is: how do you do it? That brings us to the second matched set of fundamentals. Balance between demand and supply is done at two levels: the volume (some call it the aggregate) level, and the mix. These are two very separate, unique things, involving different people and strikingly different processes. Companies that use one process for both practices typically don't do that great a job with either one.

VOLUME	MIX
• How much in total?	• Which items?
• Rates of demand/ supply	• Timing & sequence
• The big picture	Specific details-high- ly granular
• Families	• Individual products & order
Strategy/policy/risk	Tactics/executions
• Monthly for 18-36 months	• Weekly/daily for 1-3 months
Executive responsibility	Middle-management responsibility

Here are the distinguishing points:

Issues of volume almost always precede those of mix. For example, if there's insufficient capacity (a volume issue), it typically must be resolved outside the scheduling (mix) lead time, and not by improving detailed sequencing in the short term. In other words, you can't fit ten pounds of something in a five-pound bag, no matter how hard you try.

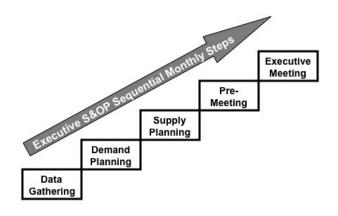
There's something very tricky here, however. Volume imbalances barely whisper for attention until they are in the mix space. Mix problems, on the other hand, scream for attention. In the example I just used, failure

to fix a capacity problem (volume) will always show up as a mix problem by not shipping to a customer cost-effectively and/or on time. For reasons like these, some companies mistakenly think that all of their problems are mix problems when, in fact, the real issue is a volume, strategy, or policy problem that goes unrecognized until it is in the mix space.

A properly designed and disciplined Executive S&OP process does not let this happen. Wise companies plan volume first and spend enough time and effort to do it well, not getting lost in the details.

EXECUTIVE S&OP MORE THAN MECHANICAL STEPS

One of top management's responsibilities is to set the overall conditions for supply-chain success so that routine things happen routinely – like making shipments on time, all the time, every time, and cost-effectively. Below is a graphic that summarizes the mechanical steps that are part of Executive S&OP. It does not, however, reveal the full breadth of the process.



Here's a full definition of Executive S&OP:

A decision-making process that:

- Brings balance to demand and supply at the family or volume level;
- Is the basis for establishing and setting necessary and appropriate strategy, policy, budgets, risk, and performance measures that lay the groundwork for future success;

Success does not come to those who get lost in the intricacy and detail, but rather to those who clear the smoke and sort the simple from the complex.

- Fully integrates with financial planning and projections;
- Becomes the forum for executive debate about alternative choices, creating a culture that allows the "ugly truth" to be put on the table while there's time to do something about it.

Running a business is a very complex activity, and it is becoming more so every day in this ailing economy. Success does not come to those who get lost in the intricacy and detail, but rather to those who clear the smoke and sort the simple from the complex. The evolution and simplification of S&OP has made it a very popular and effective tool for helping those in the corner office to do just that. Supported by data, when done properly, Executive S&OP can see the simple in spite of the complexities, allowing things to be achieved that were not before possible.

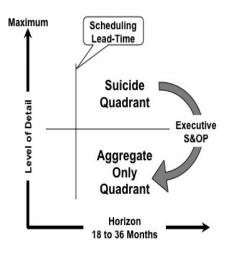
WHAT MAKES EXECUTIVE S&OP SIMPLER?

Although the basic concepts and principles of Executive S&OP have not changed much over the years, we now know a lot more about how to use them more effectively. For example, it used to be common practice for a company to predict the long-term future demand (forecast) with a maximum level of detail – by SKU, by customer, by warehouse, etc. That detail would then be added up to see the "family" picture. We now see the best-of-the-best S&OP companies not doing it this way.

A number of years ago – thanks to mass customization (SKU proliferation), global expansion with demand and supply, lengthening lead times, and more – we came to realize that operating a business at the maximum level of detail, far into the future, was getting too crazy. It was like trying to do the impossible, like living in the "suicide quadrant." It did not produce

the best results, and it was consuming an enormous amount of the sales, marketing, and financial people's time in non-value-added work. We realized that the detail outside the scheduling lead-time was less accurate than making simple "market-facing" family projections, correlated with extrinsic market models. In other words, we improved the process of forecasting by reducing the details—and simultaneously reducing work time.

The second integral part of improvement was the development of simplifying assumptions about mix, enabling inside- and outside-resource requirements, along with financial projections, to be calculated directly from market-facing families, without further detail. Both of these components of simplification



have attracted Sales and Marketing to the table because they can now do their job of forecasting simpler and better.

This simplification has also allowed top management to stay out of the detail, more effectively setting necessary strategies, policies, budgets, risks, and performance measurements. The result, for those who have been able to make the change, has been transformational.

CAUTION: SIMPLE DOES NOT MEAN EASY

Making Executive S&OP work to its best potential is typically not accomplished by doing things "better," but rather by doing something different to be better. This requires significant change to past experience and operating with less detail, which is often counterintuitive. For these reasons, executive discomfort will exist, and executive discomfort translates to risk – both personal and organizational. Mitigation of this risk is a must if the necessary top-management leadership is to be engaged.

That's accomplished with a progressive commitment to Executive S&OP, starting with a live, no-risk parallel pilot that fully demonstrates the practice in their environment, and with their people. This can be done within 90 days and is the basis of making a full commitment to deploy Executive S&OP across the entire company. Once fully deployed, the third phase can be accomplished – which is full financial integration, with simulation and scenario analysis, accompanied by risk analysis. This is shown graphically at the right. More on this implementation path of low risk, low cost, and high impact in a future column.

Contact info:

Robert Stahl RStahlSr@aol.com (508) 226-0477



Bio: Bob Stahl has spent the last 30-plus years as a practitioner and consultant to manufacturing companies, developing leading-edge processes for their manufacturing, logistics, and supply-chain practices. He is a teacher, writer, and S&OP coach and the coauthor of six books, including Sales & Operations Planning - The How-To Handbook, 3rd Edition, and Sales and Operations Planning - The Executive's Guide.

