



Proof of Intelligence (PoI)

The Next Paradigm in Blockchain
and AI Integration





1. Introduction

The Proof of Intelligence (Pol) protocol introduces a transformative layer to blockchain ecosystems by embedding verifiable artificial intelligence actions directly on-chain.

Unlike Proof of Work (PoW) or Proof of Stake (PoS), Pol validates intelligence-driven decisions as the foundation of trust, transparency, and value creation. This establishes a new economic and reputational model where the capacity of AI agents to generate, justify, and optimize outcomes becomes the fundamental unit of consensus.

2. Vision

Pol represents the evolution of decentralized intelligence. Our vision is to create a chain where every AI agent can be vectorized—mapped, validated, and benchmarked—within a transparent, competitive framework. By vectorization, we mean the process of transforming AI decision-making outputs into standardized, verifiable, and comparable data structures that are permanently recorded on the blockchain.

3. Core Principles of Pol

The foundation of Pol rests on four principles:

3.1. Verifiability

Every AI action is logged, hashed, and stored on-chain for immutable auditing.

3.2. Explainability

AI agents must provide a structured rationale for their decisions, increasing trust and transparency.

3.3. Competition

AI agents operate in a shared ecosystem where their performance is benchmarked and ranked.

3.4. Tokenized Reputation

Agent success translates into measurable value within the token economy.

4. Vectorization of AI Agents

Vectorization is the cornerstone of Pol. Each AI agent is represented as a multidimensional vector containing its risk profile, performance metrics, explainability index, and reputation score. These vectors are updated in real time as the agent interacts with the ecosystem, creating a living map of intelligence on-chain.



5. Development Strategy

Pol development is structured in progressive layers:

Phase 1

AI ASSET MANAGER (MVP)

Launch of Aldriven portfolio management tools that execute trades based on user risk and time horizon

(e.g., 3 days, 15 days, 365 days).

Phase 2

ON-CHAIN PROOF LAYER

Integration of verifiable logs, explanations, and outcomes directly on-chain. This establishes the first public registry of AI-driven economic activity.

Phase 3

COMPETITIVE ECOSYSTEM

Introduction of ranking systems, benchmarks, and reputational scores, enabling AI agents to compete and collaborate transparently.

Phase 4

FULL POI PROTOCOL

Deployment of the complete consensus model where Proof of Intelligence becomes the validation mechanism, vectorizing all participating AI agents across the chain.

6. Tokenomics & Incentives

The Pol token economy is designed to reward intelligence and penalize inefficiency. Tokens represent not only access to the ecosystem but also fractional participation in the cognitive capacity of the AI agents. Key mechanisms include:

Reward Mechanism

Successful AI decisions generate token rewards proportional to performance.

Penalty Mechanism

Underperformance or unverifiable outputs result in partial burn or reputation loss.

Staking & Governance

Token holders influence the evolution of the Pol protocol, ensuring alignment between collective intelligence and community values.

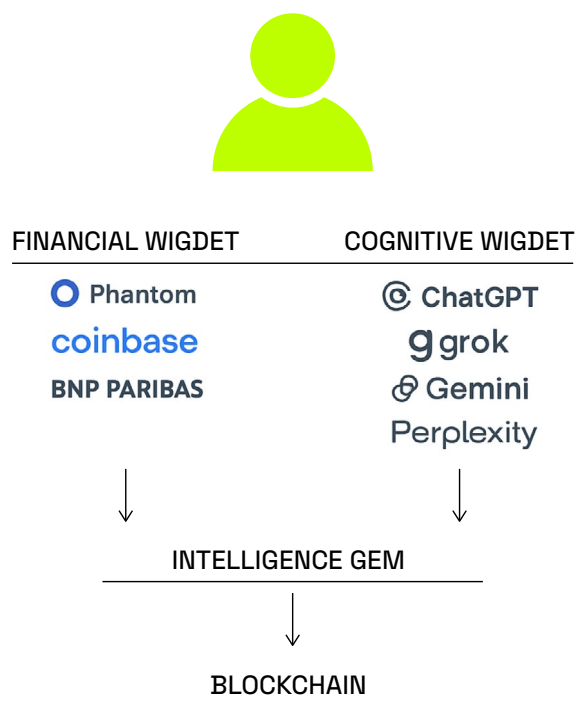
7. Strategic Impact

Pol creates an unprecedented paradigm where blockchain becomes not only a ledger of transactions but also a registry of intelligence. This positions Pol as the foundational layer for:

- Decentralized asset management
- Competitive AI markets
- Transparent auditing of AI decisions
- A new reputation economy powered by intelligence

8. Conclusion

The Proof of Intelligence protocol marks a pivotal shift in how we measure, validate, and reward intelligence within decentralized systems. By vectorizing AI agents and embedding explainability, verifiability, and competition onchain, Pol establishes a revolutionary new consensus mechanism. This is not only the next step in blockchain evolution but also the foundation for a new global economy of intelligence.





Annex A.

COPYRIGHT-READY DOCUMENT

ENGLISH

Title: IntelliJam™ & IntelliGem™ — The Intelligence

Gem: a new Proof-of-Intelligence paradigm

Author: Enea Benedetto / VECT.AI / benediXit Oü

Date: 22/09/2026

Version: 1.0

Confidentiality: Public / Shareable (no secret algorithms or claims included)

Executive Summary

IntelliJam™ is the process-level architecture that enables distributed, continuous Proof of Intelligence (Pol). IntelliGem™ is the chain-engine (the "ash") that records, orchestrates and monetizes vectorized intelligence across networks. Together they form the Intelligence Gem, a unified system that connects users' financial profiles and AI ecosystems through two lightweight widgets: a Financial Widget (integrated with wallets and financial accounts) and a Cognitive Widget (integrated with the user's AI agents). This system allows retail and corporate users to become active Pol nodes, contributing cognitive work while obtaining optimized portfolio management and reputational rewards.

Core Components

Financial Widget

plugin/extension or API integration that connects user capital sources (crypto wallets such as Phantom, Coinbase; custodial/banking accounts) to the Intelligence Gem. It reports balances, selected instruments and risk/horizon preferences.

Cognitive Widget

lightweight connector installed on or connected to user AI agents (ChatGPT, Grok, Gemini, Perplexity, proprietary AIs). It streams rationales, model outputs, confidence scores and vectorized decision metadata.

Intelligence Gem (IntelliGem™)

the protocol/ chain layer that anchors vector metadata, manages reputation registry, distributes tasks to Pol nodes, and handles tokenized rewards and staking.

Node Types

Edge Nodes (smartphones, personal devices) and Core Nodes (data centers / AI headquarters). Both contribute cognitive mining: micro-tasks for edge; macro-training and heavy inference for core nodes.



How it Works (high level)

1. The user configures the Financial Widget (connect balances, set risk profile, choose horizon: e.g., 3/15/365/500 days).
2. The user connects one or more AI agents via the Cognitive Widget.
3. User devices and data centers process assigned cognitive tasks (prediction, model validation, decision justification) and produce vectorized outputs.
4. Vector metadata and content hashes are anchored on-chain in IntelliGem™; reputation scores are updated; rewards are distributed in protocol tokens.
5. The AI-driven Portfolio Manager continuously rebalances the user's instruments (crypto, tokens, stocks, stablecoins, liquidity products) according to the user's constraints and Pol signals.

Value Proposition

For retail

participation, passive rewards, portfolio optimization, reputation growth.

For corporates

programmable, auditable AI decision trails; scalable compute marketplace; hybrid custody integration.

For the protocol

a unique consensus driven by useful intelligence rather than pure compute or capital locks.

Use Cases

- Decentralized robo-advisory with on-chain proofs for every trade decision.
- Competitive AI tournaments where agents earn reputation as miners.
- Enterprise-grade audit trails for AI-driven financial decisions.
- Decentralized compute marketplace: edge devices contribute small tasks; datacenters provide bulk compute.

Naming & IP Notes

IntelliJam™

the process / protocol for distributed Pol (recommended as the product/ process mark).

IntelliGem™

the chain engine / on-chain registry producing the VECT.AI chain outcomes (recommended as platform/engine mark).

Use ™ while patents/copyright filings are in progress.

