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Austrian Initiative for a Sustainable European Data-Service-Ecosystem

Workshop Conference:
European Data Spaces for Sustainability for key actors, data experts and implementers
Thursday, February 16th, 2023

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Goal & Invitation: collaboration of Data Spaces

between European markets and across domains

1. to combat the climate crisis,
2. to support the energy and mobility transition, and
3. the development of circular economy.

300.000 people affected
7.800 displaced

Sept 24 / 2022 FIONA – We've Got a total Destruction Zone Out There" – Port Aux Basques Mayor

October 10/ 2022: Tens of thousands of salmon found dead after Canada drought.

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Sept 27/ 2022:
Hurricane Ian bludgeons Southwest Florida

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Sept 30/2022: Pakistan floods: Six month wait for water to recede, warn relief agencies

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July 17/22 : Climate crisis is intensifying heatwaves UN-backed report warns

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1,6 Million people affected
780 000 people displaced

August 19 / 22: Somalia Drought 2015-2022 - devastating drought has reached unprecedented levels

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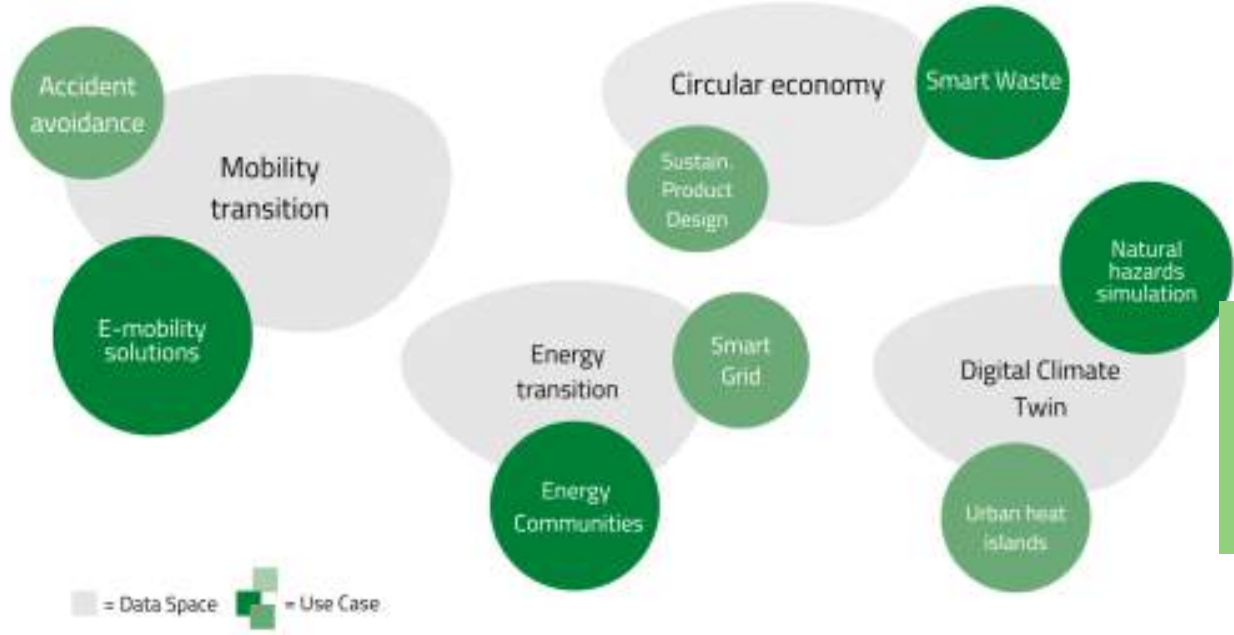
Green Data Hub:
Generate use cases out of Data Spaces

Traditional: Profitability



Green: Sustainability

Seek efficiencies, create optimization, find new solutions

Four Data Spaces aligned with the strategic fields of action of the BMK

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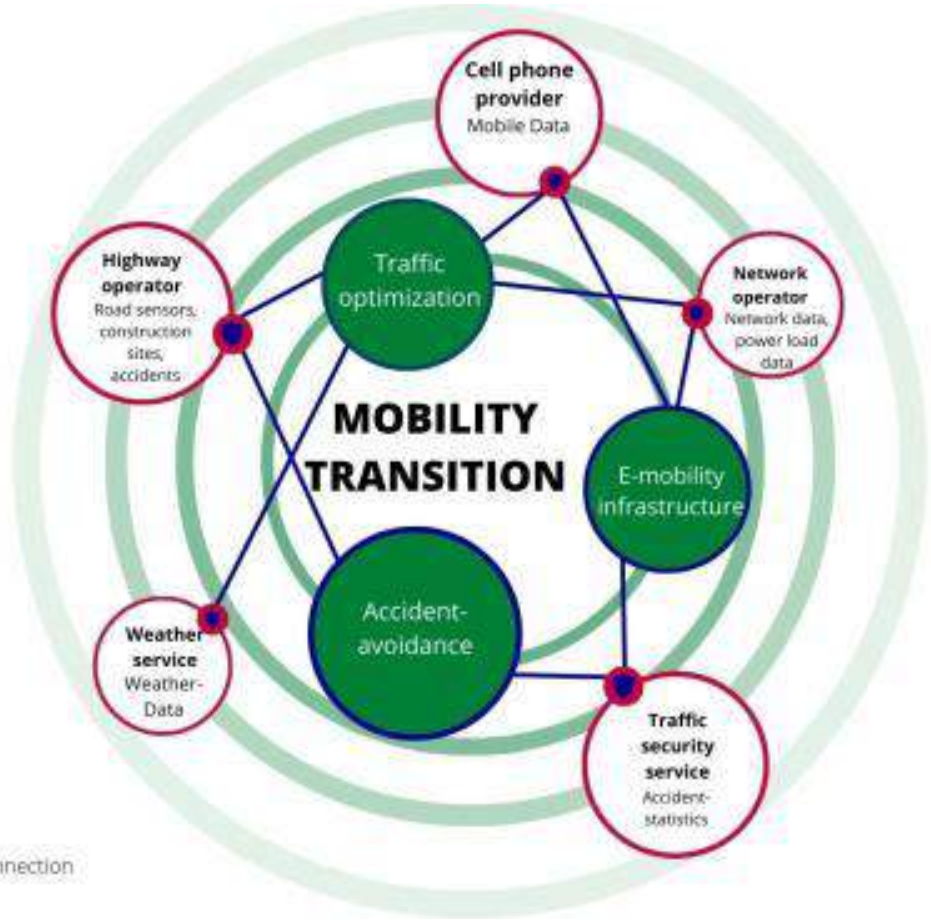
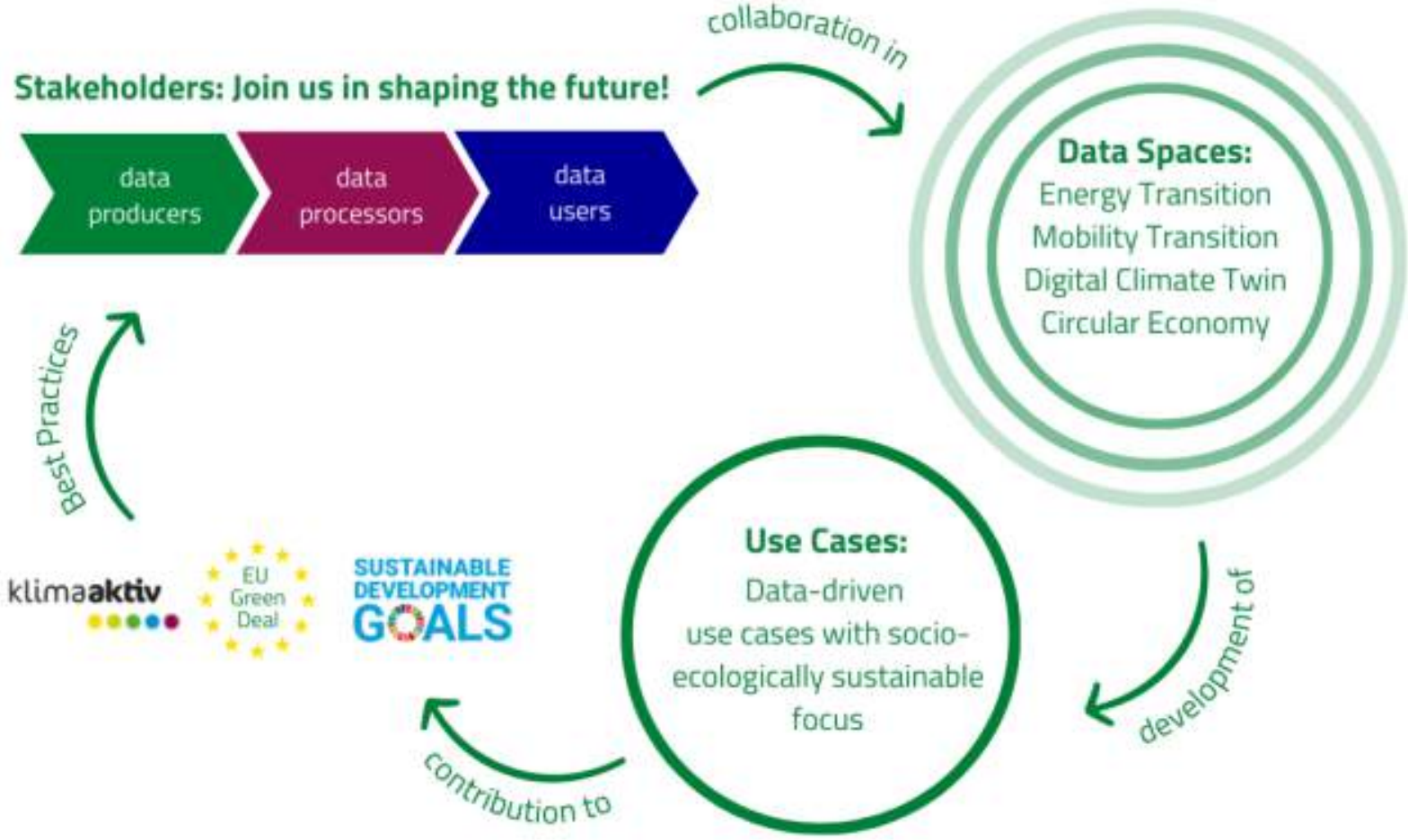
Mobility turnaround: Who works together in which role in the data space?



- Stakeholders from a wide variety of areas cooperate in a data space
- By combining the data from different actors, the full benefit and innovation potential of data is unleashed
- Sustainable use cases are created that can be processed as a closed circle within a data space

Data Spaces and ecosystems: Successful through TRUST and DATA SOVERENITY



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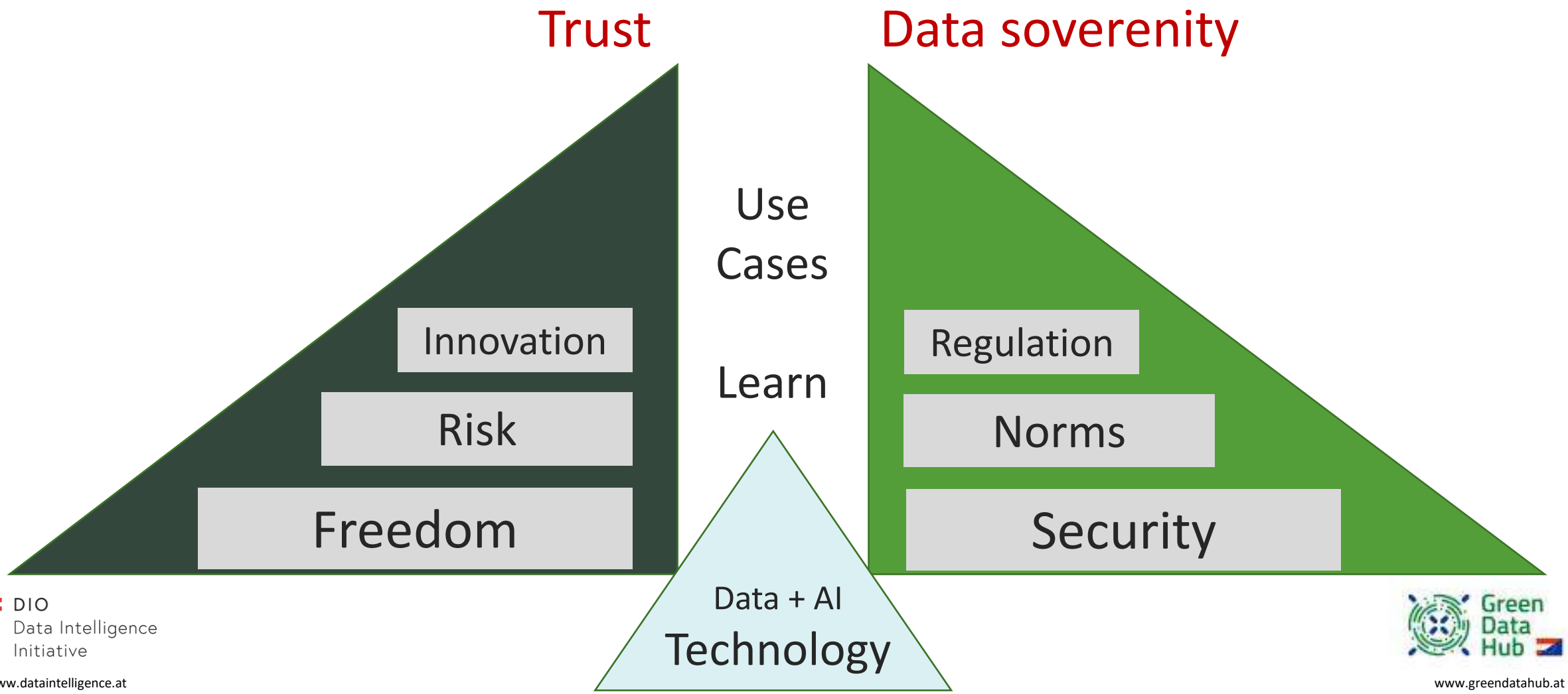
Technologies and innovation VS Trust and data soverenity



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Data Space Growth – 3 necessary steps
DIO Data Space methodology

Step 1:
Clarify need pain points

Step 2:
Clarify roles and responsibilities

Step 3:
Clarify and implement values

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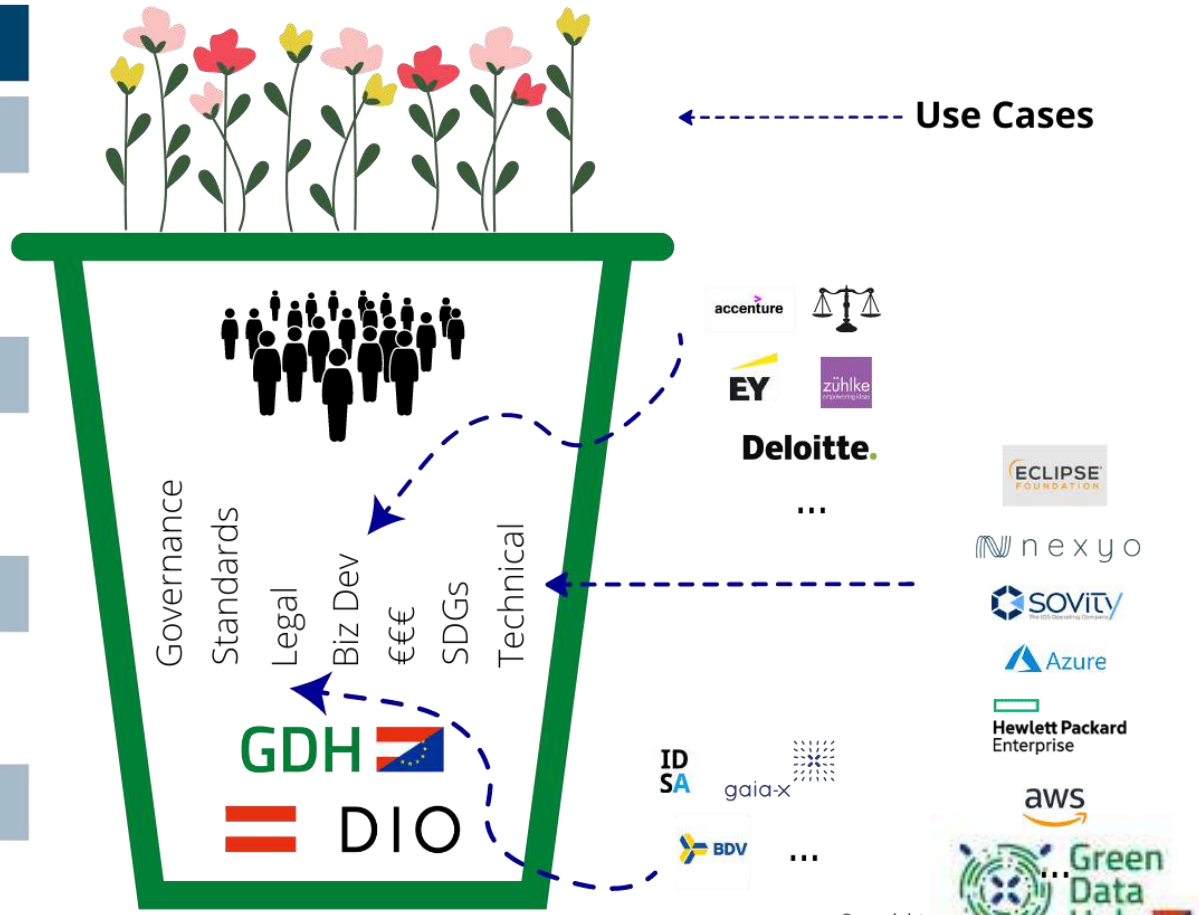
DIO Approach:
Data Spaces need actors on four role levels

TASKS / FUNCTIONS	ROLES / ACTORS
4. **GENERATING** *VALUE*	**USER**
3. **USING** *DATA*	**DATA PROVIDER / MARKET**
2. **ENABLING** *USES*	**TECH+KNOW-HOW PROVIDER**
1. **GATHERING** *STAKEHOLDERS*	**ACCUMULATOR / DIO**



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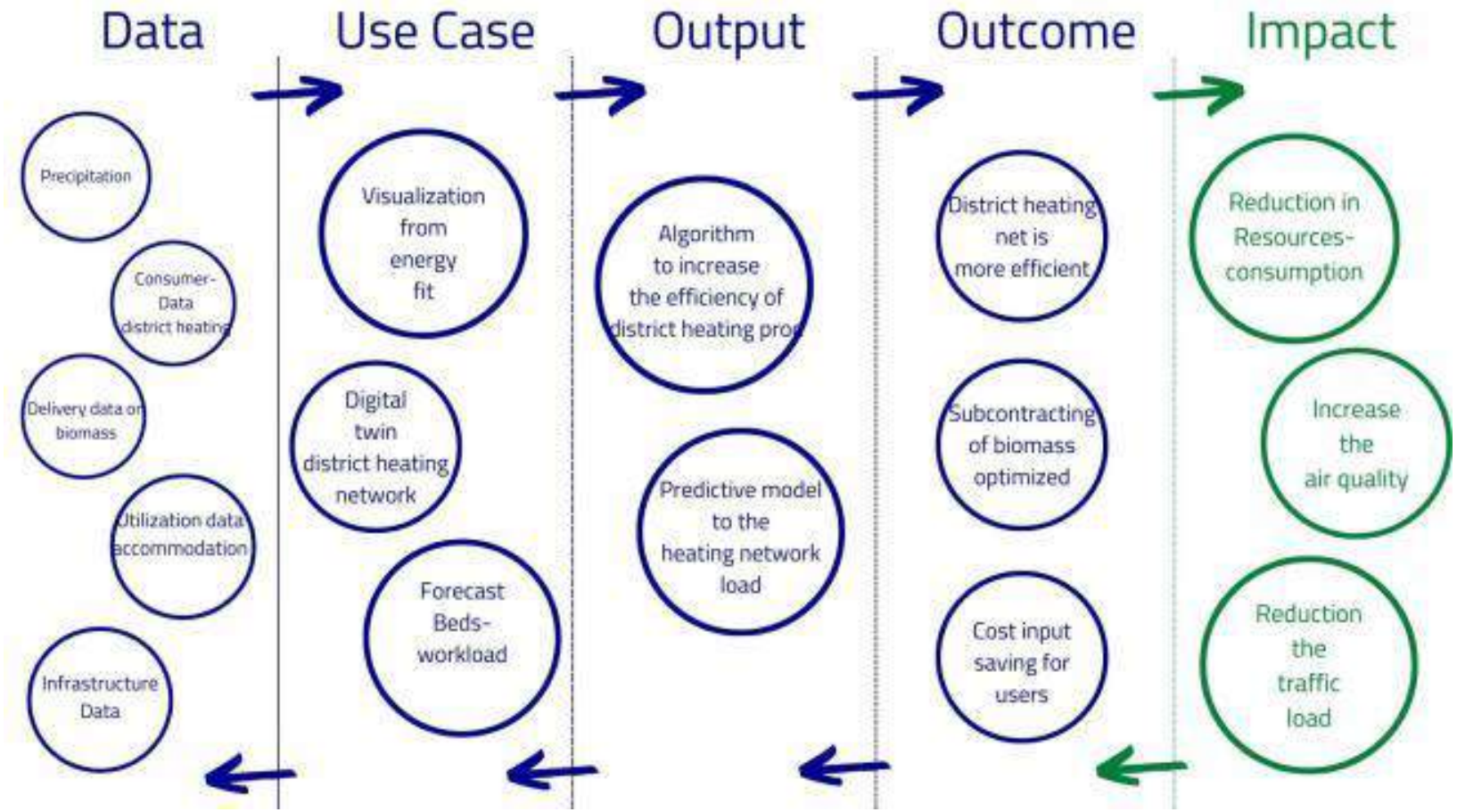
Use cases are successful when business value + impact are measurably generated



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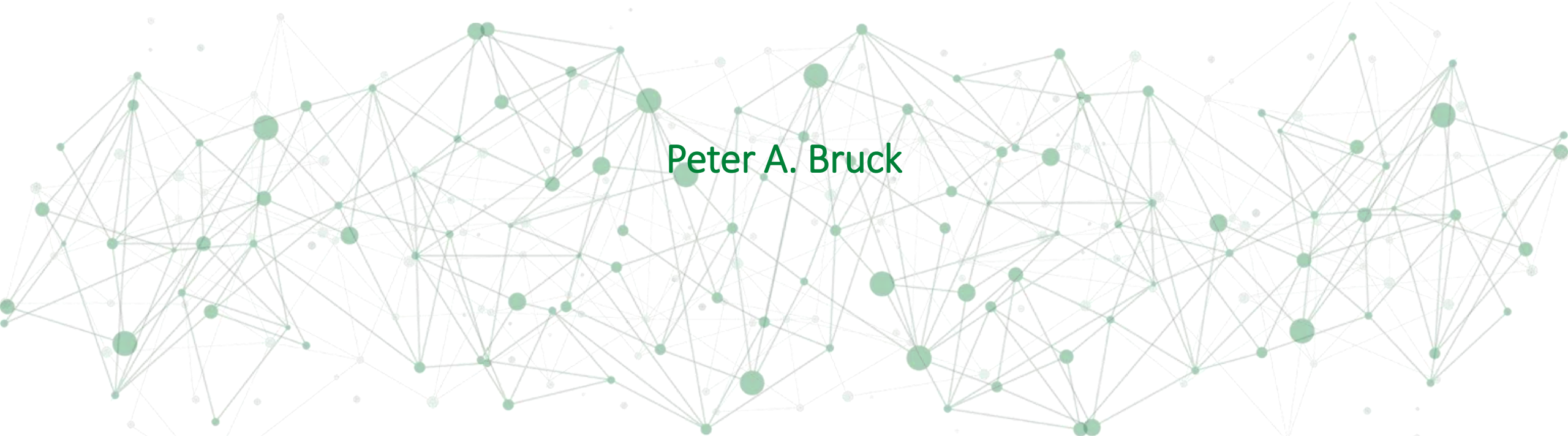
Data for Sustainability / Surviveability
Fighting Climate Change with Data



Peter A. Bruck

Fighting Climate Change with DataSpaces: Do we make progress?

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Issue: How to make fighting Climate Change with DataSpaces measurable?

SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD

SDSGs THE GLOBAL GOALS

Building on the SDGs:
>Sustainable Data Spaces Goals

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Sustainable Data Spaces Goals (SDSGs) build on Sustainable Development Goals (SDGs) and contribute to it

SDSGs THE GLOBAL GOALS

Reaching for 2030: preventing climate change and reinforcing resilience.

Measuring sustainability KPI's is essential for Data Spaces and the Use Cases outputs. They will allow us to track, manage and control the sustainability level of our Use Cases. The degree and amount of KPI's we measure is entirely dependent on the individual Data Space and the goals we are trying to achieve in each Use Case. (e.g.some examples ->->->)

DS Energy Transition

DS Mobility

DS Circular Economy

DS Digital Climate Twin (Climate Neutral Cities)

DIO Technical KPIs (T)

DIO Governance related KPIs (G)

DIO Business related KPIs (B)

DIO Organisational KPIs (O)

DIO Sustainability KPIs (S)

What are SDSGs? Examples

Type	Name	Description	Purpose	Owner	Time	Target	Target Outcome	SDG
B	**Involved Data Value Chain Stakeholders (TOTAL)**	Involved Data Value Chain stakeholders in total in a Data Space (no supporting stakeholders)	The more data value chain stakeholders, the more basis for the intersection of data and thus use cases	DBL	1 year	50	Broad data, services and demand offering of value to attact other stakeholders	
T	**Technically connected Data Space stakeholders**	Percentage of stakeholders that already have a technical Data Space connection via Connector and/or Hub	The more stakeholders are connected the more possibilites to share and exchange data and therefore empowering use cases	**DTL**	**1 year**	**80%**	Technical availablity of data sets within the data space for sharing, use case turbo	

** Reduced columns, full list in KPI file including evaluation criteria etc.*

What are SDSGs? Examples

Type	Name	Description	Purpose	Owner	Time	Target	Target Outcome	SDG
O	**Data Space internationally connected**	If the Data Space is internationally connected with other national Data Spaces or part of an international Data Space	Internationally connected Data Spaces have a broader stakeholder and exchange basis and therefore allow a broader impact	DBL	1 year	1 (true)	Broader reach accross boarders and enhanced impact	
S	**Data Space Energy Transition: Renewable energy share**	Percentage of renewable energy sources increases due Use Cases in Data Space Energy Transition compared to the total final energy consumption	Renewable energy sources have a broad impact onto our energy transition	**DCL**	**1 year**	**20%**	Increased share of renewable energy sources	 **7.2.1 Renewable energy share in the total final energy consumption**

** Reduced columns, full list in KPI file including evaluation criteria etc.*

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Types, owners and structure of KPIs: What are the key points to consider?

Types

- Technical (T)
- Governance (G)
- Business (B)
- Organisational (O)
- Sustainability (S)

Owners

- DIO Executive Board Members (DEBM)
- Data Space DIO Board Lead (DBL)
- Data Space DIO Community Lead (DCL)
- Data Space DIO Team Lead (DTL)

Structure – as shown in the last 2 slides + details

Type	Name	Description	Purpose	Owner	Evaluation criteria	#Range	Time	Target	Target Outcome	SDG

What is the purpose of SDSGs for Data Spaces?

- Visualization of **measurable Data Space outputs and outcomes** for
  - the economy
  - the society
  - environmentally sustainable development

- Ability to **compare** Data Space performances

- **Contribution** of Data Spaces to
  - Value generation
  - Technical, legal, governance and trust developments concerning data exchange
  - Achieving the Sustainable Development Goals (SDGs)

Sustainable Data Spaces Goals: What do we want to achieve?

Our Vision: Sustainable Data Space Goals

- Ensure that our work in **Data Spaces** aligns with the **Sustainable Development Goals**.
- Be able to quantify and describe how Data Spaces **contribute to achieving** the Sustainable Development Goals.
- Therefore we need **a way to measure and demonstrate** that this is happening ➔ Indicators
- **Align SDSGs** with the 169 SDG targets and 231 SDG indicators

Example: SDG 13

Sharing and exchanging data wisely is key to fighting climate change: Implementing SDG 13 and aligning with the global climate change agenda:

- ✓ Compensate for any remaining emissions with additional, quantifiable, real, permanent, and socially beneficial offsets to achieve net-zero annual carbon emissions by 2040
- ✓ Implement decarbonization strategies in line with the Paris Agreement through business change and innovations, including efficiency improvements, renewable energy, materials reductions, and other carbon emission elimination strategies
- ✓ Measure and report greenhouse gas emissions on a regular basis

SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD

A sharing and exchange of data is key to fighting climate change

Commit to action:

- ✓Neutralize any remaining emissions with additional, quantifiable, real, permanent, and socially beneficial offsets to achieve net-zero annual carbon emissions by 2040
- ✓Implement decarbonization strategies in line with the Paris Agreement through business change and innovations, including efficiency improvements, renewable energy, materials reductions, and other carbon emission elimination strategies
- ✓Measure and report greenhouse gas emissions on a regular basis

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SDSGs THE GLOBAL GOALS

Invitation to

European Action Network SDGS

building on

DIO Green Data Hub Working Group

to develop the **Sustainable Data Spaces Goals**

One final question:

- Who of us / you is of the opinion:

The ecological transformation can only succeed
if we have more data
and also make them mutually accessible?

All possible thanks to DIO Team :

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