

The Promise of Self Sovereign Identity

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vrije Universiteit
Executive education
Verandermanagement





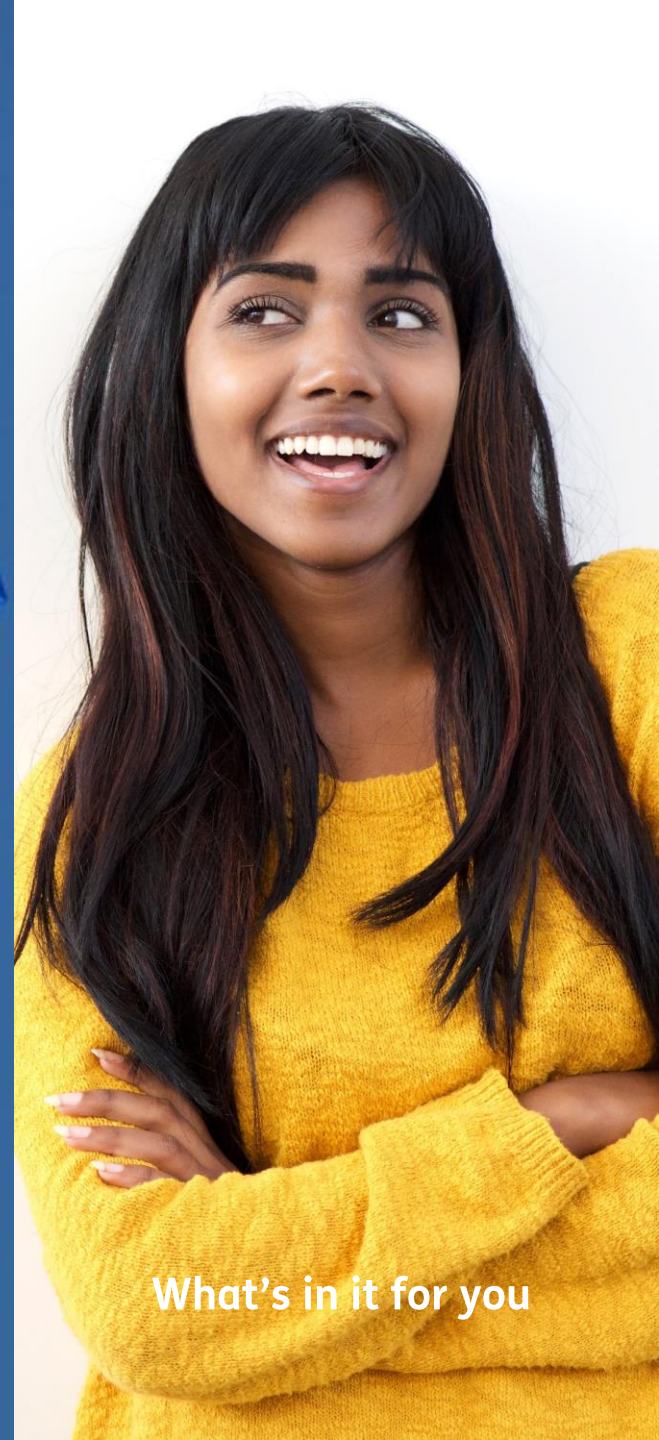
Development of
trust in data



Bridging
the physical and digital realm

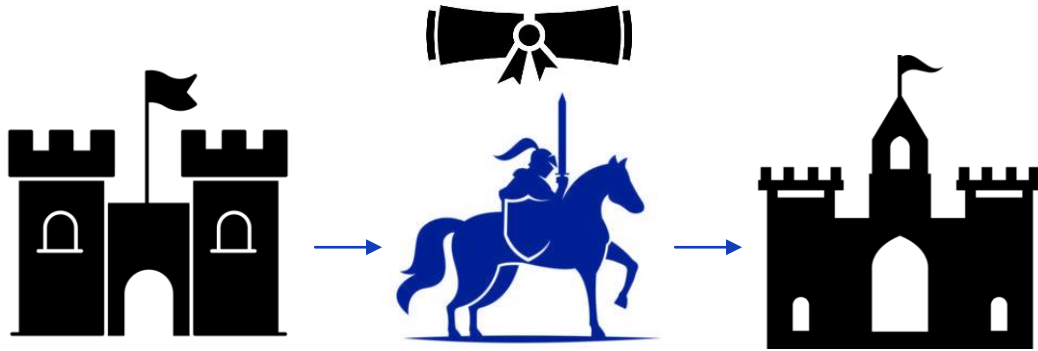


European Developments



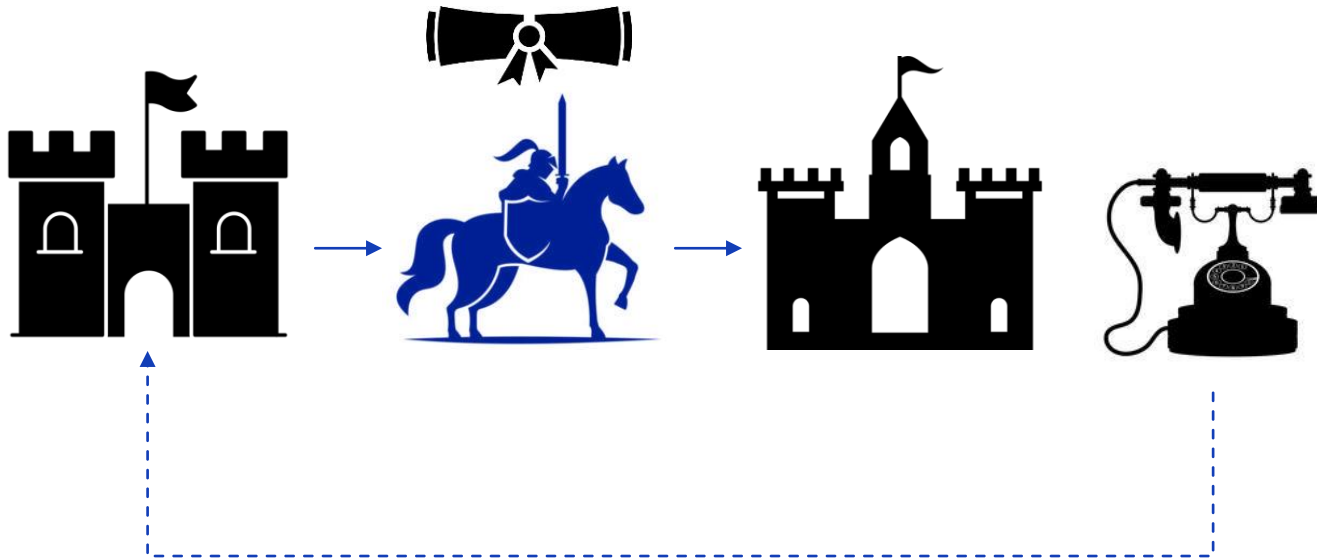
What's in it for you

A long, long time ago



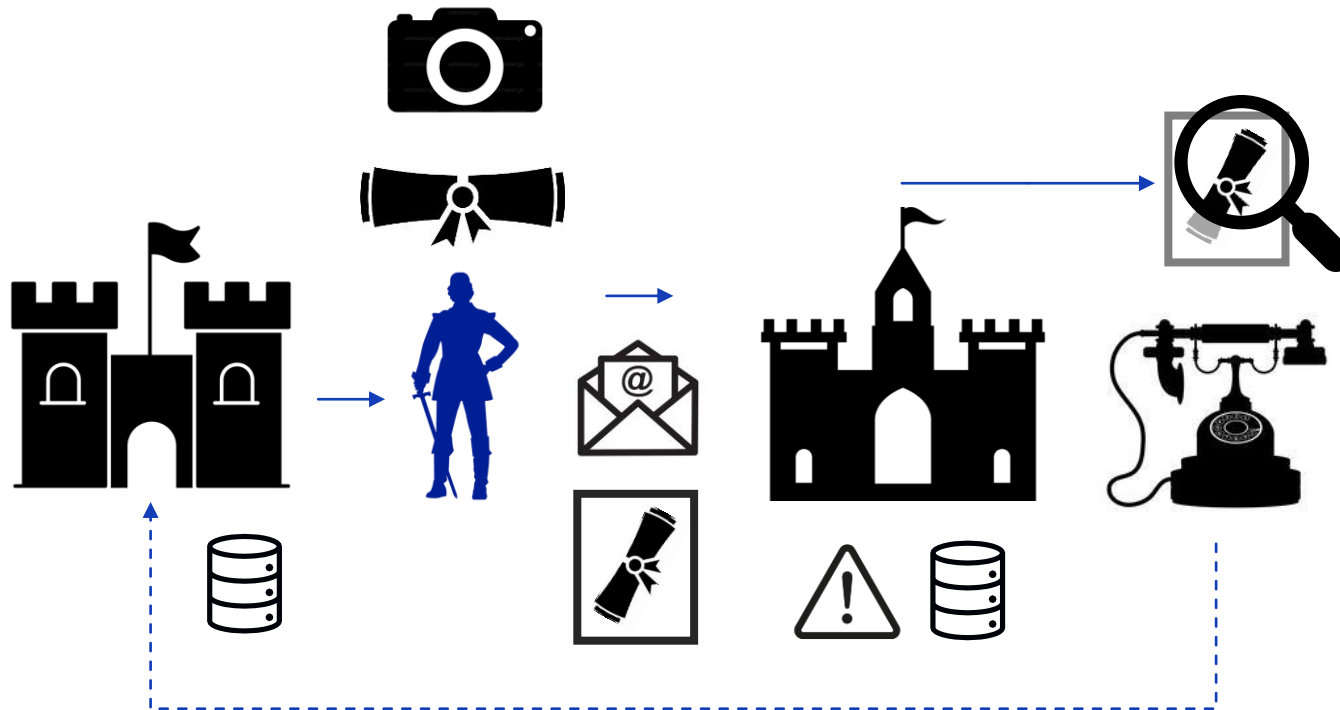
- Information was exchanged using physical documents
- The carrier of this information was responsible for protecting the information
- The recipient could only verify the information by assessing seals, signatures and the colour of the eyes of the messenger
- Despite these safeguards, alternative facts were widely circulated

A long, long time ago



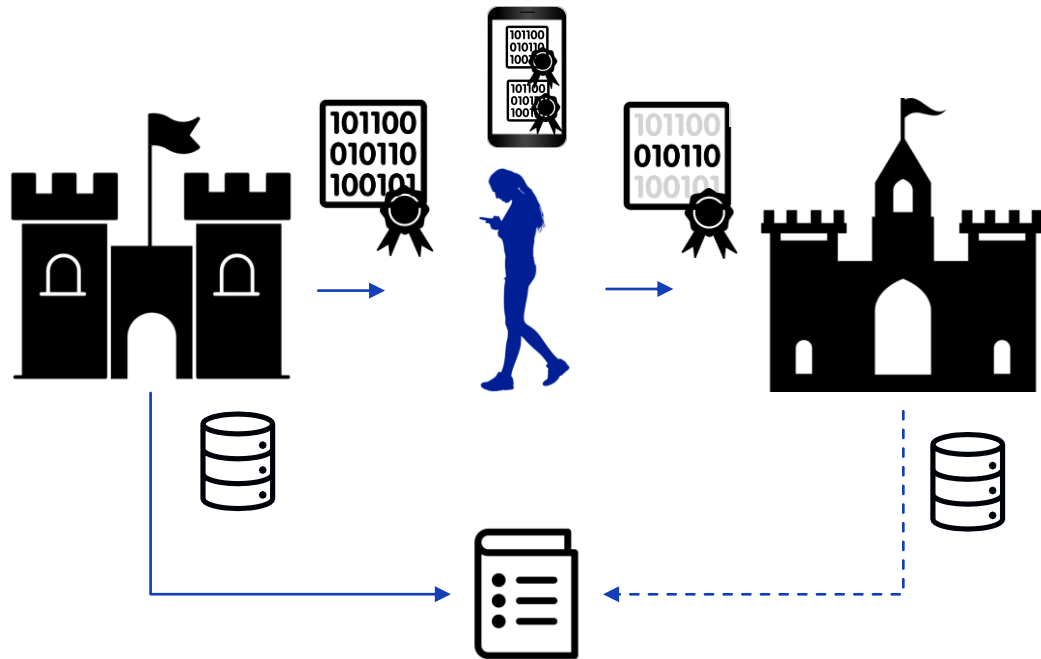
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- The carrier of this information was responsible for protecting the information
- The recipient could only verify the information by assessing seals, signatures and the colour of the eyes of the messenger
- Despite these safeguards, alternative facts were widely circulated
- Until the 2nd industrial revolution invented a backup channel for verification, breaching the privacy of subject of the information

The 3rd industrial revolution: digitalisation



- Information is still handed over using physical documents due to the lack of digital trust guarantees.
- To facilitate the exchange pictures of the physical documents came into vogue
- The recipient could not anymore verify the information by assessing seals, signatures and the eyes of the messenger
- Verification of information became a burden or a business risk
- And apart from validating information at the issuer, it became a new business model
- Gathering information became not only a burden, but also a business model breaching the privacy of the subject of the information even further

At the verge of the 4th industrial revolution



- Information can be digitally issued with seals and signatures.
- The subject of the information will hold important credentials secured on his phone.
- The recipient only receives the information needed for the transaction, nothing more.
- Verification is built in cryptographically
- Current status of the information can be assessed at a ledger without violating the subjects privacy

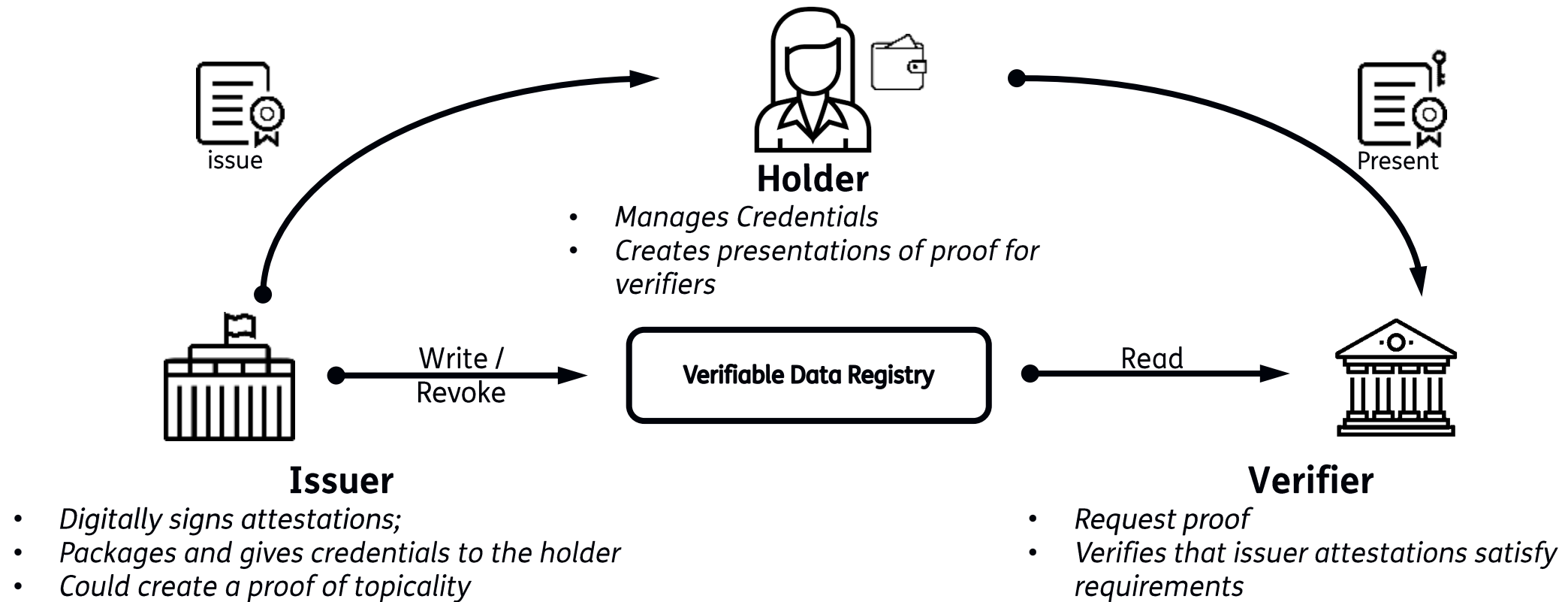
Self Sovereign Identity is a Bridge

- › The physical and digital world continue to integrate, however organisations and their customers are frustrated by the lack of trust in the digital realm.
 - › How can I trust the validity, accuracy and reliability of data in order to create a seamless digital experience?
SSI can improve customer experience whilst reducing operational costs mitigating risks arising from untrustworthy data.
- › The advancing digitization also brings threats: Data hoarding and data leakage are still increasing in size and impact.
 - › How can I regain control over my data in order to protect my privacy?
SSI gives people a means to control what they share and with whom.

Self Sovereign Identity bridges this gap by adding trust to digital data and by putting its holders in control on what they share and with whom.



The Triangle of Trust in the digital realm



SSI and Europe



Europe and SSI

Two reasons why Europe is pushing for a Digital Identity

1. Open up digital market
2. Strive for (digital) Sovereignty

Revision of eIDAS to introduce the European Digital Identity Wallet (EUDIW)

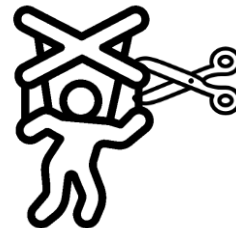
The European Digital Identity: Based on European Values



Trust



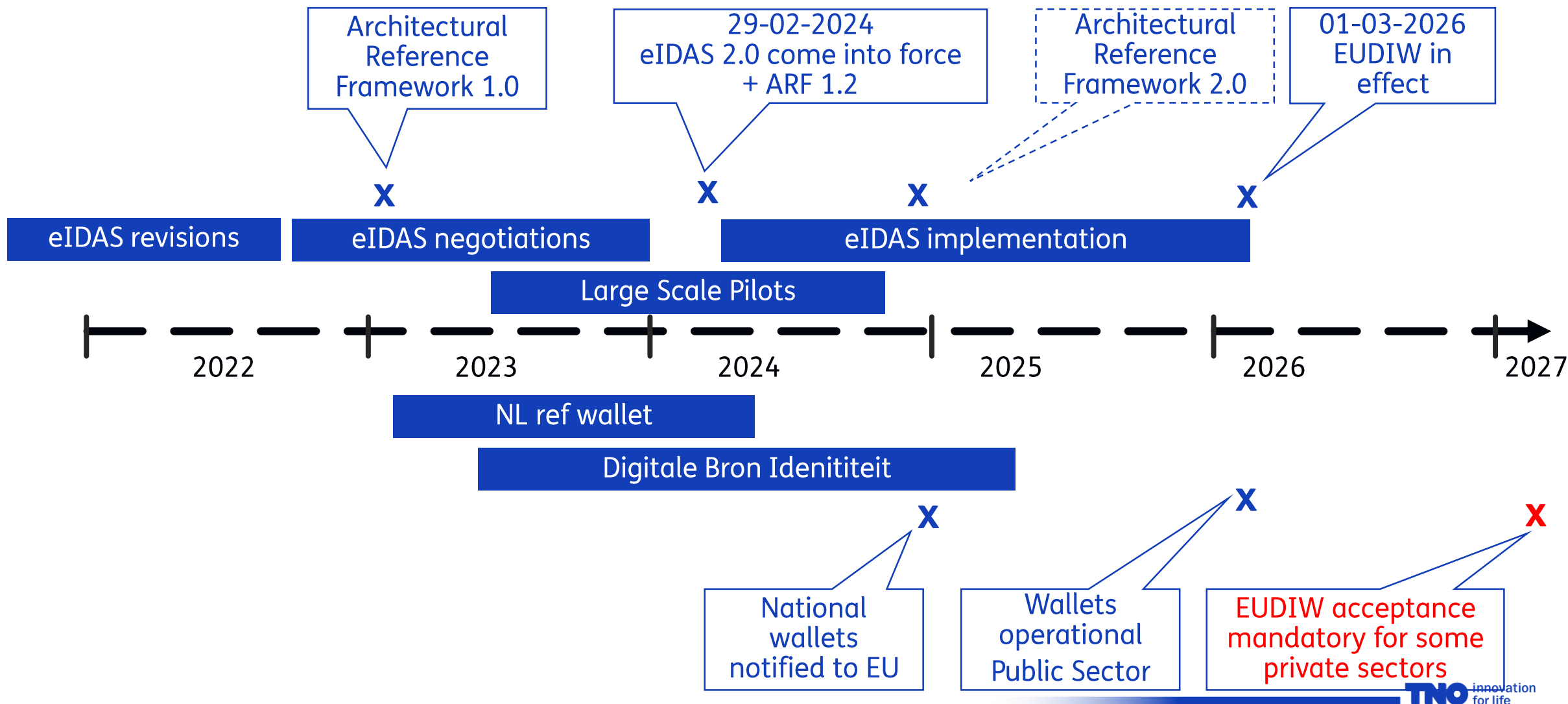
Privacy



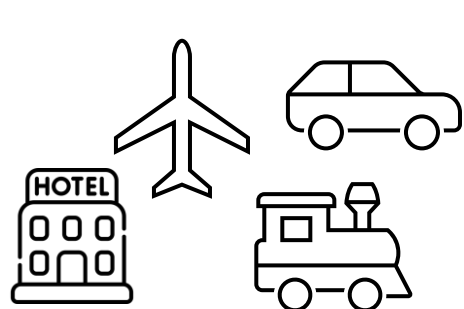
Autonomy



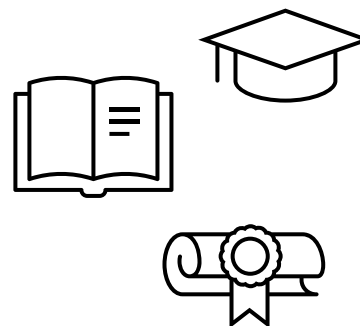
Roadmap of the EU



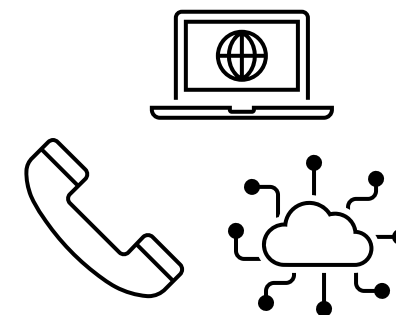
EUDIW acceptance mandatory for some private sectors for Strong User Authentication



Travel & Transport



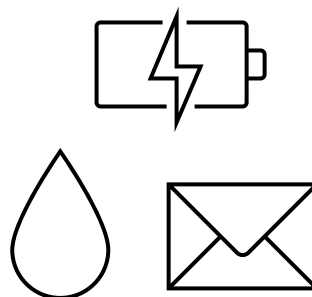
Education



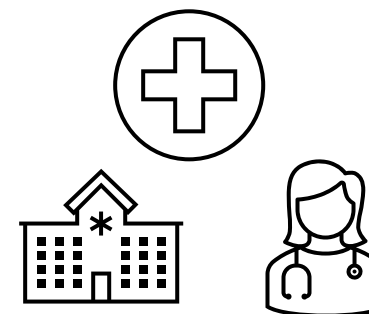
Telecom & Digital platforms



Financial Industry



Utilities



Health

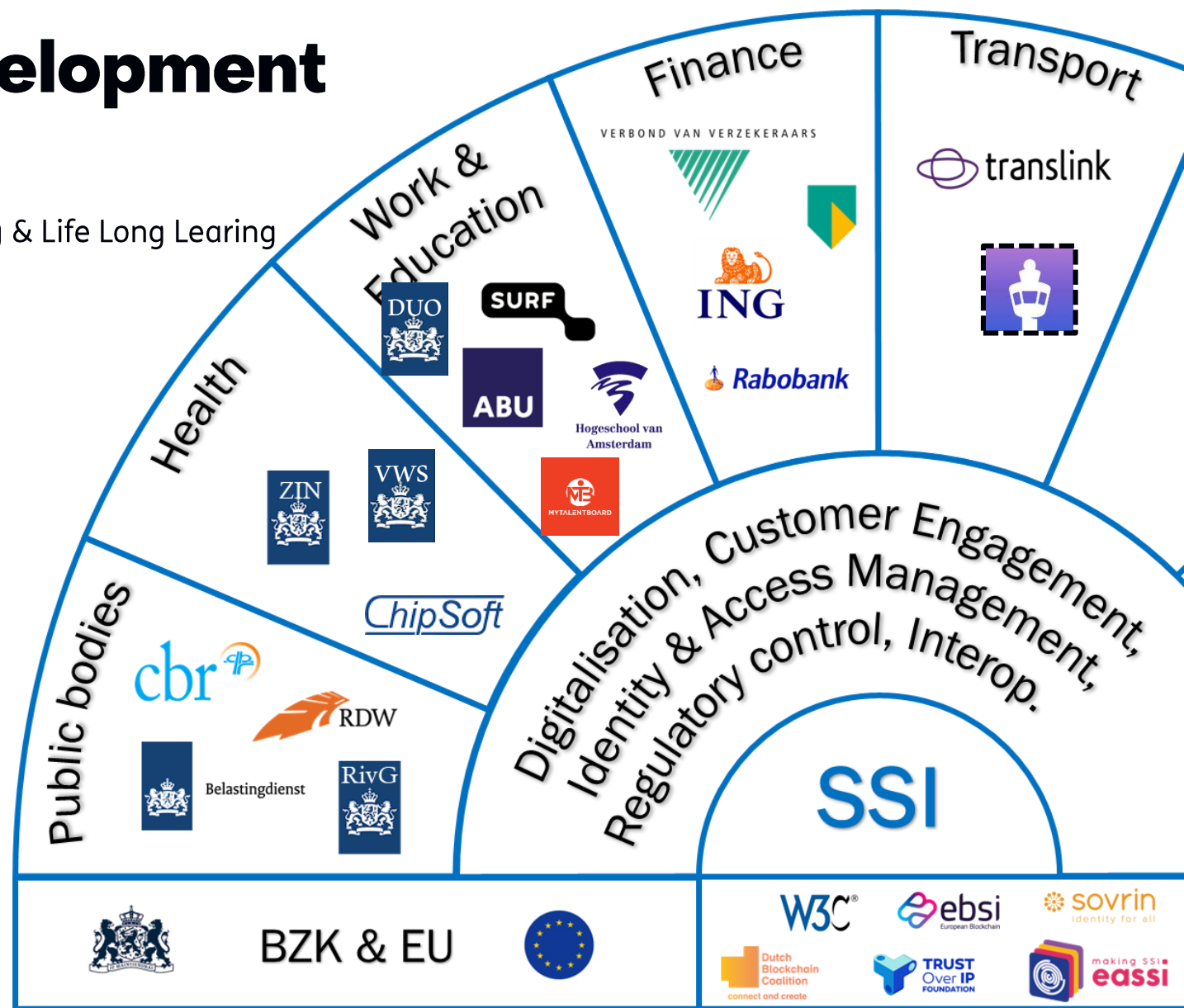
Markets & domain development

Primary market focus:

- Work & Education: Reducing market stress & onboarding & Life Long Learning
- BZK & EU: Standardisation and Interop
- Health: Reducing the administrative burdon
- Finance: reducing KYC costs and complexity
- Transport: Interoperability for seamless travel

Primary domain focus

- Digitalisation
- Customer engagement
- Identity & Access Management
- Regulatory Control / Norm Engineering
- Interoperability



**What's in it
for me?**



Benefits for users



Seamless onboarding



No Peeping Toms
(If implemented correctly)



Revoke shared info
(Research needed)



Verify the Verifier



No Rogue Data
(If implemented correctly)



Reverse Data Flow
(Research needed)

Benefits for corporations



Efficiency



Data
Minimalisation

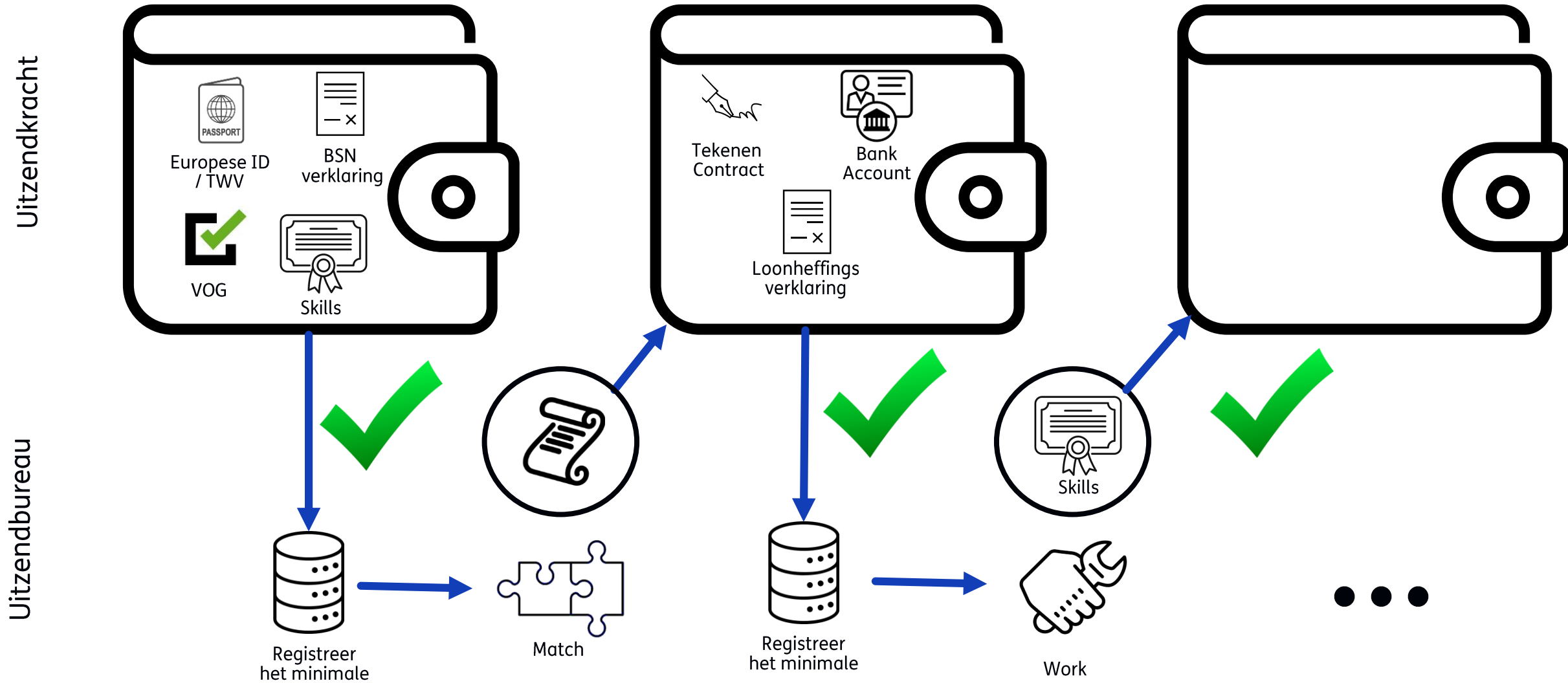


Customer
Relation



Customer
value

SSI in flexwork?



De Belofte van Self Sovereign Identity

It's a team effort!



Concerns



Societal

To what extent does SSI and/or the EuDIW contribute to the digital divide?



Risks

What new risks will be introduced and how to mitigate them?



Technical

Is the technology ready to cover all scenario's?



Gorillas

What do you give a 400 pound gorilla?

