NWSMART5.0

Strengthening North West UK Manufacturing
Through Industry 5.0 Innovation

WELCOME TO THE WORKSHOP

We will begin shortly

University of Salford MANCHESTER

Greater Manchester Chamber of Commerce

GREATER MANCHESTER I O T

UKRI Engineering and Physical Sciences Research Council

CyberFocus

CENTRE FOR SUSTAINABLE INNOVATION

NWSMART5.0

Digital Transformation for North West Manufacturing SMEs

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NWSmart5.0

- A collaborative initiative supporting manufacturing organisations in the North West as they navigate secure digital transformation.
- A programme strengthening cybersecurity capability, supports responsible adoption of emerging technologies, and builds long-term resilience across the region.
- Includes interactive workshops, a digital knowledge hub and tailored support for local companies.

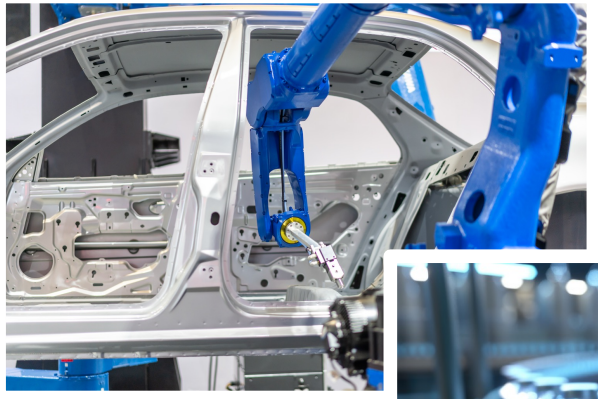
The context

Manufacturing sector in UK

Manufacturing in the UK

9%

of the total UK GDP



Manufacturing in the UK

23%

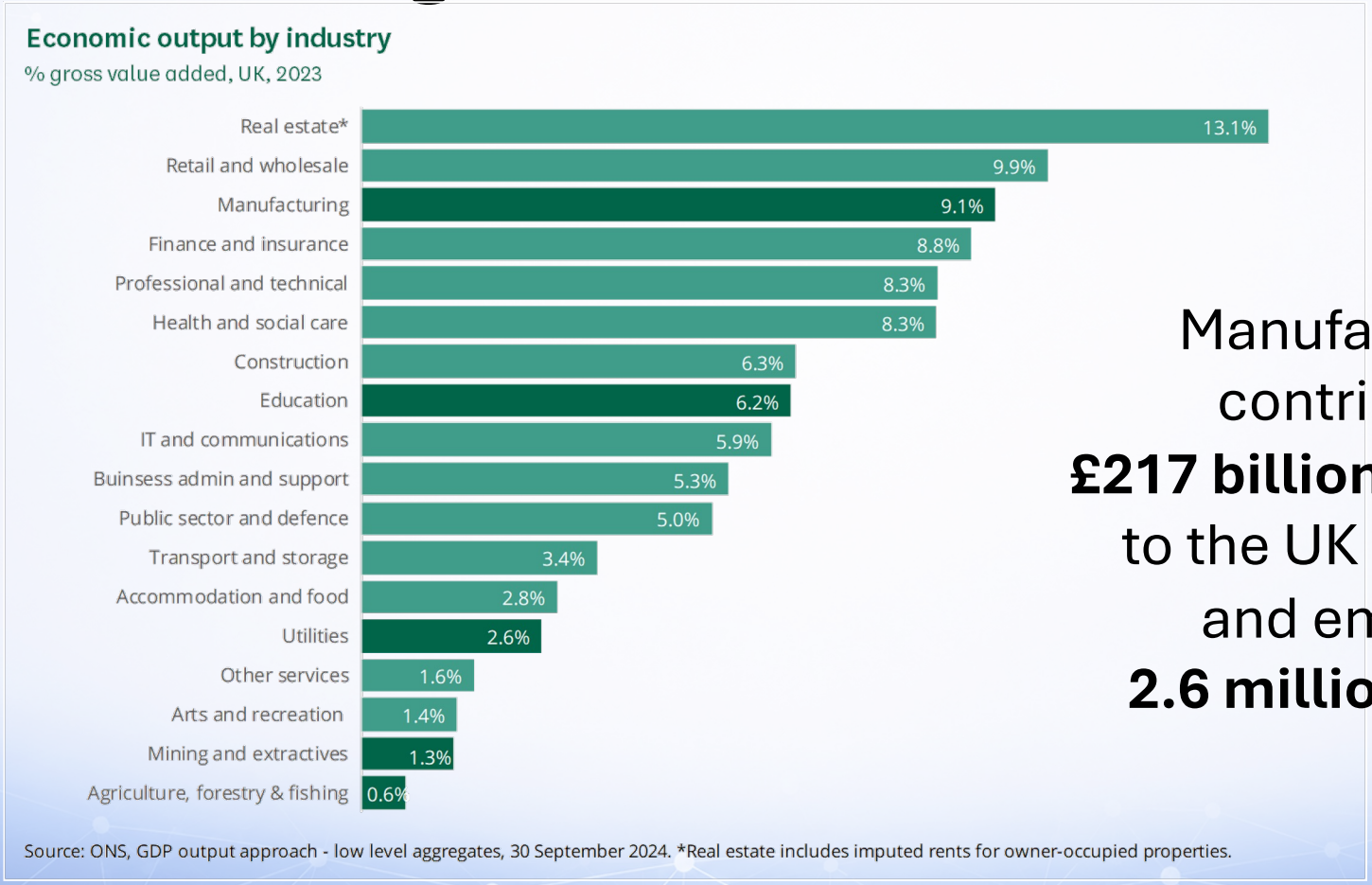
of the total UK GDP
when considering the
wide supply chain
and indirect impacts

Manufacturing in the UK

34%

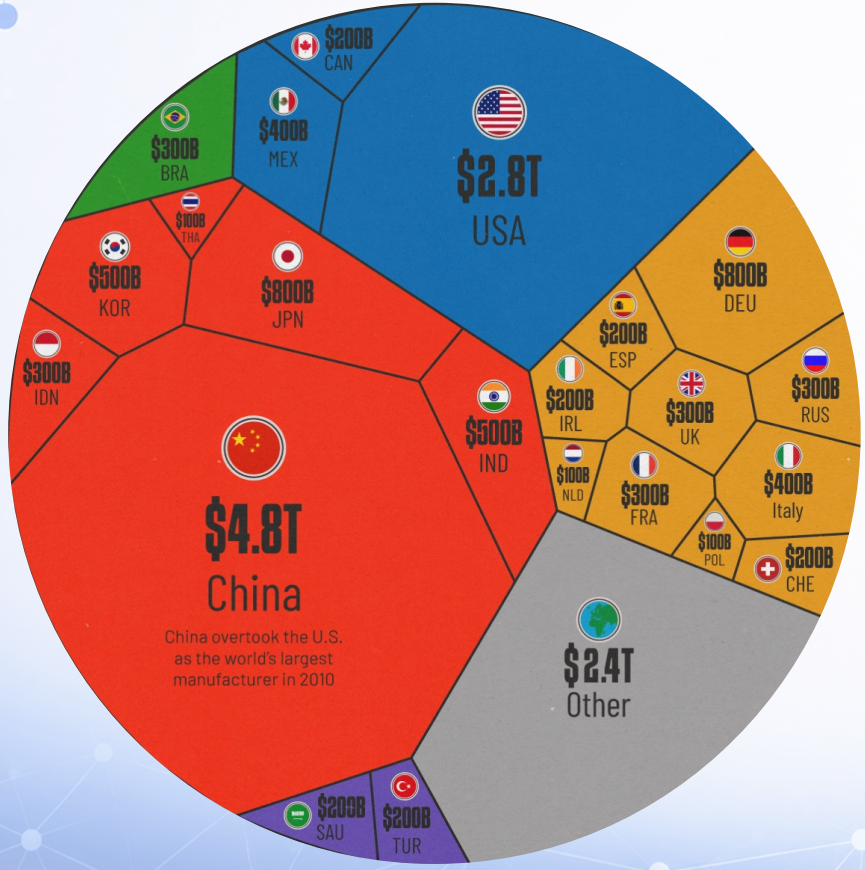
of the UK total exports

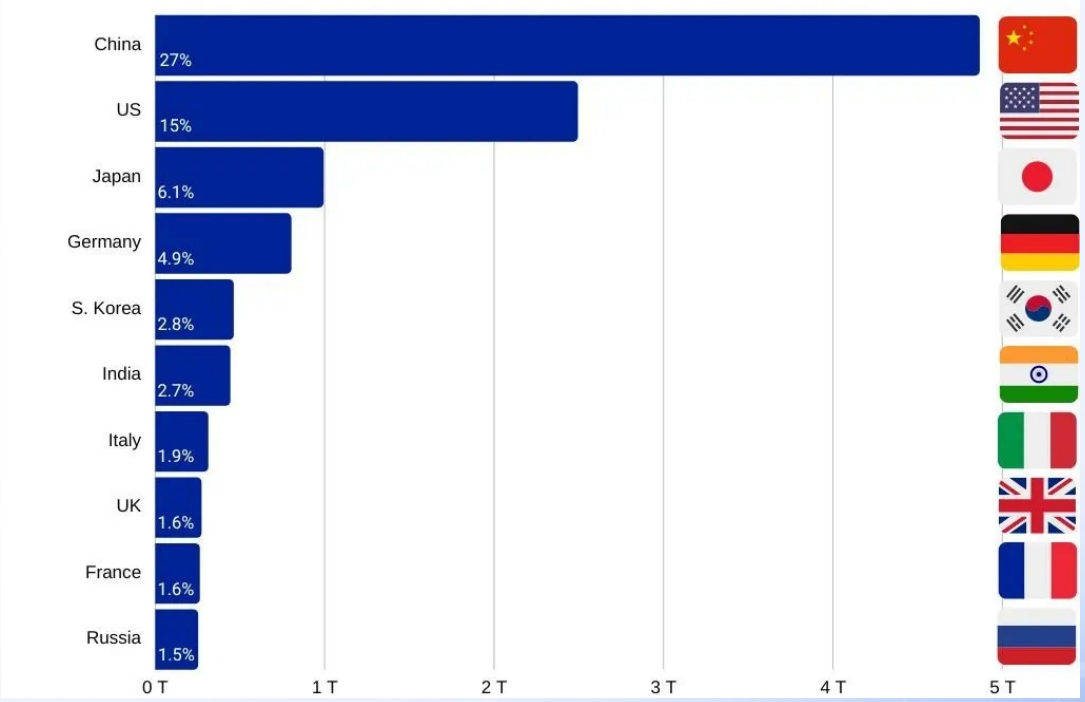
Manufacturing in the UK



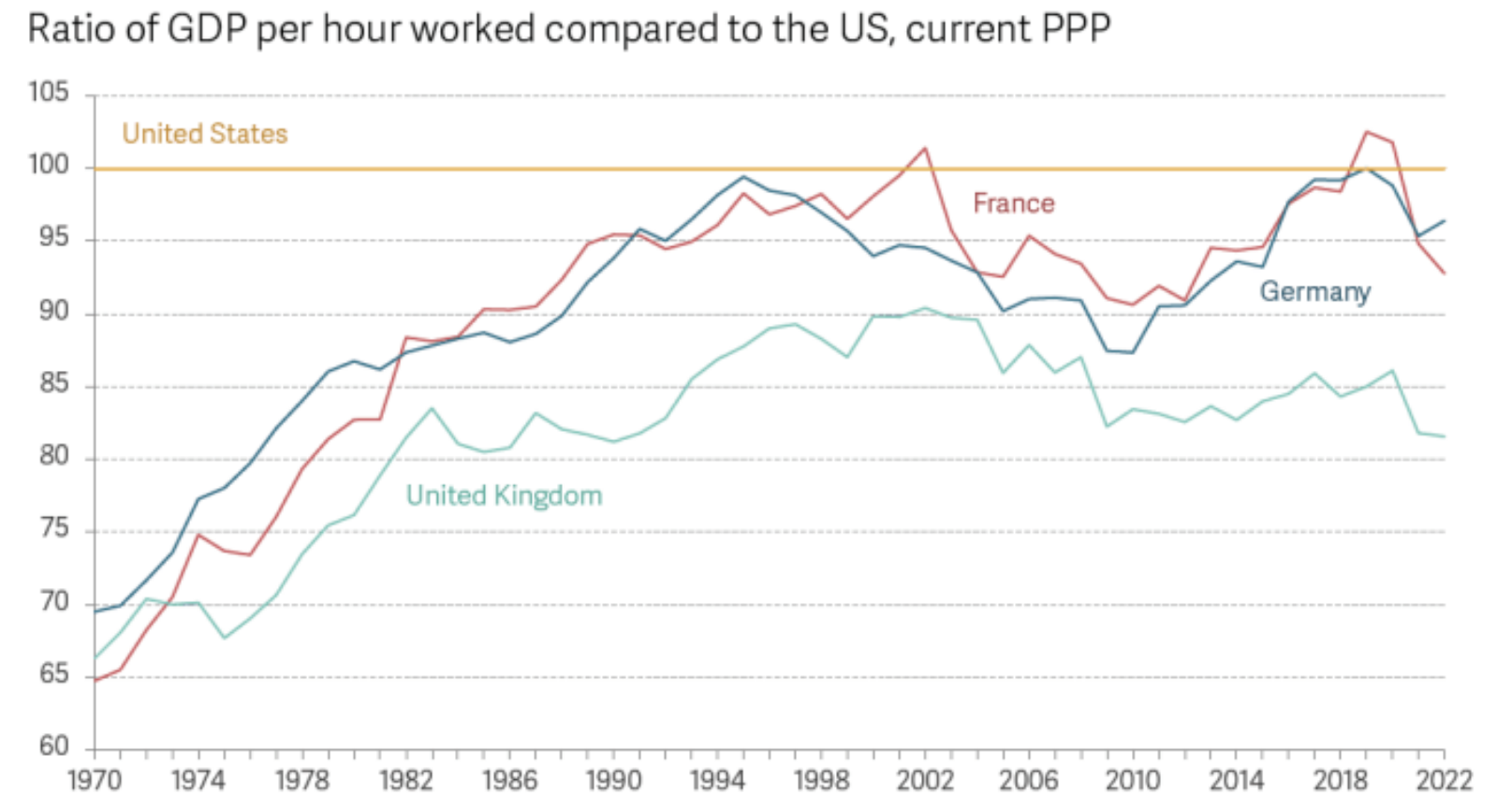
Manufacturing contributes **£217 billions annually** to the UK economy and employs **2.6 million** people

Top Manufacturing Countries





Productivity



Productivity

> Increasing output per worker to German levels would boost UK GDP by £180bn a year.

Alex Tuckett
Senior Economist, PwC

Question:

The UK has world-class universities, strong innovation capabilities, and advanced manufacturing firms. So why do you think UK productivity continues to lag behind many competitor nations? What is the real barrier?

“UK productivity lags behind international competitors primarily due to:

- *a chronic lack of **business investment**,*
- ***slow diffusion of technology** from high-performing "frontier" firms to the wider economy, and*
- *a distinct **inability to translate world-class research** into large-scale commercial manufacturing and scale-ups”*

Productivity

£18B

annual cost of
unplanned downtime in
UK manufacturing sector

Innovation

Boosting productivity and growth in UK manufacturing

Key elements of a successful strategy to boost productivity and growth in UK manufacturing

Bridging the skills gap

Driving automation and robotics

Financial incentives and access to finance

Question:

"Imagine you had £1 million to improve productivity in your manufacturing company. Would you invest it in

- *new technology,*
- *workforce skills,*
- *process improvement,*
- *leadership development, or*
- *data capabilities?"*

Nov 2025

Digitalisation is placed at the centre of manufacturing competitiveness, productivity, resilience and sustainability.

1. **Digital transformation is a key route to improving** productivity, reducing costs and accelerating innovation.

2. **Industrial Digital Technologies** (IDTs – AI, ML, IoT, DT, Robotics, Cyber…) are strategic priorities

3. **Support for SMEs is a major focus.** Providing funding, advice, training and digital adoption support.

4. **Digitalisation and sustainability are linked**

5. **Skills development is critical.**
   Creating a workforce capable of operating increasingly digital and automated production environments.

6. **Data is becoming a strategic industrial asset.**
   Making greater use of data-driven decision-making.

7. **Innovation ecosystems and collaboration matter.** Universities, research organisations, technology providers, catapult centres, regional innovation clusters…

8. **Cybersecurity is now a manufacturing issue.** Placing cyber security alongside AI and advanced connectivity.

9. **The UK wants to become a leader in Industry 5.0.** Manufacturing agendas focused on people, technology and environmental outcomes together.

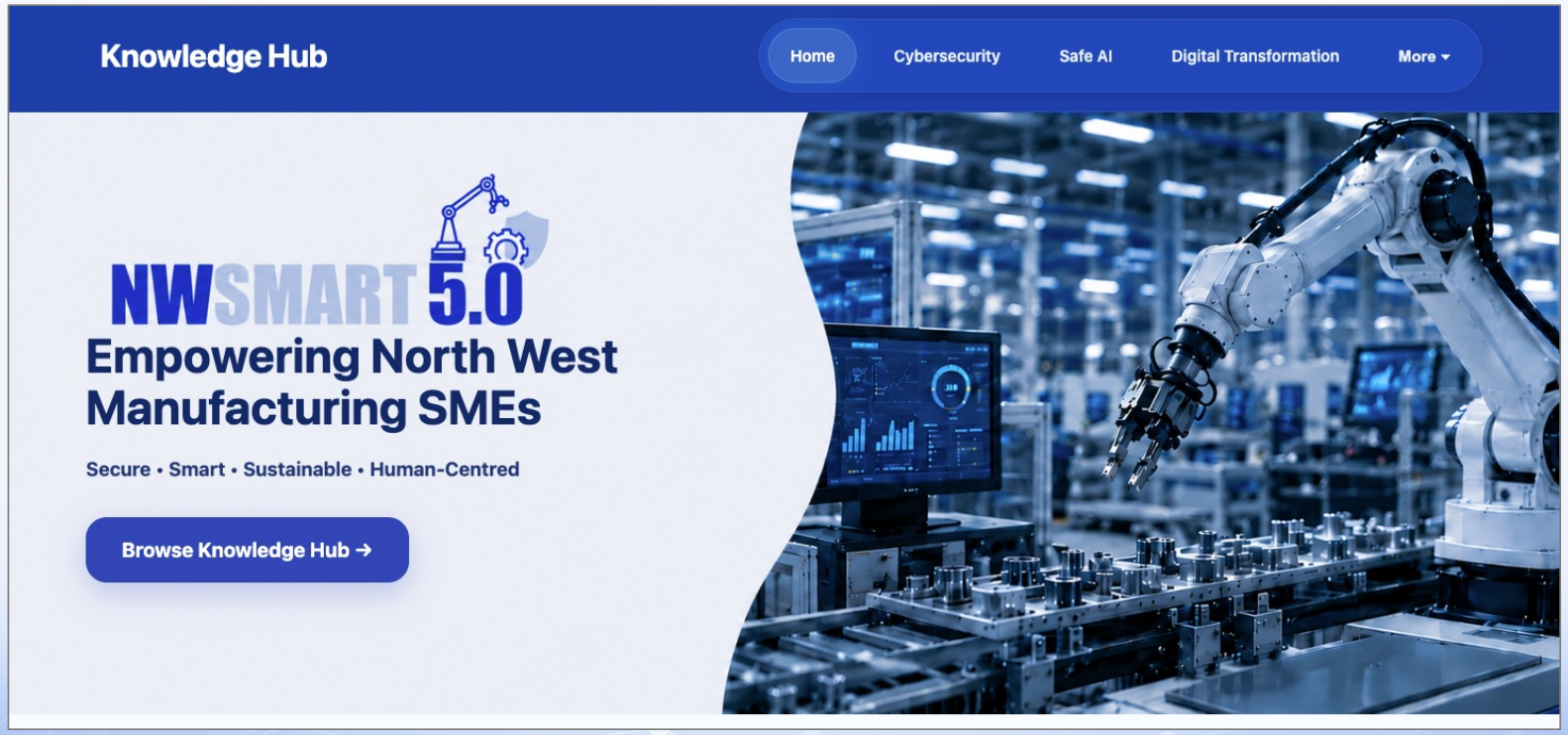
The future of UK manufacturing belongs to organisations that embrace digitalisation, invest in people and skills, and turn data into a strategic asset.

New opportunities

- Digital transformation is accelerating
- Strong government and industry investment
- Growing demand for sustainable and smart products

Knowledge hub

https://nwsmart.secureailab.co.uk/



Consultation Request Form

Next session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&
A

Feedback Forms

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