EDA Loan Case Study

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Current Application Data

Loan Repayment Status Proportion


Defaulter

8.1%

91.9%

Non-Defaulter

Observation

From the above is 91.9% of the applicants were able to repay only 8.1% are unable.

Non-Defaulter
Defaulter
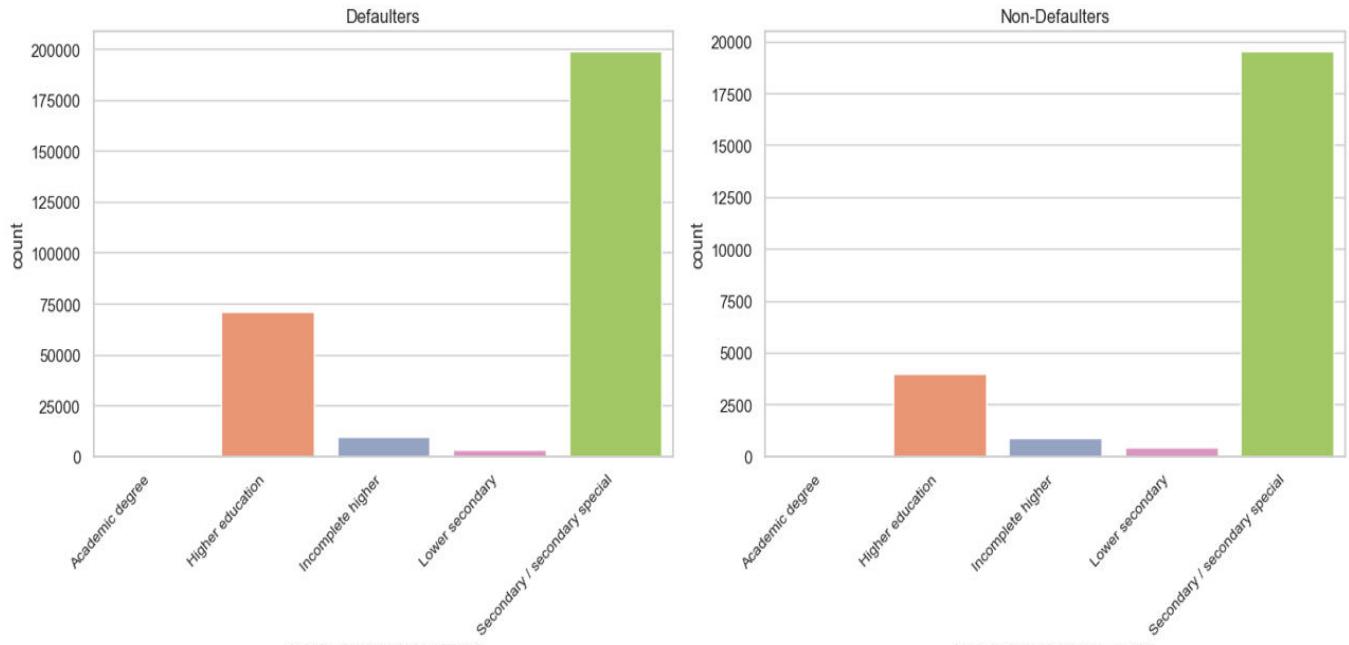
Education Observation :

Applicants are more for Secondary/secondary special education type.

Suggestions
Advised to approve loan making education qualification as a factor minimum secondary/Secondary Special education is identified to be safer.
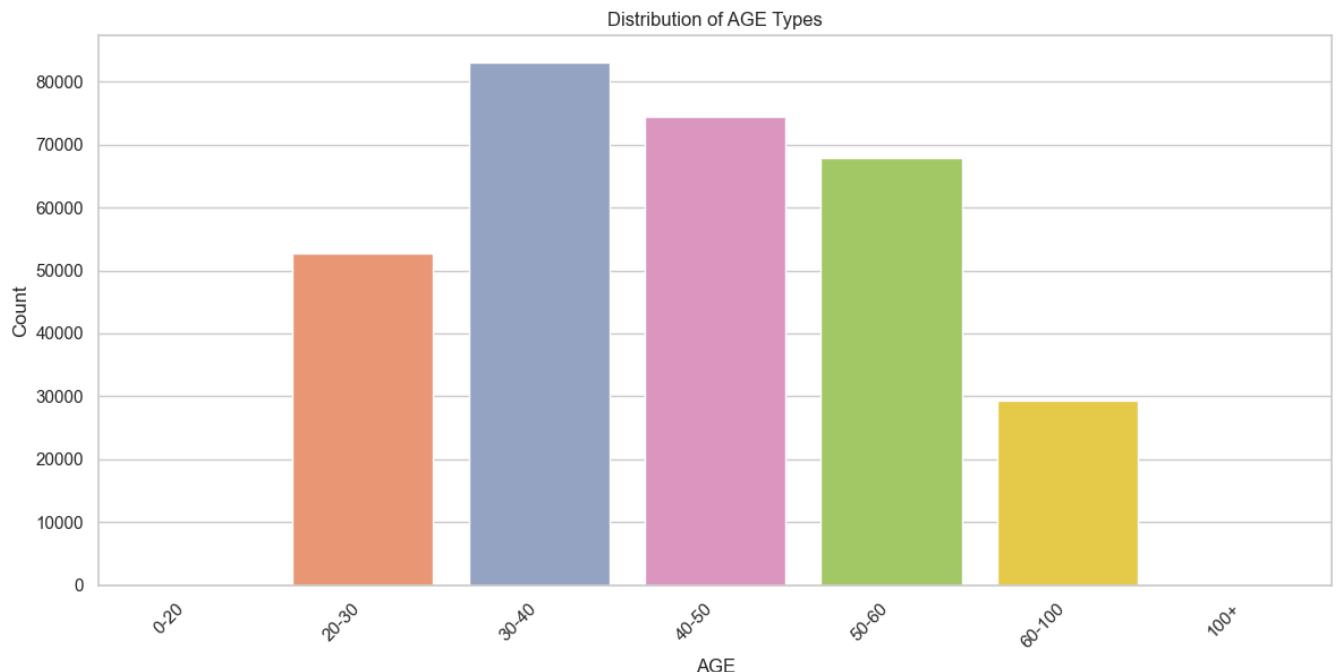
Age Range Observation :

The age group ranging from 30- 40 and 40-50 years old represents the largest segment of loan applicants.

Suggestions
It is advisable to approve loans for clients in range 30- 40 and 40-50 age gap.

Gender Observation :
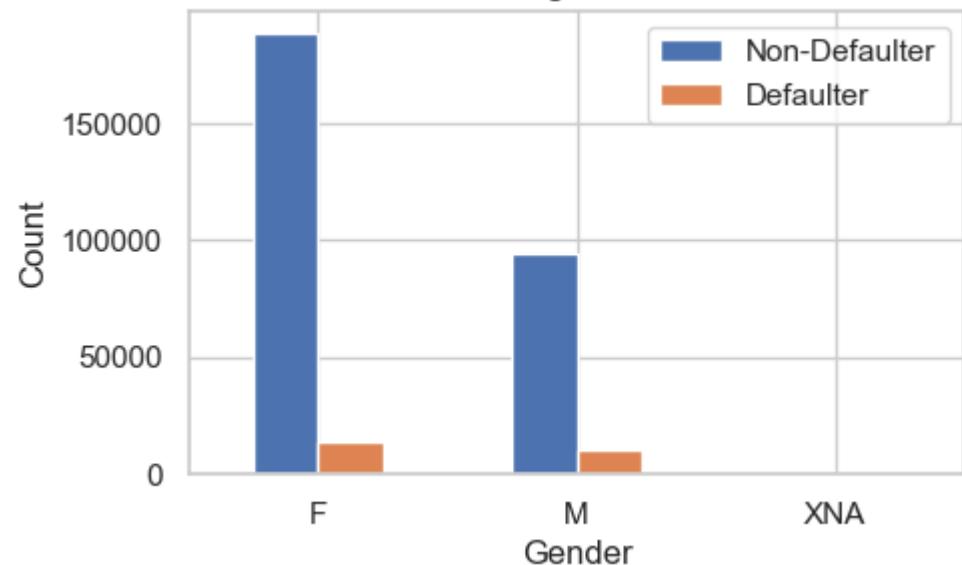
Percentage of Female repay is : 93.01 %
Percentage of Male repay is: 89.85%

<u>Suggestions</u>
Advised to give loan more to female applicants.

Distribution of Gender among Defaulters and Non-Defaulters
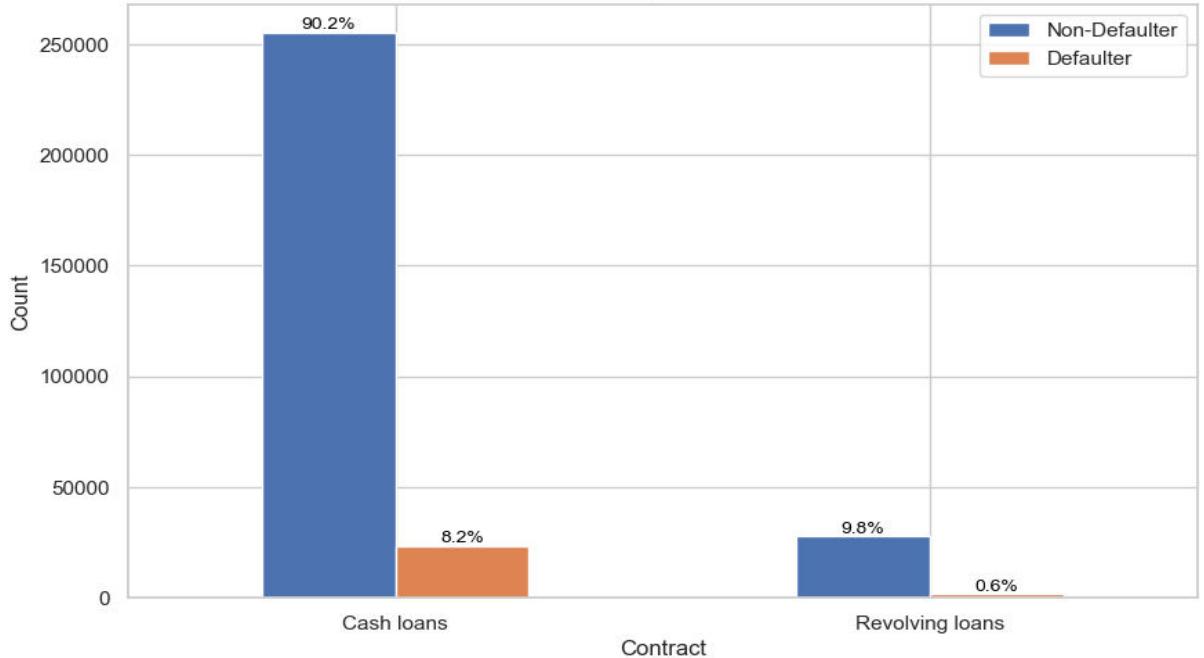
Contract Observation : we could see that unpaid
loans are 8.2 % of the 90.2 % of the Cash loans
and unpaid loans are 9.8 % of the 0.6 % of the Revolving
loans.
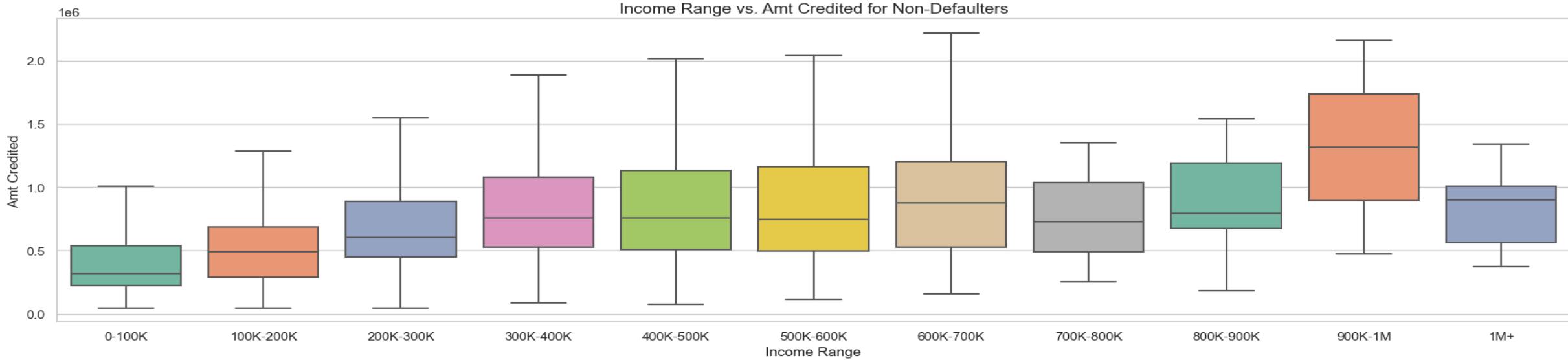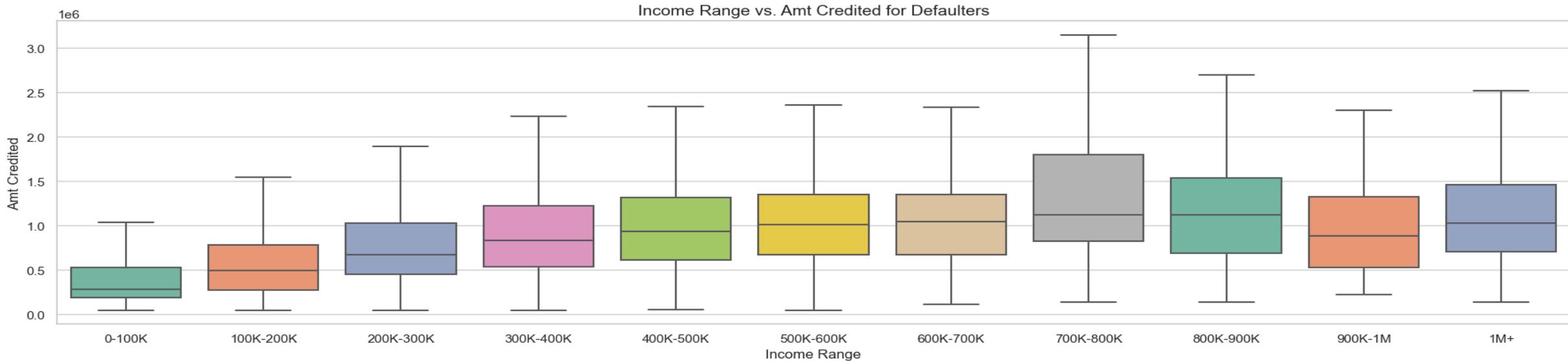
<u>Suggestions</u>
Carefully assess applicants in this category to reduce the
risk of defaults.

Distribution of Contract among Defaulters and Non-Defaulters
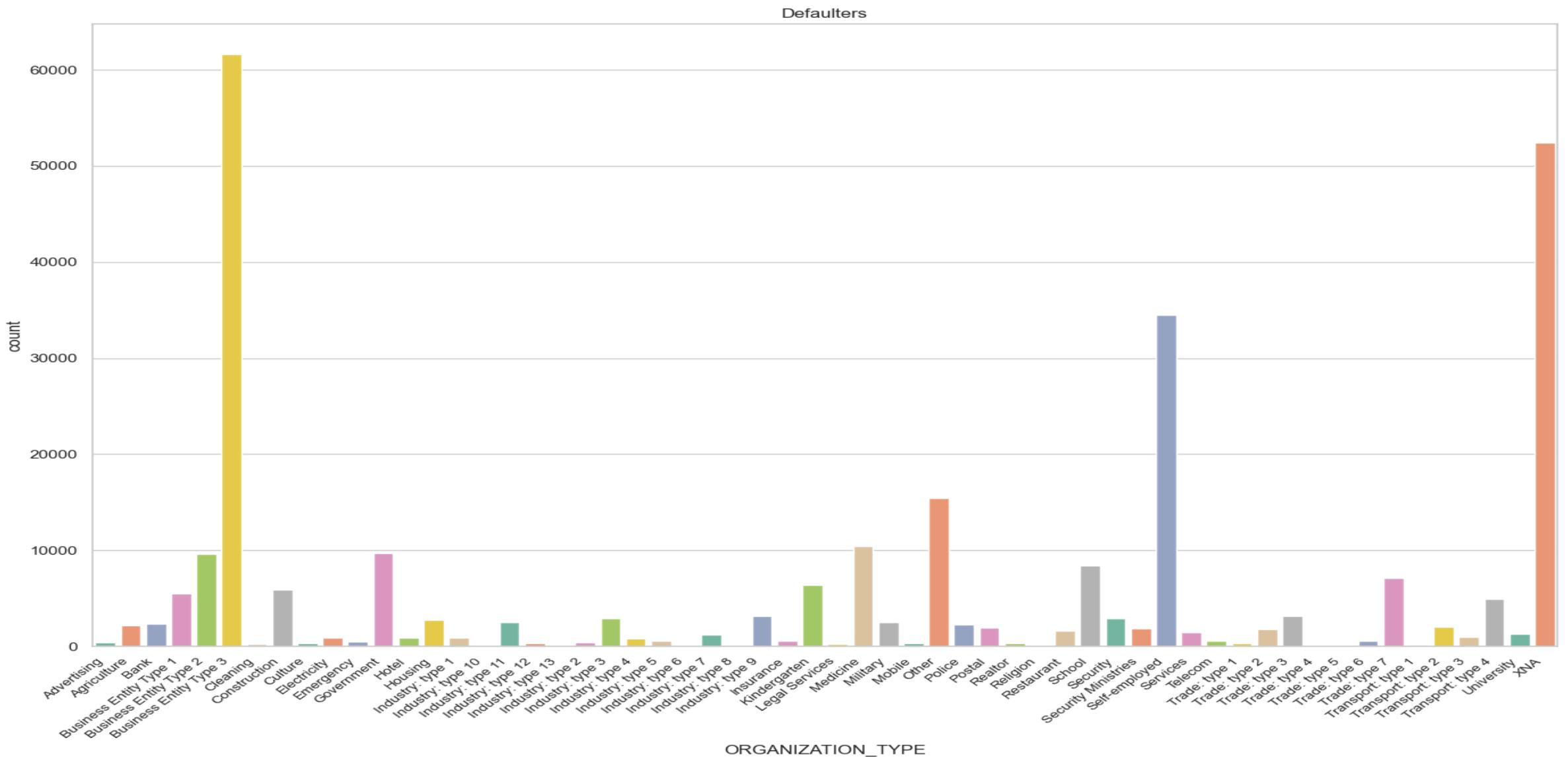
Income vs Credit Observation: As the income range increases the Amount credited also tends to increase

Suggestions : Consider applicant's income levels when approving loan eligibility, indicates a positive correlation.

Organisation type: Clients without a source of employment should be assessed carefully, and Business Entry 3 and Self employed clients tends to be struggling more with repaying.

Combined Data
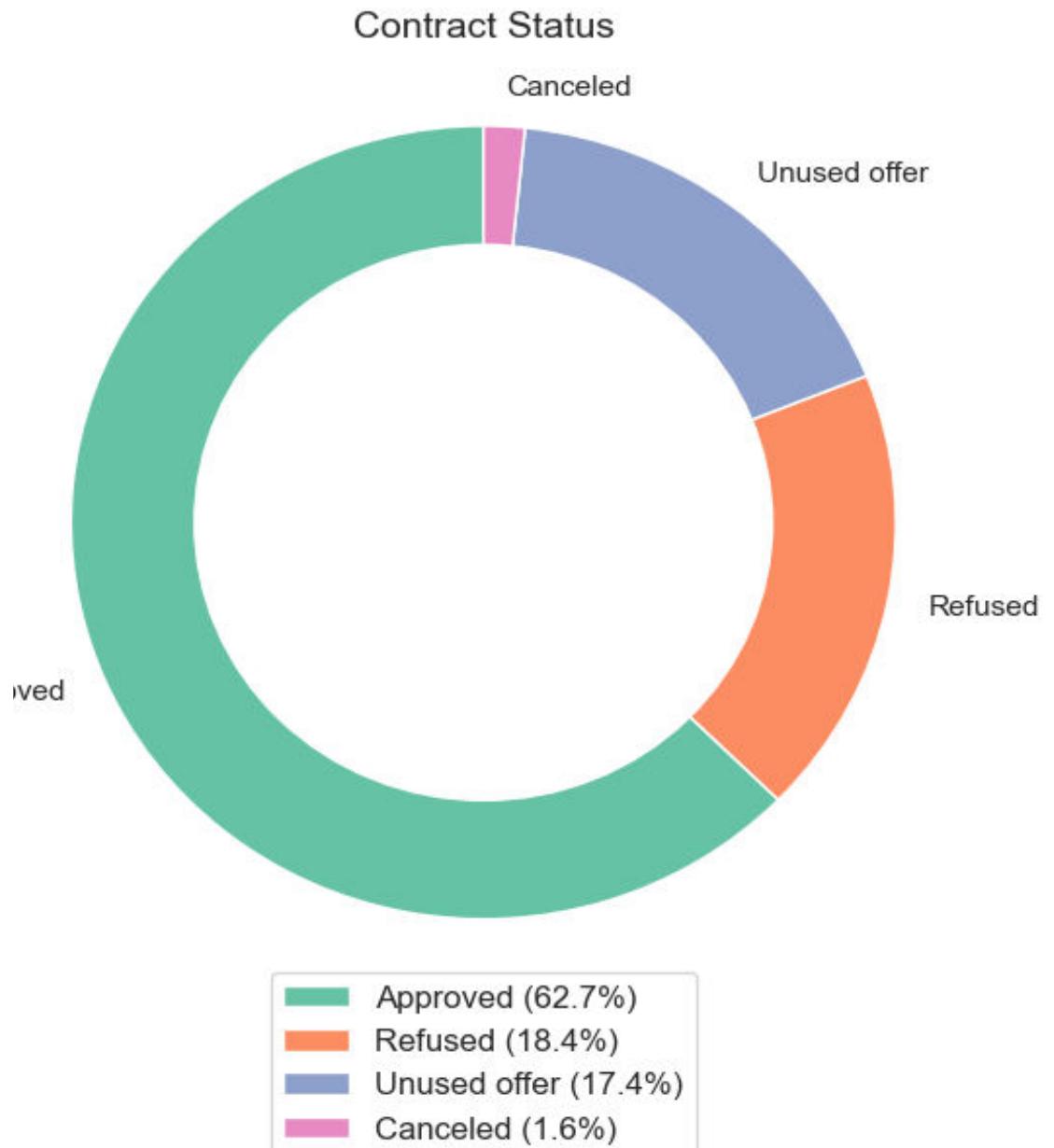
- The combined data serves as a valuable resource for uncovering patterns that can help identify clients who may struggle with loan repayments. These insights can guide strategic actions, including making informed decisions about loan approvals, loan amount adjustments, and offering loans at different interest rates to riskier applicants.

- Upon evaluating our existing Application Data, we have pinpointed several categories of information that hold utmost importance for informing future decisions and insights. These key categories include Client-Type, Portfolios, Application Channel, Amount Annuity, Amount Applied, Age, Gender, Total Income, Education and some of the deciding factors.

Contract status
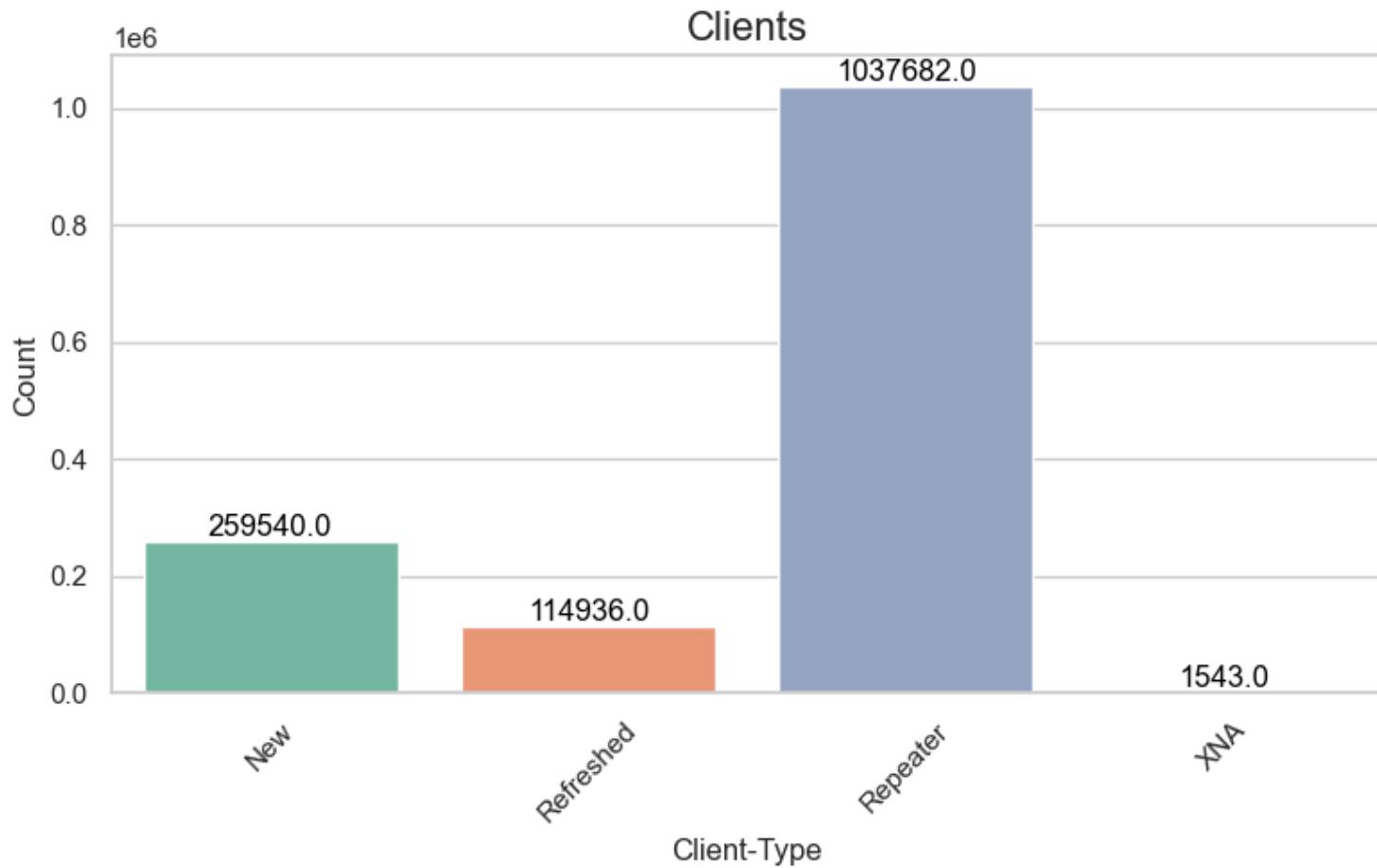
Observation of the total applicants :

Approved % is 62%

Refused % is 18%
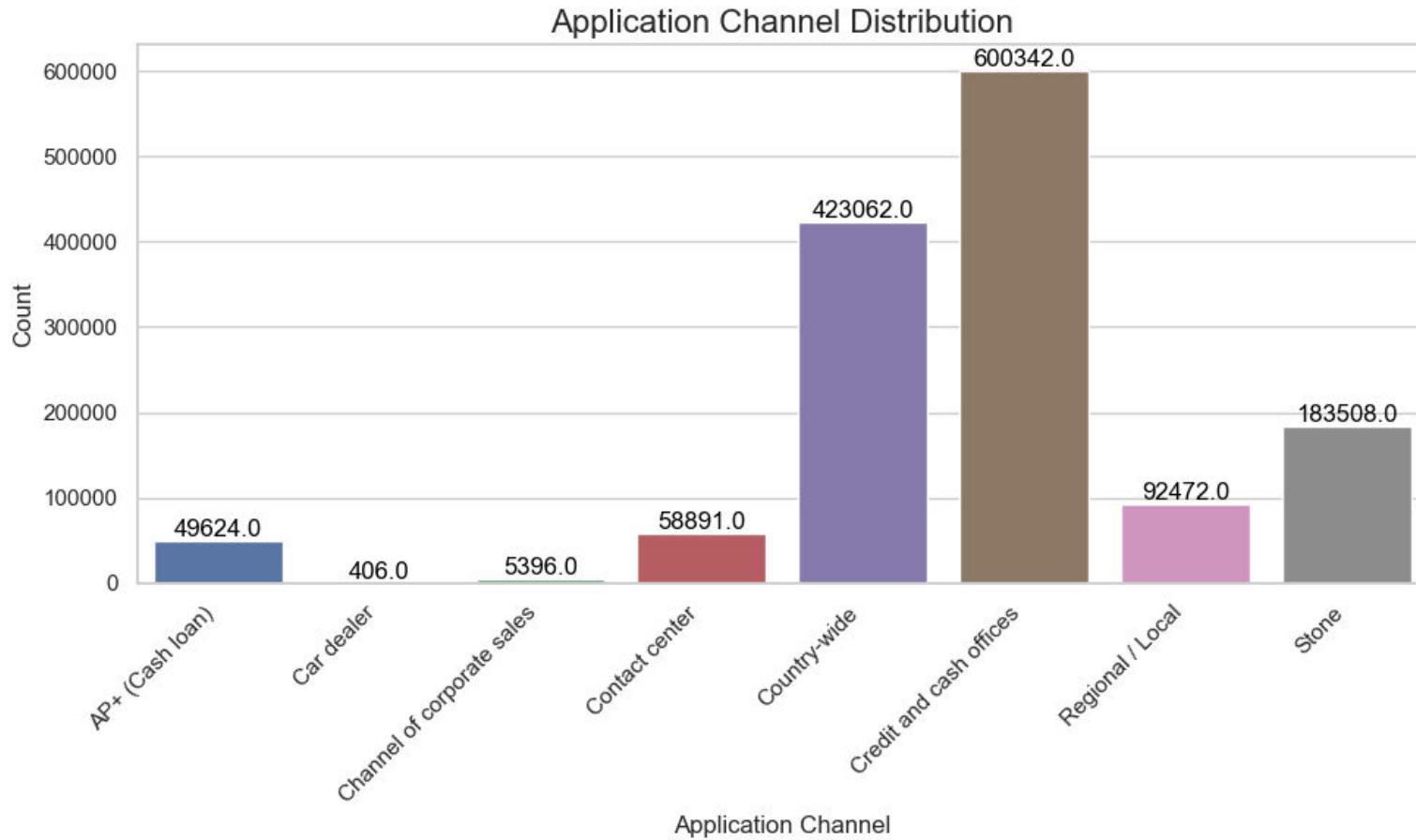
Client type: The predominant client category primarily consists of repeat applicants seeking loans.

Suggestions It is advisable to prioritize this group when approving loans. New and refreshed applicants are comparatively less likely to secure loans
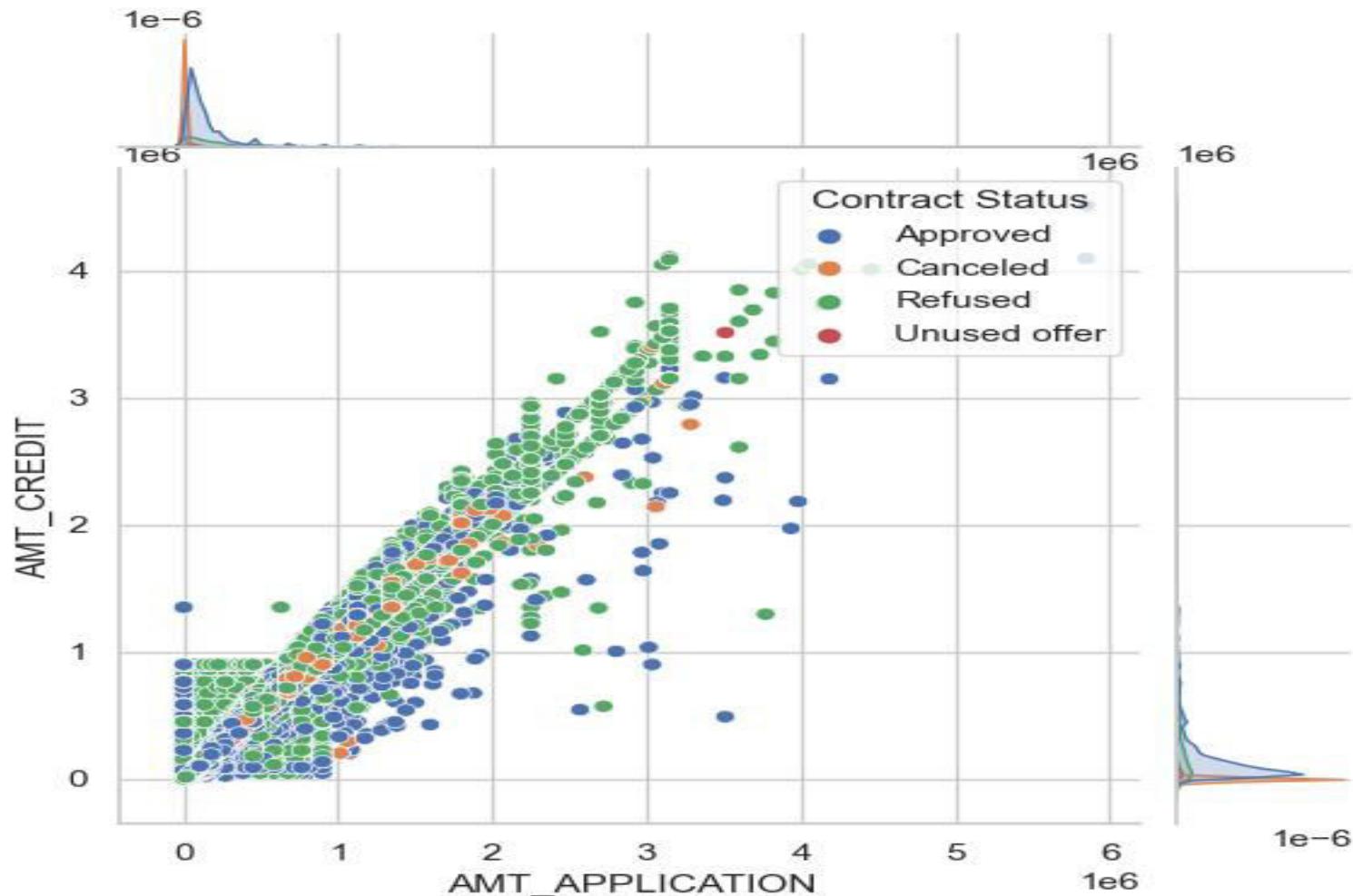
**Application Channel :** The past applications primarily revolved around POS, with only a limited number of applications for Cards and cars.

Application Channel Distribution
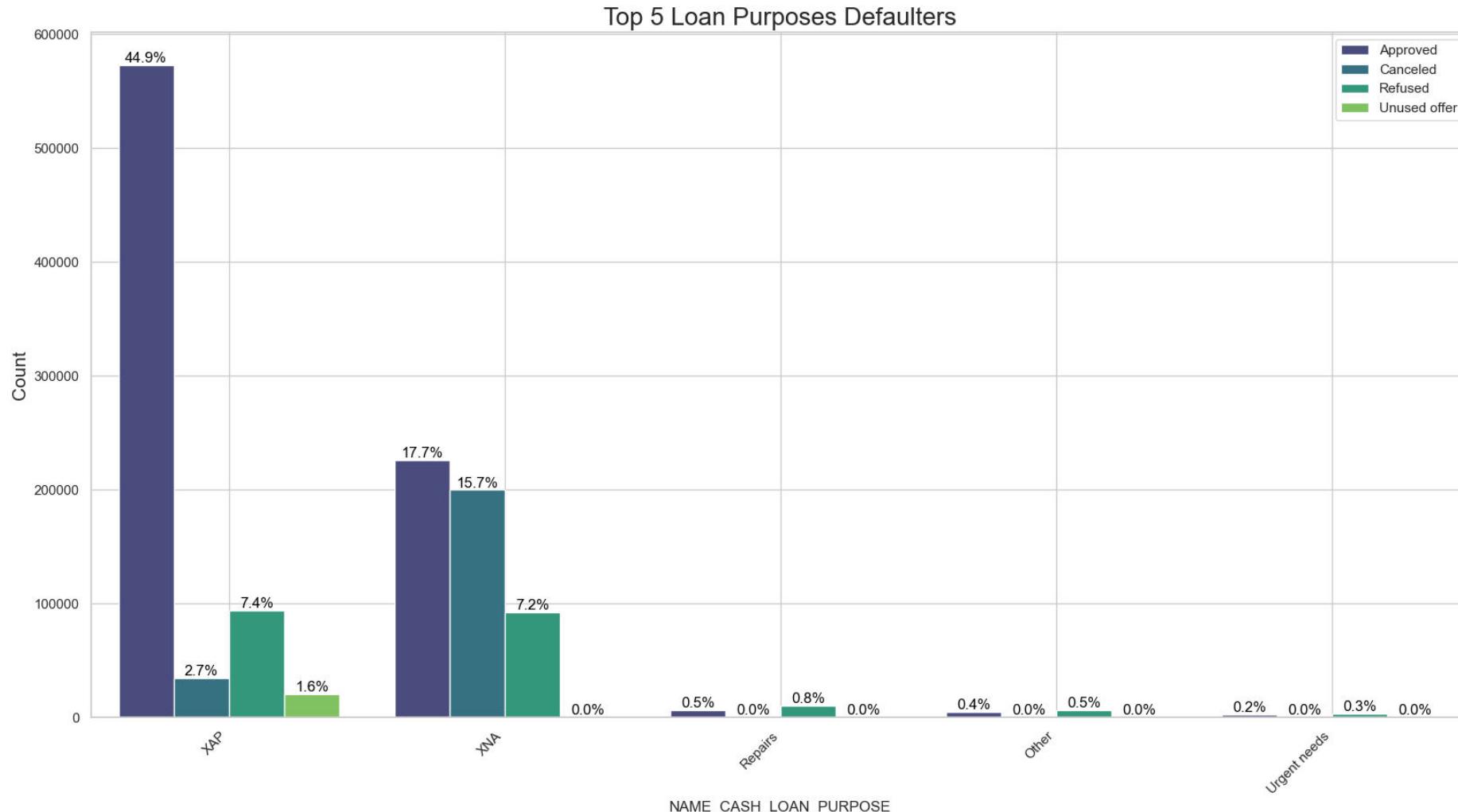
Suggestions It is advisable to prioritize POS and likely to look deeper in loan providing platforms.

Amount Credit vs Amount Application
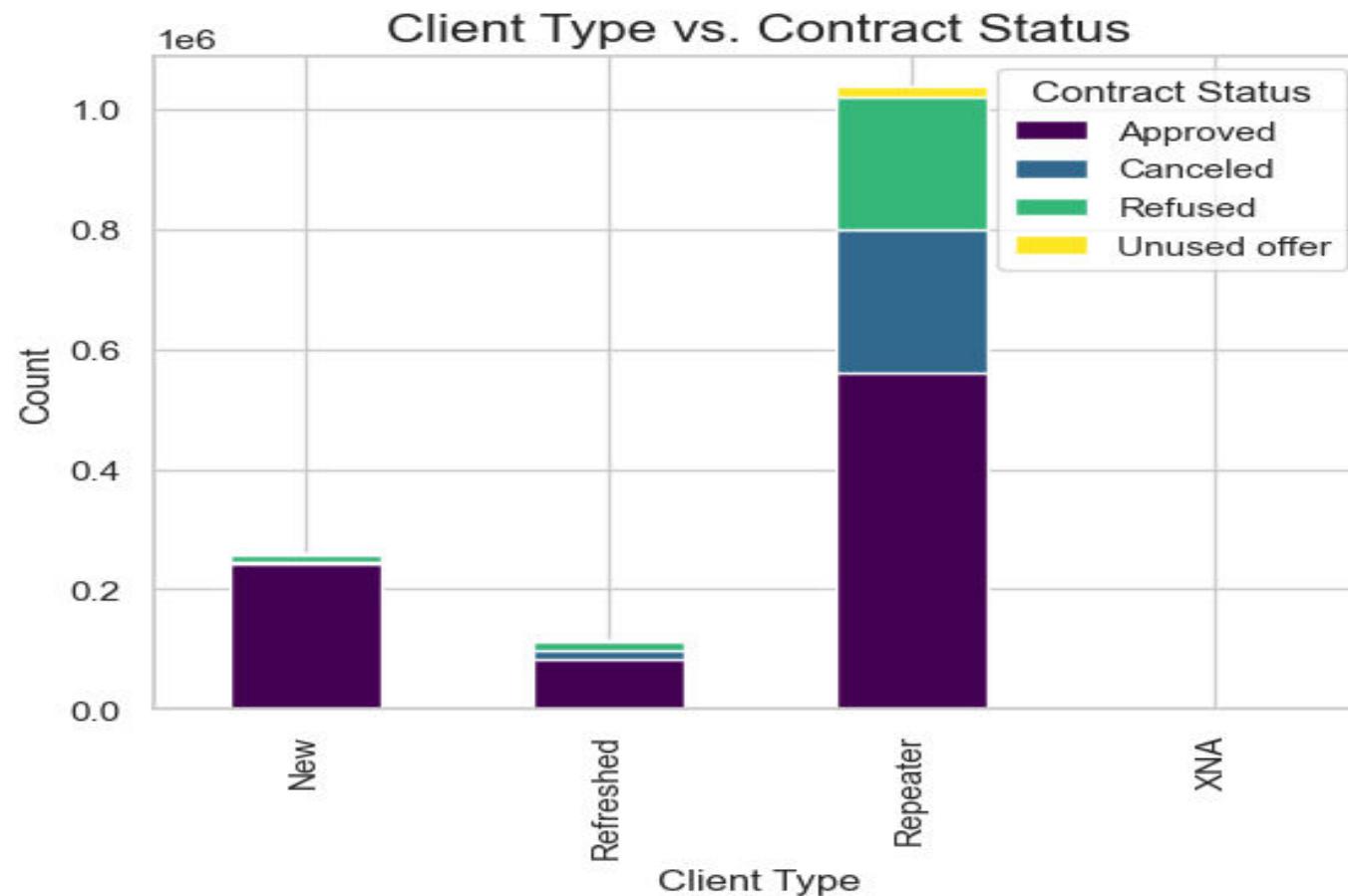
Observation: There is a correlation between the amount credited and the application amount, indicating that as the application amount increases, the credited amount also tends to increase.
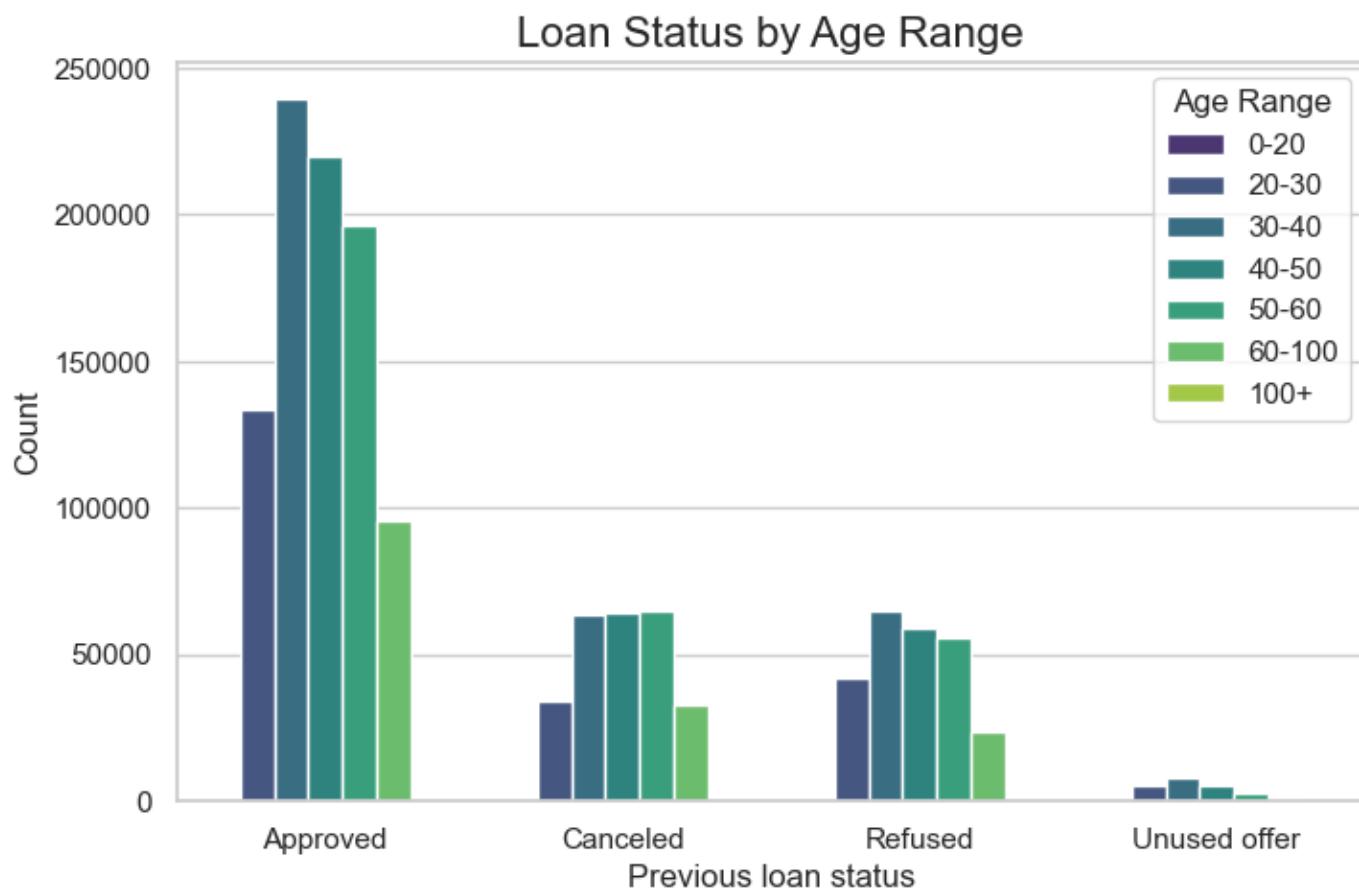
Loan Purpose : The two most common loan purposes are XPA and XNA.
Notably, XNA exhibits a higher number of cancelled cases compared to approved cases, a
trend worth highlighting for future reference. Additionally, the categories Repair and
Other are associated with a greater number of refused status cases.

Top 5 Loan Purposes Defaulters
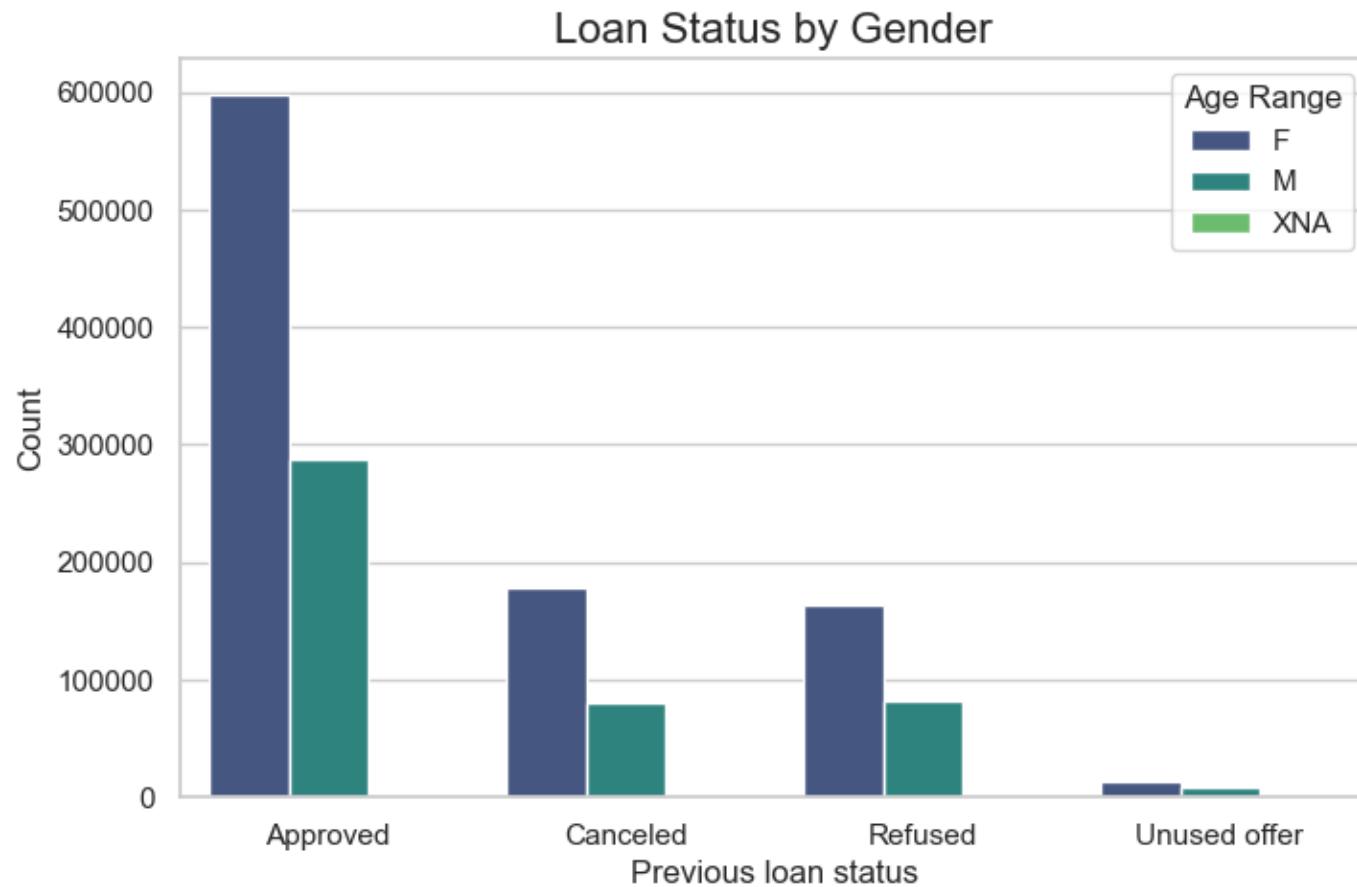
**Client Type** Observation :Some repeat applicants have experienced rejection. It's essential to closely identify the reasons behind these rejections. Additionally, there are minimal cases of loan cancellations among new applicants. To improve the loan approval process for repeat applicants, a thorough examination of the reasons behind their rejections is vital.
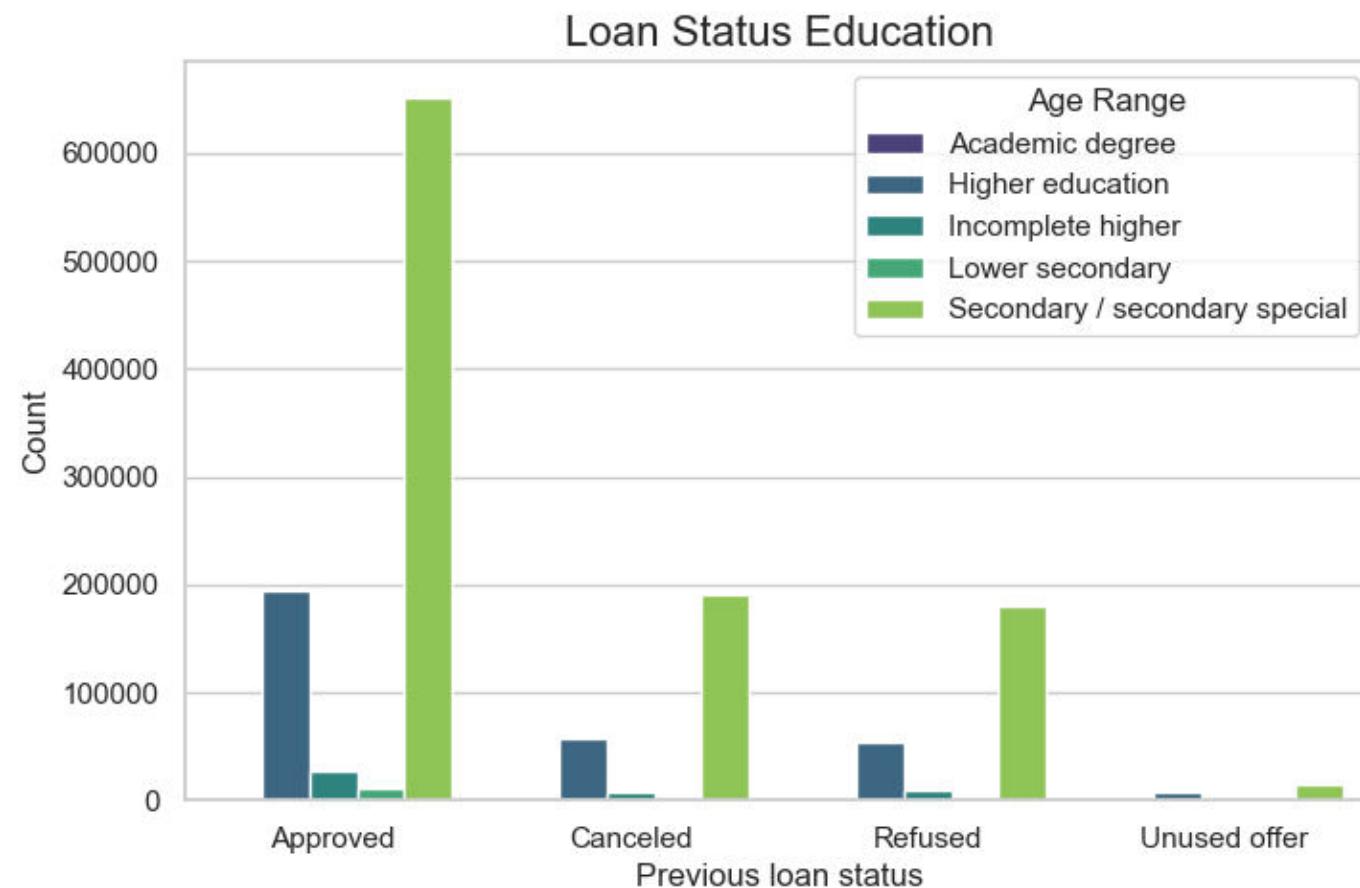
Age Range

Observation: The age range of 30-40 exhibits the highest number of loan approvals, while individuals above the age of 60 receive fewer approvals. Above the age of 60 assessing whether additional factors need consideration to improve approval rates in this age group.

Gender Observation: Females exhibit a higher loan approval rate compared to males. Efforts could be made to understand the specific factors contributing to the difference in approval rates between genders and ensure a fair and inclusive lending process.

Loan Status by Gender

Education Observation : Education levels classified as Secondary and Secondary Special show a higher approval rate.

Final Conclusion

o The age groups ranging from 30-40 and 40-50 years old represent the largest segments of loan applicants.

o Females have a significantly higher repayment rate (93.01%) compared to males (89.85%), indicating a preference for female applicants in loan approvals.

o Cash loans have an 8.2% unpaid rate among 90.2% of total applications, while revolving loans have a 9.8% unpaid rate among 0.6% of total applications. It's crucial to carefully assess applicants in these categories to reduce the risk of defaults.

o A positive correlation between income and the amount credited suggests that considering an applicant's income level when approving loan eligibility is beneficial.

o Repeat applicants make up the predominant client category, making it advisable to prioritize this group when approving loans. New and refreshed applicants are comparatively less likely to secure loans.

o Past applications predominantly revolved around POS, with fewer applications for Cards and cars. Prioritizing POS and exploring loan providing platforms is recommended.

o There is a correlation between the amount credited and the application amount, indicating that as the application amount increases, the credited amount also tends to increase.

o The two most common loan purposes are XPA and XNA, with XNA having a higher number of canceled cases compared to approved cases, particularly in the categories Repair and Other.

o Some repeat applicants have experienced rejection, making it essential to closely identify the reasons behind these rejections. Additionally, there are minimal cases of loan cancellations among new applicants.

o Education levels classified as Secondary and Secondary Special show a higher approval rate, which can guide decisions related to applicant education levels.

Points to Keep in Mind

o Be cautious when dealing with clients who have previously experienced loan refusals, cancellations, or unused offers, as they may pose a higher risk.

o Exercise prudence when considering low-income groups with a history of previous loan refusals, as their financial capacity may impact their ability to repay.

o Clients without a source of employment should be assessed carefully, as their financial stability and repayment capacity may be uncertain.

o Young clients, particularly in the age group of 20-40, tend to exhibit a higher risk profile compared to mid-age clients and senior citizens.

o Applicants with lower secondary and secondary education levels may require additional scrutiny in the approval process, as they are associated with a higher risk of default.

Thank You