

# 5 ways AI scale exposes the limits of battle- tested quant infrastructure

Trying to scale your research environment without trading off iteration velocity, reproducibility, or governance confidence? If you're relying on general-purpose cloud for AI infrastructure, these compounding effects will materially impact your bottom line.



1

### Backtest runtimes are widening

Run time is money in quant research. Do your backtest grids and retraining cycles remain predictable as concurrency rises, or are you relying only on peak throughput benchmarks?

**Result:**  
Lost iteration cycles

2

### GPUs are waiting on the storage path

As AI concurrency grows on general purpose cloud primitives, tick data and feature libraries may not deliver consistent throughput to GPUs.

**Result:**  
Wasted compute spend

3

### You're maintaining duplicate datasets

Parallel copies of tick history or feature libraries exist across environments, which can introduce hidden coordination overhead and put reproducibility at risk.

**Result:**  
Hidden operational overhead

4

### Retraining windows are slipping

Intraday or nightly cycles are running long in ways that compress validation time and affect model promotion decisions.

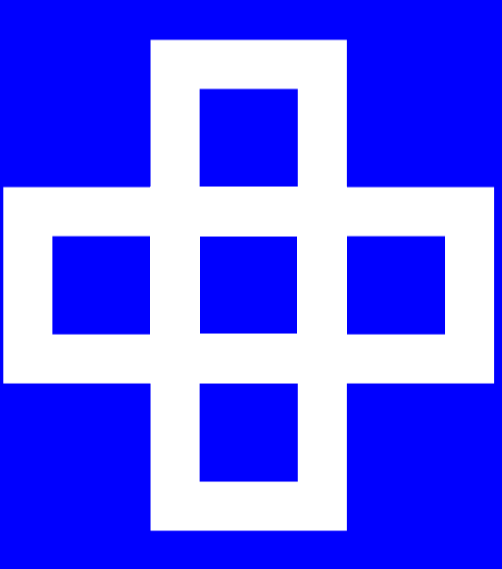
**Result:**  
Compressed alpha generation

5

### Lineage is getting harder to defend

Reconstructing which data a workload accessed, and under which policies and conditions, requires manual effort across multiple systems.

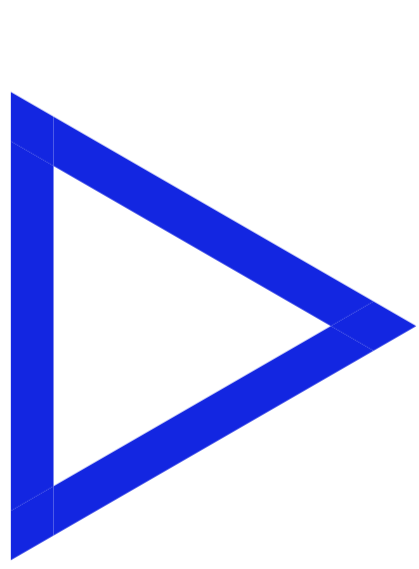
**Result:**  
Governance and model promotion risk



## Turn infrastructure strategy into research advantage

When compute, data, and governance operate in concert, research velocity compounds. Infrastructure stops acting as a constraint and starts functioning as a force multiplier.

## Running your hybrid quant workloads on CoreWeave delivers:



### Velocity.

Faster time to first result.



### Depth.

Broader backtesting across larger datasets.



### Confidence.

Higher utilization, fewer surprises.



Learn how CoreWeave can help your hybrid infrastructure behave like a unified system, so you can sustain research velocity with reproducibility and governance confidence.

[Read the white paper](#)