Risk Group Selector

# Objective

To identify groups with contrasting risk profiles using GM and other key predictors to optimize Underwriting strategy

# Proposed Method

Decision Tree algorithm is used to as a supervised approach to define the groups with maximum separation in terms of Risk Profile (i.e. Delinquency Target Variable)

# Key Parameters:

**Base:** Existing Clients with DECISION\_WF\_FINAL IN ('g\_CE','d\_PRE','e\_POST','c\_PRELIM2')

**Target Variable:** FSTPD30

**Train Set:** Jul’20

**Test Set:** Aug’20 Onwards

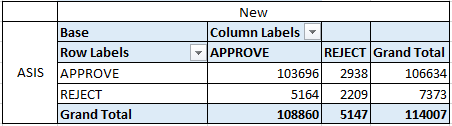
**Predictors Considered:** POS\_MAR20\_GM\_EXI, POS\_GSPN\_V2, PRODUCT\_GOODS\_TYPE, PRODUCT\_CREDIT\_TYPE, AMT\_CREDIT, DP\_PCT, CLIENT\_EMI, POS\_TYPE, SCORE\_CB

# Scripts

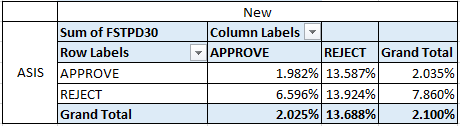
 

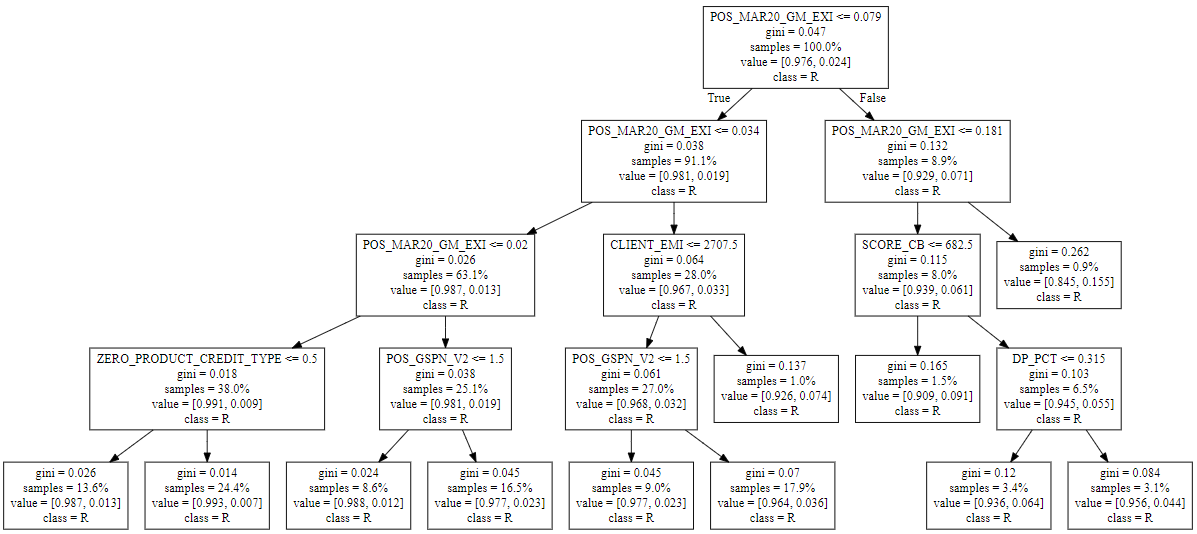
# Result

Overall Approval Rate increase by 2% over current Strategy



Overall Delinquency Rate(FSTPD30) reduce by 0.5% over current strategy





# Recommendations

* The analysis suggests that split on GM is able to identify the worst clients. We can simplify the RGS to be based just on GM currently
* The remaining predictors create differentiation but in mid deciles, hence not useful in decision making. These segments to be kept for monitoring purpose
* Rerun the decision tree when we have new data source like Airtel etc.