



Personal data ecosystems and our “digital exhaust”

User centric services as a reformulation of privacy

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Technology Assessment

Assessment of the problem



Technology solution

Proliferation of personal data as a privacy problem

Proliferation of personal data
as a privacy problem



Security of information and
communication?

Cryptography

Data Minimization

Security of information and communication?

Privacy Enhancing Technologies

Technologies

Data Confidentiality

Anonymous
Communication

Security of information and communication?

Goals:

Anonomization

Unlinkability

Unobservability

Confidentiality

Proliferation of personal data
as a privacy problem



Data Processing?

Regulatory Frameworks

Contextual Integrity

Data Processing?

Privacy by Design

Fair Information
Principles

Privacy impact
assessments

Data Processing?

Goals:

Fair use of data

Ensuring human rights

Civil protections

Maintaining profitable use

Proliferation of personal data as a privacy problem



User Centricity

Informational Control?

(Bundesverfassungsgericht)

Informational Control?

Information Ecosystem

Identity Management Systems



Association of companies “developing the tools and systems for personal control over personal data.”

Internet focused IDM systems and solutions

Fits with (EU) goals for data portability, user control, and the right to be forgotten



Personal Data Ecosystem Consortium

We connect companies that build personal control over personal data

Personal Identity Provider (Identification, Verification, Authentication)



Connected to Service Provider (Relying party)

The consortium “envisions a future where people proactively control the integration, analysis, value extraction, and social collaborative opportunities arising from the digital exhaust from their own lives.”

That is:





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Privacy?



The ability of users to be responsible for their own data

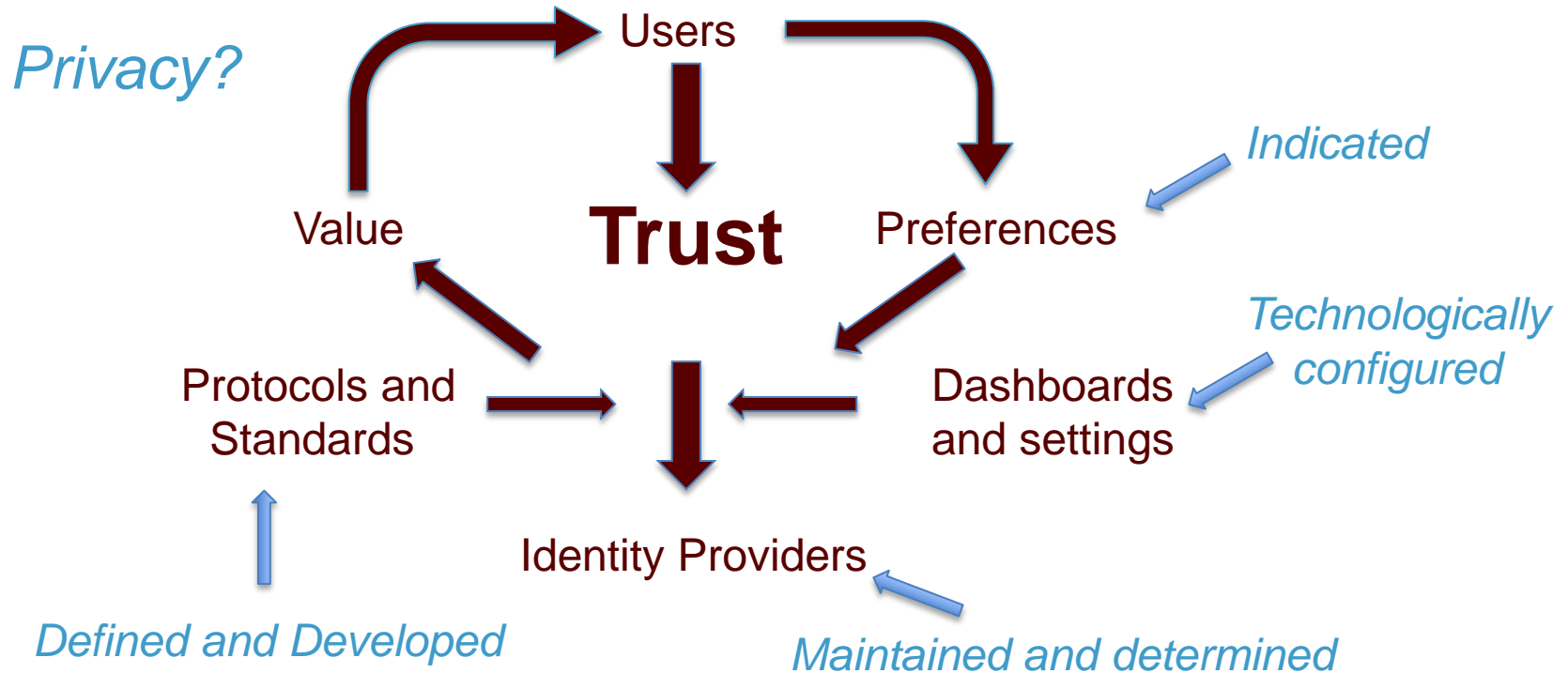


Users are compensated for their data use



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As mechanisms for Informational Self-Determination, data ecosystems are problematic

Personal data = commodity

- Most data is unused
- Reaction of the 'big' players
- How valuable is data?

Illusion of control

- Where is information is being processed?
- Different 'personas' and overlaps in practice
- Trust in identity providers and their algorithms

Highly individualistic

- Look-a-likes as proxies for privacy sensitive users
- Data is important only in relation to other data

Potential for downstream abuse

- Necessity of audit practices and verification

Assessment of data ecosystems

- What privacy? What technology?
- User centric efforts rely upon privacy as a concept and reformulates it
 - Translates the use of personal information into an issue of personal control by turning it into a commodity
- Informational self determination
 - Advantages and disadvantages
 - Assessment of how technology addresses and defines a particular problem is critical