

# CUSTOMER CLASSIFICATION FOR DIRECT BANK MARKETING

Nurgul Kurbanali kyzy

July 11, 2022



# Table of contents

**01**

**Problem Staement**

**02**

**Data  
Understanding**

**03**

**Conclusion  
Recommendation**

**04**

**Future  
Consideration**

# Problem Statement

European Banks were under pressure to increase their financial assets due to the :

- 1 Internal competition
- 2 financial crisis

They offered long term deposits with good interest rates to the people using **direct marketing strategy**, but contacting many people is



time consuming



low success rate



Our goal to build a Machine Learning model that learns the unknown patterns and predicts whether customer will subscribe (yes/no) a term deposit that helps:



increasing campaign efficiency



selecting high value customers



# Data Understanding

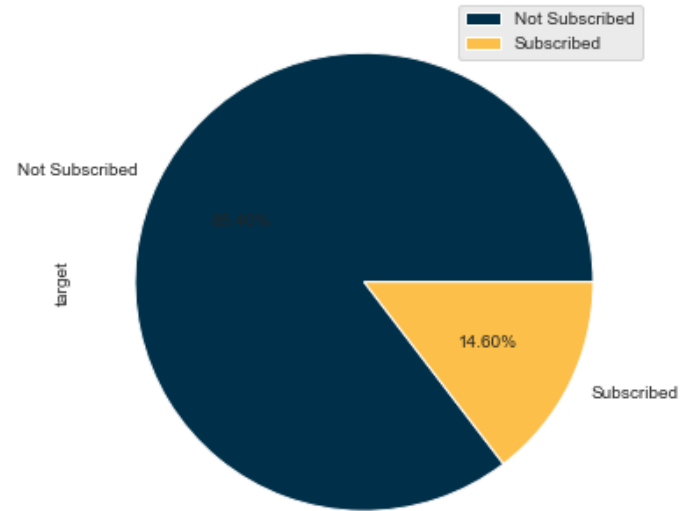
This data based on direct marketing campaigns of a Portuguese banking institution.

The marketing campaigns are based on phone calls, which occurred from *May 2008* to *November 2010*.



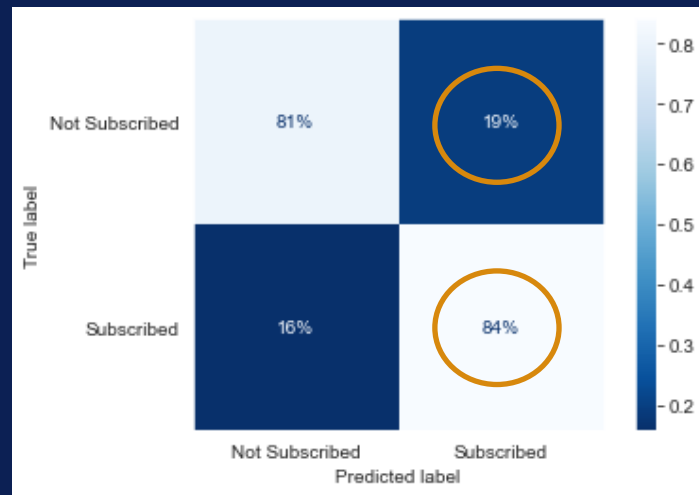


## *Class Distribution*

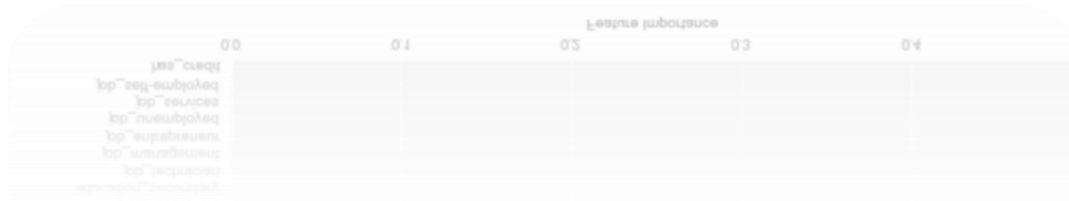
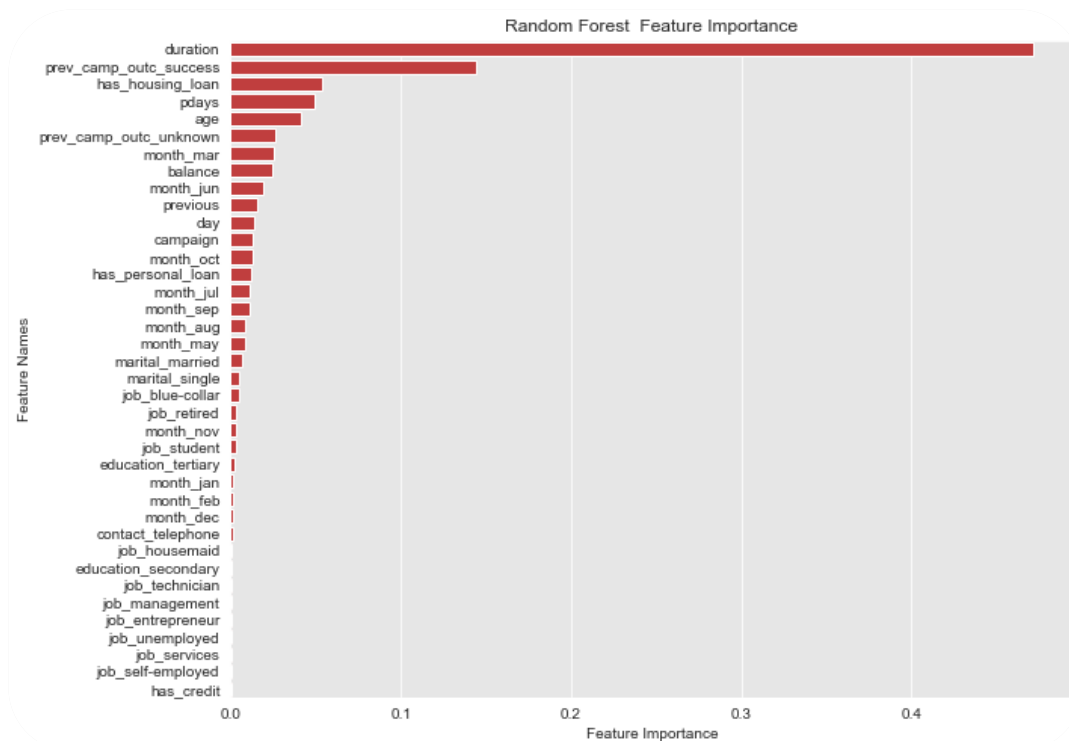




## Conclusion



**Final model can perform 84% correctly** classifications of the "Yes" class or potential clients that are willing to subscribe a term deposit.





# Recommendations

- Develop a marketing strategies during the Calls like:
  - providing an interesting questionnaire for potential clients during the calls which increases conversation length
  - monitoring call activity and conversations
  - adding contextual call routing strategies to the marketing campaigns



# Recommendations

- The successful outcome of the previous marketing campaign did positively affect customers to subscribe to upcoming campaigns.

I would highly recommend to develop a loyalty program for the previously subscribed clients by giving them some bonuses and unique offers.



## Recommendations

- House Loans and Balances

Potential clients in the average and high balances are less likely to have a house loan and therefore, more likely to open a term deposit. Lastly, the next marketing campaign should focus on individuals of average and high balances in order to increase the likelihood of subscribing to a term deposit



# THANK YOU!

**Do you have any questions?**

- GitHub : @kamalova
- Email : nurkamalova@gmail.com

