



Case Study

# Data Lake & Marts Automation for a Leading NBFC

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## Executive Summary

A leading non-banking financial company (NBFC) sought to modernize its data infrastructure to improve real-time access, reduce operational inefficiencies, and strengthen data governance. The organization faced challenges with delayed reporting, inconsistent KPIs, and high infrastructure costs. Partnering with Exponentia.ai, the company implemented a Unified Data Platform (UDP) on Databricks, enabling real-time insights, scalable analytics, and robust governance.

## The Challenge

- ▶ Lack of real-time data pipelines delayed insights
- ▶ Inconsistent KPI logic across departments led to misaligned decisions
- ▶ Frequent null values in reports reduced trust in analytics
- ▶ High cloud infrastructure costs due to inefficient architecture
- ▶ Absence of data lineage, catalog, and business glossary hindered discoverability

## Our Solution

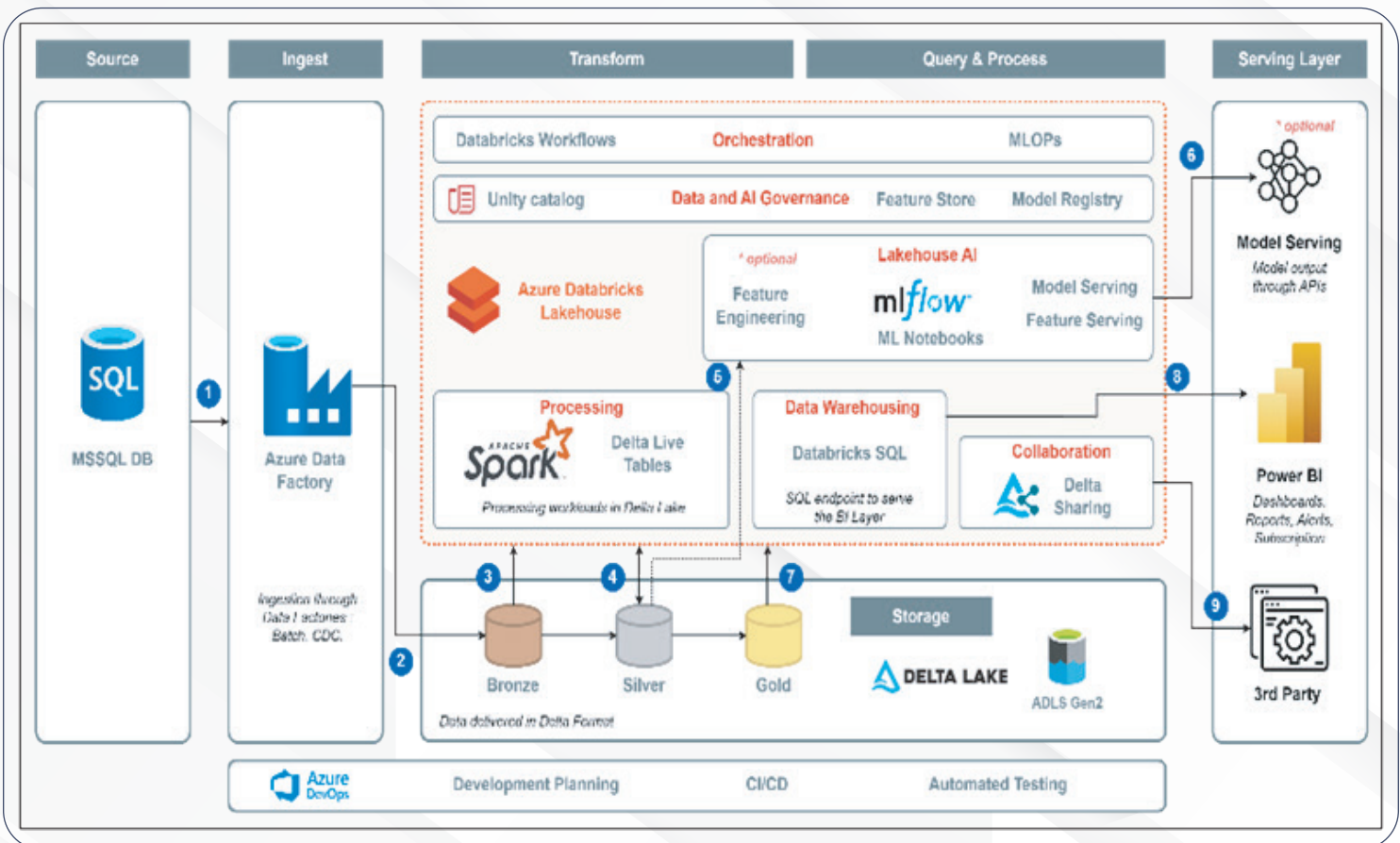
Exponentia.ai delivered a comprehensive solution:

- ▶ Unified Data Platform (UDP) built on Databricks
- ▶ Delta Live Tables (DLT) for real-time and incremental data loading
- ▶ Unity Catalog for centralized governance, lineage tracking, and glossary

- ▶ MLflow for predictive analytics and model deployment
- ▶ Power BI dashboards via Databricks SQL endpoints
- ▶ Azure Data Factory for ingestion from MSSQL sources
- ▶ Medallion architecture (Bronze, Silver, Gold layers) for structured transformation

## The Architecture

The architecture integrates batch and near real-time ingestion using Change Data Capture (CDC), stores data in Delta tables on ADLS Gen2, and enables seamless consumption through BI tools and APIs.





## The Impact

**40% reduction**

in annual infrastructure costs

**3X**

faster data refresh cycles,  
completing within an hour

Near real-time sales reporting  
enabled

Month-on-month reporting for  
strategic planning

Column-level masking and  
row-level access control  
implemented via Unity Catalog

## Technologies Used

- ▶ Databricks
- ▶ Azure Data Lake Storage Gen2
- ▶ Delta Live Tables
- ▶ Unity Catalog
- ▶ MLflow
- ▶ Power BI
- ▶ Azure Data Factory



## Want to get the same benefits for your business?

At Exponentia.ai, we partner with businesses to address complex data challenges and build trust in enterprise data. Our approach helps organizations streamline data management, improve visibility, and empower teams with reliable insights for better decision-making.

### Engage with Us



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