

HEXWARE

Modernizing Investment Data Workflows with a High-Velocity Microsoft Fabric Migration

Next-gen insights with data platforms

Case study



Client

| Client

- Challenge
- Solution
- Benefits
- Summary

Global Asset Manager

A global asset management arm of a US financial services firm, managing investments across fixed income, equities, real estate, and alternative assets for institutional and individual investors worldwide.



Challenge

- Client
- Challenge**
- Solution
- Benefits
- Summary

A High-Risk Migration in Live Investment Operations

For our client, data is not a support function—it is foundational to investment decision-making, risk assessment, regulatory reporting, and client communication. Every pipeline feeds live portfolio workflows, and every dataset carries downstream implications for trust and performance.

As part of a broader data platform modernization agenda, our client initiated a strategic migration—moving its enterprise data lake with an AWS to Microsoft Fabric migration.

Over time, its AWS environment had grown into a tightly coupled ecosystem spanning Glue, Step Functions, Lambda, crawlers, and Python-based frameworks. While functionally robust, this sprawl made it increasingly difficult for our client to govern data holistically or maintain a single, consistent source of truth.

As their Microsoft Fabric migration service partner, we sought to mitigate the inherent risk. Their platform supported active investment operations, and core Python-based logic had been validated over years of production use.

Rewriting or redesigning that logic would introduce unacceptable operational and business risk. Existing OLTP and OLAP models reflected years of business evolution and required careful consolidation rather than replacement.

At the same time, analytics and reporting teams relied on uninterrupted Power BI access, where even small semantic changes could cascade into reporting discrepancies.

The mandate for us was clear: modernize the platform without destabilizing the business.



Solution

- Client
- Challenge
- Solution**
- Benefits
- Summary

A Multi-Tiered Microsoft Fabric Migration

To meet these requirements, our client adopted a Microsoft Fabric migration strategy centered on preservation, control, and repeatability. The focus was on reusing what already worked, minimizing change in critical paths, and establishing a foundation that could support future modernization phases. The engagement also validated a service-mapping and migration playbook that now serves as a reference model for subsequent platform moves.

Rehosting and Rationalizing the Core Platform

The first phase focused on simplifying the underlying platform without altering outcomes for our client.

Existing Python based ingestion frameworks were transitioned to Microsoft Fabric notebooks, enabling continuity while reducing dependence on AWS-native services. Glue jobs, Step Functions, crawlers, and Lambda logic were translated into Fabric pipelines and notebooks to mirror existing behaviors.

Existing orchestrations were replaced with Fabric's schedule-based pipeline and execution model, giving our client a more centralized and manageable control plane with fewer moving parts and lower operational overhead.

Establishing a Fabric-Native Medallion Data Lake

A Bronze–Silver–Gold Medallion architecture was implemented in Fabric OneLake, creating clear separation between raw ingestion, curated transformations, and consumption-ready datasets. Automated staging, cleansing, and aggregation workflows reinforced consistency and auditability across data flows.

This layered structure aligned naturally with buy-side data consumption patterns—raw market and reference data at Bronze, normalized positions and transactions at Silver, and fund-, strategy-, and client-level aggregates at Gold supporting portfolio analytics, risk reporting, and regulatory disclosures.

Explicit traversal paths from Gold datasets into the Lakehouse and Fabric SQL ensured lineage visibility, governance continuity, and flexible access patterns for our client's lake-native analytics and SQL-based reporting.



Solution

- Client
- Challenge
- | Solution**
- Benefits
- Summary

Modernizing Orchestration, Governance, and Observability

Operational resilience was a critical requirement for our client’s investment environment.

Schedule-driven DAG execution automated pipeline runs based on data availability and configuration changes, reducing manual intervention. Integrated monitoring and alerting improved visibility into pipeline health, data quality, and performance—allowing our client’s teams to detect and resolve issues before they impacted downstream users.

This shift replaced fragmented orchestration with a unified, Fabric-native operational model aligned to our client’s enterprise governance expectations.

Ensuring Analytics and Reporting Continuity

Protecting analytics consumers was a non-negotiable requirement for our client throughout the migration.

Silver and Gold layers were aligned to our client’s OLTP and OLAP usage patterns, ensuring compatibility with both detailed lookups and aggregated analytics. Power BI reports were repointed to Fabric Gold datasets with minimal semantic adjustments, preserving report behavior and user trust.

Business users continued to access insights without disruption—while benefiting from improved performance and a more consistent data foundation.

The Resulting Data Platform Architecture

Our client now operates on a Fabric-native data architecture that balances continuity with data platform modernization. Proven logic remains intact, operational complexity has been reduced, and the platform supports scalable, governed analytics across investment workflows.

Most importantly, our client now has a repeatable migration blueprint—one that enables future transitions to proceed with confidence, control, and regulatory assurance.



Benefits

- Client
- Challenge
- Solution
- Benefits**
- Summary

Measurable Gains Across Cost, Speed, and Trust

In investment operations, trust is cumulative and fragile. Improvements in cost and speed only matter if confidence is preserved across valuation, risk, and reporting workflows that are scrutinized by regulators and investors alike.

The benefits validate the business value of a carefully governed Microsoft Fabric migration in live investment environments. For our client, platform simplification delivered tangible improvements across operational efficiency, delivery velocity, and—critically—data trust.

25–35% Reduction in Cloud Run Costs

By consolidating services and reusing existing logic, our client reduced infrastructure overhead and ongoing run costs without introducing development or validation risk.

Faster Pipeline Execution and Delivery Cycles

Automated, schedule-driven processing shortened lead times, reduced manual intervention, and accelerated the rollout of new data products supporting investment and reporting needs.

Higher Data Quality and Confidence

Standardized Medallion layers improved lineage, validation, and consistency—reducing downstream data issues across portfolio, risk, and client reporting functions.

Lower Migration and Operational Risk

Parallel validation, phased cutovers, and proactive monitoring ensured SLA adherence and minimized disruption to live investment operations.

Improved Developer Productivity

Fabric-native tooling and high code reuse simplified maintenance and enabled faster enhancements across our clients’ data engineering teams.

Uninterrupted Reporting and Faster Insights

Reporting teams experienced no disruption, while business users benefited from more timely, trusted insights delivered on a unified Fabric platform.



Summary

Client

Challenge

Solution

Benefits

| **Summary**

A Foundation Built for Continuous Modernization

Today, our client runs on a governed, Microsoft Fabric-native data foundation that supports both operational and analytical workloads with lower cost and complexity. Data ingestion is standardized, reporting is democratized, and trusted logic for investment workflows.

Building on this success, our client is now executing a multi-year modernization roadmap—phasing future migrations in alignment with market cycles, regulatory requirements, and business priorities.

What began as a single data lake migration has become the foundation for sustained, low-risk data platform modernization across our client's investment data estate.



Modernizing a High Compliance Data Platform?

Explore how Hexaware modernizes data platforms with Microsoft Fabric—without disrupting what already works. Reach out to us at marketing@hexaware.com to get started.

About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at <https://www.hexaware.com>.

Get in touch