

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



Enabling Scalable, Profitable Growth No 196, August 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

Hard to believe we are already a month into the second half of the year. Volatility, uncertainty, complexity and ambiguity (VUCA) seems to rule the day. Refer to our recent [article](#). With that said, we are at a crossroads and on the crux of a manufacturing renaissance with technology advancements.

Speaking about advanced technologies, I attended [SAP Sapphire conference](#) to dig into the latest artificial intelligence, ERP, and supply chain advancements. Clients have been focused on inventory, inventory, and inventory lately. In essence, the goal has been how to reduce inventory levels (and free up cash and cost especially with the high interest rates) with a right-sizing strategy to support sales revenue goals while having as little inventory tying up cash unnecessarily as possible. Refer to our recent [article](#) on optimizing inventory in the turbulent economy. To accomplish this goal of "more cash; more revenue; more profit," the [SIOP](#) (Sales Inventory Operations Planning) process and strategic pivots are warranted. We will talk about these issues in our articles.



Aside from work, I have enjoyed time with my brothers, nephew and his girlfriend touring La Jolla and Disneyland. Our collective favorite was Radiator Springs (pictured above). I also spent time in Arizona with my Mom and aunts - lots of papers to shred, errands to run, and things to do. My Mom's cat is adorable and entertains all of us. I also took a short trip to San Diego for a memorial and a quick jaunt to Old Town. On the other hand, my cat was none to happy about these trips and made his feelings known!

IN THE NEWS

I was thrilled to be on [Inc.'s From the Ground Up podcast](#) on preparing for demand shocks.

And for the rest:

- Quoted in [Bloomberg Law](#) in an article, Bogus 'Made in USA' Claims Flourish. The FTC Is Cracking Down
- Published articles in *Adhesives & Sealants*, Strategies [For Gaining Packaging Efficiencies In Your Supply Chain](#) and [Sustainable Manufacturing = Uncommon Common Sense](#)
- Published articles in *Brushware Magazine*, [Supply Chain Disruptions & Chokepoints Dominate](#) and [Managing Inventory and Cost to Navigate Economic Turbulence](#)
- Quoted in several Inc. articles on the Baltimore bridge collapse about the [lost wages](#),

[impacts to the business community](#), the [importance of diversified supply chains](#), and [how to avoid supply chain disasters](#).

- Quoted in the [Los Angeles Times](#) on how the Baltimore bridge collapse could affect prices and the West Coast.
- Interviewed on the [Green Sense Show](#) podcast about how the supply chain is changing.
- Published articles in MPO Magazine, [Medtech's Supply Chains: Global Risks Driving Regional Manufacturing](#) and [Supporting Medtech's Growth by Scaling and Mitigating Risk in the Supply Chain](#)
- Interviewed on [KNX News](#) on supply chain disruptions and its impact on consumers.
- Quoted in PYMTS in an article [Supply Chain Chaos Threatens East Coast After Baltimore Bridge Collapse](#)
- Quoted in Area Development in an article [Frontline: Red Sea Pharma Crisis Pushing Logistics Advancements](#)
- Spoke at ISM National Capital on the Top 10 Supply Chain Challenges and ASCM Orange County on [Supply Chain Trends & Opportunities](#).
- Spoke on the [Critical Mass Business Talk Show](#) on supply chain.
- Published press releases on the state of the [aerospace supply chain](#) and on [nearshoring amid Mexico's election](#).

Enjoy,
Lisa

P.S. Know anyone who is interested in getting ahead of the rapidly changing global business conditions by creating predictable revenue profitable supply? Refer them to [us](#).

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



STRATEGY

SIOP / S&OP: Successfully Navigating Turbulent Times with SIOP

Turbulent times are upon us. According to Reuters reporting from the Bank of America, geopolitics has leapfrogged inflation as the most significant risk to the market, and that was proven true as the market slumped with the expectation of Iran's attack on Israel. With multiple wars and escalating tensions occurring throughout the globe, risk levels are elevated. With that said, stagflation is also of significant concern as inflation remains elevated yet unemployment statistics signal a recession. As volatility is here to stay, the successful companies are navigating turbulent times with SIOP.



Geopolitics Run Rampant with Energy at the Center

Geopolitics have been bubbling up over the last few years. The most recent concerns in the Middle East are driving the conversations as Iran is expected to attack Israel. Conflicts are heating up with Iran-backed Houthi rebels attacking container ships and Iran-backed Hezbollah conducting drone strikes. Attention shouldn't be diverted from the Russia-Ukraine war and the rising tensions of China with Taiwan and aggressions with other countries in the South China Seas. For example, the Philippines and Vietnam are conducting joint exercises to bolster maritime cooperation in the face of Chinese aggression. China has also been on a buying spree through its belt and road

initiative which gives it power over much of the world's natural resources. To read more on this topic, refer to our article, [Geopolitics, Natural Resources and Impacts to the Supply Chain](#). Meanwhile, there is political upheaval in Venezuela due to the allegedly fraudulent election, and the southern border has become a danger zone.

Of the geopolitical conflicts, Iran, Venezuela and Russia sell oil. Energy is at the center of conflicts because the world runs on energy. Fossil fuels which include coal, oil, and natural gas supply more than 80% of the world's energy. Not only is energy required to power cars and trucks and to run houses, but it is required for manufacturing, logistics, and goods movement. In fact, it is essential for almost every product used from medical devices to aerospace and defense to electronics. Artificial intelligence has spurred huge growth and is the future, but it will require even more energy to fuel. Statistics range from double the energy to ten fold the need. For example, according to Vox, training a large language model uses nearly 1,300 megawatt-hours (MWh) of electricity, the annual consumption of about 130 US homes. Thus it is no wonder energy is the topic of geopolitical conflicts.

After the sanctions on Russia's invasion of Ukraine, Russia simply sold oil at higher prices to China and India. China (68%) is the number one buyer of oil from Venezuela, which is followed by the United States (23%). Given the geopolitical climate and dirty oil produced in Venezuela in comparison to U.S. produced cleaner oil, that statistic is quite alarming. On the Iran front, sanctions don't appear to be enforced. Iran's oil exports reached a 5-year high with China as the top buyer, according to Nikkei Asia. For example, according to FOX Business, Iran sold China \$6.5 billion worth of oil in 2020, and that number soared to \$23 billion in 2021. According to Reuters, in 2023, China purchased 1.05 million barrels per day which was 60% above pre-sanction peaks from 2017.

Stagflation Concerns

There has been rampant concerns about inflation. Consumers are paying 20-50% more for key items such as food, gas, and rent. Businesses are buried in high prices for materials, components, and outsourced products. Thus, clients have absorbed as many price increases as feasible while passing on the rest. As interest rates have risen substantially, it has added to the cost increases impacting businesses. Thus, strategies to free up debt such as inventory reduction have become a top priority.

Inflation and increasing costs are challenging enough to manage; however, it appears as though recessionary trends are starting to emerge. The unemployment rate jumped to 4.3% in July, triggering a recession signal. The signal stipulates that the economy is in the early stages of a recession when the three-month moving average of the jobless rate is at least a half-percentage point higher than the 12-month low. If this recessionary trend. Since clients and contacts are experiencing sluggish backlogs, it seems possible that recessionary trends could arise.

When you have both issues (inflation, recession) at once, you are in a period of stagflation. Emotion can avoid stagflation or it could create stagflation. There is no doubt the economy appears turbulent.

The Talent Conundrum

As companies automate, digitize, and roll out predictive technologies to support profitable growth, fewer and fewer low-skilled resources are required. For example, clients are automating standard processes with artificial intelligence and upgraded technologies such as modern ERP and advanced planning systems. These systems that use advanced AI enabled algorithms will likely

replace basic supply chain and planning tasks. Thus, there will be fewer planners and schedulers required to expedite and create schedules. On the other hand, there will be far more high-skilled planners and supply chain leaders required with the skills to oscillate between detail and big picture with complex, down-the-line thinking and what-if scenario planning capabilities. In fact, those skills will increase in demand as advanced technologies are utilized.

There will be a mismatch of talent, providing vast opportunities for those resources interested in continuous education and big picture thinking who are willing and able to jump into details as needed. It will also power forward-thinking organizations to new heights as they will be equipped to move faster while accounting for changing conditions in today's volatile, uncertain, complex, and ambiguous (VUCA) world. To learn more about the skills gap challenge for manufacturing success, read our recent [article](#).

SIOP: The Solution to Successfully Navigate Turbulent Times

SIOP, (Sales Inventory Operations Planning) is a process that oscillates between the strategic and the detail (execution) that looks forward with future demand and surfaces the appropriate decisions for the best way to fulfill that demand in a profitable, scalable, secure, and customer-friendly manner. Key decisions are highlighted including pricing strategies, capacity allocation, supply diversification, and cost/ productivity enhancement. Most importantly, the SIOP process maintains a weekly, monthly, and quarterly cadence that supports predictive views of changing conditions with informed, rapid responses, proactive pivots, and disruptive strategies.

For example, an industrial and consumer manufacturer rolled out a SIOP process to gain better clarity of customer and product profitability to incorporate into proactive decisions to gain market share while maximizing pricing and profits. By reviewing the true picture of customer profitability inclusive of pricing, rebates, predictive rebates, e-commerce demand patterns, and cost allocations (based on specific value stream capacity and labor considerations), proactive decisions were highlighted. It pointed out pricing adjustments required to ensure reasonable margins and operational strategies required to maximize productivity, level load the schedule, and align supply in a cost efficient manner. By following these strategies, there was also an opportunity to decrease the footprint and condense a second location, thereby increasing profits and minimizing complexity.

As market conditions changed such as changing e-commerce patterns, increasing rebate trends, or customer declines, they were absorbed into the SIOP cadence for rapid review. Similarly, as supply conditions changed such as Asian supplier delays, changing freight rates, and fluctuating supply requirements, the Operations and Supply teams made quick adjustments and reviewed potential strategic shifts required. For example, there was an opportunity to vertically integrate additional steps in the manufacturing process to address turbulent conditions while ensuring high customer service levels / OTIF (on-time-in-full).

SIOP: Taking the Leap

In our book, "[SIOP \(Sales Inventory Operations Planning\): Creating Predictable Revenue and EBITDA Growth](#)", we discuss how SIOP can support appropriate pivots during turbulent times. We focus most of our commentary on explaining how a SIOP process can fuel a proactive approach to navigating changing demand and supply conditions and discuss strategies for successful rollout and execution.

[Did you like this article? Continue reading on this topic: Optimizing Business Decision Tradeoffs with SIOP](#)

Bloomberg Interview about Boeing & Supply Chain Issues

TV interview on the latest supply chain issues impacting the globe.



PLANNING

Production & Labor Scheduling Case Study to Maximize Productivity

As geopolitical and economic risks rise, executives become more concerned. Proactive clients are taking action to boldly invest where it makes sense while aggressively focusing on inventory and cost reduction of non-value added items/ work and also ensuring high customer service levels. To accomplish these objectives, they are upgrading their production planning and labor scheduling processes and use of ERP and advanced supply chain technologies.



Production Scheduling Upgrades

How will upgrading the production planning process maximize productivity? When you plan what to produce, when to produce it, and in what sequence to produce it, you will directly impact the ability to meet customer request dates with high OTIF (on-time-in-full) levels in the optimal way for increasing efficiencies, optimizing and level loading the workload, reducing scrap levels while minimizing the amount of inventory required to the bare minimum to cover for fluctuations/ unexpected occurrences in demand and supply.

The bottom line is that planning is at the center of several competing factors. The better you optimize those factors in building the plan and account for the nuances of the products, customers, equipment, and skills, the you can turn 1+1+1 into 33! In essence, you achieve the win-win-win of better customer service and better productivity (and therefore margins) while having additional cash available to pay bills and reinvest into the business.

Case Study: Upgrades to Production Scheduling Process & Toolset

An industrial storage system manufacturer wanted to increase output, maximize productivity and better allocate capacity to increase profitability while supporting growth plans. Since they built the business with responsive, high service levels, these results had to remain intact. On the other hand, because customers could change their mind frequently and push orders out, pull them in, change quantities, or drop in last minute additions to their custom engineered orders to support end customer changes and installation schedules with immediate responsiveness from the manufacturing facilities, the planners jumped through hoops to deliver exceptional service yet could only do so much in terms of productivity gains.

The schedulers were more than fully occupied detailing installation schedules, grouping products

in shippable sets, and translating them into final assembly schedules while ensuring fabrication schedules kept work flowing to keep up with anything else. Thus, tasks such as updating the ERP system with production schedule dates and developing an optimally sequenced schedule had to be left for a later date. Therefore, there was an opportunity for improvement for Sales and Project Managers to gain visibility into the schedules and for Operations to maximize productivity and drive bottom line results. To learn more about production scheduling best practices, refer to our [article](#).

At the high level, the plan to achieve the objectives was straight forward yet challenging to implement across the organization:

- **Roll out advanced ERP functionality:** By upgrading the planning functionality to allow jobs on the final assembly schedule to be split into multiple work orders and carry down to the fabrication schedule, the planning task became much more doable.
- **Focus the efforts on planning final assembly:** Once this functionality was upgraded, it allowed the planners to focus on building an optimized schedule for final assembly while automating the basics of the fabrication schedule. This resulted in visibility of the schedule for Sales and Project Management because the system was updated.
- **Further automation / advanced functionality:** As the planners focused efforts on the final assembly schedule, it became clear that there was still a huge amount of manual / Excel work that had to be completed to figure out how much of which items had to be run on what date to satisfy customer delivery and installation schedules while trying to make sure fabrication was available on time and efficiently. Thus, we upgraded / added several reports and enhancements to automate the "80/20" of the manual review, highlight exceptions, and add signals/ alerts for noteworthy changes.
- **Tie plans and priorities to other groups:** As we gained clarity on the final assembly schedule, we started meeting with supporting groups such as Engineering, Project Managers, Sales/ Demand Planning, Master Planning, Purchasing, etc. This allowed us to coordinate priorities, keep customer dates updated and collaborate for improved execution.
- **Coordinate with Operations:** As the schedules became clearer, it made sense to coordinate more closely with Operations to sequence items to maximize productivity and labor efficiencies. Since the employees are cross-trained and flexible to move between work centers based on daily needs, and there isn't enough people to staff all work centers simultaneously, scheduling labor can be a complex task. Thus, the clearer the requirements upfront, the better for staffing to be optimized to maximize output and productivity. Additionally, insights can be utilized to reconfigure shift schedules for maximum productivity.
- **Focus on fabrication scheduling:** As final assembly schedules and the coordination among functions improved, the bottleneck became fabrication scheduling. The basic fabrication schedule could be derived from the weld schedules, and so we developed a dispatch report to automate the schedule; however, it wasn't enough. If multiple customers required deliveries simultaneously that used the same work centers, the planners might need to weave in and out of multiple items during the day which must be reflected on the schedule. On the other hand, if there was enough time to combine orders, it made sense to optimize operational efficiencies, requiring the opposite approach to planning and substantial manual maneuvering. Thus, we focused on automating the "80/20" of fabrication scheduling process by defining guidelines, translating requirements into shifts and tracking schedule adherence.
- **Look forward with capacity planning:** We also summarized the requirements by work center and came up with directionally correct calculations for available capacity by shift to gain a view into capacity by site for the next several months. This view provides information for the planners to shift volume between sites while maximizing productivity and mitigating cost impacts. To learn more about capacity planning, refer to our [article](#) with best practices.

Of course, the devil is in the details, and so it required several layers of complexity, significant education and training, and testing/ pilots to succeed.

Results:

We achieved several key results including:

- **Improved visibility:** Instead of picking up the phone or running to the floor to understand the status of orders, Sales, Project Management, and Executives could look in the system and rely on the information.

- **Reactive to proactive:** Instead of jumping through hoops on a daily basis to provide exceptional service to customers, the schedules kept us ahead of customer requirements from an 80/20 standpoint.
- **Stabilized production schedules:** Instead of jumping around schedules which is less efficient for Operations, the schedules were stabilized and level loaded to a greater degree. This led to a better utilization of labor, increased efficiencies, reduced scrap, and increased output.
- **Proactive view to open capacity/ bottlenecks:** By seeing into the future, resources could be reallocated to minimize overtime, unnecessary changeovers, and freight costs to satisfy customer needs. Bottlenecks are identified upfront so that they can be resolved before becoming a problem, and open capacity can be filled or the labor reallocated productively to grow revenue and profitability.
- **Productivity:** While maintaining high levels of service, the company was able to maximize productivity which translates into bottom line results.

To take this to the next level, consider rolling out a [SIO](#) (Sales Inventory Operations Planning) process to further maximize productivity, profitability and customer value. To learn more about SIO and best practices for success, download a complimentary copy of our book, [SIO: Creating Predictable Revenue and EBITDA Growth](#).

The Bottom Line

Putting additional emphasis on production and labor scheduling can provide visibility, productivity and forward-looking views to successfully navigate turbulent times. No matter how complex and variable your situation, if you upgrade your production and labor scheduling processes and systems, you can stabilize, modernize, and maximize your results. If you are interested in assessing your production and labor scheduling effectiveness, [contact us](#).

[Did you like this article? Continue reading on this topic:](#)

[Labor Scheduling: How to Maximize Operational Effectiveness While Servicing Your Customer](#)

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

The Value of Data in Fueling Profitable Growth

Companies are overwhelmed with data. There is ERP related data, global supply chain data, world economic

data, industry and market data, customer and supplier data, email communications, and the list goes on. Turning data into insights, decisions, and strategies to fuel profitable growth is no easy task yet is essential to success.



The Value of Data

Our most successful clients appreciate the value of data. They find ways to compile, analyze, and utilize data to set strategy and make key decisions. For example, from the sales side, proactive leaders analyze revenue, pricing, and profitability trends by customer, distribution channel, market, products, geographies, salesperson, etc. They utilize that information to focus sales efforts, find opportunities for expansion, and shore up weak spots. From a strategic standpoint, they utilize information to develop new strategies for markets, channels, new product development, and sales programs. Marketing will focus on market and customer preferences and insights. Inside Sales and Customer Service utilize data including lead times, service levels, order patterns, service policies, and customer scorecards to determine what to focus on, who to collaborate with etc.

From an operations standpoint, they utilize information to make strategic decisions such as make vs buy, diversifying sources of supply, investment in plant, equipment and facilities, product rationalization, R&D investment, strategic alliances to pursue, engineering resource allocation, and agreements to negotiate. They also utilize information to support [SIOP](#) (Sales Inventory Operations Planning) processes, review capacity bottlenecks, expansion opportunities, and for reallocation, training and development plans. From a planning and execution standpoint, data is integral to developing effective master plans, optimizing detailed production and labor schedules, digging into root causes, classifying items, maximizing efficiencies, reducing waste, ensuring quality, and end-to-end supply chain performance.

From a financial perspective, they utilize data to compare budgets to actuals to trends. There is a focus on department budgets, cost allocations and trends, to manufacturing and purchase price variances to spend trends. From an inventory standpoint, inventory accuracy, inventory variances, inventory reserves, inventory levels / turns are relevant. Financial ratios, balance sheets, income statements, cash flow projections are seen as basics. The most successful CFOs utilize data to become a strategic partner to the business.

Data Analysis, Business Intelligence & Big Data

No matter the label, the smart companies invest in their ability to access, consolidate, analyze, and perform what if analyses with data. From simple ERP reports to developing data clouds with slicing and dicing capabilities, all successful companies must perform data analysis. To read more on this topic, check out our [article](#).

Every ERP system contains base reports. Typically, the majority are non-value added. They don't allow you to search by transaction types, aren't compiled by key customer, summarized by product line or geography, and don't provide the answers to critical business questions. In fact, if taken at face value without ensuring the source of the data, how it was connected to related data, whether it "adds up", and many other considerations, it could lead to disastrous decisions. Strong data analysts, sometimes called experts in data science are rare. Common sense analysts are even less likely to be found.

On the other hand, you must pursue developing the appropriate reports and analyses that allows you to separate the meaningful insights from the immaterial and the directionally correct from the misleading. There are several software tools that can aid in the process such as Microsoft Power BI and other business analytical tools. More and more, these tools have the potential to be powered by artificial intelligence (AI), yet be careful it doesn't lead you to incorrect decisions quicker and buried in data.

Predictive Analytics

A step beyond data analysis is predictive analytics. Instead of analyzing the past, modern ERP and data analytics software options will provide predictive insights for enhanced decision making. For example, sales forecasting/ demand planning software can take demand patterns, external variables such as consumer spending and weather patterns and develop sophisticated sales forecasts. Staying ahead of forecast changes will improve customer value and profits. On the other hand, many clients are better off starting simple, gaining a solid footing and then expanding to the

complex. 80% of clients are significantly more successful using this approach. Yet they do not get stuck in the mud. Instead, they look for opportunities that make practical sense that will support leaps forward. Continuous improvement is not always the best approach.

Predictive analytics can also be used for supply chain and inventory optimization. For example, if you incur a supply chain disruption in a global supply chain, you can follow up with each moving part (link) in your supply chain and address individually. However, this approach can be time consuming and ineffective and leave you exposed to the weakest link in your supply chain. On the other hand, if you are utilizing advanced forecasting, planning, logistics and supply chain systems with predictive capabilities, your system will "see" bottlenecks, re-route shipments taking delivery, cost and sustainability impacts into account, re-allocate capacity, recommend alternate suppliers and/or routes, etc. Our [article](#) on data analysis and predictive analytics provides additional insights.

An Industrial Equipment Manufacturer Case Study

An industrial equipment manufacturer was focused on growing the business during times of significant supply chain disruption. To transition from reactive to proactive, they built a data model to analyze complex data (engineer-to-order), synthesize insights, and to drive proactive decisions. Their core manufacturing facility was one of the best we've seen in terms of quick execution with forward-thinking foresight; however, it was limited by the information available. Prior to developing the data model, they met largely unachievable plans by brute force and resilient execution. After gaining insights to data, they doubled output, were ahead of the curve and purchased a new paint line to support seamless growth before they had to extend lead times, transitioned from daily execution meetings to "make it happen" to working exceptions ahead of time, increased margins by focusing in on pricing and profit opportunities, and insourced/outsourced as needed to support aggressive growth plans profitably.

The Bottom Line

Start your data journey immediately. Use common sense. Hire experts to help navigate and think three steps ahead. Find the appropriate use for data analysis and predictive analytics, and build the capabilities ahead of time to transition from reactive to proactive.

[Did you like this article? Continue reading on this topic:
Achieving Customer Growth by Turning Data into Insights](#)

Listen to a Client Example

Thrilled to share our client's success story related to customer service and sales success with SIOIP 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 solid Operations and Supply Chain Leader with the ability to execute, [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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