

**From Resolution
to Reality:**

2026

**Make
Digital Transformation
Your New Year's Priority**

**MADE
SMARTER**

Intro

From Resolution to Reality:

Digital Transformation for Manufacturers

As the festive season approaches, many manufacturers pause operations for a well-earned break. This downtime isn't just an opportunity to rest—it's also a chance to reflect on the past year and plan improvements for the one ahead.

With several indicators now showing signs of recovery in the sector, the case for investing in digital transformation is stronger than ever.

The [Make UK / BDO Manufacturing Outlook Q3 2025 report](#) shows a sharp rebound in manufacturing activity: output is expanding, overseas orders are on the rise, and both investment and recruitment plans are strengthening.

But at the same time, manufacturers face continued challenges, including rising costs and skills shortages, with nearly 46,000 vacancies currently unfilled.

These pressures make a clear case for smarter and more efficient ways of working.

Digital technologies provide practical solutions to these challenges—optimising production lines, streamlining supply chains, enabling smarter decisions through data,

and improving both efficiency and sustainability.

Made Smarter helps manufacturers access the advice, skills, and funding they need to adopt these technologies with confidence.

By using the festive shutdown to explore digitalisation, you can enter 2026 stronger, more competitive, and ready to turn challenges into opportunities—whether you run a small workshop or a medium-sized enterprise.

Make next year your most successful yet: choose digital transformation as your resolution for 2026.



What is Made Smarter and how does it help with technology adoption

Made Smarter is a UK-wide initiative designed to help small and medium-sized manufacturers adopt new digital technologies with confidence

Made Smarter helps SME manufacturers take practical steps towards digital transformation by connecting them with the right knowledge, skills, and funding.

Our team works closely with each business to understand its products, processes, and people, gathering perspectives from across the factory floor.

This hands-on approach cuts through the jargon and identifies the technologies and skills that will make the greatest impact.

The outcome is a tailored digital roadmap that provides clear, solution-agnostic advice and a step-by-step plan to move forward with confidence.

Alongside this, manufacturers can access fully funded expert guidance, training to build leadership and digital skills, match-funding grants to de-risk technology investments, and even the support of a funded Digital Intern, giving them the clarity and confidence to unlock the benefits of digital transformation.

Many have reaped a multitude of transformation benefits across all aspects of their business, including:

- Increased labour and resource productivity
- Increased asset utilisation due to reduced machine downtime
- Reduced maintenance costs
- Reduced inventory
- Reduced cost of quality
- Increased forecasting accuracy
- Reduced time to market
- Creating new, higher-paid, higher-skilled jobs
- Increasing exports through competitiveness
- Improving resource efficiency for better resilience to global supply disruptions
- Reducing environmental impact
- Achieving or exceeding industry standards

In this next section, we reveal the top technologies used by SME manufacturers on the Made Smarter adoption programme.

Technology that could revolutionise your business.

Data and software systems

The much-used phrase 'data is the new oil' has never been more relevant to manufacturers.

Visibility and insight of data within a factory enables a business to increase productivity, profitability and quality. Capturing, controlling and analysing that data is the domain of software. And there are a range of options from tackling individual operational challenges all the way through to the wholesale solution of an enterprise resource planning (ERP) system.

Production planning and control scheduling

Through this technology, a manufacturer can ensure everything is efficiently scheduled at the right time and can run smoothly. Resources can be allocated, human workers assigned, and priorities ordered so that the work is optimised. A business will also be able to collect effective data from each point of the process too.

Barcoding/tracking

This is a very simple, but incredibly valuable solution to track products, parts and orders through the manufacturing process all the way through to delivery. Through barcoding, a manager wouldn't need to visit the stockroom to inspect stock levels. parts and orders through the manufacturing process all the way through to delivery.

Through barcoding, a manager wouldn't need to visit the stockroom to inspect stock levels.

Instead, the system would automatically check it, and can also order additional volumes when necessary. There are non-invasive tracking systems that can help with traceability and accountability too. These are particularly useful in areas such as quality assurance, or for informing the customer throughout the production and delivery process.

Made Smarter helped [Joshua Greaves & Sons](#) adopt this kind of solution.



Joshua Greaves & Sons invested in a CIM50 MRP production data capture system.

Enterprise Resource Planning (ERP)

A simple way of thinking about an ERP is to imagine it as a brain. It is capable of connecting an entire business from finance and design through to production and supply chain. If a business has the right, complete data, then they have a goldmine at their fingertips.

By connecting your systems, you'll have visibility of all your operations. It means effective analysis can be carried out, inefficiencies can be highlighted, and bottlenecks observed. That helps

manufacturers realise how to improve and find the answers to their challenges. Cloud computing has enabled ERP systems to be hosted remotely enabling more flexibility and the opportunity to collaborate.

Cloud-based ERPs can also harness the latest technologies such as AI and machine learning to provide automation, greater efficiency, and intelligent insights.

Made Smarter helped both [Evertaut](#) and [Fylde Fresh and Fabulous](#) adopt bespoke ERP solutions.



Flyde Fresh and Fabulous invested in a bespoke ERP system to improve product quality checks.

Automation

Automation is any type of machine or device used to perform a repetitive process without, or with reduced, intervention from a person.

There are solutions which are useful for making a variety of similar products quickly and enabling quick changeovers like you would see with mechanical cutting or spraying paint.

Then there are solutions for faster, repetitive production like you would see in car manufacturing assembly.

Automation can also be used for making highly variable products and to achieve mass customisation. For example when CNC machine tools are augmented by other equipment such as automated materials handling systems and inspection systems.

One of the key benefits is that automation often improves productivity by allowing staff

to focus on more complex, higher-value-add, or more intricate and interesting tasks.

Other benefits include improved health and safety, increased material utilisation, reduced cycle times and reduced lead times.

Made Smarter supports automation projects by focusing on the digital connectivity element, ie how the machine links to other systems. For example, we helped [Firstplay Dietary Foods](#) replace a manual packing process with a powder packaging machine.

To learn more about automation and read about more case studies visit our expert [blog](#).



Nutree Life invested in bespoke automation to boost productivity.

Robotics

Robotics can reduce or replace repetitive work previously done by humans in the manufacturing process.

This technology usually involves a mechanism, which can move in three or more directions, that can be used to complete material handling and pick-and-place tasks faster and more efficiently than manpower alone.

Collaborative robots (cobots) are designed to work safely in the same space as people without the need for safety barriers and can be used for a wide variety of tasks, such as assisted assembly, packing, welding, machine loading, and palletising.

Industrial robots are used for tasks requiring higher speed, heavier tools or products, or in harsh environments. These are more likely used for welding, assembling, or painting cars on a production line.

The introduction of robotics often improves productivity by allowing staff to focus on more complex, higher value-add, or more intricate and interesting tasks. Other benefits include improved health and safety, increased material utilisation, higher quality products, reduced cycle times and reduced lead times.



Hannah Reardon from Bloom-in-Box.

Despite all these benefits, UK manufacturers have been slow to adopt the technology. According to the [International Federation of Robotics](#), the UK's use of robotics in 2022 was below the global average and significantly lower than that of China, South Korea and Germany.

But the positive news is that robotics adoption in the UK has risen by 50% over the last five years, and is likely to accelerate.

Persistently high job vacancies are forcing manufacturing leaders to look to technology to solve their productivity problem. Add to the mix the reduction in cost and massive tax incentives such as the 'super-deduction' enabling companies to claim 130% capital allowance on qualifying plant and machinery investments - and robotics is now much more accessible to SMEs.

Made Smarter has helped several manufacturers adopt robotics including [GB Engineering](#), [Bloom-in-Box](#), [Storth](#) and [JCM Fine Joinery](#).

There are a wealth of robotics solutions available, which makes choosing one a tricky task. Made Smarter can help define problems and find the right solution to suit.

Our advisor's team can then help you access grant funding as well as provide ongoing help and support. To learn more about automation and read about more case studies visit our expert [blog](#).

Additive Manufacturing

Additive manufacturing (AM) – more commonly known as 3D printing – is the process of creating a physical object by building it layer by layer, as opposed to subtractive manufacturing methods, such as machining.

It has transformed manufacturing by enabling cost-effective, customised production of complex parts, reducing waste, and accelerating prototyping.

Objects that are impossible to make with any other process can now be made using 3D printing, driving innovation.

AM is also helping manufacturers achieve their sustainability goals. The process itself is more resource-efficient and allows for a more lightweight design.

Then there are the planning and preparation. The fuel savings from being able to manufacture components closer to the customer, rather than shipping them. And finally, AM generates opportunities that extend a product's life cycle,

lending itself to the circular economy. Made Smarter has helped several manufacturer's adopt AM. You can read their case studies here: [Fusion Implants](#), [Croft AM](#) and [Mackinnon & Saunders](#). Alternatively read our [blog](#).

To learn more about how AM is helping the manufacturing ecosystem visit the Additive Manufacturer Green Trade Association ([AMGTA](#)).

Adopting AM correctly needs effective planning and preparation. The Made Smarter team can give you an idea of costs and help determine the best applications for your needs. We can also introduce you to partners like [PrintCity](#) and [ARMC NW](#) who can work with you to perform small-scale trials.



3D printing can transform manufacturing.

The Industrial Internet of Things (IIoT)

The industrial internet of things is a network of smart devices like sensors that monitor, collect, analyse, and exchange data.

In a factory this could be inputs such as light, heat, motion, temperature, pressure, signal, radiation or force.

IIoT allows manufacturers to improve operations with data-backed insights.

Applied within manufacturing and factory environments it can unlock productivity gains, streamline processes, improve yield and increase quality control. It can help predict equipment failure, saving maintenance costs and time, but also making sure to reduce business downtime and avoid failures or accidents.

IIoT also helps tackle issues of obsolescence, especially for those SMEs with older machinery and processes.

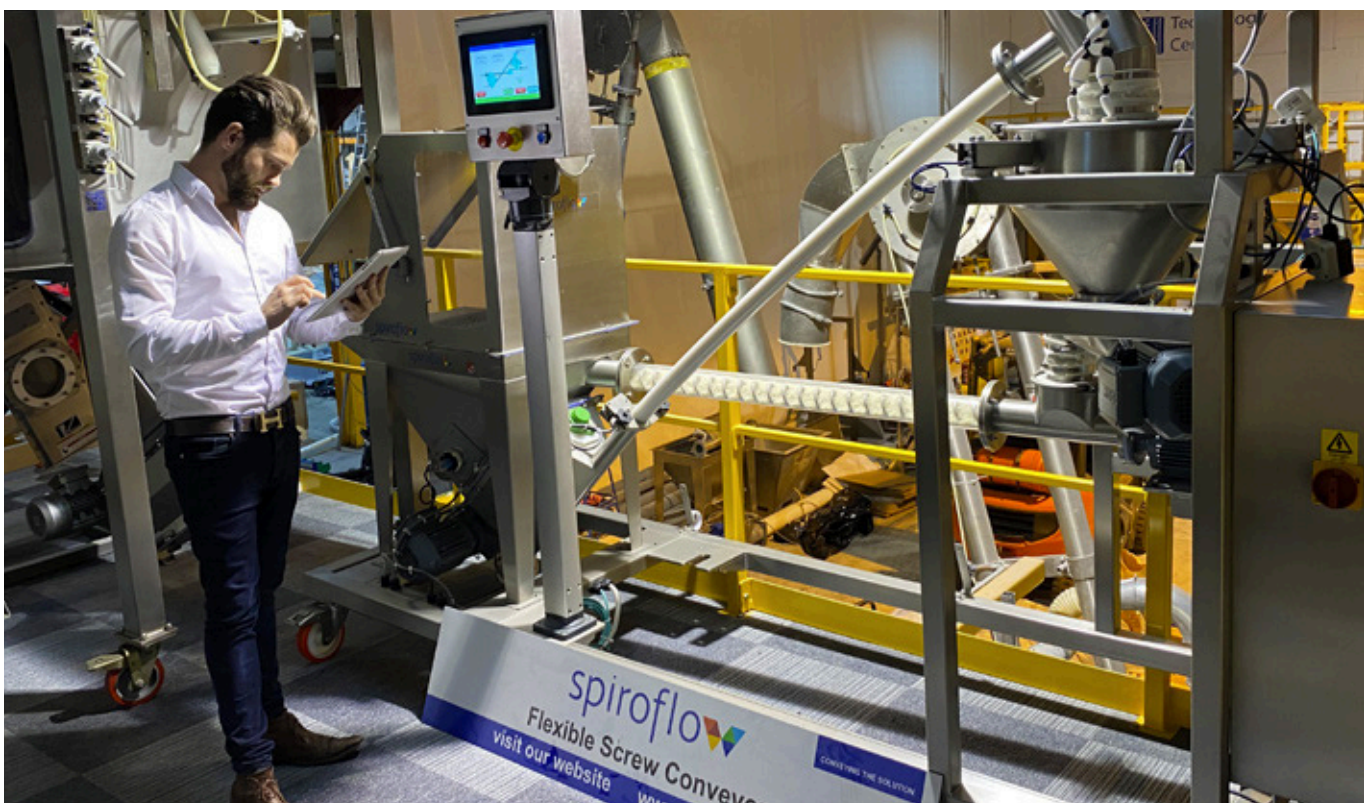
IIoT can also help manufacturers understand energy use – determining which machines are more energy-efficient and when.

Putting the benefits together IIoT is helping create the factories of tomorrow.

Read how Made Smarter helped [Spiroflow](#) reap the benefits of the technology.

Integrating machinery throughout a factory may seem like a headache, and an expensive one at that, but the reality is that the smart sensors and powerful analytic tools are readily-available for all budgets and applications.

The key is getting the right advice, which is what we are here for.



Spiroflow developed a remote monitoring system using IIoT technologies.

Cyber Security

Cyber security is the means by which individuals and organisations reduce the risk of becoming victims of cyber attack.

More of a mindset and a set of procedures than a technology, its function is to protect the devices used by manufacturers such as smartphones, laptops, computers, servers, networks and IIoT connected devices, from attack or damage. It's also about preventing unauthorised access to the vast amounts of valuable data including intellectual property, data on customers and their products.

Protecting your business from cyber security risks can seem daunting but there is plenty of free help out there to make sure you have the basics in place and protect your organisation's data, assets, and reputation.

The UK National Cyber Security Centre (NCSC) supports the most critical organisations in the UK, the wider public sector, industry, SMEs as well as the general public.

The NCSC's A-Z of cyber security is a great place to start or you can download this [Small Business Guide](#).

Cyber Essentials is a simple but effective, government backed scheme that will help you to protect your organisation, whatever its size, against a whole range of common cyber attacks.

Made Smarter has also produced a [guide to tackling cyber security](#). If you need help implementing cyber security practices, or would like advice on the current systems within your manufacturing organisation, our specialist business and technical advisers are on hand.

Not only can we support you in uncovering the tools you may need to protect yourself, but we can also discuss how to fill any skill gaps you might have in your workforce.



Cyber security is a vital tool for SME manufacturers.

Emerging Industrial Digital Technologies

Generative AI

Once the arena of data scientists, artificial intelligence tools are now freely available to all, including manufacturers.

Generative AI, an offshoot of artificial intelligence, involves algorithms that can generate new content or data that resembles human-like outputs.

In the context of SMEs, this technology can revolutionise product design and development. For instance, generative AI can enable a small manufacturer to rapidly

prototype new product designs, test them in virtual environments, and refine them based on AI-generated feedback, dramatically reducing time-to-market.

Looking to the future, Generative AI's ability to learn and adapt will make it an invaluable partner in the creative process, enabling SMEs to experiment with innovative and customised solutions.



Artificial intelligence tools are now freely available to manufacturers.

Digital Twins

Digital twins offer a virtual replica of physical processes, products, or services.

This technology allows SMEs to simulate and analyse their manufacturing processes in a virtual environment before implementing them in the real world.

For example, a digital twin could enable a small-scale manufacturer to optimise their assembly line for efficiency and minimal waste, without the need for costly physical trials. As digital twins evolve and become integrated with real-time data and AI analytics, they will become dynamic tools for predictive maintenance, process optimisation, and strategic planning.

The future may see SMEs leveraging digital twins not just for their manufacturing processes but across their entire supply chain, enhancing transparency and efficiency.

Made Smarter has helped several manufacturers adopt digital twin technology including [MSM aerospace](#). Capability in digital twins is expected to increase over the coming years through the [National Digital Twin Programme \(NDTP\)](#), a government-led initiative to develop the standards, processes, and tools that will build the foundation of the technology.



A digital twin digitally replicates a physical asset in the virtual environment.

Conclusion

Made Smarter in 2026

Looking to the future

Digital transformation is no longer a luxury for SME manufacturers; it is a strategic necessity.

Amid rapid technological advancements, evolving customer expectations, and intensifying global and local competition, digitalisation is no longer just an option—it is the foundation for sustained growth and resilience.

The manufacturing businesses that invest in digital technologies stand to reap significant benefits, including enhanced operational efficiency, cost savings, and greater agility in responding to market demands. Furthermore, adopting advanced tools such as automation, data analytics, and AI empowers SMEs to innovate, improve product quality, and foster sustainability—key priorities in today's economy.

The challenges of digital transformation, such as initial investment costs and skill gaps, are outweighed by the long-term advantages. Programmes like Made Smarter demonstrate that SMEs have access to support systems that can help them overcome these hurdles, offering tailored guidance, training, and funding opportunities. Moreover, digitalisation can unlock new revenue streams, strengthen

customer relationships through personalisation, and open doors to global markets, levelling the playing field for smaller manufacturers competing against larger counterparts.

Ultimately, the decision to invest in digital transformation is about securing the future. SMEs that fail to act risk falling behind, while those that embrace this shift position themselves as resilient, forward-thinking businesses ready to navigate an uncertain but opportunity-rich landscape.

By taking these steps today, SME manufacturers can secure not only their immediate viability but also their long-term prosperity, paving the way for a more sustainable and competitive future.

Use your capacity now to get in touch, and start 2026 with support and guidance

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Seasons Greetings from Made Smarter

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