# Research Impact – the UK experience

# Sean Fielding RTTP



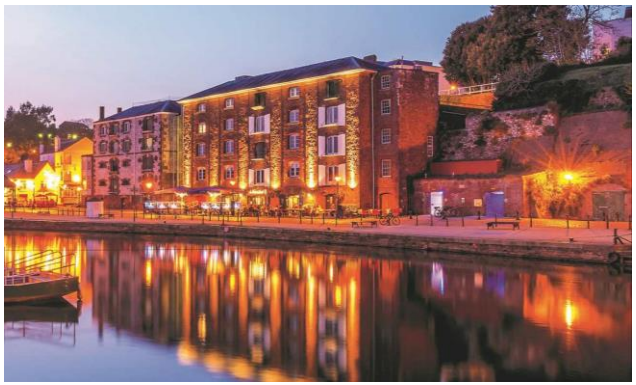



Former Director of Innovation, University of Exeter, UK.

Former chair of PraxisAuril, UK National Tech Transfer Association

Fieldingsean@yahoo.co.uk










University of Exeter



Top 10 UK University, 18th in World for THE Impact ranking

**Environment, Health, Social Justice (Greener, Healthier, Fairer)**

University of Exeter

# The UK Research Assessment Framework (REF) 2021

**Main purpose – to assess the quality of research in order to allocate funding**

**Total UK Government Expenditure on R&D £7.5Bn**

**£5.5 Bn to Research Council programmes (ad-hoc bidding – based on bid quality)**

**£2Bn per year for Underpinning Quality Research (QR) funds (based on REF outcome)**

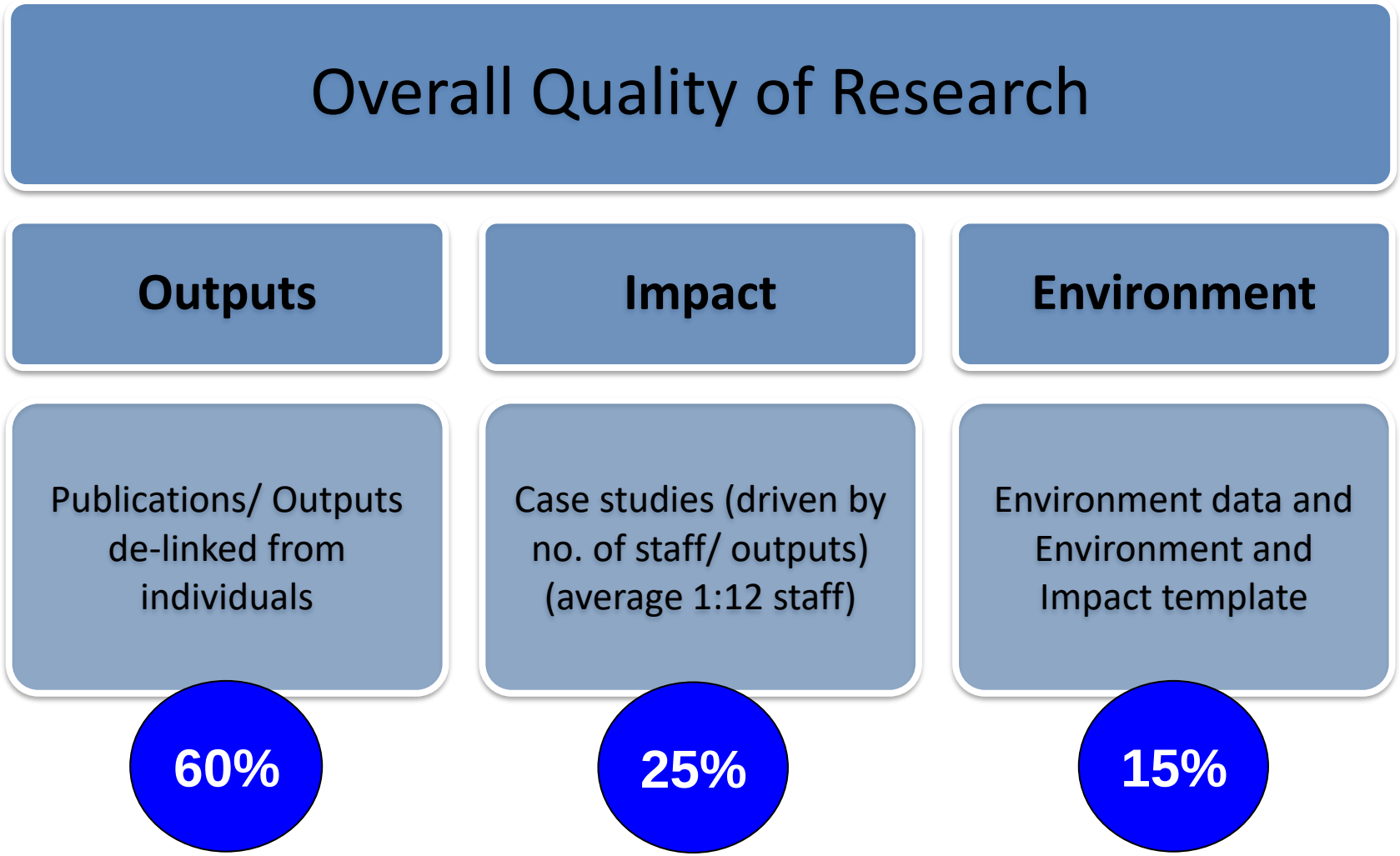
# But … The UK REF also creates the **reputation** of a department (for 8 years)

Enables success in other areas:

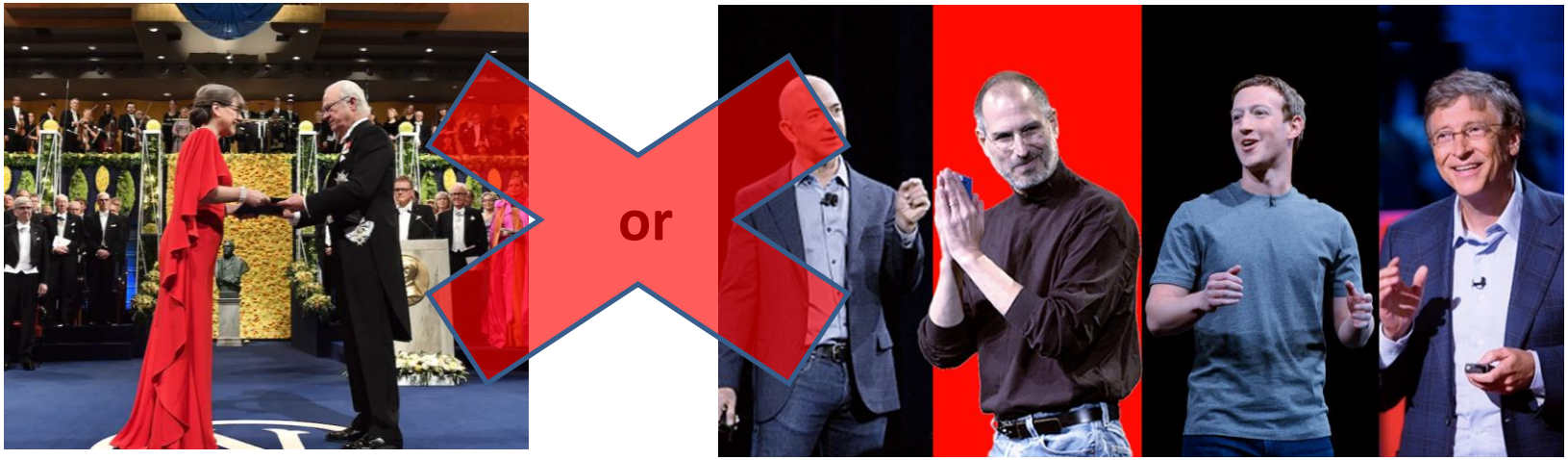
- Bidding for research funding
- Partnerships with other universities
- Partnerships with industry
- Attracting staff
- League tables (especially for international recruitment)



# The REF2021 assessment framework



# What is impact?




‘an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia’

REF impact definition

# Why is impact important?

1. **Shows we make a difference** – impact is about benefit, to the economy or society.
2. **Accountability** – demonstrating the value of research to the government, stakeholders and the public.
3. **Informs funding decisions** by understanding socio-economic return on investment of research.
4. **Creates opportunities** for academics, improving skills, improving research, career progression, more involvement in policy, innovation, environmental improvement etc.



# How much is impact worth?

- £500M for Impact
- **Impact = £10M pa to Exeter**
- Sticky money…until 2029



# Impact Case Studies

# Impact case studies – Limiting factors

- Number of Impact Case Studies is determined by staff numbers in a Department (average 1 case study for every 12 staff) (min 2 per dept).
- This therefore can restrict number of staff & outputs submitted
- Impact cannot travel – so has to be generated from research published at this university (in previous 20 years)
- Difficult to evidence impact for staff who have left….
- Case studies from previous years can be submitted but only if there has been further impact in the REF period
- Some case studies must be kept confidential – processes to manage this.

# Impact Case Studies - format

5 pages covering:

- **Title of case study (important)**
- **Summary of impact (100 words)**
- **Description of research – (500 words)**
  - has to be international quality
  - period of research
- **References to the research**
  - Up to 6 references to relevant outputs
- **Description of the impact (750 words)**
  - what has changed as a result
  - Period of impact
- **Evidence of impact**

  Up to 10 sources of evidence to corroborate the impact



# How do you prove impact?

- Making money is easy to prove!
- If Impact is the currency how do you show it?
- You must be able to connect the research to impact for which you can provide evidence.
- No unsupported assertions – no PR



# Types of Impact evidence

| Example broad Impact Type | Example Impact Evidence |
|---|---|
| Health and Wellbeing | • Additional Quality of Life Years<br>• Statistics on reduced admissions to hospital<br>• Patient surveys<br>• Testimonials from medical professionals |
| Commercial benefit | • New company creation<br>• Licence agreements<br>• Increased profit evidenced in company annual reports<br>• Reports of partnerships in company annual reports<br>• Cost savings over time/ Investment secured<br>• Testimonials from company managers |
| Public Policy | • Policy documentation referencing the research<br>• Policy briefings referencing the research<br>• Regulation and standards documents<br>• Public meeting minutes<br>• Testimonial from senior civil servants |
| Cultural | • Audience surveys<br>• Media coverage statistics such as readership/ viewers<br>• Testimonials from influential cultural figures |
| Environmental | • Government and charity reports<br>• Changes to policy<br>• Testimonials from environmental leaders |

# Impact Topic – eg Net Zero

- Developing climate or sustainability policies
- Contribution to citizen engagement
- Developing local strategies for climate action
- Developing and informing renewable energy technologies
- Contributing to energy resilience and security
- Supporting the introduction of alternative energy forms
- Contributing to energy efficiency

**(Data Enhancement and Analysis of REF 2021 Impact Case Studies - RAND Europe, Nov 2023)**



# What Impact should you claim?

## Micro plastics in the environment

What is the claimed impact?

- Healthier seas?
- Less cancer?
- Happier fish?
- A change in sustainability policy?
- Change in use of microplastics?



**What evidence can you collect?**

Policy change at the United Nations leading to banning of micro-plastics in the environment.

# What Impact should you claim?

## Using beetroot juice for improving exercise performance

What is the claimed impact?

- Better performance of athletes
- Better sports nutrition practice?
- Sales of beetroot juice?
- New Market creation?



**What evidence can you collect?**

- Performance data from athletes and testimonials from leading coaches
- Sales statements from partner companies – testimonials from executives
- Market trends data

# What Impact should you claim?

**Research on muscle growth in worms at the International Space Station**





- *Could* be applied to help people immobilised after falls
- *Could* be applied to help people with Muscular Dystrophy
- *Could* be applied to help the elderly

**But it's not yet impact……**

# Assessing Impact



# Assessing Impact – Review Panels

Each of the 34 subject-based Units of Assessment (UoAs) has their own assessment panel eg:

- History Panel,
- Geography Panel,
- Biomedicine Panel

Members are academics and **users**

Units are assessed against similar departments.
ie history departments are assessed against other history departments, not engineering departments.



# Assessing Impact – Review Panels

The departmental panels are coordinated by four main panels to ensure consistency and shared good practice.

Panel A: Medicine, health & life sciences
Panel B: Physical sciences, engineering & maths
Panel C: Social sciences
Panel D: Arts & humanities



# Assessing Impact - Grading

**Impact assessed by reach and significance**

**Reach** = how wide-spread is the impact within the addressable community

**Significance** = what demonstrable difference has been made to people/ environment/ culture/ business etc



# Assessing impact - Grading

## Grading from 1* to 4* (or Unclassified - U)

**4* Impact** = Outstanding impacts in reach and significance

**3* impact** = Very considerable impacts in reach and significance

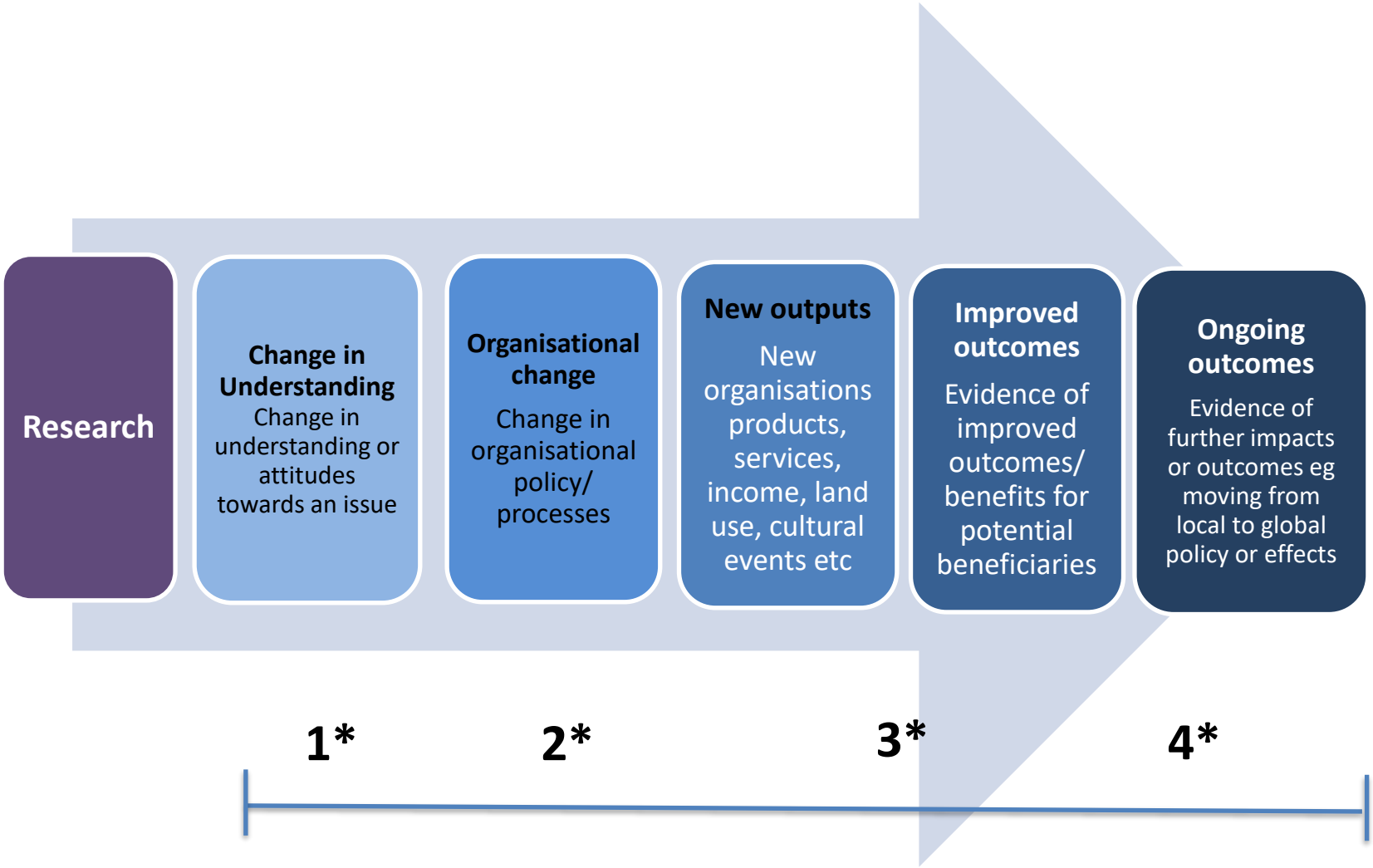
**2* impact** = Considerable impacts in reach and significance

**1* impact** = Recognised but modest impacts in reach and significance



**Unclassified** = the impact is of little or no reach or significance/ or the impact was not eligible/ or the impact was not underpinned by excellent research

# Recognising Impact –
# From probably 1* to definitely 4*



# 4* impact case studies

- Outstanding reach and significance
- Clear and well explained narrative
- Evolution of the story over time
- Maturity/depth of relationships with partners
- Different types of impact
- Outcomes for whole addressable community
- Movement from local impact to wider
- Compelling evidence (quantitative and qualitative) (But numbers are good)



# There's much more money for 4*

The annual value of a REF2023 4* Impact Case Study (depending on discipline) is 3x the value of 3*.

No funding for U-2*.

£60-120k pa for a 4* case study



# Analysis of 2021 case studies

**(RAND Europe, Nov 2023)**

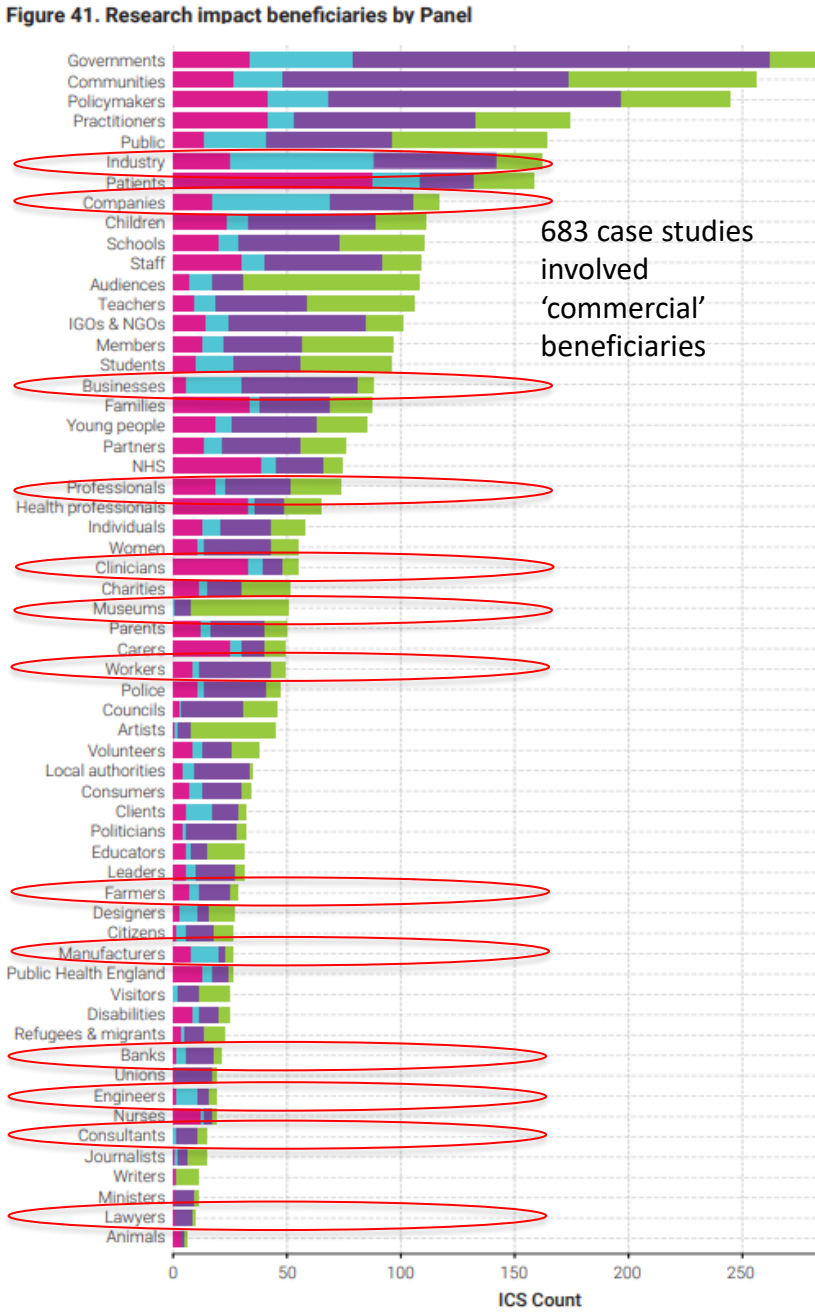
# Analysis of 2021 case studies (RAND Europe, Nov 2023)

- 6361 case studies
- Impact projects are generally underpinned by highly-cited research (ie this is not second-rate work)
- Global, local and national impact
- 60% of impact occurs outside the area where the research was conducted
- Only 19 HEIs had ‘hyper local impact’ – specialist HEIs
- 79 unique broad impact topics from ‘cancer diagnostics and therapy’ and ‘intelligence and cyber security’ to ‘pollution and air quality’, ‘language and linguistics’.
- Impact on teaching/ students (only 9 case studies)

# Analysis of 2021 case studies

## (RAND Europe, Nov 2023)

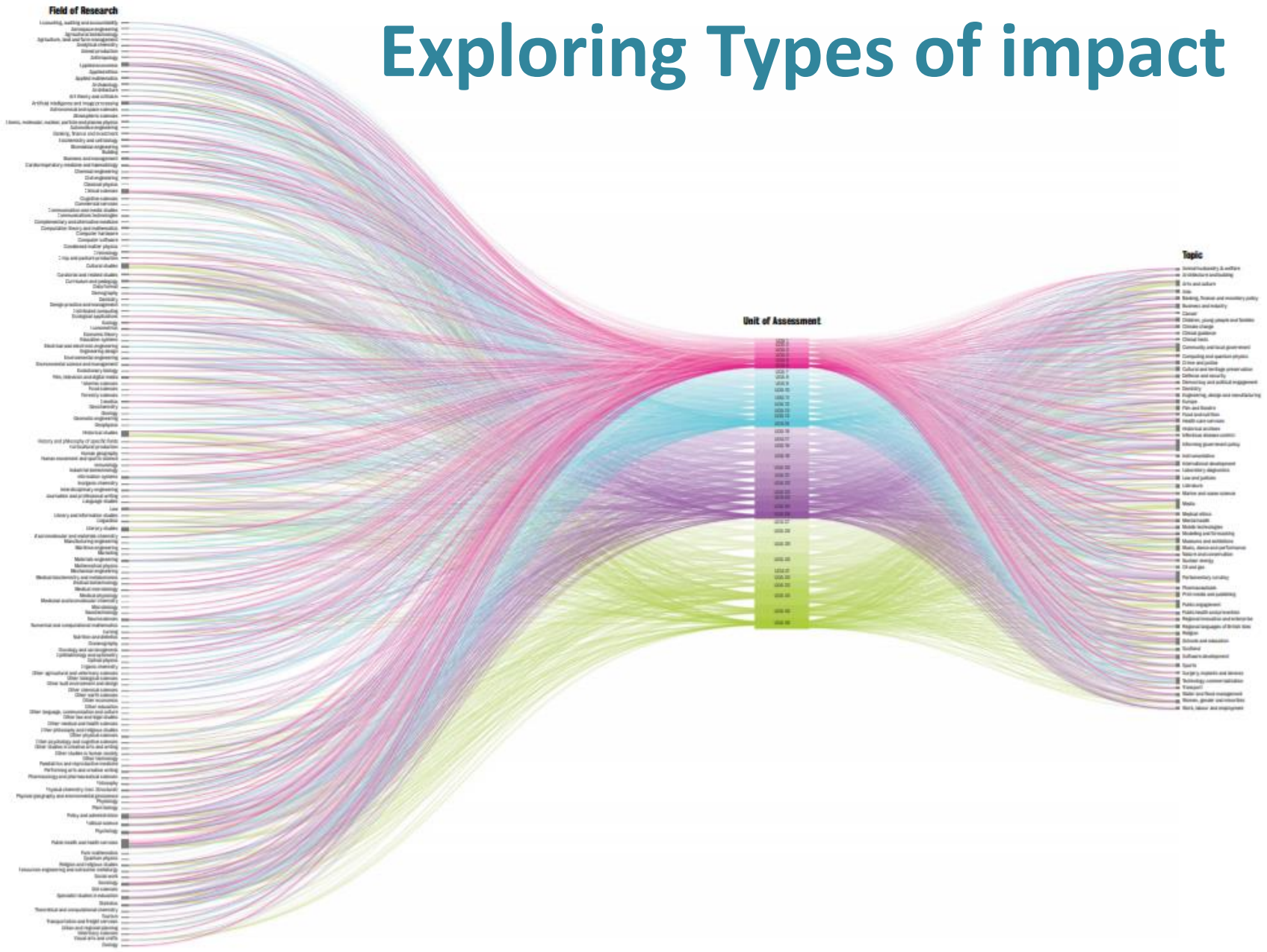
- 59 different beneficiary types.
- The top five: ‘governments’, ‘communities’, ‘policymakers’, ‘practitioners’ and ‘industry’.
- Specific beneficiary groups eg nurses, farmers, lawyers, artists
- 2,146 ICSs (approximately 34%) mentioned RoI/ income ie 66% had non-financial impact
- 3370 ICS (ie 56%) involved collaborative research partners eg healthcare, corporate, non-profit, government



# Analysis of 2021 case studies (RAND Europe Nov 2023)

- Impact takes on average 10 years (after publication) and 3 years more in panels A-B (Health, life sciences, physical sciences)
- 17% were 50% similar to a 2014 case study but with further developments
- 5397 unique impact pathways!
- “impact is a complex, bespoke activity”.

# Exploring Types of impact



# What does Impact mean for KE/ research support?

# What does Impact mean for KE/ research support?

- At Exeter we wanted to grow our income by aiming for 50% 4*
- Achieved 68% - biggest growth in UK – from 48th to 11th place

This required:

FOCUS, PRIORITISATION, SUPPORT, RESILIENCE

- Supporting academics to clarify and realise impact aims
- Ensuring the reach and significance of impacts are maximised
- Ensuring clear evidence of impacts (not making it up)
- At the same time as embedding a wider impact culture
- Reward & recognition for staff

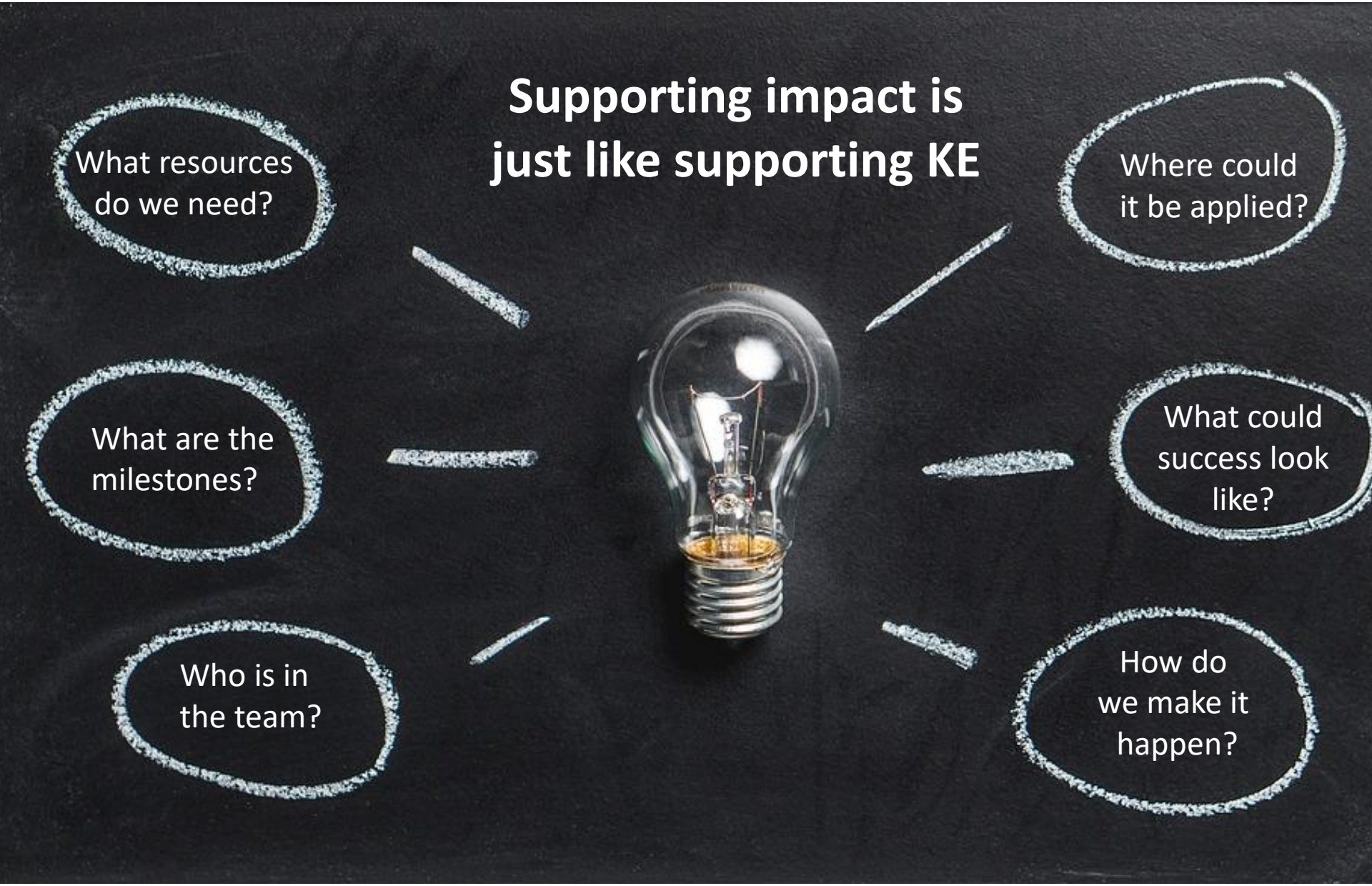
# The definition of Knowledge Exchange

*TT/KT/KE is a collaborative, creative endeavour that translates knowledge and research into impact in society and the economy.*

*(Global definition of KT/KE/TT)*



# Supporting impact is just like supporting KE



# With all the usual challenges

How do you capture the outcome?

How do you find partners?

How do you make sure they fulfil their promises?

How do you engage with them?

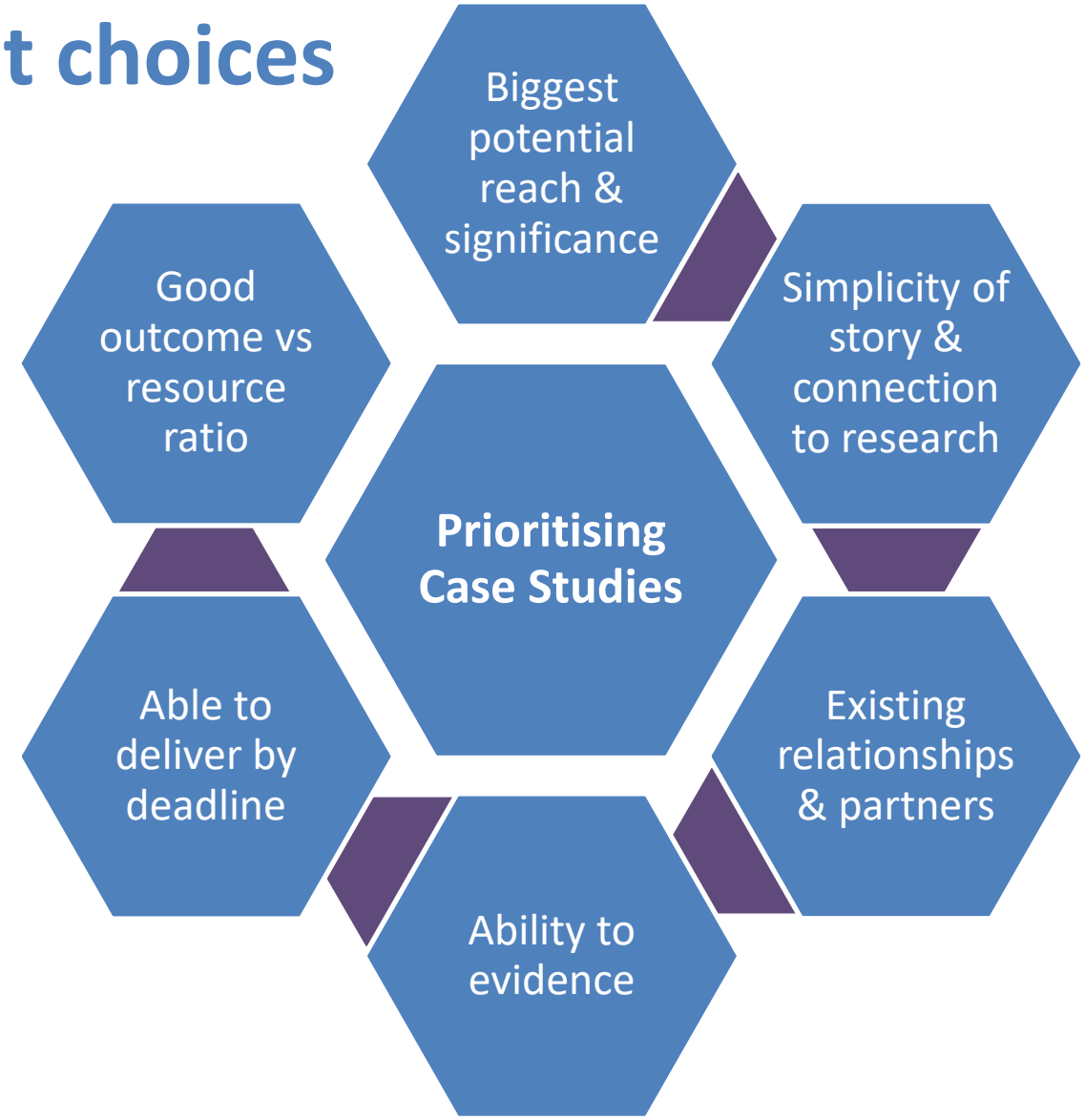
How do you structure agreements?

How do you deliver value?



**How do we minimise effort and maximise outcome?**

# Requires difficult choices



# Lessons learned

1. Not everyone will do Impact.  But all departments will.  Have to support them.

2.  Identify a pool of research impact for each department and continually review potential.

3. Determine potential research users and beneficiaries early and aim to develop mutually beneficial, long-term relationships with research users.

4. Actively plan tangible ways research can be mobilised to action.

5. There is a clear, known assessment point – focuses the mind on how to make things happen in the time available.

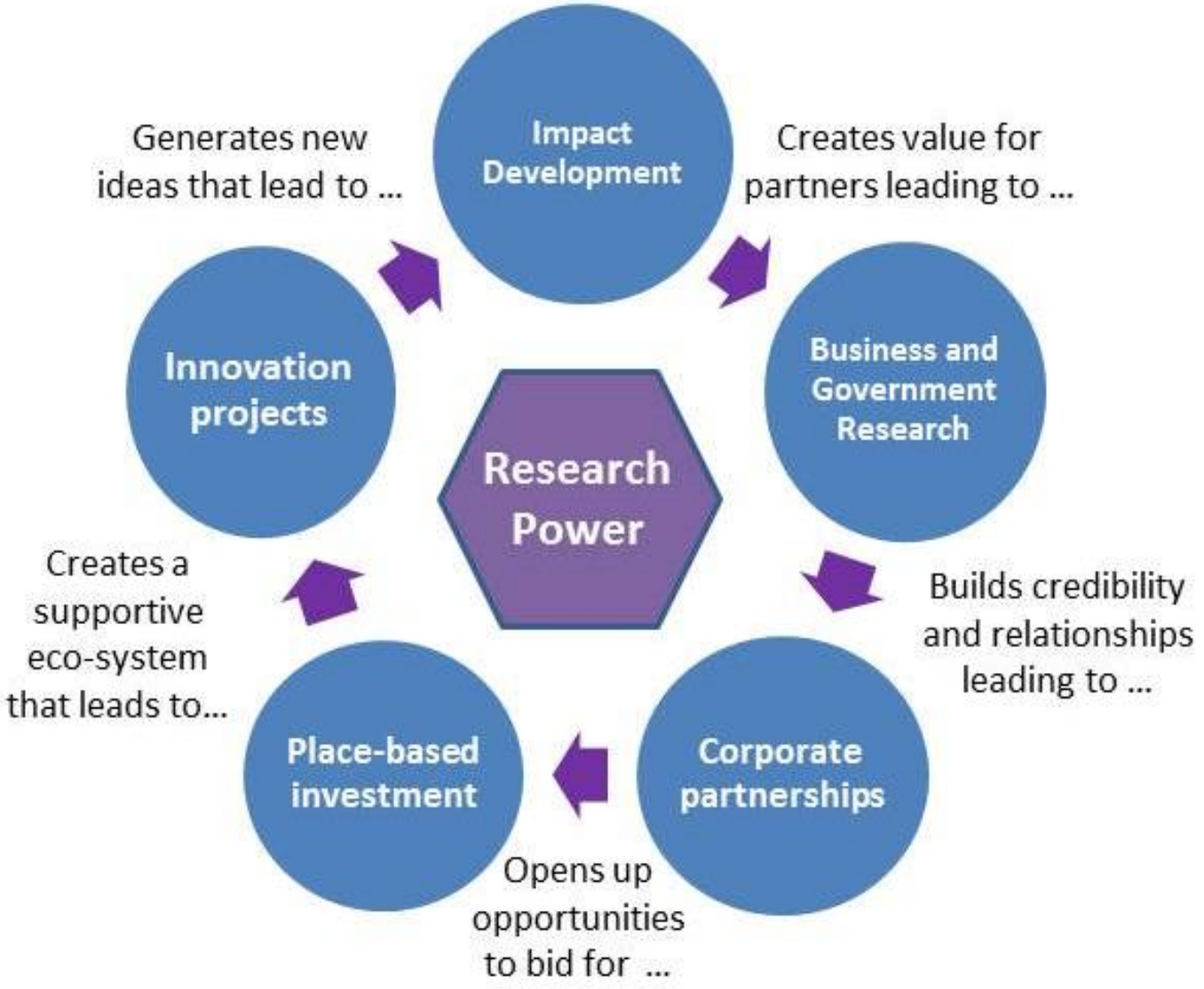
6. Recognise the difference between ‘pathways to impact’ and actual ‘impact’.

7. Gathering and recording evidence of impact is a job in itself.

# Driving change in KE/KT Offices

- Impact assessments growing: UK, Australia, New Zealand, Hong Kong, Canada, parts of Europe.
- More focus on impact  leading to relationships, income and opportunity.
- Not just industry partnerships, not just licenses/ spin-outs
- All departments involved including Classics, History, Pure Mathematics, Physics
- Doing what academics need creates lots of demand and new relationships
- They need our expertise, experience and networks
- Otherwise they will have to do it themselves and will make all the mistakes we used to make!

# Impact drives a virtuous circle building research power and social value for universities



# Actively delivering impact is now key UK Strategy



“Over the coming years, our universities will provide billions worth of support to businesses, the public sector, charities and other organisations all over the UK.

This support will provide the knowledge for our industries and communities to prosper, unlocking economic growth, improved health and quality of life, and cultural value.”

Universities UK Strategic Plan 2024-30

# Impact demonstrates relevance at a time of financial challenges



Rachel Wolf, Public First
Author of Conservative manifesto 2019

"There is going to be an opportunity for universities to place themselves more centrally in terms of growth and productivity – that is going to be the major obsession of the next two parliaments."

Universities need to focus on ensuring that their "general R&D story can be made as practical and practically transferable [into economic impact] as possible", to match with a new government.

Times Higher – 20 March 2024

# “Research-intensive universities generate nearly £38bn for UK economy”

28 February 2024

Analysis by **London Economics** showed that the research and commercialisation activities of the 24 Russell Group universities, such as the creation of new spin-out companies, wider knowledge exchange and Intellectual Property licensing across all four nations helped to support more than a quarter of a million (254,000) jobs, twice as many as in the chemical and pharmaceutical manufacturing industries combined.




For every £1 of public funds invested in research, more than £8.50 was generated for the UK economy.

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