Veltocoin: A Pegless Equity-Like Cryptocurrency Protocol

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Abstract. The modern cryptocurrency scene has a fundamental trust problem. Big-money investors are skeptical of adopting and let alone investing in cryptocurrencies. Crypto is deemed as an internet meme and a niche, left to speculators to gamble around or tech enthusiasts to make crypto sniper bots for. This whitepaper outlines a new protocol designed to bring trust to the cryptocurrency scene by establishing a new cryptocurrency Veltocoin specifically designed to mimic equity securities. In doing so, Veltocoin adopts a new consensus mechanism, Proof-of-Virality, whereby users are rewarded based on their contribution to the growth of the Veltocoin network. Veltocoin is the world's first pegless and gasless equity-like cryptocurrency and the first to employ growth-centered decentralization.

Background

Since the publication of the Bitcoin whitepaper in 2008, blockchain technology has revolutionized the concept of decentralized value exchange. Bitcoin pioneered the Proof-of-Work (PoW) consensus mechanism, enabling a permissionless system where anyone could participate in validating transactions by expending computational energy. However, while Bitcoin proved that digital scarcity and trustless consensus were possible, it was fundamentally limited in flexibility and throughput. Bitcoin's rigid scripting language, slow transaction finality, and high energy consumption have prevented it from scaling into a dynamic platform for applications beyond basic currency transfer.

Ethereum, introduced in 2015, extended the blockchain paradigm by enabling smart contracts—programmable logic that could automate decentralized applications (DApps) on a global virtual machine. Ethereum's vision of a "world computer" led to the rise of decentralized finance (DeFi), non-fungible tokens (NFTs), and decentralized autonomous organizations (DAOs). Despite these innovations, Ethereum still inherits structural issues: high gas fees during congestion, limited scalability without complex Layer 2 solutions, and a consensus mechanism—first PoW, now Proof-of-Stake (PoS)—that rewards capital or computational power rather than actual contributions to network growth or adoption.

Veltocoin introduces a paradigm shift with its Proof-of-Virality (PoV) consensus model, which directly rewards users for generating measurable, authentic social and network engagement. Rather

than relying on energy expenditure or financial staking, Veltocoin aligns block rewards with the organic expansion of the network driven by people, not machines. In Veltocoin, participants who create viral content, onboard new users, or stimulate decentralized activity receive proportionate compensation through block rewards. This turns social capital into economic value, making Veltocoin the first consensus system designed for growth-first decentralization.

Further, what sets Veltocoin apart is its equity-like and non-volatile growth profile, achieved without relying on an underlying asset. Instead, Veltocoin's value is backed by network expansion and verified engagement, creating an organic feedback loop where the token supply grows in sync with actual demand and participation. Veltocoin is designed to mimic equity securities in the stock market, hoping to become an investment rather than a speculation.

Veltocoin aims to resolve the disconnect seen in earlier blockchains between protocol security and real-world adoption. In doing so, Veltocoin is the first to make the world of cryptocurrency a trusted space for investors.

Proof-of-Virality (PoV)

Proof-of-Virality (PoV) rewards users based on their ability to generate verifiable, organic viral engagement that drives wallet adoption, token usage, or network activity. It treats social reach as a consensus input, much like Proof-of-Work (PoW) treats computation or Proof-of-Stake (PoS) treats capital. At the heart of PoV is the Virality Score (VS), which can be calculated using the following formula:

$$\begin{aligned} VS &= \vec{\alpha} \cdot \vec{w} \\ \vec{\alpha} &= [\alpha_{velto} \quad \alpha_{SNS} \quad \alpha_{chain}]^T \\ \vec{w} &= [0.5 \quad 0.2 \quad 0.5]^T \end{aligned}$$

Each alpha score α_{velto}, α_{SNS}, and α_{chain} measures the amount of organic and verified viral activity within the Velto platform, other social networking services (SNS), and the Velto chain. For the Velto platform and other SNS platforms, alpha scores can be calculated as follows:

$$\alpha = \sqrt{\text{Followers}} + \sum_{p \in \text{Post}} [\ln \text{Views} + 0.5 \times \text{Likes} + 0.7 \times \text{Comments} + \text{Shares}]$$

Notice each factor is weighted or normalized according to its level of friction, with higher friction actions receiving a lower weight. Activities more likely to lead to higher virality such as Shares are given paramount weighting. The on-chain alpha score has a similar intuition behind its formula:

$$\alpha_{chain} = 0.7 \times \text{Smart Contracts} + \ln \text{Transactions} + \sum_{r \in \text{Referred wallet}} \sqrt{\hat{\alpha}_{r,chain}}$$

Validators for chain transactions are chosen based on user Virality Scores. Hence, those with higher viral activity and social outreach consequently are given a proportionately higher chance of being selected to become a validator and receive VELT in exchange for validation. Validators are selected according to:

$$\text{Multinomial}(\vec{v}, 1)$$

Hence, PoV defends against malicious overtakes by requiring extensive social capital. Groups attempting to stage a hostile takeover of the chain would require interactions with millions of benign users, with each interaction generating positive activity on the Veltocoin chain.

Price Modeling

The natural question to ask is how does PoV support a pegless but non-volatile cryptocurrency? Indeed, that is the core goal of Veltocoin, is to become an equity-like non-volatile investment. A theoretical explanation can be given based on economic and mathematical principles. Consider the following theorem:

> *A PoV-based cryptocurrency system can simulate the growth characteristics of equity securities, while maintaining lower volatility and deflationary supply, even without an underlying asset.*

Assume the following at time t: D_t is demand; S_t is supply, P_t is price; V_t is aggregate virality; R_t is aggregate rewards; β_t is aggregate burn at time t; E_t is user engagement; G_t is global awareness; $\mathcal{U}(R_t, P_t')$ is the perceived utility of VELT, taken as a function of R_t and price velocity P_t'.

Assume the following relationships: $P_t \propto D_t - S_t$ price is fundamentally a function of demand vs supply; $D_t \propto V_t \mathcal{U}(R_t, P_t')$ demand for VELT depends on aggregate virality as well as perceived utility; $V_t = f(E_t, G_t)$ virality is a function of engagement and awareness of VELT; $\Delta S_t = R_t - \beta_t$ change in supply is aggregate reward minus burn.

We can deduce the following lemmas:

Lemma 1: PoV creates reflexive demand

As V_t grows, the user base and engagement grow superlinearly due to social propagation (consider the principle of six degrees of separation). Demand for the token increases as follows:

$$\frac{dD_t}{dV_t} > 0, \frac{d^2 D_t}{dV_t^2} > 0$$

We can conclude that demand is concave up and as demand increases superlinearly, price increases superlinearly, mocking price growth in the equity market.

Lemma 2: PoV rewards can be deflationary

Suppose R_t is nonlinear with diminishing returns and includes a burn:

$$R_t = A \ln(1 + V_t)$$
$$\beta_t = \frac{B}{C + \exp(-DS_t/S_{floor})}$$

Then, as virality grows rapidly, rewards scale slower (logarithmic) while burns scale linearly (in the "middle" and "ends" of the curve). Net supply change $\Delta S_t = R_t - \beta_t$ becomes negative for large S_t. Thus, supply can decrease over time even during viral growth.

Lemma 3: Stabilizing volatility via control theory

We can introduce a feedback controller that dampens volatility by adjusting reward issuance R_t in response to price deviation from a target price P^*:

$$R_t = \begin{cases} A \ln(1 + V_t) & \text{if } P_t < P^* \\ A \ln(1 + V_t) \cdot \left(1 - k(P_t - P^*)\right) & \text{if } P_t \geq P^* \end{cases}$$

If P_t surges above P^*, new rewards decrease while if P_t falls, rewards increase slightly. This control loop reduces amplitude of price fluctuations.

Lemma 4: Equity-like returns from PoV

Over time, token holders benefit from deflationary supply (appreciation of existing tokens) as well as virality-driven growth. Thus, expected return can be expressed as:

$$\mathbb{R} = \frac{\Delta P_t + \Sigma \mathrm{R_i}}{P_0}$$

PoV is set up to mirror stockholder return via capital gains, dividends, and share buybacks.

Conclusion

A PoV-based crypto token can simulate a non-volatile, growth-driven financial security by generating value from endogenous social propagation, controlling supply with diminishing reward curves and burn mechanisms, actively damping volatility via feedback, and providing holders with equity-like upside and value accumulation.

Gasless Tokenomics

Traditional blockchain networks, such as Ethereum, impose transaction fees (gas) to compensate validators for computational work and to prevent spam. In contrast, Veltocoin proposes a gasless model by rethinking incentives: users do not pay per transaction, but their future claim to rewards is dynamically adjusted based on recent transaction activity. In other words, users pay no transaction fee at the time of transfer. Instead, their future PoV-based rewards decrease slightly, proportional to their recent activity, through a virality-weighted decay function. This effectively internalizes transaction cost into long-term reward potential, rather than short-term financial friction—removing a major barrier to adoption while maintaining security and fairness.

We can introduce a modified reward function by adding a penalty term P_t based on transaction density T.

$$R_t = R_{base} - \lambda P_t$$
$$P_t = \int_0^t T(\tau)\delta(t-\tau)d\tau$$
$$\delta(t) = \exp(-bt)$$

Thus, such a model supports the absence of immediate costs applied during the transaction. Users experience zero friction at the point of use, which enables seamless payments and rapid adoption. This cost is instead redistributed to future PoV reward cycles if they engage in excessive or spammy activity. Recent transactions have more impact on penalties by the decay function δ. This ensures fairness and avoids long-term punishment simply for being a regular user of the interface.

In sum, PoV enables gasless blockchain activity by shifting cost from real-time fees to time-delayed reward reduction while the calculus-based decay model ensures that recent transaction activity modestly reduces PoV rewards, while older actions fade in influence. The network remains spam-resistant and value-preserving, while users benefit from frictionless transfers and deflationary tokenomics.

Governance

PoV governance introduces a unique mechanism where on-chain influence is derived not only from token holdings (as in traditional proof-of-stake systems) but also from a user's measurable virality score—a cryptographically verifiable metric tied to their ability to attract and activate new participants in the network. This approach allows the governance structure to reward users who actively contribute to network growth, rather than just passive capital holders.

At the heart of PoV governance is a dual-weighted voting system. Each user's voting power is computed as a function of both their token holdings and their normalized virality index, such as:

$$VP = T^{w_T} v^{w_v}$$

Where weights are constants that balance economic stake with social impact. This hybrid model encourages participation from both investors and network builders. Governance proposals follow a standard multi-stage pipeline: proposal submission, review, quorum check, and final execution via smart contracts. However, in PoV governance, quorum thresholds and veto rights can be dynamically adjusted based on the virality composition of participating voters. For instance, if a governance vote is primarily driven by low-virality wallets (possibly whales with little community involvement), the proposal may require a higher threshold or be subject to a veto from a "growth council" composed of top viral contributors. PoV governance can also support delegated virality, where highly viral users can delegate their influence to technically skilled voters, creating a more nuanced and resilient decision-making process.

In essence, PoV governance transforms community growth into a tangible source of protocol power. It decentralizes control not just economically but socially, creating an incentive-aligned ecosystem where the most influential users are those who grow the network, regardless of their monetary capital.

L2 Launchpad

The Velto Layer-2 Launchpad is an extensible, smart contract–powered platform designed to enable the seamless deployment of new cryptocurrencies and decentralized finance (DeFi) protocols, with an emphasis on virality-driven value creation. Built atop the revolutionary PoV consensus model, Veltocoin provides developers with the infrastructure to issue and manage equity-like digital assets that do not rely on traditional, off-chain cash flows or corporate structures.

At its foundation, the Velto Launchpad introduces a novel class of Web3-native securities: programmable tokens whose value and governance dynamics are directly influenced by on-chain network activity, including user acquisition, referral growth, and engagement metrics. Token creators may utilize pre-audited smart contract templates that support features such as virality-based reward emissions, logistic supply decay, automated token burns, and minimum supply floors, all of which simulate the behavior of traditional equity instruments without requiring centralized administration.

Through the Velto Launchpad, founders can deploy tokenized ecosystems that embed PoV logic into governance and economic mechanics. In the broader context, the Velto Layer-2 Launchpad positions itself as a scalable, modular infrastructure layer for future digital economies. As regulatory frameworks evolve to accommodate decentralized securities, Veltocoin provides a compliant-ready architecture that allows for transparent issuance, distribution, and governance of tokenized assets. In doing so, it transforms speculative meme tokens into sustainable, user-aligned financial primitives, bridging the gap between social virality and long-term, asset-backed utility in Web3. Consider the Velto Launchpad as the technical backbone for the future of stable Web3 investment securities.

Anti-Fraud Measures

To preserve the integrity of Veltocoin's PoV consensus, a robust anti-fraud framework is foundational. As Veltocoin links block rewards to the generation of real social outreach and network activity, the system must remain resilient against manipulation through bots, sybil attacks, and synthetic engagement.

Each Veltocoin participant must establish a unique identity on the network via a decentralized identity protocol and is given a decentralized identifier (DID). This identity acts as a persistent, pseudonymous anchor, allowing users to link their social accounts and wallet activities in a verifiable but privacy-preserving manner. Onboarding into the Veltocoin network includes a lightweight proof-of-personhood step. This ensures that each identity represents a real individual, significantly reducing the likelihood of sybil attacks. Further, onboarding requires proving individual uniqueness such as providing a one-time code from an SMS text message. Ultimately, Veltocoin prevents the same individual from opening several wallets and generating synthetic activity.

Veltocoin ensures that its PoV mechanism only rewards genuine, human-driven contributions to the network, protecting the token economy from manipulation but also aligns the networks towards sustained organic growth.

Velto App

The Velto App is a decentralized, censorship-resistant social platform designed to restore agency to users and incentivize meaningful expression. Inspired by platforms like X (formerly Twitter), the Velto App enables users to post content, engage in discourse, and build influence, while directly earning cryptocurrency rewards based on the virality and network impact of their contributions. Unlike traditional social media platforms where user data is monetized by centralized entities, the Velto App empowers users to own their digital identity and be compensated for the value they generate.

Each user on the Velto App is linked to a Veltocoin wallet and undergoes a Proof-of-Unique-Human (PoUH) onboarding process to establish credibility and unlock full participation in Veltocoin's PoV reward model. Posts that generate organic engagement contribute to a user's virality score. This score, verified through cryptographic linkage and decentralized analytics, determines eligibility for periodic Veltocoin token rewards distributed via smart contract.

To maintain freedom of speech while minimizing manipulation, the Velto App is built on a content-moderation-as-a-service model. Users can subscribe to or build their own moderation filters—ranging from open discourse to family-safe content—without affecting the reward mechanics or

visibility at the protocol level. All content remains permanently available through decentralized storage networks, with discoverability controlled by user-chosen moderation layers.

The Velto App is not only a social platform, but also a gateway to the Veltocoin ecosystem, acting as an onramp for new users into the token economy. Viral posts that drive meaningful community growth or adoption can lead to downstream rewards for both the original poster and the referred users. With the ultimate goal of free expression in mind, the Velto App serves as the viral engine of the Veltocoin protocol.