

Re-usable digital identity

Global State of Play 2023

Dima Postnikov
Identiverse 2023



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Head of Identity Strategy

ConnectID

A lot of research...



Government-Issued Digital Credentials and the Privacy Landscape

Lead Editor: Heather Flanagan
4 May 2023

Citation:
Flanagan, Heather, ed. "Government-issued Digital Credentials and the Privacy Landscape." OpenID Foundation, May 4, 2023. <https://openid.net/Government-issued-Digital-Credentials-and-the-Privacy-Landscape-Final>.

Date	Revision
4 May 2023	Publication of final v1.0
5 April 2023	Distribution of public comment draft

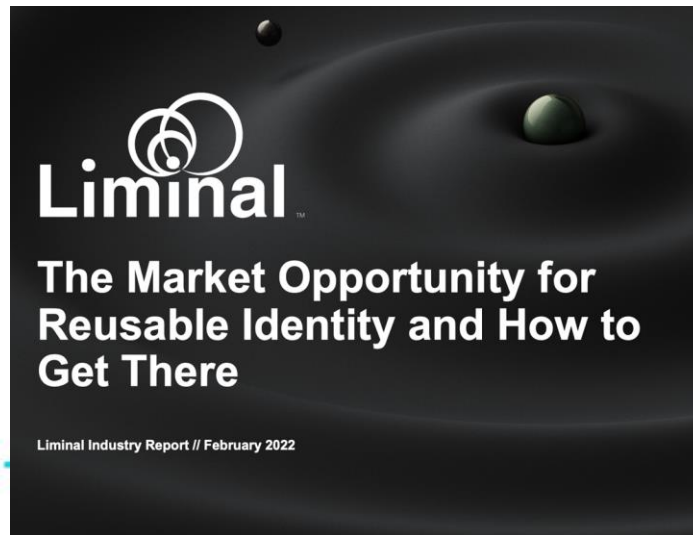


System Initiative on Shaping the Future of Mobility

The Known Traveller Unlocking the potential of digital identity for secure and seamless travel

In collaboration with Accenture

January 2018

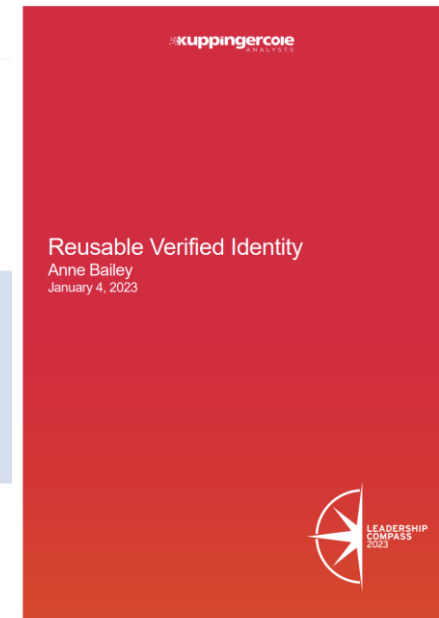


GAIN DIGITAL TRUST

How Financial Institutions are taking a leadership role in the Digital Economy by establishing a Global Assured Identity Network



With over 150 co-authors



Global view

NORTH AMERICA

Presence of **disparate state specific solutions**

Federal agencies and financial firms collaborate on future DI sol. blueprints

Focus on applications **implementing SSI based digital ID models** (Canada's DIACC partnership with Northern Block)

Push for **consolidation of usernames/ passwords**, increased customer control on data, and **high security/privacy**

Need to **reduce annual liability costs** resulting from data breaches and fraud (in \$trillions in NA)

SOUTH AMERICA

Characterised by rising **private investments and govt. security spending** on app-based DI initiatives; Focus on **financial inclusion**

Focus on adoption of **biometrics & DLT**

Push for **frictionless access** and addressal of electoral, benefits, healthcare fraud

Need to **address high liability costs** for service providers due to high new account txns. fraud rate



AFRICA AND MIDDLE EAST

Government driven digital ID initiatives at country level; Focus on **financial inclusion** of remote segments

Africa—Focus on **biometrics**, match-on-card tech enabled smart cards to provide access to govt. services ; **Middle East**—In nascent stages of tech adoption

Push for **frictionless access to government/ public services** including voting, travel, education, etc.

Need to address high **liability and compensation costs** of ID data breaches and fraud

EUROPE

Core involvement of **banks** and the **mobile industry** instrumental in building national digital ID systems in EU

eIDAS laid down as the foundation for **interoperability, security** between member states for ID schemes

Focus on **use of self-sovereign eID** for access to public services across borders e.g., **smart cards**

Enforcement of **GDPR** driving increased customer **data protection compliance** and **customer trust**

ASIA

Driven by **govt. mandates** to provide basic services and drive **financial inclusion**; Data protection reg. prevalent

Biometric information central to the element of identity

Push for access to govt. services with **convenience and security** using a universal ID

Driven by need to **reduce the costs of ID verification** (reduced from \$5 to \$0.70 per customer due to Aadhar)

ASIA

Driven by **govt. mandates** to provide basic services and drive **financial inclusion**; Data protection reg. prevalent

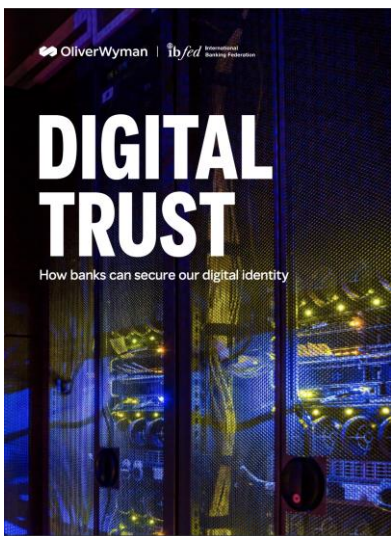
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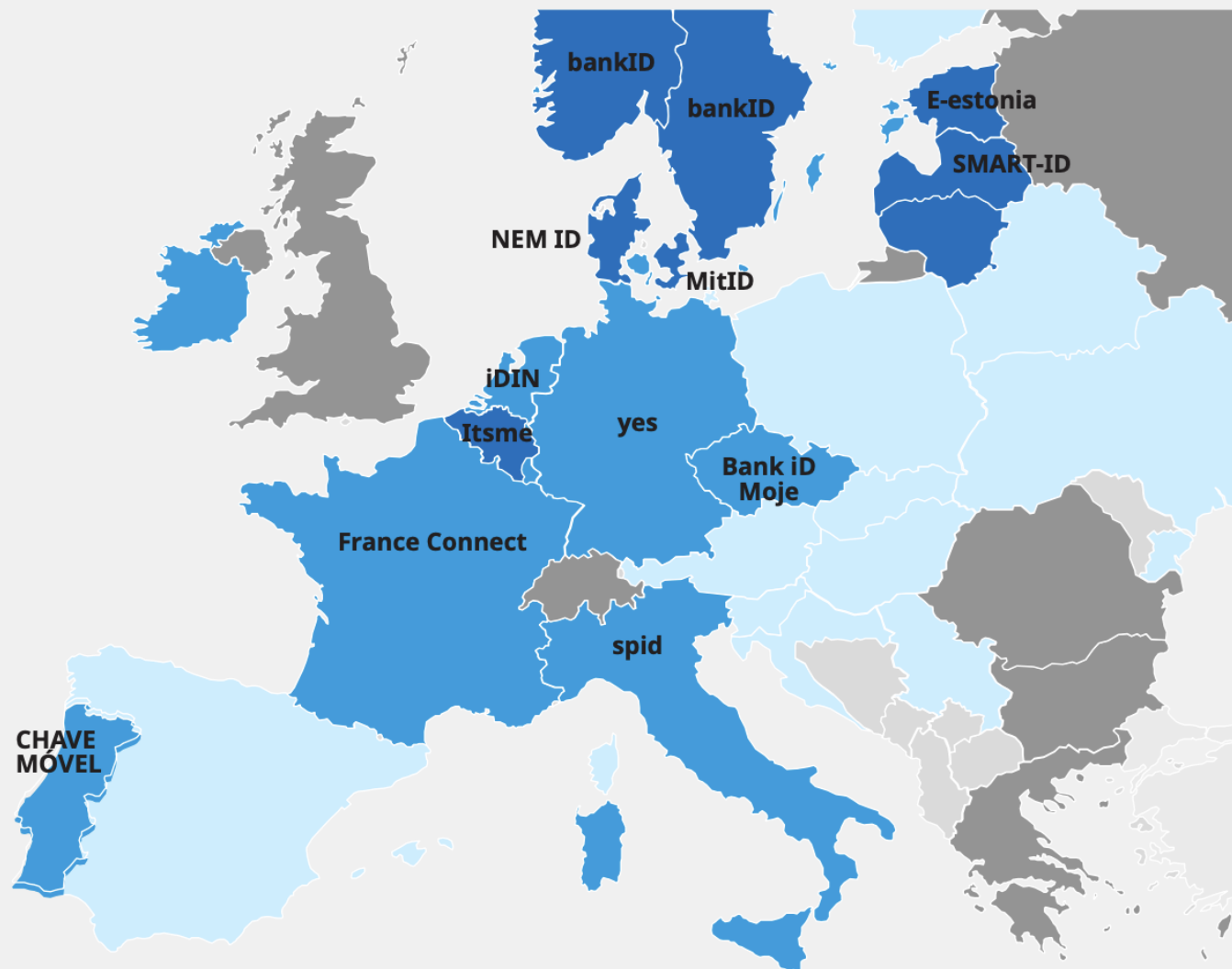
Driven by need to **reduce the costs of ID verification** (reduced from \$5 to \$0.70 per customer due to Aadhar)

#identiverse

EU



Current digital identity landscape in Europe

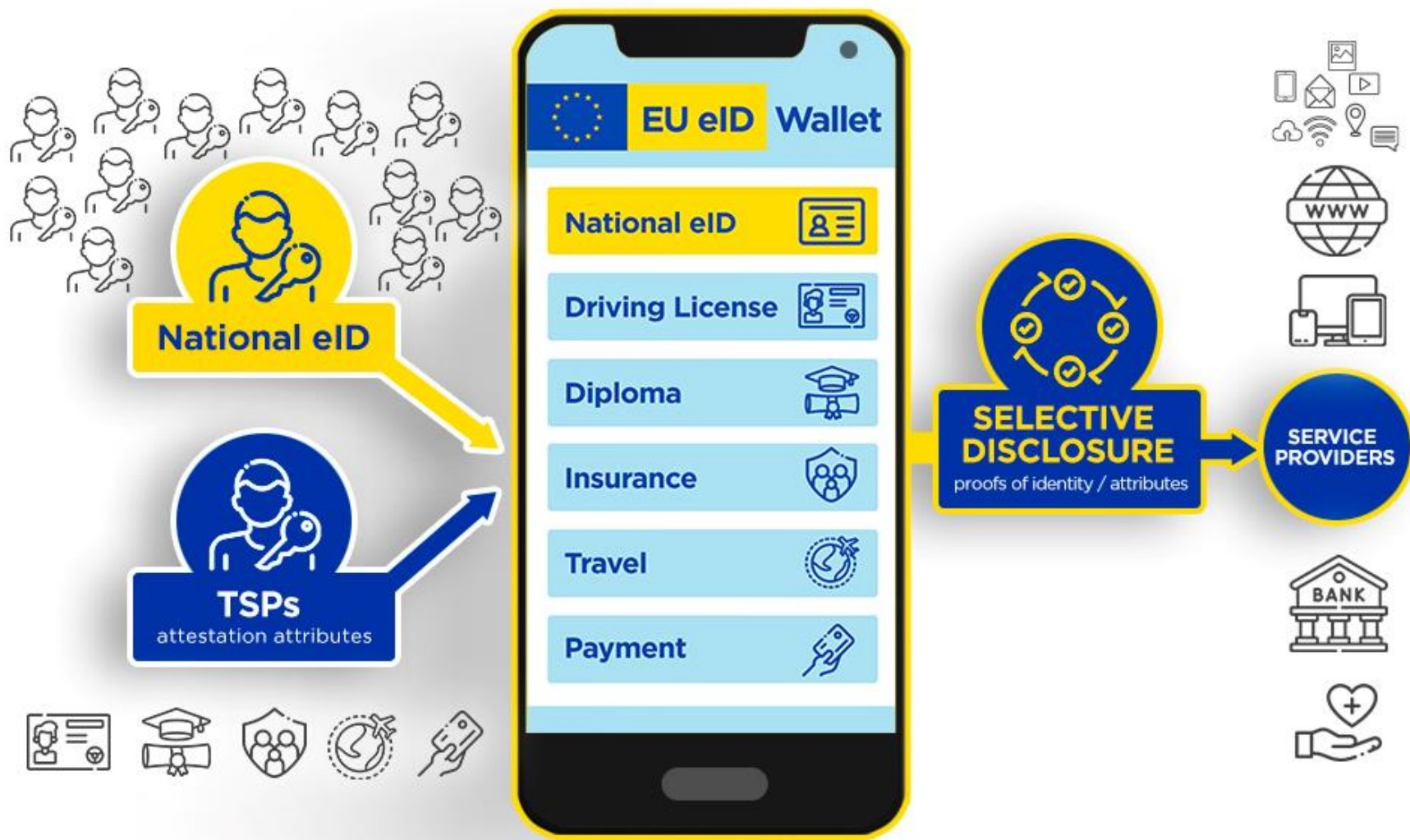


- Mature¹ Digital Identity Scheme
- Active² Digital Identity Scheme
- Active² government e-ID but no active² digital identity scheme
- No e-ID or digital ID scheme²
- No data provided by EU

1. Mature scheme with over 40% adoption; 2. Active scheme/e-ID with over 5% adoption

Source: Expert interviews, EU publications, EU eID User Community.

EU



Appetite for the EU Digital ID Wallet

Could EU citizens use a Digital ID wallet?

66% would use it.

THALES

BY 2030
the long-term objective is to have
80% of EU citizens
(around 400 million people)
using an identity wallet

Ursula Von Der Leyen
President of the EU Commission

Mitek



The benefits of electronic identification

Convenient

The automated transfer of data makes transactions faster and less prone to manual data entry mistakes and comes from a trusted source. Convenience for SME customers is also improved (e.g. no need to create an account)

Secure

eID benefits from strong authentication. It is a safeguard for SMEs and customers.

Up-to-date

An eID can be revoked (e.g. in case of theft) and more easily updated (e.g. change of address) allowing SMEs to always access the latest accurate information

Flexible

eID adapts to your needs. Private solutions can be tailored to your services.

Cost saving

If you reuse a national eID or use an identity provider, you can save significant cost in identity management activities. Efficiency gains also create savings.



Time saving

Services can be accessed remotely, reducing waiting time, commuting, delivery delays, printing of documents.

eIDAS: HOW IT WILL BENEFIT YOUR BUSINESS ?



PAYING TAX



SIGNING CONTRACTS



TENDERS



INVOICING



A SWEDISH COMPANY WANTS TO PARTICIPATE IN
A PUBLIC CALL FOR TENDER IN CROATIA

BEFORE

Danger of **UNCERTIFIED WEBSITE**



The Swedish SME **IS NOT AUTHENTICATED** might be fake



EXCHANGE OF PHYSICAL DOCUMENTS...



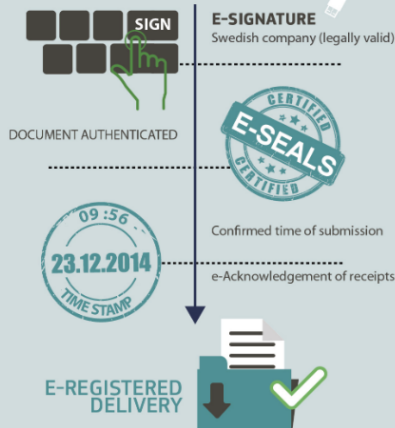
NOW

WEBSITE
AUTHENTICATION

E-ID
AUTHENTICATION



CREATION OF THE E-DOCUMENT



LESS DOCUMENT STORAGE



LESS TIME

1 - 2 WEEKS



HOURS - FEW DAYS

LOWER COST

€ 50 - 100



€ 10 - 20

Source: European Commission



ec.europa.eu/digital-agenda/en/trust-services-and-eid



Australia - identity initiatives

Federal

At the federal level, this investment has included the creation of myGovID for identity verification to access government agency services and the Digital Transformation Agency's development of the Trusted Digital Identity Framework (TDIF), an accreditation scheme for digital identity services.

State

At the state level we have seen various initiatives to digitise identification documents and other credentials. For example, Service NSW and Service SA have both launched digital driver licenses, with Victoria and Queensland expecting to rollout similar programs in 2023 and 2024.

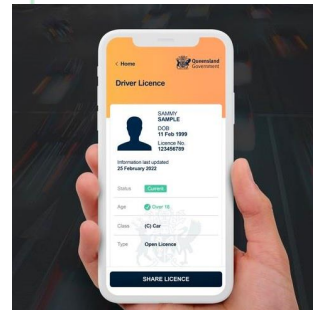
More broadly, the Queensland government released a Request for Proposal in December 2022 to develop a digital ID strategy and roadmap while Service NSW recently announced the selection of Mattr as its technology partner for a whole-of-government digital ID platform.¹⁵

Private

We have also seen solutions developed by the private sector, such as ID by Mastercard, Australia Post's Digital ID and a digital wallet from MEECO for storing verified credentials. There are also more traditional identity verification services for regulated know-your-customer use cases, but these can be costly and generally offer end users limited transparency into how their PI is being used.



Critical National Infrastructure
myGov User Audit
January 2023
Volume 1: Findings and recommendations



Australia - ready fo economy-wide Digital ID

1.9B Identity Transactions p.a.

If a strong digital ID system is implemented, the Australian economy can benefit with productivity gains estimated at 3-4% GDP.

 **ConnectID**
...is equipped to do just that.

UP TO
\$50M

The potential fines that can be incurred following legislation introduced in 2022.

UP TO
10M

Australians affected by five data breach instances in the latter half of 2022.

UP TO
70%

Of total onboarding and regulatory compliance costs can be cut with digital ID



Countries with higher digital ID adoption rates have faster onboarding processes.

MORE THAN
\$600M

Invested by the government to advance digital ID initiatives since 2015.

\$4.4M

The estimated average cost of a data breach in Australia for businesses in 2022.

US - Mobile driver's licenses



HOME >> HARDWARE

JAN
09
2023

HARDWARE

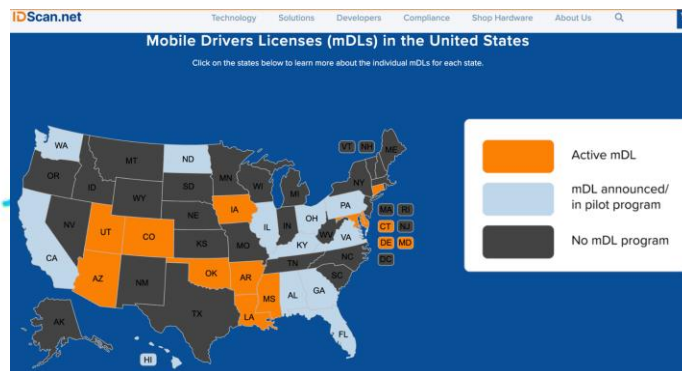
Roughly 30 States Are Testing Adoption of Mobile Driver's Licenses



Technology to authenticate electronic identification is becoming widely available.



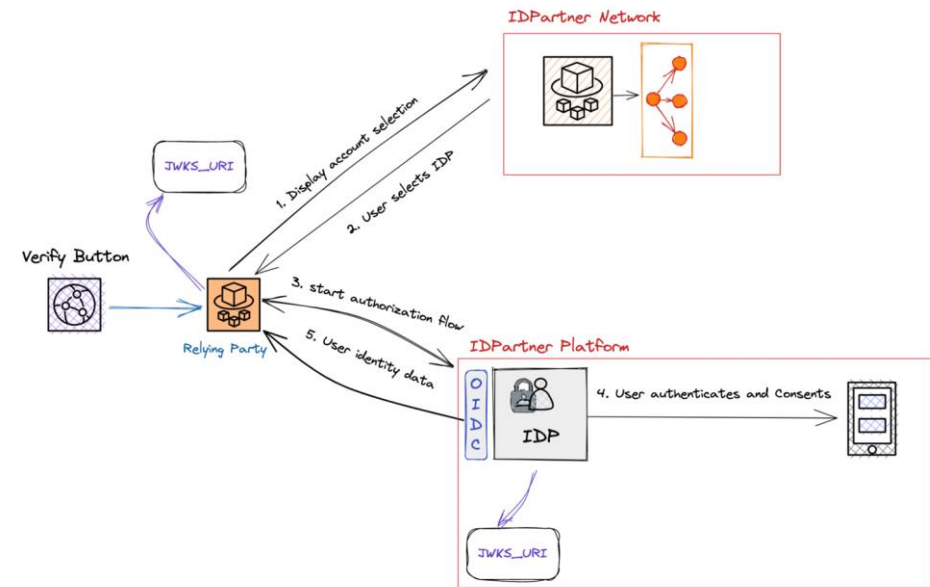
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US - Private sector led Digital ID - ID Partner

IDPartner

Reusable Digital Identity,
powered by banks.



Global initiatives

Global identity initiatives - GAIN

Connecting islands of trust

GAIN DIGITAL TRUST

How Financial Institutions are taking a leadership role in the Digital Economy by establishing a Global Assured Identity Network



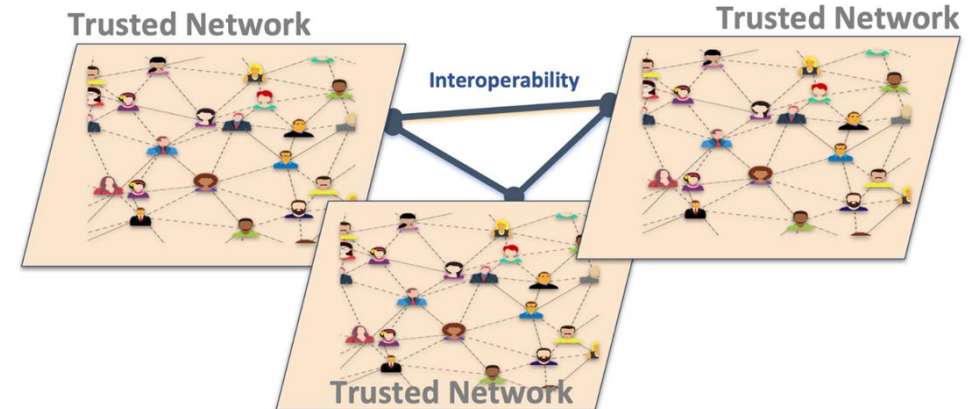
With over 150 co-authors

The Contributors

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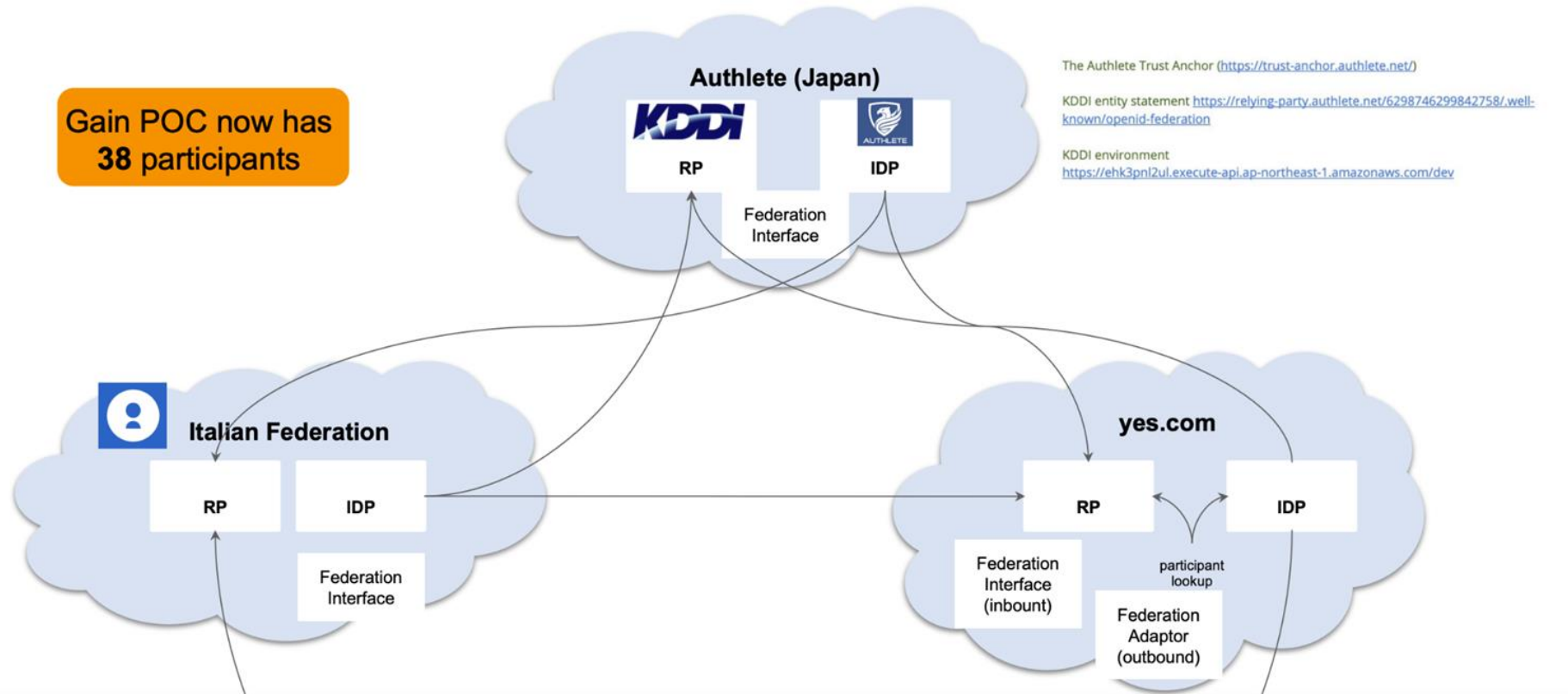
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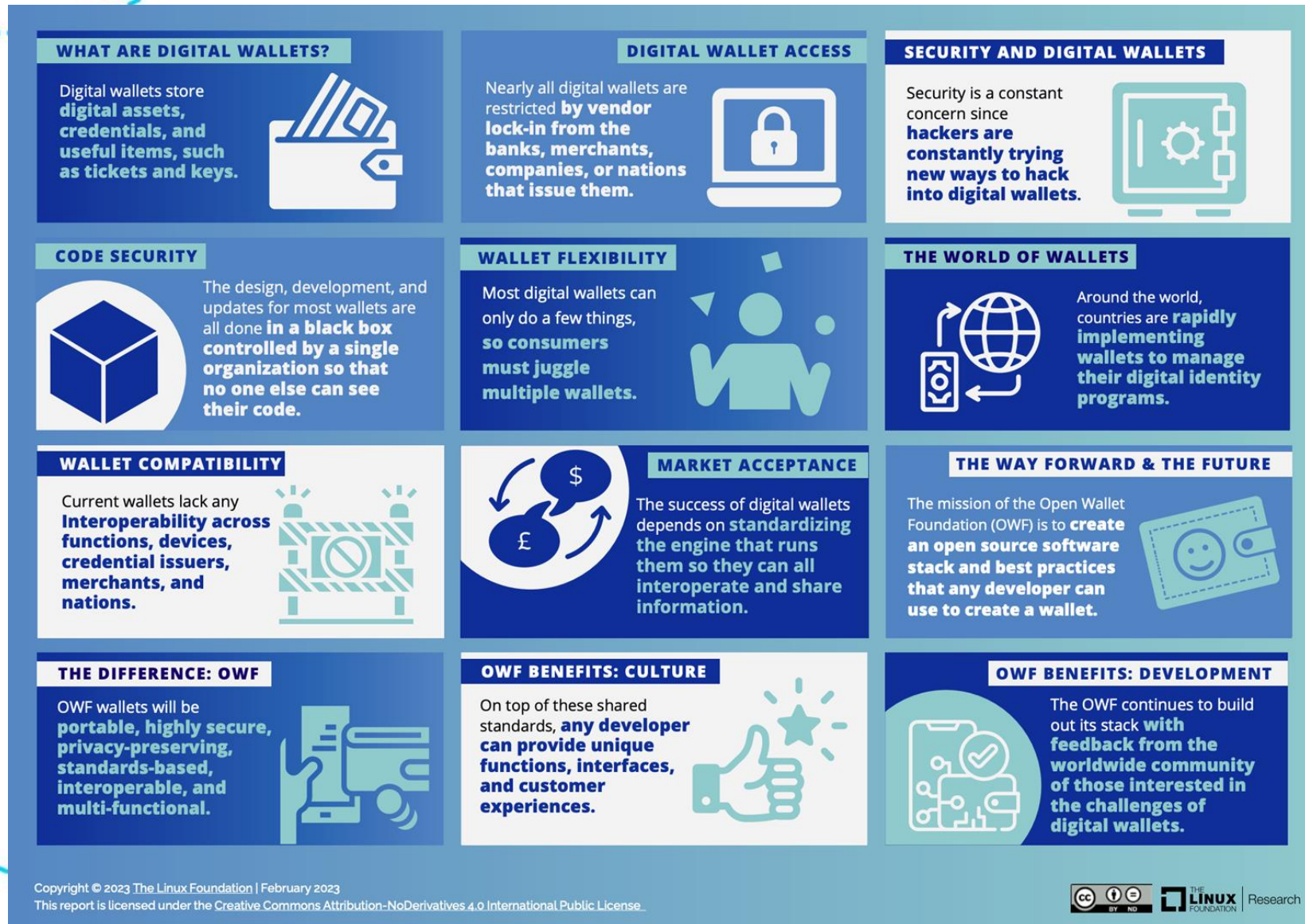


Global identity initiatives - GAIN - PoC

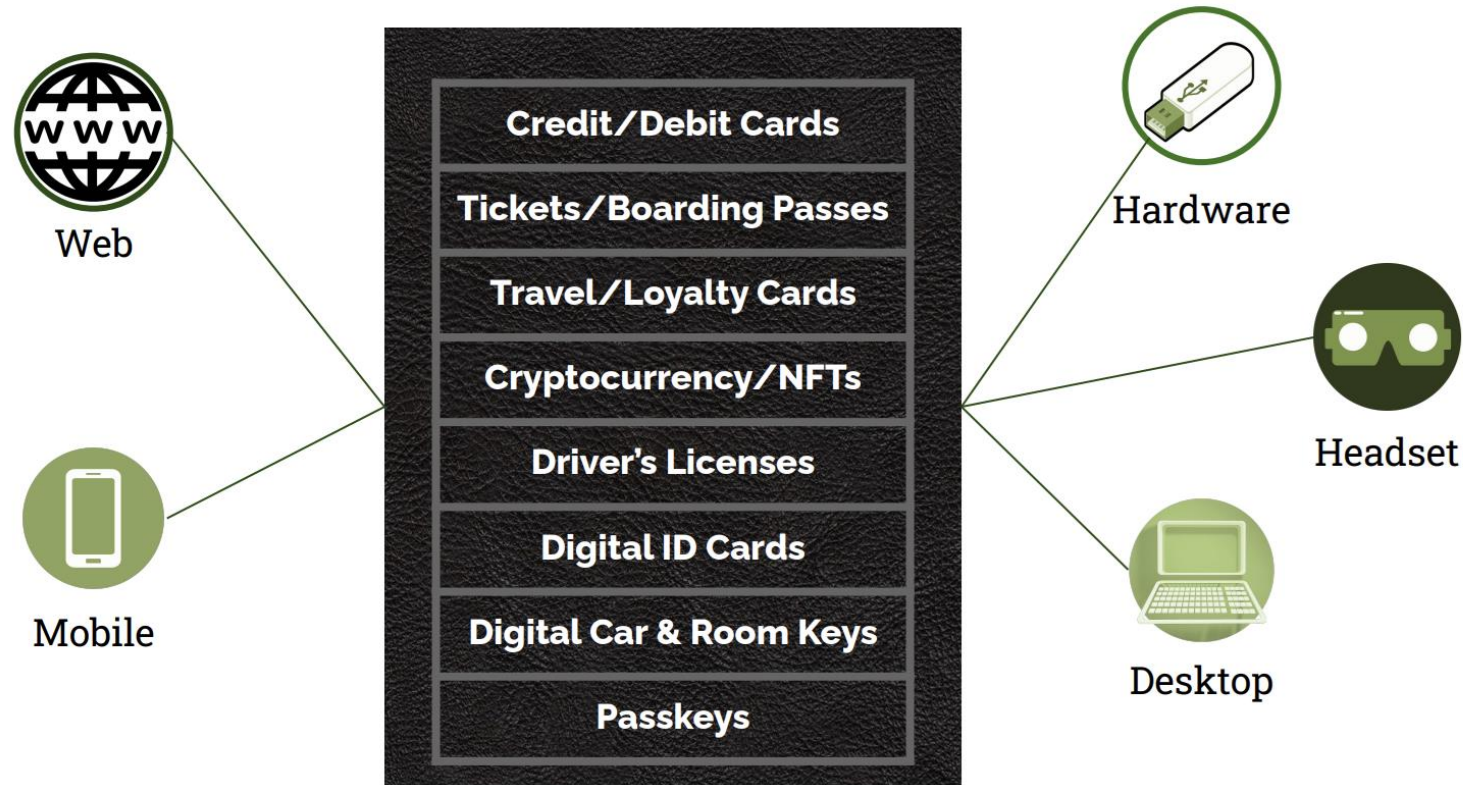
Gain POC now has
38 participants



Global identity initiatives - Open Wallet Foundation



Global identity initiatives - Open Wallet Foundation



Premier Sponsors



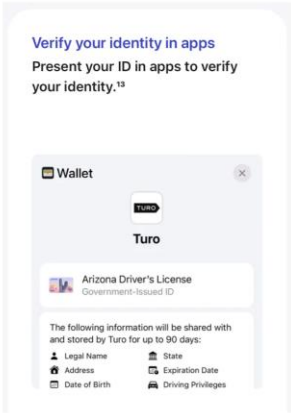
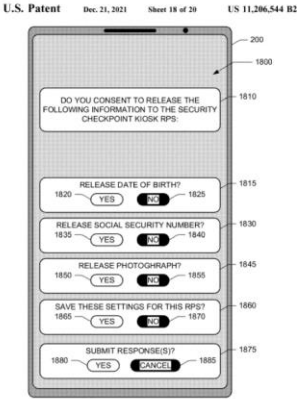
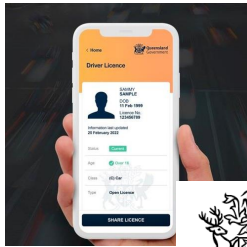
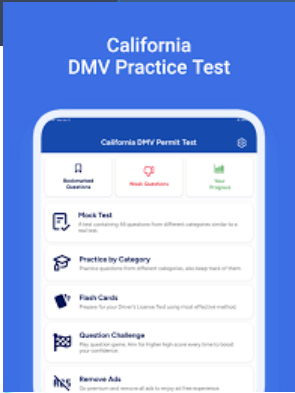
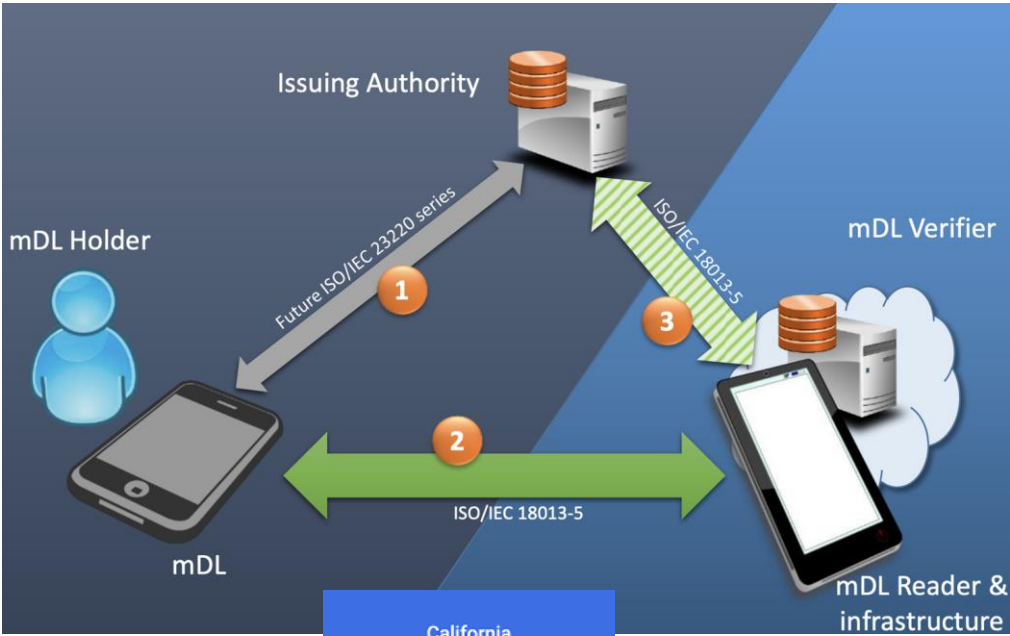
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Associate Sponsors



Global identity initiatives - Mobile driver's licences





More observations...

Digital Identity market will continue to grow

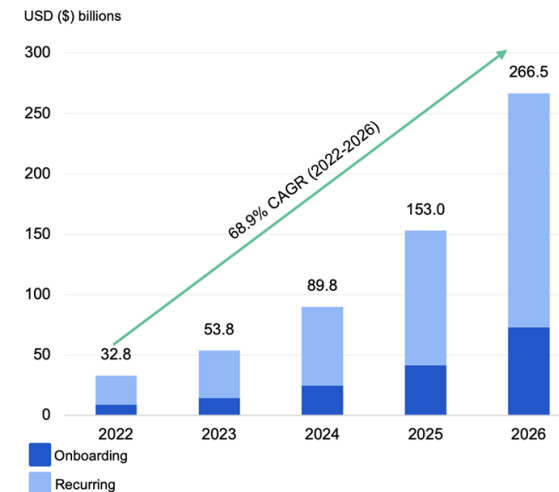
Increasing pressure:

- privacy
- security
- digitisation
- customer expectations

The global market size for reusable identity will reach \$266.5B by 2027

This nascent market is poised for strong growth by 2027 with a 68.9% CAGR, driven by the predicted expansion from high assurance verticals into all verticals

Reusable Identity TAM (2022 - 2026)¹



Notes: 1. Model is built on moderate adoption and moderate pricing
© Liminal Strategy Partners, LLC | February 2022

TAM Scope

- **TAM represents the size of the global reusable identity market** and analyzes the market opportunity onboarding and ongoing support across eight core verticals: financial services, travel, digital commerce, entertainment, sharing economy, healthcare, social media, and government.
- **Onboarding use cases** include identity verification & KYC, document verification, identity proofing, biometrics, and fraud prevention.
- **Ongoing use cases** include authentication, fraud prevention, account monitoring, compliance and transaction monitoring, customer IAM, eSignature, and data privacy and consent management.

TAM Analysis

- TAM is \$32.8B in 2022 and projected to grow at a CAGR of 68.9% to exceed \$1T by 2029. Strong growth is projected beyond 2026, driven by network effects from the increased adoption.
- Onboarding initially accounts for 27.2% of TAM but its percentage slowly decreases over time, creating a shift towards ongoing support.
- Ongoing support will reach \$193.8B by 2027. This covers use cases such as re-authentication, transaction verification, and account recovery.

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EU EIDAS 2

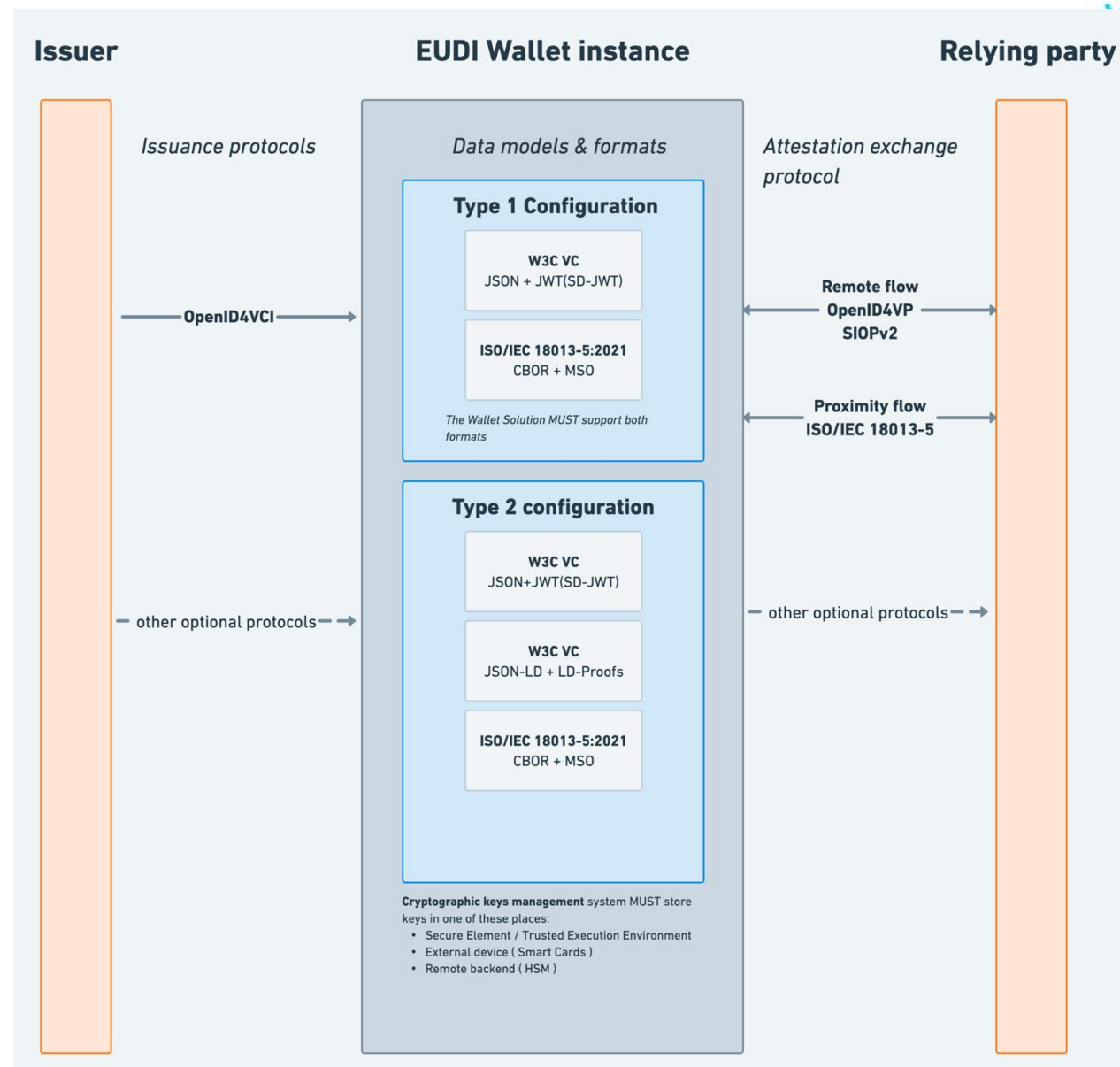
Starting to drive identity related standards and architectures globally:

- wallets
- OpenID4vp
- OpenID4vci
- ISO 18013-5
- SD-JWT
- OWF
- Trust management

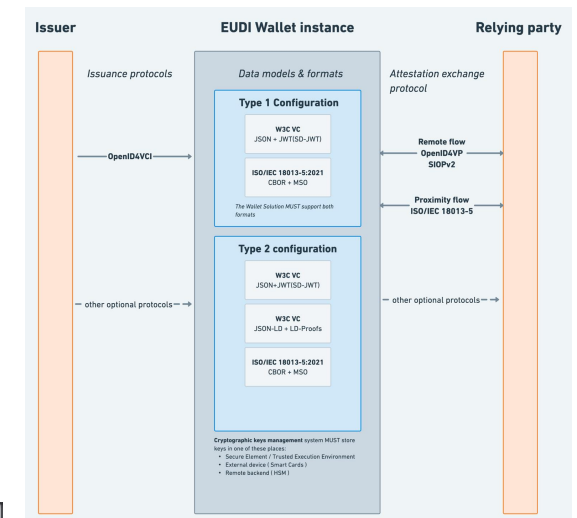
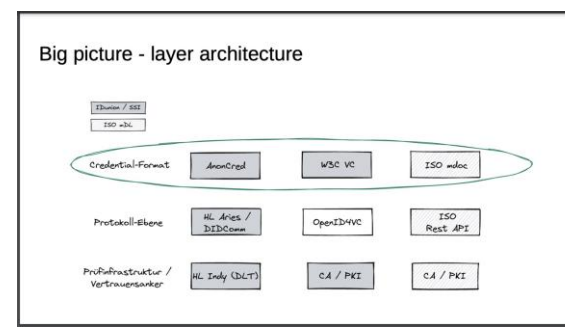
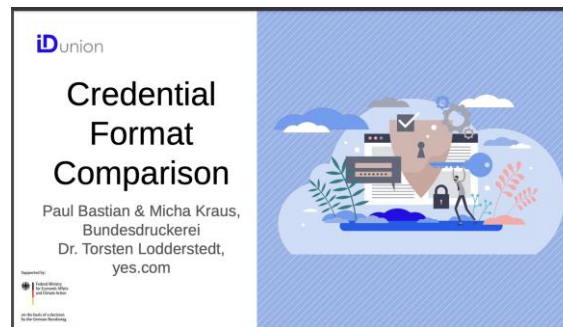
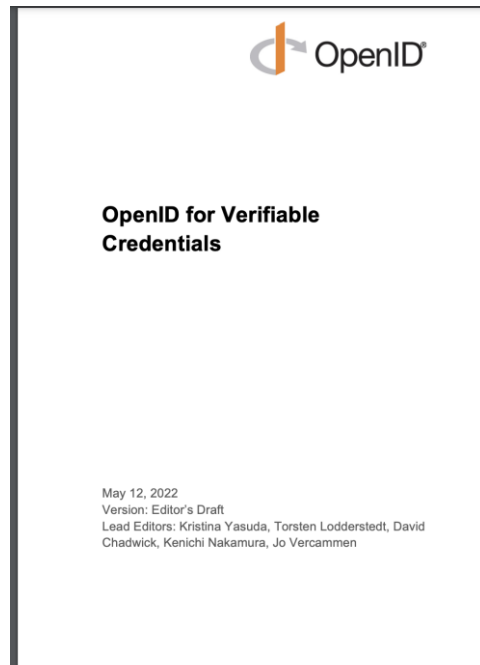
Why the European Digital Identity Wallet will change the world.



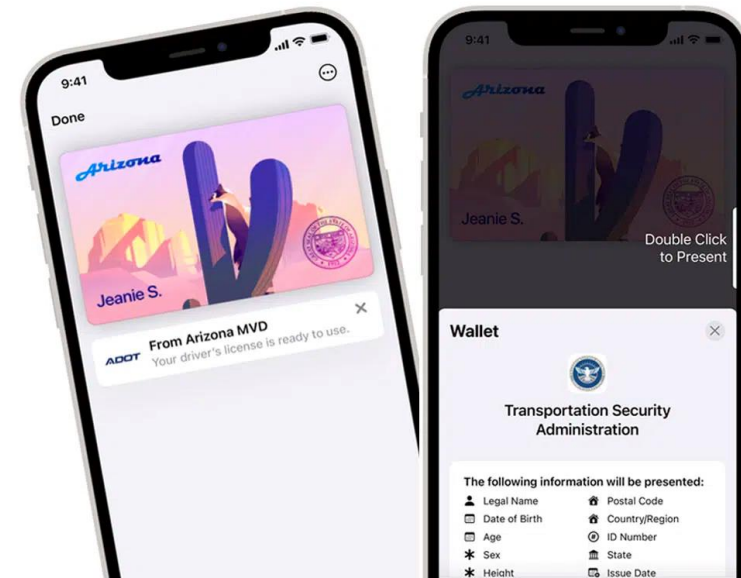
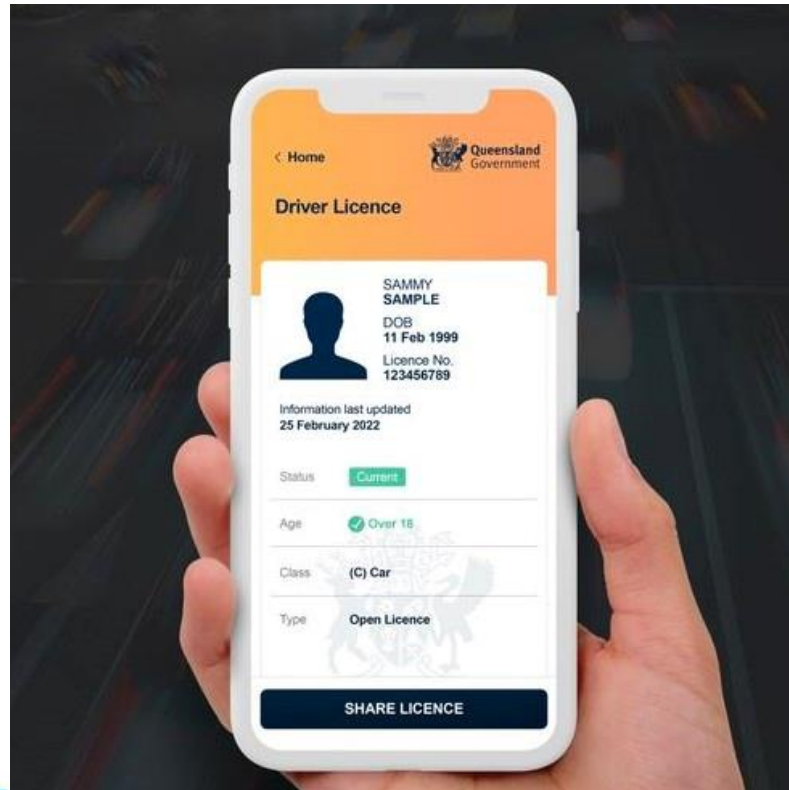
eIDAS



ISO MDL + OpenID + W3C VC practical convergence

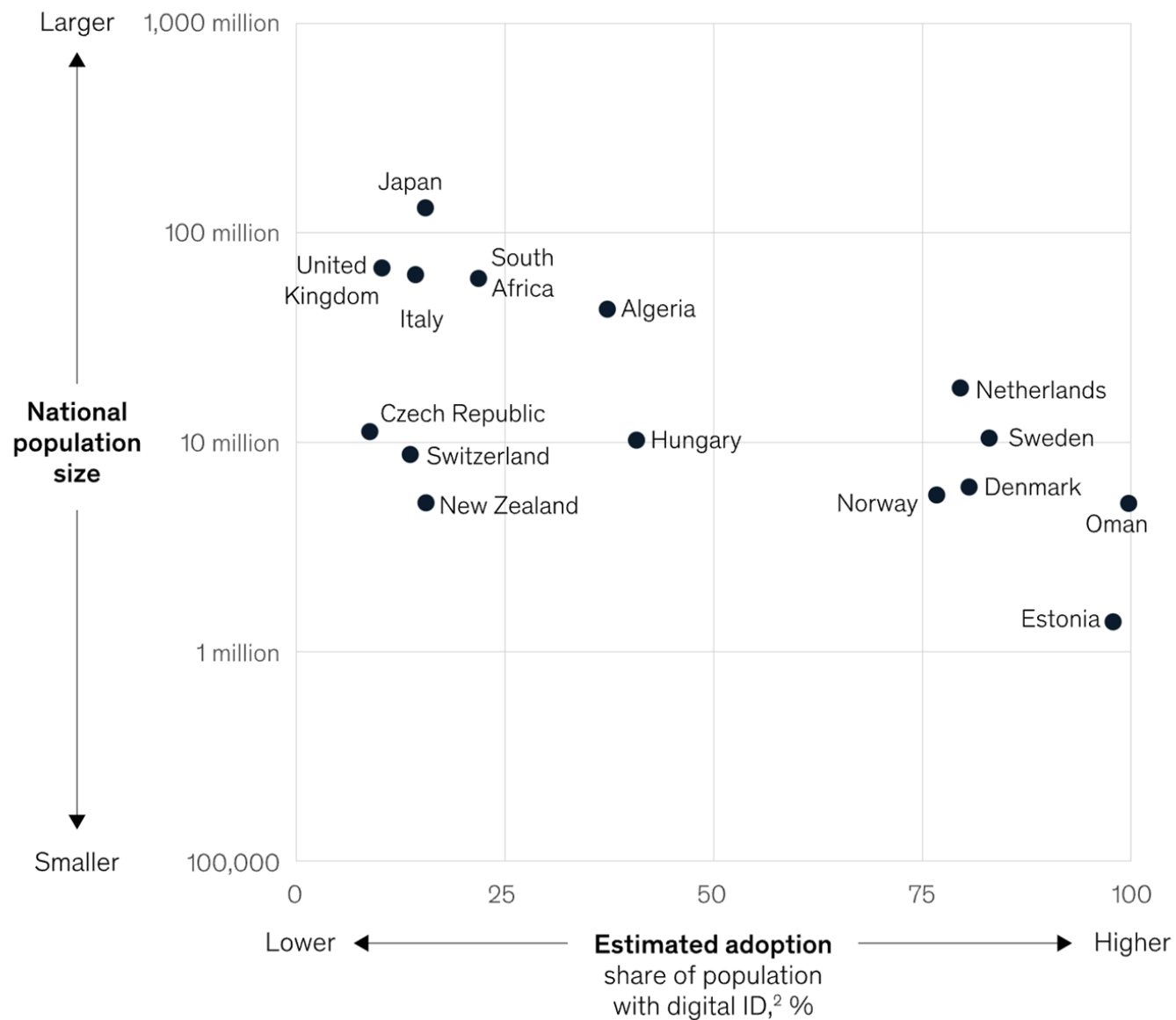


Digital driver's licenses - rollout will continue



Adoption - coverage

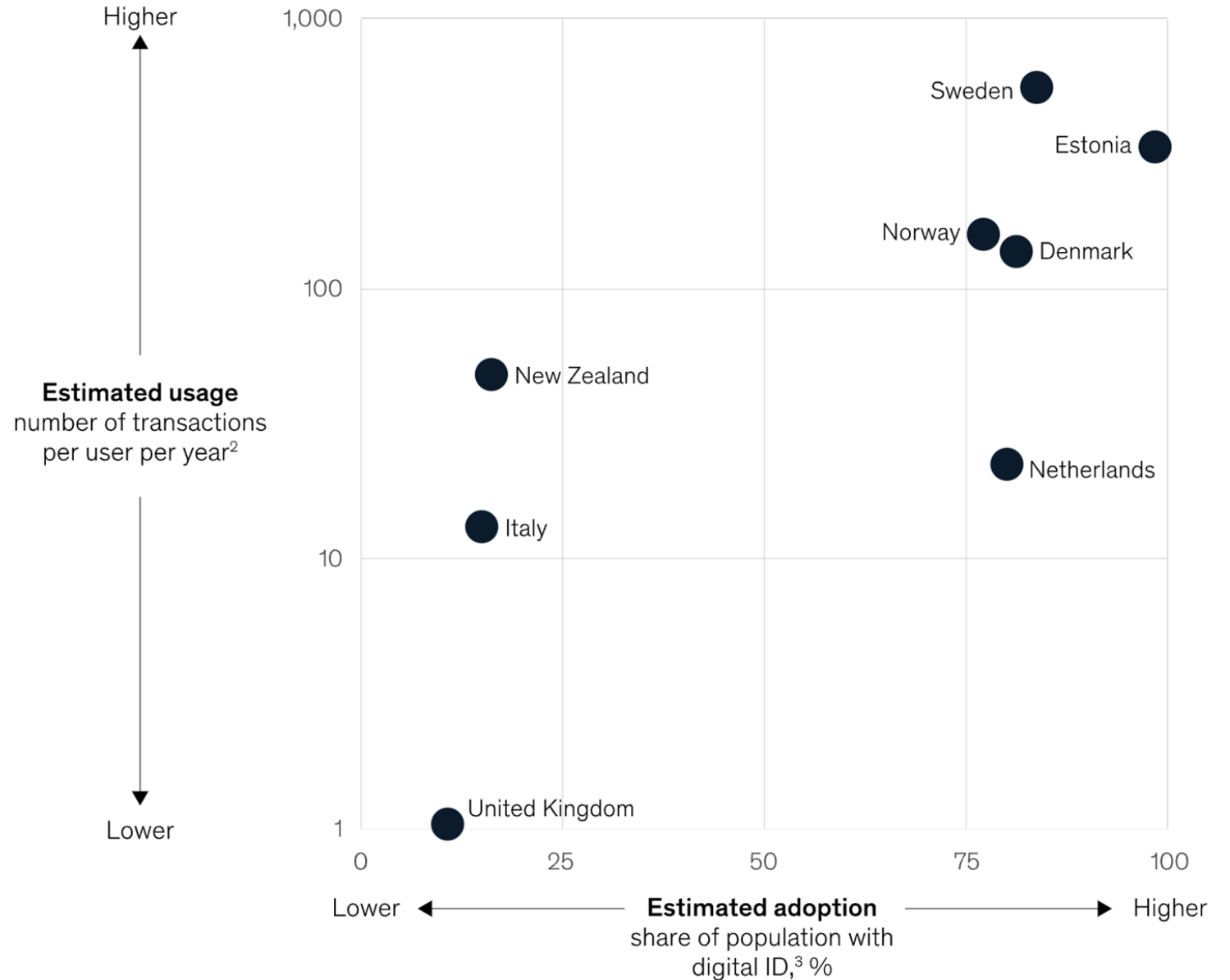
Population size of selected countries and estimated coverage of digital ID solutions, by country¹



McKinsey
& Company

Adoption - usage

Estimated adoption rate and usage of selected digital ID solutions, by country¹

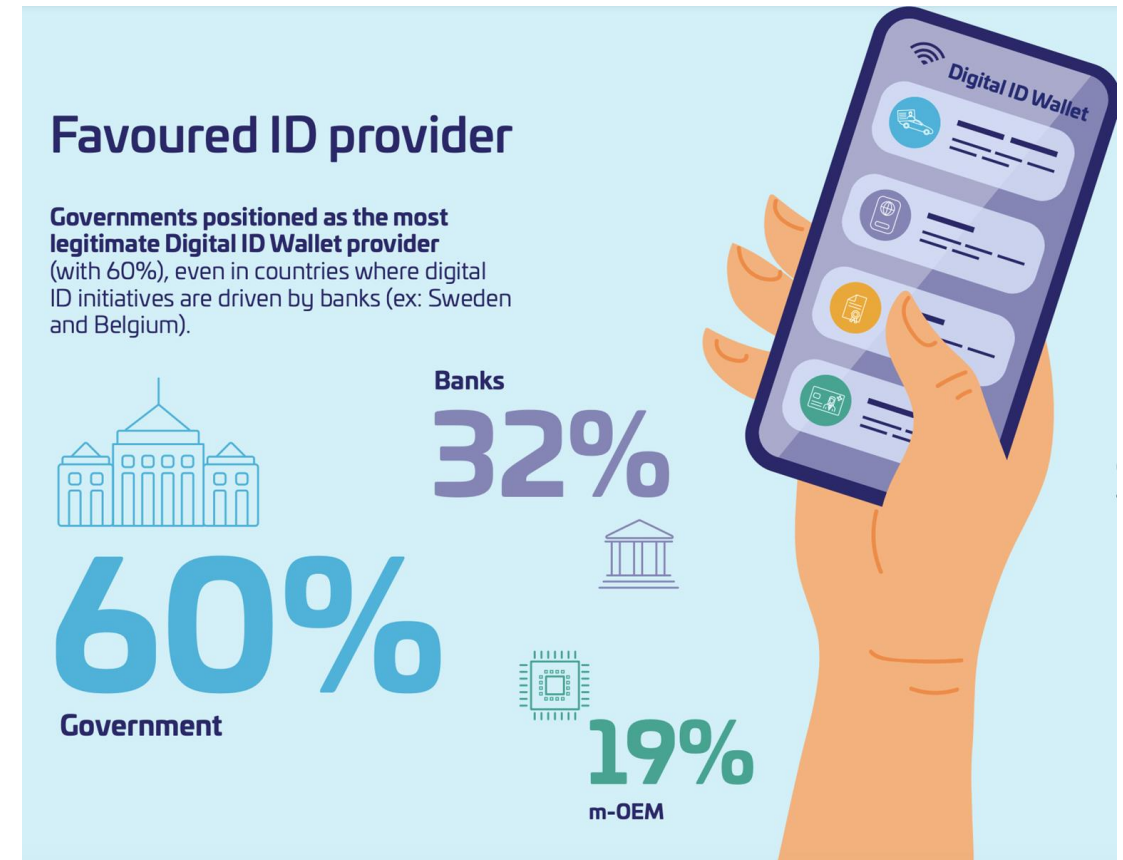


McKinsey
& Company

Choice of provider

- Government?
- Private sector? Banks?
- Tech platforms?
- Others?

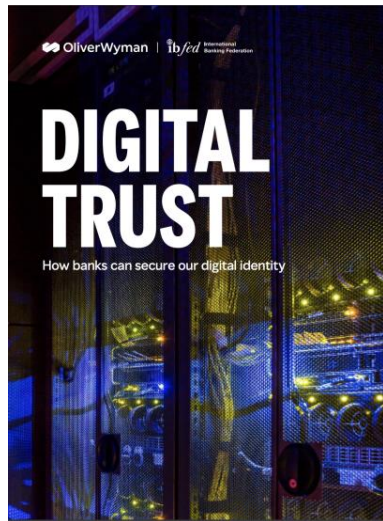
Use case
and jurisdiction dependent



THALES

#identiverse

Other observations..



- Banks can establish a cross-sector scheme, even without a government e-ID



- Banks, payment providers and tech companies are all able to deliver schemes (in China's case, with the state)
- Countries with large populations can accommodate competing schemes with different approaches



- Financial services can use their data to provide 'rich' identity services, e.g. frictionless insurance applications
- Payment service providers are moving into digital ID



- Collaboration between banks and telcos can accelerate schemes, supported by a history of collaboration



- Leveraging rich data from across sectors unlocks a range of services but presents a data risk



- Large countries unlikely to develop a single overarching scheme



- A scheme without good relying party use cases will struggle to build adoption



- Government e-ID can see fast adoption



- Digital identity schemes can be piloted with a smaller user base, like government officials



- Biometrics (including voice) are needed for enrolment where there is limited penetration of government IDs



- Enrolment using biometrics can provide citizens who previously had no government ID with a digital identity



- Universal adoption of an e-ID can transform public services like voting
- Government can create a digital ID scheme (leveraging e-ID), enrolling private companies as relying parties



- A government-led ecosystem can include private sector digital identity service providers



- Government can support private sector schemes by adopting for government use cases and investing



THANK YOU!

Questions?