SYRIATEL CUSTOMER CHURN PREDICTION PROJECT
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PROJECT WORKFLOW

- Project overview

- Business understanding

- Data understanding

- Modelling

- Evaluation

- Conclusion

- Recommendation

PROJECT OVERVIEW

CUSTOMER CHURN, OR THE LOSS OF CUSTOMERS, IS A SIGNIFICANT CHALLENGE FOR THE SYRIA TELECOMMUNICATION COMPANY. THIS PROJECT AIMS TO BUILD A PREDICTIVE MODEL TO IDENTIFY CUSTOMERS AT RISK OF LEAVING SYRIATEL. BY UNDERSTANDING THESE RISK FACTORS, SYRIATEL CAN IMPLEMENT TARGETED RETENTION STRATEGIES AND IMPROVE OVERALL CUSTOMER SATISFACTION.

BUSINESS UNDERSTANDING

Syriatel is one of the leading telecommunications providers in Syria, offering a range of services including voice, SMS, and data plans. In a highly competitive market, customer retention is crucial to maintaining and growing market share. Losing customers, or "churn," can significantly impact revenue and profitability. Understanding and mitigating customer churn is therefore a strategic priority for Syriatel.

PROJECT OBJECTIVES

PREDICT CUSTOMER CHURN: DEVELOP A PREDICTIVE MODEL THAT CAN ACCURATELY IDENTIFY WHICH CUSTOMERS ARE AT RISK OF CHURNING.
IDENTIFY CHURN DRIVERS: UNDERSTAND THE KEY FACTORS AND BEHAVIORS THAT ARE MOST INDICATIVE OF CHURN.
SUPPORT STRATEGIC DECISION-MAKING: PROVIDE ACTIONABLE INSIGHTS THAT WILL ENABLE SYRIATEL TO DEVELOP TARGETED INTERVENTIONS TO REDUCE CHURN.
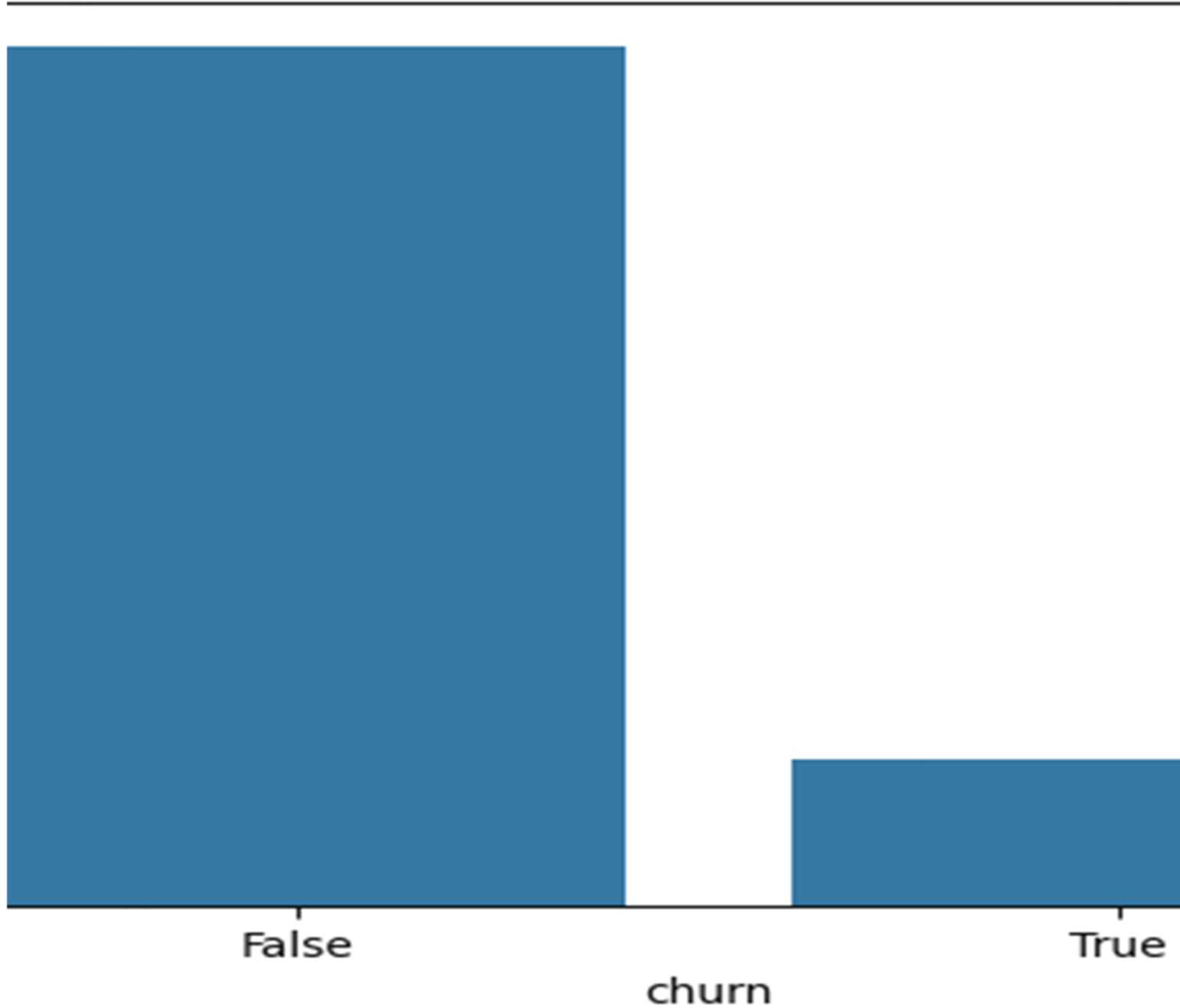
DATA UNDERSTANDING

The data for this project is derived from **Data Sources.** multiple sources within Syriatel's operational and customer management systems:

- Customer demographics.

- Service usage patterns e.g calls, sms etc.

- Billing information.

- Customer support interactions.

- Customer satisfaction scores.

Distribution of Churn

The first process was to find out the churn rate at SyriaTel Company.The percentage of the customers leaving the company was 14.5%.

This shows the summary of how different categories affected the customer churn .

Correlation Matrix
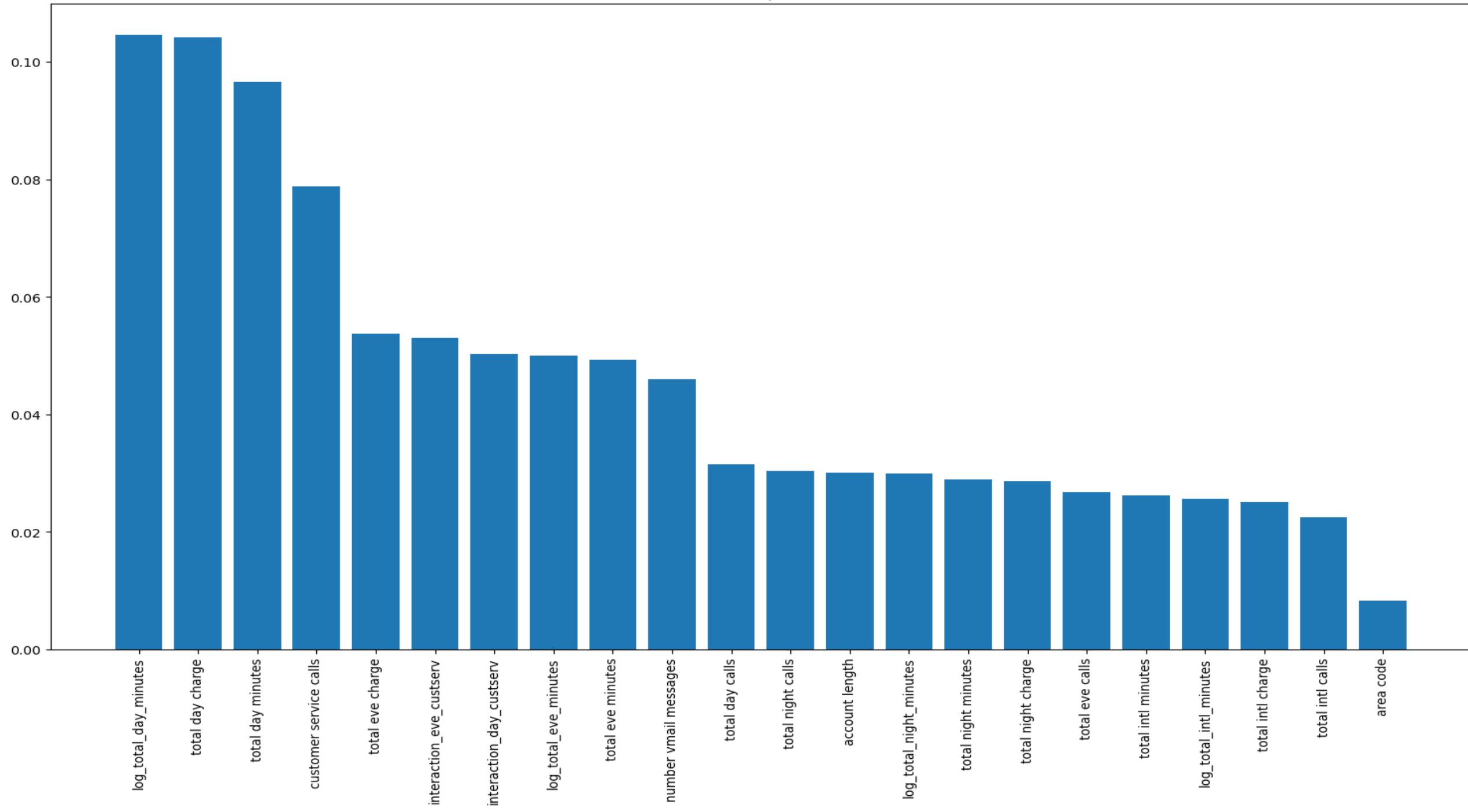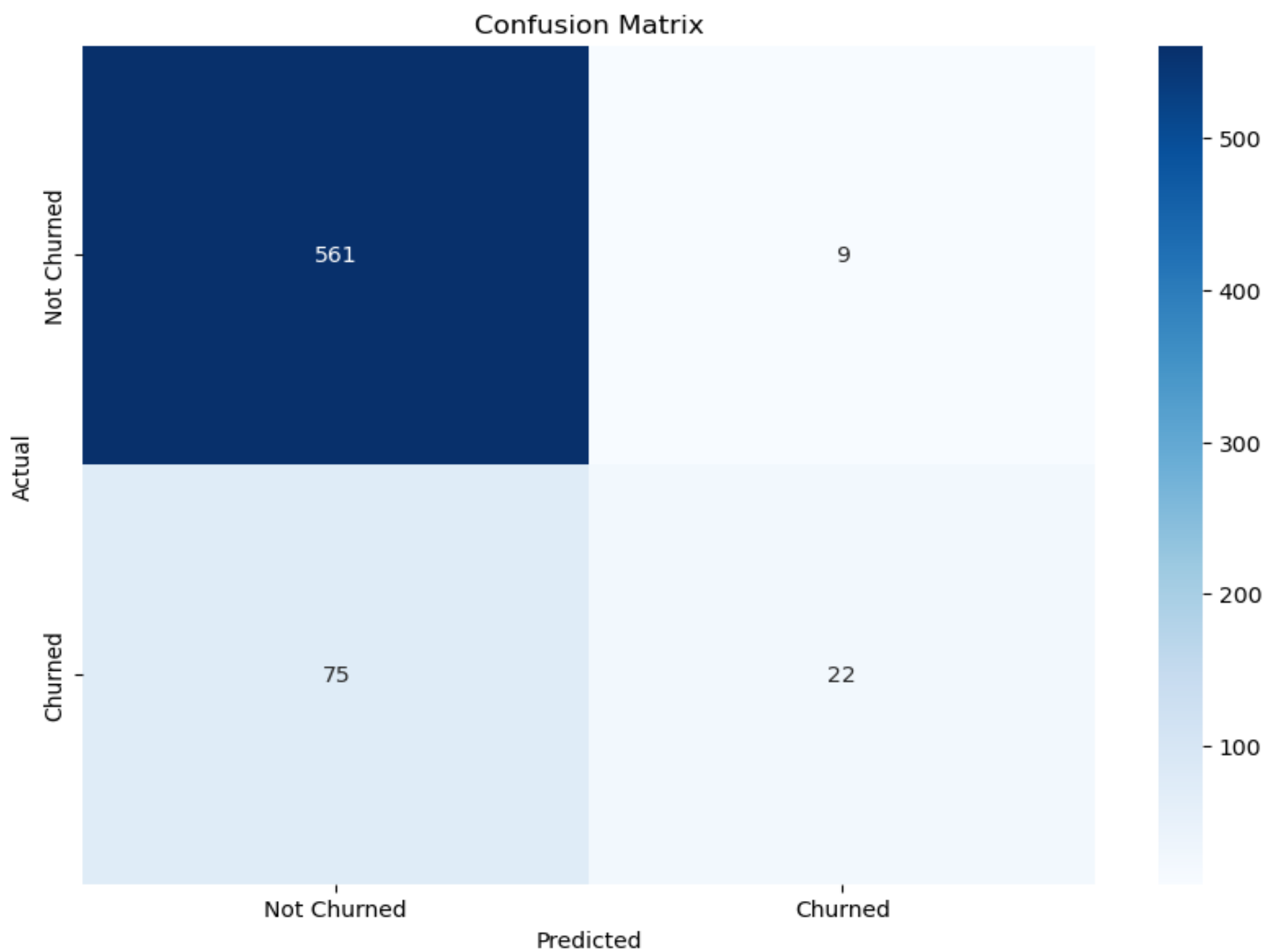
MODELING

1. RANDOM FOREST CLASSIFIER.

Confusion Matrix
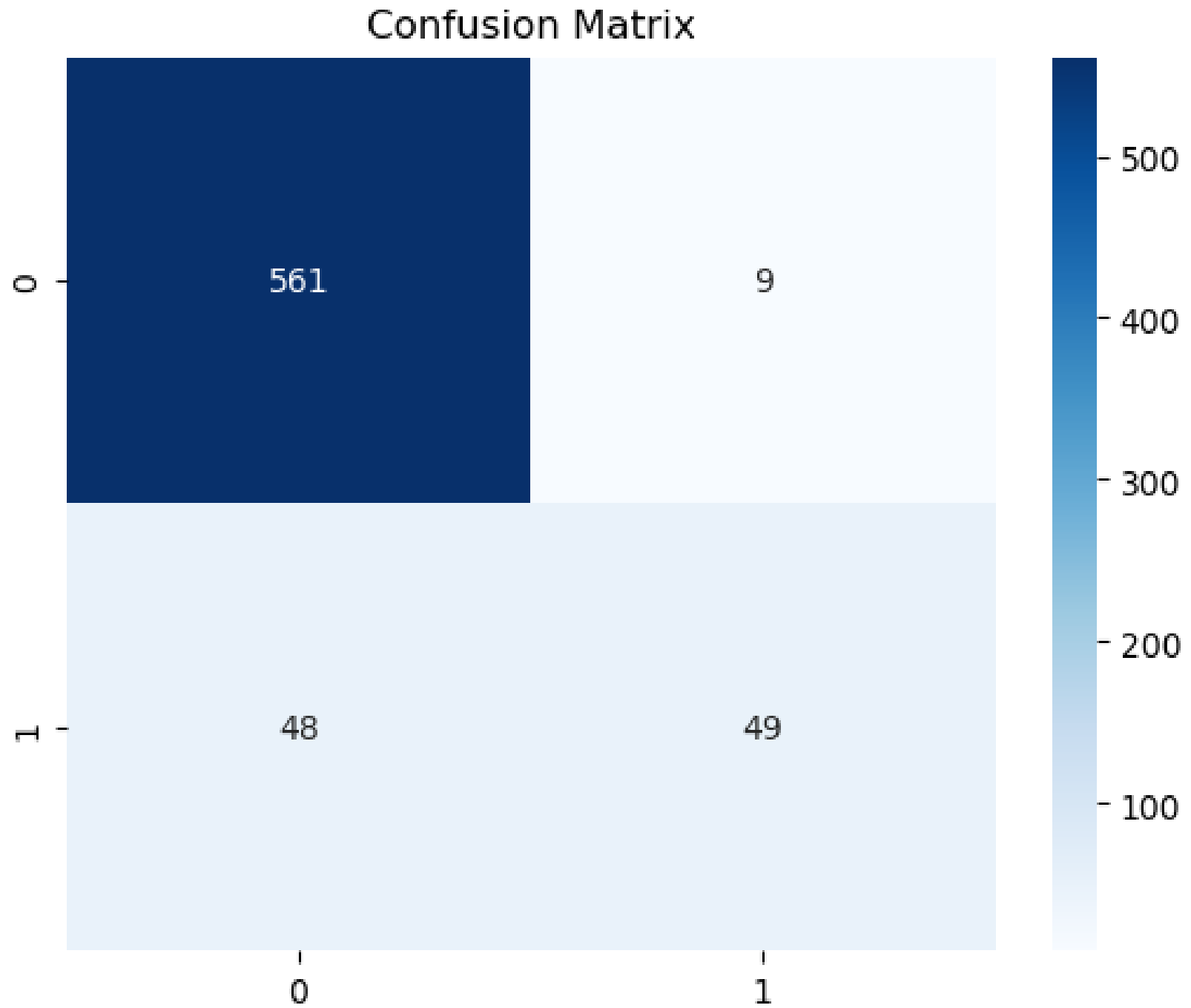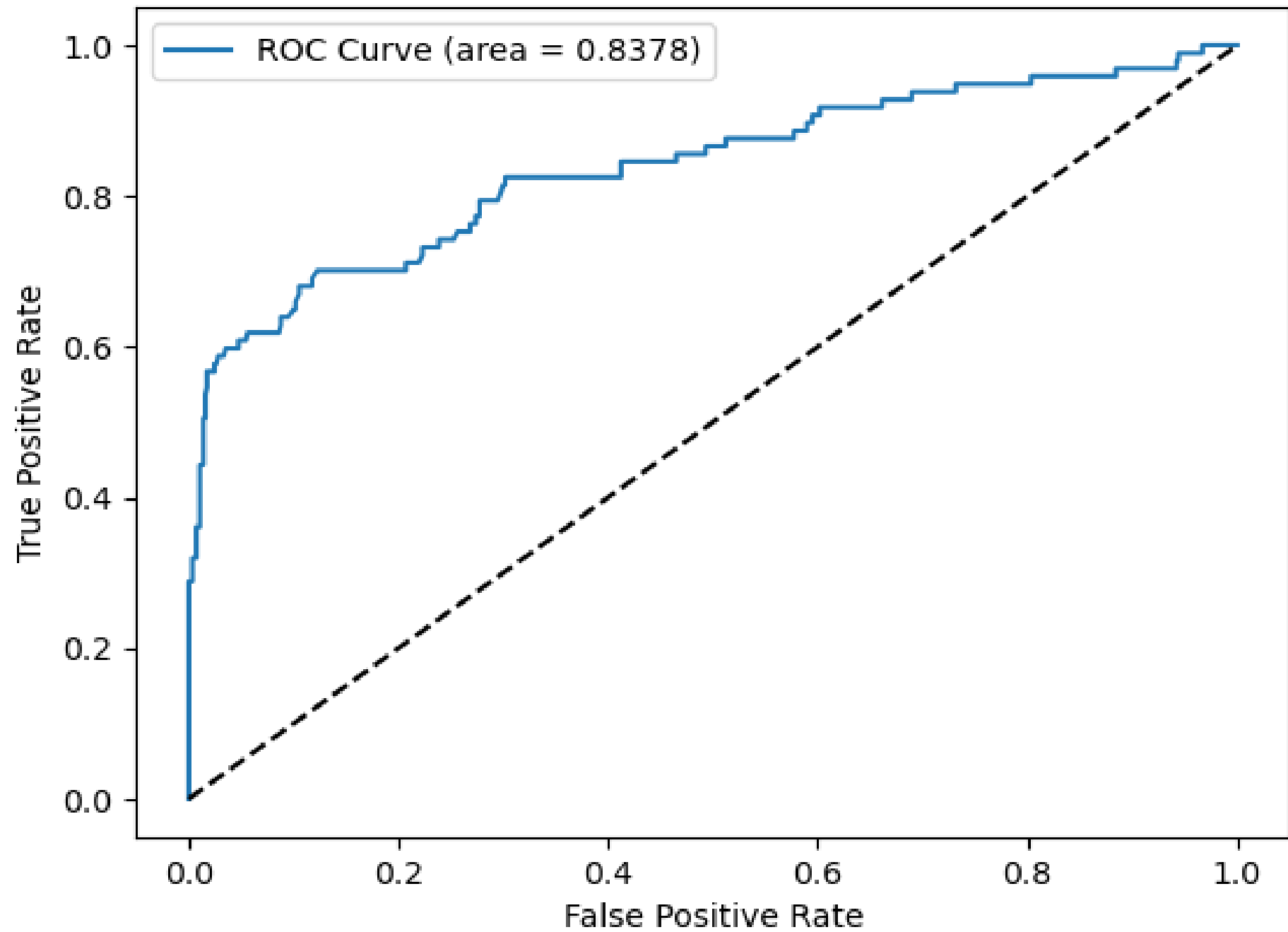
ROC CURVE.

Feature Importance

Logistic
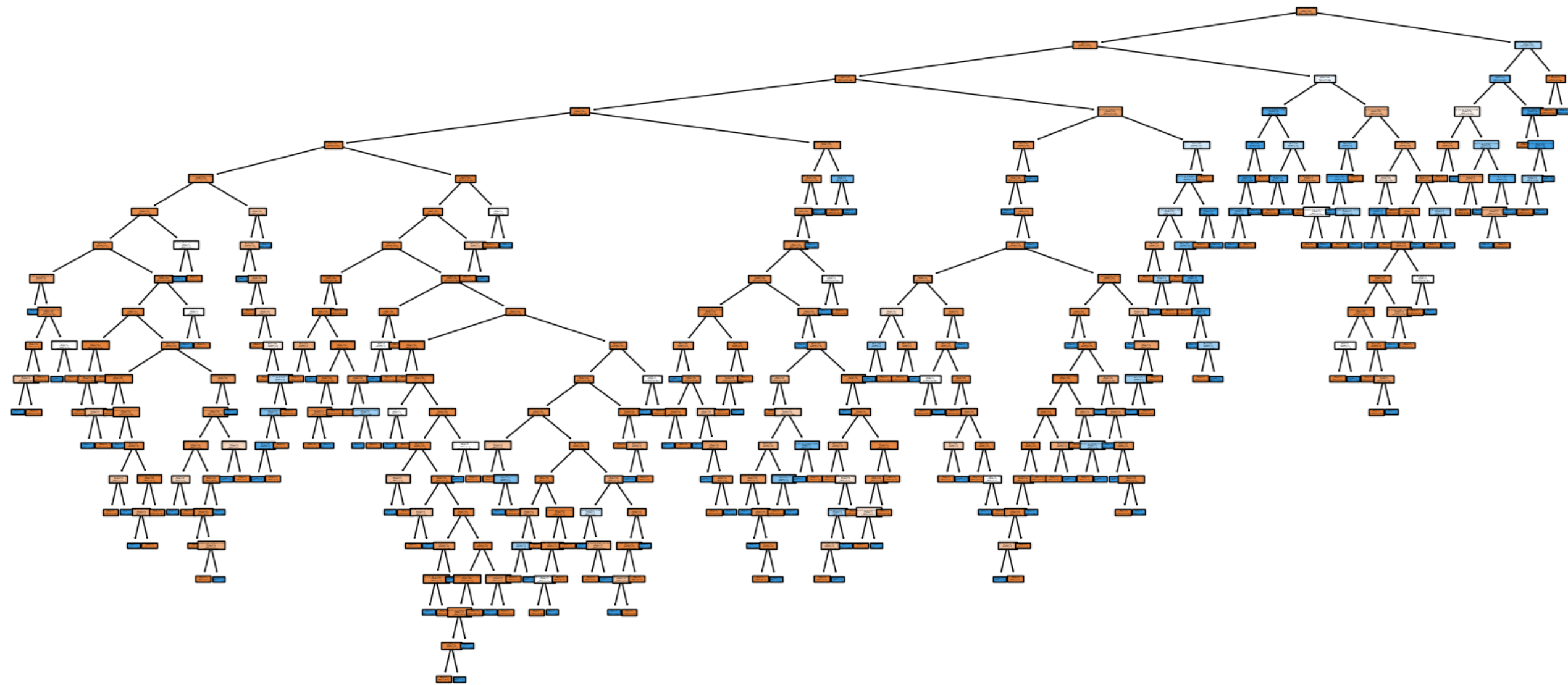Regression
model.

Confusion Matrix
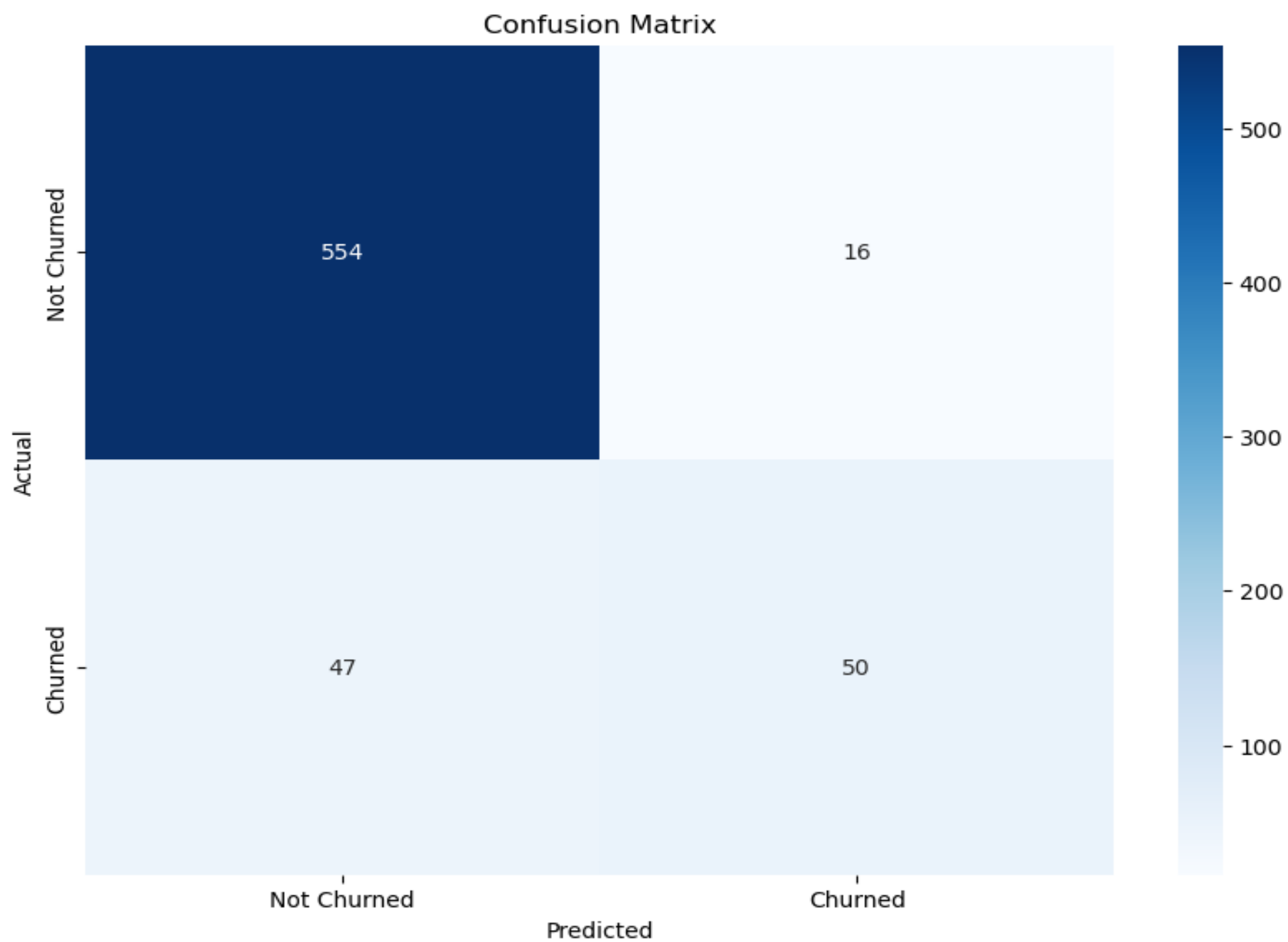
Decision Tree Model.
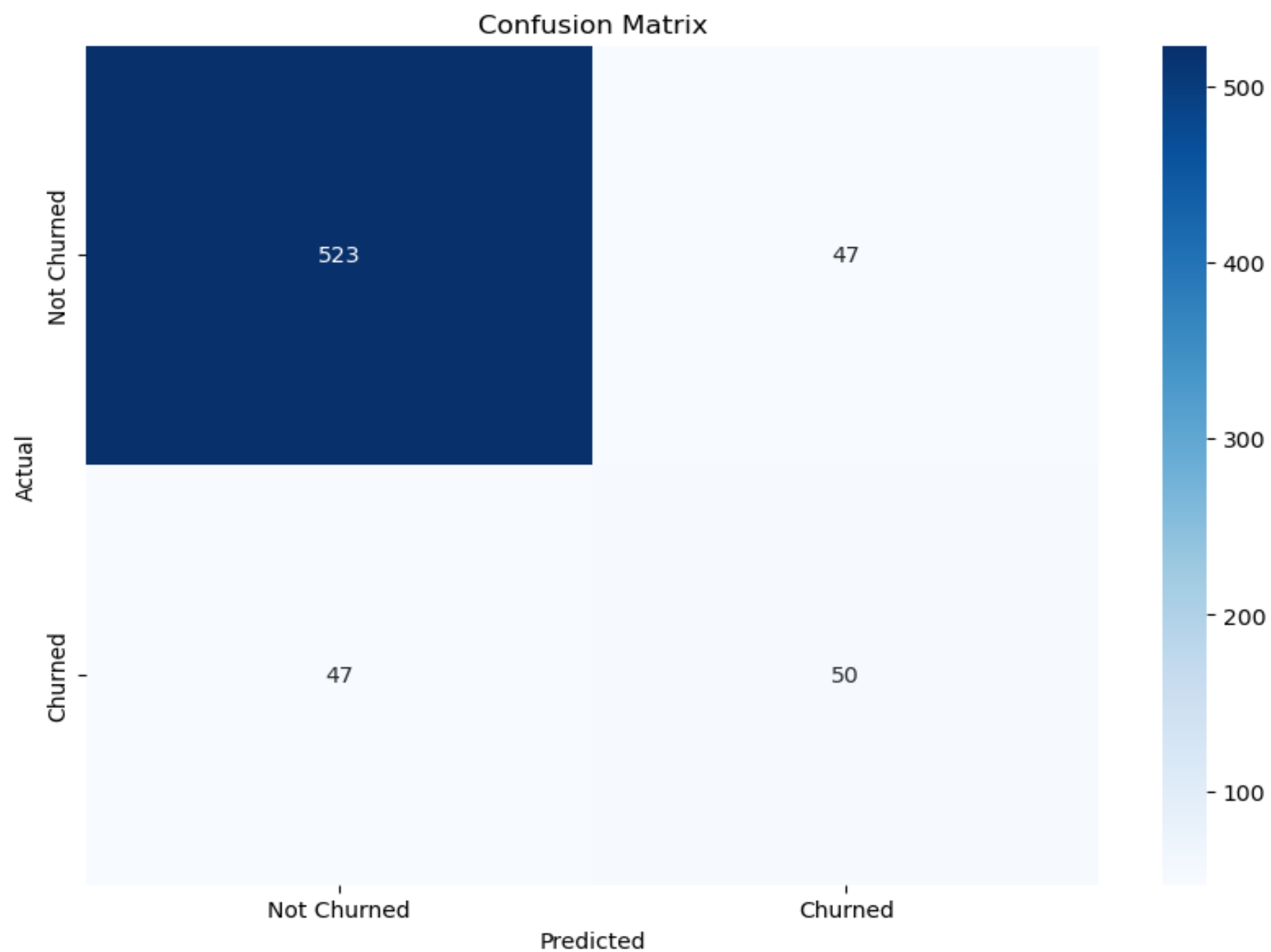
DECISION TREE VISUALIZATION

Decision Tree Visualization

XGBOOST MODEL

XGBOOST FEATURE IMPORTANCE

Feature Importance
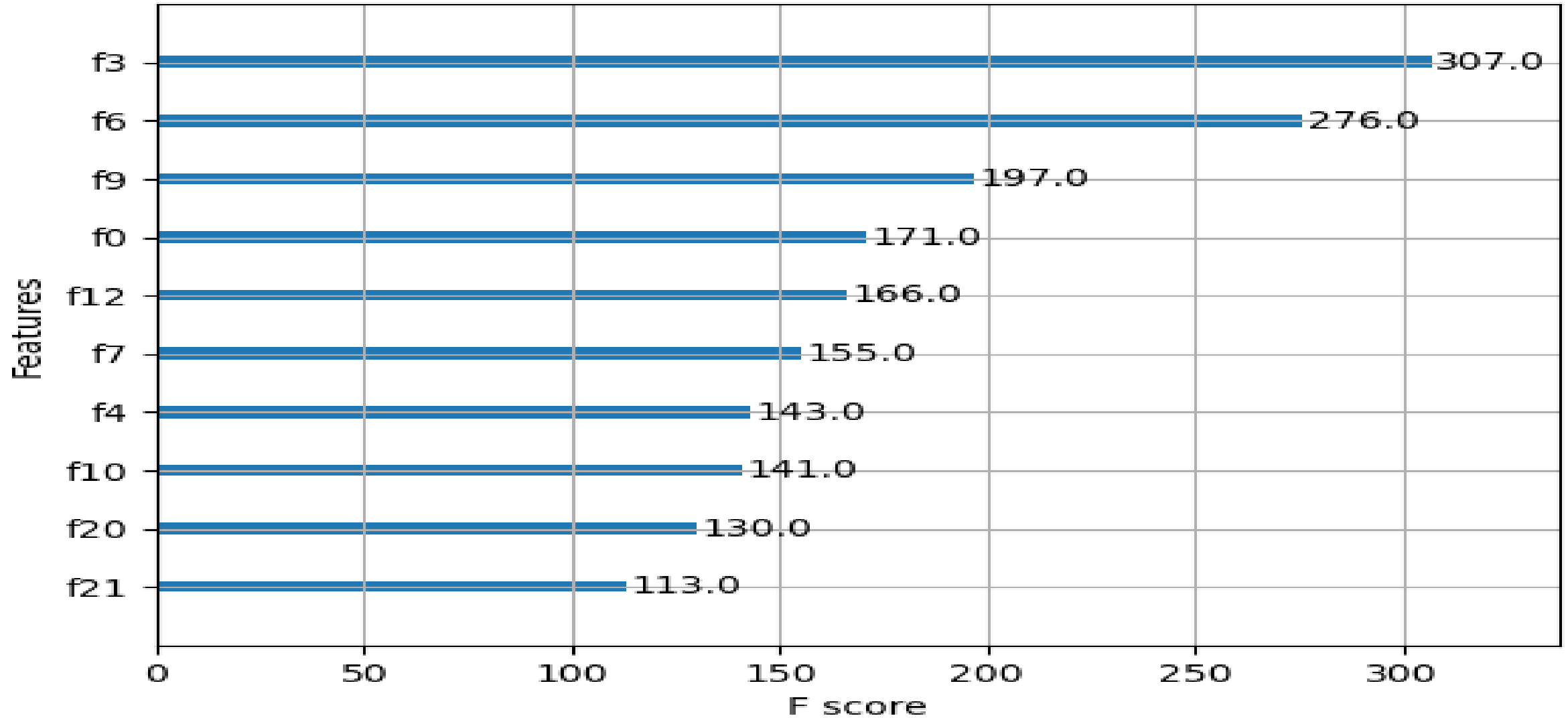
CONCLUSION

The Syriatel customer churn project has provided valuable insights into the factors contributing to customer attrition and highlighted the areas where improvements are necessary.

Through comprehensive data analysis, we identified key drivers of churn, including service quality issues, competitive pricing challenges, and customer service inefficiencies. Additionally, customer feedback underscored the importance of personalized service and tailored offers in improving satisfaction and loyalty.

By focusing on service improvements, competitive pricing strategies, and personalized customer engagement, Syriatel can strengthen its market position and foster long-term customer relationships.

RECOMMENDATION

Enhance Service Quality: Invest in upgrading network infrastructure and technology to ensure consistent and high-quality service. Implement regular performance monitoring and maintenance schedules to minimize service disruptions.

Revise Pricing Strategies: Conduct a competitive analysis to align pricing with market expectations and customer value perception. Consider introducing flexible pricing plans, bundling options, and loyalty rewards to attract and retain customers.

Improve Customer Service: Train customer service representatives to handle queries and complaints more effectively and empathetically. Implement advanced CRM systems to provide personalized support and track customer interactions.

Personalize Customer Engagement: Utilize customer data to create tailored offers and recommendations. Develop targeted marketing campaigns that address specific customer needs and preferences, enhancing their overall experience with the brand.

SPEAKING IMPACT

Your ability to communicate effectively will leave a lasting impact on your audience

Effectively communicating involves not only delivering a message but also resonating with the experiences, values, and emotions of those listening

THANK YOU.