Telecommunication Churn Prediction

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WHAT IS CHURN?

- Customer who closes their contract or customer movement from one provider to another.

WHAT IS TELECOMMUNICATION

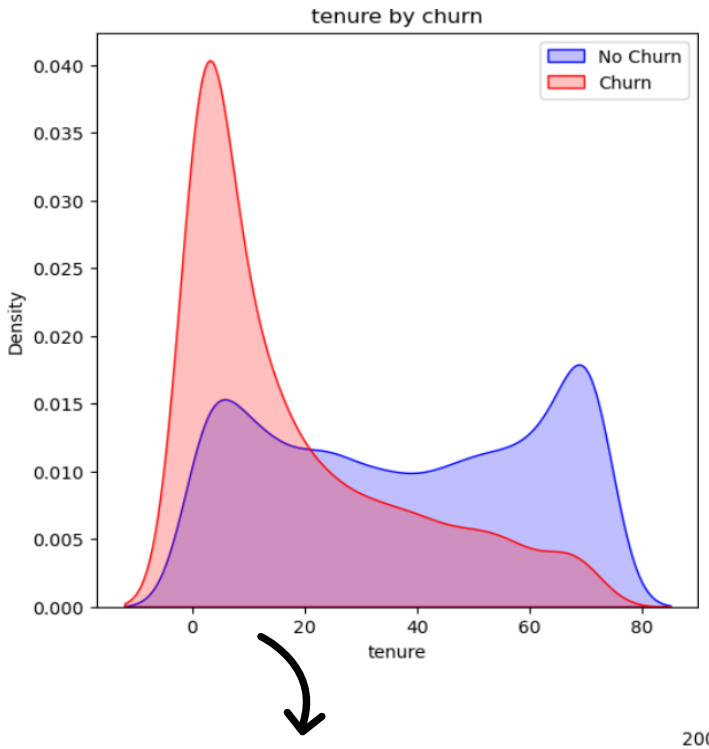
- The Exchange of information over a large distance is known as telecommunication.

HOW TO REDUCE CHURN?

- By considering target variable as "Churn" , Analyse the data and generate the insights which gives the data driven decision .

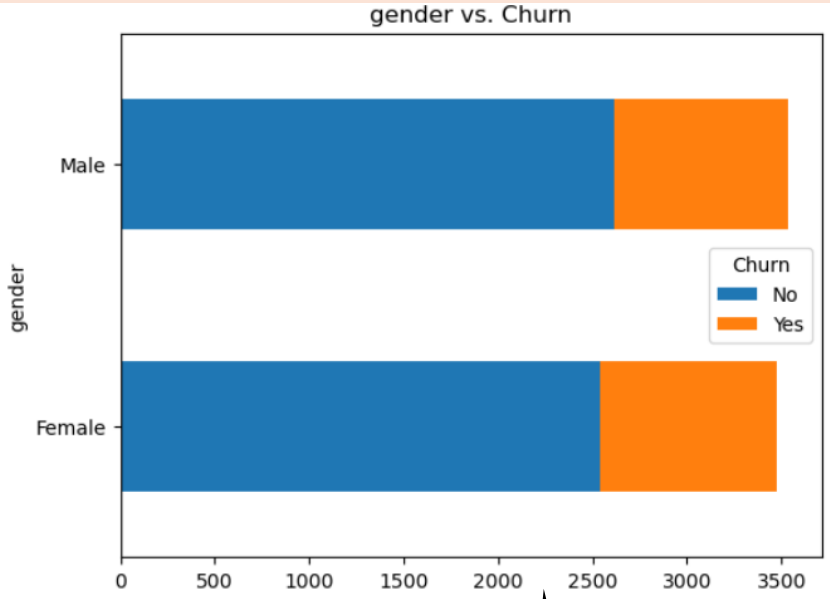
Some Analyses are .....

Tenure by Churn



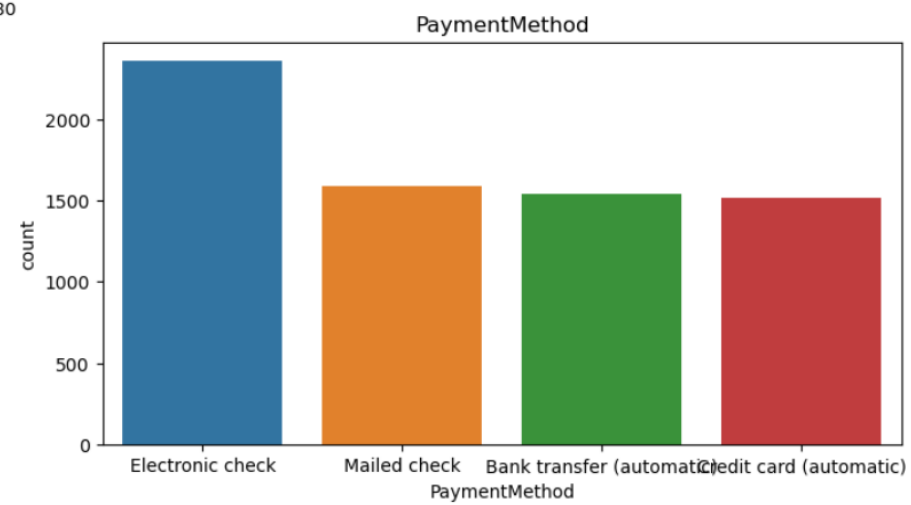
The Customer Churn rate is high with the low tenure rate.

Gender vs Churn



The Customer Churn rate is higher in the Male as compare to the Female.

The Customer Churn rate is higher for those who have Electronic Check Payment Method

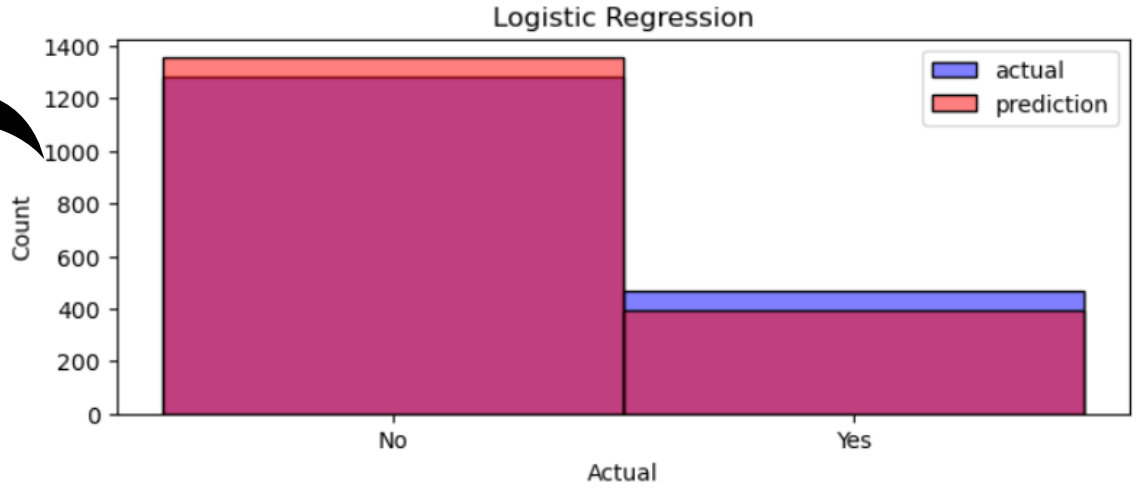


Payment

Decision Tree Algorithm

The histogram plot displays the distribution of actual values and the Random Forest model's predictions. The blue bars illustrate the actual values, while the red bars depict the model's predicted values. Overlapping regions signify where the model's predictions correspond closely with the true values, showcasing the model's precision. The model achieved an **accuracy rate of 77%.**

The histogram plot shows the distribution of actual and predicted values by the Random Forest model, where the blue bars represent the actual values and the red bars show the model's predictions. The overlapping regions indicate areas where the model predictions align well with the true values, highlighting the accuracy of the model. The model provided the **accuracy of 80%.**



Logistic Regression Algorithm

Conclusion

Harnessing the power of data scientist, we employed Logistic Regression, Decision Tree, KNN Algo, Random Forest models, achieving 80%,77%,79% and 79% accuracy, respectively. By identifying at-risk customers, we implemented targeted retention strategies, leading to a significant reduction in churn and a notable increase in customer satisfaction.