

For a financial sector firm

We boosted efficiency by 70% with a modern MLOps platform for trade surveillance.



Problem Statement



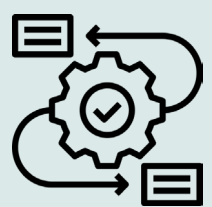
Legacy ETL pipelines were slow, complex, and prone to data quality issues



Fixed-time scheduling caused data mismatches and delayed processing



Lack of real-time triggers limited accuracy in trade surveillance



High operational overhead from fragmented tools and manual workflows



Solution

- Scalable MLOps platform on AWS for trade surveillance
- Event-driven architecture for real-time data triggers
- Python-based ETL framework replacing legacy KDB+ pipelines
- Databricks integration for faster, scalable analytics
- CI/CD support for 300+ code repositories with bi-weekly releases

Our Tech Stack



Python, Java,
KDB+



Oracle
Athena (Hydra DB)
Databricks



AWS S3, NAS,
Giga

System Infrastructure Upgrades



Event-driven triggers

Replaced fixed-time schedulers with Kafka-based event-driven triggers

Migrated legacy ETL pipelines from KDB+ and q scripts to Python

Python migration



Databricks integration

Integrated Databricks for scalable, high-speed data processing

Transitioned to Oracle DB for improved reliability and data integrity

Oracle DB transition



MLOps workflows

Deployed robust MLOps workflows to support real-time model deployment



Impact



70% increase in operational efficiency



40% reduction in cloud infrastructure costs



30% improvement in model accuracy



40% faster execution time with Databricks integration



Real-time processing of **300M** transactions,
150K monthly alerts, & **800** daily feeds



Want to build something similar?

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to see how Ccube can modernise your platform.

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