

Business Insights

Less number of ****high value customer**** are churning but for last ****6 month**** no new high valued customer is onboarded which is concerning and company should concentrate on that aspect.

Customers with less than 4 years of tenure are more likely to churn and company should concentrate more on that segment by rolling out new schemes to that group.

Average revenue per user seems to be most important feature in determining churn prediction.

Incoming and Outgoing Calls on roaming for 8th month are strong indicators of churn behaviour

Local Outgoing calls made to landline, fixedline, mobile and call center provides a strong indicator of churn behaviour.

Better 2G/3G area coverage where 2G/3G services are not good, it's strong indicator of churn behaviour.

SVM with tuned hyperparameters produce best result on this dataset with 0.92 accuracy.

Random forest also produce good accuracy with 0.91 (default overfit model) and 0.90 with tuned hyperparameters.

XGBoost also produce apt accuracy of 0.86 (default overfit model) and 0.85 with tuned hyperparameters.

As per our analysis SVM and Random forest produce best accuracy and models can be selected to predict churn data for future dataset or production.