

TLI – Asia Pacific White Papers Series

DEMAND SHAPING: THE ILLUSION OF CONTROL

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DEMAND SHAPING: THE ILLUSION OF CONTROL

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**THE TOP 10
MYTHS AND REALITIES OF S&OP**

(An invited Whitepaper)

by

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Foreword by

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Jointly organized by:



FOREWORD BY THE EXECUTIVE DIRECTOR, TLI – ASIA PACIFIC



“Demand Shaping: The Illusion of Control” is the theme of this second Executive Seminar /Master class in the 2010 THINK Innovation! Series.

We, at The Logistics Institute – Asia Pacific, are indeed, honoured to be partnering with the Singapore Workforce Development Agency (WDA) in bringing this first of a kind THINK series to the manufacturing and services sector. Our primary focus in this series is on Innovation, based on the belief that innovative transformation is perhaps an essential component to achieving key productivity growth in these sectors.

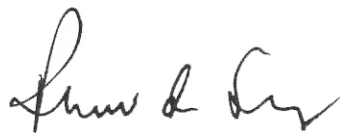
Over the last year, we have witnessed somewhat extreme shifts in the global business environment – demand shifts. Thus, demand forecasting and management and its agile synchronization with operations is perhaps the most significant business process that has perhaps impacted the ability of an organization to recover and sustain its relationships with the external and internal stakeholders and customers. Companies that can innovatively shape as well as more accurately predict demand and align this with operational assets will be the winners.

However, we should not succumb to the “illusion of control”. Gaba et al, the invited keynote speaker in this seminar and in the book, “Dance with Chance – Making Luck Work for You”, emphasizes that “by realizing and accepting that we don’t have control (over demand), that we actually gain more control.”

Sales and Operations’ planning (S & OP) is the processes which ensures that revenue (demand), costs and margins are aligned with operations plans. It is our distinct pleasure to invite this whitepaper from JDA and Oliver Wight that provides “straight talk” on S & OP now called Integrated Business Planning.

I sincerely hope that you will (continue to) engage, learn, share and network as professionals, managers and executives. Thank you for your participation in this series.

Yours Sincerely,



Robert de Souza (PhD)

THE TOP 10 MYTHS AND REALITIES OF S&OP

A new paradigm for sales and operations planning (S&OP) has emerged. After more than 20 years of focus on supply-demand balancing, today's S&OP integrates time-phased revenue, cost and margin plans with a company's operational plans. This process is also increasingly being used by executives to ensure that the company's operational plans are aligned with the company's strategic goals and priorities. With executives firmly in control and held accountable, this revised approach to S&OP — which some companies are now calling Integrated Business Planning (IBP) — is enabling significant improvements in overall business performance.

While S&OP (or IBP) best practices have evolved, elevated and transformed, some companies along with the suppliers that service them are still clinging to outdated processes that focus on historical data and near- or mid-term operational issues. This old-school approach has teams involved in creating S&OP plans that execute according to one set of numbers, while corporate and financial management are simultaneously communicating a completely unrelated set of financial plans and projections to the board and other stakeholders. These mixed messages lead to sub-optimized performance across the company. For example:

- Last-minute changes to plans are poorly communicated and managed
- Poor communications result in unsynchronized plans in the demand, supply and finance organizations
- When the unsynchronized plans result in performance failures, there is neither analysis to determine what went wrong nor the creation of procedures to avoid similar operational breakdowns in the future
- Opportunities to increase sales, service and profits are lost forever

As thought leaders and innovators in demand management and S&OP, executives from JDA Software and Oliver Wight Americas have been developing a new paradigm. Oliver Wight has been at the forefront in helping companies develop a process that integrates product/portfolio management, demand, supply and financial plans while ensuring linkage to a company's strategic and business objectives. JDA has been at the forefront in providing tools that enable and support the application of best practices for demand management, sales and operations planning and supply chain collaboration. Based on these efforts, we frequently find ourselves clarifying misperceptions about S&OP and its value.

In this paper, we will review the Top 10 Myths in S&OP. As a counterpoint, we also review the best practices in S&OP that enable innovative companies to better align all of their plans and strategies to drive improved

operational and financial performance. While organizational change is never easy, continuing with an outdated process is not the answer for companies wanting to stay competitive. Learn how transforming your S&OP process from a supply-demand balancing exercise to a strategic approach that integrates your entire business can increase supply chain visibility, improve customer service and ensure a better balance between demand, capacity and profitability.

The Myths and Realities of S&OP

The following is some “straight talk” about S&OP. Our intent is to help validate the S&OP processes that your company may be doing well and to highlight the areas that you should consider improving upon to realize greater value.

1. Who owns the S&OP process?

Myth:

The S&OP process should be owned or sponsored by the demand planning or supply chain function. These teams are in the thick of any supply chain issues and are best positioned to deal with them.

Reality:

S&OP is an executive process employed to plan and manage the business. Executives identify gaps between the latest product management, demand, supply and financial projections and the company’s previously defined strategic and business goals and objectives. During this process the executive team assigns actions and accountabilities for closing those gaps and reaches consensus on the realigned company plans. Because S&OP is an executive management process, it must be executive-owned and led.

When S&OP is “owned” by the demand planning or supply chain functions, the value of S&OP is sub-optimized. Misplaced ownership is one of the most common reasons why S&OP does not provide the expected benefits to the business enterprise. If the process is owned by supply chain management, it is viewed as a supply chain process; executives from sales, marketing, product management and finance fail to engage seriously in the process. If owned jointly by the supply chain and sales and marketing executives, it creates ill-will within product management and financial management. Decisions that affect these key areas are made without their vital input and support of the process. The new IBP paradigm is a strategic process that is sponsored, owned and led by your company’s senior executive. This process owner is typically the general manager, president or the person responsible for the P&L for the company, or a division of the company, with senior-level participation from cross-functional teams including sales, marketing, product management, operations and finance. Companies that embrace this approach also ensure global alignment across regions and operating divisions.

2. And the next problem S&OP needs to solve today is ...

Myth:

S&OP is a tactical, real-time process that enables the quick identification and response to problems as they arise. Supply chain planning applications that manage such tactics as daily replenishment and forecast planning are used to address any real-time issues.

Reality:

While every company needs to address real-time supply chain issues, this is not the purpose of S&OP. If your leaders focus their time on real-time issues (also known as fire-fighting), they are not thinking strategically over the long term. IBP or Advanced S&OP is an aggregate planning process that occurs monthly to ensure all company plans and strategies are aligned over at least a 24-month rolling planning horizon. This timeframe enables the executive leadership team to avoid problems, be opportunistic in the marketplace and have the freedom to focus their time and energy on executing the company's strategic and business plans — rather than on fire-fighting. That level of detailed, short- to mid-term management is more effectively performed by mid-level managers.

The next-generation S&OP process brings everyone to the same page, working in collaboration to agree upon a single operating plan that supports a company's overall strategy and business plan. The outputs of this well-executed, holistic process enable the creation of successful product/portfolio, demand, production and financial plans that meet business objectives. It also enables executives and functional managers to build synchronized, time-phased plans for sales, marketing, promotions, inventory management, purchasing activities, capital expenditures and other investments along with determining optimized financial management strategies.

3. There's too much strategy and not enough execution.

Myth:

S&OP deals with product families and a fixed hierarchy, so how does that really help us? The devil is the details and S&OP doesn't go there.

Reality:

There is a time-tested, counter-intuitive reality: no amount of adjustment at the detail level will correct an error at the aggregate level. Firefighting is simply an expensive, non value-added attempt to recover for inadequate aggregate planning, lack of foresight and poor execution.

S&OP does not replace the need for your company to have detailed SKU-level plans that balance supply and demand. Both aggregate and detailed plans are required and must be managed to stay in alignment. However, too often companies waste time and resources trying to plan at the detail level over the entire 24-month planning horizon. A best practice is to determine and limit detailed planning to the time horizon in which detail planning is necessary and provides value. The length of this detailed planning horizon is usually tied to lead times for procurement, production and replenishment.

Aggregate plans from S&OP are translated as necessary into detailed product management plans, detailed demand and replenishment plans, and item-level supply chain and production plans over the planning horizon. Supporting technology is necessary at both the aggregate planning and detailed planning levels to ensure visibility of credible information to drive sound decision making and to ensure the alignment of the aggregate and detailed plans.

Tools exist today that support both detailed and aggregate planning. Clearly defined processes and behaviors are also necessary to take advantage of the advanced S&OP process. Aggregate planning tools enable executive management to see information in a way that supports how they think and manage the business. For that reason, supporting IBP/S&OP tools must enable easy navigation and present intuitive graphical presentations configured in a way that empowers executives to quickly assess the business.

4. **Just look backwards.**

Myth:

S&OP is really just a review of historical data. There is no ability within the process to do any simulation of suggested changes, let alone compare a differing scenario to the optimal plan.

Reality:

While historical data is an important part of the analysis for benchmarking and input, the focus of the S&OP process must be on the future: the rolling 24-plus month planning horizon. To plan effectively for the long term, companies must make assumptions about future demand and their capability to profitably generate that demand through product innovation and marketing. They then need to consider their ability to provide excellent service and responsiveness at that level of customer demand. Executives also must ensure that they are making decisions that can be financially supported and will generate margins that will provide free cash for the business and for shareholders.

This means that S&OP is a fact- and assumption-driven process, not a numbers-driven process. The numbers are a result of the facts and assumptions. This also means that companies need to develop

different scenarios or models of the future based on different assumptions about the marketplace and their capabilities to produce and execute. Increasingly, companies that utilize an IBP approach are becoming adept at reviewing various business models or “what-if” scenarios. This best practice ensures that executives are forward-thinking and understand the multi-dimensional aspects of profitably managing the business. Through evaluating various future scenarios, companies identify alternatives and contingency plans for different business conditions. Understanding those alternatives and contingencies enables the executives to avoid reverting to crisis mode when business conditions change. Scenarios are updated as needed and available for the executive team to apply the best scenario to the current or expected business conditions.

5. It's all in the numbers.

Myth:

S&OP is limited to quantitative views of supply, demand and financial plans. Just look at the numbers and you've got what you need to support decisions.

Reality:

Fact and assumption management and the qualitative aspects of S&OP are more important than the quantitative aspects of the business plans. As previously noted, the numbers are derived from the assumptions about the marketplace, customers, pricing tactics, new products and supply capability. Evaluation of risks and opportunities — and the actions that need to be taken to mitigate risks and exploit opportunities — is also a standard element of executive decision making in IBP/S&OP.

Companies that have the most effective IBP/S&OP processes utilize technology solutions to capture and archive assumptions, risks, opportunities and other qualitative information, as well as the quantified plans. By understanding what's behind the latest projections and understanding how the latest projections compare to the business strategies and goals, company leaders can make better judgments about the future and determine what actions are required to optimize company performance. This approach has been proven to drive improved operational and financial performance.

6. S&OP is just another time-consuming meeting with little action.

Myth:

S&OP is just another executive meeting; nothing really ever comes out of it. Decisions made in the meeting stay in the meeting and rarely get executed.

Reality:

Some S&OP processes become more of a reporting meeting than an executive process for managing the business. Here's why:

- First, the process is not executive owned and led (see Myth #1), and
- Second, the information is not presented in the way that the company's executives think about the business. It doesn't enable them to quickly grasp the issues or make sound business decisions

When executives take control of the process, they define the information that they need and how they need to see it to make smart decisions. It is the role of middle management to ensure that aggregate plans are presented in a format that the senior executive team needs to see them.

Graphical views of aggregate information (both qualitative and quantitative) are crucial to an effective S&OP process. Executives need graphical views of what has changed since the last month. They need to see the assumptions that drive the quantified plan projections. Complex spreadsheets are too cumbersome and limited to meet this need. Linking the effects of new product, demand, supply and financial plans, performing scenario analysis and presenting the results in concise graphical formats that get to the heart of issues in aligning plans and attaining business objectives cannot be performed efficiently or effectively. Some companies struggle mightily with spreadsheets to do so, but the result is that the time taken to manage the spreadsheet tool leaves little time to perform the needed analysis.

Difficulty in importing and linking the operational plans also can cause data integrity issues. Non-integrated tools (e.g. spreadsheets) require manual manipulation of numbers, which can raise doubts about the accuracy and integrity of the data used to formulate the S&OP consensus plan. When the information is in doubt, executives quickly lose confidence in the numbers and in the overall process.

7. Who's worrying about demand?

Myth:

S&OP relies on a fixed demand plan or statistical forecast. It doesn't emphasize how we may need to shape demand up or down to meet business objectives.

Reality:

The truth is that demand-shaping strategies and scenarios are evaluated through the monthly S&OP cycle. Best practices in S&OP promote stronger financial modeling beyond the near term to determine the optimal economic responses to changes in customer needs and demand. Executives need to evaluate different scenarios to identify and compare the effects on Key Performance Indicators (KPIs).

Leaders need to see the corresponding impact of the different scenarios, including cost, revenue and profit changes, before collaboratively agreeing upon an optimal plan. This would be a nearly impossible task if using a manual support tool, such as a spreadsheet. Advanced S&OP tools feature modeling capabilities that quickly provide the effects of each scenario and enable a visual comparison of the scenarios.

8. It's too complex to involve trading partners.

Myth:

S&OP processes are too complex and difficult to manage — especially when trying to systematically incorporate external trading partner feedback into the internal consensus demand and supply plans.

Reality:

In today's economy of supply chain competing against supply chain, winning companies are collaborating with their trading partners more closely than ever before. Disparate plans that do not incorporate key functional and trading partner insights create a credibility gap for a company and its key executives when performance falls short of the planning assumptions. As a result, customers are left unsatisfied and margins suffer in trying to meet customer expectations as the company reverts to a crisis operating mode. Trading partner input is becoming increasingly more critical in S&OP. Companies are incorporating both internal and external information from their trading partners to develop more accurate projections of demand and supply capability. This integration is now easier to accomplish than ever before with the advent of technology that provides improved demand stream visibility and forecast sharing among upstream and downstream trading partners. Any company wanting to transform its performance should take advantage of solutions that can effectively and efficiently integrate trading partner input into their S&OP processes.

9. Finance always has the last word.

Myth:

We spend so much time striving to create a perfectly balanced supply and demand plan, yet too often it's a futile exercise. The finance team is just going to override any S&OP plan that we create, so why bother?

Reality:

When S&OP was only about balancing supply and demand, this was a valid complaint. Finance's reasoning for overriding the numbers was that the quality of price and cost information in the process was poor. Also, finance frequently found that they had already committed numbers to the market based

upon their own forecasts. As a result, the S&OP team found themselves adjusting their planning system to some false reality. The truth is that the finance organization has long wanted a seat at the S&OP table, but most companies have not included them in the process. Or they simply did not pay sufficient attention to pricing and cost forecasts to make the numbers credible. The new paradigm for IBP/S&OP incorporates financial analysis into each key step of the S&OP process (product management review, demand review, supply review, integrated reconciliation and management business review). The role of financial leaders is to evaluate the implications of the company plans and to develop future financial projections that are fully integrated with the new product, demand and supply plans. These future projections include income statements, balance sheets and cash flow across the planning horizon.

Finance leadership also provides the critical role of raising awareness of gaps between current projections and the company's goals and targets. If finance believes that actions are not in place to close the gaps, the forum for addressing these concerns is the integrated reconciliation and management business review steps of the S&OP process.

10. Let's run S&OP processes on auto-pilot.

Myth:

S&OP can be solved with the implementation of a tool. Just configure the software and turn on the "black box."

Reality:

In order to be successful, IBP/S&OP must have a combination of people, processes and tools working collectively. Today's S&OP approach is designed to unite a company's corporate objectives, financial goals and operational plans in order to realize significant top- and bottom-line improvements. Making this powerful transformation can be a significant undertaking, which is the reason many companies partner with experts to help with the following:

- Educating executive and middle-management teams on best practices and leadership behaviors required for an effective IBP/S&OP process
- Designing the process, including defining roles, responsibilities and accountabilities, process flow and information needs
- Establishing the calendar and cadence of the S&OP process
- Facilitating creation of an organization suited for S&OP
- Advising executives on creating a transparent and collaborative decision-making environment
- Providing support on the selection and implementation of tools to drive and complement the S&OP process from strategy to execution
- Providing executive coaching on improving and evolving the S&OP process as business conditions change and the executive organization transitions to include new roles or leaders

Concluding Thoughts

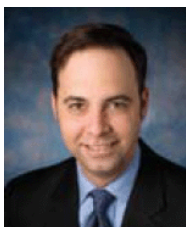
Our goal with this paper was to present how S&OP has transformed from the first processes adopted over 20 years ago and which have become commonplace over the last decade. Executive teams from a wide range of industries, including consumer goods, life and health sciences and discrete manufacturing, have helped to evolve S&OP from a demand/supply balancing process to an integrated business planning and management process for aligning all company plans and strategies.

We hear time and again from executives that the results they are realizing with an effective integrated business planning process have made the transition well worth the effort. S&OP benefits being achieved by companies worldwide include the following:

- Increased demand plan accuracy ranging from 18 to 25 percent
- Increased sales revenues ranging from 10 to 25 percent
- Increased on-time delivery ranging from 10 to 15 percent
- Reduced inventory ranging from 18 to 46 percent
- Reduced safety stock ranging from 11 to 45 percent
- Increased productivity ranging from 30 to 45 percent
- Increased bottom-line performance

Together, JDA Software and Oliver Wight can help you to transition S&OP from a supply-demand balancing process into a strategic integrated business planning and management approach that synchronizes your entire business.

ABOUT THE AUTHORS



FRED BAUMANN

Fred Baumann leads industry strategy for the manufacturing and wholesale verticals at JDA Software. Baumann has been instrumental in driving JDA's collaborative trading community strategies and launching the company's CPFR and S&OP offerings. Baumann received his undergraduate degree at Georgia State University and an MBA with distinction from the University of Arkansas, Sam M. Walton School of Business where he had a core focus in supply chain management. He is an executive board member of the Collaborative Planning, Forecasting and Replenishment (CPFR) VICS industry subcommittee and was a named contributor to the 1998, 2004 and 2007 published CPFR guidelines.



COLLEEN CRUM

Colleen "Coco" Crum, a managing principal and member of the board of directors with Oliver Wight Americas. Crum has helped to develop methodologies for enabling companies to successfully implement sales and operations planning and demand management and achieve quick time to financial benefit. Through these efforts, she has helped companies to think and act beyond their individual enterprise and extend the benefits of demand planning and sales and operations planning throughout their supply chains. Crum is the co-author of three books on sales and operations planning, demand management and supply chain collaboration.

ABOUT THE LOGISTICS INSTITUTE – ASIA PACIFIC



Established in 1998 under the Global School House Program, The Logistics Institute – Asia Pacific (TLI – Asia Pacific) is collaboration between the National University of Singapore (NUS) and the Georgia Institute of Technology (GT). Modelled after The Logistics Institute (now known as Supply Chain and Logistics Institute) at GT, the Institute's vision is to be the premier institute in Asia Pacific nurturing logistics excellence through research and education. TLI – Asia Pacific was awarded the prestigious Asian Freight & Supply Chain Award (AFSCA) for *Best Education Course Provider* for seven consecutive years, from 2003 to 2009; and has also won the *Supply Chain Education & Training Award* in the 2009 Supply Chain Asia Logistics Awards.

The Institute provides postgraduate and executive education in logistics and supply chain management (SCM), notably the Double Masters Degree in Logistics and SCM and the Executive Certificate in SCM. It also undertakes leading-edge research and development in supply chain engineering, technology and management in collaboration with industry; and hosts a regular series of THINK Tables that brings thought leaders in research and industry to discuss contemporary SCM issues, challenges and solutions in a dynamic environment.

The Institute's key research themes include Supply Chain Intelligence, Supply Chain Optimization and Supply Chain Technology.



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