The Onchain Analyst: Decoding the Transparent Economy

Folder Structure: Article Series Drafts

This folder outlines the draft sequence for the full onchain data analyst article series. Each article builds on the previous, progressing from high-level concepts to technical mastery. Articles are grouped thematically for clarity.

0. Executive Summary / Vision

 0. The Blockchain Is Watching: Why Onchain Data Is the Best Kept Secret in Tech (EXECUTIVE OVERVIEW)

1. Introduction to the Role

- 1. What Does an Onchain Data Analyst Do?
- 2. The Onchain Stack: SQL, Spellbook, and Decoding UTXOs

2. Tools & Foundations

- 3. The Dune Platform: A Gateway to Onchain Transparency
- 4. Understanding Tables: Ethereum, Bitcoin, ERC4337, NFTs, DeFi, and More
- 5. SQL Basics for Blockchain Analytics
- 6. Useful Queries: From Token Transfers to Whale Watching

3. Real-World Use Cases

- 7. NFT Analysis: Wash Trading, Mint Trends, and Market Health
- 8. Lending Protocols: Risk, Liquidations, and User Behavior
- 9. DeFi Analysis: Liquidity, Incentives, and TVL Dynamics
- 10. MEV on Uniswap: Understanding and Quantifying Extracted Value
- 11. Uniswap Multichain Analytics: Comparing Deployments Across Chains
- 12. Useful Metrics Every Analyst Should Track
- 13. BTC Coin Days Destroyed: What HODLers Tell Us About the Market

4. Advanced Infrastructure

- 14. DuneSQL: Modular Analytics at Scale
- 15. Building with Spellbook: How to Contribute Reusable Models to the Community
- 16. How to Build an Onchain App Using the Dune API

5. Account Abstraction (ERC-4337 Focus)

- 17. Account Abstraction: Why It Matters for Wallet UX and Analysts
- 18. Analyzing Account Abstraction: Bundlers, Paymasters, and Wallet Factories
- 19. ERC-4337 Aggregated Tables Across EVM Chains: Unified Analytics at Scale

6. Closing Vision

■ 20. Why the Future Belongs to Onchain Analysts

This structure ensures thematic flow, logical progression, and coverage of every topic you've gathered. Drafts will be developed in this order (excluding Polygon-specific blockchain analysis per your note).

00. The Blockchain Is Watching: Why Onchain Data Is the Best Kept Secret in Tech

"What if the most transparent data system in the world was hiding in plain sight?"

Blockchains were invented to move value—but their real revolution lies in what they make visible. Every transaction, every wallet interaction, every contract call—recorded immutably, forever, on a public ledger. For anyone who's ever struggled to get data out of an opaque API or waited days for a centralized platform to export analytics, this is a paradigm shift hiding in plain sight.

We're not talking about a financial tool anymore. We're talking about the largest open data layer humanity has ever seen—updated in real time, accessible by anyone, owned by no one.

The Transparent Economy

In the Web2 world, analysts are often boxed in by platforms. Want user data from TikTok? Good luck. Want merchant behavior data from Shopify? That's gated. APIs are rate-limited, access is monetized, and proprietary data is fiercely protected.

In Web3, everything is inverted.

On Ethereum, you can query every single interaction with Uniswap. You can see how much liquidity someone added, when they withdrew, how much they earned. You can reconstruct the NFT boom, trace wallet behaviors across chains, detect rug pulls in real time, and monitor DAO treasuries with surgical precision.

And you don't need permission.

You just need the skill to read the chain.

The Rise of the Onchain Analyst

This is the job of the onchain analyst: to decode the transparent economy.

Just as Web2 birthed a generation of growth hackers, data engineers, and business intelligence teams—Web3 is giving rise to a new role. Equal parts data scientist, protocol archaeologist, and community informant. Onchain analysts don't just study metrics—they track behavior, detect patterns, and tell stories with data that anyone can verify.

And unlike most industries, onchain data has no gatekeepers.

If you can write SQL, understand wallet behavior, and know how protocols work—you can contribute to some of the most important conversations in crypto. You can expose risk. You can quantify adoption. You can track how real people interact with decentralized systems in ways that shape billion-dollar outcomes.

Hidden in Plain Sight

The irony is that most of this goes unnoticed.

While the public worries about "crypto scams" and token prices, analysts who understand the raw onchain data are quietly surfacing some of the most actionable insights in tech.

From identifying MEV (miner extractable value) to tracing stablecoin liquidity flows during a banking crisis, from detecting wash trading on NFT marketplaces to flagging vulnerabilities in lending protocols—onchain analysts have become the decentralized world's most powerful sensemakers.

But we're still early.

Many DAOs, funds, and protocols are just waking up to the power of structured analytics. Tools like Dune, Flipside, Nansen, and Tenderly are making onchain data more usable—but there's still a massive skills gap.

This series is your guide to closing that gap.

Why This Series?

This isn't just a technical tutorial. It's a manifesto.

We believe onchain analytics is the next frontier of open data science. The analysts who master it will play pivotal roles in the evolution of DeFi, DAOs, token governance, NFT economies, cross-chain infrastructure, and more.

Throughout this series, we'll explore:

- How to use Dune to build dashboards from raw blockchain data
- What the daily life of an onchain analyst looks like
- How to analyze NFTs, DeFi, MEV, lending, and more
- How to write effective SQL for blockchains
- Why tools like Spellbook and Dune API are game-changers
- How Account Abstraction introduces new analyst primitives

Whether you're a data analyst entering crypto or a crypto native learning data, this series is for you.

This is your invitation to join the forefront of decentralized intelligence.

Let's begin.