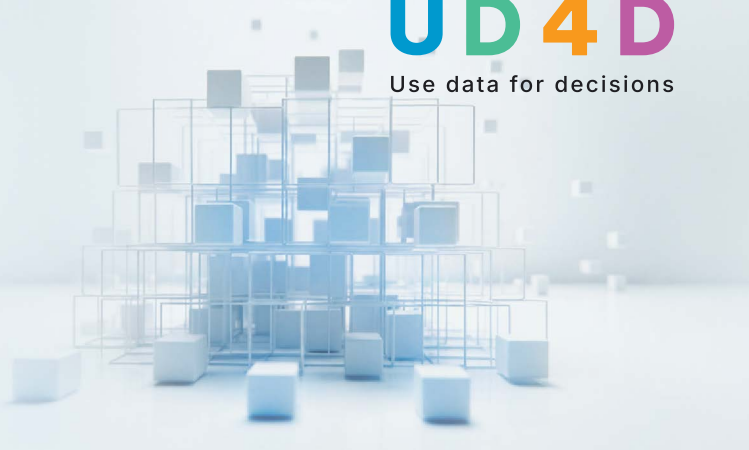




One Finance Data & Analytics Platform on Cloud with Scalable Architecture

CLIENT

Global pharmaceutical manufacturer operating across multiple business divisions and international markets.

THE CHALLENGE

The client's Finance division needed to establish a scalable enterprise data platform capable of supporting financial analytics, complex simulations, and future data-driven initiatives across multiple finance domains.

- Unknown final scope of data sources and consuming applications/projects at the outset
- A flexible architecture designed to scale beyond the first prioritized use case, EPIC, focused on foundational financial master data, supporting future analytics projects and applications
- Integration of heterogeneous financial systems with differing structures and refresh cycles
- Secure processing, storage, and consumption of sensitive financial data
- Support for multiple consumption patterns across analytical tools and project teams
- Standardization of ingestion, orchestration, and data-quality processes across the platform

SOLUTION

UD4D helped design a scalable, high-level cloud-based architecture and address specific integration and data-consumption needs across projects.

- Design of a modular AWS-based architecture supporting data ingestion, processing, storage, and consumption
- Definition of integration, side-load, and consumption patterns tailored to individual Finance projects
- Security models across the full data lifecycle, with role-based access and separation of managed and self-service environments
- Orchestration patterns using Airflow and Matillion, with dependency management and cross-environment execution
- Redshift data layer structure enabling both governed and self-service analytics
- Alignment with governance and data-quality standards through Collibra and Collibra Data Quality
- Support for Dataiku-based modeling

BUSINESS IMPACT

19 data sources unified on one platform: The architecture grew from the initial EPIC use case to ingesting 19 financial data sources and supporting 8 analytical applications.

4 levels of analytics enabled: The unified financial data layer supports descriptive, diagnostic, predictive, and prescriptive analytics on consistent data.

2 operating models on one platform: Sensitive financial data is processed securely and under governance across both managed and self-service environments.

3 core processes standardized: Standardized ingestion, orchestration, and data-quality processes accelerate onboarding of new Finance projects and speed delivery across the domain.

TECHNOLOGY STACK

AWS (S3, Redshift, Glue, IAM) | Airflow | Matillion | Dataiku | Collibra | Collibra DQ | Power BI | DIFW ingest framework