

# The state of identity & walt.id

It's been more than five years since we started to work on decentralized identity and two years since we've launched walt.id. Looking back, this past year (2023) has been truly remarkable which is why we decided to share our thoughts about the state of digital identity together with some insights drawn from our experience of building one of the leading open source companies in the space.

Let's dive in.

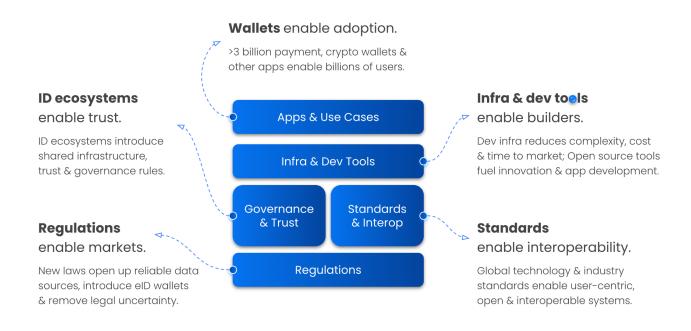
## The state of identity

In 2018, there were only a handful of vendors (most notably Evernym), one identity ecosystem (Sovrin), no standards and hardly any awareness (or even pilots) outside of the close-knit identity community.

Five years later, we encountered hundreds of identity startups and saw three (of the five) trillion dollar companies as well as leading incumbents of different identity markets announce decentralized identity products. We witnessed the emergence of and creative experimentation with identity ecosystems as well as regulators pushing new legislation that will force the adoption of identity wallets across the globe.

Decentralized identity is on the rise and it is fundamentally changing our digital world. Making sense of such transformational shifts is complex, so we decided to share our take on the top trends and drivers behind this incredible evolution of a (new) technology category that is creating a multi-billion dollar market.

Trends & drivers of an emerging billion dollar market.



#### Wallets enable adoption.

Today, there are roughly 3 billion payment wallets – a number that is expected to pass 5 billion by 2026. Digital wallets are becoming ubiquitous and will soon be available to most people on the planet. The wallet infrastructure is already in place (for payments and crypto) and can quickly be extended to include digital identity.

In fact, leading wallet providers (like Google, Apple) already started to roll-out identity features this year, followed by banks, payment providers, tech companies and social networks whose applications are already being used by billions of users.

#### Infrastructure & dev tooling enables builders.

Developers are at the heart of every technological revolution. Creating infrastructure that makes it easier to build applications and use cases unlocks innovation and real world value by spawning new companies and enabling incumbents to leverage decentralized identity. In addition, we foresee identity becoming a commodity, not at least due to the emergence of holistic open source tooling like <a href="https://example.com/The Community Stack">The Community Stack</a> we're building at walt.id.

Five years ago, building decentralized identity solutions took organizations months if not years. Today, developers can build production-grade applications and use cases in less than a week.

#### Standards enable interoperability.

In the early days, vendors invented their own proprietary technology. As a result, solutions were factually centralized and could not live up to the promise of enabling decentralized identity ecosystems in which users can freely share data with anyone. Moreover, there was no backwards compatibility with existing IT infrastructure.

By now, major standardization bodies (e.g. W3C, ISO, IETF, OpenID Foundation, DIF) are driving open standards to a point where interoperability is becoming a reality as demonstrated by a growing number of interop events and even production systems.



#### Identity ecosystems enable trust.

Identity ecosystems are a core building block of decentralized identity. By combining technology (shared data registries) with governance frameworks (rules for establishing trust), they enable the shift away from today's centralized identity paradigm which created a world of data silos and with them some of the internet's biggest problems like privacy and compliance issues, user lock-in effects, rising fraud and identity theft.

Today, we see international organizations (e.g. EU, GLEIF), governments around the globe (MENA, APAC, Americas), businesses across industries and major blockchains develop a rich variety of identity ecosystems to enable use cases across applications, sectors and borders.

#### Regulations enable markets.

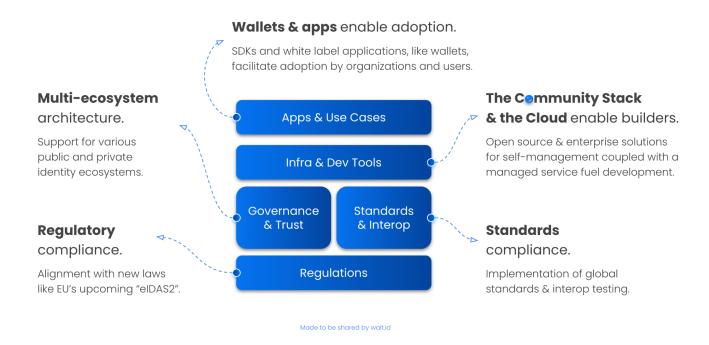
Regulators can make or break new markets. One of the main barriers to the widespread adoption of decentralized identity was the lack of data sources that can issue trustworthy digital identity credentials.

Today, we see identity regulations emerge across the globe, spearheaded by the EU with its eIDAS2, which will pass into law in less than three months. These new regulations are forcing data sources (like governments) to provide digital identity credentials and wallets to users and, at the same time, require the private sector (like banks, utility companies, large online platforms) to accept these credentials for onboarding, authentication and identity verification. As a result, regulations support the solution of the identity industry's "cold start problem" by unlocking the supply side of the market (i.e. Issuers of identity credentials) and by creating a framework and legal certainty for the large-scale adoption of identity wallets and corresponding credential verification solutions.

### The state of walt.id

After our pre-seed round at the end of 2021 (led by Speedinvest), we have been heads down building products, engaging with customers and the community in an effort to build the best possible open source identity and wallet infrastructure for developers and organizations.

We are building on industry trends & drivers.



Time to dive deeper with some insights from and a summary of our main achievements over the last two years from our core business areas: Product and technology, go-to-market and our, most importantly, our people:

#### **Product & Technology**

In 2022, we launched more than five industry-leading open source libraries, including all-in-one toolkits for decentralized identity (SSI, NFTs), identity wallets, zero-trust storage and an identity provider (IdP) to bridge the gap between decentralized and traditional identity infrastructure.

In 2023, we added support for +10 identity ecosystems and all major decentralized identity "flavors" (W3C Verifiable Credentials, ISO/IEC 18013-5 mDL/mdocs, IETF SD-JWTs, various on-chain token standards). We launched white-label applications (wallet, claim and verifier pages) and demonstrated interoperability with +25 other vendors. We integrated with leading traditional identity solutions like identity and access management (IAM) and identity verification (IDVs) tools as well as with key management and custody solutions to offer a more seamless adoption and greater flexibility to our users. On top of that, we did a complete refactoring and launched The Community Stack which made our solutions more modular, performant, easier to use and brings them to every platform (web, server, mobile desktop and IoT) and programming language (starting with Kotlin, Java and JavaScript). Composed of purpose-driven libraries, powerful APIs and improved white label applications, the Community Stack is open source under the permissive Apache 2 license to maximize the value we create for developers and builders! Finally, we opened the waitlist for our <u>Cloud Platform</u>, which is already used by selected customers, in our relentless effort to make the adoption of decentralized identity even easier.

#### Go-to-Market & Adoption

In 2022, the market was largely pilot driven and great opportunities were rare. Nevertheless, we saw initial traction from hundreds of developers and had the opportunity to work with early adopters ranging from startups and enterprises (like banks) to public authorities. Most of our traction was coming out of Europe, where we solidified our position in its emerging identity ecosystem (EU Blockchain Service Infrastructure, EBSI) by becoming one of the first vendors to conform to standards and seeing the majority of EBSI early adopters building pilots with our tools across the continent: from Portugal in the west over France, Germany and Luxembourg in



the center to the Netherlands, Finland and Lithuania in the north down to Rumania, Croatia and Greece in the east and south.

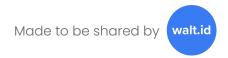
In 2023, we expanded our work with identity ecosystems into the private sector and outside of Europe (Middle East, Asia, North America). We partnered with most major blockchains and worked with standard bodies to drive interoperability by being among the first standard implementers (e.g. OID4VC protocols) and by demonstrating interoperability in practice (e.g. JFF plugfests, EBSI, customer-driven projects). We started our open source community and invested heavily into creating industry-leading documentation and a great developer experience. As a result, our open source solutions have been used by thousands of developers including startups, SMEs, iconic tech companies, multinationals as well as cities, public authorities and governments. We have built countless pilots in different verticals and moved to production with our first customers.

#### People & Careers

Over the last two years, we have built an amazing core team of developers and technologists following our aspiration to build a company in which product and technology are understood as the core driver's of our success. We started to hire internationally and became a remote company of people from three different continents united under the common vision of creating a digital world in which every interaction is effortless and worry-free. More importantly, it was this core team of early employees that guided the creation of our values and set the tone for what it means to be a *waltian*: We are pioneers and builders who thrive in an environment of transparency and autonomy – You can find our values <a href="https://example.com/here/builders/bere/bere/builders/bere

We saw interns grow into core developers and young, driven technologists becoming leaders. We introduced company-wide *demo sessions* enabling our devs to show off their achievements, *knowledge transfer sessions* to educate each other and *company updates* where each month's progress is laid out and discussed.

We could not be more proud of our team and their accomplishments and we cannot wait to meet the next people who will join us - You can find current jobs <u>here</u>.





## **Conclusion & way forward**

Decentralized identity is here. Governments, enterprises and startups are building solutions across verticals and use cases based on developer infrastructure and open source tooling like "The Community Stack". An existing and fast-growing wallet infrastructure already used by billions can unlock global adoption of identity wallets almost overnight. Standards make open, interoperable and user-centric systems possible. Identity ecosystems emerge and ensure trust based on shared technical infrastructure and governance frameworks. Regulations open up data supply and demand while ensuring privacy and security and legal certainty.

Get more insights **here** or start building **here**. If you have any questions, **reach out**.