upGrad

#LifeKoKaroLift

Lending Club Case Study: Exploratory Data Analysis

Course : EDA

Analyzed By : Richard Samuel

Praveen Bhogoju
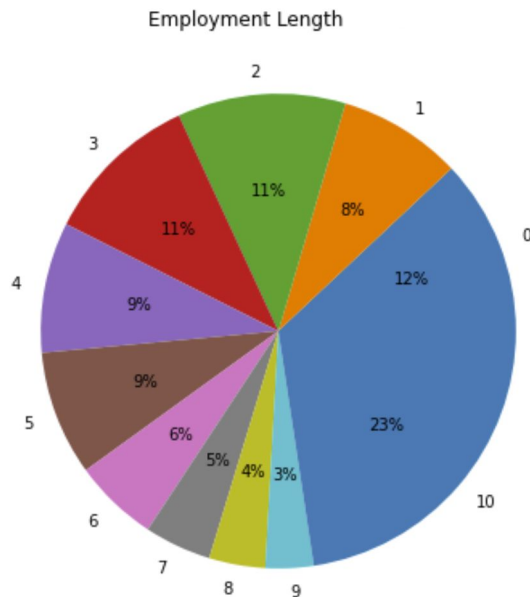
upGrad

As a lender,

I want to know who can I lend money based on the previous data I have

What type of customers are likely to pay off my loan?

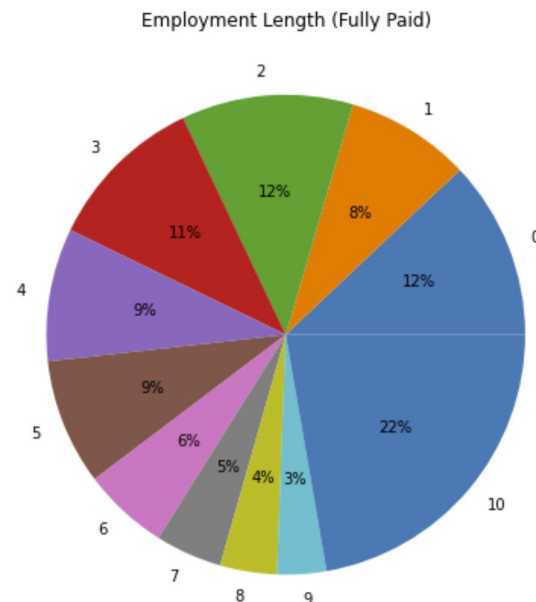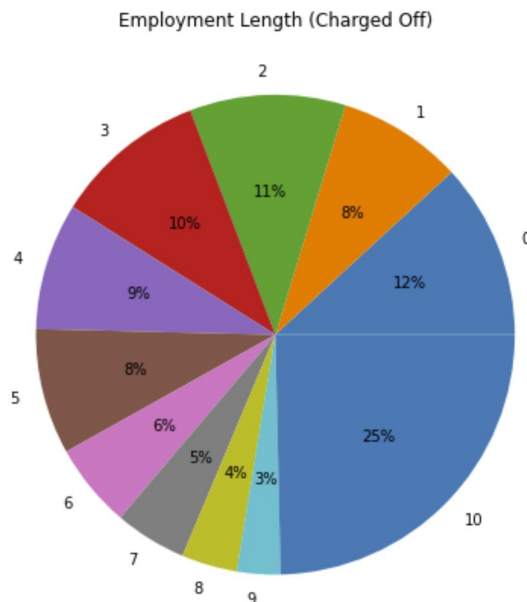Is there a common segment of people who borrows loan for specific purposes?

Who is borrowing more loans?

Employment Length

Customers with 10 plus years of experience borrow more loans.

Who is not paying?

Employment Length (Charged Off)

Employment Length (Fully Paid)

25% of the people in 10 years plus experience segment do not pay. There is a 3 percent increase of non-payers in this segment than fully paid customers whereas other segment payers and non-payers are about the same.

Who is more unlikely to charge off?

Verification Status by Employee Length
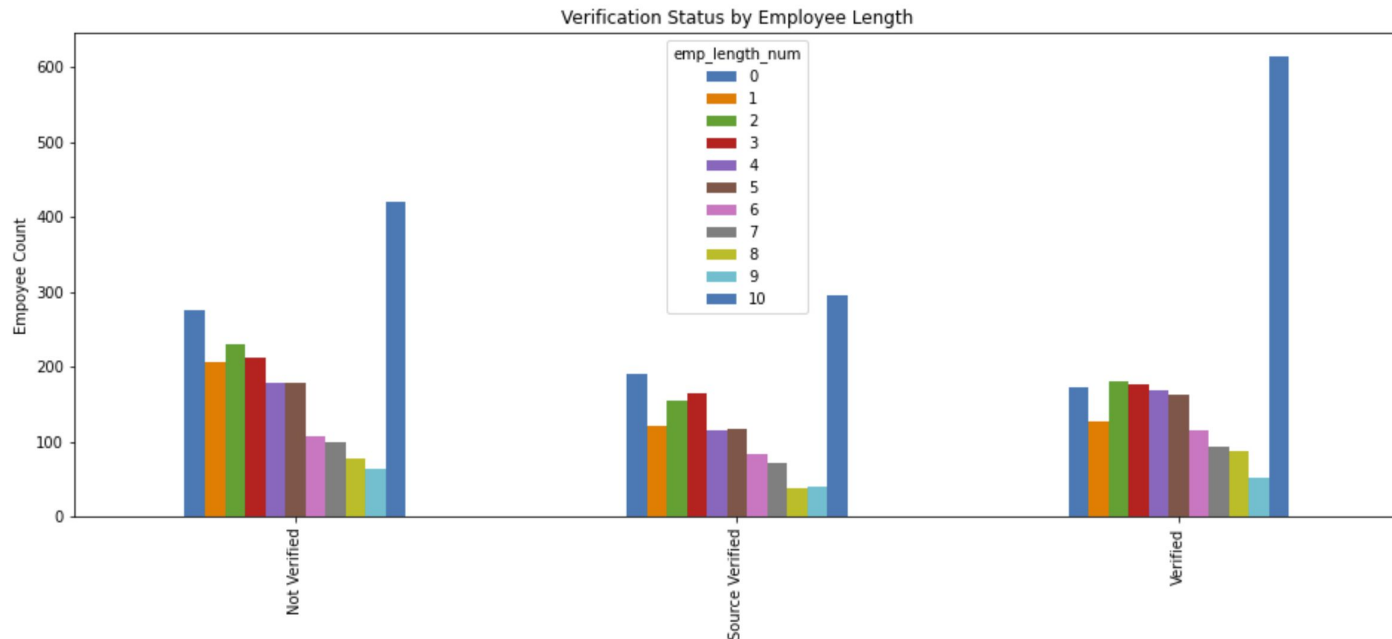
In the customers charged off chart above, applications with source verified by third party in any employment length segment are more unlikely to charge off.

While the customers with 10 plus years on employment tend to charge off higher in any segment

What is the purpose of loan?


Employee Length 10 Year with Reason
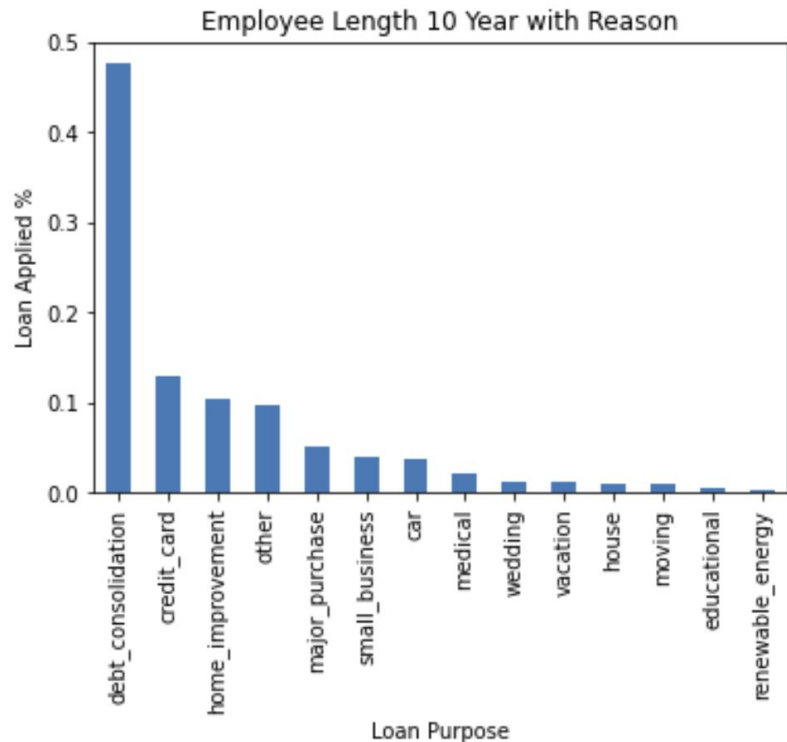
In the 10 plus years employment segment, most of the loans are taken for the purpose of debt consolidation than all other purposes put together.
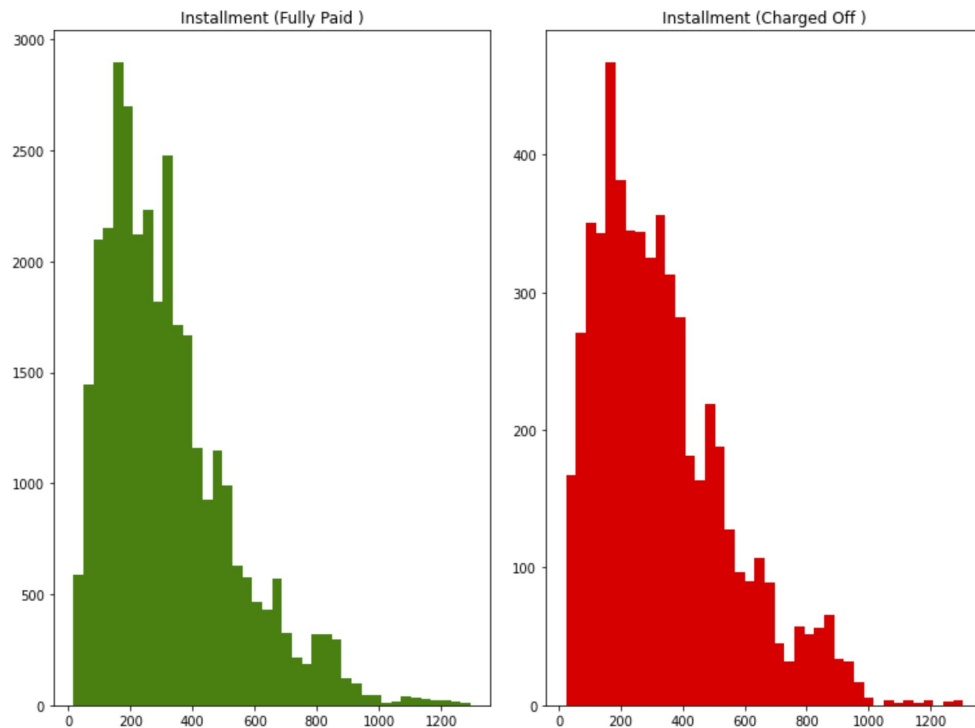
This sounds like a money juggle!

Annual income analysis

Customers with annual income between 25k and 120k pay off loans

There are fewer customers with annual income greater than 120k but charged off customers are higher as compared to other income groups.

Annual Income (Fully Paid)

Annual Income (Charged Off)
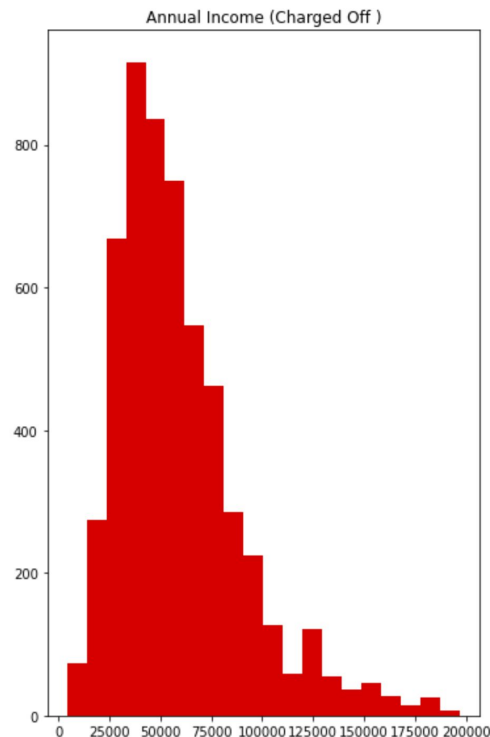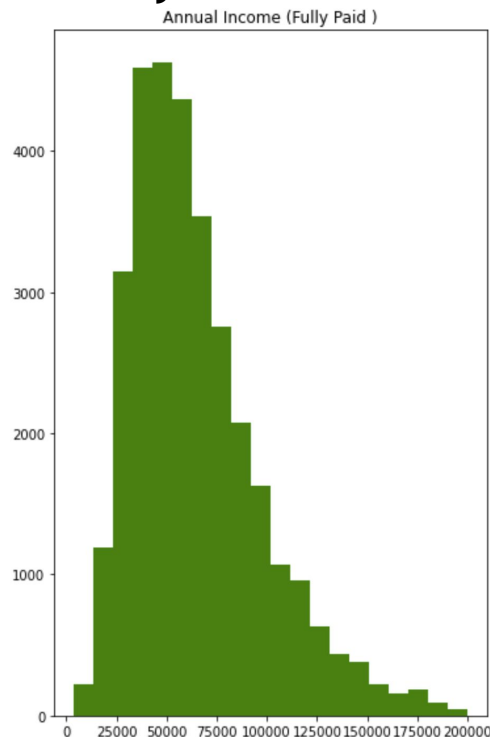
Installment Analysis

People with greater income are generally assumed to pay greater installment, however customers with installment amount greater than 500 charge off more than lower installments. This might be a reason for debt consolidation too.

Who is paying off?

Request Loan amount % not Approved (charge off)

Request Loan amount % not Approved (Full Paid)
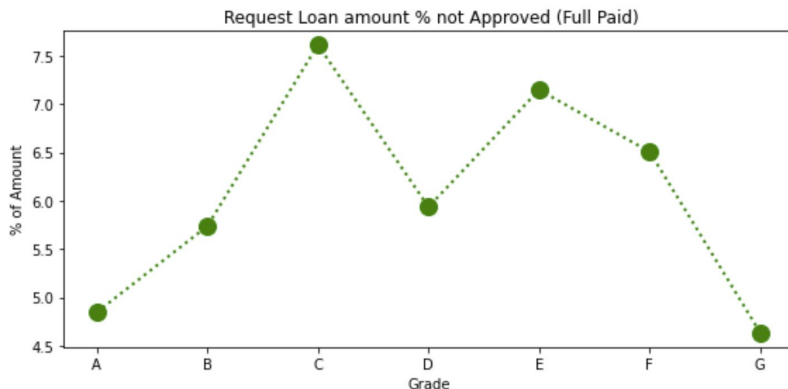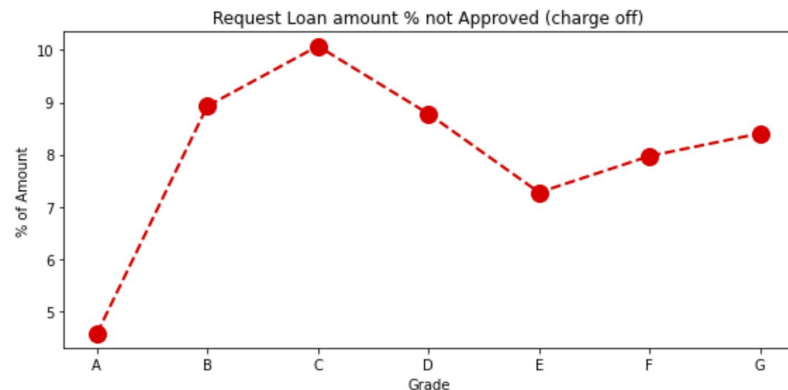
Grades B, D, F and G people whose funded amount invested is not lesser than 5% of the amount recommended by lending club analysts pay off the loan.

Mean of the percent invested in each grade is considered for this analysis.

Recommendations

Verification of income source through third party for:

- Customers in the 10 plus years employment and who applies loan for debt consolidation.

- Higher income customers earning more than 120,000 annual income

- Installments greater than 600 per month

Approve no lesser than 5% of the recommended lending amount for customers in the grades B,D,F and G

upGrad

#LifeKoKaroLift

Thank You!