

BIG DATA IMPLEMENTATION · ENTERPRISE RISK

From shared Big Data to *domain-owned lake houses*

The implementation transformed a resource-constrained centralized Big Data environment into a scalable, domain-centric lakehouse ecosystem, while keeping a common technology and governance framework across every risk stream.

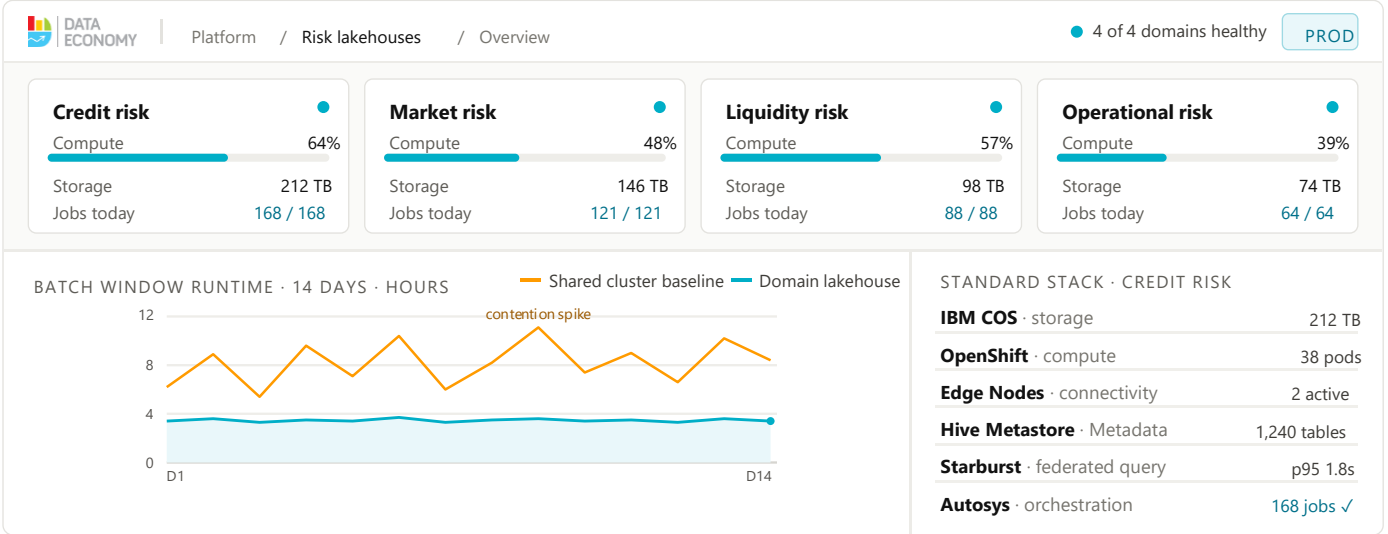
SECTOR
Banking

SCOPE
Multiple risk domains

DELIVERED BY
DataEconomy

FIG. 1 — DOMAIN LAKEHOUSE CONSOLE

ILLUSTRATIVE DATA



01 Challenge

Multiple risk domains relied on a **shared Cloudera-based platform** for compute, storage and processing. As volumes and regulatory demand grew, it became a bottleneck.

- Limited infrastructure capacity
- Resource contention across streams
- Platform-wide scaling constraints
- Centralized dependency model
- Longer delivery timelines
- Limited domain flexibility
- Growing analytical demand

02 Solution

Domain-centric ownership

Each risk domain runs its own lakehouse, from data onboarding to analytics.

Decentralized processing

Compute and storage aligned to domains, eliminating infrastructure contention.

Standardized framework

One common stack, operating model, governance and security standard.

Scalable lakehouse foundation

Storage and processing scale independently with each domain.

03 Benefits

Improved performance with predictable workload execution.

Enhanced scalability without platform-wide changes.

Domain autonomy: faster onboarding and development cycles.

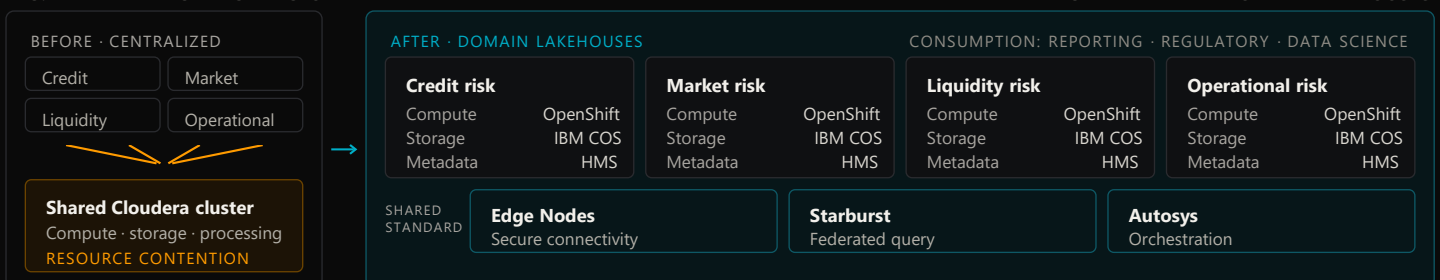
Faster analytics delivery through fewer operational dependencies.

Operational efficiency in capacity planning and administration.

Future-ready foundation for a broader Data Mesh strategy.

FIG. 2 — REFERENCE ARCHITECTURE

CENTRALIZED → DOMAIN LAKEHOUSES



The architecture, platform design, and implementation were fully conceived, developed, and delivered by the **DataEconomy** team.

04 · OUTCOME

Delivered end to end
Design, build and rollout