# SYRIA TEL CUSTOMER CHURN PREDICTION PROJECT

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## AGENDA

- Introduction
- Primary goals
- Models used
- Results and conclusion
- Summary





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### INTRODUCTION

Syria Tel looks to improve the customer retention and would like to be able to determine if a customer is likely to churn from the company or not so as to know where to make improvements and how to allocate their resources effectively.

## PRIMARY GOALS

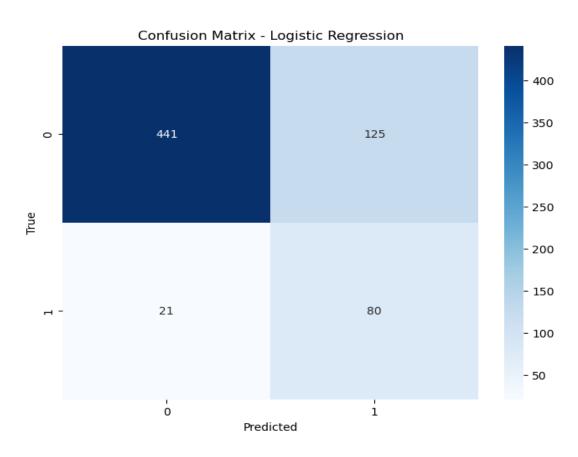
- This project main aim is to analyze a telecommunications dataset and develop a predictive model that determines if a customer will churn or not.
- We would also like to know the features that have the highest correlation to the churn status.



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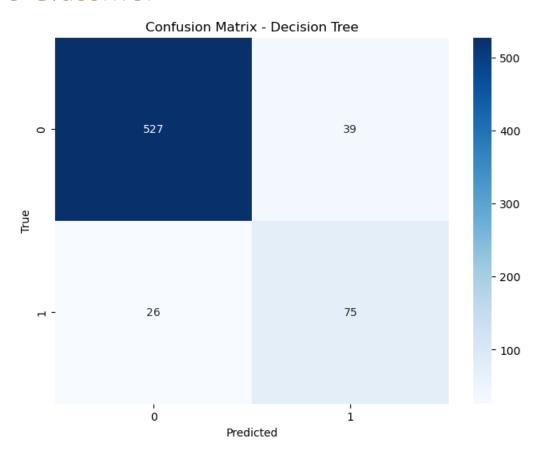
## MODELS USED

#### 1.Logistic regression



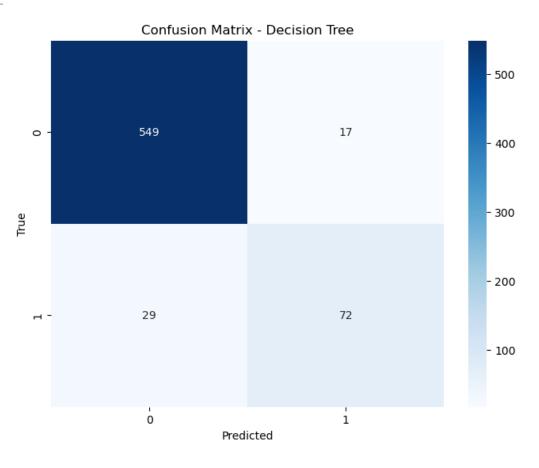
## MODELS USED

#### 2. Decision Tree Classifier

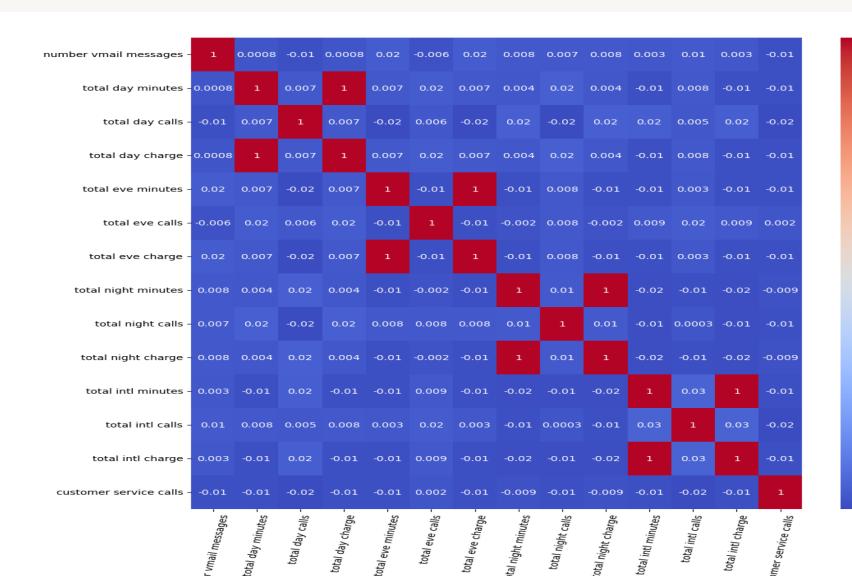


## MODELS USED

#### 3.Random Forest



#### CORRELATION MATRIX



- 0.8

- 0.6

- 0.4

- 0.2

#### RESULTS

1. From the correlation matrix we can see that the features that have the highest correlation to the churn status are the total day charge, total evening charge, total night charge and total international charge.

2. From the models we are able to determine that our best performing model was the Random forest with an accuracy level of 94%

## CONCLUSION



- From our project we were able to tell the features that affect the customers churn status. The company could use this to know where to focus their attention as they allocate their resources and determine where improvements should be made.
- We have also been able to develop a model that can accurately predict customers churn status and the company will be able to determine at risk customers and come up with strategies to retain them.

## THANK YOU

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