## Customer Churn Analysis By Erick Lintari

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## Overview



(https://www.kaggle.com/becksddf/churn-in-telecoms-dataset). The goal is to "build a classifier to predict whether a customer will ("soon") stop doing business with SyriaTel, a telecommunications company".

#### Business Understanding

SyriaTel, a telecommunication company wants to know the customers who are at risk of churn. This project aims to establish the most significant predictors of churn, create Machine Learning models that can predict the likelihood of a customer leaving Syriatel Company and inform targeted preventive measures to retain customers.



#### Problem Statement

- Given the complexity of factors that can affect the rate of customer churn, churn prediction can be challenging to get a precise assessment.
- Data-driven analysis can provide key insight to SyriaTel management to help them make informed decisions

BUSINESS
HIGHLIGHT



## Objectives

- I. To develop a predictive model to predict the risk of customer churn
- II. To identify key predictors of customer churn
- III. To investigate the impact of charges on customer churn
- IV. To evaluate the impact of customer service calls on churn

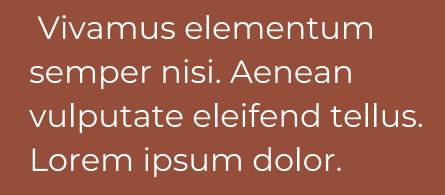
## CHANCE & PREDICTION

# METHODOLOGY AND TECHNIQUES

The research used an iterative method to visualize attributes in connection to churn, create iterative machine learning models to predict the risk of customer churn and evaluate customers' behaviors influencing churn rate.

### Data Understanding

our dataset contains 21 columns and 3333 rows. We have 20 predictors and the target feature, 'churn'. The most significant predictors of the risk of customer churn were charges and the number of customer service calls.



# MAKE BUSINESS BETTER

## Conclusion

These insights suggest that certain customer behaviors and plan types are strong predictors of churn. Strong predictors of churn include "customer service calls", "international\_plan" and "total\_charges". Therefore, the segment of customers with international plans, higher total charges, and more customer service calls are at higher risk of churn. A higher number of international calls is associated with a lower likelihood of churn. The column "state\_numeric" also plays a role, but the impact might depend on the specific states.

#### MAKE BUSINESS

#### BETTER Recommendations

- 1. Pricing strategies to address charges on products and services offered by the telco.
- 2. Target communication and marketing efforts geared specifically towards customers with international plans.
- 3. Further assessment on the telco's operations in state such as Texas and Maryland that exhibited higher churn rates.
- 4. Establish a feedback mechanism to gather insights from customers who contact customers who contact customer service frequently.
- 5. Provide clear and comprehensive information through self-service options to reduce the necessity for contacting customer service.

# THANK YOU