

Setting the scene

How the UK supports innovation

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Innovate UK

Overview

- Introduction to Innovate UK
 - Who we are
 - What we do
 - How we do it
- The wider innovation landscape in the UK
- How we approach evaluation
- The future: UK Research and Innovation

Innovate UK – the UK's innovation agency

Innovate UK drives **productivity and growth** by supporting businesses to realise the potential of new technologies, develop ideas and **make them a commercial success**.

To **stay competitive as an advanced economy**, we need to do things that others cannot do, or to do things in different and better ways.



Investment of
£2.2bn
since 2007



industry match
funding taking
the total value
of projects above

£3.75bn



Up to
£16bn
in added value
to the economy



up to
£7.30

for every £1
we've invested.



We've funded around
11,000
projects

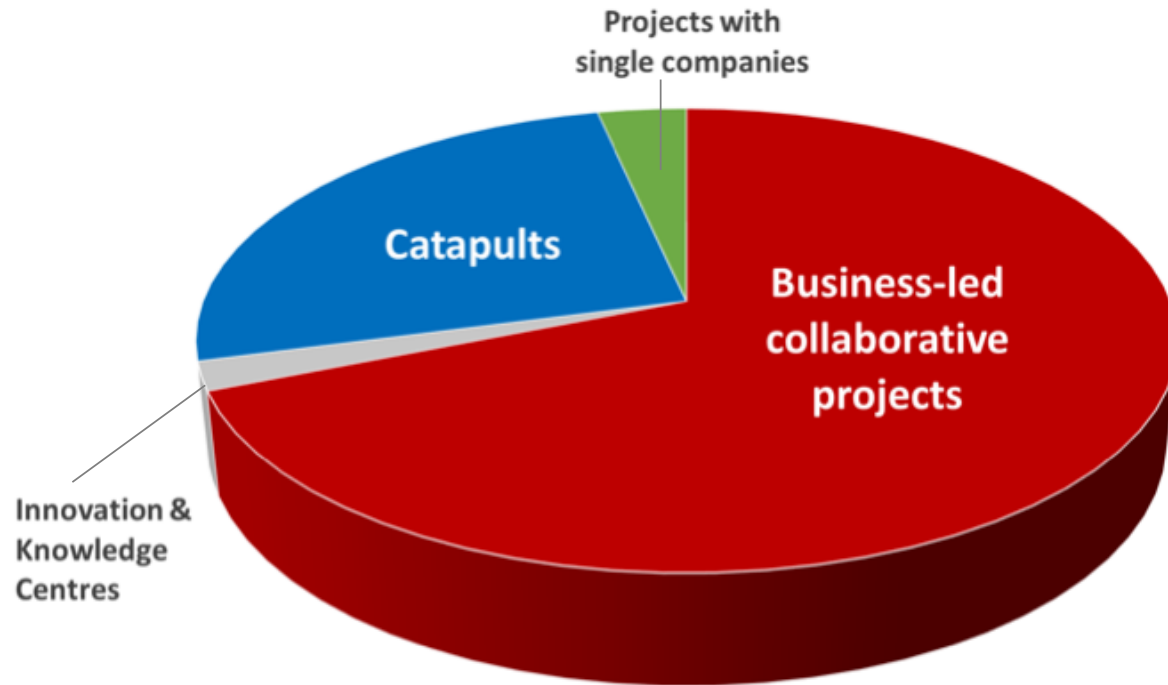
8 jobs for each
organisation
involved

8,000
unique
organisations
involved

70,000
jobs created in total



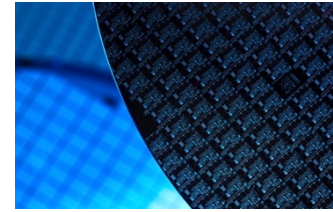
Where does Innovate UK funding go?



- ~80% of collaborative projects involve research base partner
- We work with >140 individual research base organisations (incl. Institutes and RTOs)

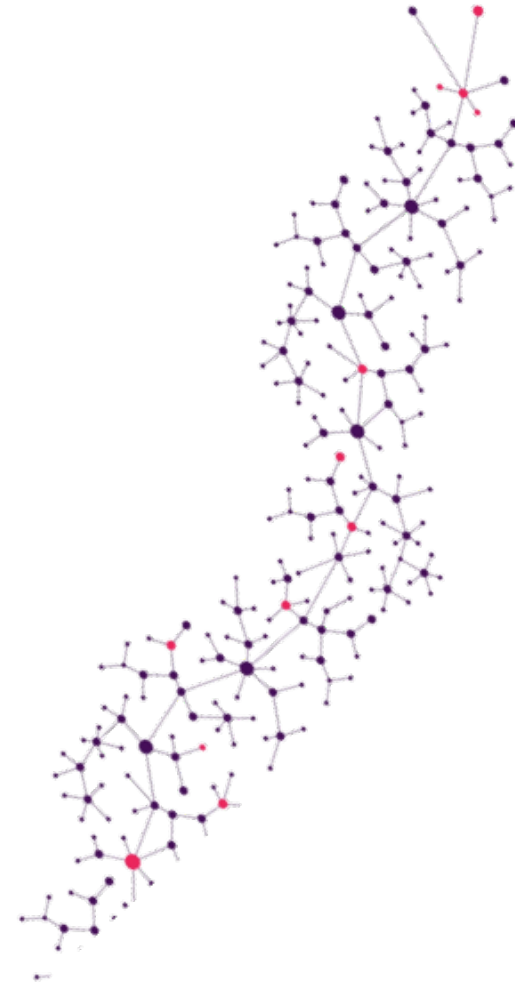
Interacting with businesses

- The role of our Innovation Leads
- Scoping funding competitions
 - What support businesses need in order to develop their technology and to grow and scale
 - What challenges existing projects/businesses have faced that further support could help with
 - Liaison with industry experts
- Follow-up with funded businesses
 - Monitoring Officer role in monitoring projects
 - Innovation Lead role in managing portfolio



Innovate UK's business networks

- **Linking businesses** with academics, government, partners and funding.
- **Guiding and helping businesses** navigate all the support opportunities that exist.
- The **Knowledge Transfer Network (KTN)** and **Enterprise Europe Network (EEN)** help companies nationally and regionally.



Driving innovation by developing talent

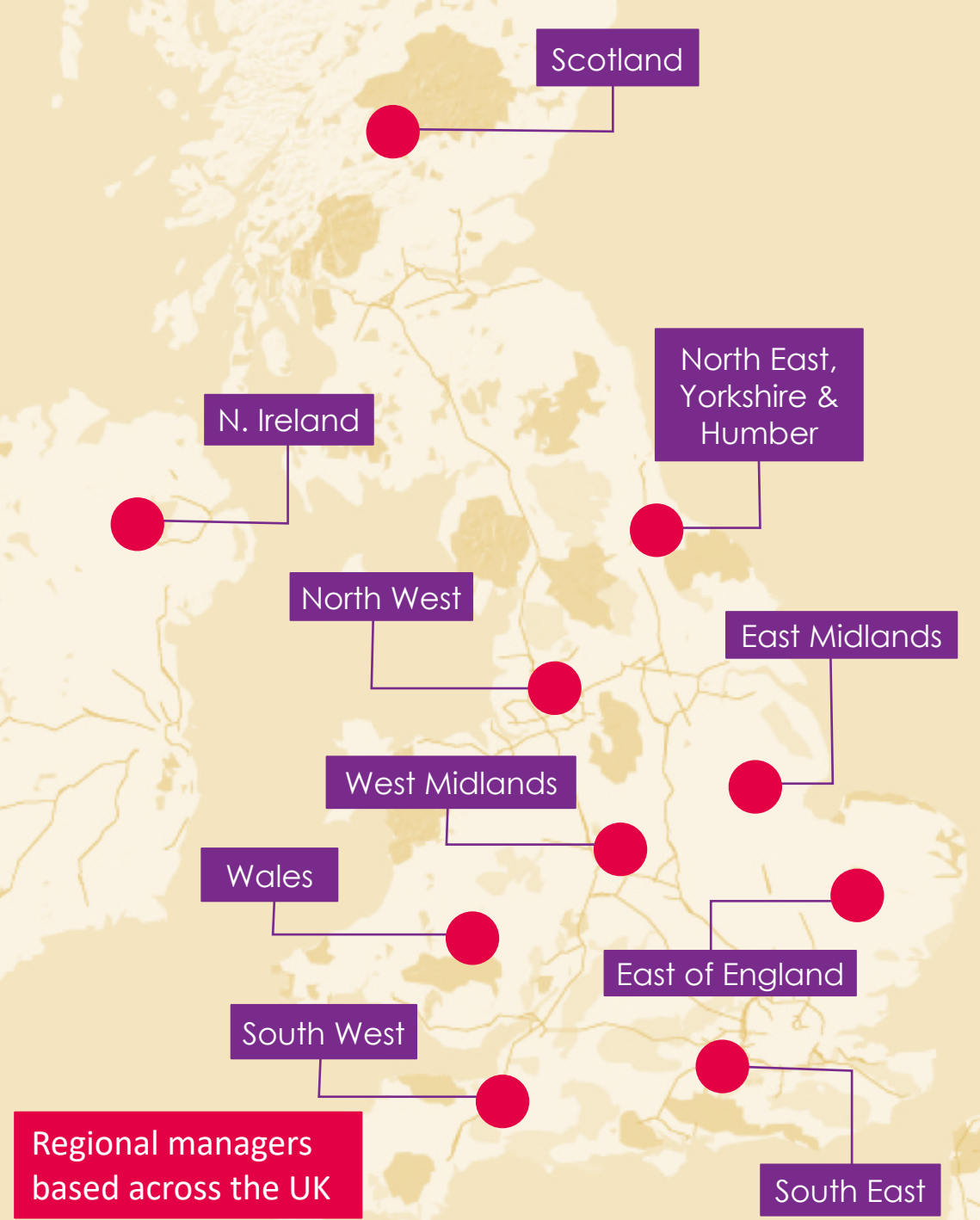


Knowledge Transfer Partnerships bring together academic expertise and growing businesses, developing skills

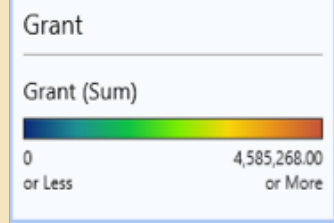


The infocus Women in Innovation funded 15 female entrepreneurs, the campaign received coverage through the BBC and the FT, and exhibited at the Getty Gallery

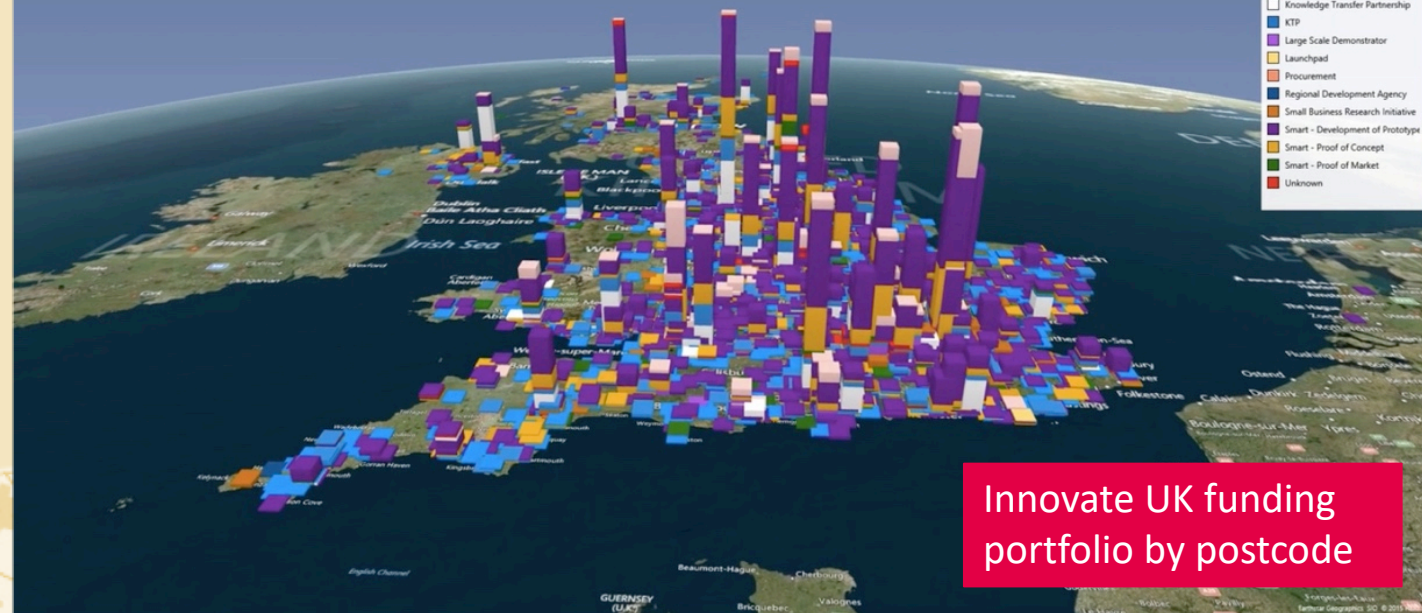




Regional managers based across the UK

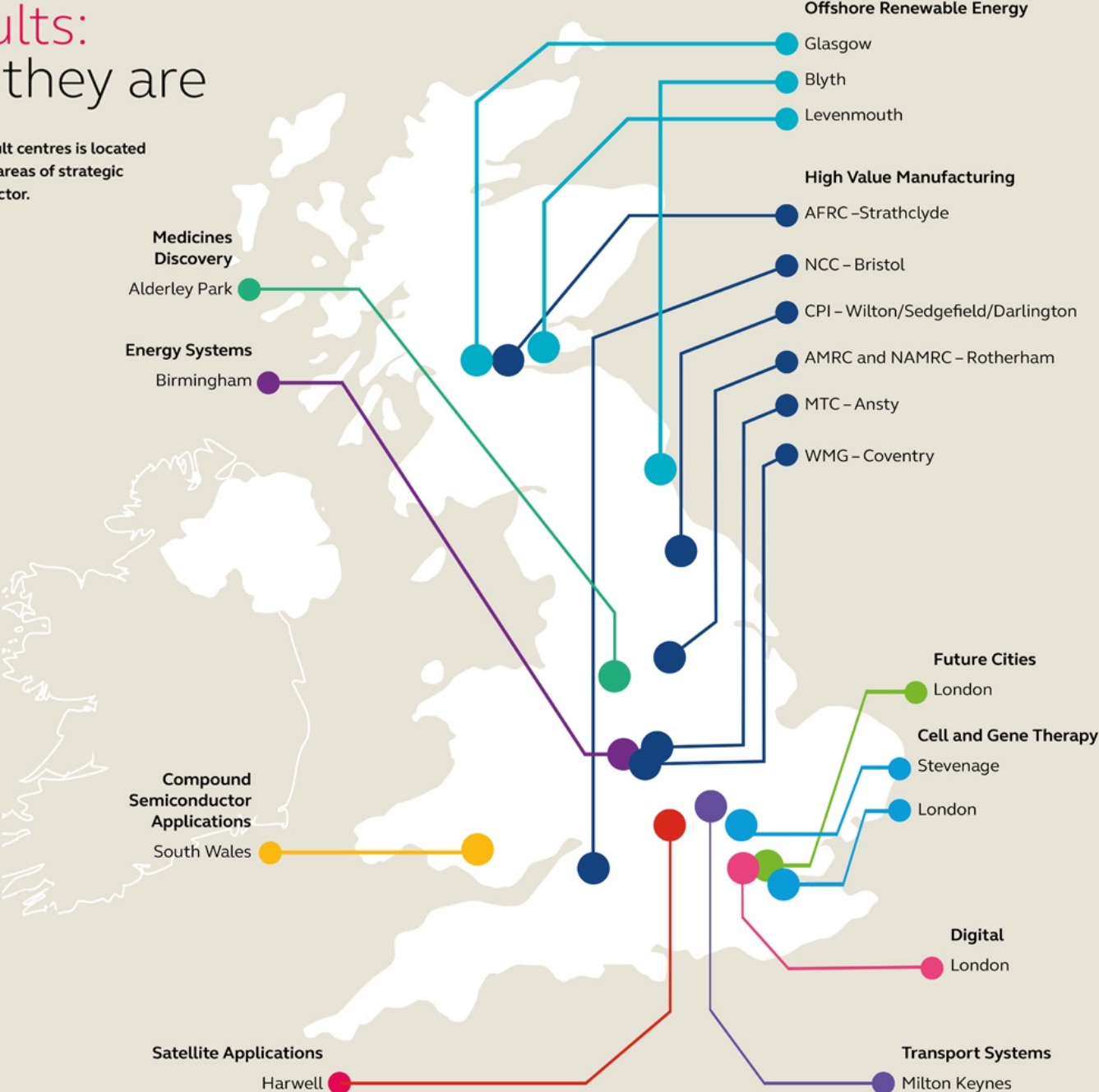


Place is key to innovation. We fund businesses throughout the UK and work closely with stakeholders in the regions and nations.



Catapults: where they are

Our network of Catapult centres is located throughout the UK in areas of strategic importance to each sector.



“To innovate, we need open centres where academia and business can get together and drive forward great ideas into manufactured products. And that’s what the Catapults are delivering for us.”

Juergen Maier, Chief Executive,
Siemens UK

Regional Centres

Digital	Satellite Applications
North East and Tees Valley	North East
Yorkshire	East Midlands
Brighton	South Coast
Northern Ireland	South West



Investing in science, research and innovation

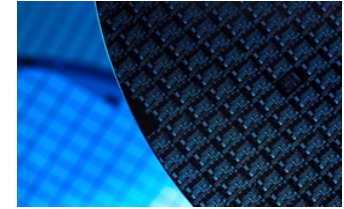
We must become a more innovative economy and do more to commercialise our world leading science base to drive growth across the UK

Industrial Strategy Challenge Fund

- Industry-led and powered by multi-disciplinary research and business academic collaboration
- Develop UK industries that are fit for the future, driving progress in technologies where the UK can become a world-leader in research and commercialisation

This is not business as usual....

- Focused on **improving productivity and economic benefit** across the UK
- Learning from the DARPA approach
- Clear **measurable** challenges are needed
- Needs clear **industry buy-in** to be successful and should be **ambitious**



Industrial Strategy Challenge Fund



Medicines manufacturing technologies

Robots for a safer world



Batteries for clean and flexible energy storage

Self-driving vehicles

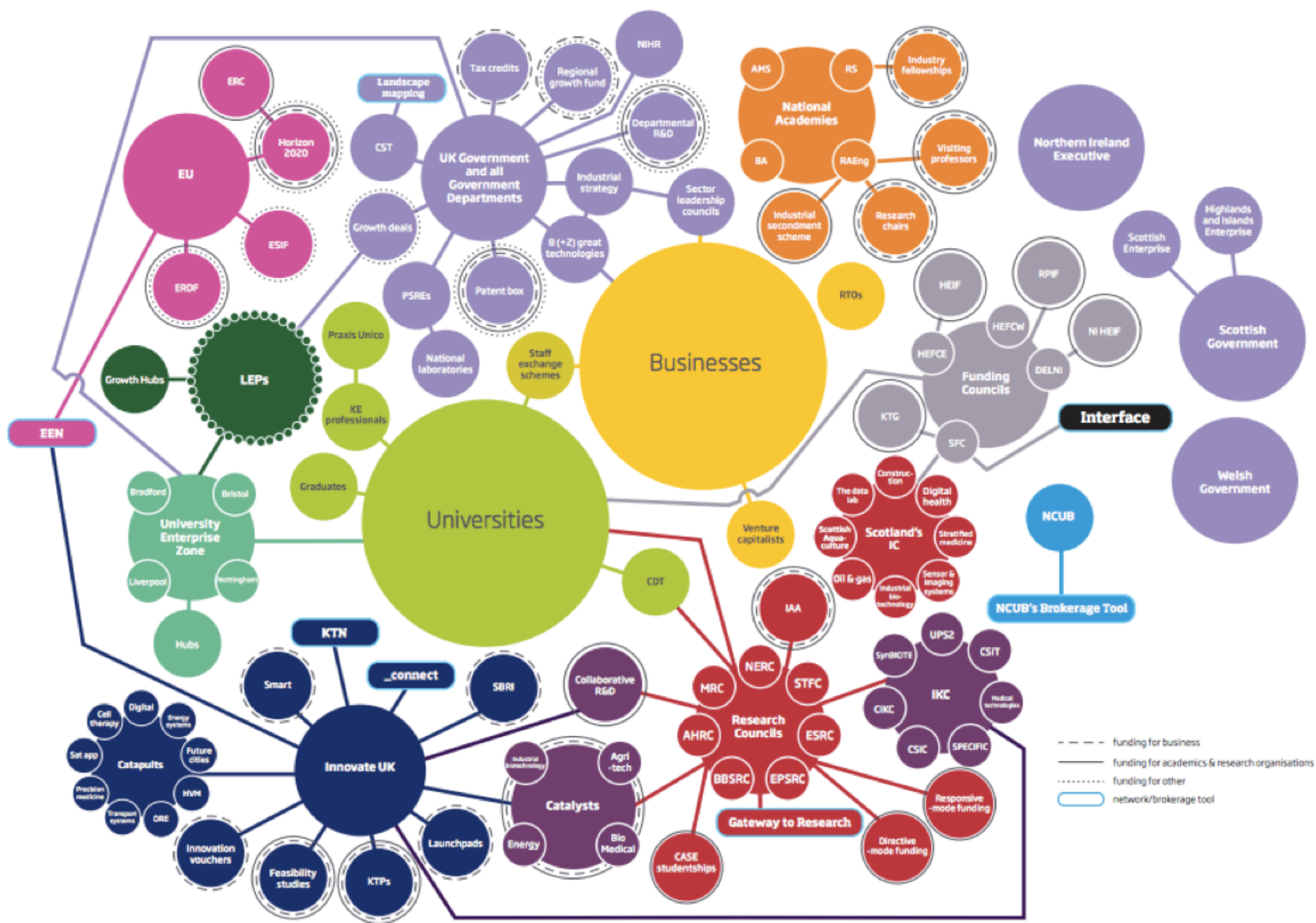


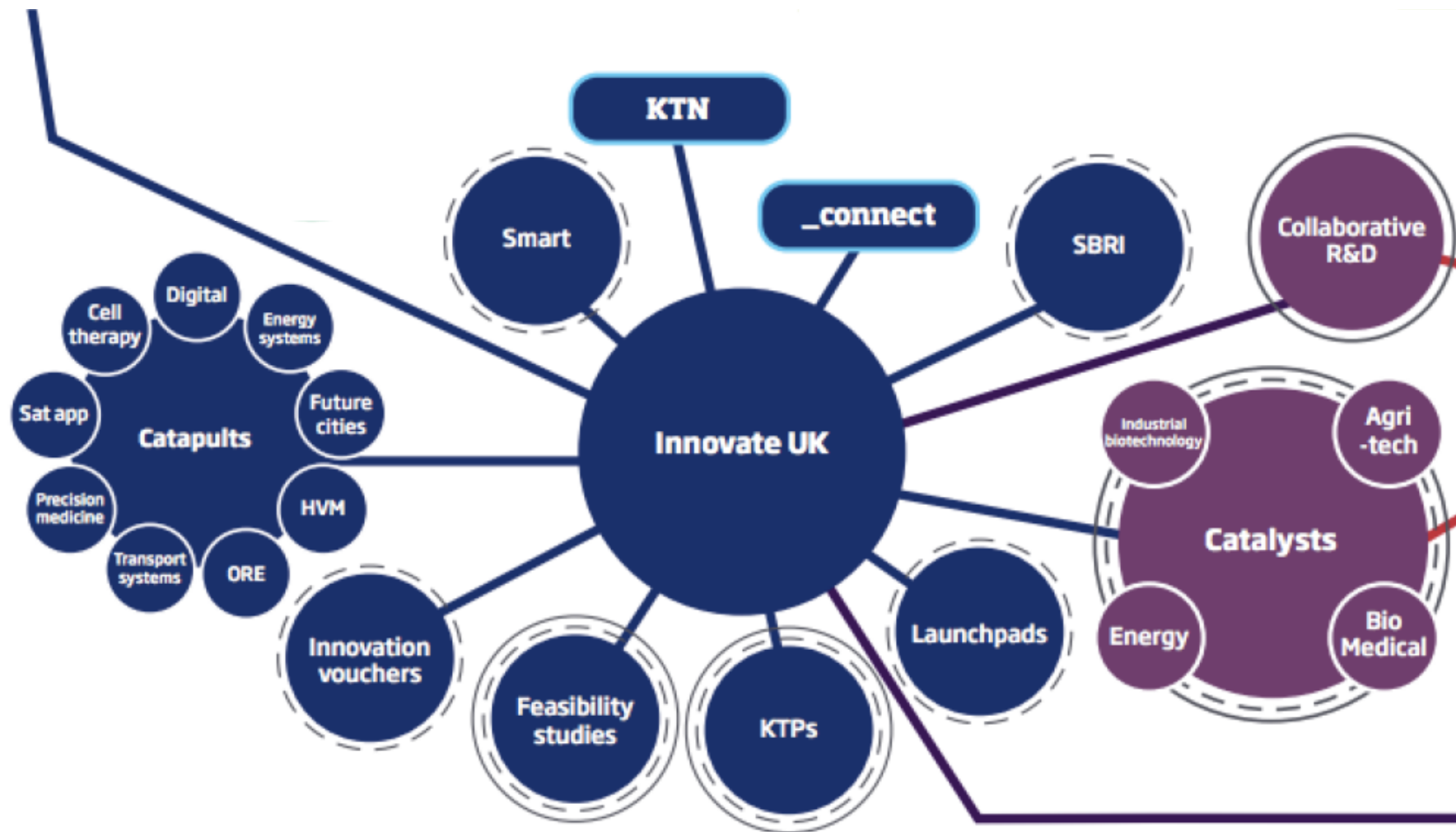
Manufacturing and materials of the future

Satellites and space technology



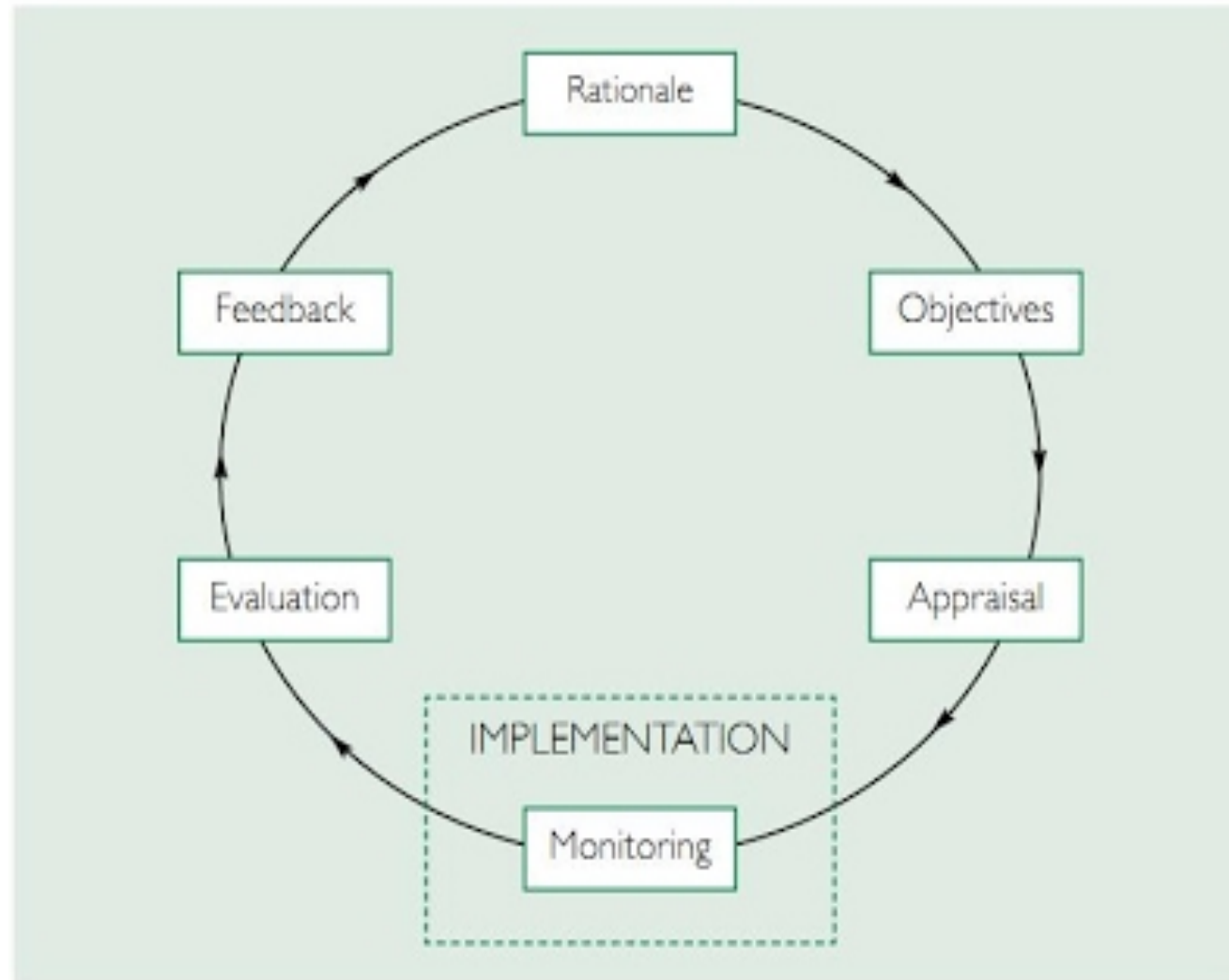
Innovate UK sits in a complex research
and innovation ecosystem





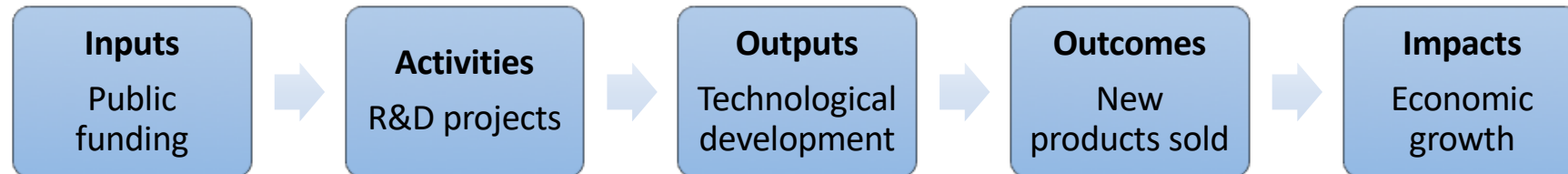
Approach to evaluation

Evaluation in Innovate UK – the policy cycle

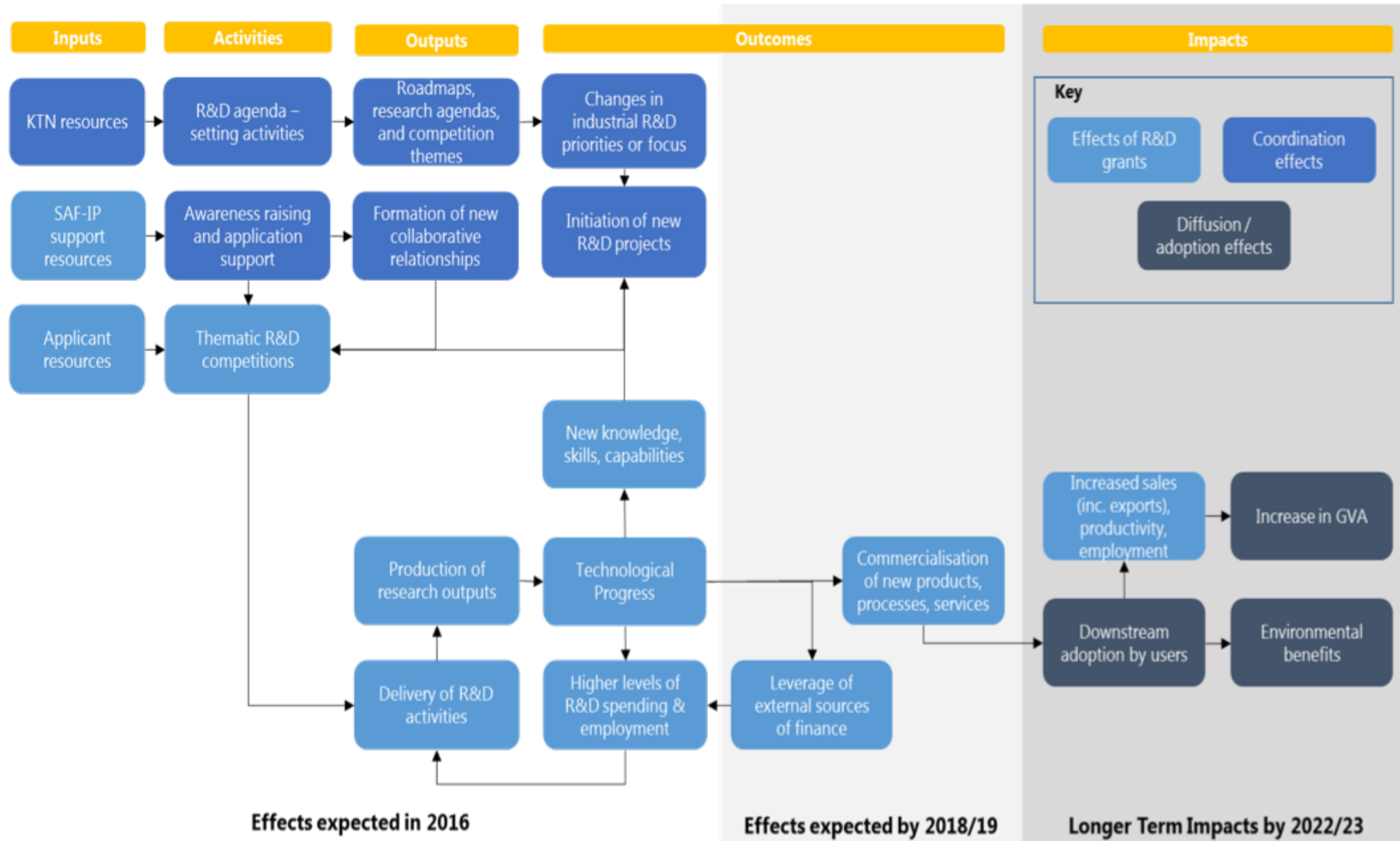


Evaluation in Innovate UK – design

- Our first step is to form the steering group.
 - In house evaluation lead
 - Programme lead
 - External stakeholders
- Next we design a logic model for the programme.



Logic model for the sustainable agriculture and food innovation platform



Evaluation in Innovate UK – design

- Consider adjustments to implementation to allow for more robust evaluation
- Define the audience(s)
- Identify the objectives and research questions.
- Identify the likely more appropriate evaluation approach(es).
- Define the monitoring framework.
- Define evaluation governance.

- Conduct the evaluation!

Evaluation in Innovate UK – commissioning

- Most of our evaluations are commissioned to external, independent researchers.
- Set the research specification for the evaluation;
 - Provide background to the programme, set out the research questions, and provide details on what data will be made available.
 - Set expectations around robustness – what we do, and do not, want to see.
 - We do expect to see a control group approach wherever possible.
 - Have an idea of what the most robust practical approach would be, but allow bidders space to make their own suggestions.
- Use an open, competitive procurement process

Evaluation in Innovate UK – control group

- Our funding for innovation is awarded competitively.
- A call for applications goes out, companies or consortia complete application forms, and these are scored and ranked.
- We fund from the top, with an element of portfolio building.
- We stop funding *either* when we run out of money, or a pre-agreed quality threshold is reached.

- On average, we want to fund around half of all applications, but can only afford to fund a quarter.
- The “high-quality, unsuccessful” group therefore becomes our most solid control group.

- But it is still not perfect...

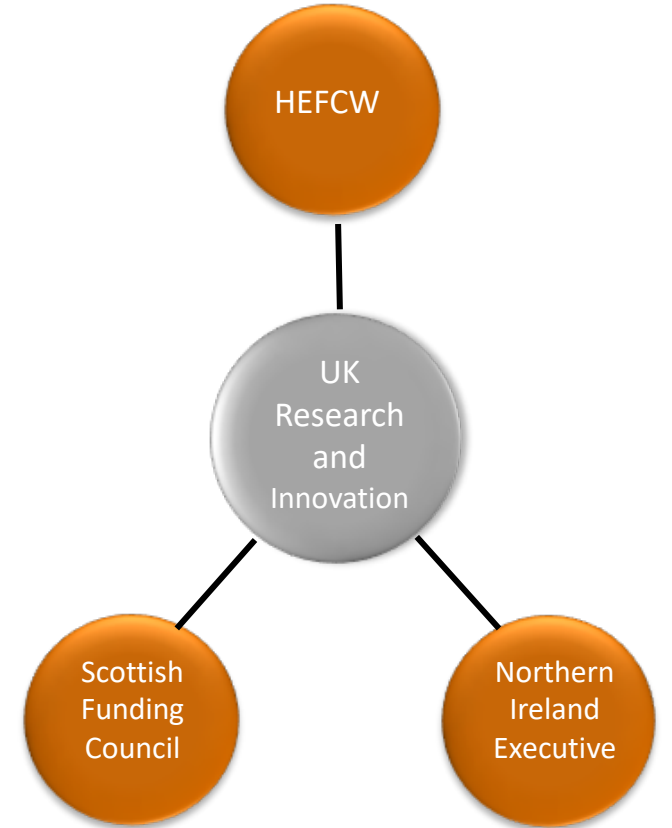
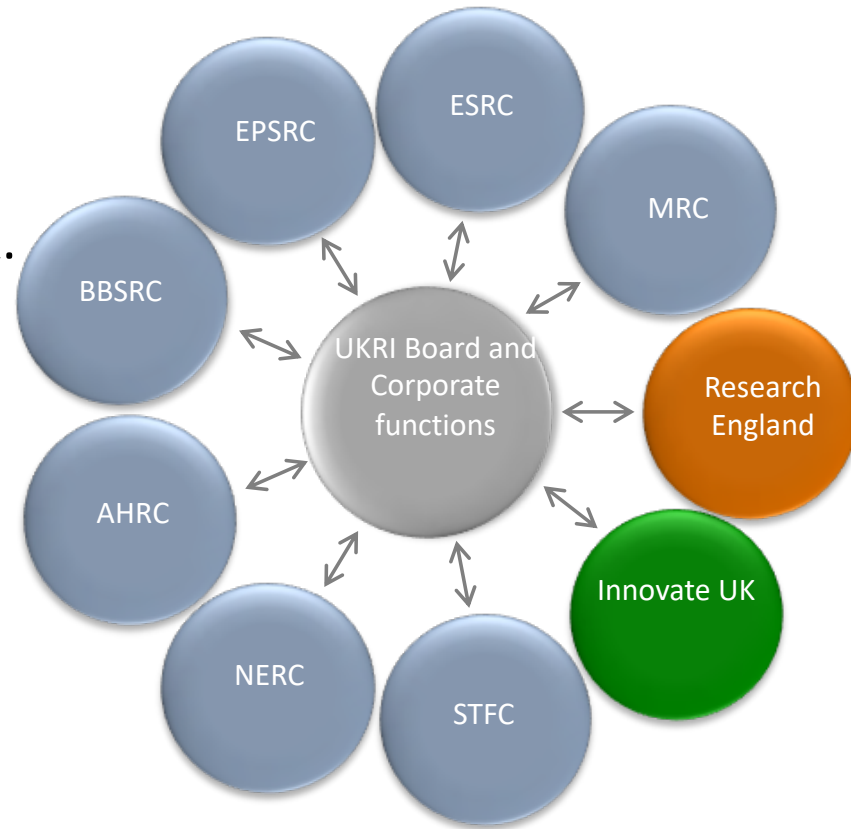
Evaluation in Innovate UK – methodologies

- Randomised control trials
- Regression discontinuity design
- Difference-in-difference analysis (with or without matching)
- Qualitative approaches;
 - Case studies
 - Interviews
- Contribution analysis

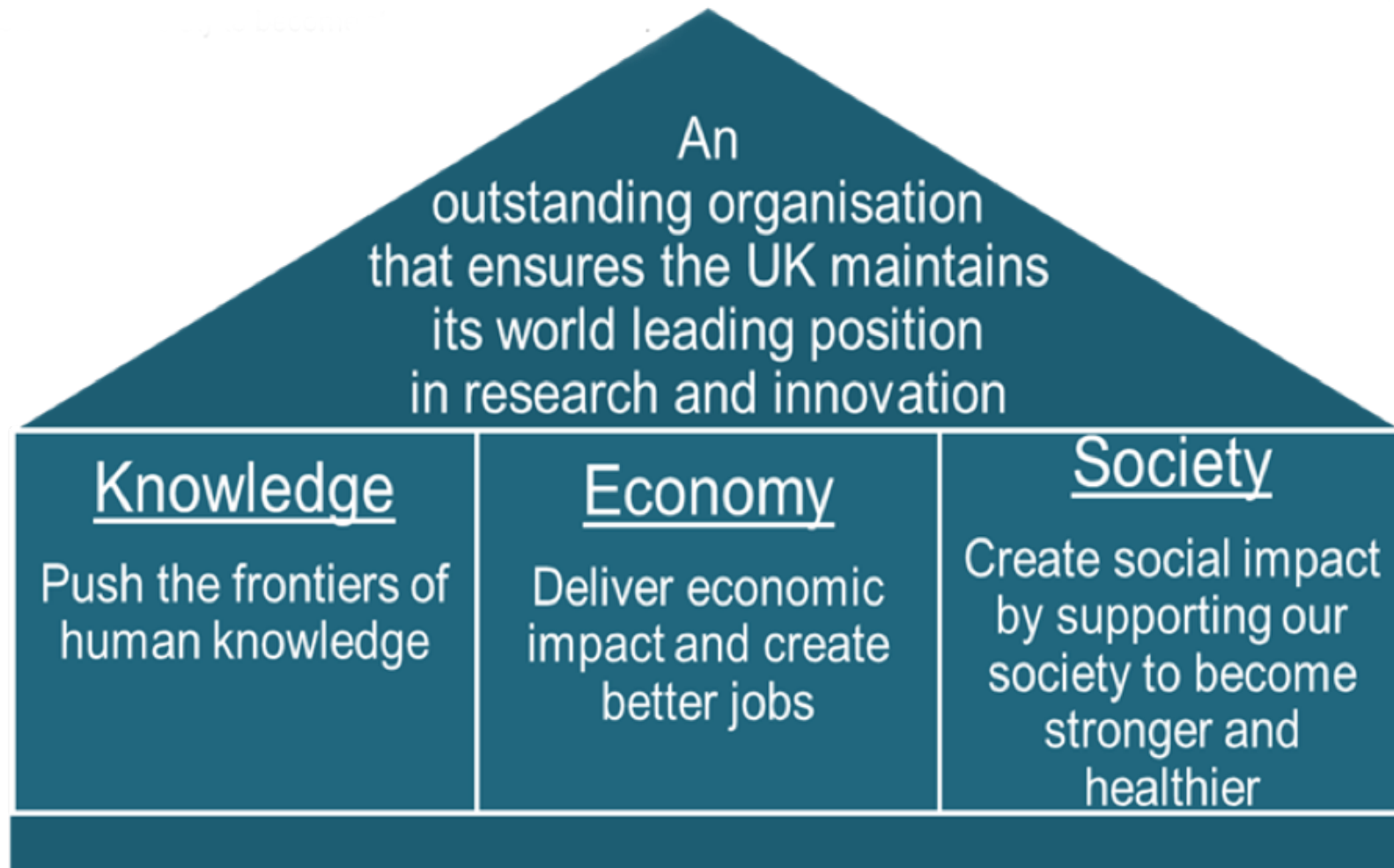
Introduction to UK Research and Innovation

What is UK Research and Innovation?

UK Research and Innovation, launching in April 2018, will be the new funding organisation for research and innovation in the UK. It brings together the seven UK research councils, Innovate UK and a new organisation, Research England, working closely with its partner organisations in the devolved administrations.



Mission statement



UK Research and Innovation by numbers

- **More than £6.5 billion** in combined budget per year
- **3,900** research and business grants issued every year
- **151** universities receiving research funding
- **38** institutes, laboratories, units, campuses and innovation catapults

Maximising impact

We will maximise impact from the research we fund, with three key strategic strands:

- We will push the frontiers of human knowledge
- We will deliver economic impact and create better jobs
- We will create social impact by supporting our society and others to become stronger, healthier and more resilient.

A key objective will be to develop a national research and innovation strategy which is based on evidence and maximises impact.

Supporting research and innovation

Our key objectives

- Be the unified voice for continued strengthening of the UK research and innovation system, nationally and internationally
- Lead on the development and delivery of a coherent national research and innovation strategy
- Ensure better prioritisation of resources, especially for the best interdisciplinary and cross-cutting research, as well as longer term investment in research infrastructure
- Maximise the impact of Innovate UK in supporting business-led innovation
- Promote stronger commercialisation, business and policy links and wider societal engagement with publicly funded research

Supporting research and innovation

Our key objectives

- Nurture and improve the talent pipeline for research and innovation
- Champion equality, diversity and inclusion across the research and innovation sector, and support a healthy and high-integrity culture
- Deliver a simpler, well-functioning research and innovation ecosystem which is easier to use and helps build collaborative partnerships
- Be a great place to work, which inspires, engages and learns from its people
- Deliver a step-change in administrative efficiency, including through combining corporate functions

Next steps

- **Transition phase** (current): the creation of a fully functioning organisation by 1 April 2018
- **Transformation phase**: building on current cross-council best practice, developing new ways of working together.

Short-term priorities:

- Develop an international strategy to maintain UK's reputation as a world-leading research and innovation nation
- Develop advice on allocating the additional £4.7bn from the Autumn Statement 2016 to ensure that research and innovation is at the heart of the government's Industrial Strategy
- Build UK Research and Innovation so it is a strong, resilient and agile organisation and a great place to work.