Credit EDA

Risk analytics in banking and financial service

Introduction

The loan providing companies find it hard to give loans to the people due to their insufficient or non-existent credit history. Because of that, some consumers use it as their advantage by becoming a defaulter. We work for a consumer finance company which specializes in lending various types of loans to urban customers. We have to use EDA to analyze the patterns present in the data. This will ensure that the applicants are capable of repaying the loan are not rejected.

Steps performed in Exploratory Data Analysis:

1. Data cleaning and manipulation which includes handling the missing values in both the data set i.e. application_data and previous_application.
2. Secondly removing unwanted columns for ease of Analysis.
3. Checking the data set for any error.
4. Creating bins for better analysis as category.
5. Then confirming data imbalance along with performing operation on outliers.
6. Finally performing univariate, bivariate analysis along with finding the top correlations.

Conclusion:

1. Banks should approve loan for 'office apartments', 'co-op apartment' housing type as they are having less chances to default.
2. Banks should provide loans to 'Repair' and 'other' purpose category more often.
3. Bank should provide loans to 'Business entity type 3' and 'self-employed person'.
4. Working people especially females are the best to target for the loans.
5. Loan purpose with 'Repair' category are facing more difficulties in repaying the loan but they are the one with lesser default.
6. Buying a garage, Business development, Buying a holiday home/land, Buying a home have better repaying capability. Therefor more focus should be on these category to decrease the default rate.