



# Telco Customer Churn Analysis and Prediction

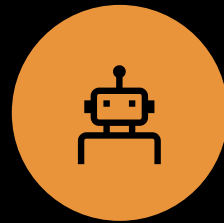
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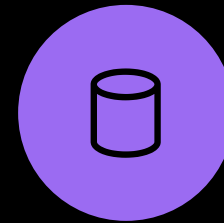
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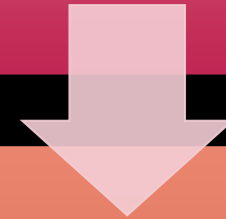
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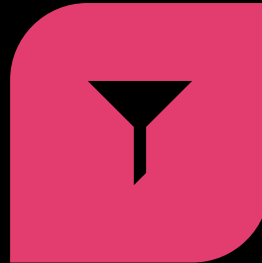
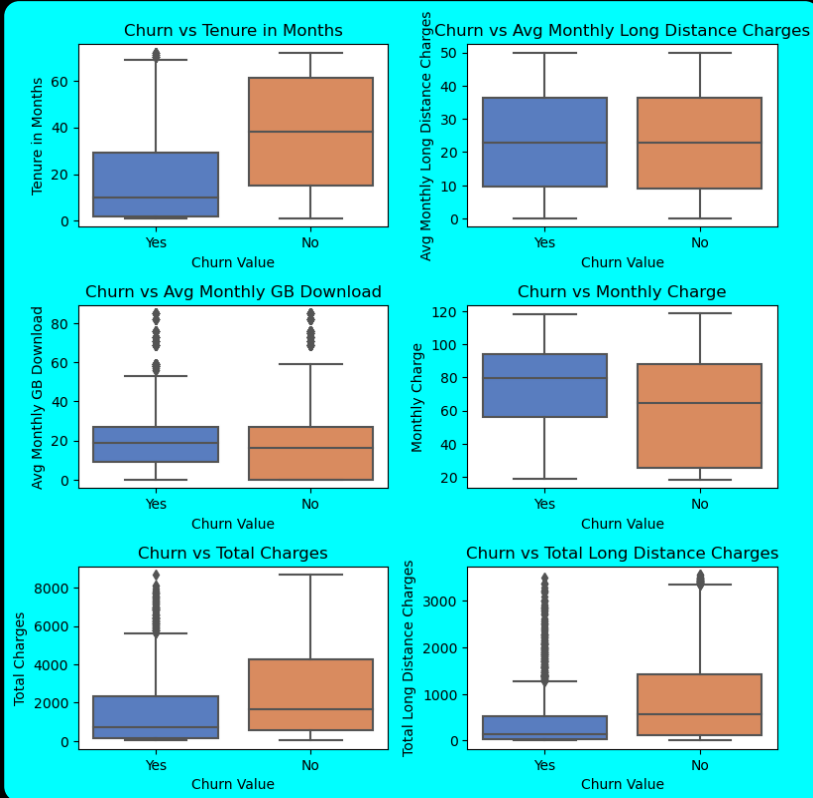
# *Introduction*

Telecom companies aim to predict customer churn for proactive retention and improved customer loyalty.



This Presentation entails ways to identify them and provide Recommendations to retain them

# Customer Churning Trends: Unraveling the Top Insights



CUSTOMER DEMOGRAPHY:  
YOUNG OR UNMARRIED  
CUSTOMERS ARE MORE LIKELY  
TO CHURN



CONTRACTS: CUSTOMERS  
WITH MONTHLY CONTRACTS  
AND HIGH MONTHLY COSTS  
CHURN MORE



PAYMENT MODES:  
CUSTOMERS PAYING BY  
ELECTRONIC MODE CHURN  
MORE THAN OTHER MEANS

# Machine Learning Models

Empowering decision-making with a lineup of predictive models to predict Customer Churn



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graph TD; A[Empowering decision-making with a lineup of predictive models to predict Customer Churn] --> B[Explored a number of Models like Logistic Regression, Decision Trees, Random Forest, XGBoost, etc to arrive at the best Model]; B --> C[Gradient Boosting outperformed other models and delivered the most accurate customer churn predictions];
```

Explored a number of Models like Logistic Regression, Decision Trees, Random Forest, XGBoost, etc to arrive at the best Model

Gradient Boosting outperformed other models and delivered the most accurate customer churn predictions

# Model Performance

## Accuracy

- The Machine has a commendable accuracy of 82%, making reliable and precise predictions in its task.

## Precision

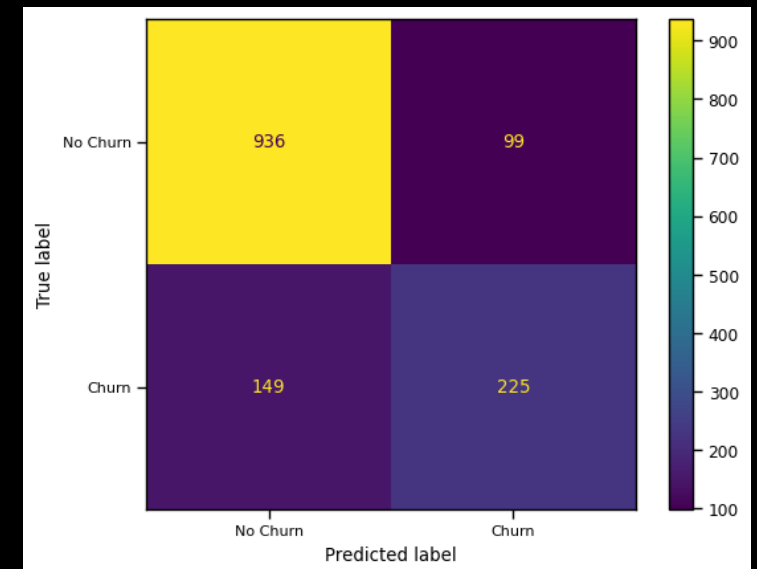
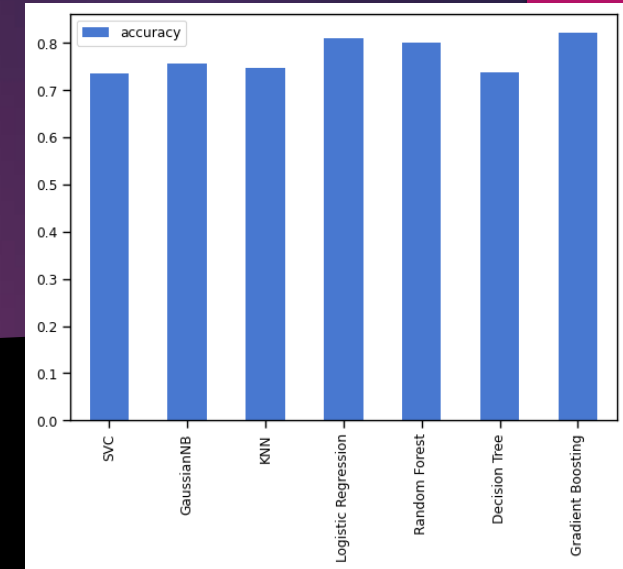
- It has an impressive precision of 82%, precisely identifying a substantial portion of true positive instances in its predictions.

## Recall

- The Machine captures a significant portion of actual positive instances in its predictions

## Highlight

- ***The machine's predictions are incredibly accurate and reliable across all aspects!!***



# Recommendations for Customer Retention



Personalized offers  
and discounts



Improved customer  
support and  
engagement



Long-term contract  
incentives



Targeted marketing  
campaigns



***Thank You***