

NAVIGATION

OVERVIEW

SUSPICIOUS
BEHAVIOUR

ML INSIGHTS

FURTHER
ACTIONS

FILTER

Is_laundering

Normal

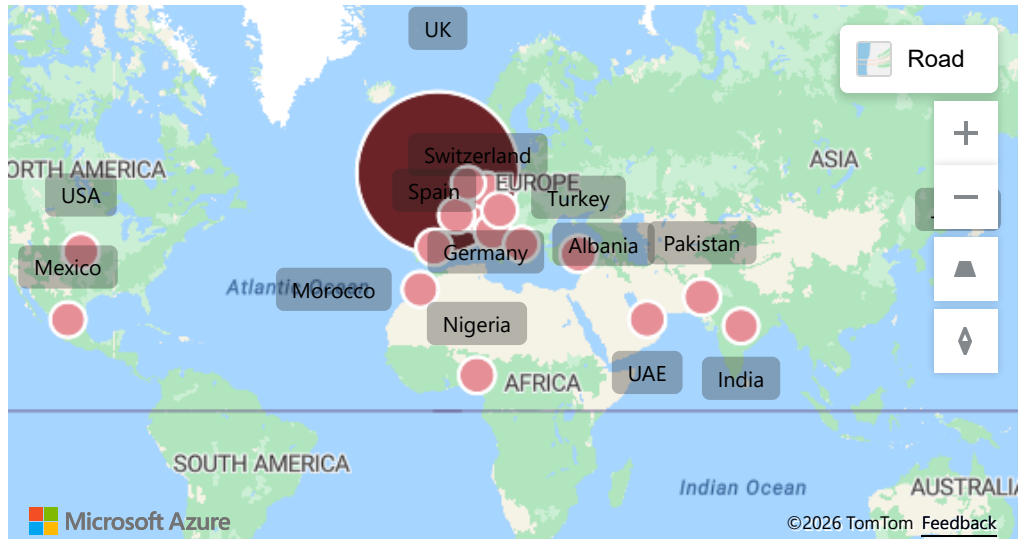
Suspicious



MONEY LAUNDERING DETECTION | TRANSACTION OVERVIEW

Uncovering the bigger picture – where transactions happen, how money moves, and which channels drive laundering risks.

Transactions by Sender Bank Location



UK

9183088

Turkey

20902

Switzerla...

20503

Pakistan

20346

UAE

20081

9.505M

Total Transactions

83.291bn

Total Amount

15

Total Typologies

7

Total Payment Type

Top Bank Location

UK



Top Payment Type

Credit card

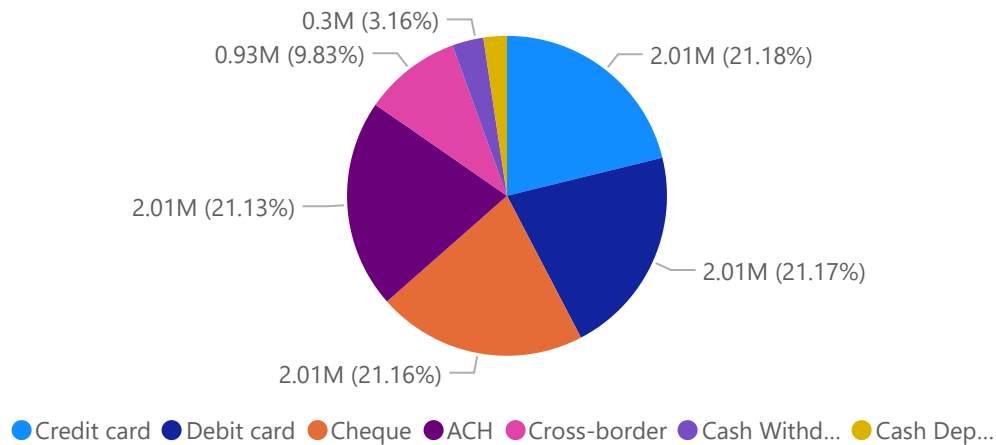


Top Laundering Structure

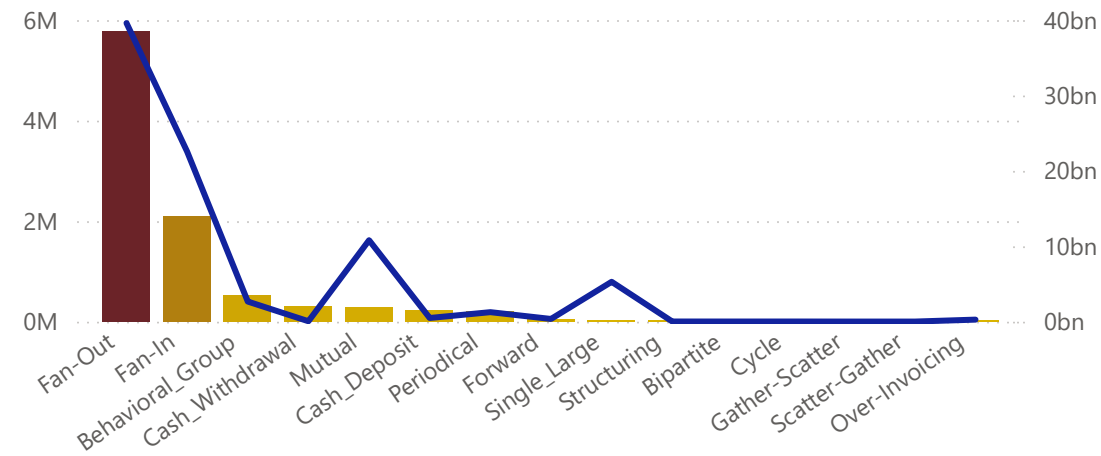
Fan-Out



Transactions by Payment Type



Transactions by Laundering Typologies with Total Amount



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MONEY LAUNDERING DETECTION | SUSPICIOUS BEHAVIOUR EXPLORATION

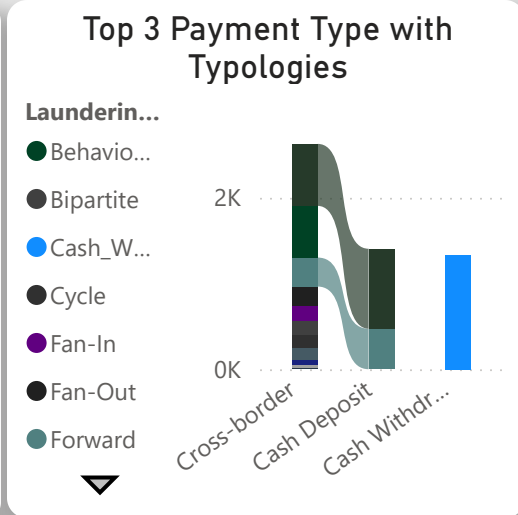
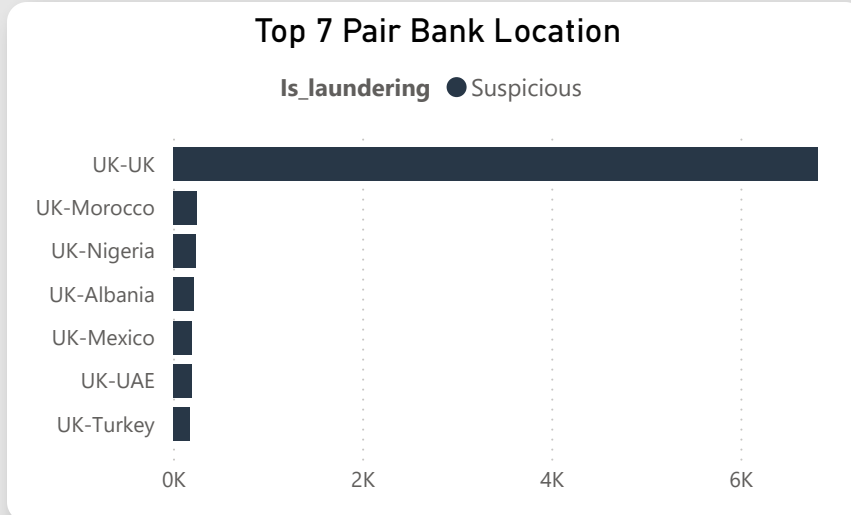
Zooming into red flags – spotting unusual patterns that reveal hidden laundering activities

Payment Type

- ☐ ACH
- ☐ Cash Deposit
- ☐ Cash Withdrawal
- ☐ Cheque
- ☐ Credit card
- ☐ Cross-border
- ☐ Debit card

Typologies

- ☐ Behavioral_Group
- ☐ Bipartite
- ☐ Cash_Deposit
- ☐ Cash-Withdrawal
- ☐ Cycle
- ☐ Fan-In
- ☐ Fan-Out
- ☐ Forward
- ☐ Gather-Scatter
- ☐ Mutual
- ☐ Over-Invoicing
- ☐ Periodical
- ☐ Scatter-Gather
- ☐ Single_Large
- ☐ Structuring



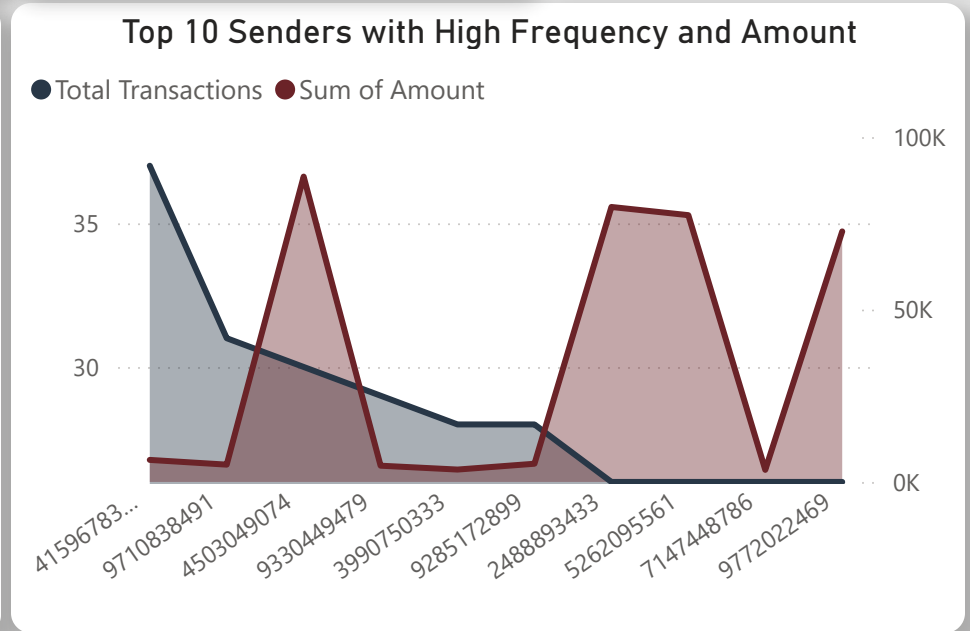
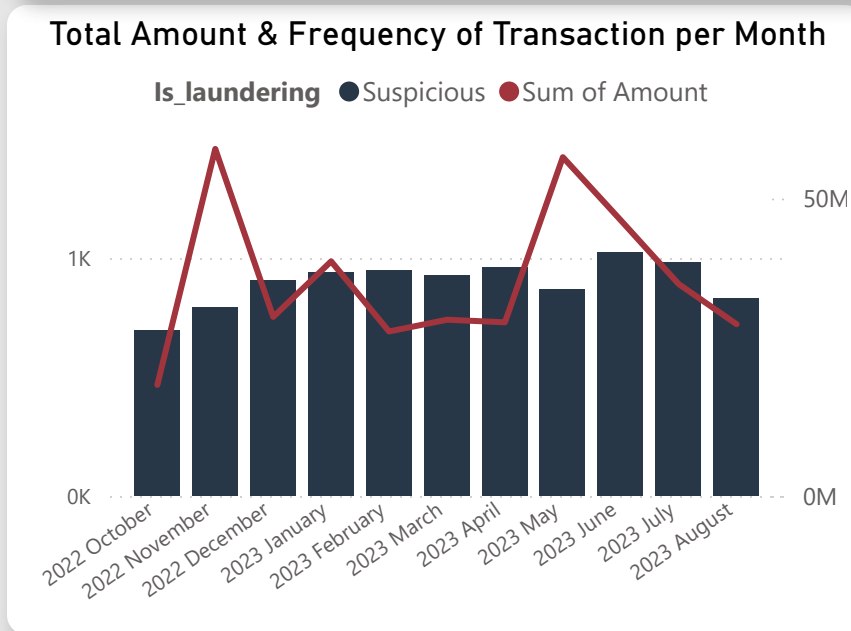
9873

Total Transactions

400.722M

Total Amount

Is_Weekend	Day	Night
Weekday	4595	2672
Weekend	1515	1091



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Model

Random Forest

XGBoost



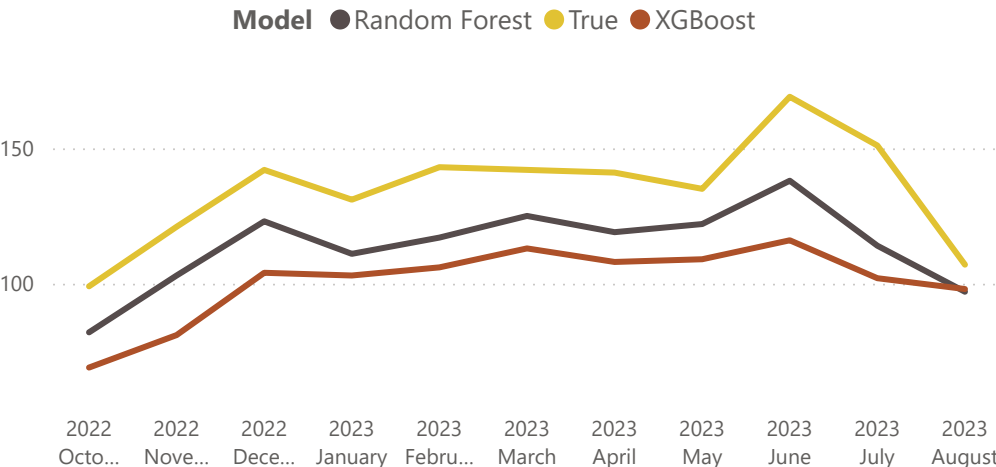
MONEY LAUNDERING DETECTION | MACHINE LEARNING INSIGHTS

From data to intelligence – evaluating machine learning models to predict and detect laundering with precision

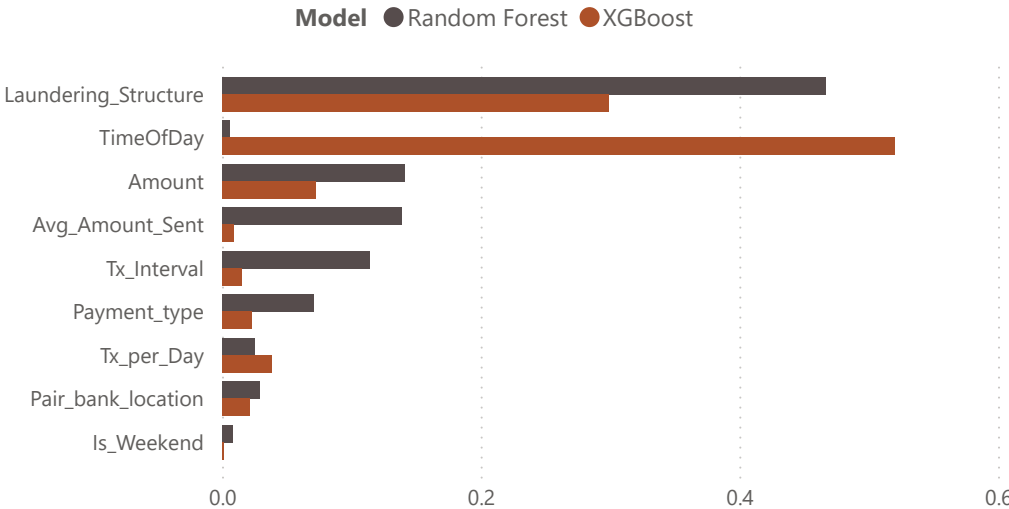
9.505M

Total Transactions

Model Predictions



Feature Importance



METRIC SCORE

0.9187

Precision

0.7316

Recall

0.8138

F1-Score

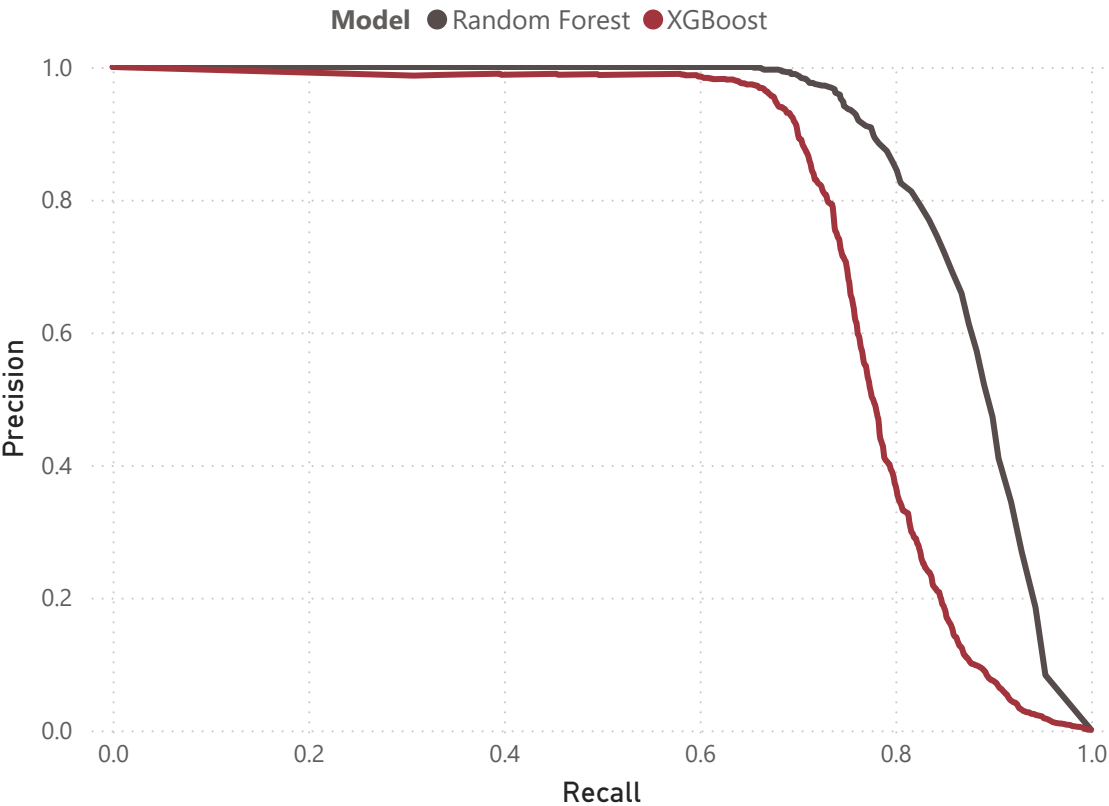
0.9997

Accuracy

0.8259

AUPRC

Precision-Recall Curve



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Threshold

0.24



MONEY LAUNDERING DETECTION

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FURTHER ACTIONS AND RISK MANAGEMENT

From Detection to Action – Prioritizing High-Risk Transactions

1251

FlaggedCount

69.9937M

FlaggedAmount

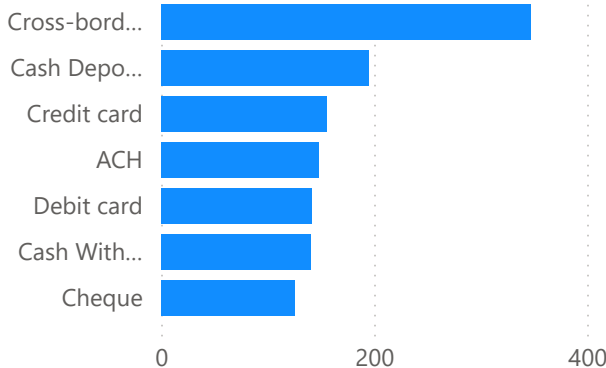
651

HighRiskCount

938 hr 15 min

Estimated Workload

High-Risk Payment Type



High-Risk Countries

UK

1150

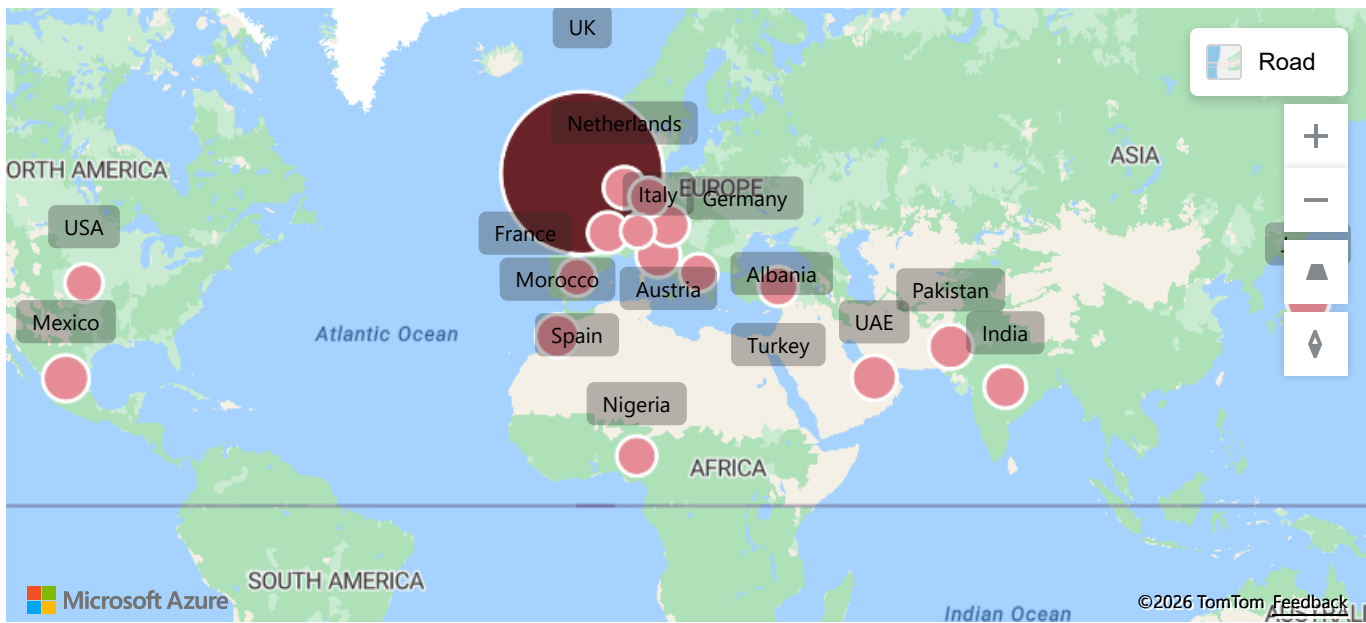
Mexico

12

UAE

10

Sender Bank Location



Transaction_ID	true_label	predicted_label	predicted_prob
253272	1	1	0.25
969114	0	1	0.25
1795513	1	1	0.25
1838655	0	1	0.25
1950682	0	1	0.25
2232192	0	1	0.25
2829885	0	1	0.25
3406266	1	1	0.25
3877077	1	1	0.25
3967410	0	1	0.25
4647140	1	1	0.25
4968607	0	1	0.25
5039715	0	1	0.25
5634053	1	1	0.25
6186007	1	1	0.25
6466469	0	1	0.25
6561183	0	1	0.25
7122526	1	1	0.25
7412212	1	1	0.25
8665825	0	1	0.25
9036678	1	1	0.25
Total			