

eIDAS, SSIs & Blockchain

**Reconciling technology & governance :
a difficult balancing act**

My profile



Stéphane Mouy

- Consultant focusing on digital transition solutions for the financial sector
- Legal & financial background with 25-year banking/financial experience
- Focus on regulatory matters, especially anti-money laundering and KYC processes
- 2018-2020 : Member of the eID/KYC Expert group of the European Commission
 - Two reports published ([existing remote onboarding solutions](#) + [Portable KKYC/CDD framework](#))
 - also took part in the preparation of the FATF/GAFI Digital Identity Guidance (March 2020)
- 2020 (on-going) : Member of the ETSI identity-proofing taskforce STF 588 for eIDAS trust services, notably electronic signatures and seals
- A clear interest in digital identity, but relatively new to blockchain & DLT

What I have learnt about eIDs in Europe

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- Now a high visibility topic everywhere, especially after Covid-19 ...
... but with considerable deployment differences within European countries (and France unfortunately *not* an avant-garde country)
- eIDAS is a landmark regulation putting Europe at the forefront of regulatory development for digital identities & trust services
 - An asset which must be preserved and enhanced, although not perfect
 - But eIDAS is a very *sovereign* construction for eIDs
- Two dimensions play a critical role :
 - **Scale** : achieving a critical mass of use cases is key for the deployment of services and the creation of a digital ecosystem
 - The private sector offers scale as proving one's identity online is required for a large number of commercial transactions
 - **Assurance levels (LoAs): digital identities need to meet a trustworthiness threshold**
 - Three industries need 'quality' identities (physical or digital) : Transport, Health & Banking & financial services
 - The FATF e-Identity Guidance puts LoAs at the core of the risk-based approach for financial institutions
- Do not ignore the political dimension – Member States are jealous of their prerogatives and... Identity is one of them. This largely explains why KYC processes remain so fragmented within Europe

Blockchain & DLT in the financial sector...

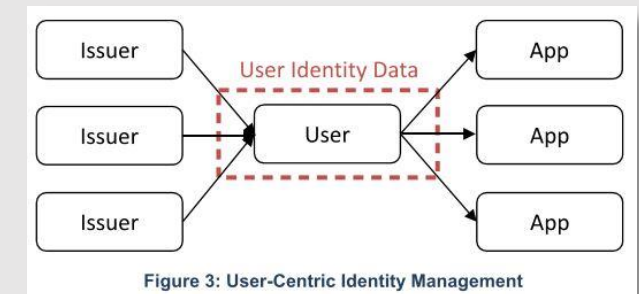
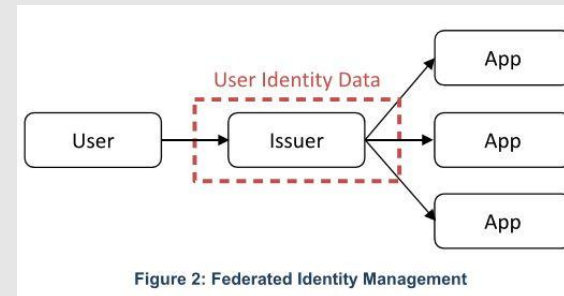
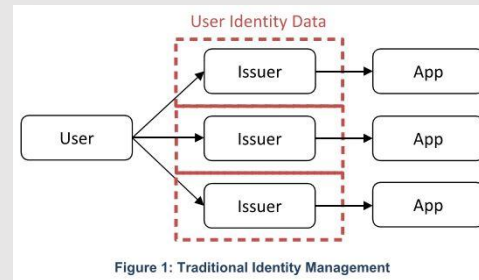
... a layman's view

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- A number of initiatives have been launched since 2015
- But results have often been modest and below expectations, especially when it came to deploying processes in production mode (not just proof-of-concept)
- Three main reasons
 - Privacy (GDPR) concerns have been difficult to address with DLTs
 - The banking industry (and EU financial sector) is based on the intermediation model which is intrinsically challenged by distributed ledger technologies – Is this too disruptive?
 - Sharing client data with other DLT participants raises client-relationships issues in a competitive environment
- This may explain why DLT/Blockchain solutions were not considered by the EU eID/KYC expert group and are not used for onboarding processes of the financial sector

But for eIDs things are changing rapidly and SSIs are now viewed as the 'next eID generation'

- Proving one's identity is problematic with conventional means for a considerable number of people (over 1 billion – World bank data)
- Technical specifications are in good progress – see W3C projects on Verifiable Credentials (2019) and DIDs (2020)
- NITS January 2020 publication on [Emerging Blockchain Identity Management Systems](#) outlining 3 generations of eID systems



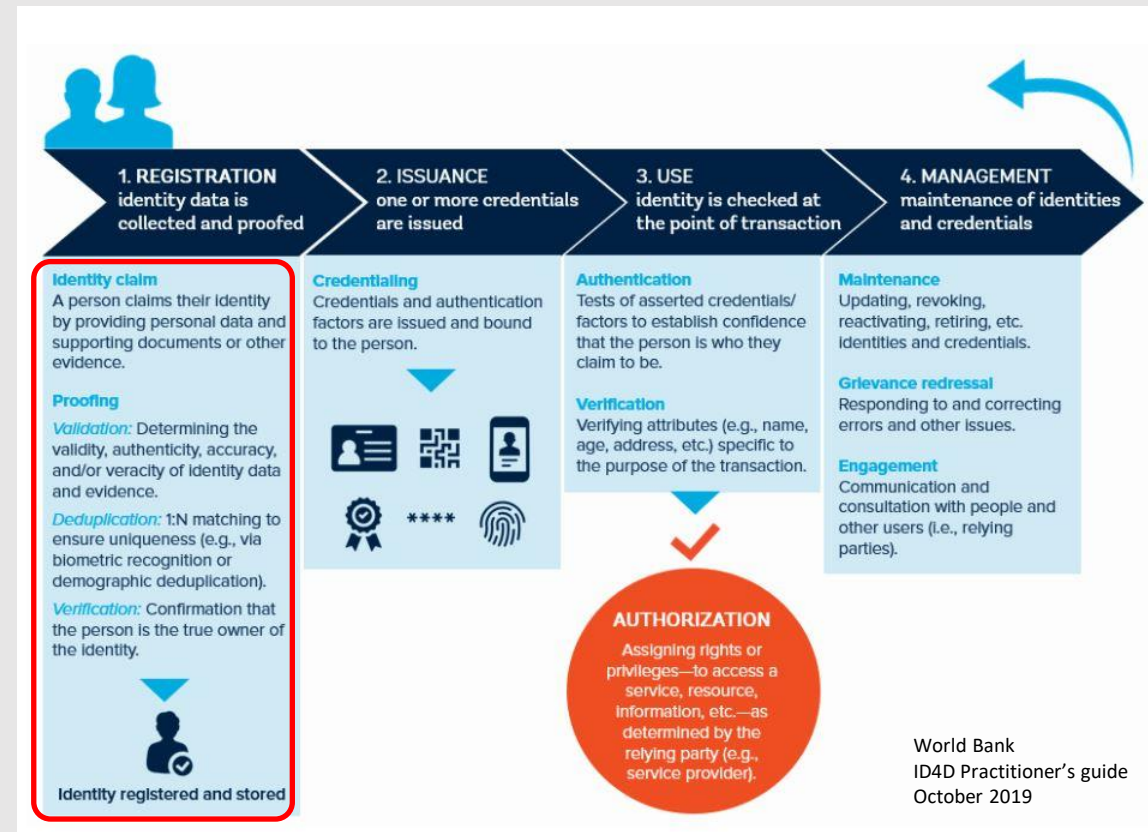
- Some SSI initiatives are mature enough to be considered by governments – e.g. Pan-Canadian Trust Framework (PCTF) Consultation draft June 2020
- In Europe, the SSI eIDAS Legal Report considers ways to bridge the gap between eIDAS and SSI solutions

But, as for all eID schemes, identity proofing needs to be implemented in SSI solutions

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- All digital ID process involves two basic components and a third optional component (FATF/GAFI Digital Identity Guidance – March 2020):
 - Component One: Identity proofing and enrolment (with initial binding/credentialing) (essential);
 - Component Two: Authentication and identity lifecycle management (essential); and
 - Component Three: Portability and interoperability mechanisms (optional)

- ID attributes are collected,
- ID attributes are validated (verified)
- ID attributes are linked to the applicant



Beyond Identity-proofing there are wider issues of governance

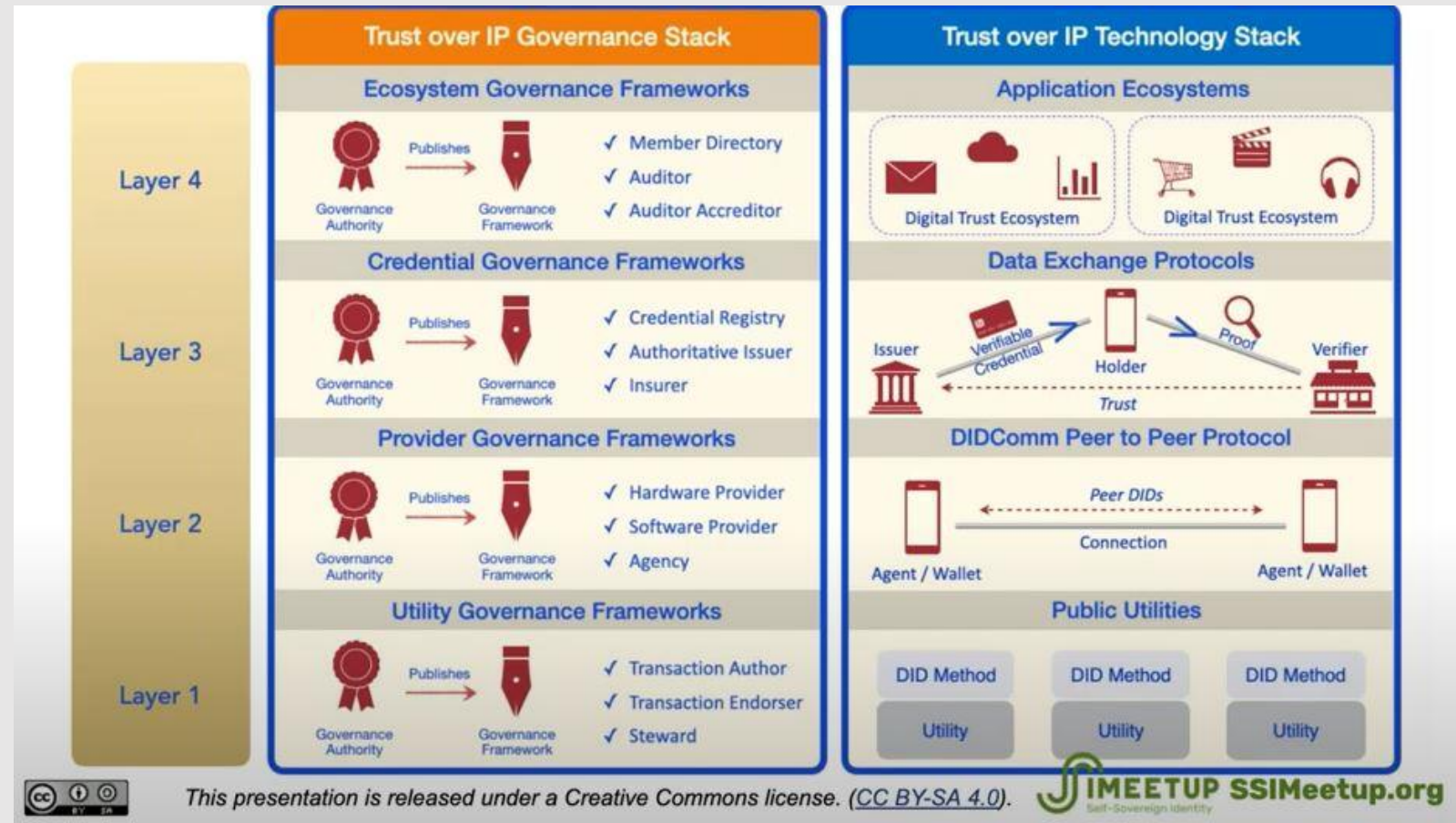
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- Two regulatory/governance conditions stand out :
 - An entity is able to assume liability for the identity-proofing phase
 - There is some regulatory recognition of the eID for key use cases (with the ultimate test for the financial and health sectors needing 'quality' ID processes)
- In the EU this is achieved by eIDAS and, for the financial sector, AMLD5
 - eIDAS eIDs : The notifying member State is legally responsible if the Level of Assurance requirements are not complied with by the notified scheme (art. 11 – Liability)
 - AMLD5 – recognition of eIDAS eIDs & trust services as well as any nationally-approved scheme
- So how does this apply to SSI schemes?
 - Proposed answer is to link eIDAS to SSI schemes
 - Short, medium & long-term scenarios outlined



Balancing Technology and governance aspects is essential, even for SSIs

- Technologies come and go. Focusing on technology in isolation is not enough – it's the governance layer that allows the deployment of use cases for real-life situations, especially when liability implications are significant



Where this
leaves us for
SSI
schemes...

A long-haul
project... but
worth the
effort!

- Issuers of core ID verifiable credentials must manage liability implications
- Core ID attributes presented need to be identity-proofed
 - Eligible documents and authoritative sources to be defined
 - Verification checks to be defined
 - Binding process to be implemented at the required level of assurance
- These aspects are (mostly) technology neutral, but key prerequisites for deployment and take a considerable time to agree at international level
- The 'eIDAS shortcut' is a good idea, but a full implementation of SSI schemes within eIDAS requires a substantial renegotiation with clear policy choices (sovereign versus self-sovereign)
- And in France, eID progress is slower than in other EU countries...

Thank you
for your
attention

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