DAT 223 Project Three Milestones

**Organizational Problem for:** La Banca Central Bank **Analyst’s Name:** Andrea Plunkett Jackson

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## Problem Statement

La Banca Central Bank has become aware of an increase in fraudulent transactions at viable financial institutions in regard to customer personal information and financial account compromise. The present objective is to identify activity parameters using various transactional data signatures that indicate probable fraud concentrating on monitoring and establishing identification of types of transactional data that are further liable to lead to duplicitous activity such as cash-outs, payments for goods and services, or fund transfers. With the vision to ultimately thwart risk as a whole.

**Research Questions**

* How does La Banca Central Bank quality management affect the incidence and severity of bank fraud within the organization?
* How effective and ethical is pattern of fraud analysis in detecting and preventing point of sale or request for money movement fraud cases?

**Revised Codebook**

The variables of codebook are as follows :

* Step: Timestamp variable to be used to look for outline of fraudulent behavior.
* Type: Characteristics of transactions to establish link between money movement type and fraud.
* Amount: The monetary value of the transaction to be used to evaluate possible link between fraud occurrence and transactional charges.
* NameDest: Receiver of transaction variable used to pinpoint possible commonality.
* IsFraud: Variable determining current fraud behavior in order to establish connections if applicable.
* IsFlaggedFraud: Review of account indicators on attempts on single transactions greater than $200,000 to establish controls in regard to Bank Secrecy Act.
* OldBalanceOrg: Based on the research question on internal possibility of fraud incidents review of balances prior to fraud activity to see if pattern can be determined.

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| --- | --- | --- |
| **COLUMN** | **DESCRIPTION** | **DATA TYPE** |
| Time | Change parameters from step = 1 hr. to real time equivalent for easier understanding.hr/day/month | Int |
| Type | CASH-IN, CASH-OUT, DEBIT, PAYMENT, and TRANSFER | Varchar |
| Amount | Amount of the transaction in local currency | Float |
| RecpName | Customer who is the recipient of the transaction | Varchar |
| IsFraud | Identifies a transaction as fraudulent (1) or non-fraudulent (0). | TinyInt |
| Flagged\_Fraud | Flags illegal attempts to transfer more than $200,000 in a single transaction. The business model aims to control massive transfers from one account to another and flags illegal attempts. An illegal attempt in this dataset is an attempt to transfer more than $200,000 in a single transaction. | Int |
| OrgBalance | Initial balance before the transaction | Int |

Rationale:

The information provided in this revised codebook meets all criteria needed to properly

diagnose La Banca Central Bank’s concern over identifying and preventing fraudulent

transactions. We decided to keep the existing naming practices for the columns as they were

logical and relevant to the data. By keeping these naming practices, we shouldn’t have any issues

presenting the dataset to another researcher who does not have prior knowledge of the project as

the data is clearly defined. In working with this data, we need to be careful to ensure customers’

personal and sensitive information including name, account numbers, social security numbers,

etc. is kept secure and protected.

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**Rationale:**

The revised codebook above meets preliminary criteria needed to properly identify and establish protocols for fraud prevention at La Banca Central Bank. By changing not only the column names to make general understanding from any future researcher a change to the step parameter would be completed in order to make time analysis statistically clearer on establishing time of transactions meeting the standardized bank reporting and transparency enabling future systematical protocols to be established. Addressing ethical, privacy, and bias is crucial to maintaining both business repetition and customer confidence as it should always be best practice in the analysis of data while compliance with laws and regulations is preserved. Awareness of these requirements is imperative.