AI Readiness Assessment for Manufacturing SMEs

Free Self-Assessment Checklist — By Obed Industries

How to use this: Score each item honestly. ✅ = Yes, in place. ⚠️ = Partially or inconsistent. ❌ = No / not started. Tally your scores at the end to see where you stand.

Section 1: Data Infrastructure (The Foundation)

Without clean, accessible data, AI has nothing to work with. This is where most manufacturers stall.

#	Question	✅	⚠️	❌
1.1	Do your machines/PLCs log production data digitally (not just on clipboards or whiteboards)?			
1.2	Can you pull last month's scrap/rework numbers in under 10 minutes?			
1.3	Is your production data stored in a central system (ERP, MES, or database) — not scattered across spreadsheets?			
1.4	Do you track OEE (Overall Equipment Effectiveness) or similar metrics consistently?			
1.5	Is your quality data (defects, inspections, customer complaints) digitized and searchable?			

Your score: ____/5

> **Quick win:** If you scored ❌ on 1.1, start with one line or cell. A $200 sensor + Raspberry Pi logging to a Google Sheet beats a $200K MES you'll never finish implementing.

Section 2: Process Documentation (Does Anyone Know How Things Actually Work?)

AI needs to understand your processes before it can improve them. Tribal knowledge trapped in people's heads is a risk, not an asset.

#	Question	✅	⚠️	❌
2.1	Are your core manufacturing processes documented (SOPs, work instructions)?			
2.2	Do operators follow the documented process, or does everyone have "their way"?			
2.3	When a process changes, does the documentation get updated within a week?			
2.4	Could a new hire learn to run your most critical process from documentation alone (with supervision)?			
2.5	Do you document the *why* behind process parameters, not just the *what*?			

Your score: ____/5

> **Quick win:** Pick your highest-volume product. Video-record your best operator running it, start to finish. That 20-minute video is more valuable than a 40-page SOP no one reads.

Section 3: Workforce Readiness (Will Your Team Run Toward AI or Away From It?)

The tech is the easy part. People are the hard part.

#	Question	✅	⚠️	❌
3.1	Do your operators use any digital tools daily (tablets, HMIs, dashboards)?			
3.2	Is there at least one person on the floor who's comfortable with Excel/data beyond basic entry?			

#	Question	✅	⚠️	❌
3.3	Has your team had any exposure to AI concepts (even a lunch-and-learn or article)?			
3.4	When you've introduced new technology before, did it stick after 6 months?			
3.5	Do your operators trust that new tech is meant to help them, not replace them?			

Your score: ____/5

> **Quick win:** Find your "shop floor champion" — the operator who already tinkers with tech, tracks their own data, or suggests improvements. Buy them lunch and ask what they'd automate first.

Section 4: Leadership Buy-In (Is This a Priority or a Side Project?)

AI initiatives that report to "whoever has time" don't survive Q2.

#	Question	✅	⚠️	❌
4.1	Does your leadership team understand what AI can (and can't) realistically do for manufacturing?			
4.2	Is there budget allocated — even $5K-$10K — for a pilot project?			
4.3	Has someone been named as the owner/champion of AI exploration?			
4.4	Is leadership willing to accept a 3-6 month timeline before seeing ROI?			
4.5	Can you articulate one specific business problem you want AI to solve (not just "be more efficient")?			

Your score: ____/5

> **Quick win:** Frame AI in money language. "We lose $X/month to [specific problem]. AI could cut that by 30%." That gets budget meetings scheduled.

Section 5: Quick-Win Identification (Where's the Low-Hanging Fruit?)

The best first AI project is boring, valuable, and uses data you already have.

#	Question	✅	⚠️	❌
5.1	Can you name a repetitive decision someone makes 10+ times per day that follows a pattern?			
5.2	Do you have a quality problem that costs you >$1K/month that you already track data on?			
5.3	Is there a scheduling or planning task that takes hours and still doesn't work well?			
5.4	Do you have at least 6 months of historical data on any of the above problems?			
5.5	Could you test a solution on one line/cell/product without disrupting the whole plant?			

Your score: ____/5

> **Quick win:** The best starter AI project? Predictive quality. If you're already logging machine parameters and defect data, you're sitting on a goldmine.

Your Total Score

Section	Score
Data Infrastructure	____/5
Process Documentation	____/5

Section	Score
Workforce Readiness	____/5
Leadership Buy-In	____/5
Quick-Win Identification	____/5
TOTAL	**____/25**

What Your Score Means

20-25 ✅ Ready to Move You've got the foundation. Stop assessing and start a pilot. Your risk isn't failure — it's waiting too long while competitors move.

12-19 ⚠️ Almost There You have pieces in place but gaps that will trip up an AI project. Focus on your lowest-scoring section first. 60 days of targeted work could get you to "Ready."

6-11 🔧 Build the Foundation First AI would be premature right now, but you're not far off. The good news: the foundational work (better data, documented processes) pays for itself even without AI.

0-5 🚩 Start With the Basics You need to digitize and standardize before AI enters the picture. But don't be discouraged — every manufacturer that's using AI today started where you are.

What's Next?

This free assessment tells you *where* you stand. The question is *what to do about it*.

The full Obed Industries AI Readiness Assessment ($247) goes deeper:

- 🔍 **Detailed gap analysis** across 12 categories (not just 5)
- 📋 **Custom action plan** with prioritized 30/60/90 day steps for your specific situation
- 💰 **ROI calculator** to build the business case for leadership
- 🏭 **Industry benchmarking** — see how you compare to similar manufacturers
- 📞 **30-minute debrief call** to walk through your results and answer questions

→ Get the Full Assessment
