# **RoonChain Whitepaper on Technology & Economic Architecture**

Next-Generation Autonomous Layer-1 Chain with AI Governance & Real-World Asset Integration | April 2025

Logo & Cover Visual Reference:







#### **Positioning of RoonChain:**

An Al-driven Layer-1 public chain focused on RWA (Real-World Asset) tokenization and the Web3 creator economy, leveraging a modular architecture and dynamic economic models to overcome traditional chains' inefficiencies, high costs, and governance pain points.

Core Advantages	Competitor Comparison
AI Dynamic Minting Engine	Unlike Polygon's static inflation, ROON's inflation rate adjusts intelligently to on-chain activity.
RWA Compliance Adaptation Layer	Provides standardized asset mapping & off-chain audit interfaces, surpassing Avalanche's generic asset protocol.
Creator Economy Toolchain	Integrates NFT DAO & IP issuance templates, reducing development costs by ~70% vs. Ethereum ecosystem.

# 1. Market Opportunity

## 1.1 RWA Market Growth

#### Explosive Potential of Tokenized Assets

Global tokenized asset markets are projected to grow at a 68% CAGR from 2023 to 2030, surpassing \$16 trillion—RWA is rapidly becoming the new home for Web3 value.

• First-Mover Advantages in Key Verticals Real estate, carbon credits, private equity, and other asset classes will lead tokenization; projects offering industry standards and turnkey solutions stand to gain a significant head start.

Huge Gap in Infrastructure Optimization

Mainstream chains struggle with compliance, off-chain data integration, and high gas fees. There is an urgent need for low-cost, compliant, data-friendly infrastructure—RoonChain's modular design precisely addresses this.

### 1.2 Al Governance Gap

Gartner predicts that by 2027, 65% of blockchain projects will incorporate AI governance, yet as of 2025 fewer than 10% have practical solutions. Most chains still rely on manual parameter setting and governance—inefficient and prone to manipulation.

RoonChain embeds an AI governance engine to monitor on-chain economic indicators and auto-tune parameters, paired with a DAO module for "**AI Recommendations + Community Voting.**" Additionally, our **AI Governance Sandbox** lets developers simulate economic policy impacts on system operation and token price, paving the way for fine-grained, data-driven on-chain policymaking.

### **1.3 Creator Economy Demand**

With the rise of IP commercialization, decentralized distribution, and community governance, Web3 creators are becoming a key growth driver of on-chain content economies. However, current solutions on Ethereum and its Layer-2s still face:

- Fragmented NFT & DAO tooling, high integration complexity
- High cost barrier (deploying an NFT+DAO stack can exceed \$300)
- Lack of customizable templates and revenue-share mechanisms for creators

RoonChain natively supports a **Creator Economy Toolchain**, featuring a low-cost NFT publishing platform, DAO governance templates, IP incubation & tipping mechanisms, all linked via the NUTZ token to form a consumption feedback loop—empowering creators to transition from "content production" to "economic sovereignty."

# 2. Vision & Technical Advantages

### 2.1 Performance Metrics & Optimization Design

As an EVM-compatible chain engineered for high throughput and modular governance, RoonChain incorporates multiple innovations to ensure scalability and responsiveness for RWA, DeFi, and Web3 use cases.

#### **Core Performance Highlights**

AI Response Latency ≤ 15 s

End-to-end—from on-chain trigger to model inference to governance proposal—completed within 15 seconds, delivering practical realtime AI governance.

~40% Gas Cost Reduction

Through optimized EVM execution paths and transaction batching, on-chain gas costs are cut by over 40% compared to Ethereum mainnet

#### Parallel Transaction Execution

Modular Execution Units (MEUs) enable concurrent processing and pipelined execution of non-conflicting transactions, dramatically boosting throughput.

Native Light-Client Support

Light-client mode compatible with mobile wallets and IoT nodes, broadening Web3 accessibility.

#### **Testnet Performance (Simulated)**

Metric	Result
Peak TPS	> 2,300
Average Block Time	1.7 seconds
Network Latency	< 500 ms

Metric	Result
Al Model Response	< 15 seconds (including proposal)

# 3. Technical Architecture & Core Modules

RoonChain employs a modular architecture combining consensus, security, EVM execution, AI governance, and RWA asset layers to deliver a high-performance, upgradeable platform.

#### **Architecture Overview**



- Consensus Layer (Tendermint Core): Fast block production with BFT consensus ۰
- Execution Layer (Ethermint EVM): Solidity smart-contract compatibility •
- Al Model Layer (Governance Al): Predicts network state & parameter recommendations
- RWA Adaptation Layer: On-chain standardized asset mapping
- Governance Module (DAO): Parameters adjusted via proposals & voting •
- **IBC Module:** Native cross-chain communication with Cosmos, Injective, Osmosis, etc.

This modular design supports flexible combinations and future upgrades per ecosystem needs.

### **Tokenomics & Release Plan**

RoonChain uses a dual-token model: **ROON** for governance & value anchoring, and **NUTZ** for user incentives & ecosystem consumption.

#### 4.1 Dual-Token Cycle



### **Cycle Details**

• Stake ROON → Earn NUTZ:

Users stake ROON to secure the network or participate in governance, earning NUTZ as community & creator rewards.

Spend NUTZ → Pay for Services & Tips:

NUTZ is used to purchase platform services (subscriptions, voting tickets, DAO events) and tip Web3 creators.

• Fee Mechanism → Buy & Burn ROON:

30% of NUTZ-denominated fees are used to repurchase ROON on the open market and burn it, creating deflationary pressure.

## 4.2 Main Token: ROON

ROON is the native token, serving three key roles: network incentive, governance voting weight, and RWA value anchor.

Module	Function
<b>Network Incentives</b>	Securing the chain via validator staking & block rewards, ensuring decentralization & efficiency.
AI Economic Engine	AI-driven inflation and burn suggestions to optimize liquidity & market stability.
Governance Voting	Voting rights and proposal prioritization within on-chain governance.
RWA Collateral	Value anchoring for real-world assets on-chain (e.g., real estate, commodities).
<b>Creator Incentives</b>	Rewarding Web3 creators & DAOs to foster decentralized content & collaboration.
<b>Cross-Chain Incentives</b>	Serving as the bridging incentive for cross-chain asset flows.

### **ROON Distribution (Total Supply: 1 B)**

Allocation	%	Notes
Investor Rounds	20%	Seed, Angel rounds for early funding.
Team & Advisors	18%	1-year lockup to align long-term incentives.
Community & Ecosystem	25%	Grants for DApps & Web3 projects.
Validator & Staking	20%	Rewards to secure network operation.
RWA Collateral Pool	10%	Backing on-chain RWA collateral & guarantees.
AI Governance Fund	5%	Supporting AI decision-making & tokenomics research.
Liquidity & Market Growth	2%	Initial liquidity provisioning post-launch.

# **ROON Token Allocation**



####ROON Release Schedule



# 4.3 Community Token: NUTZ

**NUTZ** is a fixed-supply (1 B) community token for incentives and consumption, driving engagement and creator support.

Use Case	Description
Community Incentives	Rewards for contributors, creators, and event participants.
Governance Support	Auxiliary voting on budgets, activities, and ecosystem subsidies.
Ecosystem Consumption	Exchanging exclusive NFTs, paying DAO fees, etc.
Cross-Chain Incentives	Incentives on other chains (e.g., NFT marketplaces).
Education & Training	Rewards for participating in Web3 educational programs.

#### **NUTZ Distribution**

Allocation	%	Notes
Community Incentive Pool	45%	Creator & participant rewards.
DAO Governance Pool	25%	Funding on-chain governance activities.
Ecosystem Consumption	20%	Service payments & NFT redemptions.
Cross-Chain Incentive	5%	Inter-chain collaboration incentives.
Education & Training	5%	Web3 learning incentives.



#### **NUTZ Release Plan**

- 1. Phase 1 (0–12 months): Distribute via Community & DAO pools to build early governance and community.
- 2. Phase 2 (12–36 months): Expand Ecosystem Consumption & Cross-Chain pools to support interoperability and platform usage.
- 3. Phase 3 (36+ months): Adjust releases based on community feedback and external adoption, driving NUTZ utility beyond RoonChain.

# 5. Al Dynamic Economic Control System

RoonChain's on-chain AI models dynamically adjust inflation rates, minting, and burn schedules to realize **autonomous economic management**, enhancing elasticity and long-term stability.

Component	Description
Data Collection Layer	Real-time on-chain metrics (active users, fees, staking ratio, RWA prices).
AI Prediction Engine	LSTM + Reinforcement Learning to forecast economic states (deflation/expansion/neutral).
Strategy Generator	Generates mint/burn/hold suggestions as governance proposals.
Autonomous Feedback	Community vote $\rightarrow$ execution $\rightarrow$ feedback into model for continuous learning.



Note: The AI model retrains every 7 days for continuous optimization, feeding proposals into the governance loop to form a closed-loop autonomous economic system.

## 6. Decentralized Governance Architecture

RoonChain adopts a separation-of-powers governance model, combining on-chain voting, AI recommendations, and community oversight for robust, resilient decision-making.

Module	Role & Authority	
Proposal DAO	Initiates proposals on protocol parameters, upgrades, and policies.	
Validator DAO	<b>DAO</b> Elected committee of staked token holders with proposal review and voting rights.	

#### **Observer Council** Community contributors overseeing governance, flagging abnormal proposals, auditing AI transparency.

- **Proposal Mechanism:** Any ROON holder above a threshold can propose changes, with a refundable deposit.
- Voting Mechanism: Default voting period of 5 days, adjustable on-chain.
- Al in Governance: Al-generated economic proposals require community confirmation before execution.
- Emergency Mode: Rapid voting (48 h) for critical issues or security fixes.
- **Transparency:** All proposals, votes, and executions are recorded on-chain and publicly visible via the governance dashboard.

#### AI + Governance Hybrid Model

RoonChain's AI Assistant Governance issues periodic parameter recommendations (inflation tweaks, parameter fine-tuning), which are then subject to community vote. AI holds advisory status only—it cannot unilaterally execute changes.

#### Long-Term Governance Objectives

- 1. Achieve fully community-led governance cycle (within one year post-mainnet).
- 2. Provide governance tooling adaptable to subnets/sidechains, enabling other projects to integrate.
- 3. Launch "Governance Reward Program" to incentivize active proposal submission and voting.

# 7. Ecosystem Roadmap & Milestones

RoonChain's evolution follows four phases: "Core Stability  $\rightarrow$  Modular Expansion  $\rightarrow$  Creator Ecosystem  $\rightarrow$  RWA Integration."

Phase	Targets & KPIs
2025 Q3	Testnet launch; AI model calibration
2025 Q4	Mainnet go-live; cross-chain bridge integration (5+ assets)
2026 Q1	\$20 M ecosystem fund deployment; incubate 10+ quality DApps
2026 Q2	Full on-chain AI governance engine live
2026 Q3	Launch NFT Governance DAO for community-driven IP commercialization
2026 Q4	Roll out RWA tokenization protocol (target \$500 M assets)
2027 Q1	Partner with global audit firms to certify on-chain/off-chain RWA value anchoring

#### **RoonChain Development Roadmap**



# 8. Investor Rights & Exit Mechanisms

RoonChain offers institutional and individual investors a balanced structure of liquidity, yield, and exit options.

### **Core Investor Rights**

- Pre-emptive Allocation: Priority access to initial mainnet token allocation.
- Governance Proposal Rights: Ability to submit and vote on governance items.
- Dedicated Incentive Pool: 3% monthly network fee allocation to early investors.
- Ecosystem Profit Sharing: Future RWA protocol revenues shared proportionally with investors.

### Value Capture & Deflationary Design

RoonChain implements a sustainable value-capture loop beyond simple token burn:



Each RWA transaction triggers a buyback-vest-redistribute cycle, underpinning long-term ROON value growth.

#### **On-Chain Buyback Pricing Formula**

Let:

- Pr = On-chain buyback price of ROON (in USDT or NUTZ)
- TWAP = 7-day time-weighted average price of ROON
- **F** = Buyback premium factor (default 1.05)
- N\_fee = NUTZ fees collected this period
- **R\_amount** = ROON quantity to repurchase

Price:

 $Pr = TWAP \times F$ 

#### Quantity:

 $R_{amount} = rac{N_{fee} imes 30\%}{P_r}$ 

#### Example:

If 7-day TWAP = 0.50 USDT and F =  $1.05 \rightarrow P_r = 0.525$  USDT. With 100,000 NUTZ fees  $\rightarrow$  30% = 30,000 NUTZ for buyback  $\rightarrow$ R\_amount =  $30,000 \div 0.525 \approx 57,143$  ROON (to be burned).



# 9. Contact Us

We welcome long-term investors, developers, and ecosystem partners in AI governance & RWA to join RoonChain.

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