



# CREDIT EDA CASE STUDY

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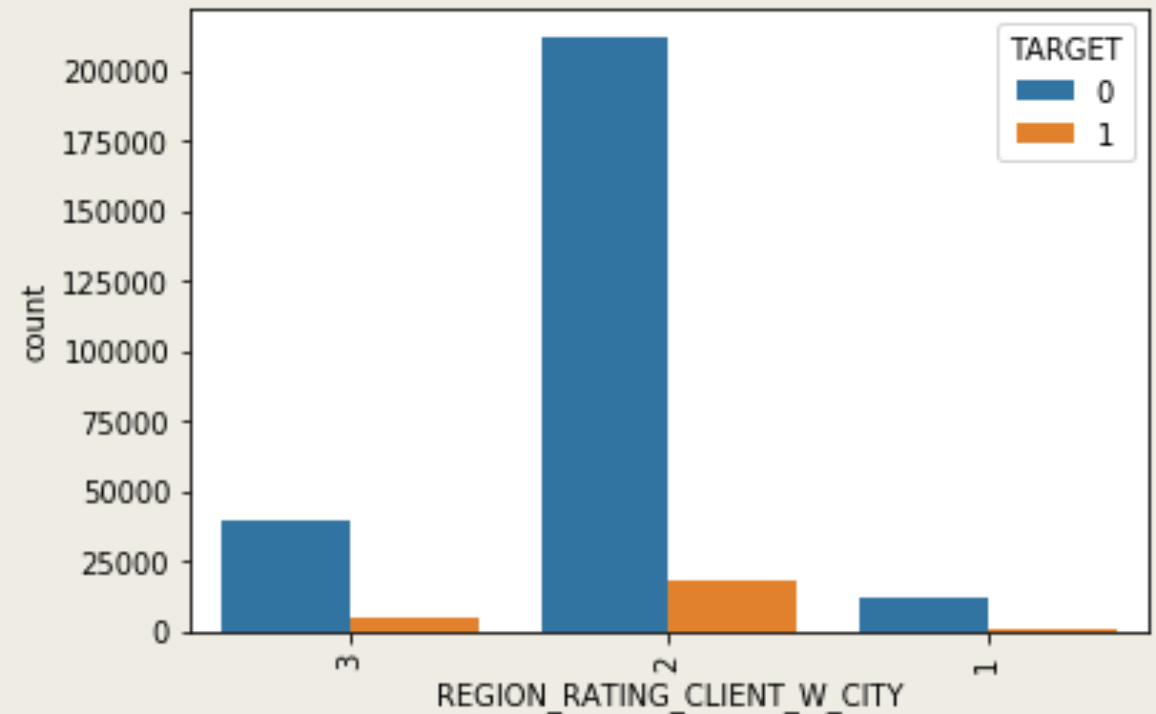


# IMPORTANT VARIABLES THAT IMPACT TARGET VARIABLES

## 1. REGION RATING OF CLIENT WITH CITY

- The percentage of default increase with decrease in rating of region indicating that this an important variable to be taken into account while disbursing credit

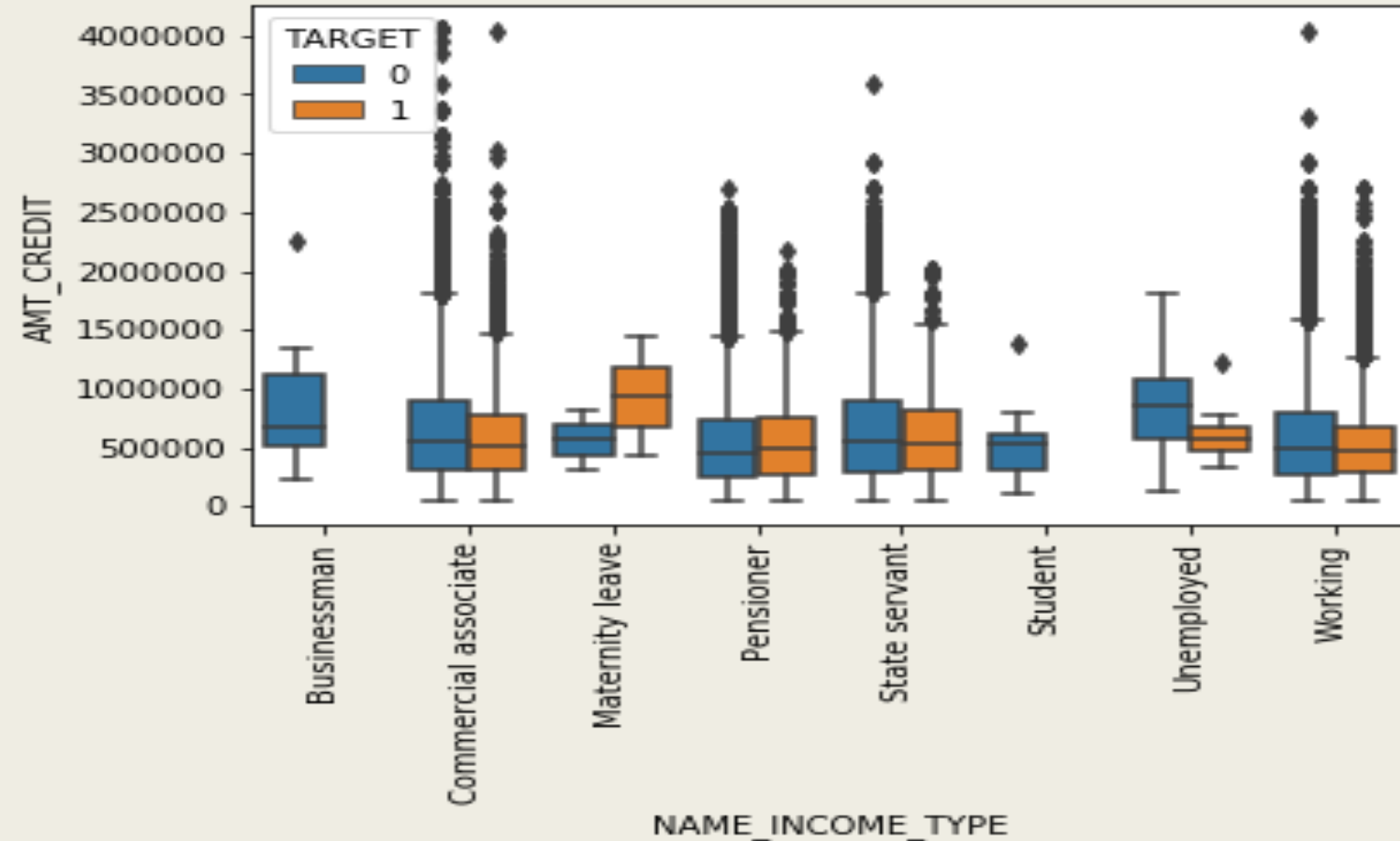
| Region Rating | % of Default |
|---------------|--------------|
| 3             | 12.86961     |
| 2             | 8.598187     |
| 1             | 5.636582     |



# IMPORTANT VARIABLES THAT IMPACT TARGET VARIABLES

## 2. INCOME TYPE

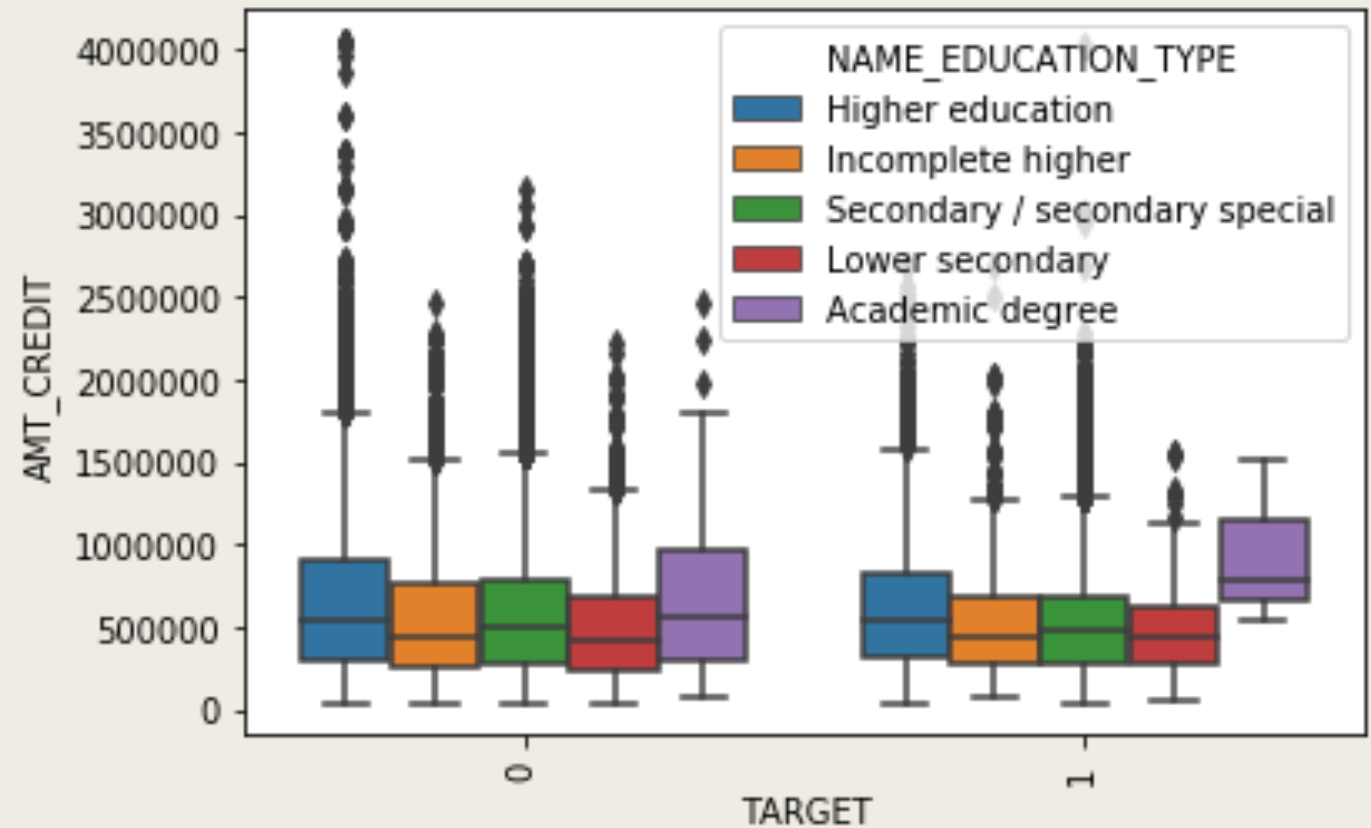
- Businessman and Student have not defaulted yet. However the number of records is very low
- All loans taken by businessman are revolving contract type
- 50 % of Maternity leave has defaulted. Also amount of credit taken is significantly high compared to others
- Credit given to unemployed is significantly higher than professional person



# IMPORTANT VARIABLES THAT IMPACT TARGET VARIABLES

## 3. EDUCATION TYPE

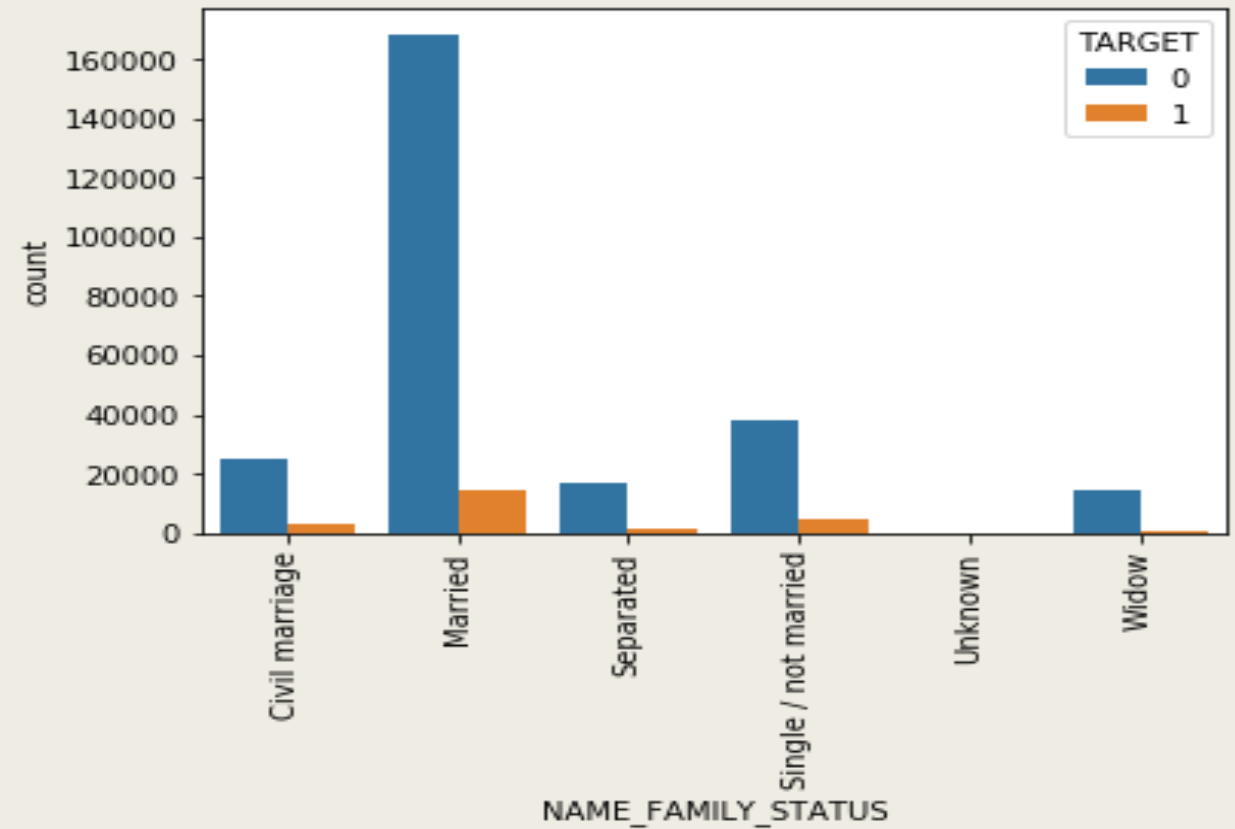
- Clients with Academic degree tend to take more credit amount and default . This indicates tendency to disburse loan easily for client with good education record . Needs to be further investigated



# IMPORTANT VARIABLES THAT IMPACT TARGET VARIABLES

## 4. FAMILY STATUS

- Clients who are single/not married tend to default more compared to others



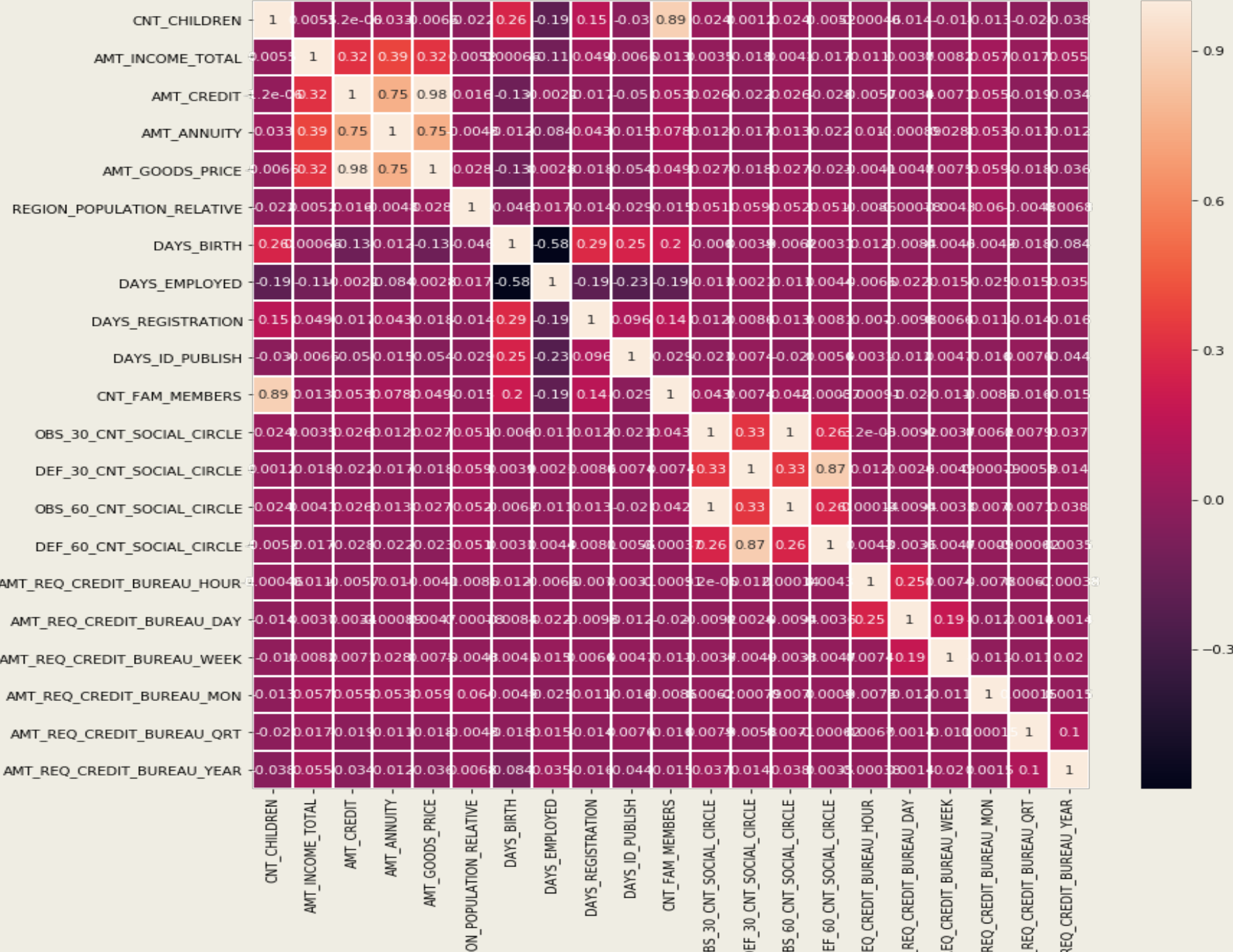
# IMPORTANT VARIABLES THAT IMPACT TARGET VARIABLES

## 5. OTHER INSIGHTS

- Address seems to have an impact on default rate. Client with permanent and contact address mismatch tend to default more
- Female client generally default less than male client
- It is observed that on an average client who have defaulted have change their phone recently then clients who have not defaulted
- The amount of credit given to clients who default is low as compared to amount of credit given to client who don't default which indicates that the amount eligibility criteria is in place
- Majority of the loan is taken by people living in house/apartment working professionals having education level upto secondary. This can be used by marketing/sales department
- Population rating of client does not seem to have significant impact. However number of query to bureau and client social surrounding observation seems to have an impact on default rate.

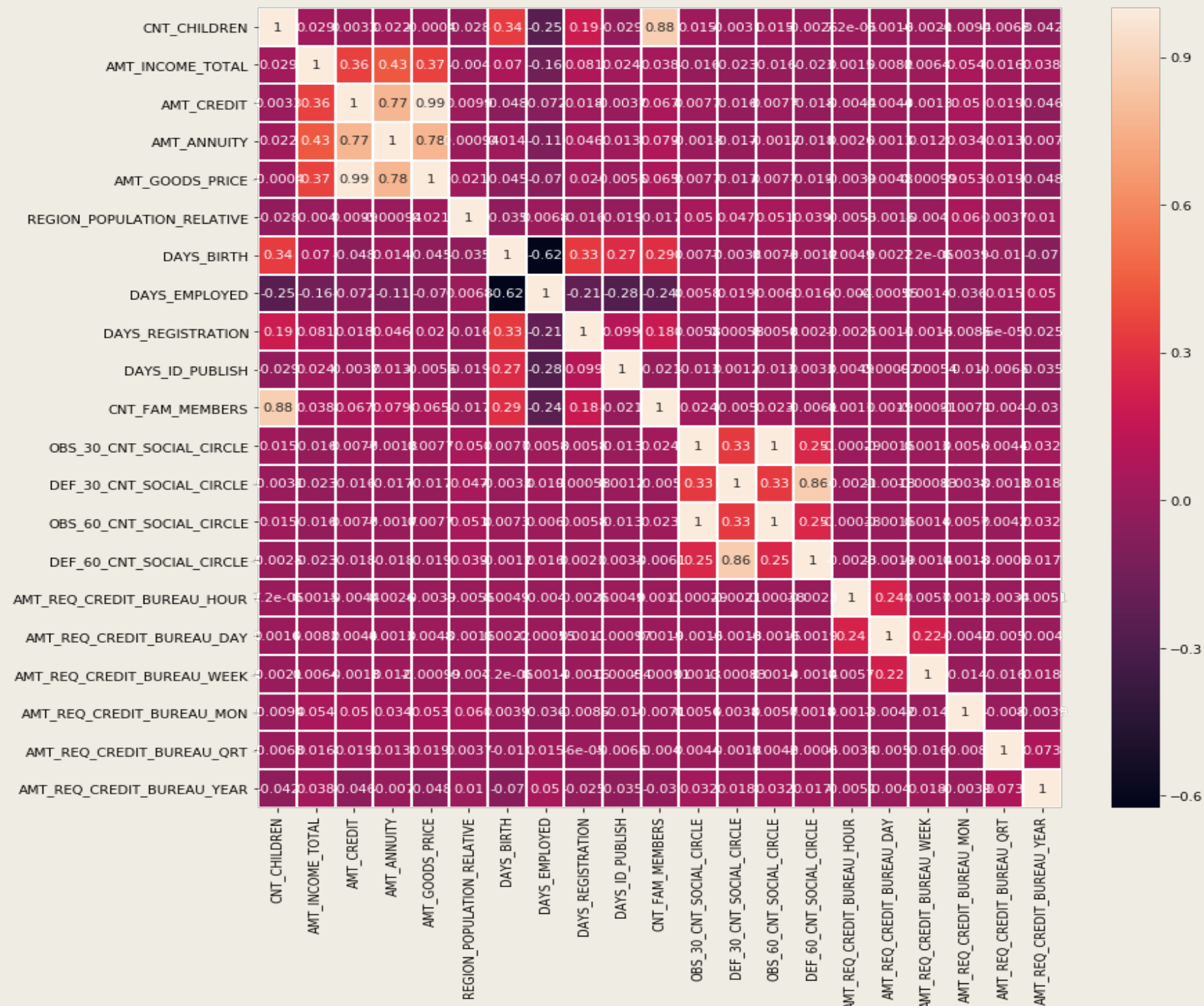
# CORRELATION MATRIX

Default case (1)



# CORRELATION MATRIX

Other case (0)



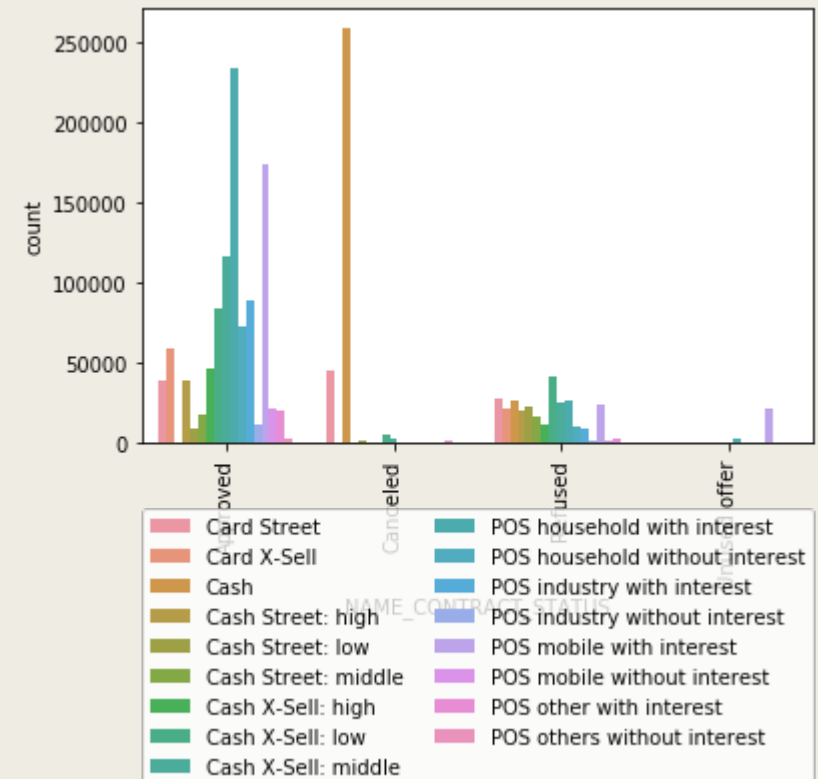
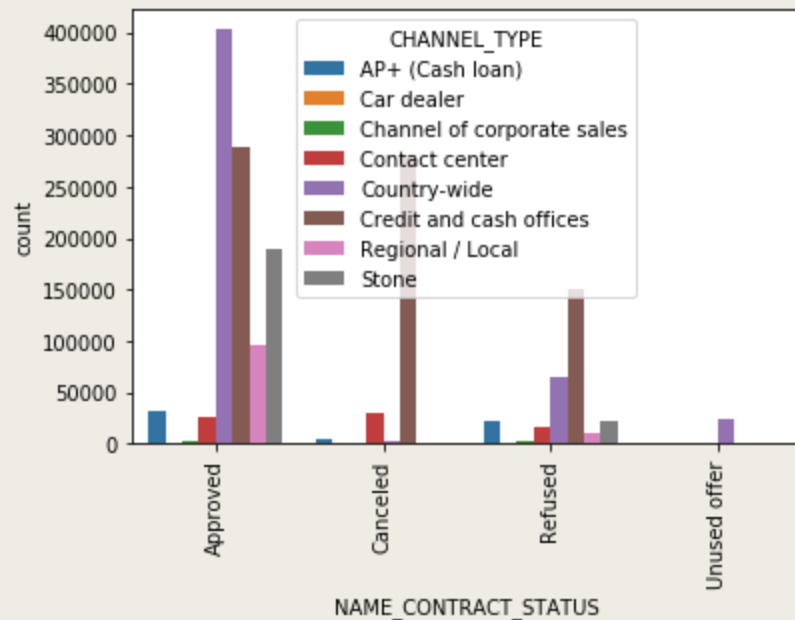


# OBSERVATIONS FROM CORRELATION MATRIX

- The correlation matrix is similar for both cases
- Amount of annuity shows a strong positive relationship with amount of credit and amount of goods prices which is expected
- Days birth and days employed shows strong negative correlation -> Means more experience person are changing job frequently
- Count of family members and count of children shows a strong positive relation
- Count of social surrounding with 30 DPD shows a strong correlation with count of social surrounding with 60 DPD

# INSIGHTS FROM PREVIOUS APPLICATIONS

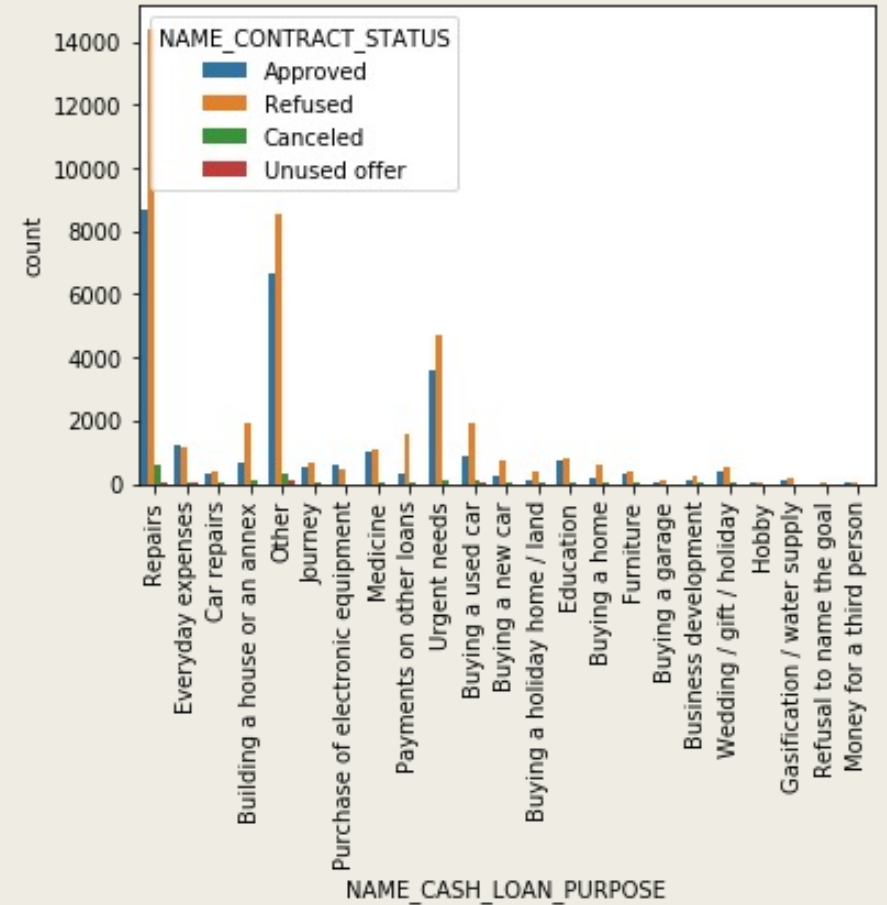
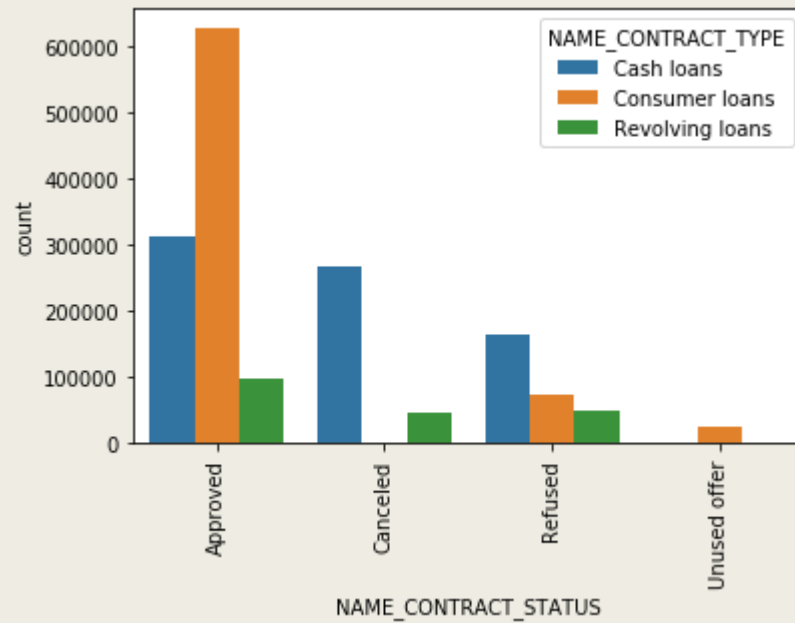
- Channel - A lot of loan application from credit and cash offices are getting refused or cancelled
- Product combination - A lot of loan application for cash street high are getting cancelled
- Such a high cancellation % should be further investigated to ensure that the bank is not losing out on potential business



# INSIGHTS FROM PREVIOUS APPLICATIONS

- Cancellation of cash loans is very high
- Repairs , urgent needs ,buying a used car and education are main reasons for cash loan purpose.
- Refusal percentage for repairs is unusually high

This needs to be further checked and investigated that the refusal / cancellation is done correctly to ensure that banks are not losing out on potential business



# INSIGHTS FROM COMBINING DATA

- 42 % of client having payment difficulties had a previous application which was refused.
- 32 % of client who had been refused in past do not have payment difficulty now.
- This means if refusal is done in past for a particular application it needs a strong case to approve loan for fresh application to avoid payment default risk for bank