Adapting Buildings for Resilient Cities
25 February, Brunel University London
How we got to here? - Developing our objectives

“The KTN is an independent network that speeds up innovation...

We are:

• A trusted friend for organisations looking to grown and capitalise on an innovation agenda.
• A purpose built operation with a unique view of the overarching innovation landscape
• Here to help you engage with the funding competition landscape
  • Helping you through this process – application assistance – access to Funding and Finance
  • Connecting you to collaborators
• Bringing people together who wouldn't normally get the opportunity to meet
• Connecting organisations to the Innovate UK toolkits

We probably know someone who needs to know you
We are likely to know the people you need to be introduced to?
KTN’s Objectives

• Increase business-led R&D in the UK

• Facilitate exploitation of R&D to capture more UK value from innovation

• Increase collaboration between businesses (B2B) and between business and research base (B2R) for UK benefit

• To be the "Go to" organisation for businesses wanting to undertake innovation

• To be a highly effective organisation
Innovate UK – Funding the gap, but not the entirely of UK innovation

5 Key strategic Areas:

- **Accelerating UK economic growth**, nurturing small, high-growth companies, helping them to become high-growth mid-sized companies with strong productivity and export success.

- **Building on innovation excellence throughout the UK**, investing locally in areas of strength.

- **Developing Catapults within a national innovation network**, to provide access to cutting edge technologies, encourage inward investment and enable technical advances in existing businesses.

- **Working with the research community and across government** to turn scientific excellence into economic impact, and improve efficiency.

- **Evolving funding models**; exploring ways to help public funding go further.
Why are we doing all this?

- The top 6% of High-growth firms delivered 50% of the UK’s employment growth (2002 – 2008)
  - High-growth firms spend more on innovation
  - High-growth firms are more productive.

For more High-growth firms, the UK needs:

- An accessible and robust access to finance arena
  - Harnessed Government procurement that provides a market for Business innovation
  - Strong networks that brings the research base and business together
  - Investment in a skilled and creative workforce
The R&D Funding Landscape

UK GDP
1.67 TRILLION (2012)

Lower than EU average

Out of the top 20 R&D investors globally, ¾ have R&D bases in the UK

75%

GRANTS DIRECT FROM GOVERNMENT
SCIENCE & RESEARCH BUDGET
R&D TAX CREDIT
BUSINESS SPEND

5.6 BILLION
1.3 BILLION
1.4 BILLION
17 BILLION
27 BILLION

1.7%
Here to help you strategise and approach the competition landscape

To note:
Innovate UK are looking to simplify.

The KTN now operates a dedicated Access to Finance operation
KTN Built Environment Themes

Digitising the Construction Sector
- Showcasing Innovate UK Digital Tool for BIM free web tool
- Working with cross section of BIM community to identify the learning requirements of unengaged clients & product manufactures.
- Report: Data sharing, use and Security

Large Asset Management and Monitoring
- Sensor Innovation and deployment
- Building Monitoring case study showcasing
- Report: Whole Life Costing

Offsite Manufacturing
- Identify key drivers, challenges, and opportunities
- Opportunity development on Smart Materials
- Connecting and supporting the High Value Manufacturing Catapult
KTN Built Environment Themes

Future Energy Management
- Innovation opportunities identification
- Development of a Special Interest Group (SIG)
- Identifying and engaging additional innovators and early adopters

Building Performance Evaluation
- Collaboration with the Digital Catapult
- Non Built Environment sector awareness

Supply Chain Integration
- key innovators; clients, user, & specifier innovation champions; and researchers
- Accelerate innovation via a support programme for the Innovators
- Stimulating thinking and debate towards future developments
**KTN Built Environment Themes**

**Infrastructure Systems Integration**
- Report: Business case for increased CAPEX leading to reduced OPEX and therefore reduced life costs, TOTEX
- Report: Identify where assets and resources can be shared/linked to reduce costs and repeated road works

**Infrastructure Risk and Resilience**
- Drive the move towards increased readiness with innovative solutions to reduce risk and increase resilience.
- Enable better risk assessment to encourage increased acceptance of innovative solutions in major projects
- Share best practice and tap into SME innovations

**Smart Infrastructure**
- Support the working groups with knowledge of the UK research landscape
- Deliver a contract template to encourage risk sharing between the client and their supply chain and financiers
Maximising the outputs
http://buildingdataexchange.org.uk/
Maximising the outputs
https://connect.innovateuk.org/web/design-for-future-climate
Thank you for your time.. And happy to chat

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