

INDUSTRIAL SOLUTIONS PROVIDER BUILT A MODERN AZURE ANALYTICS FOUNDATION

Historical data pipelines and BI migration for analytics
at scale

Challenge

A leading provider of products and services to the energy, service provider, and industrial markets faced two converging data obstacles. The absence of historical data storage in its existing architecture limited the ability to run thorough analysis and produce comprehensive BI reports. At the same time, legacy Oracle BI reports tied to ERP and Salesforce sources needed to be migrated to Power BI on Azure without disrupting daily batch reporting cycles.

Approach



Designed a Confluent Kafka CDC pipeline to capture real-time historical changes from Oracle CDC-enabled databases, Salesforce, and flat files, feeding a Databricks medallion architecture for processing.



Engineered a Bronze-Silver-Gold Delta Lake model on Azure Databricks with SQL Server and a vector database, powering AI/ML apps, self-service portals, and LLM-based reporting.



Operationalized the platform using Azure DevOps, Key Vault, AD Directory, Monitor, Apache Airflow, and Cost Management for secure, governed, and cost-efficient end-to-end orchestration.



Migrated complex Oracle BI assets to Power BI through a structured path — report inventory, data mapping, redevelopment, technical debt remediation, rigorous testing, UAT, and cutover.

Outcomes Delivered



Captured granular historical data in real time, removing a long-standing analysis blocker and unlocking comprehensive, trustworthy BI reporting.



Established a scalable Azure-native medallion architecture that supports AI/ML workloads, self-service analytics, and LLM-based reporting from a single foundation.



Migrated legacy Oracle BI reporting to Power BI cleanly, preserving daily batch continuity while modernizing the reporting layer for cloud-first operations.

Closing

Veltris combined real-time data capture, a modern lakehouse foundation, and disciplined BI migration to give an industrial solutions provider a unified, AI-ready analytics platform — replacing fragmented reporting with a scalable, governed Azure environment.