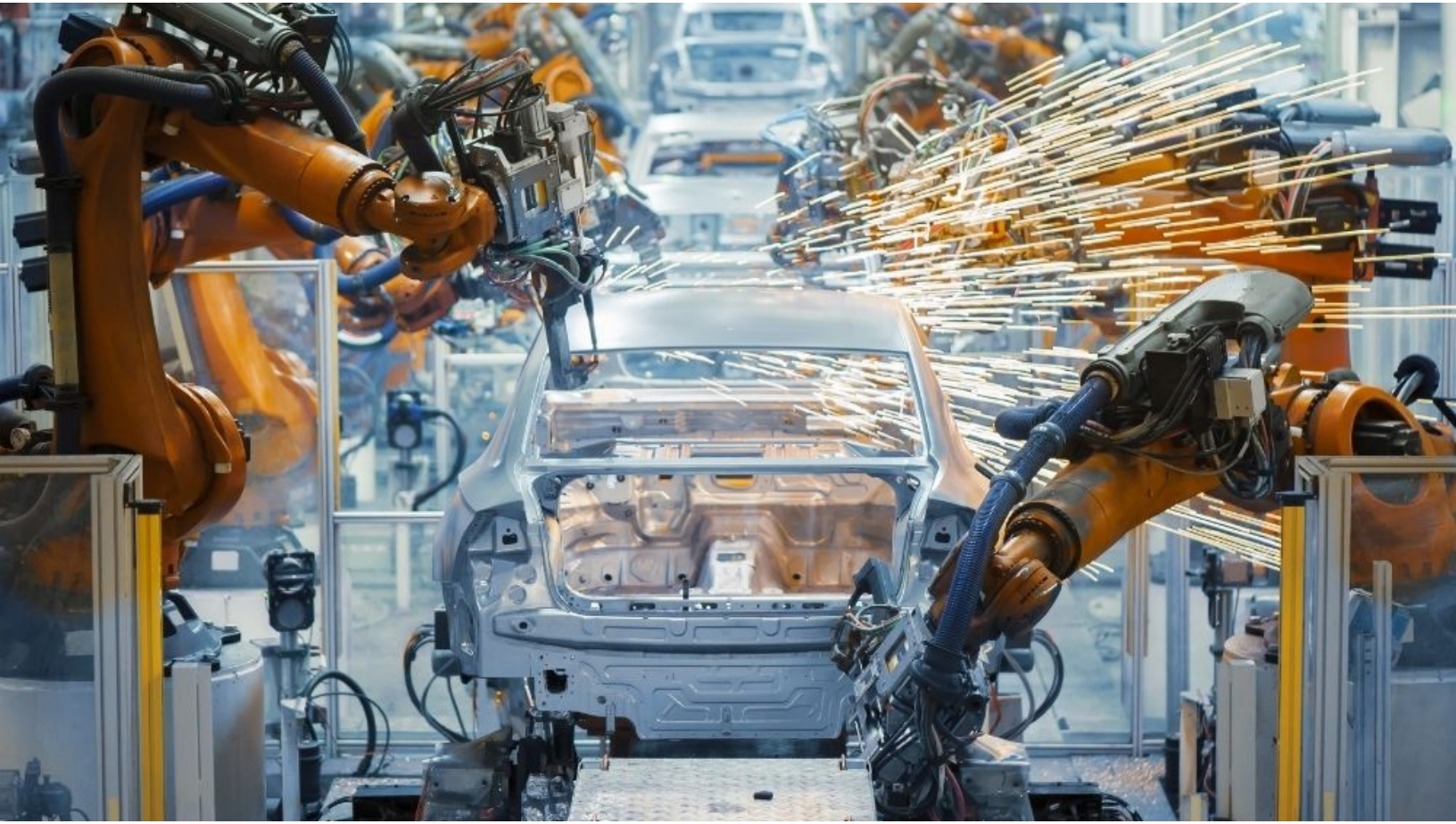




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Innovative partnership to develop game-changing manufacturing solutions

A collaborative research project driven by The NBT Group, Northumbria University and Senseye has been awarded over a quarter of a million pounds to evaluate new and emerging 'smart' technologies, helping to digitalise and transform manufacturing supply chains.

North East based NBT Group Ltd, a 112-year-old family-run supply chain management company, along with academic experts from Northumbria University and leading industrial software business Senseye Ltd, will conduct

a feasibility study to assess the potential for artificial intelligence (AI) systems to further develop 'smart factories'.

The award is part of the £18 million of funding being granted through the Digital Supply Chain competition, which forms part of UKRI's Industrial Strategy Challenge Fund (ISCF) [Made Smarter innovation challenge](#). The Digital Supply Chain competition supports the development of innovations designed to help manufacturing supply chains become more productive and sustainable.

Laying the foundations for what could be a game-changer in the Industry 4.0 journey – the fourth industrial revolution – the feasibility study will look at how manufacturers could use intelligence-based technologies to connect predictive maintenance software to stock management software.

The outcomes and knowledge acquired from the project will pave the way for further research and development, with the ultimate aim of exploiting new technology to help manufacturers increase productivity, create more highly skilled roles and become more economically, socially and environmentally sustainable.

Commenting on the funding announcement, Toby Bridges, Executive Chair at The NBT Group, said: "NBT's ambition is to utilise automation and Industry 4.0 thinking in all its activities, generating more and better jobs within our business and drive operating efficiencies for our clients and suppliers.

"This funding allows us to work closely with a leading predictive maintenance company in Senseye and Northumbria University's Global Operations and Supply Chain Competitiveness ([GLOPSCO](#)) research interest group to widen our thinking on how we integrate our own supply chain technologies into other systems and technologies across the manufacturing plant."

Driving operational efficiency

Human intervention has and continues to be prevalent in manufacturing to connect and control various production processes and systems. This new study will develop an understanding of how new technology and internet-based innovations could be applied to enhance efficiencies in the industrial

workplace.

The NBT Group provides a range of innovative technology solutions to manage complex supply chains. It enables organisations to manage their maintenance parts effectively, via automated, self-service stock management technology.

The initial phase of the study will assess the feasibility of using intelligence-based technologies to connect NBT Group's stock management software to Senseye's predictive maintenance software - a platform that allows industrial maintenance teams to predict upcoming issues with machinery so that failures can be avoided.

Connecting these systems digitally could eliminate the requirement for manual intervention and reduce unnecessary stock holdings, thereby freeing up space for production and driving down costs. It would also create efficiencies amongst a wider manufacturing supply chain, providing for improved client work scheduling.

By removing administrative and manual tasks that hinder business and productivity growth, the project aims to help make the UK the most operationally efficient place to do business, leading to more and better-quality jobs.

A collaborative approach

The project partners also consulted with a number of global manufacturers and suppliers to inform their research plans.

Northumbria University Dr Alireza Shokri, Associate Professor in Operations and Supply Chain Management and academic lead on the project from, said: "In order to take on the challenges of tomorrow, knowledge exchange and enterprise development is pivotal. This Innovate UK funded project has enabled academics from different disciplines to collaborate with professional leading organisations such as The NBT Group and Senseye with innovative and open-minded leadership.

"Integration of Industry 4.0, supply chain management, predictive maintenance and process improvement generates a novel and effective

approach to promote lean and agile supply chain solutions for the automotive sector and beyond.”

Chief Technology Officer at Senseye, Robert Russell, said: “At Senseye we’re always looking to innovate and partner with similarly minded organisations. This Innovate UK funding enabled us to deepen our relationship with both The NBT Group and Northumbria University in an exciting opportunity to bring together very different aspects of asset management that is only made possible by advancing digitisation of the manufacturing sector. The feasibility study is accelerating our vision for advanced technologies and generating new business opportunities.”

Northumbria has a long track record of successfully collaborating with small and large businesses through Knowledge Exchange activities, facilitating the transfer of knowledge and technology to increase competitiveness and to promote an innovation culture.

For more information on collaborating with Northumbria University please visit www.northumbria.ac.uk/business

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Notes to editors:

About Northumbria University

[Northumbria University](http://www.northumbria.ac.uk), Newcastle is a research-rich, business-focused, professional university with a global reputation for academic excellence.

Northumbria is one of the largest universities in the UK with more than 30,000 students from over 130 countries

About NBT Group

[The NBT Group](http://www.nbtgroup.co.uk) is a supply chain management company, working together with a common goal to assist our clients and suppliers focus on their core business and automate manual processes, reduce costs, improve cashflow and grow turnover. The NBT Group provides business support to our clients, whether using state of the art technologies or knowledge based on over a century of work in complex and disparate supply chains and sectors.

About Senseye

[Senseye](#), headquartered in the UK with regional offices in Germany, France, USA, and Japan, is a leading industrial solution company for AI-driven Machine Health Management. Senseye helps global industrial organizations unlock savings through machine health optimization in key industries such as Automotive, Manufacturing, Heavy Industry, and CPG / FMCG.

About Made Smarter Innovation

Made Smarter Innovation is a national programme to help businesses who make things capitalize on new digital technologies. Our programme will support the transformation of UK's manufacturing capabilities through the development and innovation of industrial digital technologies (IDTs). We give UK manufacturers access to a digital innovation ecosystem that helps prove their idea, quickly develop it with experts and scale it. The £300 million partnership between government and industry will provide match-funding, specialist advice and result in radical manufacturing solutions. Delivered by UK Research and Innovation.

Additional quote:

Made Smarter Innovation Challenge Director, UKRI, Chris Courtney, said:

“Digital technologies have the power to radically transform how we manufacture and deliver the products and services of today and the future delivering a productive, sustainable and flexible manufacturing sector and enhancing the future of work within it. There are enormous opportunities to innovate in this area, we have world leading industries, a powerful scientific and research community and a vibrant technology sector. It is vital we form a vibrant connected ecosystem from applied research to industrialisation in order to fully capitalise on that potential.

We have seen tremendous demand for this area across all sectors, company sizes and locations, and real evidence of the vibrant community of innovators in the areas of digital manufacturing and supply chains. I'm excited to see how this powerful coalition transforms the future of manufacturing and its supply chains.”

Northumbria is a research-rich, business-focused, professional university with

a global reputation for academic excellence. Find out more about us at www.northumbria.ac.uk --- Please contact our Media and Communications team at media.communications@northumbria.ac.uk with any media enquiries or interview requests ---

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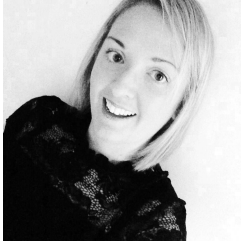


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