

The payment sector and the European Digital Identity Wallet (EUDIW): a new era of innovation?



Speaker

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R&D Manager at Worldline Labs

Payments to grow your world

Rise
2024

Payments and Digital Identity

A new area of
innovation?



Digital Identity

Ride the momentum

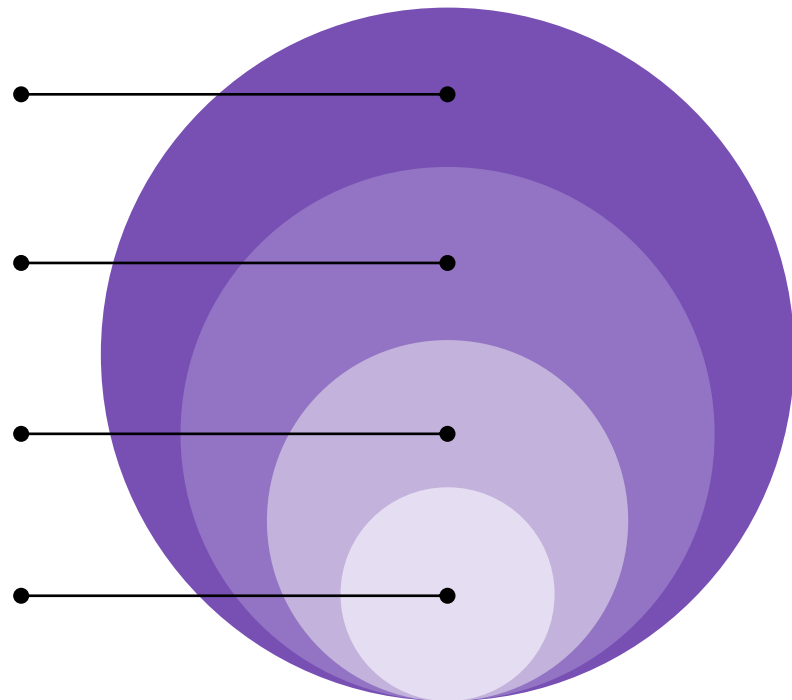
Rise
2024

Taking advantage of **mobile wallet & biometrics, decentralized** approach, **zero knowledge**. Both **IRL** and **online**

A **means** for people **to prove digitally, unambiguously** who they are

A **digital** version of a physical **identification document**

Digital information about an individual or organisation



Many countries are pushing digital identity



THE WORLD BANK
IBRD - IDA

In Europe, all the companies that implement SCA will have to accept eIDAS identification

Many challenges identity theft, regulation, fears of state control, data validation, interoperability and accessibility

Digital Identity Wallet in action

Ride the momentum

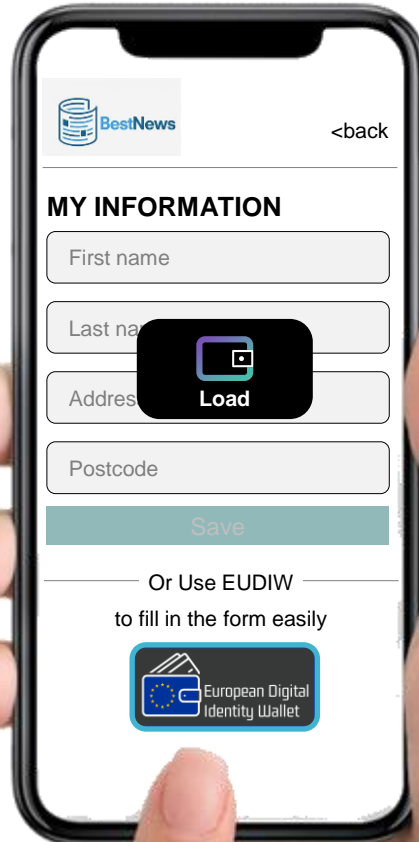
Rise
2024

A hand holding a smartphone displaying a mobile application interface. The app is titled 'BestNews' and shows a form for 'MY INFORMATION'. The form includes input fields for 'First name', 'Last name', 'Address', and 'Postcode', followed by a 'Save' button. Below the form, there is a section titled 'Or Use EUDIW' with the text 'to fill in the form easily' and a logo for the 'European Digital Identity Wallet'.

Digital Identity Wallet in action

Ride the momentum

Rise
2024



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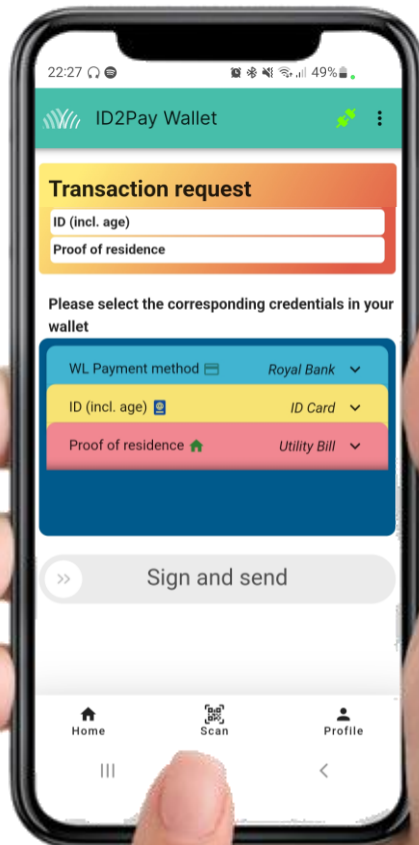


Merchants asks access
to **Certified data** by
trusted issuers

Digital Identity Wallet in action

Ride the momentum

Rise
2024

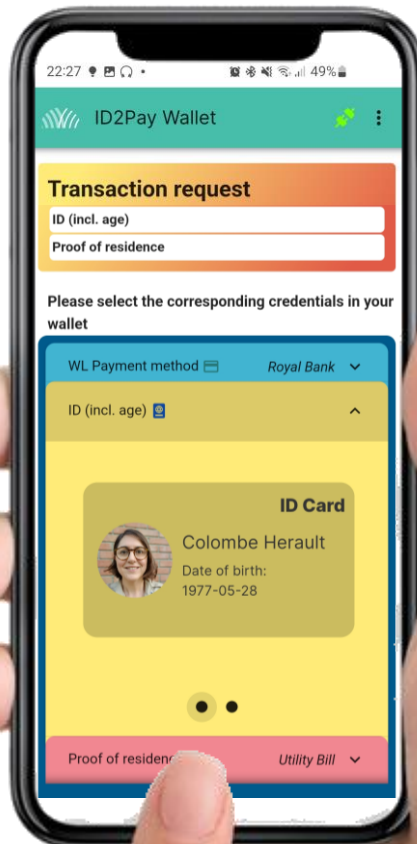


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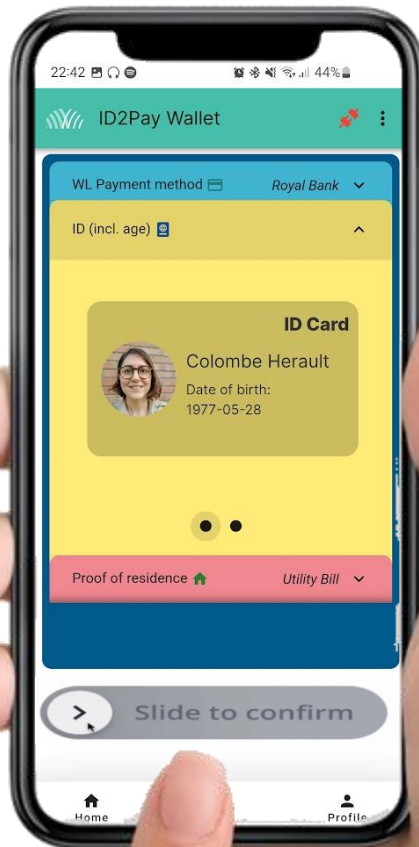


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Merchants access to
Certified data by
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Customers are
In Control of their data
and share it with
trusted merchants

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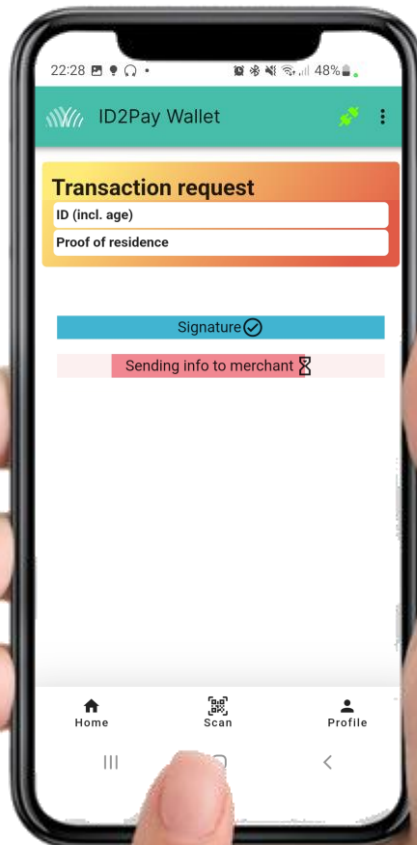
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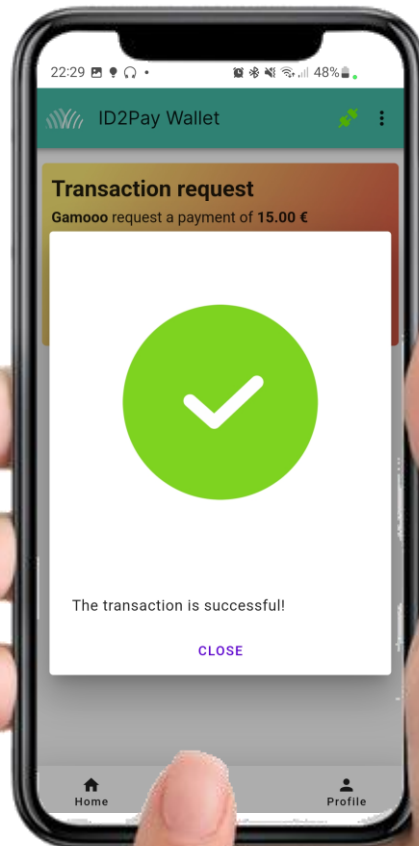
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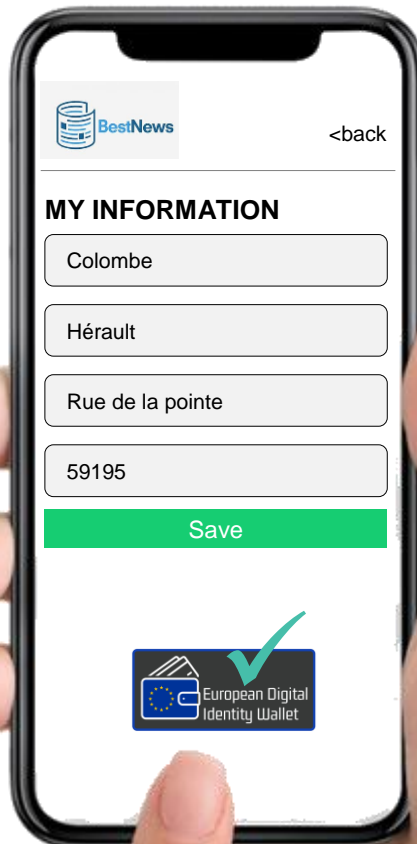
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Merchants asks access to **Certified data** by **trusted issuers**

Signed by issuers & customer

Customers are **In Control** of their data and share it with **trusted merchants**

eIDAS 2.0: a new ecosystem is emerging

Embodied by EU Digital Identity Wallet (EUDIW)

Member States **obliged to issue** EU DI Wallet

Identification & Authentication

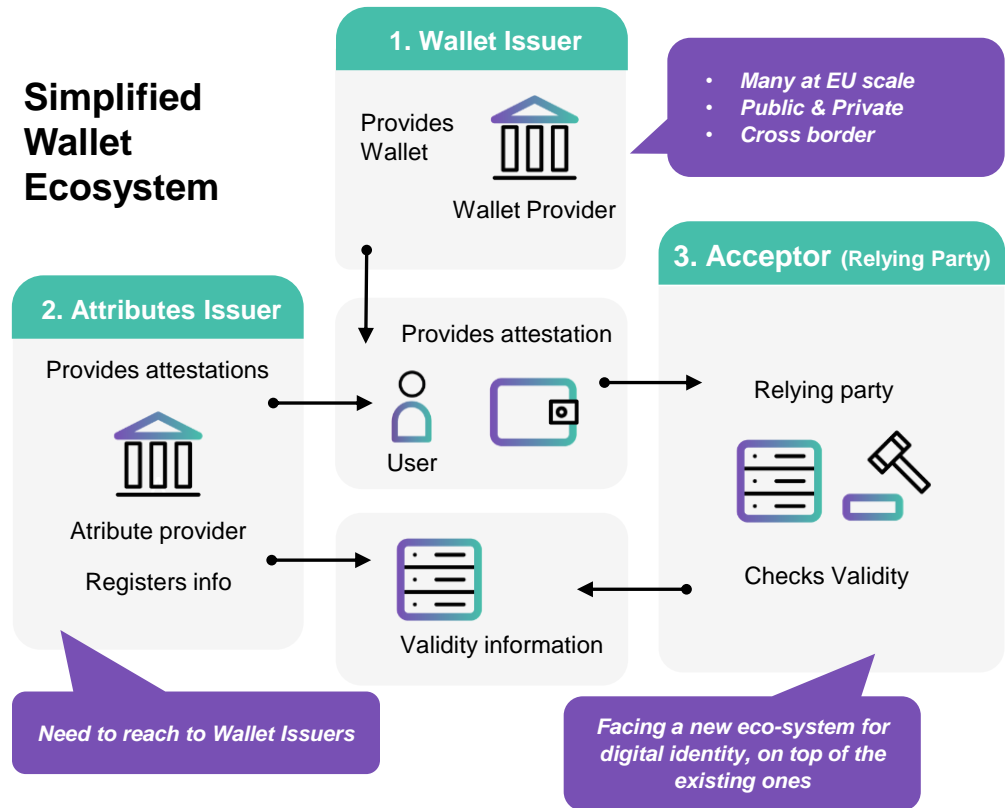
Private services **obliged to accept** EUDI Wallet in case of strong authentication by law

A new **ecosystem to exchange attributes** beyond identification & authentication

Available **online & offline**

Qualified electronic signature

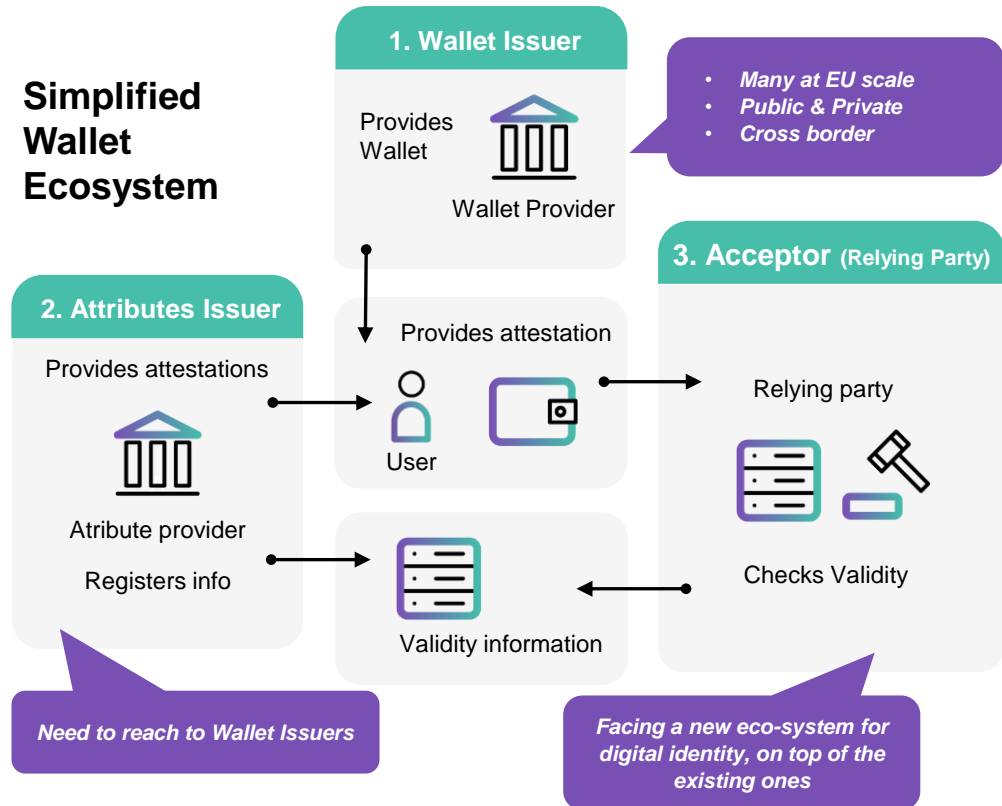
Simplified Wallet Ecosystem



eIDAS 2.0: a new ecosystem is emerging

Embodied by EU Digital Identity Wallet (EUDIW)

Simplified Wallet Ecosystem



What are the changes for
Merchants and banks in the
EU DI Wallet ecosystem?

How will the EU DI Wallet
transform the way users
perform **payments** and the
way payments are accepted?

Digital Identity is exploding



Digital Identity is exploding



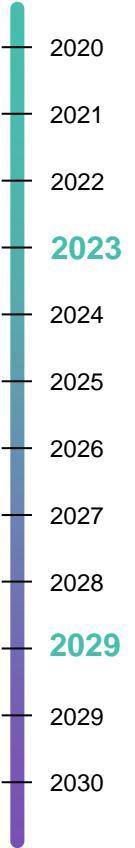
66% of Europeans say they would use the Digital Identity Wallet

Adult population have digital identity
99% of Indian
90% of Swedish

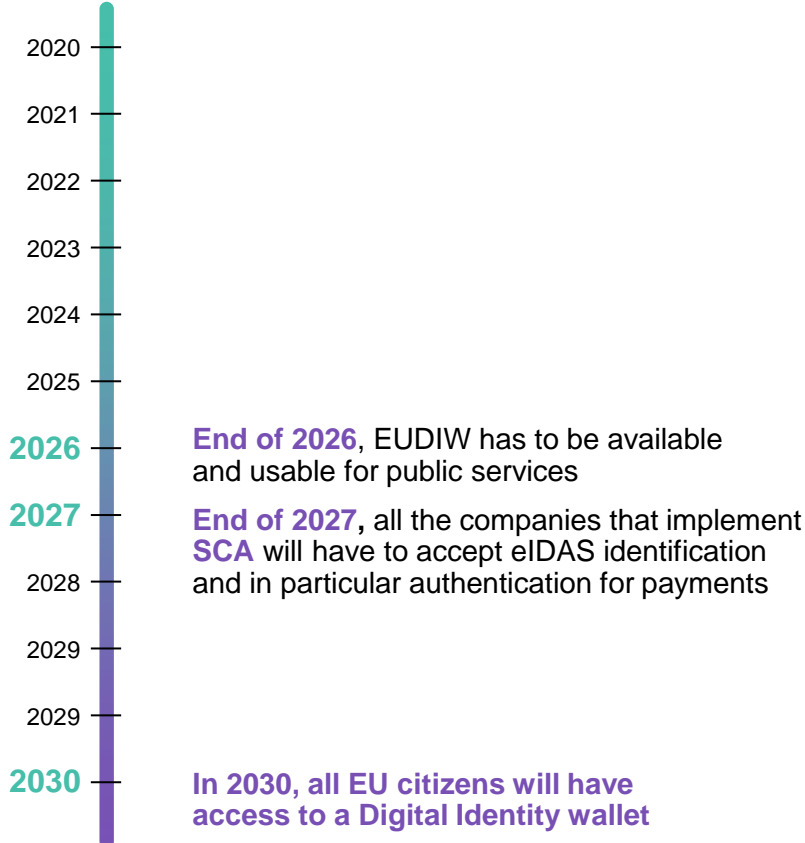
By 2029, there will be 1.5 billion digital identity wallets held by people around the world.

Countries could unlock economic value equivalent to between 3% to 13% of GDP in 2030 from the implementation of digital ID programs

The identity as a service (IDaaS) market size is expected to exceed \$25 billion by 2030.



Digital Identity is exploding



Market opportunities

Digital Identity and Digital Payments interacting

Travel and hospitality

To make reservation and Check-in
Share driving license, insurance to rent a car,
Loyalty program Cross border



Mobility – Telco Energy & utilities

Authentication and
credentials verification
Signature of contracts Loyalty,
Call center support



Healthcare

Fraud or misuse management
Access sensitive health data or treatments
Traceability of treatments
(vaccination record)
Care providers authentication



Merchants -online and in store commerce

Improve CX during shopping with seamless
Identification, Age verification, IBAN sharing for
Account-to-Account payment, shipping preferences
Increase customer knowledge with fast enrollment
and KYC



Financial Services

For banks and insurance, at enrollment,
for digital signature, Strong Customer
Authentication, Attribute issuing (IBAN,
Age, User postal address), Wallet
issuing & Payment , Credit loan and
scoring



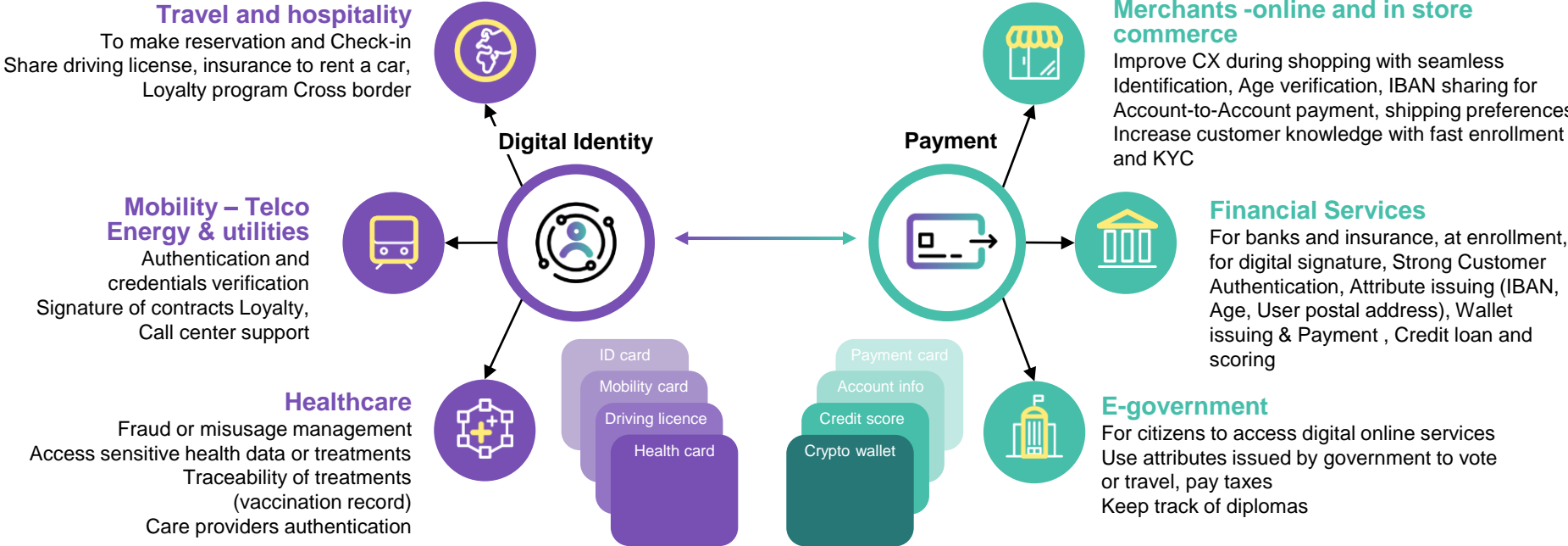
E-government

For citizens to access digital online services
Use attributes issued by government to vote
or travel, pay taxes
Keep track of diplomas



Market opportunities

Digital Identity and Digital Payments interacting



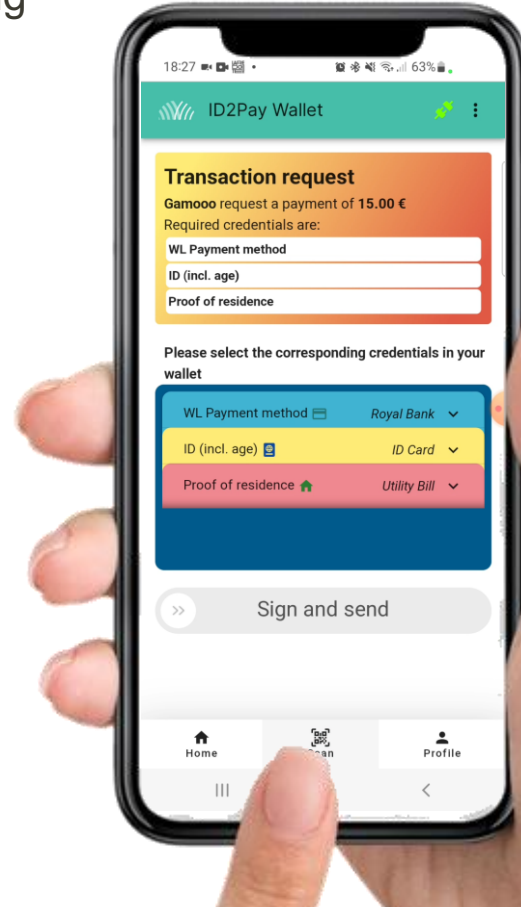
Market opportunities

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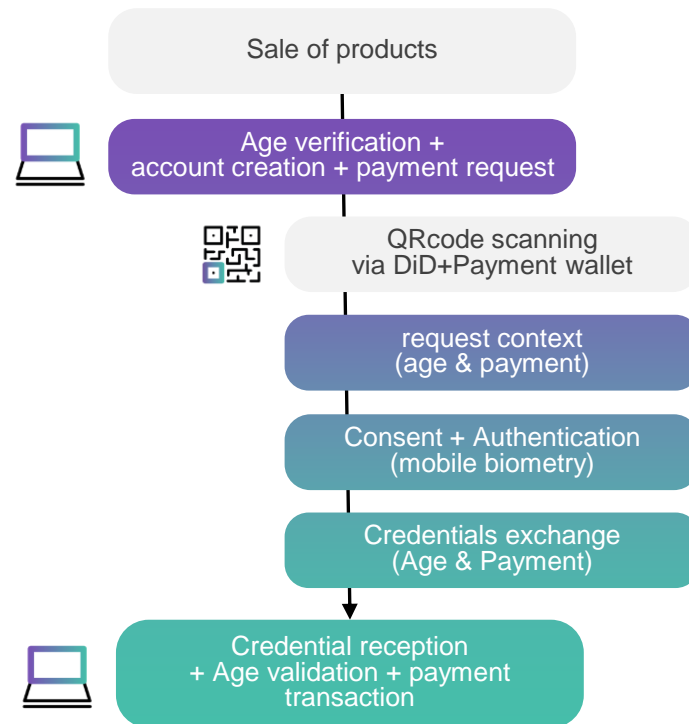
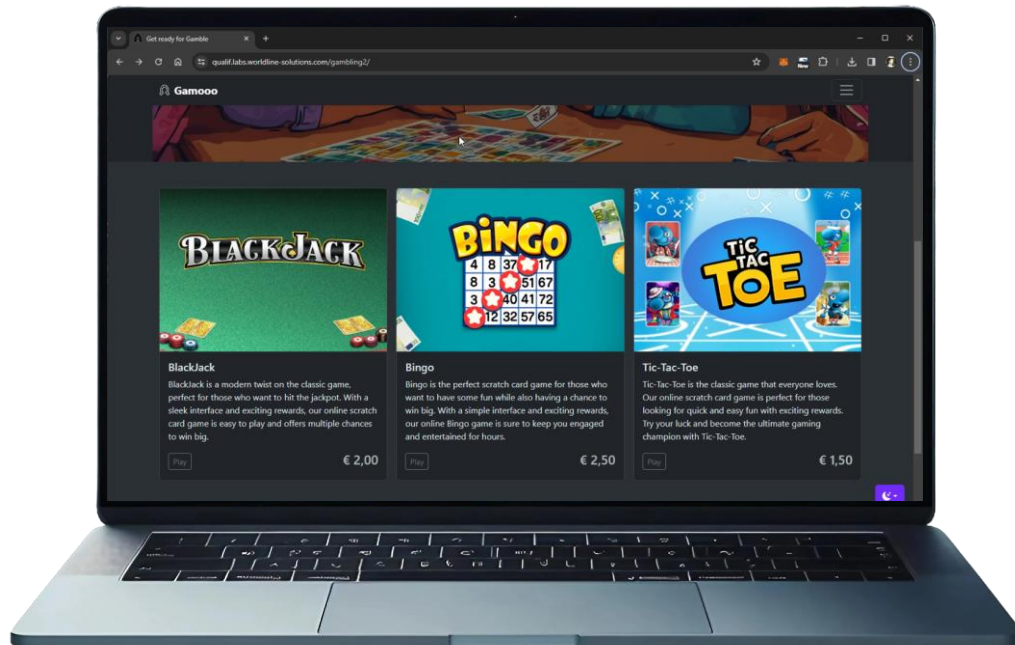
Merchants -online and in store commerce

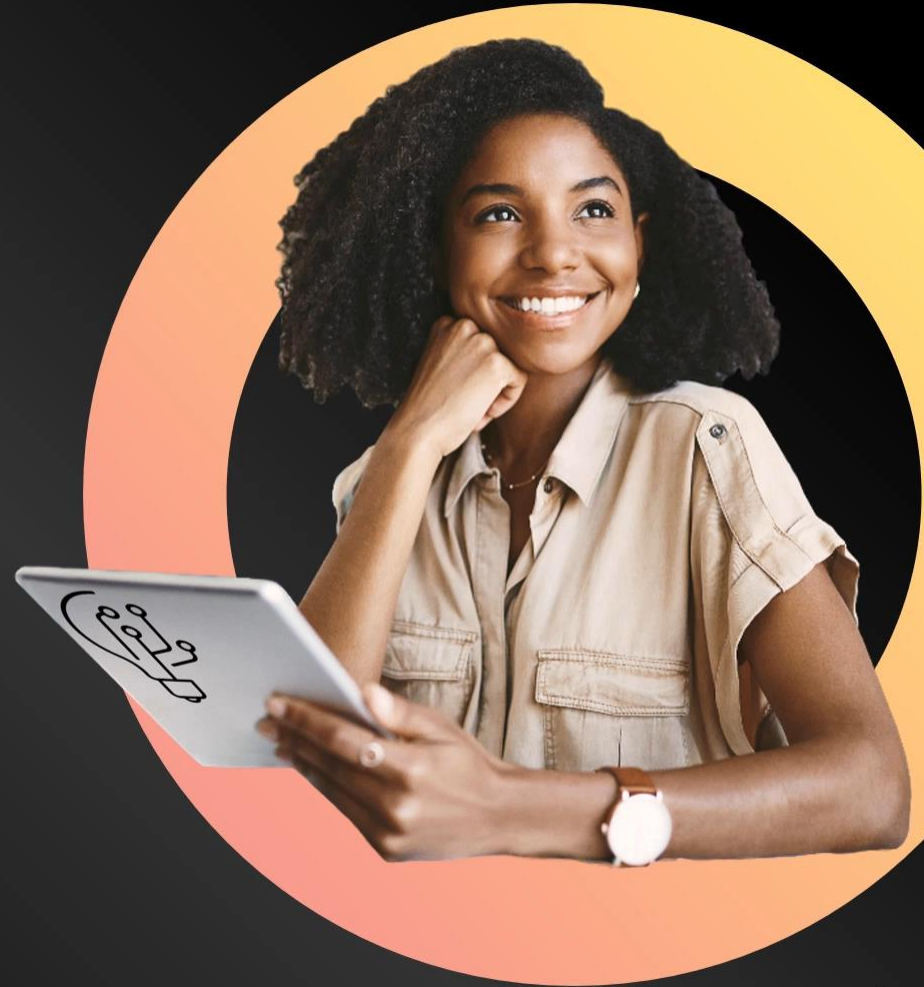
Improve CX during shopping with seamless Identification, Age verification, IBAN sharing for Account-to-Account payment, shipping preferences
Increase customer knowledge with fast enrollment and KYC



Gambling

Account creation and Payment





Technologies behind the scene

Decentralised Digital Identity : Putting the individual in control while preserving security.

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Decentralised Digital Identity : Putting the individual in control while preserving security.

Digital wallets and wearables



Mobile &
Biometrics

No need for a
physical wallet,
card or document

Standards



EUDI ARF,
W3C Verifiable,
Credentials, OpenID,
Open Wallet
Foundation

For open & rich
ecosystem

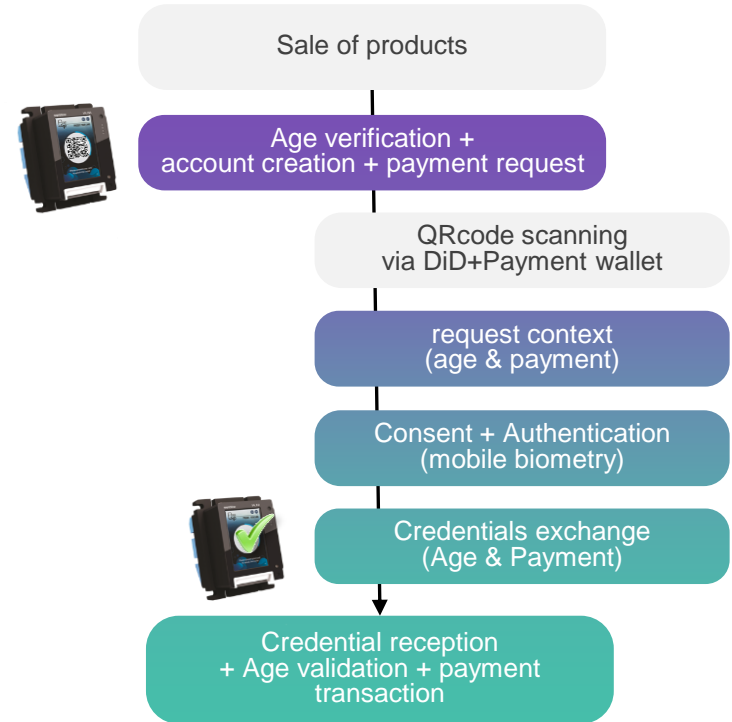
Age verification at vending machines

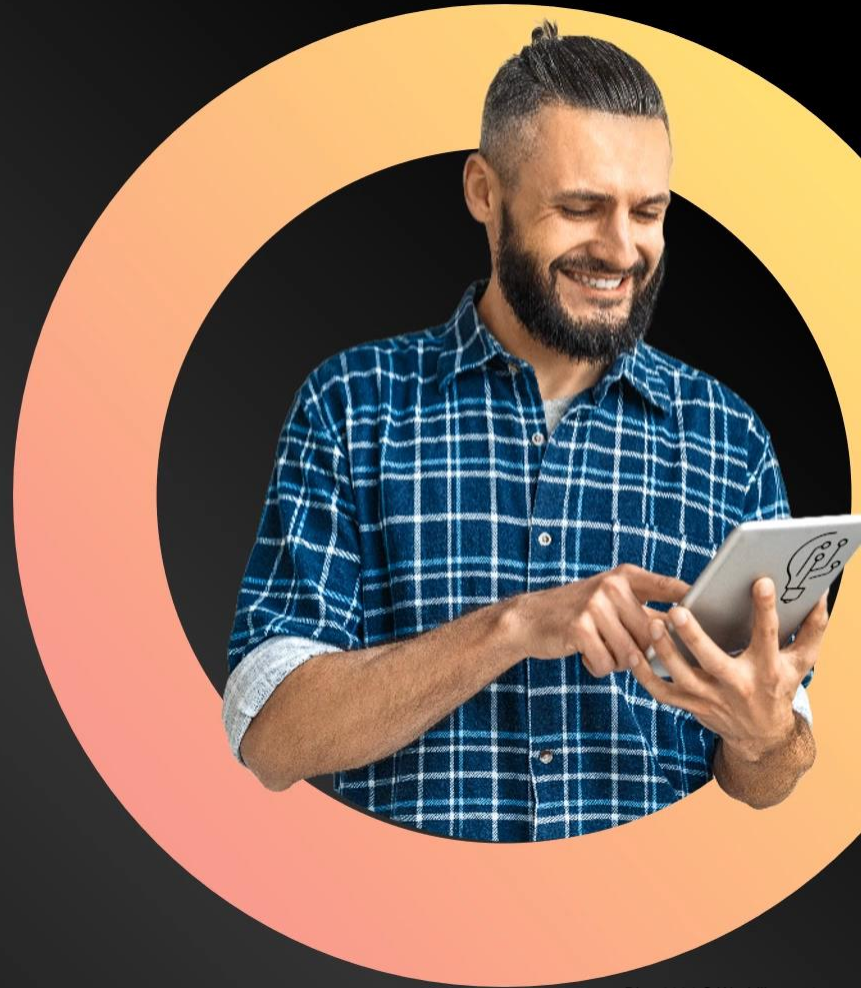
Unified flow for Payment & Identity check



£4 billion is the total cost to retailers of checking ages in the UK alone.

60% of all customer service interventions at self-checkouts are due to age related checks.





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Security & Privacy




Privacy-preserving
signatures, ZKP,
Unlinkability

To guarantee
citizen privacy &
safety

Technologies behind the scene

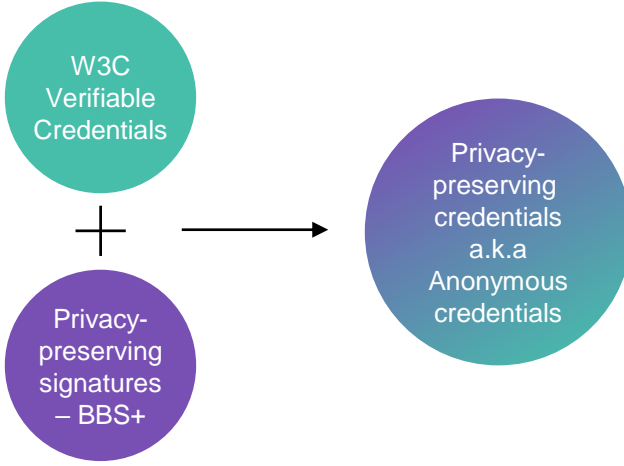
Decentralised Digital Identity : Putting the individual in control while preserving security.

Security & Privacy




Privacy-preserving signatures, ZKP, Unlinkability

To guarantee citizen privacy & safety




Government ID



Name: Alex Smith Birthday: 12/12/2000


Address: 76 Hickory Street, London

Issued: 23/05/2019 Expires: 23/05/2029




Predicate Proof

Age > 18
True



Government ID




Name: Alex Smith Birthday: 12/12/2000

Address: 76 Hickory Street, London

Issued: 23/05/2019 Expires: 23/05/2029


Government ID



Name: Alex Smith Birthday: [blurred]

Address: [blurred]

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For open & rich ecosystem

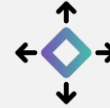
Security & Privacy



Privacy-preserving signatures, ZKP, Unlinkability

To guarantee citizen privacy & safety

Decentralized Architecture



Personal device storage, Mutual authentication, Trusted ledger & Web3

To build trusted ecosystems

Artificial Intelligence



Both a friend and a foe

Both a friend and a foe

Payments and identity are merging.

Banks will have to accept EU Digital Identity wallet for **authentication** of payees

Digital Identity will enable **seamless, secure and borderless** digital services both online and in-store

Consumers will be able to share easily and safely their credentials, in particular payment credentials, making **account to account** payments much easier.

Merchants will take advantage of EUDIW to **implement better customer journeys** and get to **know their customers** better. Access to **certified information** about customers will create **totally new revenue streams**

The EU Digital Identity wallet could also play a significant role in **Digital Euro** and **EPI** ecosystems