

# AI Driven Entity Intelligence Risk Analysis

TEAM CHATGPT

# INTRODUCTION



## MANUAL EFFORT

Financial analysts manually verify entities in transactions, which is time-consuming.

## INCONSISTENCIES

Entity names may have inconsistencies, abbreviations, or be fraudulent.

## AUTOMATED ENHANCED SOLUTION

Our AI-powered solution automates entity extraction, classification, and risk scoring.

## IMPROVED EFFICIENCY




Reduces manual effort, improves accuracy, and provides structured risk evaluations.






# RiskWise

Automated entity extraction, classification, and risk scoring to empower smarter financial decisions.

## Key Features

-  Real-Time Processing: Provides instant feedback on data inputs.
-  Advanced Validation: Multi-layer verification against trusted sources.
-  Risk Scoring: Assigns risk scores to entities with detailed evidence trails.

## How It Works

-  Upload Data → Upload transaction data via file or manual entry.
-  Process Data → AI extracts key information and classifies entities.
-  Generate Report → Assigns risk levels and provides insights.



3,500+ Entities Extracted  
+15% vs Last Year



1,200+ Risks Identified  
-5% vs Last Year



500+ Validated Reports  
+20% vs Last Year



98% Accuracy Achieved  
+2% vs Last Year

## Risk Factors Focused On

- Fraud Detection
- Credit Risk Assessment
- AML Compliance
- Market Volatility
- Regulatory Compliance
- Operational Risk
- Cybersecurity Threats
- Liquidity Risks
- Financial Crime Prevention
- Sanctions Screening

Get Started



## Risk Wise

Automating entity extraction, classification, and risk scoring to empower smarter financial decisions.

1

Input

2

Processing

3

Risk Analysis

### Data Input

Upload File

Enter Manual



Drop a file here or click to upload

Supported formats: .txt, .csv



transactions.csv



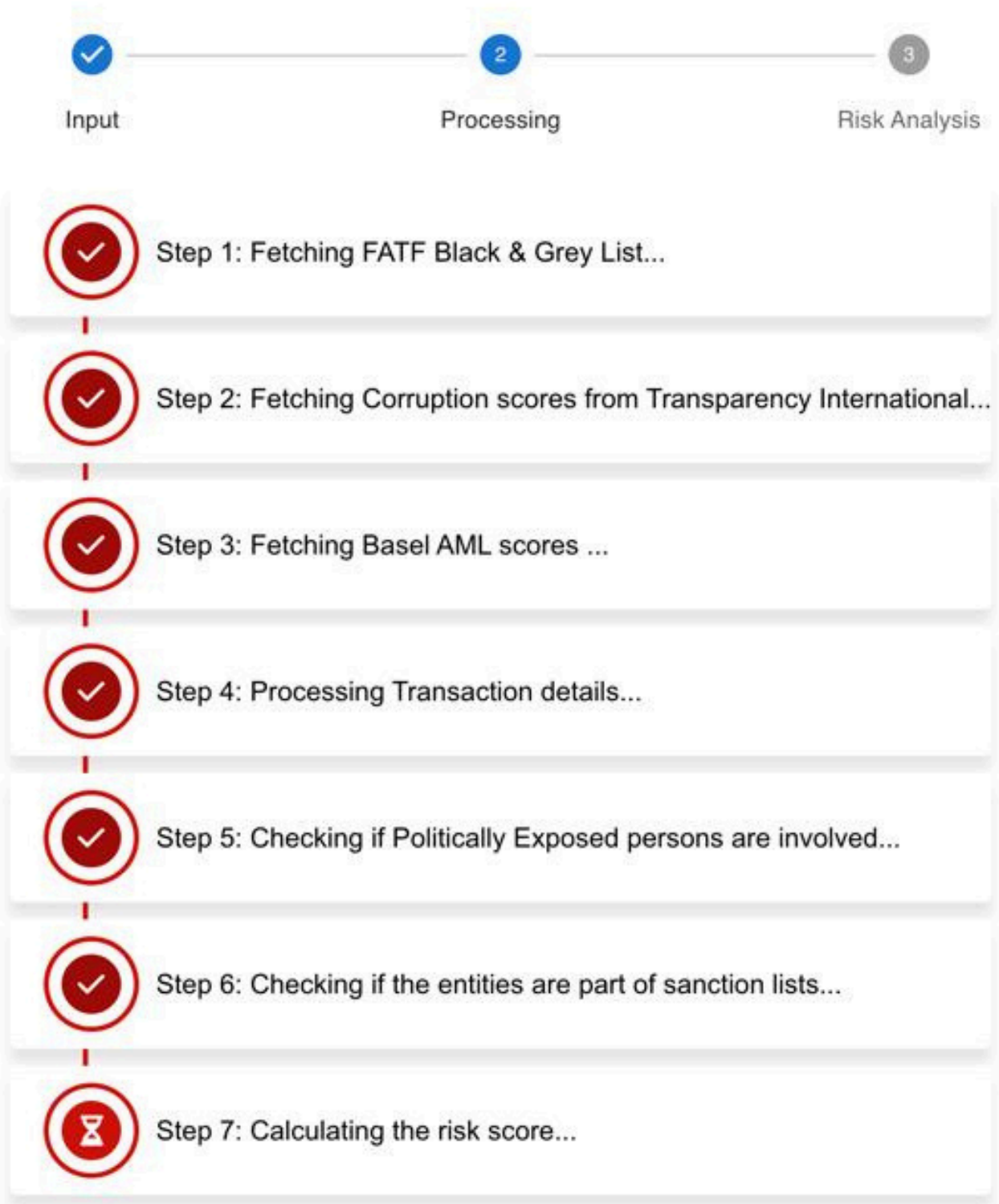
Process Data





# Executing...

Automated entity extraction, classification, and risk scoring to empower smarter financial decisions.





# Risk Report

Automated entity extraction, classification, and risk scoring to empower smarter financial decisions.



Input



Processing



Risk Analysis

Transaction ID: TXN001



## Risk Score Indicator

Low   Medium   High



Medium Risk

## Justification

SovCo Capital Partners is not on the sanctions list but is an entity of interest. It is owned by Russian businessmen and related to Soccombank PJSC, a sanctioned entity.

## Supporting Evidence

OpenCorporates, Company Website

## Entities Extracted

Acme Corporation - Corporation  
Sovco Capital Partners - Corporation

## Confidence Score

Low   Medium   High



95% Confident





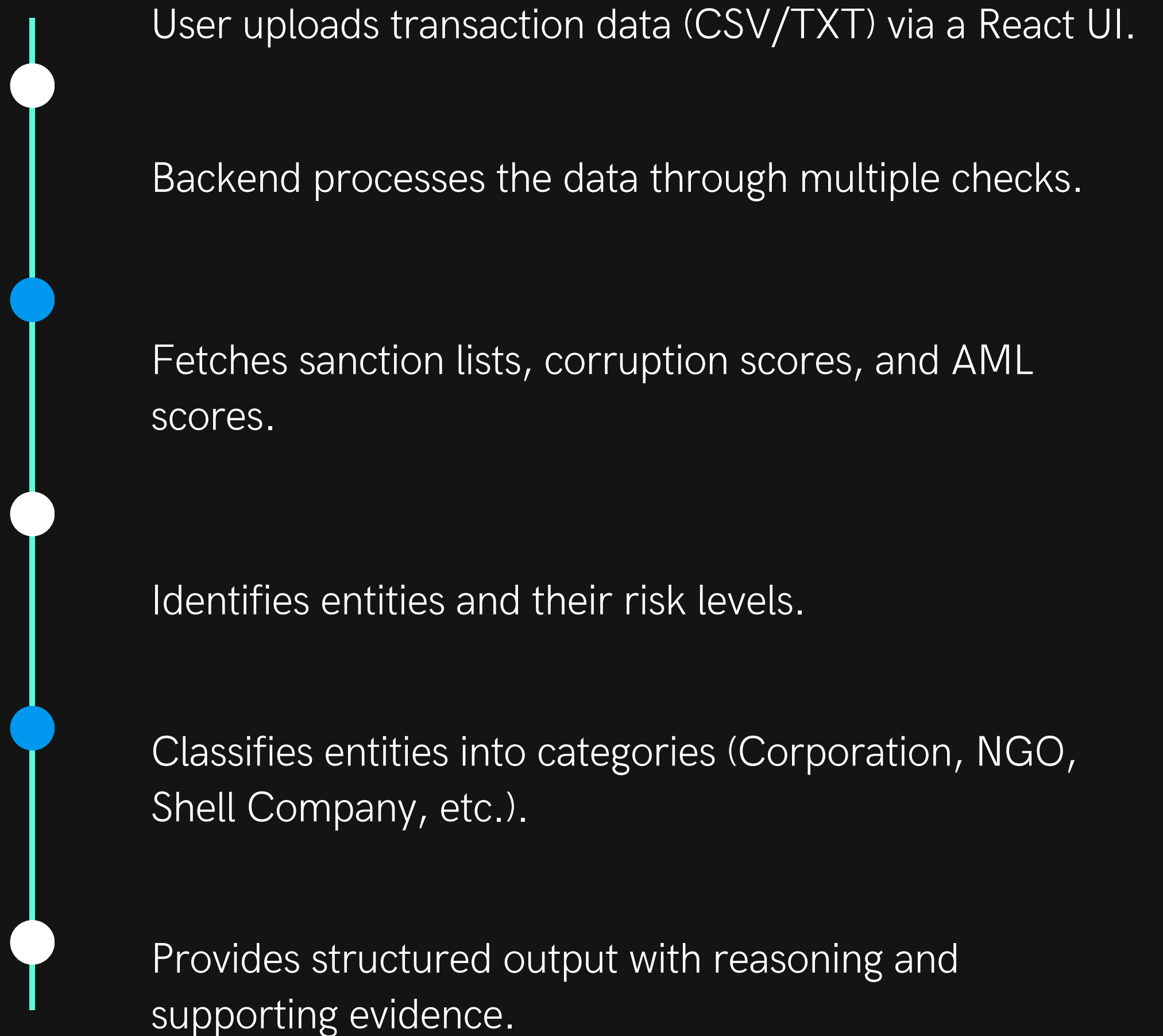
# DEMO



# SOLUTION OVERVIEW

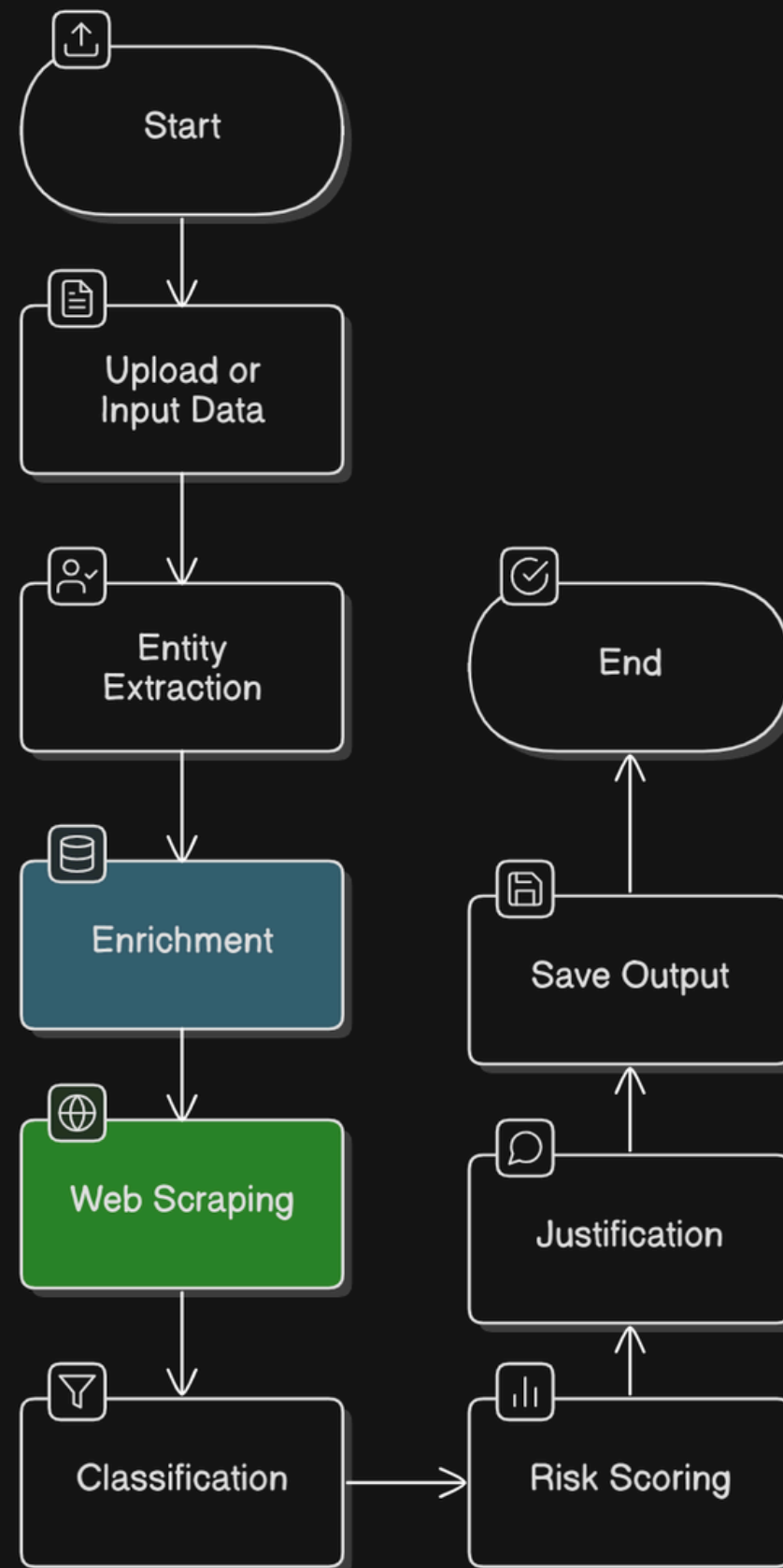


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## Gen AI-Based Entity Risk Analysis Solution



# ARCHITECTURE FLOW



# WORKFLOW



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User uploads CSV or TXT file.

System extracts entity names from transaction data.

Enriches data using OpenCorporates, Wikidata, SEC EDGAR, and financial crime databases.

Cross-checks entities against FATF, Basel AML scores, and sanction lists

Identifies high-risk entities and calculates risk scores.

Generates structured output with justification and confidence scores.

# DATA SOURCES USED

## OPENCORPORATES API

Company registry lookup.

## WIKIDATA API

Entity information

## SEC EDGAR

US Financial Filings

## FATF BLACK & GREY LISTS

Money laundering risks

## BASEL AML INDEX

Anti-money laundering risk assessment.

## OFAC SANCTIONS LIST

U.S. sanctions and high-risk entities



# RISK SCORING METHODOLOGY

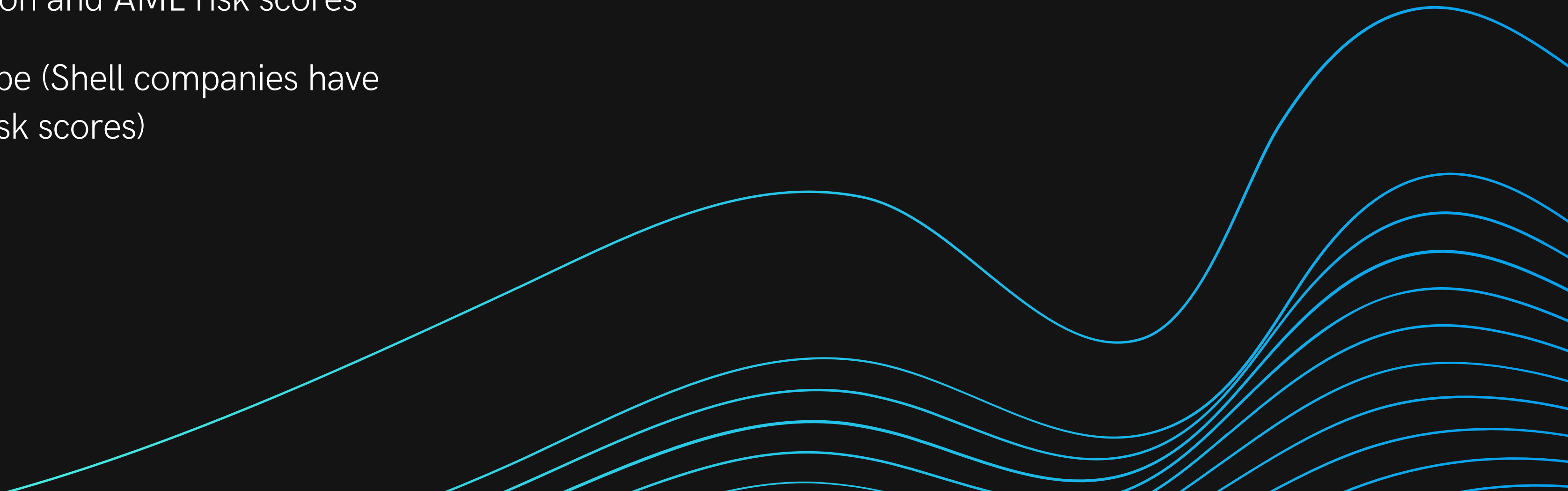
## EACH ENTITY IS ASSESSED BASED ON

Presence in sanction lists

Anomalous transaction patterns

Corruption and AML risk scores

Entity type (Shell companies have higher risk scores)



# CHALLENGES AND SOLUTIONS

## ENTITY NAME VARIATIONS (ALIASES, ABBREVIATIONS)

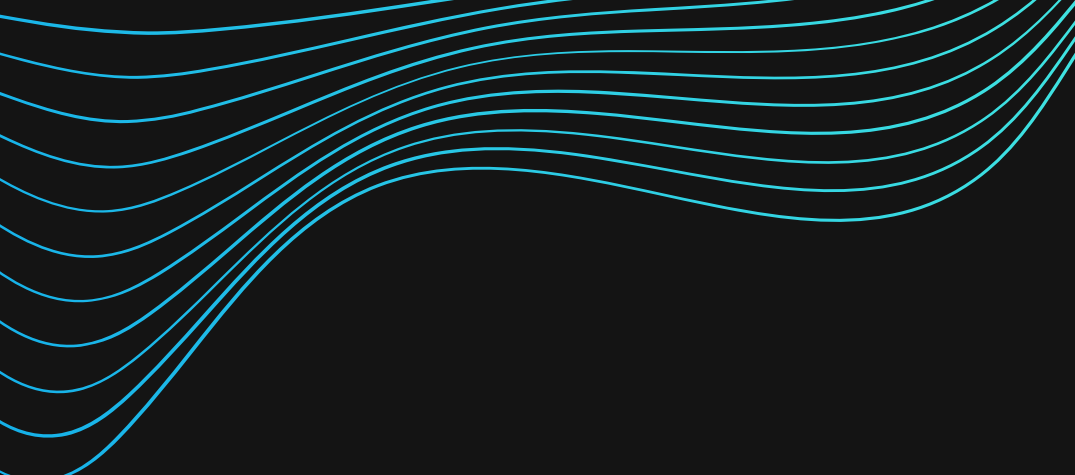
SOLUTION: Used fuzzy matching and name normalization techniques.

## LACK OF STRUCTURED PUBLIC DATA FOR RISK EVALUATION

SOLUTION: Aggregated data from multiple open sources

## ENSURING REAL-TIME PROCESSING FOR LARGE DATASETS


SOLUTION: Optimized database queries and caching mechanisms



# DEMO & RESULTS



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Successfully identified high-risk entities from transaction data.

Extracted names, classified them, and assigned risk scores with evidence


Automated process reduced manual effort significantly

Provided structured output for analyst decision-making.





# CONCLUSION & FUTURE ENHANCEMENTS



AI-driven entity intelligence improves financial risk analysis.

Reduces manual workload and enhances accuracy.

Future Enhancements:

Expand data sources for deeper insights

Improve real-time capabilities for continuous monitoring

Enhance dashboard UI for better visualization