

Current Developments of eID Projects

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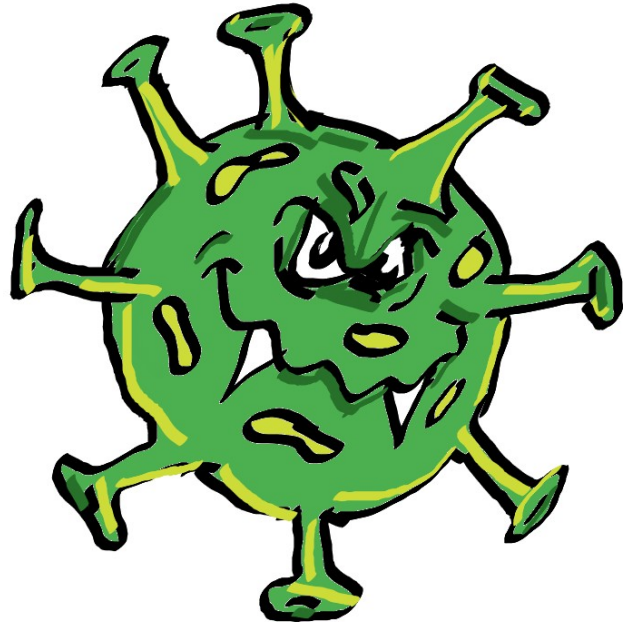
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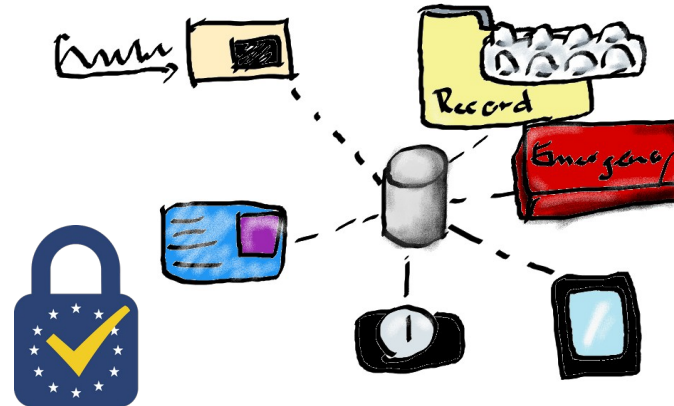
Agenda

- Introduction and Motivation
- Survey Outline
- eID Projects
- Conclusion and Outline

Introduction and Motivation



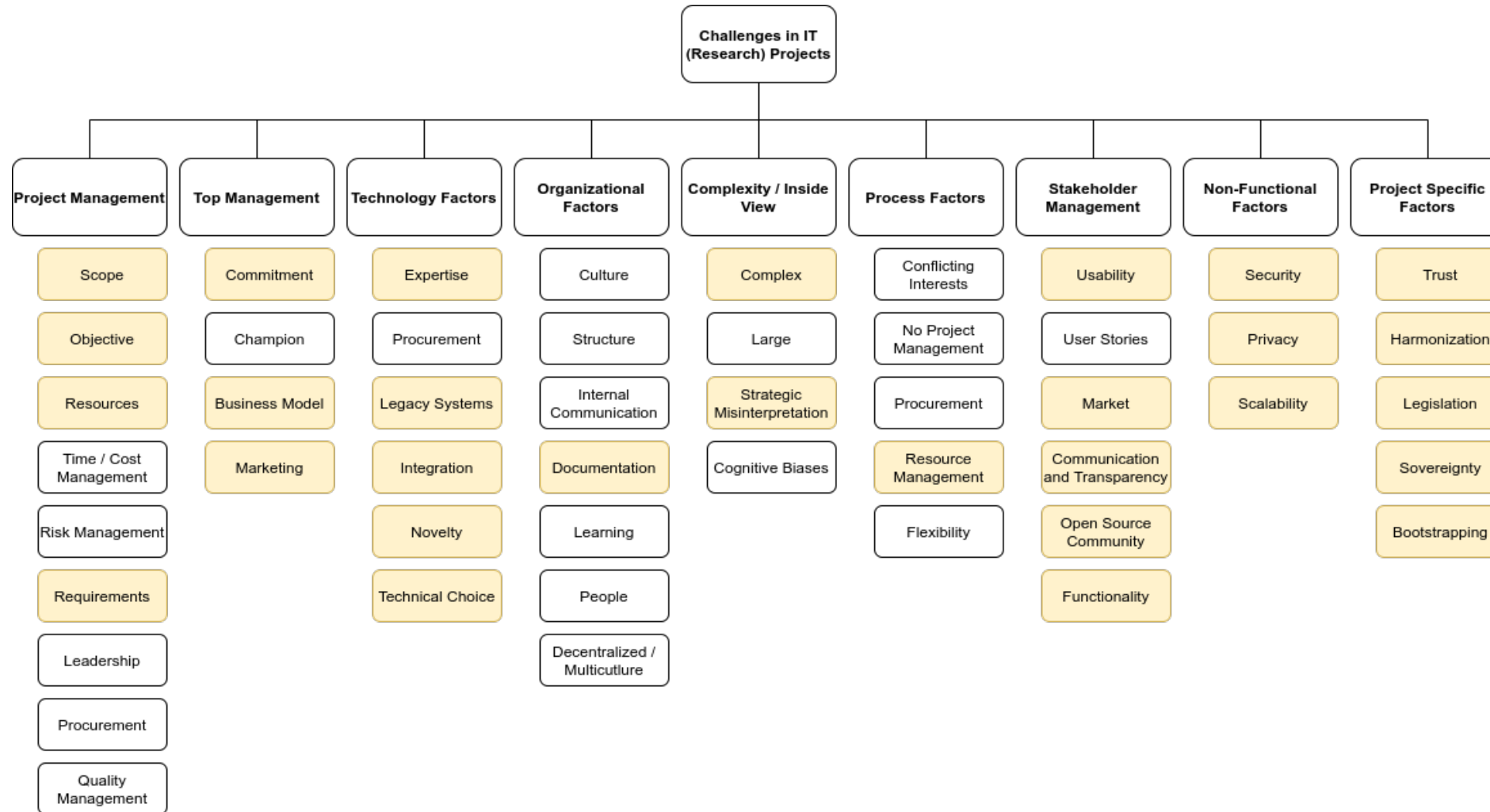
Privacy?



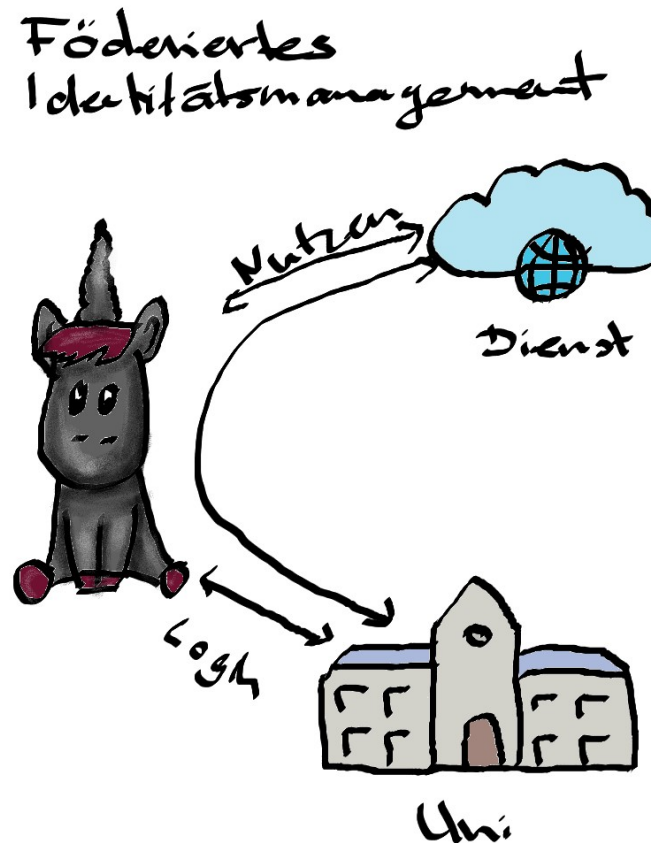
Survey Outline

- Taxonomy based on literature survey
- Applied to
 - eID developments: traditional Federated Identity Management (FIM)
 - SSI developments: government-issued eIDs with SSI
- Reference: Pöhn D, Grabatin M, Hommel W. eID and Self-Sovereign Identity Usage: An Overview. *Electronics*. 2021; 10(22):2811.

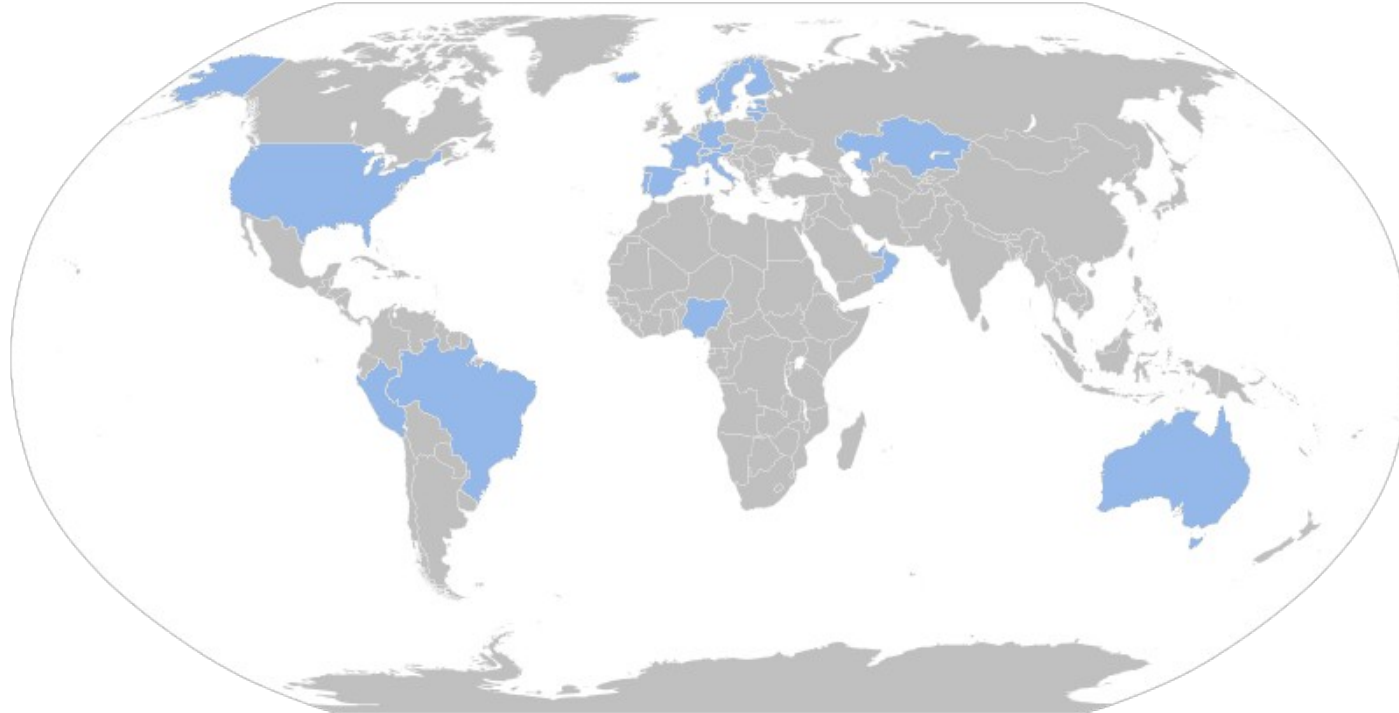
Survey Outline



eID Projects - eID



eID Projects - eID



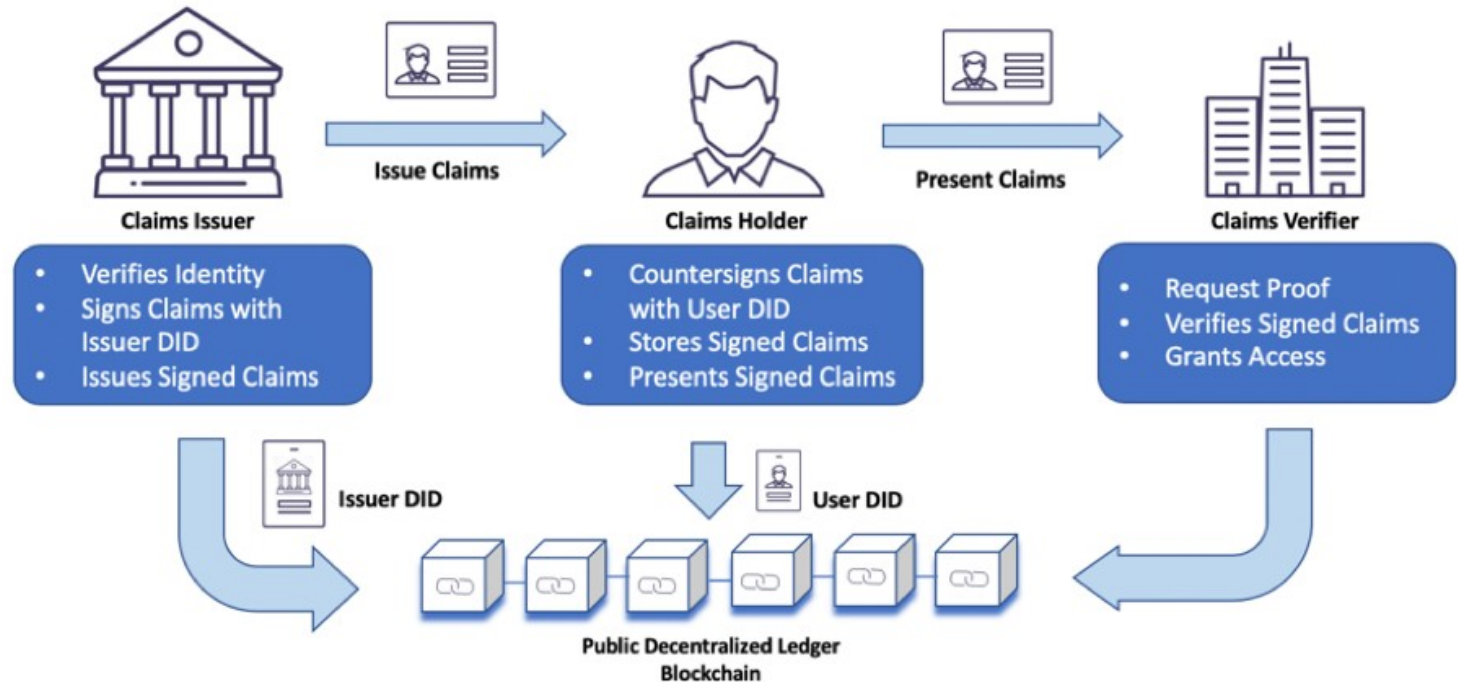
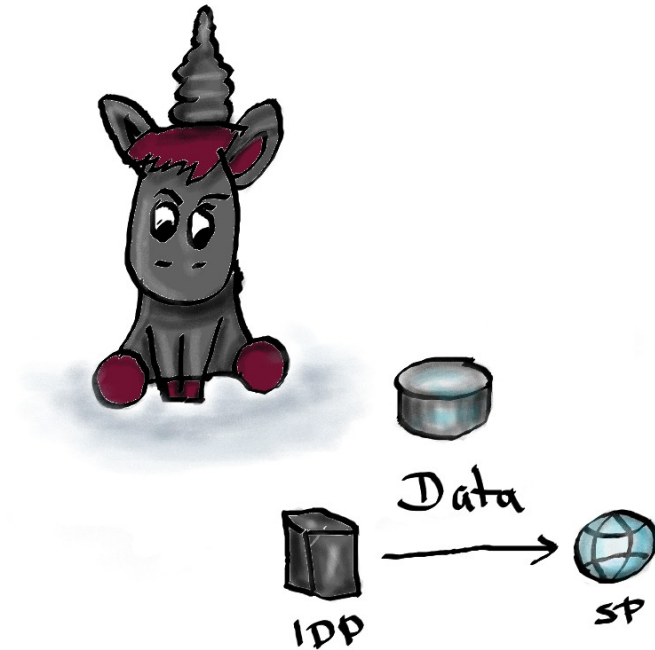
eID Projects - eID

- Scandinavia: Commercial BankIDs widely accepted.
- Baltic States: Electronic services everywhere.
- DACH Region: Reliance on smartcard-based eIDs.
- Southwest Europe: More services with OAuth/OpenID Connect.
- UAE: Unified eID on app.
- Nigeria: Based on national identity number, even on paper slip.

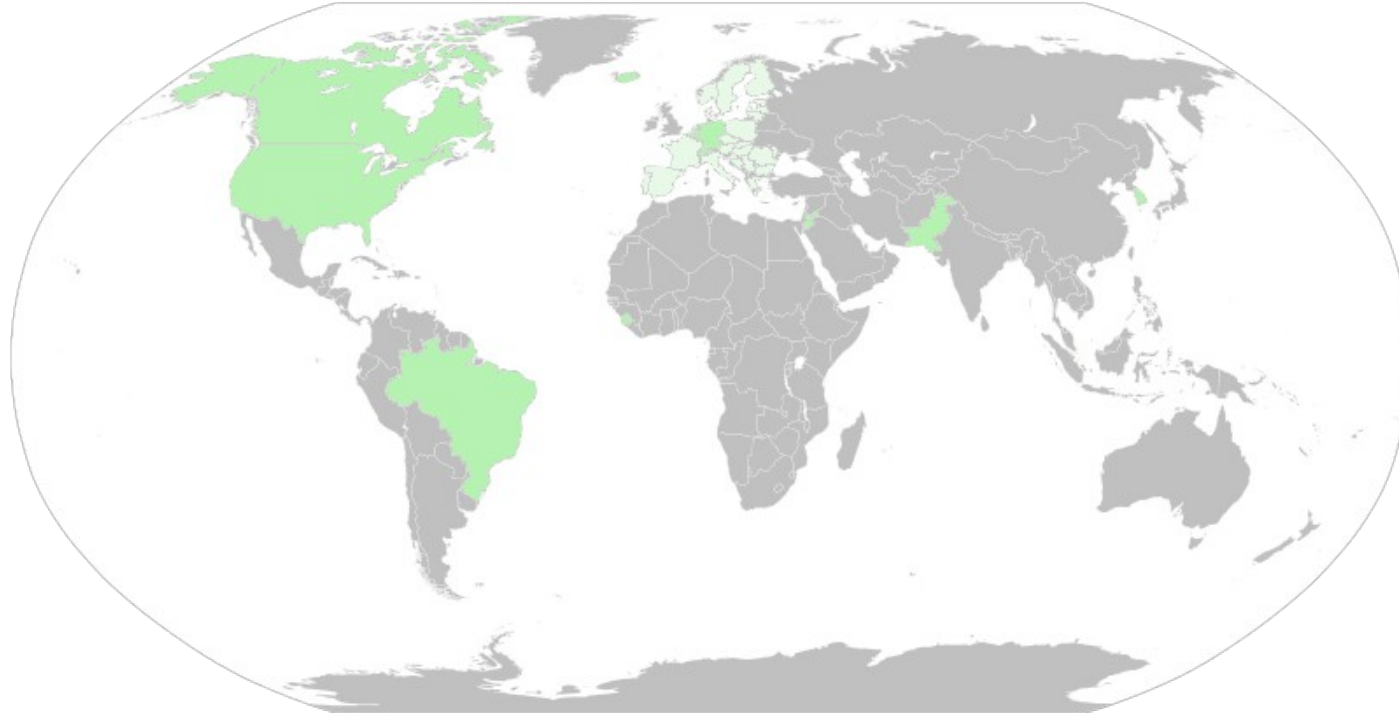
eID Projects - eID

- Kazakhstan: Inspired by Baltic States and Singapore.
- Singapore: Evolved portal.
- Australia: Trusted Digital Identity Framework with different providers after failed attempts.
- U.S.: Driver's license as eID alternative, some pilots in selected states.
- Brazil: Similar to U.S.
- Peru: Developed by focusing on eIDAS and European eIDs.

eID Projects - SSI



eID Projects - SSI

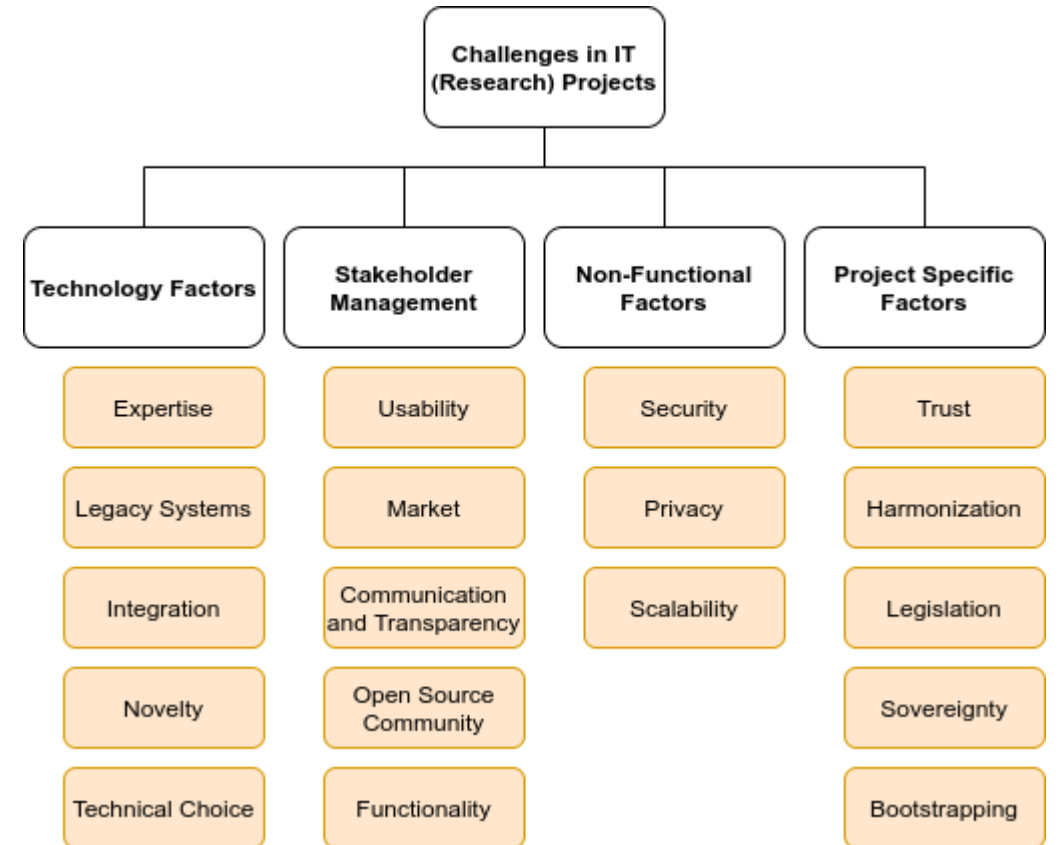


eID Projects - SSI

- Europe: Several initiatives, e.g., showcase program Secure Digital Identities in Germany. Several unsuccessful projects, too.
- Border cases: Sierra Leone, refugees, homeless people, farmers,...
- Busan, South Korea: Regulation-free blockchain zone with B Pass app.
- BC, Canada: OrgBook BC as exemplary service of VON.
- Brazil: Public administration encouraged SSI projects, but no recent information found.

Conclusion

- Use of personal data is strictly regulated by law.
- Once only principle, e.g., by X-Road.
- SSI centered on user.
- With eID more likely with central components, e.g., proxies.
- Design decisions may decrease privacy.



Conclusion and Outlook

- Current and future technologies may help to provide privacy.
- SSI hype may help to deliver privacy-enhanced and usable products.
- Also risks come with the hype.
- In any case, users have to adopt developments - Privacy paradox?