PREDICTING TENDERS SUCCESS PROPOSAL

The Electronic Government Procurement System e-government works to consolidate and facilitate the process of bidding and government procurement for all sectors, enhancing transparency on the one hand, and among competing entities on the other. This allows the largest segment of competitors to access bids, enhancing competitiveness and improving the quality of government projects undertaken. The portal is an entirely digital gateway for posting government tenders, receiving invitations, obtaining fascicles, surveying bids and awarded contracts, with first preference being given to small and medium-sized businesses, which are exempt from preliminary insurance.

For flexibility, tenders can be canceled in many stages for different types of reasons. The cost increases in later stages for both sides, the public & private sectors. Predicting the success rate of tenders in advance, might save time & many of both public tender workers as well as suppliers & contractors.

THE OBJECTIVE

The goal of this project is to

1- Better understand which factors are most important in completed tenders, and how those factors relate to tenders' completions and not being cancelled.
2- Build a model based on those factors then make predictions for future outcomes based on this model.

TARGET AUDIENCE:

1. Procurement workers in public sector
2. Suppliers & contractors.

DATA:

Data was collected from Procurement System and masked for privacy protection. It was extracted using sql and saved in Excel file.

Format	Number of rows	Number of columns	Completed tenders	Cancelled Tenders
xlsx	**160732**	**12**	**103629**	**57103**

COLUMNS

COLUMN	TYPE
Tender Type	String
City	String
Conditionsbookletprice	Int
Tender Status	String
Invitation Type	String
Submissiondate	Date
Createdat	Date
Lastofferpresentationdate	Date
Estimatedvalue	Float
regions_count	Int
categories_count	Int
Activity Name	String

In this project, a model will be built to predict if the tender will be completed or not. The target variable will be "Tender Status".

TOOLS:

- MySQL Workbench.
- Use the python packages for data science models.
- Visualization tools like Powerbi.
- Flask or click packages for the final product and to be used in future.
- Any needed python packages.

MVP GOAL

Exploratory data analysis with models and initial findings of the most important features for predicting tenders that will be completed.