

# TURNING AI INTO A MANUFACTURING ADVANTAGE

The UK manufacturing sector employs around **2.6 million people** and contributes **£217 billion** to the economy.

Yet the industry is under mounting pressure.

Labour costs have surged following recent policy reforms such as successive **national living wage increases** and higher employer **national insurance contributions**. Against this backdrop, high staff turnover and intense operating pressures, manufacturers must balance productivity with worker safety and managing supply chain disruption driven by **rising geopolitical risks and fiercer global competition**.

Our latest report, **The Grey Zone: The Untapped Advantage of AI Alignment**, surveyed leaders and employees across multiple sectors to explore how AI

is reshaping the relationship between organisations, their people and the work they do. The research shines a light on the gap between AI adoption and genuine alignment – the ‘Grey Zone’ where technology exists but doesn’t yet deliver its full potential value.

For Zellis, and our customers, AI alignment means ensuring that AI tools are built around the way people actually work. AI tools should support sound judgement, rather than becoming just another unused system.

## THE MANUFACTURING REALITY: PRECISION, SAFETY AND OPERATIONAL INTENSITY

In a market defined by tight margins, precision requirements, complex multi-site operations and a predominantly frontline workforce, the stakes have never been higher.

The pain points manufacturing businesses face are well-documented and felt most in the day-to-day running of operations: manual scheduling, complex payroll for variable hours and shift premiums, time and attendance admin that pulls managers away from the production floor, as well as quality reporting and compliance documentation.

High precision requirements add another layer of pressure, as teams must balance speed with accuracy, often spending time on administrative tasks instead of focusing on operational excellence.

Understanding where AI is helping and where value is being left untapped is essential. The insights that follow examine how manufacturing organisations are currently using AI, where expectations between leaders and employees differ, and what this means for productivity and competitive advantage across the sector.

More importantly, they reveal how closing the AI alignment gap can help businesses tackle their most pressing operational challenges. That means using AI to take away low-value administrative tasks, not people’s expertise.

**WHEN ORGANISATIONS ARE CLEAR THAT AI IS THERE TO INFORM JUDGEMENT RATHER THAN REPLACE IT, CONFIDENCE GROWS, CAPABILITY FOLLOWS AND VALUE IS UNLOCKED. ALIGNMENT TURNS AI FROM A SOURCE OF UNCERTAINTY INTO A CATALYST FOR BETTER DECISIONS, BETTER WORK AND MORE RESILIENT WORKPLACE CULTURES.**



**STEVE ELCOCK**,  
Director of Product — AI  
Zellis

## THE ALIGNMENT OPPORTUNITIES FOR MANUFACTURING

Key statistics from the research highlight where greater alignment can positively impact both culture and commercial performance:

→ **More than nine in ten manufacturing leaders (94%)** say their organisation currently uses or interacts with AI tools as part of its operations, **yet only 66% of manufacturing employees** say they use AI regularly or occasionally in their role.

This gap between leadership AI adoption and employee usage mirrors a common manufacturing challenge: technology investments that don’t reach the people who need them most.

→ When AI is in place, **76% of manufacturing employees** say it improves productivity, **52% say it increases job satisfaction**, and **77% say it gives them time back for more meaningful or strategic work**, pointing to clear benefits when adoption is well aligned.

→ Leaders also see value, with **64% agreeing that AI improves the quality of outputs** and **65% agreeing it has helped to simplify employees’ roles**, and almost three quarters (**70%**) saying that AI gives their people time back for more meaningful or strategic work.

→ Employees believe that better AI alignment would reduce stress (**69%**) and **52% say AI has helped to improve trust in leadership** – demonstrating that frontline colleagues are particularly optimistic about the cultural upside.

When employees report that AI could reduce their stress levels, they are pointing to one of manufacturing’s key priorities – keeping skilled people and maintaining safe working conditions.

## CONFIDENCE, CAPABILITY AND CULTURE IN MANUFACTURING

- AI encourages learning and development**  
75% of manufacturing employees say AI gives them a safe space to ask questions or check information without feeling judged by colleagues or managers, while 70% believe AI provides opportunities for learning new skills and 61% say AI encourages self-directed learning and development.
- Employees see clear benefits from AI at work**  
Manufacturing employees report that AI improves productivity (76%) and increases job satisfaction (50%).
- Leaders believe in responsible AI implementation**  
73% of manufacturing leaders feel confident that their organisation uses AI responsibly and ethically.
- Trust and involvement remain critical**  
However, only 50% of employees feel involved in decisions about how AI is used in their organisation.
- AI supports confidence and performance**  
64% of manufacturing employees are confident that AI supports their specific role and helps them to perform in their job more effectively, demonstrating that when AI is aligned to frontline needs, it delivers measurable support for day-to-day operations.

The data highlights a clear opportunity for manufacturers to strengthen consultation and trust. Building in regular feedback loops, co-designing use cases with frontline teams and investing in role-specific training can help close this gap – ensuring AI supports safe, efficient production while reinforcing, rather than eroding, workplace culture.

## WHY MANUFACTURING BUSINESSES CHOOSE ZELLIS

The research highlights how better AI alignment can help manufacturing operators reduce stress, retain talent and improve operational performance across complex, shift-based workforces.



### TRUSTED BY LEADING UK MANUFACTURERS

Including Mercedes AMG, Ainscough, Charlie Bigham’s and others across automotive, engineering, food production and advanced manufacturing sectors.

These outcomes sit alongside wider benefits from better AI alignment:

### 4-6%

OF OPERATING COSTS

Over a quarter of leaders (32%) estimate that 4-6% of operating costs could be saved through better AI alignment.

### 6-10%

OF PEOPLE’S TIME

Leaders believe that 6-10% of people’s time could be redirected to higher-value work if AI better supported their teams.



A timesaving of this magnitude means more capacity for coaching teams, improving quality processes and safety compliance. These practical day-to-day improvements are often where AI alignment delivers the most visible and quickest wins, not just for the business but also for its people.

## OUR MISSION – UNLOCKING MANUFACTURING VALUE

Zellis helps organisations make every moment at work count by connecting leadership vision, frontline experience and AI-enabled technology so that investments unlock both commercial and human value.

The research data shows AI adoption is proceeding at a healthy pace, with both leaders and employees recognising its value. However, success depends on addressing frontline worker pressures and ensuring AI implementations genuinely enhance rather than complicate the work of manufacturing professionals and their teams.

**Manufacturing leaders can make meaningful progress by focusing on four practical steps:**

- **Put frontline voices at the centre:** pilot AI with representative production sites, create feedback loops with line managers and frontline workers, and use workforce data to refine roll-outs.
- **Invest in skills and confidence:** tailor training to different generations and roles, positioning AI as an enabler of better work rather than a threat.
- **Target AI on the work that most people want to lose:** prioritise automation for scheduling, timesheets, quality reporting and compliance documentation – allowing frontline teams to focus on precision, safety and operational excellence.
- **Measure what matters:** track safety metrics, quality indicators, worker pressure and retention alongside productivity and costs.

## CLOSING THE AI ALIGNMENT GAP IN MANUFACTURING

Organisations that align leadership ambition with frontline expectations and AI-enabled technology will be best placed to protect margins, retain talent and deliver standout operational performance in an increasingly challenging market.

Zellis invites manufacturing leaders to explore how AI-enabled HR, workforce management and payroll can help close the alignment gap and realise the full value of AI across their organisations – turning grey into great.



## TAKE THE NEXT STEP

Learn more about the ways AI can unlimit what’s next for your people and performance.

Download the full report

Our AI-enabled HR, Workforce Management and Pay platform is reshaping workplaces and our solutions pay one in seven people working in the UK and Ireland.

Book a demo

UNLIMIT WHAT’S NEXT