Factors that impact the loan approval for an applicant

Project : Communicate data findings
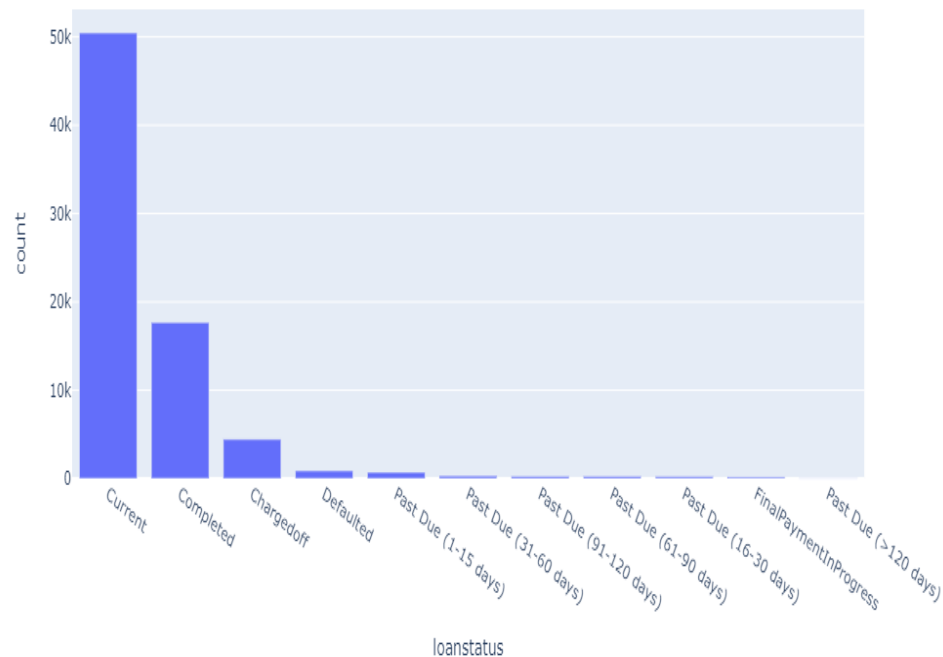
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Objective

This project is about the factors or features that could help the loan applicant to get the approval status.

Insights 1

Loan Status of all Borrowers are with current and completed state. Almost 50K current customers have been taken loans.
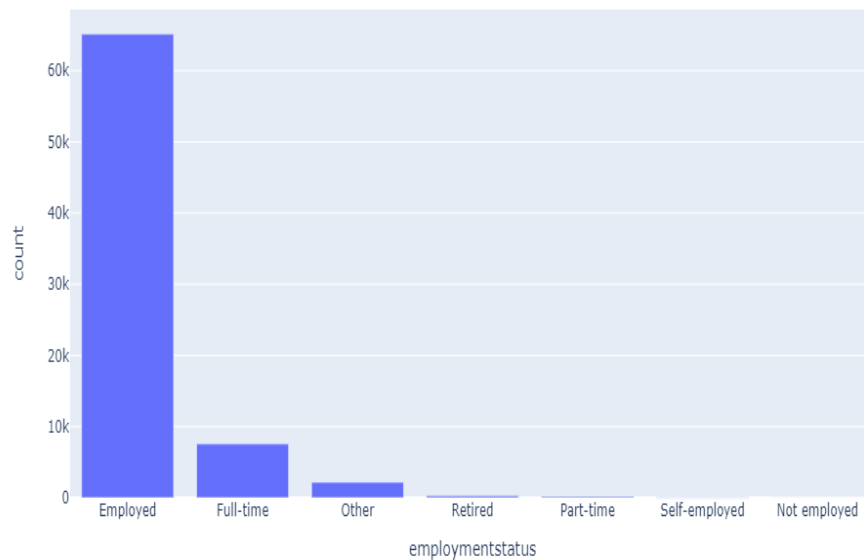
Loan status of all borrowers

Insights 2

Employment status of all Borrowers are with Employed State and most of them are full time worker.
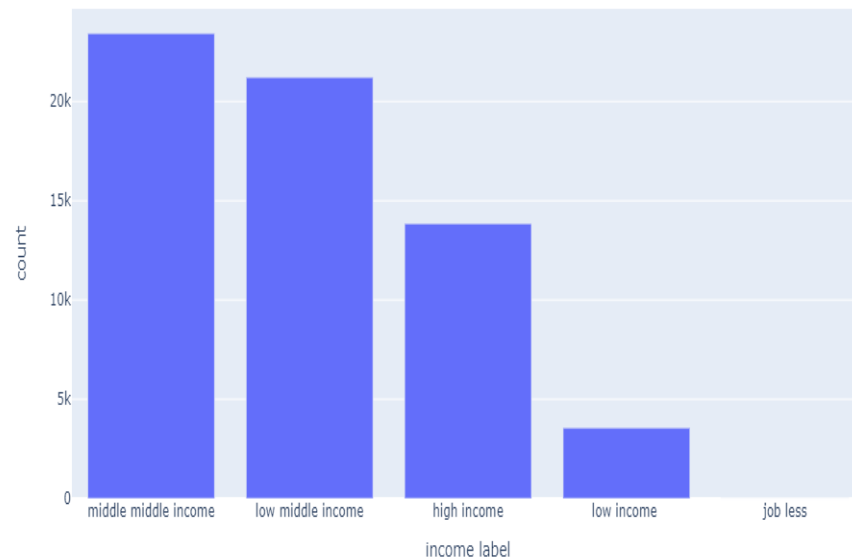
Employment_status status of all borrowers

Insights 3

People having middle-middle income(50,000-74,999 USD) and low middle income (25,000-49,999 USD) took more loans. Job less and low income people have less chance to get loans from bank.
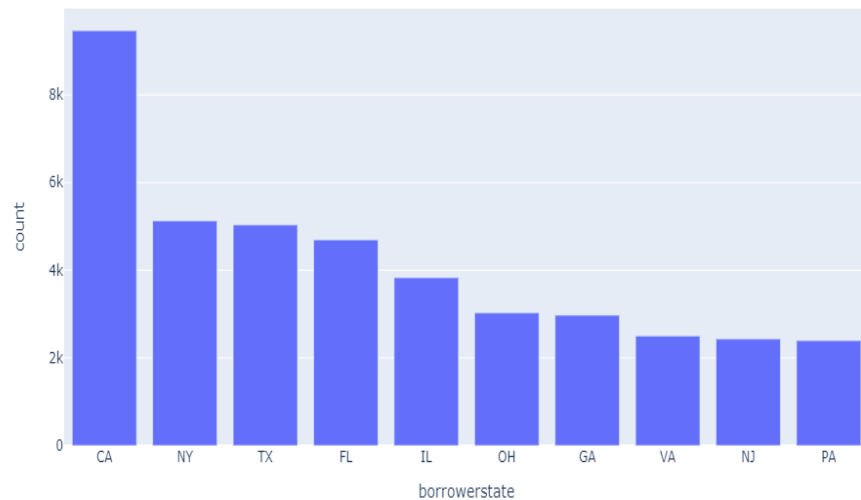
Income status of all borrowers

Insights 4

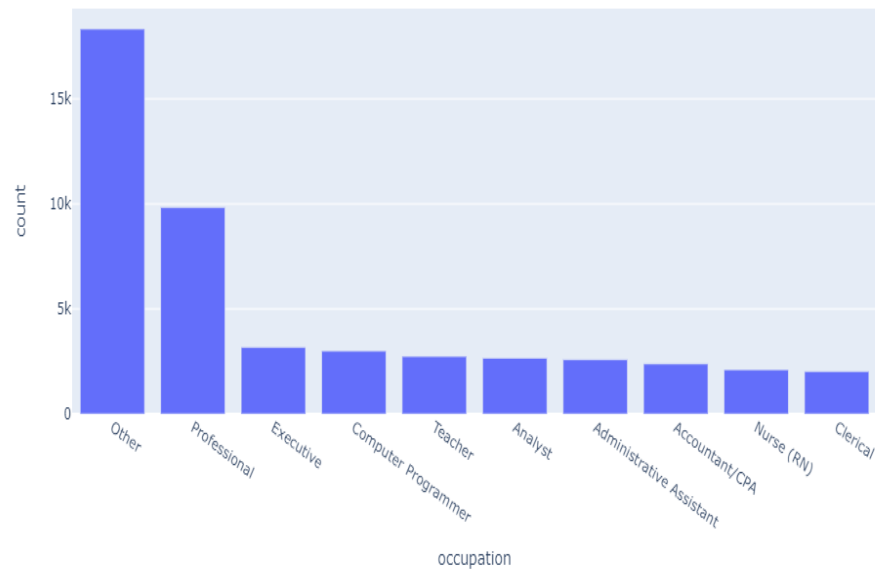Top 5 states of all Borrowers are from CA,NY,TX,FL and IL.

Top 10 states of all Borrowers

Insights 5

Most of the borrowers occupation are not defined. May be self employed like property owner. But majority are with an occupation of Professional and Executive.
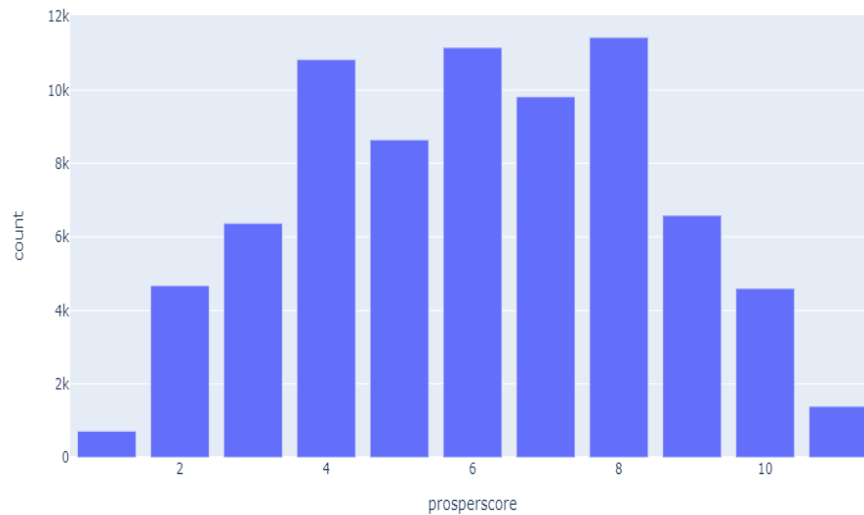

Top 10 occupation of all Borrowers

Insights 6

Majority of the borrowers are with a rating or score from 4 to 8.They have higher chance to approve loan.
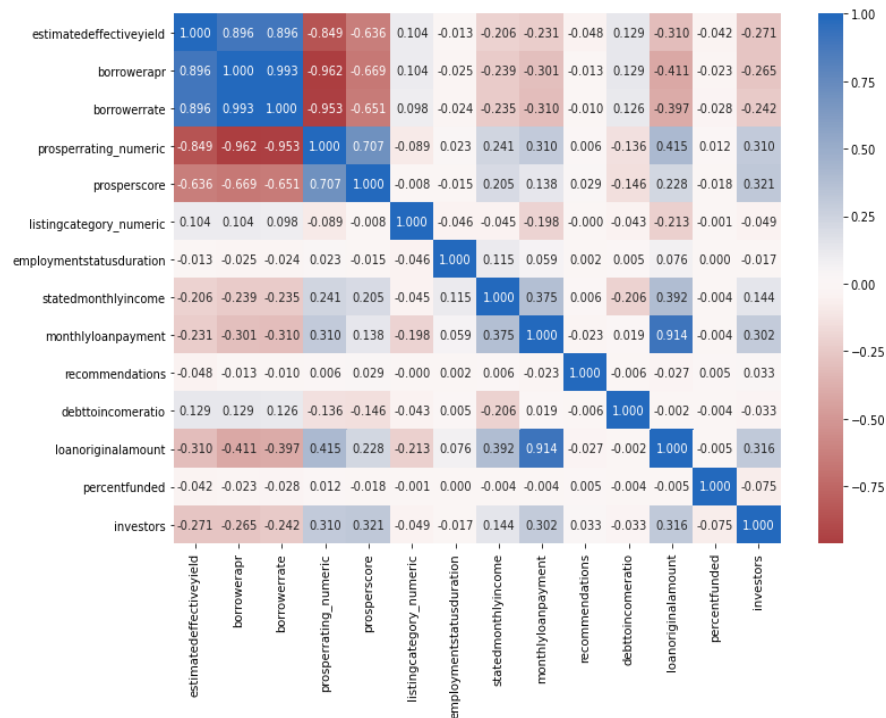
ProsperScore of all Borrowers

Insights 7

1. Loan original amount and monthly loan payment is highly correlated.

2. Borrower annual percentage rate and prosper score is negatively correlated.

Insights 8

1. For Applicants(employed and fulltime) with prosper ratings from 7 to 4 have the higher loan amount with increased salary.

2. For Applicants(part time employee) with prosper ratings from 7 to 4 have the lower loan amount with low level salary.

Applicants - Rating across Monthly Income and EmploymentStatus
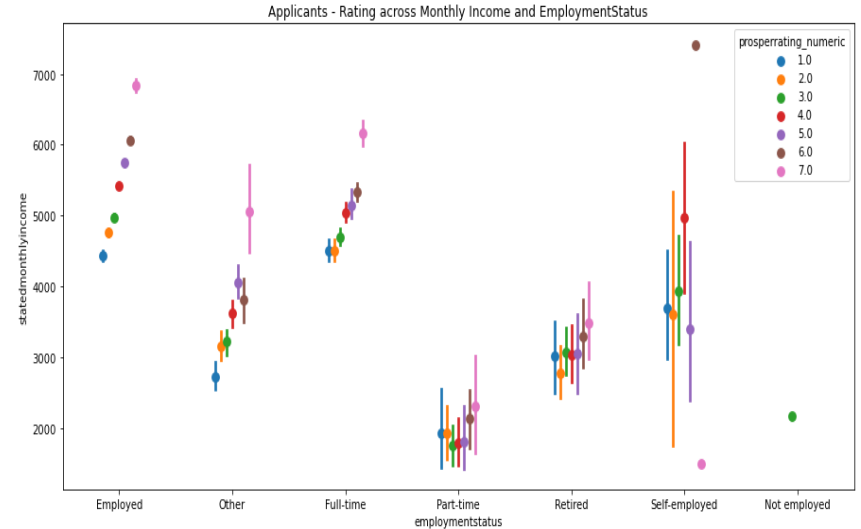
Insights 8

We observe that without homeowner tend to have a higher interest rate, and thus lower rating. However homeowner tends to have lower interest rate and higher rating. So we can safely say that homeowner is safest bet when giving a loan.

Applicants - Home owner status across ProsperRating and BorrowerRate
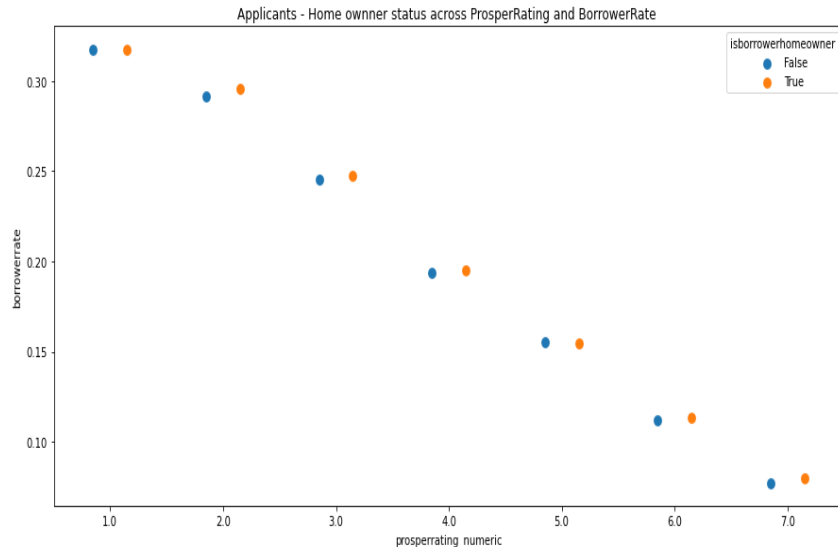
Recommendation

To summarize this report, I believe that the loan approval status is heavily influenced by the applicant's details on income range, house owner status, and job status.