

POST DATA ANALYSIS PRESENTATION CONTENT/ FRAMEWORK (in progress)

1. Data Collection

Personal financial data: income, expenses, credit history, existing debts.

Behavioral data: payment habits, account activity.

Alternative data (is it possible to get alternative data): utility payments, mobile transactions.

2. Data Cleaning and Preprocessing

Handle missing or inaccurate data.

Standardize variables (e.g., normalize income levels, create categorical variables).

3. Feature/ Attribute Engineering (from my Python programming course) (could these be research questions/answers)

Create derived variables: debt-to-income ratio, credit utilization, and loan-to-value ratio.

Incorporate historical trends: late payment frequency, credit growth.

Credit Approvals

Credit App Rejections

4. Model Development

Logistic Regression for simplicity.

Decision Trees/Random Forests for interpretability.

5. Model Evaluation

Metrics: Precision

Validation: Cross-validation, backtesting on historical data.

6. Deployment?

Integrate with credit decision systems?

Monitor for model drift or changes in borrower behavior?

7. Post-Deployment Monitoring?

Periodically assess model performance?

Regularly retrain using updated data?