



Al brings Wisconsin manufacturing to a turning point

Four years ago, we launched the Wisconsin Manufacturing Report (WMR) to give leaders deeper insights into Wisconsin manufacturing. With over 400 interviews and five regional focus groups each year, the WMR reaches and influences executives, policymakers, and the organizations that shape Wisconsin's manufacturing sector.

Last year, we took it further—translating our data into practical insights manufacturers can use. This year's focus: **Artificial Intelligence**.

When we first asked about AI two years ago, the answers were alarming with 72% of Wisconsin manufacturers saying they had no plans to use AI. That's changing rapidly as AI — and our understanding — evolves. Today, nearly half of respondents intend to adopt AI and only 37% still see no impact for their business —significant change, but still not enough.

THE RACE IS ON. To stay competitive in a world of labor shortages and global pressure, Wisconsin must lead—not lag—in Al adoption.

The Wisconsin MEP Network is taking action, alongside partners like Microsoft's AI Co-Innovation Lab for Manufacturing, the Center for Advanced Manufacturing and AI at UW-Stout, Titletown Tech, Connected Systems Institute and many of our technical colleges.

Together, we're building the tools, training, and on-ramps manufacturers need to integrate Al, boost productivity, address workforce constraints, and gain competitive advantage.

This WMR supplement is your AI playbook with clear steps to get started, smart use cases to build momentum, and advice on designing a roadmap to long-term success.

We believe in Wisconsin manufacturing. We believe in its future with Al. Let's move forward—fast and together!

Let us know what you think—and we'll see you in September with the fifth annual Wisconsin Manufacturing Report.

Enthusiastically,



In this Report



Al Today

Manufacturers adopting AI to remain relevant



Effective AI Engagement in Three Steps

A straight-forward way to start your Al journey



Challenges and Wisconsin's Al Network

Pitfalls and Wisconsin's Al network





AI Today

Al reshapes how businesses operate, moving rapidly from a novelty to a necessity. Embedded Al makes everyday tools and workflows more accessible and impactful. ChatGPT, CoPilot, and other models make decision making and content creation faster and more accessible, driving a surge in generative Al adoption.

MANUFACTURERS MUST ADOPT AI to gain a competitive edge in growth and efficiency over slower moving operators. Adoption could mean the difference between long-term success and a slow path to irrelevance.

Al holds exceptional promise for manufacturers with an abundance of repetitive processes, a data-rich environment, and clear, measurable outcomes. Al will drive efficiencies and cost savings, address some workforce shortages and make companies more agile and able to react quickly to market changes.

On Wisconsin...with Al!

Wisconsin's manufacturing sector can lead the nation in AI adoption. Large manufacturers leverage AI for competitive gain. Small- and medium-sized manufacturers (SMMs) can leverage those large manufacturers' experience to become more resilient, act faster, and implement AI more effectively.

Al offers the most value in three areas*

- Marketing Automate outreach and uncover buying signals
- Customer service Speed response times and personalize communication
- Operations Improve forecasting, scheduling, and production efficiency

Challenges remain in data quality, workforce readiness, and integration complexity. Yet, companies are moving forward in their adoption of AI because of the real world impact on their bottom line. According to McKinsey*, 78 percent of respondents say their organizations use AI — a sharp increase that reflects AI's increasing value. Wait and see is not an optimal approach to AI anymore.

* https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai

How AI can help...

- Simplify HR administration by using chatbots to access complicated documents. (Natural Language Processing)
- Reduce downtime by using data patterns to make decisions to improve predictive maintenance. (Machine Learning)
- Improve quality inspections through visual data analysis. (Computer Vision)
- Improve customer experience by using simulated human decision making to respond to routine requests. (Expert Systems)
- Create new content for marketing campaigns (Generative AI)
- Automate repetitive tasks through enhanced AI to classify emails. (Robotic Process Automation + AI)

^{*} Matt Kirchner, "State of Artificial Intelligence in Wisconsin"



Effective AI Engagement in Three Steps

STEP

Select an Internal AI Champion

Find a curious leader to lead the charge

The Best Champions Bring These Talents

- Curious and enthusiastic No certifications or Al experience is required. Natural curiosity, attention to detail, and a drive to get things done matter most.
- Intimate knowledge of the frontline with solid C-Suite Connections – The right AI leader understands frontline challenges – the real challenges, not the theoretical ones. They are credible and have easy access to top management.
- Keen focus on data Reads, understands, and executes effectively with imperfect data. Perfection is not the goal.

- Cross-functional communicator Able to communicate with every division and translate the benefit of Al into practical uses.
- Vison for the long-term with an eye to quick wins –
 Doesn't let long term plans slow immediate action.
 Al is a long-term journey, with success built through
 quick early wins.
- Action oriented Heavy focus on actions with clear results.
- Avoids Shiny Objects Able to differentiate between the real benefits of AI and the hype. Act as an emissary for AI.

That leader could be you!

STEP 2

"Just Start" once your Al Champion is in place

- **Identify** some of your company's relevant pain points.
- Decide which problem(s) you want to solve.
- Find the data to solve this problem and make sure it's usable.
- Solve a problem that will be recognized as an Al success
- Assess your internal Al capability to execute this project. Be ready to find outside help or choose another project.
- **Select small** and lower risk AI pilots to build trust, demystify AI, and quickly prove value.

Get Started with AI

Balance between a long-term plan and quick wins.

Prove Al's value throughout the organization with immediate quick wins.

Set the tone with a longer-term plan for the organization, demonstrating that Al will have an impact that will affect the entire organization.

Just Start, but take care

- Secure your data within the tools you use to keep it proprietary and protected.
- Experiment aggressively, but implement cautiously. Al adoption decisions should be reversable, flexible, and iterative.



Of these potential quick wins, the first three can be knocked out in an afternoon, while the bottom three may take longer depending upon internal readiness in systems, data availability and quality, and employee knowledge.

STEP 3

Smaller low risk Al pilots build trust, demystify Al, and prove value

Select one or two use cases to provide quick wins and prove Al's value.

EASIEST

Potential Quick Win Use Cases

- Customer email handling Use built-in AI tools like Microsoft Copilot and Gmail's AI to prioritize emails, draft replies, and summarize threads.
 - **Results:** Frees up staff time, reduces email fatigue and speeds up responses.
- Chatbots Equip chatbots with HR manuals, repair guides and "tribal" knowledge to provide employees with immediate answers. Results: Preserves institutional knowledge, supports onboarding, and improves response consistency.
- Workforce Scheduling Use AI to predict staffing needs and adjust staffing schedules for absences or surges.

Results: Ensures consistent coverage, improves productivity, and boosts employee satisfaction.

Inventory – Improve inventory control with better demand forecasting, supplier evaluation, and automated restocking.

Results: Reduces costs and risks through better analysis and faster decision making.

CRM Customer Analysis – Use AI features in your CRM system (i.e., Salesforce Einstein) to predict client behavior and understand risks or unmet needs.

Results: Improves client retention and identifies upselling opportunities through behavioral insights.

 Quote and Cost Management – Analyze historical data to generate consistent pricing, automate RFP creation, and identify unique order elements for staff review.

Results: Delivers faster, more accurate quotes with less manual effort.

TOUGHEST



Challenges and Wisconsin's Al Network

Don't let your AI crash and burn

Common Al Failures

- Undefined problem Al is not magic. Always start with a high-value, clearly defined use case that solves a real business need.
- Poor Communications Employees often fear that Al will replace their jobs. Communicate early and often that Al is a tool to augment and upgrade their roles.
- Overcomplication Skip the buzzwords and avoid the hype. Focus on practical applications that solve real problems.
- Problematic or missing data Inaccurate, siloed, or incomplete data undermines outcomes. Get your data in shape before using it.
- Undefined AI policy Without guardrails, AI efforts can drift off-course. A well defined policy provides clarity, alignment, and accountability while reducing confusion, risk, and mistrust.

Prep Operations for Al

- Clean and standardize processes Al amplifies what exists. If workflows are chaotic, fix them first.
- Map your data sources Understand where data comes from, confirm its quality, and learn how to access it reliably.
- Connect your machines (even a little) Start simple - basic machine information can unlock valuable insights.

Avoid pitfalls by choosing an AI advisor who offers honest guidance and keeps you on target.

Wisconsin's MEP links you to the Al network that matters

WMEP Manufacturing Solutions

- Readiness & Implementation Guidance on suitable AI use cases and implementation.
- Automation Advisor Assistance selecting automation solutions to enhance productivity.
- Cybersecurity Support in achieving necessary certifications and safeguarding digital assets.

UW-Stout's Manufacturing Outreach Center (MOC) & Center for Advanced Manufacturing & Artificial Intelligence (CAM-AI)

- Al Project Supports Faculty and students help solve your real problems.
- Access to CAM-Al Facilities Labs and other advanced facilities for Al development.
- Al Workforce Development Upskill employees in Al and data tools.

These cost effective services make advanced technologies accessible to smaller manufacturers.



What is the Manufacturing Extension Partnership?

- Mission: Support small- and medium-sized manufacturers (SMMs) in improving competitiveness, innovation, and productivity.
- Business model: MEP centers charge for services, but are mission-driven- not profit-driven.
- Funding: Comes from a mix of federal, state, and client sources- intended to keep high-impact services affordable.



Report Summary

Al adoption is no longer optional—

manufacturers must act now or risk falling behind. With competitors advancing quickly and workforce challenges growing, leveraging AI is critical to staying competitive. Success starts when you enlist an internal AI champion early, take small, manageable steps, create use cases to solve real business problems, and keep your approach flexible, safe, and reversible. Work with a trusted advisor who gives honest feedback and helps you stay focused on practical, high-impact solutions.

About the Wisconsin MEP Network

The Wisconsin Center for Manufacturing & Productivity (WCMP) is part of the NIST MEP National Network with centers in every state and Puerto Rico. Together, we've focused for the past 31 years on keeping small- and medium-sized manufacturers (SMMs) competitive. In Wisconsin, the WCMP and our partners – WMEP Manufacturing Solutions and the UW-Stout Manufacturing Outreach Center – make up the Wisconsin MEP Network. Our not-for-profit status frees us to create impact for our clients, delivering resources not usually accessible to SMMs.

Thank you sponsors!





Thank you partners!







