Data Ownership, Legal Issues, Privacy and Security

Code of Conduct for Ag Data

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LODA Workshop, Berlin

CEMA

Agricultural Machinery in Europe

- Biggest data generators in agriculture

- Need data to operate the machines in the field

- Strong relationship between equipment dealers and farmers

- Use data for better equipment

Connected machinery

And confidential company data

The Agricultural Evolution

1.0
Mechanization

- Introduction of tractors
- Increase in efficiency
- But labour-intensive system
- Relatively low productivity

2.0
Green Revolution

- New agronomic management practices
- Use of fertilizer and pesticide
- Improve seed quality
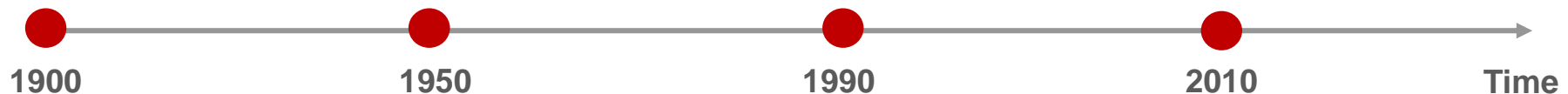- Increase yield

3.0
Precision Ag

- Guidance systems
- Yield Monitoring
- Variable Rate Application
- Telematics
- Data management

4.0
Digital Farming

- Farm Management system in real time
- Added-value services
- Automation capabilities
- Improve Agri processes & food value-chain (data platforms)

1900   **1950**   **1990**   **2010**   **Time**
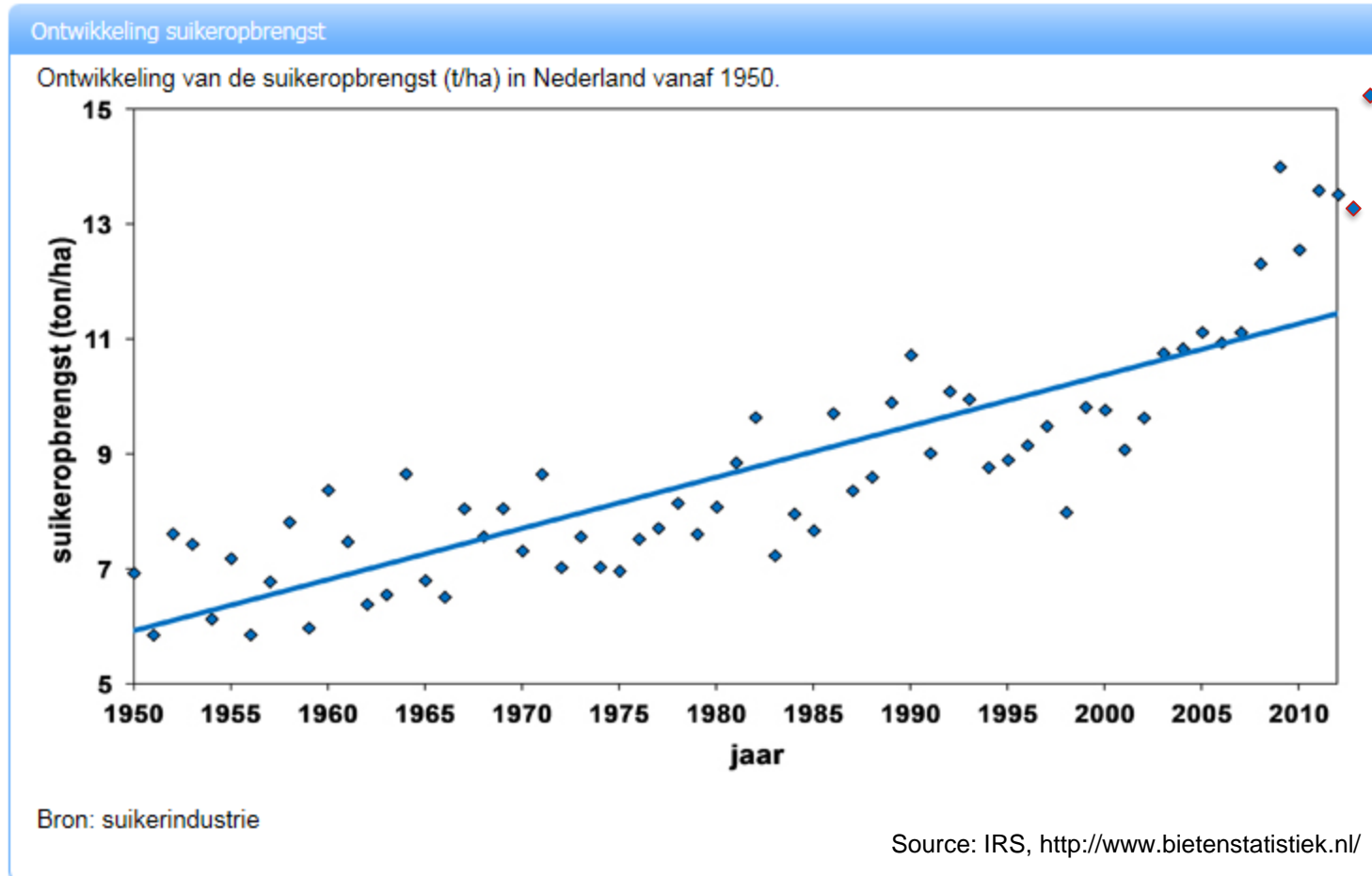
The value of farming data

Value creation outside the farm

- The value is not in the data, but in the algorithms and the improvements it brings.

- A lot of value is created outside the farm: through suppliers or in the food value chain.

- Farmer is reluctant to invest in IoT technologies: value not proven, user friendliness, interoperability, misappropriate data use, small scale farming, … eco-system not established

- Farmer is the key decision maker
(purchases of equipment, agro-chemicals, services, …, sale of products)

The value of the eco-system

Sugar yield improvements through collaboration and data exchange (The Netherlands)

Ontwikkeling suikeropbrengst

Ontwikkeling van de suikeropbrengst (t/ha) in Nederland vanaf 1950.

Bron: suikerindustrie

Source: IRS, http://www.bietenstatistiek.nl/

This example from a closed, local, crop specific eco-system sets the goal for a global open ag eco-system.

Data privacy and data ownership

The importance of trustworthy partners

Farmer "owns" is his data (i.e. controls who has access to the data of his farm)

- Power shift through skewed balance in insight

- Field data can not be anonymised

- GDPR and GPS data

- Potential roadblock for innovation

- Returning value to the farmer
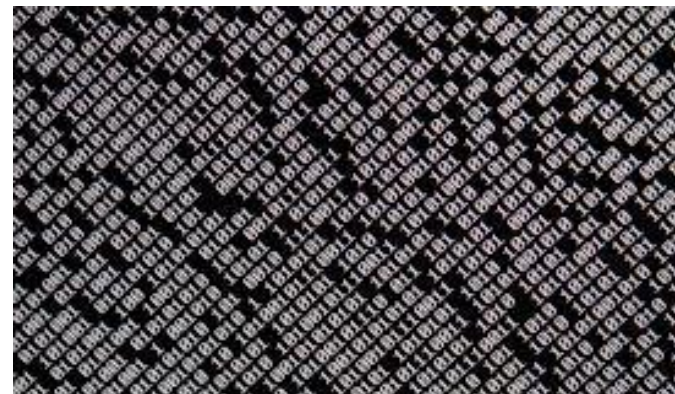
Code of Conduct

Status

Promote proper behaviour

Needs to bring **transparency** and **create trust**!

- Code of conduct draft with the partners

- Now being presented to other organisations for feedback and adoption

copa*cogeca
european farmers   european agri-cooperatives

fertilizers europe

CEMA

Farm data sharing check list

When using a product or service that captures or exchanges data from the farm, answer the following questions:

- Is there an **agreement** in place?

- **What** data is collected?

- **Who** owns/controls access to the data?

- What **services** are delivered?

- Will my data be used for **other goals** than providing me (the farmer) a service? Is it clear what these are? Can I agree/disagree? What are/is the benefits/value for me (the farmer)?

- Is data shared with **other parties**? What rules do the external parties adhere to? Can I agree/disagree with sharing data with other parties?

- Can the service provider **change the agreements** unilaterally?

- What happens when the service provider **changes ownership**?

- Can I **retrieve my dataset** from the system in a usable format?

- Will I be updated on **security breaches**?

- Can I **opt out** of the service and have my data deleted from the system?

- Is there a **contact point** to assist me with my questions?

Questions?