

3 Legs, 4 Questions and Future Building

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Innovate UK is the UK's Innovation Agency

We fund, support and connect
innovative businesses to accelerate
sustainable economic growth

But why innovate?

UK is 1% of the global pop. with 4% of global wealth
UK R&D spend is £18bn ~2% of our GDP. Think that's a lot?

China's R&D spend is about the size of the entire UK health budget. In 2011 China filled more patents than the US

China's R&D spending is almost entirely focused on **development and demonstration** (95%).

This provides a huge capability in refining technologies for the market and scaling up manufacturing

UK £18bn



UK Construction Weaknesses

Poor Integration: “...fracture between the management of construction and its execution”

High Costs: “...driven by inefficient procurement and processes”

Low Levels of Innovation

Lack of Career Attraction

Cinema built 75cm out of line to be pulled down

Grant Prior | Thu 16th May | 7:30

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Britannia Construction will have to dismantle and rebuild an £8m cinema currently under construction in Cambridgeshire.

The Cineworld complex has been found to be 75cm out of place prompting complaints from local residents.

Britannia has blamed the design consultants for the mistake

Work has been under way on the Rowley Arts Centre site in St Neots since November.

Rebuilding work could cost up to £1m and will delay the completion date from September to January 2014.

Chris Goldsmith, from the developers Turnstone Estates told the BBC: “We have taken the unprecedented step of halting the existing work and having parts rebuilt to assuage any concerns that adjoining landowners may have.

“Although we are only talking about a few centimetres, we



The steel frame will now be pulled down

One million new recruits needed to hit housing targets

Grant Prior | Fri 5th June | 7:15

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Consultant EC Harris claims companies will need to recruit one million new workers by 2020 to meet Government house building targets.

The key trades in demand will be bricklayers, plasterers, scaffolders and roofers while quantity surveyors and architects are in shortest supply among the professions.

Site management will also need a massive boost in numbers to prevent “market failure – where too many firms chase too few resources – disrupting production on site and contributing to an inflationary wage spiral.”

EC Harris experts believe that access to labour and money is more important than planning and land availability in determining how the housing crisis should be resolved.

The whitepaper [People and money – fundamental to unlocking the housing crisis](#), focuses on the limits to current house building capacity.





Balfour Beatty suffered a series of difficulties last year, and is in the middle of a restructuring

Chinese builder considering bid for UK's Balfour

■ BY CAITLÍN MORRISON

BRITISH construction group Balfour Beatty is being considered as a potential takeover target by the China Civil Engineering Construction Corporation (CCECC), despite chief executive Leo Quinn's commitment to keeping Balfour an independent company.

The Chinese state-owned firm is reported to be in talks with the aim of making an offer for the company, which is in the middle of a group-wide turnaround.

Balfour issued five profit warnings in 2014,

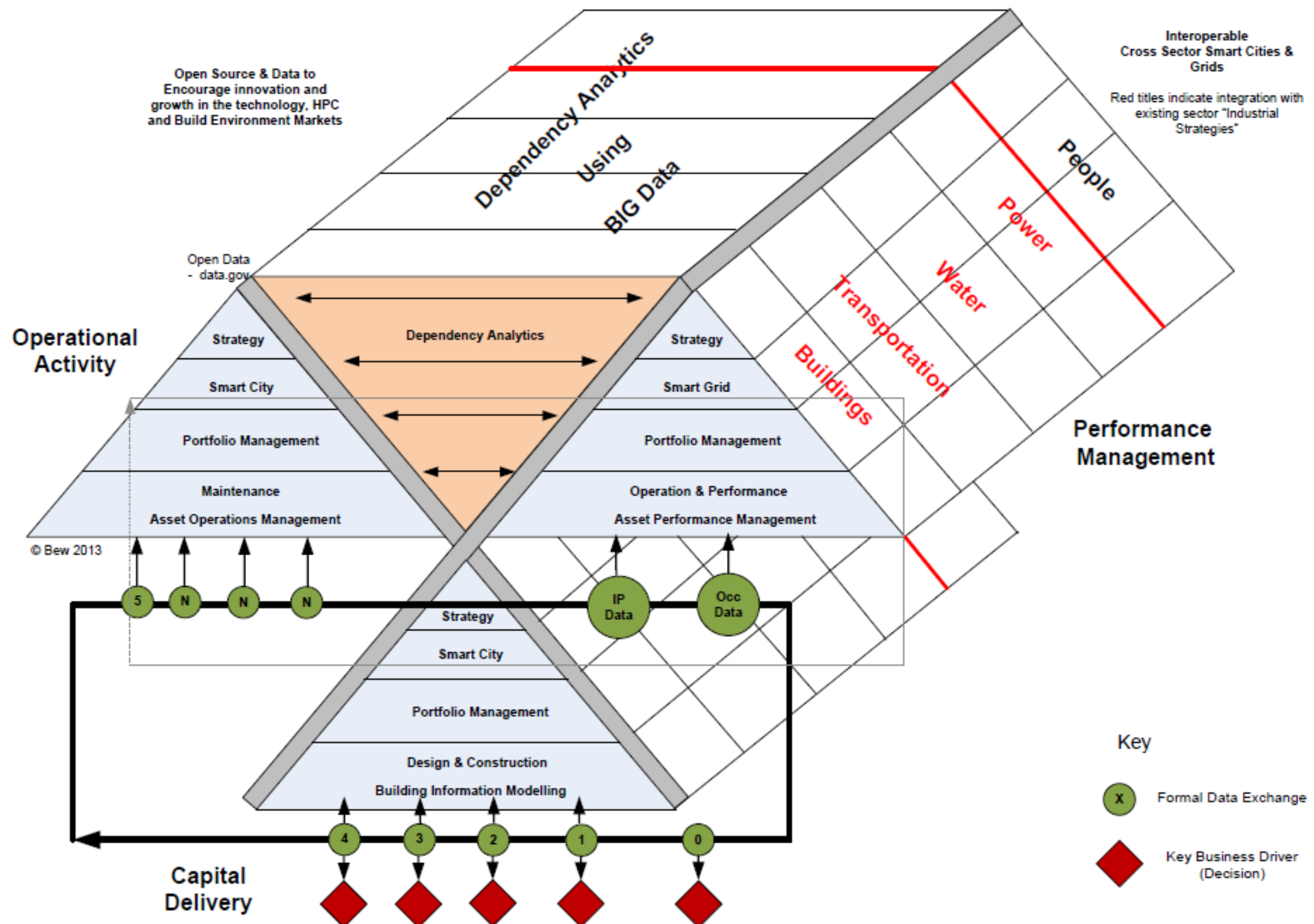


“We have world class capability in architecture, design and engineering and British companies are leading the way ... with the global construction sector forecast to grow by up to 70% by 2025”

Dr Vince Cable

“The time has come for the construction sector to reform by seizing the opportunities offered by the Digital Economy ...the demands on finite resources more challenging and the need to look overseas for growth and opportunity has never been more pressing.”

Sir David Higgins –Chair HS2



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Sustainable technology 'greening' our toxic buildings

By Matthew Wall
Business reporter, BBC News

🕒 23 May 2014 | [Business](#)

UK startup Q-Bot triumphs at robotics extravaganza with its insulation-fitting robot

The robotics company has been founded by serial entrepreneur Tom Lipinski.



By [Sam Shead](#) | Jun 05, 2015 | [Comments](#)

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You can huff and puff but this house won't blow down! Seven new STRAW homes go on sale in Bristol

BY NE DENTON FOR THIS IS MONEY

ISHED: 12:45, 9 February 2015 | UPDATED: 15:32, 9 February 2015

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Initial buyers looking for an environmentally friendly home can snap up a straw home in Bristol, thanks to a project by the University of Bath and architectural firm ModCell.

Homeowners are being promised fuel bills up to 90 per cent cheaper than in a standard brick-built house and a purchase price below the average cost of a house in Bristol, which is currently

10 million tonnes of would-be waste straw going spare in the UK, it is not surprising that a new housing development is currently underway in Cornwall.

Smart city innovators win £50,000 and a chance to help shape Wood Wharf

10:42, 15 MAY 2015 | BY GILES BROADBENT

Winners of latest round of Cognicity Challenge are revealed at Level39

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SEaB Energy, winners of the Integrated Resource Management stream

very.co.uk SHOP

Only £39	Only £30	Only £49
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SUMMER DRESS

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Technology Strategy Board

Future building

The Low Impact Building Innovation Platform

goo.gl/BgCQmK

So what have we delivered?

20 major competitions

580 projects

£118m funding to UK businesses

800 companies funded

Components and Materials, AIMC4, Retrofit for the Future, Design and Decision Tools, Energy Efficient Whitehall, User Centred design, Design for Future Climate, Ultra-Efficient Lighting, Smart Meters Smart Homes, Smart DC Home SIG, Building Performance Evaluation, Rethinking the Build Process, Invest in Innovative Refurb, Buildings Better Connected, Localised Energy Systems, EracoBuild, Scaling up Retrofit, Future Energy Management for Buildings, Digitising the Construction Sector, A Digital tool for BIM, Building Whole Life Performance, Supply Chain Collaboration in Construction

<https://goo.gl/CEvZe6>

What's next?

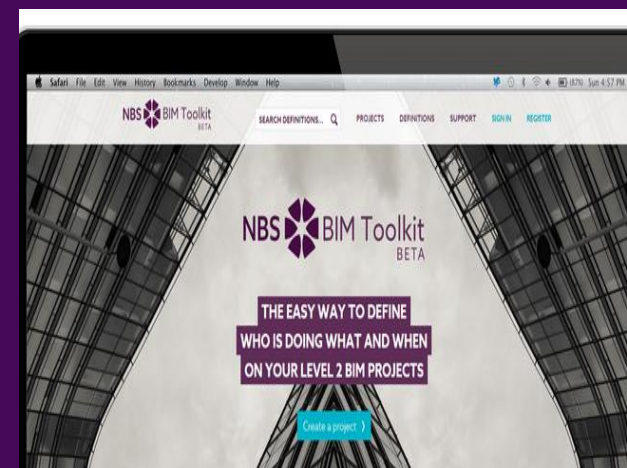
D4FC



BPE



BIM Toolkit

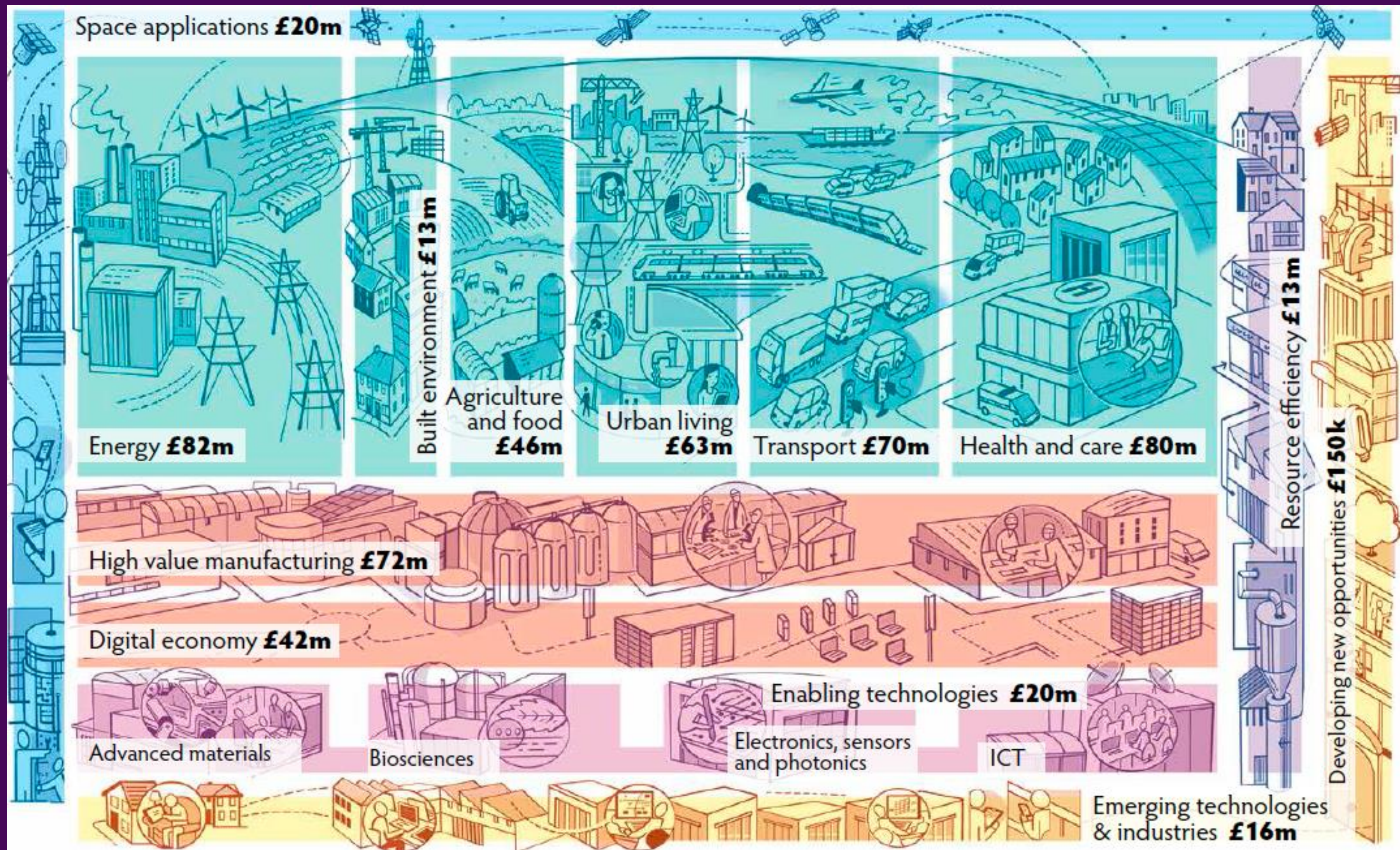


AEC Hackathon

16-18 July



Innovate UK on a Page



3 Legs...



Funding, Support



Networks, Opportunities

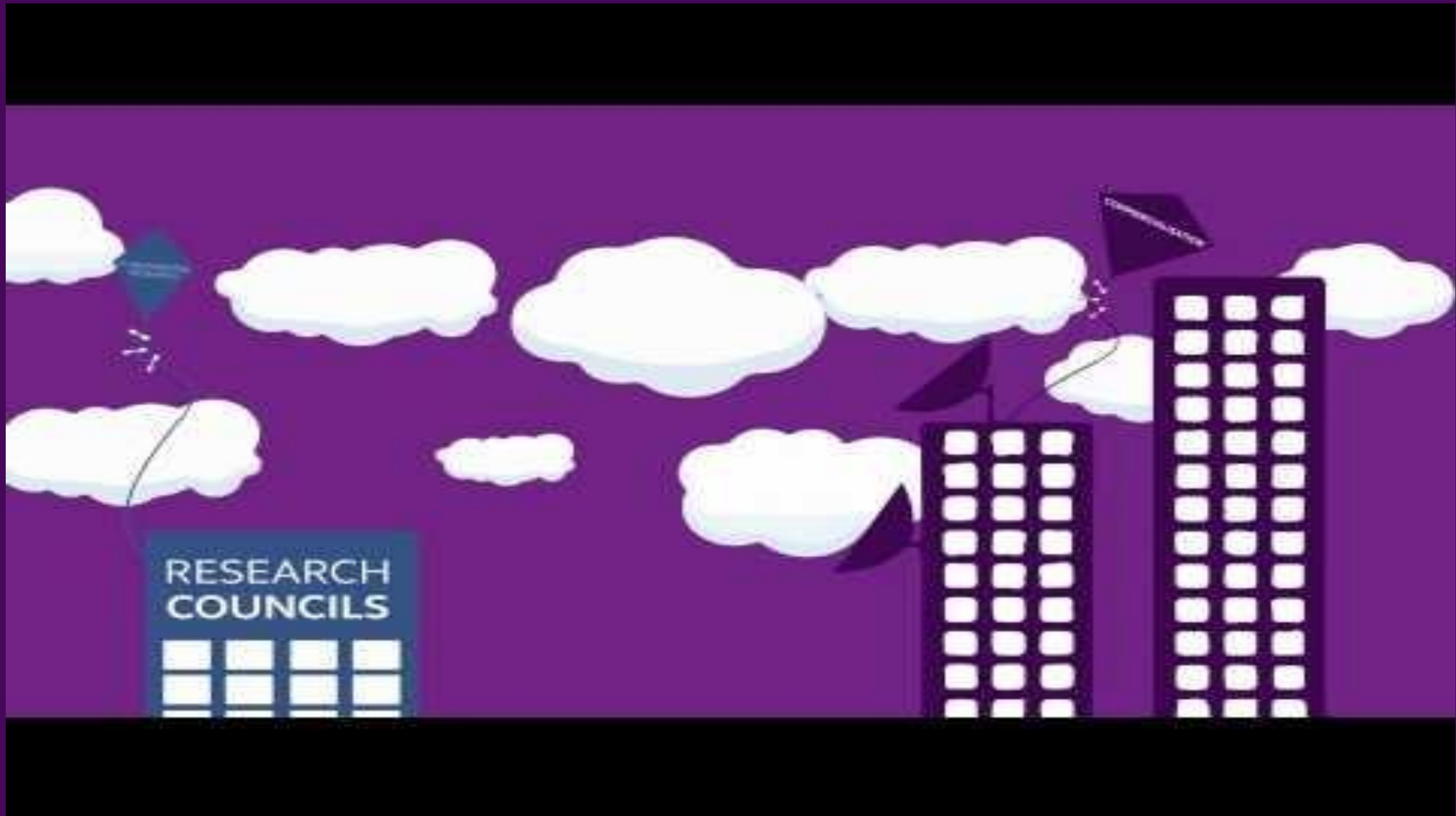


Facilities, Commercialisation, Exports

4 Questions...

1. Is there a big enough market?
2. Can the innovation be world leading?
3. Is it at the right stage of development?
4. Why should we use public money to help?

The Application Process



<https://www.youtube.com/watch?v=S-rnSplMiPc>

Thank You!

@simonLIBP

www.linkedin.com/company/the-built-environment