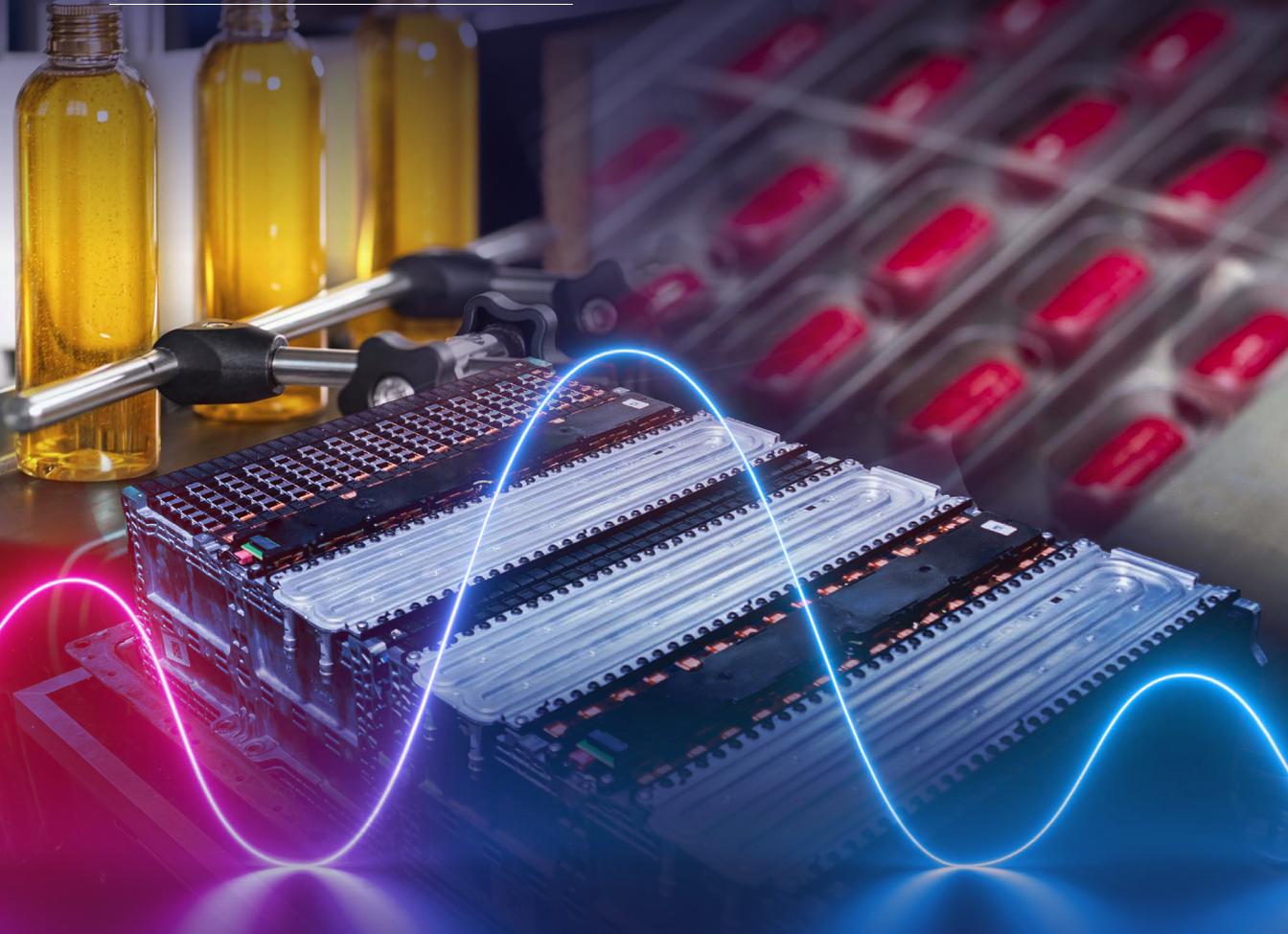




DIGITAL
MANUFACTURING
ACCELERATOR

FROM THE MANUFACTURING TECHNOLOGY CENTRE



ADVANCING UK MANUFACTURERS THROUGH DIGITALISATION & AUTOMATION



STRATEGIC INVESTMENT FUND

INTRODUCING DMA

BUILDING CAPABILITY DRIVING PRODUCTIVITY INCREASING OPPORTUNITY

The DMA is an initial 10-year partnership between the Liverpool City Region Combined Authority (LCRCA) and the Manufacturing Technology Centre (MTC) to invest in and develop UK manufacturers and their workforce to successfully build global competitiveness.

Our aim is to help companies of all sizes de-risk the adoption of digital and automation technologies and enhance the UK's reputation through the implementation of modern methods of manufacturing.

Located in new, purpose-built facilities in the Liverpool City Region, the DMA will strengthen the competitiveness of UK manufacturers through the development and deployment of new digital and automation technologies; creating a more efficient, agile and productive manufacturing sector.

The DMA has created new highly skilled jobs at its facilities in Liverpool as well as training and upskilling the existing manufacturing workforce as we support the future requirements of the sector.

The DMA is looking to work alongside manufacturers from across the region and the UK including the supply chain, SME's and industrial end users.

We want companies of all sizes to contact us as we look to directly support digital and technology focused manufacturing projects in our new digital and physical testbed facilities with the end goal of de-risking and driving the rapid adoption of new technologies to grow our manufacturing sector.

"THE DIGITAL MANUFACTURING ACCELERATOR IS A FANTASTIC OPPORTUNITY FOR LOCAL BUSINESSES IN THE NORTH WEST, AND MANUFACTURERS ACROSS THE UK TO MAXIMISE ITS HIGH VALUE MANUFACTURING POTENTIAL AND INCREASE PRODUCTIVITY."

CLIVE HICKMAN

Chief Executive, Manufacturing Technology Centre



DMA AIMS TO REALISE A NUMBER OF SOCIETAL AND INDUSTRIAL BENEFITS

The DMA was developed to recognise the strengths of the Liverpool City Region in advanced manufacturing and to accelerate these capabilities through the widespread adoption of digitalisation and automation technologies.

Its aim is to help catapult ambitious businesses from the region and across the UK, to further strengthen their competitiveness and support net-zero growth and success.

The type of manufacturing approaches and solutions that the DMA will bring to industry will be ubiquitous in many years' time, but it is important that we embed these at scale now to prepare businesses for the challenges facing UK manufacturing.

The collaborative environment of the DMA provides technology solution providers the opportunity to develop and integrate new solutions with other manufacturing system providers for an integrated supply chain. It will also support product-based manufacturers who want to explore new manufacturing approaches that can improve productivity and growth into

new market areas – providing confidence that the supply chain is both robust and scalable.

By embedding digitalisation and automation technologies in the supply chain, the DMA will be able to realise a number of major societal and industrial benefits over the next 10 years including the provision of employment, higher quality and traceable products and a more environmentally sustainable sector.

Already, we are seeing an impact with increased inward investment in the region and businesses working with us developing solutions to assist them to scale. The supply chain has also been recognised within the Department of International Trade as a real asset for the North West.

For the MTC, it is hugely exciting to be part of a project that is making a positive impact on the regions manufacturing capabilities as well as inspiring the next generation of engineers by making manufacturing accessible and exciting for the people of Liverpool.

CHARLIE WHITFORD
Director, North West and Regions,
Manufacturing Technology Centre

“THIS PROJECT IS A UNIQUE OPPORTUNITY TO UPSKILL AND CONNECT TECHNOLOGY PROVIDERS AND MANUFACTURERS, TO DEVELOP THE ECOSYSTEM REQUIRED TO RAPIDLY COMMERCIALISE PRODUCT RESEARCH AND DEVELOPMENT.”

CHARLIE WHITFORD
Director, North West and Regions,
Manufacturing Technology Centre



"THE LIVERPOOL CITY REGION IS A HOTBED OF ADVANCED MANUFACTURING ACTIVITY AND WE ARE LEADING THE WAY, NATIONALLY AND INTERNATIONALLY."

STEVE ROTHERAM

Metro Mayor, Liverpool City Region Combined Authority

IMPROVING COMPETITIVENESS AND INCREASING PROFITS OF OUR MANUFACTURERS

The manufacturing sector in the region is made up of around 3,000 businesses, supports up to 50,000 jobs, and is an integral part of our economy.

In 2015 the Liverpool City Region LEP completed a foresighting study (Making It) that examined the future challenges and opportunities facing the manufacturing sector. Making It highlighted strongly that digitalisation was going to be hugely important for the growth of manufacturing in this region and across the whole of the UK.

With the current socio-economic and geo-political changes alongside the pace of new technologies we knew that we had to support our manufacturers to ensure they were equipped to deal with the seismic shift that the industry faces, including the adoption of digitisation and automation.

We believe that by giving businesses and the wider supply chain the best opportunity to adopt advanced manufacturing technologies, this will improve their competitiveness, increase the profits and market value of our manufacturers. This in turn will help the sector grow on a national and global scale, creating more jobs and generating

more opportunities for young and disadvantaged communities.

By establishing the Digital Manufacturing Accelerator (DMA) in partnership with the Manufacturing Technology Centre and the Liverpool City Region Combined Authority, we have brought the expertise that our manufacturers require into the heart of the city region.

Utilising the extensive expertise of the MTC alongside our own industrial digitisation ecosystem, we want to make the DMA an enabler of growth for small, medium and large-scale companies to create additional value and drive prosperity in the region through the adoption of digitalisation and automation technologies.

And already it is fantastic to see companies take advantage of the opportunity, working with experts from the MTC to adopt new systems and business models and understanding how digitalisation can support their business' competitiveness and longer term prosperity.

SIMON REID

Head of Sectors, Growth Platform, the Liverpool City Region Growth Company

WHY DMA AND WHY NOW?

The DMA builds on the north west region's growing national and international reputation as a centre of excellence for advanced manufacturing.

As the policies and investment decisions of local and national government place manufacturing as a key pillar in the UK's economic future, Liverpool and the region will play a central role in advancing UK manufacturers in their adoption of new technologies and their success in securing new commercial opportunities from across the globe.

The adoption of innovative manufacturing solutions plays a key role in maintaining and developing the competitiveness of UK manufacturers. Some businesses don't have the time, expertise or budget to realise the benefits of adopting new technology and that is where the DMA comes in.

Our aim is to support companies of all sizes and at all stages of their adoption journey. We do this by providing engineering experts alongside access to purpose built digital and physical testbed facilities. It is our expertise and facilities that help identify, implement and de-risk the adoption of digital and automation technology solutions to transform businesses and their manufacturing processes.

An innovative, agile and increasingly successful manufacturing sector supports inward investment, new high value jobs and exports. It also helps support the creation of a more resilient nation that has the agility required from its manufacturers to confidently deal with future challenges in whatever form they may take.

"THE DMA TEAM HAVE BROUGHT HIGH QUALITY AND INNOVATIVE THINKING TO OUR ADVANCED MANUFACTURING PROGRAMME. I'M EXCITED ABOUT THE FACILITY AND CAPABILITIES BEING DEVELOPED."

STEVE WIRE

R&D Director, Global Hair, Unilever



ABOUT THE MTC

THE PERFECT PARTNER



MTC was established in 2010 as an independent Research and Technology Organisation (RTO) to help bridge the gap and create more meaningful and beneficial links between academia and industry to aid the growth of UK manufacturing.

Today, the MTC has over 800 employees, 100 industrial members, turns over around £100m and operates from sites in Warwickshire, Oxfordshire, South East London, Bristol and Liverpool.

Supported by the Government along with our partners in the Catapult, Innovate UK and our founding universities, we have been able to work alongside our Members and industrial partners to deliver world leading innovation to the broadest range of UK based businesses from OEM's and large scale global manufacturers through to SMEs and new start-ups.

As our footprint has grown across the UK we have been able to directly influence and support more and more advanced engineering businesses and manufacturers as we work collaboratively to drive the innovation and competitiveness of UK manufacturing.

Following a successful partnership with Liverpool John Moores University and having been located on campus since 2015 we were delighted to expand and extend our reach across the region with the forging of a 10-year partnership with Liverpool City Region Combined Authority (LCRCA) and subsequent launch of the DMA at the end of 2019.

Located in the City's Knowledge Quarter, we are determined that MTC Liverpool and the DMA become an accessible hub for local, regional and national manufacturers at all stages of their journey to adopt new digital and automation technologies, promoting advanced manufacturing opportunities throughout the wider community.

Launched in 2010, the MTC's purpose remains to support the innovation and competitiveness of UK manufacturers and in doing so to positively impact society.

We believe this makes the MTC the perfect partner to lead the DMA as we work to strengthen UK manufacturing and by de-risking the adoption of new digital technologies and automation.

WHO CAN WE HELP

FMCG & PACKAGING

The world of fast moving consumer goods (FMCG) is arguably faster moving now than ever before.

As competition grows from across the globe, the need for more efficient production processes are central to ensuring successful, longer-term profitable businesses.

At the same time, in order to meet the ever demanding needs of increasingly well researched and environmentally conscious consumers, manufacturers are in constant review of more sustainable ways to produce and package their products.

Adopting digital and automation technologies can have a positive impact in both how and what these FMCG companies manufacture and the DMA will focus on working with FMCG businesses to support the evolution of both what they produce and how this is manufactured.



AGRICULTURE & FOOD PRODUCTION

In a world of reduced resources, our food manufacturers and those responsible for the management of our land stock are under increasing pressure to maximise their processes to extract the maximum value from their work while also minimising their impact on the environment.

Technology adoption has always played a key role in advancing the production and management techniques of food producers and as new digital and automation technologies focused on the agriculture sector are developed we want to support UK food producers to benefit from these new technologies.



DEFENCE

The defence sector is a national priority and a British manufacturing success story that contributes more than £11bn in exports and supports 260,000 jobs.

As the technological landscape of defence constantly innovates to maximise new technologies including the use of new materials, artificial intelligence, robotics and with a growing focus on both cyber and space, the DMA will look to work with OEM's and the supply chain

to determine how adopting new digital and automation production techniques can support the sector to meet its manufacturing challenges and the global need for next generation warfare products and systems.

As the region is a key hub in the UK's defence R&D and engineering experts, we look forward to providing further support to the sector and working together to drive the adoption of new manufacturing technologies.

PHARMACEUTICAL

The pharmaceutical sector is one of the UK's major global R&D and manufacturing successes. The UK is a genuine world leader in the design and production of new and advanced medical devices, medicines and treatments techniques.

Approximately 67,000 people are employed in the pharmaceutical and medicine manufacturing industries with 25,000 of these in R&D roles and many of these classified as high value jobs.



The sector is a significant contributor to the UK economy and driven by advances in life sciences, is constantly looking to use new technologies to improve all aspects of its production capabilities.

Our aim is to support the sector and those companies that design and manufacture medical devices, medical machinery, medicines and their packaging to build on the UK's reputation and position as a global leader in pharmaceuticals.



ELECTRIFICATION

Electrification - the movement to use sustainable energy sources to replace fossil fuels - has been identified as a key contributor to decarbonising industry and reducing the impact of climate change.

With a global drive towards net zero, the UK is currently falling behind other nations. Whilst progress has been made in some areas, more needs to be done to meet the UK Government's target of achieving net zero by 2050.

The adoption of net zero technologies offers enormous opportunities for businesses and a long-term positive impact to industry and society.

The drive towards electrification and sustainable energy is on a global scale. The DMA is focused on supporting UK businesses in the implementation of high-performance electric machines, power electronics, machines and drives (PEMD) to reduce greenhouse gas emissions, leading to improved efficiency and productivity, resulting in significant economic, environmental and societal benefits.

A MORE SUSTAINABLE FUTURE CREATES NEW OPPORTUNITIES FOR UK MANUFACTURERS

The adoption of green, sustainable technologies is at the centre of the argument on how the world can win the battle against climate change.

There is now a legal requirement for the UK to achieve net zero carbon emissions by 2050 and, with more developed countries increasing their focus on adopting green technologies, there is a clear opportunity for the UK to lead the world in the manufacture of environmentally friendly, and sustainable products that meet the global climate challenge.

The creation of new, sustainable methods of transport, energy production and packaging are just some of the challenges the world's manufacturers are looking to solve.

These challenges provide significant opportunities for UK manufacturers to be at the forefront of, and to become the global success stories of the future.

The development and implementation of new manufacturing processes enables the production of innovative, more sustainable products. The adoption of digital and automation solutions delivers more efficient production of existing products and gives UK companies a competitive advantage in the global race to secure new business with environmentally focused companies and countries.



"THERE IS A CLEAR OPPORTUNITY FOR THE UK TO LEAD THE WORLD IN THE MANUFACTURE OF NEW, ENVIRONMENTALLY FRIENDLY, AND SUSTAINABLE PRODUCTS THAT MEET THE GLOBAL CLIMATE CHALLENGE."

HANNAH EDMONDS

Chief Engineer,
Digital Manufacturing Accelerator

CONTACT US TO FIND OUT MORE

The Digital Manufacturing Accelerator is actively looking to engage manufacturers of all sizes from across the region and the UK including the supply chain, SMEs and industrial end users.

We want companies at all stages of their journey into adopting new digital and automation technologies to get in touch so we can assess the potential of their project and our ability to support your next steps.

Contact us today by email using dma@the-mtc.org.





FROM THE MANUFACTURING TECHNOLOGY CENTRE



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