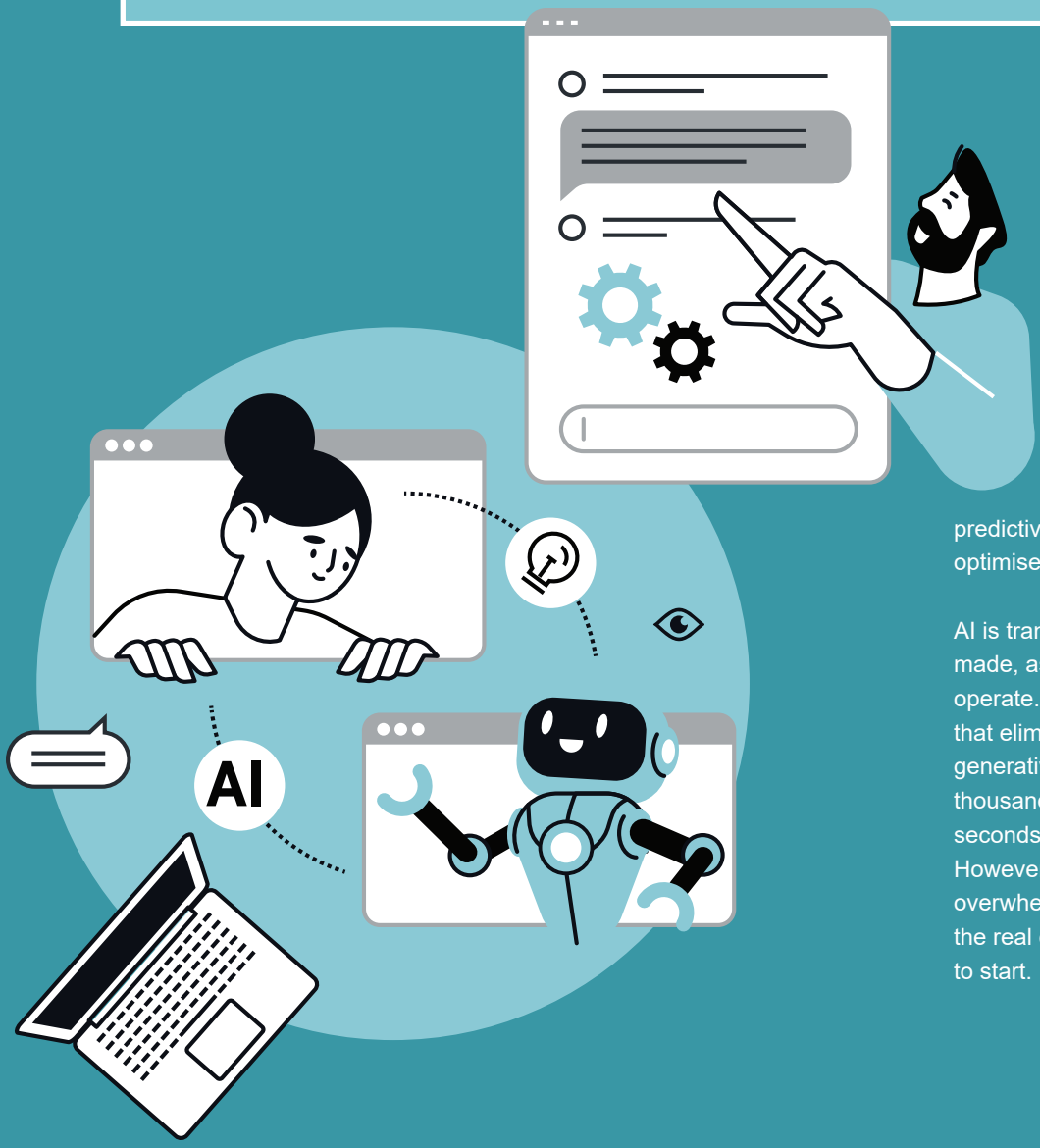
PRODUCTION INTELLIGENCE IN ACTION

HOW AI IS RESHAPING MODERN MANUFACTURING



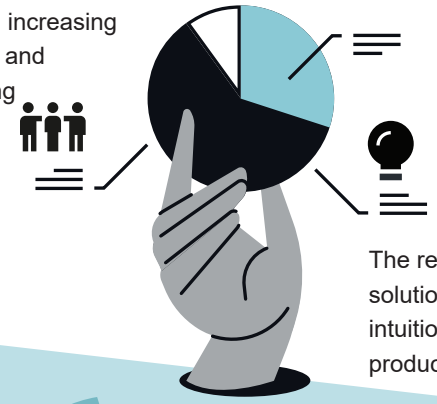
In a factory not far from here, machines no longer simply follow orders. They learn from them. A new era of smart manufacturing is emerging, driven by artificial intelligence (AI). What was once manual and reactive is now becoming predictive, autonomous, and constantly optimised.

AI is transforming how products are made, as well as how manufacturers operate. From predictive maintenance that eliminates costly downtime to generative design tools that explore thousands of product variations in seconds, AI is changing the game. However, the pace of change can be overwhelming. For many businesses, the real challenge lies in knowing where to start.

From Automation to Transformation

AI is no longer just a tool for automating repetitive tasks. It has become a true driver of transformation. With rapid advancements across the entire AI spectrum, including classical machine learning, predictive analytics, and cutting-edge generative AI, manufacturers now have access to powerful capabilities. These can improve efficiency, enhance quality, and unlock entirely new ways of working.

One of the most impactful applications is predictive maintenance, where AI analyses machine data to detect early signs of failure. This enables proactive intervention and significantly reduces unplanned downtime and maintenance costs. At the same time, AI-enhanced quality control uses computer vision to inspect products in real time, increasing accuracy and minimising waste.



Smart Factories and Smarter Decisions

At the heart of this transformation is the Smart factory. In these environments, interconnected systems and sensors continuously feed data into AI models that optimise operations in real time. Decisions that once relied on manual oversight are now automated, adaptive, and fast.

However, turning raw data into real value requires more than installing sensors or software. It demands an understanding of how ready your organisation is from a technical, cultural, and strategic perspective to adopt AI in a meaningful way.

Generative Design: Unlocking New Possibilities

AI is also pushing the boundaries of design. Generative design tools allow engineers to input key constraints such as materials, cost, or strength, and then explore thousands of options. The result is a set of highly optimised solutions that extend beyond human intuition and significantly accelerate product development cycles.

These tools are not replacing designers. Instead, they are becoming creative partners that open up entirely new possibilities.

Begin with the AI Guide

While the potential of AI is immense, successful adoption requires a clear and structured roadmap. Many companies are keen to explore AI but struggle to identify how or where to begin. Without a thoughtful approach, companies risk costly missteps or missed opportunities.

This is where FIP-AM@UT's **AI Guide** comes in. It is a practical, expert-led service designed to help organisations assess their readiness, identify promising use cases, and build a tailored AI strategy.

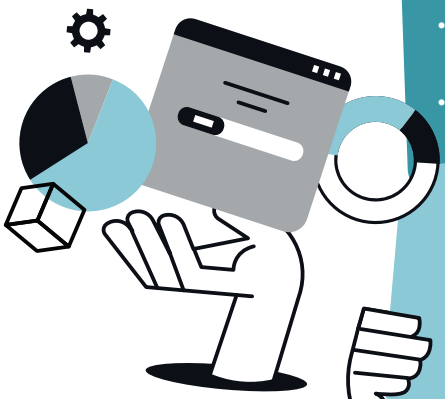
However, turning raw data into real value requires more than installing sensors or software. It demands an understanding of how ready your organisation is from a technical, cultural, and strategic perspective to adopt AI in a meaningful way.

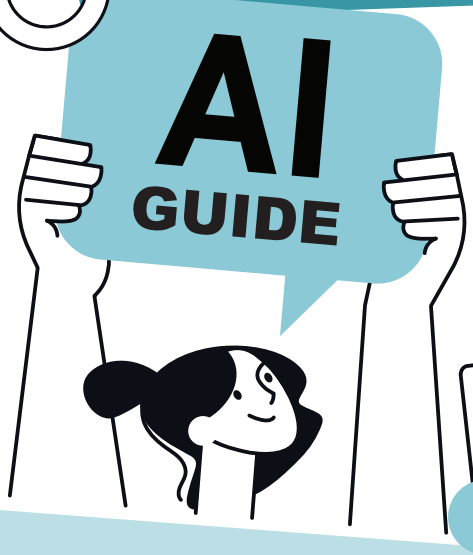
What Is the AI Guide and What Does It Offer?

The AI Guide is a structured support service that simplifies AI adoption. It focuses on what is most feasible and valuable for your particular operations.

Participating companies can expect:

- A data-based analysis of existing systems and capabilities
- A collaborative process to identify high-impact opportunities for AI
- Best practices for managing and integrating data effectively
- A personalised implementation plan with actionable next steps
- Clear guidance on the benefits, challenges, and transitions required
- Interactive sessions using proven AI tools and technologies
- Practical strategies for cost reduction, improved accuracy, and scalable growth





Identify the most suitable AI focus for your organisation, Whether it is machine learning, predictive maintenance, generative AI, or quality control enhanced by AI, the AI Guide lays the foundation for intelligent and sustainable growth.

Why and When Should Companies Use the AI Guide?

The AI Guide supports manufacturers at multiple points in their AI journey. It is especially useful when your company:

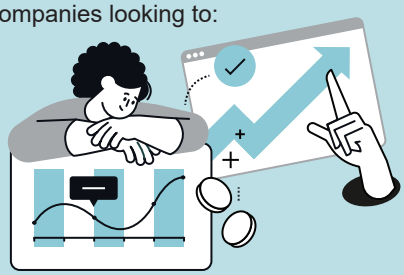
- Is curious about using AI but uncertain about the first steps
- Has data and processes that could benefit from optimisation
- Wants to build internal understanding before committing to major investments
- Aims to make quicker and more informed decisions through AI-powered insights

By using the AI Guide, companies will benefit from:

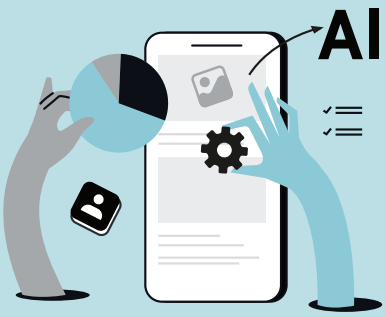
- A clear overview of their current readiness for AI
- A tailored roadmap that aligns with specific business goals
- Greater clarity on where AI can create the most value
- Practical experience with key tools to initiate implementation

Who Is It For?

The AI Guide is designed for manufacturing companies looking to:



Boost productivity and efficiency across production lines



Identify processes that could be enhanced through AI

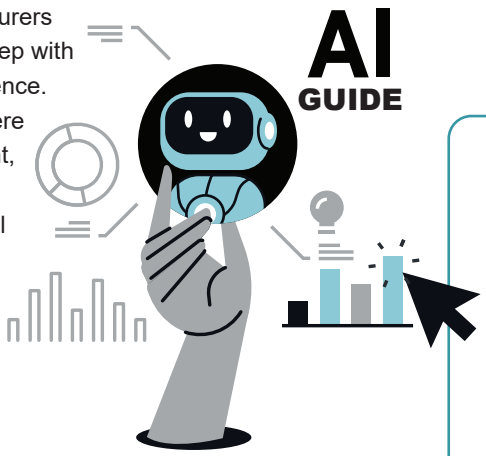
Innovate and remain competitive in a rapidly changing market

Whether you are just beginning to explore AI or already testing its potential, the AI Guide provides the insight and structure needed to progress with confidence.

Turning Potential into Progress

AI is redefining modern manufacturing. It is driving new levels of efficiency, precision, and innovation. Yet unlocking its full value requires more than interest or investment. It demands insight, a structured approach, and a well-defined path forward.

The AI Guide offers exactly that. It is a practical, expert-led service that enables manufacturers to take the next step with clarity and confidence. In an industry where change is constant, those who take a smart first step will lead the way into the future. ▪



Let's turn AI potential into measurable progress together.

Ready to Take the First Step?

To explore how your organisation can unlock the power of AI in manufacturing, reach out today.

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