

£300 million to boost UK manufacturing productivity by 30%

- Companies from Solihull to Flintshire receive £300 million government and industry funding boost
- projects to develop digital robots to weld metal parts and augmented reality headsets to help engineers make repairs to equipment set to benefit
- investment will give a crucial lift to aerospace, automotive, pharmaceuticals and food & beverage sectors as the UK builds back better from the pandemic

Businesses with creative ideas to boost the UK's manufacturing capabilities, including using robotics, AI and augmented reality, are set to receive £300m of joint government and industry funding, Business Secretary Alok Sharma confirmed at London Tech Week today (11 September 2020).

Through the Manufacturing Made Smarter Challenge, the government will invest £147 million – backed by further funding from industry – to support businesses implement new tech to boost their manufacturing productivity, helping them reach new customers, create thousands of new highly skilled jobs, slash carbon emissions and reduce prices for consumers.

The first £50 million of the funding is being allocated to fourteen cutting-edge manufacturing projects involving around 30 small or medium businesses, 29 larger enterprises and nine universities, with the rest of the funds due over the next 5 years.

A company behind one winning project – the Digital Designer Robot – aims to offer machine-to-person 'digital assistance.' When a business needs a bespoke product, it will be able to use a digital robot to help design it and upload the design quickly onto a supplier's website – so the product can then be sampled, prototyped and manufactured by the supplier.

The virtual assistant would also offer expert advice and guidance, by 'conversing' with businesses to ask questions, listen to feedback, and provide suggestions. This could reduce the time it takes to manufacture products, as well as cut costs and waste thanks to a more precise design process.

Another is developing super lightweight, aluminium bikes for children using robots, whilst another is pioneering the use of AI to help businesses design new products.

Business Secretary Alok Sharma said:

Increasing productivity is vital for any business, and having the right new technologies in place can help manufacturers make better

products to compete and thrive.

By helping manufacturers to reduce costs, cut waste, and slash the time it takes to develop their products, this multi-million pound uplift will help fire up the cylinders of productivity as we build back better from the pandemic.

Other winning projects include:

- WeldZero (West Midlands): This project will explore the use of robots, sensors and automation to improve accuracy when welding metal parts on production line. The machines will also collect and feedback valuable data to help improve the manufacturing process, leading to stronger and higher-quality parts, as well as quicker production, in industries including automotive and construction.
- Smart Connected Shop Floor – real-time data integration with multi-sector applicability (Bristol): GKN Aerospace is leading a cross-sector team trialling digital technologies, including augmented reality headsets for engineers, so manufacturing businesses can guide them through repairs. The project will also use ‘smart’ devices to exchange information between old and modern computer systems.
- The Digital Sandwich – Digitised Food Supply Chain (Chelmsford): Raynor Foods Ltd, a leading UK sandwich supplier who helped supply the NHS during the coronavirus pandemic, is creating a major piece of software where food and drinks businesses can connect online to share valuable data. This information exchange will increase productivity, improve cashflow, help boost food quality and reduce waste within in the supply chain. The platform includes small and medium sized enterprises (SMEs), who don’t usually have access to this kind of technology and will benefit sectors including pharmaceutical, aerospace and automotive.
- Dialog (Wales): This project, led by Atlas Copco IAS UK Limited, brings together affordable, automatic and human-interacting robots to help machines make quicker and better decisions, making production more efficient.

Today’s funding was announced at London Tech Week – an annual event celebrating innovation, talent and development of the tech sector.

The Manufacturing Made Smarter programme will also support technology SMEs through growth accelerators – partnerships between the government and the private sector where experts will work with businesses to identify barriers to growth and ways to overcome them. It will also create a national network of innovation ‘hubs’ where businesses can partner or share advice, to help spur growth and creative ideas.

This announcement follows the opening of a competition in July under [Manufacturing Made Smarter: Digital Supply Chain](#), where firms of all sizes can apply for up to 70% of the funding they need for industrial research projects.

The government has committed to raising productivity and earning power in the

UK by spending 2.4% of GDP on R&D across the UK economy by 2027.

Further quotes

Rich Ingram, Director of funding recipient Account Management Online Ltd, said:

Moving beyond ready-made products available from online stores, AMO's Digital Designer Robot provides the opportunity to define made-to-order products and get a price in real time including bought in tooling, sub-assemblies and parts.

We are excited how this capability delivers benefits in many industries where design requirements are unique, bringing faster, more available and resilient sales resource to customers to help them buy. Automation cutting costs and creating competitive advantage by immediate service response.

Discontinuous innovation generates high rewards for taking high risks: we are proud to be working in partnership with Government helping us manage risks and supporting our R&D in this ground-breaking area to help us turn our ambitious ideas into real world solutions for selling to the benefit of UK PLC.

Chris Courtney, challenge director for Made Smarter at UK Research and Innovation, said:

Digital technologies have the power to radically transform how we manufacture and deliver the products and services of today and the future and I am delighted that we have managed to secure the funding for this vital programme. Our ambition is to support the UK to become a leader in the manufacturing industry and the development of the next generation of technology solutions that will shape how the world works.

The current COVID challenges all sectors are facing only underline the vital importance of manufacturing in the UK across all sectors. There are enormous opportunities to innovate in this area, we have world leading industries, a powerful scientific and research community, a vibrant technology sector and I'm excited to see how this powerful coalition transforms the future of manufacturing.

Hamid Mughal, MMS Industrial Advisory Group chair said:

We have tremendous manufacturing capability in the UK and recent events have reinforced the importance of strengthening this sector for national resilience and economic growth. Rapid advances in Digital and disruptive Manufacturing technologies provide us with

the perfect opportunity to shape this outcome.

By harnessing the potential of this technology, we will be able to make a transformational improvement in productivity, sustainability and global competitiveness and create new products and services that forge modern digital enterprises. This programme is a key step forward as it will help UK Manufacturing companies to jointly address this challenge and develop cost-effective digital solutions for deployment in our Manufacturing Sector.

Notes to editors

The Manufacturing Made Smarter Round 1 Competition

The Industrial Strategy Challenge Fund (ISCF) Manufacturing Made Smarter Round 1 Competition offers grant funding investment in projects that focus on the use of industrial digital technologies (IDTs) to transform the productivity and agility of UK manufacturing.

In total 34 applications were submitted, totalling approximately £100 million of total project spend. Following independent assessment and an expert review, 14 projects have progressed to start comprising £50.5 million of total project costs including £20.1 million total grant.

Confirmed competition winners

[Get more information about competition winners.](#)

About the Manufacturing Made Smarter Round 2 Competition

The ISCF Manufacturing Made Smarter: Digital Supply Chain competition offers funding for business-led consortia carrying out projects costing up to £3 million to support the research and development of innovative digital technologies, and work with technology developers and manufacturers to rethink and restructure the way they design and operate manufacturing supply chains.

Application for feasibility studies

Find out more and [apply for funding towards feasibility studies into digital technologies to transform supply chains in UK manufacturing.](#)

Application for industrial research

Find out more and [apply for funding towards an industrial research project in digital technologies to transform supply chains in UK manufacturing.](#)