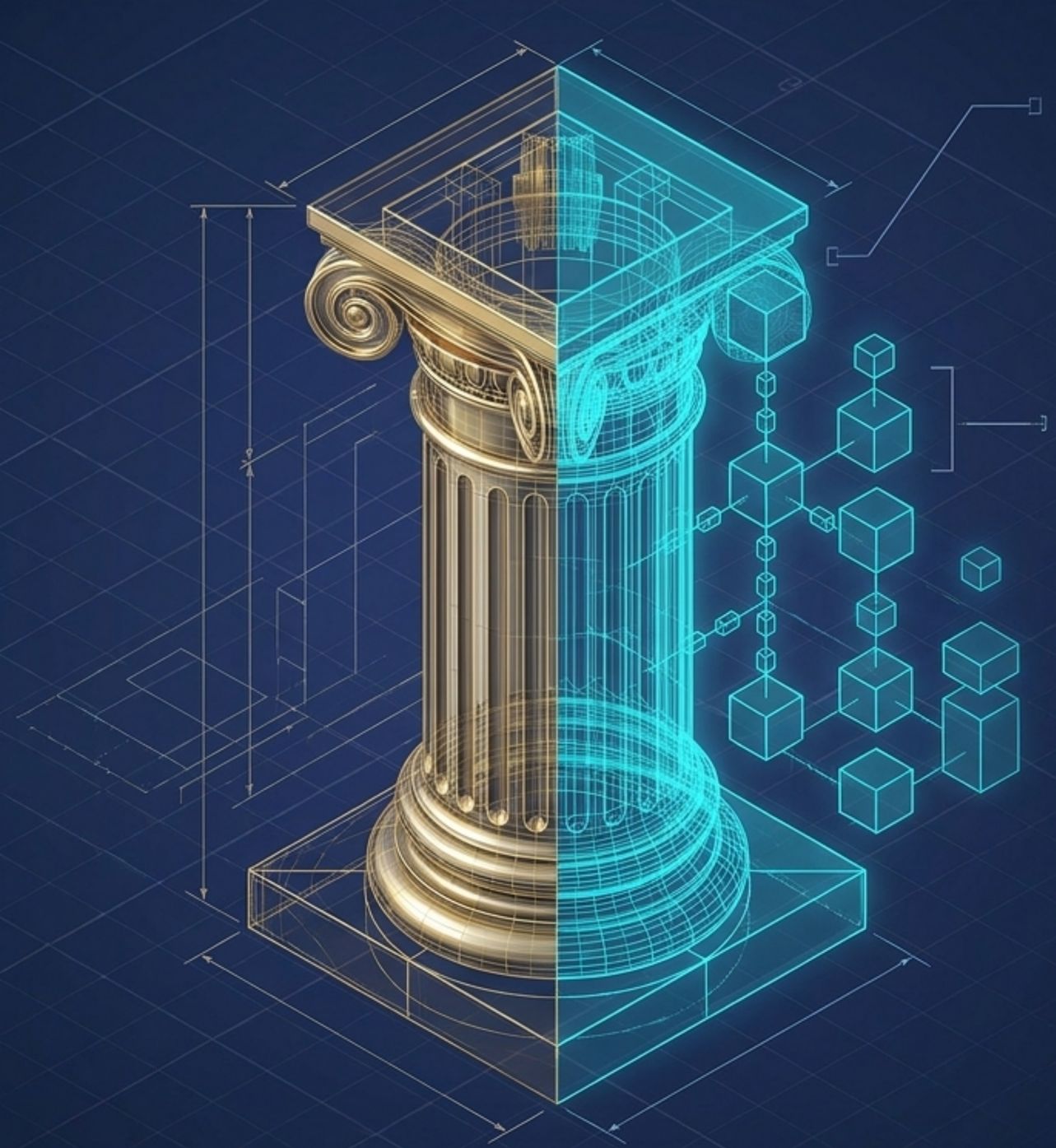


Cross-Border Regulation of the Virtual Economy in Metaverses

Intellectual Property, Digital Assets, and Autonomous Electronic Jurisdiction

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Gemini Notebook

The Jurisdictional Chasm: Territoriality vs. Decentralization

Classical Law

- Lex loci solutionis (place of performance)
- Lex domicilii (domicile)
- Lex rei sitae (location of property)

Reliant on physical nexus



The Systemic Challenge:
Traditional international law cannot ensure tax compliance, protect IP, or govern smart contracts in a borderless environment.

Web3 & Metaverses

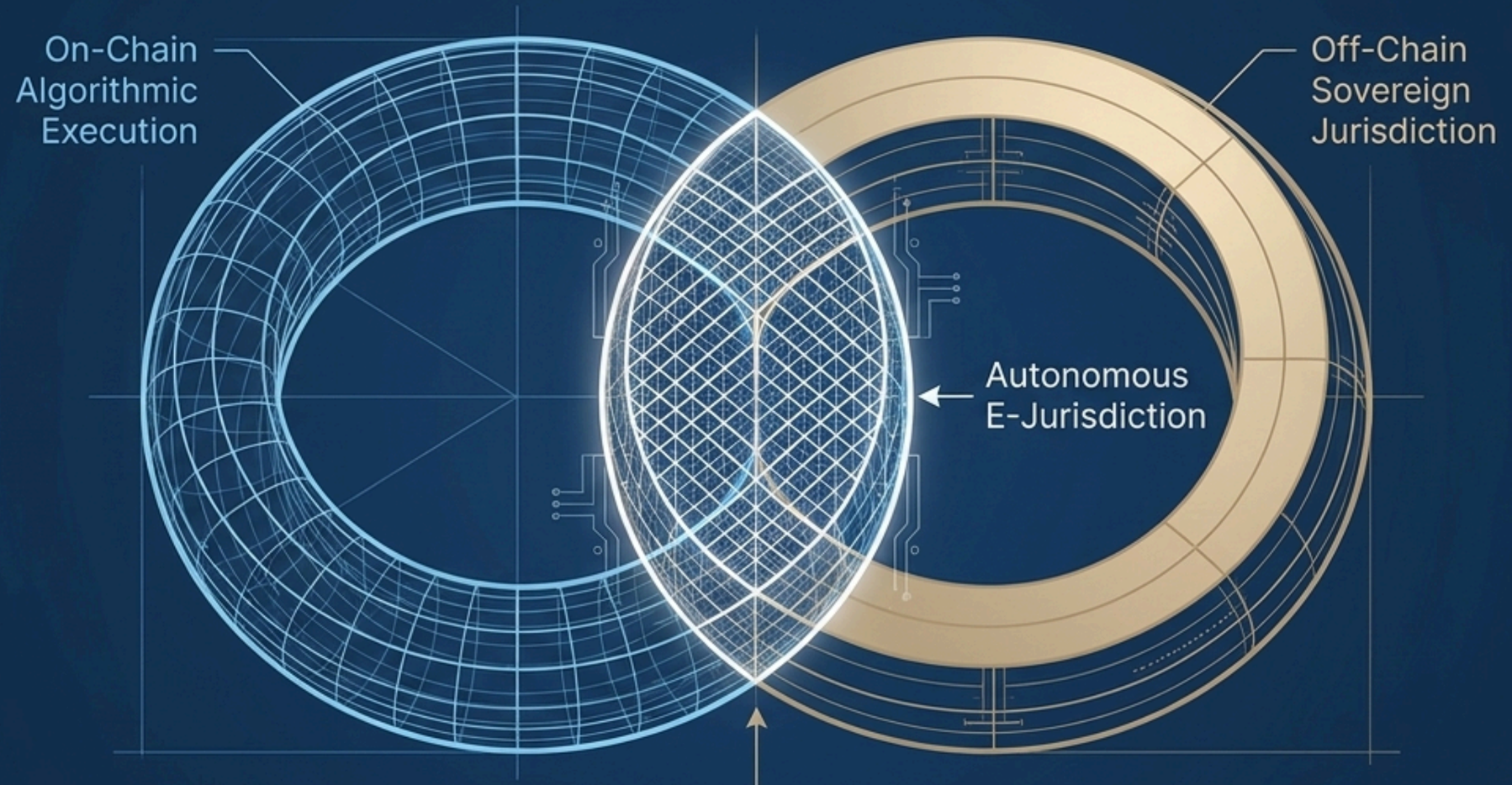
- Real-time cross-border asset commercialization
- Anonymity and pseudonymity of avatars
- Decentralized IPFS data storage



Diagnostic Evaluation of Modern Legal Doctrines

Strict Territorialism	Cyber-Anarchism	Lex Cryptographia
Asserts transactions fall under the jurisdiction of the server location or individual residence.	Asserts the decentralized environment is entirely self-regulating via ‘Code is Law’.	Recognizes blockchain specificity but actively seeks points of intersection with the public policy (ordre public) of sovereign states.
Failure Point: Decentralization of IPFS nodes makes determining a single lex loci practically impossible.	**Failure Point:** Total lack of integration with state enforcement mechanisms.	**Validation:** Provides the viable foundation for cross-border harmonization.

The Paradigm Shift: Autonomous E-Jurisdiction



Does NOT reject state sovereignty.

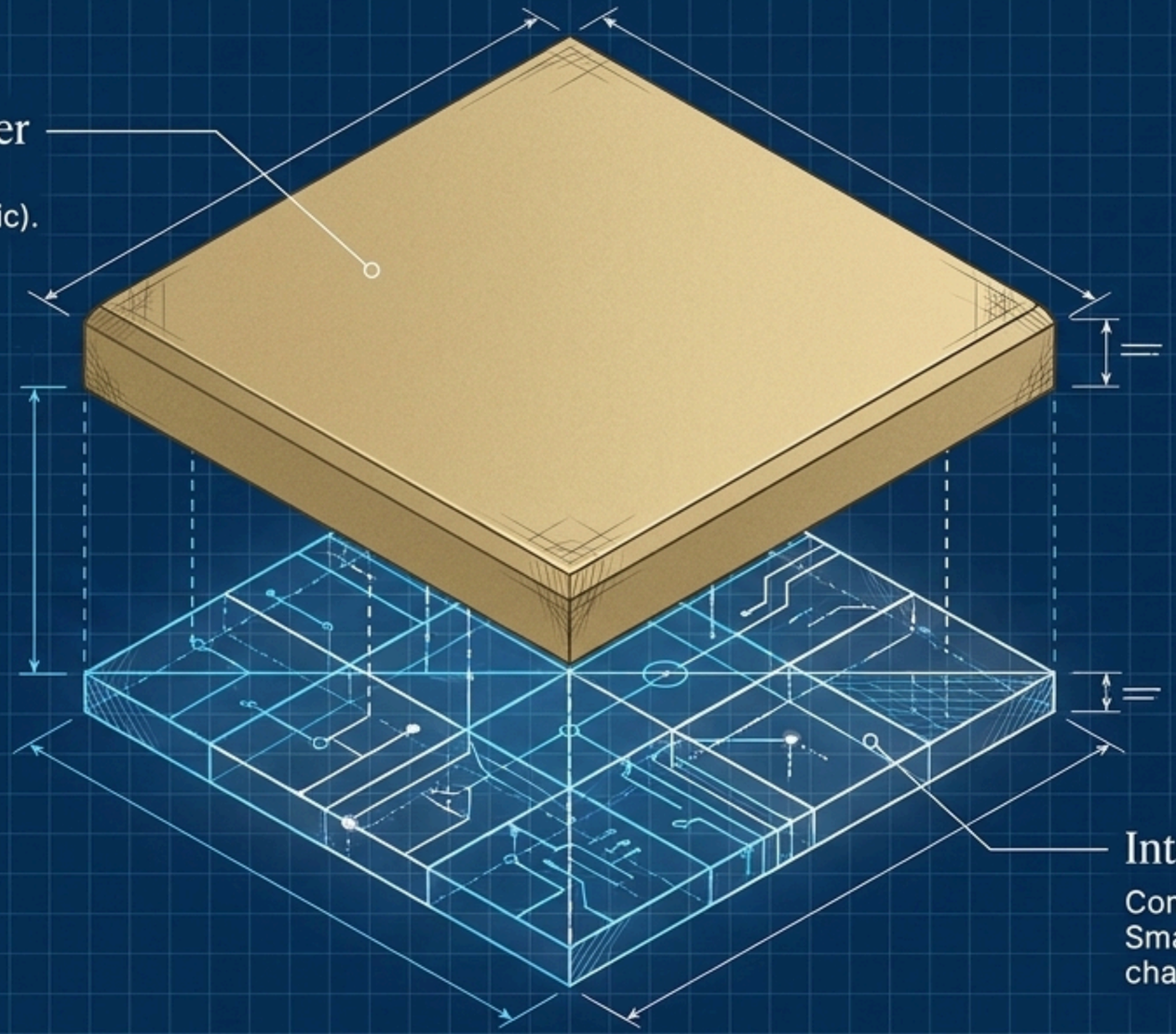
Does NOT artificially impose classical territorial law.

Integrates blockchain evidence into civil proceedings.

The Two-Tier Architecture of E-Jurisdiction

External Sovereign Tier

Comprising National Courts and Public Policy (ordre public). Operates off-chain with traditional compulsory enforcement powers.



Internal Regulatory Tier

Comprising Digital Code and Smart Arbiters. Operates on-chain for real-time, automated decentralized execution.

The Legal Bridge: Cryptographic Identity Resolution



Mechanism:

Integration of Soulbound Tokens (SBTs) and KYC-Tokens.

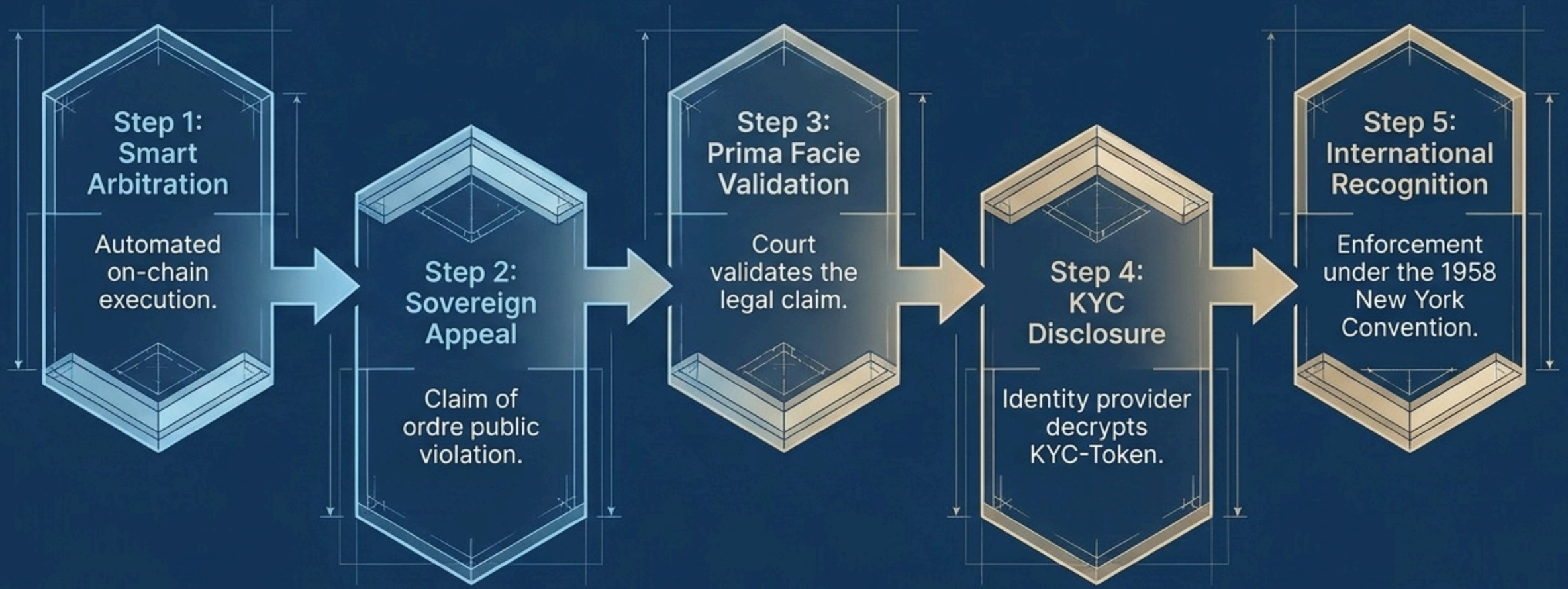
Function:

Links an avatar to the civil legal capacity of a natural or legal person.

Privacy Standard:

Personal data remains strictly encrypted on public blockchains; disclosure to external sovereign tiers occurs only upon the commencement of formal legal proceedings.

Mechanism of Interaction: Dispute Resolution Lifecycle



The Limits of Algorithmic Supremacy

Key Distinction:

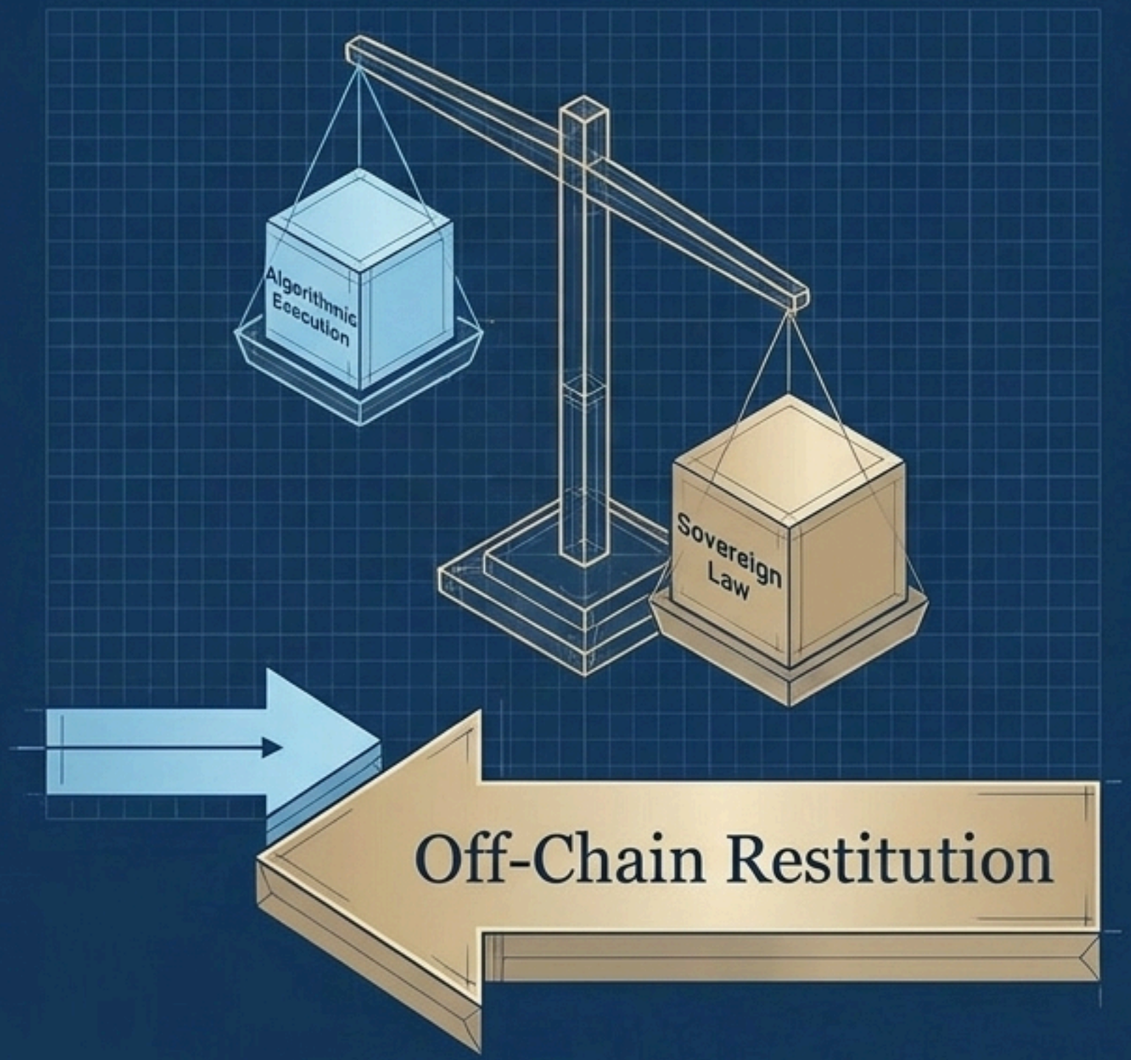
Algorithmic execution of a smart contract is not a court judgment. It guarantees no compulsory enforcement.

The Restitution Mandate:

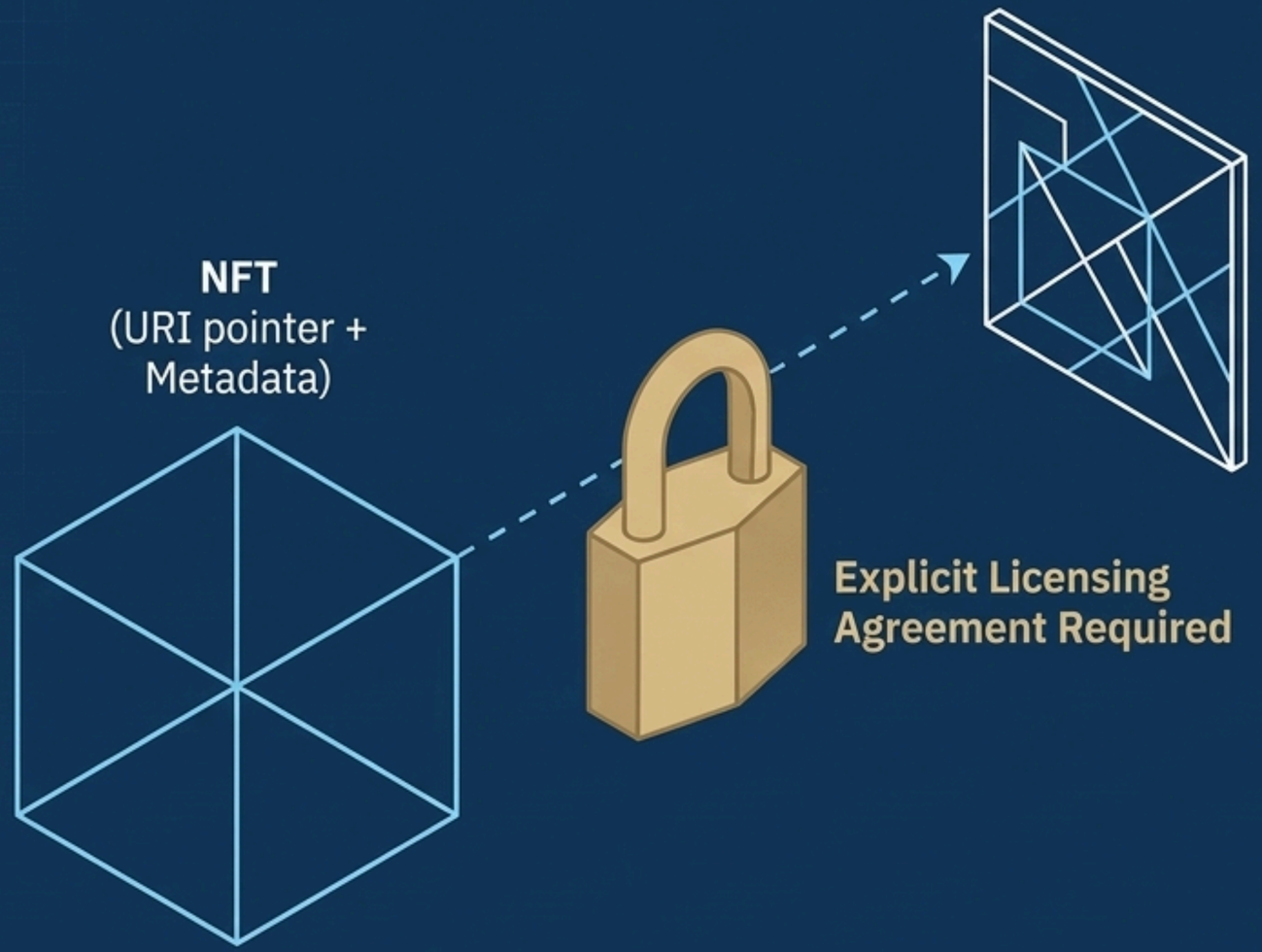
If on-chain execution violates public policy, a competent national court retains the absolute right to order restitution or recover unjust enrichment.

Outcome:

Sovereign courts can legally reverse the outcome of a blockchain transaction off-chain.



Intellectual Property in Web3: The Legal Reality of NFTs



The Illusion:

Buying an NFT automatically buys the underlying Intellectual Property.

The Legal Reality:

Non-fungible tokens are merely unique pointers on a blockchain. Intellectual property rights to the underlying asset transfer to the buyer only if a clear, traditional licensing agreement is explicitly attached.

US Case Law Diagnostics: Trademarks in the Metaverse

Hermès Int'l v. Mason Rothschild (2023)

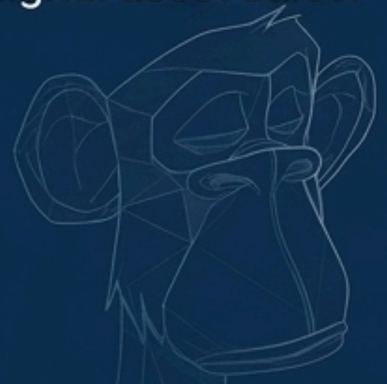
Context: Use of the 'Birkin' mark for the 'MetaBirkins' NFT collection.



Ruling: The court found trademark infringement, ruling that the virtual goods diluted the brand's value in the metaverse.

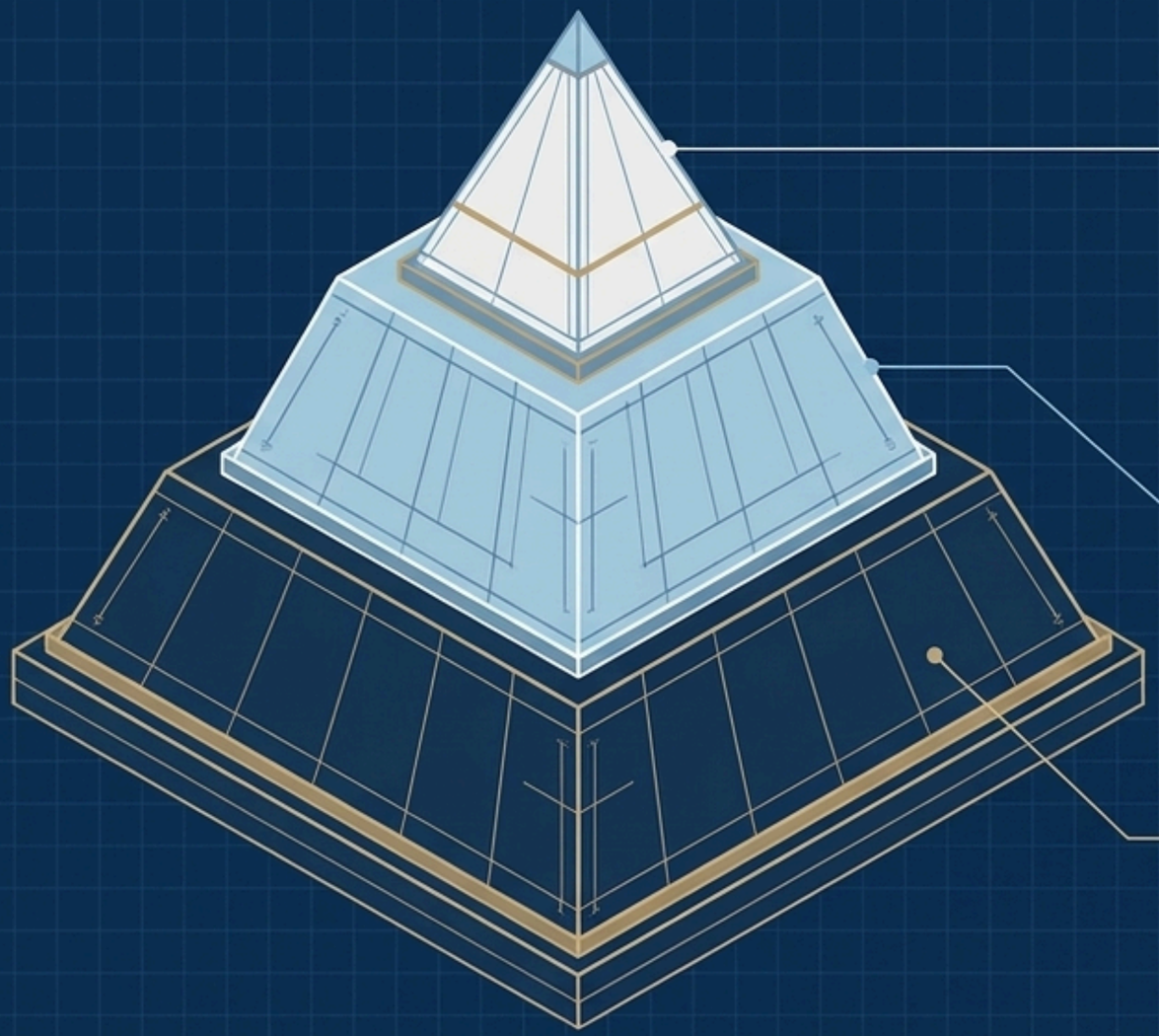
Yuga Labs, Inc. v. Ryder Ripps (2023)

Context: Unauthorized use of Bored Ape trademarks in digital asset sales.



Ruling: NFTs officially classified as 'goods' under the Lanham Act. Trademarks used in connection with NFTs receive full statutory protection against unfair competition.

The Global Regulatory Stack (2024–2027)



Peak: OECD CARF (2027)

The global standard for the automatic exchange of tax information regarding crypto-assets with investment potential.

Middle: EU DAC8 + TFR (Travel Rule)

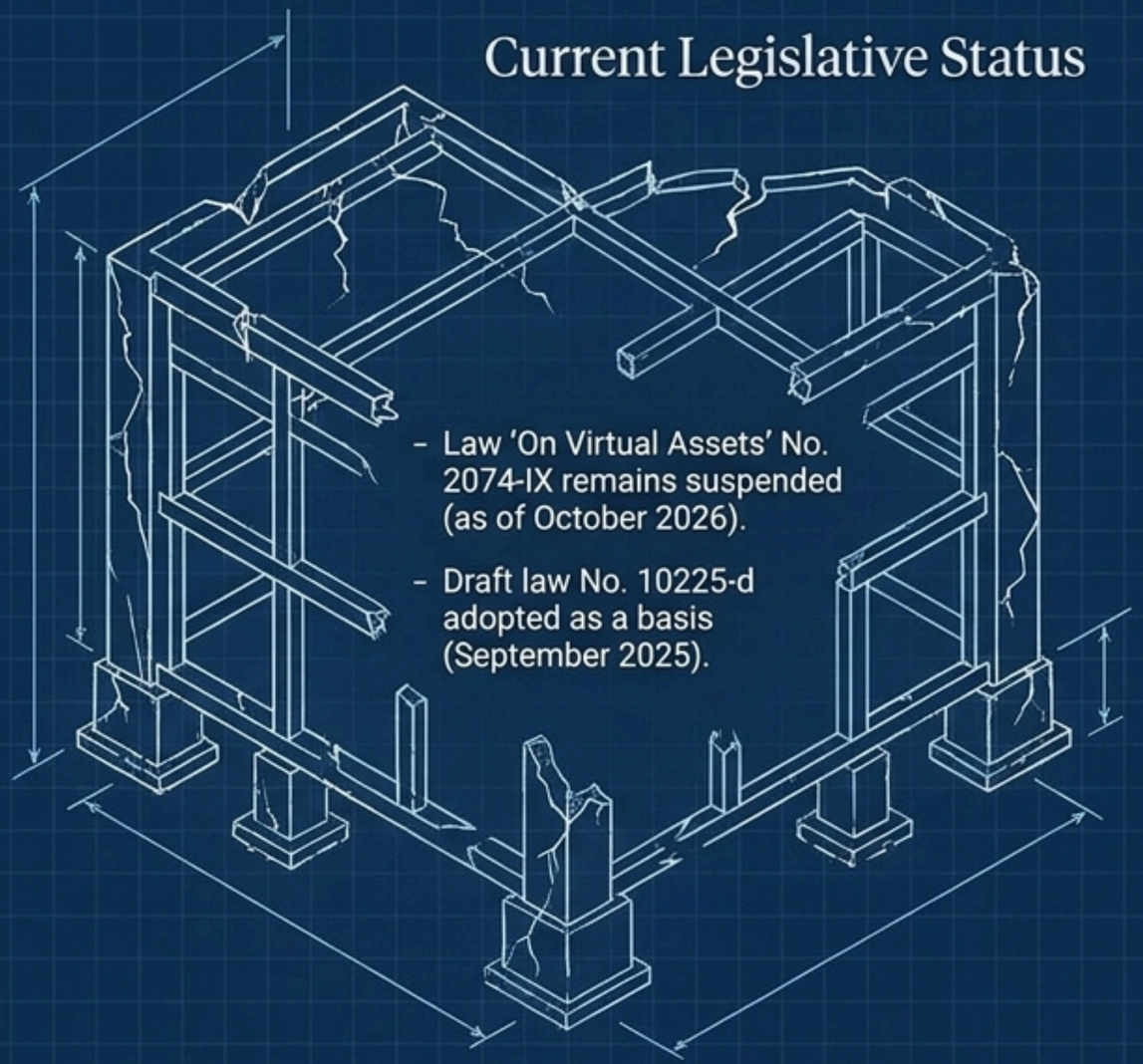
Incorporates transparency into mandatory legislation. Applies the "Travel Rule" to crypto-transactions with absolutely no minimum thresholds.

Base: EU MiCA Regulation

Establishes foundational asset classification and VASP/CASP licensing regimes.

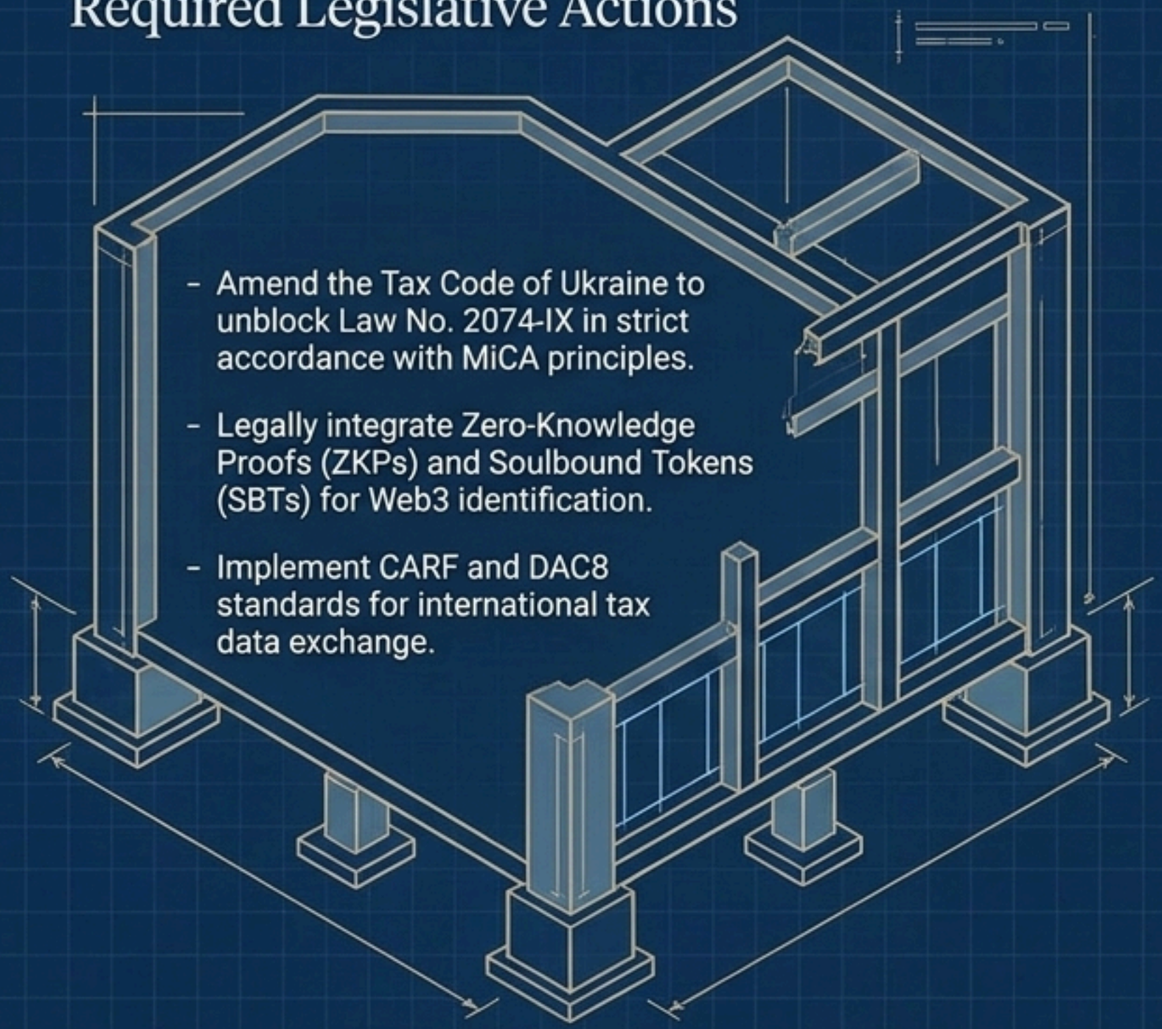
Implementation in Ukraine: The Harmonization Roadmap

Current Legislative Status



- Law ‘On Virtual Assets’ No. 2074-IX remains suspended (as of October 2026).
- Draft law No. 10225-d adopted as a basis (September 2025).

Required Legislative Actions



- Amend the Tax Code of Ukraine to unblock Law No. 2074-IX in strict accordance with MiCA principles.
- Legally integrate Zero-Knowledge Proofs (ZKPs) and Soulbound Tokens (SBTs) for Web3 identification.
- Implement CARF and DAC8 standards for international tax data exchange.

Synthesis: MiCA as the Foundational Keystone



The Core Insight:

Advanced data exchange mechanisms (CARF/DAC8) cannot operate effectively without a primary legal foundation. Harmonizing basic tax legislation with MiCA standards is the absolute primary prerequisite for the Ukrainian virtual assets market to integrate into the global digital economy.



Thank you for your attention.