

**Problem Statement Sheet(Hypothesis Formation):**

How can we accurately identify the transactions made by the fraudulent agents(fraud transaction) in financial services to minimize the losses in ABC bank?

**Context:**

ABC Bank loses millions of dollars because of fraud transactions every year. Apart from that we also lose the faith of customers. To mitigate this problem we need to identify the fraud activities happening in our bank.

**Constraints Within the Solution Space:**

1. No false detections as it may cause reduction in faith by customers.

**Criteria of Success:**

Identify fraud transactions accurately, more than 98%, using available features.

**Stakeholders to Provide Key Insight:**

1. XYZ- Director of Financial Operations
2. XYZ- Manager Financial Operations
3. XYZ- Technical Lead
4. Alka Luqman - Mentor

**Scope of Solution Space:**

1. Amount:amount of the transaction in local currency.
2. Type: type of transactions happening in ABC bank( CASH-IN, CASH-OUT, DEBIT, PAYMENT and TRANSFER).
3. oldbalanceOrg - initial balance before the transaction.
4. newbalanceOrig - new balance after the transaction
5. oldbalanceDest - initial balance recipient before the transaction.
6. newbalanceDest - new balance recipient after the transaction.
7. isFlaggedFraud -transfers more than 200,000.

**Key Data Sources:**

1. Kaggle-www.kaggle.com(Synthetic Financial Datasets For Fraud Detection)