

# Setting Up Data Spaces as a Service



**Thursday 9 February 2023**

#dataspaces

[www.gaiax.fi](http://www.gaiax.fi)

# Programme

13:00 (EET)  
12:00 (CET)

13:00

## Welcome

*ANTTI 'JOGI' POIKOLA, SENIOR LEAD, GAIA-X FINLAND, SITRA*

## Empower Data Ecosystems

*ANDREAS KRIMBACHER, CTO, NEXYO GMBH  
NATASCHA TOTZLER, PRODUCT OWNER, NEXYO GMBH*

## Setting Up Data Space Technology in Minutes Instead of Months

*SEBASTIAN BUSE, MANAGER BUSINESS DEVELOPMENT, SOVITY*

## Enabling Data Spaces

*JUHANI LUOMA-KYYNY, BUSINESS ARCHITECT, DATASPACE EUROPE*

## Questions & Answers

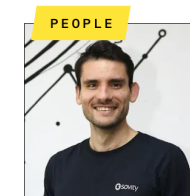
14:30

Event ends



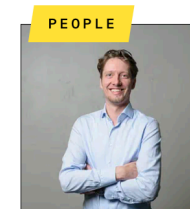
**Antti Poikola**

Senior Lead,  
Gaia-X Finland,  
Sitra



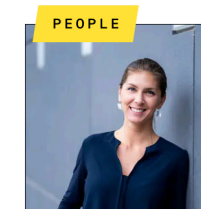
**Sebastian Buse**

Manager Business  
Development,  
Sovity



**Andreas Krimbacher**

CTO, nexyo GmbH



**Natascha Totzler**

Product Owner,  
nexyo GmbH



**Juhani Luoma-Kyynty**

Business  
Architect,  
DataSpace Europe



# Data spaces technology landscape 2023

**Antti 'Jogi' Poikola**

Lead Architect

[antti.poikola@sitra.fi](mailto:antti.poikola@sitra.fi)

Twitter: [@apoikola](https://twitter.com/apoikola)

# **Data Space**

Decentralised infrastructure for trustworthy data sharing and exchange in data ecosystems based on commonly agreed principles.

# THE EUROPEAN DATA STRATEGY



Health



Industrial  
&  
Manufac-  
turing



Agriculture



Finance



Mobility



Green  
Deal



Energy



Public  
Adminis-  
tration



Skills





# Approach to realise the potential of data spaces

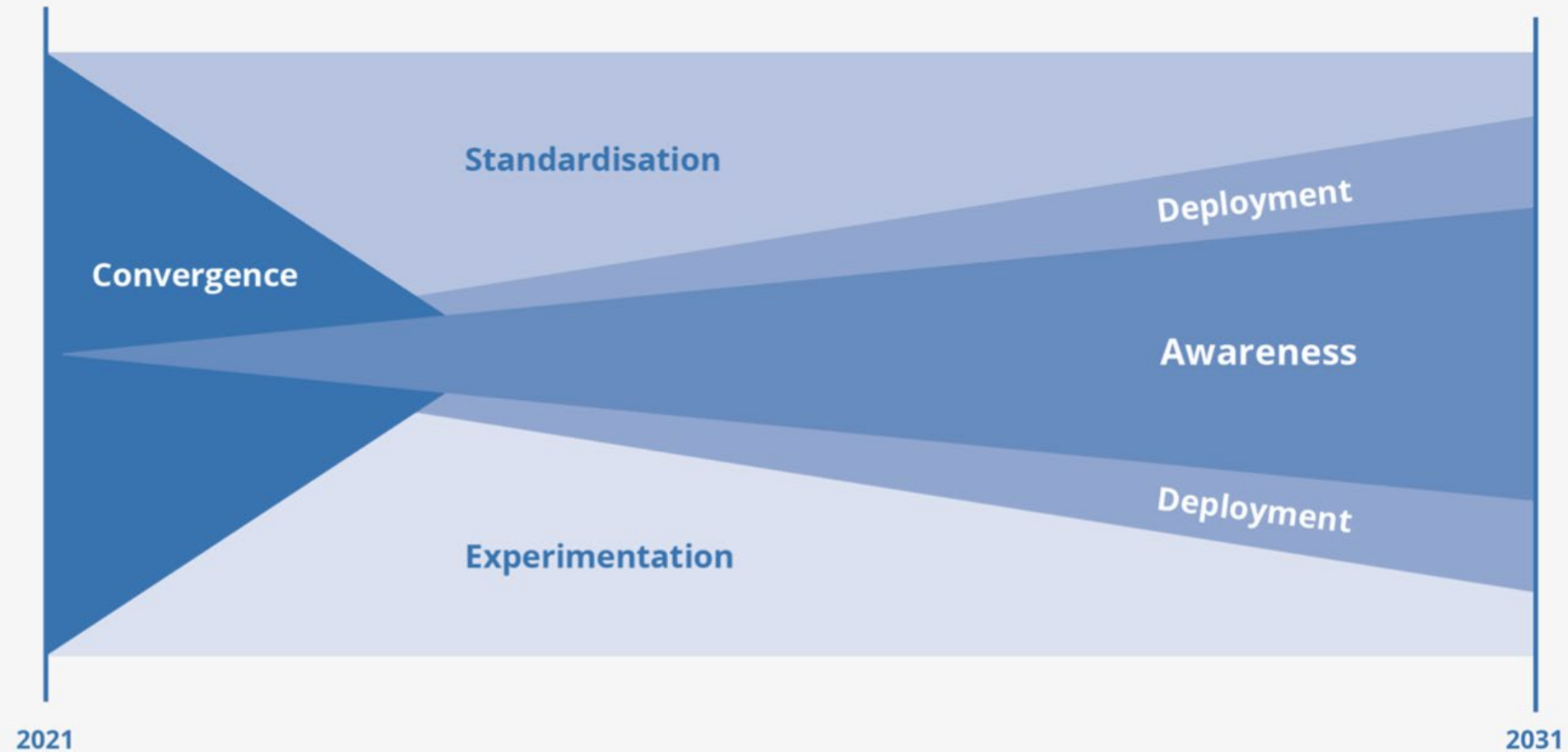
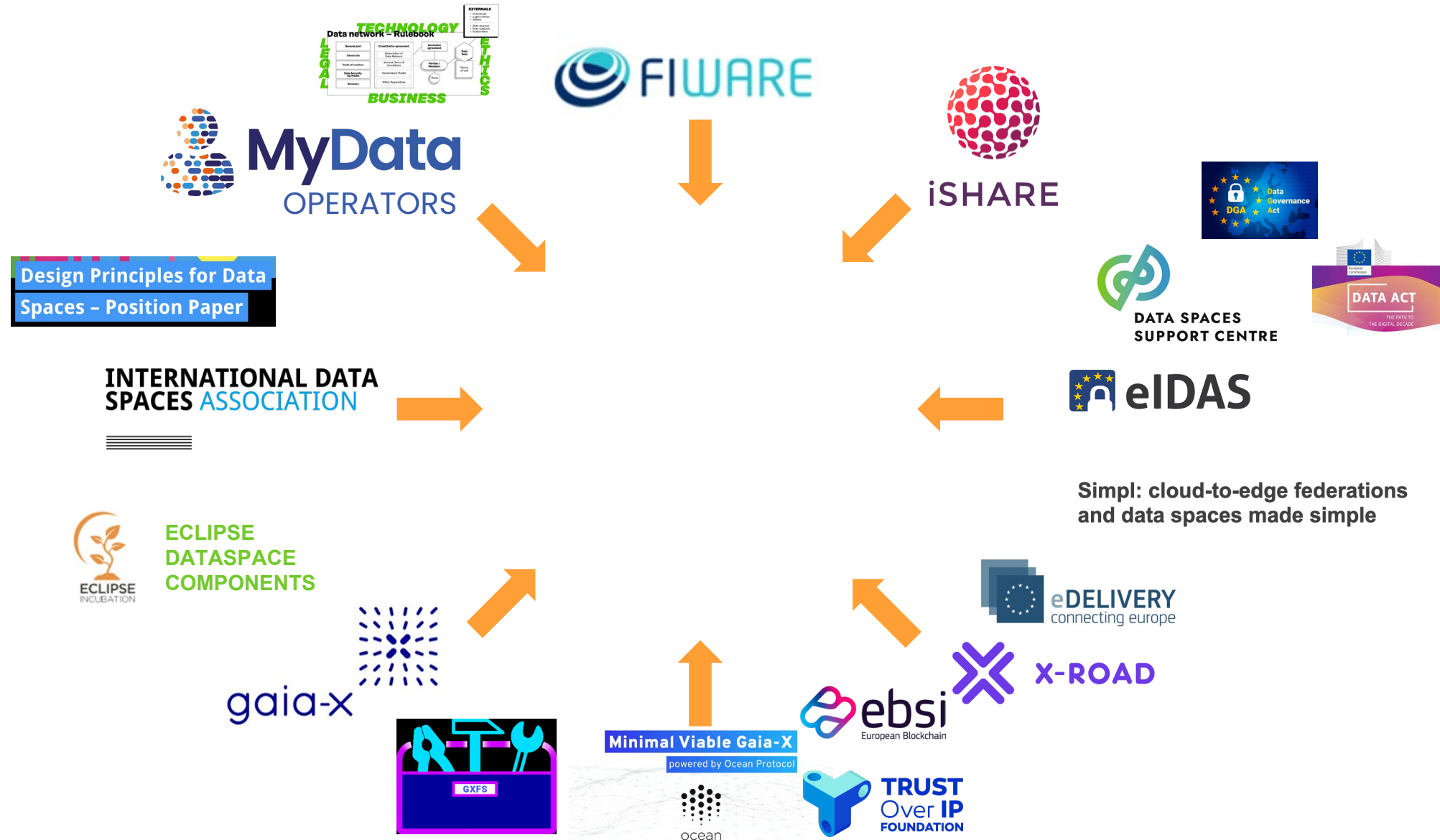


Figure 16 Schematic activity streams for the coming decade towards data spaces and their soft infrastructure (source: BDVA).

# Data spaces technology landscape



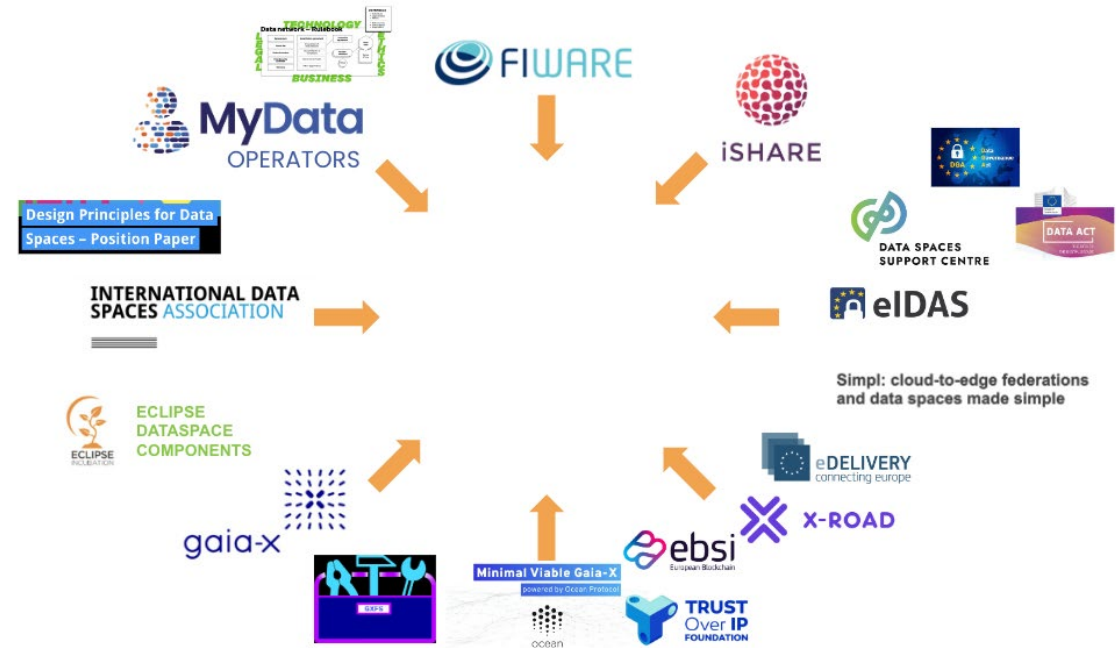


# Data spaces technology landscape

Today: Examples of commercial technology offerings

nexyo

SOViTy



# Data Spaces Symposium & Deep-Dive Day

Building the future – benefit together

Postillion | The Hague  
March 21 to 23, 2023

Hosted by

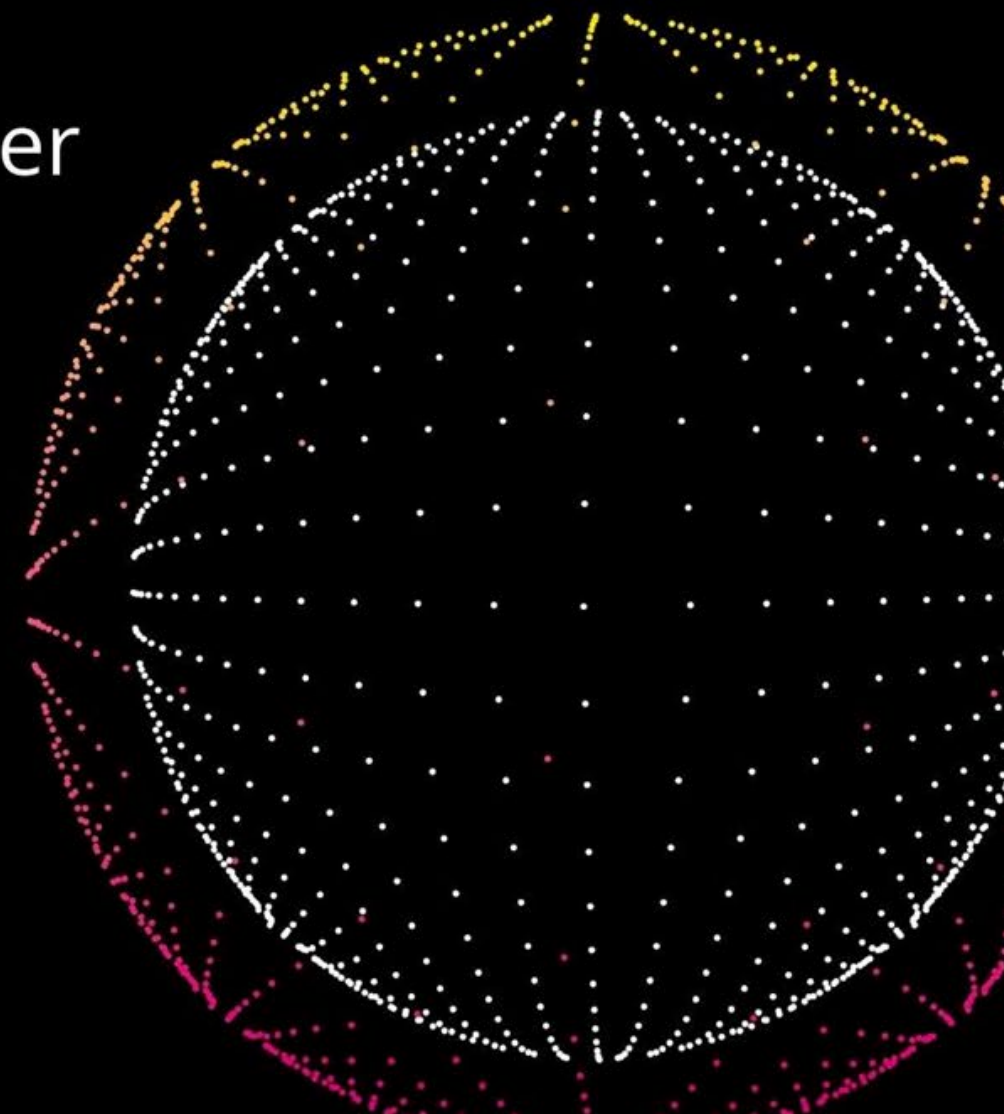


INTERNATIONAL DATA  
SPACES ASSOCIATION

Boosted by



Supported by



# Data Spaces Symposium & Deep-Dive Day

Postillion | The Hague

March 21 to 23, 2023

The Data Spaces Symposium & following Deep-Dive Day is the fast stop for all relevant data sharing initiatives and efforts in one place.

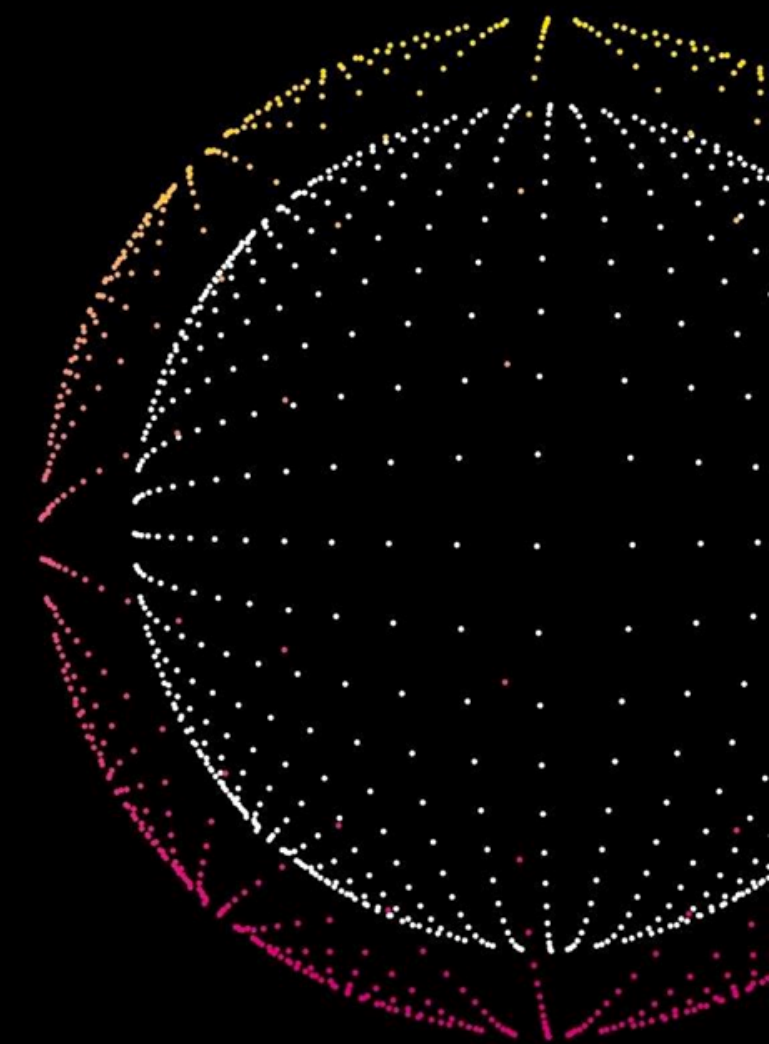
- Listen to inspirational keynotes and panels to underline the holistic economic and societal impact of data spaces
- Learn from successfully running data space projects like SCSN and Catena-X Automotive Network
- Take part in top-level discussions to conduct the paradigm shift for the data economy
- Learn everything about data spaces from thought leadership to hands-on support to create true impact via data spaces

In short: co-create the future of data spaces with us! ☐

Sounds like an event not to be missed, right?

Get a first impression of the programme and make sure you get a ticket!

[www.internationaldataspaces.org/data-spaces-symposium](https://www.internationaldataspaces.org/data-spaces-symposium)





# Thanks!

## Antti 'Jogi' Poikola

Lead Architect

[antti.poikola@sitra.fi](mailto:antti.poikola@sitra.fi)

Twitter: [@apoikola](https://twitter.com/apoikola)





# Empowering Data Ecosystems



Let's start a data driven future:

We believe that we can create a new reality.

A reality in which data is connected and creates value and innovation.

A reality in which data becomes an ecosystem.

## FIND US HERE

Ungargasse 46/3, A-1030 Vienna

[www.nexyo.io](http://www.nexyo.io)

[info@nexyo.io](mailto:info@nexyo.io)

# Your Presenters today

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Andreas Krimbacher  
CTO & Co-Founder



Natascha Totzler  
GM & Business Executive





# Who we are

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nexyo is a Vienna based deep-tech data company delivering an innovative, unified and scalable platform for distributed data – manage and share your data with one single solution.



**Founded in 2020**



**Located in Vienna**



**Successful Pilot Projects**



**High Profile Team**



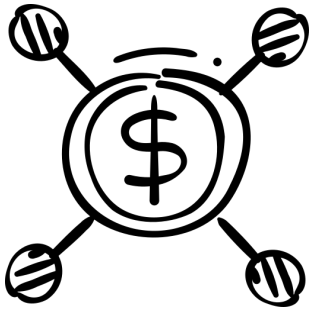
**Paying Customers**



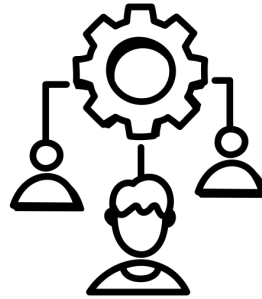
**Tech Partner for Austrian Lighthouse project**

# What we stand for

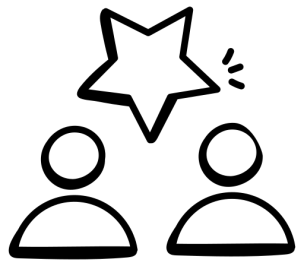
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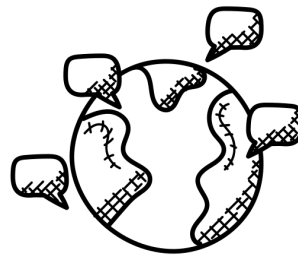
Data as Revenue Stream



Use Case Collaboration



Enable Domain Experts



Building Networks



Added Value



Building Trust

Sources: Capgemini Data Ecosystem Survey; N=750 organizations, April-May 2021. Capgemini Research Institute analysis & Capgemini Research Institute, Data-Powered Enterprises survey, August 2020, N=1,004 organizations, <https://www.flaticon.com/>



# Our Buildingblocks

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Digital Data Sovereignty



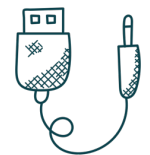
Make Assets to Offers with Policies



Decentralized Architecture

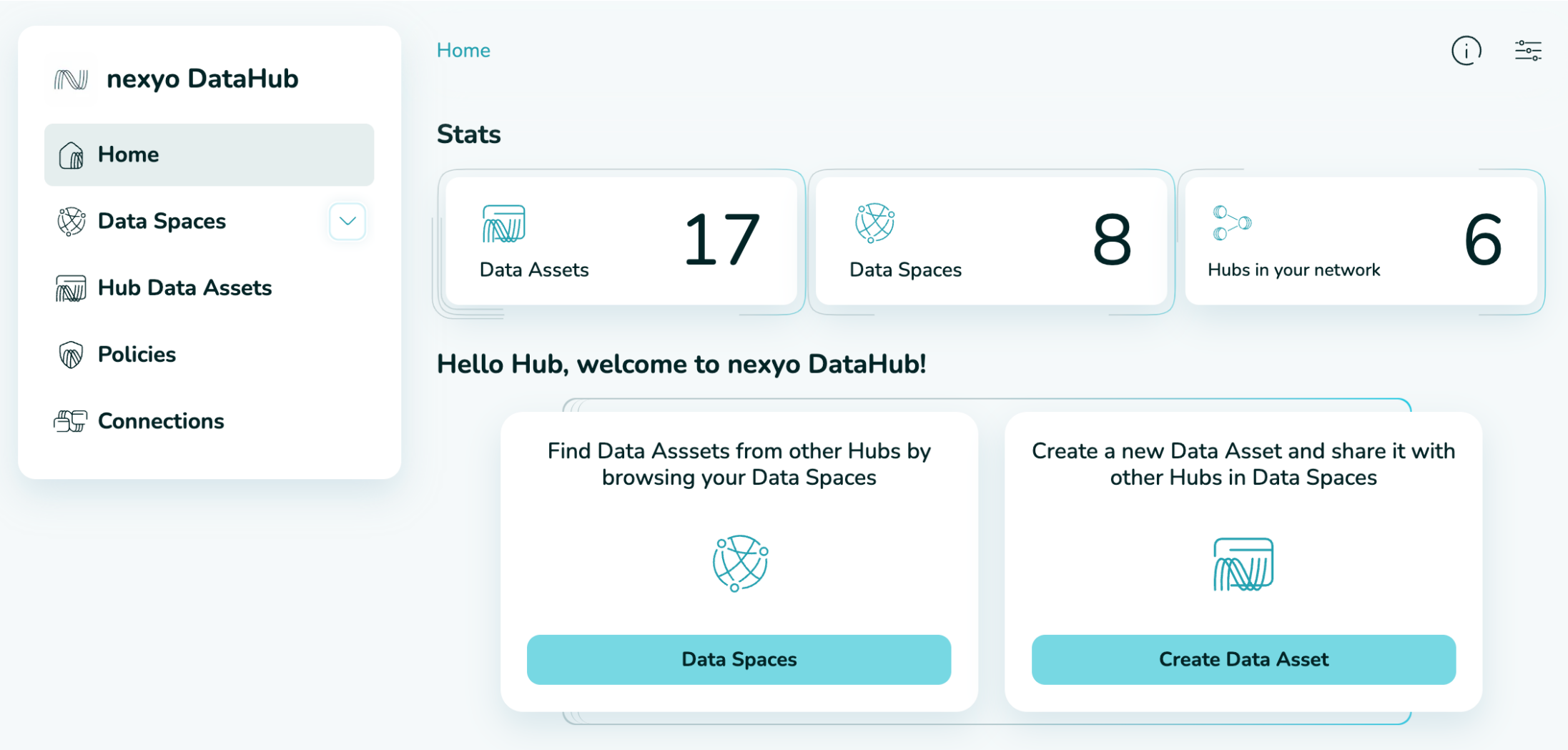


High Usability for Non-Technical Users





Interoperability with Others


# The Software





# The Software


 nexyo DataHub

 Home


 Data Spaces


 Hub Data Assets

 Policies

 Connections

Home > Data Assets > APG IST-Last

 **APG IST-Last**

 nexyo Demo Data Space

apg

ist-last

endverbrauch

inkl. Netzverl...

Publish Asset

Core Metadata

Contact Details

Files

Asset created

Oct 04, 2022

Asset last modified

Feb 06, 2023

Edit

Description ⓘ

Die Last ist in dieser Darstellung der gesamte Endverbrauch in der Regelzone APG inklusive Netzverluste. Die Last wird üblicherweise mit einer einstündigen Verzögerung veröffentlicht und aus der Summe aus Kraftwerkseinspeisungen und Importen abzüglich Exporten und Verbrauch von Pumpspeicherkraftwerken berechnet, wobei bei allen nicht einzeln erfassten Kraftwerken (in der Regel...

▼

Original Title ⓘ

AL\_2021-10-03T22\_00\_00Z\_2022-10-04T22\_...

Data Format ⓘ

.csv

Categories ⓘ

economy and tourism, environment

Chargeable ⓘ

☐

Datasource Language ⓘ

German

Metadata Language ⓘ

German

Temporal Coverage Beginning ⓘ

04.10.2021, 00:00

Temporal Coverage Ending ⓘ

04.10.2022, 10:15

Linked Metadata ⓘ

Update Frequency ⓘ

# The Software

The screenshot displays the nexyo DataHub interface. On the left is a sidebar with navigation links: Home, Data Spaces, Hub Data Assets, Policies (highlighted), and Connections. The main content area shows a breadcrumb trail: Home > Policies > Data Sharing Agree... Below this is the title 'Data Sharing Agreement' with a description: 'The subject matter of this agreement is the provision of aggregated, anonymized movement and mobile Data ("Data") to the partner for use within the framework of this contract.' There are four tags: agreement, odrl, sharing, and no charge. A section titled 'Usage rules (4)' includes a search bar and a filter dropdown set to 'All'. A list of four usage rules is shown, each with a shield icon and a colored label: 'The Partner guarantees that it will implement an...' (Obligation), 'No fee will be charged for the use of the Data' (Permission), 'The data must not re-personalized' (Prohibition), and 'Austrian law shall apply.' (Obligation). A small 'Info' icon is in the top right corner.

Home > Policies > Data Sharing Agree...

## Data Sharing Agreement

The subject matter of this agreement is the provision of aggregated, anonymized movement and mobile Data ("Data") to the partner for use within the framework of this contract.

agreement odrl sharing no charge

### Usage rules (4)


Search for the name of a Policy Rule


Filter by All


- The Partner guarantees that it will implement an... **Obligation**
- No fee will be charged for the use of the Data **Permission**
- The data must not re-personalized **Prohibition**
- Austrian law shall apply. **Obligation**





# The Software




 Home



 Data Spaces

 Hub Data Assets


 Policies

 Connections


Home > Data Spaces > Explore all Data Spa...










### Explore Data Spaces (10)

 Search for title or labels

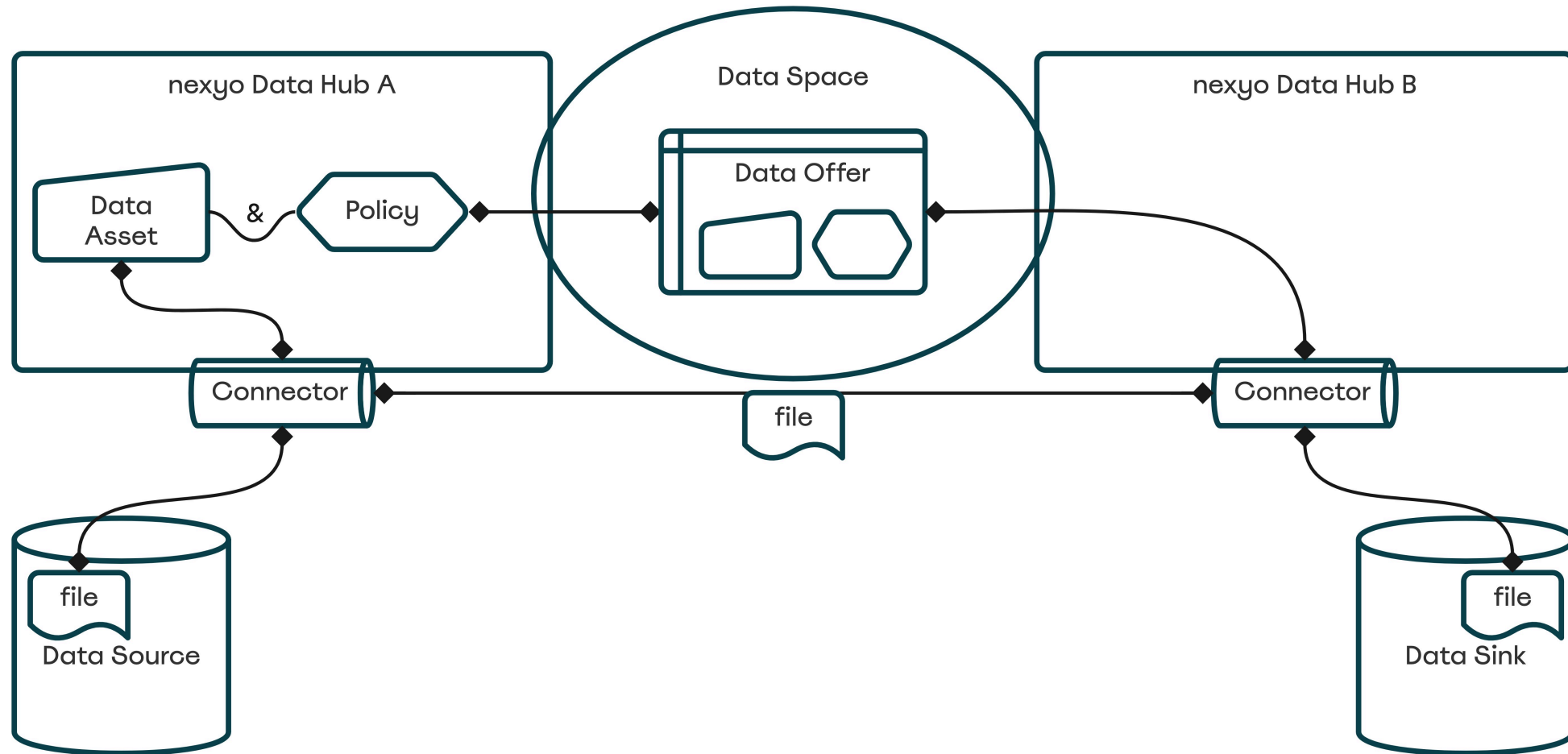
+ Join Data Space

Sort by Alphab. asc. 

 <b>DataSpace_CircularEconomy__AT</b> Public Data Space - 1 member	<a href="#">View</a>	<a href="#">Join</a>
 <b>DataSpace_DigitalClimateTwin__AT</b> Public Data Space - 1 member	<a href="#">View</a>	<a href="#">Join</a>
 <b>DataSpace_Education__AT</b> Public Data Space - 1 member	<a href="#">View</a>	<a href="#">Join</a>
 <b>DataSpace_EnergyTransition__AT</b> Public Data Space - 1 member	<a href="#">View</a>	<a href="#">Join</a>
 <b>DataSpace_Health__AT</b> Public Data Space - 1 member	<a href="#">View</a>	<a href="#">Join</a>
 <b>DataSpace_MobilityTransition__AT</b> Public Data Space - 2 members	<a href="#">View</a>	<a href="#">Join</a>
 <b>DataSpace_Retail__AT</b> Public Data Space - 1 member	<a href="#">View</a>	<a href="#">Join</a>



# Technical Approach



# The Components

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**INTERNATIONAL DATA  
SPACES ASSOCIATION**





Unleash your potential -  
not your data.



Setting up data space  
technology in minutes  
instead of months

Sitra | 09.02.2023 | Sebastian Buse



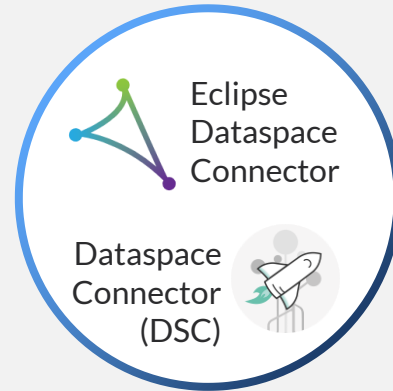
Let's connect!

# sovity – the first company explicitly founded to enable easiest access to Data Space technologies



## Data sovereignty experts

Team of experts shapes Data Space technology since day one



## Best technology

Connector based on latest open-source software enriched with key features



## Part of key initiatives

sovity shapes the standard of sovereign data exchange with important initiatives



## Strong network

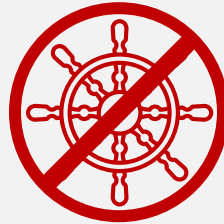
Customers and partners give strong evidence to team and tech



# Why not simply exchange data to create value?



**Expensive  
implementation**



**Loss  
of control**



**Potential  
misuse**

# Data Spaces solve given problems



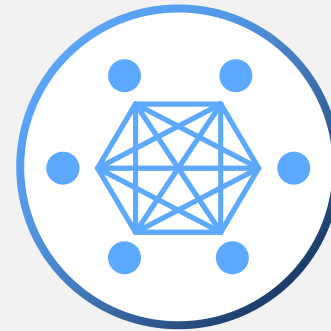
## Standardized

build common basis  
for data ecosystems



## Scalable

connect various sources,  
apps & partners



## Decentralized

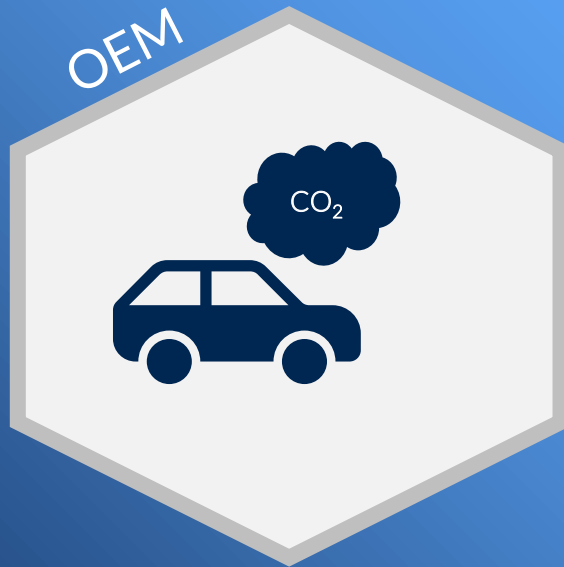
keep data stored on  
data owner's side



## Data Sovereign

define & enforce  
Usage Policies

## Example



What is CO<sub>2</sub>  
footprint  
of a car?

## Use case requirements



**Scalable solution:**  
**1000s of sources**

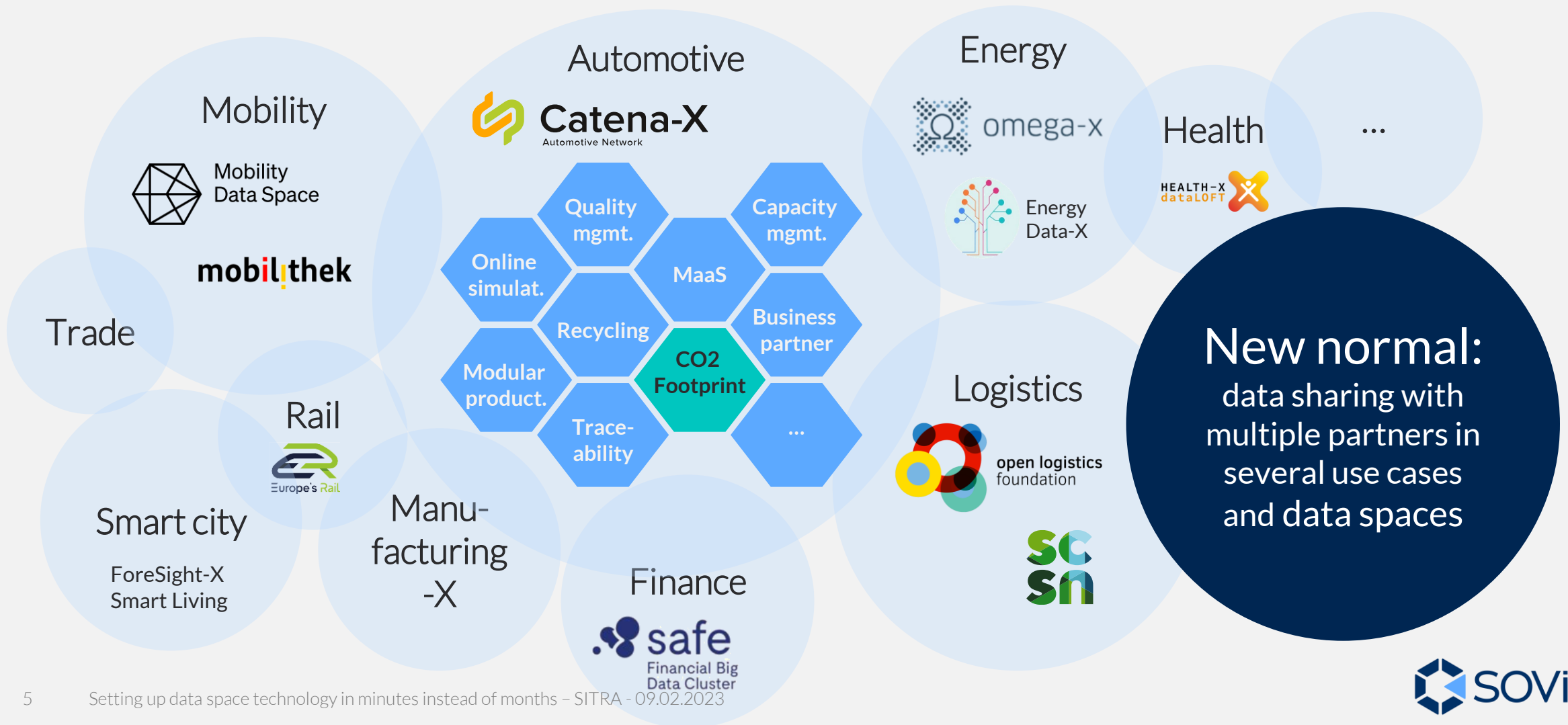
data from various partners,  
sources & systems integrated



**Share sensitive  
business insights**

e.g., energy consumption,  
sources, transport routes

# Countless Data Spaces and use cases across all domains arise



# Building a sustainable Data Space



Community &  
Business Model



Core Technology  
Design

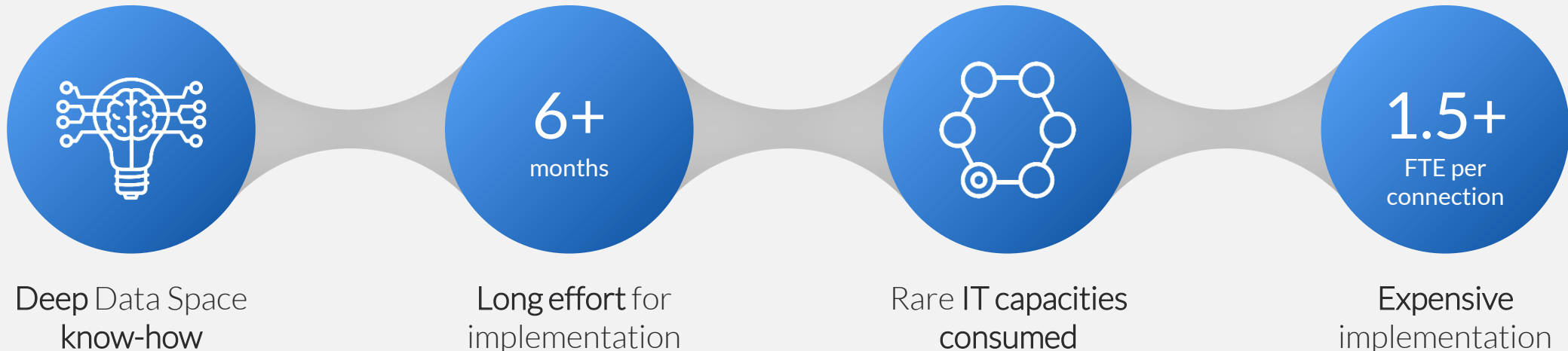


Use Case  
Development



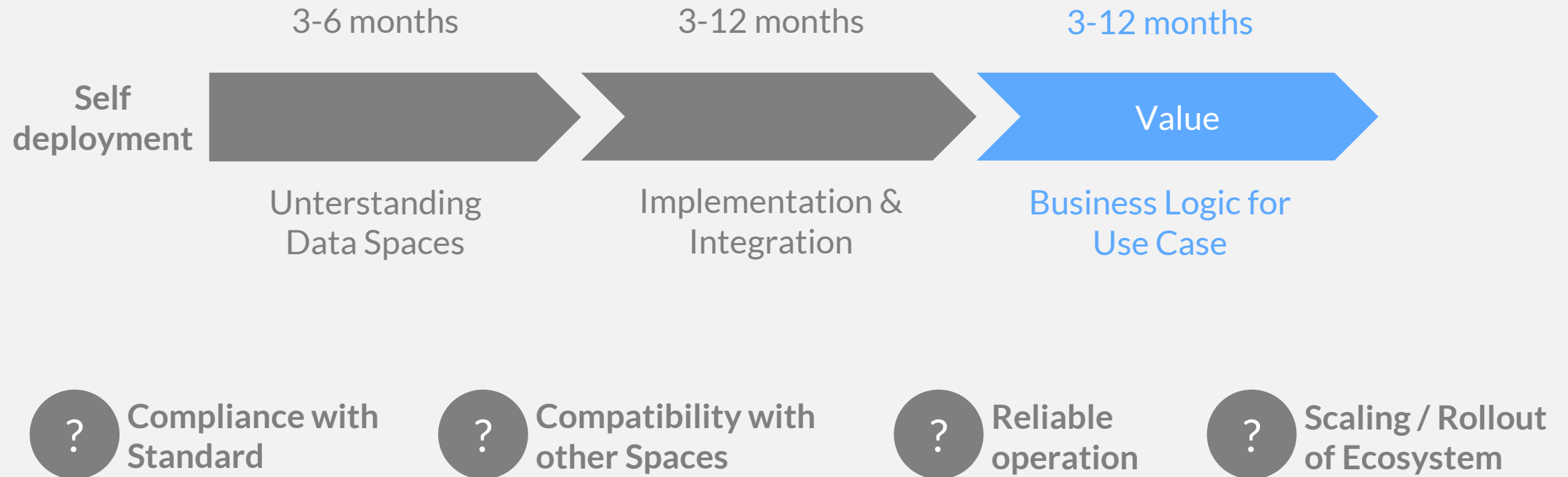
Technical  
Implementation

# Today's obstacles: Only very few companies can become expert in deep-tech Data Space software

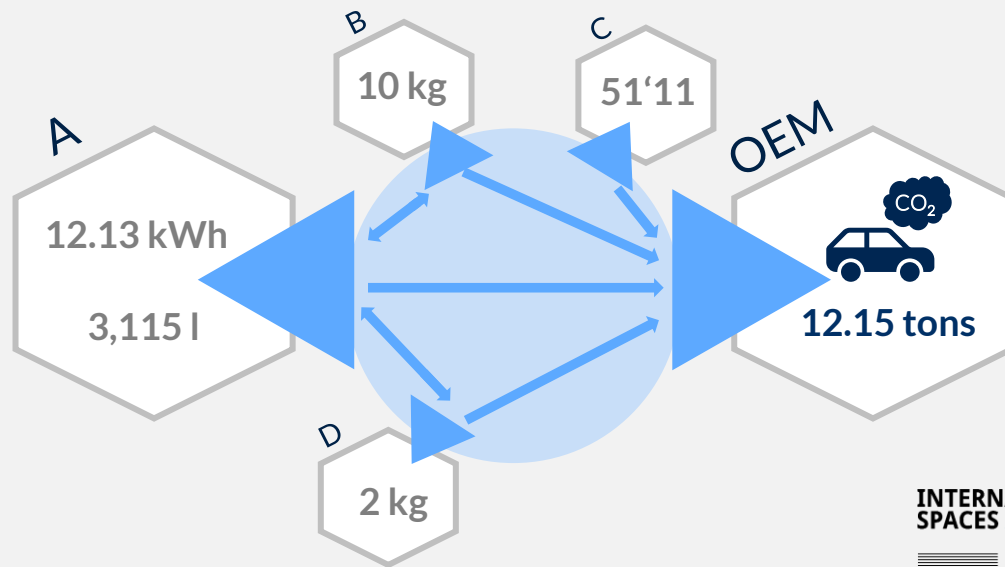




# Hurdles for takeoff & causes of project delays



# Leverage Software-as-a-Service by sovity to fully focus on use case



Use Case example:  
CO<sub>2</sub> footprint of a car



## Speed-up connection & scaling

Do not spend 6+ months to implement Data Space technology – use sovity solution in minutes



## Focus resources

Save resources to implement use case – use managed service at minimal costs

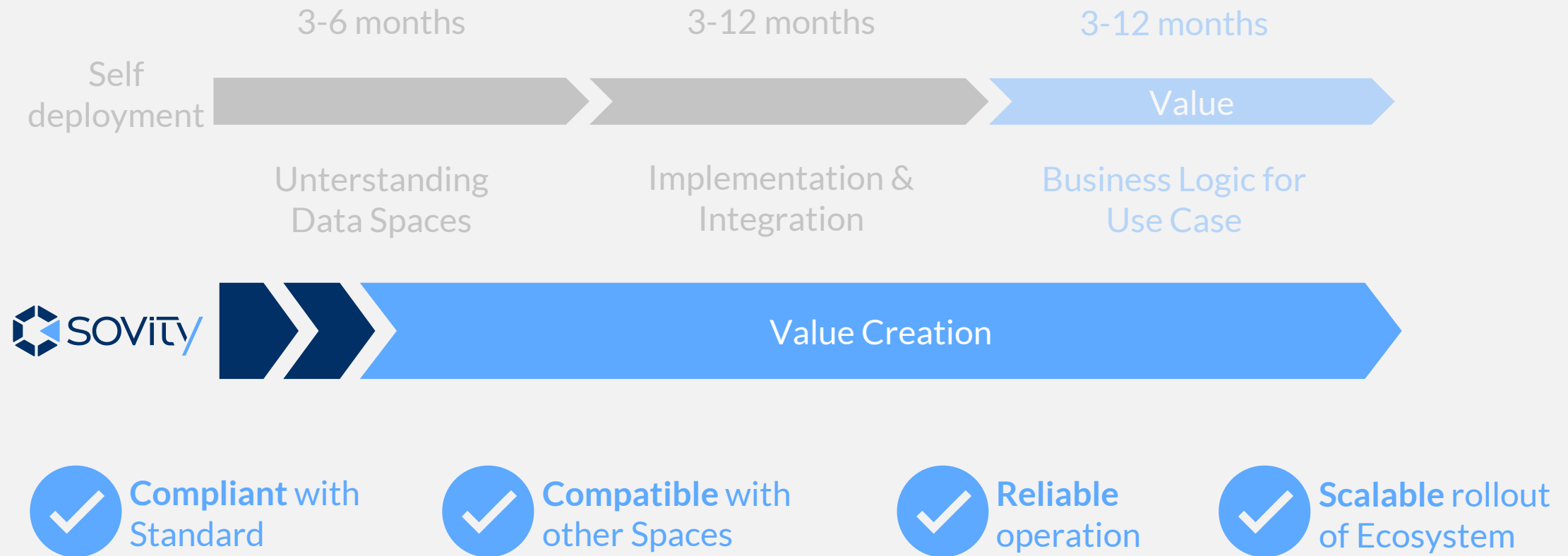
INTERNATIONAL DATA  
SPACES ASSOCIATION



## Compliance & compatibility

Use solution compliant with current standards and several specific Data Spaces

# Fastest implementation of sustainable Data Spaces and use cases



# Demo today: Data consumption in Data Space with Connector



# Key requirements covered in shortest time



**Highly automated deployment**



**User-friendly web frontend**



**EDC Connector**



**Data Sovereignty**

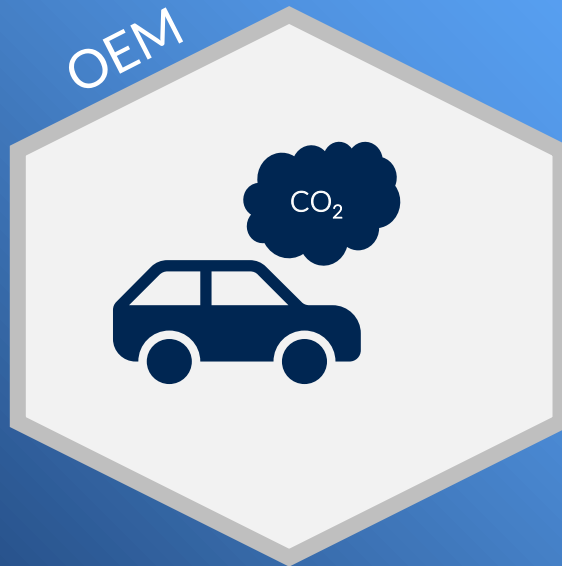


**Integrated with Data Space**



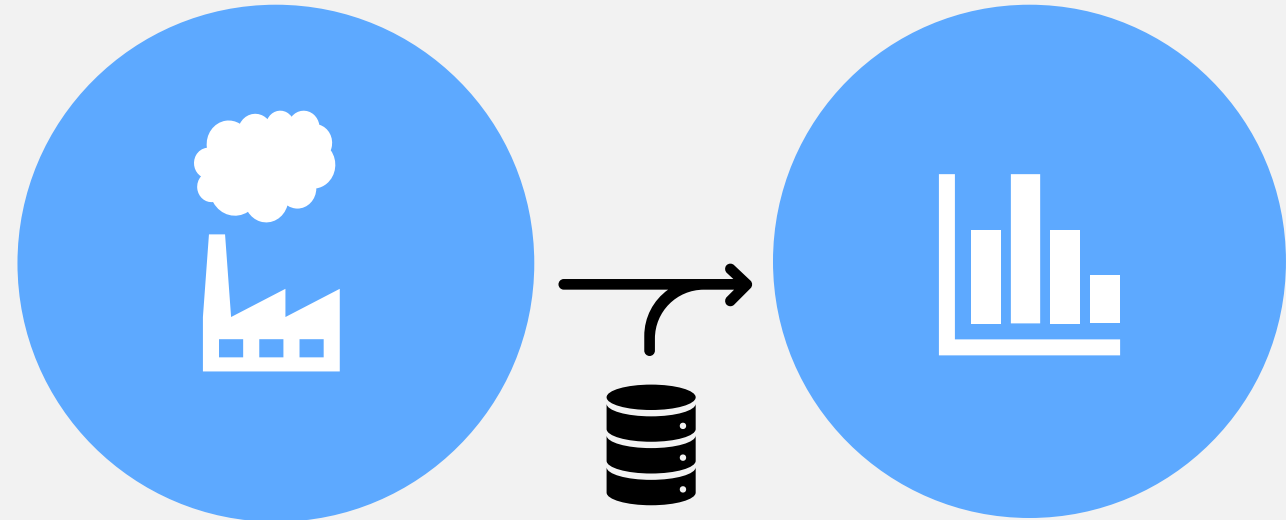
**IDSA & GAIA-X Compliance**

## Use Case



What is CO<sub>2</sub>  
footprint  
of a car?

## Situation & Actions



Emission Data of  
supplier

Calculation of  
emissions

# Lowest barriers to data sovereignty



## **Professional product:**

Use reliable product with security & value-add features (e.g. user management, middleware)



## **Scalable solution:**

Quickly connect sources & partners to standard technology and exchange data



## **Open-source core:**

Use widely compatible open-source technology without vendor lock in

e.g. compatible with  
Advaneo, Nexyo

# Your link to using newest Data Space knowhow

## Technology shaping

Active contribution with open-source software and shaping of standard



### sovity open-source Connector

Community edition based on EDC Connector



### EDC Connector

Contribution with key extensions for Eclipse Dataspace Components



### International Data Spaces Association

Design standard of sovereign data exchange and ecosystem

## Data Space development and operations

Involvement and support for several Data Space initiatives



### Mobility Data Space

Development of Data Space components and service provider



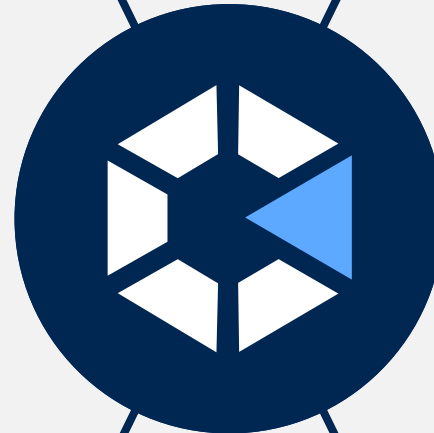
### Catena-X

Onboarding to Data Space and operation of Connector-as-a-Service



### Customer Data Spaces

Design & operation of Data Spaces for Use Case PoCs





# Let us accelerate the new category of data sharing!

## Thank you

Sebastian Buse | Manager Business Development

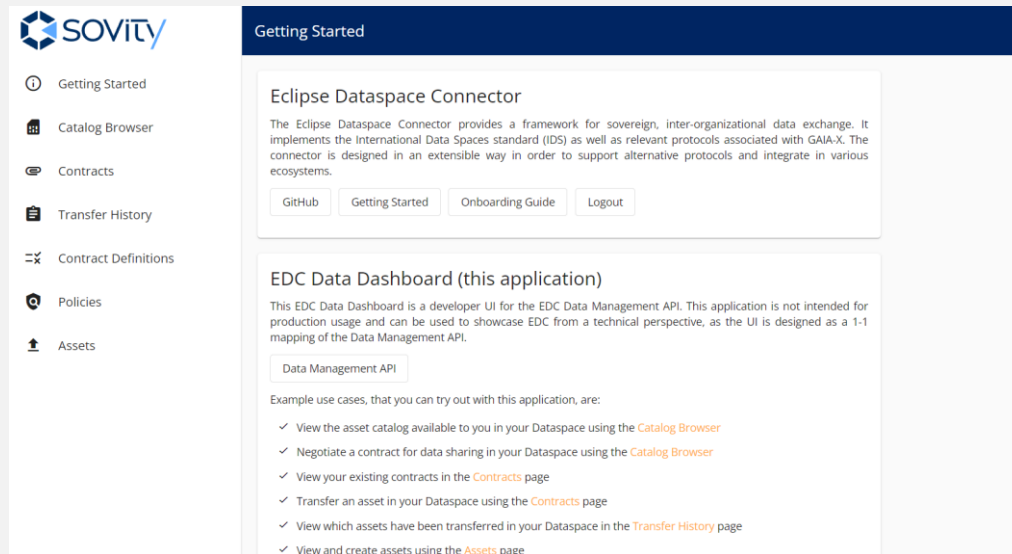
Sebastian.Buse@sovity.de

+49 176 60380643

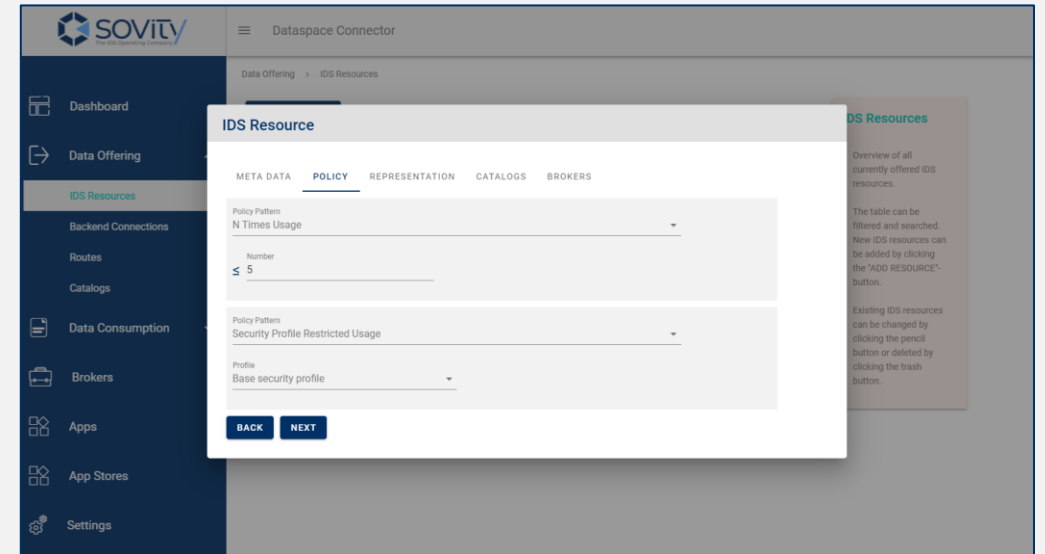
[LinkedIn](#) | [www.sovity.de](http://www.sovity.de)



# Demo: Experience easy usage of soivity Connectors



Short demo: Experience how to easily create and consume data offerings



Long demo: Experience the rapid deployment, definition and enforcement of usage policies

Used by our customers in:





# DataSpace Europe

**Setting up data spaces as a service**

**9.2.2023**

**Juhani Luoma-Kyyny**

# DataSpace Europe Oy

We develop and deliver data intermediary services defined in the EU Data Regulation

Our solution, the Triton, enables new services in selected customer segments

Agri/food is the first domain where we operate, new domains will be covered during 2023

- Est: 15.6.2022 Helsinki
- Member of IDSA and GAIA-X
- Owners: MTK ry, Cinia Oy, JSK Kiinteistöt Oy, Tikura Ventures Oy
- Funding: owners, The Finnish Climate Fund, Business Finland
- CEO Kari Järvinen
- COB Antti Kivelä



# Tritom<sup>®</sup>

The power of collaborative data.



**Tritom**Contracts

"trust"



**Tritom**Essential

"data sovereignty"



**Tritom**Enterprise

"interoperability"  
"data and service markets"



**Tritom**Connector

"connectivity"

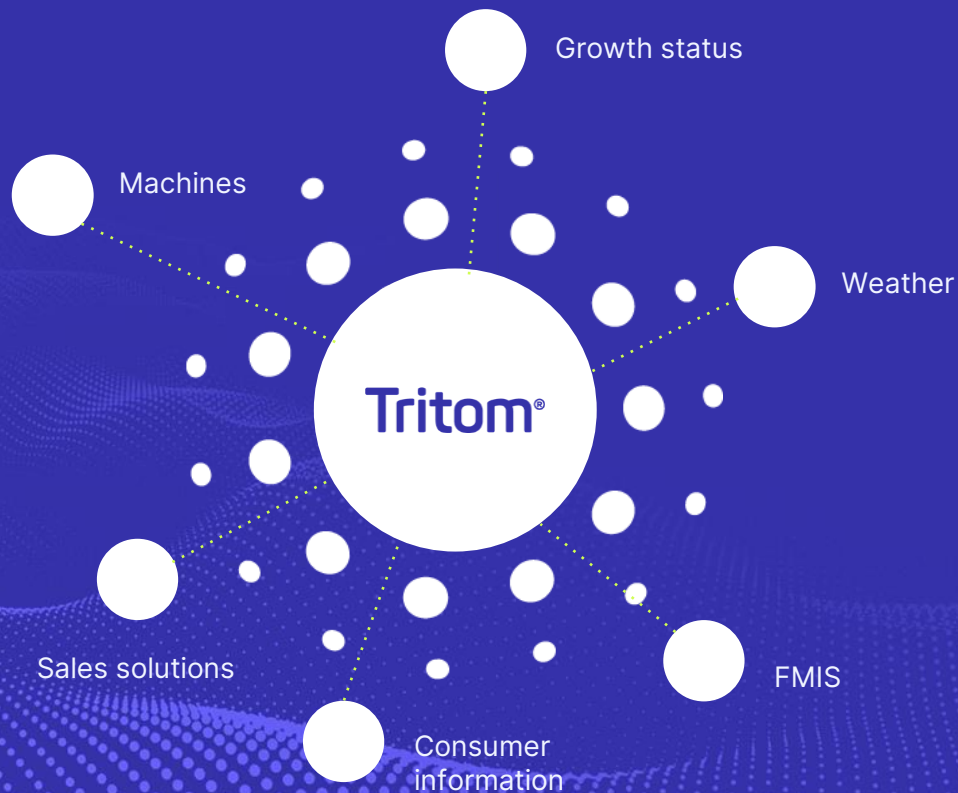
C R M

€



Tritom - the first domestic data intermediary service in the dataspace now connects Finnish food industry operators from agriculture to authorities and research institutes, and from the food industry to retail trade and the consumer.

**Tritom's most important mission is to improve the sustainability, efficiency and profitability of all operators.**





# THANK YOU!

## Contact information

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**RISE TO  
SHINE!**

