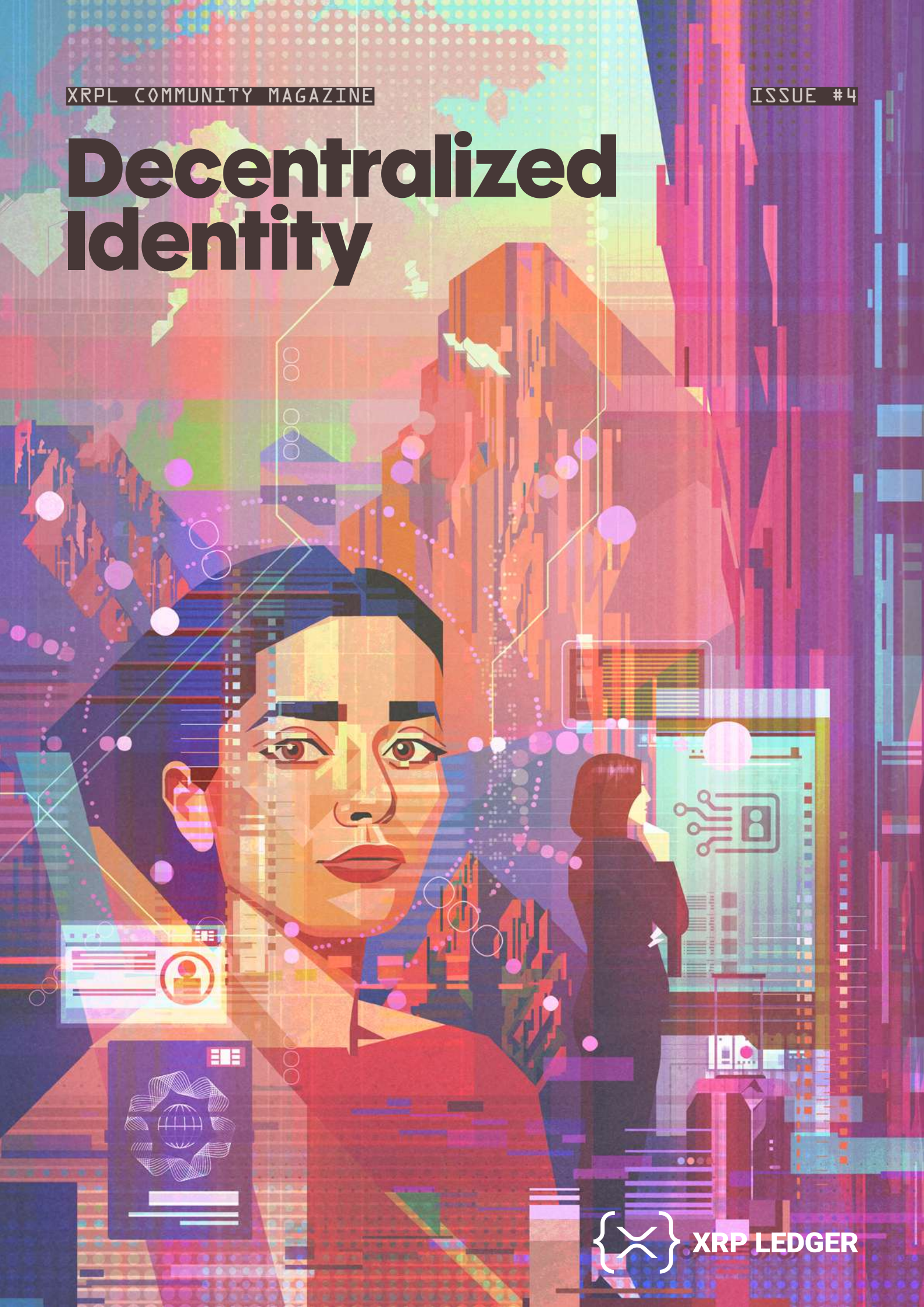


XRPL COMMUNITY MAGAZINE

ISSUE #4

Decentralized Identity



XRP LEDGER

Fore word

Aurélien Burget,
Aquarium Residency Director

Dear Reader,

This December marks the first anniversary of the Aquarium Residency, and we are excited to reflect on how much this program has impacted the XRPL ecosystem.

The Aquarium is a unique 12-week residency nested in the heart of Paris, designed for entrepreneurs and developers building with the XRP Ledger. Modeled after art residencies, it offers a hands-on experience where residents dive into development from day one. In its first year, we've hosted 46 residents from 16 countries, all participating in creating impactful real-world applications on the XRPL.

Over the past year, the program has continuously improved. We've fine-tuned the balance between ideation and prototyping, expanding the range of activities offered, including workshops, expert-led sessions, and team-building, while ensuring time for independent work. As word spread about the Aquarium, we've seen a surge in both the number and

quality of applications, with increasingly mature projects joining each cohort. Partnerships with experts like Standard Deviation (Regeneration) and ATKA (DeFi) have played a significant role in the program's success, offering residents invaluable mentorship.

One of the most gratifying outcomes has been witnessing many of our alums continue their projects post-residency and not only receive private funding, but also become active members of the XRPL community. It's been an honor to see Aquarium graduates gain recognition through the XRPL Grants and Accelerator programs, present at major international conferences like Apex and Paris Blockchain Week, and even win global hackathons. Through these experiences, we've cultivated a thriving network of innovators dedicated to advancing the XRPL ecosystem.

Coordinating the program has given me firsthand insights into how accessible the XRP Ledger is for people from diverse fields. It has confirmed XRPL's user-friendliness and versatility

The Aquarium Residency Turns 1



far beyond DeFi use cases. We've only just begun to scratch the surface of its potential.

Each Aquarium cohort focuses on a new theme. So far, we've explored Regeneration, Intellectual Property, Decentralized Identity, and Decentralized Finance. In 2025, we will focus on Gaming and Gamified Experiences (January) and AI & Blockchain (April). These topics are chosen based on a combination of emerging trends in the blockchain space, upcoming features on the XRPL protocol, and our team's analysis of under-explored real-world use cases.

This magazine highlights Decentralized Identity (DID), the theme of our third residency. We selected DID because of its release on the Mainnet and its potential to unlock a wide range of use cases across various sectors. As personal identification increasingly shifts to digital platforms — whether paying taxes or voting — there is a growing need to rethink how we safeguard privacy and authenticate identity online. DID tackles authentication, ownership, privacy, and access management

issues, making it a fertile ground for innovation. Particularly in Europe, the ongoing discussions around the eIDAS regulation make this topic even more relevant. Some of the standout projects from our DID cohort, such as Ushi, Cr3dentials, and Pawesome ID, are detailed in this magazine, showcasing innovations in healthcare, certification, pet tech, and beyond.

As we move into the upcoming cohorts, we continue to enhance the program by accelerating the building phase and incorporating AI tools to help projects scale more effectively. Our commitment to fostering projects with a tangible impact remains at the core of everything we do.

There is no one "right" profile for the Aquarium Residency. Its strength lies in the diversity of the participants — each bringing unique perspectives and experiences. If you are a motivated project leader, developer, or builder eager to learn, test, share knowledge, and embrace challenges, you're exactly the kind of candidate we're looking for, so this is your call to apply for the next cohort! 🚀

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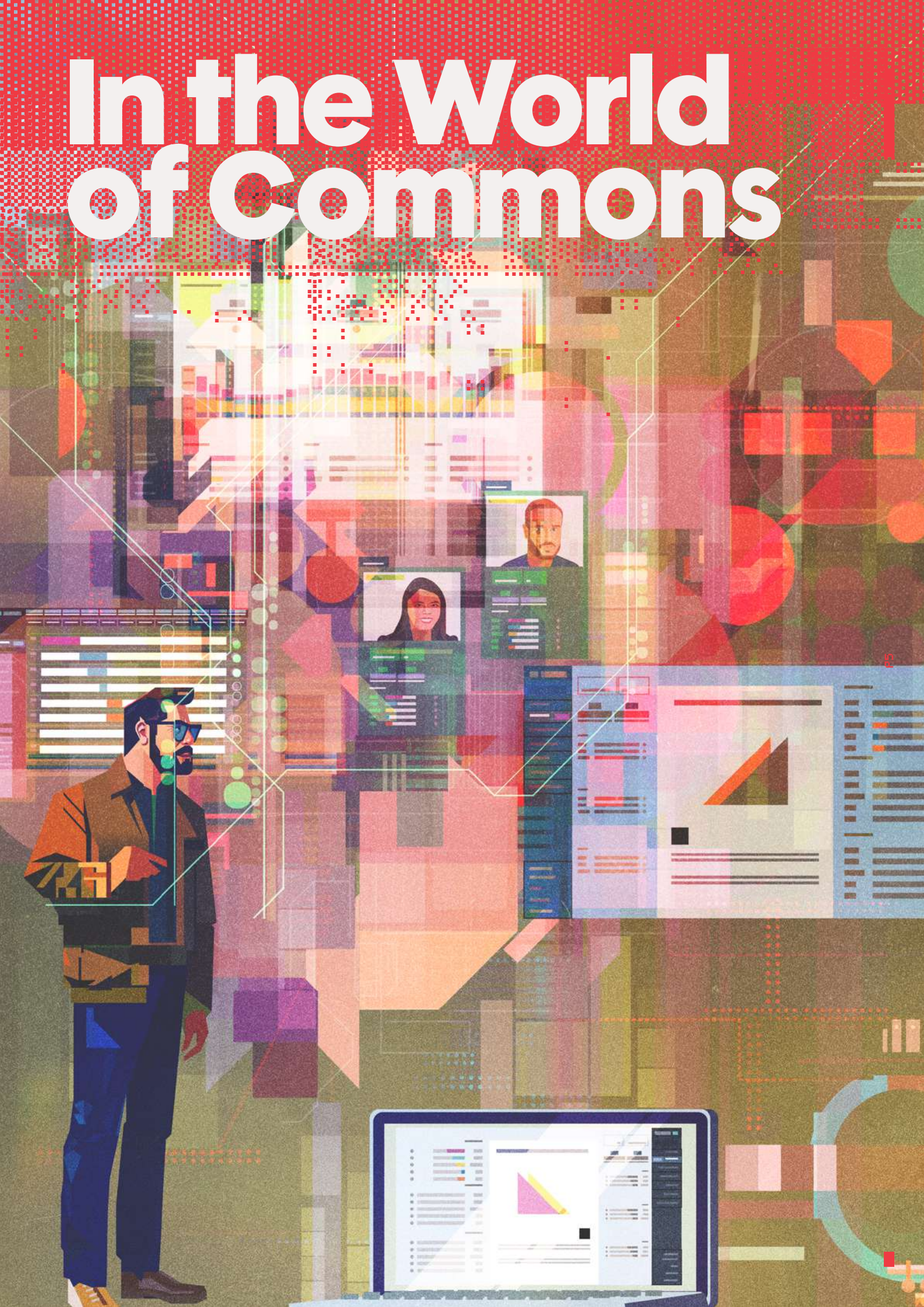
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In the World of Commons



The Scoop on XRPL Events

This quarter, XRPL Commons was in full swing, bringing our community together through events and trainings, meetups across Europe, and online events open to everyone.

Here's a look back at some of the exciting highlights from an eventful few months with Commons.

JUNE - JULY

JUNE 11-13 Apex, the largest annual XRPL developers' conference, took place in Amsterdam. Hosted by Ripple, XRPL Commons was among the top sponsors of the event.

JUNE 26 XRPL Commons hosted a Demo Day for the Aquarium third cohort on DID.

JULY 2 In a major milestone, we held our first-ever international XRPL Meetup, in partnership with the University of Luxembourg.

SEPTEMBER

SEPTEMBER 10-11 Ripple Impact's annual University Blockchain Research Initiative (UBRI) conference took place in Zurich, gathering experts and researchers from 58 world-class universities. XRPL Commons' Education Program Manager, Vera Radeva, shared our educational offerings.

SEPTEMBER 12 A memorable XRPL Meetup was held in Munich, on the sidelines of the TUM Blockchain Conference. We were thrilled by the energy and engagement of the crowd!

SEPTEMBER 16 We hosted XRPL's first virtual XRPL Town Hall meeting, bringing together voices from across the community (read the full recap in this issue).

SEPTEMBER 25-26 XRPL Commons held its quarterly 2-day Training for developers, with special insights from guest trainer Denis Angell of XRPL Labs focusing on Hooks.

ents

OCTOBER

OCTOBER 3 The next XRPL Meetup took us to Vilnius, in collaboration with Axiology and SuperHOW? during StartupFair, Lithuania's largest startup and innovation event.

OCTOBER 9 XRPL Commons hosted the last Community Magazine Launch Party of the year at our Paris HQ, featuring talks from guest speakers, including Palisade.



STAY UPDATED!

For more XRPL community events, make sure to check out XRPL Commons' upcoming [events page](#)!



NOVEMBER

NOVEMBER 4-10 Education Week at XRPL Commons! We started with a two-day developer training led by Futureverse, continued by a Career Day at Université Paris Cité and capped off with a three-day XRPL Hackathon in partnership with UNESCO Chair ITEN, focusing on blockchain for social impact.

NOVEMBER 22-23 XRPL Commons, together with the UBRI network, University of Rome Tre, and the Italian Cryptography Association, co-hosted the XRPL Italian Hackathon.

DECEMBER

DECEMBER 11 The year wraps up with the Demo Day for the fourth cohort of the Aquarium Residency, where the focus was on Decentralized Finance.



*A New Initiative to Bring
Together the XRPL Community*

Introducing the XRPL Town Hall Meetings

By Zsofi Borsi

ABOUT THE INITIATIVE

The XRPL Town Hall meetings provide an open platform for community members to connect, share insights, and discuss important updates in the XRPL ecosystem. Designed in a webinar format, these quarterly gatherings offer a structured yet inclusive space where participants can exchange ideas, ask questions, and stay informed about technical, governance, and community-related developments.

The concept for these meetings emerged after Apex 2024, where the power of in-person discussions highlighted the need for more regular touchpoints in the XRPL community. While various online spaces and forums already serve as valuable hubs for ongoing conversations, the XRPL Town Halls aim to offer something unique. Rather than focusing on a single trending topic, these meetings serve as a "live community magazine," featuring curated updates across multiple areas of interest—technical advancements, governance matters, grantee progress, open questions, and more. Each segment is led by a different community member, fostering diverse perspectives and interactive Q&A sessions where live questions from the audience can be addressed.

These Town Halls are a collaborative, grassroots effort by and for the entire XRPL community. Anyone can volunteer to organize future Town Hall events. XRPL Commons provides support and commits to hosting at least one session per quarter to keep the dialogue flowing.

The first Town Hall, hosted by XRPL Commons on September 17th, 2024, covered key areas like XRPL governance, project milestones, and strategies for strengthening community cohesion. Let's dive into the key takeaways from this first gathering.

FIRST TOWN HALL INSIGHTS

>>> Updates on Governance: The meeting opened with an introduction about XRPL Commons, addressing questions collected beforehand from the community, especially related to XRPL governance, focusing on the future role of the new XRP Ledger Foundation. David Bchiri emphasized that a new foundation must be built to last, independent of any one individual or organization. This approach is intended to safeguard the XRPL from being overly reliant on a few key players, ensuring its longevity and adaptability in a quickly changing blockchain landscape (More about governance on p. 18).

>>> Latest XRPL Trends and New Features with XRP Scan: Anurag Patel from XRP Scan, a trusted XRPL Explorer, showcased the newest metrics and features available on XRPSCAN. A notable update from XRPSCAN was the introduction of the "Console Full History Deep Search" feature. This tool allows users to search the full transaction history of the XRPL, making it easier to analyze patterns, identify anomalies, and improve overall transparency (Trends analysis by XRP Scan on p. 15).

>>> **Core Ledger Development:** Chris Dangerfield (XRPL 365) and Denis Angell (XRPL Labs) provided an in-depth analysis of important amendment discussions focusing on technical improvements to the XRP Ledger. They discussed XLS-56 introducing batch transactions, enabling developers to bundle multiple transactions into a single batch, streamlining processes, and enhancing efficiency across applications from payments to complex smart contracts. Additionally, they discussed the XLS-80 and XLS-81 amendments, which introduce the concept of permissioned domains, enabling permissioned usage of the XRPL's decentralized exchange (DEX).

>>> Updates from Startups in Our Ecosystem: In each Town Hall, startups from the ecosystem are highlighted.

This time, we heard an update from XRPL.Win, a project focused on gamifying the blockchain experience, who have been hard at work to improve their user experience and introduce new features, such as a Transaction Exporter, Trustline Viewer, and XWAnalyzer.

Another exciting startup, Dhali took the floor, a marketplace to monetize APIs using the XRPL's payment channels. Payment channels are one of XRPL's most powerful features, enabling fast, scalable microtransactions. Dhali's platform could revolutionize the way developers and businesses interact with APIs, opening up new revenue streams and use cases.

Finally, Ushi, a recently incubated project from the Aquarium Residency's DID cohort dedicated to improving the efficiency of decentralized clinical trials, shared updates, shedding light on the importance of community-driven, decentralized approaches to healthcare.

>>> Enhancing Community Collaboration: The meeting concluded with an open Q&A session led by Vet, delving into what the XRPL community needs for further growth and cohesion, and the factors for "community health". One of the key themes that emerged from this discussion was the importance of communication. While technical progress is crucial, the human element of collaboration and dialogue is equally important. The XRPL community spans a wide range of stakeholders, from developers and investors to educators and content creators. Each of these groups has its own needs and priorities, yet they all contribute to the health and success of the broader ecosystem.

[illegible]

While this first Town Hall was intended as a trial run, allowing room for format evolution, the response was overwhelmingly positive. Over 80 participants joined the nearly two-hour session—many logging in during early morning or late-night hours—demonstrating the community's strong desire for connection, support, and collaboration.

The turnout and feedback underscored a shared commitment among passionate individuals to contribute to the ongoing development of the XRP Ledger, reinforcing the need for a dedicated space where the XRPL community can regularly engage and grow together. 📌

XRPL Meetups: Road to Meet Community

By Cyrille Bourdeaux

In July 2024, we kicked off the XRPL Meetups in Europe. The purpose? To spread knowledge and create real-life connections and communities around the XRP Ledger.

These meetups are regular informal gatherings where individuals across sectors meet, exchange ideas, and deepen their understanding of blockchain technology. Designed to be inclusive, the XRPL Meetups welcome participants from academia, private industries, public sectors, and NGOs.

The XRPL Meetups are organized in partnership with local ecosystem players, with the aim of establishing more sustainable "XRPL Hubs" that provide resources and networking opportunities for the community.

FIRST STOP: UNIVERSITY OF LUXEMBOURG 🇱🇺

JULY 31 2024

For our first meetup, we were invited by Professor Radu State who is leading the SEDAN research group at the University of Luxembourg. They conduct research on data analytics and machine learning in FinTech, security for blockchain applications and decentralized finance (DeFi).



On the the

After spending the day at the university, the meetup in the evening was an opportunity for PhD students and post-docs to share their work with a broader audience. Amongst them, Flavienne Scheidt (interviewed in our first edition) shared her research on improving the scalability of the XRPL by using targeted message delivery for the UNL. Jorge Meira turned a research project into a startup called [NIR Watchdog](#)²⁷, an AI-based quality control solution using Near-Infrared Spectroscopy to authenticate materials and products, to identify commercial counterfeits. Radu State pushes his lab to break the boundaries between academia and the private sector to solve real-world problems.

Along with the University of Luxembourg—partners of Ripple's University Blockchain Research Initiative (UBRI)—we also invited several prominent members of the Luxembourg DLT and DeFi scene. Emilie Allaert (Luxembourg Blockchain Lab) shared her perspective on the local blockchain ecosystem which she supports and where she organizes the Luxembourg Blockchain Week. Finally, we heard from Alexander Tkanchenko, co-founder of VNX, Europe's first regulated tokenization platform and stablecoin issuer which is built on the XRP Ledger.

SECOND STOP: TUM BLOCKCHAIN CONFERENCE IN MUNICH, GERMANY 🇩🇪 SEPTEMBER 12-13

The start of the school year was the opportunity to meet with our academic partners at two events organized the same week. First, at UBRI Connect in Zürich to connect with researchers in the XRPL ecosystem, then at the TUM Blockchain Conference in Munich. This event, attended by over 1000 participants and hosting 150 speakers over two days is the largest European blockchain event organized by students from the Technical University of Munich. XRPL Commons strongly believes in supporting student-led initiatives and is proud to support TUM Blockchain Club among others, such as Kryptosphere in France. The conference was an opportunity for us to organize a hands-on XRPL workshop for developers with Vet (xrp.cafe) and to chat with students at our booth.



On the sidelines of the conference, we organized our second meetup, which was open to all blockchain enthusiasts. We had an amazing crowd, including student developers from TUM and Kryptosphere, as well as founders from Evmos, xrp.cafe, and the Crypto Carbon Ratings Institute.

THIRD STOP: STARTUP FAIR IN VILNIUS, LITHUANIA 🇱🇹 OCTOBER 3

Lithuania is home to several XRP Ledger startups so we were excited to finally meet members of the community there during the country's largest tech event, the Startup Fair. In partnership with Axiology, SuperHOW? and XPMarket, we co-organized a side event dedicated to the XRP Ledger in SuperHOW?'s and Axiology's office. Axiology leverages the XRPL to provide easy access to tokenized securities in conformity with the EU DLT Pilot Regime Regulation. We heard updates on the XRP EVM Sidechain with Ferran Prat from Peersyst, thoughts on the XRPL with Artur Kirjakulov from XPMarket, and discussed AML compliance in DeFi with Micapass. This insightful evening also featured a chat with James Wallis, VP of Global Financial Institutions at Ripple, who shared his perspective on RWA, stablecoin, and the company's roadmap. DeFi holds great potential, and our Aquarium Residency's Cohort 4 focused on this area. 🍷

NEXT STOPS: LONDON, THESSALONIKI...AND NEAR YOU?

The XRPL Meetups in Europe are just getting started. Next stops: London in January, Thessaloniki in March, and more destinations to be announced soon! Interested in co-organizing an XRPL Meetup with us to gather your local community?

Reach out to us at: events@xrpl-commons.org.²⁸

Mélanie Damour, Strategic Initiatives Director at XRPL Commons



After spending a decade in strategy consulting, specializing in technology, media, and telecommunication projects in Europe and Sub-Saharan Africa, Mélanie joined XRPL Commons as Strategic Initiatives Director. A blockchain enthusiast, she aims to promote the usage of this technology to create value for all.

HOW DID YOU GET INTO THE WORLD OF BLOCKCHAIN?

Personally and professionally, I've always been passionate about disruptive technologies. During the pandemic, after observing the potential of blockchain, I decided to dive in and learn more about it as a side project. Then I began incorporating this knowledge in top-tier global businesses through strategy consulting projects in a cross-industry approach. In France however, the market didn't seem mature enough so I decided to leave strategy consulting and follow the "white rabbit"—a journey that led me to join Commons.

WHAT IS YOUR ROLE AT XRPL COMMONS?

I have two main roles: shaping and executing the strategic direction for XRPL Commons and driving pivotal projects that align with our goals. For instance, I collaborate with each team to implement best practices and enhance efficiency through optimized processes and tools. I also lead the formulation of our vision, objectives and roadmap at Commons, in synchronization with our budget planning & impact measurement.

Some of the strategic projects that I drive include the establishment of the new XRPL Foundation, Community Funding, and the XRPL Sustainability initiative. Through this initiative, we aim to foster climate literacy within the XRPL community via webinars in partnership with CCRI (Crypto Carbon Ratings Institute) to assess the XRP Ledger's carbon footprint and electricity consumption. This year, our goal is to work toward decarbonizing these emissions.

WHAT'S THE BIGGEST CHALLENGE FOR COMMONS AT THE MOMENT?

Having built strong awareness and visibility for our programs within the XRPL community and among blockchain enthusiasts, our challenge next year will be to spark measurable, high-value opportunities and partnerships. We're adopting a more data-driven approach, which is essential for measuring impact and effectively communicating it to the community.

"I view XRPL Commons as a catalyst for community building, not only within the XRPL ecosystem but also across the broader blockchain landscape."

WHAT IS THE ROLE OF XRPL COMMONS IN THE BLOCKCHAIN ECOSYSTEM?

Our mission is to create the conditions of success for entrepreneurs and developers to thrive in the XRPL ecosystem. By "conditions of success," we mean supporting startups in gaining paying customers, building on a reliable protocol, and recruiting from a global talent pool within a vibrant community. We achieve this through our Learn / Build / Adopt / Engage programs and by collaborating with the incredible people we meet daily. ■

XRPL Insider



XRPL in Numbers

XRPL LEDGER ACTIVITY FOR Q3/Q4 2024

DATE RANGE: 1 SEPTEMBER - 9 DECEMBER 2024

The last week of November and early December saw increased activity on the XRP Ledger driven by the popularity of token trading platforms such as FirstLedger, XPMarket, or Magnetic; integration with token-assessment DEX Screener, as well as XRP price action.

During this period, the XRP Ledger achieved several high all-time numbers. For example, the number of activated accounts per day touched 30,631, and the number of active accounts per day touched 105,956.

//// TOTAL TRANSACTIONS: 165,921,955

= 1,659,220 TRANSACTIONS PER DAY ON AN AVERAGE AND MEDIAN 1,568,235 PER DAY

//// SUCCESSFUL TRANSACTIONS: 160,173,672

= AN AVERAGE 1,601,737 TRANSACTIONS PER DAY AND A MEDIAN 1,534,451 SUCCESSFUL TRANSACTIONS PER DAY

//// FAILED TRANSACTIONS: 5,748,283

THIS EQUATES TO AVERAGE 57,483 FAILED TRANSACTIONS PER DAY

//// TOTAL PAYMENTS: 69,075,791

THE TOTAL NUMBER OF PAYMENT TRANSACTIONS STOOD AT 69 MILLION. THIS EQUATES TO AN AVERAGE 690,758 PAYMENT TRANSACTIONS PER DAY AND A MEDIAN 618,745 TRANSACTIONS PER DAY

//// TOTAL FEE BURNED: 394,221 XRP

THIS EQUATES TO AN AVERAGE OF 3,942 XRP BURNED PER DAY AND A MEDIAN 3,429 XRP BURNED

//// NEW ACCOUNTS ACTIVATED: 356,574

356,574 NEW ACCOUNTS WERE ACTIVATED IN THE ANALYZED PERIOD. ON AN AVERAGE 3,566 ACCOUNTS WERE ACTIVATED PER DAY AND A MEDIAN 1,667 ACCOUNTS ACTIVATED PER DAY

//// NFTOKEN TRANSACTIONS: 3,692,301

TOTAL NUMBER OF NFT TRANSACTIONS DURING THE QUARTER WAS 3,692,301

//// AMM TRANSACTIONS: 214,253

TOTAL NUMBER OF AMM RELATED TRANSACTIONS DURING THE QUARTER WAS 214,253

AMM OVERVIEW:

TOTAL XRP POOLED IN AMMS: 12,950,563.253799 XRP

TOTAL ACTIVE AMM POOLS: 10,560

//// XRP DISTRIBUTION:

TOTAL ACTIVATED ACCOUNTS: 5,637,786

TOTAL XRP BURNED: 13,196,770 XRP

TOTAL XRP ESCROWED: 38,038,281,535 XRP

TOTAL XRP CIRCULATING: 61,935,324,925 XRP



NUMBERS PROVIDED BY XRPSCAN:

XRPSCAN IS THE LEADING BLOCKCHAIN EXPLORER AND ANALYTICS PLATFORM FOR THE XRP LEDGER. IT IS USED BY OVER 50+ EXCHANGES GLOBALLY, INCLUDING COINBASE, BINANCE, BITKUB, AND BITPAY, AMONG OTHERS, TO LOOK UP XRP LEDGER ACCOUNT INFORMATION AND SHOW PROOF-OF-TRANSACTION TO THEIR USERS. THROUGH ITS POWERFUL API SERVICE AND SEARCH PLATFORM, XRPSCAN DELIVERS ACCURATE INSIGHTS INTO ON-LEDGER ACTIVITY FOR WALLET SERVICES, EXCHANGES, AND FORENSICS TEAMS. [XRPSCAN.COM](https://xrpscan.com)

The Latest from the Community

P16



About the Author

Vet is a data analyst/scientist and paramedic with a degree in computer science. Since joining the XRPL Community in 2017, he has led seminars on Bitcoin game theory and has become an active XRPL community builder, communicator, and educator, engaging through various platforms. He also runs infrastructure as a dMUL Validator and co-founded the NFT marketplace xrp.cafe.

XRPL INSIDER

The XRP Ledger ecosystem is evolving — not only technologically, but also through its growing community.

Real-life events like Apex and meetups across APAC, Europe, and the US help drive this growth. With new developments such as tokenization standards (XLS-33d), decentralized identity tools (XLS-40d), and price oracles (XLS-47d), XRPL is expanding its tech and compliance capabilities, leveraging its public, neutral, jurisdiction-free properties to support a wide range of use cases.

CORE LEDGER UPDATES

Real-World Asset Tokenization (XLS-33d)

RWA tokenization is gaining momentum in crypto, with major players like BlackRock entering the space. Zoniq, for example, is helping to bring a \$1B equity and debt fund to the XRP Ledger, following Meldgold's model of tokenizing precious metals. Both companies chose XRPL for its strong reputation, reliability, and low-cost transactions. To streamline RWA tokenization, a new standard—Multi-Purpose Tokens (XLS-33d)—is being implemented on the ledger and integrated into its decentralized exchange (DEX), paving the way for more seamless asset tokenization.

Decentralized Identity (XLS-40d)

Amendments are increasingly adopting a "compliance-first" approach, focusing on user onboarding and creating the building blocks for future protocols and applications. A key building block, **XLS-40d**, is now live on the XRP Ledger. This feature sets the foundation for Credentials and other upcoming amendments like Permissioned Domains (**XLS-80d**), and Permissioned DEXs (**XLS-81d**). Efficient on-chain credential verification allows both retail users and institutions to meet regulatory requirements, supporting a compliant and scalable ecosystem.

News XRP Ledger

Price Oracles (XLS-47d)

Oracles serve as the XRP Ledger's eyes on the outside world, much like the ancient Greek oracles Pythia and Apollo. They bring off-chain data—such as market prices, interest rates, weather updates, or even a Discord server's member count—onto the ledger, making it readily accessible and updateable for XRPL applications.

Oracle providers

Known oracle providers include Chainlink, Band protocol, Pyth Network. They specialize in high-quality and reliable data feeds for dApps like for DeFi and NFTs. Such providers could use XLS-47d to bring their price feed on-chain, XLS-47d is just a data container that providers can use.

Decentralized Finance (DeFi)

Knowing the price of a given asset is essential for advanced DeFi applications involving lending and borrowing and Automated Market Makers (AMMs) that require different formulas. Consider this scenario: If I put down 100 XRP, worth \$53, as collateral to borrow \$30 of a USD stablecoin, the crucial question is how much my XRP is worth at any given time. If XRP's price decreases, we could end up in a situation where my collateral is worth less than the borrowed amount of \$30, leading to collateral liquidation. In practice, the collateral would be liquidated to mitigate risk long before reaching that point.

Smart Contracts

Price Oracles will be particularly interesting with the upcoming programmability on the XRP Ledger, where dApps can access this data to create beneficial products like derivatives, insurance, and DAO voting results.

Programmability

Speaking of programmability, another pivotal discussion began after Ripple's announcement to work with the community and stakeholders to bring smart contracts to the

XRP Ledger. This is not a shift away from the fixed-function ledger but rather a complementary function to smart transactors and an addition to the network's customizability. The development is still in the early stages of exchanging ideas.

Ecosystem Updates

The XRP Ledger ecosystem is expanding rapidly with exciting advancements like Xahau and the EVM Sidechain. JSHooks, smart contracts (Hooks) that you can code in Javascript, is coming to Xahau.

Richard Holland's recent work on XahauD is boosting Xahau's throughput. The upcoming EVM Sidechain, connected to the XRPL via the Axelar integration, promises to bring more use cases and options to the XRP Ledger Ecosystem for developers to choose from.

...AND COMMUNITY DEVELOPMENTS

Apex and XRPL Meetups

In June 2024, at Apex in Amsterdam, the XRPL community gathered for its largest event yet, welcoming both developers and retail holders with networking areas, project booths, and discussions. Moai Finance's side event, "XPAND," featured sessions and panels focusing on interoperability. Highlights included updates on the borrowing/lending protocol, hooks toolkit, tokenization, and stablecoins.

Inspired by the power of real-life events, new XRPL meetups are emerging globally, including in Germany, France, Brazil, Japan, and the US. APAC events like Japan Community Day and Korea Blockchain Week drew major stakeholders and NFT creators, with hackathons showcasing XRP Ledger innovation.

Contribute new ideas, join discussions, or add code by participating in the XRPL Standards GitHub repository: [XRPL Standards on GitHub](#)²¹. The XRP Ledger is a shared public good—let's improve it together! 🍷

A New Era of Governance for the XRPL Ecosystem

With the new XRP Ledger Foundation, a new chapter of collaboration within the community is beginning.

THE MISSION OF THE NEW FOUNDATION

Incorporated in November 2024 as a non-profit association under French law, the XRPL Foundation aims to support the ongoing stability and innovation of the XRPL ecosystem.

Its mission is to foster an inclusive and decentralized environment for all community members—developers, users, infrastructure providers, and validators alike—whether they are building applications, contributing insights, or simply engaging in discussions. This environment empowers everyone to explore, collaborate, and shape essential infrastructure and financial solutions at their own pace.

The new Foundation's founding members are **XAO DAO, XRPL Commons, XRPL Labs, and Ripple**. Additional members can join by majority vote of the founding members.

A COLLABORATIVE GOVERNANCE FRAMEWORK

The XRPL Foundation is designed to represent the wider XRPL community through a governance model prioritizing decentralization and accountability. Structured to include representation from developers, academia, users, validators, and other key stakeholders, the Foundation's approach ensures balanced decision-making and collective oversight.

KEY RESPONSIBILITIES

The XRPL Foundation's responsibilities encompass several focus areas:

- Strengthening security and stability across the network;
- Empowering developers within the ecosystem;
- Promoting transparent governance practices;
- Building partnerships & supporting sustainable development;

- Educating and engaging the community;
- Advocating for regulatory considerations;
- Safeguarding the intellectual property of the XRPL;
- Driving interoperability with other networks and systems.

Dedicated working groups and committees will be formed to focus on areas such as technical infrastructure, educational initiatives, community events, and more! This will contribute to a decentralized yet coordinated governance process.

NEXT STEPS

Upcoming actions for the Foundation include transferring existing assets from the previous XRPLF (now InFTF), appointing an Executive Director, defining membership structure, and establishing committees to support these goals. Through a collective effort, the XRPL Foundation is poised to support the enduring strength and evolution of the XRPL community for years to come. ■

The Context

In August 2024, the previous XRPL Foundation announced its rebranding to **Inclusive Financial Technology Foundation (InFTF)**. This new, broader mission centers around promoting global financial inclusion, going beyond its previous responsibilities related solely to managing and overseeing the XRP Ledger. As a result, organizations including XRPL Labs, XRPL Commons, the current XRPL Foundation, Ripple, and other prominent members of the XRP community came together to discuss how a new XRP Ledger Foundation could be established and what the road towards that looks like.

Read more: xrpl.org/blog/2024/evolving-the-xrp-ledger ➤

How the Ripple USD Stablecoin Can Enhance the XRP Ledger

By Trent Davis and Kelly Browning

Ripple is expanding its digital asset offerings with Ripple USD (RLUSD), a secure, widely available, and compliant stablecoin. Issued natively on the XRP Ledger (XRPL) and Ethereum, RLUSD enhances these networks while addressing real-world financial needs.

Why is Ripple Launching a Stablecoin?

Stablecoins offer the reliability of fiat currencies coupled with the speed, transparency, and programmability of blockchains. In Q2 2024, stablecoins moved \$8.5 trillion in volume, surpassing payment giants like Mastercard and Visa. With digital transactions on the rise, RLUSD is well-positioned to provide enhanced liquidity and security for use cases across payments, foreign exchange, and tokenization—to name a few.

Ripple USD provides faster and cheaper transactions when compared to traditional payment methods, enhancing global payment efficiency. By launching RLUSD, Ripple addresses this growing demand while boosting the utility of the XRP Ledger.

What is Ripple USD?

RLUSD is a fully collateralized, USD-backed stablecoin designed to maintain a constant value of one U.S. Dollar ("USD"). It is backed by USD deposits and U.S. treasuries, ensuring security and reliability. Ripple has partnered with many centralized exchanges and market makers to provide accessibility, driving RLUSD adoption across financial markets.

RLUSD is issued in accordance with the New York Department of Finance Services stablecoin guidance, which sets forth requirements designed to protect stablecoin holders.



Visit [Ripple's website](https://ripple.com) to learn more about RLUSD and how you can integrate it into your business

Use Cases and Benefits for the XRP Ledger Ecosystem

RLUSD is built for efficient cross-border payments, offering fast settlements and lower costs by removing intermediaries. Integrated with Ripple's global payment network, RLUSD, and XRP combine to address the high costs and currency volatility impacting international payments.

The introduction of RLUSD also boosts utility and liquidity on the XRP Ledger's decentralized exchange (DEX). With XRP auto-bridging, RLUSD increases trading volume and supports new use cases, benefiting both developers and users.

RLUSD opens opportunities in tokenization and foreign exchange markets. Its stability reduces volatility, making it a valuable tool for enterprises looking to develop and trade tokenized real-world assets.

Onwards and Upwards

Ripple's launch of a secure, compliant stablecoin is a key step in advancing the XRP Ledger. RLUSD enhances the XRPL's native functionality by improving accessibility and unlocking new use cases for developers and institutions. As Ripple continues to innovate, RLUSD will play a key role in shaping the future of digital finance.

XRPL Country Profile: Zooming in on South Korea

By Simon Luling

As a contemporary innovation powerhouse, Korea has been fertile ground for the deployment of blockchain technology. The XRP Ledger has not missed the beat, with a memorable hackathon taking place during XRPL Zone Seoul in September.

KOREA ON-CHAIN

Our introduction to XRPL in Korea comes from **Catalyze Research**. With a deep understanding of the local Web3 ecosystem, Catalyze Research runs **XRPL Korea**, offering educational programs, workshops, and hackathons to engage and empower the local developer community. Their efforts are helping other developers, companies, and projects build on the XRPL, thereby contributing to the global growth of the ecosystem.

Catching up to “the cutting-edge”, Korea’s traditional corporate giants, such as Samsung, Naver, and Kakao, have been actively exploring blockchain technology and integrating it into various business models, namely in finance and supply chain management. According to recent research on the status of Web3 and blockchain initiatives, 60% of Korea’s top 82 publicly listed companies are involved in blockchain business activities. This indicates a significant adoption of blockchain across Korea’s corporate landscape.

Against the backdrop of **Ripple launching a 1 billion XRP fund for Korea and Japan** in June 2024, Korean developers are gaining access to resources to build with XRPL. As Korea solidifies its position as a global blockchain hub, Catalyze is betting on XRPL playing a central role in the development of decentralized applications and solutions.

THE 2024 XRPL KOREA HACKATHON

Taking place at Dream Plus, an innovation hub in the heart of the modern, bustling Gangnam neighborhood, 36 teams showcased novel projects using the XRP Ledger. Ripple CEO

Brad Garlinghouse, CTO David Schwartz and President Monica Long were in attendance on a visit that included a partnership launch between Ripple and Yonsei University.

The hackathon presented **four tracks** within the hackathon: **Financial/dApp Service; Blockchain Infrastructure; SocialFi/ GameFi; Smart Contract**. We spoke with three of the four winners (Ricoo, lampocket, Crowdcraft, PredictX), giving a glimpse into how the Korean community has put the XRP Ledger to use.

The future of XRPL in Korea looks promising, backed by international support and a flourishing community. Blockchain is being adopted by people and companies across Korea’s financial, tech, and academic hubs; and it is a sure bet the country will continue to play an oversized role in global innovation. ■

Korea, with its strong technological infrastructure and vibrant developer community, is poised for significant growth in blockchain technology. The XRP Ledger, being a highly efficient and scalable Layer-1 blockchain, aligns well with the needs of Korea’s fast-evolving Web3 landscape.

HACKATHON WINNERS

FINANCIAL/DAPP SERVICE: RICO0

WHAT IT DOES: A platform to optimize the use of content created at events, for promotional and communication purposes. This is done with tools deployed to capture, organize, edit and distribute the content.

WHY XRPL: Speedy transactions at minimal fees, essential in a framework handling numerous micro-transactions on content movement and acquisition. Robust decentralized infrastructure, ensuring the security and integrity of content transactions between content creators and buyers. Our Edit-to-Earn model creates an incentive for users to engage more with the platform while promoting the adoption of XRP as a utility token.

WHAT'S NEXT: Launch an AI-powered content draft builder, co-editing tools, and enhanced payment and withdrawal systems using XRP. Join an upcoming XRPL Commons Residency. Build the community and scale the platform globally.

BLOCKCHAIN INFRASTRUCTURE: IAMPOCKET

WHAT IT DOES: A seedless multi-chain wallet and SDK on XRP Ledger, operating without seed phrases. It addresses pain points around onboarding and accessibility by simplifying its processes, and security issues such as single-points-of-failure hacking. It was created by Yoon Hyoung Lee and Yewon Choi, both members of the blockchain club at Yonsei University.

WHY XRPL: An opportunity for reciprocal advancement—IamPocket can leverage the existing infrastructure and contribute to the ecosystem in areas where the infrastructure is underdeveloped.

What's next: Support the bridging of XRP Ledger with the Root Network (open gaming), and the EVM sidechain; Developing Lit Action-based programmable features; Implementing Multi-Chain Support; Offering B2B in-app wallet solutions.



SOCIALFI/GAMEFI: CROWDCRAFT

WHAT IT DOES: A crowdfunding platform geared towards team-building in early-stage projects. By integrating a fund management system to the team building and maintenance, it helps track fund usage, thus creating internal trust within the nascent team, and reliable oversight for the investors.

WHY XRPL: Fast transactions at low fees, a reliable and stable network for storing and distributing project funds, and XRPL's built-in decentralized exchange for handling investments in various cryptocurrencies.

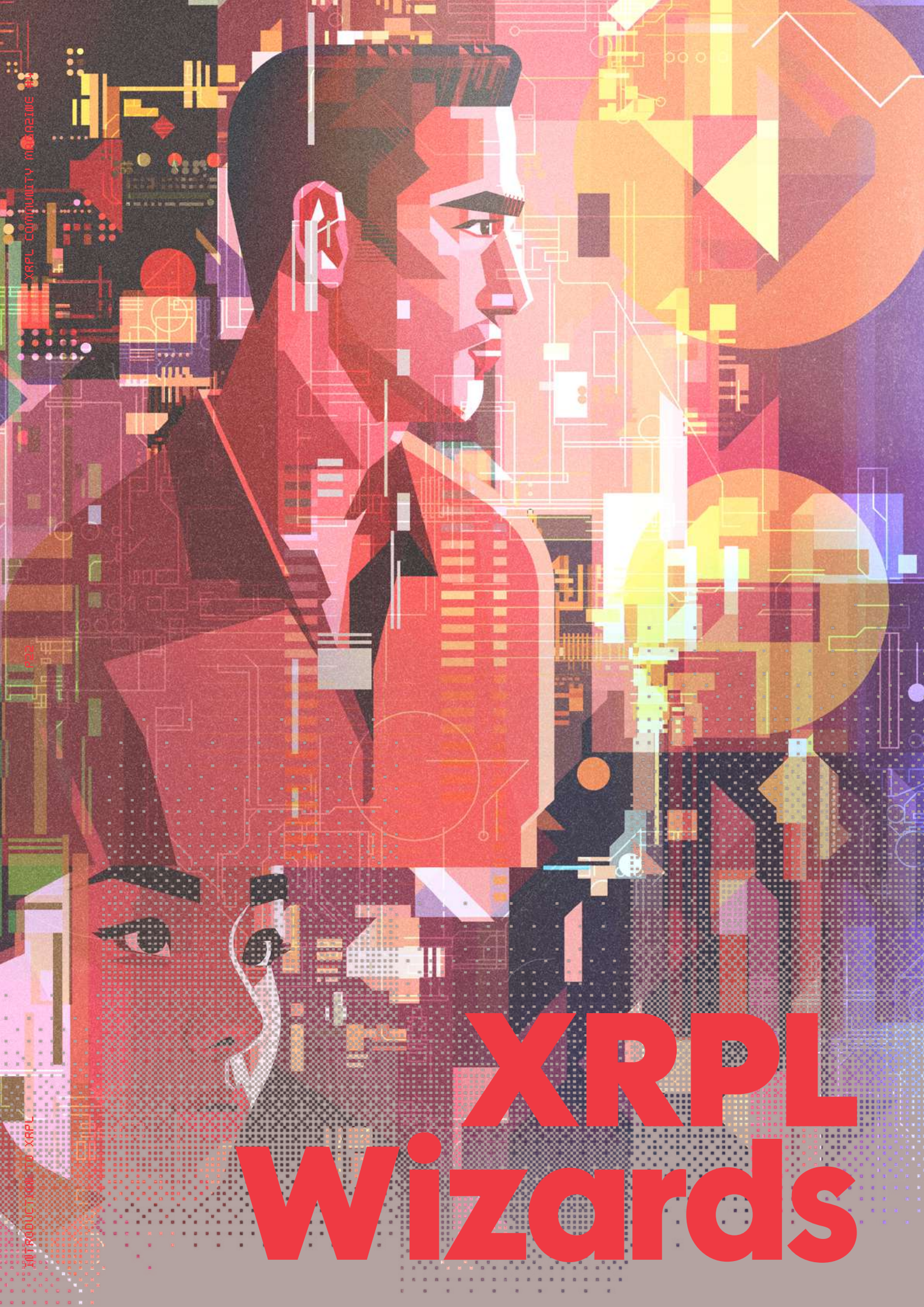
WHAT'S NEXT: MVP launch, user acquisition and partnership building in 2024. Platform feature expansion, implementing monetization model, user growth, and global expansion in 2025.

GO FURTHER!

[XRPL Korea Official Website²¹](#) (in Korean)

[XRPL Korea Hackathon²¹](#)

[Ripple Report in the Korea Times²¹](#)



XRPL COMMUNITY MAGAZINE #1

2022

AN INITIATIVE OF THE XRPL

XRPL Wizards

#AMA With i Aanchal Malhotra

The community gathered their questions for Aanchal Malhotra, Ph.D, Head of Research at RippleX. This AMA focuses on upcoming deployments, namely on DID and where blockchain meets AI. Read up on the edge of innovation at Ripple!



What does your role entail as Head of Research at RippleX?

My role involves identifying and prioritizing research initiatives that align with Ripple's vision to position the XRPL as a leading blockchain for institutional DeFi. We aim to foster a culture of innovation and experimentation, exploring emerging technologies and academic partnerships—striving to make XRPL the platform of choice for modern financial systems.

We work closely with other teams to translate research into practical solutions. An example would be XRPL's Automated Market Maker (AMM), a critical feature for institutional adoption. Following extensive research, we successfully developed a unique AMM design incorporating differentiating features such as Continuous Auction Mechanism and seamless integration with the CLOB DEX. Post-launch, the team continues to refine and improve the features through iterative development and to collaborate with UBRI partners for theoretical and data-driven insights.

Our R&D efforts combine technical know-how and persistent experimentation with cross-functional implementation efforts to translate research insights into practical solutions, ensuring that the ledger continues to serve evolving customer needs.

What are the key objectives and hot topics for 2025 for RippleX's efforts in research? The RippleX (RX) team, a business group within Ripple, is dedicated to the continuous evolution of the XRPL by experimenting and iterative development to ensure the ledger is positioned for success. RX research complements this effort with a longer-term and game-changer perspective. While we focus on long-term impact, we also prioritize delivering tangible results and making steady progress toward our vision.

Looking ahead, scalability, interoperability, privacy and compliance, and customization will be critical factors for institutional adoption of DeFi. To address these challenges, we are investing in cutting-edge cryptographic techniques such as zero-knowledge proofs (ZKPs), fully homomorphic encryption (FHE), and multi-party computation (MPC). We've assembled specialists with deep expertise in cryptography and distributed systems design, ensuring consistent progress in these critical areas.

In 2025, we will explore ZK-SNARK technology adoption to XRPL in a scalable way. Given that such advanced technology was not even available when XRPL was originally built, our primary goal will be to focus on building foundations to support ZK technology on the XRPL. However, we recognize that there are several challenges in terms of maturity, performance,

operational costs, and user experience. We will thus adopt a phased approach; initially focus on mature and proven techniques and develop strategic plans to scale beyond. This will allow us to democratize the development of advanced ZK applications with the broader community.

I also believe that AI, particularly the Large Language Models (LLMs), can significantly enhance UX on XRPL. By leveraging AI, we can develop more intuitive, personalized, and user-friendly interfaces, automate tasks, and improve security through advanced fraud and anomaly detection techniques. We are actively exploring collaborations with UBRI and other partners to advance AI research and its application to XRPL.

How do you manage research at RippleX? What is the process for going from idea to lab to product?

The RX research team plays an important role in contributing to the future direction of XRPL – ensuring scientific rigor in developing technical insights and innovative solutions and partnering with the key stakeholders to build products & services that meet evolving customer needs.

Our R&D process follows a structured, multi-step approach. First is problem identification and hypothesis generation, involving internal brainstorming with relevant stakeholders, community inputs, and market analysis, i.e. looking at industry trends and emerging technologies. Then comes the feasibility assessment by formalizing a strong hypothesis and testing it through theoretical research, proof-of-concept implementation, performance benchmarking, and other methods depending on the project type. The findings in this phase inform the next steps, which could be further investigation, a decision to put it on the product roadmap, revisit the project in the future, or completely abandon the idea. I strongly believe that collaboration with academics and researchers at the forefront of innovation is crucial to our success, so we leverage the expertise of our UBRI partners to supplement and accelerate our research efforts.

Ultimately it's an iterative process of building incrementally, ensuring that our research efforts have a tangible impact on the XRPL community and the wider blockchain industry.

Are there any ZKP initiatives planned for the XRPL?

Zero-knowledge (ZK) technology—with its properties of verifiability, privacy, and succinctness—is one of the most promising, versatile cryptographic tools bound to shape blockchain communities. Most blockchains face inherent trade-offs between

the key properties of Distributed Ledger Technologies i.e., scalability, decentralization, and security. In my opinion, ZK technology offers a promising solutions that enable blockchains to achieve a balance between all three properties. We already see several blockchains adopting this technology to address specific limitations around scalability, decentralization and security. Moreover, ZK's ability to balance privacy and compliance makes it all the more attractive.

At RX, we are assessing ZK's feasibility for the XRPL. Our hypothesis is that we can harness this technology to XRPL's advantages in a scalable way without compromising its core value propositions, which are speed, low cost, and reliability.

We've made significant strides in exploring ZK technology for XRPL. Our research includes a ZK-powered Light client protocol design to ensure secure and efficient access to the XRPL network for devices with limited resources. We have also designed the ZK bridge for trustless X-chain communication that builds on top of the ZK Light client protocol inspired by a recent academic paper by Dan Boneh, et al. Additionally, we've explored the potential of ZK-rollups, prototyping one for XRPL's payment transactions.

Through extensive research and experimentation, we've gained valuable insights into the performance and limitations of various ZK frameworks, informing our roadmap and transitioning from proof-of-concept to production-ready solutions. We will soon share details with the community for feedback and call for active contributions from researchers and developers. Stay tuned!

What do you see as the most exciting new features of the XRP Ledger?

ZK Technology, and features that enable sustainable, utility-driven use cases, bridging the gap between traditional finance and XRP Ledger, particularly for institutional clients.

Our RX roadmap with features like Verifiable Credentials, Permissioned Domains, and MPTs, collectively form a robust foundation for a wide range of compliant applications. The Lending protocol feature adds another crucial capability for building financial applications. The upcoming native programmability feature will further empower developers to customize and extend the capabilities of XRPL easily and at a faster pace.

I'm particularly excited about the potential of ZK technology to revolutionize the XRPL. This will enhance privacy, security, and scalability, opening up new possibilities for innovative applications.

What unique value do underrepresented communities—such as people of color, women, and LGBTQ+ perspectives—bring to shaping the future of the XRP Ledger community, and how can we encourage our community to create space for these essential voices?

I believe underrepresented communities bring a wealth of diverse perspectives that are crucial for the successful design and adoption of any technology, including the XRPL. Different backgrounds and experiences are critical to innovative problem-solving, ensuring that the products and services we design are more accessible, inclusive, and user-friendly. For instance, a diverse team can identify and address potential biases and ethical implications in the design and implementation of XRPL, ensuring responsible and equitable development and adoption.

We organize inclusive XRPL events such as Apex, UBRI Connect, and Community Hackathons and offer resources such as the [XRPL Learning Portal](#)²¹ for everyone to have equal opportunity to learn and access blockchain technology. We are mindful to adopt unbiased practices in our sponsorship and grant programs. I believe these efforts together help us create a more welcoming environment, harness the full potential of our community, and drive the future of XRPL for all. ■

About Raghchal Malhotra

Raghchal is the Head of Research at Ripple, leading initiatives to introduce native DeFi features on XRPL. With expertise in cryptographic primitives like Multi-party computation and Zero-Knowledge SNARKs, she has spent nearly five years advancing XRPL's scalability, privacy, and interoperability. Raghchal also serves on the Board of Directors for the Travel Rule Information Sharing Alliance (TRISA), promoting secure and compliant digital asset exchanges. She holds a PhD in Computer Science from Boston University.

By Simon
Lüling

ALL YOU Have to Know About the EVM Sidechain

GO FURTHER!

[Axelar GMP](#)

[and Interoperability](#)

[Peersyst on bridging XRPL](#)

[and EVM](#)

[EvmOS on EVM compatibility](#)

[and Cosmos SDK](#)

Before delving into its functionality, a few definitions never hurt:

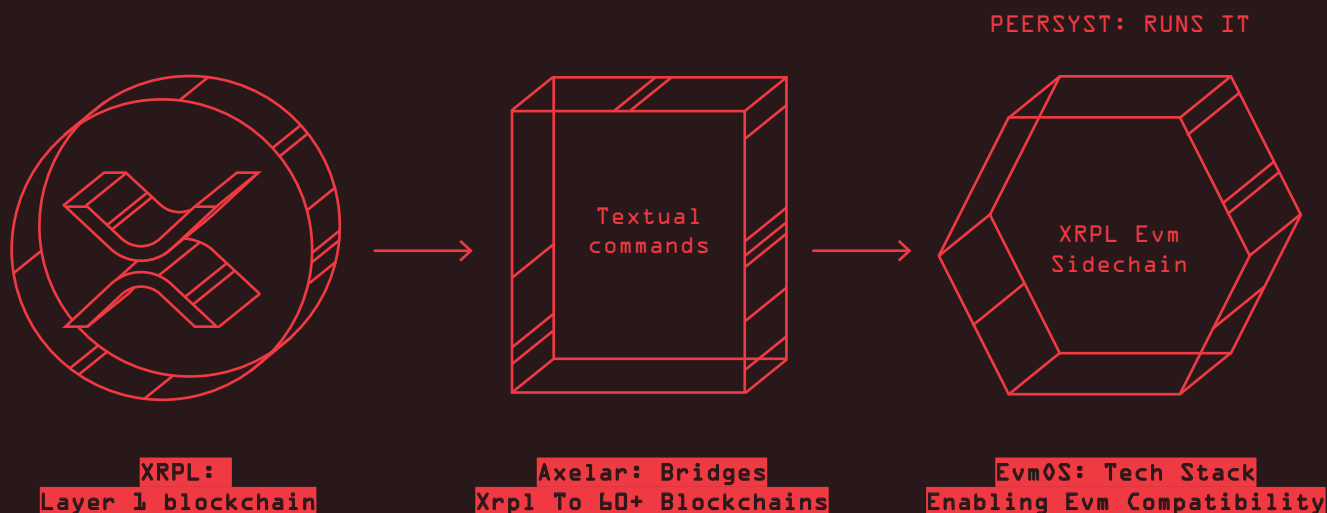
The **Ethereum Virtual Machine (EVM)**, is a decentralized computing platform that executes smart contracts on the Ethereum blockchain. It enables the creation and execution of decentralized applications (dApps). It is the base protocol on which all Ethereum-based blockchains are built.

Sidechains are a scalable solution that extends the functionality of blockchain networks by creating parallel chains that run

alongside the main blockchain. Sidechains allow developers to build and deploy custom blockchain applications with specific features or use cases while still leveraging the security and consensus of the main blockchain.

In essence, the EVM Sidechain's deployment will bridge the high-speed, low-cost, and liquidity-rich environment of the XRP Ledger, with Ethereum's smart contract capabilities.

THE THREE COMPONENTS OF THE BRIDGE



We are still awaiting the full launch of a major deployment for our ecosystem: the XRPL EVM Sidechain. Yet with its Testnet operational for over a year and early DApps available on DAppScout, the sidechain's operational possibilities from day 1 of its (imminent) Mainnet inception promise to be consequential.

1) Axelar

The first step in the process goes through Axelar, a blockchain designed to facilitate secure messaging between different chains. Announced at Apex, Axelar has partnered with Ripple to bring seamless interoperability to the XRP Ledger across a diverse range of blockchain networks.

In practice, they implement the textual commands between the XRP Ledger and the other networks. Axelar's techstack will help bolster the XRPL DeFi ecosystem, and enable developers to leverage XRPL's built-in features, such as its native DEX, the AMM and XRPL's secure and efficient payments system.

Axelar will bring General Message Passing (GMP), enabling developers to execute function calls on smart contracts residing on 60+ connected blockchains. GMP ensures the secure, cross-chain exchange of a wide array of payloads, including both data and function calls. As Jasmine Cooper, Head of DeFi Product at Ripple, comments, "With GMP, one can build a dApp that uses smart contracts from one chain (eg. EVM sidechain) but removes the bridging aspect from the user flow, so a user could transact with their wallet from a different chain (eg. XRPL Mainnet) without necessarily realizing that their transaction is executing on another chain."

To ensure the seamless cross-chain transactions, Axelar is integrating Squid Protocol, which operates as a "portal" for cross-chain swaps through a single interface.

2) Peersyst

The textual commands undertaken by Axelar are then processed by Peersyst, which has effectively built, and runs, the XRPL EVM sidechain. The synthesis between XRPL's high-speed, low-cost, and liquidity-rich environment and Ethereum's smart contract capabilities expands XRPL's utility and appeal. Through this integration, the sidechain not only amplifies XRPL's inherent features but also invites a broader range of applications and development opportunities.

Beyond EVM interoperability, the sidechain's development on the Cosmos SDK enhances its ability to interact within the

Cosmos ecosystem, ensuring connectivity and compatibility with IBC (Inter-Blockchain Communication protocol). Which brings us to our third component.

3) evmOS

XRPL and Peersyst teamed up with Evmos, an EVM blockchain designed for cross-chain dApp development. Evmos' customizable tech stack—incidentally named evmOS, is what enables EVM compatibility within Peersyst's framework. The modular basis of evmOS will provide XRPL developers with unprecedented flexibility in further developing the XRPL EVM sidechain on their terms.

According to Cooper, "By leveraging evmOS technology, we can offer developers unparalleled flexibility and customization options, enabling them to build innovative cross-chain applications that tap into the vast potential of the XRPL and the broader Interchain ecosystem. It will accelerate the growth of the XRPL EVM sidechain and unlock new opportunities for developers and users."

The interoperability brought by XRPL EVM sidechain will be further enhanced via evmOS outposts. Outposts operate as gateways connecting different blockchain networks for the transfer of assets and information between them, abstracting complex functionality for the end user.

One relevant example would be the exchange of assets without switching wallets and connecting to multiple chains, such as the function of Osmosis (a Cosmos blockchain in the IBC framework, dedicated to asset-swapping). In sum, developers and users' horizons will be exponentially broadened—benefitting from seamless interoperability, asset and data transfers across a vast range of blockchain networks.

All in all, EVM compatibility will bring new projects to the XRP Ledger, enriching the ecosystem with new developers and innovative use cases. Increased interoperability is also a major step towards a universal blockchain, for a more horizontal, transparent and inclusive future. ■



```
connect:  
= new x  
L
```

```
n createdID() {  
t.connect();
```

```
a new wallet
```

```
.net:5
```

DECENTRALIZED IDENTITY DEEP-DIVE

```
controller:  
publicKeyBas
```

```
("DID")
```

```
connect(  
console
```

org/ns/
ssi`,



```
did() {  
    };
```

```
        .address  
        did Wallet Seed: ...wallet.seed);
```

```
        w3.org/ns/did/v1",  
        address`,
```

```
        id: `did:~:~:{wallet.address}#key-1`,  
        type: "E",  
        verificationKey2018",  
        controller: {id: xrp1:#{wallet.address}`,  
        publicKey: wallet.publicKey
```

```
        console.log("DID Document:", JSON.stringify(didDocument, null, 2))
```

```
        await client.disconnect();
```

```
    }
```

*A Comprehensive
Look at Distributed
and Verifiable Digital
Identities*

**DIGITAL
IDENTITY 3.0
EXPLAINED**

By Thibault Langlois-Berthelot

By 2029, over 90% of the Planet will be online, all but completing our transformation to homo numericus. Paradoxically, the concept of digital identity remains obscure for most Internet users, even though they benefit from it through various online platforms.

Digital identity as we currently know it is imperfect: complex to generate, unreliable, lacking interoperability, relying on third parties that may or may not protect our personal data— all in all, digital identity is still lacking in verifiability. This characteristic is essential because identity and trust depend on verifying a person's qualifications and authority, for the use of an online account. Such verification ensures the safe access to digital services like social media, government services, emails, and document exchanges.

To verify is to ensure that trust can be established. It also means holding accountable the individual that shares information online, i.e. the one claiming attributes of their digital identity. Every day, we verify countless pieces of information, with a few clicks on search engines. However, the Internet was not designed for effective and automatic identity verification. You are not asked for your ID when browsing Google; only strongly encouraged to create a Google account to enjoy the full extent of its services. Today, "digital identity" is shaped by one's collection of public and private digital accounts.

**BUT HERE'S THE PROBLEM:
TODAY, MANY INTERNET USERS GET
LOST WITHIN THEIR OWN DIGITAL
IDENTITIES.**

Keeping track of every aspect is complicated. With the myriad of digital identities one creates across platforms online, many people feel overwhelmed by the sheer amount of information for which they need to keep track.

The Future of Digital Identity is Decentralized

Digital identity must, therefore, be reimaged — simpler, more efficient, secure, and above all, verifiable. Focusing on enhancing trust and simplifying user experience, we are entering the era of "digital identity 3.0" (in reference to Web3)¹.

Since 2016, a redefinition of our digital identity has been underway, relying on new IT standards added to existing Internet protocols. Decentralized Identifiers (DIDs) and Verifiable Credentials (VCs) are set to become just as essential to our online experience as URLs today.

These new digital identifiers are designed to complement, and possibly replace, traditional login and password systems. They will offer enhanced guarantees, security, and reliability for the identity information we use while navigating online. In other words, they redefine how one interacts with online accounts and how online services interact amongst themselves.

This (r)evolution will only be possible if major digital platforms adopt these new standards on a large and coordinated scale.

The shift is showing promise with the new European regulation, eIDAS-2, which will establish and enforce the relevant technical standards, and referencing technological concepts developed by leading Internet companies. As a result, the state-backed European Digital Identity Wallet (EDIW) will soon offer a next-generation dashboard where all identity elements can be digitally accessed, consolidated, and managed according to one's preferences.

A New Digital Identity Wallet in the EU

Much like your physical wallet, which you control from end to end, you will be able to manage, store, delete, or update your (3.0) digital identity flows through a mobile app provided free of charge by EU member states. While its use will be optional, a substantial budget will be allocated to promote this much-anticipated new era of seamless, cross-border, and interoperable digital identities across services and organizations.

This improved digital identity will be protected by hybrid technologies combining current Web elements with new standards, including distributed ledgers, promising unprecedented access to, and control over, your digital identity.

The aim is to offer an alternative digital identity to the ones provided by companies like Google, Microsoft, Apple, and Meta. Soon, you'll be able to connect to these services through next-generation mobile apps. With the scan of a QR code, you will be able to use their services without your personal data being exploited without your consent, as is often the case today.

1. Thibault Langlois-Berthelot, Blockchain in the context of law and identity (PhD thesis, Law, 2023), English translation, accessible on Zenodo: doi.org/10.5281/zenodo.8398960². Original version (French): La blockchain au regard du droit et de l'identité, HAL: tel-04190658³.

The new Identity 3.0 wallet is designed to be a personal digital vault for storing all parts of your online identity—social media accounts, voting credentials, travel information, and more. In short, your identity data will be centralized and securely controlled by you on your phone and computer, using decentralized identifiers (DIDs) and verifiable credentials (VCs). These tools will be easy to use, even if they sound complex.

Distributed vs. Decentralized

Distributed digital identities are expected to be available to all EU residents by 2026–2027. Technically, these identities will be "distributed" rather than fully "decentralized." Your next-generation digital identity, or "3.0 identity," is distributed in two ways: it will be issued collaboratively by multiple public and state-trusted organizations, and it may use distributed IT components via blockchain².

Practically speaking, your digital identity will be shared among several public trusted third parties, all of whom will be legally regulated, as will the technological components used, for example, with the European digital identity wallet, which will be certified by a "trust label" to prevent counterfeiting and data theft. Together, these elements will allow you to receive, send, create, or delete verifiable information in minutes and share it across a wide range of online services available within the EU. Gradually, more online services will likely be required to adopt this new concept and method of digital identity, currently European and Web3-based.

It should be noted that these standards are not limited to Europe. They actually come from the United States, where adoption is currently underway, although without the EU's dedicated regulation standards. ■

About Thibault Langlois-Berthelot

Thibault is a legal expert active and the founder of the KRYPTOSPHERE network. He also holds a PhD in law, with his thesis is titled "Blockchain in the Context of Law and Identity."

FF *A big thank you to Kryptosphere, France's largest student blockchain club, for its support on this article. XRPL Commons is a proud sponsor of the club's work."*

KEY TAKEAWAYS

European citizens' digital identities should gradually become more accessible, personalized, seamless, secure, reliable, interoperable, user-friendly, and respectful of Internet users' data. Through complementary technologies, 3.0 identity will facilitate the ongoing digitalization of society and meet users' identification needs—both online and face-to-face—through the use of QR codes, Bluetooth, or contactless technology (NFC)³. This paradigm shift for digital identity, made possible by integrating new technological components, will simplify the verification of individuals' identities when sharing information online. Information between online services will flow seamlessly, resulting in increased productivity for both Internet users and online services, and by extension, our digital society.

It will also make Internet users more accountable for their actions, while still allowing them, in certain cases, to retain the right to use pseudonyms, thus preserving their pseudo-anonymity.

In addition, distributed identity will play an essential role in marking content partially or fully created by AI models. This will allow for quick identification of the authorship, originality, and accountability of their creators.

In Europe, Identity 3.0 will ultimately strengthen digital trust in a measured, proportionate, and relevant way, in line with the objectives and promises set forth, while also addressing the current needs for the evolution of Internet users' digital identities.

For the first time since the advent of the Web, "identity 3.0" will allow users to reclaim ownership of their digital identities. The next, longer term challenge, will be to prevent unnecessary over-identification of Internet users, to avoid risks of (geo)political censorship and control over populations.

2. It is important to note that the blockchains potentially connected to the European digital identity wallet will mainly be private and hybrid blockchains, not public blockchains, which are expected to remain marginal due to their partial compliance with certain European regulations (eIDAS, GDPR, AML/CFT regulations, etc.). 3. Since 2021, and ahead of the adoption of the proposed amendment to the eIDAS Regulation (became "eIDAS-2^m"), European bodies have created a "toolbox" and an "Architecture Reference Framework – ARF^m" to guide stakeholders and discussions on the ongoing developments of the European Digital Identity Wallet (EDIW^m).

DID and the XRP Ledger

As of October 2024, the Decentralized Identifier amendment (XLS-40d) has been enabled on the XRPL. This makes it timely to discuss identity in this magazine and spotlight the projects leveraging this update.

What do we mean by DID?

A **Decentralized Identifier (DID)** is a new type of identifier defined by the World Wide Web Consortium (W3C) that enables verifiable, digital identities. DIDs are fully controlled by the DID owner, independent from any centralized registry, identity provider, or certificate authority.

Key DID principles

- ❗ **Decentralization:** No central issuing agency controls the DID, enabling the owner to update, resolve, or deactivate it.
- ❗ **Verifiable Credentials:** The DID ecosystem has three parties: user, issuer, and verifier. The user controls the DID, but needs a trusted issuer to verify the information offline. The issuer provides a verifiable credential, which the user gives to verifiers that need to confirm the user's identity.
- ❗ **Interoperability:** DIDs are open to any solution that recognizes the W3C DID standard. A DID can be used to authenticate and establish trust in various digital interactions¹.

As Mayukha Vadari, Senior Software Engineer at Ripple explains¹, "A DID is roughly equivalent to a fingerprint in the real world. Everybody has one, and though it doesn't really do anything on its own, it's useful in other contexts. For example, it can connect to Verifiable Credentials (VCs) or other data that prove who you are without relying on a centralized authority".

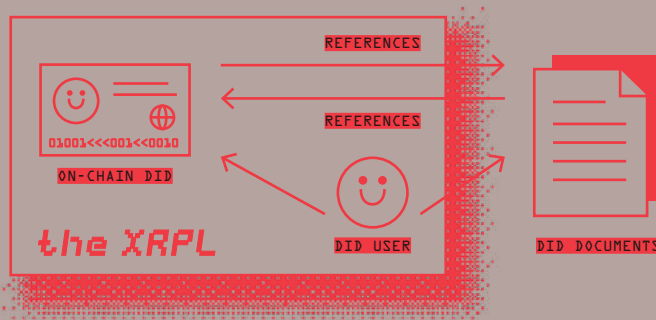
How DID works on the XRP Ledger

An **XRPL account holder** generates a DID that is controlled by the account.

- 1 The **DID** is associated with a DID document as defined by W3C specifications.

- 2 A user provides their DID and VC to a verifier for a digital task.
- 3 The **verifier** resolves the DID to its document and uses the VC to verify its authenticity.
- 4 A **DID on XRPL is created** by linking a DID document to an on-chain DID object. This setup is bidirectional: the document confirms the account as part of its identity, and the account links back to the document as its identifier.

This mutual link ensures no one else can forge your identity. This approach follows the W3C specification to be interoperable with any other network that follows the same spec.



Why it Matters

According to Vadari, Introducing decentralized identifiers will enable a system that allows users to have control over their online identity in a sovereign way.

Furthermore, this feature sets the foundation for Credentials, as well as other upcoming amendments like Permissioned Domains (XLS-80D) and Permissioned DEXs (XLS-81D). Efficient on-chain credential verification allows both retail users and institutions to meet regulatory requirements, supporting a compliant and scalable ecosystem. In this section of the Magazine, we invite you to explore the different facets of identity: whether it's digital, national, or personal identities, you will surely find something that piques your interest. ■

1. Source: <https://xrpl.org/resources/known-amendments#did>

Decentralized Identity Projects on the XRP Ledger



Fractal ID^[1] is a platform that simplifies access to various DApps on the XRP Ledger by reducing the need for multiple KYC processes. It uses KYC/AML technology to allow users to switch between DApps with a single authentication process. The platform features an off-chain registry that is accessible to all, aiming to promote wider adoption while supporting a secure and compliant ecosystem.



VerifyE^[1] is creating a solution to simplify storing and verifying data on the blockchain via API calls. It offers two key services: submitting data to the blockchain and verifying that stored records match the originals. The platform also provides a cost-effective, eco-friendly alternative by enabling companies using energy-intensive cryptocurrencies to switch to XRP.



Redimi-Decentralized Passports on the XRP Ledger^[1] (Coming Soon) XRP Passport is a decentralized digital identity solution built on the XLS-40d protocol and XRPL, empowering individuals to control their identity for DeFi applications. It combines self-sovereign identity principles for secure, user-friendly verification. Funding supports a prototype for XRPL-integrated apps and a pilot for feedback to refine the solution. The open-source module will ultimately be available to the XRPL developer community.



Self^[1] Self allows communications and interaction between verified actors. Self's integration with the XRP Ledger (XRPL) will allow consumers and businesses to verify which person or organization owns an XRPL account and know in real time if, when and by whom transactions have been carried out thereby assuring and propagating online trust.



Dibs.Directory^[1] Dibs is a file fingerprinting app and service designed to help you manage your digital assets. By allowing you to register claims on the public blockchain, Dibs provides a secure way to prove you had a file at a specific timestamp.



Pawesome ID^[1] (Coming Soon) Pawesome ID is a pet digital identity (DID) passport solution built on the XRP Ledger, designed to secure proof of pet ownership and verify pet origins. Its goal is to enhance animal welfare recognition in society.

*Curious about DID projects on the XRP Ledger?
Here's a list to get you started. With the
recent activation of XLS-40d on the Mainnet,
expect this list to soon expand as new and
innovative use cases arise.*



USHI.care (Coming Soon) Ushi is a decentralized platform that's set to revolutionize clinical trials by combining verified digital identities with incentivized participation. We provide secure, privacy-preserving verification of participants' identities and health conditions, ensuring they are who they claim to be. Additionally, Ushi leverages blockchain technology to offer micro-rewards, encouraging sustained engagement and retention among participants.



Sig Verify (Coming Soon) Sig Verify is a blockchain-based digital signature platform using decentralized identifiers (DIDs) for secure, verifiable document authentication. Built on the XRP Ledger, it supports privacy and compliance for regulated industries. Automated workflows and KYC verification streamline document management and enhance security.



Cr3dential (Coming Soon) Cr3dential is a Dapp that revolutionizes the way credentials and certifications are issued, stored, and verified. By leveraging the decentralized ID standard according to W3C and the security and transparency of blockchain technology, we provide a seamless and tamper-proof system for both credential issuers and holders. Our mission is to enhance trust and efficiency in the credentialing process across various industries.

EXPLORE AND CONTRIBUTE TO THE XRPL ECOSYSTEM MAP!



Our continuously expanding, open-source database now features over 190 live projects utilizing the XRP Ledger. Get your project featured on the map and help us grow the list!

[Check it out now](#)

National Digital Identity in a Himalayan Kingdom: Interview with Audrey Low

What happens when a discrete, traditional mountain kingdom adopts on-chain digital identity for its country folk? Speaking with Audrey Low, President of Gyalpozhing College of Information Technology (GCIT), and leading blockchain innovation in Bhutan, we get a fascinating glimpse of a DID achievement at high altitude.

GO FURTHER!

[Bhutan NDI Official Website](#)

[Audrey Low's talk at UBRI Connect](#)²¹

[GCIT participation at UBRI Connect](#)²¹

[Bhutan Innovation Forum](#)²¹

By Simon Luling

Bhutan, a small Buddhist kingdom tucked in the Himalayas, was long known for its shunning of global capitalism and conventional growth metrics—introducing Gross National Happiness as a preferred measure, over GDP and per capita income, for example.

However, Bhutan has been increasingly interacting with the world, inviting experts of various fields, and using cutting-edge technology, to develop national projects. **Bhutan National Digital Identity (NDI)**, the Kingdom's digital identity program, is one such outcome. Whether or not it shows openness to integrate the globalized system, it certainly represents good use of globally-deployed technology to the benefit of all the Kingdom's subjects.

GCIT was established in 2017, as the Royal University of Bhutan's branch dedicated to computer sciences and tech innovation. Professor Low has been at its helm for the past three and a half years, and has developed educational programs and tech deployments in direct coordination with the Druk Gyalpo—the King of Bhutan. Recently, Low got involved with UBRI Connect, where she presented Bhutan NDI.

DIGITAL BHUTAN

Bhutan NDI was created to address issues of trust and security for its citizens' bureaucratic processes, all with an eye on ensuring inclusion. Its stated mission is to foster a harmonious digital ecosystem for seamless delivery of government & business



services; provide verification and authentication as-a-service for individuals and service providers to meet compliance requirements; continuously innovate to meet the demands of an evolving landscape of digital transactions; driving financial and economic inclusion for all citizens.

"Our vision is to accelerate seamless access to citizens, governments, businesses, and financial services by facilitating a digital ecosystem rooted with trust using blockchain."

In February 2023, the Crown Prince became Bhutan NDI's 1st Digital Citizen. On October 13th, Bhutan NDI was officially rolled out to the population. Recent statistics show that 140,000 Bhutanese have registered—nearly one fifth of the Kingdom's population, along with over 30 public services and a dozen private sector institutions.

In practical terms, Bhutan NDI has thus far been used in the **improvement of services across sectors**. At the governmental level, it has been deployed to improve human resource services, and document work completed and paid leaves.

Financial institutions, namely the Bank of Bhutan and the Royal Securities Exchange of Bhutan, have **enhanced e-KYC**, and introduced passwordless logins, as well as verification in a one-stop portal and wallet. In the private sector, local SIM cards have been registered on Bhutan NDI, and soon the platform will have applications for the country's growing (and sustainable) tourism sector.

Bhutan NDI was built on Polygon, for its advanced consensus mechanisms ensuring fast and secure transactions, and the need for smart contracts. It has made DID management more reliable for users, especially when applying **Zero-Knowledge protocols**.



Citizens registered with ZK protocols—namely via KYC and biometric parameters (which Low terms **"Show but don't tell."**), transact in a trust ecosystem that connects government, individuals, private and public organizations. With 90% of the platform built on open-source technology, Low foresees integrations on the XRP Ledger, with its upcoming smart-contract capabilities.

"Its underpinnings is also akin to the philosophy of Self-Sovereign Identity (SSI) meaning personal data is not with any 3rd party or in the cloud. SSI replaces all data attributes, and is stored in the 100% decentralized NDI wallet, with biometrics enabled", she adds.

BEYOND THE MOUNTAINS

In less than a decade, the small Himalayan kingdom has become a global reference for blockchain-based DID. The early success of Bhutan NDI's deployment has led it to contribute to SevisPass, a similar DID platform in the Pacific country of Papua New Guinea.

Bhutan NDI has earned global accolades. It earned an award for Identity and Data at [Mobile Ecosystem Forum²¹](#), in recognition of features around ZKP, passwordless single sign-ins, verifiable credential exchange, and a blockchain layer for security and privacy. Bhutan NDI earned the award for decentralized identity at the [European Identity and Cloud Conference²²](#), for contributions to digital identity management and its use of blockchain. Most recently, in October, it became the first national DID program to join the [Global Acceptance Network²³](#).

As Professor Low reminds us, "Size and value of GDP does not matter! You just need a good vision, wisdom of a monarch or the leader to provide the courage to break out of the norms and do what is right for the development and modernization of a nation." 🏔️

RESEARCH INSIGHT

Enhancing User Privacy in Digital Identity Management



The Boquila Project

As online services grow in number, managing digital identities has become increasingly complex. Traditionally, federated identities, which allow users to access multiple platforms using the same login credentials, have made the process more convenient. However, they introduce a single point of failure by centralizing security with an identity provider, creating privacy concerns and risks for users. On the other hand, decentralized identities give users more control but can be harder to manage.

The Boquila Project explores whether decentralized identities can be improved to match federated systems' easy use while enhancing privacy and security. This article delves into how the Boquila solution attempts to solve these issues by offering a decentralized, user-friendly identity management system that brings back ownership and control to the user's sensitive data.

Fun Fact: The name "Boquila" comes from *Boquila trifoliolata*, a unique plant known for its remarkable ability to mimic the leaves of surrounding plants. Just like the plant adapts to its environment by changing its appearance, the Boquila project

aims to create an identity system that adapts to different services without revealing the user's underlying identity—offering privacy through "mimicry" in the digital world.

Federated vs. Decentralized Identities

Digital identities have evolved over time, beginning with centralized models, where each service would require unique login credentials. This became impractical as the number of online services grew. Federated identities emerged, allowing users to log into multiple services with a single set of credentials, such as "Sign in with Google." While this model improved usability, it also made the identity provider a single point of failure (SPoF) and a centralized data collector with access to sensitive user information.

Decentralized identities, or self-sovereign identities, remove the need for a central provider and give users control over their data. However, managing multiple identities can be burdensome, and the use of a distributed ledger can inadvertently increase the risk of privacy violations due to the public exposure of identifiers.

By Mariarosaria Barbaraci, University of Bern

The Need for a Middle Ground

Users appreciate the convenience of federated identities, but there is a growing concern about privacy and security risks associated with their online presence, particularly regarding the tracking of activities across different services. This project aims to explore whether a decentralized approach can be enhanced to provide the same level of usability as federated identities, while allowing users to maintain control over their data and remain unlinkable across the various services they use in their daily lives.

Thus, the research question driving the Boquila project is: Can decentralized identities be enhanced so that users can access multiple platforms with a single credential, while preventing tracking and maintaining control over their personal data?

A Novel Approach

The Boquila solution aims to combine the best of both worlds—offering the ease of use of federated identities while building privacy on top of decentralized identities. Unlike traditional federated systems, this approach eliminates the need for a central identity provider by utilizing a distributed ledger to ensure availability and Sybil-resistance.

Users, on their end, only need to manage one set of credentials. A user agent (such as a mobile app) on the user's device generates unique, unlinkable credentials for each service, ensuring that users' activities remain private and untrackable across platforms. The cryptographic library developed leverages cutting-edge cryptographic primitives in innovative ways. This approach preserves the usability of federated identities while decentralizing control, giving users back ownership of their data and eliminating the privacy risks associated with a single identity provider.

Conclusion

The Boquila Project's solution is a promising advancement in digital identity management. It effectively bridges the gap between the convenience of federated identities and the benefits of decentralized identities, while also providing enhanced privacy through unlinkability. By empowering users to control their data while maintaining a simple user experience, it has the potential to revolutionize how we manage digital identities. In essence, Boquila delivers usability and privacy for lazy users, allowing them to enjoy a seamless experience without sacrificing security.

As online services proliferate and privacy concerns continue to escalate, solutions like Boquila offer a glimpse into the future of self-sovereign, user-centric identity management. The Boquila Project is committed to further develop this technology that ensures both usability and security for all users. ■

FUN FACT

The name "Boquila" comes from *Boquila trifoliolata*, a unique plant known for its remarkable ability to mimic the leaves of surrounding plants. Just like the plant adapts to its environment by changing its appearance, the Boquila project aims to create an identity system that adapts to different services without revealing the user's underlying identity—offering privacy through "mimicry" in the digital world.

GO FURTHER

The Boquila project was born during the yearly Hackathon at the I3 Blockchain Bootcamp, with the Boquila team winning²¹ the competition. Get in touch to discover more about the solution and the next steps forward.

MARIAROSARIA

mariarosaria-barbaraci@unibe.ch²¹

JAYAMINE

jayamine.alupotha@unibe.ch²¹

DID's Extended Arm: Exploring Digital Assets

By Andrius Bartminas
Bartminas
Bartminas

🚩 **How would you define digital assets? You likely understand both words individually and use them daily. But are they a part of your vocabulary when put together?**

This concept dates back to the late 1990s, and every single one of us owns thousands, if not millions, of digital assets. Yet, the term sometimes might feel bodiless, just a vapor floating around and occasionally emerging in headlines next to words like “innovation, technology, or future”.

In truth, digital assets are anything and everything that was created and exists in a digital form, come with distinct ownership and usage rights, and have or provide value. If it sounds like the definition covers all digital things, you're not far from the truth.

🚩 **Examples of Digital Assets**

A vacation selfie, a video from your friend's birthday, songs on your old MP3 player, slides from your freshman year, that PDF file your boss asked you to convert to Word – these are all examples of digital assets.

The list becomes longer when we include website domains, social media posts, programs, apps, and tools on your PC or mobile. Even user data, analytics, and customer information stored by your organization qualify as digital assets.

All this has existed for over 20 years, so why are we bringing up digital assets in 2024? Because the new generation, enabled by blockchain technology, solves the problem of “double spending”.

Simply put, when you upload a vacation selfie to Instagram, you still have one on your phone. Hence, you're not giving away the original, you're creating a copy.

It can be convenient. Sharing digital photos is much easier than printing out physical albums and showing them to your friends. But what if you're an artist creating digital art? While forging a physical painting is possible, it's difficult; replicating a .jpeg takes just a few clicks.

Blockchain-enabled digital assets prevent replication and provide property rights, allowing us to embrace the new wave of assets like cryptocurrencies, NFTs (non-fungible tokens), CBDCs (Central Bank Digital Currencies), tokenized assets, digital certificates, and digital collectibles.

🚩 **What are Digital Collectibles?**

A digital collectible is a type of digital asset that signifies ownership or provides proof of authenticity for a unique item or piece of content, utilizing blockchain technology. Each digital collectible is unique, with distinct characteristics permanently recorded on a blockchain, ensuring authenticity and scarcity.

This digital provenance means that while a digital collectible can be copied, its ownership and the original version can be reliably verified, making it highly valued in the digital economy. Hence the collectible part.

Digital collectibles can also be phygital. It covers everything we just discussed and adds a physical representative of the digital asset.

While embodying distinct entities from our digital selves, digital assets – ranging from your everyday computer files to cryptocurrencies, raise an array of issues around ownership, usage and authentication – intertwining with the challenges surrounding DID.

🔗 Examples of Digital and Phygital Collectibles

If you would Google top digital collectibles names like CryptoPunks, CryptoKitties, or Bored Ape Yacht Club would pop up. These are some of the first-generation NFT collectibles that in their prime cost almost half a million USD.

Digital collectibles have evolved, becoming interactive and integrated into digital worlds like metaverses and gaming platforms. They also often offer social or status benefits within online communities.

For example, DiSCO KCOiN (a part of the KEiINO COiNs collection) is created by Eurovision group Keiino and grants the holder access to the exclusive KEiINOCUB.

O Mundo Digital, while also a coin, works differently. It is the world's first physical coin designed by Artificial Intelligence. The front side of each coin is crafted by human artists, while the back is generated through an innovative process that mimics the evolutionary complexity of nature.

🔗 XRPL and Digital Collectibles

Both new generation collectibles that we just discussed—DiSCO KCOiN and O Mundo Digital—are enabled using XRPL technology. They are a part of BeMy.Digital, a platform. It is designed to empower institutions, brands, and creators by providing the tools and resources needed to turn their digital and phygital assets into captivating collectibles. This allows them to grow engagement in their community and digital presence.

It is a platform for connecting old & new –traditional & Web3 communities. The dual view allows members to choose which one to relate to while not dividing the community. This way,

the brands that BeMy.Digital curates can achieve old-school goals in a new world.

🔗 Final Takeaways

All in all, digital assets encompass anything created and existing in digital form, coming with distinct ownership and usage rights. Digital collectibles (a part of digital assets) are unique or limited-edition assets that use blockchain to verify authenticity and ownership. Modern digital collectibles focus on interactivity, virtual world integration, and community building, and can even have physical counterparts (phygital collectibles).

Platforms like BeMy.Digital, powered by XRPL technology, are enabling creators to expand and innovate within this space. This evolution is reshaping how we perceive value and ownership in the digital age. Check out bemy.digital and be a part of the progress. ■

ABOUT ANDRIUS BARTMIŪNAS
Andrius is the co-founder and CEO of SUPER HOW?. He has led teams of researchers and developers working on e-Health, e-Government, and e-Democracy projects. Under his leadership, along with co-founders Vytautas Kašėta and Linas Būtėnas, the SUPER HOW? team has established itself as the leading private research and innovation laboratory in the FinTech ecosystem, with a primary focus on emerging technologies.

SUPER HOW?

Lessons from a former DID Founder

By Mick Dazé



Heirloom, our company dedicated to making DID go mainstream, is closing. We worked closely with universities and companies like Ripple to verify identity data on distributed ledgers like the XRPL.

At first glance, building technology looks hard. It is! But for a group of motivated and experienced people, it's not "the hard part." The hard part is building something people want, so much so that it financially sustains the team and, ideally, creates returns on investment.

And even with the right idea, you need to get the world to move with you.

That's where Heirloom failed.

Decentralized identity will be everywhere. It can fix many things: privacy, data integrity, portability, and security. If we're going to build a world where technology works for human beings, DID will be a part of it.

But builders need to take a sober look at their competition, and that awareness needs to inform business models.

We were competing with email addresses.

You likely have a Gmail account. Why wouldn't you? It's fast, reliable, and, most importantly, free.

But nothing is free. Google exploits your Gmail activity to enrich its ad targeting across its properties—Android, Google Search, etc. Companies pay a lot of money to reach you. They place ads in your Gmail account. You probably don't notice them because they look like marketing emails, but they're there.

And when your Gmail account is filled with spam and marketing emails, they'll nag you to upgrade your storage. ("75% off for 2 months!")

Your email address is your de facto identifier. But its status as the cornerstone of your digital identity is an accident, a random mutation in the evolution of the web. When you use your Gmail address as your primary digital identifier, a lot of problems arise. **Your Gmail account is not you, but most software doesn't know that.**

If someone knows your Gmail account password (12345?), they can pretend to be you. They can reset any account using your Gmail address ("Forgot your password?"). They can DocuSign legal documents on your behalf. They can email your family to request emergency money ("Just click this link").

This is bad. But the gravitational pull of 20 years of entrenched user behavior and the sexy price of FREE is, again, really hard to compete with.

DID is a fundamentally better technology for proving your identity, digitally. You hold the private keys on your phone, separate from your email or other passwords. There are many ways to build DID, and they're all improvements on nickdaze@gmail.com.

We Need to Build 10x Better Products for DID to Succeed

But DID will not break into the mainstream until apps are built because they leverage DID, not in spite of it.

We tried to do that when we built event tickets, single sign-on, and several other things on top of DID. But none of them got the traction they needed to break through, and certainly none could compete with FREE.

I think it's only a matter of time, but the apps that will truly make it mainstream aren't here yet. We need a breakthrough—an app or service—that's not just different but ten times better than what exists.

Maybe you'll be the one to create it. We need this—for privacy, security, and a world where technology works for humans—not the other way around. ■

Meet the Aquarium Residents Working on DID Solutions

Learn more about our DID-focused residents, their projects and insights from the Aquarium Residency.

PAWESOME ID

Tell us about your project in 3 sentences.

I'm building a passport ID solution for pets, built on the XRPL blockchain and applying principles of digital ID. Therefore, we are developing a web and mobile app for professionals and pet owners.

What pain points is it trying to solve?

When you buy or adopt a pet, you must provide identification and have a health report, for which no digital solutions exist today—it's all on paper. So in the case of an emergency, or a need to consult a vet while you're away, you might be limited without these physical documents. There is also a darker side, with cases of fraud and fake papers created around pets and their backgrounds.

How are you using blockchain technology and the XRP Ledger?

We are using decentralized identifiers that ensure that an identity pertains to a specific pet. XRPL is ideal for this, as it is a fast and stable blockchain, ensuring quick transmission and easy registration of information, at low cost.

Why did you join the Aquarium residency?

A friend from the previous cohort told me about their good experience at XRPL Commons. As a self-taught developer and business owner, the residency seemed generally compelling. As an avid pet lover, when I saw that the topic was DID, I knew I had to apply. I loved the supportive atmosphere and the inspiring discussions, with people of different backgrounds coming together. Through the workshops on sustainability, I realized that I can even incorporate such principles to the project.

What's the future of your industry?

Whether through Pawesome ID or not, I do see a revolution in the pet industry through pet passports on its way, through the topics I previously mentioned—health, identification and combating fraud. AI will also come into the picture for pet advice, training and scoring pet food.

What's next for Pawesome ID?

Our MVP was ready for Demo Day. We are now raising funds and finishing to build the web and mobile apps. In the longer term, and in light of the data collected on the pets, their background and their health, we could foresee other integrations, such as nutritional and physical activity recommendations for our companions.



CR3DENTIAL

Tell us about your project in 3 sentences.

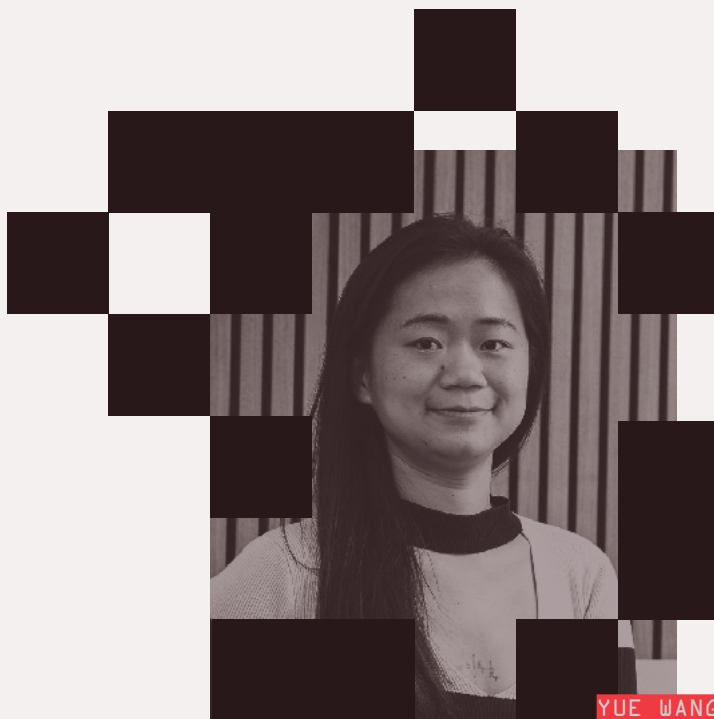
Cr3dential is a Dapp that revolutionizes the way credentials and certifications are issued, stored, and verified. We provide a seamless and tamper-proof system for both credential issuers and holders, leveraging the W3C standards on DID. We thus enhance trust and efficiency in the credentialing process across various industries.

What problem/pain points is it trying to solve?

Cr3dential aims to be an all-in-one wallet for storing one's credentials—proof of personal identity, academic achievements, professional certifications, and more. It counters credential fraud and the inherent inefficiency in traditional verification processes. Current systems are slow and vulnerable to manipulation, which undermine trust and reliability. By providing a secure, decentralized platform for credential verification, we streamline these processes, reducing time, costs and guaranteeing authenticity.

How are you using blockchain technology and the XRP Ledger in your project?

We utilize the XRP Ledger to set up unique decentralized IDs for credential issuers and holders, signed on by these decentralized identifiers, and verifiable in real-time. The blockchain ensures that signatures cannot be altered or forged, providing a high level of trust and security.



YUE WANG

What's the future of your industry?

The future of 'credentialing' lies in increased digitization and adoption of secure verification methods. As more organizations recognize the benefits of blockchain, we anticipate widespread adoption of digital credentials across education, the workplace, and regulatory compliance.

Why did you join the Aquarium residency?

I joined the residency to leverage the expertise and resources of the XRPL community, which provided invaluable support in refining our technology and business model. The program allowed us to focus on solving specific challenges related to decentralized identities, explore collaboration with industry leaders, and gain insights into best practices.

What's next for your project?

We aim to onboard as many issuers as possible, namely educational and professional institutions, to enhance our UX and launch new features, such as zero-knowledge proofs for better credential privacy. We are also working on a credential gating tool, which could be a game-changer, as it helps verifiers filter entries efficiently.



Tell us about your project in 3 sentences.

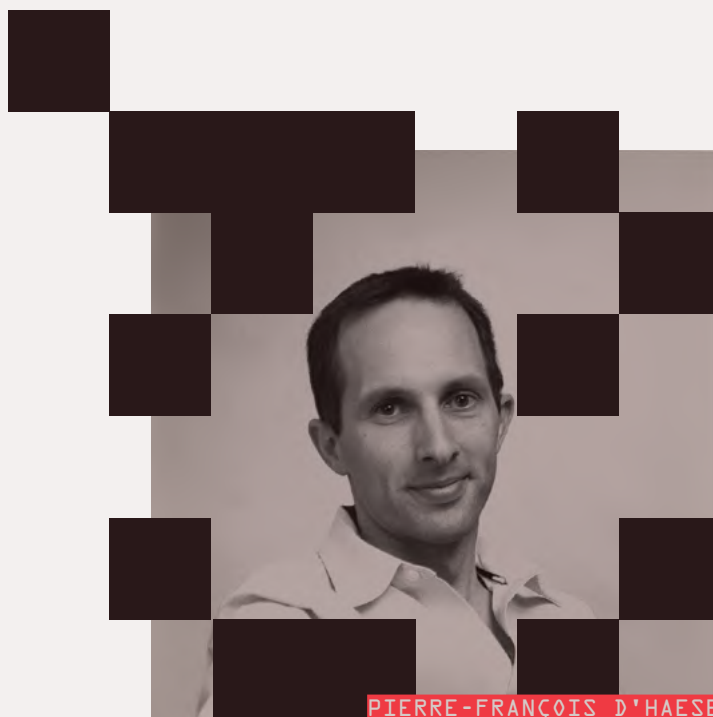
Ushi is a platform revolutionizing clinical trials, combining verified digital identities with incentivized participation. We provide secure verification of participants' profiles, ensuring they are who they claim to be, along with blockchain-based micro-rewards to encourage sustained engagement and user retention.

What problem/pain points is it trying to solve?

It's a challenge to recruit and verify participants for clinical trials, a process plagued by inefficiencies, high costs, and privacy concerns. Utilizing DID and verified credentials, we create a trusted pool of reliable participants while safeguarding sensitive data.

How are you using blockchain technology and the XRP Ledger in your project?

We create a tamper-proof environment where participants' identities and health conditions are verified and stored, without compromising privacy. We also leverage the XRP Ledger to manage our micro-rewards system, distributing tokens to participants as incentives for verified contributions and trial participation. This combination not only fosters trust but also makes it easier for sponsors to recruit and retain quality participants.



Why did you join the residency and what were your main learnings during the program?

I had a solid healthcare product, but I knew it had potential to be transformative. The residency gave me the chance to dig deeper on blockchain as part of our solution. XRPL and DID integration has since become central to our strategy. The guidance of David, the President of XRPL Commons, alongside the incredible team allowed us to fully leverage blockchain's potential and bring genuine value to our product.

What's the future of your industry?

Clinical trials are moving towards earlier and more proactive engagement. Traditionally, trials focused on symptomatic individuals, in a hospital setting; focus is now on catching people earlier, when they're still symptom-free. This is where decentralized trials come into play: reach people earlier, with new methods, new tech, using gamification to keep users involved, ultimately accelerating the journey from research to real-world solutions.

What's next for Ushi?

After a soft-launch with OEM partners, the full app will come out early next year. We're also applying to an XRPL Grant, currently under review, and if approved, will help expand our marketplace and increase visibility. It's not just an app launch, we're laying the foundation for a new era in clinical trials.



DAVID RUTLEDGE

SIG VERIFY



P46

While I initially thought it would be a walk in the park, the amount of information, the mentors coming in, and the technical complexity of the subjects that we're dealing with, amounted to a proper challenge. But the fact that we're set up to tend to these challenges is what made it priceless.

I also partook in my first ever hackathon – HAKS 2024 in Paris, which was an amazing experience. I have become addicted to hackathons, and will participate in as many as I reasonably can.

In essence, it was an energetic time seeing an idea take form. My project, Sig Verify, seeks to deploy document signing on the XRP Ledger, whereby credentials for verified-users are created on-chain, ensuring greater accountability and efficiency on signatures. In two months, we have made great strides with the demo, incorporating XRPL and Xaman functionalities for authentications and key management.

The fact that it is so intense really makes you constantly think, evolve, and be agile. It opens the door for collaboration. Everyone at Commons, from staff to residents, fills a niche and has something to offer, both personally and professionally. The staff, the mentors, the subject matter – it is all very well crafted." ■■

Giving Up the Kool-Aid: A Path to Decentralized Identity from an Age of Trust

By Matt Mankins

In the seventh grade, I was a king.

My domain was digital, but it had a very real presence in my bedroom where a tangled mess of cables connected my Commodore 128 to floppy drives and a 1200 baud modem. I was the SysOp (system operator) of The Devil's Triangle BBS (bulletin board system), doing my best to entertain those who dialed in. The BBS dribbled out simple text games like a stock market simulator, let you exchange software, or request a chat with the king: me, the SysOp.

I didn't exactly hide my geek identity from my friends. At school, I was a normal kid, though I sometimes wrote 'GOTO' instead of 'go to.' Online, through my screeching modem, I became an authority. Adults dialed into my BBS, unaware that they were speaking to a twelve-year-old. It was my secret identity, a persona that allowed me to transcend the usual limits of age and status. Looking back, people put more trust in me than they should have—after all, I was twelve.

In college I wasn't sure about becoming an engineer. Instead I got a job as a graphic designer at the School of Architecture. This would lead to my second fiefdom, earned by introducing the Mosaic web browser to the Dean. In those days authority was localized and trust was something that could be revoked by returning a [physical] key. I became the webmaster.

In this pre-blockchain era, trust came from the top-down: you didn't need consensus to publish on the web, you needed a domain name record and a server. It was just like running a BBS, except the impact was global.

One day, while playing around, I built my first website, which became a pseudo-authority on Kool-Aid—a powdery drink mix sold in the US. Why? Because Yahoo! said so. Was I an authority on Kool-Aid? No. Did the Wall Street Journal interview me as an expert? Yes. This was a microcosm of what was to come.

In the next decades, we saw that top-down authorities couldn't always be trusted. And so we harnessed peer-to-peer networks and algorithms like Chord, Raft and Gossip to build distributed systems. Projects like Folding@Home showed the potential of what we could achieve by uniting individual machines.

These revolutions showed that, through math and distributed consensus, we could build on knowledge without relying on one gatekeeper's whim. In this future, identities can shift freely, without the burden of allegiance. Yet, decades later, we still struggle to discern truth from authority.

"My interest in blockchain stemmed from the idea that no one can be trusted to tell the truth. Instead, we can work together, each running our own servers and without wars or other medieval foolery come to an understanding of what the state of the world is."

In the end, identity—whether on a BBS, the web, or a blockchain—is about the trust we build with those who interact with us. As technology continues to evolve, the real power lies not just in how we define our identities, but in how we collectively safeguard the trust that underpins them, ensuring that in a decentralized future, no king (or queen) can ever rewrite the truth.

ABOUT MATT MANKINS

Matt is developing *Kudos*[®], a new system for compensating creativity. With a degree from the MIT Media Lab, he has been CTO of Fast Company, co-founded SMTP.com, and is known for open-sourcing the earliest webmail implementation as a student at the University of Miami.

XRPL Events and Opportunities

Opportunities in the XRPL Ecosystem

Whether just starting out or an advanced XRPL dev, some of these opportunities might be waiting for you!

Getting Started



The Aquarium is a 12-week residency program hosted by XRPL Commons in the heart of Paris. It offers builders and developers the space and time to get inspired, build impactful projects, connect with like-minded peers, and kick off their next big thing.

Applications are open for the next cohort focusing on Blockchain and AI, starting in April 2025.

Learn more about it at xrpl-commons.org/build/residency

Launching Into the Sea



Applications are open on a rolling basis for **XRPL Grants**! Projects are evaluated and awarded continuously. The XRPL Grants Program funds software development projects and ventures that leverage the open-source XRP Ledger (XRPL) and help grow and benefit the XRPL community. Funding opportunities range from \$10,000 to \$200,000 for projects with a timeline of up to one year.

The XRPL Grants program is open to any technical development projects and ventures leveraging the XRP Ledger.

Learn more and apply at xrplgrants.org

Finding Your Edge



The XRPL Accelerator is a 12-week program to support entrepreneurs seeking to scale up their XRPL projects. The "Launch" phase of the Accelerator is an optional "primer" program preceding the "Scale" program, empowering Advanced Start-Ups to Scale on the XRP Ledger and including a \$100K grant (non-equity) with emphasis on securing further funding.

Check out the details at xrplaccelerator.org

XRPL Accelerator — Scale Program Drives Blockchain Innovation

The XRPL Accelerator recently announced its Scale Program cohort, with five pioneering startups leveraging XRPL across several different use cases including real-world asset tokenization, stablecoins, infrastructure, and gaming.

Selected teams receive mentorship, hone their go-to-market (GTM) strategies, and validate their product-market fit. In addition, each team is awarded a grant to further spur their growth as they raise funds from venture investors.

The participating companies in the first Scale Program cohort are:

PALISADE

Palisade is a multi-chain custody platform paired with a non-custodial mobile app intended as a day-to-day wallet. Palisade provides development teams and retail users with an affordable way to store, issue and manage their digital assets.



PROPTO

Propto, a decentralized exchange and tokenization platform, enables commercial property owners to fractionalize and list their assets on-chain. Propto allows investors with a small amount of capital to participate in the commercial real estate market. Propto's tokenization and trading functionalities utilize the XRPL's native features to facilitate real estate token transactions.



ALT DRX

ALT.SQFT offers a unique approach to real estate investment by tokenizing square footage into tradeable digital assets called Property Tokens, which represent a proportional financial value in a specific property managed by a Special Purpose Vehicle (SPV). Investors can buy and sell these tokens on the Alt DRX Platform, allowing for dynamic market participation and liquidity in real estate investments.



RIPPLE PARTNERS WITH DIFC INNOVATION HUB TO ACCELERATE ADOPTION OF BLOCKCHAIN TECHNOLOGY IN THE MIDDLE EAST

Ripple has announced a partnership with the DIFC Innovation Hub, part of the Dubai International Financial Centre (DIFC), to drive blockchain and digital asset innovation in the UAE. The collaboration will connect developers with the region's largest innovation community, which includes over 1,000 tech startups, venture capitalists, and regulators.

This partnership aims to accelerate blockchain adoption among early-stage builders and startups leveraging blockchain technology to primarily focus on DeFi and RWA applications. Ripple's own presence at DIFC, coupled with the UAE's regulatory clarity for virtual assets, will foster fintech innovation and contribute to solidifying the UAE's position as a global fintech hub.



Apply to the **DIFC-Launch Program** now starting in March 2025²

VNX

Europe's first regulated tokenization platform and stablecoin issuer. VNX Commodities is registered with the Liechtenstein FMA under the TT Token Providers and Services Act (TVTG). In 2021, VNX launched VNXAU, a multichain token backed by physical gold. Later, VNX also launched two fully backed stablecoins: VEUR and VCHF. With this project, VNX aims to expand operations to the XRP Ledger by issuing VNX tokens on the XRPL.



ZERPMON

Zerpmon engages players in the world of auto-battling combat, where strategic depth meets diverse gameplay. With 20 unique types of Zerpmon and hundreds of move combinations, players must thoughtfully curate their teams to excel in battle. Zerpmon stands out as a community-centric project, deeply rooted in fostering a vibrant, inclusive, and loyal community. Zerpmon leverages XRPL-based tokens to enrich gameplay, ownership, and rewards for players.



About XRPL Grants

The XRPL Grants Program funds software development projects, and ventures that leverage the open-source XRP Ledger (XRPL). Funding opportunities range from \$10,000 - \$200,000 for project timelines up to one year in duration.

Having previously conducted applications in a wave format, the XRPL Grants program has moved to a rolling application process, which aims to speed up the review process and response time and provide greater flexibility to applicants seeking funding for their projects. This means that teams no longer have to submit applications during a set window; and can apply anytime. For more information about the process, please visit the XRPL Grants website at xrplgrants.org.

The XRPL Grants program has also announced funds to help identify potential grantee projects in various regions and industries. There are currently three pathways to apply:

XRPL Grants Rolling Application: This application is open to any software development projects and ventures leveraging the XRPL. This is a global program and is open to projects based in eligible locations. (Restrictions apply, see XRPL Grants Terms: xrplgrants.org/terms)

XRPL Grants' Brazil Fund: This fund is aimed to support projects and ventures based in Brazil, and leveraging the XRPL or XRPL EVM Sidechain. The Brazil Fund primarily supports startups that have found product-market fit and are ready to scale.

XRPL Grants' AI Fund: This fund is aimed at developers and entrepreneurs exploring a wide range of AI applications on the XRPL, with an area of focus on things such as AI-driven optimization, predictive analytics, anomaly detection, AI-powered risk assessment, algorithmic trading, and AI personalized financial services.

The XRPL Grants program also plays a role in the [Japan/Korea fund](#), which is aimed at driving blockchain innovation in these two markets.

Basic eligibility requirements for the XRPL Grants program can be found on the [XRPL Grants Terms page](#). The XRPL Grants' judges take a detailed and holistic look at all applications, but at minimum, applications will need to submit:

- ✦ Proof of Concept or MVP
- ✦ Proof of Code and/or Code Architecture and a technical integration plan with the XRPL (i.e GitHub Repository and/or system design diagram)
- ✦ 2-min Project Demo
- ✦ Product Roadmap & Milestones for up to 12 months
- ✦ Plan for Monetization / Financial Sustainability
- ✦ Project Traction & Growth Metrics

REACH OUT!

If you have any questions about the XRPL Grants program, please feel free to reach out to the team by emailing info@xrplgrants.org

Upcoming Events

CONNECT WITH THE
XRPL COMMUNITY
#IRL!

**27-28
Jan**

FREE 2-DAY
DEVELOPER
TRAINING
XRPL Commons HQ,
Paris

**3~~E~~
Jan**

XYZ PARIS
Grande Halle de la Villette
Paris

**14-15
Feb**

XRPL MEETUP
London

**12
Feb**

**24-26
Mar**

IE MADRID STUDY
TRIP TO XRPL
COMMONS
XRPL Commons HQ
Paris

XRPL COMMONS
ADOPTION SOIRÉE
Paris

AQUARIUM GAMING
COHORT DEMO DAY
XRPL Commons HQ
Paris

**2
Apr**

**8-1~~E~~
Apr**

PARIS BLOCKCHAIN
WEEK
Le Louvre
Paris



FOR MORE XRPL COMMUNITY
EVENTS, MAKE SURE TO
CHECK OUT XRPL COMMONS'
UPCOMING EVENTS PAGE



XRPL Announcements



JOIN THE COMMUNITY AT APEX 2025!

Following two eventful gatherings in Amsterdam, the next edition of Apex, the largest annual summit on the XRPL calendar, will take place in Singapore, on **10-12 June 2025**.

Officially announced in September at XRPL Zone Korea, the move indicates the importance attributed to XRPL growth in the Asia-Pacific region. Nevertheless, it promises to once again showcase the XRPL Community in all its worldwide glory, with hundreds of attendees, dozens of speakers and sessions, covering all topics and geographies.

More details to be announced in early 2025! check it out at www.xrplledgerapex.com²¹



HAVE YOU HEARD OF THE XRPL BUILDER OFFICE HOURS?

The XRPL Builder Office Hours is an open forum hosted monthly by RippleX Developer Advocates to answer technical and business questions from community members, and for receiving feedback on members' projects.

It is also an opportunity to receive information and insights regarding applications for XRPL Grants and XRPL Accelerator programs, and participation in XRPL Hackathons.

The Office Hours are typically hosted on the last Friday of the month. You can find the upcoming office hours at xrpl.org/community/events²¹



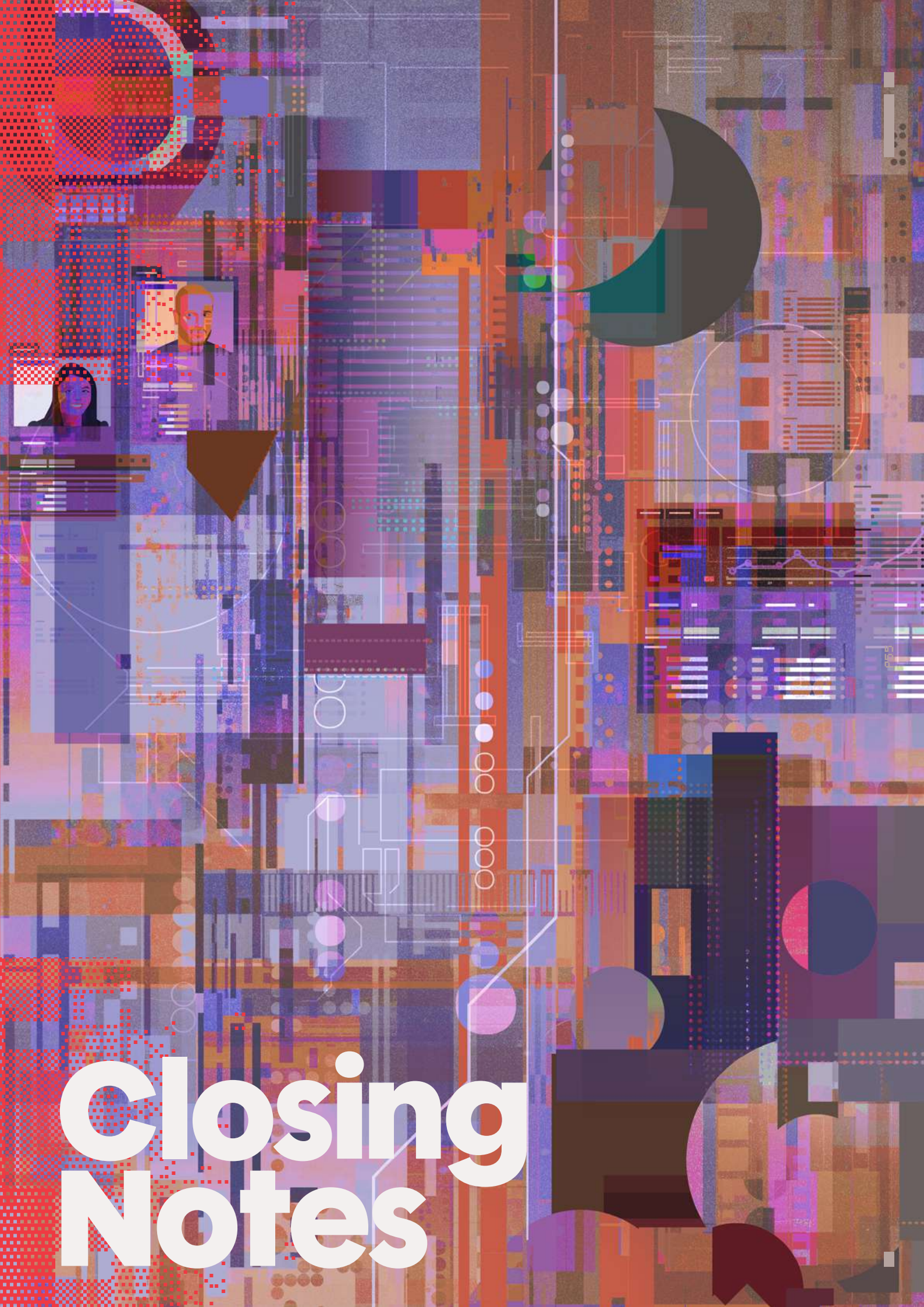
NOW OPEN FOR APPLICATIONS: CRYPTO FOR GOOD FUND IV!

Mercy Corps Ventures' Crypto For Good Fund offers equity-free grants of up to \$100,000 to ten startups in emerging markets, with a strong focus on Africa and Latin America. This fund, especially welcoming applications from the XRPL ecosystem, is dedicated to supporting impactful Web3 solutions that advance financial inclusion and climate resilience.

Since its inception in 2022, the fund has screened over 1,000 proposals, launched 15+ crypto use cases, and deployed \$3M+ in funding, impacting the lives of 40,000+ people.

For more details on how to apply, visit xrpl.at/cryptoforgood-mag4²¹





Closing Notes

XRPL Glossary

AMM (Automated Market Maker) : A decentralized exchange mechanism used in DeFi to facilitate trading without the need for traditional order books.

Apex : The largest XRPL developer summit that meets in different cities, see <https://www.apexdevsummit.com/>

BBS (Bulletin Board System) : An online discussion system from the pre-Internet era, allowing users to share messages, files, and participate in discussions; now used as a digital community or social platform.

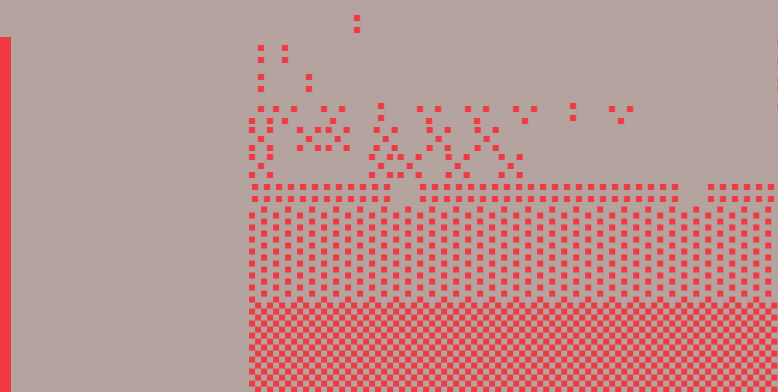
Cypherpunk : A movement advocating for the use of cryptography and privacy-enhancing technologies to achieve privacy and autonomy on the Internet.

DAO (Decentralized Autonomous Organization) : A digital organization run by smart contracts on a blockchain, enabling decentralized decision-making and governance without the need for traditional hierarchical management structures.

dApp (Decentralized Application) : An application built on a blockchain or decentralized network, which operates without centralized servers.

DeX (Decentralized Exchange) : An exchange platform that facilitates direct peer-to-peer trading of digital assets without the need for intermediaries.

DID (Decentralized Identifier) : A unique, self-sovereign digital identifier created by the owner, commonly used in identity verification on decentralized networks.



Escrow : A financial arrangement in which a third party holds assets temporarily, releasing them only when agreed conditions are met.

EVM-Compatible (Ethereum Virtual Machine Compatible) : Refers to blockchain networks that can run smart contracts compatible with the Ethereum Virtual Machine.

IBC (Inter-Blockchain Communication) : A protocol that enables interoperability between different blockchains, allowing them to communicate and transfer data and assets seamlessly.

Interoperability : The ability of blockchain networks to communicate with each other, sending and receiving messages, data, and tokens.

Mainnet : The live and production-ready version of a blockchain network where real transactions occur.

NDI (National Digital Identity) : A government-backed digital identity system used to verify citizens' identities online and grant access to services securely.

Too much technical jargon? We're here to help with quick and easy definitions.

NFT (Non-Fungible Token) : A unique digital asset on a blockchain, representing ownership or proof of authenticity for digital or physical items, art, or collectibles.

Phygital : A concept blending physical and digital elements to create unified experiences, often used in marketing or immersive tech.

RLUSD (Ripple USD) : A USD-backed stablecoin issued natively on the XRP Ledger and Ethereum.

RWA (Real-World Assets) : Refers to physical or traditional financial assets tokenized on a blockchain, such as real estate, commodities, or equities.

VC (Verifiable Credentials) : Digital certificates stored on a blockchain, allowing individuals to prove identity, qualifications, or claims while preserving privacy.

W3C (World Wide Web Consortium) : An international standards organization that develops protocols and guidelines for the Web, including blockchain-related standards.

XLS-40d : An amendment (now live on Mainnet) that proposes to integrate Decentralized Identity (DID) directly into the XRP Ledger.

XLS-47d : An amendment (now live on Mainnet) that proposes to add price oracles to the XRP Ledger, supporting more efficient and versatile digital asset management.

XRPL Ecosystem : The collective network and applications built around the XRP Ledger, including its various components and participants.

ZKP (Zero-Knowledge Proof) : A cryptographic method allowing one party to prove to another that they know a value without revealing the actual value itself, often used for privacy.

Get Involved!

Visit Our Website

www.xrpl-commons.org²¹

The Aquarium Residency

www.xrpl-commons.org/build/residency²¹

Follow Us on LinkedIn

www.linkedin.com/company/xrpl-commons²¹

Like Us on Instagram

[@xrpl_commons](https://www.instagram.com/xrpl_commons)²¹

Check out Our X/Twitter

[@xrpl_commons](https://twitter.com/xrpl_commons)²¹

Check out Our Youtube

[@XRPLCommons](https://www.youtube.com/XRPLCommons)²¹

Read the Latest Issue of the XRPL Community Magazine

www.xrpl-commons.org/engage/community-magazine²¹

YOUR VOICE MATTERS!

Thank you for reading the XRPL Community Magazine! Your feedback shapes each issue, helping us capture what truly matters to our readers. We're committed to highlighting diverse voices, and we want to hear from you!

What topics are you most excited to explore in our next edition? Who would you like to see featured in interviews? Are you ready to share your own insights and ideas with the community?

Reach out to us at mag@xrpl-commons.org²¹, and let's craft the next issue of the magazine-together!

BECOME AN INSTRUCTOR AT XRPL COMMONS!

At XRPL Commons, we're on a mission to make blockchain accessible to everyone! Ready to inspire curious minds?

In this role, you'll teach blockchain concepts to learners at every level, adapting your approach to fit diverse educational needs. You'll stay up-to-date on blockchain advancements and may even lead some of our XRPL Commons events.

We're looking for someone who's passionate about technology, loves to teach, and has excellent English communication skills. Fluency in other languages is a plus!

Sound like you? Send us your CV to education@xrpl-commons.org²¹

Copy

Zsofi Borsi

—

Design

chilli drop.

—

Illustration

James Gilleard

—

Contributors

Ranchal Malhotra

Adrian Falk

Andrius Bartminas

Ahuraag Patel

Aurélien Burget

Cyrille Bourdeaux

Julia Heithner

Kelly Browning

Mariarosalia

Barbaraci

Matt Mankins

Mélanie Damour

Mick Dazé

Simon Luling

Thibault Langlois-

Berthelot

Trent Davis

Vet

—

Photography

Angela Di Paolo

