Amanita Protocol — Contract Architecture & Economic Design Overview

✦ Introduction

The Amanita Protocol introduces a socially regenerative peer-to-peer commerce network based on circular economic flows. It empowers sellers (nodes) to build local economic micro-clusters through invitations, reputation capital, and programmable social tokens. The architecture builds on Ethereum-compatible smart contracts and decentralized governance principles.

✦ Vision

Amanita enables **post-capitalist coordination** by turning social trust into economic value. Sellers build their own marketplaces and invite early adopters. These audiences can issue reputation via “LoveDo” posts. Superlikes received on these posts translate into dual-token emissions: utility (for liquidity and rewards) and governance (for influence).

✦ Smart Contract Modules

1. InviteNFT.sol

Purpose: Decentralized social onboarding
Key Features:

- ERC-721 invite tokens
- Trackable invitation graph (inviter/invitee)
- Controlled distribution through role-based minting

Role in Ecosystem: Enables reputation provenance and controls network growth through traceable social trees.

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2. LoveDoPostNFT.sol

Purpose: Social feedback and trust generation
Key Features:

- NFT-based public testimonials authored by users about sellers
- Each seller can be mentioned up to 8 times
- Sellers receive superlikes on these posts from their direct audience
- Anti-spam protections via monthly post limits and superlike quotas

Core Event Flow:

- A user posts a LoveDo about a seller
- Any peer within the seller's invited audience can give a superlike
- Each superlike triggers token emissions (via external engine)

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3. LoveEmissionEngine.sol

Purpose: Token emission engine triggered by superlikes
Core Logic:

- For each valid superlike:
    - Emits utility token ($AMANITA) into the seller's pending balance
    - Tracks count of valid LoveDo posts received
    - Once 8 LoveDo posts received → seller can claim $AGOV (governance token)

Security Principles:

- Reputation (AGOV) only claimable if seller is socially embedded
- Utility ($AMANITA) is withdrawable anytime (but accumulates to save gas)

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4. AmanitaToken.sol

Purpose: Utility token ($AMANITA)
Behavior:

- ERC20-compliant
- Mintable by emission engine
- Withdrawable by sellers
- Acts as social liquidity for commerce or barter inside ecosystem

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5. AmanitaGovToken.sol

Purpose: Governance token ($AGOV)
Behavior:

- Non-transferable ERC20Votes token
- Minted only after 8 verified LoveDo posts
- Cannot be sold or delegated → enforces authentic governance

Design Insight: Prevents plutocracy or speculative governance manipulation.

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6. AmanitaRegistry.sol

Purpose: Role management & permissions
Roles Managed:

- SELLER
- ADMIN
- MODULE (for privileged contracts)

Use Cases:

- Authorizing access to product registries

- Controlling superlike access (via seller verification)
- Enabling controlled extension updates

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7. ProductRegistry.sol

Purpose: Marketplace catalog linked to sellers
Features:

- Listings stored on-chain or via IPFS hash
- Each seller maintains their own product set
- Product ownership enforces per-seller sandbox

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8. Orders.sol

Purpose: Order creation, matching, fulfillment
Features:

- ERC20-based payments
- Emits order lifecycle events
- Connects buyer and seller via product ID and amount
- Hooks into `AmanitaRegistry` for permissioned operations

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9. AmanitaPaymentRouter.sol

Purpose: Abstract payment routing & fees
Responsibilities:

- Token-based payments
- Future compatibility with revenue sharing, loyalty schemes, treasury routing

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✦ Economic Model

Interaction	Emission Type	Receiver	Token
Superlike on LoveDo	Utility Emission	Seller	$AMANITA
8 LoveDos received	Governance Emission	Seller	$AGOV (non-transferable)

✦ Governance Model

- **$AGOV holders** are the legitimate voice of the ecosystem
- Power is social, not speculative
- Sellers must earn $AGOV through social proof, not capital
- On-chain governance proposals can update caps, eligibility, or modules

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✦ Anti-Abuse & Security

- Role-based access across all sensitive functions
- Front-running protection via monthly usage caps and optional EIP-712 extensions
- Double-like prevention and self-like restriction
- Seller verification through registry before interaction

✦ Visible Roadmap

The Amanita Protocol is designed for progressive decentralization and increasing social contextualization of coordination. The roadmap is not driven by speculative metrics, but by qualitative network coherence and community agency.

1. Reputation-Governed Seller Onboarding

Implement a decentralized and socially-verifiable process for accepting new sellers into the ecosystem. Reputation mechanisms, rather than unilateral authority, will determine inclusion. Catalog curation will be collectively managed by the seller community, ensuring alignment with values and norms. This feature establishes Amanita as a *trust network*, not a shadow market — fundamentally differentiating it from darknet-style P2P commerce.

2. Weighted Superlikes Based on Reputational Strength

Introduce a model where each superlike carries weight according to the social credibility of the sender. This enables trusted participants to have higher influence on token emissions and reputational signaling, reinforcing a quality-over-quantity dynamic. This makes the system resilient to bot abuse or low-signal activity.

3. Inter-Business Loyalty & Mutual Tokenization

Develop loyalty systems for intra-ecosystem collaboration: e.g., tokenized punch cards for coffee shops or barter-compatible credits. Sellers will be able to issue branded utility tokens representing loyalty or access, and mutually recognize or exchange them through smart contract-driven partnership agreements. This evolves Amanita into a programmable mutual aid economy.

4. Mobile-Native Seller DApp Toolkit

Build open-source mobile-first storefront templates (progressive web apps or Telegram bots). Sellers can easily rebrand and launch their own Amanita-powered commerce frontends. The design will prioritize UX simplicity, identity-linked wallets, and integrated token flows. The project encourages a fork-and-flourish model rather than walled-garden SaaS.

5. Node Deployment Simplification & Technical Agency Partnerships

Simplify the technical complexity of node deployment through:

- turnkey deployment packages (smart contract + frontend)
- one-click infrastructure kits
- partnerships with local tech agencies who can deploy and maintain nodes as service providers for local businesses

Eventually, this bootstrapping process will be encoded into on-chain governance flows, enabling community-led provisioning of the entire stack.

✦ Conclusion

Amanita is a programmable trust economy — each token is minted through a verified human relationship. This makes it not just decentralized, but also **culturally resilient**. It invites a new economic era where coordination, gratitude, and integrity become measurable assets.