

Smart Data Research UK: Innovation Fund

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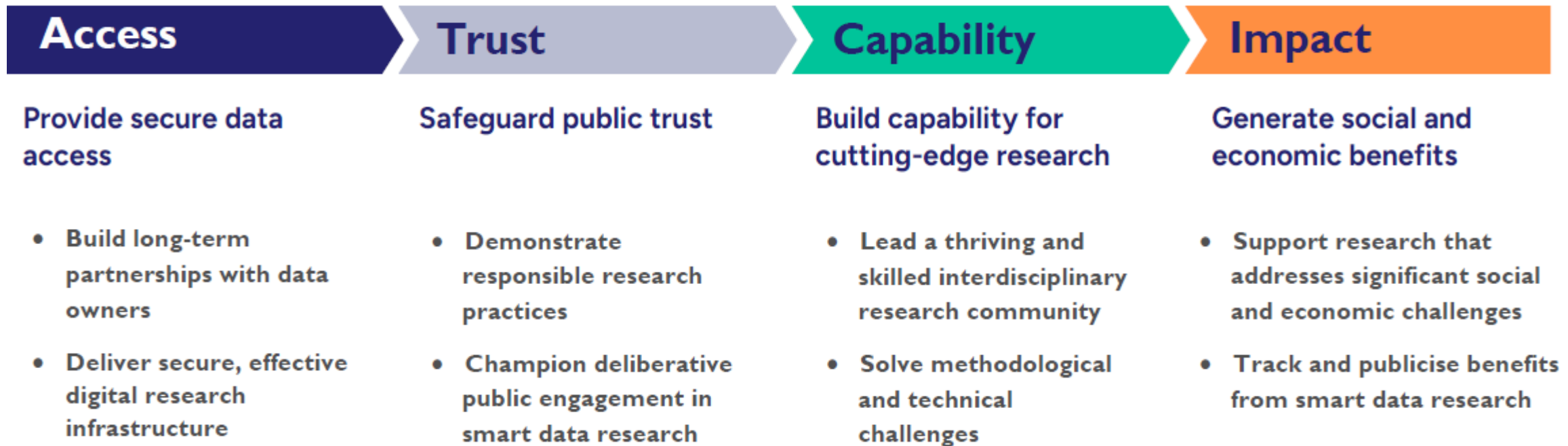
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UK Research
and Innovation

Introducing Smart Data Research UK

SDR UK is a UKRI **infrastructure investment** which seeks to harness the power of digitally derived data to drive research and innovation for public good



Smart data = “the data generated through engagement with digital systems, devices and sensors”

Retail and business data

about the production, distribution and sale of goods and services, and those who consume them

Store loyalty cards, checkout scanners, management information systems, online shopping transactions.

App and web data

resulting from human engagement with online services and platforms.

Social media, forums, apps, gaming and streaming services, property listings, gambling services

Financial data

resulting from digital transactions and other financial products

High street banking transactions and account data, card payment systems, digital currencies, loans, pensions and other investments.

Transport, mobility and infrastructure data

generated by sensors monitoring the physical environment or the movement of people and objects

GPS-enabled devices and vehicles, communication networks, sensors in transport networks, supply chains, buildings, environmental sensors, energy systems, utility networks.

Imagery data

from remote imaging devices

Satellite observations, aerial imagery, LiDAR, street-level imagery, crowdsourced imagery.

Smart devices and wearables data

including from sensors on the body or devices sensing and acting in small-scale environments.

Smart watches, fitness trackers, wearable glucose monitors, IOT and smart home devices.



We fund a portfolio of national data services to enable better access to smart data

Acquire, steward and enable safe access to smart data for research:

Partnerships with data owners; developing and curating data products; address issues of representativeness, provenance, bias, licensing; protect sensitive data when making it available

Collaborate to build a user-friendly federation of services and enable cross-domain research:

SDR data will be FAIR; collaboration with other UK data services to standardise and streamline services

Ensure responsible use of data:

Go beyond regulatory compliance to embed ethics and responsibility in all aspect of the data service

Build capability:

Establish CoP; support development of research skills to build user base for smart data

Centres of excellence for smart data research:

Impact-focused research to shift practice, thinking and capacity; bring researchers, policymakers and other actors together to address critical challenges in the UK





Our mission is
to unlock the
power of data
to improve
lives



**PRODUCTIVITY AND
PROSPERITY FOR ALL**



**HEALTH AND
WELLBEING**



DIGITAL SOCIETY



SUSTAINABILITY

Let's do **good things** with data

A network of expert data services, with
central coordination

Smart Data Research Data Services



Data Service	Lead Organisations	SDR UK Thematic Pillars	Data sources
Smart Data Donation Service	University of York	Digital Society	Video game (donation)
Geographic Data Service	UCL University of Liverpool	Productivity and Prosperity	Web/App and Image, Financial, Transport
Healthy and Sustainable Places Data Service (HASP)	University of Leeds	Health and wellbeing Sustainability	Mobility, Spatial, Housing Financial, Food, Health (NHS, Gyms, etc)
Imagery Data Service (Imago)	University of Liverpool Newcastle University	Sustainability Productivity and Prosperity Health and Wellbeing	Satellite, Imagery



Smart data
for a healthy,
equitable,
sustainable
and resilient
UK food
system

Flexible funding: Innovation Fund

- Approx. £6m Innovation Fund – £2025/26: £1.5m high impact-generating activity on food system R&I
- Cross-pillar focus: H&WB; Productivity, Sustainability, Digital Society
- Consultation to develop a call in 2025
 - Scope and focus of the investment
 - Approaches to high-impact activities, drive interdisciplinary research and innovation, promote diverse communities of knowledge and practice, and demonstrate the value and utility of smart data to enhance the UK food system

1. Addressing consumption challenges through smart data to tackle health inequalities

- UKRI-BBSRC: 'Health inequalities in the food system' call
- 2 sub-themes: (a) Understanding the causes of UK dietary health inequalities; (b) Interventions to achieve equitable and healthy consumption in the UK food system

2. Optimising the UK food supply chain for economic and environmental efficiency and resilience

- Focus on the economic-environmental nexus across the food system

How can smart data be used to enable new understandings of the UK food supply chain to support greater efficiency and resilience?

- How can smart data be deployed to improve the productivity and environmental efficiency of food supply chain functions and operations?
- How, and with what effect, can data sharing be enhanced and democratised across the supply chain?
- What mechanisms can be developed to drive improved productivity and sustainability across the food supply chain, and enhance its resilience?

Two
proposed
focus areas



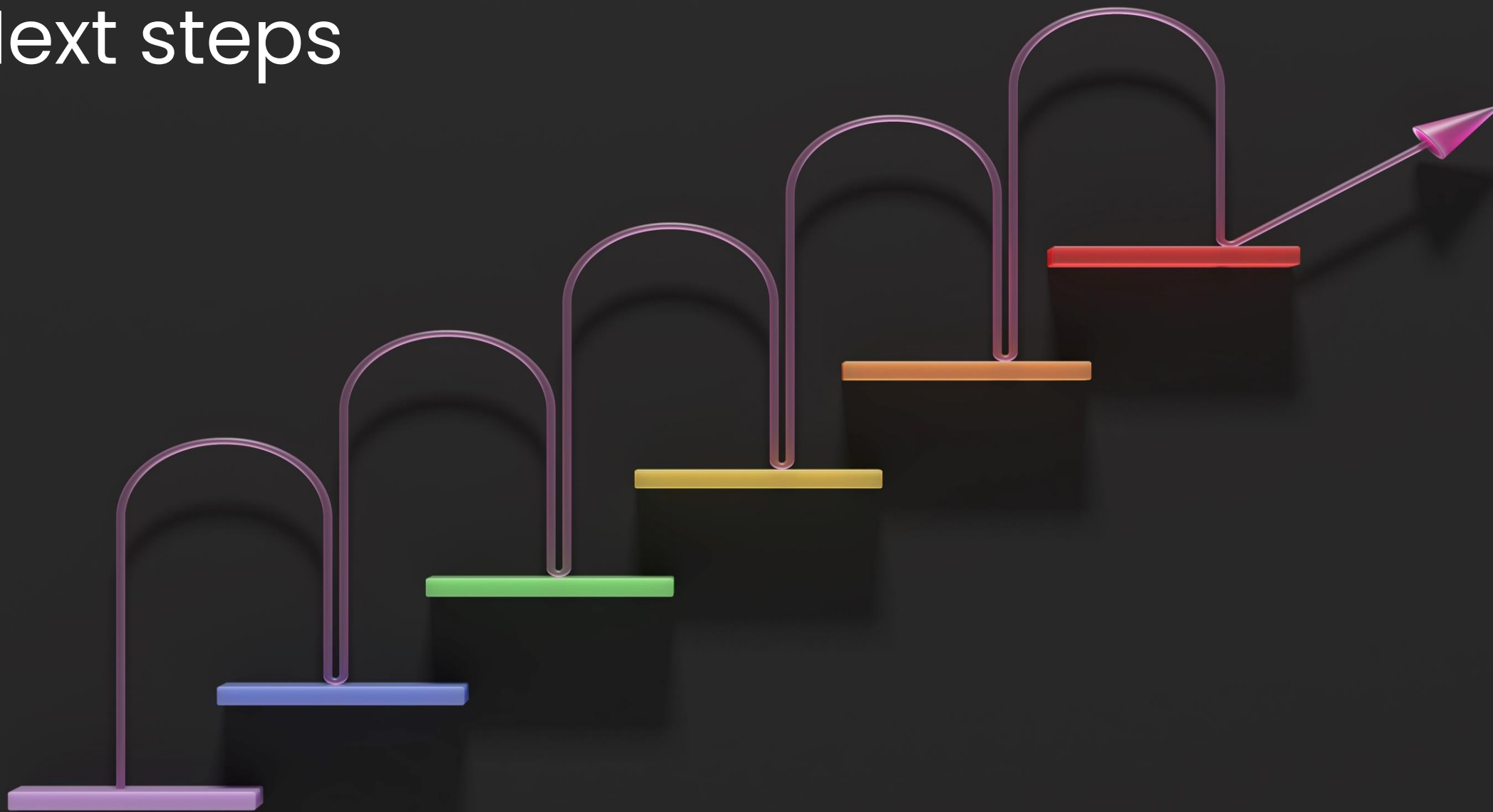
Emerging themes from consultation

Contd.

- **Broader nexus: healthy**, environmentally **sustainable** and **affordable** food production, availability, and consumption
- **More institutional and infra focus, less individual:** societal and systemic perspectives over individual focus
- **Supply chains:** data access and sharing across supply chains a challenge
- **Health inequalities:** linking health and non-health data to understand vulnerabilities to address health inequalities
- **Mapping food 'deserts' and 'swamps':** identify health inequalities and drive policy and planning interventions
- **Food aid and alternative supply chains:** food aid sector as an alternative supply chain for optimisation; social infrastructures and small grower supply chains
- **Metrics on food environments:** development of data points for granular, place-based understandings of local food environments



Next steps



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