

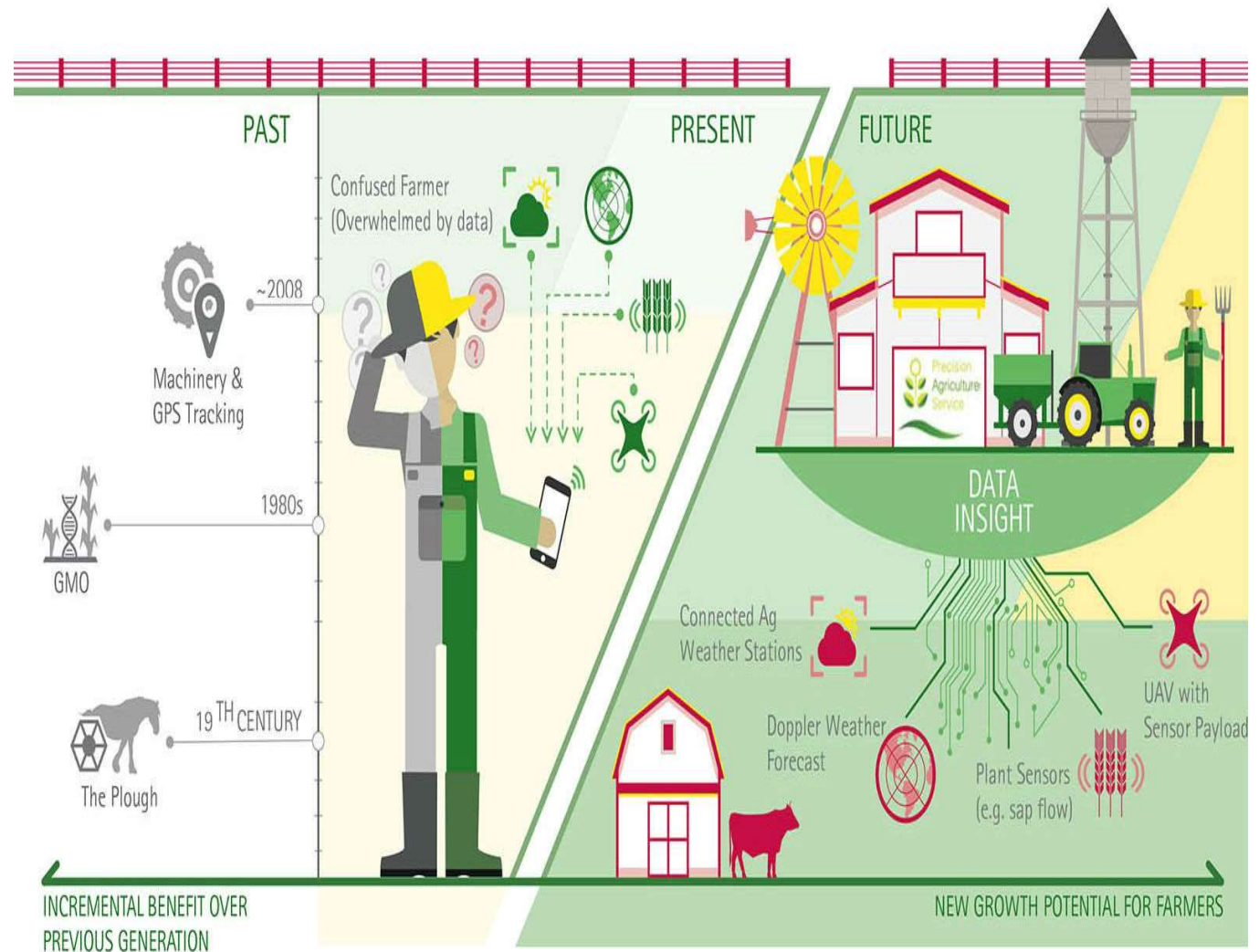


# Regulating Agricultural Data and the Concept of Data Ownership: Approaching the Debate from the Competition Policy Perspective

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# Big Data and Agriculture: Emergence of Smart Farming

- Wrong perception: *“Agriculture is a totally rural activity that is far from technology.”*
- Sure?
- Big Data is a key concept in modern agriculture.
- Smart Farming is promising for a sustainable and more efficient production.



# Lock-in Problem

1. **Legal Ambiguity – Data Ownership Discussions**
2. **Lack of Interoperability:** There is no sector wide data and interoperability standard

## **-Unbalanced Terms and Conditions**

- a- Data blocking provisions - (ATPs' side)
- b- End-user license agreements (EULA) – (Machine Producers' side)

## **-Farmers' Weaker Bargaining Position**

## **-Special Importance of Historical Fam Data Sets**

Competition enforcement might have limited effects

**Main focus in the DAs literature:** Ownership of data

**General view:** *'data ownership problems should be regulated', but how?*

## Attribution of Original Data Rights

### The US Privacy and Security Principles for Farm Data (April 2016)

- **Data ownership:**  
“Farmers own information generated on their farming operations.”

### The EU Code of Conduct on agricultural data sharing (April 2018)

- **Data ownership:**  
*The originator (owner) –*  
“It can be assumed that the data originators are the farmers...”

**Does this ‘data ownership’ design really help farmers or solve data access problems in the sector?**

## How has the broader literature discussed the Data Ownership Right?

### **Discussion:** “Data Producers’ Right” as a Right In Rem

- The EC: “*A right to use and authorise the use of non-personal data could be granted to the “data producer”, i.e. the owner or long-term user (i.e. the lessee) of the device*” (in its Communication of 10 January 2017)
- *Drexl (2017)* – criticised this approach:
  - ✓ the intended function of such a right would fail
  - ✓ problems for third party access
  - ✓ ownership is open to violations.
  - ❖ Proposed another approach: ‘*Data Access Rights*’ design, but with sector-specific focus due to various particularities of different sectors.

# Property Rights, Data and the Digital Agriculture Sector

- **What is ownership of a property?**

- i) the right to use the good (*usus*),
- ii) the right to encumber or transfer the good (*abusus*), and
- iii) the right to the fruits (*fructus*).

- **Possible Effects of Data Ownership in Digital Agriculture Sector:**

1-Farmers do not have power to change standard terms and conditions.

2- ATPs are tend to keep data themselves.

3- ATPs' terms and conditions are sometimes highly one-sided.

4- *abusus* element of full ownership right: data can be transferred to ATPs.

a) Ownership right is a) not able to change the *status quo* b) does not have any solution to interoperability problem and c) could even make farmers more dependent on ATPs with legally recognized ownership rights.

- Therefore, the regulatory intervention should be more sophisticated than just providing ownership right for farmers.

# Alternative ways and farmers' lock-in problem

## Ownership

EU Code of Conduct (on agricultural data sharing) by a coalition of EU agri-food associations in Brussels 2018

Data Originator: Farmers

Considers contracts over farmers

Focusing on ownership right for farmers

## Data Pooling

Agri-Business Collaboration and Data Exchange Facility (ABCDEF) suggested by Poppe and Others

Fispace ([www.fispace.eu](http://www.fispace.eu))

However, it is used voluntarily.

Binding Data Access Regime might be a complementary solution

## Data Portability

The GDPR is not applicable

A sector-specific inalienable data portability right for farmers might be a way-out

Realising the Potential of the ABCDEF Suggestion

[See at (Atik and Martens, 2021) – forthcoming]

# Data Portability Designs in the Voluntary Governance Initiatives

## US Principles:

- Within the context of the agreement and retention policy, farmers should be able to retrieve their data for storage or use in other systems”

## Australian Farm Data Code

### e. Portability of Farm Data

Providers will:

- Provide Farmers with the ability to retrieve their Individual Farm Data – in both a processed (cleaned) and unprocessed form – for storage and/ or use in third party systems (this includes during any Data Retention Period).
- At the request of a Farmer, delete any Individual Farm Data or Private Data relating to that Farmer.



## EU Code:

- “Unless otherwise agreed in the contract, the data originator has the right to transmit this data to another data user.
- If agreed between the parties, the data originator shall have the right to have the data transmitted directly from one data user to another, where technically feasible.”

[See more detailed discussion at (Atik and Martens, 2021) – forthcoming]



## General Considerations

- The ownership concept might not be compatible with the sector needs: Providing a regulatory framework with full ownership, including the *abusus* (the right to transfer the good) element might serve the exact opposite of the initial intention.
- Way out: *Sui generis* binding access rights designed to address specific market failures such as data-driven lock-ins.
- Linking farmers and all the data rights + Exclusiveness 
- Multiple rightholders + Access rights for non-rival data 

## Ideas for solution

### ***The lock-in concern could be eased to a large extent via***

- i) Refined voluntary governance structures that need to be;
  - a) widely adopted by stakeholders, b) binding for participants, and c) that need to contain well designed data portability and interoperability regime according to the sectoral conditions.
- ii) Regulatory intervention: bringing [inalinable](#) and elaborated data portability right according to farmers' specific needs in combination with mandatory interoperability standards for stakeholders.

and/or

### ***Broader data access concerns could be addressed via***

- iii) Detailed data access regime within a central data access hub: implementing data pooling suggestion in combination with the well-designed data access regime according to the distinctive conditions of the sector by particularly considering specific incentives;
  - Regarding exclusive rights and rules that limit others' access to data such as consent, data retrieval, purpose or storage limitations (as in the US and EU data charters): there is a need for a careful consideration => Balancing the benefits of increasing rightholders' bargaining power and negative effects on third party data access.



Thank you!