### FUTURE CUBE

Futureproofing and Accelerating the performance of SMEs in the Greater London and Thames Gateway region





## WELCOME TO FUTURE CUBE

# A new partnership to enable local manufacturing, logistics and construction businesses to overcome challenges and thrive.

Future Cube has been established to work directly with small and medium sized enterprises in the Greater London and Thames Gateway region. It draws on the extensive resources of the Manufacturing Technology Centre, part of the High Value Manufacturing Catapult, to address practical, technical, and strategic challenges faced by manufacturing, logistics and construction small and medium sized enterprises today.

We know that at the heart of the UK's manufacturing, logistics and construction sectors are thousands of small and medium sized enterprises, and that these businesses are critical to enhancing the country's longer-term success.

Our team has local knowledge, extensive engineering experience, specialising in advanced manufacturing processes, modern methods of construction and digital simulation. All initial consultations are delivered at no cost to you, other than your time, plus we only move forward if together we can agree the business case.

Recognising small and medium sized enterprises will benefit from further support to invest, we have access to the Innovate UK REACH small and medium sized enterprises grant scheme that can provide up to 50% towards the cost of your project with us.

#### Set us the challenge - contact us today

T: 07866 033257

E: John.McCallion@the-mtc.org

Visit futurecube.org for more information

### OUR APPROACH

### Transform your processes while minimising the risk.

The Future Cube team draws on the experienced senior engineers from the MTC that specialise in supporting the UK's SME manufacturers, logistics and construction businesses.

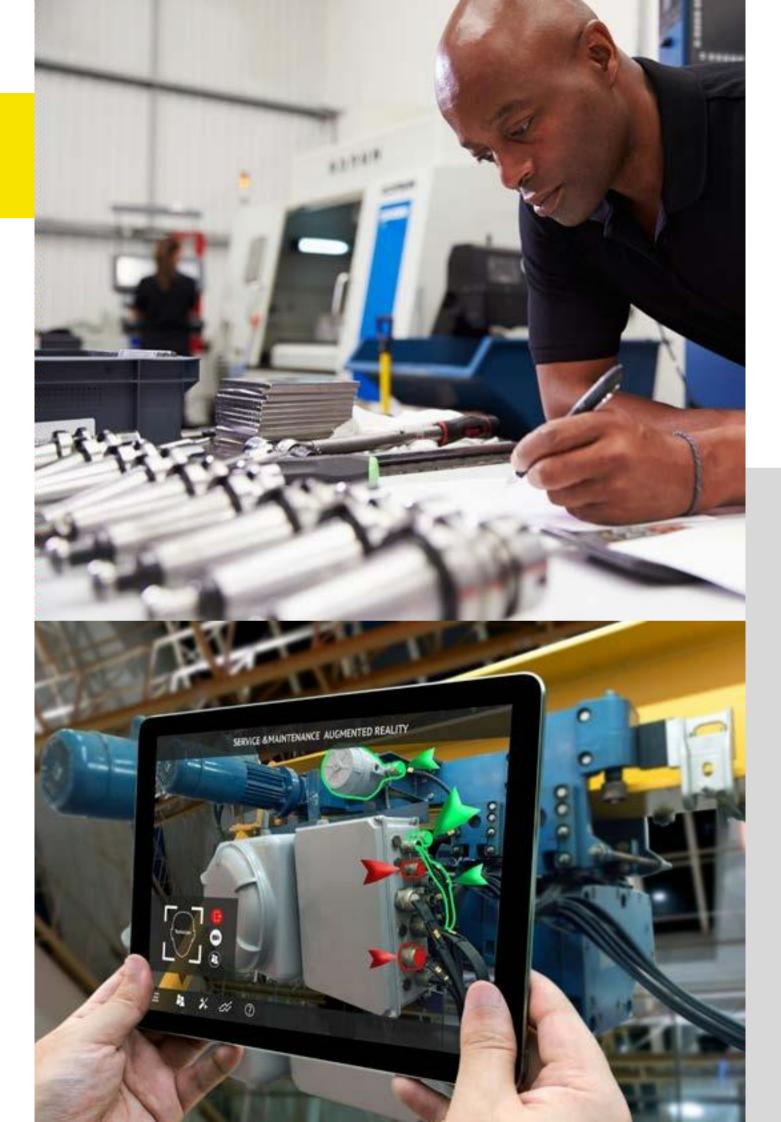
Central to our approach is supporting small and medium sized enterprises for the long term to:

- Improve productivity
- Reduce costs
- Embed innovation
- De-risk the use of technology

We understand the need to build trust and confidence before you invest, this is why, other than some time to discuss your challenges, there is no initial cost to you, and we only expect to work with you if we can agree the business case and be confident in the expected return on any investment by you.

Our commitment is that we will only ever recommend solutions where there is a clear value proposition and ROI on the project.

Unlike many initiatives which operate on a single intervention only, Future Cube can provide on-going support through follow-on projects to ensure you continue to develop and prosper.







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We're already seeing the benefits of our strategy to re-shore and recently secured 200k units of product originally outsourced to China.

Our work with the MTC has been truly transformational.

We've invested in our factory and new technologies. We've taken on new staff and improved the skills of our existing employees.

Garth Cooper CEO, Albert Jagger.

# WHAT CHALLENGES CAN WE SUPPORT SMES TO ADDRESS?

With our team of experienced engineers and the backing of the Manufacturing Technology Centre, the Future Cube team can support SMEs to address a full breadth of practical, technical, and strategic engineering challenges.



#### **Productivity**

Support with process flow improvements from material handling, processing techniques to business systems.



### Technology Roadmapping

Highlighting future technology trends and identifying the best fit for your business.



#### Supply Chain Robustness

Support reshoring of key current supply chains to make domestic production globally competitive.



### Technology Adoption

Readying your business to adopt new technologies and de-risking your investment.



#### Digitalisation

From online work instructions to RFID stock tracking, digital technologies provide opportunity to boost productivity.



### New Product & Process Development

Support through the challenges of the design, prototype and testing phases.



The MTC have been excellent to work with. Everyone on the project was engaged from the start and incredibly proactive, and their passion and enthusiasm are reflected in what we've been able to achieve in a short space of time. The team also really understood the brief and identified a solution that not only met our technical objectives, but also our commercial and strategic objectives too.

**Douglas Campbell**Technical Director, Electroflight



# DE-RISK YOUR PROJECT WITH OUR FUNDING

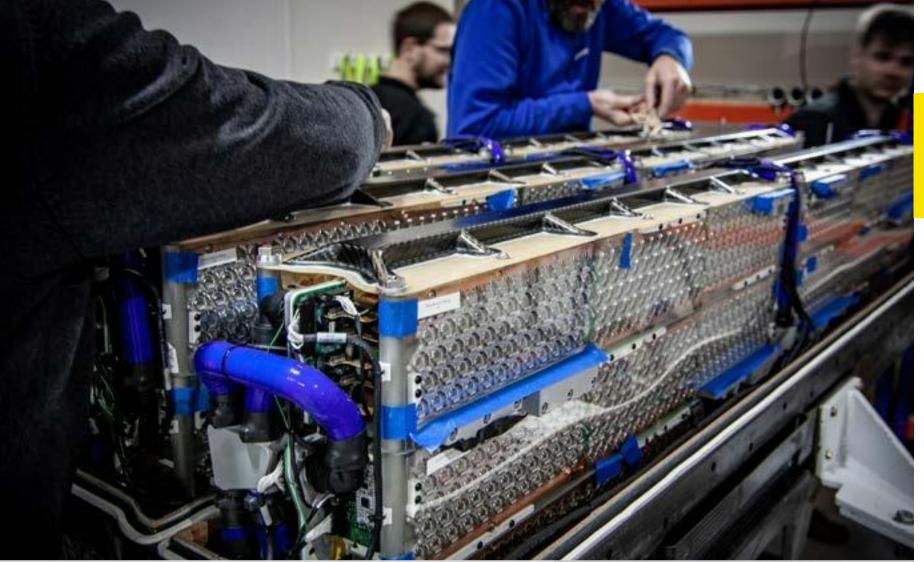
We are here to support the UK's small and medium sized manufacturers, logistics and construction businesses and we can provide Innovate UK REACH funding to support up to 50% of your investment.

Our commitment is that we will only ever recommend solutions where there is a clear value and ROI on the project and in all cases, if you are an SME with fewer than 250 employees, we can provide funding to support up to 50% of your investment.

REACH funding, provided by Innovate UK, can be offered to any qualifying SME engaging Future Cube and is based on the amount of time allocated to a project.

For every day of support a qualifying business invests in an eligible project – the REACH programme will fund another day.

Once engaged with Future Cube following initial consultations and confirmation of the work programme, our experienced team will help secure the funding for you.



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The project was a real collaboration; the MTC team spent time onsite getting to know our operations, our people and our skill sets, so the findings and proposed strategy were extremely relevant to our business. The MTC's enthusiasm for innovation and problem solving was infectious and their fresh and energetic approach was really inspiring.

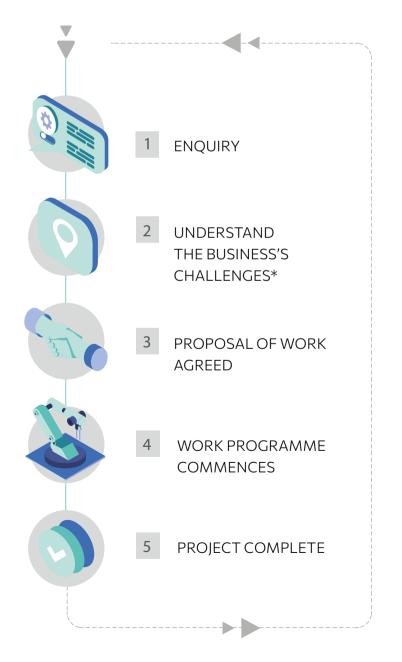
Phil Rawnson
Managing Director, MRT Castings



## FUTURE CUBE ROADMAP

### Once engaged with us, our team will guide you through each step of the journey with Future Cube.

This is bespoke for each client based on the requirements of each project. The below roadmap is only an indication of the process you will go through.



We will repeat the same process for all follow-on projects

\*This exploratory meeting can be conducted via a visit to your facility, the MTC or virtually.

### BOOK YOUR FREE, NO OBLIGATION LINE WALK

To help businesses start to understand some of the challenges that they face and how the MTC could support you to overcome them, Future Cube offers free initial consultations.

The first step of your journey with us is a line walk of your facility with no obligation to commit to any of the work discussed.

A senior member of the team will visit your facility and conduct a tour of your business's operations to obtain an initial understanding of the challenges faced, before providing guidance on the best route forward.

Future Cube brings skills and experience from across a range of technologies and, provided we can agree on a business case, the priorities, and an appropriate work programme, we will share with you a proposal outlining how Future Cube could support the implementation process. For qualifying SMEs, we will also discuss with you the Innovate UK REACH funding that is available to support the cost of your project with us.

#### **CONTACT US TODAY**

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**CASE STUDY** 

### MRT CASTINGS

# Factory re-design and new technologies to boost manufacturing productivity and agility.

A privately owned family business, MRT Castings has been operating from its base in Andover, Hampshire, for more than 50 years. In 2019, in response to growing demand and a commitment to providing its customers with greater flexibility and productivity, the organisation began construction on a new, purpose-built 20,000ft² foundry. To support the delivery of the new facility MRT Castings, manufacturers of aluminium die-castings and machined components, approached the MTC to support with delivery of their new foundry, to include layout, automation and technology selection and robotic handling.



What's been great working with MRT is their attitude towards looking to the future; always looking for new ideas and how can they optimise them. From machine automation and the use of VR to support factory layout, we're now exploring an additive manufacturing project to help MRT make the right choices, and set them on the journey to improve their productivity even further.

Nigel Knapp
Senior Business Development Manager, MTC



An SME team from the MTC worked closely with managers and operators from MRT Castings to help plan the layout for the new foundry. 3D modelling and visualisation were used based on data from existing and proposed equipment, which enabled visuals to be laid out within the architectural plans.

The MTC then provided a technology roadmap to support the introduction of automation and robotic loading solutions for the facility's CNC machining centres. 3D printing approaches were also developed for manufacturing bespoke grippers for the automated loading cells. MRT Castings' new foundry opened in March 2020. Through the work of the MTC, staff were

engaged throughout the facility design process, which helped to encourage internal buy-in and ease of adoption of new technologies. As an independent RTO, the MTC were able to provide impartial advice to ensure the proposed solutions met the specific needs of the business; specifically, improved productivity and agility, and a first-class manufacturing environment utilising the latest technology.

As a result of the project, MRT Castings saw a 100% increase in manufacturing space, a 500% increase in production of key component parts for ventilators in response to the COVID-19 pandemic and a 300% increase in sales within 12 months.

### FUTURE CUBE

Future Cube is a partnership between the Manufacturing Technology Centre, Greater London Authority, Havering Borough Council, SEGRO and the London Riverside BID. These organisations have come together to support manufacturing, logistics and construction small and medium sized enterprises in the Greater London and Thames Gateway region.

Future Cube's vision is to enable businesses to make transformative decision through the adoption of new technologies and digital capabilities by introducing practical expertise and accessible solutions that will improve productivity and businesses performance in a rapidly evolving technological and digital world.

www.futurecube.org

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Unit 6 Enterprise Business Centre | Consul Avenue | Rainham | RM13 8JE

In partnership with









**MAYOR OF LONDON** 





@FutureCube2



