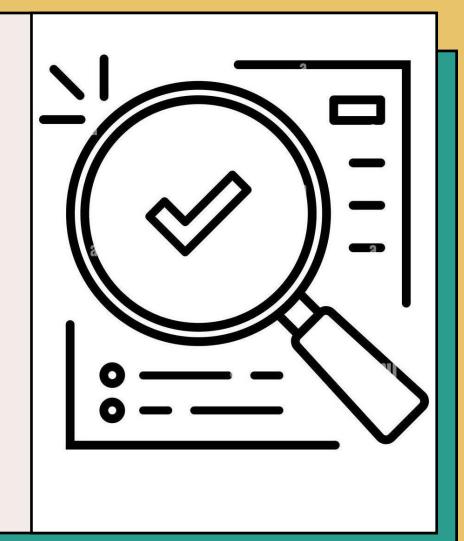
KYC & Client Onboarding Data Quality Audit

Amal S



Agenda



Introduction

Know Your Customer(KYC) compliance is a core requirement in banking and financial services. Ensuring accurate and complete client data helps institutions prevent fraud, meet regulatory obligations, and improve operational efficiency.

This project simulates a real-world scenario of client onboarding, where incomplete or inconsistent data can trigger compliance risks.

Using Python, I created synthetic client records and implemented logic to detect missing values, data entry errors, and sanctioned country flags.

The project also includes fuzzy matching techniques to correct misspelled country names — a common issue in data entry.

Visual summaries of flagged issues provide actionable insights for improving KYC data quality and onboarding workflows.

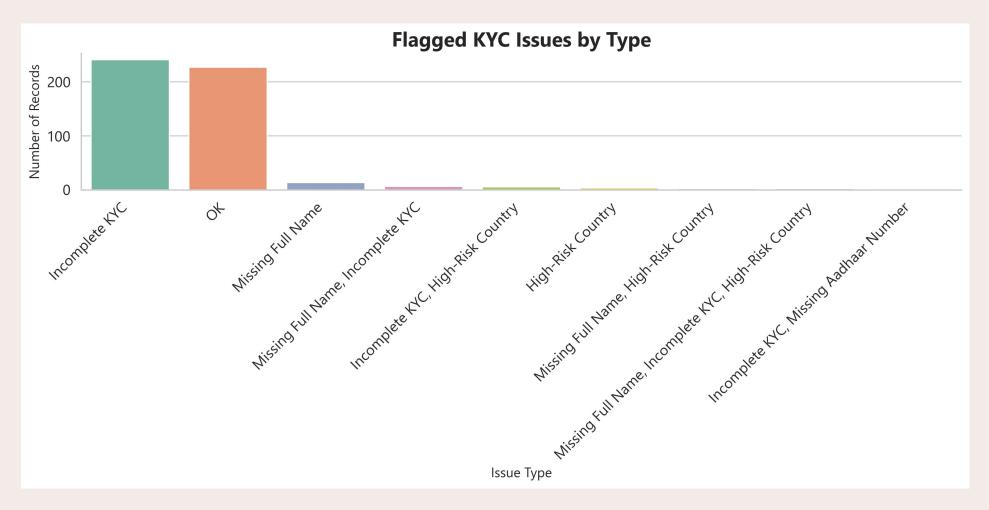


Primary goals

Ensure completeness, accuracy, and compliance of client onboarding data using Python-based validation and flagging logic.



Flagged KYC Issues by Type



KYC Data Risk Overview

Issue Type	Number of Records	Risk Level	Suggested Action
Incomplete KYC	241	⊗ High	Improve follow-up and automate document reminders
Missing Full Name	13	Moderate	Make full name mandatory at entry point
Missing Full Name, Incomplete KYC	6	⊗ High	Flag for manual review before account activation
Incomplete KYC, High- Risk Country	5	⊗ High	Escalate for compliance officer review
High-Risk Country	3	High	Block or require enhanced due diligence (EDD)
Missing Full Name, High- Risk Country	2	Medium	Cross-check with source documents
Missing Full Name, Incomplete KYC, High- Risk Country	2	Critical	Multi-risk: escalate immediately
Incomplete KYC, Missing	1	High	Indian client: Aadhaar



Without data, you're just another person with an opinion

W. Edwards Deming



Tools & Technologies Used

Tool/Tech	Purpose
Python (pandas)	Data cleaning, simulation
Faker	Generate synthetic client data
RapidFuzz	Correct misspelled country names
Matplotlib/seaborn	Visualizations
PowerPoint	Final reporting & presentation

Presentation title

Key Takeaways / Lessons Learned

- •Real-world KYC processes can have hidden data quality issues
- •Simple Python tools can help detect compliance risks at scale
- •Fuzzy matching and rule logic are powerful for automated anomaly detection
- This project strengthened my confidence in data-driven decision-making

Strategic Roadmap for KYC Data Integrity



Planning
Define Key Fields & Flags



Validation

Build Validation & Simulation



Cleaning

Data Correction & Enrichment



Analysis

Detect Patterns & Risks



Reporting
Deliver Insightful Outcomes

Timeline

Sep 20XX

Synergize scalable e-commerce Jan 20XX

Coordinate ebusiness applications May 20XX

Deploy strategy networks with compelling ebusiness needs

Nov 20XX

Disseminate standardized metrics Mar 20XX

Foster holistically superior methodologies

Areas of focus

B2B market scenarios

- Develop winning strategies to keep ahead of the competition
- · Capitalize on low-hanging fruit to identify a ballpark value
- · Visualize customer directed convergence

Cloud-based opportunities

- · Iterative approaches to corporate strategy
- · Establish a management framework from the inside

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How we get there

ROI

Envision multimediabased expertise and cross-media growth strategies

Visualize quality intellectual capital

Engage worldwide methodologies with web-enabled technologies

Niche markets

Pursue scalable customer service through sustainable strategies

Engage top-line web services with cutting-edge deliverables

Supply chains

Cultivate one-to-one customer service with robust ideas

Maximize timely deliverables for real-time schemas



Summary

At Contoso, we believe in giving 110%. By using our next-generation data architecture, we help organizations virtually manage agile workflows. We thrive because of our market knowledge and great team behind our product. As our CEO says, "Efficiencies will come from proactively transforming how we do business."

Thank you

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