

# TAICHUNG COMMERCIAL BANK – LOAN APPROVAL ANALYSIS

Simran Kaur January 2023

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#### **GOALS**

- Determine the most important financial ratios in the underwriting process
- Create suggestions to improve/streamline the process

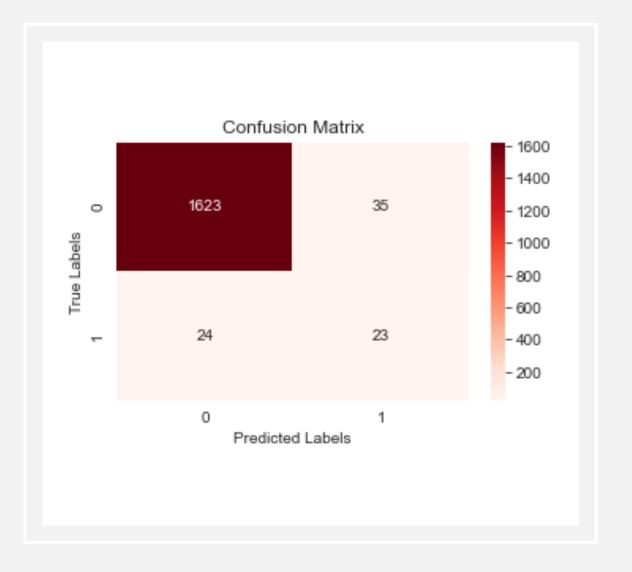


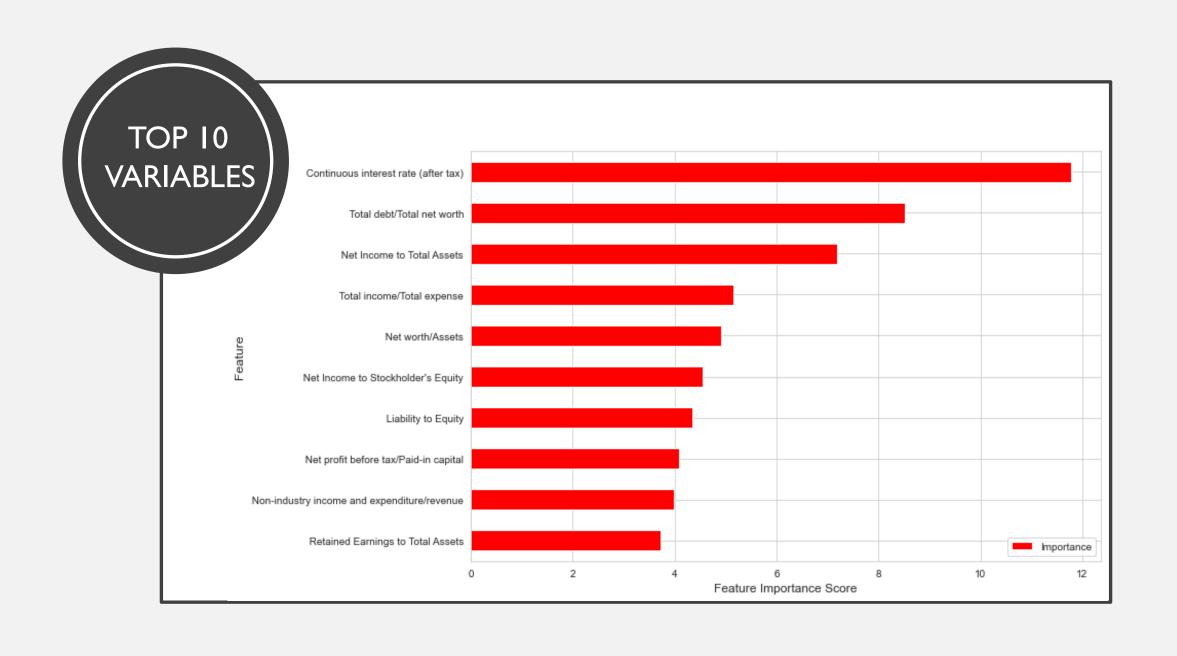
#### DATA & METHODS

- Bankruptcy data from the Taiwan Economic Journal
- EDA
  - Highly correlated features dropped
  - Sample Minority Oversampling Technique ("SMOTE") applied
- Five different algorithms ran
- Deep-dive into chosen model

## MODELING RESULTS

- Random Forest Classifier
- FI-Score = 43.8%





## **SUGGESTIONS**



Separate clients into Red, Amber and Green buckets



Review client history