



Tim DeBarro – Heathrow Airport Expansion, Head of Projects

Off Site Construction Show 2018

*You either create something, and you keep it a secret,
and you die with it, or you benefit your craft*

Vidal Sassoon





Benefits of Collaboration

The Vision

Lessons for other projects

Future
Motorways

Heathrow
Expansion

High Speed 2

High Speed 1

Heathrow T5

Olympics



New/Better

- * Products
- * Services
- * Processes

Worldwide

Innovation in designing it



Innovation in building it

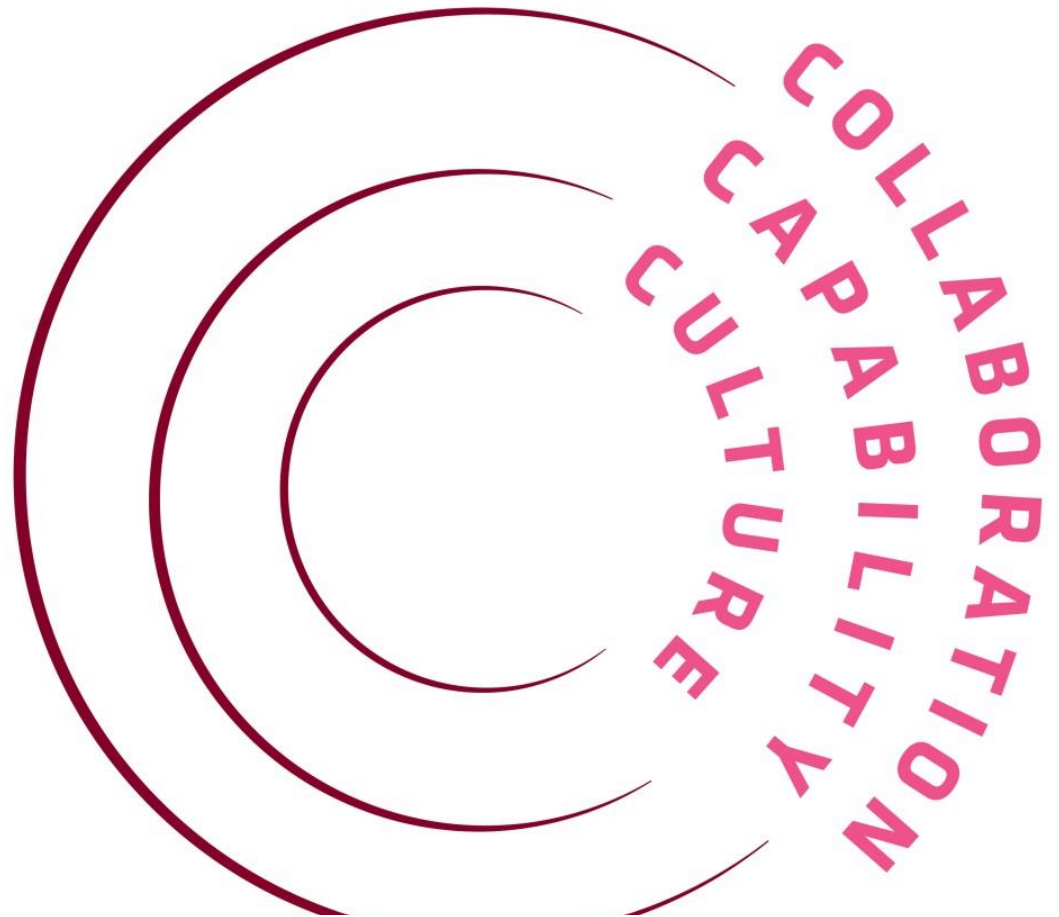


Innovation in running it



Lessons from Previous Projects

From Mantra to Method



<http://learninglegacy.crossrail.co.uk/>

The Innovation Club

SIEMENS



SKANSKA

MORGAN
SINDALL



INNOVATE

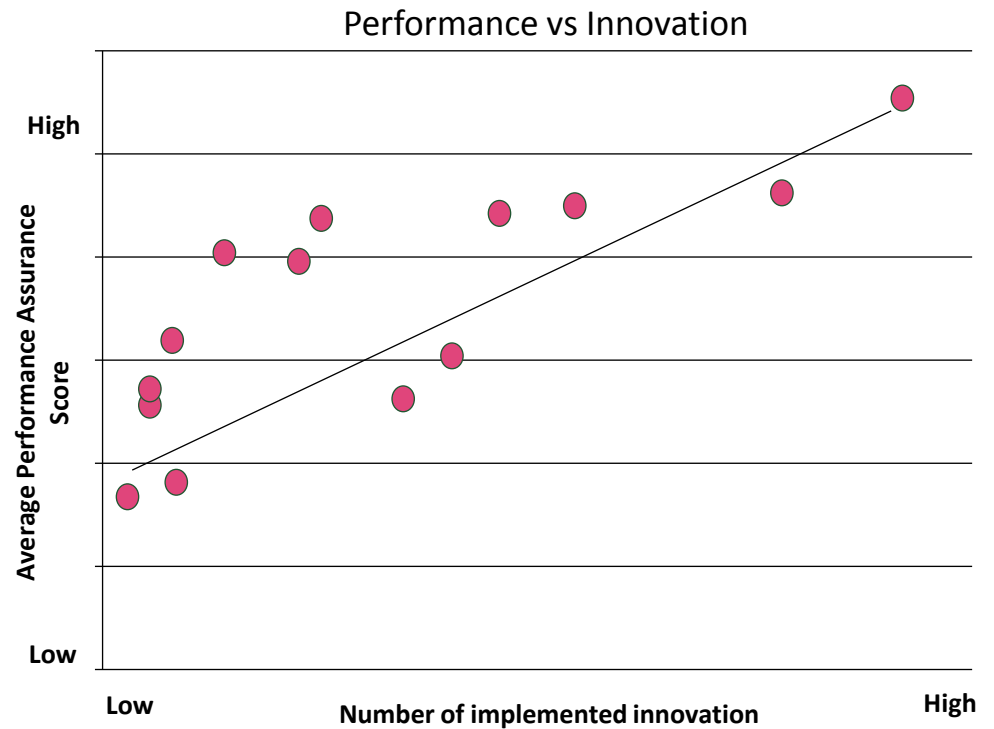


ALSTOM



Benefits

- Access to funds and resources
- Closer working relationships
- Industry value sharing of knowledge
- Major Clients can support innovation



The Learning Legacy



Crossrail
Strategy

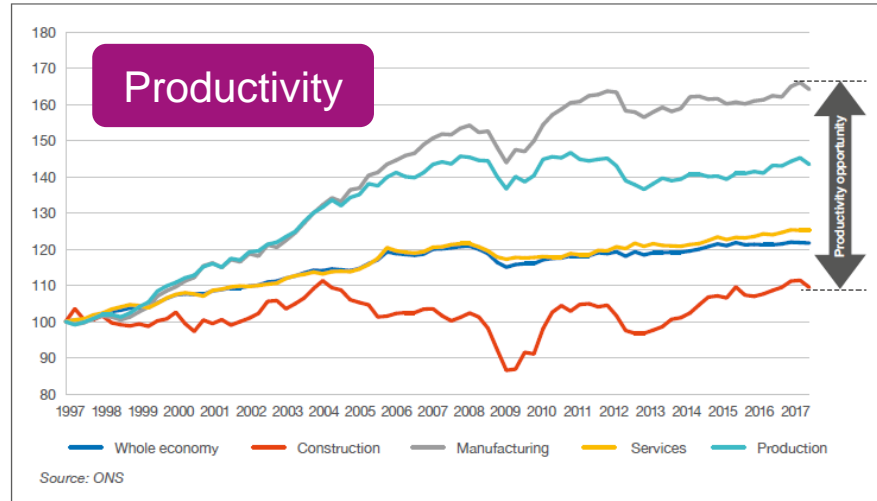
Making Innovation
in a Megaproject
Davies et. al 2015

From Mantra to Method,
DeBarro et. al 2015)

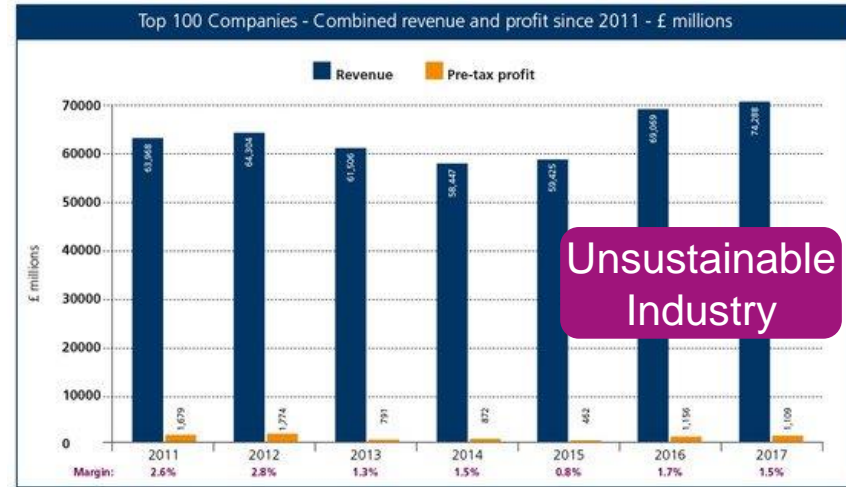
<http://learninglegacy.crossrail.co.uk/>

THE DRIVERS FOR CHANGE

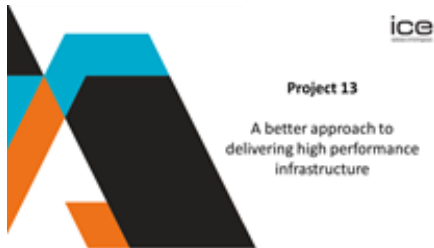
Chart 1: Productivity Growth – Output per worker (1997=100)



Source: McKinsey&Company, "The construction productivity imperative" By S Changali, A Mohammad and M van Nieuwland, July 2015



Source: Construction Leadership Council, "The Farmer Review – Modernise or Die" By M. Farmer 2016



Digital Transformation



The Capable Owner

Ensures the right infrastructure is created, operated and maintained by:

- Articulating the voice of the customer
- Value-driven mindset
- Articulating the voice of operations
- Relating to the ecosystem (supply chain)
- Creating and maintaining complex systems
- Recruiting, building and maintaining talent



Future Heathrow



Expansion will unlock a £16 billion private sector investment creating up to 40,000 new local jobs and 10,000 apprenticeships by 2030

LOGISTICS HUBS

HEATHROW IS LOCATING **FOUR LOGISTICS HUBS** ACROSS THE UK, SPREADING THE ECONOMIC BENEFITS OF EXPANSION TO COMMUNITIES ACROSS BRITAIN



SKILLS: Each logistics hub will create demand for both a skilled and semi-skilled workforce



SUPPORT: Local political or business support will ensure the benefits created are secured for the long-term

SUPPLY CHAIN:

Opportunity for SMEs in every corner of the UK to access Heathrow's supply chain

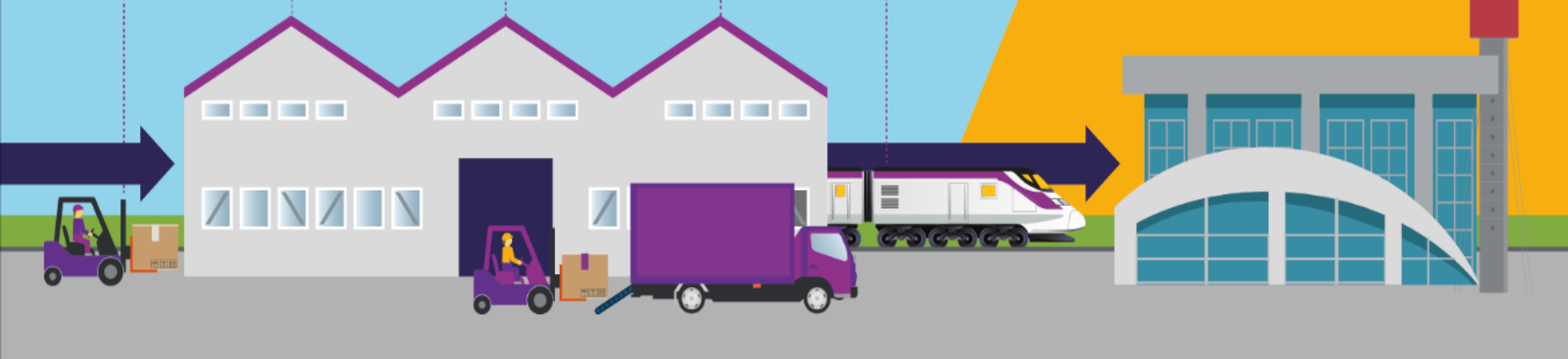


COLLABORATION:

The hubs will allow for potential collaboration with other infrastructure projects

CONNECTIVITY:

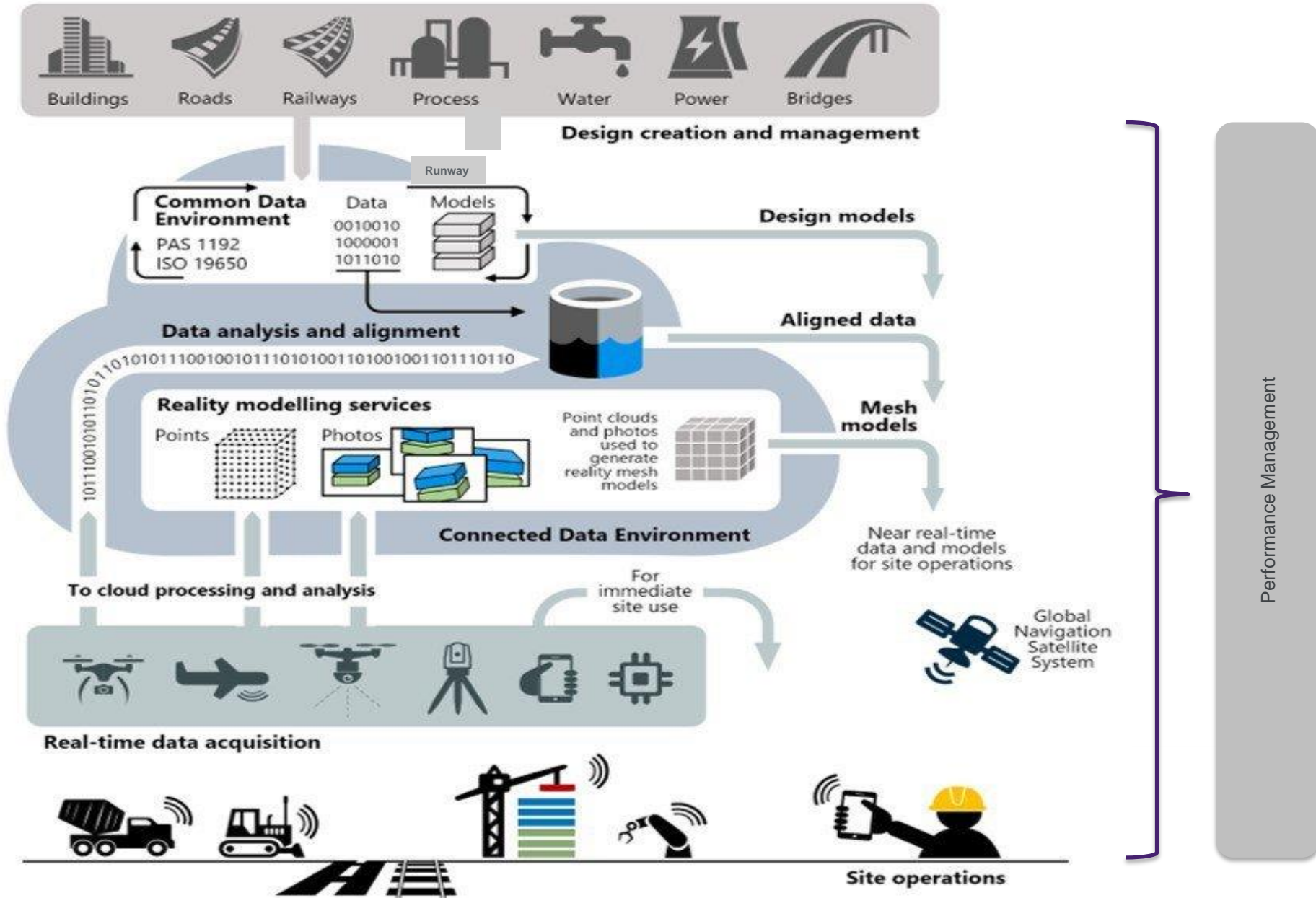
Good connections will allow consolidated loads to be transported to Heathrow just as they are needed



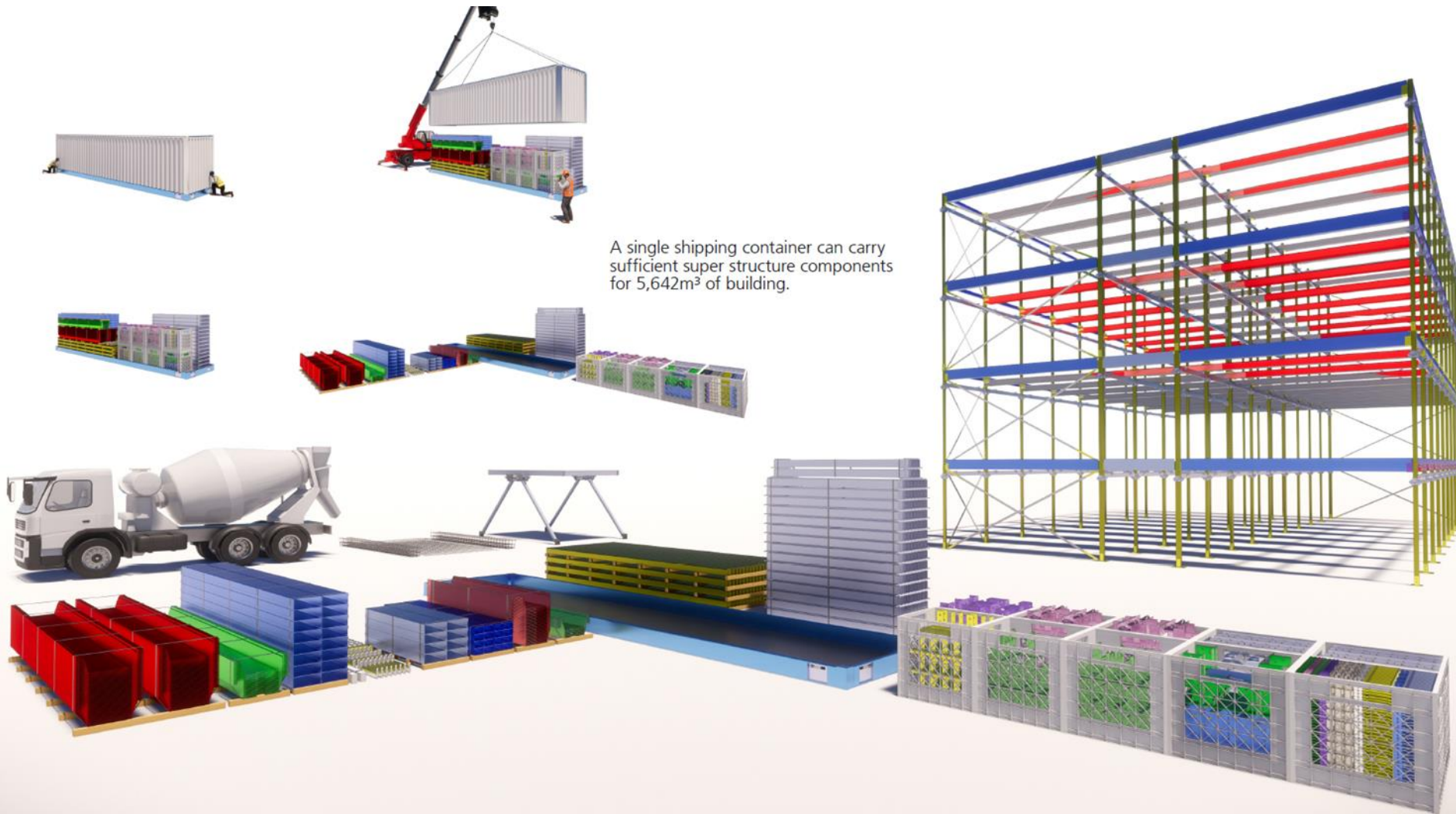
Heathrow

Making every journey better

THE DIGITAL TWIN

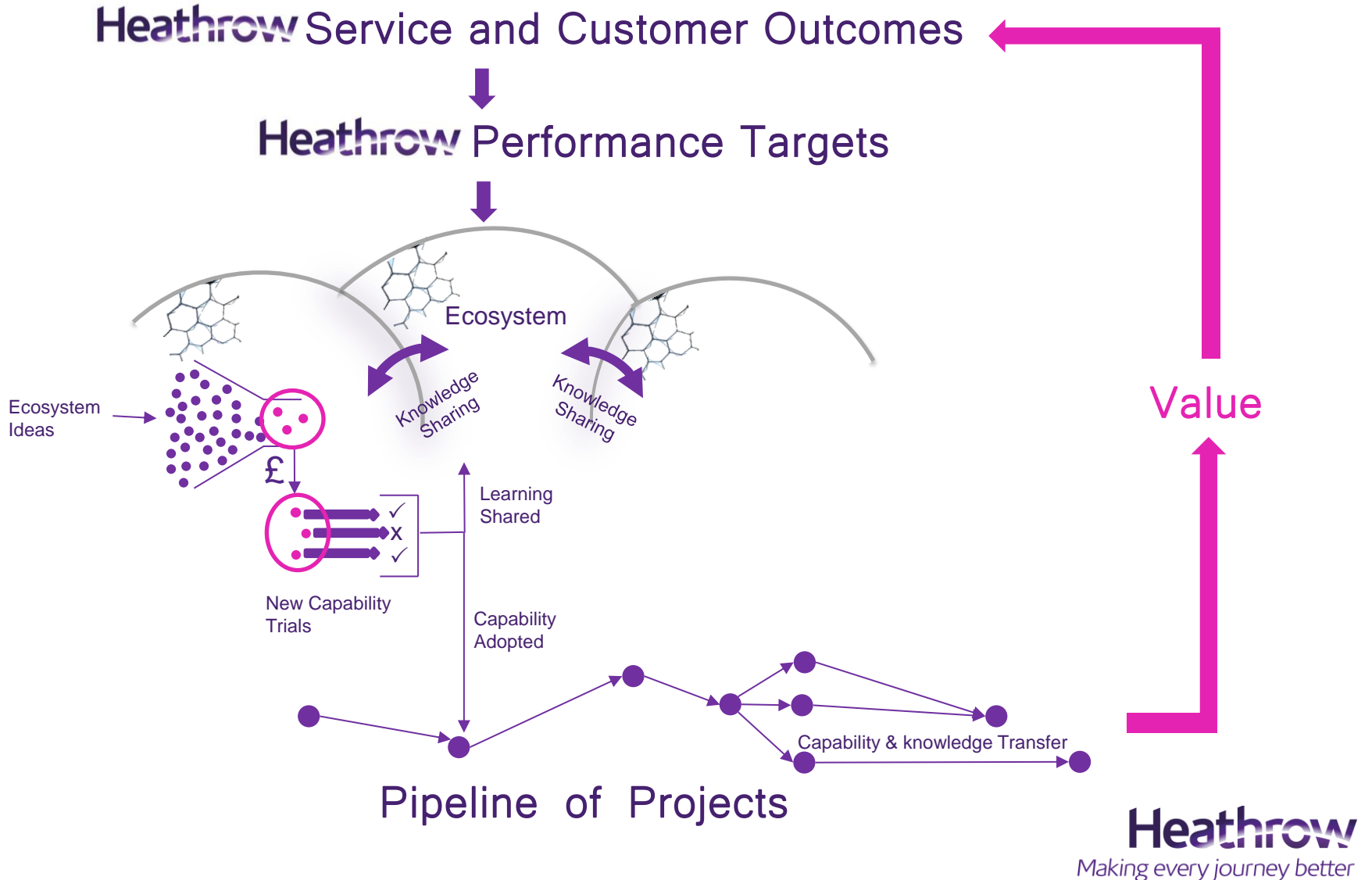


BUILDING IN A BOX



A single shipping container can carry sufficient super structure components for 5,642m³ of building.

VALUE CHAIN ECOSYSTEMS



WHAT YOU CAN DO...

- Encourage a culture of collaboration
- Pursue ideas and build capability
- Establish your ground rules for sharing
- Pinch ideas with Pride
- Develop partnerships



Heathrow

Building for the future