RESEARCH SERVICES
KNOWLEDGE EXCHANGE & IMPACT TEAM

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IMPACT & COMMERCIALISATION

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IMPACT

What is Impact?

Academic impact

- The demonstrable contribution that excellent research makes to academic advances, across and within disciplines, including significant advances in understanding, methods, theory and application

Economic and societal impacts

- The demonstrable contribution that excellent research makes to society and the economy. Economic and societal impacts embrace all the diverse ways in which research-related knowledge and skills benefit individuals, organisations and nations by:
  - fostering global economic performance, and specifically the economic competitiveness of the European Union
  - increasing the effectiveness of public services and policy
  - enhancing quality of life, health and creative output

Impact in Horizon 2020

- Academic Impact useful to demonstrate ‘excellence’ of applicants but has less weighting than economic/social
- General principle in H2020
  - **IMPACT** = **INNOVATION** = **COMMERCIALISATION**
- Turning research outputs into economic growth, jobs and wealth creation = commercialisation
- Improving the lives of the EU citizen (policy & public services)= dissemination
- You need a plan for both!

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Why does impact matter?

- **Accountability**
  - spending public money means demonstrating the benefits of that investment to society
- **Quality**
  - research can be improved by engagement with a broad range of potential beneficiaries
- **Maximising benefits**
  - shortening the time to benefit, and increasing the impact investments in research and innovation have
- **Reputation**
  - enhance attractiveness for research and innovation investment

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University is a generator of knowledge

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Research costs money

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Funders want to see a “return”

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If they see a return, they will keep funding

Impact

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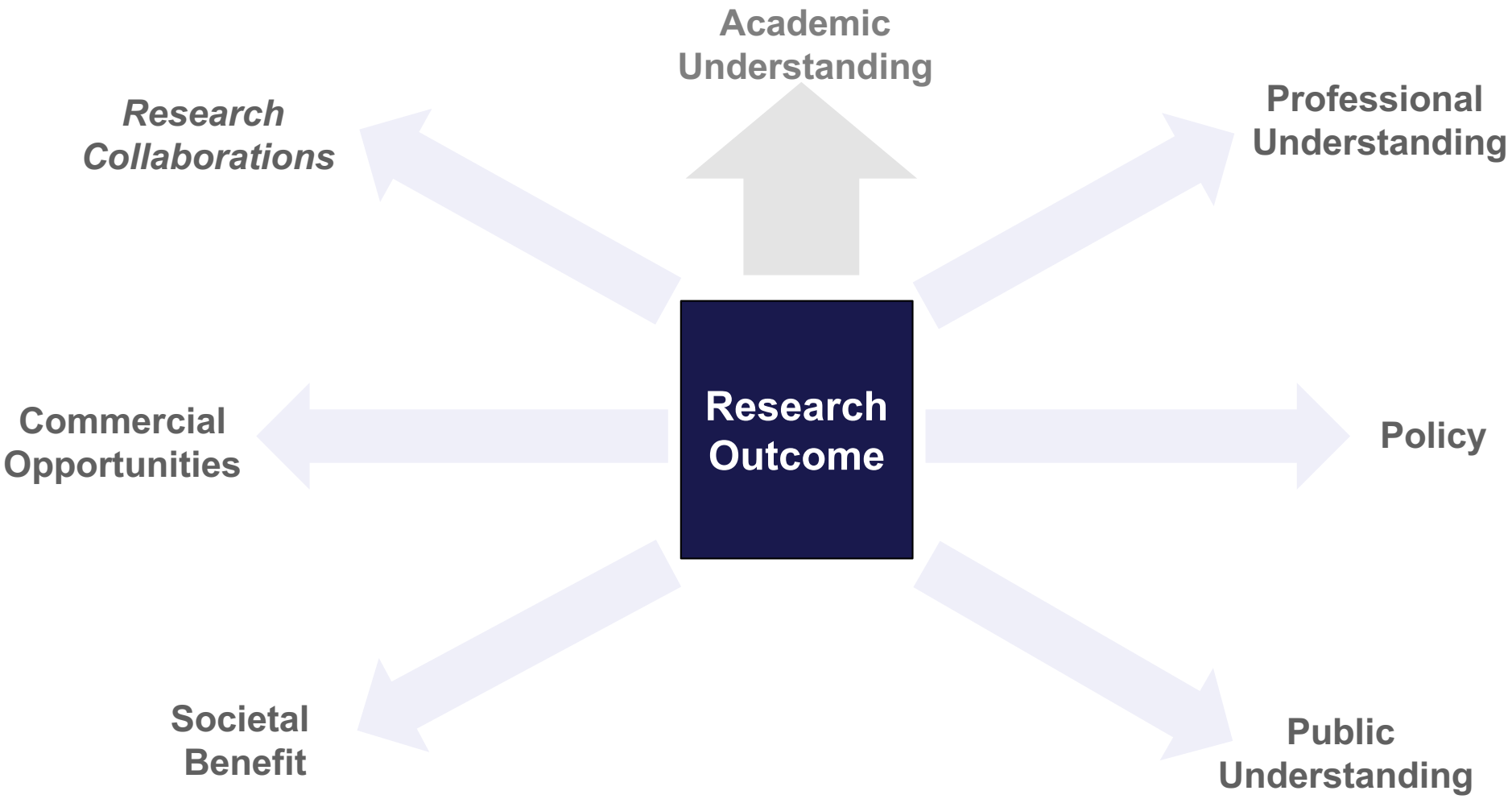
Types of impact



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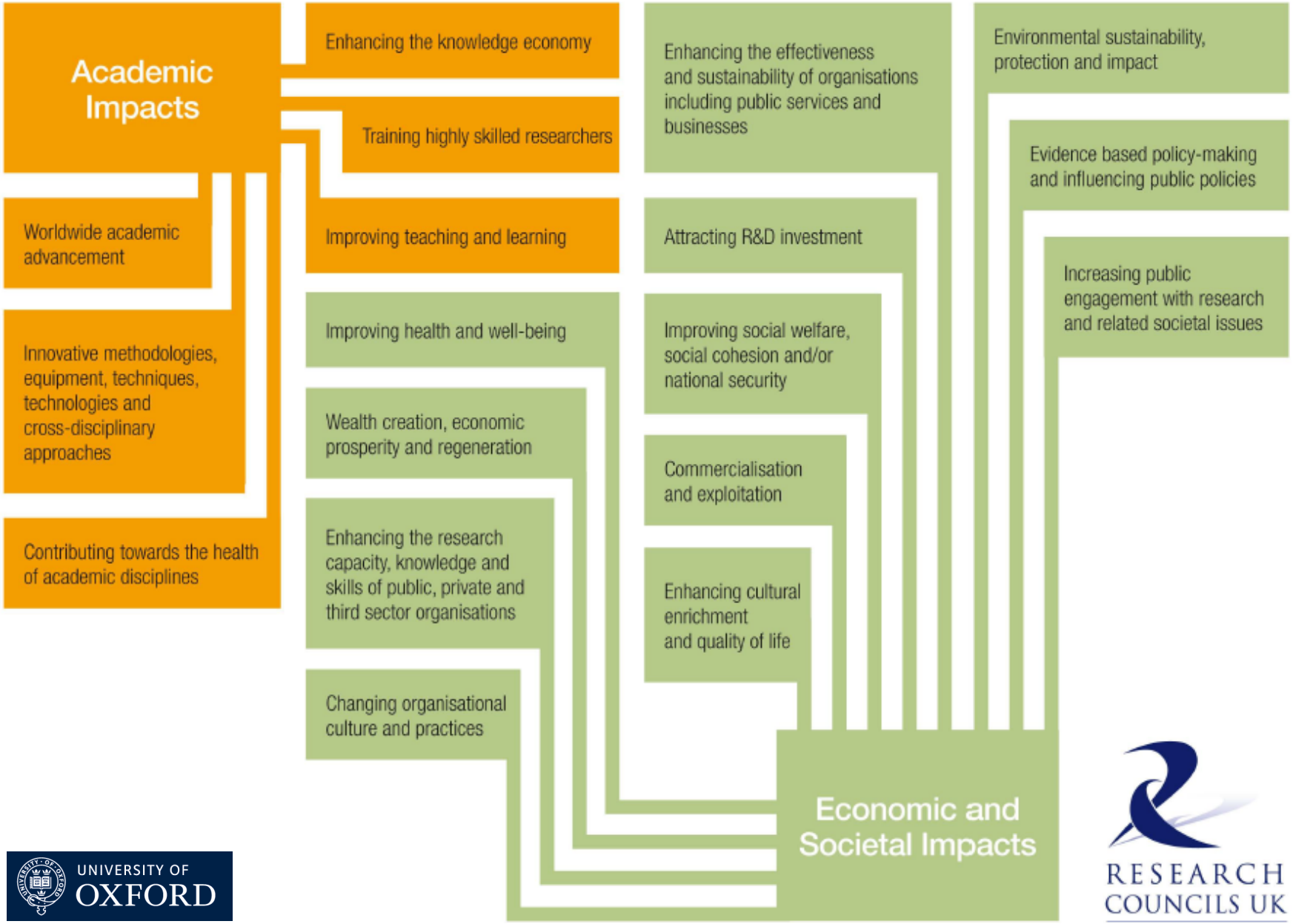
Impact Statements – UK Perspective



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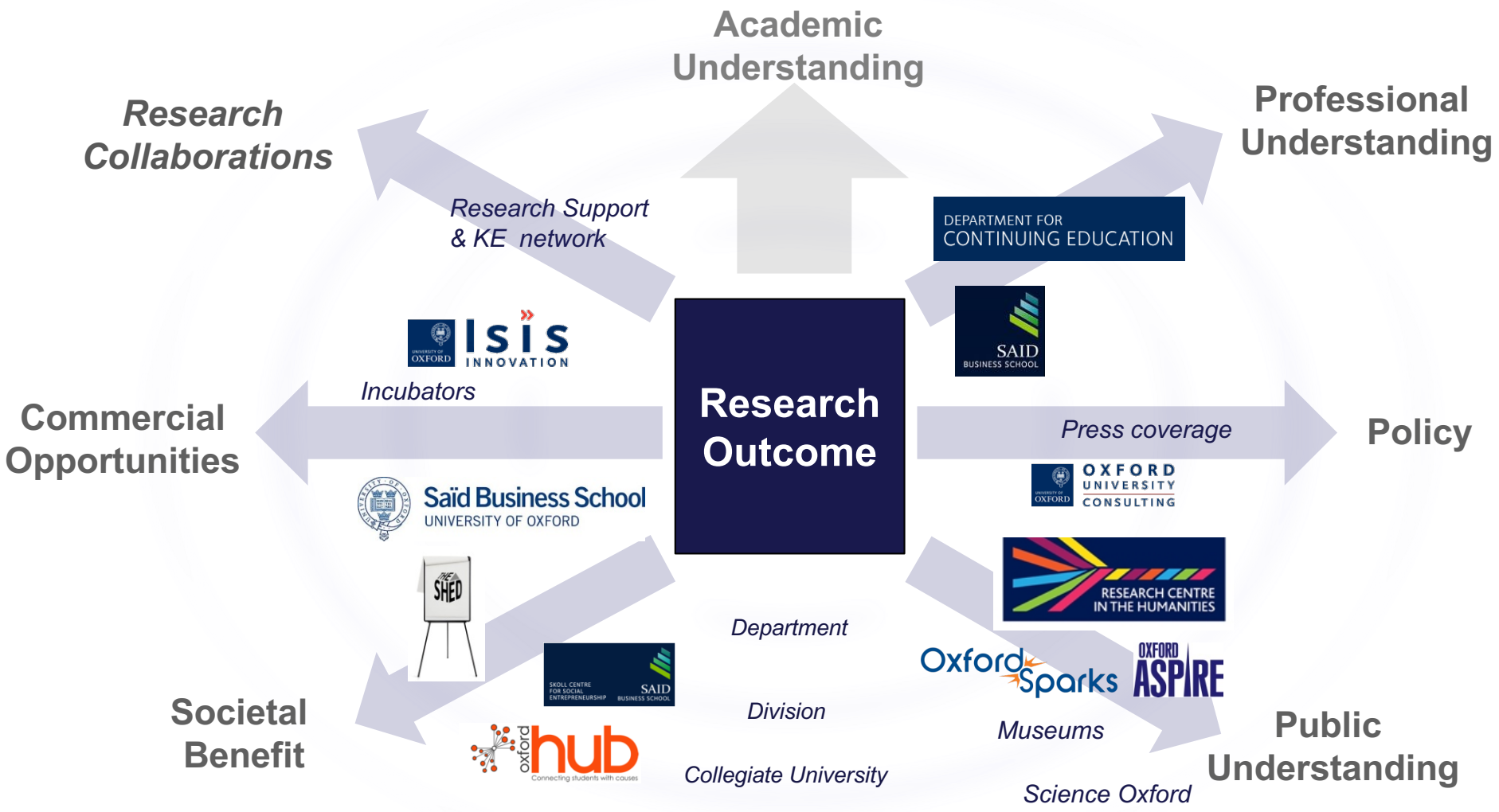
RESEARCH COUNCILS UK

Facilitating impact at Oxford



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Oxford Impacts

SHARE THIS

Home 〉 Research 〉 Research impact 〉 Impact case studies

Impact case studies

The Oxford Impacts series celebrates the range of impacts the University has on the world of policy, health, business and culture. All of this is enabled by the world-leading research of Oxford academics. This set of case studies showcases academic research, across a range of subjects, that has had an impact on the world.

If you know of some impact from Oxford research which we should showcase please contact the Knowledge Exchange and Impact Team.

Search

Search case studies

Department

- Any -

Division

- Any -

Research funder

- Any -

APPLY

Managing the risk of surface water flooding
Research by the University of Oxford, in conjunction with the London School of Economics, is playing a key role in combatting one of Britain's most persistent natural hazards.

Improving treatment of speech disorders
An Oxford University researcher has developed a telephone-based system to help clinicians diagnose and treat patients with diseases that affect their voice.

Providing the technology for 'space refrigerators'
Engineers at Oxford have made key improvements to the design of cryocoolers, an important cooling component of satellites, thereby contributing to many successful satellite missions and to reduced launch costs.

Preserving an exceptional fossil site for future generations
Research carried out at the University of Oxford has helped to demonstrate the extraordinary significance of a fossil site in China for understanding evolution at the time of the Cambrian explosion, culminating in its designation as a UNESCO World Heritage site in 2012.

Turning orange into grapefruit
Research in the Department of Chemistry into the action of natural enzymes is finding a commercial application in the global flavours and fragrances market.

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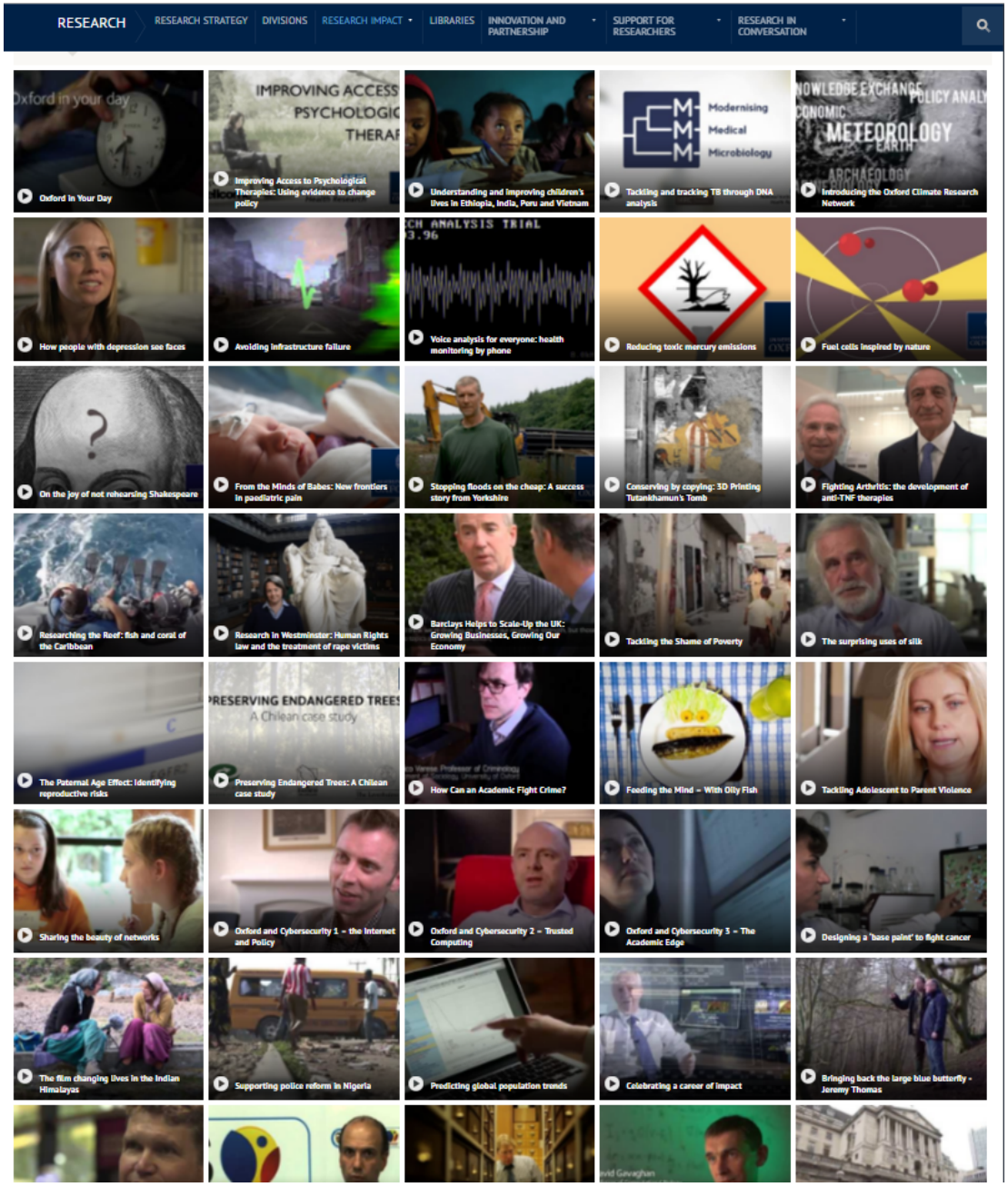
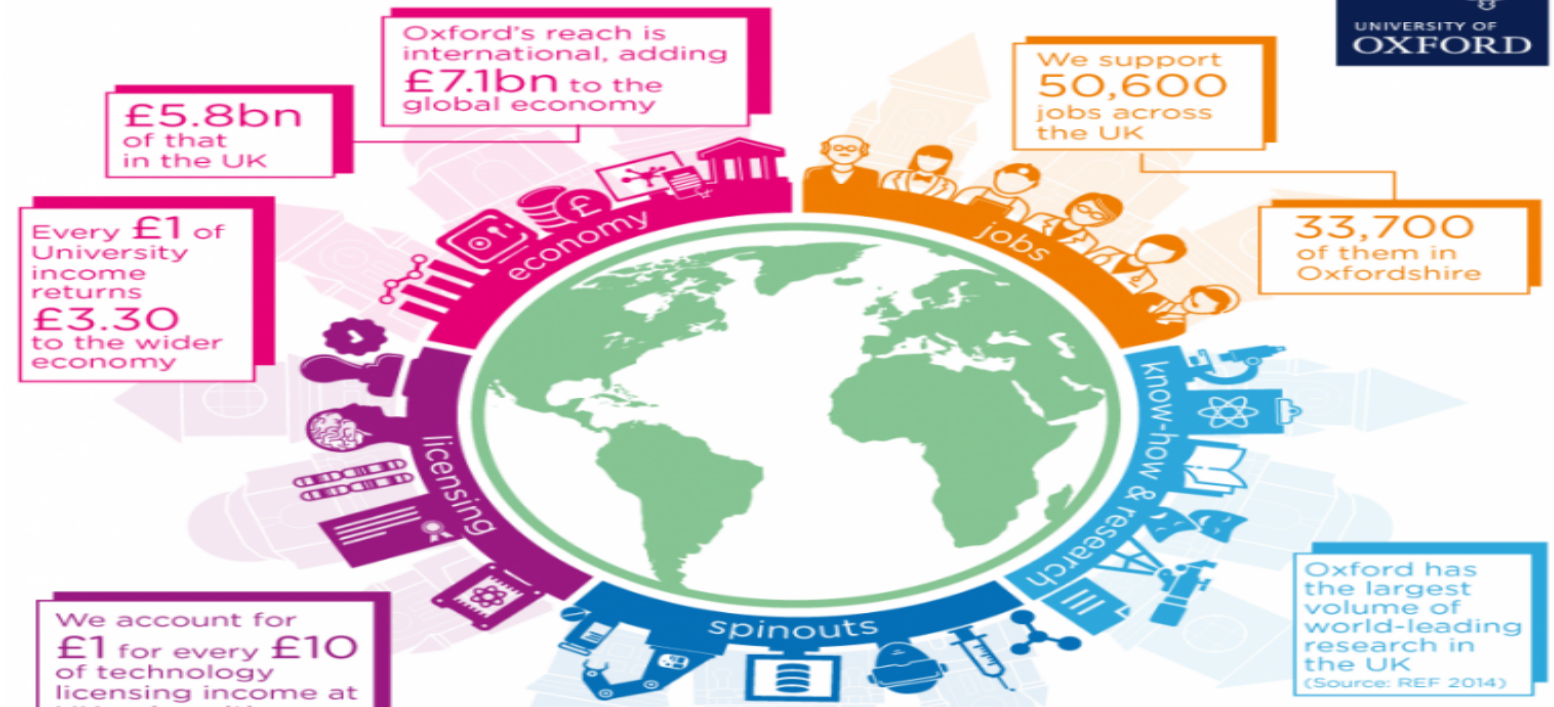


Economic Impact of the University of Oxford



All of Oxford's commercialisation activity added £320m to the UK economy

Source: BiGGAR Economics report 'Economic Impact of the University of Oxford' (2017). All figures relate to the 2014/15 year and economic contribution is measured as Gross Value Added (GVA). See the full report at: www.ox.ac.uk/economicimpact

COMMERCIALISATION

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What is Intellectual Property?

- Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.

- IP is protected in law by, for example, patents, copyright and trademarks, which enable people to earn recognition or financial benefit from what they invent or create. By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to foster an environment in which creativity and innovation can flourish

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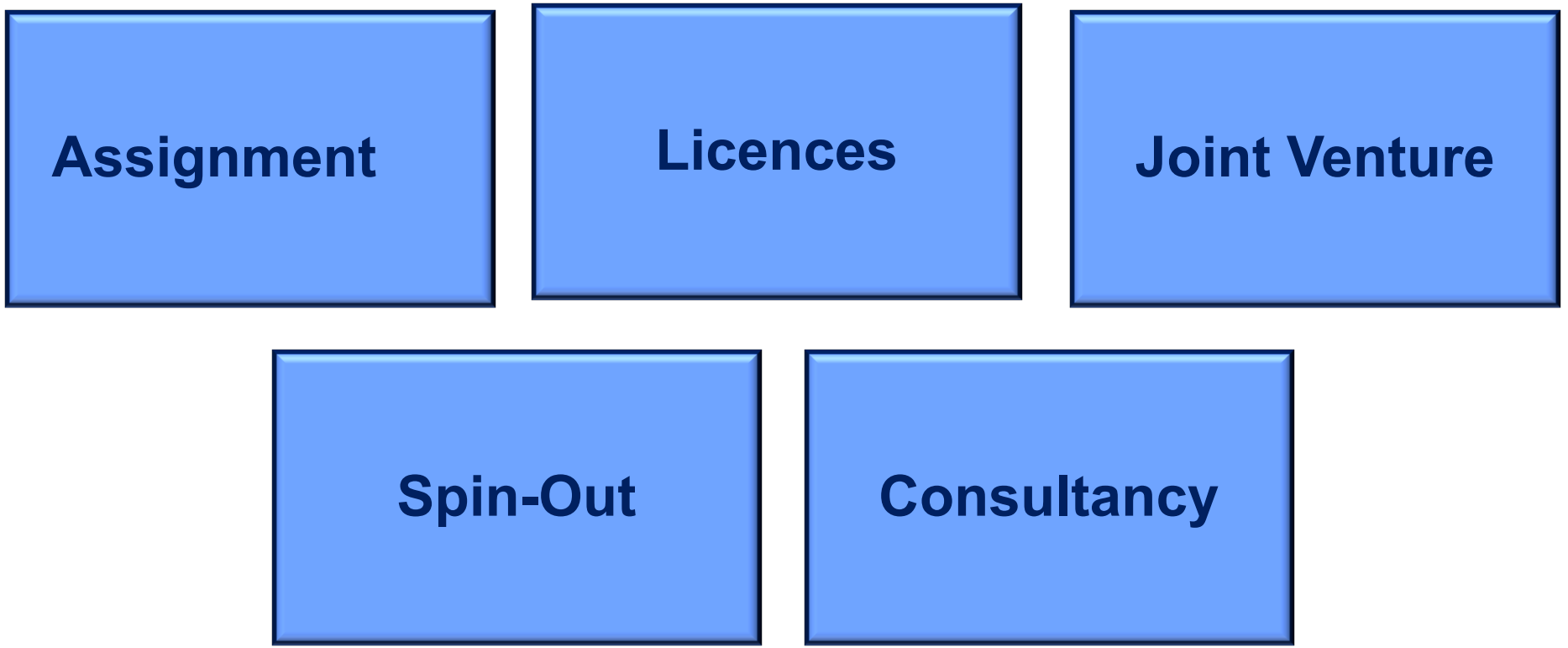
Commercialisation Channels



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Assignment

- IP ownership permanently transferred from one party (assignor) to another party (assignee).
- Advantages
  - immediate cash flow return for further investment in R & D (lump sum payment is normal)
  - No further responsibility (or costs) for IP management
- Disadvantages
  - Loss of control/rights over IPR
  - Use of IPR would constitute infringement without specific clause for future research
  - Potential non-benefit for socio-economic if assignee does not exploit IPR

Licence Agreement

- A contract under which the IP holder (licensor) grants permission for use to another party (licensee) with specific limits for use set out
- Licences for exploitation should include payment
- Advantages
  - Provide faster access to markets
  - Licensor keeps control over IP
- Disadvantages
  - Can lose control of information flowing from further development
  - If exploitation not successful, income may be limited (especially if an exclusive licence is granted)

Joint Venture

- Type of collaborative commercialisation – university & private company jointly commit resources and research efforts to projects ranging from short-term narrow projects to long term strategic partnerships
- Advantages
  - Economic benefit form commercialisation of existing IP or results of joint venture
  - Sharing of R & D, marketing and commercialisation costs
  - Reduced investment risks
  - Development of new products
  - Access to new markets
- Caution – carefully define access to other IP (background) as well as terms for project results

Spin Out

- Company created specifically to bring IP onto the market
- Valuable channel for universities to transform technology into product and service as well as licence out technology
- Powerful means of technology transfer between acadmia and industry (especially when larger companies buy the spin out)
- Advantages
  - Outsource development that might not fit with other scientific objectives
  - Access funding not available to universities to help with development costs
  - Participate in H2020 as an industrial partner
  - Equip research staff with entrepreneurial skills and experience
- Disadvantages
  - Complex process including business planning, risk management and investment
  - Sensitive negotiations with university in terms of IP licencing and ownership shares
  - Risk of financial failure and potential liabilities for participants

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Consultancy

- **Contract research -** commissioned by a private company to pursue the solution to a problem of interest (should be at commercial rates)
  - Involves the creation of new knowledge to specifications or goals of the 'client'
  - Private company will own the IP
  - Background ownership not affected
- Good for universities because should be very lucrative but work may be outside the scope of research objectives
- **Consultancy** – research or advisory services provided by researchers to non-academic clients.
  - Clients can be private companies, charities, government and NGOs
  - Most common example of industry academia engagement
- Good for industry as work is specifically tailored and usually will not compromise university research objectives

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Advice and support

- **Universities – Technology Transfer Offices or Research Offices**
  - **At Oxford** https://innovation.ox.ac.uk/
- **H2020 – IPR Help Desk**
  - https://www.iprhelpdesk.eu/
- **Icelandic Patent Office**
  - http://www.els.is/en

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