IO.ATALA
PRISM

Powering decentralized identity for the telecom Sector

Provide trusted identities for improved network security, seamless data management, and banking opportunities for new markets

Presented by

INPUT | OUTPUT

Contents

Why is there a need for a next-generation decentralized identity solution?

The problem

Telecoms and mobile banking are prime targets for fraudulent activity. Worldwide, telcos took a $29bn hit due to fraud in 2018, according to a recent **global study**, and banking fraud amounted to 783m in 2020 alone. Statistics predict that by 2024, over 3.6bn people will use on-line and mobile banking facilities, so fraudulent activities are likely to increase.

Both industries are targeted in three different ways: identity fraud, account takeovers, and payment fraud. Telecom operators and banking firms now deploy a range of Mobile Connect technology to provide mobile based authentication and identity solutions, but these have limitations:

- Closed systems controlled by operators, unable to onboard other identity issuers or leverage existing KYC processes.

- Users do not have full ownership of their identity and data. No auditable way for users to know who has access to their data.

- Difficult to get mobile operators and vendors around the world to cooperate due to complex contract structures.

Centralized and federated identity environments also pose significant risks of large-scale hacks.

In centralized frameworks, identity is fragmented across several enterprises, which hold full control of users' data. This intrinsic centralization of user data sets represents a 'honeypot' for cyber attacks.

Federated environments on the other hand keep user information fragmented across several enterprises (which also control this data), and just like centralized frameworks, these environments remain vulnerable to large-scale hacks

Decentralized identity as a solution

Decentralized identity supersedes both of these frameworks and offers clear value to telecoms by achieving the following:

- Identity is portable across enterprises.

- User information is stored in a wallet or secure cloud.

- The user remains in control of their own data.

- The very trait of decentralization disincentivizes malicious attacks due to their futility.

What is the real value of reliable digital identity for mobile network operators?
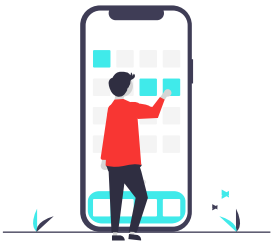
Seamless access to digital services
Blockchain- based solutions streamline the user experience by simplifying the sign-up and sign-in processes. Users just need to prove their identity once with a trusted third party. Then they can reuse it to access public and private sector services.

Built-in privacy
Decentralized identity systems are private by design, giving users full control of how their identity is shared. These systems also simplify account setup and access to all participating providers, eliminating the need for login IDs and passwords.

Enhanced security
Users are more secure because they aren't managing passwords. Businesses are more secure because they no longer control honeypots of descriptive PII (personally identifiable information).

New opportunities
Digital identity will open opportunities for products and business models.

Cost savings
Costs may be reduced for customer onboarding, data management and security, and lifecycle management.

Reduced risk of fraud
Identity fraud is reduced because there are no login IDs and passwords to steal and reuse.

The Atala PRISM platform

The Atala PRISM platform offers ready-made tools, including a Mobile Application, a Management Console, and a Browser Wallet, for both telecom operators and their customers. Telecom operators can easily issue digital identities to their customers thus opening up a world of opportunity for customers to access a range of services.
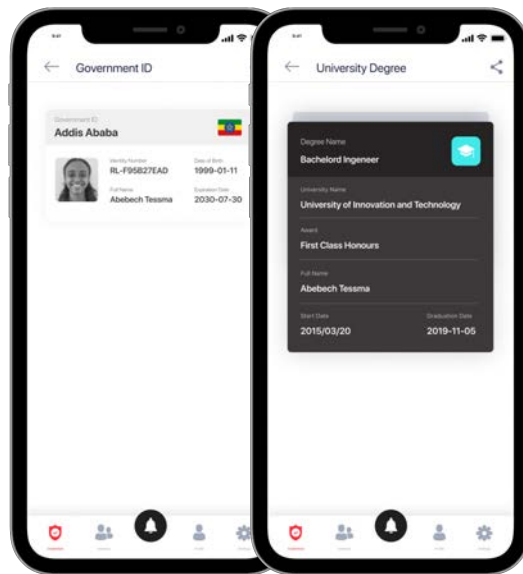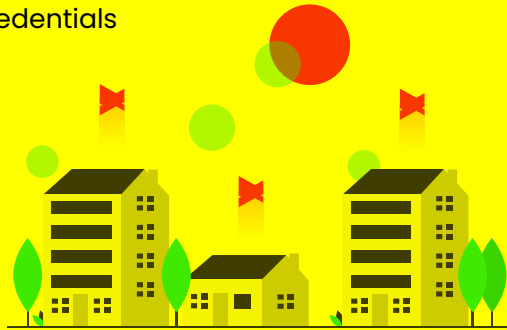
Mobile Application
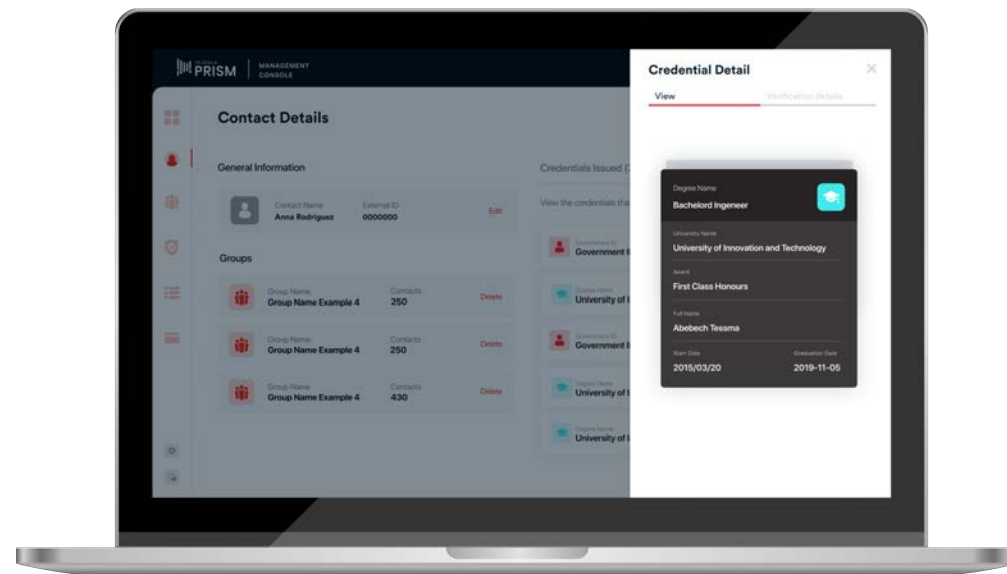
Management Console • Browser Wallet

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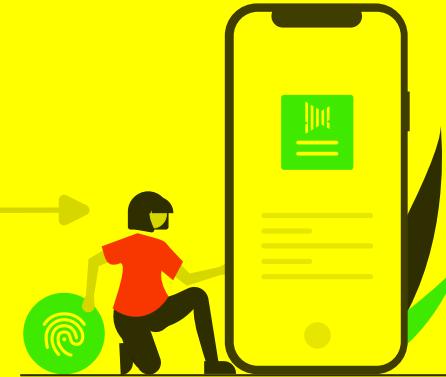
How does it work?

Issuer
Issues credentials

Holder
Stores credential
in digital wallet

Issues credential
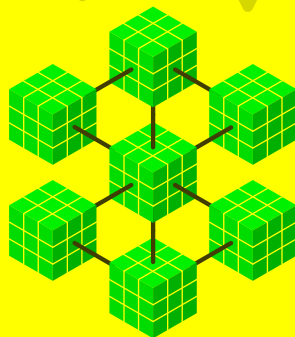
Signs
credential

Countersigns
credential

Shares
credential

Request permission for
specific credential attributes
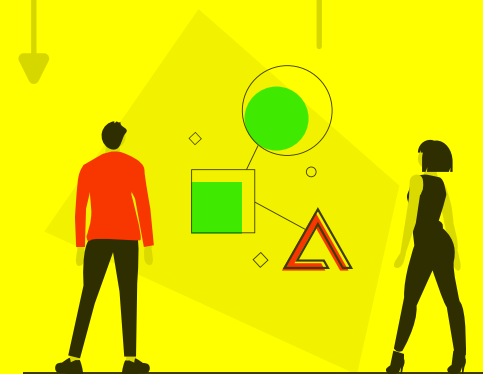(selective disclosure)

Verifies
credential

Blockchain

Decentralized Identifiers (DIDs)
Stores issuers and users
identities on the blockchain

Requester (Verifier)

Receives credential from
user and verifies issuer
via blockchain

Why is the Atala PRISM digital identity solution the best out there?

Designed for scalability: can scale to millions of individuals, organizations, or things.

Customizable: the underlying protocol can be optimized for different use cases.

Cost-efficient with predictable payment plan: based on a batching scheme to keep cost-per-user low.

Designed for high security: built-in resilience against high-risk data breaches, and prevention of data unavailability problems often encountered with competitor solutions.

What are some of the real-world deployments of Atala PRISM?

We have partnered with World Mobile Chain (WMC) to enable open finance in Tanzania first and then across Africa.

The goal of this project is to lay the foundations for a totally connected Africa. Using Cardano blockchain technology to help empower remote and hard-to-reach areas across the continent, everyone will get an equal chance to access services and opportunities, no matter where they live.

" I saw what IOHK (IOG) stands for and it was an obvious choice. There is nobody else in the space who has the same vision as you, and it matched us. To bank the unbanked, you need to connect the unconnected. To get them to a perfectly symbiotic relationship. "

Founder and CEO, World Mobile, Micky Watkins

Interview with Micky Watkins: Watch now

Contact us

We work with your team to:

✓ Help you understand decentralized identity and the bold opportunity it presents.

✓ Develop a Proof of Concept, built by a team of leading engineers who have designed some of The most advanced DLT protocols available.

✓ Deploy, manage, and scale your operations.

To learn more about **Atala PRISM** and how it can transform your organization, reach out to us directly at **business.development@iohk.io**

Founded in 2015, Input Output is an engineering company that builds blockchain solutions for government entities, corporations, and academic institutions. Underpinned by peer-reviewed science, we are building the first blockchain-based operating system that will enable global scale financial transactions and all forms of social exchange. We aim to put billions of new people and assets on the economic map, give 3 billion unbanked people an economic identity, track global goods from source to sale, and de-risk investment in emerging markets. Our ultimate goal is to expand social and financial services worldwide by digitally verifying people and assets that are off the banking grid, consequently doubling the consumer market.

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