TELECOM CHURN CASE STUDY

PROBLEM STATEMENT:-

- To reduce customer churn, telecom companies need to predict which customers are at high risk of churn.

- We will analyze customer-level data of a leading telecom firm, build predictive models to identify customers at high risk of churn and identify the main indicators of churn.

DATA PREPARATION

1. Derive new features

2. Filter high-value customers

3. Tag churners and remove attributes of the churn phase

MODELLING

- Build models to predict churn

- It will be used to predict whether a high-value customer will churn or not. By knowing this, the company can take action steps such as providing special plans, discounts on recharge, etc.

- It will be used to identify important variables that are strong predictors of churn.

BUSINESS RECOMMENDATION:

Top predictors

Below are a few of the top variables selected in the logistic regression model.

Most of the top variables have negative coefficients which means, the variables are inversely correlated with the churn probability.

Variables	Coefficients
loc_ic_mou_8	-3.3287
og_others_7	-2.4711
ic_others_8	-1.5131
isd_og_mou_8	-1.3811
decrease_vbc_action	-1.3293
monthly_3g_8	-1.0943
std_ic_t2f_mou_8	-0.9503
monthly_2g_8	-0.9279
loc_ic_t2f_mou_8	-0.7102
roam_og_mou_8	0.7135

RECOMMENDATIONS:

1. Target the customers, whose outgoing others charge in July and incoming others on August are less.

2. The customers having value-based costs in the action phase increased are more likely to churn than the other customers. Hence, these customers may be a good target to provide offers.

3. Customers, whose monthly 3G recharge in August is more, are likely to be churned.

4. Target the customers, whose minutes of usage of the incoming local calls and outgoing ISD calls are less in the action phase (mostly in the month of August).

5. Customers having decreasing incoming minutes of usage for operators T to fixed lines of T for August are more likely to churn.

6. Customers decreasing monthly 2g usage for August are most likely to churn.

7. Customers having decreasing incoming minutes of usage for operators T to fixed lines of T for August are more likely to churn.