Access to Funding

Innovation UK : Simplification

Dec'16

Innovate UK

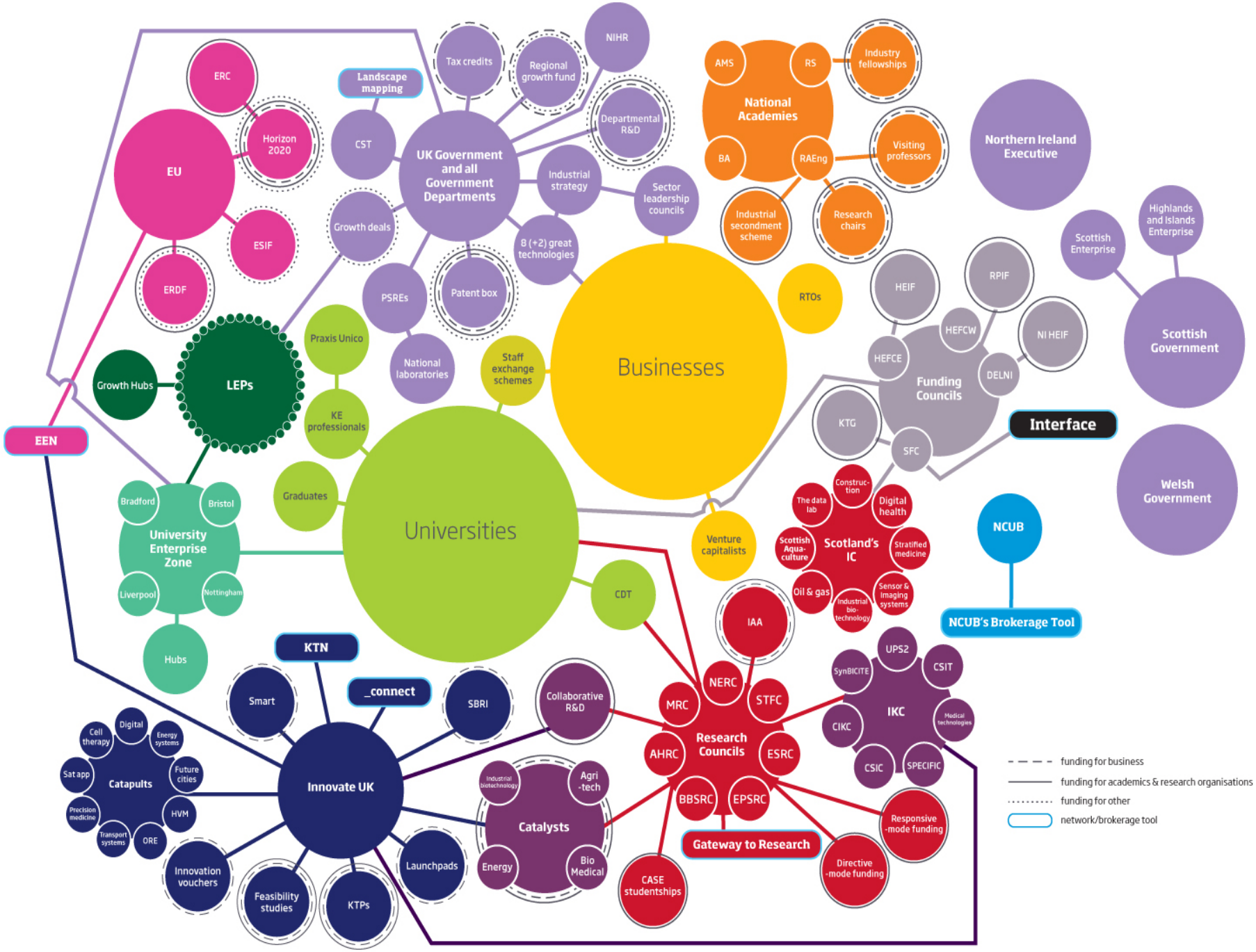
Tim Just
Head of Space,
Emerging and Enabling Technologies

Another Definition….

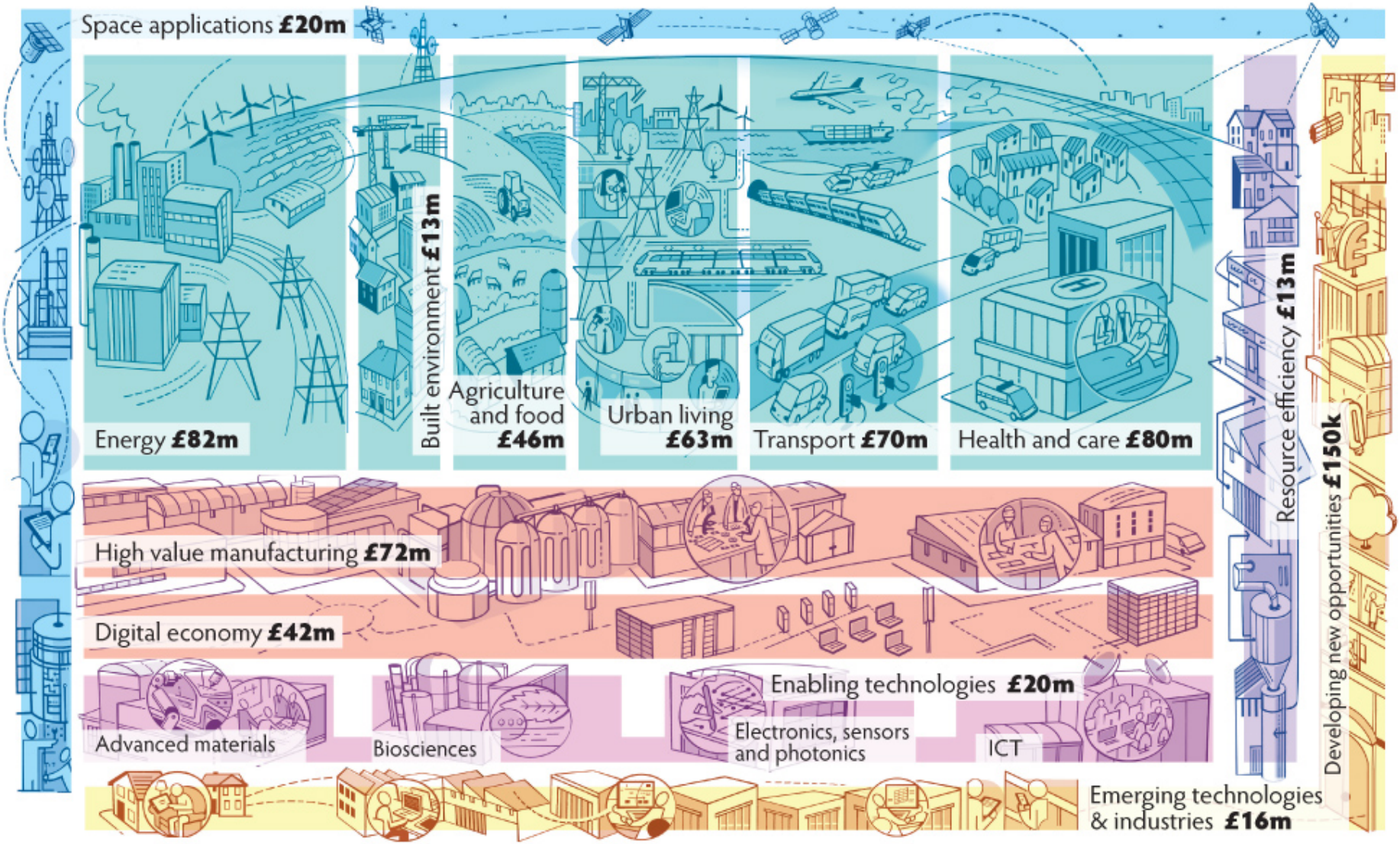
"Research is the transformation of money into Knowledge…..

… Innovation is the transformation of that knowledge back into money."

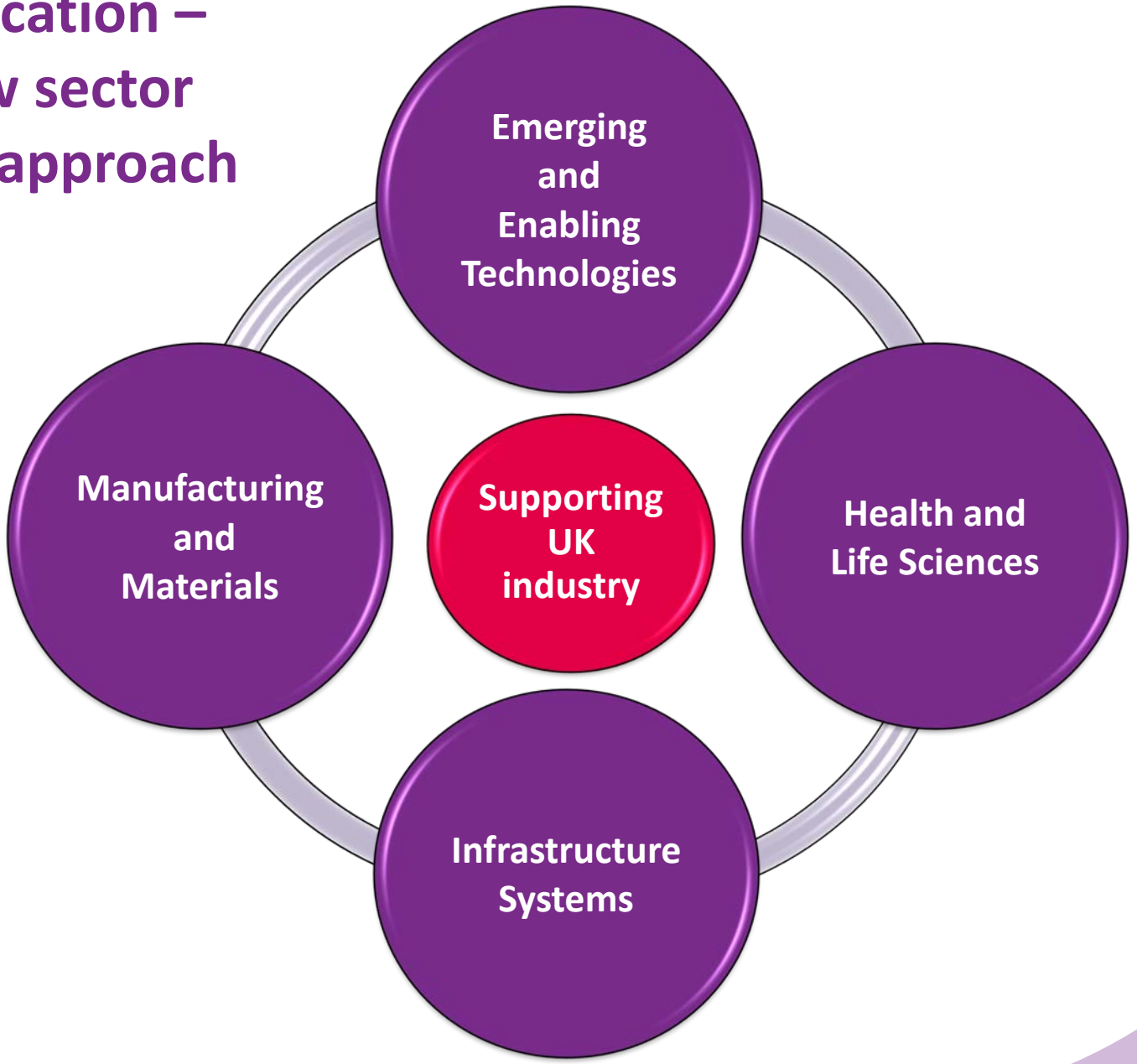
Geoffrey Nicholson, 3M


ERC
Horizon 2020
EU
ESIF
ERDF
Landscape mapping
CST
Tax credits
Regional growth fund
NIHR
UK Government and all Government Departments
Departmental R&D
Industrial strategy
Sector leadership councils
Growth deals
8 (+2) great technologies
PSREs
Patent box
AMS
RS
Industry fellowships
National Academies
BA
RAEng
Visiting professors
Industrial secondment scheme
Research chairs
Northern Ireland Executive
Scottish Enterprise
Highlands and Islands Enterprise
Scottish Government
RTOs
HEIF
RPIF
HEFCW
NI HEIF
HEFCE
DELNI
Funding Councils
SFC
KTG
Interface
Welsh Government
Businesses
Praxis Unico
National laboratories
Staff exchange schemes
Growth Hubs
LEPs
KE professionals
Graduates
EEN
Universities
Bradford
Bristol
University Enterprise Zone
Liverpool
Nottingham
Hubs
CDT
Venture capitalists
Construc-tion
The data lab
Digital health
Scottish Aquia-culture
Scotland's IC
Stratified medicine
Oil & gas
Industrial bio-technology
Sensor & imaging systems
NCUB
NCUB's Brokerage Tool
IAA
KTN
Smart
_connect
SBRI
Collaborative R&D
NERC
MRC
STFC
Research Councils
AHRC
ESRC
BBSRC
EPSRC
UPS2
SynBICITE
CSIT
IKC
CIKC
Medical technologies
CSIC
SPECIFIC
Digital
Cell therapy
Energy systems
Sat app
Future cities
Catapults
Precision medicine
HVM
Transport systems
ORE
Innovate UK
Innovation vouchers
Feasibility studies
KTPs
Launchpads
Industrial biotechnology
Agri -tech
Catalysts
Energy
Bio Medical
CASE studentships
Gateway to Research
Responsive -mode funding
Directive -mode funding
funding for business
funding for academics & research organisations
funding for other
network/brokerage tool

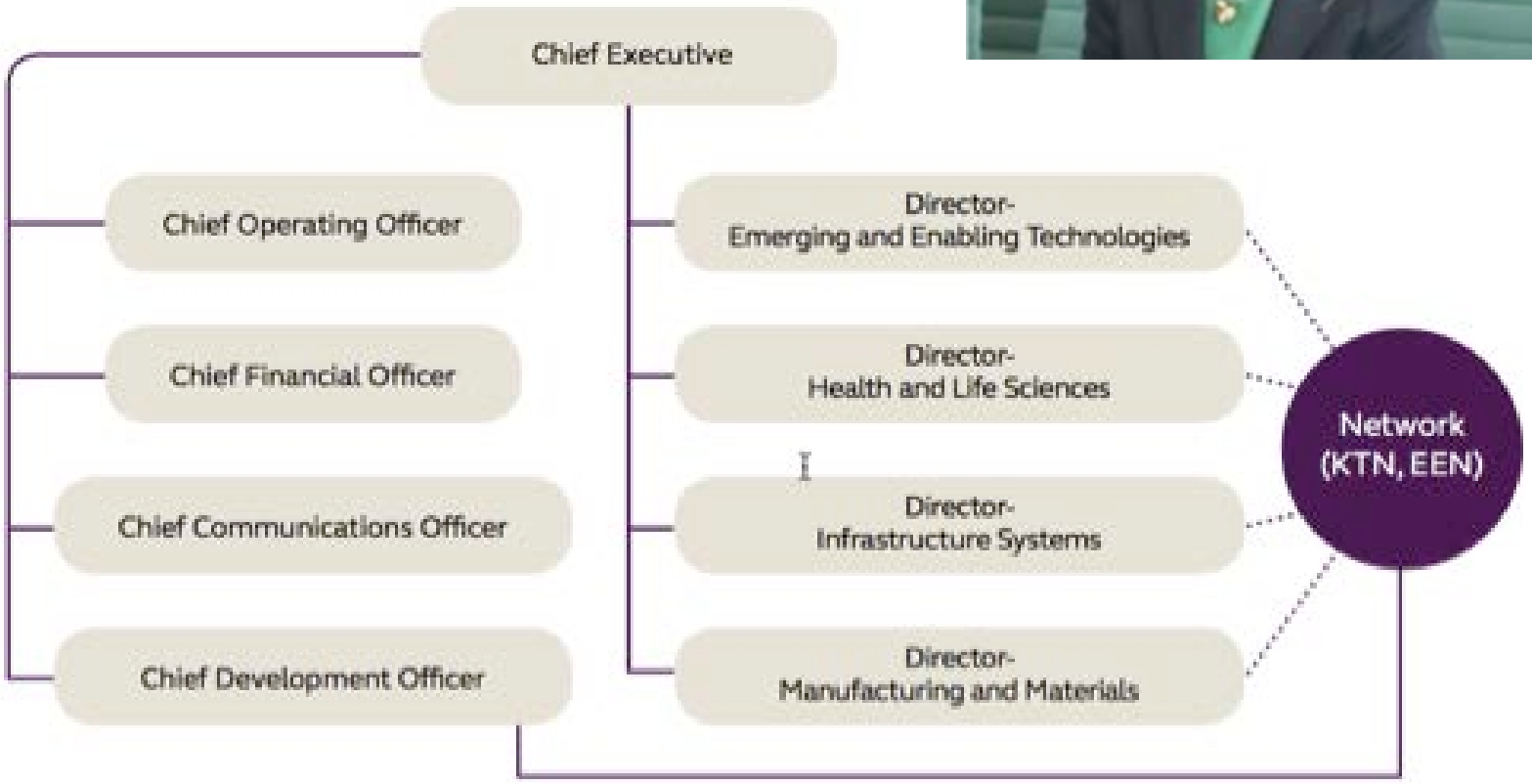
Anticipated commitments in priority areas, during 2014-15



Simplification – our new sector groups approach



New Structure in place



Supporting a simplified post-Dowling approach

A Completely New Context

- **Brexit Referendum outcome to leave the EU**
- **Theresa May as new Prime Minister**
  - New Departments
  - New appointments
  - New policies

Secretary of State for:
Business, Energy & Industrial Strategy:

- Energy
- **Industrial Strategy**
- Cities & Regions

Minister of State for:
Universities, Science, Research & Innovation

- Continuity
  - Higher Education & Research Bill
    - **UKRI moving ahead**
      - John Kingman
      - CEO recruitment

But a plan to deliver …

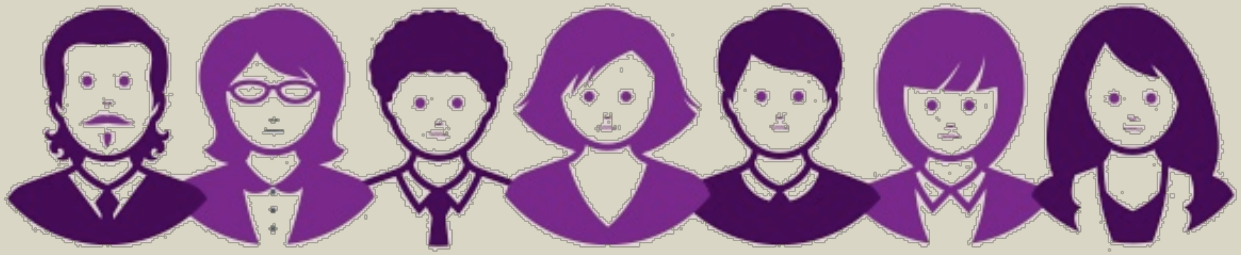
.. and a case to make for
Increased innovation investment

Confidence in our ability to deliver

return to the economy

organisations supported

of GVA for every £1 invested



> 7 jobs created for every business invested in

Autumn Statement

Prime Minister at CBI Annual Conference 2016

"A new Industrial Strategy Challenge Fund will direct some of that investment to scientific ***research and the development of a number of priority technologies*** *in particular, helping to address Britain's historic weakness on commercialisation and turning our world-leading research into long-term success."*

[Industrial Strategy is about] *"creating the conditions where winners can emerge and grow. It is about backing those winners all the way to encourage them to invest in the long-term future of Britain. And about delivering jobs and economic growth to every community and corner of the country."*

Chancellor's Autumn Statement 2016

"Mr Speaker, we do not invest enough in research, development and innovation.

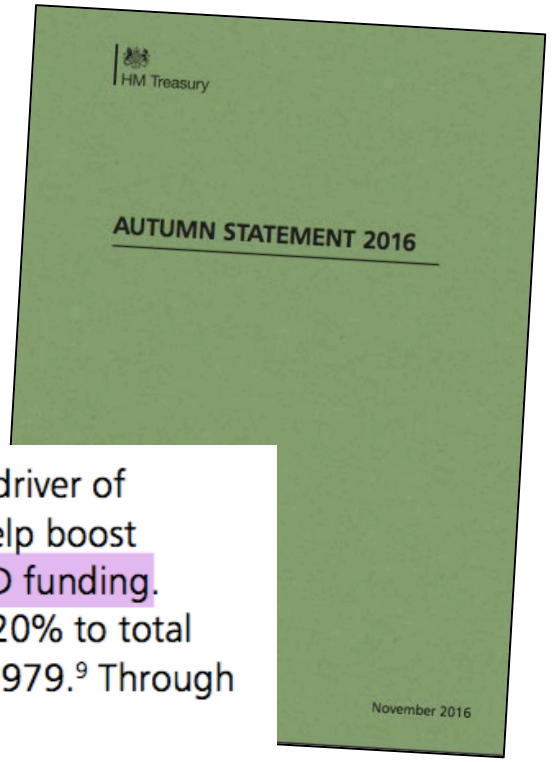
As the pace of technology advances and competition from the rest of the world increases, we must build on our strengths in science and tech innovation to ensure the next generation of discoveries is made, developed and produced in Britain.

So today I can confirm the additional investment in R&D, ***rising to an extra £2 billion per year by 20-21****, announced by my Right Honourable Friend, the Prime Minister on Monday."*

Gov.uk: some of the things we've announced (#16)

- £2 billion more per year in research and development funding by 2020-21
- A major increase in research and development funding for universities and businesses with R&D projects to help the UK remain an attractive place for businesses to invest in innovative research.
- This will back scientific research and development of technologies such as **robotics**, **artificial intelligence** and **industrial biotechnology**.

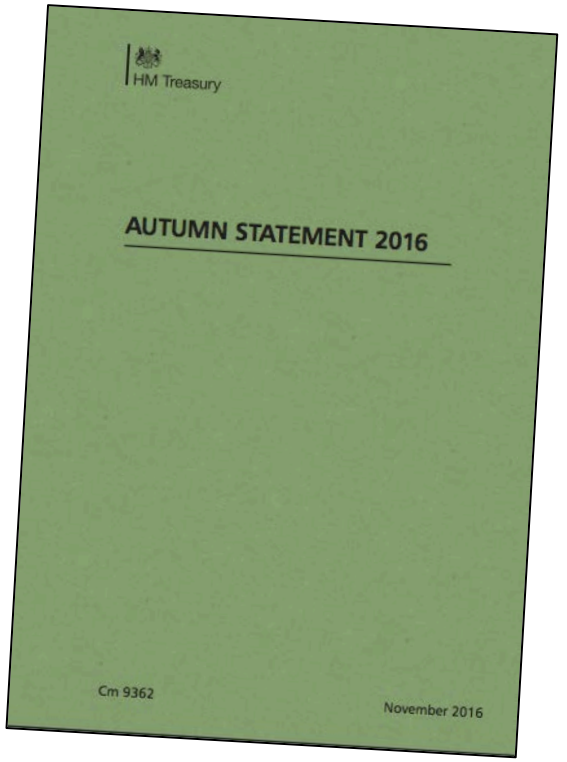
Research and development in Autumn Statement 2016 (1 of 2)



3.29 Research and development – Research and development (R&D) is a key driver of economic growth and is a vital part of the government's Industrial Strategy. To help boost UK productivity the NPIF will provide an additional £4.7 billion by 2020-21 in R&D funding. This extra £2 billion a year by the end of this Parliament is an increase of around 20% to total government R&D spending, and more than any increase in any Parliament since 1979.[9] Through the NPIF the government will fund:

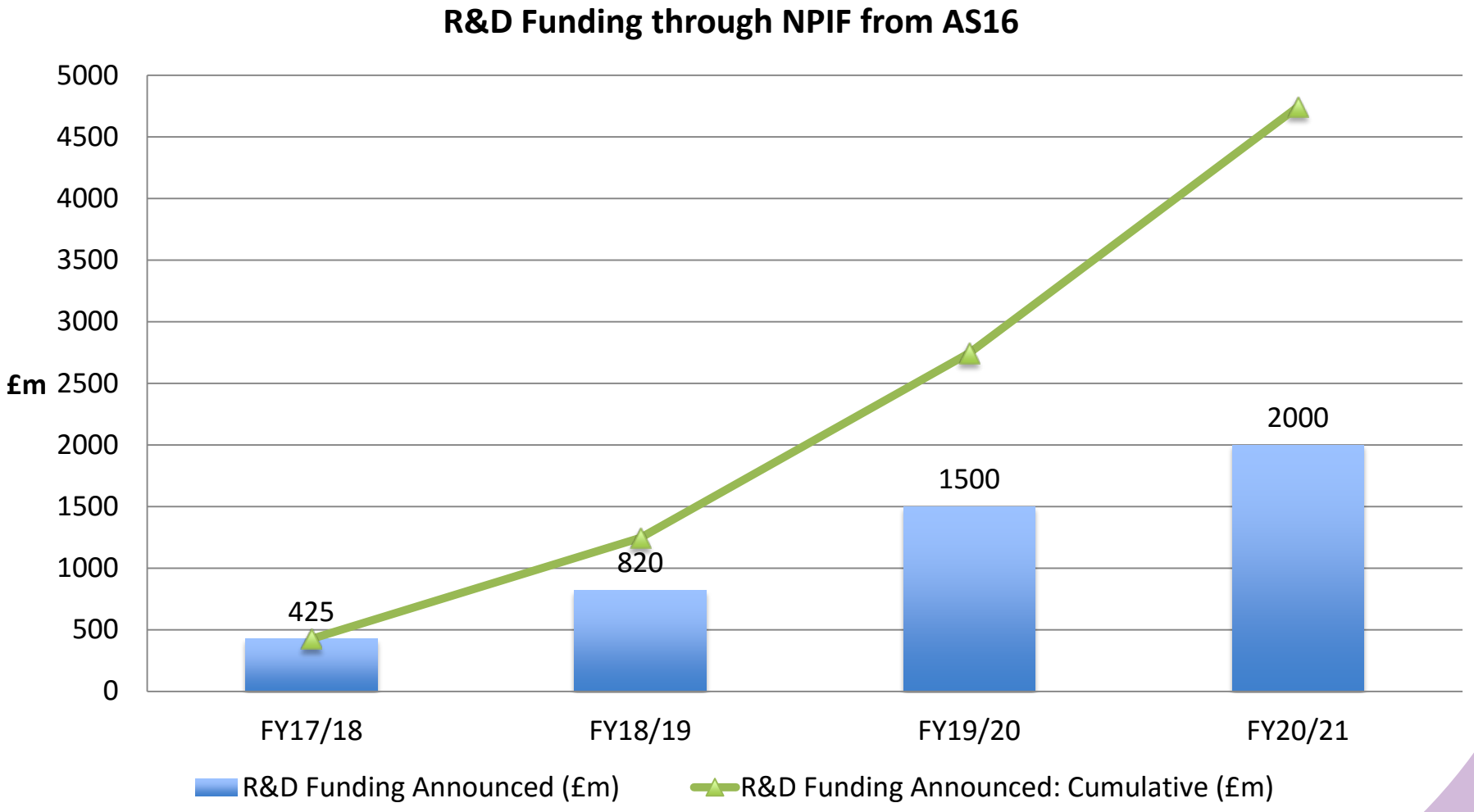
- **Industrial Strategy Challenge Fund** – a new cross-disciplinary fund to support collaborations between business and the UK's science base, which will set identifiable challenges for UK researchers to tackle. The fund will be managed by Innovate UK and research councils. Modelled on the USA's Defense Advanced Research Projects Agency programme the challenge fund will cover a broad range of technologies, to be decided by an evidence-based process (11)
- **Innovation, applied science and research** – additional funding will be allocated to increase research capacity and business innovation, to further support the UK's world-leading research base and to unlock its full potential. Once established, UKRI will award funding on the basis of national excellence and will include a substantial increase in grant funding through Innovate UK (11)

Research and development in Autumn Statement 2016 (2 of 2)



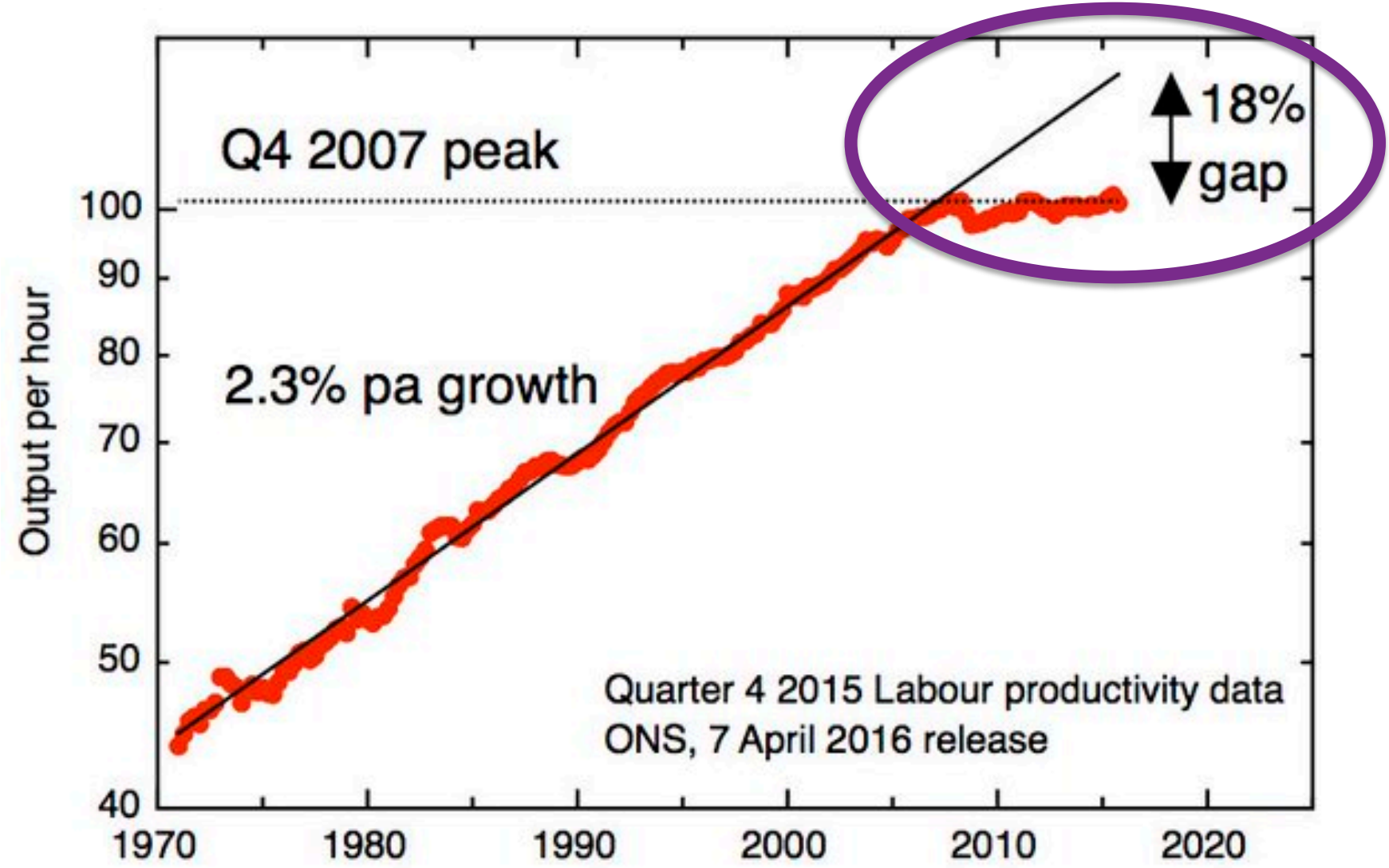
3.31 Tech transfer and R&D facilities – In October the government committed an additional £100 million until 2020-21 to extend and enhance the Biomedical Catalyst. These funds will be allocated to Innovate UK. Funding of £100 million will also be provided until 2020-21 to incentivise university collaboration in tech transfer and in working with business, with the devolved administrations receiving funding through the Barnett formula in the usual way. (34)

Autumn Statement 2016
National Productivity Investment Fund (NPIF)



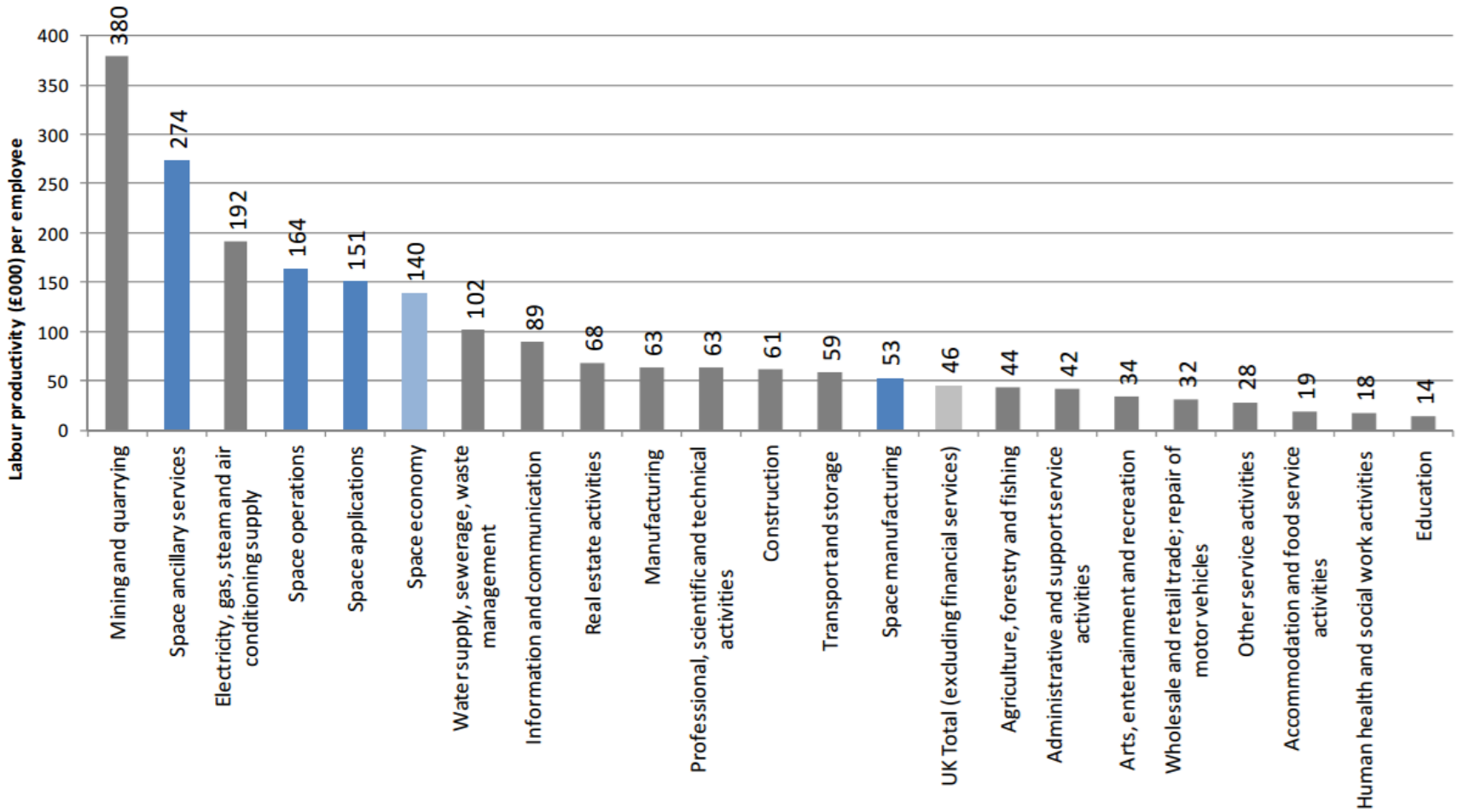
[FY17/18 +£10m, FY18/19 +£30m, FY19/20 +£30m, FY20/21 +£30m]

What this is for…..



Source: Richard Jones, 2015 - Business, Innovation and Skills Committee Productivity Plan Inquiry

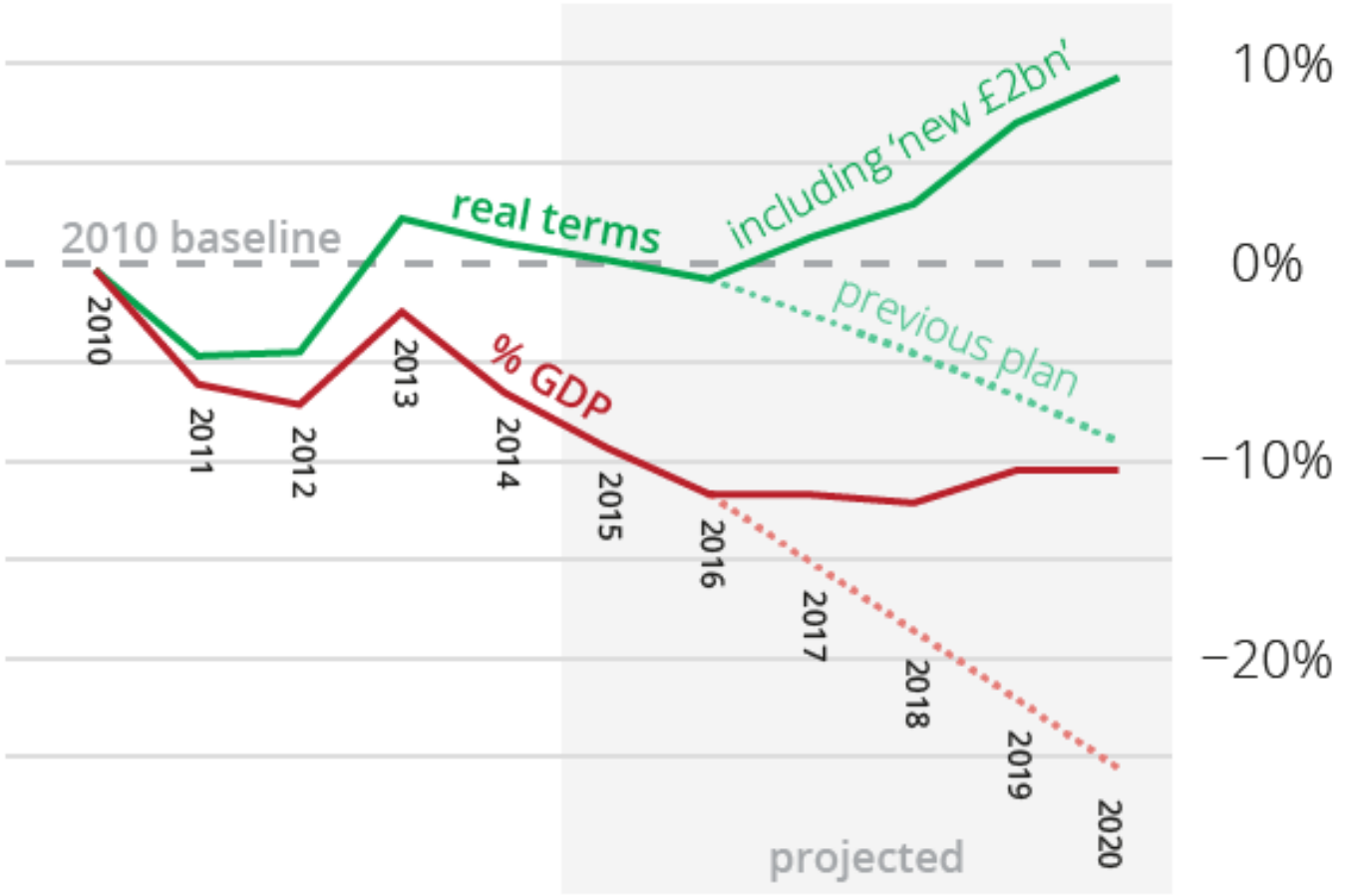
Figure 21 Labour productivity by sector



Note: Financial services are not covered by the Annual Business Survey. Non-space sectors estimated as approximate GVA divided by average annual employment.

Source: London Economics analysis and ONS Annual Business Survey 2013.

What this means…..



UK government funding of research and development
Change since 2010

scienceogram.org

https://scienceogram.org/blog/2016/11/autumn-statement-2bn-research-npif/

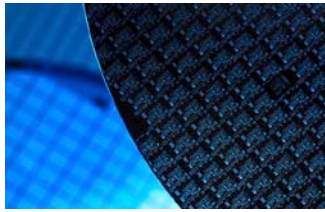
Our 5-point plan

1. Turn scientific excellence into economic impact
2. Scale up high-potential businesses into highly-productive, mid-sized companies
3. Build innovation excellence throughout the UK
4. Develop Catapults at the heart of a high-impact national innovation network
5. Find new ways of funding innovation

Sector Groups

Emerging and Enabling Technologies

Emerging Technologies, Space, Digital, Electronics, Photonics, Sensors, Robotics and Autonomous Systems, Design, Creative Economy, Open (former “Smart”/KTP)



Health and Life Sciences

Health, Healthcare, Agriculture & Food, Biosciences

Infrastructure Systems

Energy, Transport, Future Cities, Urban Living

Manufacturing and Materials

High Value Manufacturing, Advanced Materials (including nanotechnology)

Funding: simpler competitions

- Two Foundation Competitions in each **sector group**
- Each open to a much wider range of applications
- Two **'Open Programmes'** rounds per year - for applications from any technology area or sector.
- Plus open knowledge transfer competitions (KTP)
- And continued competitions delivered in **partnership** with other organisations

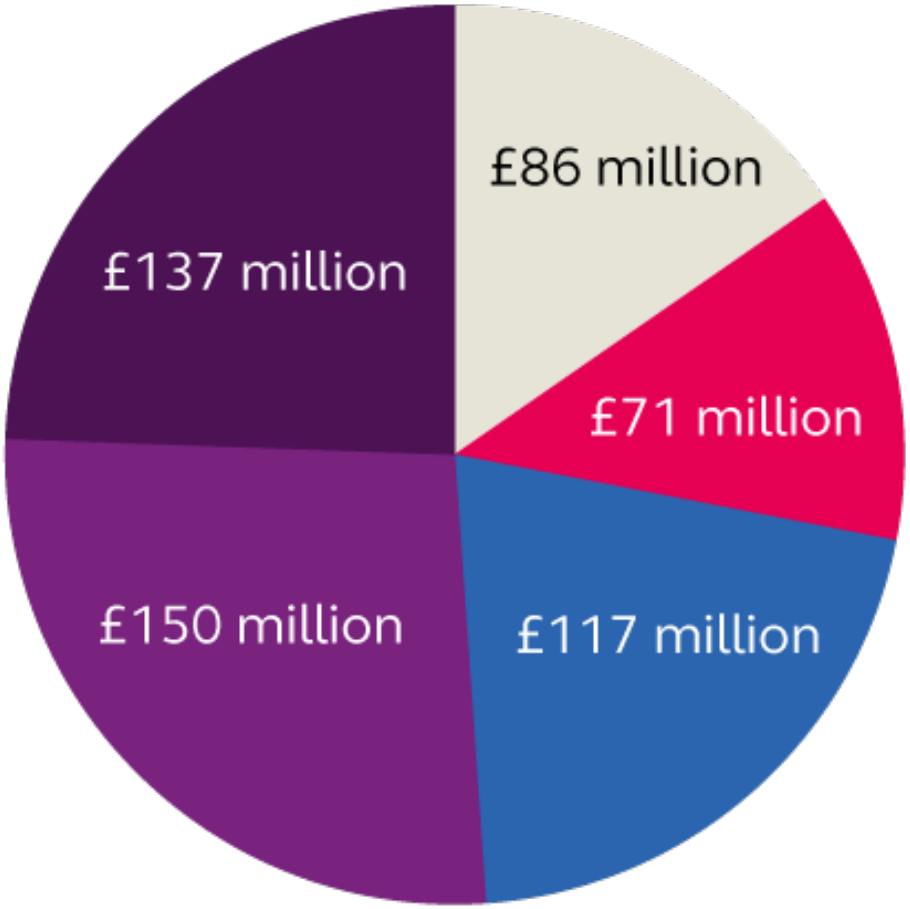
New simplified Foundation Competitions

Foundation Competitions	"Open" dates
Manufacturing and Materials	Nov'16
Open	Dec'16
Infrastructure Systems	Jan'17
Health and Life Sciences	Feb'17
Emerging and Enabling Technologies	Oct'16* & Mar'17

*Registration closes Noon on 30th Nov, submission deadline is noon 7th December

Projected expenditure 2016/17 (Pre-AS)

£561m
Core budget for 2016/17



- **Emerging and Enabling Technologies** 15%
- **Health and Life Sciences** 21%
- **Infrastructure Systems** 27%
- **Manufacturing and Materials** 24%
- **Open Programme** 13%

Summary

- Lots of change:
  - Brexit
  - Machinery of Government
  - UKRI

- SIMPLER ?

A glimpse for the Future

16.3094.03_Space
sion3_Highlights_I

We can’t stop thinking about the future

Innovate UK

North Star House, North Star Avenue, Swindon SN2 1UE
Tel: +44 (0)1793 442 700
Email: support@innovateuk.gov.uk
www.innovateuk.gov.uk