



Anti-Money Laundering Detection From Transaction Data

Overview

The goal of this project was to develop an anti-money laundering system that could flag suspicious transactions based on peer group analysis. The system monitored historical data and applied rules against peer groups to identify potential money laundering activities. The stack used for this project included Python, Scikit-Learn, and SQL.

Problem Statement

The challenge in developing an anti-money laundering system is to accurately identify suspicious transactions without flagging too many false positives. The system needs to be able to analyze large amounts of data and apply rules that are tailored to specific peer groups. The system also needs to be able to adapt to changes in the market and regulatory environment.

CUSTOMER

A technology-driven company offering Identity Verification, KYC and AML solutions.

Country: UK

Industry: Private Sector

Customer Size: 50 - 200

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Technologies	Domain
Power BI, SQL, Pandas, Scikit-Learn, Python	Machine Learning, Anomaly Detection

Technical Solution

To tackle this problem, the team developed a system using Python, Scikit-Learn, and SQL. The system was designed to analyze large amounts of transaction data and flag potential money laundering activities based on peer group analysis. The system used a combination of rule-based and machine learning techniques to identify suspicious transactions.

The system was trained on historical data and monitored rules against peer groups to identify transactions that deviated from normal patterns. The system used Scikit-Learn to build machine learning models that could identify potential money laundering activities based on peer group analysis. The system also used SQL to store and manage the transaction data.

Results

The results of the project were promising, with the anti-money laundering system successfully flagging suspicious transactions based on peer group analysis. The system was able to analyze large amounts of transaction data and identify potential money laundering activities based on historical data and peer group analysis.

In several test cases, the system was able to accurately flag suspicious transactions and provide alerts to the relevant authorities. The system provided a valuable tool for financial institutions to monitor and identify potential money laundering activities.

Overall, the project demonstrated the potential of using machine learning techniques and peer group analysis to develop effective anti-money laundering systems. The project highlighted the importance of accurate data analysis and the need for effective rules-based and machine learning techniques to detect potential money laundering activities.