

AML Alert Dashboard

(Anti-Money Laundering Risk Monitoring)

Project Overview

This Power BI dashboard project aims to support **anti-money laundering (AML)** efforts by providing financial analysts and compliance teams with an **interactive tool** to monitor suspicious transactions. It highlights risk-prone areas, transaction patterns, and alert categories based on various parameters such as date, geography, risk level, and transaction type.

Key Objectives

- Identify and monitor high-risk transactions
- Provide visual insight into transaction patterns across time and geography
- Help decision-makers prioritize AML investigations
- Demonstrate data visualization and business reporting skills

Tools & Technologies Used

- **Power BI**: For data modeling, dashboard creation, and visual analytics
- **Python (Faker)**: To synthetically generate realistic transaction data
- **Pandas, NumPy**: For data preprocessing and manipulation
- **Google Drive / GitHub / Kaggle**: For data hosting and project sharing

Dashboard Features

Section	Description
KPI Cards	Total Transactions, High-Risk Count, External % Transactions, etc.
Date Slicer	Allows filtering of alerts by custom time ranges
Heat Map	Geographical visualization of alerts and risk levels
Bar Charts	Show alerts by Transaction Category and Risk Levels
Recent Alerts Table	Lists flagged transactions with Account ID, Risk Score, Category & Date




Sample Metrics Displayed

- Total Alerts
- High-Risk Transactions Count
- % External Transactions
- Total Amount Paid
- Risk Levels Distribution

Data Information

- **Source:** Synthetic data inspired by IBM AML Dataset on Kaggle
- **Volume:** ~512 MB (CSV format)—available via Google Drive / Kaggle
- **Fields:**
 - Transaction_ID
 - Date, Account_ID
 - Transaction_Type
 - Amount, Country
 - Risk_Level, Is_External, etc.

File Access Links

-  **Power BI Dashboard (.pbix):**
https://drive.google.com/file/d/1Mm6CP4IPSqUj-n8Mw_7r-9qPtJosXtVI/view?usp=drive_link
-  **Full Dataset (512 MB):**<https://www.kaggle.com/datasets/amals418/aml-alert-dashboard>
-  **GitHub Repo:** <https://github.com/intheperkofextinction/AML-Alert-Dashboard>

Key Takeaways

- This project demonstrates strong business intelligence and reporting capabilities.
- Focused on practical applications of AML monitoring using synthetic financial data.
- Effectively mimics a real-world dashboard that compliance officers and financial institutions can use.