

KEVIN'S

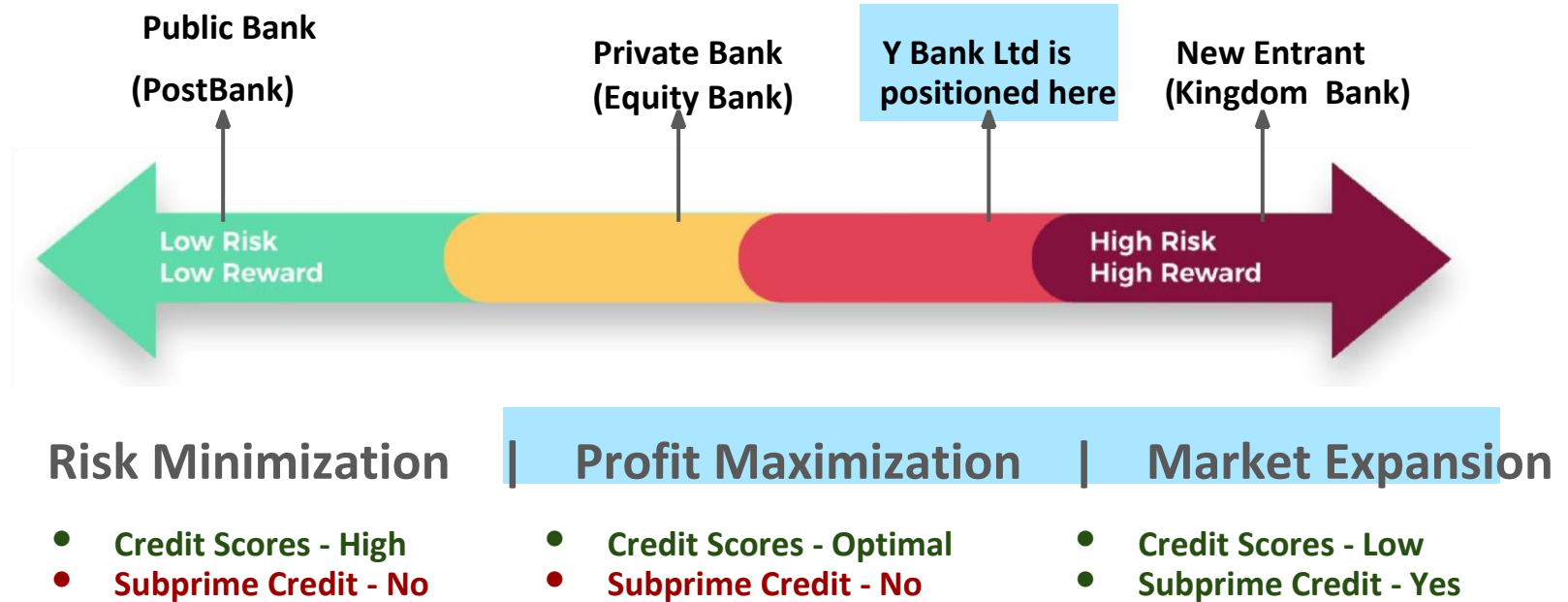
Credit Scoring Project for Bank Y



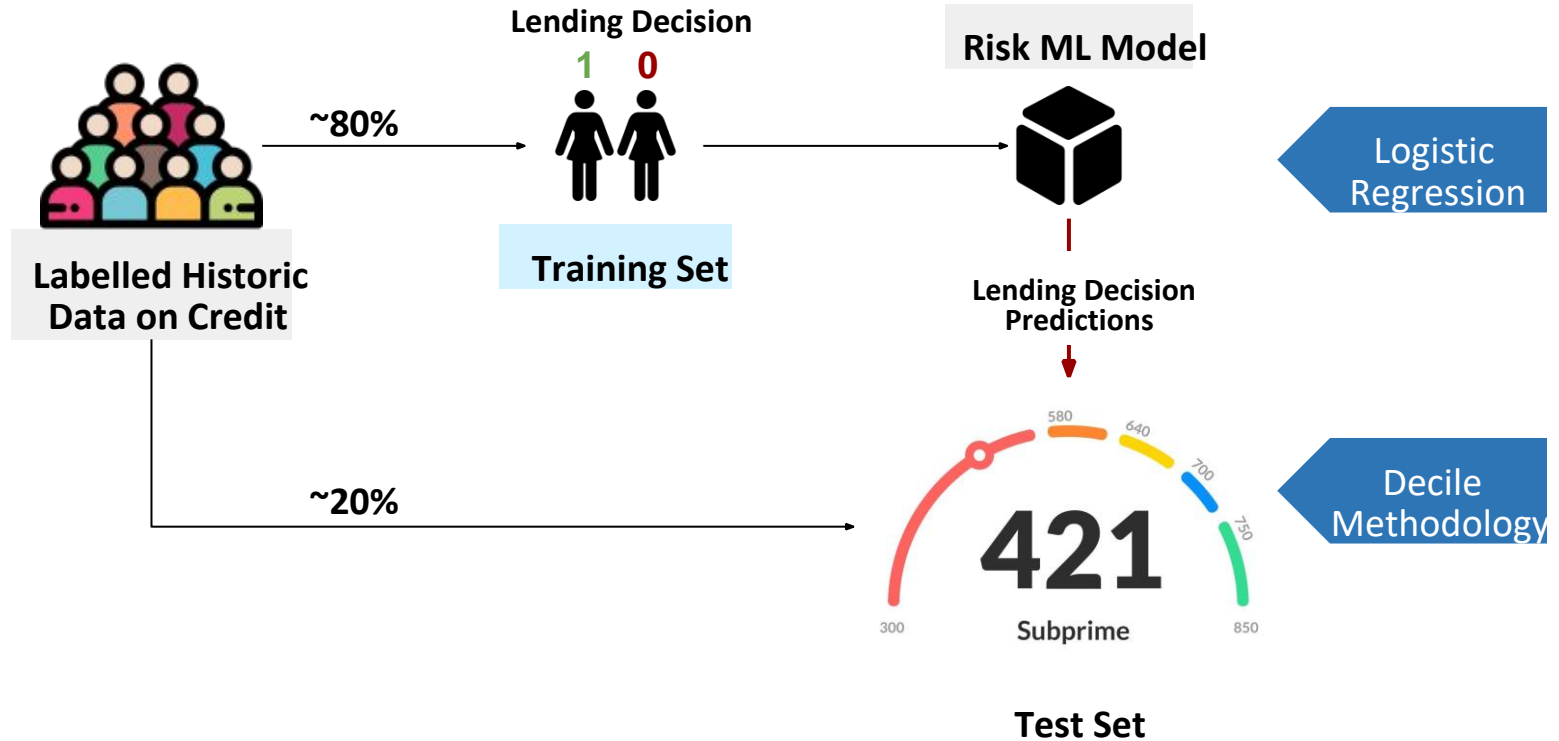
Business Case : Credit Risk Modelling.

- Y Bank Ltd. intends to build an **in-house risk model** to make **lending decisions for subprime mortgages**
- Business objective is to **maximise profitability**, given:
 - Profit from a good customer is \$100
 - Loss from a bad customer is \$500
- Bank has shared historical data on customers':
 - Credit bureau records
 - Loan outcomes (paid off or bad loan)

Business understanding of the assignment.



High Level solution architecture.



The approach towards solution.



- **Assumptions**

- missing values imputed with mean
- customer ID excluded from analysis



- **Trained a classification model, for**

- predicting likelihood of loans being good/bad
- using Logistic Regression Classifier

Deliverable no 1 : In house risk model.



82.66%

Model accuracy achieved



Zero

Operational Cost to Business

Y Bank lending strategy options.

Option 1.



Strategy for profit maximization.

- % of good loans predicted correctly = 41.37%.
- % of bad loans avoided predicted correctly = 66.67%.
- Probability threshold for approvals = 91.98%.

Option 2.



Strategy for profit maximization and market expansion.

- % of good loans predicted correctly = 51.41%.
- % of bad loans avoided predicted correctly = 56.86%.
- Probability threshold for approvals = 89.50%.

End....