CREDIT EDA

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APFE21826813

DATA CLEANING

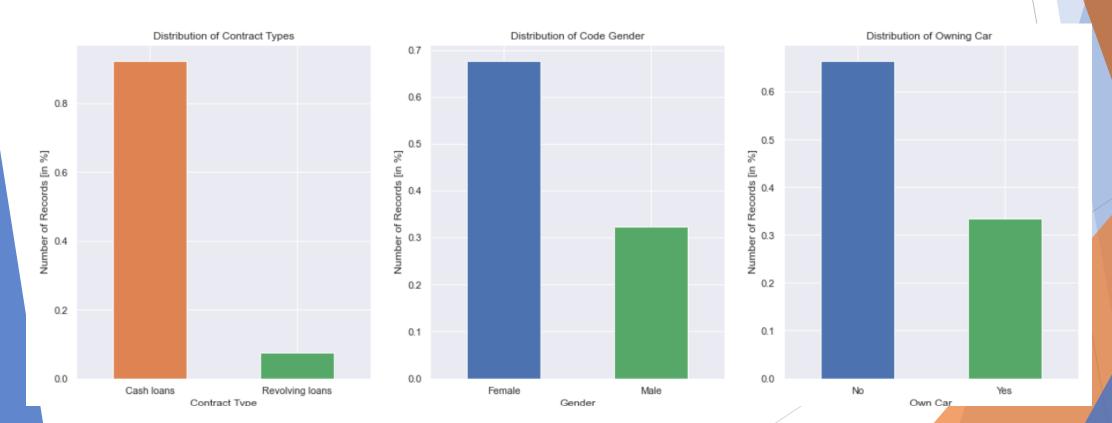
- CODE_GENDER : Removing the records with "XNA".
- NAME_TYPE_SUITE: 'Other_A', 'Other_B, 'Group of people' Name Type Suits merged into new 'Others' Type. Null Values are replaced by 'Missing' Type.
- > NAME_FAMILY_STATUS: Remove the "Unknown" FAMILY STATUS records.
- > NAME_CLIENT_TYPE: Remove the "XNA" Client Type records.
- NAME_CONTRACT_TYPE: Remove the "XNA" Contract Type records.
- > Removing Columns with more than 50% Null Values.

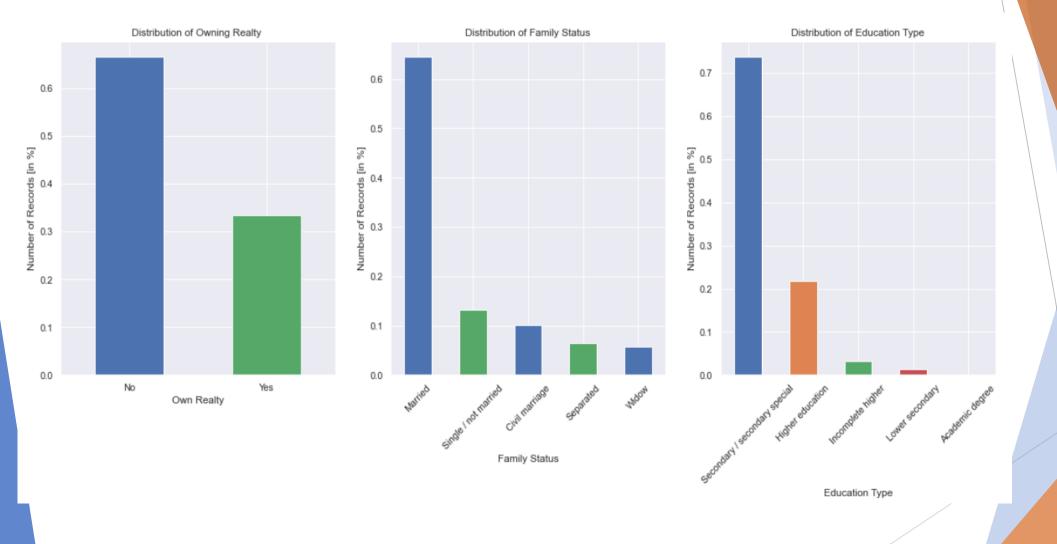
HANDLING OUTLIERS

> Remove Outlier from AMT_INCOME_TOTAL column.

Distribution of Various Columns

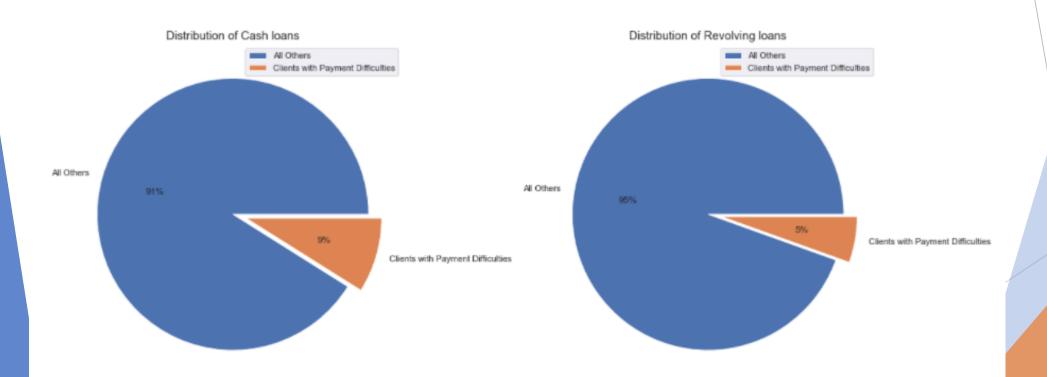
- > Customers prefer Cash Loans much more than Revolving Loans.
- More Female Customers apply for the Loan as compared to Male Customers.
- Customers owning Car or Realty are more likely to apply for the Loans.
- > Number of Married Customers applying for loans are quite significant as compared to the Others.
- > Customers with Secondary Education are more prominent to apply for the loans.





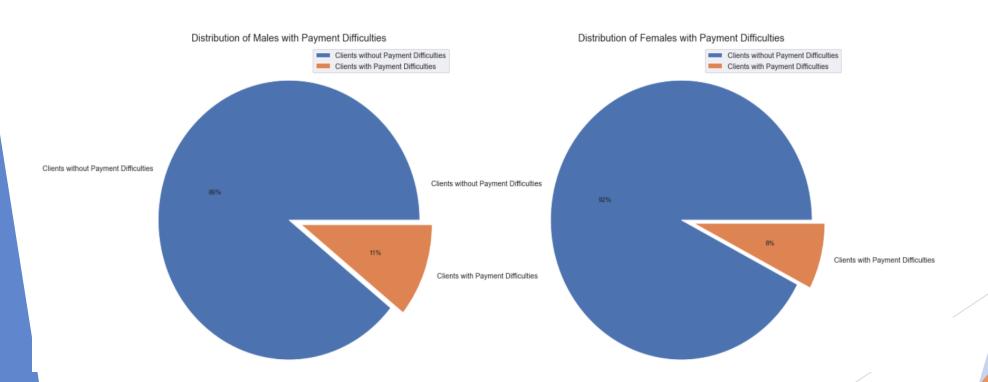
Distribution of Contract Types of Clients vs Payment Difficulties

Percentage of Payment Difficulties in Cash Loans are higher in comparison to Revolving Loans.



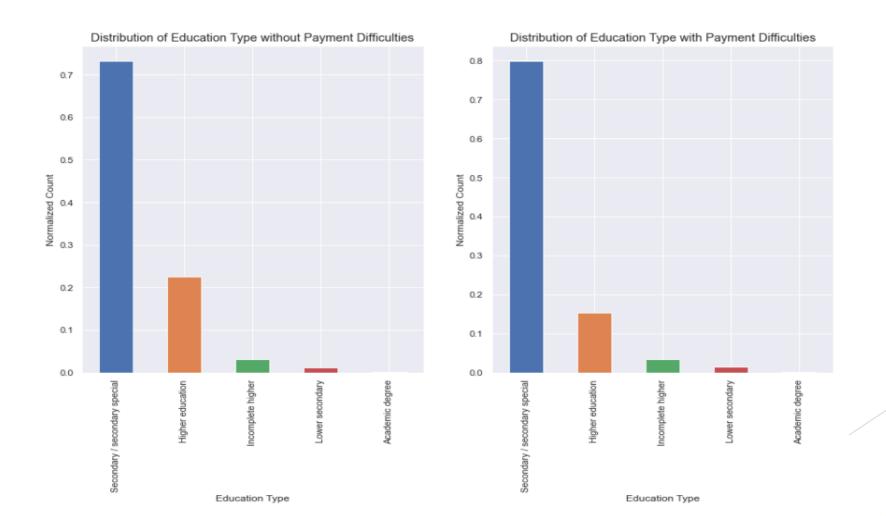
Distribution of Gender vs Payment Difficulties

Percentage of Payment Difficulties by Males are higher as compared to Females.



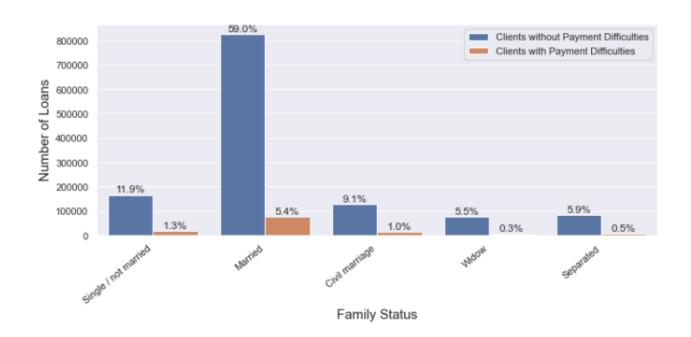
Number of Loans vs Education Type

Percentage of Payment Difficulties in Cash Loans are higher in comparison to Revolving Loans.



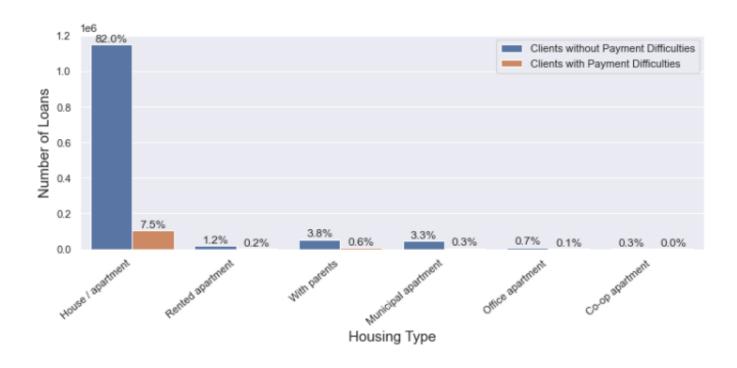
Number of Loans vs Family Status

More Number of Married couples apply for Loans as compared to Others.



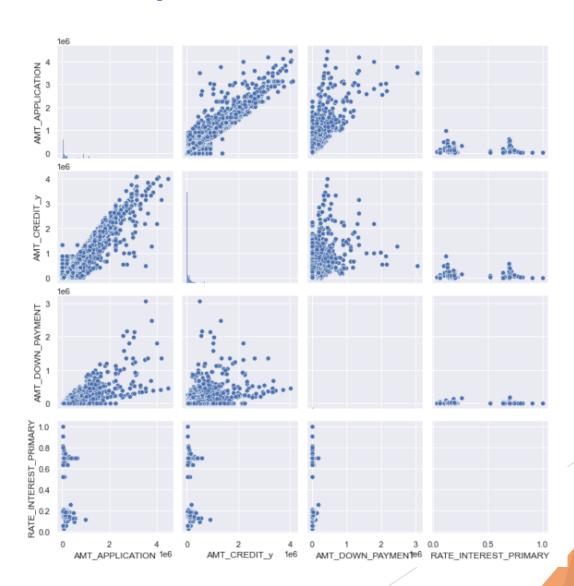
Number of Loans vs Housing Type

Clients with House/Apartment apply more for Loans as compared to Others.



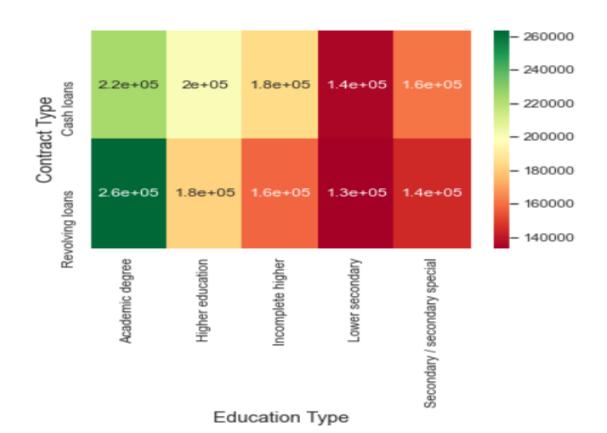
Amount Application vs Amount Credit vs Amount Down Payment vs Rate Interest

- Request Amount in application and Credit Amount on application increases in a Linear fashion.
- Rate of Interest primarily applied on Application amount is in Two clusters.
 This implies Rate of Interest is different for different Contract Types
- The amount of Down Payment is majorly similar across all Application Amounts requested.



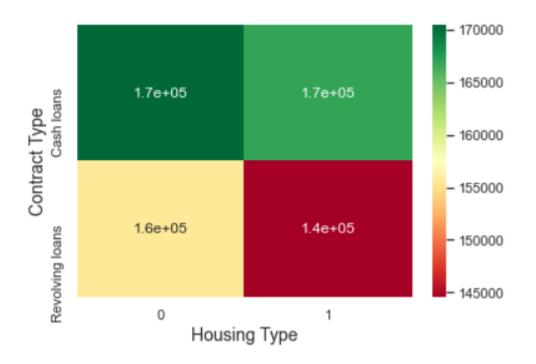
Contract Type vs Education Type vs Application Amount

- Clients with Higher Education qualification are approved with Loans having more amount.
- Loan Amounts approved for educated clients is 75% more than the others.



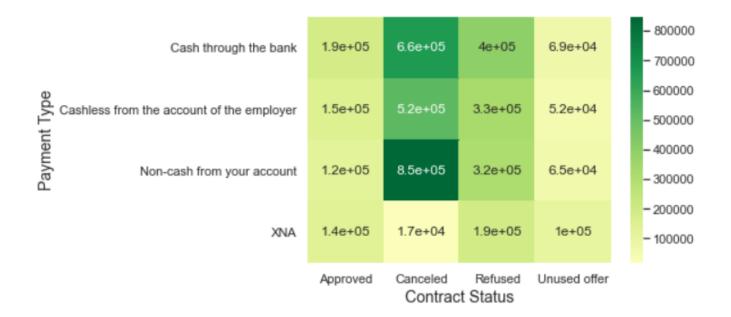
Contract Type vs Target vs Application Amount

Probability that Clients will have Payment Difficulties is higher in Revolving Loans than Cash Loans even if Lesser Loan Amount Application is approved for a client.



Payment Type vs Contract Status vs Application Amount

- Chances of loan getting approved for all payment types is much higher when loan amount is less than 500000.
- ➤ Chances of loan getting cancelled for non-cash from your account is much higher when loan amount is more than 500000.
- > There are lot of refused or unused offers due to variable reasons.



Inferences

- More Female customers apply for the Loan with low Payment Defaults. More offers can be introduced for the Female Customers.
- More offers can be introduced for Married Couples as significant number married clients apply for Loans.
- Due to varied reasons, lot of Customers are Rejecting Loan Offers.