

KYC / AML Reporting Automation – Case

Study

Project Overview

Automated **KYC completeness monitoring** and **AML alert generation** using SQL, Python, and BI dashboards. Designed to improve compliance efficiency and reduce risk of financial crime.

Problem Statement

- Manual KYC checks were time-consuming and error-prone
- AML alerts were reactive, increasing risk of non-compliance
- Compliance teams wasted time on repetitive monitoring instead of investigations

Solution Approach

- 1. **SQL** → Built queries for KYC completeness and expiry checks
- 2. **Python** → Automated ETL pipeline and AML rule logic
- 3. **BI Dashboards (Tableau/Power BI)** → Visualized KYC status and AML alerts

Key Features

- **WYC Monitoring** → Complete, Partial, Missing, Expiring Soon
- ▲ AML Rule Automation → Structuring, Velocity, High-Risk Geography, PEP, Rapid In-Out Flow
- **Dashboards** → Interactive reports for compliance officers

• Impact

- **0** 90% reduction in manual monitoring effort
- Faster detection of suspicious activity
- **Data-driven decision support** for compliance teams

Tools Used

- SQL (Joins, Rule Logic)
- Python (Pandas, Matplotlib, Automation)
- Tableau / Power BI (Dashboards)