

We are the UK's original digital innovation impact centre.

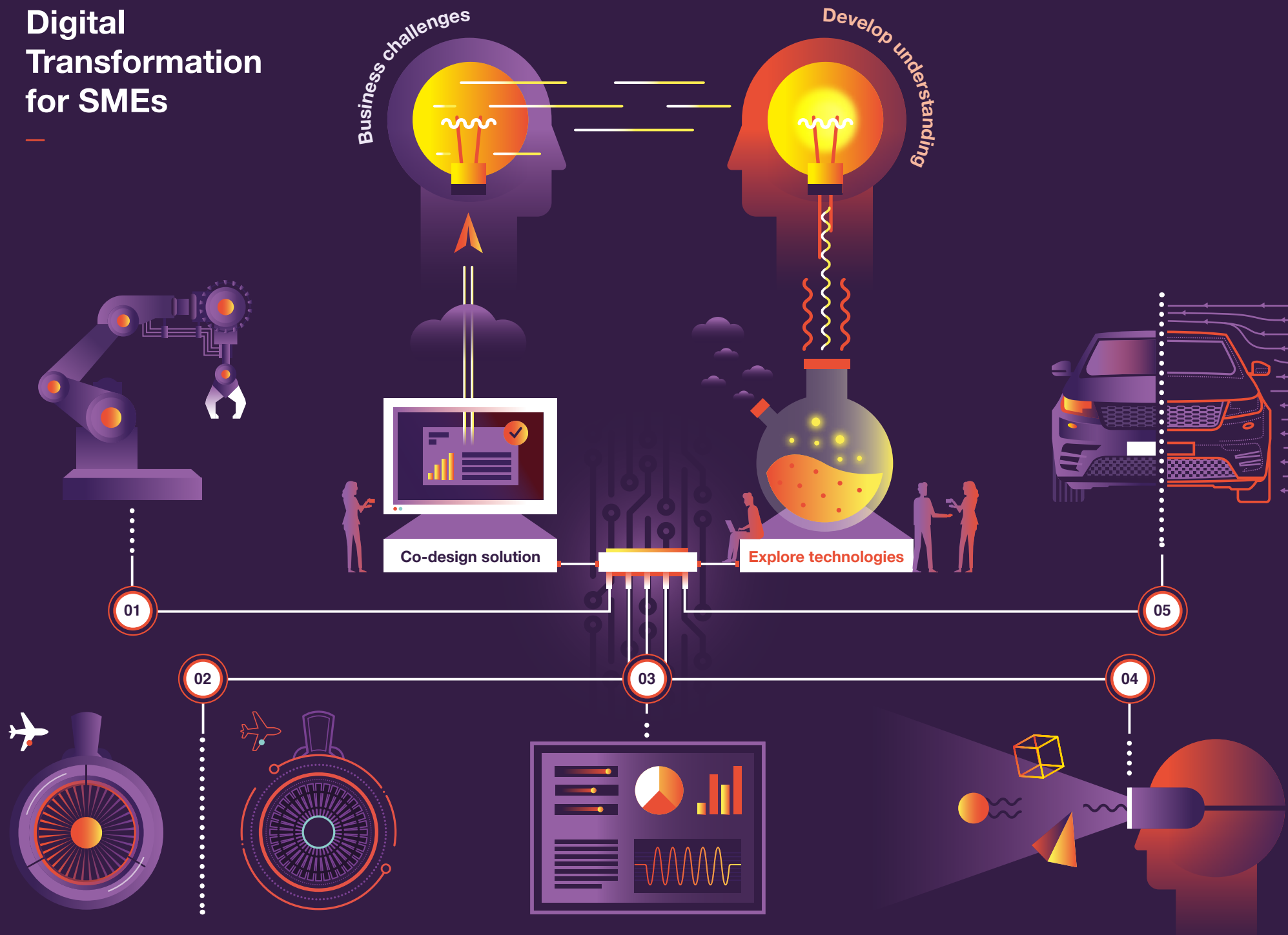
The combination of knowledge, experience, and world-class research we offer, helps our clients explore the adoption of digital technologies to solve complex industry problems in a welcoming and friendly environment.

Based at the University of Liverpool and Sci-Tech Daresbury, we have been delivering digital solutions and strategic support to the design, engineering and manufacturing industries since 2010.

We were the lead partner in the LCR 4.0 project that supported more than 300 SMEs across a wide range of sectors on their digital transformation journey, solving their design, engineering and manufacturing challenges.

For more information, please visit: virtualengineeringcentre.com

Digital Transformation for SMEs



To find out how we can help you use digital innovation to grow your business, contact us at:

**UNIVERSITY OF LIVERPOOL
SCI-TECH DARESBUURY
KECKWICK LANE
DARESBUURY WA4 4AD
01925 864 854**

vec@liv.ac.uk
virtualengineeringcentre.com



Who do we work with?

- We provide our services and expertise to large companies and SMEs.
- Our sectors include: nuclear, automotive, aerospace, healthcare, energy and utilities, FMCG and manufacturing.

Why work with us?

- We collaborate with businesses to provide a problem-solving approach to industry challenges.
- We help businesses increase productivity, reduce risk and add value.
- We bring together world-class research and practical support.
- We create a collaborative community that connects SMEs to expertise and support from the region.
- We deliver results – the LCR 4.0 Project is set to generate £31m GVA and create 955 jobs over a six year period within the Liverpool City Region.

Digital Transformation for SMEs

Our services and capabilities

Over the last 10 years we have helped over 300 SME's adopt digital technologies across their organisations in the design, manufacturing, maintenance and distribution of products and services. **Here are our tools and services:**

- 01 Robotics and Autonomous Systems**
Clients are provided with a state-of-the-art autonomous systems demonstration facility that connects advanced robotics in the laboratory with the real world.
- 02 Digital Twin**
We develop integrated systems architecture to support the realisation of Digital Twinning which helps our clients innovate faster.
- 03 AI and Data Analytics**
We help organisations to unlock the value in their data and to use those insights to drive improvements.
- 04 Advanced Visualisation**
We enable clients to develop a deeper understanding of their data, processes and products through the use of advanced immersive simulation techniques such as Virtual Reality and Mixed Reality.
- 05 Advanced Modelling and Simulation**
Using Advanced Modelling and Simulation Techniques we help business create a risk-free way to successfully prototype and test their designs.

LCR 4.0

LCR4.0



The VEC was the technical lead for the ERDF funded LCR 4.0 project. Along with STFC, LJMU, Hartree, Sensor City and the Growth Platform, it has supported manufacturing SMEs within the Liverpool City Region to realise the potential of digital transformation.

This project is on target to generate £31m GVA and created 955 jobs over a six year period within the Liverpool City Region.

Commenting on the survey results, Dr Andy Levers, Executive Director at the Virtual Engineering Centre (VEC) and technical lead for LCR 4.0, said:

“These figures demonstrate the tangible impact of the LCR 4.0 programme to date and show that digital innovation can help small businesses punch above their weight.”

Project Impact

303

SMEs helped

248

R&D collaborations



Nationally Recognised

Listed as one of the Top 100 European digital champions in the **Financial Times (2018)** and referenced as a best practice initiative in the **Made Smarter Review (2017)**.

Enhancing Businesses

82% of LCR 4.0 SMEs indicated that the support from LCR 4.0 had enhanced their innovative capacity and changed their perceptions of Industry 4.0.

New Products

71% indicated that they are currently developing a new product and the support received through LCR 4.0 will help them bring new products to market quicker.

82%

71%

43%

29%

36%

43% of businesses reported increases in employment.

29% of businesses reported an increase in company turnover.

36% of businesses reported an increase in productivity.

88

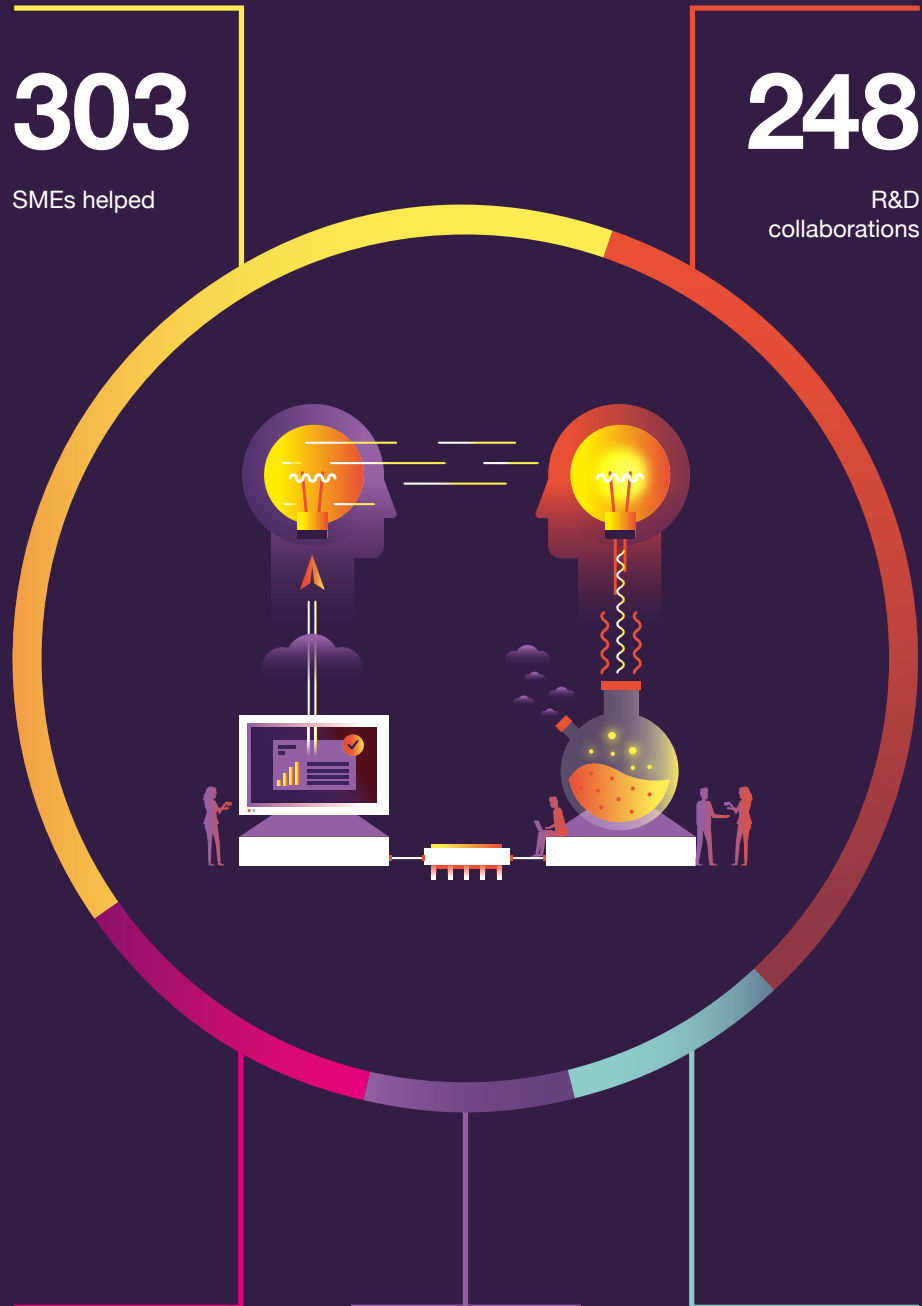
New products to firm

57

New products to market

61

Direct new jobs created



Impact Delivered

GVA Figures (Gross Value Added)

Gross Impact to Date (2019)

Gross impact: **£4.1m** to **£10.5m** in GVA and 125 FTE jobs.

125 ↑ Jobs

£4.1m → **£10.5m** ↑ GVA

City Region Growth

LCR 4.0 enabled SMEs to create an additional **955 jobs** and add **£31.1m** GVA to the local economy in the next three years.

2019 → 2022 **955** ↑ Jobs

£31.1m ↑ GVA

Growth for SMEs

Increase in GVA experienced by the LCR 4.0 enabled SMEs to range from **£10k** to **£1.25m**.

£1.25m

10K ↑

2019 → 2024 **£22.5m** ↑ GVA

£22.5m ↑ GVA

Exceeding Expectations

The lifetime net additional impact estimates suggests that the project is expected to exceed its GVA target of **£22.5m**, by **2024**.

“In 2018, the LCR 4.0 programme was hailed as an ‘exemplar project’ in the Made Smarter report and featured in the Top 100 European Digital Champions list by the Financial Times.”

Simon Reid,
Growth Platform

Learn more about the SMEs we've supported:

virtualengineeringcentre.com