

Gramener Case Study

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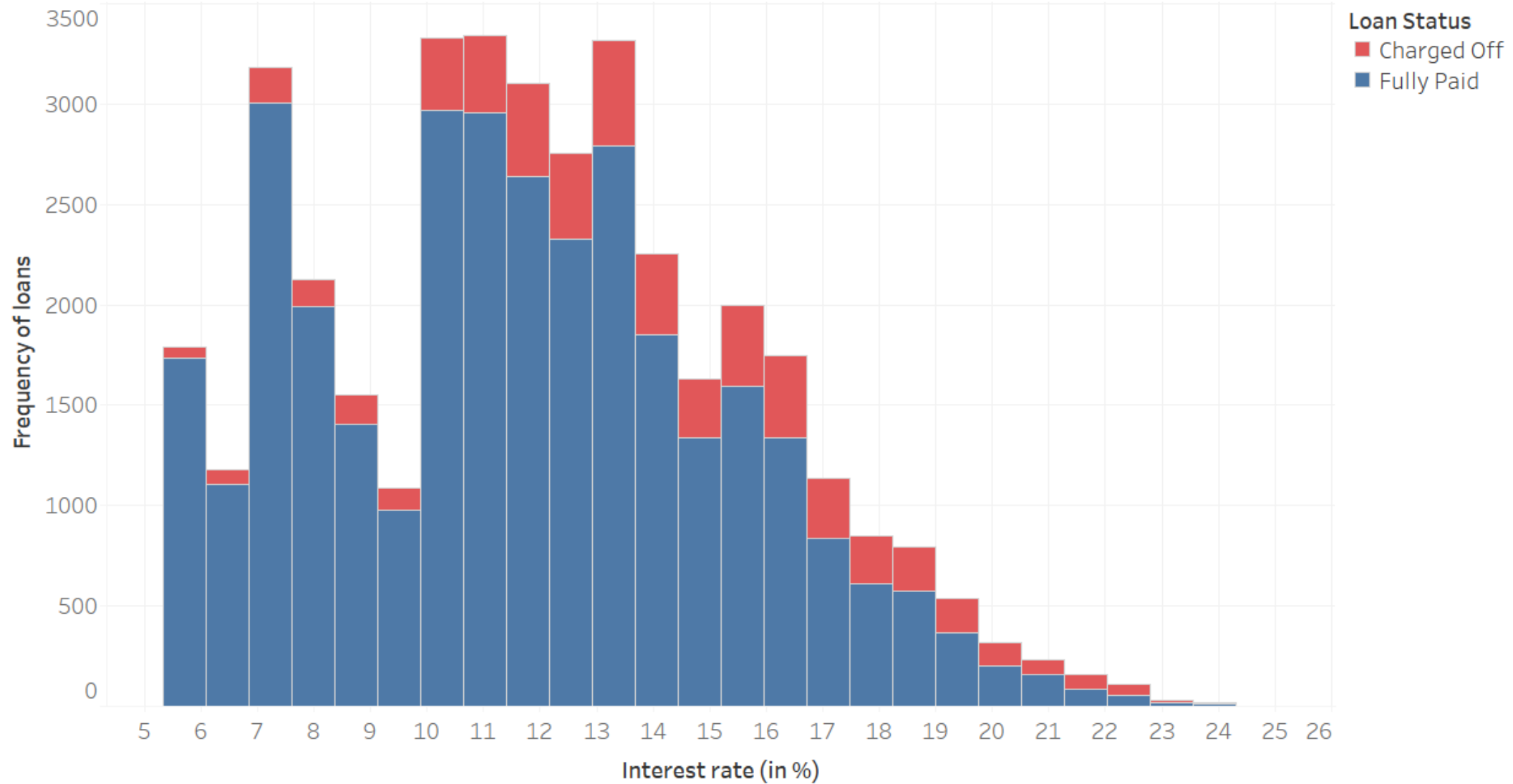
Anukrit Raj

ABSTRACT

The aim is to identify patterns which indicate if a person is likely to default, which may be used for taking actions such as denying the loan, reducing the amount of loan, lending (to risky applicants) at a higher interest rate, etc. In this case study, you will use EDA to understand how consumer attributes and loan attributes influence the tendency of default. We will also see how the frequency of loan takers varies with different variables such as interest rate, annual income of a person, purpose of loan etc.

PLOT 1

Frequency varying with different interest rate



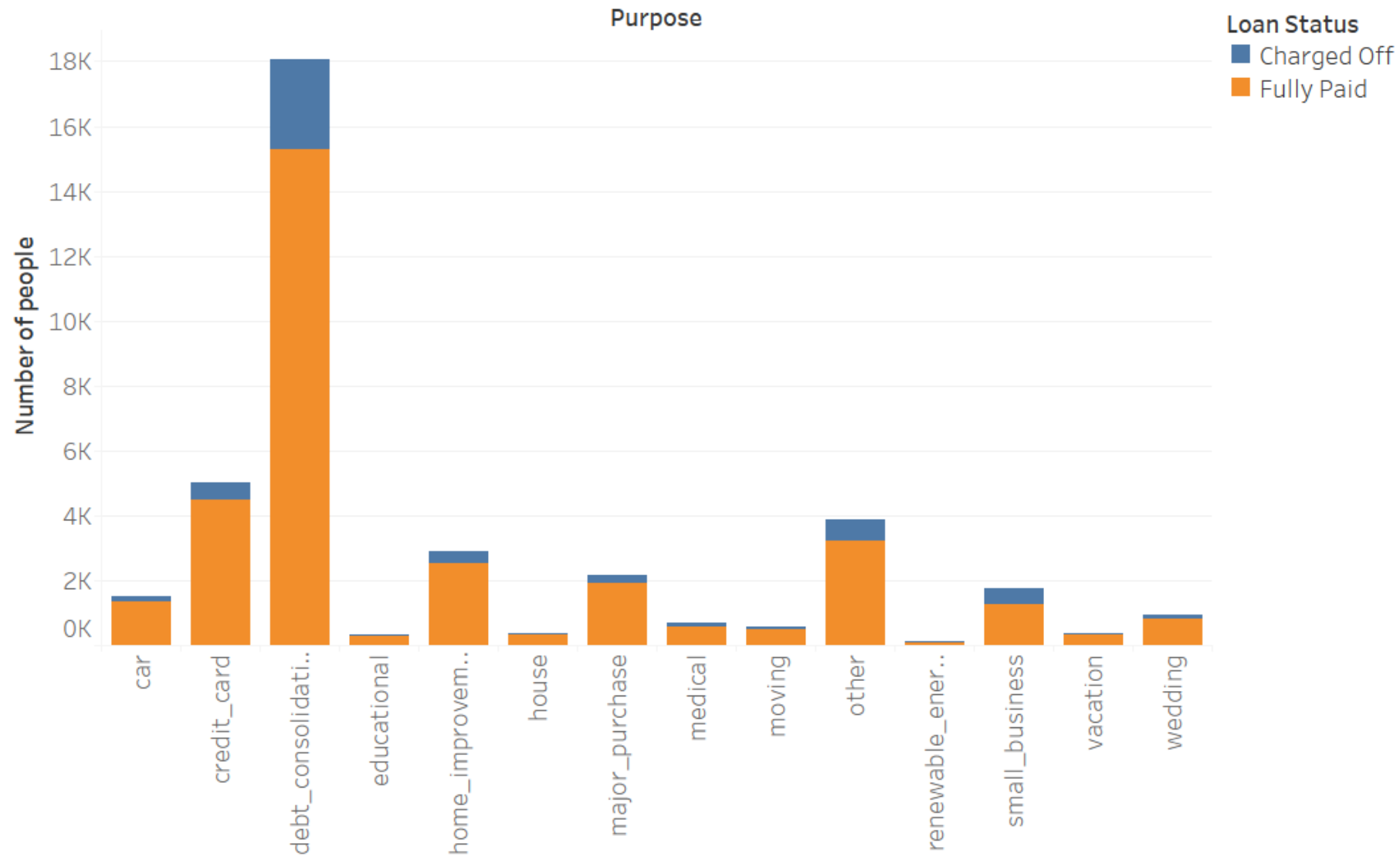
The trend of count of Int Rate for Int Rate (bin). Color shows details about Loan Status.

PLOT 1 ANALYSIS

- Highest number of loans that were approved were having the interest rate between 10% to 14% and the same had the highest number of of charged offs.

Plot 2

Purpose for seeking loans



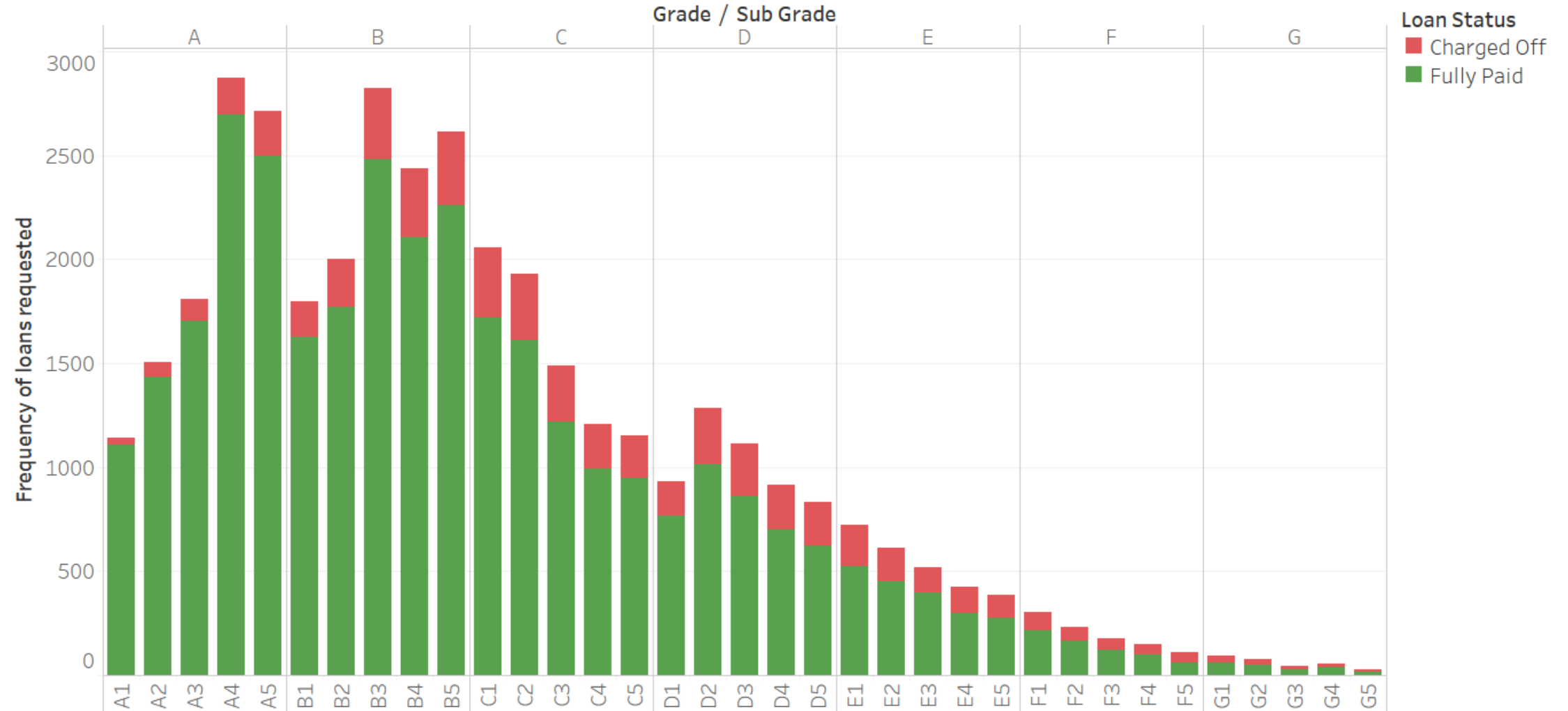
Count of Id for each Purpose. Color shows details about Loan Status.

Plot 2 Analysis

- Most of the loans were taken by customers to pay off their other debts/loans
- The least were taken towards financing in the renewable energy sector.

Plot 3

Loan varying with the Grade and Sub Grade

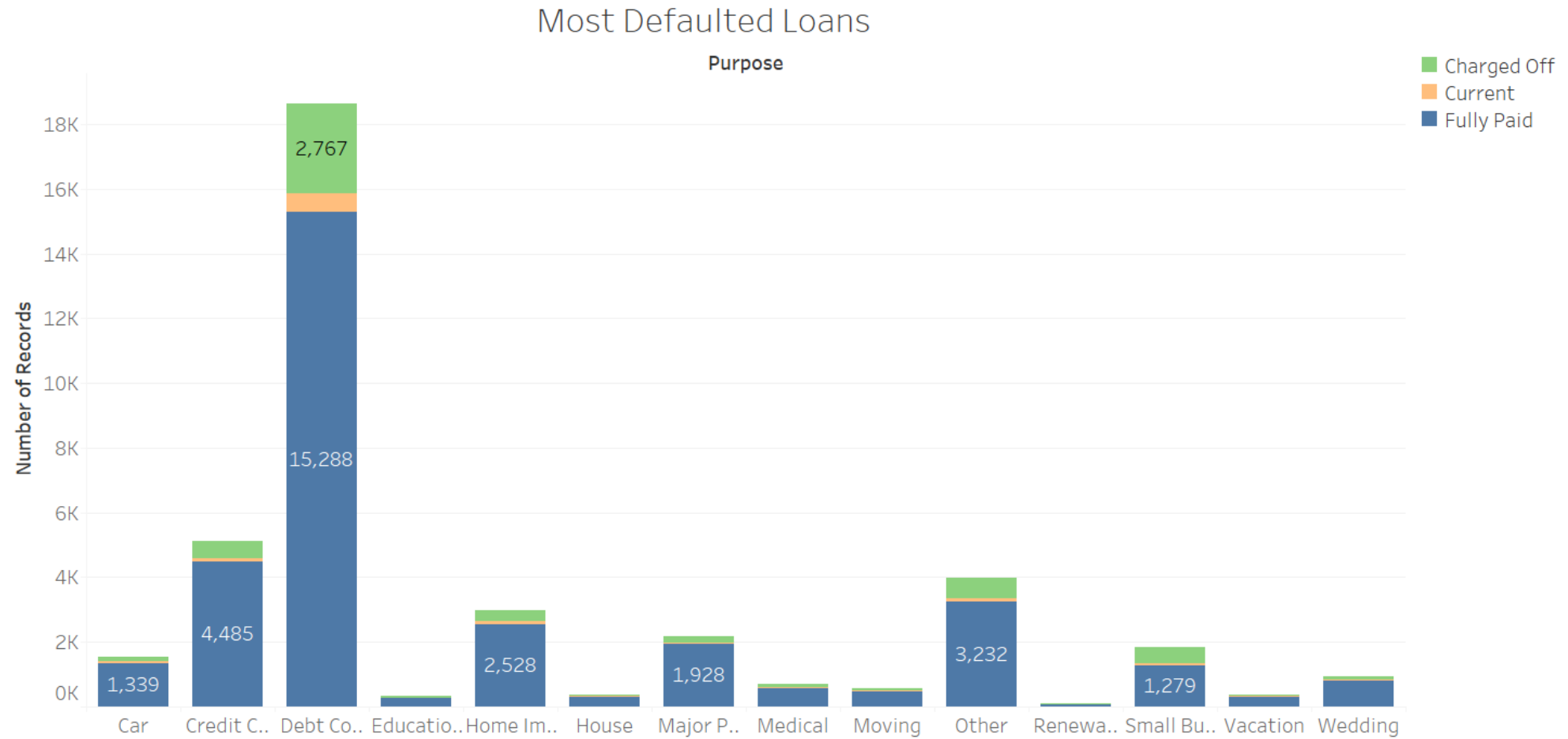


Count of Id for each Sub Grade broken down by Grade. Color shows details about Loan Status.

PLOT 3 ANALYSIS

- Most of the Charged Offs occurred in B,C and D grades of loan with A grade being one of the lowest.

Plot 4



Sum of Number of Records for each Purpose. Color shows details about Loan Status.

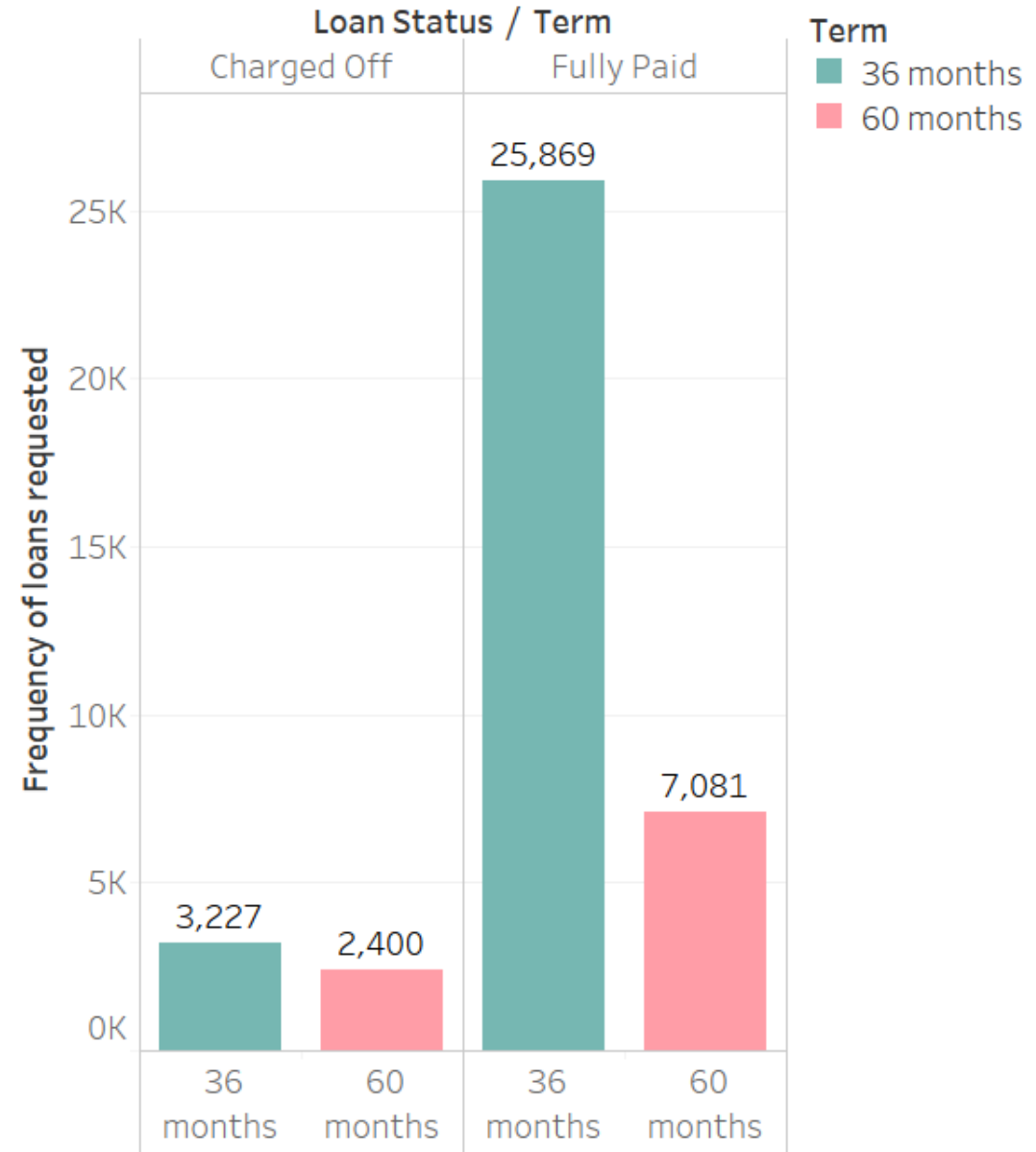
Plot 5

ANALYSIS

Basis the data, we found that the 88.9% of the loans having the term 36 months were paid as compared to 11.1% loans having the term 36 months which were charged off.

On the contrary, in the 60 month loan term segment, 74.68% of the loans were paid off compared to the 25% loans which were charged off.

Frequency of loans requested based on Term



CONCLUSION

- In total, more loans were charged offs in the 36 months loan term segment (3227 loans out of the total 5627 loans that were charged off) as compared to 60 months loan term segment.
- More loans were defaulted when given for the purpose of debt consolidation as compared to any other loan purpose.
- Most of the charged off occurred in the B,C and D grade of loan type.