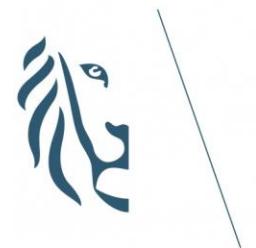


User, societal, legal and business-related aspects of Solid and personal data vaults: some insights

19 January 2026



DEPARTMENT OF
ECONOMY
SCIENCE &
INNOVATION



Gefinancierd door
de Europese Unie
NextGenerationEU



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.jouw.dataprofiel.be

Home | SolidMonitor profiles | Results SolidMonitor



61.6% match

Your data profile
"Privacy Pioneers"

Together with 25% of the Flemish people, you belong to the profile of the Privacy Pioneers. You have a generally positive attitude towards technology and welcome innovations. You are concerned about your online privacy and convinced that privacy should enjoy legal protection and that organizations should be made accountable for the use of personal data. You take action to protect your privacy, such as using a VPN, or surfing in 'incognito' mode.

You show a high willingness to share data but also consider the possible consequences of this. You are looking for more insight and control into how your personal data is used.

Pioneers are very positive about personal data safes and want to get started with this. Their main motivation is the extra control that personal data vaults could give them.

Your match with other profiles:

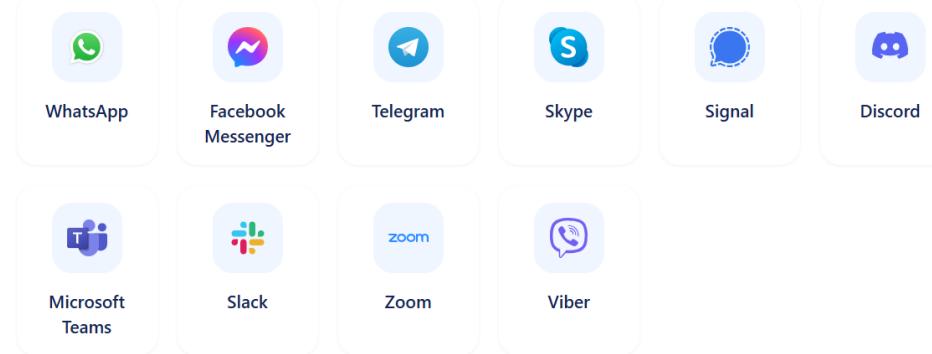
 2.9% Worries Weathercocks	 34.6% Promiscuous Passions	 0.8% Suspicious Stragglers
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[SolidLab Flanders](#)

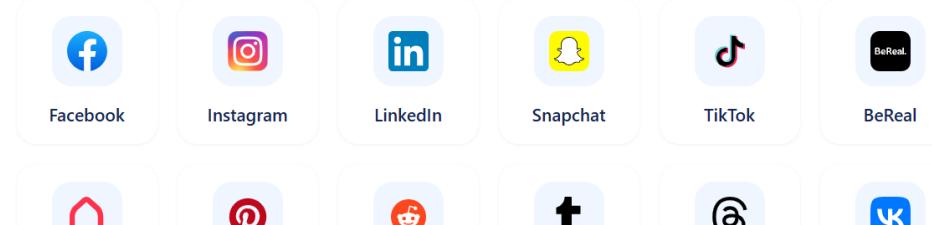
[Discover more results from the SolidMonitor survey](#)

Datasafari.net

Welke instant messaging-applicaties gebruik je?



Welke sociale media gebruik je?



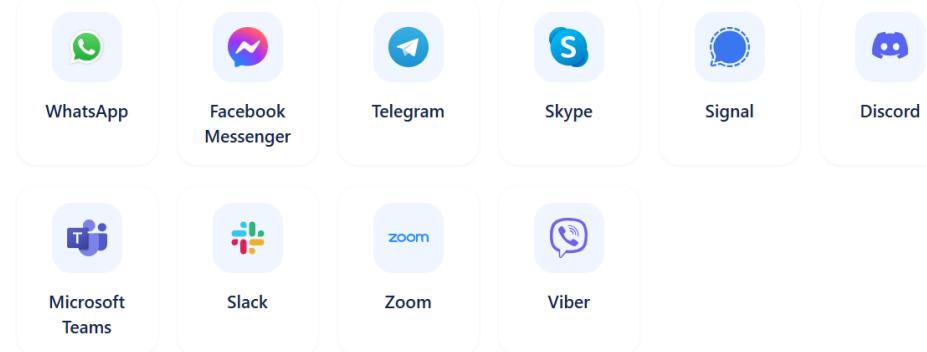
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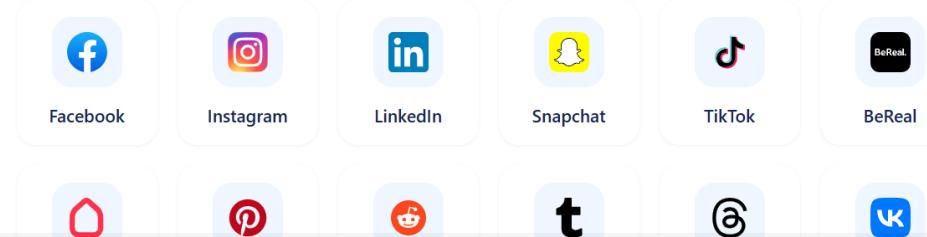
Volgende →

Datasafari.net

Welke instant messaging-applicaties gebruik je?



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← Vorige



Volgende →

Datasafari.net

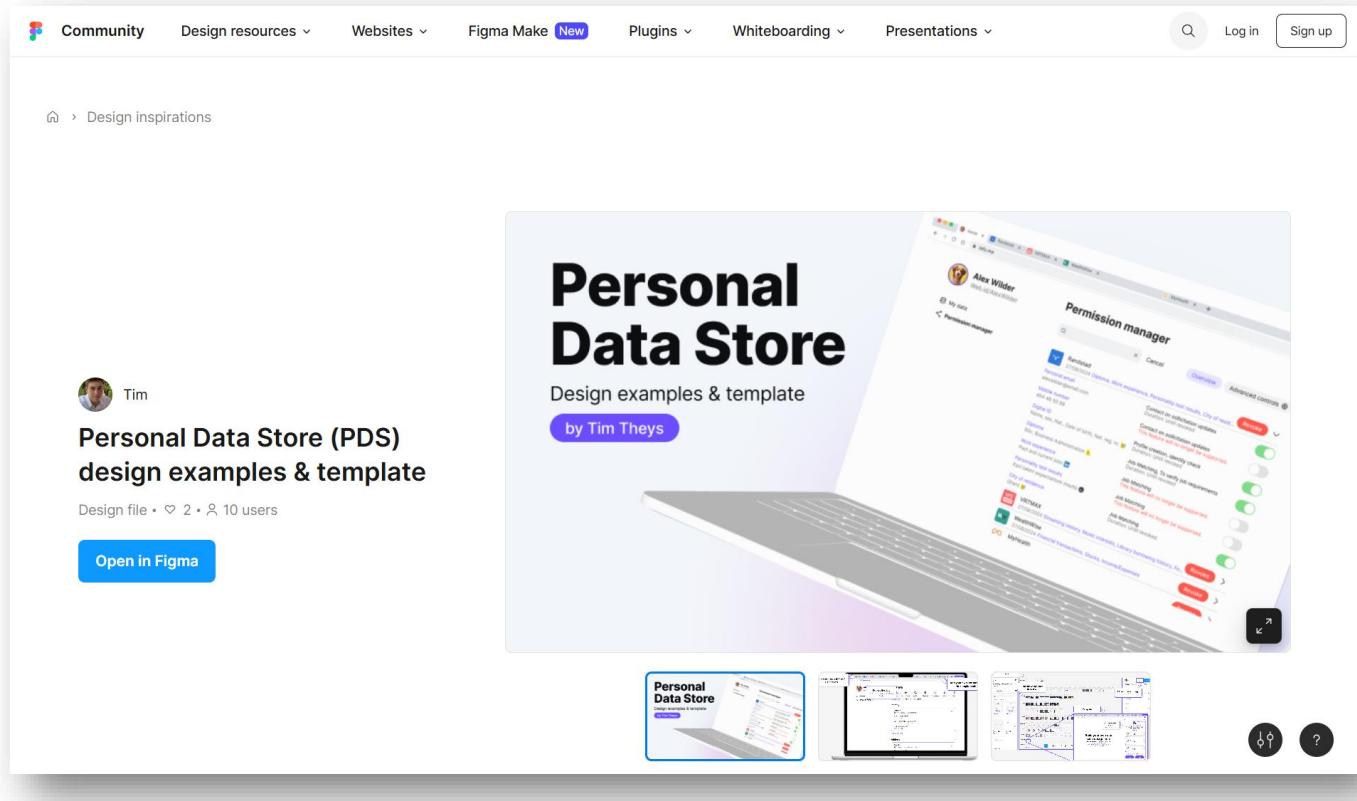
Datakaart

Klik op een categorie om dieper te gaan.

Motorola GMX Mail Facebook Messenger Slack Immovlan Philips Hue Opel Belfius Bancontact ING
Christelijke Mutualiteit Izimi UGent



Personal Data Stores design templates



Community Design resources Websites Figma Make Plugins Whiteboarding Presentations Log in Sign up

Design inspirations

Tim

Personal Data Store (PDS) design examples & template by Tim Theys

Design file • 2 • 10 users

Open in Figma

Personal Data Store Design examples & template by Tim Theys

Permission manager

Personal Data Store

Personal Data Store

Personal Data Store



HR



Media



Finance



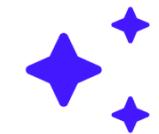
Health



E-commerce



Sports

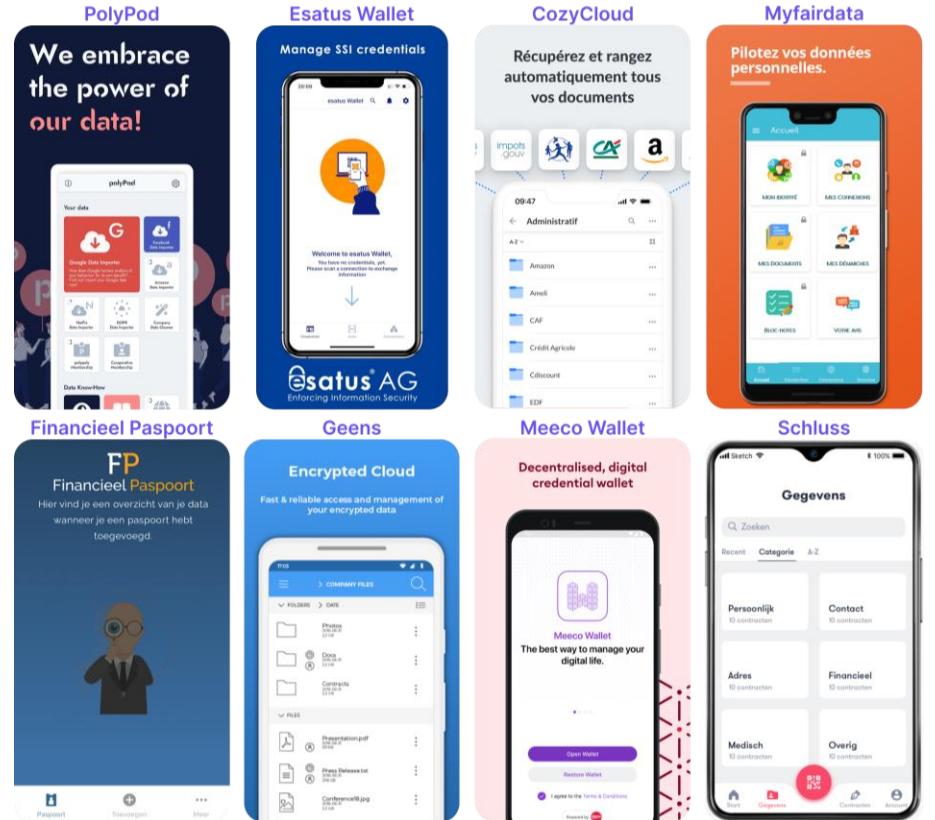


Agentic AI

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

White Paper on the Definition of Data Intermediation Services

63 Pages
Posted: 31 Oct 2023

Business model of DISPs

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

Paper statistics

DOWNLOADS
674

ABSTRACT VIEWS
2,733

RANK
90,914

Fundamental Legal Tensions

Tension between EU Data Strategy and fundamental rights approach

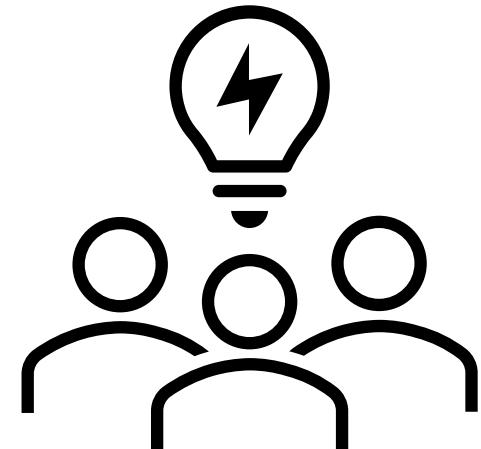
- **Misconceptions!**

- 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**

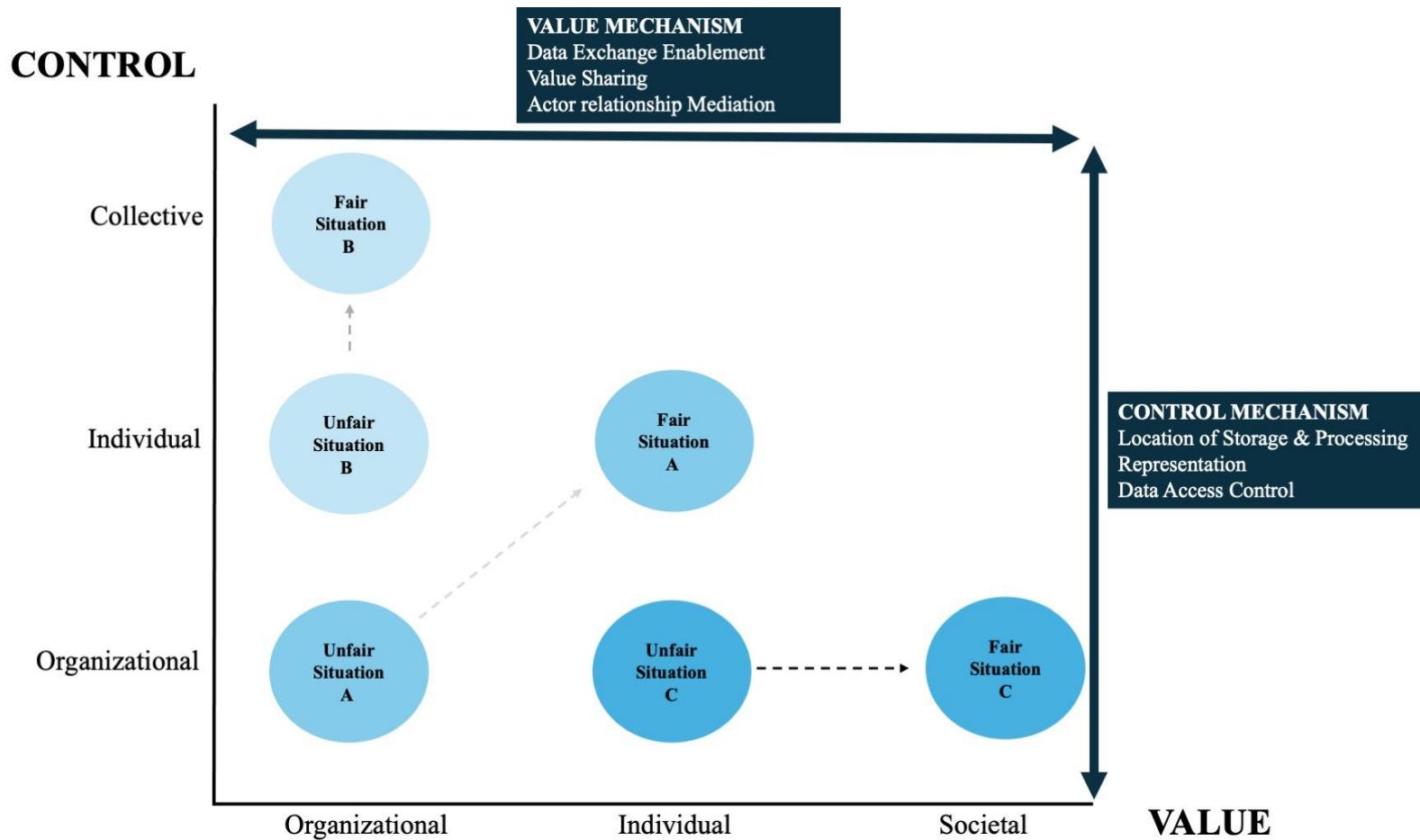


Compliance automation and reporting tools

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



Data intermediaries enabling fair data governance



D'Hauwers, R., & Bourgeus, A. (2024). Empowering data sovereignty: strategies of data intermediaries in data ecosystems. In *37th Bled eConference: Resilience Through Digital Innovation: Enabling the Twin Transition: June 9 – 12, 2024, Bled, Slovenia, Conference Proceedings* (Vol. 37, pp. 243-256). University of Maribor Press. <https://doi.org/10.18690/um.fov.4.2024>

Sector need is essential for business success

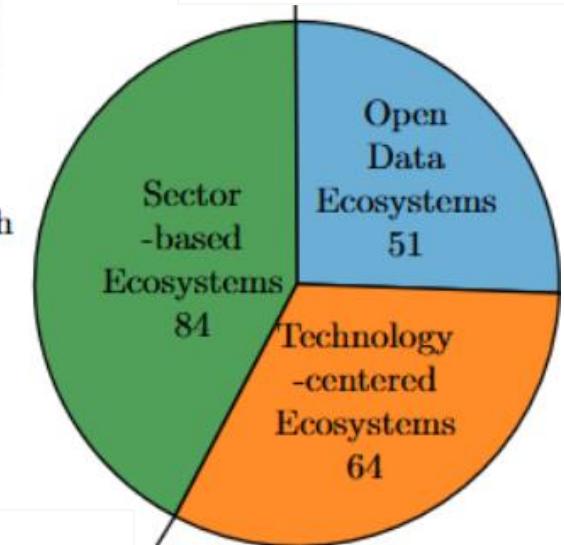
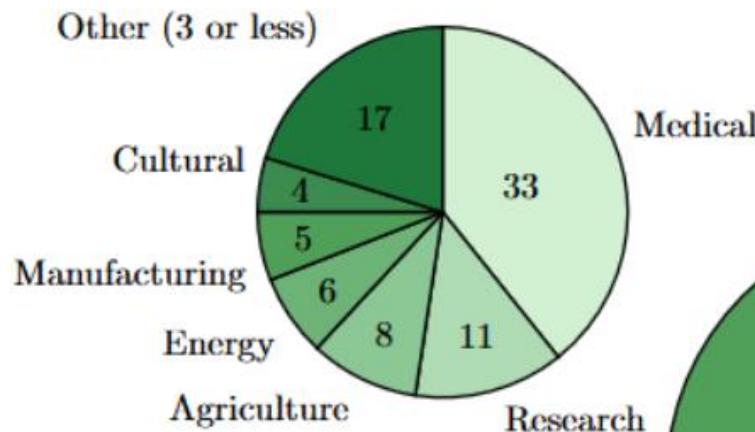
Sectorial data ecosystems dominate the landscape



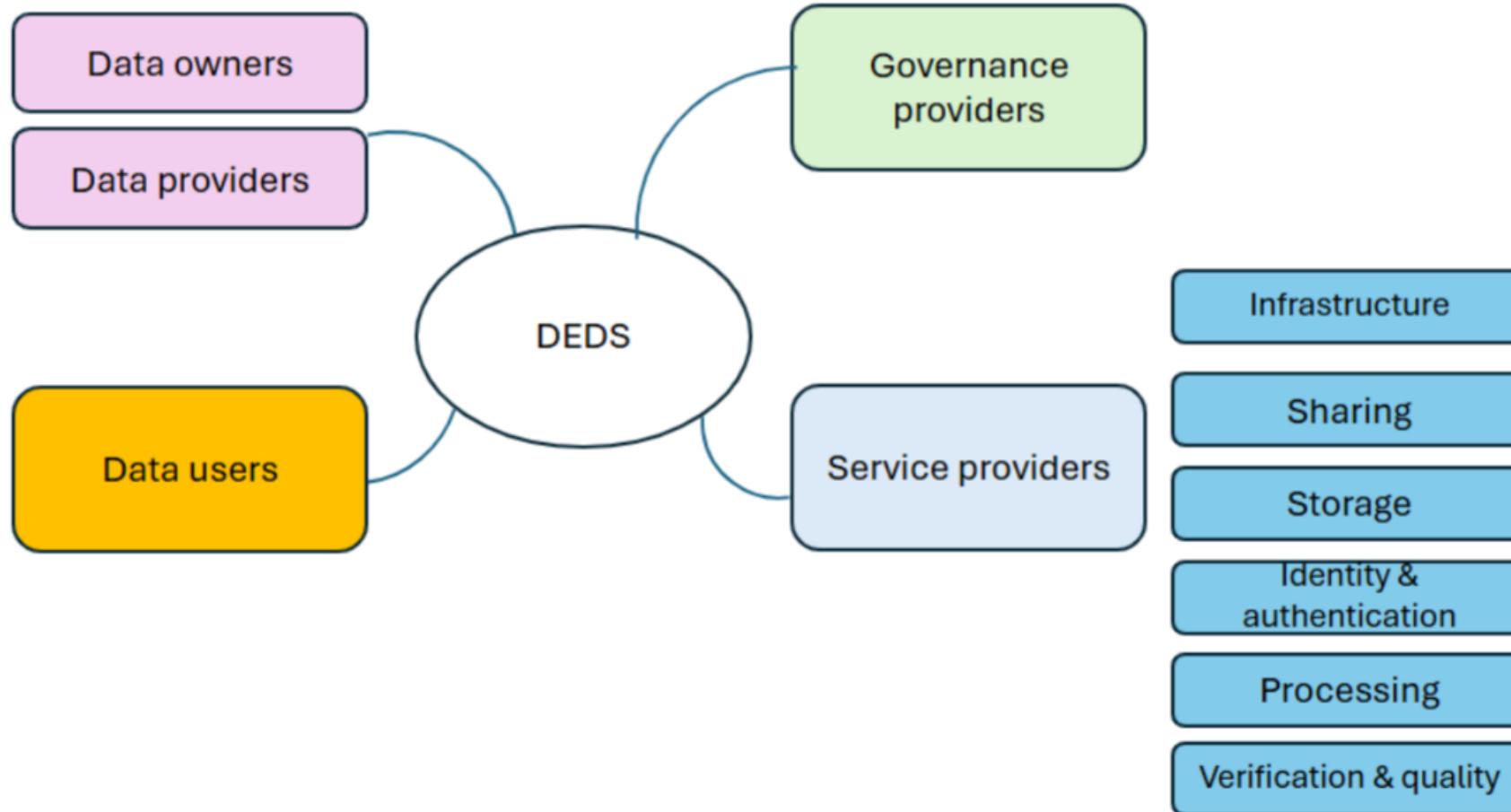
Established sector networks provide need for data exchange and create network effects



Shared infrastructure funded by multiple parties spread risk



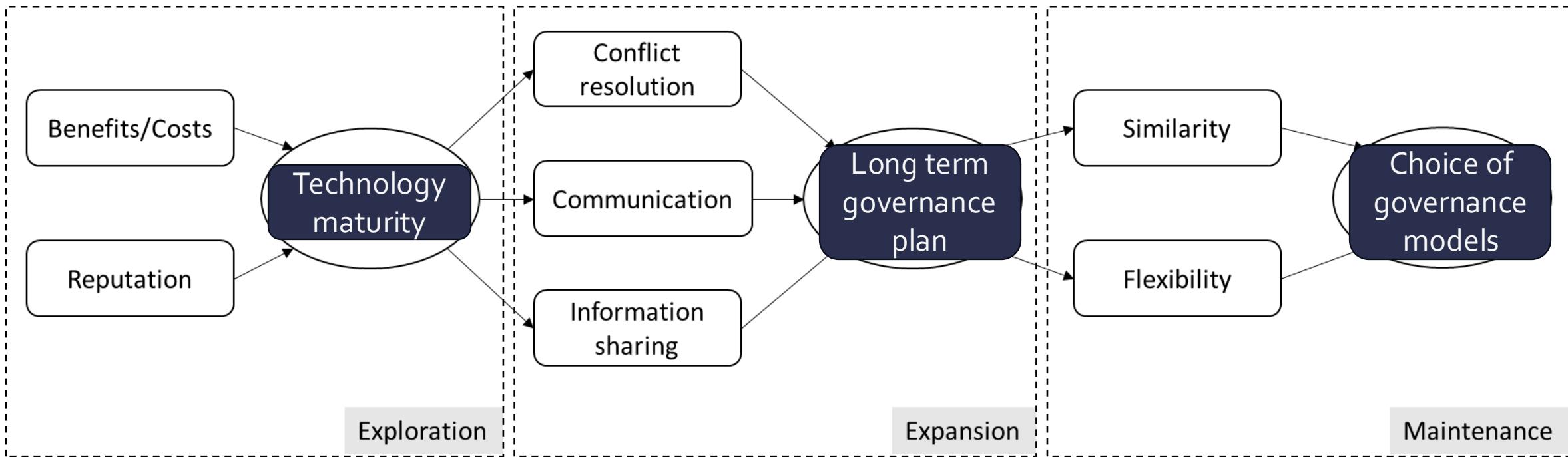
Intermediaries provide multiple service and governance roles to data ecosystems



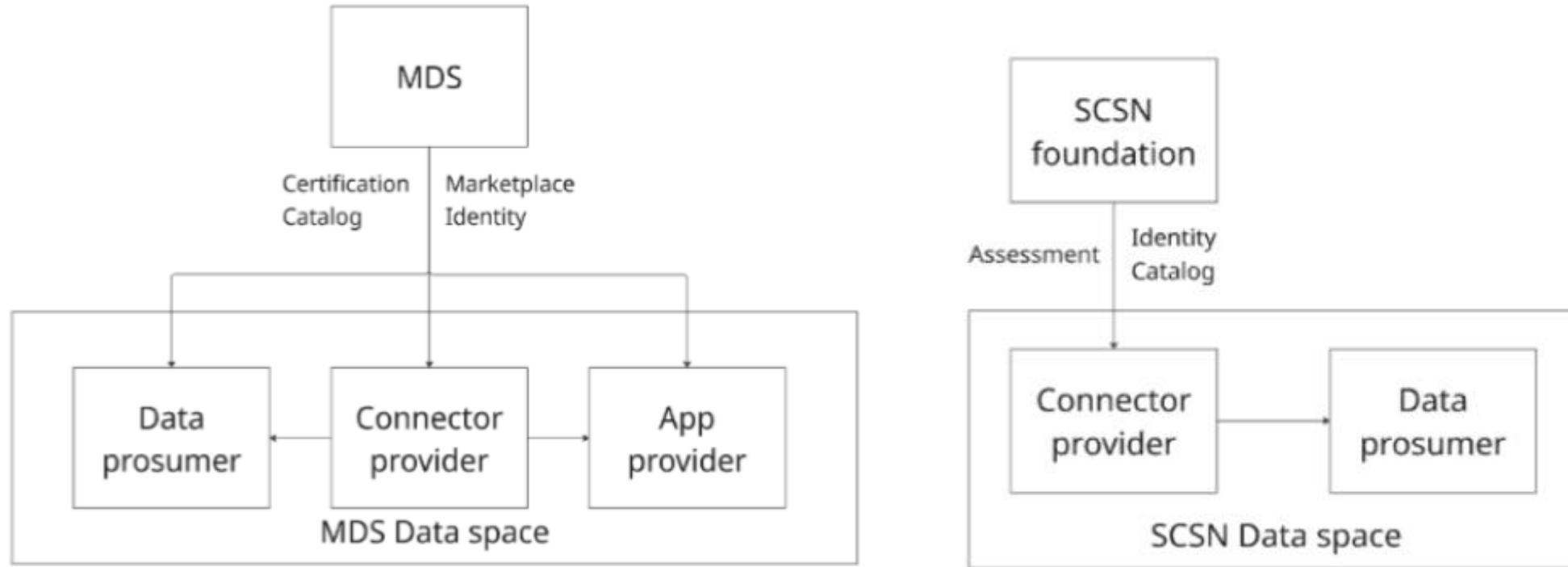
Verstraete et al. (2025) From Definition to Clarity: Survey on Stakeholder Roles in Data Ecosystems. Submitted at Journal of the Knowledge economy (forthcoming)
Contact: melanie.verstraete@ugent.be,

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

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



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)

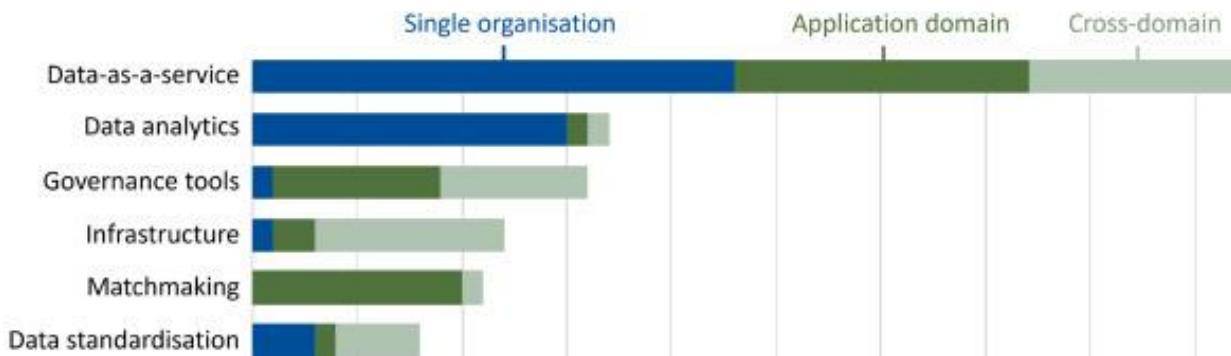
Not the technology determines the value, but the way that users interact with it

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

But

Newly identified are interoperability and legalities affordances

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

