https://foodchain.ac.uk/

Overview

Investigations of how artificial intelligence, data analytics and emerging technologies can enhance the digitalisation of the UK food supply chain

- Unites: Agri-Food Tech, Data and Computer Scientists, Chemists, Economists
- With Industry and Policy

Launch event

- **Date:** 21st September 2018
- **Location:** The IET's Global Engineering Hub, Savoy Place, London
- Business partners will present the broader industrial reach of the Network

Programme: 11:00 – 15:30 (for the main talks & discussions)

- **Professor Guy Poppy**, Chief Scientific Adviser at the Food Standards Agency (FSA), will invite the community to help the FSA address the challenge of modernising regulation during these transformational times
- **Josephine Hansom** from Youthsite on Millennials and food - https://www.youthsight.com
- **Patrick Curry** Director, British Business Federation Authority (BBFA), on Distributed Ledger Technology and Food Traceability
- **Kirsten Coppoolse** from The Fork, NL, on monthly blockchain meetup in Amsterdam
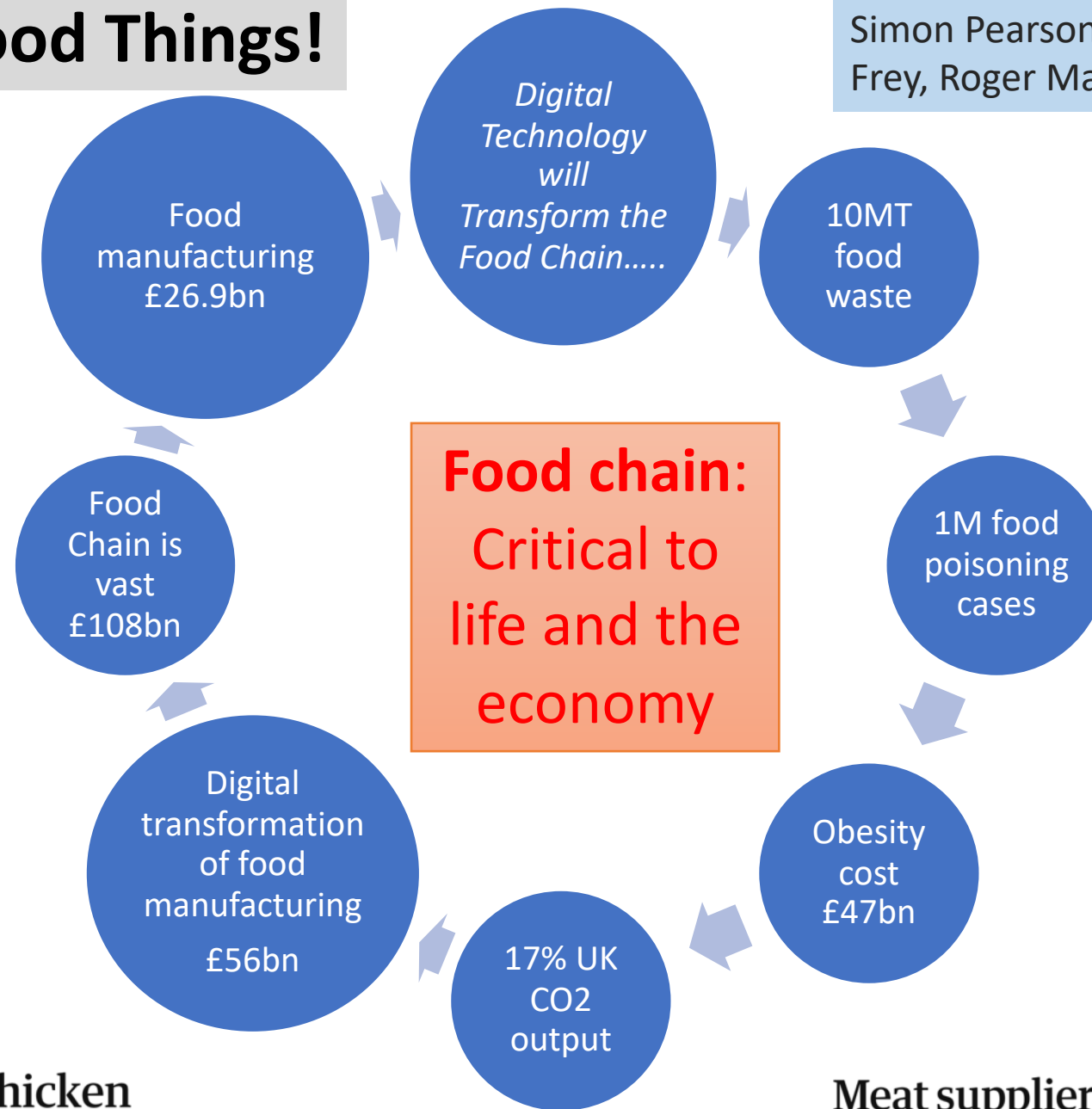
The Internet of Food Things!

We will join up a highly diffuse academic community, connect it to the key challenges, make the community sustainable and deliver impact…..

Simon Pearson, Andrea Zisman, Jeremy Frey, Roger Maull, Gerard Parr, Luc Bidaut

Made Smarter Review: £56bn of GVA generated by the digital transformation of food manufacturing by 2035

Food manufacturing £26.9bn

Digital Technology will Transform the Food Chain…..

10MT food waste

Food Chain is vast £108bn

Food chain:
Critical to life and the economy

1M food poisoning cases

Digital transformation of food manufacturing £56bn

17% UK CO2 output

Obesity cost £47bn

Food chain: -
Huge societal impacts:

UK's largest manufacturing sector:
- £26.9bn GVA
- 420,000 jobs

Food chain is vast:
- £108bn GVA
- 3.9m jobs
- £20bn of exports

Job cuts loom at scandal-hit chicken supplier 2 Sisters

TESCO Everyday Value
8 beef burgers
No artificial preservatives, flavours or colours

Meat supplier Russell Hume collapses with loss of up to 300 jobs

The Internet of Food things: issues, activities and people

Issues:
1. Trust, identity and privacy
2. Digital business models
3. Internet of things for a service economy
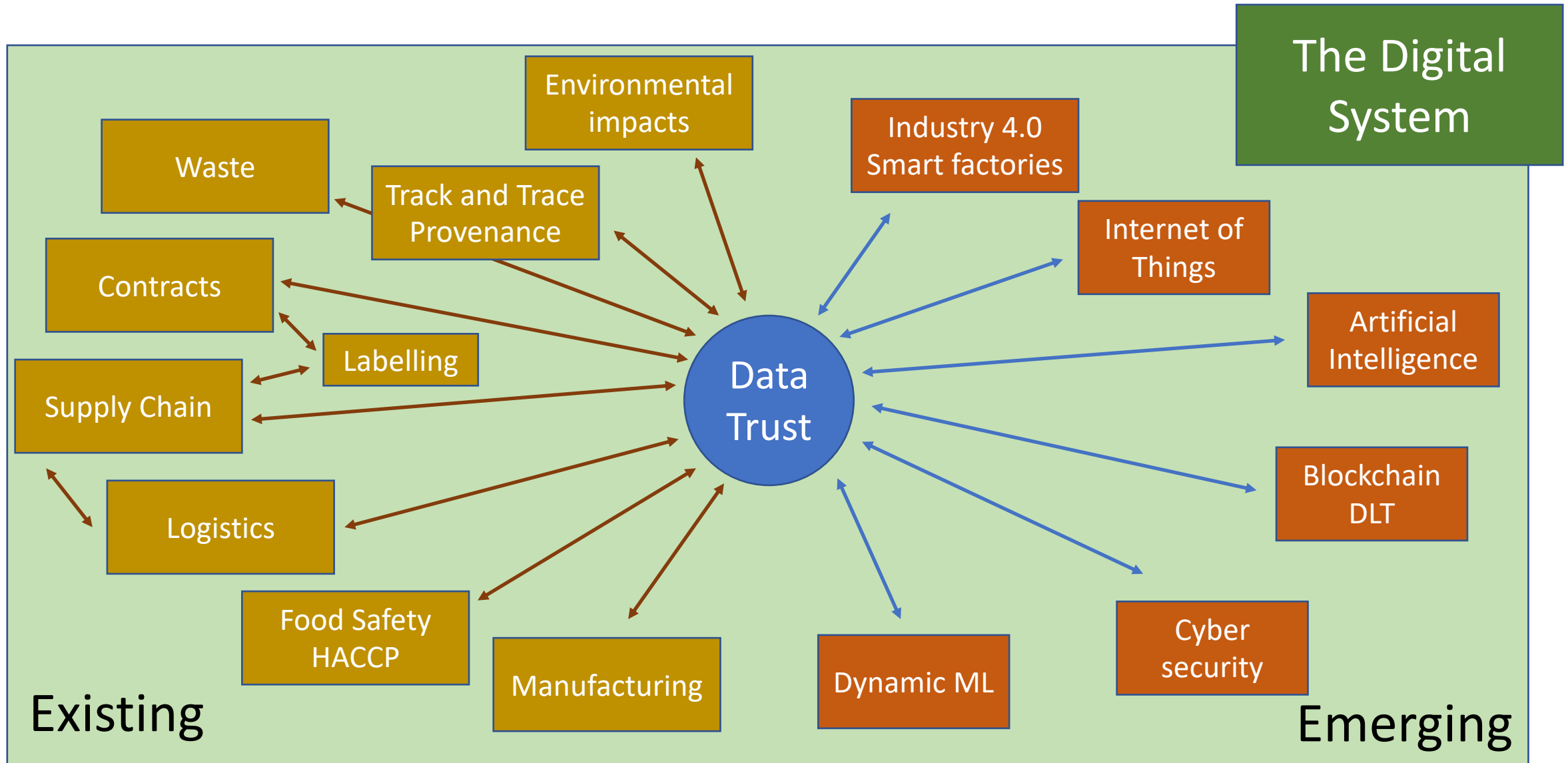4. Content creation and consumption

Activities:
1. Network creation
2. Digital demos and innovation
3. Horizon scanning and promoting opportunities
4. Communication, digital champions
5. Advisory board: sharing & steering

People:
1. Growing the network
2. Motivating the community
3. Launching spinout activities
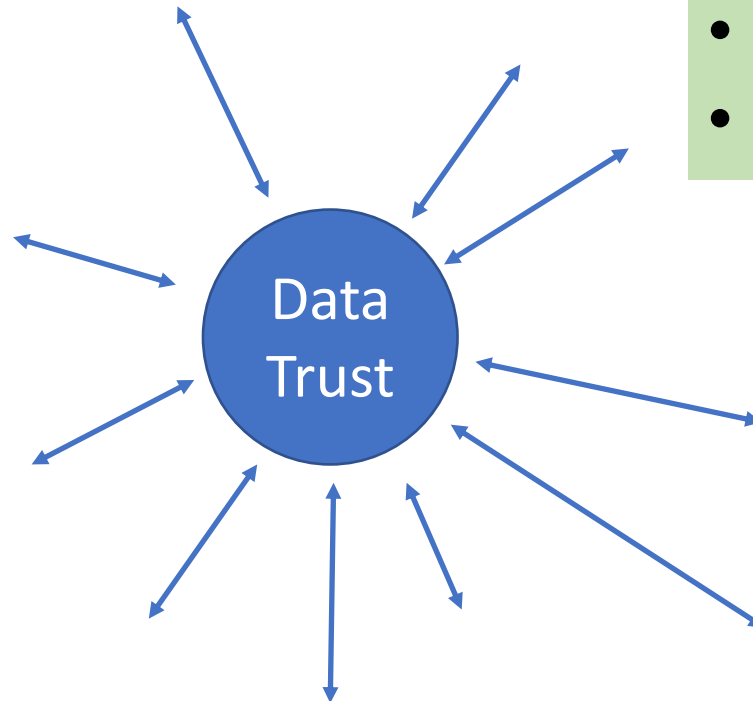4. Hosting workshops & events
5. International outreach

Mapping the digital food chain challenges

Defining the digital food chain challenges

Data Trust model needs:

- Governance frameworks
- Standards
- Open and closed chains
- Access mechanisms
- Interoperability
- Cyber security

Benefits:

- Productivity
- Waste reduction
- Increased choice
- Support for the environment

Data Trust

Perspectives:

- Academic
- Industrial
- Policy

Funding opportunities for Network members

We will require:

- Reports
- Papers
- Pilot projects
- Blog posts
- Feasibility studies
- Venues

We are interested in:

- Whole supply chain risk profiles
- Emerging technologies
- New business models
- Barriers to implementation
- Standards, structure, governance and trust
- International collaboration
- Communication and defragmentation

Possible IoFT Network themes

- The creation of a "data trust" for the food sector to underpin data sharing, trust and interoperability within complex supply chains
- New business models via distributed ledger technology (DLT) to underpin traceability throughout the food chain
- Wide scale application of the internet of things (IoT) for the service community
- The development of new digital labelling protocols
- The use of novel digital technologies (e.g. artificial intelligence) to reduce food waste
- Digital manufacturing of food

Pilot studies (7 @ £50k)

Two calls over the lifetime of the Network tied to workshops. Bids to be led from academics (endorsed by finance dept.) with business partnership.

Timeline for pilot projects to address 1 or more Network themes:

- Fine-tune call scope with AB, and scoping workshop
- Promote call
- Workshop to explore themes
- Call closes, Co-Is to sift, and AB to review short list of applications
- Projects executed
- Workshop to present and review outcomes
- Publish booklets etc. to promote outcomes and recommendations
- Project outcomes presented at Conference

Breakout discussions: what we need to know!

1. The one thing you want to do in digital food chains
2. Biggest opportunities for digitising the food chain
3. Biggest barrier to digitising the food chain
4. The key challenge for feasibility funding – ie. ideas for our pilot project calls, probably at (up to) £50k
5. Suggestions for our working groups/workshop themes: eg Data Trusts, DLT, IoT, AI, Systems, new business models, smart packaging/labelling, standards
   1. Which *one* group would you like to be involved in?

Join the Network

- Website: https://foodchain.ac.uk/

- Mailing list: https://www.jiscmail.ac.uk/lists/FOODCHAIN.html

- Twitter: @IoFTnetworkplus

Thank you!