

Step1 -> Create a target -> churn or non-churn -> remove 9 month columns

Step2 -> Handle missing values (

Step3 -> High value customers (removing lot of rows)

Step4 -> EDA

Step5 -> Modeling

Good performance model -> PCA-> Train-test split -> SMOTE -> RF

Good interpretation model -> Train-test split -> SMOTE -> Logistic regression/RF

total_ic_mou_9 -> incoming and outgoing usage

total_og_mou_9

vol_2g_mb_9

vol_3g_mb_9

Total_usage = total_ic_mou_9 + total_og_mou_9 + vol_2g_mb_9 + vol_3g_mb_9

Total_usage=0 -> churn=1, else churn =0

Target = 1/ 0 -> sum of these four columns

For every customer:

$\text{total_value_6} = \text{data_recharge} + \text{call_recharge}(\text{not given})$

$\text{avg_recharge_amt} * \text{count}$

$\text{total_value_7} = \text{data_recharge} + \text{call_recharge}$

$\text{total_value} = \text{avg}(\text{total_value_6}, \text{total_value_7})$

Take ≥ 70 th percentile customers

HV_June = **Total_amt_recharge_data_6(Data)** + Total_amt_recharge_data_6

HV_June = **Total_amt_recharge_data_7(Data)** + Total_amt_recharge_data_7

Average = avg(HV_june, HV_July) -> 70 percentile

total_recharge_data_6 = number of data recharges = 5

avg_rech_amt_data_6 = 200

Total_amt_recharge_data_6 = total_recharge_data_6 * avg_rech_amt_data_6

Total_amt_recharge_data_6(Data) = 5* 200 = 1000