A close-up of a logo

Description automatically generated

DAT 223 Project Two Milestones

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

**Date:** 02/04/2024

## 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?
* How do data protection regulations affect the employee hiring process and outcome in the bank fraud sector?

**Success Criteria**

Success criteria for achieving positive outcomes based on La Banca Central bank vision to ultimately thwart risk from fraudulent transactions would be within the frequency parametric of 96%. The standards of success satisfying stakeholders through delivery of project outcome would be defined and measured through transparency and establishing benchmarks. Due to the sensitive and regulatory requirements of handling customer personal information and financial account data while cost will be minimal as the resources required are available both within the bank and public data sets, the scope and timeline must be considered in order to accommodate the large complex data.

**Data Collection**

The types of data required to be collected is both quantitative and qualitative in order to fully answer the above research questions addressing the organizational problem and vision for the future. Qualitatively identify customers through surveys using questioning on preferences, concerns, and baseline knowledge of current financial scams. Observation of current employee knowledge using in house resources of call monitoring and quiz base questioning establishing level of skill set for real time detection of fraud incidents presently occurring and textual data, to understand training and hiring procedure. In regard to quantitative data, continuous data is recommended as it allows for the measuring of fractional values that is incurred with financial analysis. This combination will allow us to address each question by providing objective and measurable evidence to locate the correlation between the variables and proceed with proper data driven resolution.

**Variables**

Customer qualitative surveys with questions such as, “How do you perceive the risk of financial scams and what factors influence your decision to use our services?” include the independent variables such as the type of service, the price, or the marketing message received. Dependent variables such as customer satisfaction, loyalty, or trust. For the surveys, we will also want to consider moderating variables. These are the factors that affect the relationship between the independent and dependent variables, such as age, income and education level which may influence how customers perceive and respond to fraud risk and satisfaction with La Banca Central Bank. Stratified and systematic sampling would be encouraged to both allow for proportionate numbers and randomly selected participants.

For quantitative data used with financial analysis of fraud, the independent variable is the variable that represents a potential fraud risk indicator, for example the ratio of cash flow to net income, the number of audit opinions, or the frequency of transactions. The dependent variables are the amount of financial inaccuracies, the probability of fraud detection, or the legal consequences of fraud. These variables of interest will help address the research question by clarifying what is to be measured and compare the unit of analysis to correlate or regress the relationship between.