Telecom Churrn Report

Updated: 05 May 2024

PROBLEM

- ➔ Based on historical data, predict which customers are at high risk of churn.
- ➔ Build predictive models to identify customers at high risk of churn and identify the main indicators of churn.
- ➔ Before build model, we need to create meaningful dataset and defining the flag Churn or No Churn

```
high_cus.select_dtypes(object)
```

0.0s

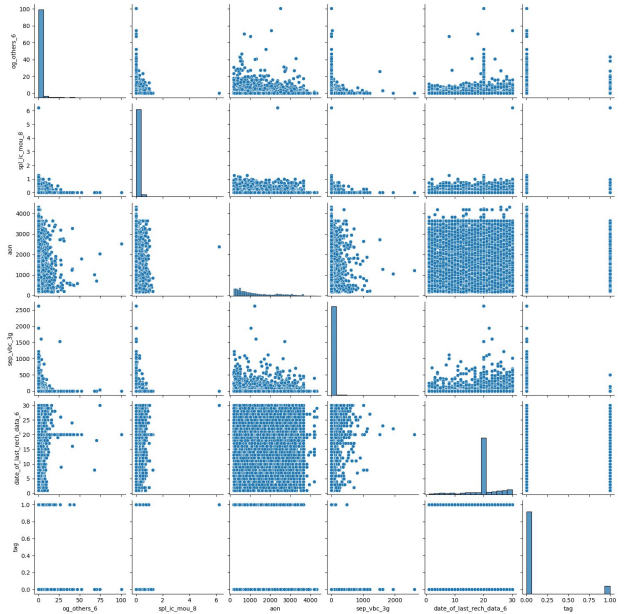
mobile_number	last_date_of_month_6	last_date_of_month_7	last_date_of_month_8	date_of_last_rech
7000701601	6/30/2014	7/31/2014	8/31/2014	6/27/201
7001524846	6/30/2014	7/31/2014	8/31/2014	6/25/201
7002191713	6/30/2014	7/31/2014	8/31/2014	6/20/201
7000875565	6/30/2014	7/31/2014	8/31/2014	6/30/201
7000187447	6/30/2014	7/31/2014	8/31/2014	6/30/201
...	...	...	...	
7001386760	6/30/2014	7/31/2014	8/31/2014	6/30/201
7001453306	6/30/2014	7/31/2014	8/31/2014	6/29/201
7001729035	6/30/2014	7/31/2014	8/31/2014	6/20/201
7002111859	6/30/2014	7/31/2014	8/31/2014	6/30/201
7000498689	6/30/2014	7/31/2014	8/31/2014	6/17/201

30011 rows × 9 columns

OBSERVATION

- ➔ Volume based cost, 3G network, Incoming calls, Outgoing calls, Special calls, Date of last recharged data on June play important role in our present busines probel -> need to tracking on them more for inspect customer behaivour

- ➔ No linear relation between tag and any special attribute



OBSERVATION

➔ Base on summary table, customers who has low outgoing calls < 43.9, special calls < 6.2 and cost using 3g less than 493 have higher potential to churn

	og_others_6	spl_ic_mou_8	aon	sep_vbc_3g	date_of_last_rech_data_6
count	27418.000000	27418.000000	27418.000000	27418.000000	27418.000000
mean	0.681224	0.029931	1301.404844	7.154397	19.814866
std	2.256827	0.115128	985.956668	50.750466	5.244409
min	0.000000	0.000000	180.000000	0.000000	1.000000
25%	0.000000	0.000000	487.000000	0.000000	20.000000
50%	0.000000	0.000000	958.000000	0.000000	20.000000
75%	0.000000	0.000000	2014.750000	0.000000	20.000000
max	100.610000	1.260000	4321.000000	2618.570000	30.000000

PROPOSAL

- ➔ Segmentation based on Usage Patterns: utilize customer data to segment user base based on their volume-based cost, 3G network usage, incoming calls, outgoing calls, and special calls.

- ➔ Retention-focused Loyalty Programs: Develop loyalty programs that reward long-term customers and encourage continued engagement. Offer perks such as loyalty points, exclusive discounts, or priority customer support to incentivize retention.

PROPOSAL

- ➔ Customer Engagement Initiatives: Engage with customers through targeted communication channels such as SMS, email, or app notifications. Provide relevant updates, promotions, and value-added services to keep customers informed and engaged with your brand.

- ➔ Personalized Offers and Incentives: Offer personalized incentives and discounts based on individual usage patterns. For instance, customers who heavily rely on incoming calls may appreciate bonus minutes, while those who frequently use data might prefer discounted data plans.