

SPRING 2024

# PRECISION

## MANUFACTURING

JOURNAL OF THE MINNESOTA PRECISION MANUFACTURING ASSOCIATION

# Golden Gloves

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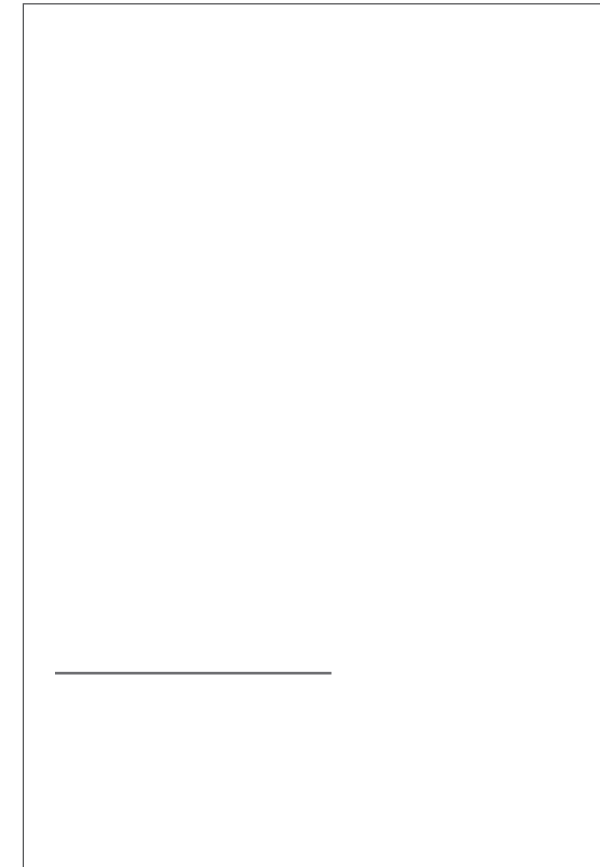
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# Slowing down and reviewing strategies

MPMA Board Chair Laurent Deconinck on how leaders can plan for future growth in today's economy.



**LAURENT DECONINCK**  
 Board Chair  
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Dear members,

If you're anything like me, it feels like 2024 is moving quite fast. Hopefully every member was able to navigate the new sick leave policy and have a smooth implementation.

Most of us are feeling the effects of a sluggish economy, and with current interest rate levels, it will likely stay sluggish for the foreseeable future. I hear from a lot of shop owners that they are slowing down but keeping their workforce. This could explain why unemployment levels are staying low — it will be interesting to see how long the economy can sustain all these factors.

For those that can afford it, now is a great time to invest in additional training for your workforce. MPMA offers a few options for our members, which can be found on our website. Now is also a great time to improve your internal processes, clean work centers and do cross training with employees.

For leaders, this slowdown has given us a chance to review our current strategies, as well as plan for future growth and asset allocation. It's also an opportunity to look back at the last few years and reflect on what went well and what areas we struggled in.

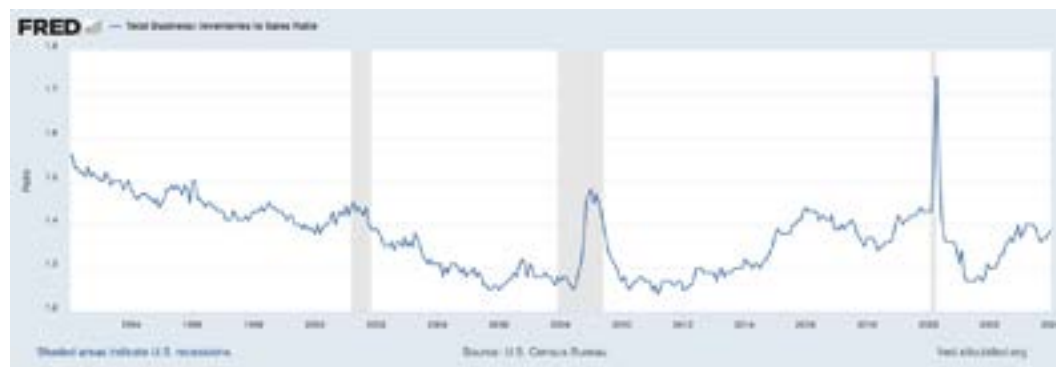
Eventually, the economy will stabilize. Data from recent Fed. reports show the inventory to sales ratio flattening in the last 12 months (see graph below).

Companies and consumers will have to adjust their spending accordingly. The big unknown is if the government will start reducing their spending. A lot of money is still not allocated for future projects which will probably keep inflating prices.

Despite all the unknowns, MPMA is here to continue providing quality resources and events to our wonderful members.

Sincerely,

Laurent Deconinck



# Reflections from an additive manufacturing event

Matt Havekost with AdvancedTek shares insights after a week engaging with manufacturing executives in Europe.



**MATT HAVEKOST**  
 VP Sales  
 Additive Manufacturing  
 AdvancedTek  
 mhavekost@advancedtek.com

Recently, I had the pleasure of attending an additive manufacturing event at Stratasys's European headquarters in the beautiful city of Baden-Baden, Germany. As I reacclimate to Minnesota, I am reflecting on the insights and meaningful relationships formed during my time at the event.

Throughout the week, I engaged with manufacturing executives from across Europe, uncovering the universal nature of our industry's challenges. These discussions echoed concerns I've heard back home in the United States, and specifically in my Minnesota base, with skilled labor shortages, supply chain complexities, and escalating production costs being prominent topics. Lately, there seems to be more focus on the hurdles from increased regulations. Particularly in the EU, where stringent carbon emission regulations are rapidly changing the corporate landscape, businesses are on a precipice of change. The crux of the issue is that these regulations tend to be aspirational in intent but lack practical grounding, often leading to convoluted and costly compliance for businesses and, in turn, the end consumer.

I'm grateful to be part of an industry that's positioned to address these multifaceted issues head on. The world of 3D printing and additive manufacturing is sparking enthusiasm for the field in young minds—from the elementary level right up to university education—and I take pride in the industry's involvement in nurturing this interest through support of 3D printing courses at the University of Minnesota, as well as commitment to advancing internships and support of organizations like MPMA to propel these efforts.

We're working diligently to educate manufacturing leaders about the benefits of embracing additive manufacturing, demonstrating how it can expedite product development and streamline production workflows. I recently met with a VP of Global Additive Manufacturing at a renowned Fortune 500 company, who underscored the demand, not for machine operators, but for skilled individuals who can harness the potential of 3D printing within the manufacturing ecosystem. As an industry veteran, I am elated just to see "additive" in a job title! Such a shift signals boundless prospects for the upcoming generation of engineers and technical experts.

Our collective endeavor is to mainstream the adoption of additive manufacturing for the production of final goods at scales previously unseen. Companies are combating supply chain issues by creating parts on-demand, circumventing the need for hefty tooling investments or minimum production quotas. The notion of a digital inventory for replacement parts is revolutionary, enabling the on-demand, locale-specific production of parts, thereby optimizing efficiency and minimizing waste.

Our clients' reliance on additive manufacturing has allowed them to remain adaptable and cutting edge, tailoring their operations to overcome staffing obstacles through automation and conforming product designs to meet ever-changing regulatory standards. Every industry challenge is the precursor to opportunity. We are eager to uncover and embrace the potential that lies on the other side of these obstacles!

Matt Havekost

Tuesday • July 23 • 2024

## REGISTER HERE

40th Annual MPMA Open  
 Golf Classic presented  
 by Lube-Tech



This event sells out every  
 year. Register early to  
 secure your team.

## Meet our newest team member, Meaghan Ziemba!



**MEAGHAN ZIEMBA**  
Sales and Membership Associate  
Minnesota Precision  
Manufacturing Association  
meaghan@mpma.com

*"I am committed to fostering an environment where everyone, regardless of background or gender, can thrive in engineering and manufacturing careers."*

Hello, Ya'll,

**M**y name is Meaghan Ziemba, and I am so excited to join the Minnesota Precision Manufacturing Association (MPMA) as its new Sales and Membership Associate.

A little bit about me: I was born in Upstate New York (Go Bills!) and grew up in Southern Wisconsin. I started my college adventure at the University of Minnesota in the Twin Cities but had to switch schools after my second year when I found out I was pregnant. I received my B.A. and M.A. in Professional and Technical Writing from the University of Wisconsin–Milwaukee. I started writing for manufacturing in 2008 at a trade publication in Madison, Wisconsin.

Professionally, I am an industrial technical writer, brand storyteller, and marketer for manufacturers—part-time, I report for MTDCNC at trade shows and different manufacturing facilities around North America.

I also host a live video broadcast series called *Mavens of Manufacturing*. The series focuses on women in the sector. My mission with *Mavens* is to attract younger generations to join manufacturing and engineering career pathways to help close the skills and gender gaps.

When I am not writing, hosting *Mavens*, or speaking at public events, I have three children who keep me on my toes. My daughter, Annabelle, is 20 years old and studying to be a nurse at Eau Claire in Wisconsin. My two boys, Deagan and Rónán, are six and four years old and love to create things and play different sports. They recently got diagnosed with asthma, so it's been an educational experience for me to get used to their daily treatment plan.

### So why MPMA?


Joining the MPMA team was a natural progression in my mission. I strongly advocate for U.S. manufacturing, and I don't believe we will achieve greatness unless we all put our boots to the ground and do the work needed to strengthen this wonderful sector. Working with the MPMA will allow me to learn more about the Minnesota manufacturing scene and connect with businesses dedicated to solving the challenges we face as an industry.

Some critical aspects of my advocacy revolve around diversifying the sector and empowering women in manufacturing, engineering, and the skilled trades. Women bring unique insights and skills that are invaluable to the sector. Yet, we remain at 30% representation. I am passionate about creating a platform for women and underrepresented groups to be heard and celebrated.

I am committed to fostering an environment where everyone, regardless of background or gender, can thrive in engineering and manufacturing careers. I firmly believe that can be achieved through collaboration, mentorship, and advocacy, so I am excited to join the MPMA team to break down barriers and strengthen U.S. manufacturing.

Thank you for being so supportive on this journey, and I look forward to hearing your stories and learning more about your contributions to Minnesota manufacturing.

Cheers,

Meaghan Ziemba 



## How to Reduce Supply Chain Spend

Using the CI Methodology to seek new opportunities for improvement.

By Waypost Advisors

**A** supply chain continuous improvement program should be able to identify and drive improvements to costs (materials, transportation, storage), non-value-added work (human capital optimization), the use of cash (inventory), and service to customers.

There is generally untapped cost-reduction opportunities in supply chain, considering the cost-impacts within material cost, transportation cost, warehousing cost, overhead (people) cost, and variable production cost. These costs are not always easily visible so a CI program should focus on gathering information to summarize total supply chain spend as well as the value of opportunities to improve.

### CI Methodology for Supply Chain

- **Lean:** Many supply chain issues are rooted in process, data integrity,

information flow, communication, decision-making, or roles/responsibilities. There generally isn't enough of the right data to identify variability in the process for six-sigma to be effective.

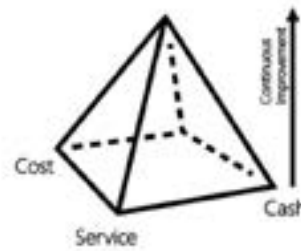
- **TIMWOODS:** TIMWOODS stands for transportation, inventory, motion, waiting, overproduction, overprocessing, defects, and skills. Looking for opportunities to reduce non-value-add time, activities, transactions, or money spent is the most effective approach. Optimized headcount utilization, reducing the need for inventory, and purchasing tactics that leverage discounts are some of the most common improvements.
- **Inventory:** Lacking supply chain/communication processes will result in improper inventory positions,

whether over or under-stocked. There is an optimal inventory range for all SKUs – see next spread.

- **Purchasing:** There are ways to better manage buying to garner better-pricing. Strategically managing suppliers (when they are strategic), leveraging buying groups, order quantities that get discounts, payment terms that get discounts, etc.
- **Planning:** Supply Chain Planning is the process/tool that is used to reduce variability in the end-to-end supply chain. This allows for optimal inventory levels, better labor planning, better machine uptime (due to better-managed maintenance), and optimized capacity utilization. Improvements in Planning (communication is a big part of this) will drive improvements in supply chain performance.

### Key Metric Areas

We recommend 3 key metric areas for any supply chain. There are many sub-metrics within these areas that can be selected based on the strategic and tactical objectives for the company.



**Service:** This is how you define service to your customers. The most useful is OTIF (on-time in-full) as it will drive stocking levels in a statistical calculation. But you may also use a customer satisfaction coefficient, customer retention, perfect order index, etc.

**Cost:** It is important to measure supply chain costs over time in order to understand where there are opportunities to improve. Also ensuring that your material and transportation/logistics costs are keeping pace with the market rates is important (so you're not over-paying). Cost of materials, services, indirect materials, transportation services, storage (warehousing), technology subscriptions, and overhead (SG&A) are very important to ensure you understand and control your supply chain costs.

**Cash:** This refers to the working capital tied-up in order to purchase and produce inventory. It can be measured in a variety of ways:

- **Cash Conversion Cycle** – This is how many days your money is “tied-up” before you get paid by customers. It consists of your Days Payable Outstanding (DPO), Days Inventory Outstanding (DIO), and Days Sales Outstanding (DSO). The lower this number, the better.
- **Days of Supply** – this is a volumetric that shows how many days of forecasted demand you have in inventory.

- **Turns** – How many times per year your inventory is turning (this is a financial calculation so use in tandem with Days of Supply if your inventory value changes frequently).

### Optimal Inventory Analysis Example

Optimal inventory means the target range of stock (min/max) to hold that maximizes service to customers (target

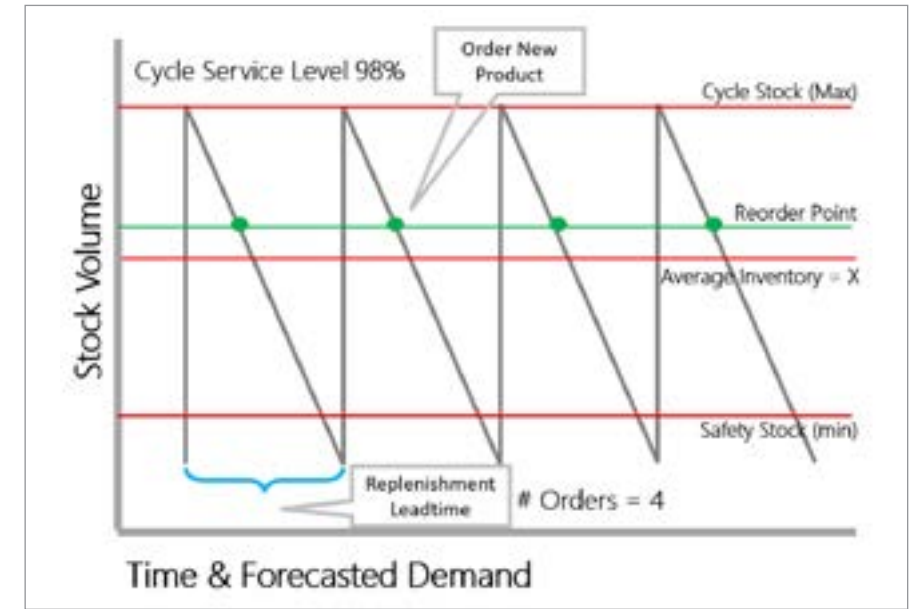
OTIF %) and minimized working capital investment (money tied-up in inventory).

This can be statistically set (a confidence interval) by using the TRLT, Forecasted demand in the TRLT, TRLT variability, demand variability in TRLT, and target service level.

This is a data-driven, statistical calculation based on actual business inputs. It can be used to understand the optimal targets and, more importantly,

why those targets are not achieved – whether it’s due to too much or too little inventory. From there, root-cause analysis and corrective actions can be performed to get inventory levels back into focus.

Additionally, optimal inventory analysis can be used to create scenarios that allow you to see how your needs for inventory (and cash to pay for it) will change based on changing operating parameters. What happens if your demand changes? What happens if you create efficiencies in production and your TRLT diminishes? What happens if you change your targeted service level to customers? Use this exercise to test your theories. [PM](#)



Graph courtesy of Waypost Advisors

# Continuous Chain of Improvement

## Staying compliant after changes from 2023 legislative session

By Jaimee Barnhart

The 2023 legislative session ended in May of last year, but Minnesota business owners are still grappling with its implications for how they do business.

Due to the Democratic-Farmer-Labor (DFL) Party's single-party control of the legislature, the session moved at a brisk pace and brought about several policy, spending and taxing measures that will continue to go into effect over the next two years.

Each year, Enterprise Minnesota conducts and publishes their State of Manufacturing survey, which highlights the trends, conditions and outlooks shared by manufacturing leaders across the state. Results from the 2023 survey showed that many leaders were feeling anxious about what some of the new measures would mean for their organizations and the industry as a whole.

Some of the top concerns include the newly-mandated sick and safe time policy, legalization of cannabis products for recreational use and the upcoming paid family leave policy (which goes into effect in January of 2026).

The State of Manufacturing survey found that 77% of participants were worried about the lack of small business exemption for paid leave, with 56% citing that they are "very worried."

Others also shared concerns about new payroll taxes necessitated by the new paid family and medical leave program and the ban on non-competes. Despite the challenges, there are a variety of resources available to manufacturing leaders trying to make sure they're ahead of the curve with compliance.

### When will these new policies affect you and your business?

Some of the implications of the recent session are already in effect, and some are still on the horizon. But just because they don't have current implications doesn't mean you shouldn't be preparing for the future, says Mckenzie St. Claire, HR Manager and Consultant at Vision One.

Here is a timeline with the highlights of when new policies will go into effect (or, when they did) according to the Minnesota Chamber of Commerce:

#### As of July 1, 2023:

- Noncompete agreements banned
- New and increased OSHA penalties went into effect

#### As of Aug. 1, 2023:

- Recreational use of marijuana legalized

#### As of Jan. 1, 2024:

- Sick and safe time mandated
- Ban established on asking about pay history

#### As of Jan. 1, 2025:

- Minnesota Secure Choice Plan (retirement savings program) launches
- Beginning of PFAS ban in 11 products

#### As of Jan. 1, 2026:

- Paid Family and Medical Leave mandate goes into effect
- New reporting requirements for all PFAS products

### Mounting frustrations

While much of the recent legislation is aimed at positive outcomes for the community (namely, supporting new parents and families), it can be hard to see those same outcomes from a business owner's perspective, said Michelle Beck-Howard, a Client Success Manager at G&A Partners.

G&A Partners, a PEO (professional employer organization), provides HR consulting services to their clients, many of whom are manufacturers. Beck-Howard said that in over three decades of living and working in Minnesota, this is one of the busiest legislative sessions she's seen.

Vision One also provides consulting services to many manufacturing clients. St. Claire said she's been hearing similar concerns in her conversations with industry leaders.

"In many past laws, you had to have a certain number of people who worked for you in order for them to apply," said St. Claire. "A lot of the new legislation applies to every business regardless of size, which I think just adds a layer of nerves."

Mandated paid sick and safe time is not new for businesses with a home base in Minneapolis. But for those who are smaller or located outside the Twin Cities, the idea of another expense is worrisome, especially as labor shortages in the industry continue. Plus, Beck-Howard added, while new tax implications are not necessarily large, they are just one more tax for employers to keep track of.

Now, employers are grappling with how to implement attendance policies and incentivize their employees to come to work, St. Claire said.

"There are a lot of regulations on what you can and can't ask, and I think that makes a lot of employers uneasy," said St. Claire.

*"Statistics show that if you have an environment that appropriately supports your employees, they're going to be more productive in the work that they do."*

Mckenzie St. Claire  
HR Manager and Consultant at VisionOne

On top of the day-to-day demands of leading a manufacturing business, ensuring compliance with all of the new regulations poses a significant administrative burden, Beck-Howard said.

"It is nice that the state is going to be administering the paid family and

medical leave, but of course there are concerns about bureaucracy and things getting lost in the process," said Beck-Howard.

Still, the benefits of being as compliant as possible outweigh any potential drawbacks — not only are employers avoiding potential lawsuits by updating their policies as thoroughly as possible, but they could also be improving employee satisfaction, recruitment and retention.

Take paid family leave specifically — although filling long-term gaps created by employees on leave is a valid concern, a 2016 Deloitte study found that 77% of workers with access to benefits said that paid parental leave impacted their decisions to go with one employer or another.

"Statistics show that if you have an environment that appropriately supports your employees, they're going to be more productive in the work that they do," said St. Claire.

Photo courtesy of AlexiusHoratius on Wikimedia Commons



## Tips for industry leaders

In light of all of the new legislation, both already effective and on the horizon, there are a number of strategies manufacturers can use to make sure they remain as compliant as possible.

For one thing, both Beck-Howard and St. Claire pointed out, it's beneficial to have an HR professional on your team (whether they're on-staff with your organization or brought on board as a consultant) who knows the ins and outs of the manufacturing industry.

It's also important to keep open lines of communication with your employees, said Denise Macik, Regional Manager, Client Success at G&A Partners.

"In the manufacturing environment, everything you're doing is already very measured," said Macik. "If you commit to keeping open lines of communication — regular one-on-one's with your team members, and having an open door and open ear to what's happening — you can have a quicker turnaround with eliminating frustrations."

Employers can also eliminate frustrations and impact retention and hiring by showing employees that they are committed to continuous improvement.

"It's just that continuous chain of improvement — by continuing to invest in improving conditions you show employees your vision, and they tend to stay longer rather than turning the door as they come in," Macik said. <sup>PH</sup>

### There are a number of resources available to leaders in all industries for understanding the implications of new legislation. Here are a few cited by St. Claire and Beck-Howard:

#### Twin Cities Society for Human Resource Management (TCSHRM) — [tcshrm.org](http://tcshrm.org)

- Stay up-to-date on all things MN employment law. Members can access webinars, networking and professional development opportunities.

#### XPertHR — [xperthr.com](http://xperthr.com)

- This paid resource provides comprehensive breakdowns of all things HR at the state and local level.

#### Minnesota Department of Employment and Economic Development (DEED) — [mn.gov/deed/programs-services/paid-family/](http://mn.gov/deed/programs-services/paid-family/)

- Sign up for email updates on Paid Leave.

#### G&A Partners — [gnapartners.com/industry/manufacturing](http://gnapartners.com/industry/manufacturing)

- Resources including articles and webinars specific to the manufacturing industry.

#### Vision One — [visiononeperformance.com](http://visiononeperformance.com)

- A variety of fractional services for small to midsize businesses including HR solutions, M&A, value growth and more.

#### "What the HR!" Podcast — [Apple Podcasts](#) and [Spotify](#)

- Hosted by TCSHRM board member Mike Thul and Jessie Novey, listen in for conversations around HR best practices including Episode 74 - "Compliance Update."

# 2024 Golden Gloves

Sponsored by Sunbelt + True North M&A



MPMA President/CEO, Steve Kalina, in his corner ready to face his opponent, Jesse Schelitzche, President of Imagineering Machine Inc, for an exhibition bout at Medina Entertainment Center on March 27, 2024



Top left: Jerry Bridges of Firehouse Gym, and Devan Blackmore of Golden Lakes Boxing, in the first round of their bout  
Bottom left: The Sunbelt + True North M&A team poses for a picture  
Top right: A judge hands their score card to the referee  
Middle right: Golden Gloves attendees enjoy a prime rib buffet  
Bottom right: Timothy Greer with his corner man between rounds





# An Unlikely Combination

How MPMA's Golden Gloves Event Began

by Maddie Lemay

Every year, hundreds of people from across the state of Minnesota gather for an unlikely purpose: boxing and manufacturing.

Guests of the Minnesota Precision Manufacturing Association sit at circular tables, sipping refreshments and cutting into a prime rib dinner as they cheer on their favorite boxer. The event has drawn thousands of people over nearly half a century, and it's the association's most popular one of the year.

The Minnesota Precision Manufacturing Association's 47th Annual Upper Midwest Golden Gloves Banquet & Boxing Exhibition, which took place this year on March 27 at the Medina Entertainment Center, has remained a staple for the Minnesota manufacturing community for nearly half a century – and it all started with one person who happened to be passionate about both boxing and manufacturing: Chuck Hales.

Hales passed away in 2020, but his legacy is palpable at each annual Golden Gloves event.

"I brought the two together and no one (from the industry) knew too much about boxing," Hales told MPMA back

in 2018. "But it was for a good cause and everyone had so much fun, it just kept growing and growing."

The partnership was popular from the start. It is the MPMA's largest annual event, with about 500 attendees coming to the Medina Entertainment Center each year to enjoy a prime rib dinner, networking, and several rounds of boxing bouts.

Every year, the event raises thousands of dollars that go towards scholarships for young athletes in the Upper Midwest Golden Gloves program. The scholarships encourage young boxers to pursue higher education and to attend colleges, universities, or trade schools.


The mission of Golden Gloves of America Inc. is to "provide an activity and safe environment that promotes and enhances the physical and emotional well-being and social development of young athletes; develop individual athletic skills, work ethic, discipline, sportsmanship, self-respect and pride."

Hales said in 2018 that the lessons he learned in Golden Gloves as a boxer, coach and referee – compassion and respect for others, courage and

patience – have given him a leg up in what became a highly successful business career.

Early on in his life, Hales was a machinist and eventually started his own business – Hales Machine Tool. He grew up in Staples, graduating from Staples High School, before residing in Maple Plain.

After he retired from coaching, Hales became involved at the administrative levels at Golden Gloves, serving in all of the roles over the years, including president. Hales also served as the Upper Midwest team manager at national tournaments. In 2016, he was inducted into the National Golden Gloves Boxing Hall of Fame, only the fourth Minnesotan to achieve such an honor.

Although Hales is no longer with us, his legacy lives on at MPMA's Golden Gloves event, and it's felt every time a roar of applause or laughter rolls through the Medina Entertainment Center on the annual evening he dreamed up nearly half a century ago. 

Left: Members socialize between bouts  
Right: Golden Gloves attendees zoned in on the ring



Photos by Emma Gottschalk

# Future Forward: How AI Could Lubricate the Future of Manufacturing

By Richard Leguil, Technical Writer at Lube-Tech



In the world of manufacturing, tribal knowledge refers to the shared but unwritten techniques, procedures and practices that a handful of employees hold. This might sound like a secret sauce that gives your manufacturing company an edge, however, it's also a ticking time-bomb, set to detonate once these key employees decide to move on. Then you're left to scramble, fill in the knowledge gap, all while trying to maintain efficiency and productivity. Not exactly an ideal situation, right?

But here's the silver lining: Tribal knowledge doesn't have to be your kryptonite. You, as a manufacturer, can turn that knowledge into power as a new revolutionary force is taking the future of the industry by storm: Artificial Intelligence (AI). Let's explore how AI is positioned to change the entire manufacturing landscape, unlocking opportunities for precision, efficiency, and optimization.

## Precision Meets Intelligence: A Glimpse into the AI-Powered Factory

Imagine a factory floor humming with robotic activity, guided by an invisible hand – AI. Sensors collect real-time data on equipment health, wear patterns and environmental conditions. Algorithms analyze the collected data, predicting maintenance needs and optimizing operations with unparalleled accuracy. Robots collaborate seamlessly with your workforce, performing intricate tasks with pinpoint precision, guided by AI-assisted decision-making. This isn't sci-fi; it's the future taking shape.

## AI's Impact on Precision Manufacturing

**Predictive Maintenance:** Traditional maintenance schedules often lead to unnecessary downtime or catastrophic failures. AI-powered systems

can forecast component wear and tear with remarkable precision, enabling targeted preventive maintenance. Lube-Tech and Redlist provide dynamic AI-powered lubrication and asset management to help prevent downtime and premature failure of critical equipment inside of the manufacturing environment.

John Keller, President and Co-founder, of Redlist says,

*“A healthy asset is the lifeblood of your business. Unplanned down times due to a preventable reliability issue—can be costly and even catastrophic to your business and the people that run it.”*

Using AI to predict when your machines may need maintenance, new lubricants or both, reduces downtime, extends equipment life and optimizes lubricant usage.

**Dynamic Lubrication:** Lubrication plays a crucial role in minimizing friction and wear, but

traditional static schedules may not always be optimal. AI-powered systems, like those provided by Lube-Tech and Redlist, can analyze real-time sensor data, including temperature, pressure and vibrations, to adjust lubrication parameters dynamically. This ensures optimal lubrication levels across varying operating conditions while reducing lubricant waste and extending equipment life.

**Smart Supply Chain Management:** AI can optimize the entire supply chain for lubricants, predicting demand fluctuations and streamlining delivery routes. This ensures the right lubricant is available at the right time and in the right quantity, minimizing inventory costs and ensuring uninterrupted production.

*“A healthy asset is the lifeblood of your business. Unplanned down times due to a preventable reliability issue—can be costly and even catastrophic to your business and the people that run it.”*

John Keller  
President and Co-founder of Redlist

**Collaborative Robotics:** Collaborative robots (cobots) are designed to work alongside humans, performing tasks like machine tending and quality control.

AI can empower cobots to adapt to new tasks, handle intricate components with superior precision and even identify potential lubrication issues, freeing human workers for higher-value activities.

## Navigating the AI-Powered Frontier

Change can be hard, and embracing AI requires strategic preparation. Here are some key considerations for manufacturers:

- **Educating the Workforce:** As AI automates certain tasks, workers will need new skills. Focus on data analysis, programming and collaboration with AI systems to ensure a smooth transition.
- **Data-Driven Culture:** Data fuels AI algorithms. Invest in collecting and storing high-quality data across operations to facilitate effective AI implementation.
- **Cybersecurity and Ethics:** Prioritize robust data security measures and adhere to ethical principles in AI development and deployment.
- **Partnerships:** Collaborate with technology providers, research institutions and other manufacturers to accelerate learning and share best practices for successful AI integration.

Keller says that the ease of embracing AI in your facility is a matter of effort:

*“It really depends on how organized and consistent a manufacturing facility's data is. If their data is consistent, clean and organized, it can take a matter of hours to migrate their information and*

*only a few more hours to train their staff. If the data is incomplete or inconsistent it can take several weeks with our team of experts and going through the reps to get your data in the system. This data can and should include pictures of the assets and their respective components and lube points and a basic mapping of where to find these assets within your facilities. It should also include the basic lube instructions of how much of which lubricant goes where and how often.”*

If you follow best practices and the advice of experts in the field, then you'll be able to integrate your facility with AI and foster the knowledge of your key employees that keep your business running. Doing it right will lead to your business increasing productivity with minimal impact on your workers and customers.

## Harnessing the Power of Tribal Knowledge with AI Technology

The future of precision manufacturing is undeniably intertwined with AI. By harnessing your company's tribal knowledge and embracing this transformative technology, you can unlock unprecedented levels of precision, efficiency and profitability. Together, we can navigate the AI frontier, ensuring your business remains lubricated for success in the years to come. <sup>PM</sup>



### **MPMA Receives Workforce Development Grant**

We are thrilled to announce a milestone in MPMA's 70 year history- the reception of an \$800,000 grant from the Minnesota Department of Employment and Economic Development (DEED). This funding is dedicated to workforce development across the state. Stay tuned for how your company can benefit.

### **We've Moved!**

Our offices have relocated to 7700 68th Ave N, Suite 12, Brooklyn Park, MN 55428. Please update your records accordingly.

### **Mars Supply celebrates 100 years**

Mars Supply is proud to announce that they are celebrating a century of business in 2024! Today, the company operates out of distribution centers in Duluth and the Twin Cities, serving foundries, machine shops, mining companies, railroads, power companies and manufacturers.

### **Source Machinery Sales Open House**

Source Machinery Sales is putting the finishing touches on their new facility in Fridley. To celebrate, an open house is scheduled from May 13th to the 17th, where they will have more than 20 machines under power on display.

### **MPMA and Minnesota Manufactured**

Our campaign to connect with the next generation of manufacturers continues with two major tournaments:

- Minnesota High School Trap-Shooting Tournament: From June 10th-18th in Alexandria. Stop by and see us!
- St. Croix Cup Soccer Tournament: Catch us May 31st to June 2nd at the Lucy Winton Bell Athletic Fields in Stillwater. One thousand athletes will be sporting their Minnesota Manufactured jerseys!

### **Dual Training Grant open for applications**

The Office of Higher Education's (OHE) Dual Training Grant is open for applications from March 12 through April 22, 2024. Application materials are available on OHE's website.

## UPCOMING EVENTS



**Toolbox Talk:  
Tour Arrow Finishing**  
Thursday, June 20, 2024  
11:00 am – 1:00 pm  
Arrow Finishing



**40th Annual Open Golf Classic  
presented by Lube-Tech**  
Tuesday, July 23, 2024  
11:00 am – 6:30 pm  
Bunker Hills Golf Club



**International Manufacturing  
Technology Show**  
September 10-11, 2024  
McCormick Place, Chicago



**Shoot for Scholarships**  
Wednesday, September 10, 2024  
Time: 11:00 am – 6:00 pm  
Minnesota Horse & Hunt Club



**Celebration of Manufacturing**  
October, 2024  
Exact date and location TBD

Register/learn more  
about the events here



Please contact Brenda at [office@mpma.com](mailto:office@mpma.com)  
with event questions or scan the QR code.

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