Whitepaper v1.0

Dahym

A Transient Stablecoin for the Digital Economy

Table of Content

Introduction:
A New Paradigm for Digital Value

The digital landscape is in a constant state of evolution, yet fundamental challenges surrounding value exchange persist. The existing digital payments infrastructure often ignores the subtleties of small, casual transactions, causing friction for both consumers and merchants.

At the same time, digital piracy remains a significant issue, cutting into earnings for creators and businesses. Traditional enforcement strategies have proven ineffective, highlighting the need for a new approach that promotes positive incentives rather than punishment. Dahym enters this landscape not as another conventional cryptocurrency Web3 crypto, but as a catalyst for a new economic model built on incentives and legitimate consumption. It is a retail-only digital currency where a per-device public key is required for it to work.

Dahym is the world's first transient stablecoin, a new class of digital assets designed specifically for spending and legitimate consumption. Valued at a consistent $0.10, Dahym functions as a temporary medium of exchange within a dedicated ecosystem of sponsoring businesses. It is engineered to be spent, not held as a speculative asset. Dahym fosters a vibrant and sustainable digital economy that benefits all participants by providing a secure and seamless payment system for micro-transactions and rewarding users for purchasing licensed digital content.

The Problem

The digital economy faces two significant, intertwined challenges. First, the high transaction fees and complexity associated with traditional payment systems and even many blockchain networks make small, casual payments impractical. This friction discourages everyday digital commerce, from buying digital comics to tipping a content creator.

Second, digital piracy continues to undermine the creative industries. Despite years of anti-piracy efforts, unauthorized consumption of digital media remains rampant, depriving creators and distributors of rightful earnings. This environment stifles innovation and devalues creative work, creating a negative loop that is difficult to break.

The Solution

Dahym addresses these challenges with a novel, incentive-driven solution. Instead of penalizing piracy, Dahym rewards legitimate consumption. When a user purchases licensed digital content from a participating business, a portion of those purchase funds a stablecoin reserve, and the user is credited with Dahyms. This creates a positive feedback loop where legal consumption is directly rewarded with spendable value.

Dahyms are designed for seamless, low-cost transactions, making them the ideal medium for the small, casual payments that characterize the modern digital marketplace. This dual-pronged approach tackles the root causes of friction in digital commerce, cultivating an ecosystem where value flows freely and legitimately.

Core Concept

The core of the Dahym project is the principle of transience. Unlike traditional stablecoins designed for indefinite holding and trading, Dahym is a currency with a built-in lifecycle, compelling it to be used. This transient nature ensures a constant circulation of value within the ecosystem, driving economic activity and engagement. It is a purpose-built tool for commerce, not speculation.

By focusing exclusively on spending, Dahym simplifies the user experience and aligns the interests of consumers, merchants, and content creators toward a common goal: building a more active and equitable digital economy.

The Dahym Transient Stablecoin

Dahym introduces a unique classification of digital currency engineered to fuel commerce. As a transient stablecoin, its value is pegged to a stable asset, but its utility is defined by a finite lifespan. This limited lifespan encourages active participation in the ecosystem.

Definition & Purpose

A transient stablecoin is a digital currency with a fixed value and a predetermined lifecycle, designed exclusively for transactional purposes.

Dahym, short for "Dah, Your Money," is pegged at $0.10 USD. Its primary purpose is to serve as a frictionless medium of exchange for digital spending and to act as a rewards mechanism for legitimate content consumption. Dahym provides a predictable and user-friendly tool for everyday commerce within its partner network.

Tokenomics

The economic model of Dahym is straightforward and built for stability and utility. Each Dahym token maintains a constant value of $0.10. This value is backed by a reserve funded through a portion of sales from legitimate digital content.

When a user spends Dahyms, merchants receive the payment instantly in a mainstream stablecoin of their choice, such as USDC or USDT. This model ensures merchants receive stable, liquid assets while the Dahym token continues to circulate as the primary incentive and spending mechanism within the ecosystem.

The 6-Month Lifecycle

Every Dahym token has a defined six-month lifecycle, designed to maximize its utility and drive economic velocity. This lifecycle is divided into two distinct phases:

01 Months 1-3: Sponsor-Specific Spending

For the first three months after being issued, Dahyms can only be spent at the specific sponsoring business that generated them. This provides direct, measurable value to the merchants who participate in the rewards program.

02 Months 4-6: Network-Wide Spending

For the following three months, the Dahyms "unlock" and become spendable at any sponsoring business across the entire Dahym network, all merchants on the account with an active balance.

The following states apply:

- Active_Spend_anywhere(1)
- Active_Spend_anyone(1)
- Active_spend_Specific(+n)

This expands the utility for the consumer and fosters a collaborative, interconnected ecosystem among merchants.

03 End of Lifecycle

After six months, any unspent Dahyms must be converted by the user into a mainstream stablecoin like USDC or USDT. This final step enforces the coin's transient nature, ensuring it fulfills its purpose as a medium of exchange rather than a store of value.

The Dahym Payment System

The Dahym payment system is built on a foundation of security, efficiency, and transparency. It utilizes a novel ledger technology that combines the security of cryptographic signing with the efficiency of a centralized system. This creates a robust framework for managing transactions.

Rollup Ledger

At the heart of the Dahym payment system is the Rollup Ledger. This is a centralized ledger that employs cryptographic principles to ensure the integrity and security of every transaction. The account identifier on the ledger is a user's per-device public key, and every transaction must be signed with the corresponding private key. This architecture allows for public read access, promoting transparency, while ensuring that only the legitimate owner of an account can authorize transactions.

Functionality

The Rollup Ledger is designed to support three primary functions: debit, credit, and two unique "rollup" unlocks. The ledger meticulously records all transactions, tracking the flow of Dahyms through their six-month lifecycle. The rollup functions are user-initiated actions that correspond to the two phases of the lifecycle.

The first rollup unlocks Dahyms for network-wide spending after three months, and the second rollup makes them eligible for conversion to a mainstream stablecoin after six months.

These actions are not automatic; they require explicit user consent and a cryptographic signature, placing the user in full control of their assets.

Dual Signing Mechanism

A core security feature of the Dahym ledger is its dual signing mechanism. Unlike many systems where only the sender signs a transaction, both the sender and the receiver cryptographically sign a Dahym transaction. This ensures that a malicious actor cannot alter a transaction record without access to both parties' private keys.

When a transaction occurs, the sender signs to authorize the debit from their account, and the receiver signs to confirm the credit to their account. This dual-signature requirement ensures mutual consent and creates an immutable and verifiable record of the transaction agreed upon by both parties, significantly enhancing the security and integrity of the ledger.

Proof of Combined Value

The security of the Dahym ledger is based on the innovative Proof of Combined Value (PCV) mechanism. PCV ensures the integrity of the ledger without relying on a decentralized consensus. The principle is that in any transaction between two parties, the combined value of their balances must remain constant. Any new transaction verifies that the existing balances are correct.

Let's illustrate this with a simple example:

Let’s imagine Party A has a balance of $80 and Party B has a balance of $70. The combined value of their balances is $150. This is the starting point for our transaction.

Now, Party A wants to send $20 to Party B. Here is how the transaction is recorded:

01 **Transaction Initiated**

A transaction is created where Party A’s balance decreases by $20, and Party B’s balance increases by $20.

02 **Balances Updated**

After the transaction, Party A’s new balance is $100 ($80 + $20), and Party B’s new balance is $50 ($70 - $20).

03 Verification Check

The system instantly verifies that the combined balance remains constant. The new combined balance is $150 ($100 + $50), which is the same as the original combined balance ($80 + $70). This check is a core part of the PCV mechanism, ensuring no value is created or destroyed.

04 Cryptographic Signatures

For security, both Party A and Party B must cryptographically sign the transaction. This signature confirms that they both agree to the transaction and its updated balances. A malicious actor would need both private keys to alter this transaction, which makes it highly secure.

Field Name	Party A (Pre-Transaction)	Party B (Pre-Transaction)	Party A (Post-Transaction)	Party B (Post-Transaction)
Balance	$80	$70	$100	Party B (Post-Transaction)
Transaction Amount	+$20	$20		
Combined Balance	$150	$150	$150	$150
Signature	Party A Signature	Party B Signature	$150	$150

As shown, the combined balance of Party A and Party B remains unchanged at $150 after the transaction. Every record on the ledger contains a cryptographic signature from both parties, which a verifier can use to validate the transaction details and balances. A malicious actor attempting to modify a record would need access to both private keys, making the ledger highly resilient to fraud.

Mechanisms for Adoption & Engagement

The success of the Dahym ecosystem relies on a self-reinforcing loop of adoption, where businesses are motivated to sponsor Dahyms and consumers are incentivized to earn and spend them. This model is designed to drive legitimate digital consumption and on-site retail engagement by linking digital value with real-world utility. The objective is to cultivate a robust and dynamic economy from the ground up and move it beyond traditional digital reward systems.

Earning Dahyms

The process of acquiring Dahyms is designed to be highly accessible and engaging, deliberately bypassing the complexities of blockchain-based mining or the speculative nature of trading. This low barrier to entry ensures broad consumer participation. The primary built-in methods for earning Dahyms are as follows:

01 Gamification

Dahyms can be won as prizes in skill- or luck-based games. These games are retro-styled and incorporate AI elements to create a dynamic and challenging experience. This mechanism leverages the psychological principles of gaming to encourage repeat engagement and value acquisition.

02 Gifting

The ecosystem allows for a direct peer-to-peer transfer of value and enables friends and family to gift Dahyms to one another. This feature promotes social interaction and expands the network organically.

03 Legitimate Digital Content Consumption

A core tenet of the Dahym project is to combat digital piracy. Dahyms are awarded as a direct incentive for the legitimate consumption of licensed digital content, such as streaming movies, music, or other media. A portion of the content purchase price is allocated to the Dahym Reserve, which is then credited to the consumer.

This model creates a direct and measurable link between ethical consumption and personal reward. For live events, such as a concert or a sports broadcast, a dedicated Legitimate Use API can trigger a double incentive, further encouraging real-time, legitimate engagement.

Spending Dahyms

The spending process is streamlined to be as intuitive and rewarding as the earning process. Consumers can use their Dahyms for purchases exclusively at sponsoring businesses.

The transaction is seamless for both parties; while the customer pays in Dahyms, the merchant instantly receives an equivalent payment in their preferred stablecoin (e.g., USDC or USDT). This model provides merchants with immediate, stable, and usable currency, entirely insulated from the volatility risks typically associated with other cryptocurrencies. It is a system built on certainty and convenient for all participants.

Sponsorships & Rewards

Businesses are the cornerstone of the Dahym ecosystem. They act as the primary sponsors, funding the rewards that drive consumer engagement and participation. This sponsorship model is facilitated through several strategic channels designed to maximize business reach and customer loyalty:

01 Sponsor Cards

Businesses can purchase and distribute Sponsor Cards. These are digital assets that award spendable Dahyms to players as prizes within the ecosystem's games. This provides a clear, measurable return on investment for marketing and promotional activities.

02 Welcome Cards

These can be used to onboard new users and provide them with an initial balance of Dahyms to encourage participation.

03 Gift Cards

Consumers can dispatch Gift Cards directly from smart TVs, eliminating the traditional friction points of requiring phone numbers or email addresses. This novel approach enables instant and effortless value transfer.

04 Live Event and Special Promotions

Businesses have the flexibility to offer special promotions and events. For instance, a sponsoring movie theater could offer a unique reward of Dahyms to attendees of a specific premiere, thereby driving traffic and direct sales.

Security and Infrastructure

The integrity and trustworthiness of the Dahym project are paramount. Security is achieved not through a traditional decentralized blockchain but through a robust and auditable centralized ledger that employs advanced cryptographic principles. This approach ensures high transaction speed and low overhead costs.

Cryptography

The Dahym payment system operates on a cryptographically secure centralized ledger. Each debit and credit transaction is secured by digital signatures, ensuring the integrity of the data. The unique Proof of Combined Value (PCV) mechanism, which was detailed earlier in the whitepaper, acts as a continuous internal audit, ensuring that no transaction can be tampered with without immediate detection.

Key Management

The system employs a layered approach to key management that ensures asset security while simplifying the user experience. Private keys are never stored on a central server. They are instead generated and stored locally on the client device (e.g., the Dah -g app or a browser), protected by a sophisticated, proprietary masking protocol.

This client-side storage model ensures that even in the event of a server-side breach, private keys remain secure. Customers are only required to back up their account data, and they are not burdened with the complexities of managing private keys.

The Dahym system distinguishes between two distinct types of keys to enhance security and operational efficiency:

Key Type	Role and Purpose	Storage Location	Assets Held
Wallet Key	This key is the master key for an account. It holds and manages all Dahym assets and is used to authorize the final sweeping of Dahyms into a stablecoin wallet.	Secure client-side storage, strictly isolated from the server.	$100
Signing Key	This key is a temporary, non-custodial key used exclusively for the cryptographic signing of individual transactions. It has no associated balance and cannot be used to transfer assets.	It can be stored on the cloud or on devices like kiosks for operational convenience.	No

This deliberate separation of duties is a critical security measure. For example, if a signing key on a public-facing kiosk were ever compromised, a malicious actor would gain no access to any assets, as the key has no associated balance.

Private Key Masking and Recovery

To secure the private keys stored on the client side, the Dahym system uses a simple yet effective masking logic. When a new wallet is created, the private key is fragmented and embedded within a random text string. A key for this process, known as an LEDGER_REF, is returned from the server and stored locally on the user's device. This process renders the stored private key unreadable to any unauthorized user who might gain access to the device.

Account recovery is a straightforward and secure process. Users can download an encrypted backup file of their wallet information and import it to a new device. This recovery process utilizes a two-round masking and unmasking protocol, ensuring that the private key remains secure during transit and while at rest.

Audits and Transparency

The Dahym ledger is designed for full transparency to build trust and accountability. All transaction data is available for public, read-only access. This open access provides a clear and verifiable history of value movement. This transparency also facilitates efficient and impartial audits by third-party regulators, which is a key component of the project's long-term strategy for operational integrity.

The DAHG Security Token

The DAHG token is the security token for the Dahym project. It is fundamentally different from a utility token, as its possession is not required for participation in the network. Its value is directly tied to the growth and success of the Dahym ecosystem. Unlike utility tokens, DAHG is an investment vehicle.

Role & Purpose

The DAHG token represents a share of the company, and its value is directly linked to the project's performance. It will not be airdropped but will be distributed to individuals who contribute to the network's growth through a verifiable offline proof of work. This includes a wide range of contributors, from sponsoring merchants to content creators and retail staff, all of whom actively help expand the ecosystem. The value of the DAHG token is subject to market forces and is expected to appreciate or depreciate, similar to a traditional stock.

Fixed Supply and Distribution

The DAHG token has a fixed and unchangeable supply of 21 million tokens, a number chosen to reflect the finite supply of Bitcoin. This hard cap is a critical aspect of its tokenomics. One million tokens are allocated to the founders to cover initial project development and seed funding.

The remaining 20 million are divided equally among five key stakeholder groups to incentivize their participation and ensure a broad and equitable distribution. A specific mechanism for initial customer distribution is as follows: When a customer registers and shares their first game, the customer can claim 2 DAHG tokens from the Dah -g app. The distribution plan is as follows:

Group	DAHG Allocation	Purpose of Allocation
Founders	1 million	Project development and seed funding.

Group	DAHG Allocation	Purpose of Allocation
Merchants	4 million	Incentivizing businesses to adopt the Dahym system and serve as transaction hubs.
Poplar	4 million	
Customers	4 million	Encouraging community participation and the hosting of events that promote the ecosystem.
Developers, Builders, Suppliers, Partners, and Retail Staff	4 million	Recognizing and rewarding technical, logistical, and operational contributors who build and maintain the ecosystem.
Movie Theaters	4 million	Incentivizing movie theaters to use the "Tail-end Virtual Theater Streaming" (TVTS) service for first-run movies, creating a new revenue stream and a unique use case for the Dahym system.

This distribution model is designed to ensure that every major contributor to the ecosystem's success is aligned with the project's long-term vision and is rewarded for their verifiable contribution.

The Dahym Ecosystem

The Dahym project is not merely a transient stablecoin or a payment system; it is an ecosystem composed of integrated applications and systems designed to facilitate digital value exchange and engagement. The ecosystem's components are designed to work in synergy, creating a frictionless experience for all participants.

The Dah -g App

The Dah -g App is a central hub for the Dahym ecosystem, providing a user-friendly interface for consumers. This application serves as a digital wallet for Dahyms and other stablecoins. It allows users to track their balances, earn rewards, and spend their Dahyms at participating businesses. The Dah -g App is built to be intuitive, minimizing the learning curve for new users and enabling secure, device-to-device transactions with ease.

The Dumbwood System

The Dumbwood System is an exclusive membership-based framework that governs participation within the Dahym ecosystem. It is designed to ensure a secure and trusted environment for transactions. Membership is granted to consumers and merchants who pay a subscription fee, while popular creators can join without a fee. This model creates a closed-loop system that prioritizes legitimate and verified interactions.

Kiosk System

The Dahym Kiosk System provides a minimal, efficient, and secure device-to-device payment solution optimized for on-site retail environments. These kiosks can be as simple as a tablet, offering a convenient point of sale for Dahym transactions. The system is engineered for instant, real-time value exchange between a customer’s mobile wallet and the merchant’s kiosk.

Each kiosk utilizes a Signing Key for transaction authorization, which, as previously detailed, holds no assets, thereby eliminating the risk of physical theft. This key separation ensures that the physical hardware is never a target for attackers seeking to steal funds.

Conclusion

The Dahym project's vision is to establish a new paradigm for digital value, where a transient stablecoin catalyzes a more engaged and legitimate digital economy. By providing a secure, efficient, and user-friendly system, Dahym aims to bridge the gap between digital rewards and tangible value. The project is strategically positioned to develop into a foundational layer for other applications and systems, with the potential to become a global standard for incentivized commerce.

Component	Function	Status
Dahym	A transient stablecoin for digital spending.	Live, limited to sponsoring businesses.
Dumbwood System	A membership-based framework that governs participation.	In development.
Kiosk System	A device-to-device payment solution.	Undergoing field tests.
DAHG	A security token representing a share of the project.	Initial distribution planned.

The Dahym ecosystem is engineered for scalability and designed to adapt to a wide range of use cases. The decentralized nature of earning and spending, combined with a centralized, secure ledger, provides a balanced approach that is both highly efficient and fundamentally trustworthy. The system is capable of supporting millions of transactions with minimal latency, making it ideal for micro-transactions.

Call to Action

The Dahym project is actively seeking partnerships with businesses, content creators, and developers who share our vision of a more engaged and legitimate digital economy.

Email:

Website: