Agrimetrics Data Platform; Harnessing and merging big data

D. Flanders, M. Coffey

Speaker: David Flanders

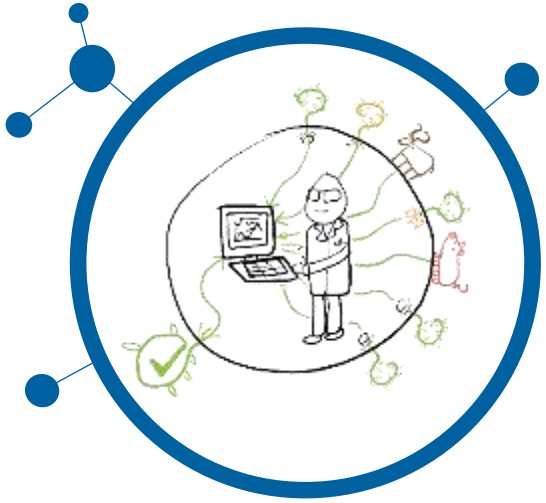
We work with Innovate UK

Agrimetrics Data Platform: Harnessing & Merging Big Data

David Flanders, PhD
CEO, Agrimetrics Ltd
14 June, 2017

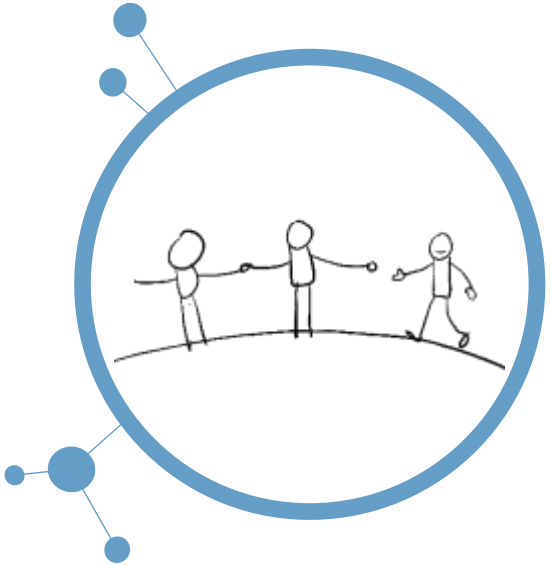
Who we are

A Big Data Centre of Excellence



Agri-Tech Strategy
Innovate UK
£12m

Collaboration

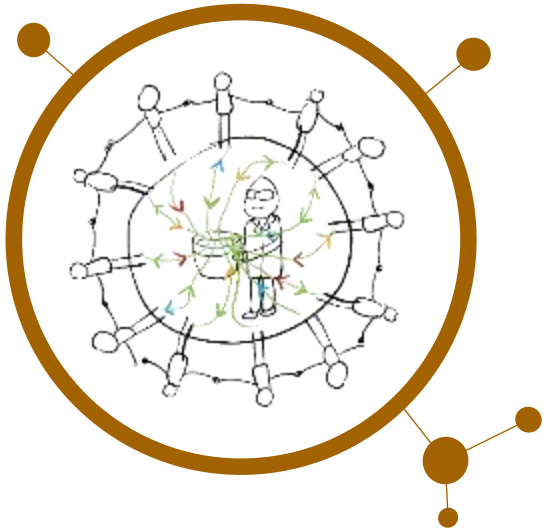


Rothamsted Research
University of Reading
NIAB
SRUC

A team of experts

Data Science
Crop & plant health
Livestock production
Sustainability

Independent, Not for Profit Broker

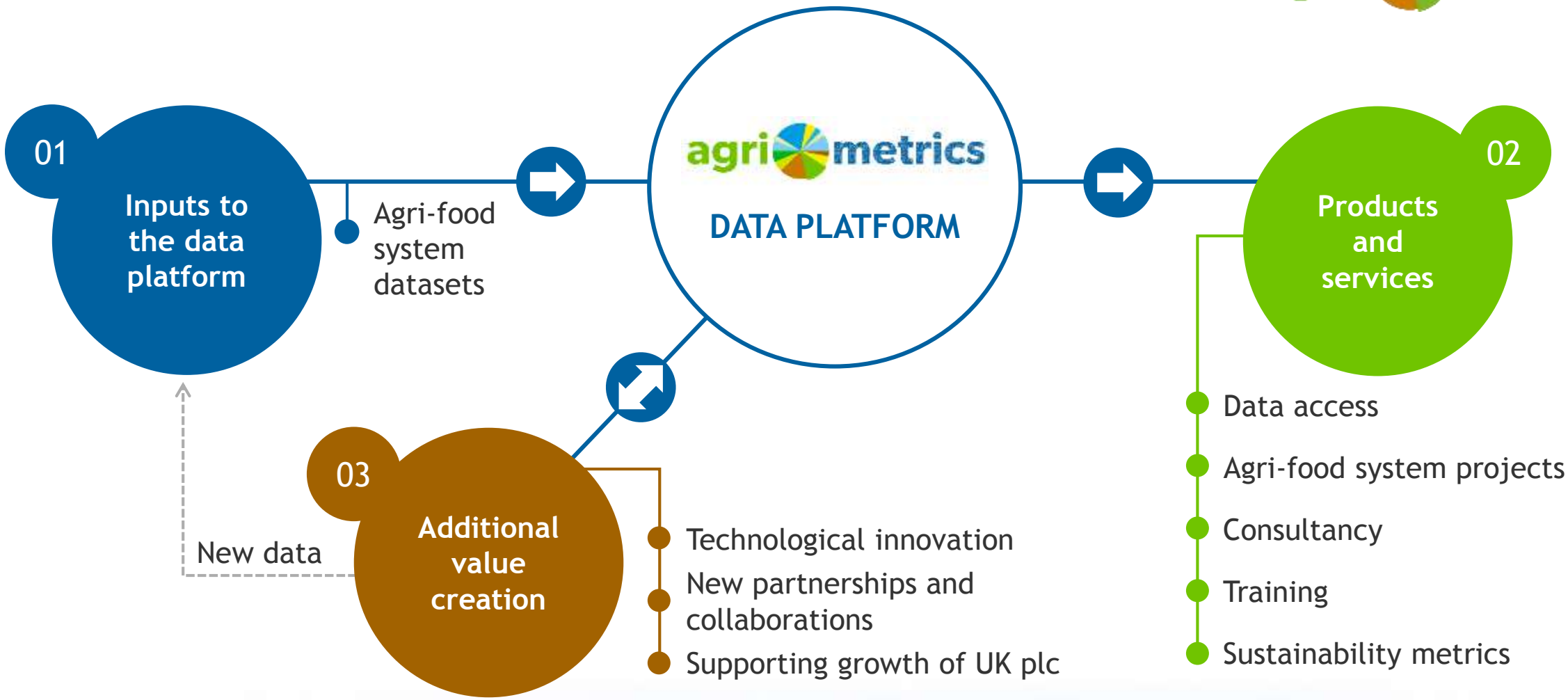


Trusted and secure
Across the agri-food system

Our vision

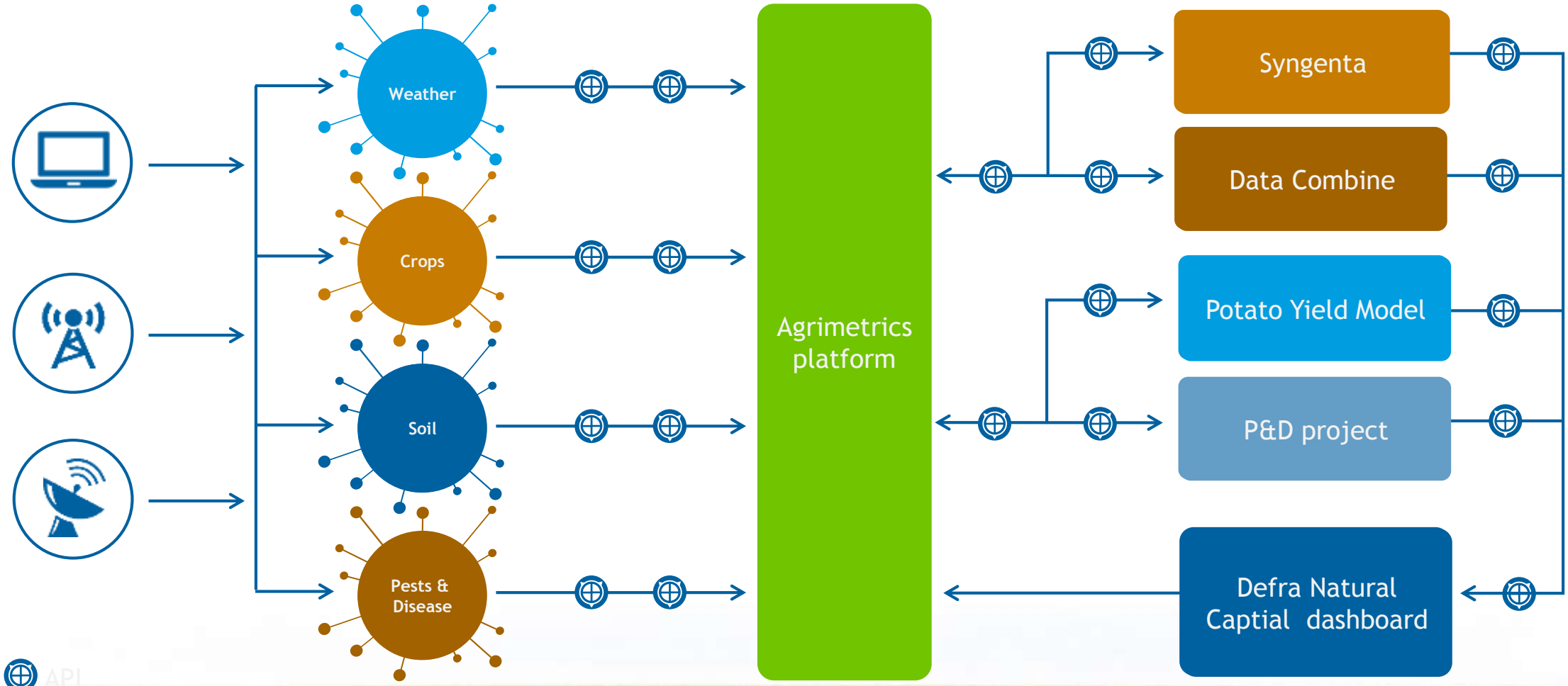

To be the most reliable and innovative evidence base for the sustainable agri-food system, which users trust and value

Delivered via the world's first agri-food big data exchange



Creating a market in agri-food data and insights that is open to all

Delivered via the world's first agri-food big data exchange



Agrimetrics's three aims

The value

- Independent, trusted way of connecting data across the Agri-food system
- An evidence base for the interconnected challenges of growing, sourcing & selling food
- A common framework that can be processed by machines allowing data to be shared and reused across applications, enterprises, & locations
  - Insights provided in real time
- Used to enhance the productivity, safety, quality & sustainability of agri-food production
  - Now and in the future

Case studies

Confidential benchmarking

Connected cow

Potato yield model

Other agri-food data-sharing success stories

- **Sedex** (Supplier Ethical Data Exchange) – Shares data on ethical treatment of workforce
  - Across 40,000 organisations and 150 countries
- **Food Hygiene Rating Scheme** – Identifies hygiene standards across 99% UK food businesses
  - encourages businesses to improve hygiene standards & reduce incidence of foodborne illness
- **Cool Farm Tool** – GHG, biodiversity and water assessment on farm
  - Shared anonymised information used for analysis of crops & regions

By sharing data together you could

- Better connect supply and demand for different livestock sectors
- Create confidential benchmarking processes that enable farmers to become more productive and profitable
- Develop an evidence base that enables better understanding, measurement and management of interconnected issues
  - *e.g.*, animal welfare, GHG emissions, carcass quality, nutrition
- Compare performance across different production systems and geographies
  - *e.g.*, UK lamb vs. NZ lamb
- Connect world leading science on sustainability of livestock production

The challenges to overcome

- Trust
- Identification of win:win
- Data as a currency to trade for better insights
- Shift from ‘thinking you can do it on your own’ to ‘needing to work with others’ to find the solutions to complex agri-food related problems

End

Appendix

Four Centres – One vision

CHAP
CROP HEALTH & PROTECTION

AGRIEPICENTRE
Engineering • Precision • Innovation

CIEL Centre for Innovation Excellence in Livestock

agri metrics

Industry-led application of UK's World Class science across the Agri-food system, measured through:

- Efficiency
- Sustainability
- Food Security
- Quality

To deliver an enhanced contribution to UK wealth creation

Centres tackling identified UK weaknesses

- Excellent basic science, but
  - Too fragmented to address strategic challenges
  - Mostly not addressing real industry needs
  - Lacking investment in translation
- Best practice not being shared or driven

Centres tackling identified UK weaknesses

Three Centres linked to defined industry sub-sectors
Working together
Underpinned by sector-wide metrics