EIP

Data
sato

Biotalks
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About DataSato

Mikko Himanka

projektipäällikkö

Project partners

- Coordinator: **Centria R&D**
- Other partners:
  - **LUKE**
  - **JAMK / Biotalousinstituutti**
  - **KPEDU Kannuksen toimipaikka**
  - **Grainsense Oy**
  - **Yield Systems Oy**
- Innovation partnerships
  - **Junkkari Oy**
  - **Sampo-Rosenlew Oy**
  - **Datanvälityskumppani**
  - **Tampereen yliopisto**
  - **CrossControl Oy**

EIP-AGRI projects apply interactive innovation or the 'multi-actor approach'. This means that farmers, farm advisors, scientists and other stakeholders collaborate throughout the project to develop innovative solutions to practical problems. These solutions have a greater chance to be relevant and used as they are elaborated with and for farmers or practitioners.
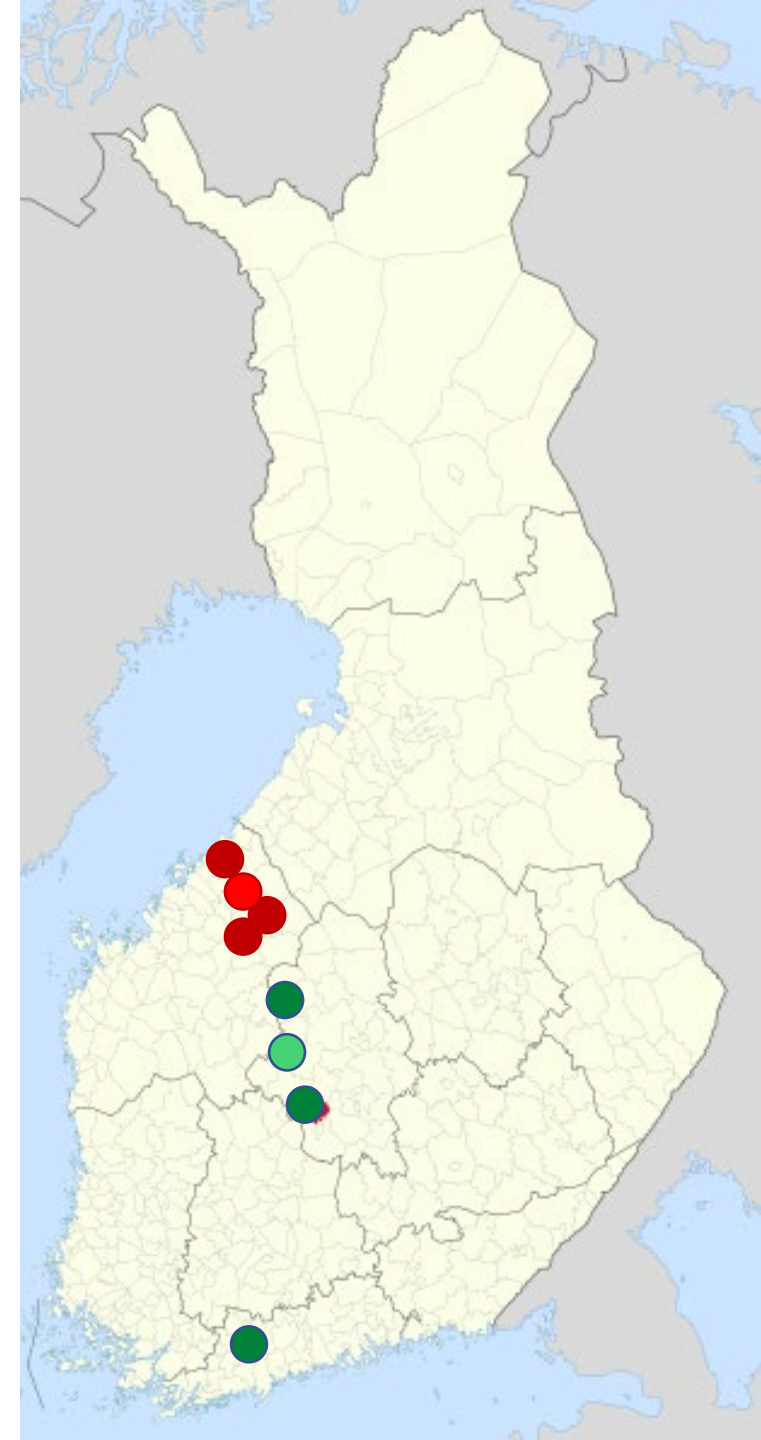
Demo Farms

Crop-based demonstration sites

- **Tarvaalan biotalouskampus   Saarijärvi**
- Verkatakkilan tila
- Räihän tila
- Lahti-Kallion tila

Livestock-based demonstration sites

- **KPEDU educational farm   Kannus**
- Olli Niemelän maatila
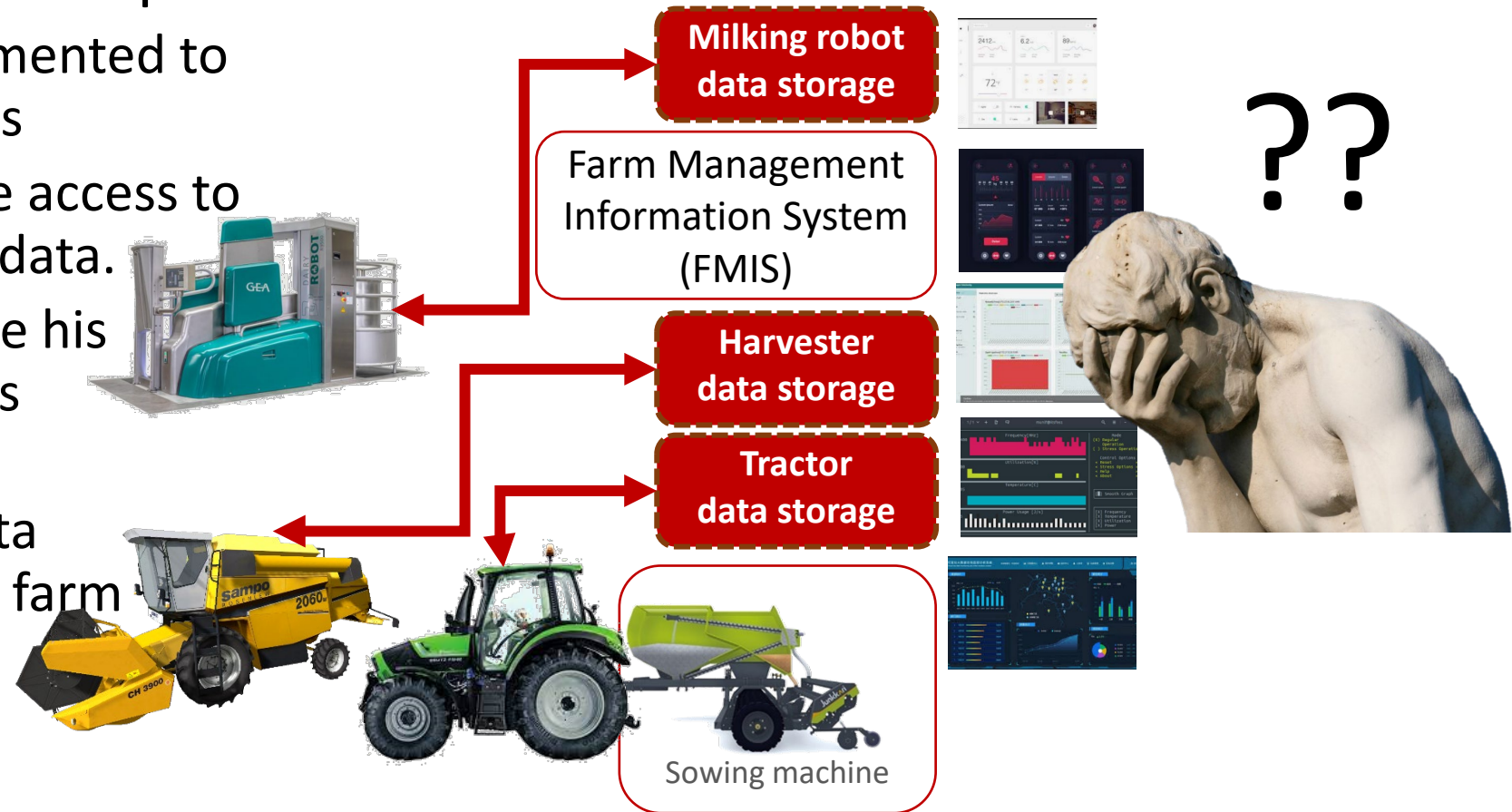- Kotila Kai
- Annala Pekka

DataSato activities in brief

Challenge with current agricultural data

- Farmers must understand the strong data intensity of their business Otherwise they will be exploited
  - Farm data gets fragmented to many closed systems
  - Farmer doesn't have access to majority of his own data.
  - Farmer cannot utilize his data with 3rd parties
  - Farmer is often not fully aware what data is collected from his farm

Milking robot data storage

Farm Management Information System (FMIS)

Harvester data storage

Tractor data storage

Sowing machine

??

"Big Five", fruits of EU datastrategy

- Five crucial ones are on a decision pipeline

DGA 09/23
Data Governance Act
Rules for sharing public data

DA työstössä
Data Act
Rules for using data in business

Data use & sharing, openness and fair rules

DSA 11/22
Digital Service Act
Data sharing business rules

DMA 11/22
Digital Market Act
Rules for data unicorns

Ethical instructions for data sharing business, transparency, monitoring, advertising

AIA työstössä
Artificial Intelligence Act
Säännöt tekoälyn käytölle

Safety, ethics of AI solutions, compatibility to the mutual values of EU

GDPR
General Data Protection Regulation
Rules for handling personal data

eIDAS
Electronic Identification, Authentication and Trust Regulation
Rules for electronic transactions

Digital Finance Package

DORA
Digital Operational Resilience
Rules for digital finance

MiCA
Markets in Crypto-Assets
Rules for crypto-assets and their service providers
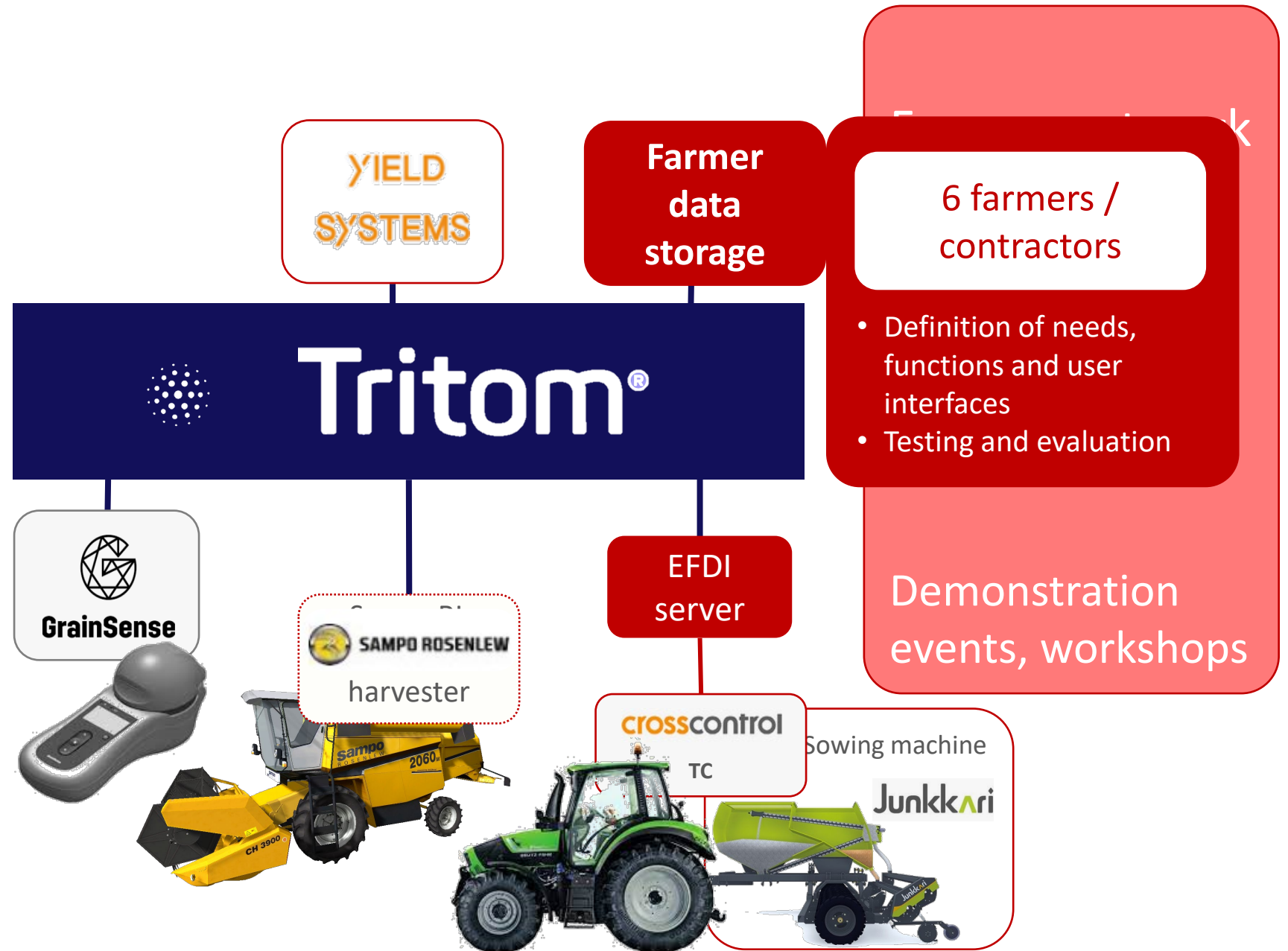
Consequences for farms (proposed)

- Service provider is allowed to collect only the data needed for the contracted service, no "in case" and especially not for utilizing in other business

- Service provider is obliged to provide all the data gathered from the farmer whenever requested

- Service provider is obliged to deliver data for the disposal of 3rd party if requested by the farmer

- Service provider is not allowed to cause any intentional difficulty nor delay if the farmer wants to change the service provider. Data has to be delivered to the new service provider and deleted from own storages after that

- All data delivered from party to another must be permitted by the farmer. It is not allowed to make business behind his back

EIP

Datasato

Implements an exemplary solution of utilizing sowing and harvesting data so, that it gives financial benefit for the farmer.

Central part of the solution is the farmer's own data storage, where his own data can be accessed directly or undirectly
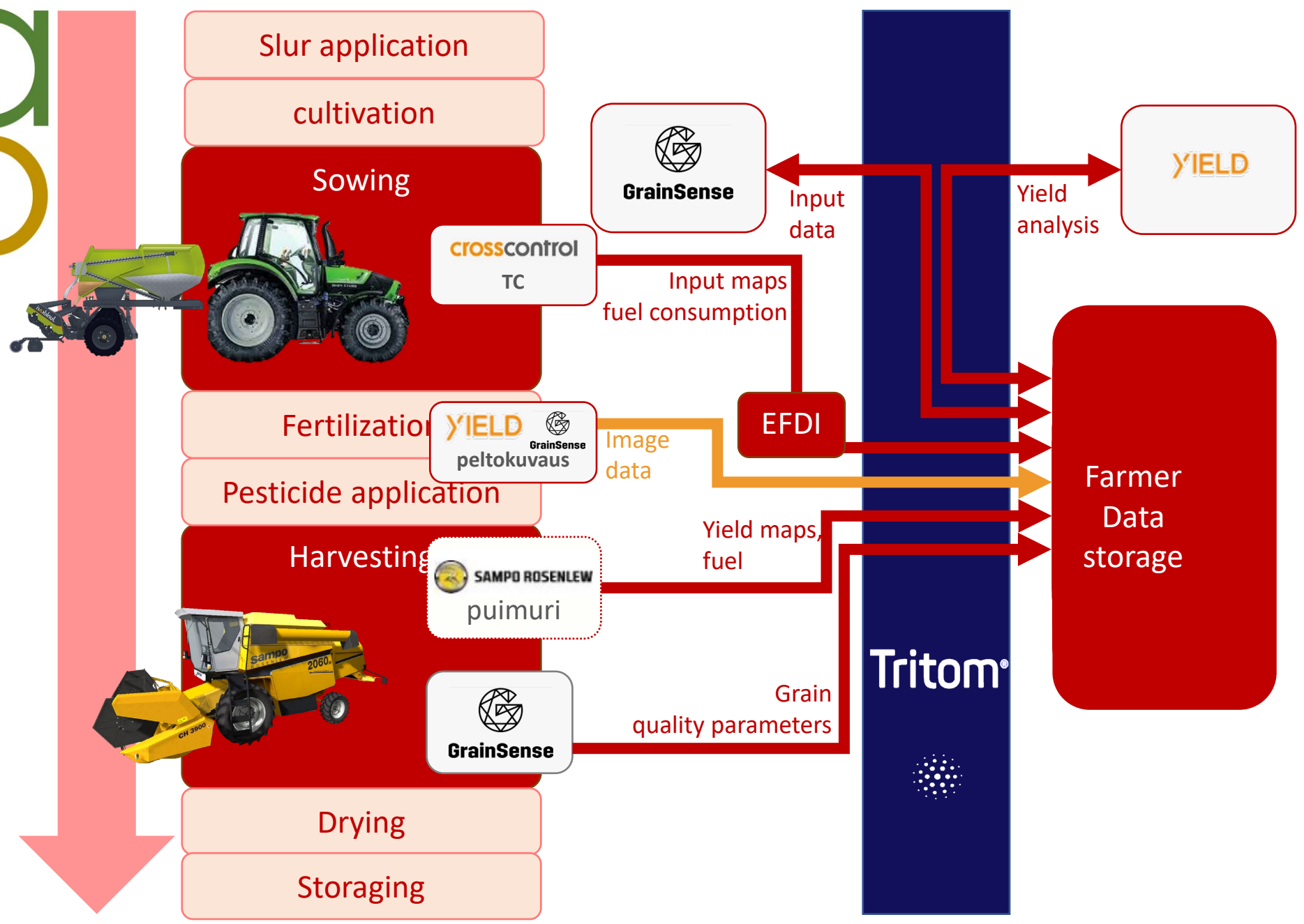
As a result, farmer's data is processed so that it enables new business models

YIELD SYSTEMS

Farmer data storage

Tritom®

6 farmers / contractors

- Definition of needs, functions and user interfaces
- Testing and evaluation

Demonstration events, workshops

GrainSense

SAMPO ROSENLEW
harvester

EFDI server

crosscontrol
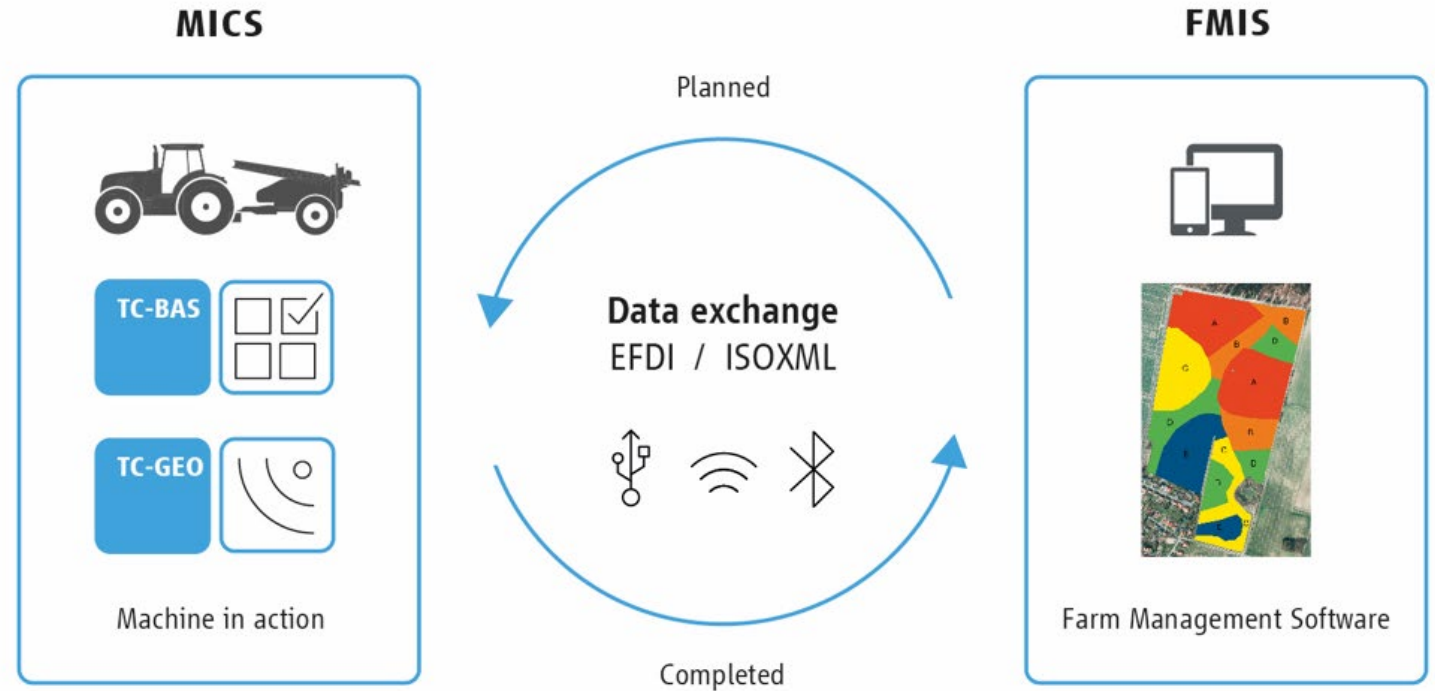TC

Sowing machine
Junkkari

Project objectives

1. Gathered data is transmitted automatically to the farmer data storage, which initiates data-based business for the farmer

2. Farmer develops further is own business by utilizing new technologies enabled by DataSato-based awareness and competence

3. Technical results: Farmer-centered data transfer is demonstrated in the EU data strategy –compatible data space environment

4. Innovation group commits to continue its activity as a competence center. The project results act as basis for the further collaboration

About EFDI server

- Official ISOBUS extension developed by AEF and released as ISO 11783-11 standard

- Intermediates ISO-XML data between the tractor TC and the backend system
  →wireless transmission of prescription maps and input maps

- DataSato provides a mature demonstration platform for EFDI server, which realizes the ISO standard and allows also wider testing by 3rd parties

Thank you!

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