glassnode
Quantamental Trading

FOUNTAINHEAD DIGITAL

Fountainhead Digital is a digital asset investment firm focused on generating alpha through fundamental research, systematic strategies, and on-chain analytics. The firm develops proprietary, active investment strategies deployed in its own fund and offered as customizable solutions for institutional investors. By incorporating on-chain activity and derivatives market data, these strategies offer return drivers that go beyond conventional price-based signals. Through this approach, Fountainhead provides structured, risk-optimized exposure to digital assets, designed to manage volatility, limit drawdowns, and capture long-term growth in the crypto market.

The Challenge

Unlike traditional assets, the digital asset ecosystem is characterized by greater market inefficiencies and an abundance of granular, real-time data that provides transparent insights into network behaviour, supply distributions and investor cost basis.

Fountainhead Digital set out to build systematic investment strategies that extract alpha from on-chain and derivatives data, sources unique to the crypto asset class. While this data offers an edge over price-based signals, incorporating it effectively into quantitative research presented several structural and technical challenges:

1. Lack of high-quality, standardized data

The crypto ecosystem is fragmented, with major inconsistencies in how metrics are defined, calculated, and aggregated across different providers. This made it difficult to source reliable inputs for systematic strategies. Fountainhead needed access to clean, well-documented, and consistently structured data to support signal discovery and production-grade model design.

2. Insufficient tooling for non-price related datasets

On-chain and derivatives datasets often lack intuitive interfaces and visual workflows. This meant early-stage research required extensive custom engineering, typically involving Python-based workflows that were time-intensive and difficult to scale. Fountainhead needed more agile tools to facilitate faster hypothesis generation and signal evaluation using non-price data.

3. Maintaining model robustness in evolving market conditions

Crypto markets are dynamic, with participant behavior, liquidity conditions, and asset mechanics constantly shifting. Indicators that are effective in one regime can quickly lose signal quality in another. Fountainhead faced the challenge of not only validating new signals, but also ensuring existing models remained relevant over time. This required a systematic approach to monitoring market structure changes, evaluating signal durability, and mitigating alpha decay.

Solution

To overcome these challenges, Fountainhead Digital integrated Glassnode on-chain and derivatives datasets directly into their research pipeline to support the development of proprietary quantitative strategies. Glassnode Workbench serves as a critical tool for early-stage hypothesis generation, enabling rapid exploration of potential signals and relationships prior to formal testing. Additionally, Fountainhead leverages Glassnode Dashboards for efficient visualization of strategy components and for monitoring structural market shifts, supporting ongoing model validation and refinement.

1. On-chain sentiment metrics

The team integrated Glassnode's on-chain metrics into a core market exposure strategy: _OnChain Pulse_. This strategy leverages key indicators such as Market Value to Realized Value Ratio and Spent Output Profit Ratio, applied specifically to short-term holder cohorts, to extract insights from the market's most reactive segments. Since inception, _OnChain Pulse_ has delivered consistent risk-adjusted out-performance relative to benchmark assets.

2. Derivative metrics

Fountainhead Digital integrated Glassnode's derivatives data into a key market exposure signal: _Guardian Core_. This strategy captures short-term sentiment shifts driven by institutional activity in crypto derivatives markets. Built on empirically validated data with demonstrated predictive power, _Guardian Core_ has consistently delivered risk-adjusted outperformance relative to benchmark assets since inception.

3. User-friendly tools and research acceleration

Glassnode's Workbench environment enabled the team to explore early-stage hypotheses quickly and visually, reducing reliance on slow, custom-coded pipelines. With built-in indicators, flexible transformations, and intuitive interfaces, Fountainhead was able to shorten the research cycle and more efficiently validate emerging relationships. Dashboards were also used to monitor evolving market structure, ensuring continued model relevance and supporting communication of insights across the firm.

4. Market structure tracking

Glassnode's data and dashboards are crucial to monitoring structural shifts in the crypto market that may affect model reliability, such as changes in transaction composition, ETF flows, trading volume distribution across venues, and investor composition. For example, spikes in Ordinals or Runes activity can inflate Bitcoin on-chain metrics like transaction counts, fees, and active addresses, reducing their effectiveness as adoption signals. By continuously tracking these dynamics through both internally-built and Glassnode-native dashboards, Fountainhead Digital proactively identify signal degradation and adjust model assumptions to maintain strategy robustness and mitigate alpha decay.

Results

By integrating Glassnode's on-chain and derivatives data into its investment process, Fountainhead Digital has developed systematic long-only strategies that consistently deliver superior risk-adjusted returns.

This data-driven approach has played a pivotal role in attracting institutional investors who are seeking regulated and compliant digital asset exposure, as it directly addresses their concerns regarding volatility and risk management.

Key outcomes

- Enabled improvements in risk-adjusted returns relative to benchmarks for long-only strategies.
- Identified and captured unique return drivers beyond traditional price signals, broadening and diversifying the sources of alpha
- Accelerated research innovation and more efficient strategy development, driven by Glassnode's intuitive tools that facilitate rapid exploration and validation of on-chain signals
- Continuous monitoring of market dynamics enabled, ensuring ongoing model relevance and robustness
- Boosted investor confidence as reduced portfolio volatility addresses institutional concerns around digital asset drawdowns, supporting demand for regulated, risk-managed investment solutions.

"Glassnode's products have been instrumental to our active portfolio management, both during the development phase and in live production. Leveraging their data intelligence, we were able to maintain a defensively positioned portfolio with approximately 20% market exposure during the February and March 2025 corrections. The Glassnode team has consistently delivered outstanding support, characterized by high availability, responsiveness, and deep domain expertise."

— **Anton Werner,** Partner & Co-founder