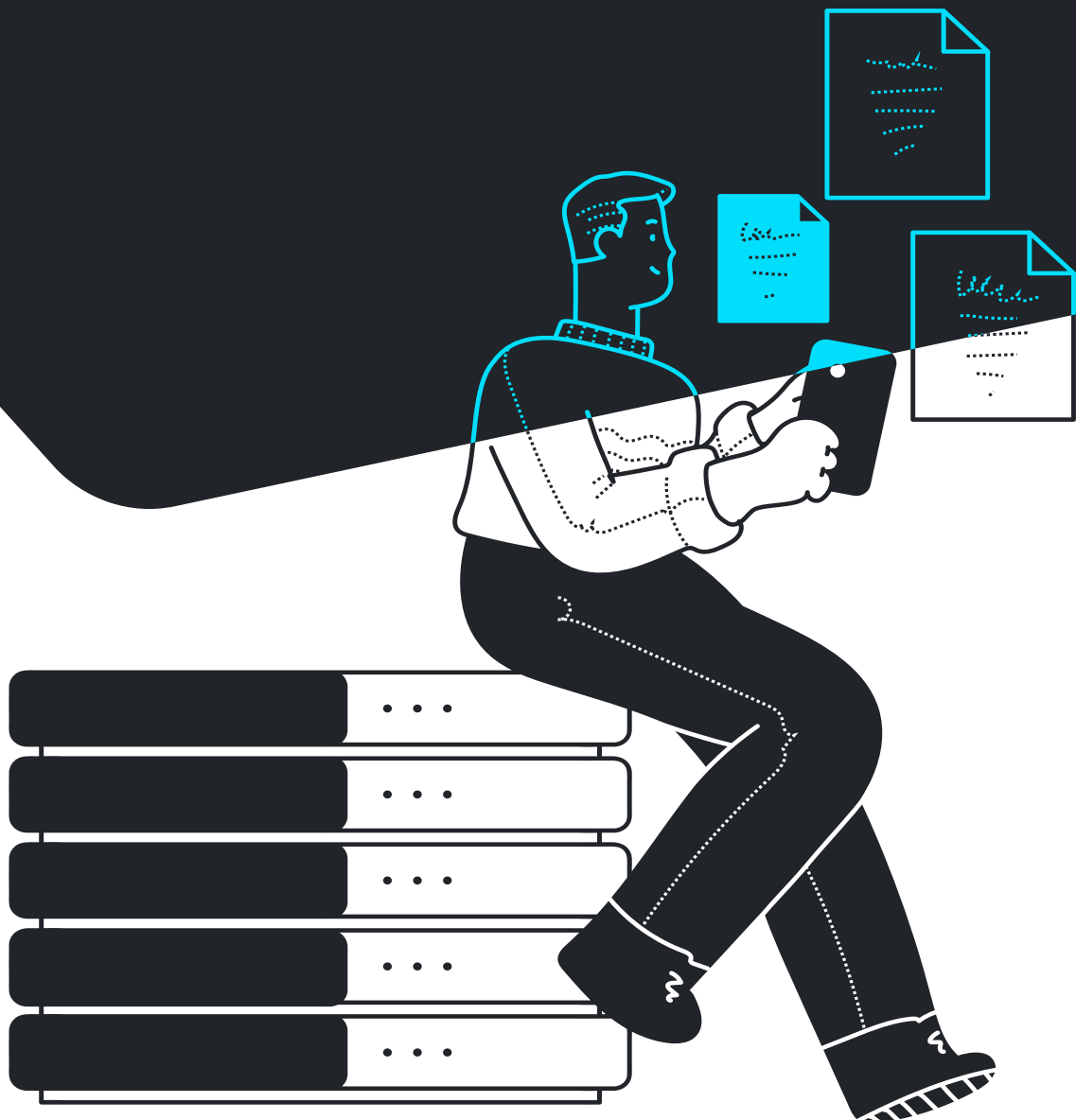




The Power of Partnership:

Leveraging QuantHouse's Data in Quod Financial's AI Trading Models



How QuantHouse's high-performance market data and extensive historical data were integrated to enhance Quod Financial's AI-driven trading platforms.

In today's highly competitive financial ecosystem cost is everything – having the ability to visualise cost within trading workflows is paramount to stay ahead of your peers.

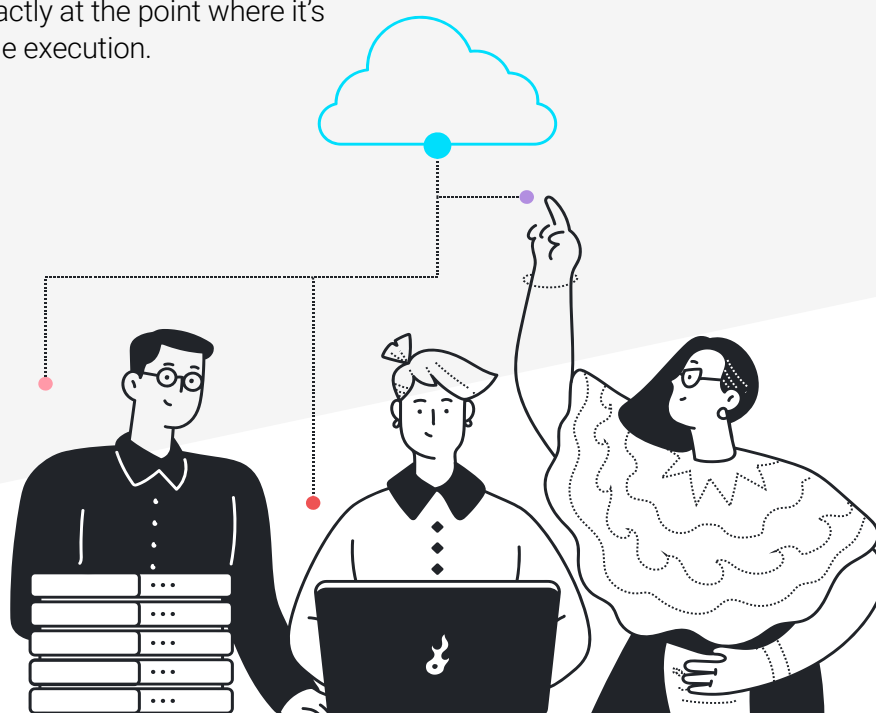
Previously to understand the transactional cost of your trading flow you would need to rely on whole back-office teams to scroll through detailed data files and perform the correlation analysis historically whilst at the same time trying to apply any 'learnings' to trading desks' investment strategy. The process was slow, cumbersome, costly and prone to human assumption as well as being dislocated from where the analysis is needed most; front-office trading applications.

Today the advent of data-driven and tested AI/ML algorithms means that transactional cost analysis (TCA) is fast, automated and integrated – it can be performed in real-time exactly at the point where it's needed as part of the trade execution.

What's more, traders no longer need to worry about adjusting their TCA assumptions or trading strategies manually when unexpected market events happen – due to rigorous backtesting using detailed historical data AI/ML algorithms adapt dynamically to changing market conditions to optimise trade execution automatically.

But how do you sufficiently train AI/ML models to adapt to and even anticipate market movements – that's where QuantHouse comes in with high quality, extensive historical data, easily accessible and ready to be loaded to any trading AI/ML model.

In this case study Quod Financial talks us through their experience to date with QuantHouse, some of the challenges they have overcome through using QuantHouse products and data to fuel their trading applications and development environments.



The Challenge

Before partnering with QuantHouse, our primary challenge at Quod Financial was **optimising our market data consumption to fully support our AI-driven trading platform**. We needed a solution that could provide high-quality, low-latency market data along with extensive historical records crucial for backtesting and refining our trading algorithms. Our requirements included comprehensive **data breadth and depth, minimal latency, cost-effectiveness, managed services to streamline operations, and strong expertise and support for seamless integration and ongoing enhancement**. QuantHouse met these needs, enabling us to significantly improve our trading strategy execution and overall system efficiency.

Quod Financial is at the forefront of transforming the trading industry by integrating advanced artificial intelligence (AI) and machine learning (ML) technologies into our platforms. This integration not only enhances our existing capabilities but also sets **new benchmarks** in trading and order execution. Our strategic collaboration with QuantHouse, a leader in superior quality normalised streaming and historical market data, reinforces our commitment to leveraging superior technology to amplify trading strategies and execution precision.

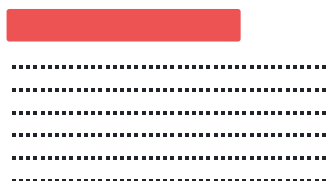
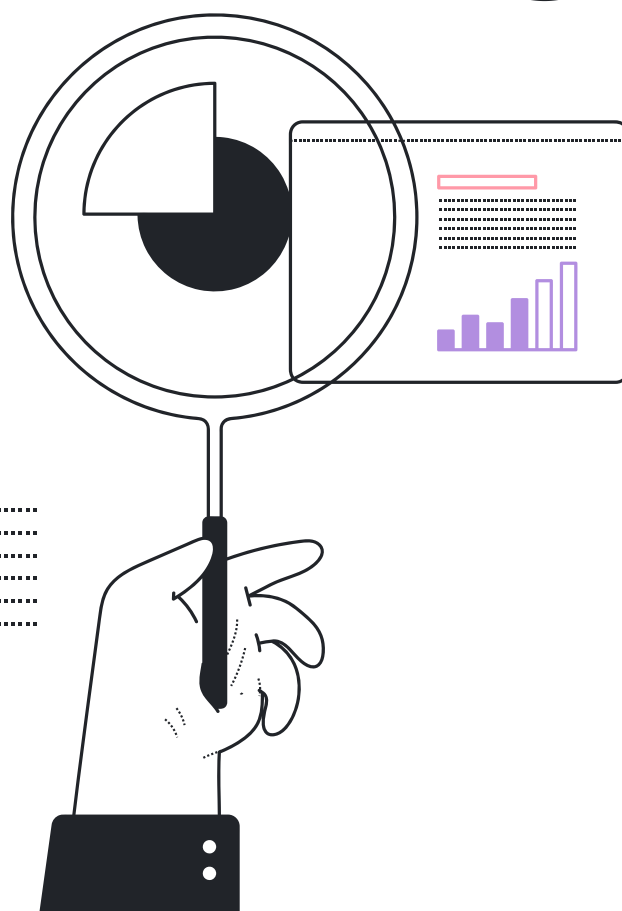
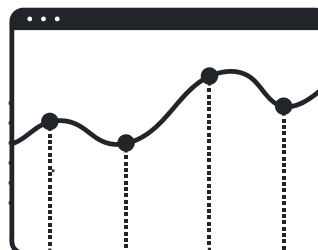
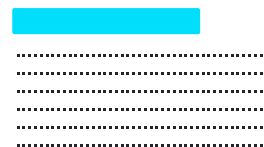
The Solution

At Quod Financial, we have found QuantHouse's products, wider service, and overall relationship to be highly beneficial for our operations. The integration of QuantHouse's high-performance market data and extensive historical data into our AI-driven trading platforms has significantly enhanced our trading strategy execution, allowing us to optimise trade executions, minimise slippage, and maximise returns.

The quality and reliability of their data feeds have been critical in ensuring timely and accurate market information, which is essential for our real-time decision-making processes. Additionally, the collaborative relationship with QuantHouse has been exceptional, with their expertise and support greatly contributing to the seamless integration and continuous improvement of our systems.

QuantHouse Data Products cover historical data for dozens of global venues with back-fill extending to 15+ years in some cases, giving users a large window of global macro economic events and structural changes from which to train algorithms.

The data is normalised so it's easy to switch markets and accessible via API or compressed csv files that can be delivered via https links (download process can be easily automated) or directly to users' AWS S3 buckets. Timestamp granularity extends to microseconds and users have access to multiple versions including exchange, feedhandler and storage server timestamps. Easy to use technical specifications with extensive field coverage documentation helps users quickly understand the data they're looking at whether it's historical L1 (including trading phases and market mechanisms), L2 MBL or full orderbook, reference and tick sizes. QuantHouse also provides a self-serve historical data on demand (HoD) tool to allow users to quickly find, download and pay for the exact data they need with very little human interaction required.



“We are constantly reminded of the importance of high quality market data and reliable delivery - thankfully we are fortunate to have long standing clients because of this. The feedback we hear from end users is that our market data API is very easy to use and mandatory changes to data feeds are handled with the minimum of fuss. Having our data integrated into the Quod Financial AI-driven trading platform, as we do with many other trading platforms, we are confident that Quod Financial and their clients will be comfortable with the reliability and the quality of the normalised data format.”

Rob Kirby, Head of Sales & Business Development EMEA, QuantHouse.

The Benefits

The integration of QuantHouse's data solutions has provided Quod Financial with numerous advantages, enabling us to enhance our AI initiatives and machine learning applications significantly. By leveraging QuantHouse's high-quality and low-latency market data, we have improved the precision and efficiency of our trading strategies, but also opened up new potential initiatives for comprehensive training and simulation of our AI models.



Core AI Initiatives at Quod Financial

Our AI initiatives are multi-faceted, focusing on both generative models and foundational machine learning techniques to optimize trading decisions and improve operational efficiency.

- 1. Generative AI and Extensive Data Training:** Utilising the historical data provided by QuantHouse, our generative AI (GenAI) models undergo rigorous training, allowing for accurate simulation and prediction of market trends. This integration allows comprehensive backtesting, crucial for refining models to accurately reflect market behaviours and patterns.
- 2. Enhanced Smart Order Routing and Algorithmic Trading:** The detailed historical data from QuantHouse enriches our smart order routing capabilities. By leveraging past market performance data, our platforms can optimise trade executions to minimise slippage and maximise returns. This proactive strategy adaptation is designed to anticipate and react to market movements and trading demands efficiently.
- 3. Advanced Order Management Systems (OMS):** Our OMS is customised to support diverse trading operations, including multi-asset and multi-desk environments. Integrating AI into this system enhances its predictive capabilities and operational agility, allowing it to dynamically adapt to changing market conditions and complex trading strategies.



Innovative Machine Learning Applications

Our machine learning strategies are designed to provide practical, real-time benefits that directly impact trading outcomes:

- 1. Clustering for Efficiency:** We use clustering algorithms to enhance the performance of our trading strategies. By grouping similar trading instruments, our models can process high-frequency trades more efficiently, reducing computational demands and improving predictive accuracy.
- 2. Real-Time Transaction Cost Analysis (TCA):** Our platforms employ AI to conduct real-time TCA, optimising trading strategies by closely analysing the cost impacts associated with each trade. This capability not only aids in reducing expenses but also improves the precision of trade executions.
- 3. Automated Algorithm Selection:** Utilising advanced AI methodologies like the multi-armed bandit process, our systems autonomously select the most effective trading algorithms based on live performance data. This continuous optimization ensures optimal trading results in varying market conditions.

“In financial services, the performance of your technology is defined by the quality and speed of the data that powers your systems. This has never been more true or more important than now, as we go through a transition of data automation and AI/ML. QuantHouse has proven to be an exceptional partner in this data journey.”

Medan Gabbay, Chief Revenue Officer at Quod Financial.



Training and Simulation

A key aspect of our initiative is utilising historical data from QuantHouse. This data is essential for the training and backtesting of our GenAI models. These training processes involve advanced simulation techniques that assess the effectiveness of our trading strategies under various historical conditions and help predict future market behaviours more accurately.

At Quod Financial, our journey with AI and ML is ongoing. Our systems are designed to continuously learn from new data, adapting and evolving to keep pace with the dynamic financial markets.



The Value of High Performance Data

Incorporating QuantHouse's high-performance data feeds into our decision-making processes offers a notable advantage, ensuring that our trading decisions are informed by the most timely and accurate market information available. In the fast-paced world of financial trading, even milliseconds can significantly impact trade outcomes.

Conclusion

Our collaboration with QuantHouse reflects our commitment to improving financial trading through innovation. By constantly advancing our AI and ML capabilities and integrating superior quality data, Quod Financial aims to provide unmatched service and performance to our clients. As we navigate the complexities of the financial markets, our advanced technological solutions ensure that we not only meet but exceed the expectations of the modern trader, providing reliable, efficient, and cutting-edge trading solutions.



About Quod Financial

Quod Financial is a global multi-asset OMS/EMS trading technology provider focused on automation and innovation. We specialise in algorithmic trading, smart order routing, and liquidity internalisation services. We leverage a data-driven architecture to continually fuel AI/MLenhanced trading automation for liquidity venues, exchanges, retail brokers, and buy-side/sell-side institutions. The intelligent system reduces market impact and enables traders to build powerful execution and trading strategies. Quod Financial is a pioneer in leveraging real-time execution and decision-making capabilities to add control and transparency to execution processes. This improves trading performance and execution quality through the combination of AI-enabled decision-making tools with dynamic market access, using a strategy that is non-disruptive, scalable, and highly resilient.

quodfinancial.com

About QuantHouse

QuantHouse provides high-performance streaming market data API feeds, data products and trading infrastructure which help banks, energy and commodities trading companies, online brokers, market makers, hedge funds, asset management firms, financial technology providers, and trading venues perform at their best with quality data delivered the way they want. All from one trusted source.

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