

# User, societal, legal and business-related aspects of Solid and personal data vaults: some insights

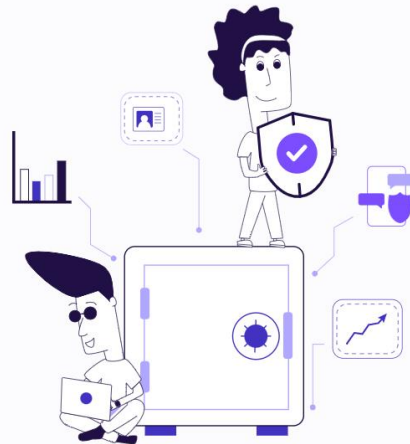
19 January 2026



# Imec.jouw.dataprofiel.be

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## imec.yourdataprofile test

Are you aware of your online privacy settings and do you keep a close eye on who you share data with? Or do you perhaps feel a bit unsure about what is known about you and about who processes your personal data? Are you concerned about the consequences of increasing digitalization and what companies do with your data? Or not at all?

Answer twelve questions and discover which imec.yourdataprofile suits you best!

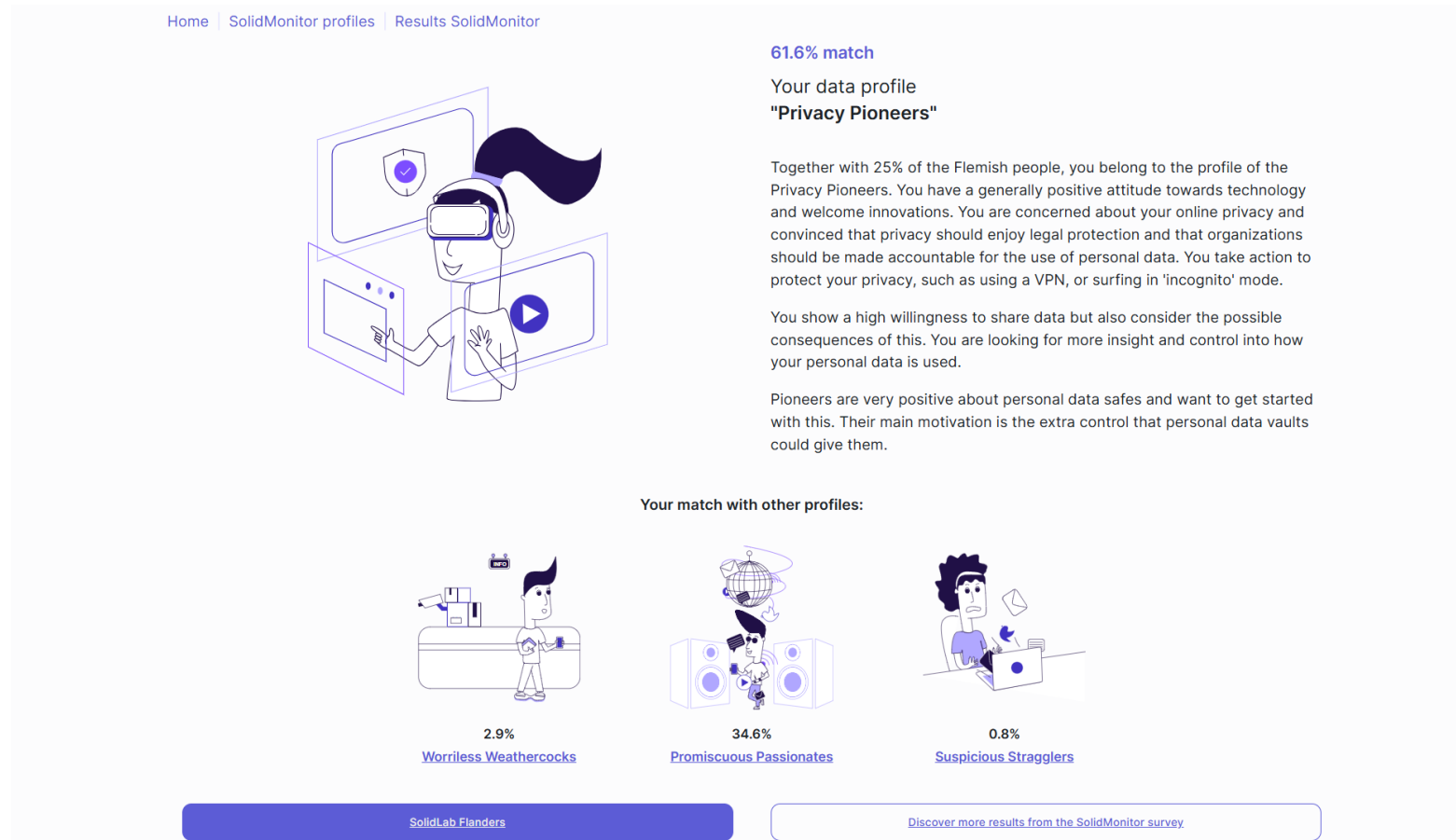
*imec does not collect personal data. Your answers are only processed to calculate your imec.yourdataprofile.*

[Do the test](#)



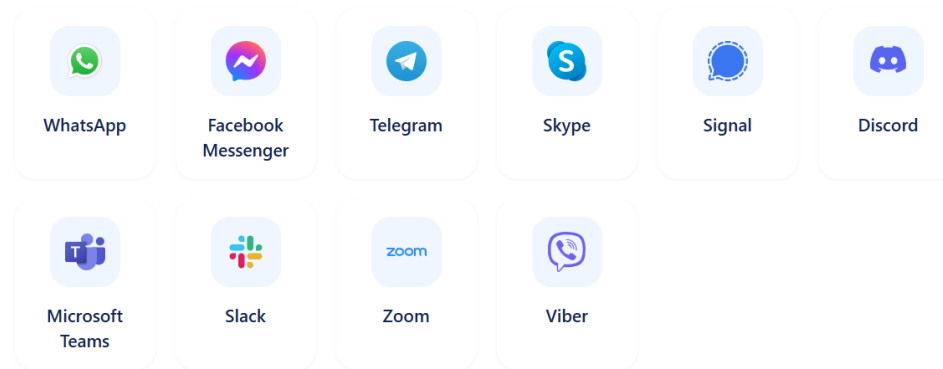
imec

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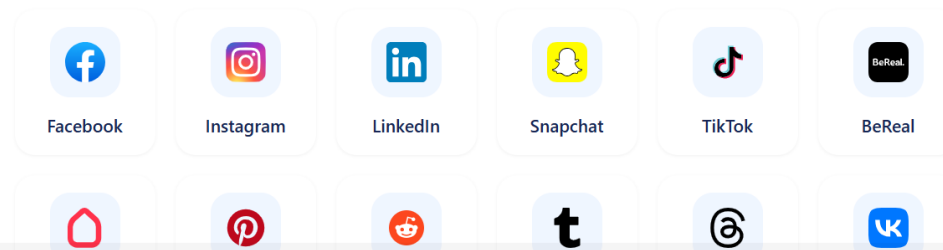


# Datasafari.net

Welke instant messaging-applicaties gebruik je?



Welke sociale media gebruik je?



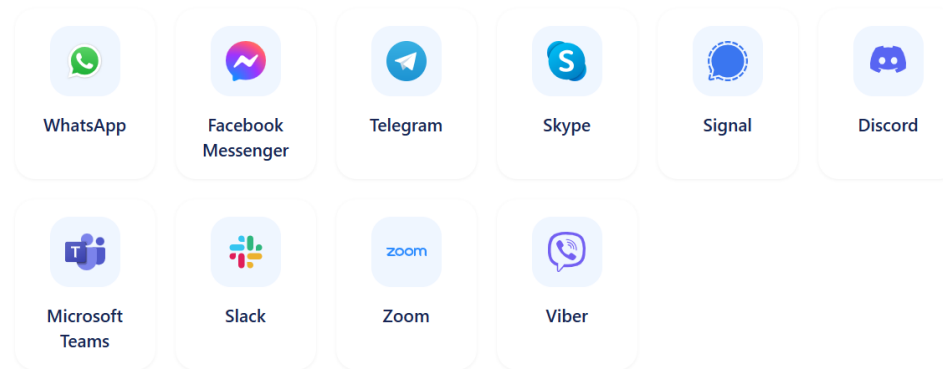
← 🦊 Vorige



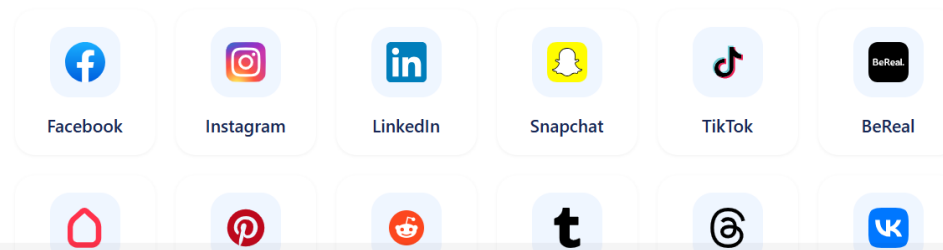
Volgende 🦊 →

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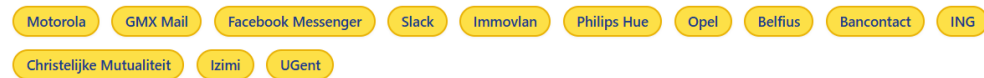


Volgende 🦊 →

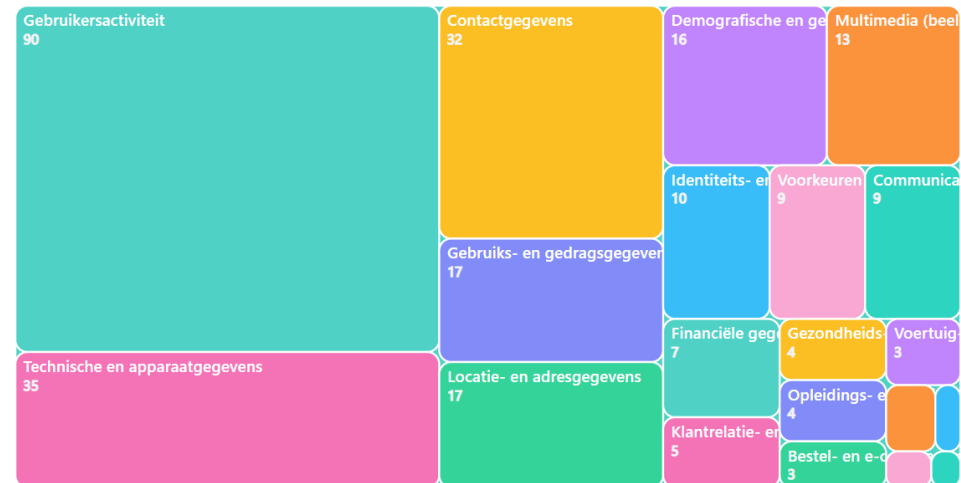
# Datasafari.net

## Datakaart

Klik op een categorie om dieper te gaan.



Totaal weergegeven  
279 datapunten

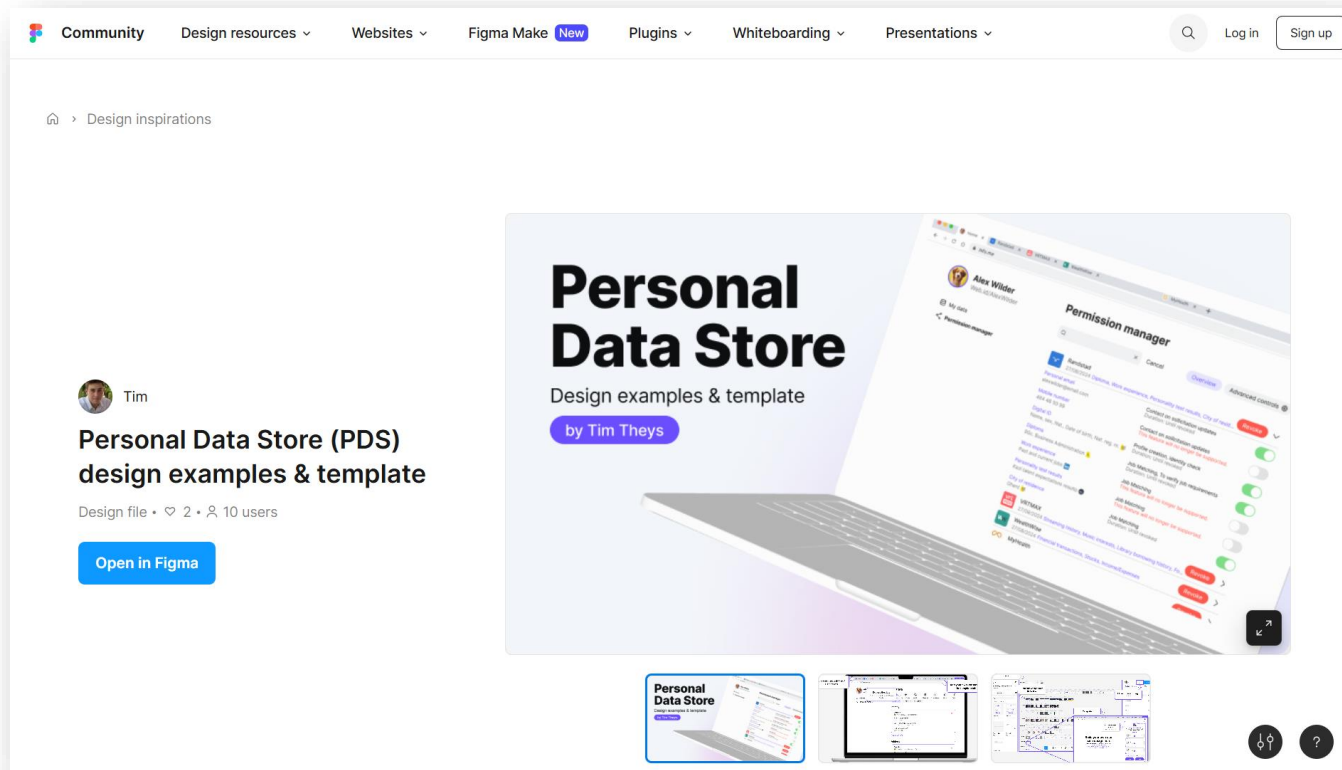


←  Vorige



Volgende  →

# Personal Data Stores design templates



HR



Media



Finance



Health



E-commerce



Sports

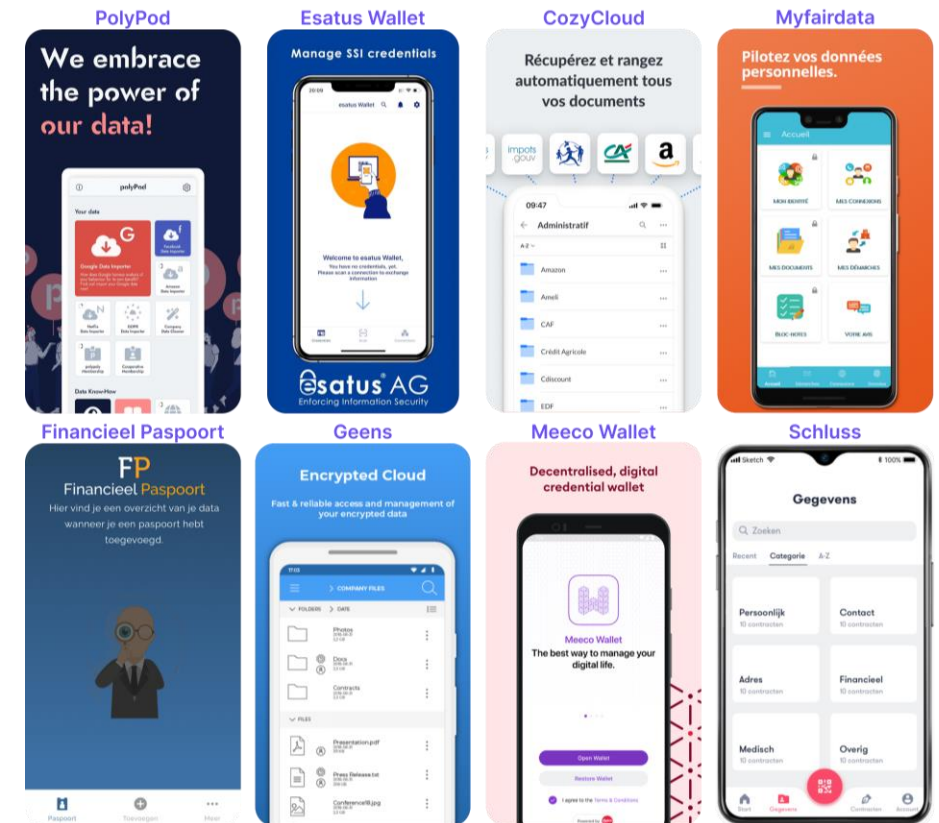


Agentic AI

# Personal Data Stores (PDS) in the wild

## Reality check on existing PDSs (2023)

- Mostly offering users (limited) control and sharing affordances
- Most “working” PDSs have low usability and user adoption
- Focus on individual control → The current control-heavy design risks turning empowerment into decision fatigue





# Vignette (user-)experiments

People prefer **control**... but they'll **delegate** (selectively):

- in mobility/wearable experiments, self-decision is rated most appropriate overall, yet data cooperatives are rated second, especially for public-interest purposes
- ➔ **Purpose** and **Duration**

Towards a **hybrid model** for personal data governance

- keep data subjects “in charge” for sensitive cases, but enable **context-bounded delegation** for routine or clearly public-interest flows under narrow purposes, fixed durations, and accountability.

Role of Data Intermediaries



# Potential of Data Intermediaries

## Potential of DISPs

- ***To act in the best interests of data subjects***
  - Representative actions under article 80 (1) GDPR
  - Systemic Risks under article 80 (2) GDPR

## Business model of DISPs

- *Fair data governance*
- *Sector needs*
- *GovTech business models*
- *Data Space design choices*

## White Paper on the Definition of Data Intermediation Services

63 Pages

Posted: 31 Oct 2023

### Paper statistics

DOWNLOADS  
674

ABSTRACT VIEWS  
2,733

RANK  
90,914

Bobev, T., Fierens, M., et al. (2024). White Paper on the Definition of Data Intermediation Services.  
SSRN, <https://dx.doi.org/10.2139/ssrn.4589987>  
Fierens, M. (2026, Under Review). Data Intermediaries to fully leverage the dual nature of data protection under article 80 of the GDPR. A worthy hypothesis to explore.  
Contact: [Michiel.fierens@kuleuven.be](mailto:Michiel.fierens@kuleuven.be)

# Fundamental Legal Tensions

## Tension between EU Data Strategy and fundamental rights approach

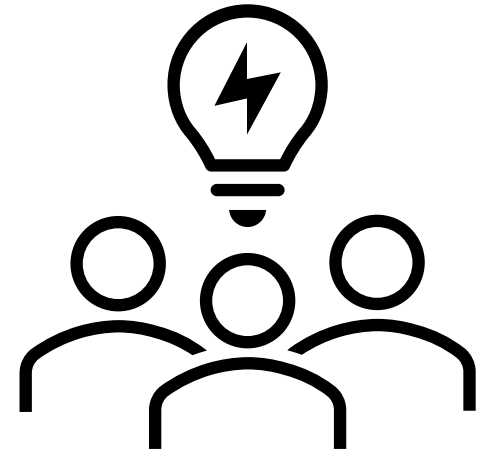
### ○ **Misconceptions!**

- **Data markets** ≠ commodification
- Personal Data Management ≠ ownership
- GDPR literacy not complete

## Complex data processing ecosystems

### ○ Delineation of **responsibilities**

- Sector-specific obligations
- Model contracts



# Practical Legal Tools

## Multiparty data access via Solid Protocol

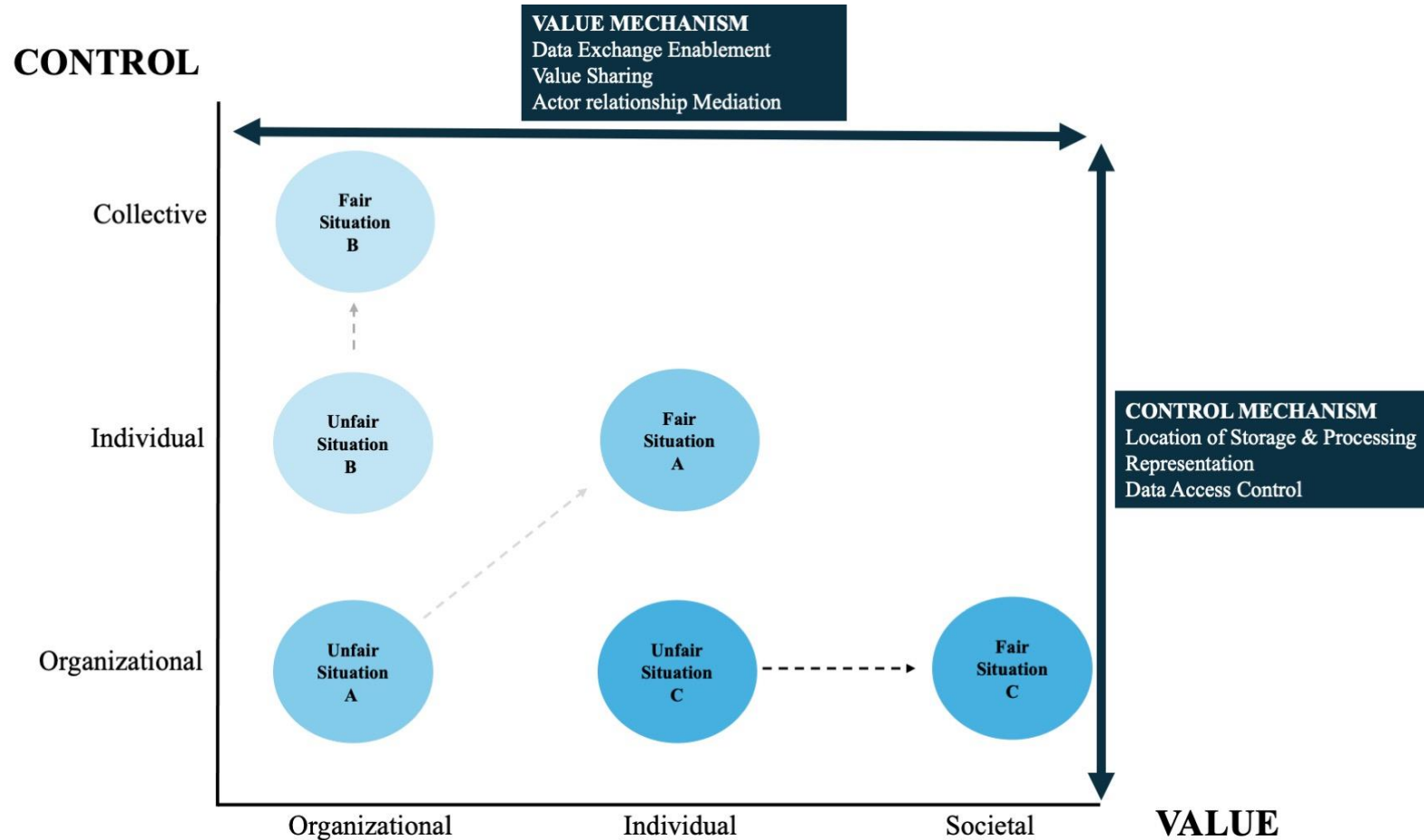
- Compliant with **Data Act**
- Agentic home
- Edge computing and GenAI
- **DPV/ODRL**

## Compliance automation and reporting tools

- Audit & logging
- Record-keeping (documentation)
- Smarter regulation
- Risk ontologies



# Data intermediaries enabling fair data governance



# Sector need is essential for business success

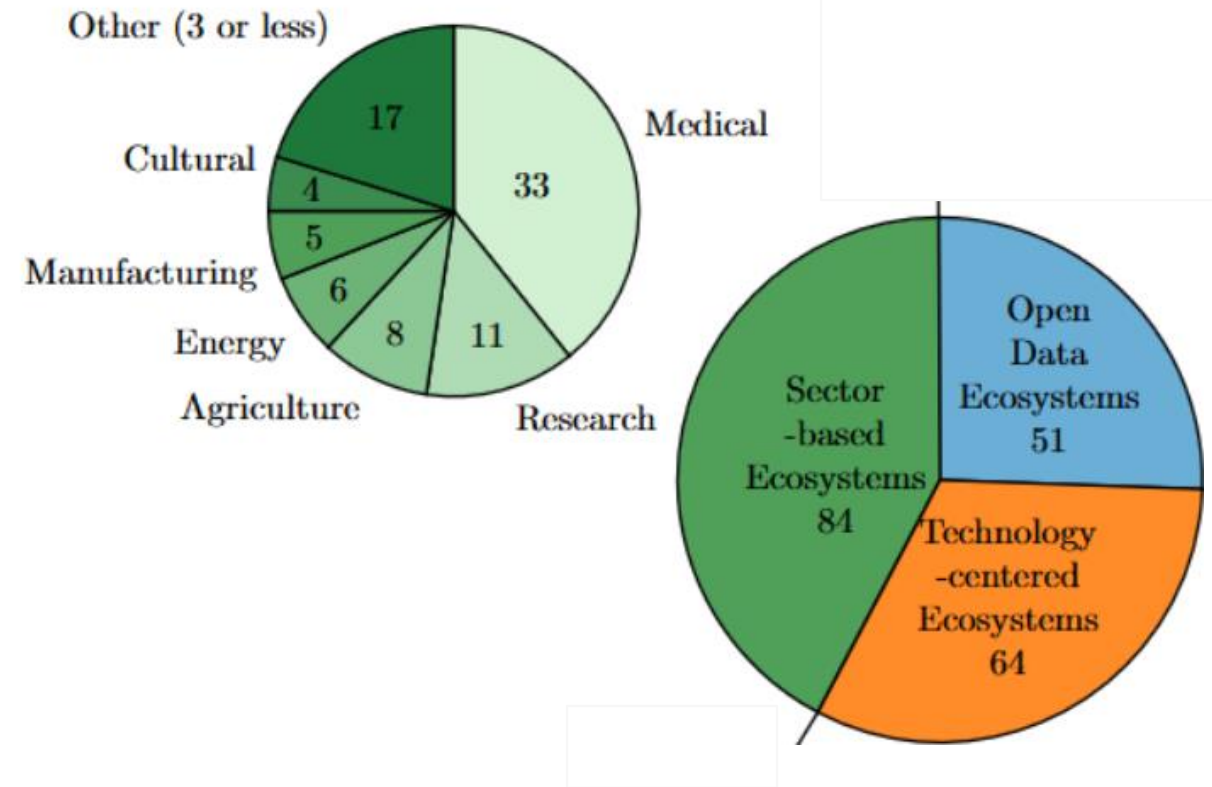
## Sectorial data ecosystems dominate the landscape



Established sector networks provide need for data exchange and create network effects

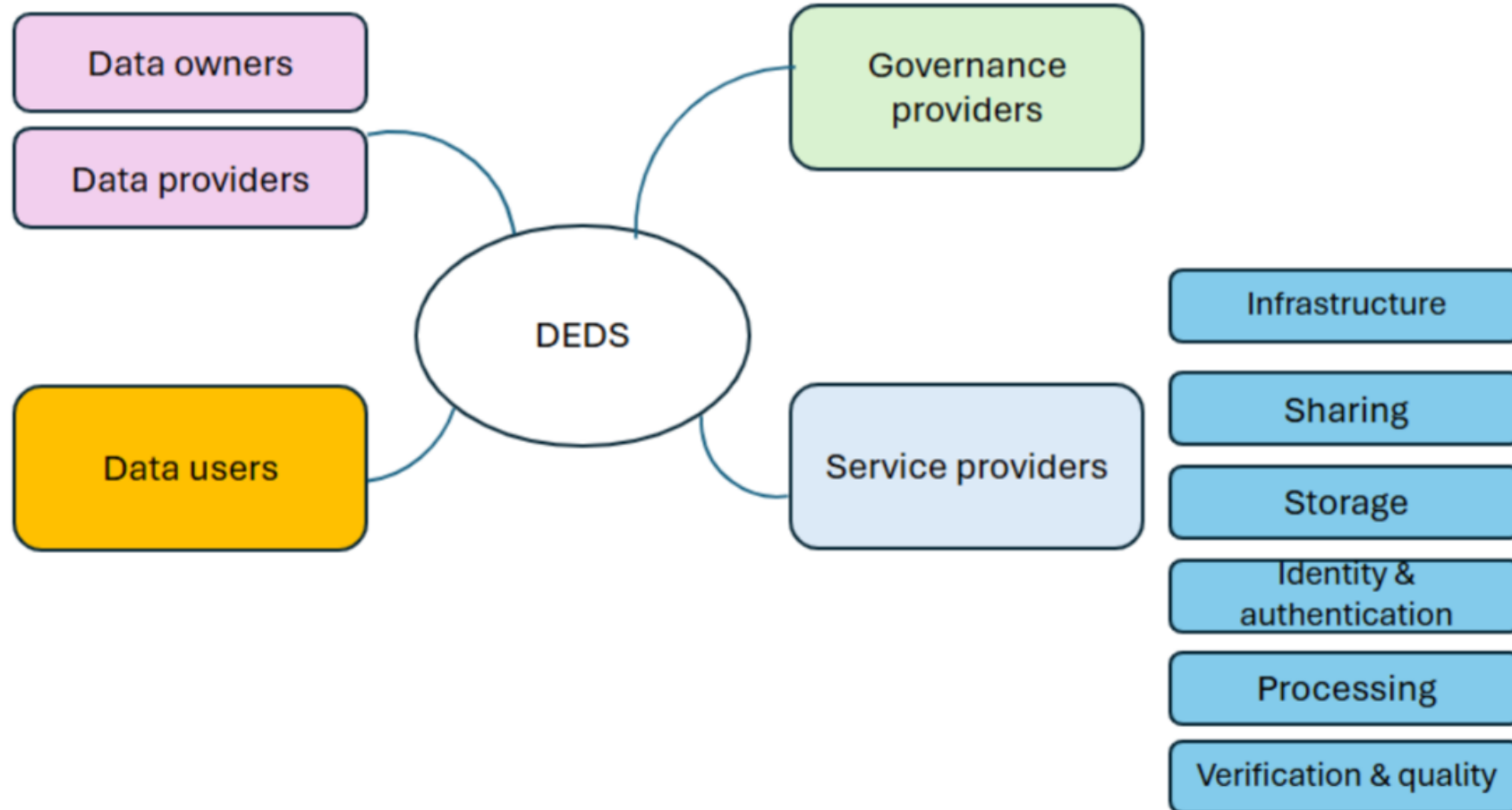


Shared infrastructure funded by multiple parties spread risk



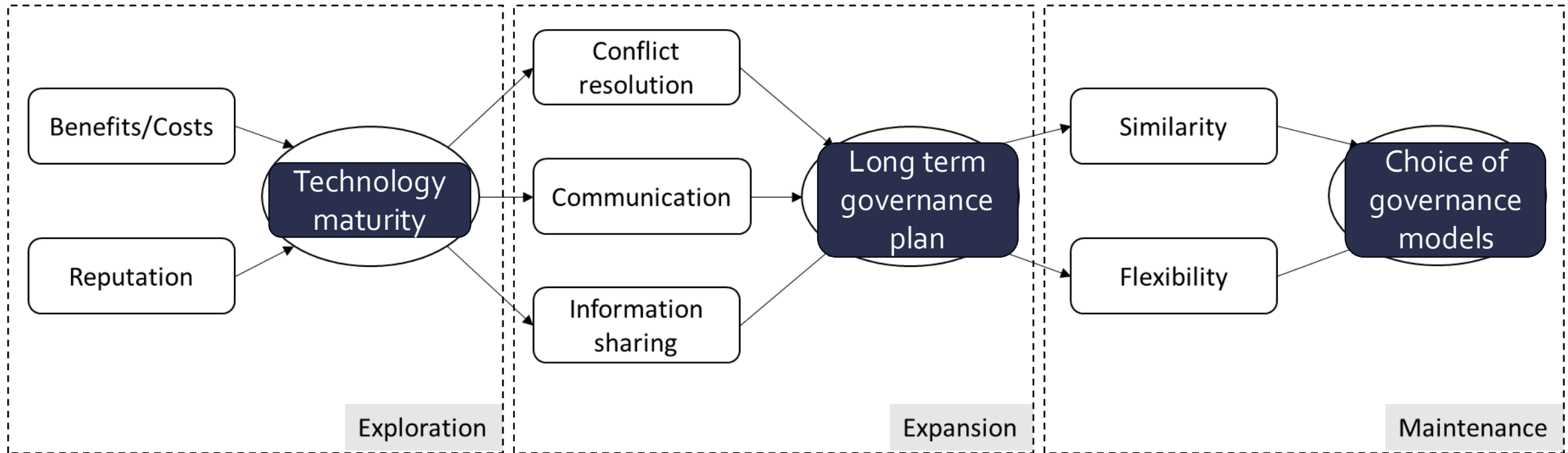
A conceptual deep-dive into Data Ecosystems: a systematic literature review. M. de Mildt, S. Van Damme, S. Verbrugge, D. Colle  
submitted to Information Systems and e-Business Management

# Intermediaries provide multiple service and governance roles to data ecosystems



# Technology alone does not create trust: GovTech business models face trust challenges

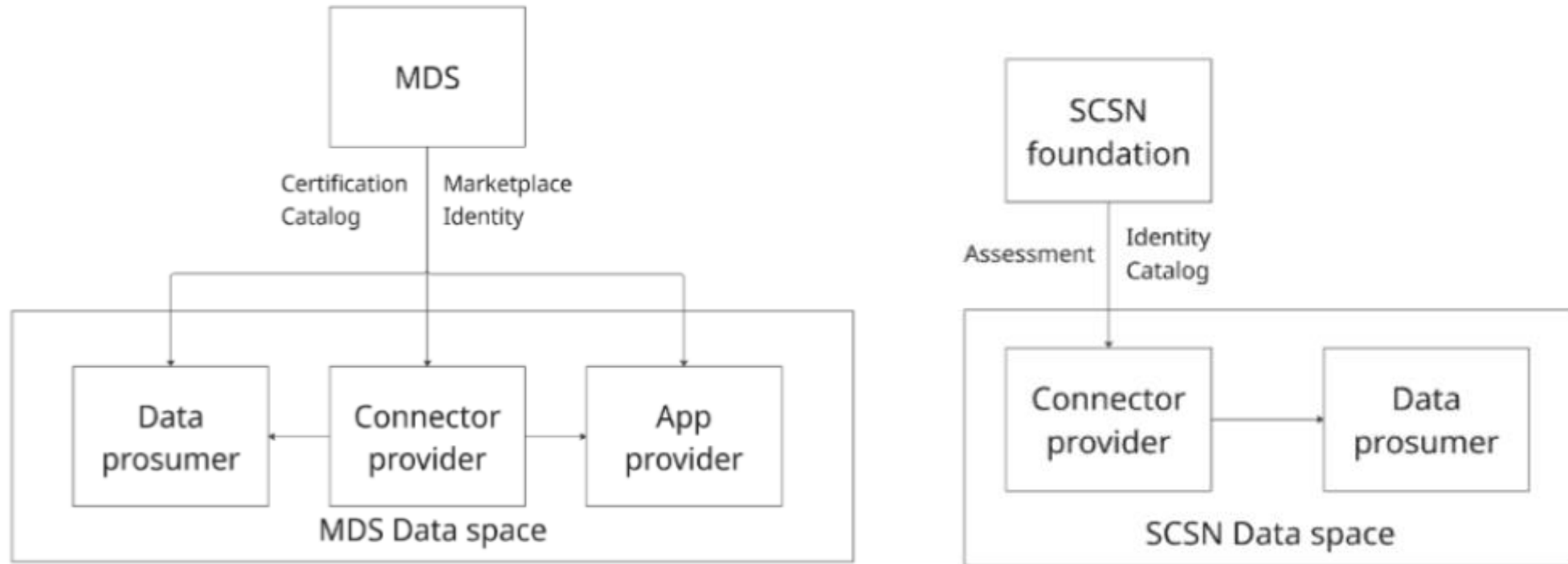
GovTech creates trust in ecosystem... but also new trust challenges



Trust in decentralized data ecosystem implementation: a GovTech-constituted data sharing case study. M. de Mildt, S. Verbrugge, D. Colle  
In revision at Government Information Quarterly  
Contact: maarten.demildt@ugent.be



# Data space design choices affect business models of intermediaries



Verstraete, M., Verbrugge, S., and Colle, D. (2025) The Role of Design Choices in Data Spaces: Connector Providers' Business Models.  
Submitted to Telecommunications Policy (forthcoming)

Contact: [melanie.verstraete@ugent.be](mailto:melanie.verstraete@ugent.be)

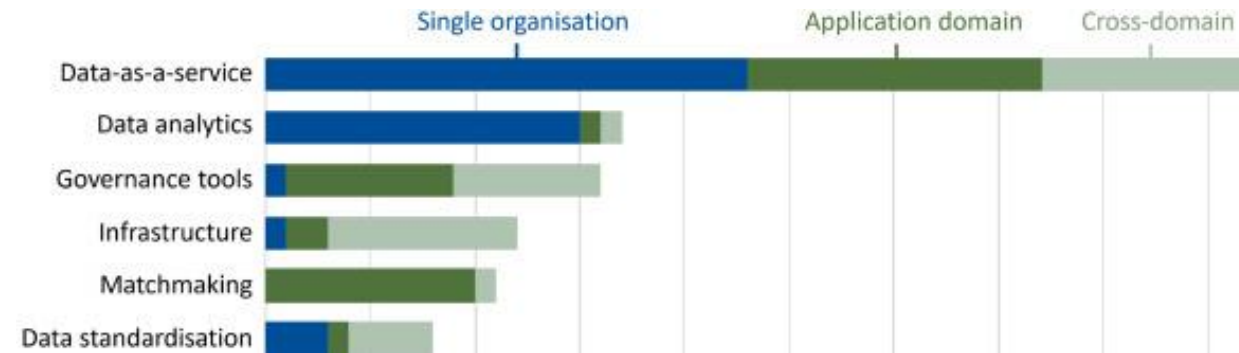
# Not the technology determines the value, but the way that users interact with it

**Solid affordances** include transparency, personalization, automation, collaboration, decentralization, and validity which it has in common with similar technologies

**Newly identified are interoperability and legalities affordances**

**But**

**Innovation by having reusable data without purpose is difficult to materialize**



Broader ecosystems struggle to offer services that turn data into insights and actions

# More info

<https://solidlab.be/>

<https://solidcommunity.be/>

[peter.mechant@ugent.be](mailto:peter.mechant@ugent.be)

