

# Detection system for money laundering

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# About money laundering

## Illegal Activity

Hidden or disguised financial transactions

## Financial Crime

Used to hide the origin of money

## Impacts Society

Undermines financial systems

indicators. Effectively harnessing this wealth of information is paramount for making informed decisions, managing risks, and staying competitive in the dynamic landscape of the financial sector. Data science techniques offer powerful tools for extracting actionable insights from financial data, enabling institutions to optimize processes, enhance customer experiences, and identify new opportunities for growth.

## Suspicious transaction detection system

1

Identify Suspicious Transactions

Using machine learning techniques

2

Feature Engineering

Analyze transaction patterns

3

Real-time Data Processing

Monitor financial transactions

4

Analyze and Report

Financial data for insights

# System Architecture

1

## Data Collection

Gather transaction data from various sources

2

## Data Preprocessing

Clean and prepare data for analysis

3

## Feature Engineering

Extract meaningful features from raw data

4

## Model Training

Train machine learning models to detect anomalies

5

## Real-time Monitoring

Monitor transactions for suspicious activity

6

## Alert Generation

Trigger alerts for potential money laundering cases

# Machine Learning Techniques

## Anomaly Detection

Identify unusual transaction patterns

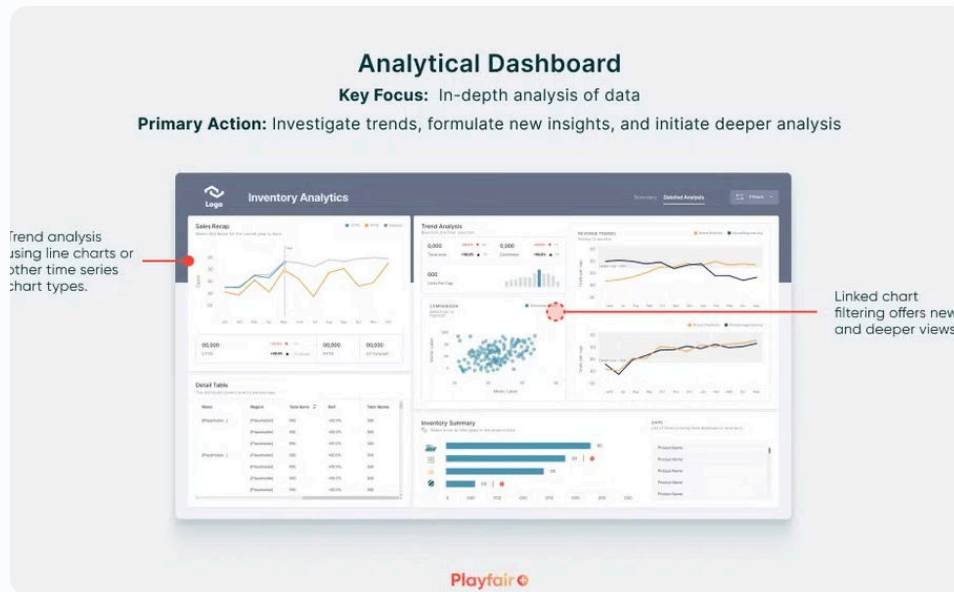
## Classification

Categorize transactions as suspicious or legitimate

## Network Analysis

Analyze relationships between individuals and entities

# Dashboard Visualization



## Tableau

Interactive dashboards with real-time updates



## Power BI

Comprehensive analytics and reporting capabilities

# Impact

## 1 Reduce Money Laundering

Identify and prevent suspicious transactions

## 2 Strengthen Financial Systems

Protect financial institutions from fraud

## 3 Enhance Compliance

Meet regulatory requirements and industry standards

Prevention of Money  
Laundering Act, 2002

Postapex Classes

# Thank You

Khushi Bachhil

