

Lisa Anderson's *Profit Through People*[®] Newsletter



Enabling Scalable, Profitable Growth No 192, July 2023

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

It has been a whirlwind. I've been upgrading my rental house, working and traveling with clients, taking time out to help my Mom and Aunt with a few tasks, and so on. With that said, I was able to take a night off and see the Doobie Brothers. They were awesome!



In case you missed it, I'm thrilled that our book, *SIOP (Sales Inventory Operations Planning): Creating Revenue and EBITDA Growth*, has been 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!

From a business standpoint, we are thrilled to see continued growth (clients have strong backlogs even though worries persist), improved customer service (shorter lead times, improved on-time-in-full OTIF), reduced inventory (stronger cash position), improved operational performance (increased output, improved labor efficiency, reduced cost and waste) and more due to the rollout of planning, scheduling, inventory, [SIOP/ S&OP](#) and other projects related to better utilizing ERP and related technologies to improve performance.

IN THE NEWS

I was thrilled to be interviewed by *Harvard Business Review* on creating a [Resilient Supply Chain Built for Competitive Advantage](#).

And for the rest:

- Quoted in *Manufacturing Dive's* article, "[How manufacturers can navigate a slowing economy](#)".
- Spoke on *Manufacturing Radio's Network* [Manufacturing Matters podcast](#) on what to expect in manufacturing and supply chain and where to focus.
- Quoted in *Snowflake* on "[How Supply Chains are Life and Death](#)" about the impacts of healthcare supply chains.
- Quoted in a SAC press release, "[Supply Chain Issues Critical to Address in Today's Volatile Global Environment](#)".
- Published an article in *Brushware Magazine*, "[How Smart Manufacturers are Navigating Interest Rates](#)".

- Published a press release, "[Lisa Anderson, Manufacturing & Supply Chain Expert Issues Supply Chain Special Report](#)"
- Our press releases were picked up by [Inland Empire Business Journal](#) and [The Reshoring Institute](#).

Enjoy,
Lisa

P.S. Know anyone who is interested in getting ahead of stagflation complications to thrive in 2023 and 2024? Refer them to [us](#).

The **STRONGEST LINK** in Your Supply Chain™



STRATEGY

SIOP / S&OP: Don't Reshore; Move Manufacturing Forward



Globalization is no longer working

Globalization is not working. Geopolitics abound. For example, the war in Russia and Ukraine ravages on. There are concerns around the nuclear power plant in Ukraine, occupied by Russia. And that is aside from the impact on oil, food, commodities and much more. China continues to threaten Taiwan and has already changed Hong Kong. It is no longer the same for business. There are countless risks throughout the world. Read our recent [article](#) on geopolitics, natural resources, and the supply chain to

learn about the larger scope of these risks. The bottom line is that globalization is no longer working.

SIOP to Devise a New Path Forward

[SIOP](#) (Sales Inventory Operations Planning), also known as S&OP is a process that will help you navigate changing business conditions (such as the fall of globalization). It provides a proactive view into your demand plan (sales forecast) so that executives can evaluate changes required to your manufacturing and supply chain footprint to successfully and profitably supply the revenue forecast. If you are dependent on China, Russia, Ukraine or other risky countries for manufacturing or anywhere in your supply chain (ie. your suppliers' suppliers' supplier) or if your customers are dependent, you should reevaluate. SIOP is a process/ tool that will help you with this process.

Will reshoring and nearshoring suffice?

In our recently released special report, "[The Road Ahead: Business, Supply Chain & the World Order](#)", reshoring, nearshoring and friendly-shoring are discussed. Every executive should be evaluating these strategies to regionalize your supply chain if you want to have a sustainable business for the long term. A few of the key points include:

- **Reshore:** Certainly, smart companies are moving manufacturing closer to customers (which typically is bringing it back to its country of origin if that is where the customer base is located). Extended lead times and delays were unacceptable during the pandemic; however, much worse than that is the fact that executives can no longer "count" on reliable sources of supply in today's risk laden environment.
- **Nearshore:** If your product requires a significant amount of labor to produce, you might want to nearshore, meaning move manufacturing to a country close to your customers. For example, Mexico has a lower labor rate than the U.S. yet is close (and doesn't require a container ship to transport), and so several companies are producing in Mexico if they have a high labor content in their products.
- **Friendly shoring:** Friendly shoring, also known as friend-shoring, is the same as nearshoring except that you have to be careful about where you are locating manufacturing. Is it a friendly nation to your 'home' location with the bulk of your customers? If not, if global conflict arises, you will be left with the same geopolitical risks.

Read more about these strategies in our blog category [reshoring/ nearshoring](#). Although reshoring and nearshoring are important strategies, they will not suffice. China produces at scale. There is no way companies can move enough manufacturing to suffice by itself. Many executives think that they will be OK because they diversified to other southeastern Asia countries. That is not enough. Additionally, according to the [Economist](#), China has expanded its influence throughout southeastern Asia, making these manufacturing havens such as Vietnam riskier. The other big powerhouse and hot spot is India. As discussed in our special report, India offers promise; however, it also comes with infrastructure risks, [water risks](#) etc.

The bottom line: Reshoring/ nearshoring is not enough.

Expand Manufacturing Capabilities

Don't just think about moving manufacturing. Why risk your current supply? If your outsourced company finds out you are reshoring/ nearshoring, you will go to the bottom of the priority list immediately. That will not help your service or viability. Why not expand your manufacturing capabilities near your customers so that you can make a seamless transition? Unfortunately, it is unlikely you will get your equipment and other assets out of China. You can always try that after you have sufficient capacity near your customers.

Whether you insource or outsource doesn't matter. The key point is that you need to expand your manufacturing and supply chain capabilities ASAP. Start by thinking through several questions:

- **Equipment capabilities:** Do you have any manufacturing presence near your customers? If so, take an inventory of your equipment, assets and infrastructure.
- **Talent capabilities:** Take an inventory of your talent capabilities. What types of skills do you have? Where are they located? What risks are associated with your talent?
- **Industry 5.0 (manufacturing and supply chain technologies):** Take inventory of your capabilities, ease of transition to these new concepts, etc. A few of the top technology enablers include industrial blockchain, drones, exoskeleton [robots](#), additive technology, 5G and beyond, and [mixed reality](#) to achieve a superior customer experience, hyper customization, a responsive and distributed supply chain, experience activated (interactive) products, and a return of manpower to factories.
- **ERP system capabilities:** Will your ERP system support your transition and expansion needs? Do you have a supplier that is investing heavily to keep up with the latest technologies and incorporating [artificial intelligence \(AI\)](#), internet of things (IoT), [predictive analytics](#), [e-commerce](#) (B2C, B2C), [WMS](#), advanced planning and more.
- **Process capabilities:** Do you have the appropriate processes to support both strategy and tactics that will be required to navigate the next 10+ years? From a strategy perspective,

you should have a [SIOP](#) (Sales Inventory Operations Planning) process in place to determine how to best navigate changing conditions to be prepared to supply your ideal customers and achieve profitable growth. From a tactics point-of-view, you will need the execution capabilities to support SIOP which is known as S&OE (Sales & Operations Execution). These processes include [demand planning](#), [production planning](#), [replenishment planning](#), [capacity planning](#), [material planning](#), [production scheduling](#), [logistics planning](#), [labor scheduling](#) etc.

- **Innovation culture:** The only way to succeed in the next decade is with [innovation](#). Start creating a culture of innovation. It isn't something you can dictate.
- **Supply chain capabilities:** In addition to demand and supply planning capabilities, you need to elevate to the SIOP process to make sure your logistics, distribution and transportation capabilities will support your changing circumstances.

There is no time to waste in building your manufacturing capabilities. By performing a quick assessment, you'll know where to focus.

Innovation: Develop New Manufacturing Capabilities

Beyond simply expanding manufacturing capabilities, develop new manufacturing capabilities. Innovate. Create new technologies and advanced capabilities. The future will belong to those who can manufacture to scale while maintaining resiliency and profitability. When you develop new capabilities, choose to locate your manufacturing next to your customers. For example, additive manufacturing (3D printing) enables for on demand production near the point of use (customer, consumer). Innovate and find ways to utilize this technology, combine with other technologies and capabilities, develop new and you'll surpass the competition and secure your market leadership position for decades to come.

Refer to our [SIOP webpage](#) for more information, our [blog](#) (SIOP category) for hundreds of articles, and learn more about SIOP and what's important for a successful implementation in our new release eBook, [SIOP \(Sales Inventory Operations Planning\): Creating Predictable Revenue and EBITDA Growth](#). If you are interested in talking about how to improve profitability, free up cash, and/or improve service, [contact us](#).

[Did you like this article? Continue reading on this topic: SIOP/ S&OP Playbook: Creating Predictability & EBITDA Growth](#)

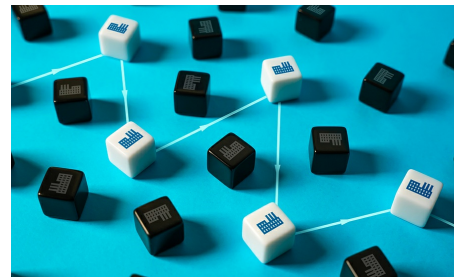
Interlinks Podcast: Sales Inventory & Operations Planning (SIOP) Parts 1 & 2

Podcast on how implementing SIOP supports profitable growth as well as many other business objectives.



PLANNING

Using Capacity Planning to Increase Revenue & Profitability



The state of affairs in manufacturing & distribution

Manufacturing is on a downward trend after eight months of [PMI](#) (purchasing manager's index) below 50. It dropped to 46 in June. China's manufacturing also shrank for a third month in a row to a PMI of 49. Yet manufacturers' backlogs remain relatively robust in many industries, leaving executives perplexed on what to do about capacity shortfalls.

Logistics is in largely the same shape as the [Logistics Manager's Index](#) (LMI) hit a new all-time low of 47.3 for May, down 3.6 points from April and operating in contraction territory for the first time. Thus, not surprisingly, the [Freightos Baltic Index](#), which measures freight volumes and prices globally, shows average daily spot rates from China/East Asia to the U.S. West Coast at \$1,324 per 40-foot container, down from more than \$14,000 a year ago. Yet, products aren't easy to find and get delivered on the rapid expectations consumers expect.

On the other hand, supply chains are on the move. Smart companies are reshoring, nearshoring/ friend-shoring, expanding manufacturing capacity and getting ready to scale up rapidly to meet customer expectations. As manufacturers struggle with [rising interest rates](#) and consumers focus on services, weak ones will get absorbed or go out of business, leaving an opportunity for those ready to take on the volumes. The same is true on the logistics front. As the West Coast ports struggle to finalize labor negotiations, [container ships are on the move](#) to the east coast, leaving distribution and transportation suppliers ready to support the volume with aggressive growth. It is a time where the winners and losers will separate, leaving vast opportunities for forward-thinking executives.

What are the implications for capacity planning?

Companies need to expand capacity yet remain resilient and flexible so that they can also maximize profitability and accelerate cash flow. In order to do that, it is vital to get on top of your capacity capabilities. The majority of clients do not have clarity of their capacity (upcoming requirements as compared with available capacity). Thus, they struggle to know if they can take on customer orders and deliver it with the appropriate level of customer service (meeting the customers' expected lead time and delivery performance with high OTIF (on-time-in-full)). When opportunities arise, poor service will kill the opportunity quickly. Also, if you don't understand your capacity, you will not allocate it optimally and maximize your capacity; thus, losing profit opportunities.

Capacity planning is a key element of the [SIOP](#) (Sales Inventory Operations Planning) process: it takes your demand and translates it into your capacity requirements (manufacturing, equipment, storage, transportation, talent, etc.). By evaluating capacity, executives can get in front of changing business conditions and determine how to optimize their capacity to scale up or down quickly to meet key customer needs while maintaining margins.

Client Example: Using Manufacturing Capacity to Scale Up to Meet Sales Forecasts

In a storage manufacturer, a key to success is to have the capacity capabilities where needed when customers need it. As logistics changes occur (such as the transition from the west coast to the east coast), storage systems will adjust in concert. Since storage systems are bulky and freight costs of inbound and outbound freight is expensive, it is important to have capacity available where it's needed at the "right" time.

It is not for the faint of heart to get a directional view of manufacturing capacity for a storage solutions manufacturer. The good news is that shop floor employees can move between machines and equipment to produce what's needed; however, the bad news is that this makes understanding capacity availability challenging because not all products require the same number of people or skills to produce. By using a [SIOP](#) and [demand planning process](#), customer orders, likely customer orders and quotes are available. Assuming engineering is on target in completing product designs, using a capacity planning process, this demand plan can be translated into directionally correct requirements (weight and hours) by plant and customer.

However, required machinery, equipment and labor requirements doesn't provide valuable

information if you can't compare to available capacity. It sounds much easier than it is in reality due to the complexities. Typically in these types of operations, there are many different work centers (work areas) that are not alike in terms of capabilities and labor requirements. Similarly, products are not created equal; each product can require different numbers of people, different skills and it will go through multiple work centers before completion (fabrication, weld/ final assembly, paint). Storage requirements are also not created equal. Thus, a simple available capacity calculation across a work center or group of work centers is not feasible. However, using the forecast as well as historical run rates and weights by product, summarized by work center and production area can provide a directional view of available capacity.

Reviewing capacity requirements vs. available capacity by plant and production area will give Operations leaders their marching directions. For example, in one facility they had plenty of fabrication operators and had excess inventory of these parts yet customer service was suffering. The bottleneck was in weld operations, and so work in process (WIP) was stuck waiting for weld. As they trained weld operators and expanded the capabilities of a few fabrication operators, they were able to catch up and improve their OTIF (on-time-in-full) metrics.

As they gained a view into upcoming capacity, they could see potential bottlenecks in advance so that they could proactively handle them. For example, the plant could see that they had more requirements than capacity two months into the future; however, they could absorb it (level load) in advance if they could get engineering to complete the designs. Thus, a priority list was developed and managed with engineering. Additionally, they could evaluate whether they could fulfill a key customer project that another plant couldn't handle on time and transfer the project to a nearby site so that it could be delivered on time without negatively impacting margin. On the other hand, if a critical project came up that required advanced manufacturing capabilities, they could see the impacts of transferring the volume to another facility with these capabilities and incorporate the cost impacts of the additional freight. They also had the opportunity to potentially transfer the volume to their Mexico facility which would add freight yet mitigate the labor costs. The bottom line is that capacity visibility supports revenue growth with minimal impact to profitability.

Client Example: Expanding to Storage, Freight , & Engineering Capacity

Although the focus has been on manufacturing capability, the next priorities are storage, freight and engineering capacity analyses. As the plants have the capability to see into the future and want to level load operations in a way that maximizes operational performance (running in the optimum sequence to minimize inefficiencies and waste), engineering capacity becomes the bottleneck. Seeing which orders / projects should be prioritized across sites will give a priority list to Engineering. If you add available engineering capacity into the picture, it might lead to hiring additional engineers or supplementing with short-term resources.

The same holds true for storage and freight capacity. Since the product is bulky and can only be stored outside for certain periods before fading, storage capacity should be managed. If you have significant customer orders coming down the pike, you could decide to produce ahead to keep customer service intact without adding unnecessary long-term manufacturing capacity. In this case, you could calculate storage capacity by region (to minimize freight costs). This goes hand-in-hand with transportation and freight capacity.

Final Thought

Capacity planning is cornerstone for any manufacturer or distributor as you must serve customers, maximize operational efficiencies, reduce waste, coordinate resources, right-size inventory levels, and execute plans.

Refer to our [blog](#) for many articles on capacity planning, production planning and related concepts. Also, read more about these types of strategies in our [eBooks](#) including [SIOP \(Sales Inventory Operations Planning\): Creating Predictable Revenue and EBITDA Growth](#) and [The Road Ahead: Business, Supply Chain & the World Order](#). If you are interested in talking about implementing out best practices for production scheduling to drive cost reduction and inventory reduction while maximizing your customer experience, [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 Leap Forward with ERP & Supply Chain Technologies

Should ERP & Related Technologies Be a Priority?

ERP and related technologies should only be a priority if you want to grow and succeed for decades to come. If not, it will be the same as if you said you wanted to stick with the horse and buggy instead of leaping into a Ford.



To put this into perspective, according to Deloitte Insights (from 20220), manufacturers' average IT budget as a percentage of revenue is 2.14%. Of course, it depends on whether you are small or large, but the ballpark remains valid. If focused on ERP (as a modern ERP system is vital to success), a rule of thumb is that you'll spend 5-7% of revenue (for the full project price and implementation cost). How do these compare with your budgets?

Why Should ERP & Related Technologies be a Priority?

The future will be for those who are innovating and using technological advances. Manufacturers and distributors are navigating a mountain of [geopolitical, natural resource and rare earth issues](#) in addition to navigating [interest rate impacts](#) and a host of other economic challenges that create negative headwinds on preparing for profitable growth and contributing to key financial indicators. Instead of pushing a boulder uphill, it makes sense to look for new solutions and strategies to solve old issues. One of these strategies is to maximize the power of ERP and related technologies.

Will my ERP System Suffice?

Of course, the answer to whether you should upgrade your ERP system is that "it depends". Upgrading your ERP system isn't for the faint of heart. 80% fail to achieve the intended results. Yet having a modern ERP system that supports your needs is absolutely essential to support growth plans.

No matter your situation, you can start immediately by better leveraging your underutilized asset. In almost 20 years of consulting, I've yet to find a client that couldn't better utilize their ERP system to attain bottom line business results. Read our comprehensive article to find out how - [The MacGyver Approach: Leveraging Your Underutilized ERP Asset](#). For example, an aerospace

manufacturing client was struggling to provide high service levels to their customers while dramatically reducing their inventory levels with a wide breadth of products to support their growth goals. In addition to process improvements and common goals, a key ingredient to success was leveraging additional ERP functionality to improve their production and inventory planning processes across their production facilities.

However, as customer expectations have increased, supply chains have become increasingly complex, and margins have been squeezed with rising costs, having a modern ERP system is the only viable path forward for sustainable success. How do you know if your ERP system will suffice and whether an upgrade should be a priority? Read our [article](#) on find out the answer. If you determine you should modernize your ERP system, check out our [guide for selection and implementation success](#).

What Technologies are Required to Support Success?

Again, of course, the answer is "it depends". With that said, the answer is NOT that you can afford to sit still. What is absolutely clear is that only manufacturers and distributors that pursue advanced technologies will thrive in today's volatile and complex age.

There are countless technologies that might be appropriate. No client should pursue all of them. If everything is a priority, nothing is a priority. The key is to review your growth plans and assess your SIOp (Sales Inventory Operations Planning) process results to set your technology priorities. A few of these technologies that pop to mind include:

- **Robotics:** Almost every client is testing, trialing or using robots. There has been controversy over people vs robots in some circles although manufacturers are flipping that equation to people and robots. Read examples in our article, [People vs Robots](#). It doesn't make sense in every situation. In fact, one equipment manufacturing client chose not to pursue a specific robot because it didn't provide a return on investment and slowed down the process after thorough testing. On the other hand, another client continues to add welding robots which automates repetitive tasks.
- **Artificial intelligence:** Demand planning, also known as sales forecasting, is important for every company, and artificial intelligence can always add value to the forecast yet is especially key for hard to predict patterns such as those in consumer products industries. AI is used in countless manufacturing and supply chain technologies. Check out our recent article on AI, titled "[ChatGPT & AI: Good or Bad?](#)".
- **Predictive analytics:** [Business intelligence](#), big data, and predictive analytics are proving essential. Every ERP system can provide you with an overwhelming amount of data. The issue is sifting through the data to get meaningful information for decision making. Read our article to get strategies to [turn data into insights](#). Taking that a step further to using your data to predict the future can give you an advantage over your competition.
- **E-commerce (B2B and B2C):** Consumer expectations continue to increase. After all, who doesn't expect immediate deliveries from Amazon? What goes on behind the scenes to make that happen isn't a no brainer. Read our articles on [manufacturing opportunities in e-commerce](#) and [B2B, B2C & Associated Technology](#).
- **Digital twins:** What could be better than simulating your factory, products, your supply chain etc.? Digital twins enable better designs, planning, and much more to contribute to customer success and EBITDA growth.
- **Autonomous capabilities:** These capabilities are used widely in manufacturing environments to supply or move materials and components; in logistics and distribution environments to move items and in transportation and goods movement to move products.
- And many, many more such as drones, blockchain, additive manufacturing, [mixed reality/metaverse](#), internet of things (IoT), 5G, etc.

The Bottom Line

Jump into the world of technology. Bring on experts and deep dive into those areas that will provide significant benefits to your business. Minimally, you should test and trial the use of advanced technologies. Perhaps you'll even combine technologies in a new way or develop a new technology to support your profitable growth.

[Did you like this article? Continue reading on this topic:](#)
[Modernize Your ERP System: A Guide for Selection & Implementation Success](#)

Listen to a Client Example

Thrilled to share our client's success story related to service, use of ERP system (SAP), and SIOP decision-making. 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 commercial real estate broker 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 [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.

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