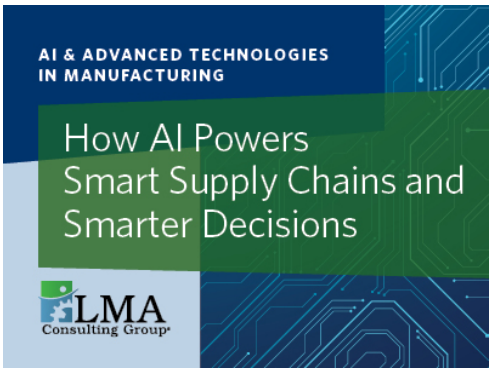
Enabling Scalable, Profitable Growth No 200, October 2025

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



Time absolutely flies by. On that note, I'm thrilled to announce that this is my 200th Profit through People (PTP) newsletter. It has been a flagship since founding LMA Consulting 20 years ago as of May 2025! In the last few years, we have evolved it to be quarterly and focused on our flagship content - SIOP (Sales Inventory Operations Planning), Planning/ Supply Chain, and ERP/ AI/ Advanced Technologies.

How does PTP fit in?

- **PTP** - flagship content
- **Supply Chain Briefing Newsletter** (weekly) - timely topics in the news / at clients with related impacts and strategies
- **Supply Chain Bytes videos** (weekly 90sec videos) - topics in the news and/or of relevance to what we should be paying attention to in the supply chain
- **Supply Chain Chats Podcast** (monthly at a minimum) - we have evolved this series to focus on interviews with thought leaders and experts in supply chain on timely topics.

After 20 years, 200 PTP newsletters and more, there are almost 2200 articles and thought leadership pieces in our **blog**. Thus, to make it easier, we also developed our **Best of Supply Chain** webpage with our core topics and articles, categorized into sections, sub-sections and with hyperlinks.

I'm also excited to announce that we've just published an eBook, **AI & Advanced Technologies in Manufacturing: How AI Powers Smart Supply Chains and Smarter Decisions**. It is value-packed with insights, impacts, and strategies for utilizing artificial intelligence and advanced technologies in manufacturing and covers topics from AI, ERP, finance, risk, global, marketing & sales, strategy, talent/ HR, supply chain, data, and technology. Thanks to all the contributors and to Kathy for her expertise in taking our great content and making it tie together and look fabulous. Check it out and please send your feedback and insights!

From a personal side, I spent significant time in Arizona with my mom as her cat struggled for a few months, spent a few days in the ER (including one where we could stay overnight with him) and eventually passed away. It was really sad for everyone as he was an integral part of the family. Sam was a treasure. My brother found a new cat that needed help and a new home and so we have been acclimating him. Gary Jonathan (there is a story there) is enjoying his new home and thrilled to be away from scary dogs and with people who love him. I also went to Denver for a long weekend with my two best friends and Wade. We had a great time. Lastly, I'm thrilled that my nephew (best friend's son) Ryan had a baby girl, Zenaya on July 2nd, adding to his growing family of his wife, Tori and his son, Isaiah. Isaiah and Zenaya call me Grandma. Love the pictures below!

Ryan's son, Isaiah on his first day of school

Ryan's new daughter, Zenaya. Born 7/2/25

IN THE NEWS
I am thrilled to be featured in Intelligent Enterprise Leaders Alliance publication, "The Next Frontier of Smart Manufacturing". See my comments directly here or download the full report.

And for the rest:

- Quoted in Inbound Logistics' Good Question section to answer "What Is One Supply Chain "Trade-off" That Is Actually Not a Trade-off?"
- Quoted in Orthopedic Design and Technology (ODT) in an article, Worldwide Worries: How Geopolitical Issues Impact the Medtech Industry
- Featured in the Intelligence Enterprise Leaders Alliance publication about Women in Manufacturing. Read my advice to women here or download the full publication.
- Published articles in *Adhesives & Sealants,* Creating Scalability for Supply Chain Success and Resiliency of Paramount Importance for Supply Chain Success.
- Published articles in Medical Products Outsourcing (MPO), Proactive Strategies for Medtech Supply Chains and The Future of Medtech Supply Chains.
- Published articles in *Brushware Magazine,* Navigating Vulnerabilities and Tariff Impact with Supply Chain Resiliency and Upgrading Manufacturing Planning to Reduce Costs & Inventory
- Published an article in *Fabricating & Metalworking*, Key Trends And Technologies Powering Distribution Success
- Featured on the Interlinks podcast about Tariffs, Trade Wars & the Tug of Global Supply Chains: Manufacturing in the Crosshairs
- Featured on the IEEP's Working Together podcast about workforce needs in the manufacturing sector.
- Featured on the ASCM-IE Adapting Supply Chain webinar, "Tariffs & Turbulence: Strategies for Supply Chain Resilience"
- Featured on the DC Velocity's Logistics Matters podcast about the One Big Beautiful Bill.
- Spoke at several ProVisors (trusted advisor) manufacturing, distribution and international meetings on tariffs, trade and impacts on manufacturers and supply chain.
- Published press releases on LMA Consulting's 20th anniversary, the One Big Beautiful Act's benefits for manufacturers, LMA Advocate & Futurist winners, and the eBook on AI & Advanced Technologies
- Our press releases were picked up in Adhesives & Sealants, Today's Medical Developments, American Journal of Transportation, Transportation Newswire, etc.

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.

STRATEGY/ SIOP

Maximizing Performance & Margins with SIOP

As companies are concerned about the whether they should cut back with decreased sales volumes, they are searching for solutions to keep top talent and stop the bleeding. Since the key economic variables are coming together to power a surge in manufacturing (competitive tax rates, stabilizing tariff rates and/or forecasts, and interest rates starting to come down), smart executives want to be prepared for success. Thus, leadership is turning to **SIOP** (Sales Inventory Operations Planning) and advanced technologies to provide proactive and predictive information to maximize business performance and EBITDA growth.

Case Study: Industrial Manufacturer Utilizes SIOP to Maximize Performance
An industrial equipment manufacturer gained significant growth during the pandemic as companies expanded and they utilized **SIOP** to stay ahead of growth curves to deliver on-time, with superior service and with shorter lead times than their competition. However, as interest rates increased rapidly, severely impacting their customer base's ability to make large purchases instead of spreading the volume out over time, orders were pushed out. As tariffs rolled out, additional customers pushed out risk especially those in impacted regions or concerned regions such as Canada. Thus, the manufacturer proactively reduced lead times to be more competitive although backlogs started to shrink for the near-term timeframe.

Since the company invested heavily in training, education and building capabilities across their sites to ensure success, they didn't want to lose key talent. Additionally, Newton's law shows that an object in motion stays in motion whereas an object at rest stays at rest. Thus, if a company starts cutting back and putting a halt to progress, it becomes much harder to get the momentum moving again, and they have a higher risk of missing opportunities. Therefore, executives would prefer to embrace opportunities to gain predictive insights and visibility into their supply chain to maximize profit and cash flow while maintaining readiness to scale rapidly and grow profitably. SIOP provides the toolset to achieve this objective.

SIOP to the Rescue
The team has rolled out a SIOP process for a few of the main sites. However, to gain a full picture perspective of rapidly changing demand plans and needs across sites and how that stacks up with capacity and purchase plans, SIOP had to quickly be instituted at additional sites that produce like-

products with similar resource skillsets. Thus, the first priority was to get a quick, directional view of the sales forecast and translate that plan into high-level operational capacity. For a custom manufacturer with different allocation methods, getting an apples to apples SIOP plan is easier said than done. Thus, the team jumped into the details with an aggressive timeline.

Demand Planning
The team put together a demand plan by following these steps:

- **Quick assessment**: To gain a perspective of the nuances of the additional sites, the team performed a rapid assessment of what was available currently (if nothing else, a list of orders), reviewed staffing by key areas, and gained insight into core processes and use of systems (ERP, CRM, configurator/ quoting, BI).
- **Data dump**: We requested demand data including quotes from the configurator, sales opportunities from CRM, sales orders won, and sales orders with a full bill of materials (BOM) once engineered. After a deep dive with process and systems experts, we compiled a sales forecast. That alone would not suffice as there were numerous data integrity issues and it was dependent on the timing and standardization of the latest updates.
- **Demand review in $$**: We reviewed the data with key resources and Sales leaders. Products were not available in the level of detail required to gain a good view. Thus, we decided to circle back to that issue and start by ensuring the dollar level forecasts made sense. This required developing a quick map of which dollar types to include vs which to exclude to get a comparison perspective with the other sites. For example, engineering dollars were separated into a different category. In addition, we had to dig into due dates. It is rarely as simple as it seems as companies develop internal processes of what dates mean. Thus, similarly, we had to get to a high-level that would provide a shipment view of revenue (instead of a production view or engineering view). Not all fields were used in a similar way, and therefore they didn't mean the same thing from site to site. Thus, we made a list for future improvements and aligned the information to the standard format by working with key resources. We had to add estimates for additional sources of revenue (aftermarket/ spares) and ensure that the totals made sense vs last year, last month and in comparison to changing trends.
- **Sync with customer view**: Once we had a reasonable picture of demand from the dollar point-of-view, we had to make sure it made sense from the customer perspective. For example, we commonly find that salespeople will put a higher level of confidence on an quote than makes sense based on the stage of the process. In addition, they don't necessarily update dates constantly for expected close dates. The estimates for engineering lead times and production lead times can vary widely also creating unlikely customer ship dates. Although there wasn't time to resolve the issues, standardize the processes and potentially converge on a standard toolset, we could update key quotes, identify key customers to highlight and align on a collaborative demand plan.

To gain additional insights into demand planning, refer to our article, "**Sales Forecasting Case Study to Fuel Customer & Operational Success**".

Supply Planning
Simultaneously, the team focused on translating the demand plan into a supply plan. When translating a custom (ETO/ CTO) order, there are several key steps to gain predictive insights into product groups and key attributes. For a rapid ballpark picture, there wasn't sufficient time. Thus, the experts dug into meaningful trends, broad assumptions, and numbers of people by core departments. A few of the strategies rolled out included:

- **Prior trends:** They reviewed prior data trends to find meaningful insights that provided directionally correct insights and found ways to apply those rules to the demand plan to gain a high level view of the capacity plan. For example, if a certain product line or work center was reliably 30% of the total volume, they used that assumption.
- **Production and/or shipment output**: Determining the available capacity is often much harder than it seems in custom manufacturing. ETO products can vary widely and so production rates will also vary widely especially depending on which stage of the process is calculated (fabrication, machine shop, weld, assembly, paint etc.), the size of the product, the number of accessories, the material type, sourcing for unique materials etc. Sometimes you can use dollars as a reasonable comparison, other times you should review for the bottleneck production area, and other times it is something else all together. Gather experts and start with reasonable assumptions for the first SIOP cycle.
- **Products**: Frequently, at the early stage of SIOP, you will not be able to get to the product

grouping level quickly enough. However, you should start to pursue product groupings and key attributes as it will drive the effectiveness of the longer term supply plans.

- **Purchases/ inventory**: In several clients, the key in supply planning relates to the purchase of a core group of items that will drive operational effectiveness. Start by utilizing broad inventory planning assumptions. In this situation, inventory reduction was a key objective. Thus, broad insights into what the demand plan meant for purchasing was a good place to start.
- **Collaborative input:** Of course, the team ran key assumptions and data by the key resources and incorporated their inputs and feedback. 99% of the time a key resource will provide a critical insight that doesn't align with the data upfront. Pay attention and incorporate what makes sense yet put processes in place to confirm viability from an 80/20 standpoint.

Executive Review

The executive review evolved from a site level demand and supply review to a multi-site demand and supply review, thereby uncovering opportunities to maximize profit, better utilize resources, and accelerate cash flow. A few of the core tenets include:

- **Combined demand & supply view**: We put together a stacked bar graph with quotes, orders, aftermarket, sales funnel and other statuses. In addition, we had lines for the budget and operational capacity so that you can see at a quick glance if you are over or under capacity.
- **Site by site review:** For those sites that are close in proximity and can produce several similar products (similar capabilities), we put the charts over one another so that you can see that if you are over capacity in January in one site and under capacity in the other site, you could move volumes among sites. Clearly, if this arises, you would cross-train and prepare ahead of time. This strategy became a key to success.
- **Resource sharing**: If you find a month or quarter that is severely over capacity, look across all your sites to see if you can utilize resources from another facility. Of course, it is unlikely they will produce exactly the same type of products; however, it is likely they will have resources with similar skillsets (weld, machine shop, assembly, etc.). Why not send resources to fill short-term gaps so that you can maintain your high-skilled resources while satisfying your customer needs. We did just that.
- **Project work & training**: If you find a month that is under capacity, prepare in advance to roll out project work, improvements, new technologies and the like with the opportunity. Or develop a training/ cross-training program to develop skills requiring by looking at volumes/ mix coming down the pike. Again, this strategy was deployed.
- **Medium/long-term actions**: For short-term spikes in demand, we evaluated offshoring opportunities that you cannot absorb throughout your network. For long-term shortfalls in capacity, we evaluated hiring additional shifts and/or resources, bringing on additional sites or outsourcing to a reliable supplier. If the issue was reversed, we dug into the sales pipeline, expanded into additional markets, focused on new product launches and other opportunities impacting the plant's capabilities and/or region. Remember to evaluate mix changes and the impact on SIOP. If the issue cannot be resolved, we considered layoffs, idling the plant if there are advantages in maintaining the ability to scale in the future, converting the plant to a distribution center, or closing the plant especially if it can be combined more effectively into another location while maximizing the customer and margin effectiveness.
- **Alignment of Sales & Operations**: We highlighted key customers and/or big quotes or new product launches so that Sales could provide perspective as you reviewed demand charts. Similarly, we pointed out key capacity shortfalls or overages based on input from Operations leaders and plans to address. Encouraging collaborative thinking and creative solutions was also integral to the process.
- **Inventory & expected purchases**: Although we were just bringing the site on SIOP, there wasn't time to roll out the appropriate upgrades to project inventory levels and forecast purchases yet. Thus, at a minimum, we discussed key trends, opportunities to share inventory and other strategies to more effectively manage this precious resource. For the sites on SIOP over the longer term, they utilized SIOP to proactively manage inventory and reduce around 50%, freeing up cash flow for higher priorities.

By rolling out this multi-site SIOP process, the company was able to keep critical capacity and resources with high potential in the next 6-12 months while supporting customer needs, improving lead-times to gain additional opportunities and maximizing profit, productivity, and efficiencies. We also dramatically reduced inventory for the sites with greater SIOP maturity while

maintaining service levels. In addition, we are exploring additional ways to incorporate artificial intelligence and advanced technologies to further improve the SIOP process. To learn more about strategies to utilize AI and advanced technologies to power smart supply chains and smarter decisions, download our complimentary **special report**.

SIOP: The Path Forward
SIOP should be used as a strategic tool to proactively and predictively navigating changing business conditions while maximizing bottom line results. To learn more about how to rollout SIOP, download a complimentary copy of our book, "**SIOP (Sales Inventory Operations Planning): Creating Predictable Revenue and EBITDA Growth**". Clients value the practical nature of SIOP in allowing them to gain control over their future business success. In essence, moving from reactive resilience to proactive strategy setting.

Did you like this article? Continue reading on this topic:
Using SIOP to Drive Revenue, Margin, & Working Capital Predictability & Improvement

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Timely News, Updates & Strategies: Supply Chain Bytes

Supply Chain Bytes is our quick-hitting video series that delivers concise, impactful insights on the latest supply chain changes, strategies, trends, and impacts —all in under 90 seconds. Stay ahead with quick updates that keep you informed in the rapidly evolving supply chain landscape. See the full series - **SupplyChainBytes.com**

PLANNING
VMI Case Study to Drive Win-Win Customer & Supplier Results

Taking your supplier / customer relationships to the next level of partnership is integral to supporting profitable growth with exceptional customer service and cash flow (ie. inventory turns) levels. Vendor managed inventory (VMI), also called collaborative customer ordering and customer partnership programs, can be integral to maximizing revenue/ service, profitability, and working capital. Whereas **SIOP** (Sales Inventory Operations Planning) provides the vehicle to turn from reactive to proactive in navigating your demand and supply planning processes to ensure the successful and efficient fulfillment of your customer demand, VMI provides the vehicle to collaboratively manage your customer-supplier relationship to deliver win-win results.

Vendor Managed Inventory
Vendor managed inventory (VMI) is a supply chain strategy where the supplier or manufacturer takes responsibility for managing inventory levels at the customer's location based on real-time demand and usage data. We see VMI opportunities across industries. It is common for aerospace suppliers to manage inventory at aerospace customers including Boeing. Consumer goods suppliers frequently manage inventory at retailer distribution centers including companies like Walmart. In addition, medical products suppliers manage inventory at production and distribution facilities including Cardinal Health, Baxter or McKesson.

In a traditional manufacturing environment, the buyer monitors inventory levels, places purchase orders, and manages replenishment, also known as distribution requirements planning (DRP), to their facilities / distribution centers to ensure high service levels to customers with greater productivity and minimized inventory levels. In a VMI environment, these responsibilities shift to the supplier. Clearly, it could not shift successfully without communication, collaboration and shared objectives.

Benefits of VMI
There are many benefits of VMI. Most importantly, the benefits are not just for the customer; they are also for the supplier, creating win-win benefits that extrapolate with collaboration. The main benefits we've seen include the following:

- **Sales revenue growth**: As the supplier becomes an integral part of the customer's success, they gain when the customer gains. The better service and performance of the customer, the greater the growth. As expected, this growth extends to their key supply chain partner, creating win-win revenue growth. In addition, as fewer stockouts occur, revenue increases.
- **Customer service improvement**: As the supplier gains insights into the customer's business and customer needs, the two companies are more aligned and in sync with the demand and supply plans. Not only does service improve (OTIF, on-time-in-full, OTD, on-time-delivery), but lead times also improve. Not only does lead-time improvement create happier customers but it also typically leads to revenue growth.
- **Inventory turns improvement**: As the supplier gains better insight to the customer's forecast and/or demand requirements by location, more of the "right" inventory can be sent to the "right" place at the "right" time. Since the supplier typically gains more frequent access to demand, they also gain insights into changing conditions so that they can take appropriate actions. Since the supplier also has access to its manufacturing and distribution capabilities, it can optimize its schedules to reduce inventory overall (win-win improvements at the customer and supplier) while improving service.
- **Manufacturing & logistics efficiencies**: Since the supplier gains visibility into the end-to-end supply chain and can control the flow of product so long as it meets the customer's metric requirements (service, turns, etc.), they can optimize their master plans, capacity and staffing plans, and production schedules to meet customer needs while minimizing costs and maximizing efficiencies. For example, they can run a product requiring a significant changeover for an extended run since they have better insights into demand and supply. From a distribution standpoint, they could adjust quantities to pallet or layer quantities to optimize warehousing efficiencies.
- **Transportation benefits**: There are significant transportation benefits that can be achieved. Instead of shipping several less than truckload shipments, they can combine into a smart load without overstocking the customer and saving transportation costs. Similarly, they can combine multiple customers on a multiple-stop truckload. In addition, the supplier can utilize its supply chain visibility and to adjust the mode of transportation to be less expensive while ensuring customer service levels remain intact.

Case Study: Medical products manufacturer boosts revenue & profitability with VMI
An absorbent products medical products manufacturer was experiencing service issues due to the transition to a new **ERP system** while also absorbing a significant company purchase. Since the companies had different processes, systems, and data (orders, shipments, invoices) and suffered with typical go-live issues (not understanding how to use the new ERP system to accomplish unique customer requirements and not gaining key insights with reports and analytics), service suffered with their core customers.

Coincidently, their key customer also requested to embark on a VMI journey. If they wanted to maintain the customer long-term, they had to embrace VMI. Thus, the executive team decided to embrace VMI to retain their top customer at a minimum. They hoped they could expand business with a successful rollout.

Key Actions to Prepare for VMI Success
They formed a cross-functional team of supply chain, operations, IT/ ERP and supporting resources. Most importantly, the executive team empowered the team to make decisions and provided the appropriate resources as requested. From the high-level, the team took the following actions:

- **Collaborated with the customer**: The team visited the key customer to meet the key project team members, learn more about VMI and discuss critical steps. Establishing these relationships were vital to success.
- **Demand planning & replenishment software**: Since the supplier had two manufacturing plants with a few distribution sites supporting Canada and the key customer had 25-30 sites with 50-100 skus per site and multiple daily transaction sets (demand, inventory, shipment notices, invoicing, etc.), the equation was more complex and required a software that would support sales forecasting and replenishment planning across the supplier and customer. Forecasting capabilities must be leading edge with artificial intelligence and advanced capabilities embedded to support evolving customer needs. Thus, the team put together a VMI software selection process, visited clients of the finalist to gain additional insights into VMI, and put together training programs to ensure a smooth implementation. To gain ideas and insights on utilizing AI and advanced technologies, download our eBook: AI & Advanced Technologies: How AI Powers Smart Supply Chains & Smarter Decisions.
- **Data updates:** We set up the appropriate EDI transactions and integrations with ERP to support timely updates of data. Receiving daily consumption, inventory and related information was invaluable to staying on top of critical issues, trends, and changing conditions.
- **VMI education**: The cross-functional team found conferences and educational programs to learn more about VMI and ask for best practices and insights from resources currently supporting VMI programs.
- **Metrics**: The customer had a customer scorecard to monitor progress, which drove performance audits. In addition, the supplier set up brief connect meetings with the customer to review progress, bottlenecks, questions and metrics**.**
- **Pilot:** The team also put together a pilot with the customer, starting with one branch. They coordinated closely to monitor progress and ensure success. They also incorporated insights learned along the way.
- **Prioritized feedback**: The cross-functional team listened to insights from the Sales team, the key customer, and other participants in the supply chain and incorporated ideas for improvement.

VMI Process Upgrades
From a detail point-of-view, the team rolled out several key process upgrades.

- **Key customer forecasts**: The team set the software to develop a forecast for the top few key customers and broke the forecast up by site for the VMI customer so that it would support VMI. It also provided forecast by manufacturing and/or distribution site. By focusing on the key customers, it supported improved insights for the top volume customers while putting the rest into an "all other" bucket. Product categories were visible across all forecasts.
- **Exception management**: One of the keys to success was to focus on exception management. By definition, forecasts will be incorrect at a detailed level (by sku by week by customer). Thus, it is easy to get lost in detail that will not contribute to meaningful results. Instead, we set the sales forecast software to track forecast accuracy and provide exceptions to review. By focusing on those exceptions and picking up the phone to ask the customer detailed questions about demand changes, we gained valuable insights and adjusted the forecast accordingly.
- **Replenishment planning best practices**: The software incorporated replenishment recommendations based on DRP/ replenishment logic incorporating service level targets, forecast accuracy calculations etc. Since the team understood these parameters, they continually reviewed settings, evaluated results and adjusted as it made sense.
- **Performed a top down review**: As issues and / or opportunities arose, we performed a top down review. For example, we could review demand forecasts and inventory levels across sites. If one of our customers' sites was selling through inventory more quickly than anticipated, we could move inventory from one site to another or prioritize a shipment or production run to address while not impacting other sites.
- **Optimized production & transportation schedules**: Since we could see across the customer

and supplier's sites, we could optimize production and transportation schedules to meet service objectives with the most efficient production runs and transportation lanes and load builds. This led to a 20% reduction in core cost.

- **Supplier forecasts:** Based on the demand plans and conversion to key raw materials, we developed supplier forecasts for key materials. This provided insights to keep the end-to-end supply chain on track and proactive to changing customer conditions. In addition, we prioritized supplier programs and R&D that would best contribute to success.
- **Tie with SIOP (Sales Inventory Operations Planning)**: All of the forecast information is incorporated into a rolling 12-month demand plan, which is converted into master production schedules and capacity plans (manufacturing, transportation, inventory) to at least the longest lead-time so that the organization can be resilient to changing conditions while proactively planning strategic changes based on long-term production and replenishment plans.

Customer & EBITDA Results
Not only were the minimum expectations achieved (salvage the customer), but they were greatly exceeded. VMI caused the customer's metrics to surge as lead-times disappeared; the customer simply had the "right" inventory at the "right" place at the "right" time to eliminate stockouts and serve customers with high levels of service and effectiveness. The customer scorecard was so good that the supplier won awards and received accolades for its performance. Better yet, the supplier was able to reduce inventory by more than 20%, thereby freeing up cash flow, increasing production efficiencies while reducing waste with improved schedules, and dramatically reduced freight costs with improved load planning and supply chain visibility.

Case Study: Aerospace Manufacturer Utilizes VMI to Resurrect Service
An aerospace manufacturer struggled with its number one customer as service levels lagged. Following a recession in the industry after 9/11, most companies cut back and slashed inventory levels. As Boeing increased its ship sets suddenly, the end-to-end supply chain had to ramp up quickly. To add fuel to the fire, rapidly changing conditions impacted down-the-line orders and transaction timing delays caused data inaccuracies and planning complexities. The supplier was not performing well on Boeing's scorecard. Unfortunately, future business is based on scorecard results, and so it was urgent to turn around the performance.

The aerospace manufacturer was performing VMI for Boeing. In essence, they determined what to ship to Boeing to support their Kanban process. Aerospace is typically low-volume, high-mix manufacturing depicted with production of a wide variety of complex, highly customized, and precision-critical parts in relatively small quantities. This client was no exception. Thus, VMI didn't require a special software yet it was integral to success.

What We Did to Resurrect Service
Although we followed several best practice project management and planning best practices, the keys to success included the following actions:

- **Customer collaboration**: We met frequently with Boeing to coordinate, ask questions, push back with transaction timing questions, and build relationships. We proactively pushed for adjustments to incorrect data, incorporated feedback and maintained rigor in the twice weekly process.
- **Dedicated resources**: The team dedicated a planner with solid execution skills to the project. Although she didn't have advanced Excel and ERP skills, she ensured that whatever tasks had to be performed were completed and monitored progress. In addition, the manufacturer requested that a **consulting resource** dedicate time to the project to shore up the integration with ERP/ **MRP,** the education and training programs and the tie to SIOP and associated metrics.
- **Demand planning:** We focused on developing a demand plan for Boeing's items as well as related items impacting bottleneck areas of the operation and other items that used the same components/ materials. We utilized Boeing's consumption data, inputs from Sales and other customers, market insights and prior trends.
- **Execution of the demand plan**: Developing a sales forecast alone was not sufficient as the planning team was unsure about executing the forecast, due to the prior management's perspective. In fact, they were so concerned about producing ahead that it required significant efforts and pushing from the executive team to instill the change in process. The team had to believe they would not be held accountable for following the forecast.
- **SIOP freed up bottleneck capacity**: As we rolled out the SIOP process, the team agreed to consensus forecasts and aligned Sales and Operations. We developed capacity projections,

providing visibility to upcoming bottlenecks with proposed solutions. Thus, the executive team allocated the appropriate resources to ensure capacity availability and resourced critical skills for bottleneck operations. Quality and engineering resources had to be allocated and prioritized accordingly as well.

- **Built on momentum**: As Boeing's requirements changed rapidly and the manufacturer had work-in-process (WIP) inventory and/or the appropriate components and capacity to produce rapidly based on the demand plan and related SIOP plans, the team gained confidence and momentum.
- **Metrics**: We tied it together by monitoring key metrics including service, quality, transaction timing, and other key data points required to ensure success.

Results
The most important result is that the team went from poor performance on the Boeing scorecard (which would lead to decreased business if not turned around) to the top performing tier of the scorecard. Not only did this solidify the business with Boeing but it also provided opportunities for expansion in the future. This accomplishment also engaged employees and brought them into the fold so that they could see how they contribute to customer success and they gained insight into the importance of what they do.

In addition, by improving the service levels to Boeing, we gained a better view into Boeing's requirements and trends. When combined with the confidence gained with the full demand plan, Sales and Customer Service were able to better compete to win additional business with shorter lead-times. Additionally, they were able to charge expedite fees for quick turn around jobs, creating a win-win for the customer and margins. In addition, Purchasing incorporated the enhanced supply chain visibility into their supplier discussions and further increased margins. Suppliers knew what was coming down the pike and could plan accordingly, thus passing on savings for volume commitments.

The Bottom Line
The value of VMI can be dramatic. Simple customer and supplier collaboration can deliver profound win-win results. Although these programs typically start with a customer request, they evolve into a strong partnership with the supplier gaining significant value and return on investment. Forward-looking executives search for opportunities to pursue VMI so that they can demonstrate value-added service and secure their position as a strategic partner for growth and success.

Did you like this article? Continue reading on this topic:
Supply Chain Collaboration & VMI to Get Ahead of Economic Challenges

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Listen to a Client Example Case Study

Thrilled to share our client's success story related to key improvements in capacity to support aggressive sales growth and gain visibility, the upgrade of MRP to improve customer service and optimize operations, and developing a proactive approach to achieving inventory objectives. Our client discusses process upgrades, ERP optimization, and collaborative success.

ERP & RELATED TECHNOLOGIES
Utilizing ERP - Case Study in Automating and Enhancing Visibility & Performance

As companies look ahead and prepare for improving backlogs yet are concerned about getting too far ahead of their ability to maintain profit and cash flow objectives, smart leaders are better utilizing and optimizing ERP and data analytics to bridge the gap. Our best clients are better utilizing ERP to automate processes, enhance customer value and better prioritize resources to support growth and scalability. Simultaneously, assuming they have a modern ERP system, they can create win-win results by better leveraging **artificial intelligence** and advanced technologies to power smart supply chains and smarter decisions.

Better Utilize ERP Systems to Drive Business Results
During our 20 years of consulting, we found that 100% of our clients could better utilize their ERP system to drive bottom line results. Here are a few of the top ways clients better utilize ERP and related technologies:

- **CRM:** Our best clients utilize CRM (customer relationship management) to provide value to potential customers and track opportunities for growth. As we better utilize CRM such as Salesforce and standardize stages in the sales process and how to track percentage likelihood of winning the sale, this information can be powerful in creating a predictive demand plan as part of a **SIOP** (Sales Inventory Operations Planning) process.
- **Configurator:** Custom manufacturers (ETO, CTO) can achieve step change improvements in service, lead times and visibility by better utilizing a configurator. For example, several clients not only shortened the time to quote an order by weeks to hours or minutes (depending on several factors), but they also provided enhanced visibility to what was coming down the pike to production, purchasing, and logistics support systems.
- **Sales forecasting**: ERP systems have a placeholder for your demand plan/ sales forecasts; however, they do not support developing the sales forecast to gain a predictive view of customer demand without additional modules/ advanced technologies. If your business is custom, forecasts can be created from your quotes, orders, historical patterns, aftermarket, and configuration capabilities and uploaded into this field. That can transform your supply chain as it will drive MRP, production planning and related needs. If your business is high-volume and/or promotion driven, it is likely you'll need an advanced demand planning module / capabilities. The results will also populate this ERP field.
- **Sales orders**: Companies are automating the order entry for sales orders and providing exceptions for the Customer Service team to review, enabling real-time visibility. In addition, better utilizing and standardizing pricing capabilities will not only enable automation but it will enhance service and support increased profitability with quick

updates for changing conditions.

- **Purchasing**: Clients build purchasing variables into ERP such as lead times, primary and backup sources of supply, blanket order capabilities, and other standard ERP functionality that automates and improves the outcome. Supplier portals extends visibility into the supply chain and supports collaboration.
- **Master data**: Boms, routings, work centers, item masters and the like seem like no-brainers yet 80-90% of clients have opportunities to better utilize functionality to better track waste, labor, and progress for fulfilling orders.
- **Production**: Work order management is often overlooked as leaders assume this standard functionality should be a no-brainer; however, there are often opportunities for improvement especially in combination with other factors. In addition, better utilizing MES (manufacturing execution systems) and related systems (vision systems, predictive maintenance systems, etc.) will reduce waste, build quality into the process upfront, improve labor efficiencies and increase output.
- **Cycle counting/ inventory accuracy**: Although this topic should be "easy" from executives' minds, it is often underappreciated how integral and complex it can be depending on ERP setups, transaction timing, and other factors. Since it drives manufacturing, replenishment, service, and financial performance, it is important to better utilize ERP to support business results. This topic is highly ingrained with operational processes and transactions. Thus, combine both to ensure success.
- **Raw material planning/ MRP:** Material requirements planning (MRP) will drive the appropriate purchases (raws, commodities, components, finished goods) to supply your production and replenishment plans as well as your customer requirements, optimized to minimize costs and maximize results.
- **Production planning/ MRP**: An optimal production plan and schedule will power growth, customer service, operational performance, and cash flow. It brings together the optimal master data setups with the better utilization of MRP, inventory, sales orders, forecasts, and work orders to develop a production schedule. In addition, better utilizing your ERP system for production planning and scheduling is key to creating a win-win of service, margin/ efficiencies and inventory levels/ cash flow. Thus, this becomes a huge focus in our **consulting** services as it becomes an interrelated, heavy ERP utilization and upgrade topic in combination with business process improvement with a link to strategy and SIOP.
- **Replenishment planning/ DRP**: Distribution requirements planning (DRP), also referred to as replenishment planning or vendor managed inventory (VMI) planning, ensures that the "right" products get to the "right" location (distribution center, customer facility, service center, warehouse) at the "right" time to support customer needs and growth plans with the least amount of cost and inventory. Better utilizing DRP will drive improved results.
- **Advanced planning:** For multiple production facilities, more complex plans (container ships routed around the world, ETO environments requiring AI-driven capabilities etc.) and scenario planning capabilities, clients turn to advanced planning systems. Similar to sales forecasting systems, base capabilities are typically in ERP with advanced functionality requiring additional modules and/or advanced technologies. Upgrading and/or utilizing these systems will drive greater capacity/ ability to scale, enhanced profitability and superior customer service.
- **Capacity & labor planning**: Depending on your master data, production and planning setups, and work order and labor tracking, you can gain insight into your capacity (machinery, storage) and labor needs as you better utilize your capacity requirements planning (CRP) module and related technologies. AI will give you predictive functionality with run rates and other insights to better manage capacity and labor.
- **Shipping & receiving/ logistics:** ERP functionality will support inventory allocation, prioritizing of customer orders, and efficient shipping of customer orders. Customer service will not occur if you cannot ship on-time, accurately and efficiently. There are several other related technologies that can get involved to tie this to package shipping, tracing, truckload planning and with import/ export compliance.
- **Warehousing/ WMS:** Simple warehousing efficiencies can be gained by using ERP and a dose of common sense. For more complex warehousing and distribution scenarios, WMS (warehouse management systems) and related automation and AI-enabled technologies are key to success. Better utilize WMS capabilities including receiving, putaway, order fulfillment, task optimization, automated guided vehicles, AR/VR etc. to drive productivity and profitability.
- **Transportation/ TMS**: Transportation management systems (TMS) will select optimal routes, carriers, modes, and fulfillment strategies to optimize your transportation plans. With advanced technologies for supply chain visibility, greater levels of speed and profitability are achieved.

- **Budgeting & cash flow planning**: As part of financial management and tied with SIOP, ERP systems and related business intelligence (BI) and predictive analytics will result in predictive revenue, profitability and working capital.
- **Reporting, BI, predictive analytics, exceptions & alerts**: In addition to providing sales insights, there are many uses for business intelligence and predictive analytics to enhance customer value, productivity and profitability. In addition, **modern ERP systems** such as Oracle and SAP are embedding AI agents and functionality to increase productivity and profitability. There are countless flags to highlight potential shortages, delayed receipts or shipments, errors, potential spikes and/or bottlenecks, etc.
- **Artificial intelligence**: Modern ERP systems are incorporating AI into their systems. For example, cash flow planning, predictive analytics, integration to MES and predictive maintenance systems, etc. To learn more about how to leverage AI and advanced technologies, download our complimentary eBook: **AI & Advanced Technologies for Manufacturers: How AI Powers Smart Supply Chains and Smarter Decision**s.

Case Study: Equipment Manufacturer Spurs Growth, Service & Engagement with ERP Utilization
An equipment manufacturer serving the safety industry maintained robust sales as they provided superior service and stayed at the forefront of R&D/ new product development to lead in the marketplace. Thus, it was important to scale production rapidly while being resilient to changing conditions and product mix changes to best support customer growth while maintaining financial performance. They could do this by adding resources to support business process needs or they could upgrade their use of their ERP system (Oracle's JDE) and related technologies (CRM, configuration, Teams, BI) to enable profitable growth. Thus, they brought in consultants and experts in customer service and planning to assess and recommend a path forward.

After improving the customer service processes to support service improvements, the leadership team decided to pursue the production scheduling process to upgrade and optimize manufacturing schedules to better serve customers with a more automated, efficient and sustainable process. The team found that the best way to improve results was to better utilize ERP and related technologies while educating and upskilling the team and connecting the improvements with the daily process. The team selected a manufacturing focus area that performed well with a high-skilled resource due to manual methods and proactive follow-up. It was dependent on the machine shop and fabrication areas and supplied final assembly, positioning it as an optimal pilot.

After digging into the details of the production scheduling process and key inputs, the team addressed several key areas:

- **Product attributes**: The team captured critical product attributes (referring back to key configurator characteristics), customer pickup schedules, and production line characteristics that supported the optimal sequencing of items and performance of the manufacturing area. With the upgraded use of ERP, these attributes could be used by production scheduling and incorporated into key reports.
- **Customer demand:** The company was rolling out SIOP (Sales Inventory Operations Planning) to improve visibility, better forecast and highlight potential opportunities. Thus, the team tied into this process and upgraded the demand planning process to enable statistical forecasting, easier incorporation of sales feedback by customer and/or product line, and integrate with the supply planning processes. In addition, the team automated the sales forecasting base so that the team could focus attention on exceptions and highlights.
- **Customer dates**: The customer requirements changed frequently and dates were unreliable. Thus, intense manual revisions were required. The team partnered with the assembly planners to update key master data that drove MRP, better utilize MRP functionality, and better understand down-the-line impacts of data integrity and schedule changes. This supported their initiative to improve available to promise (ATP) capabilities and allow for better utilization of this ERP functionality to provide reliable dates to customers.
- **Backlog reporting**: We automated the backlog reporting to incorporate what was relevant from a scheduling standpoint into a report that could be used for production planning, thereby turning a manual process into automated one focused on exceptions.
- **Dispatch report**: JDE had a standard dispatch report that could communicate to the floor what should be run in what order on which production line. However, it couldn't be utilized until the items were attached to the appropriate work centers and assigned run rates. Thus, the team condensed the items into run rate groupings, updated work centers and completed the process. In addition, they wanted additional information such as customer

noted on the dispatch report and so they coordinated for the report to be revised.

- **Capacity planning**: Understanding if the work center and work areas were full, had excess capacity or required additional resources was important. The planner performed this function manually; however, the process wasn't sustainable. Therefore, the team updated the work centers, assigned run rate groupings and reviewed standard capacity reporting. This information was incorporated into the monthly SIOP process.
- **Schedule adherence**: In addition, we wanted to roll out key metrics to support effective monitoring of the process and ensure production stayed on track with customer needs with the optimal schedules for the floor. Thus, we developed a schedule adherence tracking process and aligned with the team. After performing the process manually, we identified reports that contained the key information (work orders by work center, work order completions etc.) and automated the schedule adherence tracking process so that it could be incorporated in the weekly review meetings.
- **Order status**: To gain better visibility into order status to enhance customer service and operational effectiveness, we rolled out order status tracking with key points in the end-to-end process. Although there were almost ten process steps the planner tracked manually, we reviewed the steps for those that were differentiated and/or meaningful to the process. If we tracked too many, we'd add additional production entry steps into the process without a benefit. On the other hand, if we continued without tracking any steps, we'd have to walk the lines to find out order status and the visibility wouldn't be available for anyone else in the organization. We agreed on three key steps and rolled out JDE functionality to trace the order through the processes. It also provided better visibility by consuming the appropriate raw materials at the "right" step in the process, thereby improving inventory accuracy.

Not only did the team automate several process steps by better utilizing and rolling out ERP functionality, but they also developed a process that provided better visibility which benefited the customer and internal resources. The planners could spend time on looking to the future, managing exceptions and increasing operational performance while ensuring high levels of service instead of performing manual tasks, thereby improving their engagement and morale. The process was sustainable and scalable! In addition, because the planners didn't have to spend so much time ensuring details were handled manually, they could deliver improved results (customer service, operational efficiency, inventory).

Tips for Better Utilizing ERP

No two clients are alike yet every client can **better utilize ERP**. No two systems are alike (JDE, SAP, Epicor, Dynamics, Salesforce, CPQ, Oracle, etc.) yet modern systems will have base functionality to improve business performance. Of course, tier 1 ERP systems will have more capabilities. On the other hand, tier 2 or 3 systems typically are simpler which can be a benefit as well. Whether process manufacturing, job shop, or custom (ETO/ CTO), there are best practices in common. No matter the situation, consider a few keys to success.

- **Business need**: Start by evaluating your business requirements. What would add value for your customers, operations, suppliers or employees? Quickly prioritize where to start and research the appropriate functionality that would support your needs.
- **Cross-functional team**: Form a cross-functional team including key resources from the focus area, upstream and/or downstream resources, IT/ ERP resources, and sponsoring resources. Empower the team and provide them with the appropriate tools, consultants and/or experts etc.
- **Test plans:** Put together the appropriate test plans to simulate what you'd like to achieve. Try different pieces of functionality in a controlled setting, adjust as needed, re-test and document results.
- **Pilot**: Complete a pilot process to try a real-world scenario. Tweak setups, adjust settings, update the process, and look for improvements. Set your team up for a quick win and be nimble with changing conditions and to incorporate feedback / ideas.
- **Rollout**: Develop a cutover plan, incorporate training and education, develop metrics to ensure the process stays on track, and ensure there are resources to support go-live.

The Bottom Line

The best companies will utilize all resources at their disposal to support customer growth and business performance. ERP systems are one of the largest, if not the largest, investment your company will make. Many companies only use 20% of their ERP system with less than 50% usage being common. Our best clients dedicate the time and resources to better utilize their ERP system and related technologies (not to a particular percentage, but focused on key functionality that will

add value) to automate, digitize, and thrive.

Did you like this article? Continue reading on this topic:
Case Study in Fueling Productivity, Profitability, & Performance with ERP Optimization

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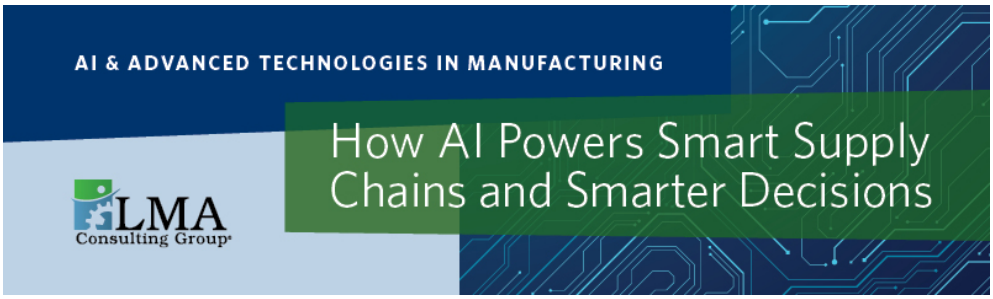

Experience in Working with LMA

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

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 family law attorney 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? If so, I lead a group of top notch trusted advisors (with hybrid capabilities), **ProVisors** Ontario group, and we have an opening for someone interested in super charging their network, stimulating commerce, community and collaboration. 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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