



**GHENT
UNIVERSITY**



Vlaanderen
is verbonden

**INFORMATIE
VLAANDEREN**

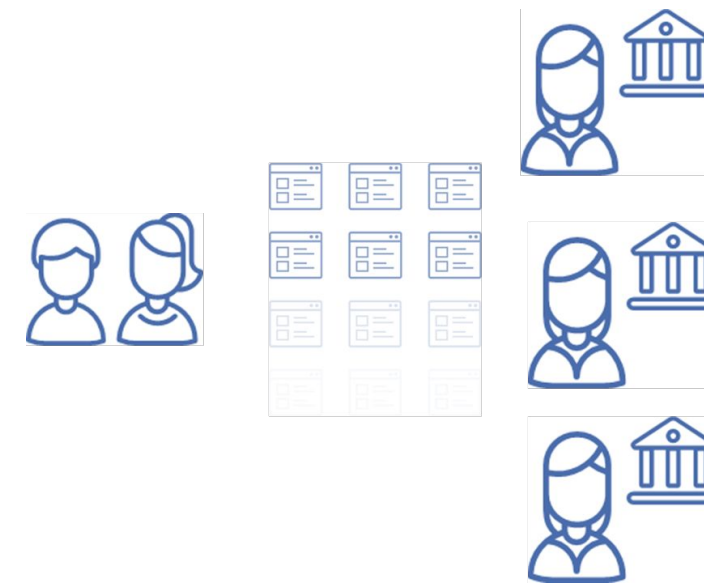
OASC Minimal Interoperability Mechanisms (MIMs): Personal Data Management (MIM4) applied to Solid

OASC | Ruben Verborgh and Raf Buyle

1. Challenges for public administrations
2. Solid: the user in control & decentralisation
3. Reference case Flanders: Solid & My Citizens profile
4. Solid en OASC MIM4

CHALLENGES FOR PUBLIC ADMINISTRATIONS

- Government administrations struggle to keep personal data of citizens up to date.
- Empower citizens to reuse their data stored in government information systems in a different context



CHALLENGES FOR PUBLIC ADMINISTRATIONS

- General Data Protection Regulation (GDPR)
- The relationship between a government and a citizen is considered as an imbalanced relationship.

“In order to ensure that consent is freely given, consent should not provide a valid legal ground for the processing of personal data in a specific case where there is a clear imbalance between the data subject and the controller, in particular where the controller is a public authority and it is therefore unlikely that consent was freely given in all the circumstances of that specific situation.”

(European Commission, 2016, Article 43).



MyData declaration

***...to empower individuals with their personal data,
thus helping them and their communities develop knowledge,
make informed decisions, and interact more consciously
and efficiently with each other as well as with organisations.***

People choose where they store every single piece of data they produce

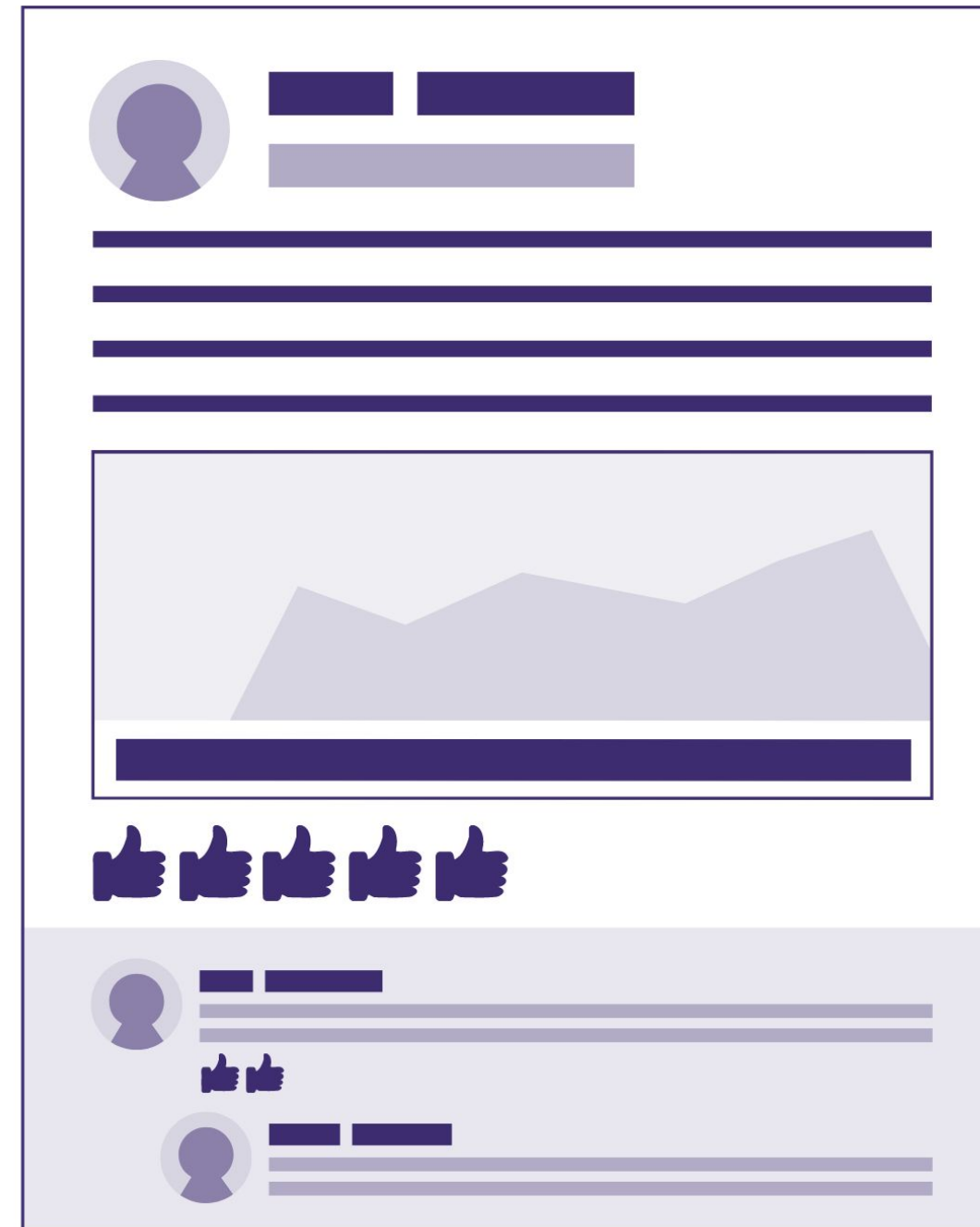
Author's name and latest profile picture
stored in author's personal data pod

Work-related opinion about an article
stored in data pod of author's company

Discussed article title and photo
stored in news website's data pod

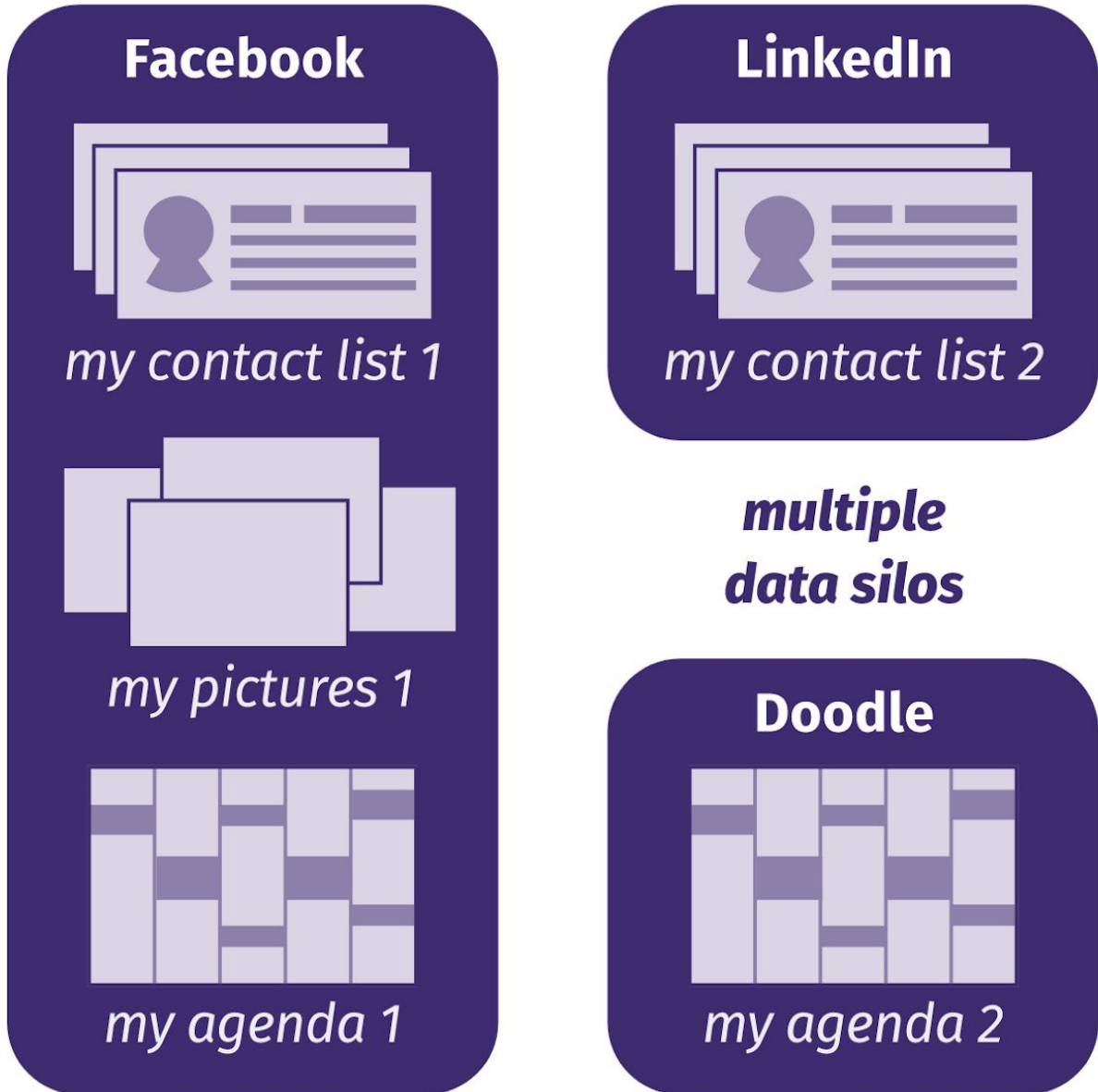
Likes on this post
each one in different individuals' data pods

Comments on this post
each one in different individuals' data pods

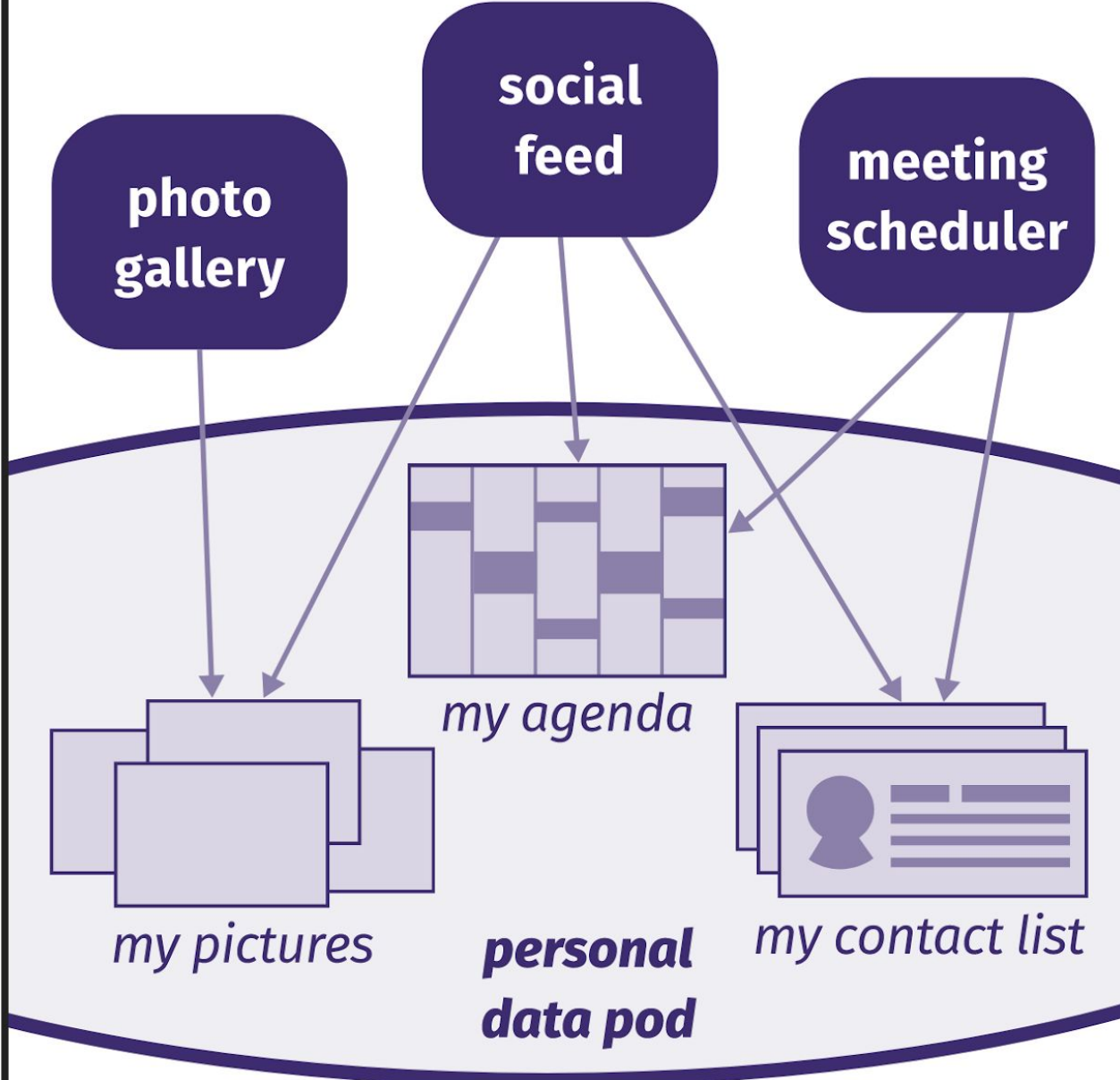


They can grant apps and people access to very specific parts of their data

centralized Web applications

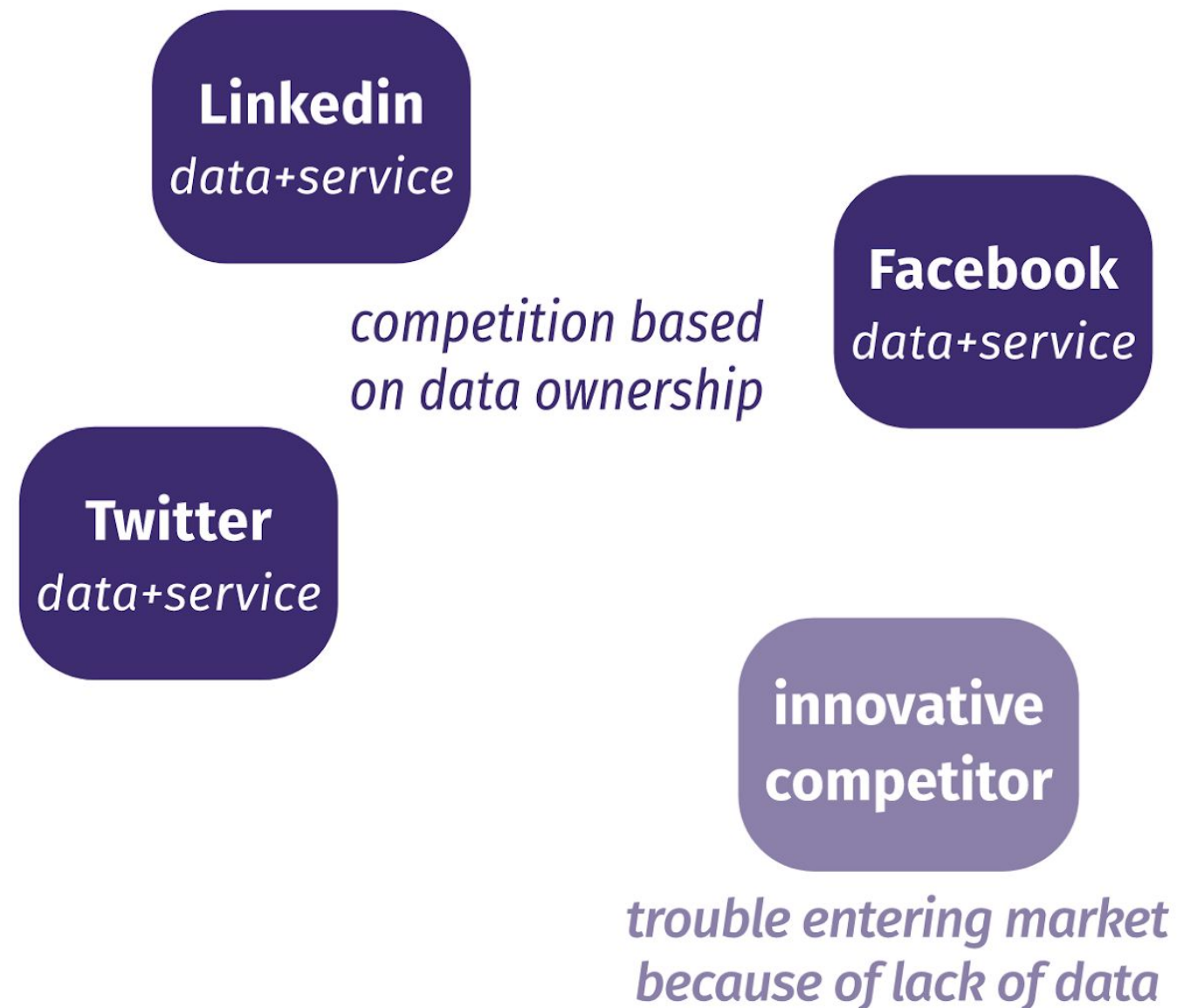


decentralized Web applications

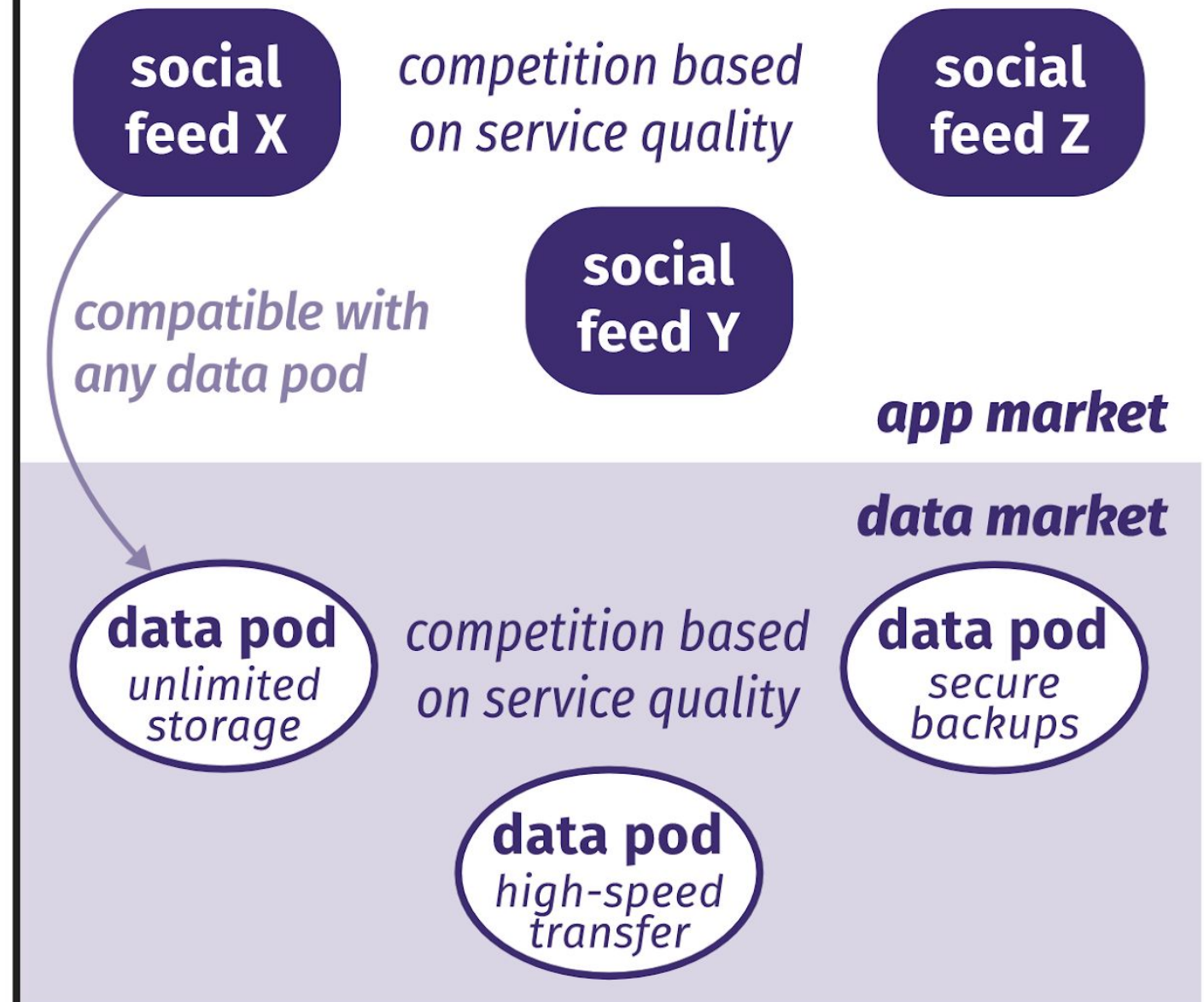


Separating app and storage competition drives permissionless innovation

single market for centralized apps



separate data and app markets



CITIZENS SHARE THEIR DATA WITH GOVERNMENT ADMINISTRATIONS

The screenshot shows the 'Mijn Burgerprofiel' website for the user Raf Buyle. The page is titled 'Contactvoorkeuren en privacy' and is part of the 'Vlaanderen' (Flanders) government portal. The user's name 'Raf Buyle' is displayed in a yellow header bar. Below the header, there is a navigation menu with icons for 'MELDINGEN', 'U & UW GEZIN', 'WOONST & VASTGOED', 'WERK', 'VOORDELEN & BELASTINGEN', 'ONDERWIJS', 'ATTESTEN', and 'HINDER IN UW BUURT'. The main content area is titled 'Contactvoorkeuren en privacy' and contains the following text: 'Op deze pagina vindt u uw persoonlijke gegevens en uw contactvoorkeuren bij de overheid. De overheid hecht veel belang aan uw [privacy](#) en wil zelf zo transparant mogelijk zijn. [Bekijk het overzicht van overheidsdiensten die uw gegevens hebben opgevraagd en waarvoor.](#)' Below this text, there are two tabs: 'Persoonlijke gegevens' and 'Contactvoorkeuren', with the latter being selected. The 'Contactvoorkeuren' section is titled 'Contactvoorkeuren' and contains a list of three items, each with a dropdown arrow and a 'Wijzigingen opslaan' button: 1. 'Solid Community' (Verbonden met uw Solid FOD), 2. 'Melden van gebreken aan wegen, fietspaden, wegverlichting, ... in Vlaanderen' (agentschap Informatie Vlaanderen), and 3. 'Melden van gebreken aan wegen, fietspaden, wegverlichting, ... in Vlaanderen' (Stad Kortrijk). At the bottom of the page, there is a footer with the text 'Mijn Burgerprofiel is een samenwerking van overheidsdiensten in Vlaanderen' and a link to 'Privacyverklaring'.

CITIZENS REUSE THEIR DATA STORED IN GOVERNMENT INFORMATION SYSTEMS

The data subject becomes the controller of the data.

The screenshot shows a user interface for a Flemish government portal. At the top, the user is identified as 'Raf Buyle'. Below this, there is a navigation bar with icons for 'MELDINGEN', 'U & LW GEZIN', 'WOONST & VASTGOED', 'WERK', 'VOORDELEN & BELASTINGEN', 'ONDERWIJS', 'ATTESTEN', and 'HINDER IN LW BUURT'. The main content area is titled 'Onderwijsloopbaan' and shows a timeline for the year 2018. Two educational records are displayed:

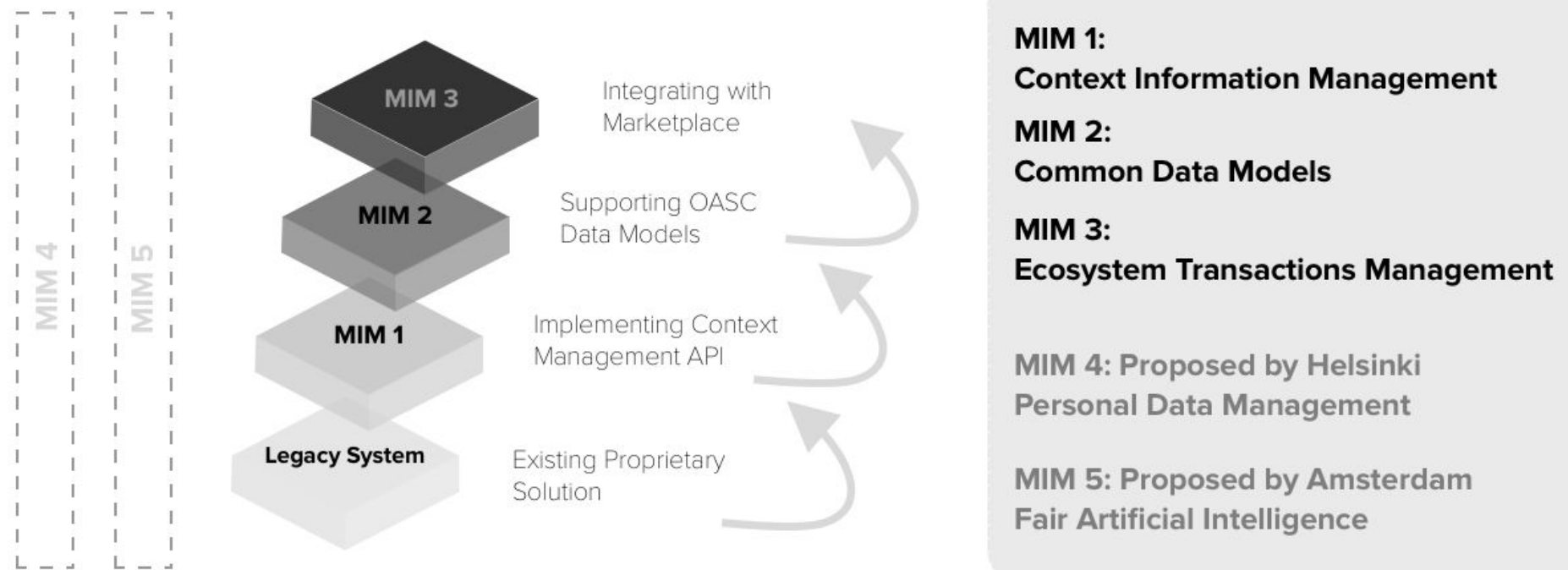
- Doctor in de industriële wetenschappen: informatica** (Universiteit Gent | Hoger onderwijs)
 - Ingeschreven vanaf 2016
 - 2018: Academische graad van doctor, Diplomacontract
 - 2017: Academische graad van doctor, Diplomacontract
 - 2016: Academische graad van doctor, Diplomacontract
- Doctoraatsopleiding Universiteit Gent TW** (Universiteit Gent | Hoger onderwijs)
 - Ingeschreven vanaf 2016
 - 2018: Doctoraatsopleiding, Diplomacontract
 - 2017: Doctoraatsopleiding, Diplomacontract
 - 2016: Doctoraatsopleiding, Diplomacontract

The timeline continues with the year 2000 visible at the bottom.

RAISING INTEROPERABILITY

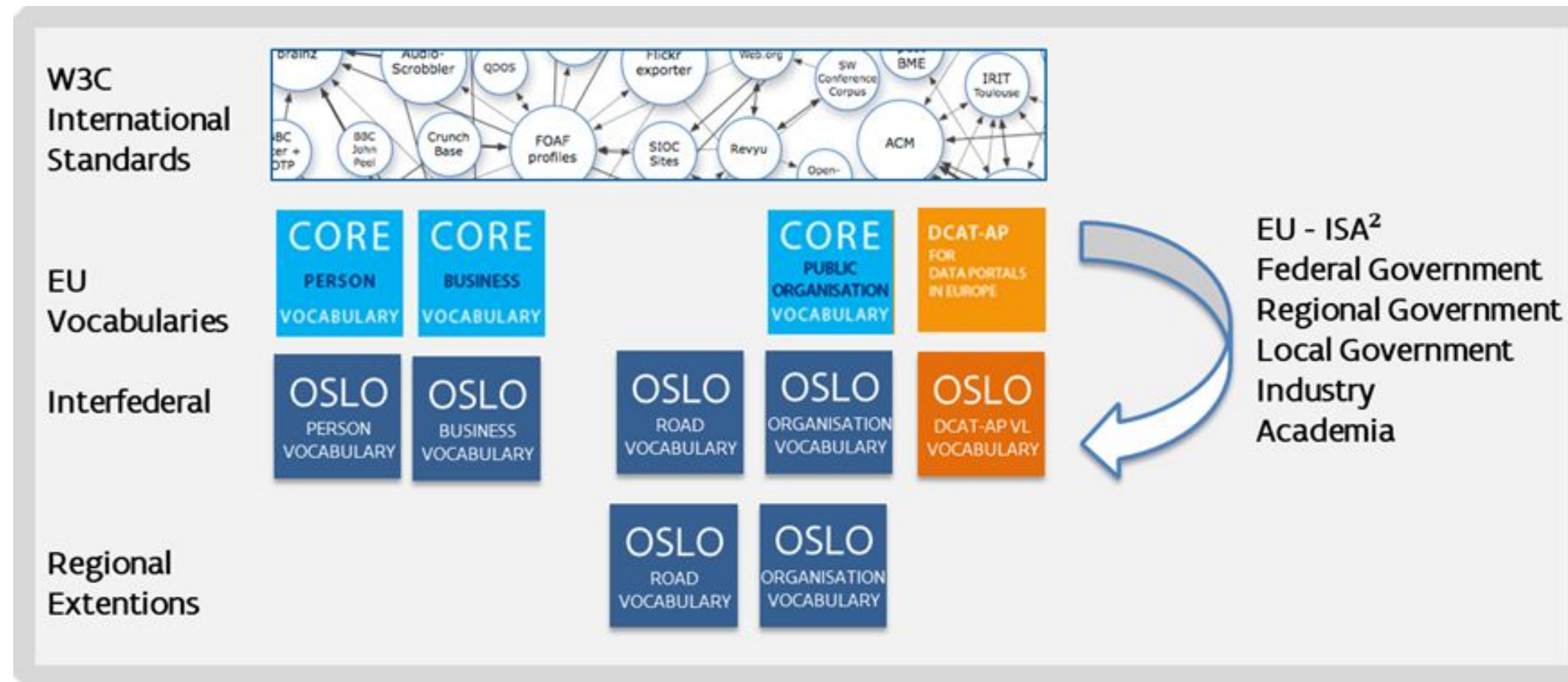
MIM applied to Solid

Minimal Interoperability Mechanisms (MIMs)



THE INTERFEDERAL INTEROPERABILITY PROGRAMME

It's about 'reuse of context neutral vocabularies'

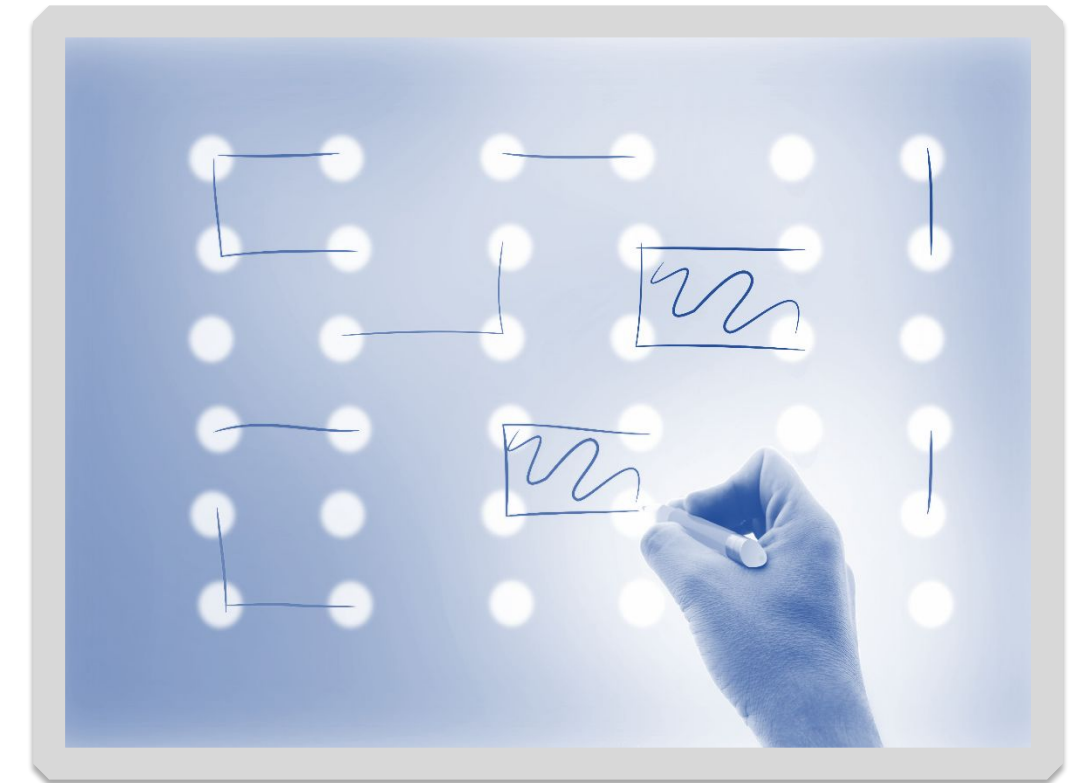


TAKEAWAYS

The MyData principles bring process innovation, which Solid puts into action with concrete technology.

Working integration of the Flemish Citizens Profile

Interoperability-first strategy (MIM).



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 rafbuyle

Are you interested in Solid? We are looking for partners to do further research!