



# Telecom Churn Prediction (Syria Tel)

Presentation Slides

Presented by:

MICHAEL  
ARITA



# Using Predictive Modelling to Retain Customers

Overview

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Business Understanding

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Modelling

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Evaluation

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Recommendations and Next Steps





# Overview

LET'S RETAIN AND MORE NUMBERS

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Customer churn is one of the biggest challenges in the telecom industry. This project focuses on building a predictive model to identify customers likely to churn, providing actionable insights for Syria Tel to enhance customer retention



# Business

# Understanding

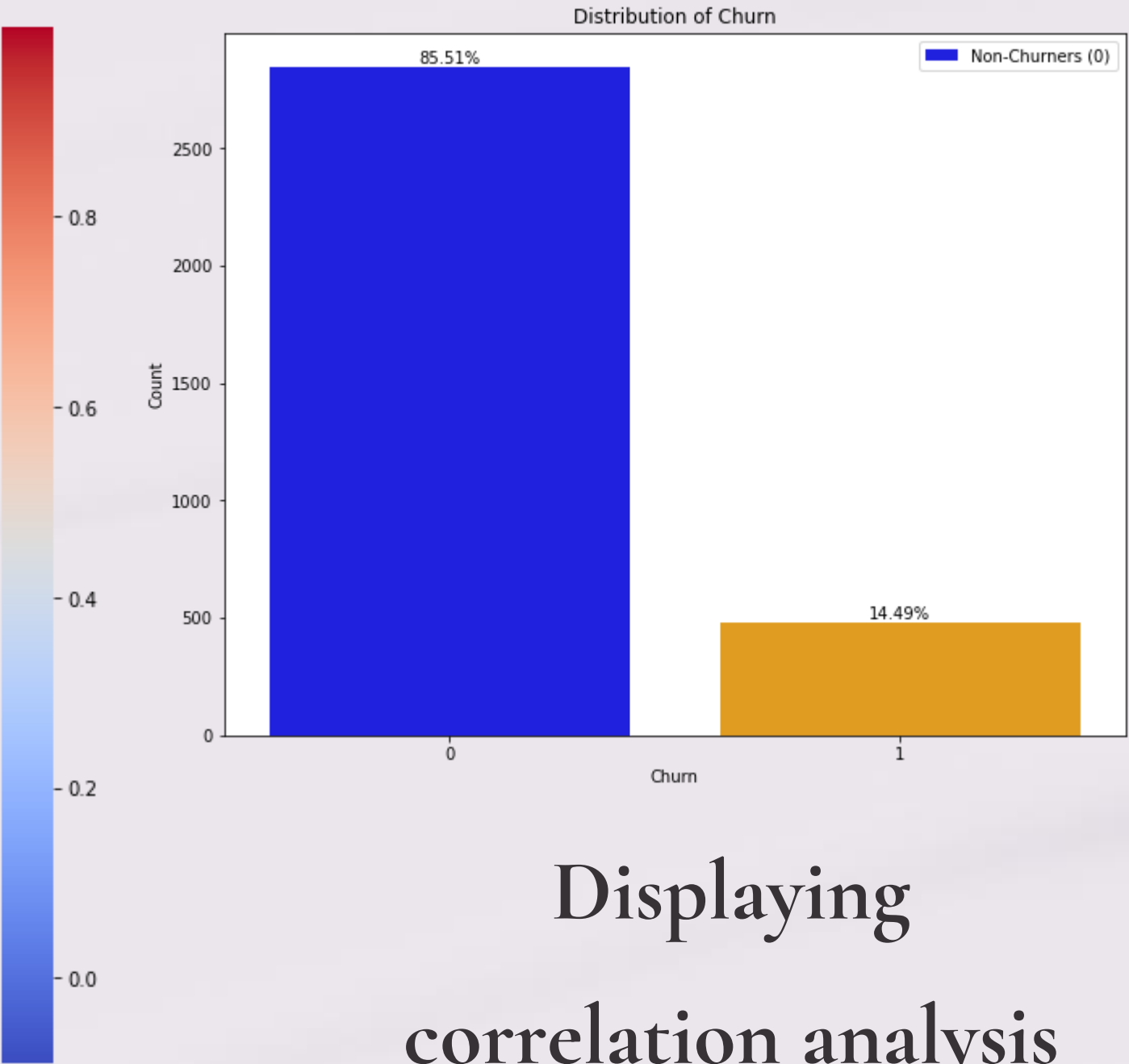
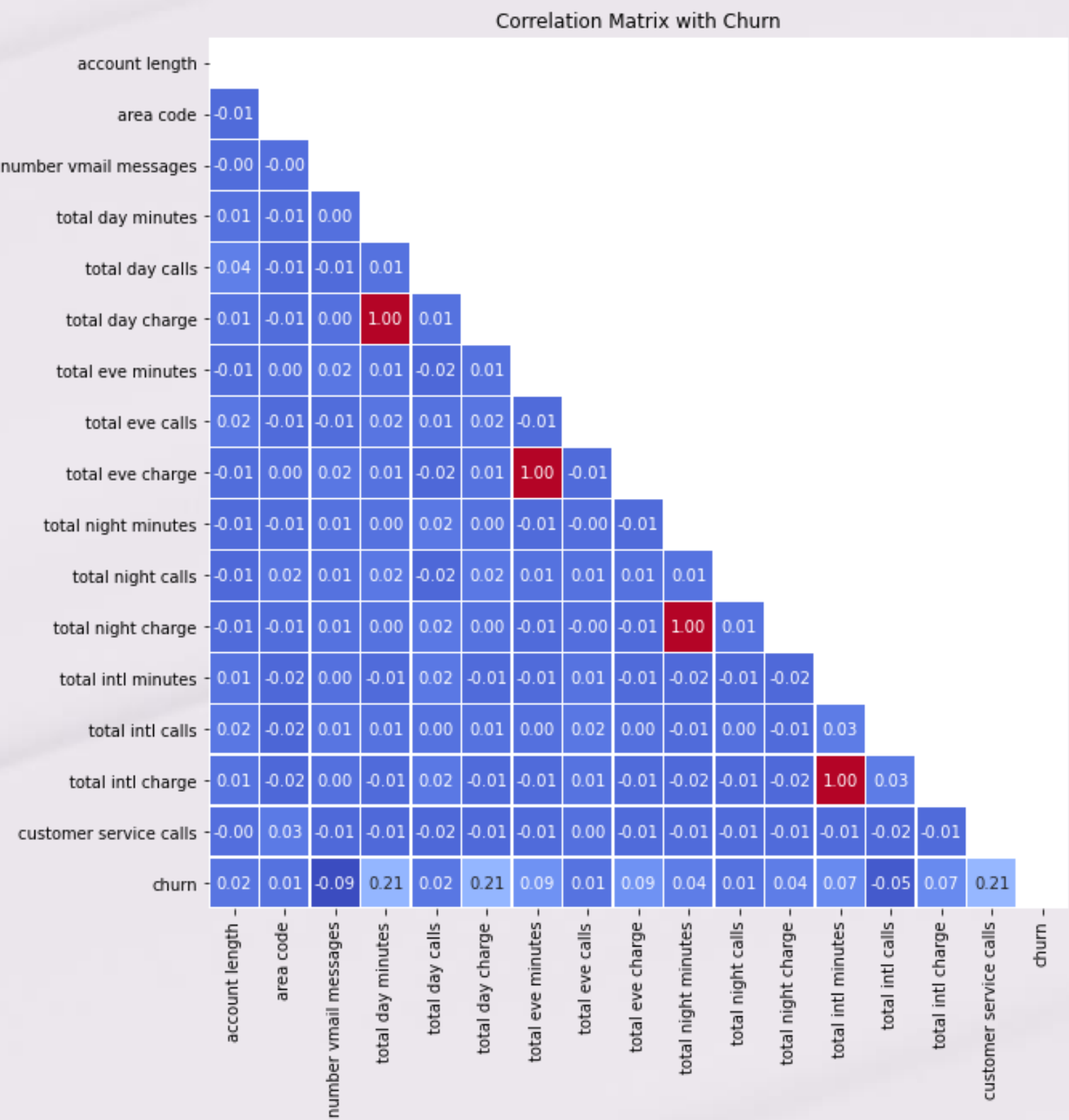
Churn impacts telecom revenue by reducing the customer base. Key triggers for churn include:

- Competitive pricing and offers
- Poor service experiences
- Changes in customers' personal situations

Objective: Develop a predictive model to reduce churn and recommend strategies for retention.

# EXPLORATORY DATA ANALYSIS (EDA)

The graph represents the distribution of the target variable 'Churn'



Displaying  
correlation analysis  
and class imbalance

# MODELLING

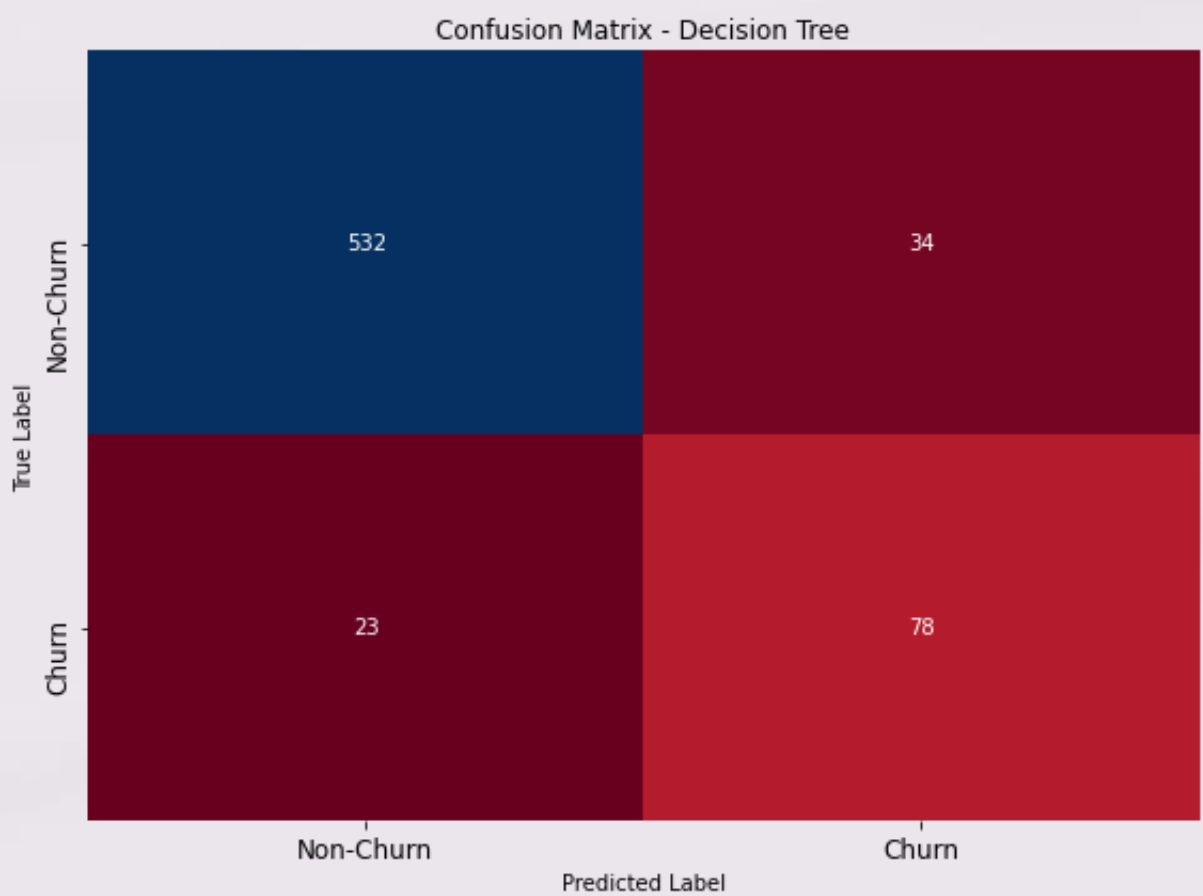
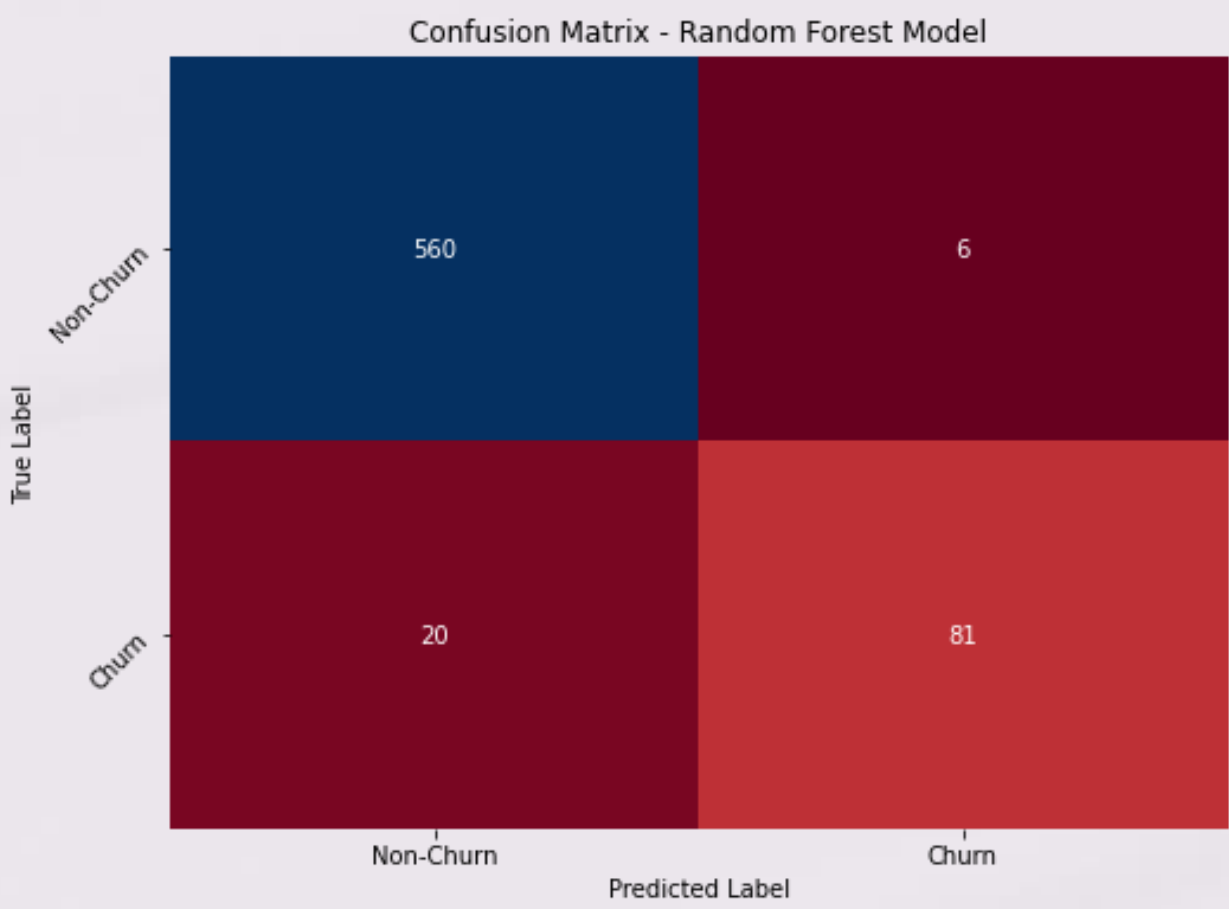
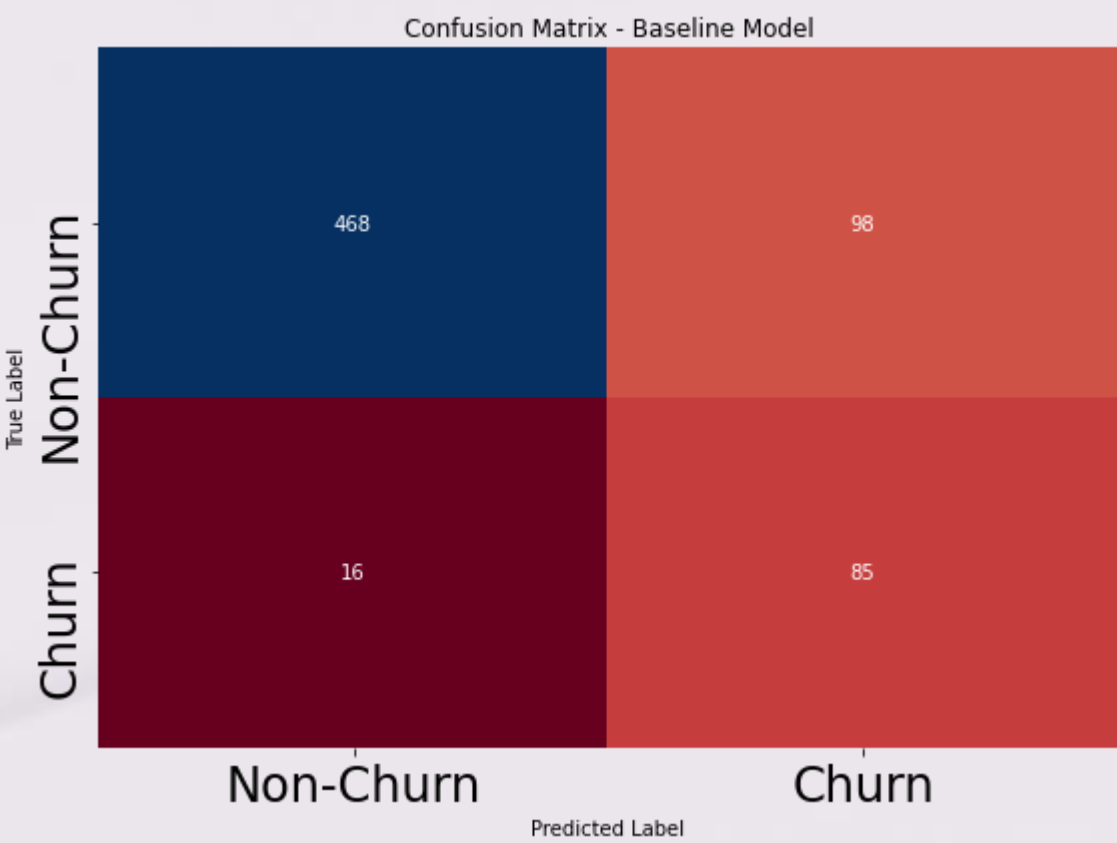


1. Baseline Logistic regression Model
2. Random Forest Model
3. Decision Tree Model


# MODELLING

- Approach:
  - - Use machine learning algorithms to predict customer churn.
  - - Identify the most significant features contributing to churn.
  - - Validate the model's performance using metrics such as accuracy, precision, recall, and ROC AUC.

# CONFUSION MATRIX





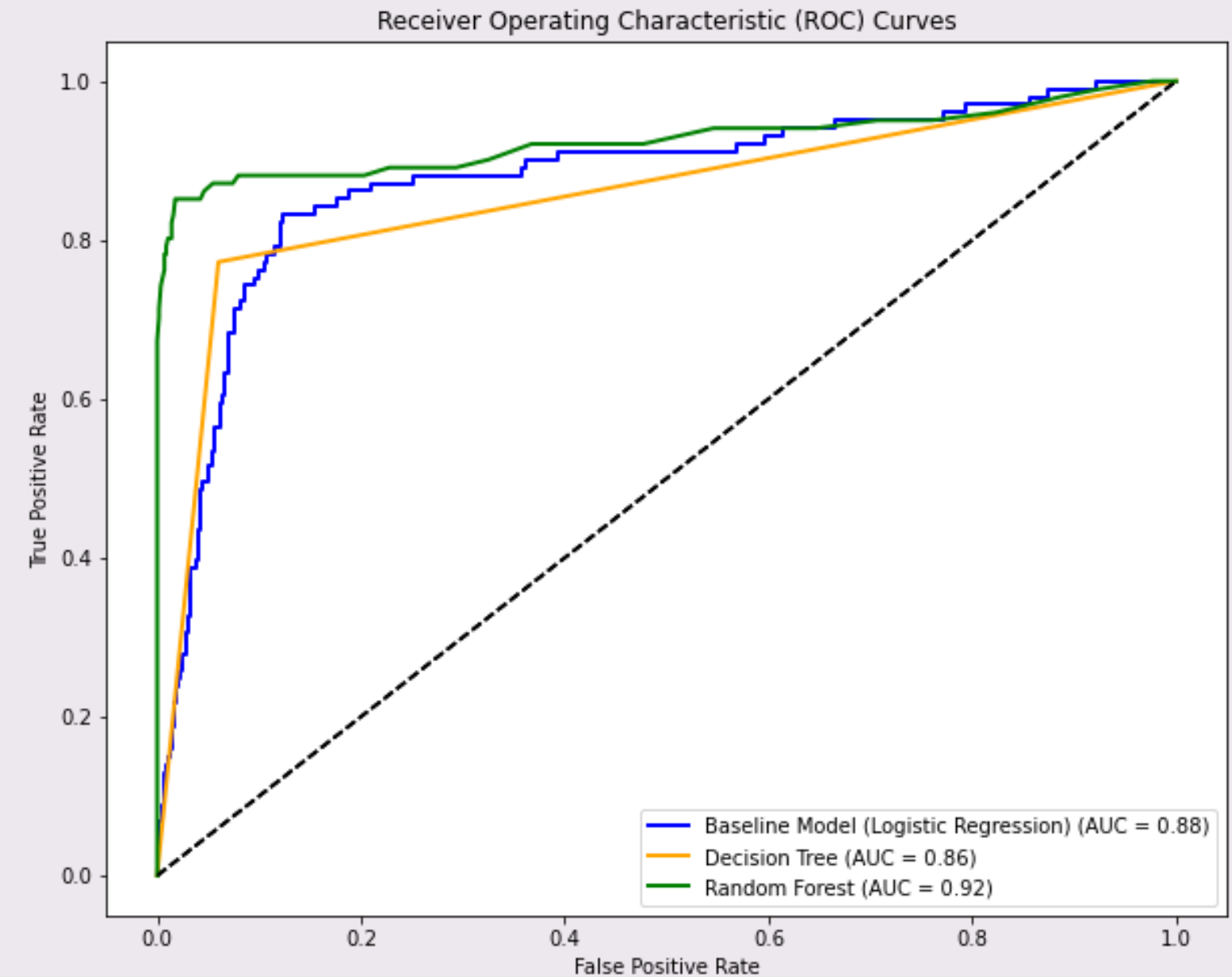


“The goal of business is to  
create and keep a customer.”

John Strong, a businessman

# Evaluation

- Key Findings:
- - The model achieves high accuracy and recall, indicating its effectiveness in identifying churners.
- - Some important features include customer service calls, contract type, and monthly charges.
- - ROC AUC score demonstrates the model's reliability in distinguishing churners from non-churners.



# RECOMMENDATIONS

- 1. Focus retention efforts on customers flagged as likely to churn.
- 2. Improve customer service to address complaints and reduce dissatisfaction.
- 3. Offer personalized discounts or incentives to customers at high risk of churn.
- 4. Monitor key features such as monthly charges and service interactions for early intervention.

**12 Million**

Revenue

**+30%**

Sales Growth  
YoY

**+18%**

Increase  
from Q3:







# Next Steps

01

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- 1. Deploy the model in a production environment to monitor and predict churn in real-time.

02

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- 2. Regularly retrain the model with updated data to maintain accuracy.

03

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- 3. Expand analysis to include additional factors such as customer feedback and market trends.

# Thank You

**Got any questions?**

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