Lending Club – Loan Data Analysis

Agenda

INTRODUCTION

PROBLEM STATEMENT

DATA ANALYSIS & RECOMMENDATIONS

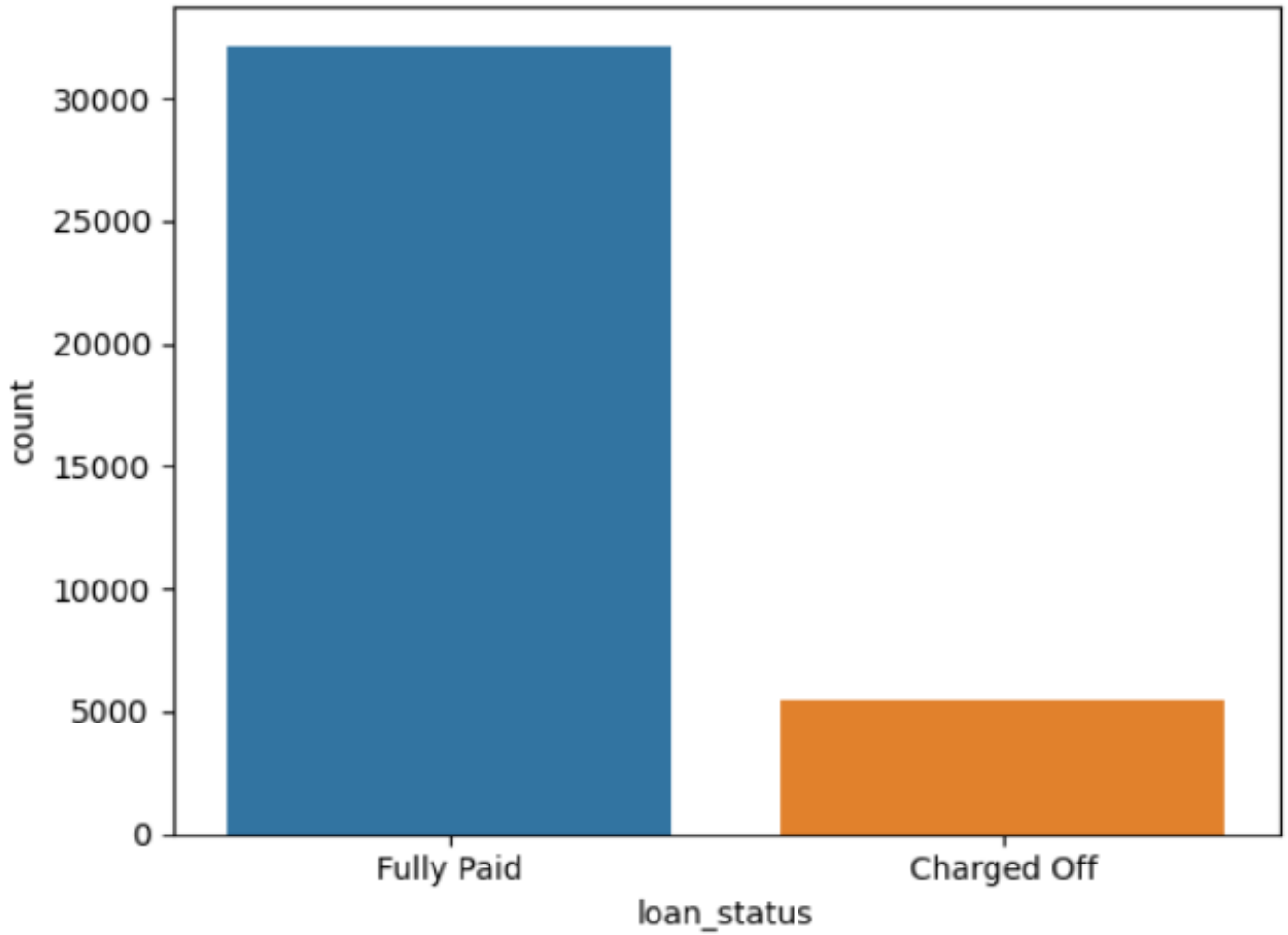
Lending Club - Introduction

- Largest online loan marketplace
- Borrowers can access lower interest rate loans online
- Risks associated with loan approval
  - If the applicant is **likely to repay the loan**, then not approving the loan results in a **loss of business**
  - If the applicant is **not likely to repay the loan (risky applicants)**, then approving the loan may lead to a **financial loss**
- Need to reduce loan to risky applicants to avoid financial loss

Lending Club – Problem Statement

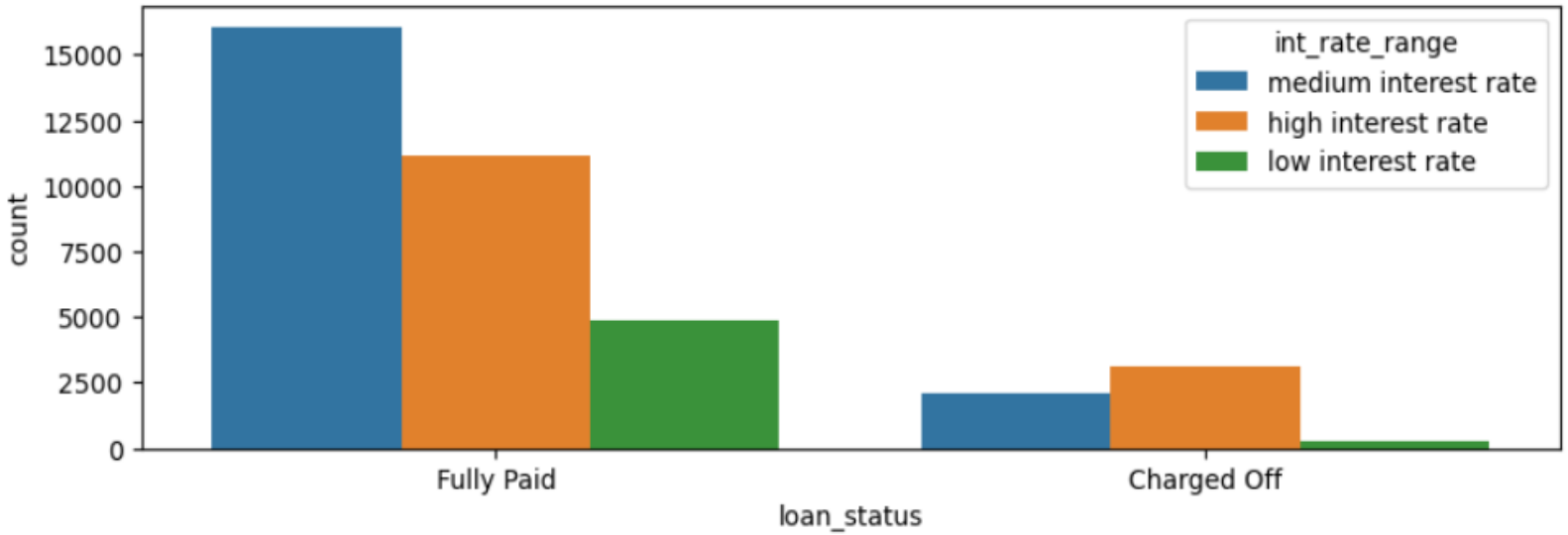
- Enhance revenue by reducing loan to risky applicants while making sure that non-risky applicants are not missed out
  - Identify Risky loan applicants using Exploratory Data Analysis
  - Identify driving factors behind loan default
  - Identify patterns which indicates that a person is likely to default
  - Data of past loan applicants can be used for Data Analysis

Lending Club - Defaulters



Around 14.4% of the customers have defaulted

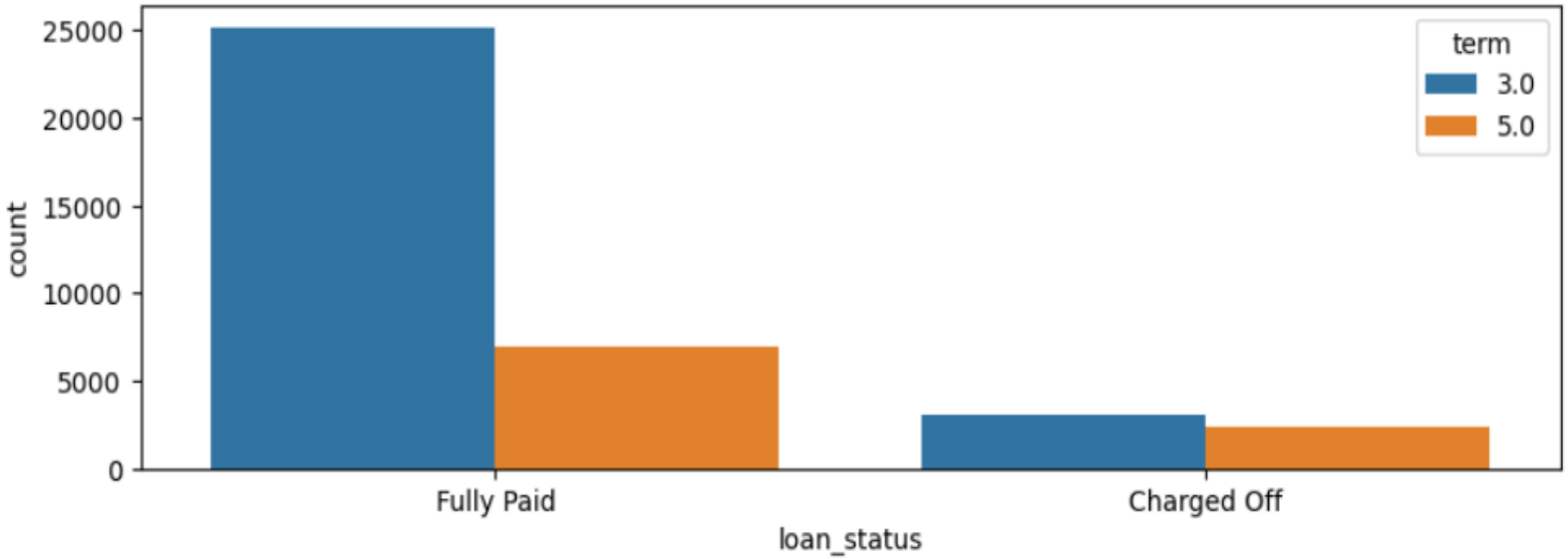
Impact of high Interest Rates



There is a high ratio of defaulters among those took loan at high interest rate

Recommendation: There should be more investigation on repaying capability for applicants who is ready to take loan at high interest rate

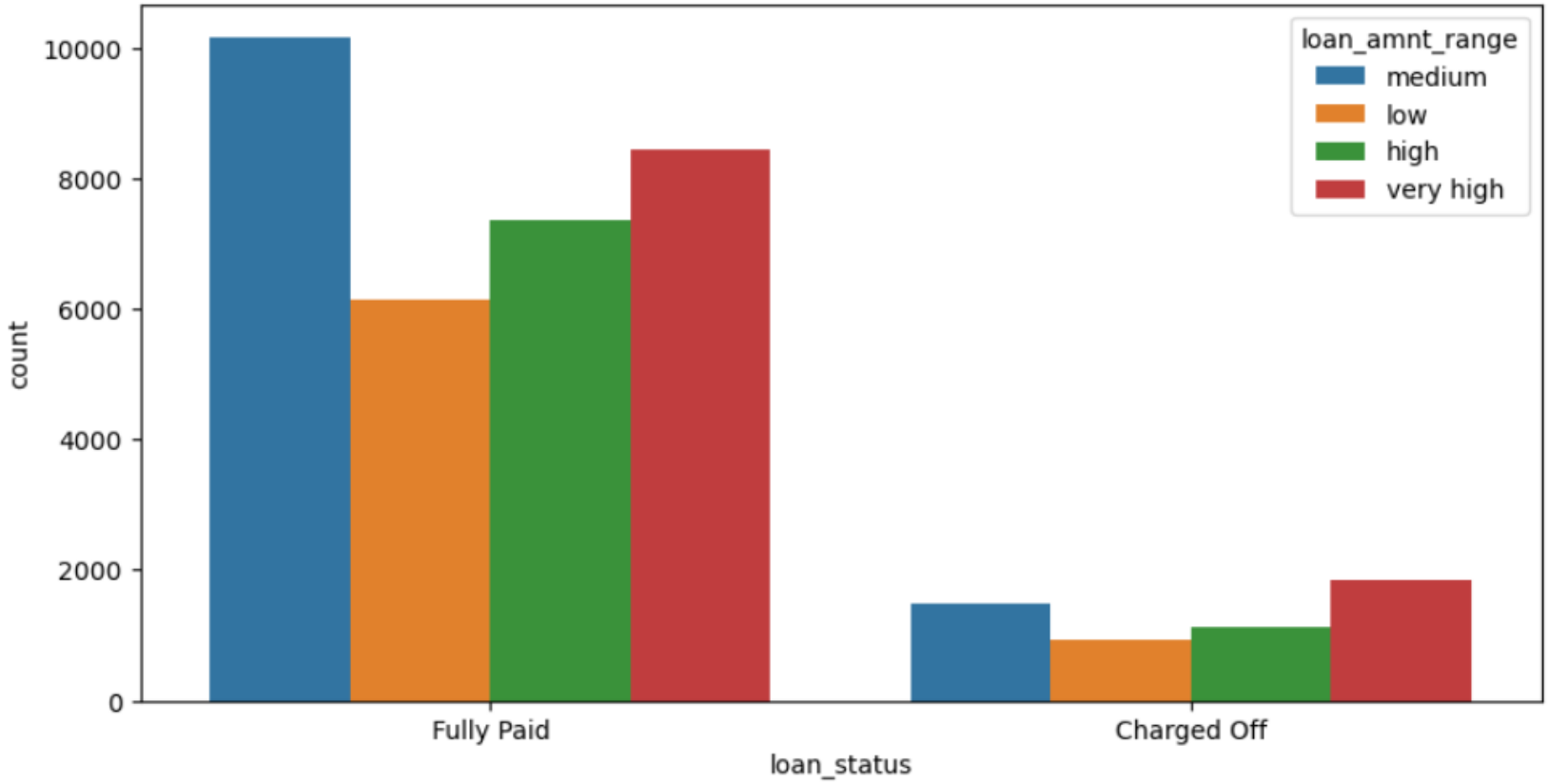
Impact of Loan Tenure



High percentage of defaulters are seen for loans taken for 5 years tenure

Recommendation - More strict verification of the repayment capacity of loan applicant when opting for longer loan tenure

Impact of High Loan Amount



Ratio of defaulters is increasing for higher loan amount range

Recommendation - Investigate replayment capacity while providing higher loan amount

Analysis of Loan Purpose

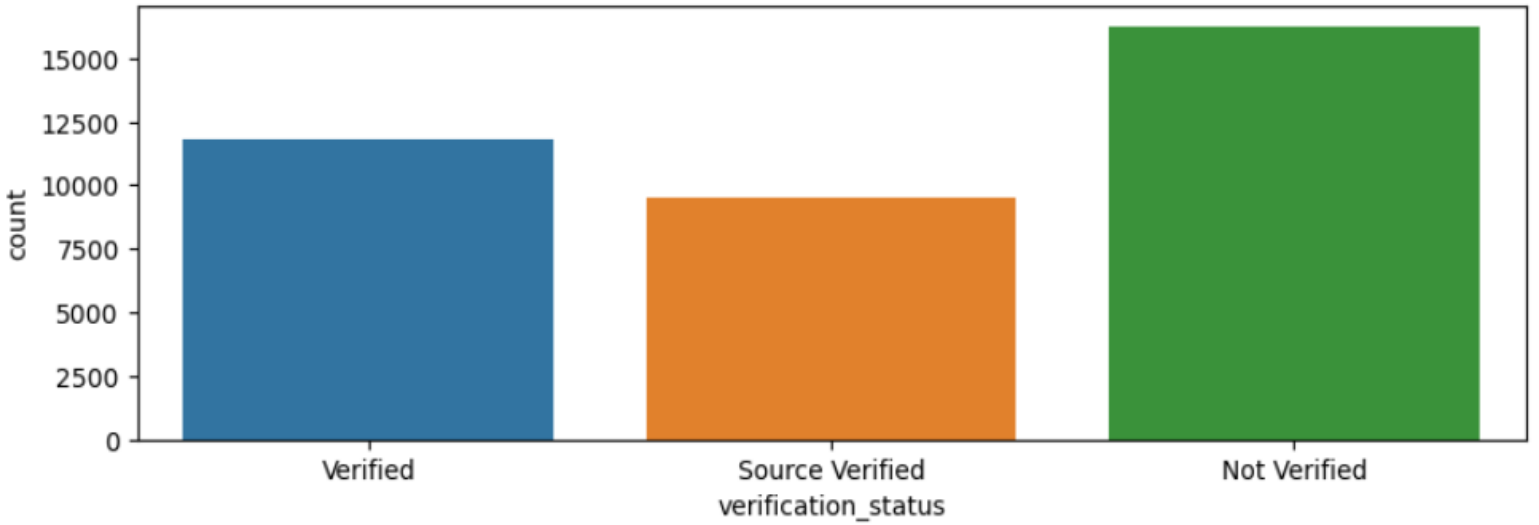
loans taken for small business, debt consolidation and other purpose are showing high percentage of defaulters

Recommendations - Verification of repayment capacity should be done while providing loans for small business

Verification of credit history must be done while providing loan for Debt consolidation

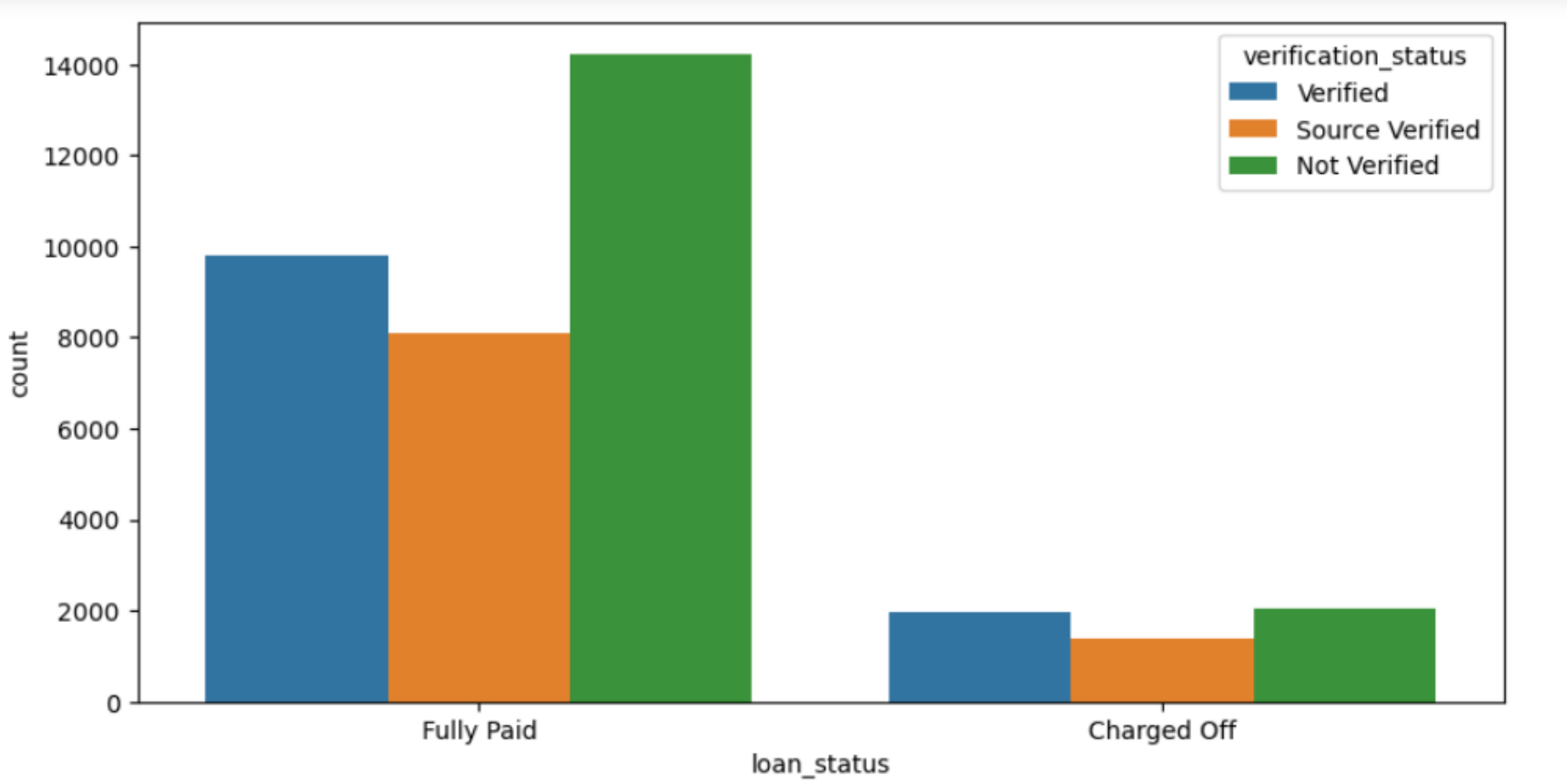
Loans marked for other purpose needs more transparency on purpose

Verification strategy



Recommendation - Revisit the verification strategy - very high number of loan applicants were granted loan without any verification

Impact of Verification Process



Verification has not made much of a difference in avoiding default

Recommendation - Revisit verification process since it seems to be failing to prevent defaulting

THANK YOU