

The problem of data discovery and data quality:
How Dataspaces can help Al

Problem statement



Al's Data Challenge





Data discoverability

Al models can't easily find the right datasets



Data quality

Al depends on trustworthy, well-structured data



Fragmented silos

data is locked across organizations and domain

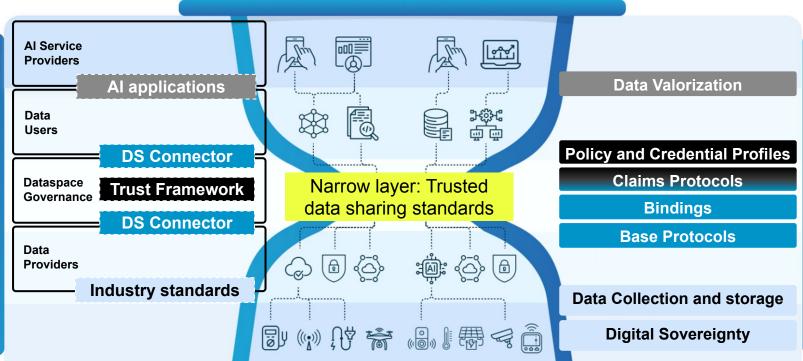


Dataspaces Solving Al's Pain Points





The hourglass model



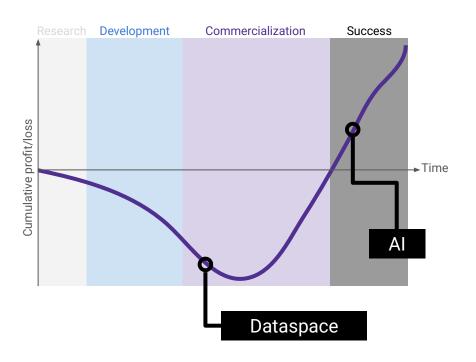
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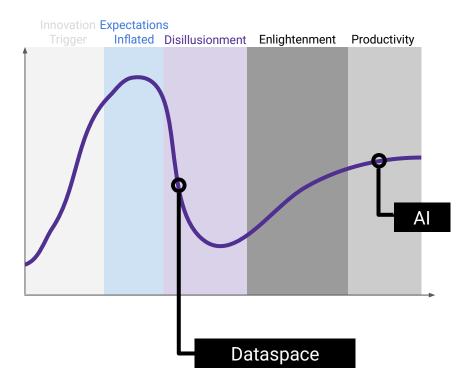
BILITIES

Dataspaces, where are we?



Where we are?

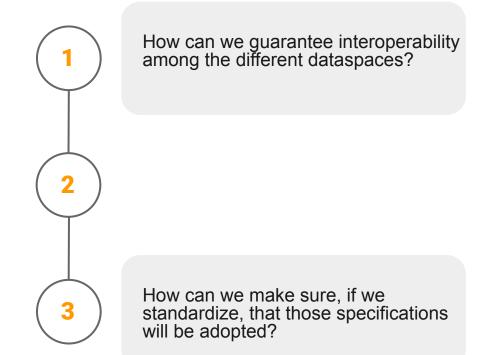






The questions ahead of us

How can we collaborate to make sure we draft relevant standards taking all the views/needs of the ecosystem?





Working on Interoperability



Overview Current Specifications under EDWG

- Eclipse Conformity Assessment Policy and Credential Profile (CAP)
- Eclipse Data Rights Policy Profile (DRP)
- Eclipse Dataspace Decentralized Claims Protocol (DCP)

Eclipse Dataspace Protocol (DSP)

Policy and Credential Profiles

Define an ODRL policy model, subject format for verifiable credentials, and semantics associated with the former

Claims Protocols

Message protocols for proving the identity of, and claims about, dataspace participants

Bindings

Application of abstract message protocols to wire protocols such as HTTP

Base Protocols

Abstract message protocols for catalog, contract negotiation, and data transfer



Why do we need standards? The Tennis analogy



Tennis game rules include the scoring, court size, net height, how to serve...

Base protocol



Tennis players need to be identified by the ITF so they can prove their ranking and identity

Claims protocol



Every tennis club can also include additional rules, such as using clay or grass courts, dressing code, club fees...

Profile



Tennis players can choose the club that is best for them, but they could join any as they know how to play tennis

Participants



Credit for the analogy: Gianfranco Cecconi (IDSA)



Certifications

How do these protocols fit into the full stack?

Dataspaces & Enabling Service Provider: Member Management, Observability, Connector-aaS, Marketplace **Gaia-X Trust Framework iSHARE Trust Framework Other Trust Framework Conformity Assessment and Credential Profile (CAP) Data Rights Policy Profile (DRP) Dataspace Connector Implementations:** Data Discovery, Claims Mgmt, Contract Negotiation, Data Planes DCP **Dataspace Decentralized Claims Protocol (DCP)** TCK DSP **Dataspace Protocol (DSP) TCK**



Workflow & Architecture: Specification Projects

Data Act Chapter VIII

Interoperability - Article 33

Automatic access & transmission

Open formats & vocabularies

Find, access & use

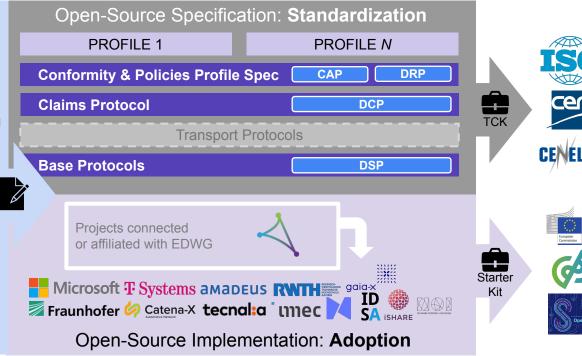
Smart contracts

Interoperability - Article 36

Consistency

Safe termination/interruption

Robustness & access control





The value of EDWG membership

Standard supervisor



Be part of the <u>decision</u> <u>making</u> process regarding the <u>specifications</u> and eventual <u>standardisation</u> of Dataspace protocols

Interoperability master



Contribute on the way specifications/standards are globally harmonised for Dataspaces

First to know



Be <u>well informed</u>
<u>strategically</u> about what is
happening on OSS projects
for Dataspaces and
evaluate <u>potential impact</u>

My work matters



Be recognised as a <u>thought</u> <u>leader</u> in Dataspace implementation/specification <u>Contact</u> other thought leaders

Giving back to the community



Support the coordination of the Dataspace OSS projects financially because you rely on them

Trusted developer



Certify your Dataspace modules to prove its compatibility with OSS specifications/standards

Implementation business advisor



Be part of the <u>strategy</u> facilitation for OSS <u>implementation</u> projects in Dataspaces



Useful material and references



Summary

Be at the forefront of the Dataspace **standardization**

Help us build the **strategy** for the Dataspace ecosystem

Join the **adopter community** of Dataspace OSS solutions

Resources:

- Charter
- Working Group
 Participation Agreement
- Working Group Process
- Working Group Operations
- Working Group Mailing List (open to public)
- Working Group Web page

Contact us!

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