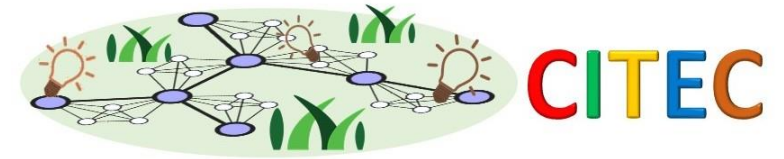


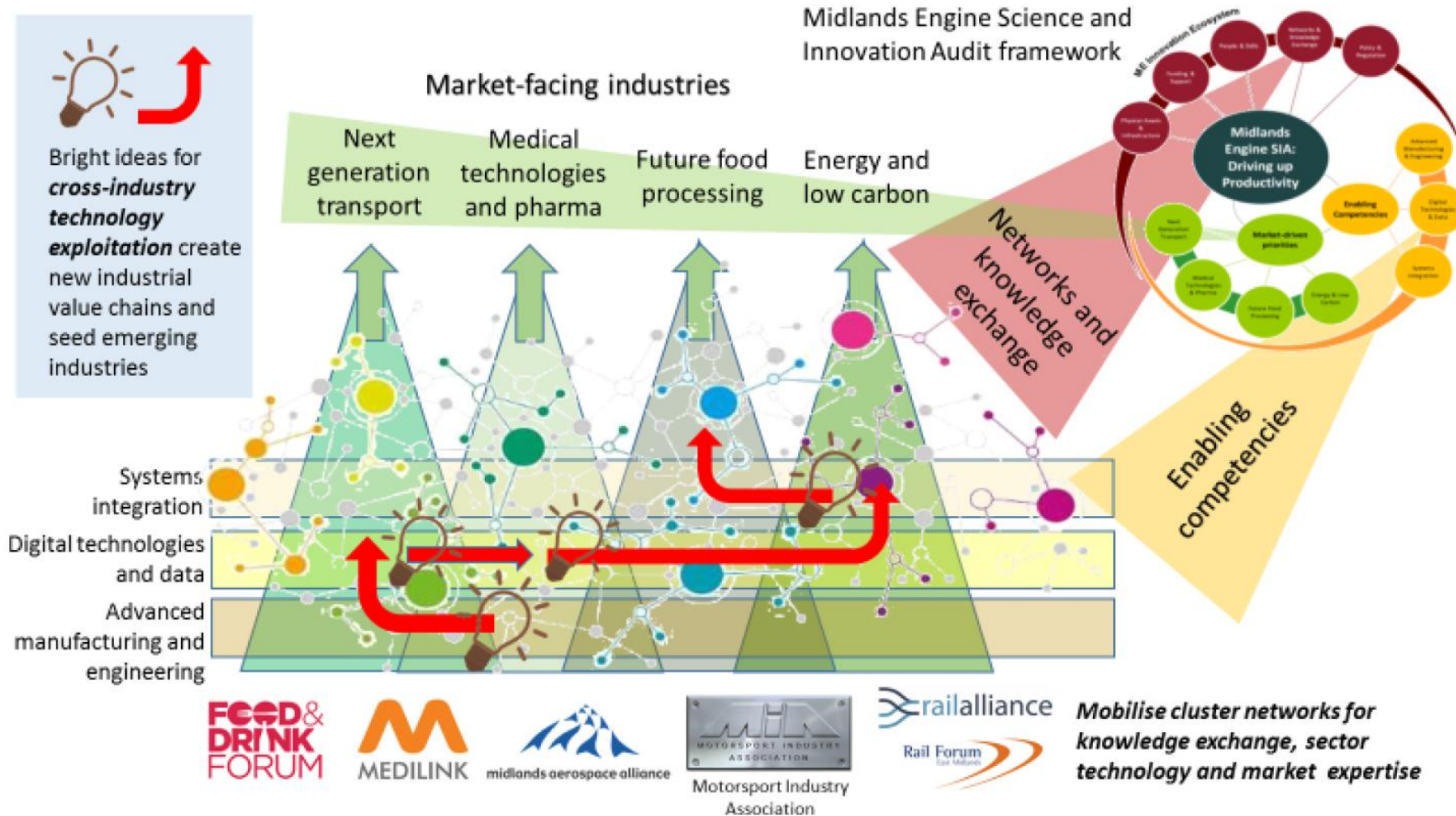
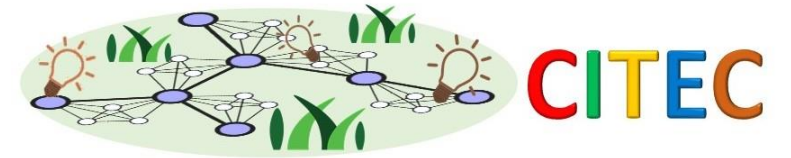
Cross-Industry Technology Exploitation in Clusters (CITEC)

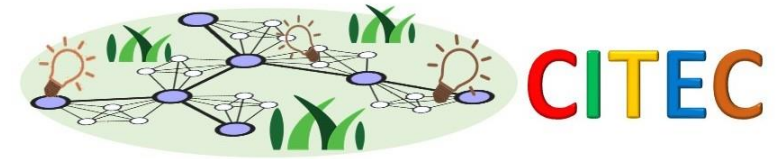


CITEC: *systematic* cross-sector technology exploitation

- Cross-industry technology exploitation already occurs – but piecemeal and sporadically. Here are some examples:
 - Using sugar cane waste from the food industry to create less hazardous, ecologically sustainable and fire-resistant resins for composite aircraft interiors.
 - Technology which protects Formula One drivers in the event of a crash is used to create a safe environment for new-born babies needing emergency transportation.
 - A company transformed from a manufacturer of car shampoos to a specialist in infection control products for the healthcare and dental markets.
 - Spray-on quick drying polyurea coatings used for the beds of pick-up trucks now provide insulation for the underside of railway bridges, tunnels and railway electrical transformer boxes.
- CITEC would systematically exploit the potential of cases like these, to support companies to develop their product and process technologies for exploitation in new and emerging markets.

CITEC concept: linking to Science and Innovation Audits





CITEC pilot proposal

- Launch with pilot to test system
 - Transfer and adapt aerospace experience
 - Three-four collaborative R&D projects (competitive bidding, private matched funding).
 - Budget c.£500k
 - Pilot with projects across transport sectors (automotive, motorsport, rail, aerospace), supported by end users and cluster bodies.

CITEC programme delivery

- Full delivery phase
 - Could be a £40m programme to develop 200 new technologies
 - Broaden out across all WMIP sectors
 - Recognise different sectors may have different innovation models
 - Delivering CITEC at scale can
 - address market opportunities in innovative ways
 - support supply chain innovation themes of sector action plans (support smaller or emerging sectors with a shared infrastructure)
 - make step change to West Midlands supply chain innovation ecosystem including buy-in from big end users (aerospace now has 150 ATEP/NATEP projects across UK)
 - underpin a West Midlands “super cluster”

Major new market opportunities

Future of mobility

Data driven health and life sciences

Creative content, techniques and technologies

Modern services

A distinctive economy - Creative and innovative, with global supply chain strengths a diverse and young population, well connected, trading and entrepreneurial. Unique opportunities ahead in the Commonwealth Games and City of Culture.

Sector strengths

Low carbon technology

Energy and clean growth

Aerospace

Precision component manufacturing

Logistics / transport technology

Future mobility

Metals & materials

Innovative supply chains

Life sciences

Devices
Diagnostics, real life testing

Professional skills

Skills and a full services sector

Rail

Digital rail
High Speed 2

Construction

Offsite modern manufacturing
Land remediation

Creative

Games, Next Gen content, process and product design and designer maker

Food & drink

Machinery, food & fluid control tech, Photonics R&D

Automotive

Battery development
Drive train
CAV

Tourism

Shakespeare's England
Commonwealth Games
Business City of Culture

Actions to unblock barriers to productivity and growth, integrated in places and communities to drive inclusion

Foundations of productivity - drivers and enablers of growth

People, skills & employment

Infrastructure & environment

Ideas / Innovation

Business environment

Place