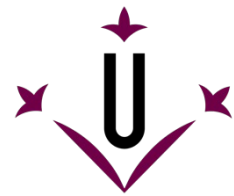




Agri-food data space demonstrator for
sovereign data sharing and Artificial Intelligence services



Universitat de Lleida

AgrospAI team:

- | | |
|------------------|-------------------|
| - Rosa Gil | - Christian López |
| - Roberto García | - Claudia Colás |
| - Zihan Chen | - Aleix Segura |
| - Jordi García | - Pol Jaimejuan |
| | - Joan Piñot |

<https://agrospai.udl.cat>



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NextGenerationEU



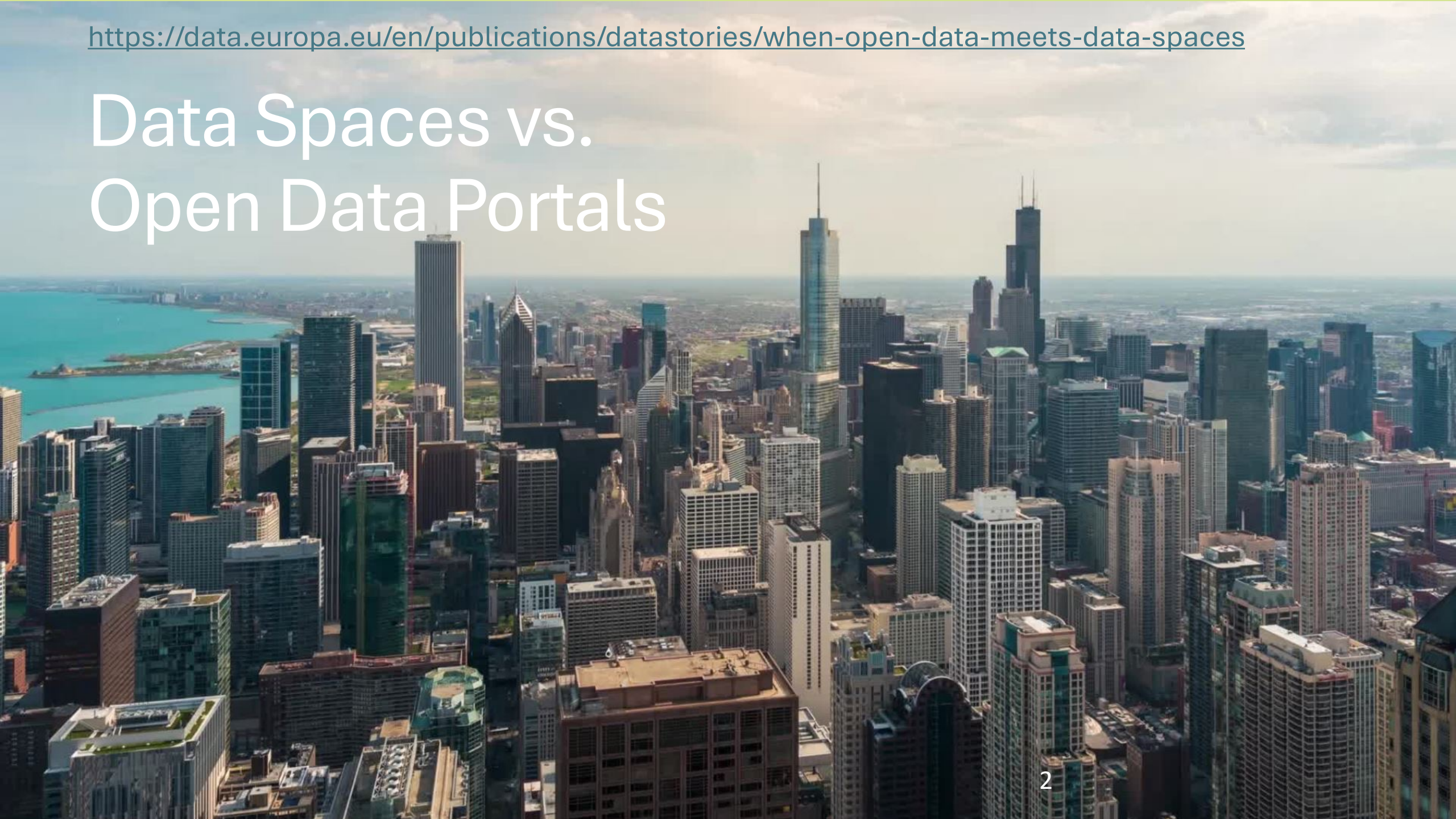
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SECRETARÍA DE ESTADO
DE DIGITALIZACIÓN
E INTELIGENCIA ARTIFICIAL



Plan de Recuperación,
Transformación
y Resiliencia

Data Spaces vs. Open Data Portals





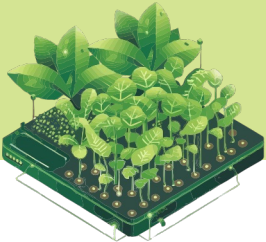
Ideal Open Data outcome...



**... but common outcome
when incentives lacking**

Data Spaces

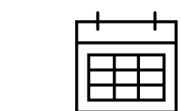




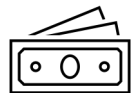
AgrospAI

Spanish call for sectorial data spaces

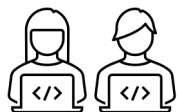
Agri-food data space demonstrator for sovereign data sharing and Artificial Intelligence services



Jan'25 – Jun'26

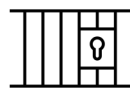


750K €



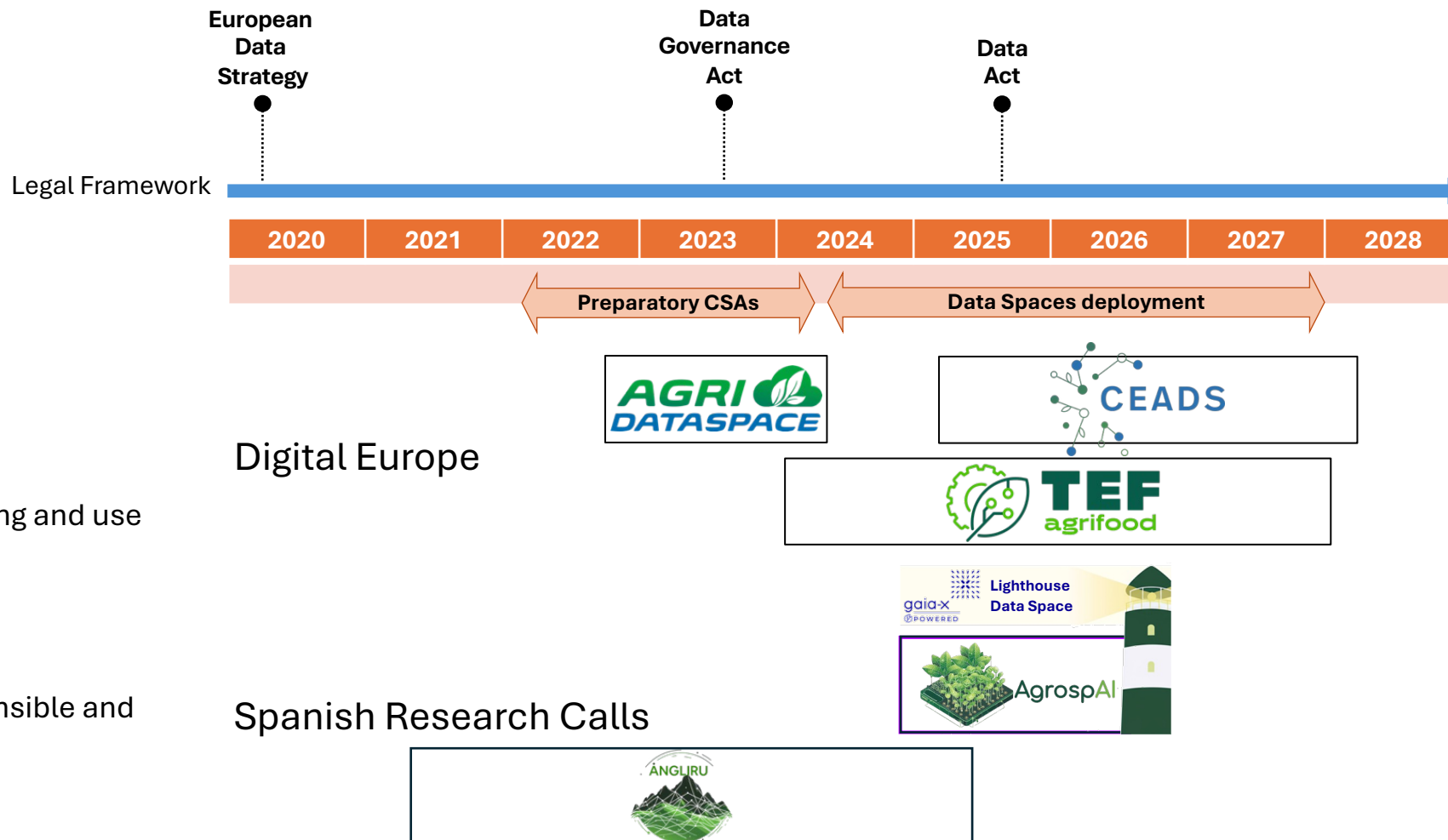
6 consultants

For participant onboarding and use case deployment



Sovereignty by design

Guarantee control on sensible and personal data



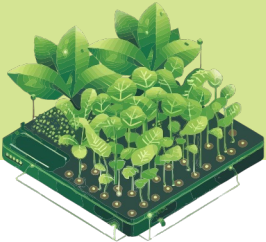
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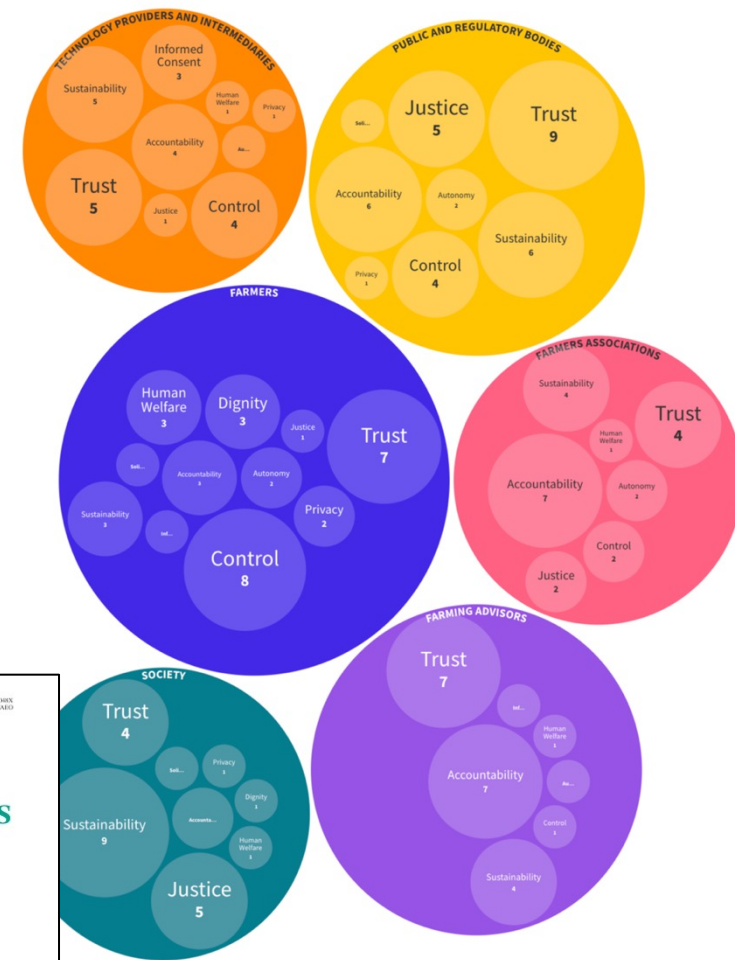
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DE DIGITALIZACIÓN
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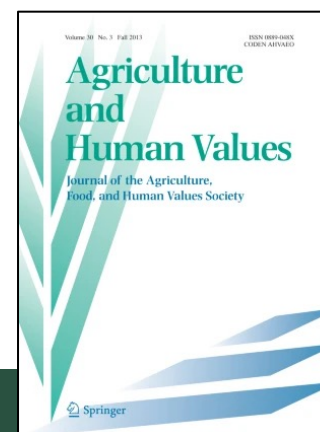
Plan de Recuperación,
Transformación
y Resiliencia



- Starting points:
 - Data Act, Data Governance Act,...
 - “EU Code of conduct on agricultural data sharing by contractual agreement”



- Ethical analysis
Gil, R., Ryan, M., & García, R., & (2025)
[Sovereignty by design and human values in agriculture data spaces](#)

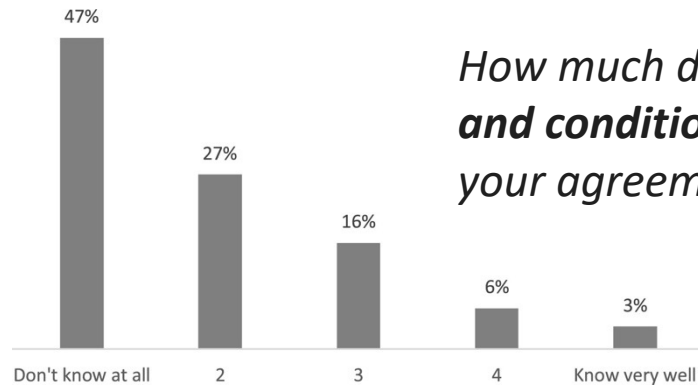




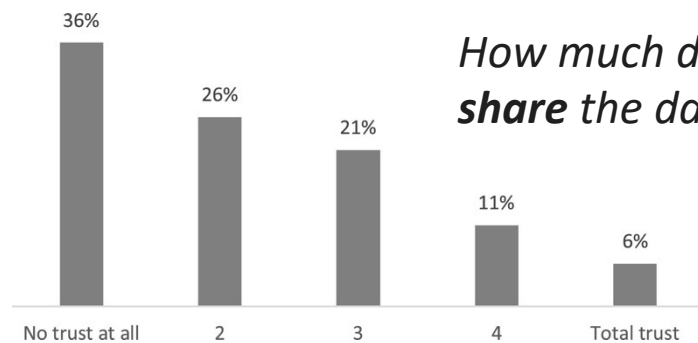
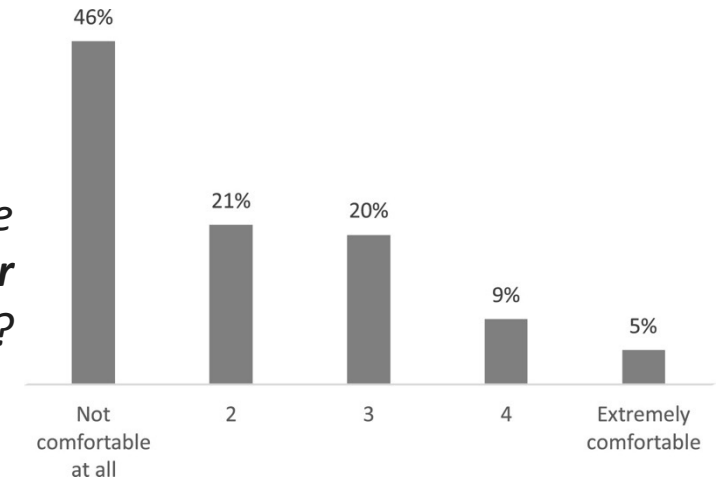
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Farmers and their data

A survey to 1000 Australian farmers [1]



How **comfortable** are you if they use the **data** to make **profit for themselves**?



[1] Wiseman, L., Sanderson, J., Zhang, A., & Jakku, E. (2019). **Farmers and their data: An examination of farmers' reluctance to share their data through the lens of the laws impacting smart farming.** *NJAS-Wageningen Journal of Life Sciences*, 90, 100301.



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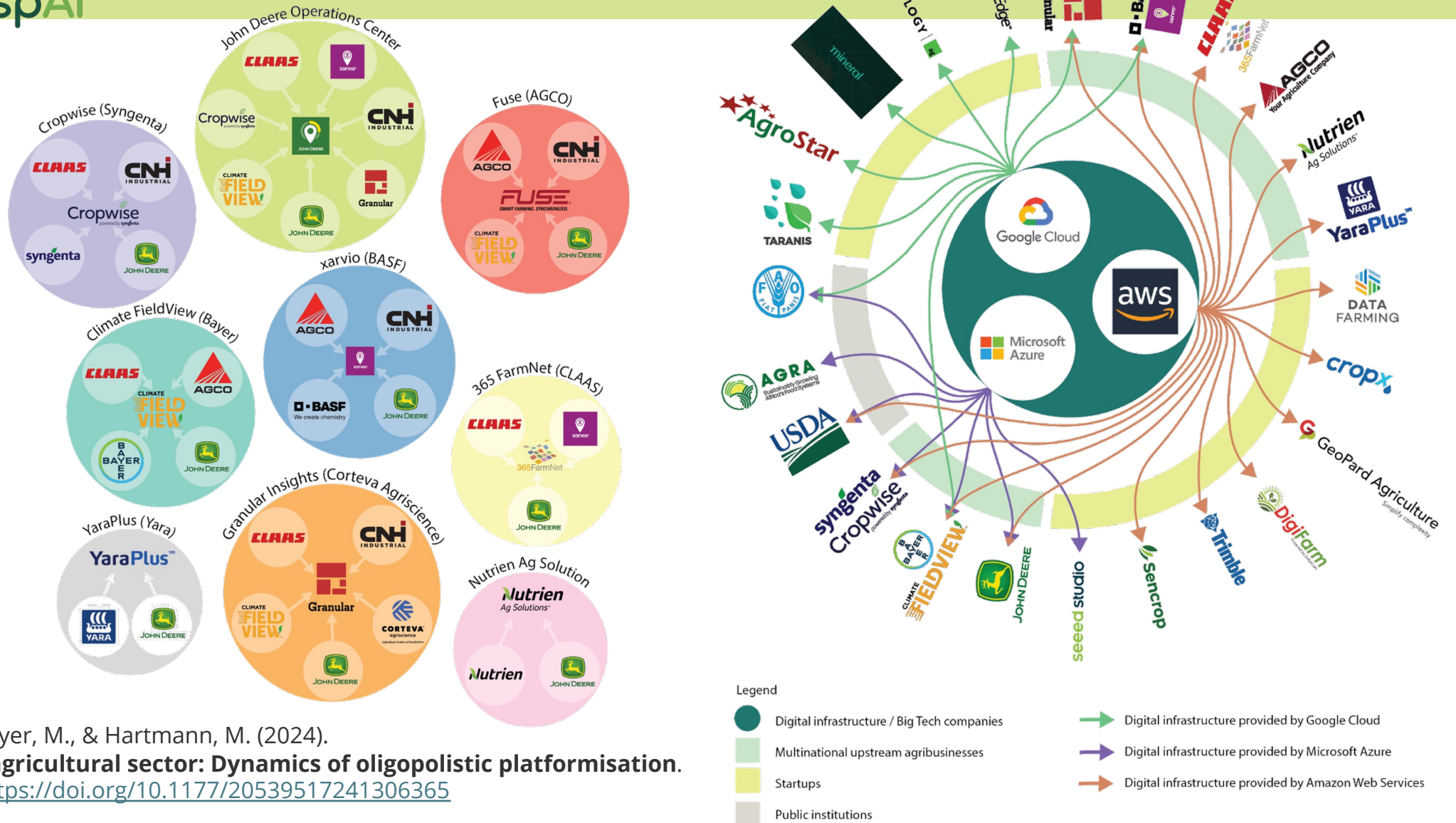
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Y DE INTELIGENCIA ARTIFICIAL





AgrospaceAI

Risks: data concentration



Fuente: Sauvagerd, M., Mayer, M., & Hartmann, M. (2024).

Digital platforms in the agricultural sector: Dynamics of oligopolistic platformisation.

Big Data & Society, 11(4). <https://doi.org/10.1177/20539517241306365>



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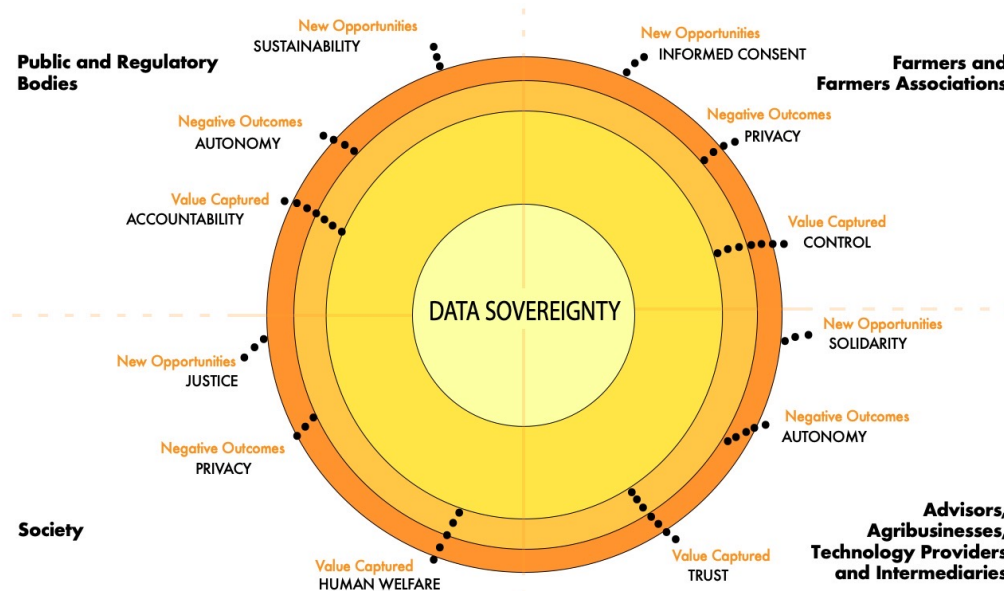


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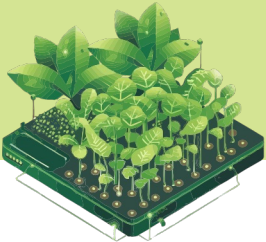
SECRETARÍA DE ESTADO
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Plan de Recuperación,
Transformación
y Resiliencia



- Sovereignty by design:
 - Originators retain **CONTROL** over the data they generate
 - Private and sensible data
 - Decide who and for what it's used, **INFORMED CONSENT**
 - This builds **TRUST** and facilitates all get a fair compensation

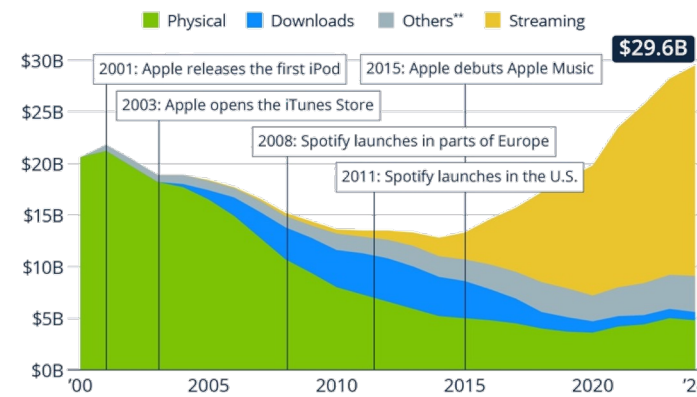


1. Data **monetization** (tokenization) as an **incentive**
2. Trustful environment for data sharing without losing their **control**
 - The "tragedy" of the digital, so **easy** to copy and distribute...
 - **Example:** digital music, Digital Rights Management (DRM),... and "**streaming**"
 - For data... **Data Sovereignty by Design?**
 - P2P **Connectors** or **API** Intermediaries → **difficult policy enforcement** beyond trusted environments (like with DRM...)



Streaming Changes the Tide for the Global Music Industry

Global recorded music industry revenues*



* Not adjusted for inflation

** Includes performance rights and synchronization revenues

Source: IFPI

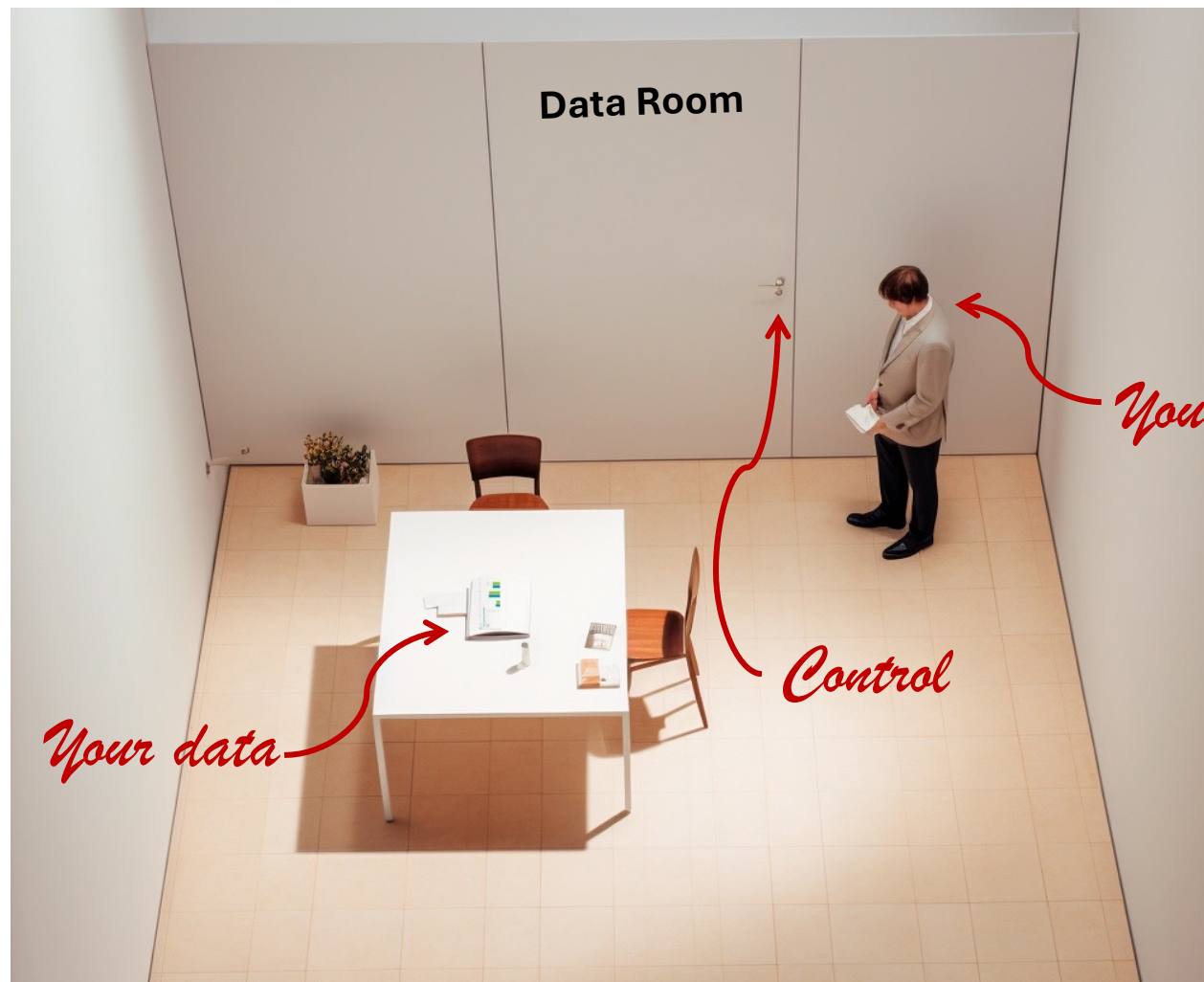
Data Self-Sovereignty by Design

- **Your data:**
Never “leaves the room”
- **You:**
In **control** on who “enters” and what they “take out” with them

- ✗ Full or partial copies
- ✓ Aggregated data
- ✓ AI trained models
- ✗ Personal data

...

dar01995_a_bird-view_of_the_inside_of_a_whole_room_without_wind_1b2e5c91-5513-471d-9673-6c6493a76c11



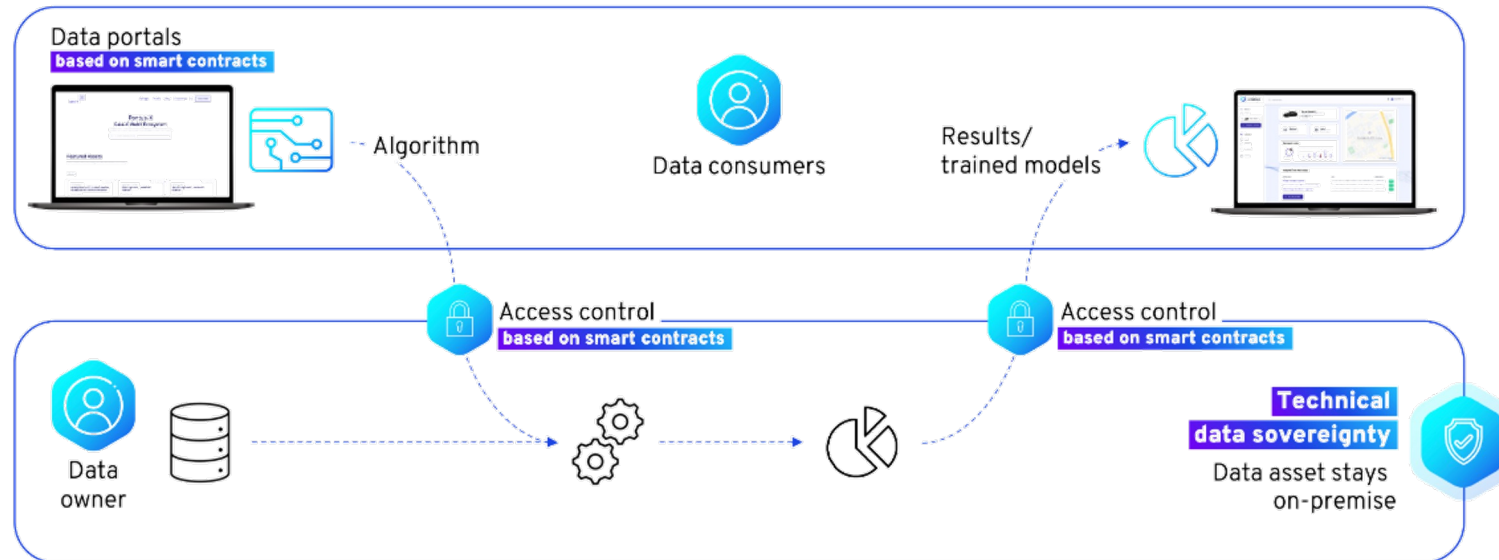
dar01995_a_bird-view_of_the_inside_of_a_whole_room_without_wind_1b2e5c91-5513-471d-9673-6c6493a76c11



AgrospAI

Compute to Data

- Facilitates providing **privacy** and data **sovereignty** by design
- Algorithms process data where it is stored or in trusted providers
 - Data originators retain **control**, data is **not copied** anywhere



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y Resiliencia



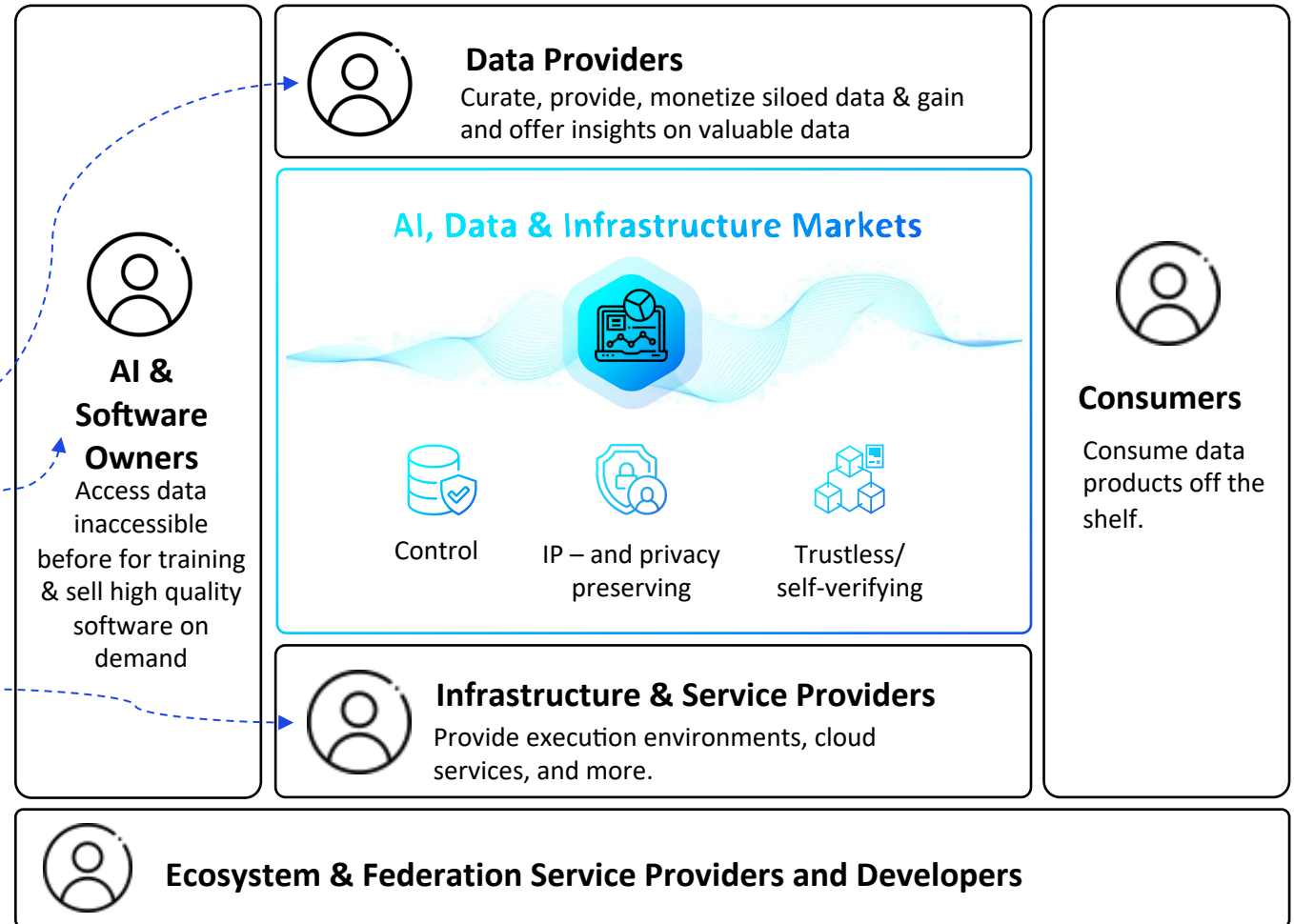
Settle transactions instantly in Euro.
Pay per use and subscription models
for data, AI applications and
infrastructure.

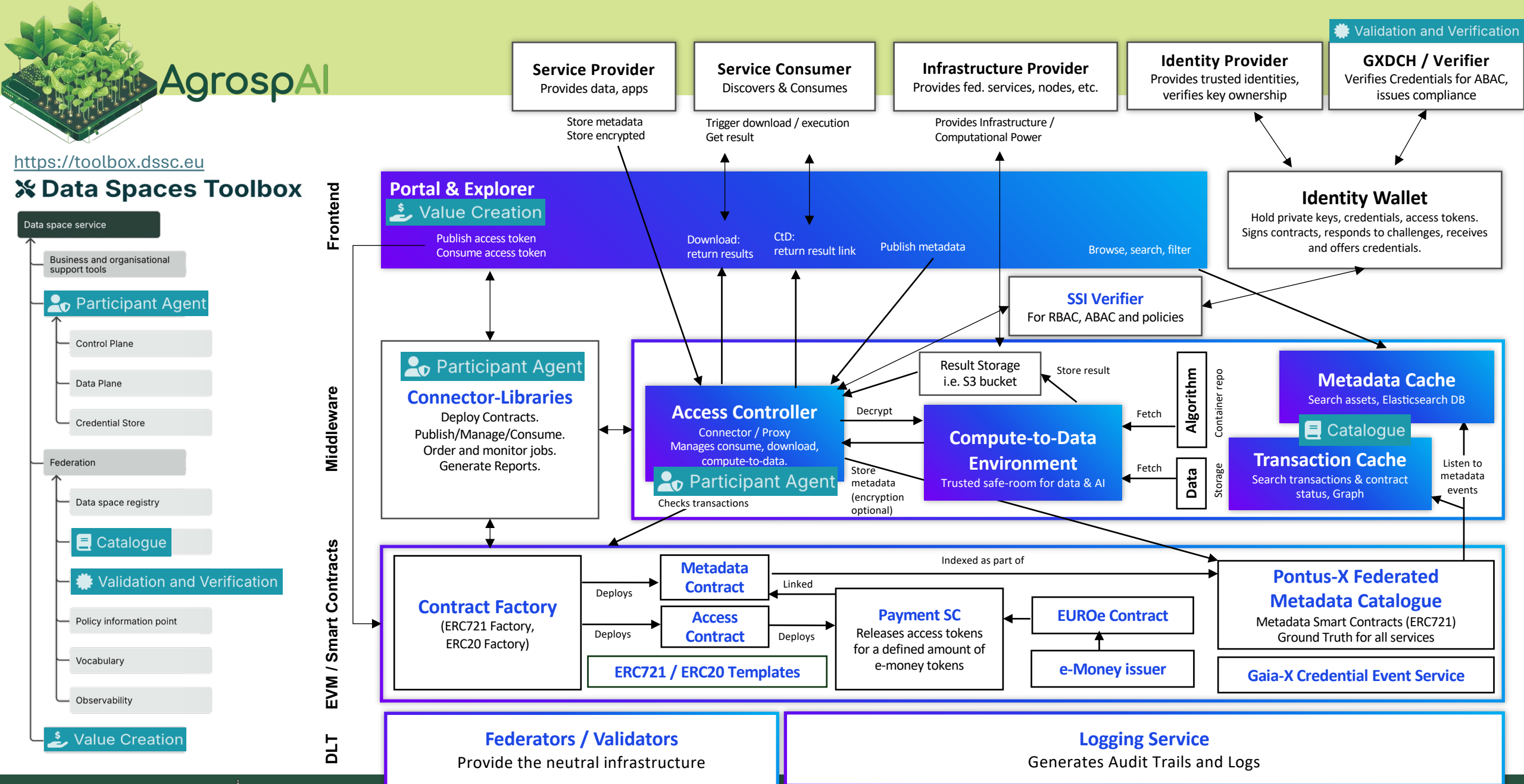
Curated and
trusted data

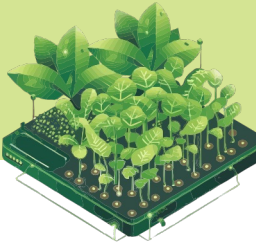
Applications ,
& AI models

Infrastructure
Resources

DATASET	5 EUROe for 1 hour
+ COMMUNITY FEE	0.01 EUROe
+ ALGORITHM	10 EUROe for 1 day
+ COMMUNITY FEE	0.02 EUROe
+ INFRASTRUCTURE RESOURCES	0.998 EUROe for 600 seconds
=	16.028 EUROe
& CO2 COMPENSATION	0.25 EUROe







AgrospAI

Gaia-X Integration



Universitat de Lleida (UdL)
@xD999bAae98AC5246568FD726be8832c49626867D
Pontus-X Testnet · Pontus-X Devnet

267 Sales

69 Published

1 Incoming Pending Consents

0 Outgoing Pending Consents

Universitat de Lleida

Victor Siurana, 1, 25003, Lleida, https://www.udl.cat

Presentation Credential

version: 22.10

last check: less than a minute ago

Participant Verifiable Presentation
<https://compliance.agrospai.udl.cat/well-known/UdL.vp.json>

Sensitive Exploratory Data Analysis

**Pontus-X Testnet**

Owned by Universitat de Lleida (UdL)

Accessed with UDL-EDA

DOWNLOAD

ALGORITHM

Published 12 months ago by Universitat de Lleida

updated 3 months ago

Service Credential

Credential ID match

version: 22.10

last check: less than a minute ago

Generate an **Exploratory Data Analysis (EDA)** report for the sensitive input tabular data.

The input data is loaded using **pandas** and then the EDA report is generated using **YData Profiling**. The version of the report can be downloaded when the algorithm finishes.

🔥 Sovereignty by design: this algorithm is executed following the Compute-to-Data approach on t dataset. This way, consumers get access just to the computation results, the EDA report in this case data that remains in control of its data holder.

✅ Privacy Preserving: this algorithm uses YData Profiling sensitive data configuration, so it is safe datasets including personal or sensitive data.

The report includes the following information:

Data Quality Alerts

Overview

Service Verifiable Presentation
https://compliance.agrospai.udl.cat/well-known/UdL/UDL-EDA_testnet.vp.json

Datasets algorithm is allowed to run on

CEP - Automatic Pig Feeding - 2021 S1 - 982091062894506

CEP-FEED | did:op:bb5f52d48cf3294e8e979ac591ac75830ea98d87308183d389d26620...

Free

CEP - Automatic Pig Feeding - 2021 S1 - 982091062894406 (UdL)

GXAT | did:op:a11ea853ef7872210e154a9785ac23801880b616fa471dab95b6eeca67bc...

Free

Access allowed

10 sales

gx-compliance 2.0.0 OAS 3.0

Prototype for a compliance service as defined in https://gaia-x.github.io/policy-rules-committee/trust-framework/

credential-offer

POST /development/api/credential-offers

Check Gaia-X compliance rules and outputs a VerifiableCredentials from your VerifiablePresentation

Parameters

Name

Description

vcid string (query)

Output VC ID. Optional. Should be url_encoded if an URL
Example : https://storage.gaia-x.eu/credential-offers/b3e0a068-4bf8-4796-932e-2fa83043e203
https://storage.gaia-x.eu/credential-offers/b3e

Request body required

application/json

A VerifiablePresentation in JSON-LD or JWT format

Examples:
Participant

PONTUS-X
Testnet Explorer

Blocks

Transactions

Tokens

APIs

Search by address, token symbol, name, transaction

Daily transactions



Average block time

4.2 seconds

Total transactions

26,603

Total blocks

13,052,368

Wallet addresses

4,193

Blocks

13052367

0 Transactions 8 seconds ago

Miner 0x00000000000000000000000000000000...

Reward 0 GX

13052366

0 Transactions 10 seconds ago

Miner 0x00000000000000000000000000000000...

Reward 0 GX

13052365

0 Transactions 12 seconds ago

Miner 0x00000000000000000000000000000000...

Reward 0 GX

13052364

0 Transactions 14 seconds ago

Miner 0x00000000000000000000000000000000...

Reward 0 GX

View All Blocks



Agri-food Data Space Demonstrator for Sovereign Data-Sharing and Artificial Intelligence Services



AI-based Animal Well-being Assessment without Images Leakage

COMPUTE | ALGORITHM | CVC-SEG-T

Image Recognition and Tracking for Animal Well-being Monitoring

Universitat de ...

A computer vision service developed by the Centre de Visió per Computador (CVC) performing automatic image segmentation and tracking to identify and monitor pig movements in the input se...

1

4 sales

COMPUTE | DATASET | CEP-PEN-I

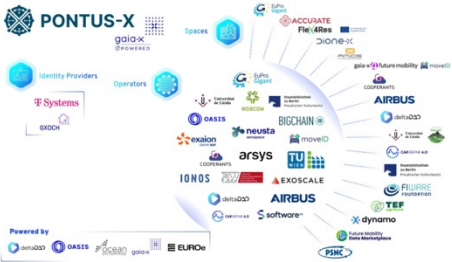
Pig pen images sequence for animal well-being assessment

Centre d'Estudi...

A sequence of images from video surveillance of one of the pens in the Centre of Swine Studies of Catalonia (CEP), an experimental pig farm managed by a consortium made up of the Diputació de LL...

2,5

4 sales



The Gaia-X Powered Ecosystem on DLT

The principle of decentralization is a perfect fit for **Distributed Ledger Technology**. Ocean Enterprise is a fully open-source technology stack, leveraging DLT and decentralization, aiming to give control back to the owners of data services. Pontus-X is built on top of Oasis Network showcasing how future industrial digital service ecosystems work today.

LEARN MORE ↗

Precision Pig Feeding Semantic Data Integration and Sovereign Data Pooling

COMPUTE | ALGORITHM | CEP-MP

CEP's CSV Data Mapper and Semantic Data Pooler

Universitat de ...

This algorithm supports the "Pay-as-you-go" approach when sharing data through a data space. Instead of requiring that publish...

Free

2 sales

DOWNLOAD | ALGORITHM | UDL-EDA

Exploratory Data Analysis

Universitat de ...

Generate an Exploratory Data Analysis (EDA) report for the input tabular data. The input data is loaded using pandas and then the E...

0,1 EUROe

17 sales

COMPUTE | DATASET | CEP-FEED

CEP - Automatic Pig Feeding - 2021 S1 - 982091062894496

Centre d'Estudi...

Automatic pig feeding data collected at the (Centre of Swine Studies of Catalonia), a consortium made up of the Diputació de Lleida, the ...

1 EUROe

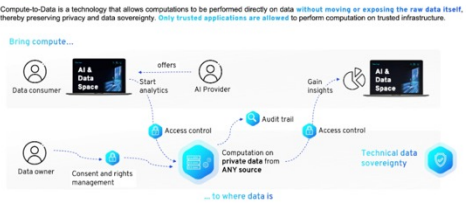
5 sales

Data Sovereignty by Design

One core concept of AgrospAI is the **Compute-to-Data (CtD)** approach. Compute-to-Data is the functionality that solves the current trade-off between the benefits of using private data and the risks of exposing it. It allows data consumers to run compute jobs on private data while the data stays on-premise with the data provider, who retains control.

LEARN MORE ↗

A safe & compliant environment for AI & data with CtD



<https://agrospai.udl.cat>



AgrospAI

Running use cases



Precision feeding...



Temp., Hum., CO₂,
Ammonia,...

Cameras



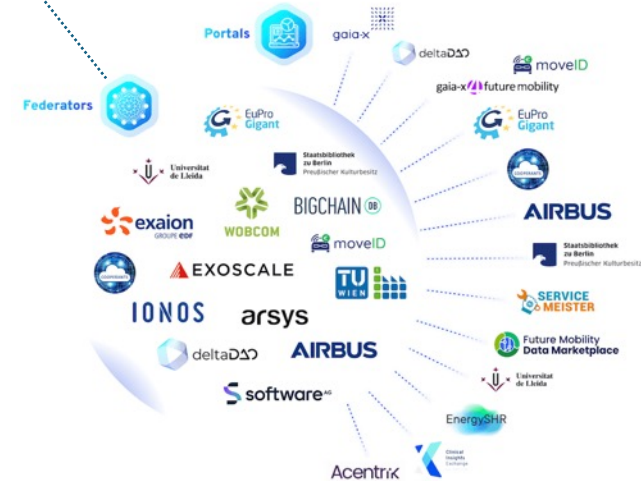
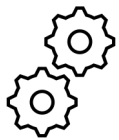
Feed and
Weight

Environment
Sensors

Videos



Compute-to-Data
provider at Universitat
de Lleida



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Plan de Recuperación,
Transformación
y Resiliencia

Pig pen images sequence for animal well-being assessment

GEN-X Testnet

Owned by 0x38f8...840d
Accessed with GXAT

COMPUTE | DATASET | Published about 2 months ago

A sequence of images from video surveillance of one of the pens in the [Centre of Swine Studies of Catalonia \(CEP\)](#), an experimental pig farm managed by a consortium made up of the Diputació de Lleida, the Regional Council of La Noguera, the Torrelameu Town Hall and the Universitat de Lleida.

The images can be used by animal well-being assessment algorithms available from the compute section on the right. These algorithms perform automatic image segmentation and tracking to identify and track pig movements in the sequence of images. Additionally, it is also possible to monitor the visits of pigs to defined areas of interest like the automatic feeding machine or the waterer bowl. This allows for the automatic generation of metrics that can be used for animal well-being assessment.

Data sovereignty is guaranteed by design through a [Data Room](#) implemented using "Compute-to-Data". The algorithm visits the image sequence inside the data room, where they are analysed, and just the computed metrics leave the room. Consequently, there is no leakage of any image from inside the farm. They are just copied to the data room and destroyed after the computation without leaving it.

The available animal well-being assessment algorithm computes the following metrics from sequences of images:

Movement metric per pig

Example:

```
{
  "0": 2438.4733276550605,
  "1": 533.9017133622191,
  "2": 1411.6580468122302,
  "3": 1481.5184106820652,
  "4": 1863.6384070993606,
  "5": 2910.0410553493325,
  "6": 665.6211681307876,
  "7": 702.4427292321657,
  "8": 1212.4275062016434,
  "9": 1331.9712414388393
}
```

Time spent on the automatic feeding machine area per pig

Example:

```
{
  "0": { "frames": 5, "time": 0.2 },
  "1": { "frames": 0, "time": 0 },
  "2": { "frames": 0, "time": 0 },
  "3": { "frames": 0, "time": 0 },
  "4": { "frames": 1, "time": 0.04 },
  "5": { "frames": 8, "time": 0.32 },
  "6": { "frames": 0, "time": 0 },
  "7": { "frames": 0, "time": 0 },
  "8": { "frames": 0, "time": 0 },
  "9": { "frames": 12, "time": 0.48 }
}
```

Sample Data

Download Sample

Select a Compute Environment

UdL Data Room

CPU | GPU | max duration: 1 hour
0.01 OCEAN / minute

Select an algorithm to start a compute job

Search by title, datatoken, or DID...

CIDAI pig farm Mask R-CNN segmentation & Tracking (CUDA) (UDL)

GXAT | did:op:5375665bed1685ab035efcac73a440e74892967891e

Free

You will pay 0.6 OCEAN

ORDER COMPUTE JOB

You bought this dataset already allowing you to use it without paying again. You already bought the selected algorithm, allowing you to use it without paying again. In order to start the job you also need to pay the fees for renting the c2d resources. Please note that network gas fees still apply, even when using free assets.

☒ I agree to the Terms and Conditions

Access allowed

Your Compute Jobs

HIDE

STATUS	ACTIONS	FINISHED
JOB FINISHED	SHOW DETAILS	about 2 months ago
DATA PROVISIONING ...	SHOW DETAILS	about 2 months ago
JOB FINISHED	SHOW DETAILS	about 2 months ago

Job finished

Pig pen images sequence for animal well-being assessment

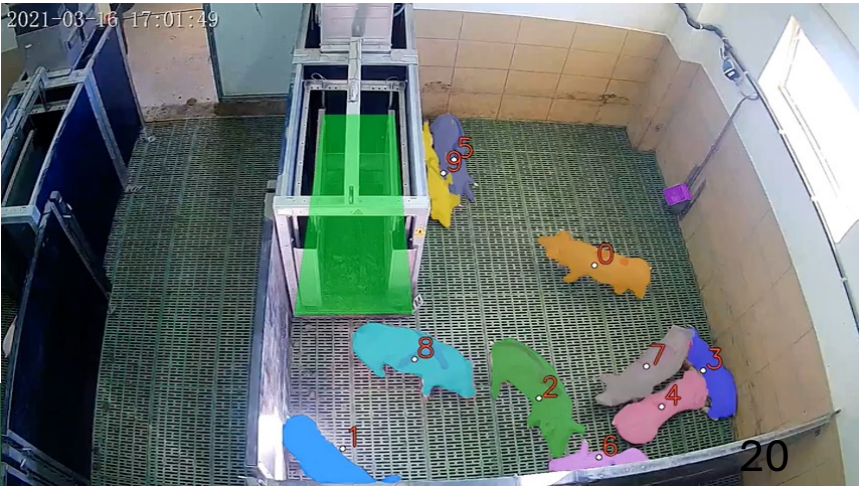
CIDAI pig farm Mask R-CNN segmentation & Tracking (CUDA) (UDL)

Results

CREATED about 2 months ago

PROCESSED about 2 months ago

- **Compute** animal well-being metrics **without revealing** farm **images**
 - Images and algorithm loaded into the **data room**
 - **Just metrics** can be **downloaded**
- **Monetization:**
 - data, algorithm and computation infrastructure





AgrospAI

Running use cases

Compute-to-Data
provider at Universitat
de Lleida

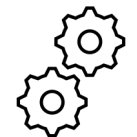
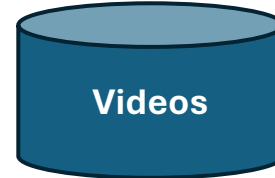
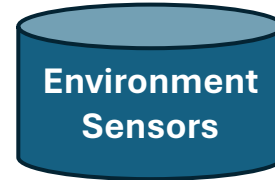


Precision feeding...



Temp., Hum., CO₂,
Ammonia,...

Cameras



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Lower Entry Barriers: “Pay-as-you-go” Model

Pen Number	Animal ID	Date	Time	Duration (s)	Feed (g)	Animal Weight (g)
4	982091062894196	2021-03-16	01:08	42	0	16500
4	982091062894196	2021-03-16	01:09	45	1	16300
4	982091062894196	2021-03-16	13:05	70	0	15300
4	982091062894196	2021-03-17	10:44	5	0	14400
4	982091062894196	2021-03-17	10:45	9	6	14500
4	982091062894196	2021-03-17	10:45	50	14	14400

CEP - Automatic Pig Feeding - 2021 S1 - 982091062894196

GEN-X Testnet

Owned by 0x6207...6822
Accessed with CEP-2021-S1-FEED_982091062894196

DATASET

Published 4 days ago

Automatic pig feeding data collected at the Centre for Pig Studies of Catalonia (Centre d'Estudis Porcins), a consortium made up of the Diputació de Lleida, the Regional Council of La Noguera, the Torrelameu Town Hall and the Universitat de Lleida.

The feeding data includes:

- Pen Number: the pen the pig is located in.
- Animal ID: the pig identifier.
- Date: the date the feeding data is about.
- Time: the time pig feeding happened for the given date.
- Duration (s): the duration of the feeding event.
- Feed (g): the amount of food provided, measured in grams.
- Animal Weight (g): the pig weight, measured by the feeding machine during each feeding event.

udl

pig

agriculture

livestock

feed

automatic-feeding

DATA AUTHOR

Centre for Pig Studies of Catalonia

OWNER

0x6207...6822

DID

did:op:0d9493e7c7be9afdd6119a0099b54347ab053201d04a49ac1090deee8e73e041

Binary
56.98 kB
url

Free

Select an algorithm to start a compute job

☐ Exploratory Data Analysis [↗](#)
GXAT | did:op:e73ac9c332adfea204acefb4b300e... Free

☐ RML Mapper for Daily Pig Weight CSV Data [↗](#)
GXAT | did:op:f421dff824262a7a61e42370f65cc... Free

You will pay ⓘ

BUY COMPUTE JOB

You bought this dataset already allowing you to use it without paying again. The C2D resources required to start the job are available, no payment is required for them. Please note that network gas fees still apply, even when using free assets.

Your Compute Jobs

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2 sales



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<https://portal.agrospai.udl.cat/asset/did:op:f0f0...f426>

NetPig - Environmental Sustainability Report Generator

Pontus-X Testnet



Owned by Universitat de Lleida (UdL)

Accessed with NP-SR

COMPUTE

ALGORITHM

Published about 2 months ago by Universitat de Lleida

updated about 2 months ago

Service Credential

Credential ID match

version: 22.10

last check: less than a minute ago

This algorithm generates comprehensive sustainability reports based on environmental air quality data, specifically CO2 and NH3 measurements from agricultural facilities. It supports the certification process by analyzing whether farms meet the required environmental standards for sustainability certification.

Output

The algorithm generates a PDF report, as shown in Figure 1, suitable for regulatory submission and certification processes including:

Sustainability Report

This document presents an environmental analysis based on data collected from the facility. The main objective is to assess whether the farm meets the air quality requirements necessary to obtain a sustainability certification, based on predefined thresholds for key indicators.

Defined Limits for Certification

To obtain the certification, the farm must maintain pollutant levels within the recommended limits and must never exceed the alert values (%).

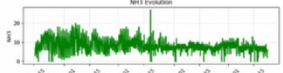
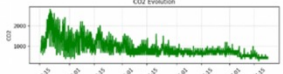
CO2:

- Recommended limit: 3000 ppm
- High value (alert): > 5000 ppm

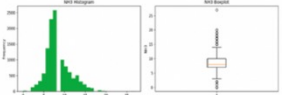
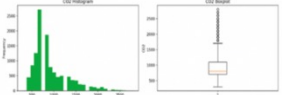
NH3:

- Recommended limit: 20 ppm
- High value (alert): > 40 ppm

Indicators Evolution



Data Distribution and Outliers



Environmental Quality Summary

Indicator	Mean (ppm)	Max (ppm)	Count > Limit	Count > Alert
CO2	817.4	2850.0	0	0
NH3	8.4	27.0	1	0

All CO2 and NH3 values are within recommended thresholds. The item complies with the environmental sustainability criteria. Final assessment: **SUITABLE FOR CERTIFICATION**

(1) Reference (CO2), ammonia and CO2 limits in pig farming: recommendations for optimal welfare. <https://www.researchgate.net/publication/350000000> and <https://www.researchgate.net/publication/350000000>

Report based on data 31, 2023

CEP - Environment and Comfort - 2021 S1

Pontus-X Testnet



Owned by Centre d'Estudis Porcins (CEP)

Accessed with CEP-ENV

COMPUTE

DATASET

Published 7 months ago by Consorci Centre d'Estudis Porcins

updated 25 days ago

Service Credential

Credential ID match

version: 22.10

last check: less than a minute ago

Environment and comfort data collected by sensors at the CEP (Centre of Swine Studies of Catalonia) experimental pig farm, a consortium made up of the Diputació de Lleida, the Regional Council of La Noguera, the Torrelameu Town Hall and the Universitat de Lleida.

The environment and comfort data includes:

- Date Time:** the date and time the data was collected, in the format YYYY-MM-DDTHH:MM:SS .
- Avg. Temp.:** the average temperature in the Fattening 5 area, measured in Celsius degrees (°C).
- Ext. Temp.:** the external temperature at the CEP experimental pig farm, measured in Celsius degrees (°C).
- Rel. Hum.:** the relative humidity in the Fattening 5 area, measured in percentage (%).
- Ext. Rel. Hum.:** the external relative humidity, measured in percentage (%).
- CO2:** the carbon dioxide concentration in the Fattening 5 area, measured in parts per million (PPM).
- NH3:** the ammonia concentration in the Fattening 5 area, measured in parts per million (PPM).
- Wind Speed:** the external wind speed at the CEP experimental pig farm, measured in meters per second (m/s).
- Wind Direc.:** the external wind direction at the CEP experimental pig farm, measured in degrees (°).

Service Credential

SAMPLE DATA

DOWNLOAD SAMPLE



598.54 kB
url

4,5 EUROe

Select a Compute Environment

☐ AgrospAI Small Data Room ⓘ
CPU | max duration: 30 minutes
0 EUROe / minute

☐ AgrospAI Medium Data Room ⓘ
CPU | max duration: 1 hour
0.01 EUROe / minute

☐ AgrifoodTEF AI Data Room ⓘ
CPU | GPU | max duration: 1 hour
0 EUROe / minute

☐ Arsys GPU Data Room ⓘ
CPU | GPU | max duration: 1 hour
0 EUROe / minute

Select an algorithm to start a compute job

Search by title, datatoken, or DID...

☐ Sensitive Exploratory Data Analysis ⓘ
UDL-EDA | did:op:88d669824854177e42fe423f42ba5f7e9823d8ac6f9f224fec157e2...
Free

☐ NetPig - Environmental Sustainability Report Generator ⓘ
NP-SR | did:op:f0f0e7de07529aac4987a619c53dc6884ccb81cadd2666174216cd1a3f...
5 EUROe



CEP's CSV Data Mapper and Semantic Data Pooler

GEN-X Testnet

Owned by 0x6207...6822
Accessed with CEP-RML

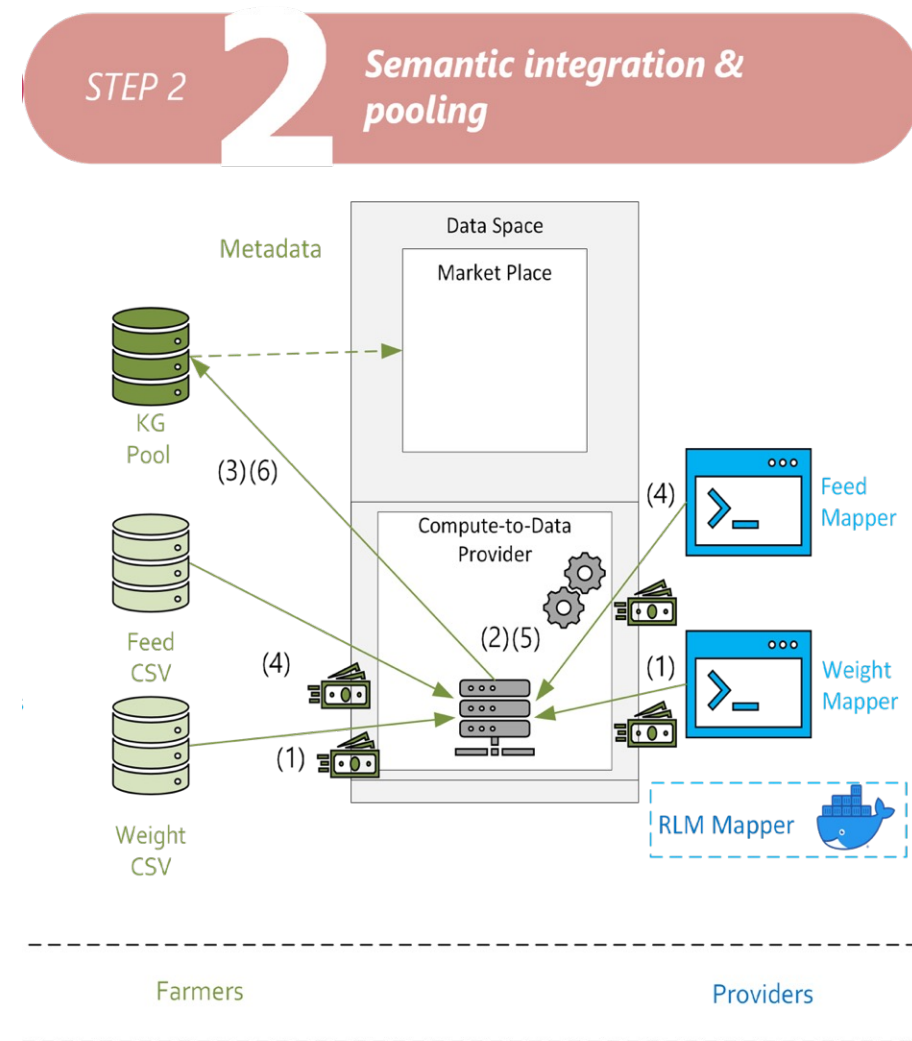
COMPUTE | ALGORITHM | Published 2 months ago

This algorithm supports the "Pay-as-you-go" approach when sharing data through a data space. Instead of requiring that publishers integrate the data based on existing schemas, which causes a significant upfront overhead, the pay-as-you-go paradigm favours an incremental approach. This way, entry barriers are lowered and it becomes easier to share data.

Moreover, data sovereignty is guaranteed by design through a **Data Room** implemented using "Compute-to-Data". The mapped data does not leave the room, it is processed and then stored into a Knowledge Graph that stays inside the room. This way, it remains under the control of the data originator, the **Centre of Swine Studies of Catalonia (CEP)**.

Later, CEP can decide to grant access to trusted algorithm to visit the Data Room and slice the Knowledge Graph to extract the semantically integrated data relevant to their computations. Also in this case, data sovereignty is guaranteed as just computation results, like aggregations or AI trained models, can leave the room, not the original data or subsets of it.

Diagram illustrating the data flow and processing within the CEP (Centre d'Estudis Porcins) and the Compute-to-Data Provider at Universitat de Lleida. The provider interacts with a Knowledge Graph and various partners like Airbus, Exoscale, and Arsys.



<https://portal.agrospai.udl.cat/asset/did:op:ffa6...a519>

- Local LLM for sensitive and private data processing
- Sovereign data storage and integration
 - Data Cooperative for shared ownership



Informe analític

Agrostudi, S.A.

Codi de mostra	123-2024-00000001	Data	23/01/2024	Pàgina 1/2
Número d'informe analític	AA-00-AA-00000-01 / 123-2024-00000001			

Entitat client de l'anàlisi

A l'atenció de Joan Doe
Ctra. del Camp, km 1
25001 Lleida
ESPAÑA

Contacte per al servei al client :			
Referència Laboratori	123-2024-00000001 / AA-00-AA-00000-01	Tipus:	EX
Descripció de la mostra	Suelo / Sol		
Data de recepció	19/01/2024		
Data d'inici de l'anàlisi :	19/01/2024	Data de finalització de l'anàlisi	22/01/2024
T.mostra/Transport:	Recogido/toma muestra AgrospAI		

La informació que figura en el quadre inferior, ha estat aportada pel client i el laboratori no és responsable de la mateixa. Aquesta informació no està emparada per l'acreditació.

Descripció pel client	LLE-001-AA	Parcel·la	1r1
Terme Municipal	LLEIDA	Denominació Local	1-MAS LLEIDETA, ALBERT
Cultiu	arroz		

Propietats bàsiques	Resultats	Interpretació (*)
XX003 XK Humitat 105°C Mètode : C5110007 Gravimetria Humitat	>5 %	
XX008 XK Conduct. Elèctrica 25°C (extr. 1:5 H2O) Mètode : C5110009 Conductimetria Conductivitat elèctrica 25°C	2.2 dS/m	Alta
XX006 XK Carboni orgànic (C) Mètode : C5110079 Titulació Potenciomètrica Carboni orgànic	0.71 % s.m.s.	
XX005 XK Materia orgànica (W&B) Mètode : C5110079 Titulació Potenciomètrica Materia orgànica oxidable	1.23 % s.m.s.	Baix

Nutrients	Resultats	Interpretació (*)
XX012 XK Nitrogen nitríc (N-NO3) Mètode : C5110272 Espectrofotometria UV-VIS Nitrogen nitríc	4.8 mg/Kg s.m.s.	Normal
XX014 XK Fòsfor (P) (Olsen) Mètode : C5110080 Espectrofotometria UV-VIS Fòsfor sms	9.75 mg/Kg s.m.s.	Baix
XX016 XK Potassi (K) (extracte acetat amònic) Mètode : C5110105 Espectrometria ICP-OES Potassi sms	213 mg/Kg s.m.s.	Normal
XX017 XK Calci (Ca) (extracte acetat amònic) Mètode : C5110105 Espectrometria ICP-OES Calci sms	28411 mg/Kg s.m.s.	Alt
XX018 XK Magnesi (Mg) (extracte acetat amònic) Mètode : C5110105 Espectrometria ICP-OES Magnesi (Mg)	169 mg/Kg s.m.s.	Normal
XX019 XK Sodi (Na) (extracte acetat amònic) Mètode : C5110105 Espectrometria ICP-OES Sodi (Na)	64 mg/Kg s.m.s.	Normal

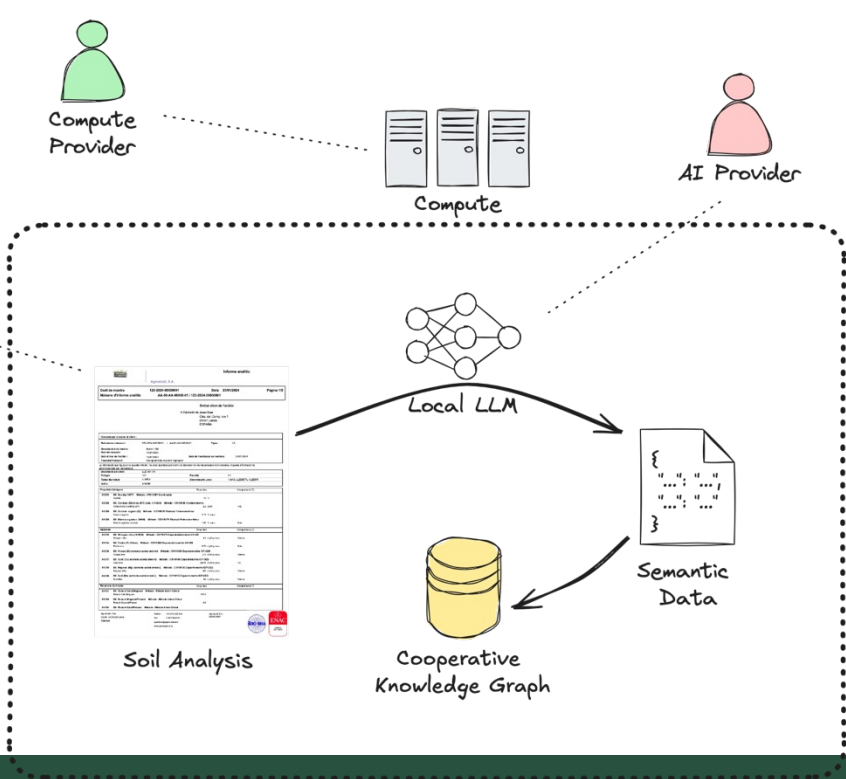
Relacions de interès	Resultats	Interpretació (*)
XX151 XK Relació Calci/Magnesi Mètode : Mètode Intern Càlcul Relació Calci/Magnesi	167.8	
XX152 XK Relació Magnesi/Potassi Mètode : Mètode Intern Càlcul Relació Magnesi/Potassi	0.8	
XX154 XK Relació Calci/Potassi Mètode : Mètode Intern Càlcul		

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Carner, s/n 25222 Lleida
Espanya

Telèfon +34 973 000 000
Fax +34973000001
agrospai@agrospai.com
www.agrospai.com

Agrostudi S.A.
EBA000001

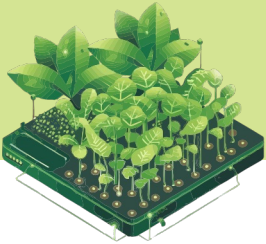




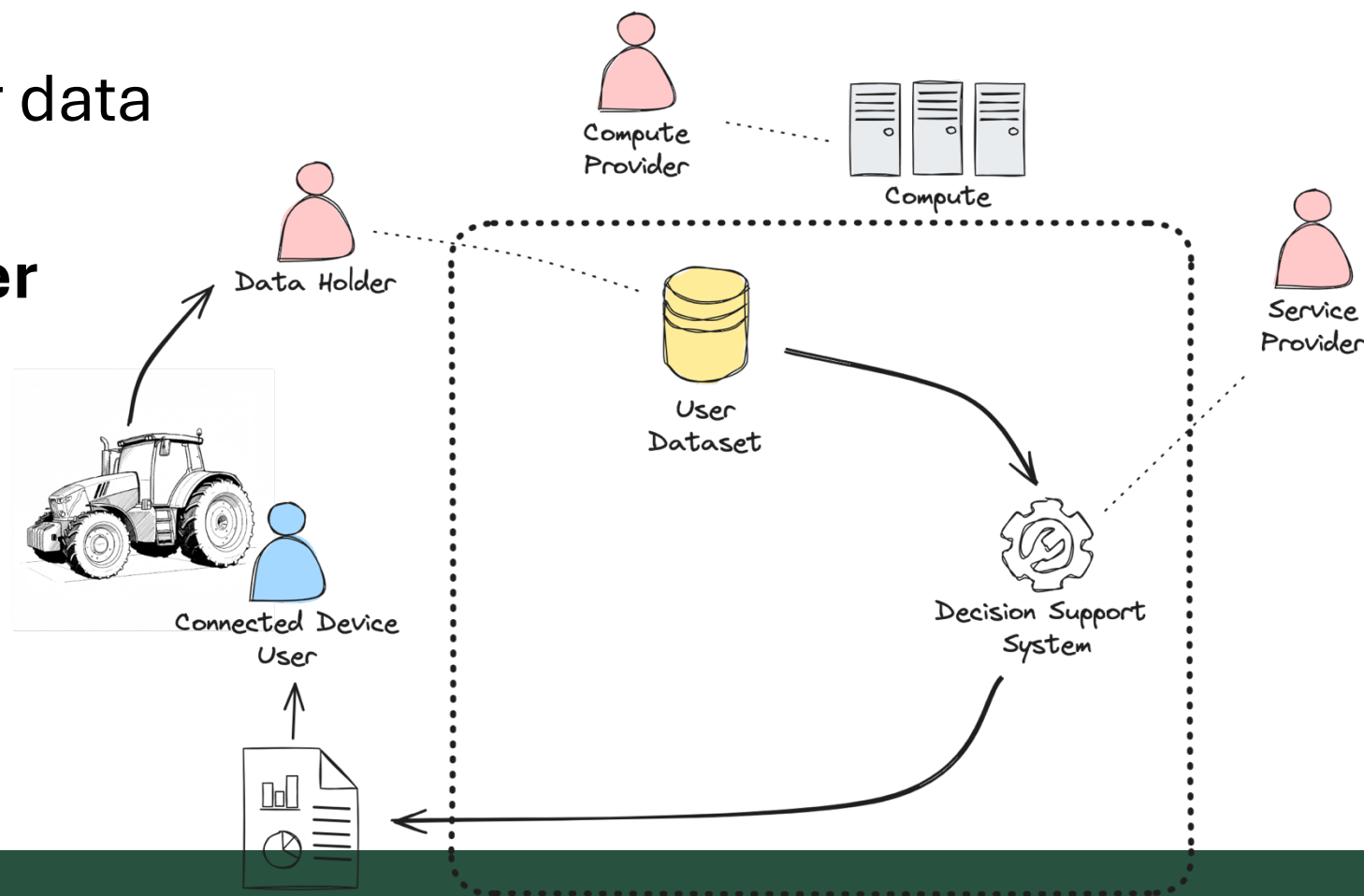
```
@prefix saref: <https://saref.etsi.org/core/> .
@prefix s4agri: <https://saref.etsi.org/saref4agri/> .
@prefix om: <http://www.ontology-of-units-of-measure.org/resource/om-2/> .

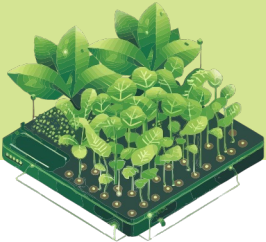
ex:SoilSample_0123456_1 a s4agri:Soil .

ex:Measure_0123456_1_Humidity a saref:Measurement ;
  saref:isMeasurementOf ex:SoilSample_0123456_1 ;
  saref:hasValue "1.160"^^xsd:float ;
  saref:isMeasuredIn om:percent ;
  saref:relatesToProperty ex:SoilHumidity .
```

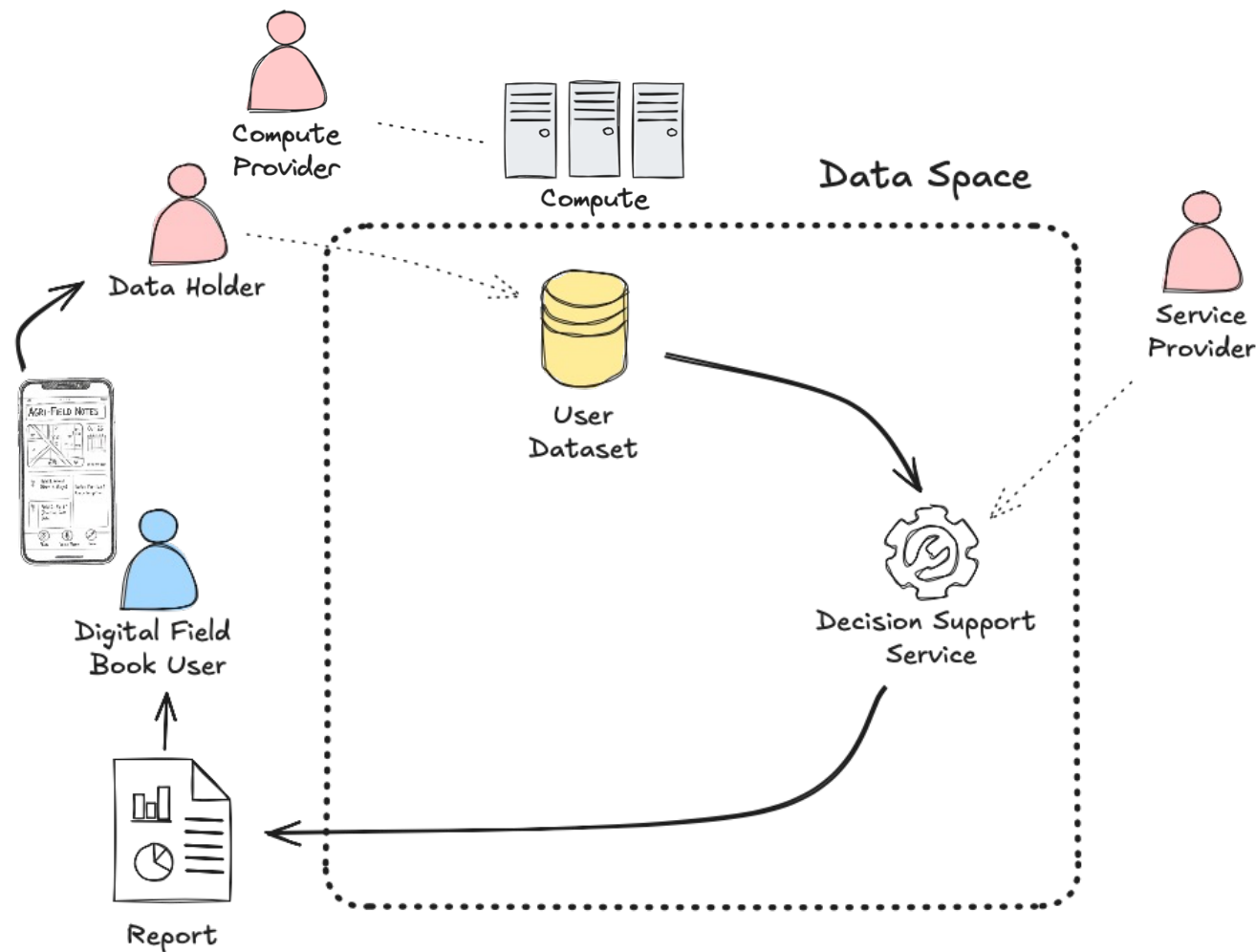


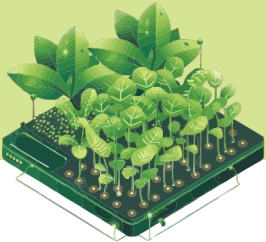
- Facilitate **controlled use** of collected data
- **Data holder** makes user data available in data room
- Used by **service provider** chosen by **user**





- Reuse data held by public sector bodies
 - Focus on protected data
 - (e.g. personal or commercially confidential)
- Safeguards to facilitate it:
 - Technical: anonymisation, pseudonymisation or secure processing environments (e.g. **data rooms**)
 - Contractual: confidentiality agreements
- Public sector to assist reusers in seeking consent from data holder affected by the reuse
- Public sector might charge reasonable fees
- [European register for protected data held by the public sector \(ERPD\)](#)
- Data Intermediaries (DGA)
 - Trustworthy organisers of data sharing or pooling within the Common European Data Spaces





- Scaling up:
 - Additional participants
 - Extending the [use cases catalogue](#)
 - Eclipse Connector integration, yield estimation, plant health data,...
- Guidelines for participants
 - Sharing [data](#), [services](#) and [compute](#)
- Spanish Data Spaces Kit:
 - **Beneficiaries:**
public/private entities with tax domicile EU
 - **Benefit:**
fund costs incurred to participate in Spanish data space demonstrators, based on participation level
 - **Eligible expenses:**
 - Own staff dedicated to the project
 - Hiring of external services
 - Acquisition of products necessary for data preparation or connection



Participation Level	Description	Private Entity (€)	Public Administration (€)
Effective	Onboarding, digital identity & data preparation	15.000	25.000
Advanced	Effective + data product publication	30.000	50.000



AgrospAI

Work in progress...

- Developing missing components:
 - **Consent management**
 - **Data cooperatives and shared ownership**

Universitat de Lleida (UdL) 
 0xD999bAaE98AC5246568FD726be8832c49626867D
 Pontus-X Testnet Pontus-X Devnet

267 Sales 69 Published 1 Incoming Pending Consents 0 Outgoing Pending Consents

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Image Recognition and Tracking for Animal Well-being Monitoring
 Exploratory Data Analysis
 UdL-EDA | did:op:621ff293e4c6ee4b7ff025892a622c7908f7d08eb354f47c2868f3a...
 Free

Your algorithm is not listed? **MAKE PETITION**

PUBLISHED DOWNLOADS COMPUTE JOBS **CONSENTS**

 REFRESH ☐ Only show pending

INCOMING OUTGOING

DATE	DATASET	ALGORITHM	SOLICITOR	STATE	ACTIONS
Nov 5, 2025	Timeseries Forecasting Testin...	Exploratory Data Analysis	Centre ...	Pending	Inspect 

Assets
 Assets involved in this consent, your dataset and the requested algorithm

Timeseries Forecasting Dataset
 by Universitat de Lleida (UdL)

UdL EDA Algo
 by Universitat de Lleida (UdL)

Requests
 Requests made by the solicitor

Centre d'Estudis Porcins (CEP) 7 days ago

Please, I would like to use the EDA service to check the quality of the data.

Requests for:

- To trust the access and usage of Timeseries Forecasting Dataset via UdL EDA Algo.

Response

Reason of the response

Permissions:

- ☒ To trust the access and usage of Timeseries Forecasting Dataset via UdL EDA Algo.

Correct network 32456 

REJECT ALL **SUBMIT**



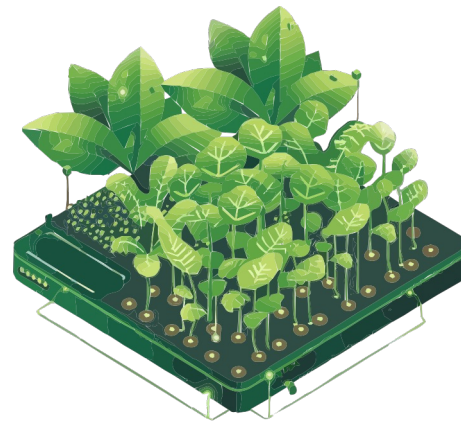
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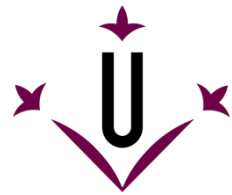
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E INTELIGENCIA ARTIFICIAL

R Plan de Recuperación,
Transformación
y Resiliencia



AgrospAI

Agri-food data space demonstrator for
sovereign data sharing and Artificial Intelligence services



Universitat de Lleida

AgrospAI team:

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agrospai@udl.cat / <https://agrospai.udl.cat>



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