Intelligence Economy
INSTITUTE

Operability in Tokenized Finance with AI

Where May We Find the Answer to Today's Structural Mismatch?

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Operability is that which has been holding tokenized finance back from realizing its full potential. Part of the answer, as we have been championing at the IEI, is functional scalability through modularity—at the architectural level, modularity holds the key in making financial systems programmable and composable, all while being more efficient, more flexible, and more resilient. However, at the operational level, institutions face yet another challenge.

As the financial system moves from static instruments to programmable instruments and from isolated platforms to composable markets, the amount of technical and financial knowledge required to safely oversee a tokenized workflow quickly expands beyond what a human agent can realistically muster. AI is one hopeful answer if we want to go beyond limited production-level use cases.

However, today's AI agents and real-world financial infrastructure have a fundamental mismatch: Even the best AIs can behave unpredictably unless constrained, but failure is not an option for financial institutions. Even the most mature tokenized financial systems come with fragmented data models, brittle standards, opaque smart contract codes, and ad hoc integrations across DeFi and TradFi, but AI agents work most effectively in a structured environment.

At the Intelligence Economy Institute, we are making research into resolving this mismatch a priority for 2026.

We think that the answer may lie in operationalizing the context, be it protocols, codes, or environments, etc. into structured inputs for AI agents, and in constraining AI agents such that they behave predictably. The key is for such operationalization and constraints to be at all times verifiable, auditable, and interpretable to humans.

How exactly this can work needs in-depth dissection of the tokenized finance context and thorough reimagination of AI modelling. It will be challenging but still tractable. Indeed, we think the recursive application of operationalizations and constraints in like manner can help us achieve the desired results by starting from a core that humans can understand and audit.

When this challenge is eventually resolved, we will have cleared all the hurdles for tokenized finance to scale dramatically. AI agents will be able to design, operate, and oversee complete workflows with precision, timeliness, and efficiency in a way that is fully verifiable, auditable, and interpretable. Crucially, the transition will be frictionless, at least from an operational perspective. We can unlock efficiency without sacrificing accountability and the financial system can be made more resilient in the process.

In Q1 2026, expect an early report on this subject that expands on our thinking with detailed contexts and initial study results. We will be involving financial institutions among our partners and beyond in this effort.

View from the Frontier – The Convergence of AI and Blockchain

GBBC
Global Blockchain
Business Council

While the Intelligence Economy Institute focuses on resolving the "structural mismatch" between AI agents and financial infrastructure through operational constraints, the recent **GBBC panel at Davos** underscored that this convergence is not just theoretical, it is a marriage of necessity.

As the financial system transitions from isolated platforms to composable markets, industry leaders at Davos highlighted three critical pillars where blockchain resolves the "black box" limitations of autonomous agents:

- Agentic Finance is Crypto-Native: The operational friction of legacy banking is incompatible with autonomous agents. An AI cannot navigate human-centric bureaucracy (e.g., calling customer service or verifying physical ID). To scale beyond limited use cases, agents require "computer money"—stablecoins and crypto-native rails—to execute programmable workflows with millisecond latency.

- Hard-Coding Trust into Silicon: To ensure AI behaviors are "predictable" and "constrained", trust is moving from software to hardware. Initiatives like Equity Lab are embedding ledger code directly into Intel and Nvidia chips. This creates an immutable "flight recorder" for every operation, ensuring that even the most complex AI workflows remain fully "verifiable, auditable, and interpretable".

- From "Black Box" to Provenance: In an era where data integrity is paramount, blockchain provides the necessary "blueprint of data." By anchoring data provenance and decision-making logic on-chain, we move from "hope-based" verification to cryptographic certainty, ensuring that the "recursive application of operationalizations" is built on a foundation of unpoisoned truth.

The Verdict: The "mismatch" between AI and finance will be solved by a shift in architecture. As we move toward 2026, the question is not if AI will operate finance, but whether we choose the unverified speed of the "black box" or the resilient integrity of the on-chain record.