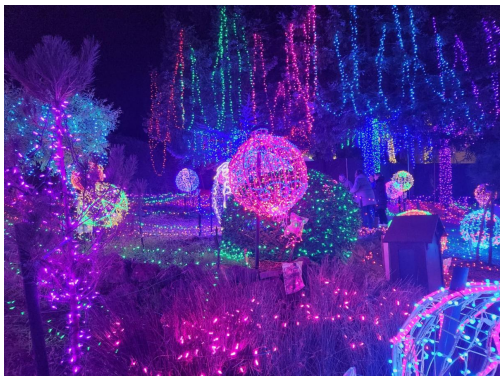
Enabling Scalable, Profitable Growth No 194, January 2024

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 New Year!

I had a great time at the Christmas Market in Cambria. They have some of the best lights I've seen and fabulous food from Linn's. If you like chicken pot pie or berry pie, you will not be disappointed! Since it is somewhat close to Paso Robles, I was able to get a fabulous Thanksgiving dinner and a wine tour before visiting the beautiful Cambria.

I also went to New Orleans with great friends. I can't go wrong with Cafe du Monde! Thank goodness I don't live there as I love the beignets. And I drove to AZ to see my Mom and family and go to my uncle's funeral and again for Christmas. It was a whirlwind.

From a business standpoint, I had a proactive and highly productive strategy session in San Diego. We are looking forward to working with additional **SIOP** (Sales Inventory Operations Planning) clients as we are fast-forwarding with AI and advanced technology to support SIOP results. Read more about how to implement SIOP in our recently released book, SIOP (Sales Inventory Operations Planning): Creating Revenue and EBITDA Growth, published on **Amazon** (paperback, Kindle) and **iTunes**. We have a special **free download** for our newsletter subscribers. We just ask that you add a review on **Amazon** if you gain value from it. I'd love to hear your feedback, and our Amazon ratings would benefit!

I'm still seeing the critical importance of fundamentals and talent. Clients are truly suffering and are frustrated more than I've seen in 20 years with manufacturing and supply chain fundamentals, the use of ERP, and the lack of talent. Pay attention to transaction disciplines, financial forecasts, planning processes, ERP utilization, **backlog management** etc. To provide superior customer value, it is essential to start with a solid foundation and take it to the next level with advanced processes and technologies while paying close attention to mitigating critical risks.

IN THE NEWS
I was thrilled to be interviewed by **Harvard Business Review** on forecasting and navigating uncertainty through supply chain flexibility. Check out the special report **here**.

And for the rest:

- Quoted in the *Los Angeles Business Journal* in an article, **Conflict Abroad Has Local Effect**
- Published an article in *Medical Product Outsourcing (MPO)* Magazine on **Medtech's Supply Chain: From Disruption to Opportunity**

- Spoke at Vision 33's conference on **The Future of the Supply Chain - Thriving into 2024**
- Quoted in SelectHub's articles **ERP Requirements Template and Checklist** and **Best Manufacturing Production Planning Software**
- Quoted in *Food Logistics* in **State of the Industry: Top 10 Trends to Shape Cold Food Chain in 2024**
- Published an article in *Adhesives & Sealants,* **Sustainability Driving Triple Bottom Line in Manufacturing and Logistics**.
- Published an article in *Brushware Magazine*, **How to Evaluate ERP Systems & Related Technologies**.
- Spoke on *Next Level Supply Chain with GS1 US* Podcast on **What's Happening in Supply Chain Today?**
- Spoke on *Interlinks* podcast on the **Importance of Supply Chain Partner Relationships** and **Supply Chains, Energy Transition and Geopolitical Fragmentation**.
- Quoted in *Overt Operator* in an article, **A Crossroads of Terror: How Central Asia Acts as the Asia Pacific Weapons Silk Road**
- Spoke at Georgia Distributors & Manufacturers Group of *ProVisors* on supply chain
- Spoke on a global supply chain consultants panel on **Life After Globalization**
- Published press releases on **Rising Importance of ERP Strategy**, **Supply Chain Vulnerabilities Amidst Israel-Hamas Conflict**, and **Proactive Backlog Management as a Keystone for Elevating Customer Service in Manufacturing**
- Published press releases on SAC on the topics **Integrated Hybrid Work Creates Positive Results for Employers** and **Consulting Society Announces Global Award Winners Outstanding Consultants Honored at 20th Annual Meeting**
- Our press releases were picked up by **Quality Digest** and **Today's Medical Developments**.

Enjoy,
Lisa

P.S. Know anyone who is interested in getting ahead of the rapidly changing global business conditions by creating predictable revenue and proactively planning capacity? Refer them to us.

STRATEGY

SIOP / S&OP: Proactive Approach to Maximizing Production Output & Capacity

Clients are struggling to keep up with customer's changing requests. Order backlogs remain relatively high (depending on the industry), but customers are pushing orders out at the last minute, pulling orders in without notice, adding future potential orders, and changing requirements on the

fly. Production is scrambling to keep up.

80%+ of manufacturers simply do not have enough skilled production and support resources to keep up with the volumes, let alone with the volatility of the order backlog and changing forecasts. Not surprisingly, executives do not want to hire more resources than absolutely necessary as they are concerned about rising input costs and the uncertainty of their order backlog. To add fuel to the fire, the supply chain has been volatile as well with global unrest, strikes, and other disruptions as well as supply chains on the move. Read our recent article on how supply chains are changing. The production resources cannot keep up with changing conditions, and triage must occur.

Our best consulting clients are engaging in proactive business processes to get ahead of changing customer conditions and sales forecasts and the impact on capacity, production and replenishment plans as well as the reallocation of critical resources. **SIOP** (Sales Inventory Operations Planning) is a key process and toolset for successfully navigating this volatility while maximizing output and production capacity to support revenue growth.

An Industrial Manufacturer Case Study
An industrial manufacturer struggled to meet customer requirements. Order deliveries were lagging, capacity wasn't allocated evenly across its ten production facilities and production at a critical site had almost 1000 hours of change overs per month for nine months in a row to try to keep up with urgent customer requirements. Several large customer jobs pushed out and others pulled in, keeping Operations scrambling.

We rolled out a SIOP process, starting by getting a handle on the sales orders and potential sales orders. A weekly meeting with Sales and Project Management helped to solidify the priorities of the demand plan (sales forecast). Although customers continued to request push outs and pull-in's, when the requests were proactively worked with the team and the ERP system was maintained, better clarity emerged.

The demand was run through a capacity model, showing available capacity vs. operational requirements by production facility. The operational requirements were bucketed in categories of firmed sales orders, sales orders waiting on Engineering release, sales quotes that were better defined, and sales quotes. By evaluating near-term capacity, priorities could be established with Engineering, short-term capacity actions could be taken (overtime, supplementing production at additional sites, etc.), and proactive customer communications could take place.

More importantly, by evaluating medium and long-term capacity, the appropriate strategic decisions came to light. For example, the critical site showed as overloaded months in advance so that Operations could reallocate customer orders among production facilities within the same region to mitigate impacts on freight cost. The model could be evaluated with multiple what if scenarios so that Sales and Operations could address the bottlenecks proactively. Guidelines were set to reprioritize and set pricing for key customers, capacity could be reallocated, additional capacity could be planned, and capacity offload options explored.

The key is the connection between Sales, Project Management, and Operations and Engineering. As customer requirements change, capacity scenarios need to be reevaluated and impacts reviewed. Proactive communication and collaboration is a critical piece of SIOP to keep demand and supply aligned and optimized.

SIOP Maximized Production Output & Capacity
By seeing the demand and capacity picture in advance with **SIOP**, the executive team could maximize production output and capacity. They could do this by proactively addressing bottlenecks to level load the plants so that the scheduling teams could optimize the production schedules to increase efficiencies and reduce waste. By running like items, sizes, and material types together, changeovers are minimized. And by seeing the final assembly schedule requirements, labor and resource plans could be optimized.

Also by reviewing the full capacity requirements across all North America sites, capacity could be reallocated to maximize output, thereby minimizing the need for offload capacity. Each plant's strength could be maximized and planned in advance while minimizing transfers between plants,

freight to customers, and material price differences.

By addressing these supply plans proactively, materials contracts could be addressed in advance ensuring material availability which positively impacts manufacturing planning and output. It also typically provides opportunities for more favorable contracts and pricing. In addition to maximizing production and capacity output, SIOP improved the customer delivery performance, resulting in happier customers and additional revenue possibilities.

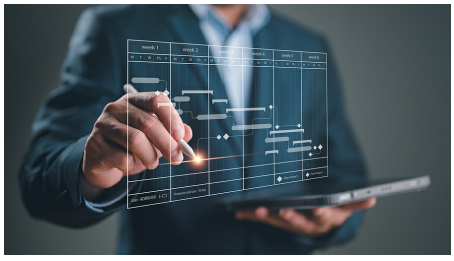
SIOP: A Look Forward
In our book, "**SIOP (Sales Inventory Operations Planning): Creating Predictable Revenue and EBITDA Growth**", we discuss how SIOP can support these types of improved results. As companies navigate the exaggerated volatility of the global environment and try to keep up with changing customer needs, SIOP becomes an essential tool in the toolkit to survive, let alone thrive. Our best clients are utilizing SIOP as a way to take control of their future and manage their options instead of letting their situation manage them. In fact, they are taking SIOP to the next level with advanced technologies and by connecting SIOP to their customers and suppliers to gain an end-to-end supply chain view.

Did you like this article? Continue reading on this topic:
Optimizing Business Decision Tradeoffs with SIOP

Next Level Supply Chain Podcast with GS1 US

Podcast on what's happening in supply chain today. Catch it on **GS1,** or **YouTube**.

PLANNING
Master Scheduling & Production Planning Case Study: Gaining Visibility for Results



Although production and materials planning can be overlooked in its importance in most companies if going smoothly, it is cornerstone to success. Unfortunately, when not going smoothly, it can bring a company to its knees. For example, production might not know what to run, changeovers can be out of control, customers become unhappy, materials shortages persist, resources are scrambling to catch up with changing conditions, and chaos ensues. Read more about this topic in our article, **The Million Dollar Planner**.

An Industrial Equipment Manufacturer Case Study
An industrial equipment manufacturer struggled to keep up with month end sales goals when receiving last minute notice from Engineering of final design of the engineer-to-order item (bills of materials) before the item was scheduled to ship to meet customer requested dates. There were multiple stages to the manufacturing process (fabrication, weld, paint, final assembly), and parts had to be shipped offsite for process steps and married up along the way at the "right" time to make the orders come together.

The bottleneck and pacing item was the machine shop yet visibility was limited to seeing which parts had to complete production at the same time, and the production schedule was completely manual based upon paperwork on hand since there was a lack of visibility in the system. The production supervisor would go through the work order packets, pick out manufacturing differentiators (size, material type, etc.) and group the packets in piles by the optimal run sequencing. For example, you run different sizes on different machines, and you would sequence by material type to be most efficient with changeovers.

Although the machine shop pulled out the stops on a regular basis to meet sales goals, it required constant expediting and coordination of process steps, was sub-optimal based upon the work order packets available at the time, and the process was completely dependent on a person (who also turned into a single point-of-failure). Since there was a lack of visibility, sales order availability frequently moved from month-to-month, creating concerns with predictability. And the machine shop ran less efficiently than it would have if there was visibility to the full scope of work order packets.

As we provided consulting support to this client, we learned about the optimal sequencing triggers (size, material type, etc.) and looked for ways to identify these triggers sooner in the process. Of course, it is never as easy as it appears. Thus, we had to work upfront in the sales quoting process to get a better picture of the demand plan by adding configuration strings (high-level identification of the item) into the process and system early in the process. By adding this information into sales orders, the team had better visibility to what was coming down the pike prior to Engineering's final design so that we could gain visibility to plan capacity and materials (master scheduling) instead of reacting to sales orders late in their life cycle. We integrated this visibility into a **SIOP** (Sales Inventory Operations Planning) process to build a monthly cadence and review of critical sales and operational forecasts.

To address the machine shop scheduling, additional triggers had to be identified and incorporated into the data. Sales order statuses were also key to the process as sales orders went through engineering, production engineering, customer approval, material availability, and work order creation before the items were available to be scheduled. We built these statuses into a planning report along with key triggers and dates (incorporated from a production status review process). Once this report was built, a dashboard was developed for improved visibility and ease of use. This powered the production scheduling process and replaced the packets process so that the system automated the 80/20 and focused attention on what was meaningful to optimize the production schedule and ensure the parts married up at the right time.

Master Scheduling & Production Planning Results
As the client gained visibility to required capacity and materials, they were able to start making directionally correct decisions early in the process. As capacity bottlenecks arose, they were able to address proactively before "running into a wall". For example, we gained visibility that paint was a future bottleneck, and so the head of Operations was able to put together the appropriate capital requests, gain approval, and order an additional paint system to support sales growth goals. Additionally, offload capacity was needed to supplement the weld area, and so leadership was able to pursue additional options prior to negatively impacting customers.

From a materials standpoint, Purchasing was able to look into the future and secure materials ordered from the Russia-Ukraine region while they were still available. While every client struggled to maintain service levels during COVID, our client was able to keep one step ahead and sustain higher levels of service for customers.

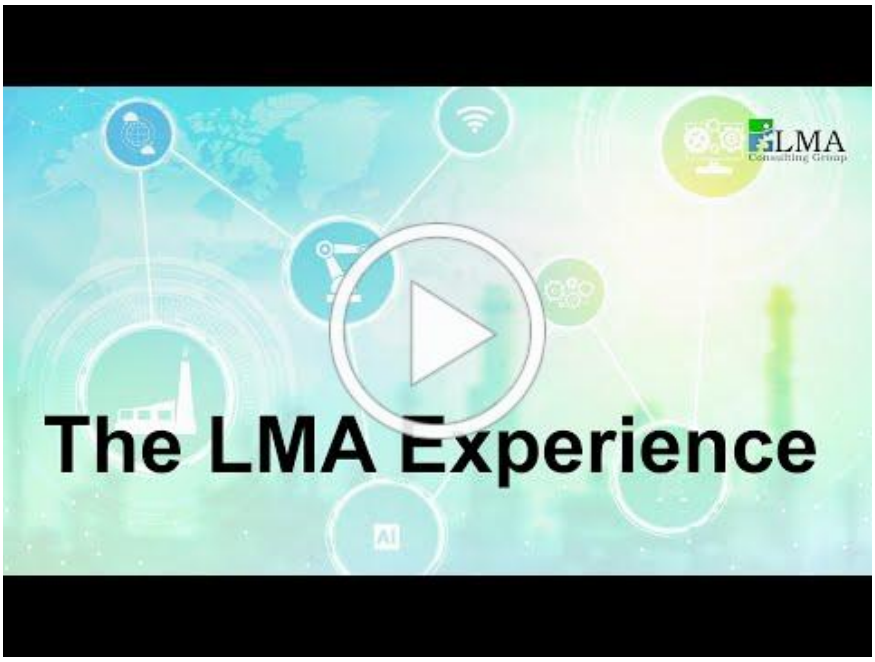
As the production scheduling process was upgraded, our client gained visibility to the machine shop and could optimize efficiencies and gain capacity. The head of Operations said he was able to double capacity to support sales growth. The production schedule was no longer dependent on a person; it became part of a process. Thus, this key resource could focus attention on further optimizing machine shop performance.

The Bottom Line
Pay attention to your planning processes as they will drive bottom line business results. Changing from reactive to proactive sounds far easier than it is when you get down to the details, but rolling out the appropriate process, data, and ERP system upgrades will propel progress. If you are interested in talking about implementing a master planning and production scheduling process upgrade to improve visibility and results, contact us.

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

Clients Experience in Working With LMA

Our client Armacell talks about their experience in working together from the CEO, General Manager of Operations, Integrated Business Planning (Supply Chain), and Sales point-of-view



ERP & RELATED TECHNOLOGIES Better Utilizing ERP for Sustainable Results

99% of the companies that bring us on board for consulting projects can accelerate bottom line business results by better utilizing their ERP system. The typical 80/20 equation holds true - at least 80% of companies underutilize their ERP system by a significant amount. Even the 20% that utilize their ERP system to a better degree than most have opportunities.

In almost 20 years of consulting, we have found only 1 client that couldn't utilize their ERP system to a greater degree as their manual work around processes would fall apart. They required an ERP upgrade before they could utilize their system to a greater degree. Every other client could make progress (improve customer service levels such as OTIF on-time-in-full, reduce lead times, increase efficiencies, reduce waste, automate manual functions, reduce inventory, etc.) by better utilizing their ERP system. It didn't matter if they had a tier 1 ERP system such as SAP or Oracle, or a tier 2 or 3 system such as Epicor, SAP Business One, Microsoft Business Central, Sage 100 etc. It didn't matter the industry - aerospace, building products, life sciences/ healthcare products, or food and beverage. These statistics apply across the board. To learn more about how to better utilize ERP, read our article, **The MacGyver Approach: Leveraging Your Underutilized Asset**.

Building Products Manufacturer Case Study
A building products manufacturer struggled to get the "right" inventory to the "right" distribution center at the "right" time to service customers successfully. There were four production facilities supplying around 12 distribution centers across North America. Each production facility also functioned as a distribution center for their region. This consulting client used SAP, and although they were on an older version of the software, the system could support a complex distribution network. However, they were underutilizing the ERP system.

There were various levels of expertise at the production facilities, different processes at different facilities, and different use of the ERP system and different data integrity at different sites. This is not uncommon. In 80% of clients, the employees using the ERP system are NOT resistant to change once they understand how it works, how it will help, and how what they do fits into the big picture. Until they understand how to perform their daily tasks to successfully serve customers and accomplish their goals, they will do whatever it takes to do what's needed including developing manual processes, updating spreadsheets, etc. That is exactly the situation as we entered this client.

We started by understanding the current business processes and use of the ERP system. By documenting the high level processes, we could identify gaps and opportunities. We quickly addressed quick wins. There are typically a few quick wins at every client; however, to make sustainable progress, the key is to review how the business processes connect with and interface with each other. Once a full view of the business processes and interfaces emerges, the current use of ERP will also become apparent. Finally, the use of data, integrity of the data, and reliability of the data for decision-making will also emerge during the process review.

In this client situation, we started by sharing best practices among production facilities. One production site had a more advanced use of planning functionality, and so we worked with the second priority site to set up the appropriate system settings, update data, and roll out upgraded planning processes. This use of SAP in conjunction with upgraded planning processes and coordination with Sales and Operations propelled service levels to jump from low 60%'s into the 80%'s within a few months. Next, there was additional SAP functionality that could upgrade the planning process across both sites, and so we worked with SAP experts to test and roll out additional SAP functionality to further automate what made sense. This resulted in a solid production plan.

From a replenishment standpoint, it started with a solid production plan. Beyond a solid production plan, the replenishment process to supply the distribution centers with the appropriate product to satisfy customers required a directionally correct forecast. The forecast was the trigger to supply the distribution centers. Thus, we worked to better utilize the advanced planning module of SAP to whatever degree feasible on an accelerated timeline in addition to upgrading the business process for reviewing the demand plan with the Sales Team. This step was incorporated into the monthly **SIOP** (Sales Inventory Operations Planning) process to gain executive alignment and to ensure the forecasts passed the smell test.

In addition, we reviewed the current replenishment process including the MRP and replenishment or transfer order settings. We performed inventory analysis to determine optimal settings for safety stock, minimum orders, etc., and rolled out process improvements in conjunction with SAP functionality. These process and ERP utilization improvements allowed us to improve our service levels greatly and rectify relationships with customers. As the process smoothed out, we started to look at ways to optimize inventory levels while maintaining higher levels of service.

Results with Better Utilization of ERP

Results followed the rollout of improved utilization of SAP in combination with process upgrades and associated education. Most importantly, service levels improved from around 40% to the 90%'s. Lead times were also shortened in a critical site that produced a core product line. This made a dramatic impact on customers' perception and and turned unhappy customers into customers looking for opportunities to expand business with our client.

In addition, the critical site increased output and capacity as manufacturing got in front of what was needed to support customer requirements. Manufacturing efficiencies improved as the production schedule transitioned from reactive to proactive.

From a replenishment standpoint, as upgraded replenishment planning was rolled out, service levels improved. And, as MRP settings were updated with optimized variables, inventory levels were reduced without impacting service levels negatively.

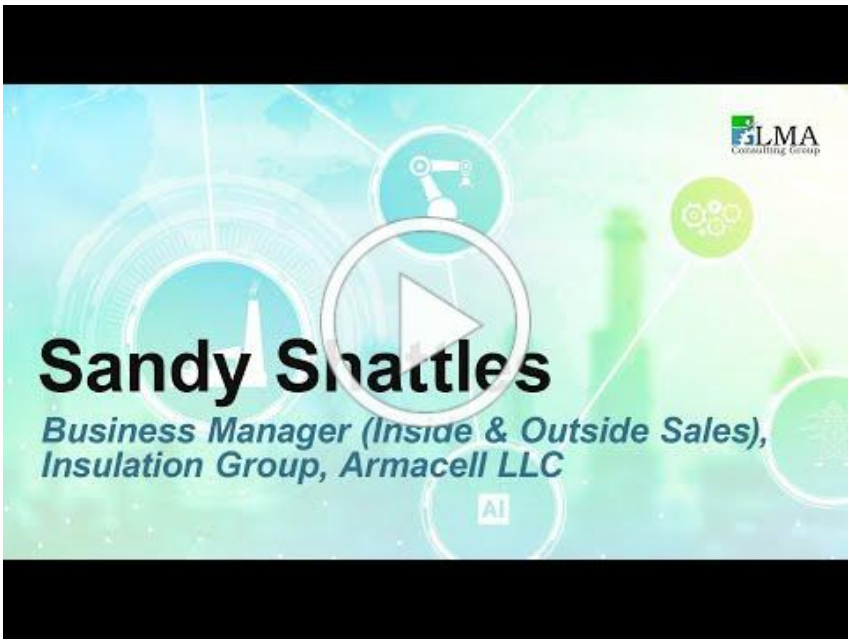
Finally, as the process and system upgrades were rolled out, the team was educated and gained confidence with their core tasks. Additionally, as processes were automated, the team could spend more time on exceptions and less time performing mundane tasks. This freed up time for additional improvements to grow revenue and profitability.

The Bottom Line
Pay attention to your business processes in conjunction with your use of ERP. The better you utilize ERP in a smart way to accomplish your goals, the more focus will go to exceptions, bottlenecks, and additional process and technological upgrades. If you are interested in talking about how to better utilize your ERP system to drive superior customer service, customer growth, profitability and cash flow, contact us.

Did you like this article? Continue reading on this topic:
Better Utilize Your ERP System

Listen to a Client Example

Thrilled to share our client's success story related to customer service and sales success with SIOP internationally from the Sales and customer point-of-view. Our client also discusses how LMA works with client teams to achieve these bottom line results, and more importantly, how we will jump into details and educate the team so that the improvements are sustainable.



Connections

THIS MONTH'S REQUESTS:

- If you have a supply chain or operations position, post it on our Association for Supply Chain Management Chapter (ASCM/ APICS) **website**.
- Do you know a top notch investment banker with key clients in Southern California area interested in growing his/her business and meeting top-notch trusted advisor colleagues in the Inland Southern CA area? My **ProVisors** group has an opening for these professions, and we have lots of referrals for these professions on a regular basis. Please introduce ***me***.
- If you are looking for a highly-skilled Supply Chain Manager with planning, purchasing, and inventory experience, please **contact me** for a referral.

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.

Check out our new video & articles series