Ubyx Whitepaper

Stablecoin Ubiquity

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Abstract

Stablecoins will reach their full potential as peer-to-peer, digitally-native money when the option to redeem them at par value on demand is ubiquitous. Ubyx delivers this through a clearing system that solves the many-to-many problem between issuers and accepting institutions, enabling anyone to deposit stablecoins into existing financial accounts (held at banks and regulated non-banks) at full value.

In today's world, stablecoin recipients have to evaluate counterparty risk against the issuer and the off-ramp, and contend with unfavourable accounting treatment. This means that there are incentives to convert to fiat currency as quickly as possible, especially for corporate recipients of stablecoins.

Ubyx helps stablecoins make the transition from crypto use-cases into universal digital cash by solving the accounting treatment problem. Stablecoins can achieve IAS7 cash equivalent status, opening the door to mainstream corporate adoption. Ubyx helps stablecoins to exhibit singleness of money (between issuers, and with reference to other form factors of fiat currency), and promotes redemption through regulated channels subject to AML, KYC, sanctions, and fraud checking.

Ubyx will be a progressively decentralized network with open-source governance and strong economic incentives for all participants to drive positive network effects. Ubyx introduces a new non-interest source of revenue for issuers, protecting the business model from adverse changes in interest rates.

The stablecoin ecosystem will be multi-currency, pluralistic, collaborative where it needs to be, competitive where it should be and provide the foundation for the next wave of permissionless innovation.

An original goal of cryptocurrency will be achieved—mass market peer-to-peer digital money conducted over public-permissionless blockchains. By solving the many-to-many network problem, achieving cash equivalence and aligning economic incentives, Ubyx will usher in the stablecoin epoch—they will become ubiquitous, general-purpose methods of digital payment.

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Foreword

This whitepaper seeks to establish common ground between the crypto community, traditional finance, and regulators/central banks. It contains propositions that may be meaningful to one group but not others.

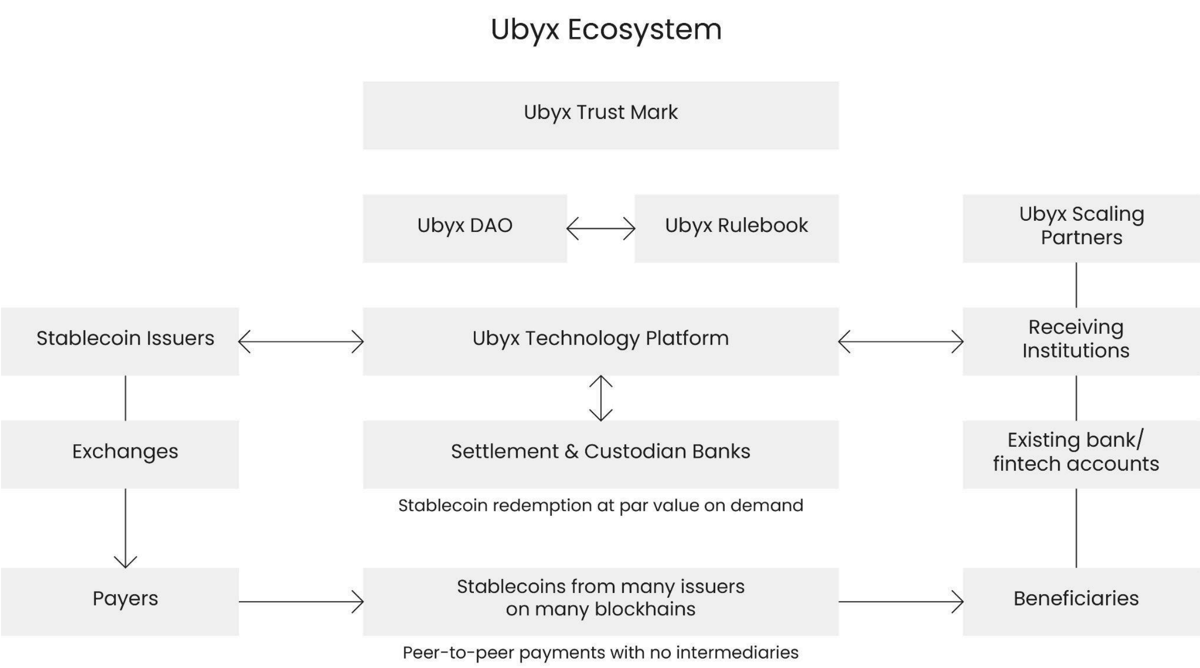
The crypto community may not care about accounting treatment, but corporations do. Decentralization and peer-to-peer payments may not be top of mind objectives for regulators, but they are crypto fundamentals. The singleness of money is dear to the heart of central bankers, but it is not a primary concern for the issuer trying to differentiate from the rest.

Design decisions have been made that may not make sense to every party, but are essential for at least one stakeholder. Every effort has been made to avoid showstoppers for any individual constituency.

Each stakeholder group is asked for forbearance and understanding of other's interests and terminology—for stablecoins to reach their full potential as general purpose, ubiquitous methods of payment, unlikely allies must learn each other's languages and work together in the common interest.

Summary of Key Features

This whitepaper is an executable plan for achieving stablecoin ubiquity through an ecosystem state change. The 'how' is a realistic technical, legal, regulatory, and commercially viable roadmap. The 'why' is a set of compelling economic incentives aligned for each ecosystem participant.



- **Ubyx creates mutualized acceptance:** A single, low-cost connection gives issuers global access to a unified redemption network.
- **Ubyx makes stablecoins cash equivalents:** Enables stablecoins from many issuers & currencies to be deposited directly into users' existing bank or fintech accounts at par value.
- **Ubyx solves for "singleness of money":** Makes stablecoins interchangeable among themselves and other fiat currency forms, ensuring practical utility and regulatory clarity.
- **Ubyx promotes regulated off-ramps:** Redemption through regulated institutions ensures AML, KYC, sanctions compliance, and fraud prevention.
- **Ubyx creates non-interest income for issuers:** Enables issuers to systematically earn fees from receiving institutions, safeguarding the stablecoin issuer's business model against interest-rate fluctuations.
- **Ubyx reinforces peer-to-peer transactions:** Realizing crypto's original vision, enabling people to transact confidently peer-to-peer and hold stablecoins in native digital form.
- **Ubyx reduces uncertainty:** The Ubyx trust mark signals universal acceptance and confidence.
- **Ubyx helps stablecoin stability:** Creates market-based arbitrage opportunities reinforcing stablecoins' price stability under varied market conditions.
- **Ubyx drives stablecoin acceptance by TradFi:** Provides traditional financial players with a compelling economic incentive and straightforward pathway to integrate stablecoins from multiple issuers and blockchains.
- **Ubyx strengthens crypto exchanges:** Increases liquidity and institutional access, enabling exchanges to efficiently engage with numerous stablecoin issuers on one platform.
- **Ubyx serves as a gateway to Web3 acceptance:** Traditional finance players integrating via Ubyx can readily expand into tokenized assets, DeFi, and digital identity solutions.
- **Ubyx drives stablecoin ubiquity:** Establishes a new market structure enabling exponential positive network effects between issuers, institutions, and end users.
- **Ubyx is self-determination:** The industry asks for prudent regulation, but should not require it every time a coordinated response is required to community issues.

For stablecoins to achieve their full potential as general-purpose, peer-to-peer digital cash equivalents, an ecosystem state change is required. Current bilateral issuer-to-off-ramp relationships, problematic accounting treatments, and misaligned economic incentives must transition. This state transformation is achievable if issuers, accepting institutions, exchanges, foundations, and regulators align with and support the collaborative Ubyx proposal.

Prepare for the Stablecoin Epoch
In the age of paper payments, was there any financial institution that could not serve its customers' needs for cash and cheques? In the era of financial messaging, was there a bank that could not make or receive electronic payments? In the time of cards, is there an institution on the planet that cannot issue debit or credit cards? So it shall be in the Stablecoin Epoch: every bank and non-bank financial institution will enable customers to receive stablecoins—from many issuers, in many currencies, across many public blockchains—and to hold and pay with stablecoins.. Those who choose not to participate will see their clients migrate to those who do. Choosing not to act is a choice, because the process has already begun.

Ubyx Vision: Stablecoin Ubiquity

Bitcoin's original promise was radically simple: peer-to-peer electronic cash with no centralized issuer and no backing. But volatility and scalability issues transformed most cryptocurrencies into speculative assets rather than everyday money. Stablecoins emerged as the crypto ecosystem's answer, offering price stability against national currencies while exhibiting many public blockchain benefits.

Stablecoins remain trapped in a limited ecosystem because unlike traditional payment methods, there's no universal way to convert them back to "regular money" at full value. If you receive a check, credit card payment, or bank transfer, you can deposit it at your bank for 100% of its stated value, irrespective of the issuer. Universal redemption does not yet exist for stablecoins, but it is required in any system made up of many issuers and many acceptance points. The Ubyx protocol fills the gap by:

1. **Transforming isolated connections into a mutual acceptance network:** Instead of each stablecoin issuer building separate relationships with every 'off-ramp', Ubyx creates a highly scalable clearing system where one simple, low-cost connection reaches the entire network.
2. **Enabling "singleness of money":** With Ubyx, a digital dollar is a digital dollar irrespective of issuer, as long as they are part of the clearing system and play by the mutually agreed rules. This interchangeability is essential for mainstream adoption and satisfies regulatory expectations.
3. **Supporting accounting treatment:** For businesses to use stablecoins, they must qualify as cash equivalents under global accounting standards. Ubyx creates the fact pattern necessary for this classification to be agreed by global accounting bodies.

With Ubyx, anyone receiving a participating stablecoin can easily deposit it at par value through their existing bank or fintech, just like depositing a check. This creates user indifference to which stablecoin they receive—the same principle that enables universal acceptance of checks and cards. When recipients stop worrying about which stablecoin they're receiving or how to off-ramp, ubiquity becomes possible.

Stablecoin Acceptance: Market Opportunity

Stablecoins stand at the threshold of mainstream adoption. Even without Ubyx, 2025 will mark a significant expansion beyond crypto-native use cases, driven by regulatory clarity emerging worldwide and an emerging wave of stablecoin innovators. The EU's Markets in Crypto-Assets (MiCA) regulation and similar frameworks in other jurisdictions create legitimacy, while anticipated U.S. stablecoin legislation will signal their arrival as a recognized payment method.

Countries worldwide have strong economic motivation to develop stablecoin frameworks. When a nation's currency-backed stablecoins are used globally it creates international demand for that country's government debt (providing the stablecoin 'backing'). This economic incentive drives global demand for an international acceptance network for stablecoins from many jurisdictions.

Despite this potential, today's market structure creates significant barriers. The status quo resembles a world where each credit card issuer would need to establish direct relationships with every merchant—an approach that would make universal card acceptance impossible.

Economic opportunities
With a $1 trillion supply of stablecoins circulating globally and 0.5% redeemed daily, the economics of acceptance are compelling. At a 100bps redemption fee and 100bps FX spread, the potential gross revenue is significant: ● *A country capturing 5% of global redemption flow could generate **$1.825 billion** per year in gross revenue for its local financial institutions.* ● *A single bank or non-bank with 5% market share in that country stands to earn **$91.25 million** annually—from accepting overseas stablecoins and redeeming them at par value through Ubyx.* *These opportunities are unlocked through participation in the Ubyx clearing system. The first step: Join the Ubyx Association → https://ubyx.xyz*

With Ubyx in place, stablecoins can rapidly expand from their current specialized role to address the entire global payments market—estimated at over $2.5 trillion in annual revenue. By solving the common acceptance network challenge, Ubyx enables stablecoins to fulfill their promise as the digital economy's native peer-to-peer payment system, benefiting users, issuers, fintechs, financial institutions, and nation states worldwide.

Problem Statements

Problem 1: Universal Redemption

Stablecoins can move value across borders instantly at minimal cost and are technically superior to traditional payment systems in multiple ways. Yet stablecoins remain trapped in a specialized ecosystem because of one critical missing piece: the ability to redeem them at full value through the financial institutions people already use and trust. Today's stablecoin ecosystem is hampered by five fundamental barriers:

1. **Limited entry points (on-ramps):** To acquire stablecoins, users must go through cryptocurrency exchanges or establish direct relationships with issuers (an option only available to large players).
2. **Restricted exit options (off-ramps):** When users want to convert stablecoins back to traditional money, their options are few, inconsistent across different stablecoins, and unavailable in many countries.
3. **Fragmented acceptance:** Each stablecoin issuer must build its own redemption network. This creates a counter-productive dynamic where every new issuer-specific arrangement makes the overall system more convoluted and fragmented.

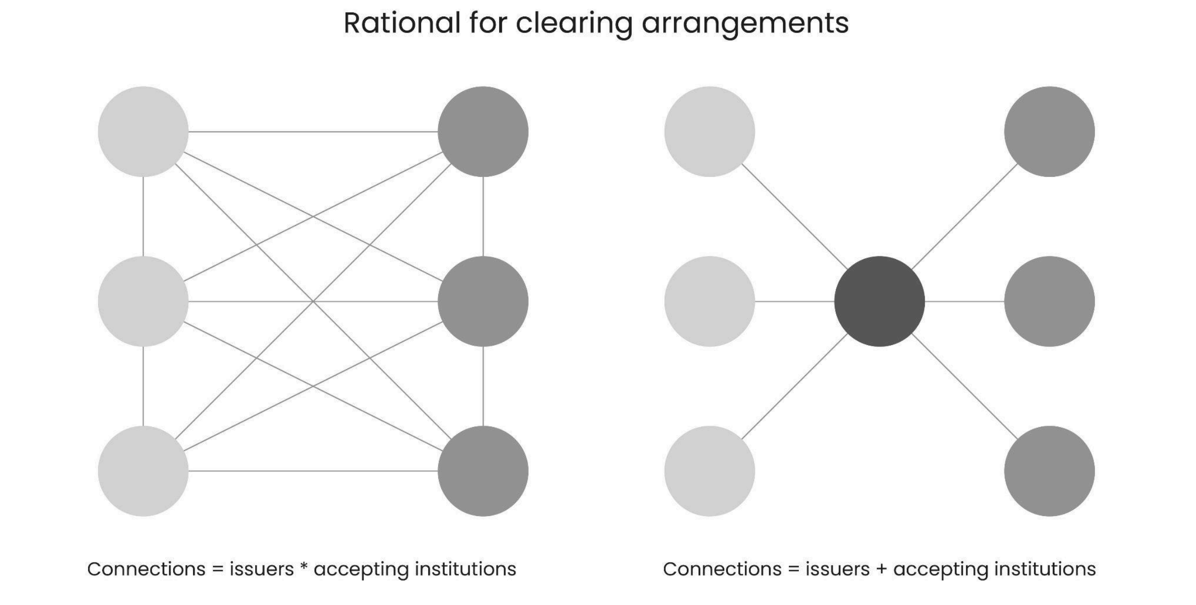
4. **Uncertainty:** Without established redemption channels, anyone receiving a stablecoin must individually assess the creditworthiness of both the issuer and their available off-ramp options—a level of due diligence unrealistic for everyday transactions.
5. **Accounting roadblocks:** Businesses can't treat stablecoins as cash equivalents under current accounting standards (IAS7), but instead must handle them as financial instruments (IAS32), creating significant barriers to corporate adoption.

These limitations confine stablecoins to crypto-specialized use cases, inhibiting their rapid expansion into the broader economy.

Problem 2: Many-to-Many Network

The stablecoin ecosystem faces a classic network coordination problem when it comes to redemptions. There will be many issuers and many accepting institutions in a healthy stablecoin ecosystem. Actors who seek to create competitive moats through bilateral acceptance arrangements are working against themselves and the wider health of the stablecoin ecosystem. In a pluralistic network of issuers and accepting institutions, the same logic that drives the creation of clearing systems for checks, cards, and ACH applies to the emerging stablecoin ecosystem.

This is not to be confused with the logic that applies to the transfer of stablecoins between payers and beneficiaries - that must remain peer-to-peer according to the founding cryptocurrency vision. The need for a clearing system only applies to the situation where the beneficiary wishes to redeem the stablecoin at par value through their existing financial institution, and that institution needs a mechanism to collect the fiat currency from a large number of issuers with whom they do not and cannot have a bilateral relationship.



The clearing system that supports redemptions into fiat currency at par value needs to satisfy these constituents:

- **Users** want to deposit any stablecoin into their existing financial accounts, regardless of issuer, currency or blockchain—they want to be indifferent to the issuer.
- **Banks and fintechs** need certainty they'll receive full value when accepting stablecoins from issuers they have no direct relationship with.
- **Stablecoin issuers** need widespread distribution without building separate acceptance channels for each financial institution.
- **Ramps and exchanges** need simple interfacing with many issuers, not bilateral connections.
- **Regulators** require compliance frameworks that manage risk while enabling innovation.

The crypto community is rightfully wary of any proposal that creates a network 'hub' run by a trusted intermediary. This is a serious, first principles objection that Ubyx must overcome if it is to be adopted. The community should reject stablecoin clearing system proposals from any centralised entity. Ubyx aims to provide the clearing function required to solve the many-to-many redemption problem without replicating 20th century monolithic systems. Ubyx will walk the path of progressive decentralization on governance, technology and community engagement in line with regulatory expectations of safety and soundness.

Problem 3: Accounting Treatment

For stablecoins to reach mainstream corporate adoption, they must clear a critical hurdle: qualifying as "cash equivalents" under international accounting standards (IAS7). This isn't just a technicality, it is a fundamental requirement for corporations to use stablecoins in their everyday operations because operational liquidity is managed with cash equivalents.

Currently, when a business holds stablecoins, they are classified as financial instruments under IAS32. Each issuer has different terms and conditions. Sometimes the stablecoin represents a claim against the issuer, sometimes against the underlying assets—we call them all stablecoins, but they are all different instruments that behave differently in bankruptcy.

IAS 32: Financial Instruments	IAS 7: Cash Equivalent
"A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity."	*"For an investment to qualify as a cash equivalent it must be readily convertible to a known amount of cash and be subject to an insignificant risk of changes in value."*

IAS32 classification creates significant operational and compliance burdens for businesses. Companies don't want their operating cash tied up in financial instruments—they need it classified as cash or cash equivalents. Ubyx solves for cash equivalence through clearing arrangements with standardized rules that apply to all issuers:

1. **Pre-funded settlement accounts:** Issuers maintain dedicated cash reserves at Ubyx nominated settlement banks specifically for redemptions. This layer abstracts redemption away from the individual backing of the issuer, and their specific terms and conditions.
2. **Standardized redemption process:** All redemptions follow the same process regardless of the issuer.
3. **Established redemption pattern:** Creates the factual evidence accounting bodies need to classify stablecoins as cash equivalents—ready conversion at par value in theory and practice.

By homogenizing the redemption process across all issuers, Ubyx creates the conditions necessary for stablecoins to qualify as cash equivalents. When stablecoins achieve this status, they become viable for:

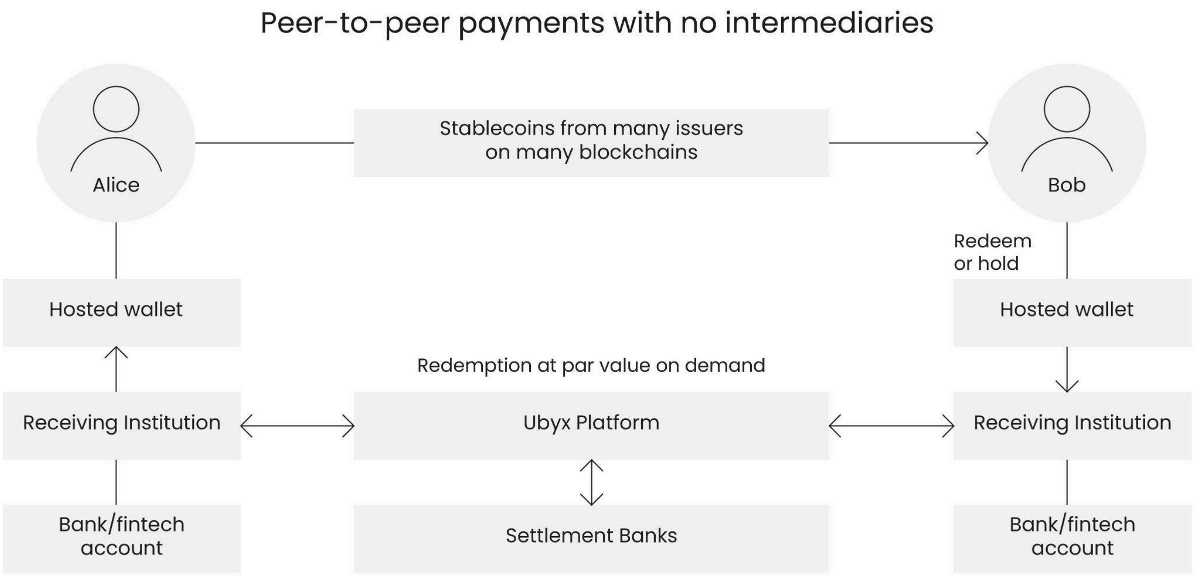
- Business-to-business (B2B) payments
- Consumer-to-business (C2B) transactions
- Business-to-consumer (B2C) disbursements
- Complex multi-party transactions (B2B2C)
- International cash & liquidity management for corporations
- Interbank settlements currently conducted over correspondent banking nostro/vostro accounts
- Wholesale financial market settlements, e.g. DVP and PVP

Without cash equivalence, stablecoins will remain specialized crypto tools and fail to live up to their transformative potential. This is not a problem that can be solved through a stroke of the regulatory pen—accounting bodies require a fact pattern that can only be established through the kind of clearing system that Ubyx provides.

Problem 4: Underpin Peer-to-Peer Payments

Bitcoin introduced a revolutionary concept: digital money that moves directly between people without intermediaries. While Bitcoin itself has become more of a store of value than everyday money, stablecoins now fulfill this original vision—but only if people can trust them enough to keep and use them as readily as they trust traditional financial products.

In the ideal state, recipients of stablecoins are indifferent towards redemption and holding. Being neutral between holding stablecoins in native form versus conversion into traditional balances means that stablecoins have achieved parity of treatment with existing form factors of fiat currency. Competition and choice are augmented and users can transact as they wish on a level playing field.



1. **Direct exchange:** Alice sends Bob stablecoins from one of many issuers, over one of many blockchains.
2. **Recipient choice:** Bob has two equally valid options:
    a. Keep the stablecoins in his wallet as cash equivalents for future use
    b. Deposit them to his bank or fintech account at full value
3. **Seamless redemption:** If Bob chooses to convert, his bank processes the redemption through Ubyx, crediting his account with the full value.

By providing this redemption assurance without interfering in direct peer-to-peer transactions, Ubyx preserves a key element of the core crypto vision—peer-to-peer transfer without intermediaries. Mass market adoption and parity between form factors will be achieved when the recipient is indifferent/neutral to holding on to the stablecoin, or converting it to their traditional account.

The Ubyx Protocol

Ubyx provides the missing piece in the stablecoin ecosystem that connects issuers and financial institutions in a network of mutual trust and benefit. The key participants are:

Stablecoin Issuers	Receiving Institutions
Regulated by competent authorities	Regulated by competent authorities
Banks and non-banks	Banks and non-banks: fintechs, payment services providers, e-money institutions, exchanges

Ubyx enables any regulated receiving institution to offer a powerful new service: the ability for their customers to deposit stablecoins from any participating issuer, in any currency, on any supported blockchain, directly into their existing accounts—24/7 with near real-time settlement. This represents a fundamental shift in how stablecoins are converted to traditional currency today:

Existing Off-Ramp Model: Sale	Ubyx Redemption Model: Collection
Users sell stablecoins into an exchange order book	Users deposit stablecoins at their bank or fintech
Price received varies based on market conditions (in addition to redemption and FX spreads applied by the exchange)	Value received is always 100% of face value (the receiving institution decides what fees and FX to apply to the transaction)
Exchange may act as a counterparty to the transaction	Financial institution acts as the user's agent, collecting funds from the issuer on a best efforts basis, returning any uncollected items to the customer

Financial institutions need assurance they'll receive full payment from potentially hundreds of different stablecoin issuers before crediting their customers' accounts. The receiving institution cannot possibly maintain direct relationships with every issuer. Nor can they off-ramp through an exchange, as that adds counterparty risk and goes through an order book. Ubyx solves this many-to-many problem by providing a rules-based clearing system:

1. A single standardized interface for submitting redemption requests
2. A secure channel for routing stablecoins back to issuers for verification
3. A reliable settlement process ensuring receiving institutions receive full fiat value

Ubyx Protocol Components

Ubyx consists of core and advanced components, with the core elements being the minimum necessary to demonstrate live transactions through a many-to-many clearing system. The advanced components are necessary to walk the path of progressive decentralization, and to fully realize the vision of stablecoin ubiquity.

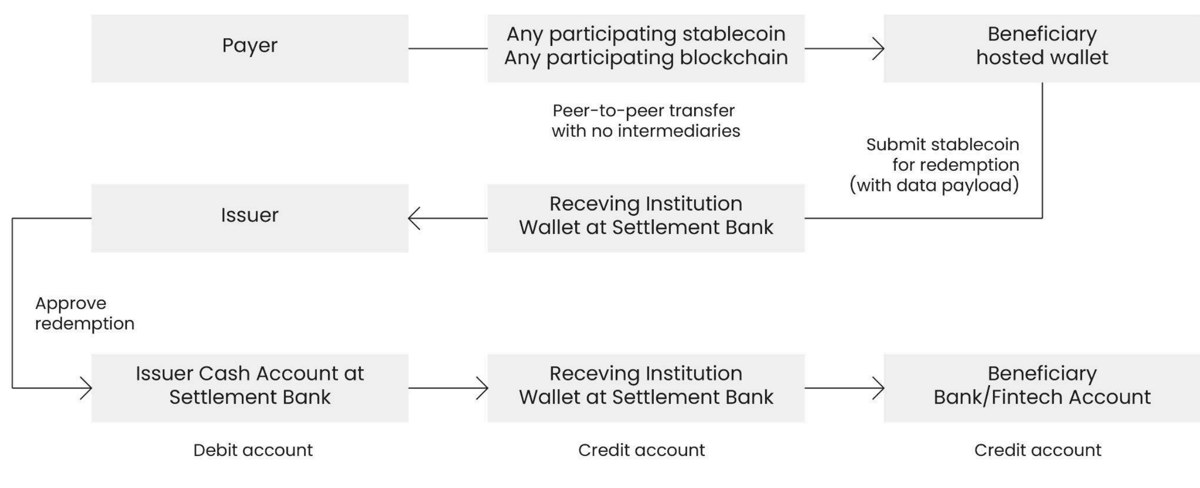
Core Components	Advanced Components
● **Ubyx clearing platform:** A secure, scalable technology infrastructure connecting all network participants, carrying instructions between the regulated participants	● **Ubyx token:** A governance token enabling community participation and ecosystem incentives ● **Ubyx foundation & DAO:** A decentralized governance structure for community-driven protocol evolution

● **Ubyx rulebook:** A comprehensive governance framework defining access criteria, operational standards, etc. ● **Hosted receiving institution wallets:** Specialized Ubyx scaling partners provide the technical tools financial institutions need to participate including hosted wallets on multiple chains, blockchain analytics, etc.	● **Ubyx minting gateway:** Enabling the reverse flow—letting users source participating third-party stablecoins through their financial institutions ● **Ubyx lending facility:** A supra-issuer liquidity mechanism to support issuers during operational disruptions ● **Ubyx labs:** Collaborative R&D on additional requirements for stablecoin ubiquity

Ubyx doesn't replace existing stablecoin off-ramps—it adds a critical new channel that enables users to accept a variety of stablecoins while being relatively indifferent to the issuer. This indifference is the key to achieving accounting recognition as cash equivalents, which in turn enables stablecoins to function as general-purpose payment methods rather than specialized cryptoassets.

How Ubyx Works

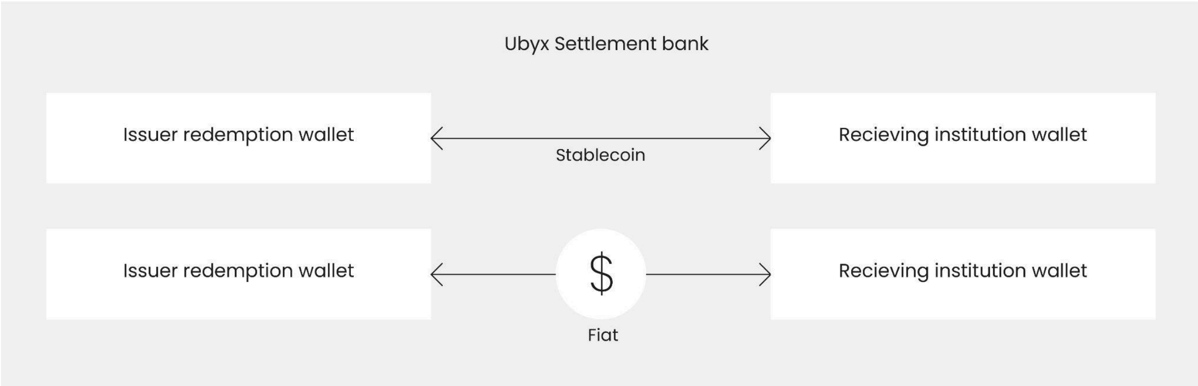
Ubyx is a straightforward system that makes redeeming stablecoins as simple as depositing a check. Here's how it functions:



1. **Network membership**: Issuers and receiving institutions join by agreeing to the Ubyx rulebook and connect to the Ubyx platform through standard APIs. Eligibility to join Ubyx is defined in the rulebook and is limited to regulated institutions. High risk jurisdictions are not part of the system.

2. **Settlement bank set up**: Each issuer and receiving institution holds wallets and cash accounts at the Ubyx appointed settlement banks/custodians in each currency.
3. **Customer setup**: Banks and fintechs provide their customers with hosted digital wallets that support all participating stablecoins across all supported blockchains. These are typically provided by Ubyx scaling partners.
4. **User experience**: Customers are provided with blockchain addresses to receive stablecoins on different networks, and can easily convert them to their bank or fintech account.
5. **Pre-funded cash accounts**: Stablecoin issuers maintain dedicated cash reserves at the designated settlement banks, ensuring all redemptions can be honored. These are part of an issuer's existing reserves, not an additional capital buffer. The amount of pre-funding is determined by the community through the Ubyx rulebook and may be expressed in terms of a number of days of average net redemptions.
6. **Redemption flow**:
    a. When a customer deposits stablecoins, they're checked by their own institution to interdict financial crime and routed to the issuer for verification.
    b. Upon acceptance by the issuer (after further financial crime checks), funds move from the issuer's pre-funded account to the receiving institution's cash account.
    c. The customer's bank account is credited with the full value of their stablecoins in the currency of their choice.
7. **Compliance**: Multiple layers of compliance checks occur at the receiving institution, settlement bank, and issuer levels.
8. **Unhappy paths**:
    a. Stablecoins could fail compliance checks by any of the regulated participants and be blocked.
    b. The issuer may fail to hold sufficient funds in the pre-funded cash account, meaning that redemption cannot be achieved and the stablecoin is returned to the beneficiary (they may try alternative off-ramps).

Redemption are processed against pre-funded cash accounts



Ubyx is designed for global interoperability:

- **Multi-issuer:** All regulated issuers can join Ubyx subject to agreed rulebook criteria
- **Multi-blockchain:** Works across all participating blockchain networks and scaling solutions
- **Multi-currency:** Supports stablecoins denominated in any participating national currency
- **Multi-jurisdiction:** Connects financial institutions worldwide into a single network

This universal approach means a bank in the United States can accept a Japanese yen stablecoin just as easily as a store in New York accepts a Japanese tourist's credit card. The bank's customer receives dollars, while the settlement system handles the currency conversion automatically. By creating global interoperability, Ubyx enables a diverse ecosystem where stablecoins from any country can achieve global acceptance on an exponentially scaling network.

Ubyx Core Components

The Ubyx Platform

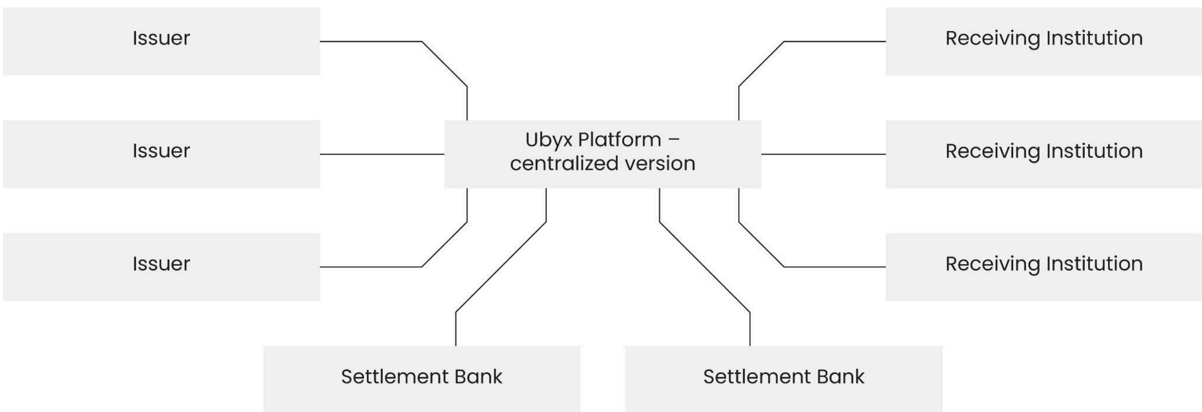
The Ubyx technical platform coordinates all interactions between stablecoin issuers, financial institutions, and settlement banks. The platform connects all network participants through standardized APIs that orchestrate the redemption process:

1. **Receipt into hosted wallets in recipient name:** The sender obtains the address of the beneficiary on the chosen blockchain and sends the stablecoin of their choice. The Ubyx trust mark on both sides provides the sender and receiver with the understanding that the payment will be accepted.

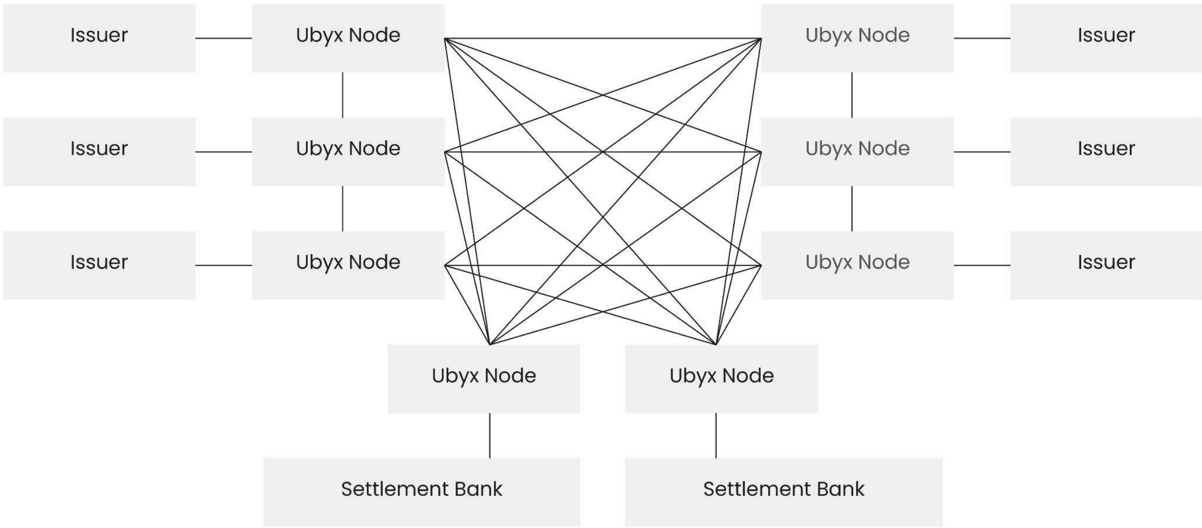
2. **Redemption routing:** When a customer deposits stablecoins at their financial institution, the platform routes these tokens to the appropriate issuer. This is achieved by transferring the customer's stablecoins into an institutional wallet held by the receiving institution at the Ubyx settlement bank.
3. **Verification process:** The stablecoins are submitted to the issuer along with a data package to satisfy travel rule and other requirements. The issuer verifies the stablecoins and authorizes redemption.
4. **Settlement coordination:** The platform orchestrates the movement of funds from issuer pre-funded accounts to receiving institutions on a 24*7 basis across the books of the Ubyx settlement bank, at arms length from Ubyx.
5. **Settlement modes:** Initially, settlement will be conducted on a gross basis, but over time other settlement modes can be introduced as the system matures (e.g., deferred net settlement). Ubyx clearing arrangements can be optimised over time for attributes like liquidity efficiency, but initially the focus will be on establishing ecosystem trust with a simple and standard offering.
6. **Transaction records:** Detailed redemption information is provided to receiving institutions for customer account crediting using the ISO20022 data model.

Ubyx takes a pragmatic approach to technical implementation:

- **Initial phase:** The platform begins as a largely centralized system similar to traditional clearing infrastructure, building trust with regulators and traditional financial institutions.



- **Progressive decentralization:** Over time, the platform will transition to an increasingly decentralized architecture and could become its own layer 1 or layer 2. The functions would be the same—to orchestrate the required stablecoin, cash, and data movements between the participants.



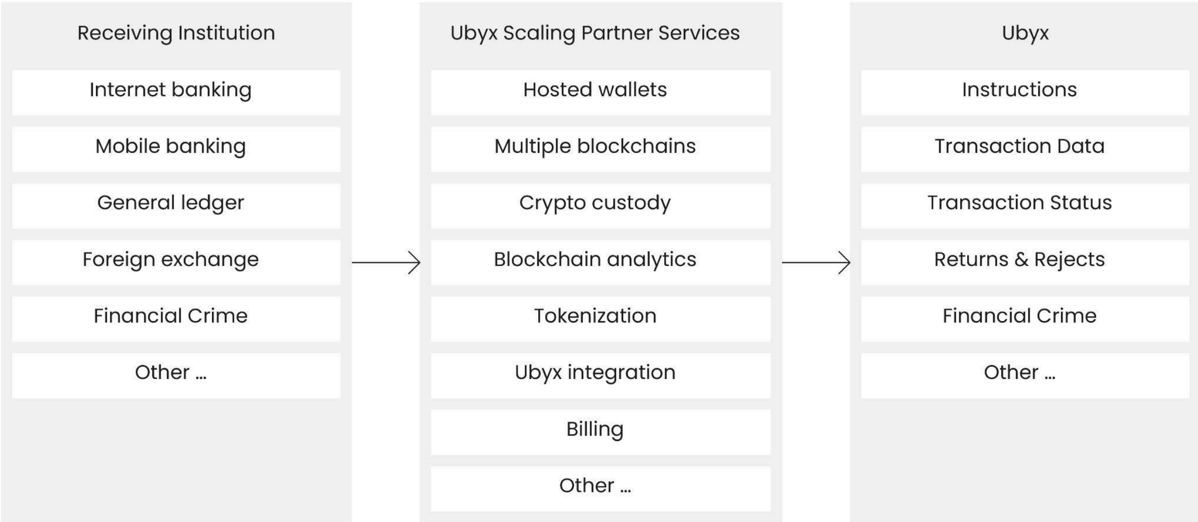
By starting with proven technology and familiar models, then evolving toward greater decentralization, the Ubyx platform bridges the gap between traditional finance and the decentralized future in a way that builds trust while fostering innovation.

End-User Hosted Wallets

For financial institutions to accept stablecoins, they need capabilities that most don't currently possess, in particular hosted wallets that support several public networks and the blockchain analytics necessary to detect financial crime. Ubyx addresses this through specialized integration partners that provide the necessary technical infrastructure. Rather than expecting every financial institution to build blockchain expertise from scratch, Ubyx creates an ecosystem of licensed "scaling partners" that provide turnkey solutions:

- **Direct relationships:** Scaling partners contract directly with financial institutions and equip them to go live.
- **Multi-blockchain support:** Partners provide wallet infrastructure supporting several participating blockchains.
- **Compliance tools:** Built-in analytics and monitoring for regulatory compliance.
- **Technical integration:** Seamless connection to both Ubyx platform and the institution's existing systems.

This model allows for rapid parallel implementation across many institutions, freedom for institutions to choose their preferred technology provider, and a competitive dynamic between several Ubyx scaling partners.



Ubyx scaling partners enable receiving institutions to provide their business and personal customers with hosted wallets. The customer experience is simple. Alongside traditional banking details, customers see blockchain addresses for receiving stablecoins:

Payment channel	Address
Wire (IBAN address)	DE89 3704 0044 0532 0130 00
Ethereum mainnet	0x206137152706A269a31292c89986Ad8838AC5812
Blockchain 2	6VXm9x2WCrqgAbqBg3th6RMqkEndSh2asWsqzMqz5FGQ
Blockchain 3	0x206137152706A269a31292c89986Ad8838AC5812

Financial institutions can start with simple stablecoin acceptance and automatic conversion. In this initial mode, the hosted wallet does not function as a custodial service but rather as a pass-through mechanism—akin to the legacy "lockbox" arrangements banks traditionally offered for check collection. In those systems, checks were not held *in custody* for the customer; they arrived in the lockbox and were immediately routed for processing.

As institutional comfort grows, additional services can be offered:

- Holding stablecoins in customer wallets without conversion (with custody provided by the receiving institution or by the Ubyx scaling partner).
- Enabling customers to send stablecoins directly from their hosted wallets.

- Distributing 3rd party stablecoins to customers through the Ubyx minting gateway.
- Issuing their own stablecoins through tokenization capabilities offered by Ubyx scaling partners.

The hosted wallet infrastructure provides financial institutions with more than just stablecoin capabilities—it creates a foundation for broader blockchain integration. These same wallets used for stablecoins can support the full range of digital assets, making Ubyx the first practical step for traditional finance to engage with Web3 in a phased, compliant and customer-focused way.

The Ubyx Trust Mark

In the world of payments, visual symbols carry powerful meaning. Existing payment system logos all instantly communicate a promise: "This payment method works reliably anywhere you see this symbol." The Ubyx Trust Mark will serve this same crucial function for stablecoins. The mark represents a collective assurance from all network participants:

1. **Rulebook compliance:** All participants follow standardized operational rules.
2. **Redemption confidence:** Stablecoins can be redeemed at full value through regulated financial institutions with a high degree of confidence.
3. **Compliance:** Transactions meet global regulatory standards for KYC, AML, and fraud prevention.

For recipients of stablecoins, the Ubyx mark eliminates the need to navigate technical blockchain differences or assess the backing model of each issuer. Like card networks, Ubyx does not guarantee redemption—but it does create trust, usability, and consistency across participants. The mark delivers distinct advantages to each party in the ecosystem:

Users and Businesses	Stablecoin Issuers	Financial Institutions
• Confidence in accepting any Ubyx stablecoin • Certainty about redemption options • Reduced need for counterparty evaluation	• Immediate recognition and acceptance • Reduced marketing costs for building trust • Network effects that increase with each new participant	• Clear signal of payment innovation leadership • Simplified customer communication • Established standards for stablecoin acceptance

As the mark becomes recognized, it creates a virtuous cycle of adoption. Each new participant increases the value for all existing participants, accelerating the network's growth. Just as few merchants would consider accepting credit cards without displaying network logos, the Ubyx Trust Mark will become the essential visual signal that an institution is connected to the global stablecoin clearing system.

The Ubyx Rulebook

Every payment network requires a clear, enforceable set of rules that govern how participants interact. The Ubyx Rulebook fulfills this role, establishing the standards and processes that enable reliable and interoperable stablecoin clearing. All participants contractually agree to be bound by the rulebook at all times. The rulebook defines:

- **Participant requirements**: Standards for issuers, receiving institutions, and participating blockchains
- **Settlement timelines**: Service-level expectations for near real-time processing
- **Pre-funding requirements**: Reserve and liquidity standards for reliable redemption
- **Dispute resolution**: Processes for handling exceptions and resolving disputes
- **Compliance standards**: Regulatory adherence requirements for regulated participants
- **Technical specifications**: Implementation requirements for integration with Ubyx

To ensure enforceability in both principle and practice:

- **All participants will enter into a legally binding agreement**, governed by the appropriate jurisdiction, incorporating the rulebook by reference.
- **Participants must be identified and verified**, and subject to contractual obligations, including liability for non-compliance.
- **Minimum standards of operational, financial, and technical readiness** will be assessed before participation is permitted. These standards are designed to ensure that participants can meet their obligations, including reserve and reporting requirements.
- **Continuous compliance monitoring** will be implemented, including automated verification (where possible), periodic attestations, and independent audits. Early-warning signals will be built into the system to detect potential issues before they lead to defaults.

The rulebook will define a graduated enforcement framework temporary and permanent expulsion from the network. To ensure legitimacy and stability in rulebook changes, amendments will follow a structured governance process, with clear proposal, review, and voting stages. Community governance will be implemented in a measured way:

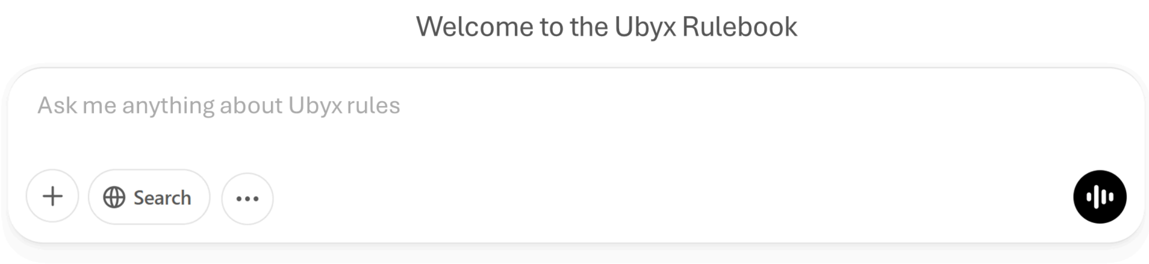
- **Initial phase**: Ubyx Inc. will retain decision-making authority to ensure launch stability, with transparent public input and publication of all changes.
- **Transitional Phase**: governance will begin the process of progressive decentralisation in measured steps towards community stakeholders and verified participants.
- **Mature Phase**: governance will be more fully decentralized under the Ubyx DAO, with token holders voting on changes. There will be limits on the extent to which the system can be decentralized to remain consistent with safety and soundness. Rule changes can have significant impact on ecosystem participants, including the requirement to implement technical and operational changes, as well as impacts on business models.

Unlike traditional payment network rulebooks—often controlled behind closed doors—the Ubyx Rulebook will be developed as an open-source project on GitHub. Each rule is an independently modifiable 'code block' that can be optimized with the help of the community. In the open-source world, the motto is: *"Given enough eyeballs, all bugs are shallow."* By pointing many eyes at the Ubyx Rulebook, the community can build a fit-for-purpose, resilient, and transparent framework—one that evolves continuously, reflects the needs of all stakeholders, and earns trust through openness.

https://github.com/UbyxRules/Ubyx-Rulebook

This collaborative process allows transparent input from all stakeholders, public review and feedback, contributions from legal, technical, and regulatory experts, and ongoing adaptation to industry, legal, and technological developments

Contributors who materially improve the rulebook may be rewarded with Ubyx tokens, aligning incentives for a secure and robust governance framework. The rulebook will also be integrated with AI to allow participants to query it in natural language, helping to make complex rules more accessible.



By combining the best practices of traditional payment systems with the collaborative approach of open-source development, Web3 and AI, the Ubyx Rulebook creates the foundation of trust necessary for a transparently community governed system.

The Ubyx Association

While technology platforms and rulebooks provide the 'how' of stablecoin clearing, the Ubyx Association addresses the equally critical 'who' and 'why', creating the human connections and institutional relationships necessary for mainstream adoption.

The Ubyx Association serves as the ecosystem's collaborative forum, bringing together industry participants, regulators, and other stakeholders to advocate for practical regulatory frameworks, develop industry standards, promote stablecoin adoption, and facilitate knowledge sharing across the ecosystem. Key functions include:

1. **Regulatory engagement:** The association makes the case that regulated financial institutions should participate actively in public blockchains and accept & issue stablecoins.
2. **Rulebook development:** The association encourages all stakeholders to contribute to the development and maintenance of the open-source Ubyx Rulebook.
3. **Accounting recognition:** Work with global accounting bodies to establish stablecoins as cash equivalents (IAS7).

4. **Ecosystem expansion:** Support ecosystem growth by providing expertise to new issuers and receiving institutions, connecting participants with appropriate technology partners and developing practical implementation guides and best practices.
5. **Government relations:** Work with governments and supranationals worldwide to demonstrate how Ubyx benefits their financial systems, enabling receipt of foreign stablecoins into the domestic financial system and global acceptance of locally issued stablecoins.

By focusing on these crucial community-building functions, the Ubyx Association complements the Ubyx technical infrastructure with coordinated ecosystem action towards stablecoin ubiquity. Every bank and non-bank looking for a coherent and practical roadmap into the stablecoin epoch should join the Ubyx Association.

Benefits to Ecosystem Participants

There's an old European folktale about a stranger who comes to an impoverished village carrying nothing but an empty cooking pot. The villagers are unwilling to share their precious food stores with each other, let alone a stranger. The stranger fills the pot with water, drops a polished stone in it, and places it over a fire in the village square. One curious villager asks what they're doing, and the stranger explains they're making "stone soup," which tastes wonderful but could be even better with just a small addition, perhaps an onion. A villager fetches an onion. Another villager brings a potato, another some herbs, and gradually, each villager makes a small contribution. Eventually, a delicious and nourishing pot of soup is enjoyed by all.

The Ubyx protocol embodies this same principle of collaborative value creation. Like the initial stone in the pot, Ubyx provides the foundational clearing infrastructure—valuable in concept but limited on its own. As each participant joins the network, they contribute their unique value: issuers bring their stablecoins, financial institutions bring their customer relationships, exchanges provide liquidity, technology partners contribute implementation expertise, and regulators establish stability and trust.

Each participant adds to the "stone soup" of the Ubyx ecosystem, and in return, receives far more value than they could create independently. Just as the final soup was more nutritious and abundant than any individual ingredient, the mature Ubyx network creates a financial ecosystem that transcends what any single participant could build alone.

This collaborative model, where each addition exponentially increases the value for all, is the essence of how Ubyx transforms the fragmented stablecoin landscape into a unified, ubiquitous payment system. The following section details the specific benefits each participant receives from contributing to this shared ecosystem.

Stablecoin Users

- **Universal acceptance:** Deposit any stablecoin at full value into existing financial accounts
- **Customer experience:** Simple user interface within a trusted existing relationship
- **Financial recognition:** Hold stablecoins as recognized cash equivalents on balance sheets

Stablecoins currently serve crypto-native users, who redeem through exchanges, and large institutions with direct issuer relationships. However, this model restricts mass adoption. Ubyx overcomes this by allowing banks and fintechs to seamlessly integrate blockchain addresses alongside traditional payment methods. Users can effortlessly receive stablecoins from any issuer and blockchain, without handling private keys or assessing issuer risk. With redemption at full par value by participating financial institutions, stablecoins become as trusted and easy to deposit as checks or cash. This removes counterparty uncertainty and fosters user confidence, transforming stablecoins into universally accepted digital money.

Stablecoin Issuers (bank and non-bank)

- **Global reach:** Access worldwide distribution without building proprietary networks
- **Revenue diversification:** Generate stable non-interest revenue from redemption and minting fees
- **Compliance efficiency:** Reduce regulatory costs through shared infrastructure and standards
- **Exchange independence:** Reduce reliance on exchange listings and associated fees

Stablecoin issuers currently struggle to achieve mass adoption due to reliance on costly exchange listings and inefficient bilateral agreements. Ubyx solves this by providing a unified redemption network, enabling issuers to instantly connect with thousands of banks and fintechs through a single integration, thus removing the burden of individual negotiations and reducing barriers to global acceptance.

A note to large issuers
Large issuers may hesitate to join Ubyx because they benefit from the current market structure. Their bilateral integrations and exclusive off-ramps act as moats—but moats built on friction are vulnerable to better networks. A linear model of stablecoin acceptance cannot compete with the quadratic power of a mutualized network. The next wave of issuers will build together, interoperate from day one, and soon win through the maths of network evolution. Large issuers who wish to remain dominant should be among the first to join Ubyx—before their moat becomes a trap.

Traditionally, issuers rely heavily on interest income from reserve assets, a model vulnerable to interest-rate fluctuations and market pressures. Ubyx introduces an alternative revenue stream, allowing issuers to set redemption fees paid directly by receiving institutions. This creates predictable and sustainable revenue, independent of interest rates.

By shifting from closed-loop models to a shared redemption network, Ubyx transforms stablecoins from issuer-specific products into universally accepted digital cash, facilitating global scale and driving issuer innovation rather than infrastructure management.

Financial Institutions (bank and non-bank)

- **New revenue streams:** Generate fee and FX income without risking disintermediation
- **Reduced counterparty risk:** Operate within a rules-based clearing system with predefined risk controls

- **Efficient innovation:** Expand into blockchain services without building specialized infrastructure
- **Competitive positioning:** Establish leadership in digital asset services

Banks and fintechs have long hesitated to adopt blockchain-based payments due to regulatory concerns and integration complexity. Ubyx addresses these challenges by offering a compliant, low-risk pathway into stablecoins through simple API integration and trusted scaling partners. Institutions can effortlessly provide customers with multi-issuer, multi-blockchain wallets, seamlessly converting stablecoins into fiat within existing accounts—no crypto exchanges or complex infrastructure required.

Practical advice for traditional finance senior management
You cannot properly evaluate the impact of stablecoins on your institution if you have never sent or received a stablecoin payment. Take these simple practical steps as a senior management team: 1. *Have your team download one or more of the popular crypto wallets (e.g. Phantom or Metamask)* 2. *Fund one of the wallets with one or more stablecoins and have the execute team send and receive between themselves. Try doing this on several different blockchains.* 3. *Attempt to 'off-ramp' stablecoins through existing channels and note frictions and costs - these are the obstacles your clients experience today. You can solve them.* 4. *Consider how much more convenient it will be for existing business and personal customers to be able to transact in stablecoins through hosted wallets that you provide.* 5. *Consider how easy you can make it for your existing clients to convert to and from stablecoins and their existing bank account.* 6. *Consider then what additional services you might provide to your clients now that they all have hosted wallets that can be used to transact in any digital asset.* 7. *Ask yourself whether you want to be left behind as your clients adopt stablecoins with other providers.* *Taking these simple steps is more useful than reading about stablecoins in the financial press or listening to presentations from consultants. Once you experience the latent potential of stablecoins, the way forward for your institution will be much clearer - engage in the Ubyx Association and join the Ubyx clearing system.*

Rather than disrupting existing revenue streams, Ubyx expands them: institutions gain new income from deposit conversion fees, transaction fees, FX spreads, and faster, lower-cost cross-border payments. Initially focusing on stablecoin deposits and conversions, institutions can progressively offer broader digital asset services, positioning themselves strategically for Web3 finance.

Exchanges

- **Ecosystem growth:** Benefit from expanding stablecoin/crypto volumes across the entire market
- **Streamlined operations:** Rationalize relationships with multiple stablecoin issuers
- **New business opportunities:** Provide infrastructure services to traditional financial institutions

While Ubyx might initially seem to compete with crypto exchanges, it actually enhances their liquidity and expands market potential by streamlining stablecoin redemption across issuers and blockchains. Currently, exchanges face operational overhead due to fragmented integrations and limited liquidity confined to crypto-native users. Ubyx resolves this, enabling exchanges to easily process stablecoin deposits and attract broader institutional demand.

Exchanges already specialize in custody, analytics, and digital asset settlement—exactly the expertise traditional institutions need. By becoming Ubyx scaling partners, exchanges can offer hosted wallets, compliance tools, custody services, and on-chain settlement solutions to banks and fintechs. This creates new revenue streams and positions exchanges as essential infrastructure providers for traditional finance entering digital assets. Ultimately, Ubyx amplifies exchange activity, unlocking significant institutional volumes and fostering broader stablecoin adoption.

Crypto Community

- **Core vision fulfillment:** Support the fundamental purpose of peer-to-peer digital payments
- **Network growth:** Increase transaction volumes across public blockchain networks
- **Mainstream adoption:** Attract new users through familiar financial interfaces
- **Traditional finance bridge:** Practical connections between TradFi and DeFi

Stablecoins have long connected traditional finance with crypto, yet adoption has largely remained limited to crypto-native use-cases. Ubyx broadens this scope, driving mainstream adoption by enabling general-purpose stablecoin use. As businesses, financial institutions, and everyday consumers integrate blockchain payments into daily transactions, public-permissionless blockchain usage and transaction volumes will surge, enhancing network security and liquidity.

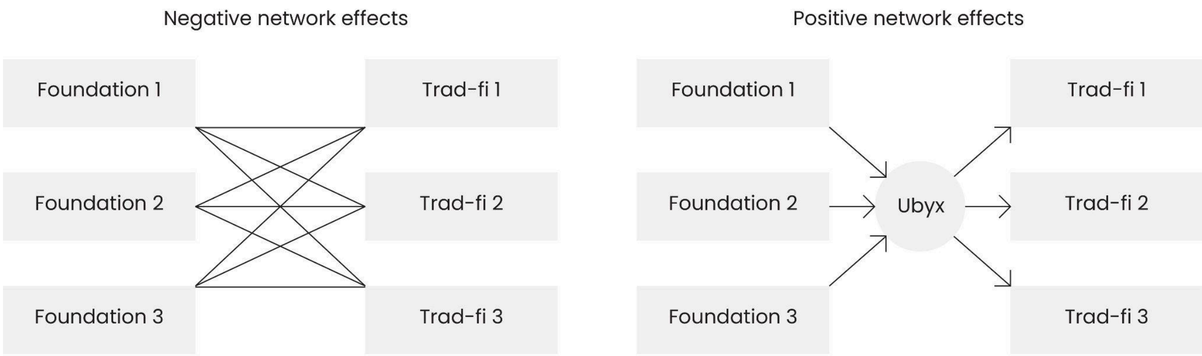
This adoption transforms blockchain technology from a speculative niche to essential financial infrastructure, overcoming institutional skepticism and regulatory uncertainty. Banks and fintechs providing blockchain wallets for stablecoin transactions will eventually expand into broader digital assets, including staking, tokenized securities, and decentralized finance (DeFi). Ultimately, trillions of dollars could shift to public blockchains, merging traditional finance and Web3.

Ubyx thus revitalizes crypto's original vision—open, permissionless, peer-to-peer payments—by making stablecoins a practical global currency solution.

Blockchain Networks

- **Coordinated growth:** Pool resources to drive financial institution adoption
- **Reduced integration barriers:** Allow financial institutions to support multiple networks without "picking winners"
- **Implementation funding:** Overcome traditional finance budget constraints through coordinated grants

Blockchain foundations aim to attract traditional financial institutions, yet regulatory uncertainty, cumbersome internal processes, and fear of "picking winners" have limited institutional adoption. Ubyx removes these barriers by allowing banks and fintechs to integrate multiple stablecoin issuers and blockchains through a single implementation, eliminating reliance on any single blockchain.



Instead of fragmented bilateral grants, foundations can collectively leverage Ubyx to efficiently fund and accelerate ecosystem expansion. Institutions integrate just once, benefiting all participating blockchains simultaneously. This shared infrastructure reduces institutional barriers, increases adoption speed, and creates coordinated incentives rather than competition.

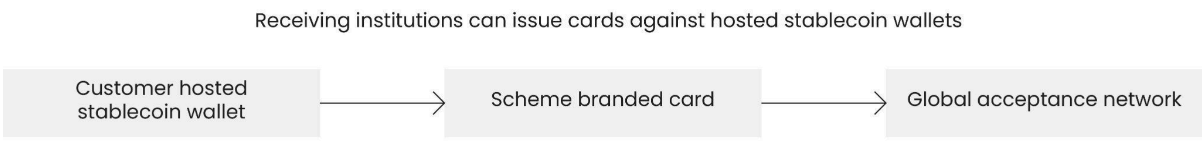
Ubyx thus transforms blockchain adoption from a zero-sum game into a unified growth strategy, making public-permissionless networks integral to global financial infrastructure.

Traditional Payment Systems

- **Embrace the new:** Form connections with the emerging stablecoin clearing ecosystem
- **Interoperate:** Enable old and new forms of money to flow from one to the other without friction
- **Innovate:** Deploy formidable existing assets to help develop general-purpose stablecoins

While Ubyx establishes a new clearing system for stablecoins, existing payment networks like card schemes and SWIFT have vital roles to play in the transition to stablecoin ubiquity. Rather than being disintermediated, these established networks can evolve to become essential infrastructure providers in the growing stablecoin ecosystem.

Card networks can leverage their global reach and technical expertise to become Ubyx scaling partners, providing turnkey solutions for financial institutions to receive and issue stablecoins. Card schemes can help banks and fintechs issue traditional card products against stablecoin hosted wallet balances, creating a bridge between stablecoin holdings and existing merchant acceptance networks.



SWIFT can update the ISO20022 message standard to incorporate stablecoin-specific data fields, including wallet addresses, transaction IDs, and blockchain identifiers. By creating an issuer and blockchain-independent data transport layer, SWIFT enables critical invoice and payment reconciliation data to accompany stablecoin transactions. This ensures businesses can automatically reconcile stablecoin payments with outstanding invoices in their ERP systems, making stablecoins viable for complex B2B payment scenarios.

Domestic payment systems can provide fallback and interoperability options, ensuring stablecoin payments can seamlessly interact with traditional bank transfers. These systems can facilitate efficient movement between stablecoin and fiat positions for financial institutions, supporting the liquidity needs of the Ubyx ecosystem.

These traditional payment networks stand to gain significant advantages by embracing stablecoins through Ubyx. Participation allows them to extend their relevance, develop new revenue streams, and ensure they remain central to the evolution of global payments as public-permissionless technology and cash equivalent stablecoins become mainstream.

Regulators and Central Banks

- **Monetary coherence:** Maintain "singleness of money" across digital and traditional systems
- **Controlled innovation:** Channel stablecoin activity through regulated institutions with established financial crime controls
- **Consistent oversight:** Apply regulatory frameworks to digital assets systematically
- **System resilience:** Create payment redundancy through multiple independent blockchain networks

Regulators and central banks face significant challenges integrating stablecoins into traditional finance due to concerns about compliance, volatility, and systemic risk. Ubyx resolves these issues by providing a structured, compliance-ready clearing mechanism analogous to traditional cashier's check clearing—replacing paper instruments with digital tokens transmitted over public blockchains.

Ubyx embeds stablecoins within existing financial institutions' compliance frameworks, utilizing rigorous KYC, AML, and anti-fraud processes. By establishing standardized redemption processes and mandating issuer pre-funding, Ubyx ensures full-value redemption, fulfilling regulatory requirements for "singleness of money" and cash-equivalent status.

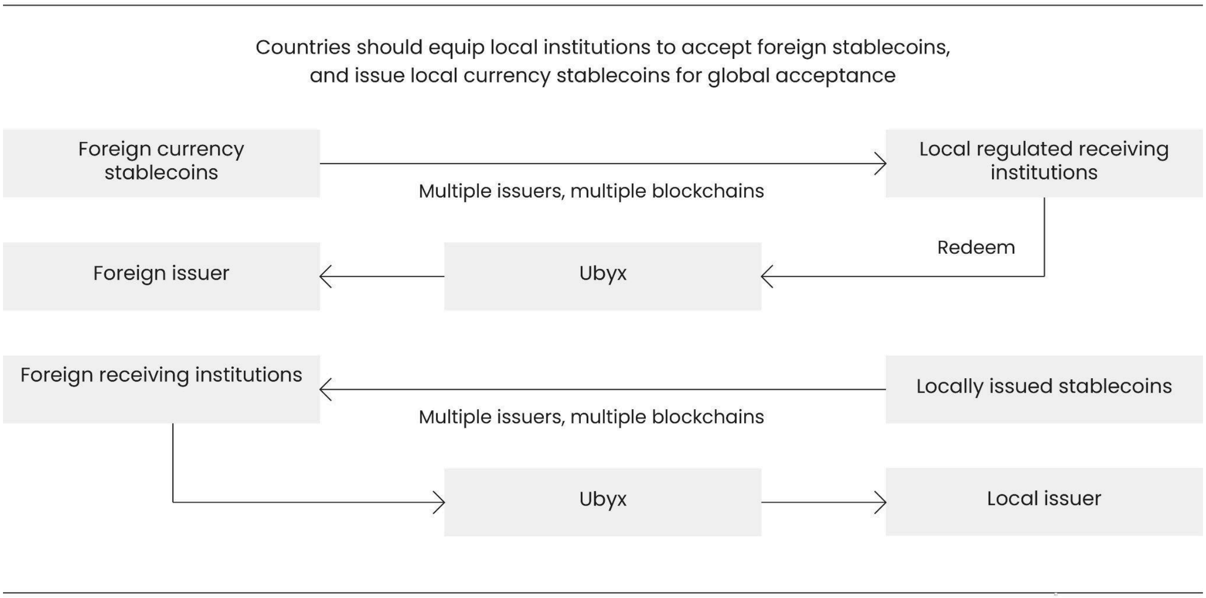
Additionally, Ubyx naturally stabilizes stablecoin prices through market-based arbitrage, reducing volatility and systemic risk.

Regulators can confidently support the Ubyx model, as it modernizes financial infrastructure while preserving necessary oversight and stability, transforming stablecoins from niche crypto assets into reliable elements of the regulated global financial system. Ubyx will engage constructively with regulators and central banks to align the development of the system with key safety and soundness objectives, in particular in the measured journey towards decentralization.

Nation States

- **Currency promotion:** Enable local currency stablecoins to achieve global acceptance
- **Regulatory framework:** Establish clear models for stablecoin, tokenized deposit and CBDC oversight
- **Financial resilience:** Strengthen payment system robustness through technological diversification

The future of stablecoins is global, multi-currency, and interoperable, presenting nations an opportunity to extend their financial sovereignty and economic influence. Ubyx allows countries to securely integrate their national currencies into a global stablecoin network, empowering their financial institutions to facilitate seamless cross-border trade and investment. By ensuring stablecoins from different jurisdictions can be confidently deposited at par value, Ubyx enables universal acceptance akin to traditional global payment systems.



Through a clear regulatory framework, nations can leverage stablecoins to increase financial sovereignty, expand economic influence, and strengthen demand for local assets backing these coins. Ubyx further enhances compliance by integrating KYC, AML, and sanctions standards into stablecoin transactions, ensuring secure and legitimate usage.

Ubyx envisions an open financial ecosystem where stablecoins act as trusted digital cash equivalents, fostering an inclusive environment that allows nations worldwide to participate and benefit equally from digital financial innovation.

Regulatory Considerations

This section covers the status of Ubyx as a neutral technology platform, the ability for regulated institutions to participate in public-permissionless blockchains, the legal framework that enables receiving institutions to accept stablecoins and the case for industry self regulation.

Status of Ubyx as a Technology Platform

Ubyx is designed to operate as a technology layer that organises activity between regulated participants, rather than being a regulated entity itself. Ubyx will positively engage with regulators in each jurisdiction to comply with local laws and regulations, and achieve the appropriate designation.

- **No custody or control:** Ubyx never controls or custodies funds—regulated settlement banks handle all cash, while regulated custodians manage stablecoins
- **No principal activity:** Ubyx functions as technical infrastructure passing instructions between regulated entities, not as a financial intermediary
- **No intermediation:** Ubyx doesn't act as an exchange, money transmitter, or custodian

- **Jurisdictional adaptability:** The protocol accommodates different regional requirements while maintaining consistent global standards according to the Ubyx Rulebook

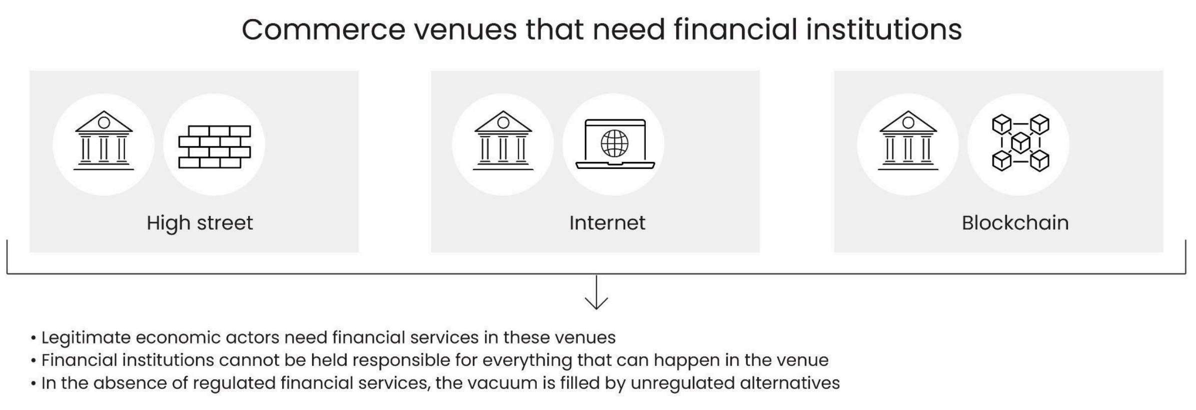
This neutral technology platform design allows Ubyx to align with regulator objectives.

- **Market competition:** Creating a level playing field for stablecoin issuers of all sizes
- **Financial innovation:** Enabling new payment capabilities without compromising security
- **System stability:** Enhancing resilience through transparent pre-funding requirements
- **Singleness of money:** Maintaining consistent value across different forms of currency
- **Multiple compliance layers:** Every transaction is examined by up to four regulated entities including the receiving institution, settlement bank, custodian, and issuer

Regulated Institution Participation in Public-Permissionless Blockchains

For regulated institutions to participate in the development of stablecoins, regulators may wish to reconsider the public-permissionless blockchains on which they operate. In the absence of providing a path forward, the next epoch in payments will be driven exclusively by non-regulated and/or non-bank actors. A healthy ecosystem permits participation from all regulated entities, including banks.

Public blockchains should be viewed as public infrastructure (like the internet) rather than as third-party service providers subject to traditional outsourcing frameworks. When banks operate on the internet, regulators do not hold them responsible for the internet's architecture or for all activities occurring on it. Similarly, banks using public blockchains should not be accountable for the inherent characteristics of blockchain technology beyond their control.



The "dangerous street" analogy is instructive—we allow banks to operate physical branches on city streets without holding them responsible for everything that happens on those streets. A bank operating on a public blockchain cannot control the decentralized consensus mechanisms, the actions of pseudonymous users with whom they have no relationship, network forks, or the operational decisions of independent node operators. Preventing bank participation creates a dangerous vacuum that drives users to unregulated alternatives. A bank branch on a dangerous street presents risks, but greater harm is caused by its absence.

Public permissionless blockchains present several inherent risks that banks can fully or partially mitigate. These include customer identity verification, transaction monitoring for direct customers, custody security risks, and integration with core banking systems. Standard risk management practices can address these concerns, though they may require adaptation to the blockchain context.

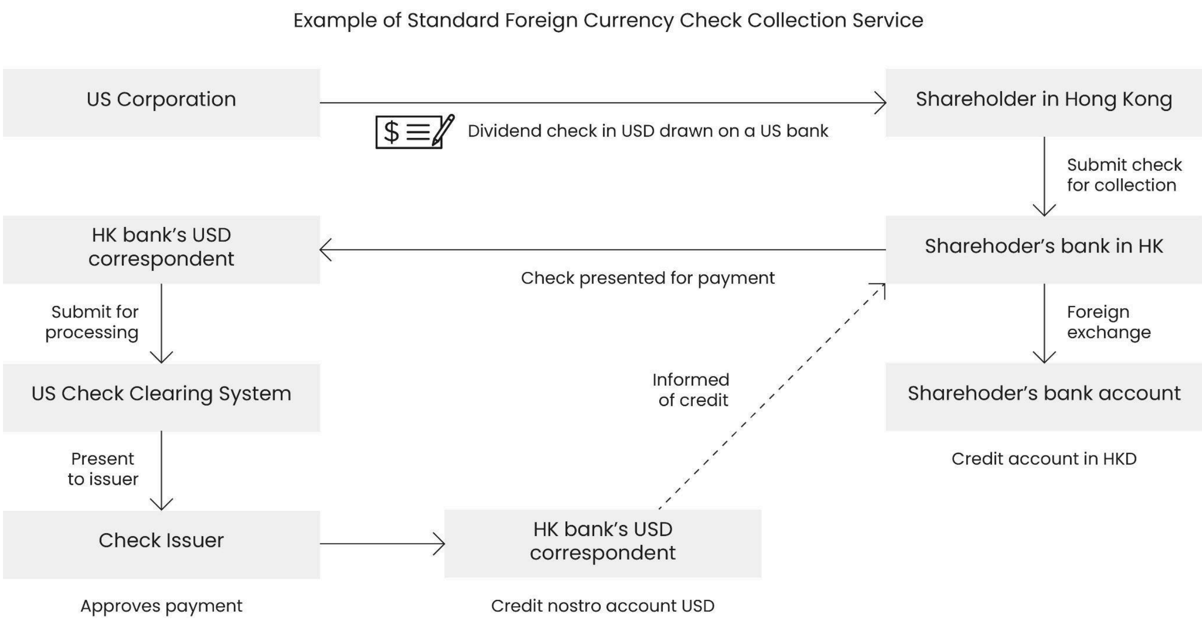
However, certain structural risks inherent to blockchain technology cannot be fully controlled by banks and must be accepted as part of participation. These unmitigable risks include decentralized consensus and network forks, transaction counterparty anonymity, sanctions compliance limitations, transaction immutability, network performance variability, and cross-border regulatory exposure. These are not failures of bank governance but inherent characteristics of blockchain technology that require a recalibrated regulatory approach.

Against these inherent risks, the benefits of bank participation are substantial. Banks can make blockchains safer for legitimate commerce by providing trustworthy service providers. They can leverage established AML/KYC capabilities to decrease financial crime. Bank involvement provides regulators with visibility into blockchain activities through institutions they supervise. Banks participating as validators can strengthen governance mechanisms and reduce reliance on opaque actors. Bank-issued stablecoins will add to customer choice.

For banks to participate effectively, regulators might wish to consider a practical framework that distinguishes infrastructure from outsourcing, establishes realistic BSA/AML boundaries focused on direct customers, adopts a risk-based approach acknowledging that certain risks cannot be eliminated, and provides legal clarity on liability limitations for inherent blockchain risks.

Receiving Institution Ability to Accept Foreign Stablecoins

Receiving institutions should be permitted to accept and process foreign issued stablecoins on behalf of their customers within existing rules and regulations. The model to adopt is based on the existing processing of foreign currency checks throughout the world.



USD checks are routinely sent to foreign beneficiaries (e.g., for dividend payments). These are deposited with local banks.

- The issuer of the USD check is not regulated in the receiving country
- The USD check as an instrument is not separately regulated in the receiving country
- The receiving bank offers two kinds of service for foreign checks: 'collection' and 'negotiation'
- 'Collection' means that the check is sent to the bank's USD correspondent for onward processing through the USD check clearing system—the receiving bank waits until they receive USD into their 'nostro' account before crediting the customer in local currency or USD
- 'Negotiation' means that the receiving bank effectively buys the check from customer at a discount and credits their bank account straight away
- In the standard 'collection' mode, the bank is acting as the agent of their customer to collect money from the issuer; If the issuer fails to pay, then the bank has no obligation to pay the customer

Banks around the world today collect foreign currency checks on behalf of local clients. They submit them for collection through the 'International Cash Letter' services made available by correspondent banks. Historically travellers checks were accepted around the world and processed through similar routes. By analogy, receiving institutions should be able to accept foreign stablecoins on behalf of clients and submit them for collection through the Ubyx clearing system. The receiving institution is not purchasing the stablecoin—they act as a collecting agent on behalf of their client. If the issuer fails to pay through the clearing, then the customer gets the stablecoin back and can pursue alternative cash-out options.

The Case for Community Self Regulation

The Bitcoin network asks nobody's permission, yet stablecoin issuers actively seek regulation. Why the contrast? The reason is clear from first principles: unlike Bitcoin, stablecoins are anchored in national currencies. Sovereign authorities have legitimate interests in safeguarding their currencies, maintaining monetary unity, ensuring financial stability, and protecting the integrity of the broader financial system. Consequently, stablecoin issuers naturally require licensing by nation states.

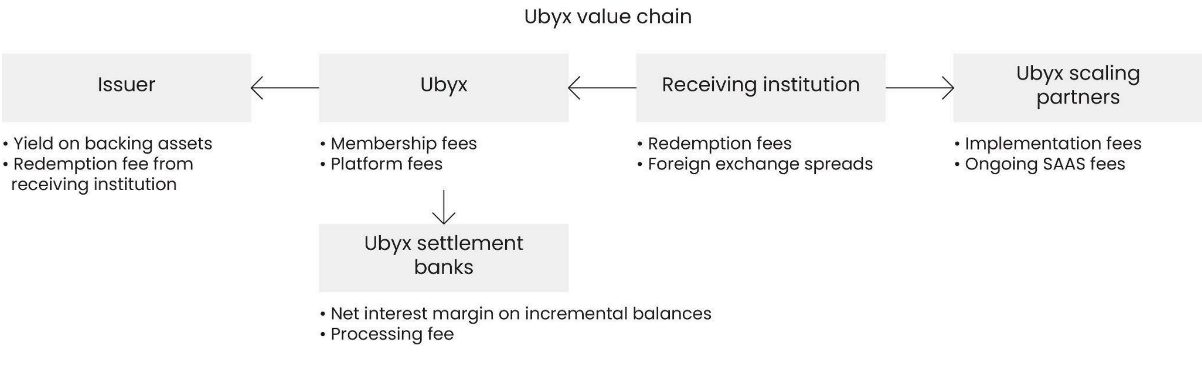
But should stablecoin issuers ask for more regulations in every case where industry coordination is required? That would be a critical mistake. Without proactive community self-organization, regulations risk becoming unnecessarily extensive, overly burdensome, and innovation-stifling.

- Consider the need for common standards. The stablecoin industry faces three choices: allow each issuer to act independently, wait passively for regulators to impose a rigid framework, or proactively develop its own responsible and unified standards.
- Does the industry need a supra-issuer backstop? Here too, three choices present themselves: operate without any safety net, rely on authorities to provide one, or self-organize an effective, industry-led backstop mechanism.
- On the vital subject of financial crime, once again, three pathways exist: do the bare minimum, await stringent regulatory mandates, or proactively implement collaborative industry solutions.

The Bitcoin network exemplifies successful self-organization driven by technology and economic incentives. The stablecoin community should adopt a similarly autonomous and proactive approach through the Ubyx ecosystem. By doing so, it demonstrates maturity and responsibility, enabling regulators to confidently apply a lighter-touch oversight, assured by the industry's commitment to addressing common challenges on its own initiative.

Ubyx Ecosystem Incentives

For any network to achieve global adoption, the economic incentives must align properly for all participants. Ubyx creates a balanced economic model where each participant receives fair compensation for their role, driving rapid ecosystem expansion.



An illustrative scenario demonstrates the economic incentives for each participant. Model inputs are given below using round numbers that may not reflect reality. For the sake of comparison, a similar model based on the card ecosystem using actual numbers might have an acceptance fee of 250bps and FX spread of 300bps. Ubyx will not be involved in setting end user prices - these are set by the receiving institution.

The ability for issuers to charge fees for redemptions may be subject to regulation. For example, Article 49 of the EU's Markets in Crypto-Assets (MiCA) regulation states that the redemption of e-money tokens shall not be subject to a fee. This prohibition applies specifically to fees levied directly by the issuer. It does not necessarily apply to scenarios—such as the Ubyx model—where redemption is performed by a third party acting as a collecting agent on behalf of the token holder.

The reader may wonder how a business model based on transaction fees can remain consistent with the concept of cash equivalence and the singleness of money. In financial practice, fees for payment processing are treated as ancillary to the principal value of the instrument. For example, a bank may charge a handling or FX fee when collecting a foreign cheque, but the cheque is still redeemed at par value. Similarly, interchange fees on card payments are borne by merchants, yet this does not disrupt the singleness of money or undermine the cash-equivalent treatment of the underlying funds. These distinctions are critical in meeting the fact patterns required under IAS 7 for classifying an asset as a cash equivalent.

Total issuance	**Daily redemptions**	**Receiving institutions fee**	**Receiving institution FX**	**Ubyx Platform fee**	**Issuer redemption fee**
$1trn	0.5% of total issuance	100 bps	100bps	20bps	50bps
Assumed all accepted overseas	Amount converted each day to local fiat currency	Set by receiving institution	Set by receiving institution	Set by Ubyx Inc.	Set by issuer

Model outputs:

Metric	**Value**
Total annual redemptions ($1trn * 0.5% * 365)	$1.825 trillion
Receiving institution acceptance revenue (200bps * $1.825 trn)	$36.5 billion
Issuer redemption revenue (50bps * $1.825 trn)	$9.125 billion
Ubyx platform revenue (20bps * $1.825 trn)	$3.65 billion
Net financial institution revenue (total revenue - ubyx + issuer revenue)	$23.725 billion

Issuer reserve revenue (at 4% yield)	$40 billion
Total issuer revenue (revenue on reserves + issuer redemption fees)	$49.125 billion

This scenario demonstrates significant potential economic opportunity for all participants. This creates powerful incentives for:

- Financial institutions to join the network and compete for redemption volume
- Stablecoin issuers to participate and gain global distribution
- Technology partners to develop solutions for the ecosystem
- End users to benefit from increased competition and options

Let us now consider the opportunity seen through the lens of a country that captures 5% of the flow through its local financial system. The gross revenue opportunity for the country's financial system is:

- 5% * $36.5 billion = **$1.825 billion** in redemption fees and FX spread (before Ubyx platform fees and Issuer redemption fees)

So the business case for an individual receiving institution with 5% market share within that country is:

- 5% * $1.825 billion = **$91.25 million** in redemption fees and FX spread (before Ubyx platform fees and Issuer redemption fees)

Compared to the overall payments market ($2.5 trillion in annual revenue), these figures represent a modest, achievable share. With thousands of financial institutions worldwide still unable to process stablecoins, the growth potential for the Ubyx ecosystem is substantial.

Development Milestones

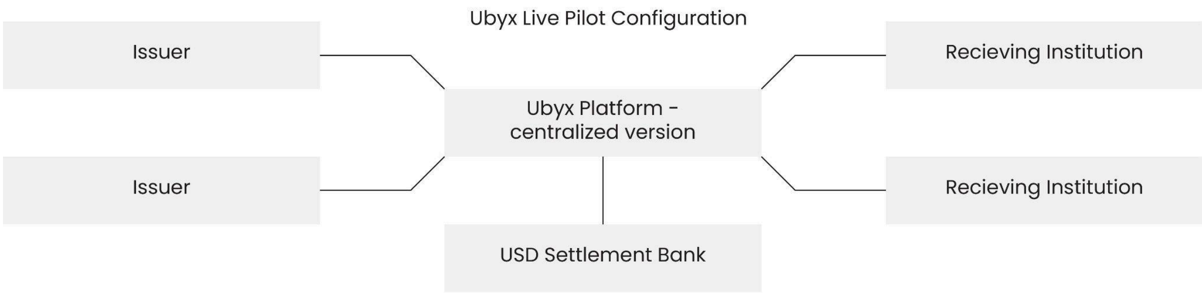
To achieve global stablecoin ubiquity, Ubyx will follow a structured, three-phase deployment strategy, balancing rapid execution with community engagement and institutional adoption.

Phase 1: Foundation (2025)

In the first phase, Ubyx will establish its legal, technical, and governance foundations, ensuring that both traditional finance and crypto-native participants can confidently engage with the system. The key deliverables are:

- Release of the Ubyx Whitepaper, outlining the protocol's design and objectives.
- Formation of legal entities to enable contracts to be put in place.
- Launch of the Ubyx Association, acting as a bridge between stablecoin issuers, financial institutions, and regulators.

- Onboarding of Ubyx scaling partners to provide infrastructure for stablecoin processing.
- Integration of a cash settlement bank and a regulated custodian to facilitate settlements (may be a single institution).
- Deployment of the core Ubyx protocol, including the rulebook and technical infrastructure.
- Live demonstration of the system with at least: 2 stablecoin issuers, 2 receiving institutions, 2 blockchains. Operating initially in USD. This is a major milestone as it is the minimum model that improves upon bilateral arrangements. Adding participants from that point increases the value of the network quadratically with each new member.
- Creation of the Ubyx Foundation to drive long-term ecosystem growth.
- Establishment of the Ubyx DAO, initiating progressive decentralization.
- Strategic allocation of Ubyx tokens to incentivize early adoption and network effects.



Phase 2: Expansion (2026–2028)

With the foundation in place, the next phase focuses on growing the network, expanding stablecoin acceptance, and decentralizing governance. Key growth initiatives:

- Marketing launch of the Ubyx Trust Mark, establishing brand recognition for global stablecoin acceptance.
- Expansion of the network, onboarding:
    - More stablecoin issuers
    - Additional receiving institutions
    - More blockchains for cross-chain interoperability.
- Geographic and currency expansion, integrating locally regulated entities and regional settlement banks to support multiple fiat currencies.
- Launch of the Ubyx Lending Facility, providing initial small-scale liquidity support to stablecoin issuers.
- Introduction of issuer- and blockchain-independent data transport, supporting B2B stablecoin transactions.
- Progressive decentralization of governance, transitioning decision-making to the Ubyx DAO.
- Gradual decentralization of the Ubyx technology platform

Phase 3: Ubiquity (2028+)

The final phase marks the full realization of stablecoins as universal digital cash, with deep integration into traditional finance and further decentralization of the Ubyx protocol. The key final milestones are:

- Stablecoins achieve full accounting recognition as cash equivalents under IAS7, enabling mass corporate adoption.
- General-purpose payment acceptance, with stablecoins seamlessly used for consumer and business transactions.
- Complete decentralization of Ubyx, with the rulebook, governance, and technical platform to a degree consistent with the Ubyx mission, regulator and stakeholder needs.

The path to stablecoin ubiquity requires more than just technology, it demands trust, compliance, and network effects. Ubyx's phased approach ensures that stablecoins evolve from specialized crypto instruments into a universally accepted, highly liquid, and institutionally recognized medium of exchange. With each milestone, the network grows stronger, the barriers to adoption lower, and stablecoins edge closer to becoming the ubiquitous digital equivalent of cash.

Progressive Decentralization

Ubyx will follow a carefully structured path of progressive decentralization, aligned with community interests and regulatory expectations around safety, soundness, and accountability. This journey will be transparent, deliberate, and inclusive—designed to ensure stability during the system's early stages while gradually expanding community governance as the network matures.

Receiving institutions can issue cards against hosted stablecoin wallets

Technology platform	Initially a centralized secure messaging system passing instructions between regulated participants	A public-permissionless, decentralized network that manages state changes across Ubyx participants, with native token
Rule book	Open-source on Github for community building, but initially controlled by Ubys Inc.	Progressively delegated to independent Ubyx DAO for community governance. Needs to be managed transition
Settlement banks	Centralized settlement banks maintaining wallets and cash accounts for all issuers and receiving institutions	Potential for each issuer and receiving institution to hold cash and stablecoins in a settlement bank/custodian of their choiceto maintain stability
Settlement asset	Receiving institutions initially redeem against pre-funded cash accounts held by issuers in the clearing system	Once stablecoins achieve cash equivalence, receiving banks can transfer customer stablecoins to own balance sheet directly
Market structure	Current market structure encourages oligopoly when distribution is agreed on bilateral basis	Mutualised acceptance network encourages pluralistic market structure, lowering barrier for many issuers
Public-permissionless Adoption	Public-permissionless adoption by trad-fi is small, hampered by regulatory antipathy and lack of clear business case	Receiving institutions connect to many public blockchains and drive volume across the ecosystem
Peer-to-peer adoption	Peer-to-peer payment without intermediaries is limited to crypto and adjacent use-cases	Peer-to-peer payment in cash equivalent stablecoins without intermediaries becomes the norm

Ubyx promotes broader decentralization across key dimensions of the financial system, including issuance, custody, access, and governance—enabling a more open, competitive, and resilient financial infrastructure.

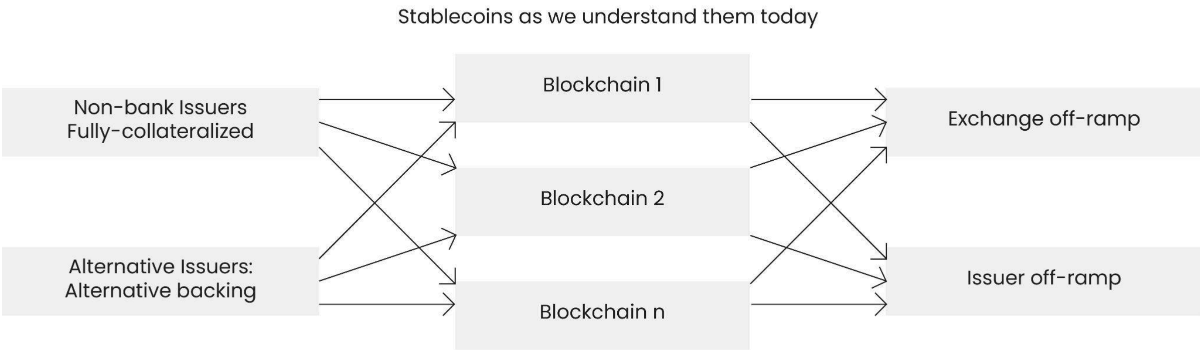
The ultimate outcome is not decentralization for its own sake, but a ubiquitous system of general-purpose, cash-equivalent stablecoins—a stable foundation for permissionless innovation by the next generation of builders and inventors.

General-Purpose Stablecoins

Stablecoins have the potential to significantly improve global liquidity by enabling fast, low-cost cross-border transactions in parallel with traditional infrastructure. They make it easier for individuals and businesses to move money, reduce currency friction, and offer a stable alternative in emerging markets.

Ubyx accelerates adoption by ensuring ubiquitous acceptance and redemption at face value—streamlining payments, supporting trade, and expanding financial access. By integrating stablecoins into the financial system, Ubyx maintains trust and stability while enabling stablecoins to evolve into a general-purpose method of payment.

Ubyx also broadens the conceptual understanding of stablecoins in a powerful way: not simply digital cash-like bearer tokens issued by non-banks, but digital checks—redeemable at par, drawn on a variety of issuers, and cleared through a common system. This is not science fiction, it is based on established technological and financial precedent.



The stablecoins we know today may not reflect their final form. Their current feature set is a subset of what is possible. When regulating stablecoins, authorities should consider that what today looks like a pocket calculator may soon evolve into a general-purpose computer. It would be short-sighted to legislate that all future devices must have numeric keypads, simply because that's what we see today.

Special-purpose computer	General-purpose computer
	
General-purpose stablecoins	Special-purpose stablecoins
IAS 32 financial instruments	IAS 7 cash equivalents
Non-bank issuers	Bank and non-bank issuers
100% backed	Varied methods of backing
Sold through exchanges	Redeemed at par value on demand
No interest payable to end users	Interest can be paid to end users
Cash-like bearer instrument	Superset of features that go beyond lagacy payment types
Bilateral issuer-acceptance network	Mutualized acceptance network

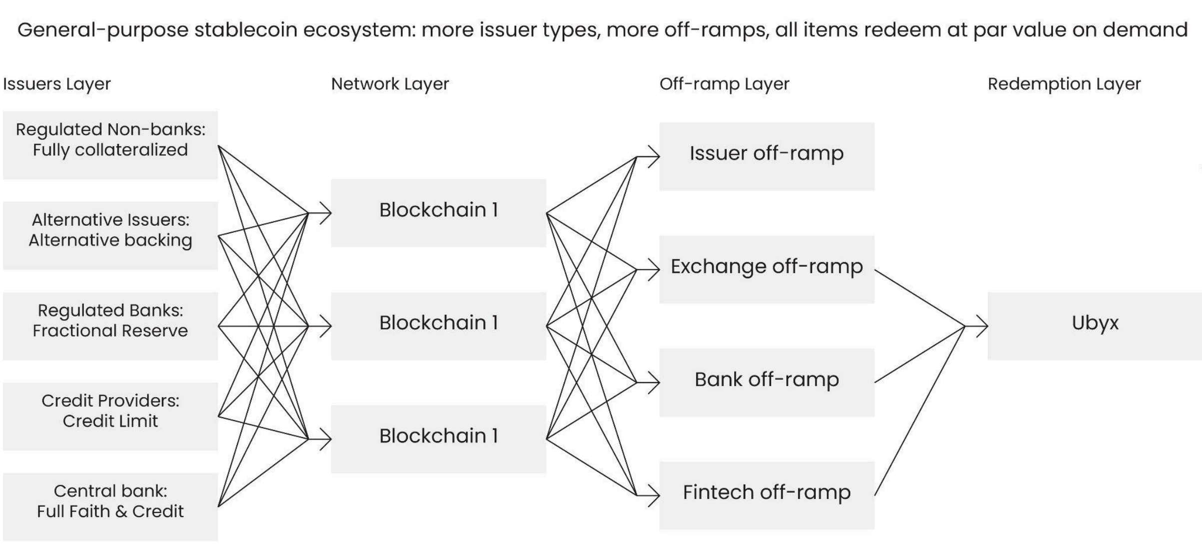
Today's stablecoins are often bearer instruments issued by non-banks, and they're interpreted through that narrow lens. But in a world with Ubyx clearing, stablecoins begin to exhibit check-like features, including par value redemption. Over time, stablecoins will evolve into instruments with a superset of the features found in cash, cheques, cards, and wire transfers—plus entirely new capabilities that legacy instruments cannot match. We should prepare for the arrival of general-purpose stablecoins.

Definitions:

- **"General purpose stablecoin"**: a token transacted on a public-permissionless network that can be converted on demand at par value against a range of regulated issuer types through a ubiquitous acceptance network.
- **"Stablecoin Singularity"**: the day that stablecoins are granted IAS7 cash equivalence, after which stablecoins rapidly become ubiquitous forms of peer-to-peer digital money and the stablecoin epoch commences in full force.

With the Ubyx clearing system in place, stablecoins issued by a wide variety of institutions can meet the above definition. Consider the precedent: in the U.S., it has long been possible to write a check against a money market fund—with a very different backing structure from a deposit account. Yet to the check clearing system, it was just another instrument drawn on just another issuer. In the 1980s and '90s, people could even write cheques against their credit card limits—again, a different form of backing, but functionally equivalent. The clearing system treated it the same.

The same principle applies to stablecoins. When regulating them, it may be useful to distinguish the instrument—a redeemable, par-value digital check—from the issuer. The power of such an instrument should not be conflated with attributes of current non-bank issuers.



This opens the door to a broader future: one in which stablecoins are understood as digital checks, drawn on various types of issuers:

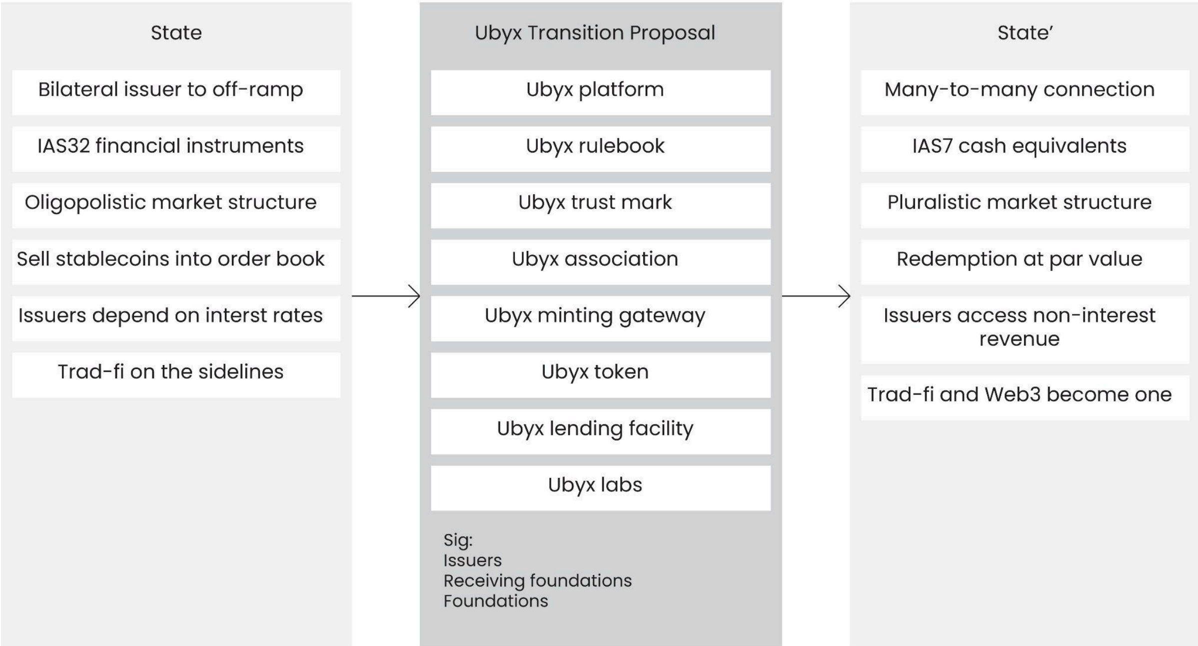
- Non-banks with fully collateralized reserves
- Banks issuing against their balance sheets
- Credit Institutions issuing stablecoins against revolving credit lines
- Even central banks, issuing directly onto public blockchains—potentially conferring not just cash equivalence, but legal tender status.

All of these instruments can be considered general-purpose stablecoins—redeemable at par through an organized clearing system. The clearing system rulebook could have different rules for each class of issuer, e.g. pertaining to the amount of pre-funded cash should be held to account for inherent risks related to each type of issuer. It is, of course, each country's sovereign right to determine which issuers are permissible. Some may prohibit central bank issuance; others may ban algorithmic models.

Regulators may wish to consider these distinctions and possibilities before freezing today's design patterns into law. Stablecoins have the potential to be more than non-interest bearing, cash-like, fully collateralized instruments issued by non-banks. These innovative instruments have established the current ecosystem, surely deserve regulatory clarity and may dominate the stablecoin market for some time to come, but future possibilities might lead to a greater variety of issuer and more general-purpose instruments. After all, we wouldn't legislate that all future computers must be limited to numeric keypads.

Stablecoin Ecosystem State Change

Ubyx represents a fundamental shift in how stablecoins integrate with the financial system, but it depends on an ecosystem state change to be agreed by the participants. By enabling financial institution-based redemption, Ubyx will drive stablecoins beyond the crypto ecosystem, achieving cash equivalence and unlocking their full potential as general-purpose, peer-to-peer digital money.



Financial System Resilience

In a world where financial institutions hold hosted wallets for businesses and individuals, connected to multiple public blockchains, a new level of financial system resilience will emerge. Even in the event of a national payment system failure - due to a cyberattack or other disruption - users will still be able to transact via public-permissionless networks, with cash equivalent stablecoins that remain redeemable at par value through their trusted financial institutions. Ubyx is not just about innovation, it is about making the global financial system more resilient, more flexible, and less dependent on fragile centralized infrastructure.

A Necessary State Transition

If stablecoins are to achieve their full potential, they need a common framework for universal redemption, liquidity, and acceptance. If Ubyx does not exist, it must be invented, because without it, stablecoins will remain fragmented, underutilized, and unable to fulfill their true promise as ubiquitous, general purpose, peer-to-peer digital cash. All that is required is for the ecosystem to support the necessary state change.

Enter the Stablecoin Epoch

There is no need for anyone across the traditional or new financial worlds to ponder 'what is my stablecoin strategy?' The way forward is clear:

1. **Issuers and receiving institutions**:
    a. Join the Ubyx Association now - your gateway into the Ubyx ecosystem.
    b. Prepare to join the Ubyx Clearing System as issuer and/or receiving institution.
2. **Regulators and central banks**:
    a. Clarify the ability for regulated financial institutions to participate in public-permissionless venues. Consider the application of outsourcing frameworks, and distinguish mitigatable from unmitigatable risks, with the latter not being the responsibility of the bank.
    b. Acknowledge that regulated receiving institutions are permitted to redeem foreign stablecoins, just as they have processed foreign physical checks for decades - within existing regulatory frameworks.
    c. Regulate stablecoins for what they can be, not what they appear to be today - consider stablecoins as a species of digital check that can be drawn on a variety of different kinds of issuer. Encourage the development of general-purpose stablecoins and open competition in a pluralistic market structure.
3. **Ubyx scaling partners**: prepare your picks and shovels and join the Ubyx Association to meet your new clients - there are thousands of them who will need your services.
4. **Settlement banks:** contact Ubyx to become a core provider of regulated settlement services for cash and stablecoins under an Agency & Trust agreement.
5. **Foundations**: work in concert with Ubyx to connect 10k+ traditional finance institutions to public permissionless networks. The motto is, "one for all and all for one, we don't subscribe to zero-sum."
6. **Academic institutions**: research the dynamics of a healthy stablecoin ecosystem, identify gaps and suggest solutions.
7. **Accounting bodies**: watch the development of universal redemption at par value and prepare to grant cash equivalence when the facts support it.
8. **Founders, builders, innovations**: consider what you can create with ubiquitous, peer-to-peer, programmable, digital money. Dream big.

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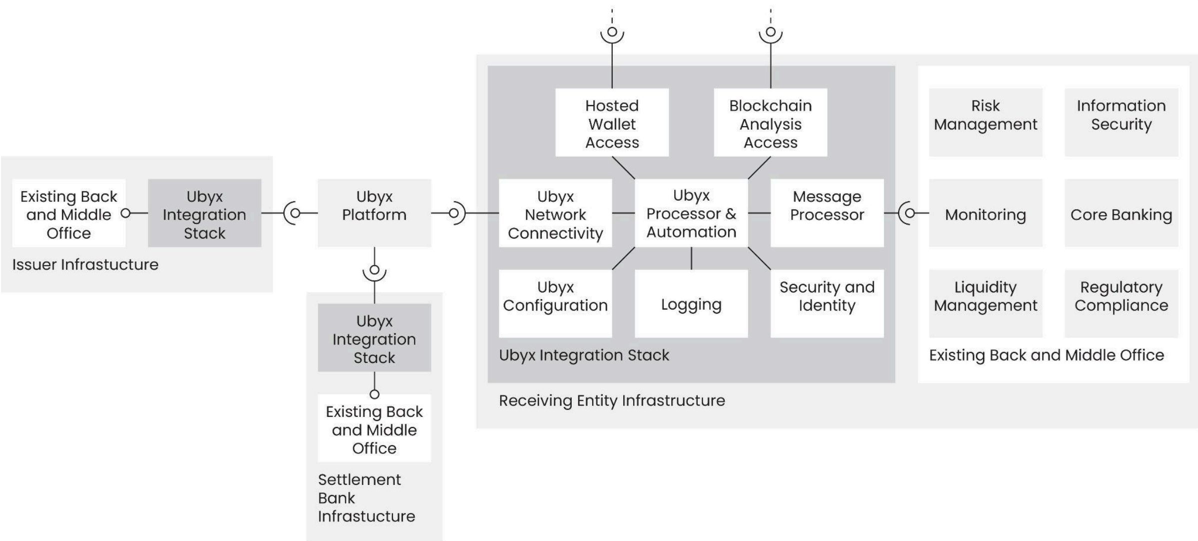
Donate: ubyx.eth

Appendix 1: Technology

This appendix provides an overview of the technical components, integration approach, and security considerations that enable participants to seamlessly and securely interact with the Ubyx platform.

Technical Components

The following diagram illustrates how all necessary components for a participant to connect to the Ubyx Platform can be abstracted into a standardized, non-differentiating technology stack. This standardized stack seamlessly interacts with the Ubyx Network and provides clearly defined APIs, enabling straightforward integration with participants' existing back-office systems. This approach significantly simplifies and accelerates the onboarding and integration process for new participants.



The Ubyx Integration Stack is largely consistent across participant roles and nearly identical among entities fulfilling the same role. In other words, different receiving entities will have the identical Ubyx Integration Stack, while for example the Settlement Bank probably will have a different Configuration of the components. The Integration Stack includes the following components:

Ubyx Processor & Automation	Manages Ubyx-specific processes and executes tasks either automatically or when initiated by existing back- or middle-office systems. For example, it identifies stablecoin deposits in a managed wallet, verifies asset compatibility, initiates the redemption process, and coordinates necessary compliance checks.
Hosted Wallet Access	Enables institutions to seamlessly interact with externally managed wallets hosted by custodians. This approach reflects the initial expectation that most participants will not self-host wallet

	infrastructure.
Blockchain Analysis	Ensures regulatory compliance by verifying the provenance and integrity of blockchain transactions. This component also allows the execution of sanctions screening processes.
Ubyx Network Connectivity	Provides an interface layer to the Ubyx Network, abstracting the complexity of network interactions from other internal components.
Message Processor	Simplifies integration by translating commonly used messaging standards, such as ISO20022, into the specific process steps required by the Ubyx Network.
Ubyx Configuration	Defines customizable behaviors of the integration stack, such as specifying whether redemption processes occur immediately after compliance checks or if they are deferred to allow for transaction netting.
Logging	Records transactions for audit purposes, enabling the reconstruction of event sequences and supporting compliance and operational analysis.
Security and Identity	Secures communication with the Ubyx Network through encryption and digital signatures. This component maintains cryptographic keys and certificates internally or interfaces with external Key Management Systems (KMS).

General Technical Approach

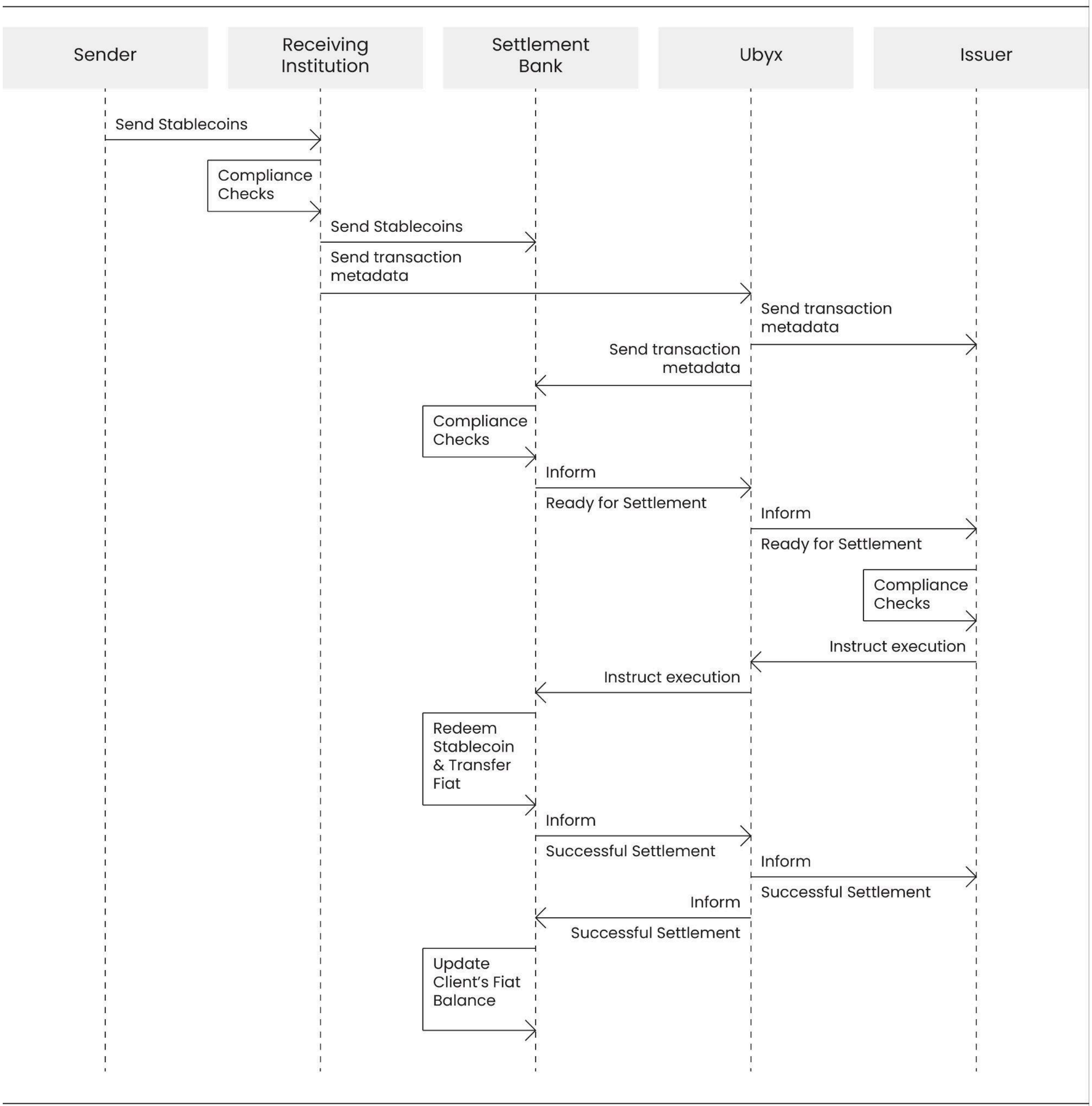
A key technical objective of the initial implementation is to ensure that adopting and integrating with the Ubyx platform is straightforward and frictionless, while simultaneously laying a secure and scalable foundation consistent with the platform's long-term vision. To achieve this, the initial release of the Ubyx platform will enable participant interaction exclusively through standard, message-based API integrations.

Over time, the Ubyx platform will progressively transition toward decentralization, allowing participants to engage more directly with the underlying network infrastructure. Participation in the decentralized version of Ubyx will offer additional benefits, including enhanced transparency, an authoritative single source of truth for transaction status, and atomic transfers and redemptions, depending on the specific ecosystems through which stablecoins and fiat currencies flow.

Simplified Process Flow

The following flow diagram illustrates the steps required to redeem stablecoins within the Ubyx network. Each entity involved performs compliance checks relevant to their respective roles. The diagram also underscores the legal positioning of Ubyx purely as a technology platform, clearly demonstrating that it:

- Does not take custody or control of any assets,
- Does not act as a principal in transactions, and
- Does not serve as an intermediary between participants.



Security and Compliance

All technical interactions between participants and the Ubyx platform are secured through industry-standard encryption, digital signatures, and robust compliance protocols. Additionally, transaction data is strictly limited to relevant stakeholders, ensuring confidentiality, integrity, and regulatory compliance across all network interactions.

Appendix 2: Objections

Objection/Risk	Response
Ubyx does not introduce any new technical breakthrough in cryptography, consensus models, etc.	True. Ubyx is a proposal for an ecosystem state transition. The deployment of technology is part of the proposal but the Ubyx whitepaper does not describe a technical breakthrough and does deserve mention in the same breath as the classic crypto whitepapers.
Large issuers will not join because they like the market structure as it is	A linear scaling acceptance network cannot compete with a quadratically scaling mutual network. Large issuers who consider their bilateral deals to be a competitive moat should reconsider. The next wave of issuers will build a mutualised network and win. Large issuers should be the first to join Ubyx and drive market change.
Ubyx is centralized and anathema to crypto	Ubyx will begin relatively centralized to establish trust with regulators and traditional finance. It will pursue the path of measured, progressive decentralization, with governance transitioning to a DAO over time. Ubyx will decentralize responsibly, maintaining credibility with the crypto community, regulators and trad-fi as it evolves.
Ubyx is decentralised and anathema to regulators	The decentralization process will proceed in measured, deliberate steps—aligned with regulatory expectations for safety and soundness. Ubyx will work closely with regulators to define and agree upon the decentralization roadmap.
Exchanges are already a good enough off-ramp	Exchanges offer a vital service, but do not offer reliable par value redemption required for stablecoins to be recognized as cash equivalents. They do not provide a standardized process across issuers. However, exchange on- and off-ramps will thrive and enjoy higher volumes as a result of Ubyx as the market grows.
The card schemes will step in and do the same as Ubyx	Card schemes have the size, scale and resources to provide stablecoin clearing services but the community will have to ask itself whether it prefers a centralised solution owned by someone else, or a decentralised solution owned by the community.
We don't want to recreate trad-fi structures in crypto	Any system involving multiple issuers and multiple acceptance points cannot function efficiently through bilateral arrangements alone. A clearing infrastructure is necessary to scale. Ubyx does not interfere with peer-to-peer transactions, it underpins them.

Ubyx vision is too grand and unrealistic	The minimum demonstration required to improve upon the bilateral model is simple: just two issuers and two receiving institutions working together. The network effect grows from there - the value of the network increases quadratically with new participants.
Banks will be too slow to join	While traditional banks may take time to participate, neo-banks and regulated non-bank financial institutions such as Payment Services Providers will move faster and lead the adoption curve. Some large banks may be early movers, giving courage to their brethren.
There is no way for smaller issuers to compete	Smaller issuers gain a level playing field if they do not need to build their own acceptance network and can plug into a shared infrastructure. Ubyx scaling partners can help smaller issuers move fast and establish a valuable presence.
Ubyx commoditizes stablecoins by making the issuer unimportant	Ubyx shifts competition away from closed issuer networks and toward user adoption, usability, and compliance. The target market for stablecoins becomes the entire $2.5trn payments revenue pool. The qualities of the issuer will be very important, but not focused on the acceptance network as this will be mutualized.
Ubyx disintermediates exchanges	Ubyx adds a complementary infrastructure. Like adding a new lane to a highway, it increases overall transaction volume rather than taking away from existing market participants. Ubyx will create many opportunities for exchanges.
The stablecoin market will be oligopolistic	Ubyx enables many issuers and receiving institutions to succeed by reducing the barriers to entry and eliminating the need for exclusive agreements. Scaling partners will provide turnkey solutions to even small issuers and receiving institutions.
There is no reason for banks to issue stablecoins	Banks will issue stablecoins for the same reason they issue checkbooks and debit cards—to serve their customers' evolving financial needs. There is no bank in previous eras that decided not to service clients with the prevailing method of payment.
Banks cannot participate in public-permissionless blockchains	Regulators may recognize that preventing regulated financial institutions from engaging creates more systemic risk than allowing responsible participation. Regulators should clarify requirements on bank participation with respect to outsourcing arrangements.

USD stablecoins will always be dominant	While USD stablecoins will play a significant role due to the dollar's global status, other currency-backed stablecoins will gain traction, just as there are cards from many currencies that work well on global card networks.
Stablecoins are not true crypto because they are not trustless	Cryptocurrencies like Bitcoin have not succeeded as mediums of exchange due to observed price volatility - stablecoins provide a viable kind of digital cash while preserving many public blockchain benefits. The author respects maximalists, but Ubyx has nothing to add to trustless cryptocurrencies, as by definition, there is no issuer, backing or redemption required.
You don't need to convert stablecoins to bank balances	Stablecoins need to be flexible enough to support all user needs, not just those of crypto-native users. Universal redemption is key to mass adoption. Let users decide how they want to transact. In addition, the presence of par value redemption channels through financial institutions improves pricing on exchanges through arbitrage.
Stablecoin issuers are too reliant on interest rates and have a weak business model	Ubyx introduces new non-interest-based revenue streams for issuers, such as redemption fees, which stabilize the business model. The ability of issuers to charge redemption fees will be determined in line with regulation, but in Ubyx the issuer is not the direct redemption channel.
Consortiums never work because of divergent interests	Ubyx aligns the incentives of issuers, regulators, receiving institutions, and blockchain networks to create a synthesis of Web3 and TradFi.
Regulators may not approve of Ubyx	Ubyx operates within existing regulatory frameworks, ensuring compliance with KYC/AML, financial stability, and accounting standards. Regulators want singleness of money, and Ubyx provides it.
CBDCs will replace stablecoins	CBDCs may coexist with stablecoins, but stablecoins offer flexibility, programmability, and global interoperability that most CBDCs lack. They also live on different venues, as few central banks are yet considering public-permissionless blockchains.
Why not just use SWIFT for this?	SWIFT is not optimized for stablecoin transactions. Ubyx provides real-time settlement, universal access, and blockchain interoperability. SWIFT can play a role in updating ISO20022 messages to carry stablecoin reconciliation and metadata.

DeFi protocols already offer stablecoin liquidity	While DeFi provides liquidity, it lacks universal redemption mechanisms. Ubyx ensures seamless integration with the traditional financial system.
What if issuers default on redemptions?	Ubyx mandates pre-funded settlement accounts to ensure that redemptions can always be honored, eliminating issuer-specific counterparty risk. But if the issuer defaults, the user gets their stablecoin back.
What happens if Ubyx itself fails?	While Ubyx is intended to be cyber, operationally, technically and commercially resilient, it could fail. In this case the industry could migrate to an alternative clearing system, or revert to bilateral connections and existing off-ramps.
You cannot build a venture that balances equity and tokens	Ubyx wants to balance interests between equity and token holders because it sits between crypto and trad-fi. Both constituents need to have a way to participate in ownership and governance.
How will Ubyx impact monetary policy and financial stability?	Ubyx helps to facilitate a pluralistic network of many regulated issuers - bank and non-bank. The 'backing' of Ubyx issuers can be fully collateralized or be based on bank balance sheets. A competitive market with many regulated issuers and universal acceptance brings stablecoins into the realm of regular monetary policy tools.

Appendix 3: Ubyx Differentiation from Legacy

If this whitepaper is successful in making the case for a new stablecoin clearing system, then perhaps it should be developed by an existing global payment scheme with enormous resources and pre-existing scale? Here is why that might not be the best path forward for the stablecoin ecosystem.

Existing Payment System	Ubyx Approach
• Fiat-first business model	• Stablecoin-first business model
• Motivated to avoid disintermediation	• Motivated by stablecoin ubiquity
• Quarterly earnings focus	• Community focus
• Unmanageable conflict of interest with existing 'cash cow' business models	• Purpose-built for stablecoins, free from legacy financial conflicts
• Centralised rulebook - ecosystem participants are rule takers	• Decentralised rulebook - ecosystem participants are rule makers
• Centralised decision making	• Governance through Ubyx DAO
• Centralised technology	• Progressive tech decentralisation
• No community ownership	• Community ownership encouraged and planned for
• Concentration of market power	• Diversification of market power
• Legacy branding, legacy associations	• New branding specific to stablecoins
• Benefits payment system equity holders	• Benefits Ubyx equity & token holders
• Anti-competitive between payment types	• Pro-competition between payment types
• Multi-day financial settlement processes	• Near real time settlement
• Legacy organisational structures not optimised for stablecoin ecosystem	• Designed from the ground up for stablecoins
• Public company constraints	• Private enterprise freedom of action
• Legacy systems juggle multiple priorities	• Single focus on stablecoin ubiquity
• Conservative, bureaucratic management style	• Agile, entrepreneurial management style

Ubyx will collaborate with everyone who shares the goal of stablecoin ubiquity, including existing payment systems, but when it comes to building and operating the new stablecoin clearing system - that rightfully belongs to the community of issuers and receiving institutions.

Appendix 4: Advanced Ubyx Components

This appendix describes Ubyx components that are not required for day 1 operation, but are intrinsic to its longer term success as a progressively decentralized clearing system that supports permissionless innovation.

The Ubyx Token:

The Ubyx Token is a critical component designed to foster sustainable growth, ecosystem alignment, and progressive decentralization. While Ubyx's core clearing system initially operates independently of a native token, introducing the Ubyx Token creates essential incentives that strengthen governance, utility, and community-driven innovation. A separate Ubyx token whitepaper will be released in due course.

Token holders gain direct influence over the network's future through the Ubyx DAO, actively proposing, discussing, and voting on updates to the Ubyx Rulebook. To balance innovation with regulatory compliance and systemic stability, governance decentralization will occur in carefully managed phases. Over time, token holders assume greater control in a fine balance with equity holders from traditional finance, ensuring the network remains responsive to evolving market needs and regulatory expectations.

Beyond governance, the Ubyx Token serves practical purposes within the network. Fees associated with stablecoin redemptions, membership, and transactions can be paid in Ubyx tokens, and these tokens circulate back into ecosystem development initiatives managed by the Ubyx DAO. Additionally, issuers holding Ubyx tokens gain proportional access to emergency liquidity via the Ubyx Lending Facility, safeguarding against temporary disruptions and ensuring stablecoin redemptions remain uninterrupted.

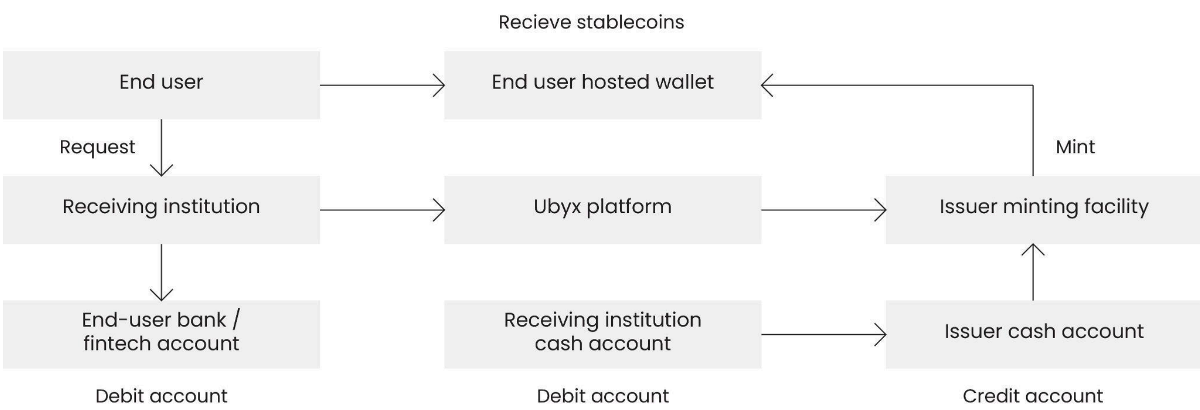
To accelerate adoption and foster community engagement, the Ubyx Foundation will strategically allocate token-based grants, supporting initiatives such as the establishment of the Ubyx Trust Mark, educational programs, developer tools, and financial institution integrations. This token-driven ecosystem expansion creates a self-reinforcing network effect, incentivizing continued participation and innovation from all stakeholders.

Issued in compliance with relevant legal frameworks, the Ubyx Token thus enables a seamless transition from an initially centralized infrastructure provider to a fully decentralized, community-governed financial network. By aligning incentives for stablecoin issuers, receiving institutions, developers, and users alike, the Ubyx Token ensures stablecoin ubiquity emerges from a robust, collaborative, and decentralized ecosystem.

The Ubyx Minting Gateway

A functional stablecoin ecosystem requires both redemption and issuance. The ability to redeem stablecoins at par value through Ubyx removes friction, making users more likely to hold and transact in stablecoins. But for stablecoins to serve as true digital cash, users must also be able to acquire them seamlessly, on demand, and from trusted financial institutions.

The Ubyx Minting Gateway enables this reverse flow, allowing any bank or fintech in the Ubyx network to instruct stablecoin minting operations from authorized issuers. This ensures that stablecoins can enter the financial system as smoothly as they exit, unlocking new efficiencies for users, institutions, and issuers alike.



1. A user requests to purchase stablecoins through their bank or fintech app.
2. The bank or fintech submits the minting request via Ubyx, specifying the stablecoin issuer and amount.
3. Ubyx routes the request to the issuer's minting facility, ensuring compliance with local regulations.
4. The user's bank account is debited, and the corresponding funds are credited to the stablecoin issuer's account.
5. The issuer mints the requested stablecoins and deposits them directly into the user's hosted wallet.

The Ubyx Minting Gateway establishes a two-way flow between traditional finance and stablecoins, creating a virtuous cycle that benefits all participants:

- **Users** gain seamless access to stablecoins, directly from their bank or fintech account, reinforcing their trust in stablecoins as a legitimate payment and savings method.
- **Banks & Fintechs** unlock a valuable new service - allowing users to both purchase and redeem stablecoins without needing a separate crypto exchange.
- **Stablecoin Issuers** benefit from a built-in distribution network, expanding their reach beyond crypto-native channels and into mainstream financial services.

Each of these benefits compounds over time. As trust in stablecoins grows, transaction volumes rise, increasing liquidity and usability. This drives greater adoption among financial institutions, accelerating the transition of stablecoins from niche assets to ubiquitous digital money.

The Ubyx Minting Gateway ensures that stablecoins can circulate fluidly between users, financial institutions, and issuers- unlocking their full potential as a next generation medium of exchange.

The Ubyx Lending Facility

Stability is the foundation of trust in any financial system. In traditional markets, central banks and institutions like the IMF serve as backstops, stepping in during liquidity stress to prevent local shocks from becoming systemic crises.

In the stablecoin ecosystem, no such safety net exists and the official sector may not be willing to provide it. Issuers operate in isolation, with no shared infrastructure for crisis management. When faced with sudden redemption spikes, market volatility, or operational disruptions, even well-managed issuers can be forced into fire sales or delays—eroding user confidence and undermining the broader ecosystem.

The Ubyx Lending Facility addresses this gap—not by mimicking traditional institutions, but by introducing a decentralized and collective response. Controlled by the Ubyx DAO, it provides a supra-issuer liquidity mechanism: a shared pool designed to offer short-term support during market dislocations, without relying on any single entity or external authority. It is envisioned to be funded through the Ubyx token and/or levies on transaction processing as agreed by the community through the Ubyx rulebook.

This is not a bailout engine. It is self-insurance for an industry that aspires to autonomy.

1. **Liquidity Request** – An eligible stablecoin issuer facing temporary constraints submits a request for short-term liquidity.
2. **Automated Risk Assessment** – The Ubyx protocol evaluates the request based on predefined parameters: reserve quality, redemption velocity, and system-wide conditions.
3. **Collateralized Loan Issuance** – The facility provides a short-term loan, denominated in stablecoins or fiat equivalents, enabling the issuer to meet redemptions at par.
4. **Repayment & Controls** – Loans are time-bound and must be repaid promptly. Access is limited to issuers with sufficient Ubyx token holdings, ensuring alignment and deterring moral hazard.

This mechanism offers a decentralized equivalent of lender-of-last-resort functionality, grounded in code, governance, and risk transparency—not politics or discretionary intervention. Designing such a system to be useful in practice while not being subject to abuse is non-trivial, but having some supra-issuer facility is superior to having no facility at all. It will be developed and deployed in measured steps.

Stablecoin issuers should not have to build individual acceptance networks—that's why Ubyx enables universal redemption. Nor should they have to weather market turbulence alone. The Ubyx Lending Facility introduces a collective stability layer, allowing the ecosystem to absorb shocks together rather than fracture apart.

In doing so, it advances the core mission of Ubyx: to make stablecoins usable as trusted, everyday digital money. A more resilient stablecoin infrastructure benefits everyone—issuers, users, and institutions—paving the way for broader adoption and systemic credibility. A separate whitepaper on the Ubyx Lending Facility will be published in due course.

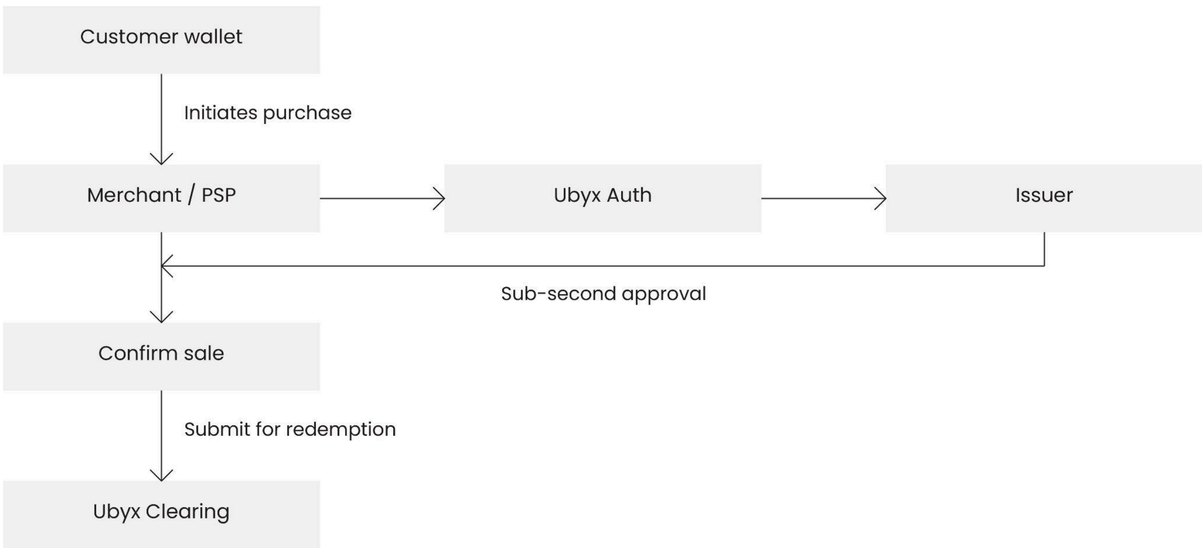
Ubyx Labs

For stablecoins to become the general purpose methods of payment that they can be, a variety of value added services should be built to support all use-cases and make stablecoins safe for every user. Ubyx will ally with third parties where possible to complete the feature set. Some tangible examples are:

Ubyx Auth: direct integration with mobile wallets

When trad-fi provides hosted wallets to end users they will be able to receive stablecoins and convert them into traditional accounts. Those accounts have cards associated with them that permit them to be used online and in-store with merchants.

For stablecoins to achieve parity of treatment, it should be possible to directly use a stablecoin balance to pay for goods and services online and in-store. One way to achieve this is for financial institutions to issue existing card products against stablecoin balances but this has pros and cons. The advantage is that it connects stablecoins to existing card acceptance modalities - the downside is that it inherits card economics.

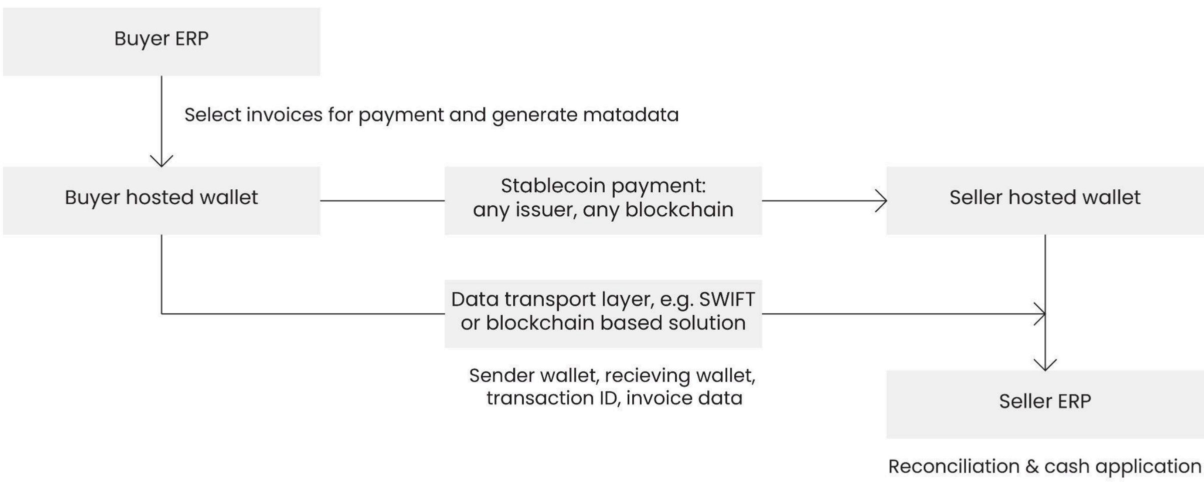


Development of native stablecoin acceptance by merchants could be facilitated by an Ubyx Authorization service - this would process sub-second authorization requests from payment services providers back to issuers for approval. Settlement could take place soon after through the normal Ubyx clearing process. The development of Ubyx Auth could help serve use-cases where immediate payment acceptance is required.

ERP to ERP Data Transfer

In the B2B use-case, the transfer of money is necessary but insufficient. A company receives many invoices from its suppliers and performs matching to determine which ones are eligible for payment. It may then make a single payment for x out of y outstanding invoices. If a stablecoin payment is made without the associated data, then the supplier has no way of reconciling the incoming payment.

For stablecoins to exhibit the beneficial features of wire transfers, the data must be sent along with the payment. It should be possible to do this in a way that is independent of the stablecoin issuer or the chosen blockchain. The ERP to ERP connection between buyer and seller needs to be independent of the underlying method of payment.



To achieve this, ISO20022 standards should be updated to incorporate the necessary data elements to enable the reconciliation of a given stablecoin payment with an associated data payload. This data likely includes: sending address, receiving address, transaction ID and metadata about which blockchain and issuer was used in the transaction.

There should be competition in the provision of this data layer - it might be carried over SWIFT or any number of alternative networks, including blockchain based solutions. Over time, issuers may wish to natively support the necessary data standards and embed these within the payment itself.

Confirmation of Payee (CoP)

The ability for a payer to check whether they are making a payment to the intended party has become an important part of the fight against Authorised Push Payment (APP) fraud. APP fraud has become rife in markets that have implemented domestic instant payment systems using traditional technologies. The stablecoin community will need to address a magnified challenge given the ability for stablecoins to be sent to pseudonymous addresses globally with no possibility to unwind transactions.

Confirmation of Payee (CoP) could be run over the Ubyx network between participating institutions that operate hosted wallets. Other technical implementations are possible that are native to each chain, or stablecoins might interact with blockchain based digital identity solutions that help prove the beneficiary is who they say they are, perhaps without sharing Personally Identifiable Information (PII) in the process.

Request to Pay

Bill payments and other customer payment journeys are initiated by the payee rather than the payer. These can be one time related to the presentment of an invoice, or recurring payments such as subscriptions. The addition of Request to Pay functionality to stablecoins in an issuer and chain independent way could help drive widespread adoption and integration into mainstream use-cases, emulating the success of traditional finance systems such as UPI in India.

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All shortcomings, errors, and omissions in this whitepaper remain my sole responsibility. I am painfully conscious of the compromises within this work that seemed necessary to establish common ground between the interests of the crypto community, trad-fi and regulators/central banks, and the substantial amount of work that remains to be done to execute on the Ubyx vision of stablecoin ubiquity.

Tony McLaughlin, 24 March 2025

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