Report on Churn Prediction

1. What is Churn Prediction

Churn Prediction is the act of predicting or guessing if a customer is going to be churned or not.

1. Why doing Churn Prediction

So that, you will satisfy a customer by making up to their expectation

1. About the dataset

Dataset used: customer\_churn\_dataset-testing-master.csv and customer\_churn\_dataset-training-master.csv, downloaded from Kaggle.

These datasets contains 12 feature columns. In detail, these are:

CustomerID: A unique identifier for each customer Age: The age of the customer Gender: Gender of the customer Tenure: Duration in months for which a customer has been using the company's products or services Usage Frequency: Number of times that the customer has used the company’s services in the last month Support Calls: Number of calls that the customer has made to the customer support in the last month Payment Delay: Number of days that the customer has delayed their payment in the last month Subscription Type: Type of subscription the customer has chosen Contract Length: Duration of the contract that the customer has signed with the company Total Spend: Total amount of money the customer has spent on the company's products or services Last Interaction: Number of days since the last interaction that the customer had with the company Churn: Binary label indicating whether a customer has churned (1) or not (0)

1. What are the main focus features to be considered for this churn prediction dataset?
2. Age
3. Support Calls
4. Payment Delay
5. Last interaction
6. What are the visible factors that can cause a customer to churn?
7. Customer service: When a customer call more than 3 times it’s highly cause them to be churn
8. Transaction Delay: When customer is waiting for more than 15 days before product or service confirmed, it also causes a customer to be churned
9. Engagement: Engage wit customer for at most 2 weeks interval
10. Suggestion on reducing churn
11. Work on customer service
12. Improve transaction delay
13. Engage with customer more often than ever
14. Accuracy of the model

Accuracy Score: 0.847380297302112

|  |
| --- |
| precision recall f1-score support |
|  |
| 0 0.82 0.84 0.83 45086 |
| 1 0.87 0.85 0.86 55956 |
|  |
| accuracy 0.85 101042 |
| macro avg 0.85 0.85 0.85 101042 |
| weighted avg 0.85 0.85 0.85 101042 |

1. Advantage of the model

This will help in knowing customer that will be churn then focusing on how to avoid them to stop buying with us

1. Recommendation for Machine model prediction enhancement

I will recommend you should more research on key factors that can make a customer to be churned.

1. What is the dashboard about?

Dashboard visualized the main key features relationship

1. Objective

To show the main features that makes the project successful

1. Why the objective

To show the features you considered when working on churn prediction