

Modernized on-premises DWH to a Cloud based DWH using Snowflake for fast Analytics and Reporting for a US based financial service company

Challenges

The Legacy Corporate DWH system holding Finance and Risk data faced challenges and required modernization. It processed 125+ source systems, 300+ source files/processes, and an average of 15-20 transformations/ source file

- Multiple reconciliation points, with limited data models, resulting in longer processing time and increased support effort and cost.
- End customers faced challenges in updating their portfolios based on live market rates due to a batch process that was siloed
- The individual data warehouses for RISK, Assets, and Finance (BS & IS) did not offer a full 360-degree view for end customers.
- Legacy technology limitations necessitated continual band-aid solutions to support new business demands.
- Lack of self-service for data ingestion and reporting resulted in heavy dependence on IT support

Solution

Virtusa's accelerated transformation solution helped automate and reduce modernization effort, a rinse and repeat model which now can be standardized across other client LOBs.

- Supported build of unified data model consisting of Risk, Assets, and Finance to generate 360-degree view
- Metadata driven modern data processing framework to automate data ingestion from source to staging to ADL to EDL.
- Data pipeline on cloud with dynamic infrastructure provisioning to help faster data ingestion and process.
- Automated Data validation and quality checks using Great Expectations and a robust run control instrumentation to track failures and exceptions.
- Re-run feature to enable multiple cycles of ETL run without compromising on data integrity.
- Self-managed Data Warehouse as a Service (DWaaS), for scalability, blazing-fast query performance, on-demand compute for efficient means of data sharing and distribution

Value delivered

Virtusa's solution delivered consolidation of multiple databases into a single warehouse with a simpler data model, better integrity and consistency, and optimized storage for efficient consumption. Other key benefits include:

- The corporate data processing framework exhibited quick win, a solution which will now be standardized across other client LOBs.
- Reduced data processing times and increased daily loads by 50+%.
- Metadata based framework automated initial data ingestion from source to staging to ADL to EDL, reducing overall effort by 80%.
- Modern data warehouse on cloud helped client to share their data with their partners without any additional process or incurring cost.
- Opportunity to work on downstream data consumption, analytics and reporting using Power BI.