

Enabling Scalable, Profitable Growth No 184, April 2022

As our inaugural newsletter from LMA Consulting's founding in 2005, Profit through People remains our flagship brand because although most clients call us because of our manufacturing, supply chain and technology expertise, the 80/20 of success goes straight to people!

Lisa's Note

Happy Spring....my favorite season.

I thought this photo of my cat, Smokey (on the left) and my best friend's cat, Loki, on the right was adorable and reflects many clients' state of mind.... "I've had it with the volatility and supply chain disruptions. Just give me some treats!"



On the personal side, I went to AZ for Easter to see my family. It was good to see them, and I'm glad we got a lot of

work accomplished at my mom's house and my aunt's house. Several items organized, cleaned, donated, and the like.

Every month seems to fly by with more volatility on BOTH the demand side (record-breaking increases in sales in certain industries while others are going through fits and starts due to the lack of critical materials for customers to produce) and the supply side (need we say more than supply chain disruptions abound!?). Our most successful clients are becoming resilient, collaborating across organizations with S&OP (also known as SIOP) processes, have strong leaders willing to make quick, directionally correct decisions, and are using nimble supply chain strategies. Because the results are compelling (for example, a client grew the business substantially with high service levels attributed to the rollout of SIOP) and our strengths lie in both the strategy and execution of SIOP and its underlying concepts, we have decided to highlight its importance with a <u>SIOP webpage</u>. If you want to know more about SIOP, why you'd want to use SIOP, the benefits by function, client examples, and much more, <u>check it out</u>.

IN THE NEWS

I continue to be excited about media pickups & accolades.

- Published an article "<u>Do You Have Suppliers or Partners</u>" in the Adhesives & Sealants Industry magazine
- Published an article "<u>Proactive Planning to Grow and Scale</u>" in <u>Brushware Magazine</u>.

- Quoted in an article "<u>ERP Trends: The Future of Enterprise Resource Planning</u>" in SelectHub.
- Quoted in an article, "<u>Manufacturing Trends 2022: Maintaining a Competitive Edge</u>" in *SelectHub*.
- Quoted in a Just Drinks article "Supply Chain Special: Who Will Be the Winners & Losers in 2022?"
- Interviewed on *Industrial Insights* podcast about "Improving Sales, Inventory & Operations Planning" which is on <u>Apple, Vimeo, Spotify</u>, and on <u>Industrial Insights</u>.
- Interviewed on *Patrick Daly's Interlinks Podcast* on the topic of <u>Overcoming Barriers to</u> <u>Growth in Face of Supply Chain Disruption</u>.
- My WBSRocks podcast, "<u>Grow Your Business By Being Directionally Correct with Sales and</u> <u>Operations Planning</u>" was picked up by <u>Spotify</u>.
- Interviewed by <u>Behar on the Block</u> about the recent supply chain and logistics complexities.
- Published an article on *NewComm Global Group's blog* on <u>Presicent Strategy &</u> <u>Manufacturing Resilience Using SIOP.</u>
- Featured in a press release on the need for <u>360 Planning</u> to mitigate swings associated with supply chain disruptions.

Enjoy,

Lisa

Email LMA Consulting Group, Inc.

P.S. Know anyone who is interested in getting ahead of the surge with strategies to thrive in 2023 and 2024? Refer them to <u>us</u>.

STRATEGY

Proactively Addressing Global Events to Grow Market Share & Ensure Seamless Customer Service Using S&OP



Because we have gone global and live in an interconnected world, events around the world disrupt the global supply chain and impact local customers. Whether its the shutdowns in Shanghai due to the pandemic, the Russia-Ukraine war, concerns about port delays due to the upcoming union negotiations at the ports of Los Angeles and Long Beach, or weather events impacting the supply chain, global events are significantly impacting local companies and

communities. The most successful clients are proactively addressing global events and potential global risks to ensure seamless service. In addition, they are taking advantage of the opportunity to take market share from the companies that are using a wait and see approach.

Exploring the Russia-Ukraine war example

For example, the Russia-Ukraine war is already resulting in supply chain disruptions throughout the world. Starting with the obvious, as access to oil and gas is limited, fears of shortages in Europe escalate, and prices have increased dramatically throughout the world. It doesn't stop at the gas pump. Oil and gas is required to transport throughout the global supply chain, and it is used in a multitude of products. For example, when I was a VP of Operations for an adult incontinence manufacturer, oil and gas prices had a dramatic impact on our costs. Depending on the product, material costs represented almost 70% of product cost, and around 70% of product cost was impacted by oil and gas prices. The second larger cost driver was transportation, and so when prices rose, the negative impact to margins was severe.

Russia and Ukraine also export significant metals, commodities and agricultural products. Shortages of these products will create chaos. The metals are used in the production of cans, cars, electrical batteries, equipment, machinery, electronics, household appliances, and more. In fact, it further aggravates the computer chip shortage issues. Specifically, the U.S. and U.K. are impacted by palladium which is used in catalytic converters. In another example, one of our clients purchased nickel from the region, and so quickly reviewed long range SIOP plans and placed a strategic buy to secure supply and pricing. On the other hand, Turkey, Japan, and China are the top buyers of aluminum.

Agriculture products and commodities are heavily impacted. For example, Russia and Ukraine export wheat around the world. African and Asian importers will be most impacted, and India's shipments are increasing as higher global prices make its grain more competitive. Sunflower oil is another issue. There are fears that European stores will soon run out, and prices are escalating. Fertilizer will impact the U.S., Brazil, South Africa and India. The risks of a truly global supply chain have been highlighted.

Using S&OP (also known as SIOP) to Navigate Rough Waters

Clients utilizing a <u>Sales, Inventory & Operations Planning (S&OP</u>) process are more resilient to these changing and volatile global conditions. More importantly, S&OP (also known as SIOP or IBP for Integrated Business Planning) provides the data and highlights the strategic decisions required to ensure end-to-end supply chain alignment, EBITDA performance and the appropriate strategic positioning and levels of inventory and capacity to successfully support customer requirements with enough flexibility to accommodate changing conditions.

The types of strategic decisions that might bubble up to the executive SIOP meeting due to global events including the following:

- Reshoring/ nearshoring production to ensure product availability
- Increasing capacity and capabilities through the manufacturing network to increase the capability and flexibility to move production and pivot with changing conditions.
- Repositioning capacity through your network to best support changing customer conditions and to best mitigate the more probable risks and likely global events.
- Developing strategic partnerships with critical material and component suppliers to ensure geographic diversification and alignment with service policy requirements.
- Repositioning and reallocating inventory through the supply chain network to best support changing customer conditions
- Repositioning and redesigning the supply chain network (inclusive of internal and external resources) to support changing customer needs, stocking strategies and distribution and transportation strategies.
- Making strategic purchases to ensure supply and mitigate inflationary pressures
- Analyzing and confirming customer pricing and priority decisions related to available resources, customer profitability and strategic relationships.
- Evaluating product rationalization and stocking strategies based on product profitability, logistics infrastructure and related impacts.
- Supporting new product development and R&D rollout plans
- Evaluating typical distribution vs. e-commerce fulfillment strategies

Client Example in Proactively Navigating Global Events

For example, a building products manufacturer saw changing demand patterns show up during their monthly demand planning SIOP review. In reviewing CRM and order data, Sales input, market conditions, and customer feedback, they saw that one of their customer segments was negatively impacted with supply chain disruptions because their customers couldn't produce due to a critical material shortage. Their revenue was negatively impacted because the customer slowed purchases in alignment with these changing conditions. Instead of panicking, the building products manufacturer got in touch with their customer to understand if the slowdown in sales was temporary and would bounce back when the critical material was received or if the

disruptions created further misalignment, causing a reduction in sales for the year. In this case, the customer expected shipments to pull through on an extended timeframe as the critical material arrived and resources were available to produce, and so the manufacturer proactively addressed the capacity shortfall with temporary measures while securing the appropriate resources for the long term.

Separately, the manufacturer saw that another customer segment was forecasted to experience significant volume increases during peak season which would require additional storage capacity to build product and ramp up to support customers with high service levels (on-time-in-full, OTIF). Thus, the manufacturer evaluated this customer segment from a customer and product profitability perspective to make sure the additional storage capacity at their outsourced distribution network and the additional freight movements required throughout their network to support service policy commitments would make sense from a customer pricing and profitability perspective. After negotiating to consolidate their regional network space at a lower cost, the manufacturer decided to add the capacity to the logistics infrastructure to support the expansion in sales.

Similarly, the manufacturer maxed out in manufacturing capacity at one of their manufacturing facilities to support this customer segment during peak season, and so they had to evaluate the increased cost of intercompany transfers, cross-border freight, and the differences in manufacturing costs. Although there was a negative impact to costs, they decided to proactively address capacity to expand business with a strategic customer since there was an opportunity to take business from the competition based on availability, and they could pass along price increases to offset some of the difference.

SIOP Is Not a One Time Solution

Setting strategy for the next 5 years no longer works! In fact, most companies find that setting strategy a year out can be a tall order. During times of volatility and change, it is critical to stay on top of your changing market conditions and customer needs, incorporate new and changing product and service offerings, and constantly reevaluate your end-to-end supply chain for what will best position you for success.

SIOP is not an off-the-shelf solution, and it is not a one-time "magic bullet". Instead, the most successful clients look out a minimum of a year to three years (if they have long-term customer contracts) on a monthly cadence, incorporate changing conditions, and evaluate results. Typically, they will reconfirm prior decisions and priorities and address critical changing conditions. Of course, this process must be accompanied with strong execution. If you follow this path, you will thrive during these times of volatility and unexpected global events. In fact, the resilient and innovative companies have a once-in-a-lifetime opportunity to gain significant market share during these volatile times. Listen to additional insights on this topic and how companies can get ahead with a silver lining in the cloud of supply chain confusion as LMA Consulting was interviewed by the Truckers Network Radio Show

Refer to our <u>SIOP landing page</u> for information about SIOP and how to get started on your journey. Also, read more about these types of strategies in our eBook, <u>Thriving in 2022: Learning</u> <u>from Supply Chain Chaos</u>. If you are interested in talking about what it would take to purse the SIOP journey in your business, <u>contact us</u>.

Did you like this article? Continue reading on this topic: Taking Control of Customer Success Using SIOP

Improving Sales, Inventory & Operations Planning Podcast with Industrial Insights

INDUSTRIAL

WITH JUSTIN SMITH

PLANNING

Improving Service Levels, Logistics Efficiencies, and Inventory Turns with Replenishment Planning Best Practices



Improving OTIF and Reducing Cost and Inventory

Every client wants to support growth goals while improving service levels (OTIF, on-time-in-full), operational efficiencies and inventory turns. These are timeless objectives for every planner. During the pandemic, the priorities shifted to service levels because clients struggled to keep up with dramatic increases in demand and extreme volatility. There has been an all hands on deck focus to improving OTIF (on-time-in-full), OTD (on-time-delivery), and fill rates.

As we did whatever it took to service customers, logistics costs started to skyrocket, even before the dramatic increases in oil and gas prices. Thus, logistics costs also came into closer focus. Depending on the supply chain network, logistics costs could relate to container costs (which have gone up four-fold since pre-pandemic levels), drayage costs, storage costs, freight costs, ecommerce fulfillment costs, and more. For example, a consumer products manufacturer supplied outside distribution centers across the U.S. and Canada to support short lead time customer requirements. As volatility increased, freight and logistics costs went up accordingly. Thus, additional focus was put on how to optimize logistics costs.

As the pandemic unfolded, consumers switched from services to products, thereby increasing demand. Similarly, as stimulus packages were passed, consumers gained cash, further increasing demand. Finally, as lockdowns ended, demand has stayed at high levels even though services are skyrocketing, driving inflation. As supply chain disruptions abound, product availability is limited, thereby driving prices higher. There is a combination of inflationary and deflationary pressures going on simultaneously which is further exacerbated by the Russia-Ukraine war. These incidents have led to a return of focus on managing inventory to free up cash.

Utilizing Planning Best Practices to Optimize Service, Cost & Inventory Objectives

From a best practice point-of-view, in order to optimize service, cost, and inventory objectives, you'll want to upgrade the appropriate <u>planning processes</u>. No matter your business type and complexity, <u>demand planning</u> will be a priority. From a supply planning perspective, the priorities will depend on your specific situation. If you produce internally, <u>production planning</u>, material planning and <u>supplier management</u> will be a priority. On the other hand, <u>capacity planning</u>, purchasing, and logistics planning will be important regardless of your supply chain network although to varying degrees. Replenishment will be more relevant if you have a more complex distribution environment or if you replenish your customer's network for them (also known as <u>vendor managed inventory</u> or VMI).

If you have a more complex distribution network, replenishment planning (also known as distribution planning or DRP) will be a critical component to achieving your objectives. Replenishment planning should consider the following factors:

• Order frequency - are you receiving orders on a daily, weekly, monthly, seasonally, or

- sporadic basis?
- Order size when you receive orders, are you receiving several small orders over a period of time, one large order covering the same period of time, or another option?
- Order volatility how predictable are your customer's ordering patterns?
- Lead time requirements how much time do you have to react to customer orders vs. the lead time to replenish?
- Replenishment lead time flexibility do you have options to decrease your replenishment lead time by shipping via a different mode of transportation (such as rail vs. truck)?
- Replenishment cost with various modes of transportation
- Replenishment frequency how often do you replenish the distribution center.
- Service policies can your customers change their orders after placed? Can they change it until the last minute prior to shipping?
- Network flexibility and stocking patterns if you have a stockout in a distribution center, are you stocking that same product in another distribution center that could supply the customer within standard lead time?
- Safety stocks how have you set safety stocks to cover for variability in demand and supply?
- Forecasts and/or consumption information do you receive collaborative forecasts from customers, or, better yet, consumption information real-time? For example, when working with an absorbent product manufacturer, our key customer Allegiance Healthcare provided us with our consumption data from their distribution centers so we could sell real-time consumption. Additionally, when consulting with an aerospace firm, we received consumption information from Boeing so we could see when they used our parts in production of the plane.
- ABC value are your items set as A B or C based on volumes, value or another method to designate frequency and importance?
- Storage constraints and warehousing costs
- Inventory objectives
- Sales orders, transfer orders, and purchase orders

Replenishment Planning Strategies

A replenishment plan should take the factors described above into account when building a plan. Typically, you'll start with demand and determine your replenishment plan based on what's needed to serve the customer with the agreed upon service policy, and then evaluate replenishment strategies, logistics options, and resulting inventory levels to determine the optimal schedule.

Depending on your network complexity, product and customer mix, your tools (ERP and related technologies), and your objectives, there are multiple replenishment strategies you could follow. Conceptually, consider the following options:

- Reorder point / Kanban strategies in essence, you replenish the reorder quantity when you hit the reorder point inventory level
- MRP/ DRP strategies in essence, you replenish to sales orders, transfer orders, and forecasts as needed when reviewing your inventory and orders in process.
- DDMRP strategies demand-driven material requirements planning (MRP) which is more sensitive to variations in demand and supply.
- Advanced planning these systems take what if scenarios, capacity, capabilities and costs across sites into account in replenishing

There are tradeoffs, benefits and costs to each approach depending on your demand, supply, factors, and objectives.

Incorporate Replenishment Planning into a Monthly Review Cadence

Review your replenishment plan summary information and related impacts as a part of your monthly <u>SIOP/ S&OP</u> process. Gather inputs from appropriate parties, compile and synthesize data, and design a monthly review of the replenishment plans required to support customer orders. This will result in transportation volumes by mode of operation (truck, rail, air), storage requirements by distribution center, distribution / supply chain network changes and stocking strategies (and resulting inventory levels) required to support service policies, and appropriate resources and system capabilities to support the plans.

Refer to our **blog** for many articles on planning, capacity and related systems. Also, read more about these types of strategies in our eBooks, **Thriving in 2022: Learning from Supply Chain Chaos**

and <u>Future-Proofing Manufacturing & Supply Chain Post COVID-19</u>. If you are interested in talking about what it would take to purse the replenishment planning and <u>SIOP journey</u> in your business, <u>contact us.</u>

Did you like this article? Continue reading on this topic: Recovering Capacity with Production Planning Best Practices

Thriving in 2022: Learning from Supply Chain Chaos

Check out our <u>eBook</u> on what is relevant in 2021 according to manufacturing, supply chain and technology executives.



ERP & RELATED TECHNOLOGIES Managing Increased Complexity with High OTIF & Efficiencies Using Technology

If there is one thing in common with every client (big or small) in the current business environment which is characterized by significant volatility and

uncertainty, it is the increased level of complexity of supply chains. As the old saying goes, you are only as strong as your weakest link in your supply chain! That has proven true and has led to unfettered complications in successfully navigating the current supply chain environment. In fact, it is why we are have been focused on helping clients become "the strongest link in your supply chain".

Customers do not care about the complexities of our supply chains. They want the "right" products delivered at the "right" place at the "right" time at the "right" price. In fact, during this volatile post/emerging from pandemic timeframe, customers are laser focused on which suppliers can provide solid delivery performance as measured by high levels of OTIF (on-time-in-full) and a superior customer experience. They will give volume to customers that can deliver!

On the other hand, companies are laser focused on increasing operational efficiencies so that they can deliver to customer expectations while meeting profit objectives. Because of the significant level of supply chain disruptions and increased money supply, costs are escalating. Companies want to limit the price increases they have to pass on to customers as they will lose the business if substantially more expensive than competitors without a commensurate increase in product quality or service. Thus, there is an increased interest in increasing efficiencies, automation, and "doing more with less".

Utilizing ERP to Improve Service & Decrease Costs

Almost every client has an **ERP system**; however. ERP systems perform the transactions required to support taking orders, purchasing materials, planning production, picking and shipping product, handling returns, and invoicing customers. NOT every client has a modern ERP system. In today's world of global, complex supply chains and increasing customer requirements, advanced functionality is needed to support customers without adding armies of people to support the processes. Additionally, modern ERP systems provide additional opportunities to automate, digitize, predict what needs focus (example: predictive maintenance vs. preventative maintenance), and they enable the collection, assimilation and analysis of data for decision-making.

Performing a quick assessment of your business needs as compared with your system functionality and capabilities is a great place to start. When evaluating whether an ERP upgrade is needed to support customer and profit objectives, we recommend starting with a comprehensive yet directionally correct assessment of business process requirements. For example, when working with a control panel manufacturer, we quickly determined that their current ERP system would not meet their growth plans. Not only were they struggling with multiple add-on software options that didn't seamlessly connect, resulting in double keying and a hodgepodge of data, but they also needed advanced functionality with customer relationship management (CRM), configure-to-order (CTO) and engineer-to-order (ETO) and related customer interfaces, and advanced reporting and analytics. Thus, an upgrade was required.

Therefore, we started a deep dive of business requirements to <u>select the appropriate softwar</u>e. We talked through and observed the business process requirements that would support sales and customer relationship management, engineering design, order entry, configure-to-order, production planning, purchasing, operations, shipping, invoicing, accounting, quality control, data management, and reporting/ data analysis. Based on that, we documented business requirements and, most importantly, identified the critical success factors that were unique to their industry, company, specialized process, and /or unique system requirement. Armed with this data, we were able to develop a request for proposal, demo ERP systems, compare pricing, and decide upon the best fit system to meet their objectives for the best return on investment.

Utilizing Other Technologies to Increase OTIF, Reduce Costs & Inventory

In addition to utilizing an ERP system, to meet the increasingly complex customer requirements without adding overhead, other technologies will add value. Similarly to evaluating business requirements for ERP systems, start by evaluating your needs to support customer and profitability objectives. Some of the technologies required to support success in the current volatile and uncertain business environment are as follows:

- CRM (customer relationship management) software to proactively manage customers and potential leads
- Forecasting software to forecast customer demand
- Advanced planning software to go beyond traditional MRP and simple planning systems to better navigate complex supply chains
- Warehouse management software (WMS) and warehouse execution system (WES) to increase warehouse efficiencies and achieve fulfillment objectives
- Transportation management software (TMS) to optimize transportation planning and freight costs, lead times and service objectives
- Predictive maintenance systems (using artificial intelligence and internet of things (IoT) to predict maintenance needs to target resources
- Manufacturing execution systems (MES) to monitor manufacturing performance and tied to machines with IoT
- E-commerce systems to support B2C and robust B2B effectiveness
- Business intelligence systems (BI) to analyze data and consider what if scenarios
- Predictive analytics to take BI and data to the next level
- Blockchain although this type of software remains in an R&D phase for the majority of businesses
- Additive manufacturing/ 3D printing to print products on the fly
- Digital twins, robots, drones, RFID, autonomous vehicles, virtual reality, and more

The key is not to get caught up in fads. Start with your business requirements, and determine the "right" place to invest to support your business objectives where the efforts and investment will support critical customer requirements and/or provide a significant return on investment.

Turn Data Into Insights

Data is especially essential to driving OTIF and efficiency improvements. Simply tracking information in your ERP system and related technologies is not enough. It is more important to use your data to evaluate progress towards objectives and make directionally correct decisions to move the business forward. The key is to turn <u>data into insights</u>.

When your data analysis is achieving directionally correct results, it will make sense to take it to the next level with dashboards and slicing and dicing ability with a **business intelligence** solution. Once you can slice and dice data and have a dashboard available with the push of a button, consider moving on to advanced data topics such as predictive analytics. Instead of solely using data for decision-making, you can take it to the next level and predict your future so you can get ahead of the competition.

The Bottom Line

To succeed in these volatile and uncertain times, there is no doubt you'll need a modern ERP system and related technologies to automate, digitize, meet customer expectations, accomplish

more with less, and make directionally correct decisions rapidly by turning data into insights. Don't go overboard and do everything and accomplish nothing, but get started on your journey with an assessment of your needs immediately before your competition passes you by.

Did you like this article? Continue reading on this topic: Achieving Customer Growth by Turning Data into Insights

Listen to a Client Example

Thank you to Craig Young for talking about our work together on planning, inventory & SIOP!



Connections

THIS MONTH'S REQUESTS:

- If you know of a machine shop operator interested in a family-friendly lifestyle in Kansas working for a great company, please contact <u>Charlotte McElroy</u>.
- If you have a supply chain or operations position, post it on our Association for Supply Chain Management Chapter (ASCM/ APICS) <u>website</u>.
- Do you know a top notch investment banker or environmental attorney in the Southern California area interested in growing his/her business and meeting top-notch trusted advisor colleagues in the Inland Southern CA area? My <u>ProVisors</u> group has an opening for these professions, and we have lots of referrals for these professions on a regular basis. Please introduce <u>me</u>.

NOTE: To submit an item for this section, please send me an email with a short description of your needs and an email address. Please note that NOT all requests will be published as it must fit the guidelines and align with the Profit through People brand.

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