FSL Engagement Tracking Methodology Framework

Public Research Methodology — No PII or Activity Data

Last Updated: May 5, 2026

This document describes the engagement tracking methodology for FSL's decentralized infrastructure ecosystem. It contains the analytical framework and research design only — no user activity data, wallet addresses, or transaction hashes.

Thematic Tagging Framework

Each content post across FSL's 5-platform distribution network (Discord, Telegram, Bluesky, Mastodon, Dev.to) is tagged with present themes for attribution analysis:

Tag	Definition
WOUND	References personal pain, trauma, hardship
MEDICINE	References healing, what someone carries that helps others
SOVEREIGNTY	References autonomy, ownership, power
IDENTITY	References self, who one is
INVITATION	Direct ask to act
QUESTION	Interrogative format
STATEMENT	Declarative format
LONG-FORM	Multi-sentence content
SHORT-FORM	Single sentence content

Tags are not mutually exclusive. A single post may carry multiple tags (e.g., WOUND + MEDICINE + SOVEREIGNTY + QUESTION + LONG-FORM).

Research Hypotheses (To Test — Not Validated Findings)

These are predictions to validate as engagement data accumulates. They are stated as testable hypotheses, not conclusions:

1. **H1:** Question format outperforms statement format for response rate
2. **H2:** Wound + Medicine + Sovereignty triad outperforms single-theme posts for engagement
3. **H3:** Long-form content with callback structure outperforms short-form for conversion (wallet

acquisition)

4. **H4:** Personal-narrative framing outperforms abstract-concept framing for user action

Status: No data collected yet. Hypotheses derived from initial content design observations and behavioral health communication literature.

Future Predictive Analytics Direction

As data accumulates, the following analytical approaches become feasible:

Regression

- Predict engagement rate (replies + shares) from thematic tag combination
- Independent variables: tag presence (binary), platform, day of week, post length
- Dependent variable: engagement rate (normalized per platform)

Classification

- Classify posts as HIGH / LOW conversion potential before publishing
- Train on historical tag-to-conversion mappings
- Use for content engine prompt optimization

Clustering

- Identify natural groupings of high-performing content
- Unsupervised analysis of tag co-occurrence patterns
- Surface thematic combinations not hypothesized a priori

Time Series

- Track sovereignty-framing resonance over time
- Detect content fatigue or theme saturation
- Inform rotation strategy for content engine

Privacy-by-Design Constraints

FSL's architecture is wallet-gated and pseudonymous. The following are structurally NOT trackable without explicit user opt-in:

- Real identity behind a wallet address

- Email or contact information
- Direct marketing channel to wallet holders
- Demographic data
- Geographic location
- Device or browser fingerprinting

This is a feature, not a limitation. The sovereignty promise depends on it. Any future research must work within these constraints.

Implications for Research Design

- All engagement metrics are aggregate or wallet-indexed (pseudonymous)
- No individual-level demographic analysis without opt-in
- Research publications must use de-identified, aggregate data only
- IRB protocol required before any formal data collection begins

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Future Algorithm (Post-Admission Research Direction)

Once external user data accumulates, a dynamic content attribution model can:

1. **Tag** each post with thematic markers at publish time
2. **Correlate** marker presence with response rate and conversion rate
3. **Surface** which combinations consistently outperform
4. **Inform** content engine prompts dynamically (closed-loop optimization)

This creates a publishable research pipeline: "Behavioral Health User Acquisition Through Sovereignty Framing on Decentralized Platforms."

Academic Collaboration Targets

- Dr. Dragan Boscovic (ASU) — blockchain analytics, tokenomics engagement modeling
- Dr. Hassan Ghasemzadeh (ASU) — behavioral health digital intervention effectiveness

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FSL Contract Address Reference

All contracts deployed on Ethereum Sepolia testnet. Verifiable on Sepolia Blockscout.

Contract	Address	Purpose
AlchemistForge	0x5e1757441D7d4a29788e6A59	Shadow work transmutation

Contract	Address	Purpose
	892d9F159DAB3c3B	attestation
HypnoNeuro Token (HNT)	0x1ae1e10929f008d1f9883ce574a318abd86084e2	Earned engagement token
EHTv2	0x93583a7A24e50075c79b06db0be8Cf4D45B0bd88	Capped supply token (144K max)
SovereignLedger v2	0x4afA577fA914068451e0Aa97b61F23960f02aCc4	Consent governance
BenevolenceFund v2	0x96E8006a1fBB693B55fFf6254B8BF19EC605251B	Session fee redistribution (50/30/20)
SovereignAchievement	0xC3F11d2F1F12bB96b9DCF7e8f85e9704D2869B8D	ERC-1155 soulbound tier credentials
HypnoNeuroNFT	0xCb9EcB00574DB29976c7C54045d443666D5C7771	NFT credentialing

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Engagement Metrics Architecture

Engagement is measured at two layers:

On-Chain (Verifiable)

- Total transmutations (AlchemistForge `alchemize()` call count)
- Unique sovereign wallets (distinct addresses interacting with FSL contracts)
- Credential tier distribution (SovereignAchievement token holdings)
- HNT distribution (earned token allocation)

Off-Chain (Platform-Reported)

- Content replies per platform
- Content shares per platform
- Click-through rate to alchemistforge.io
- Discord/Telegram member count

On-chain metrics are the source of truth. Off-chain metrics supplement but do not override.