
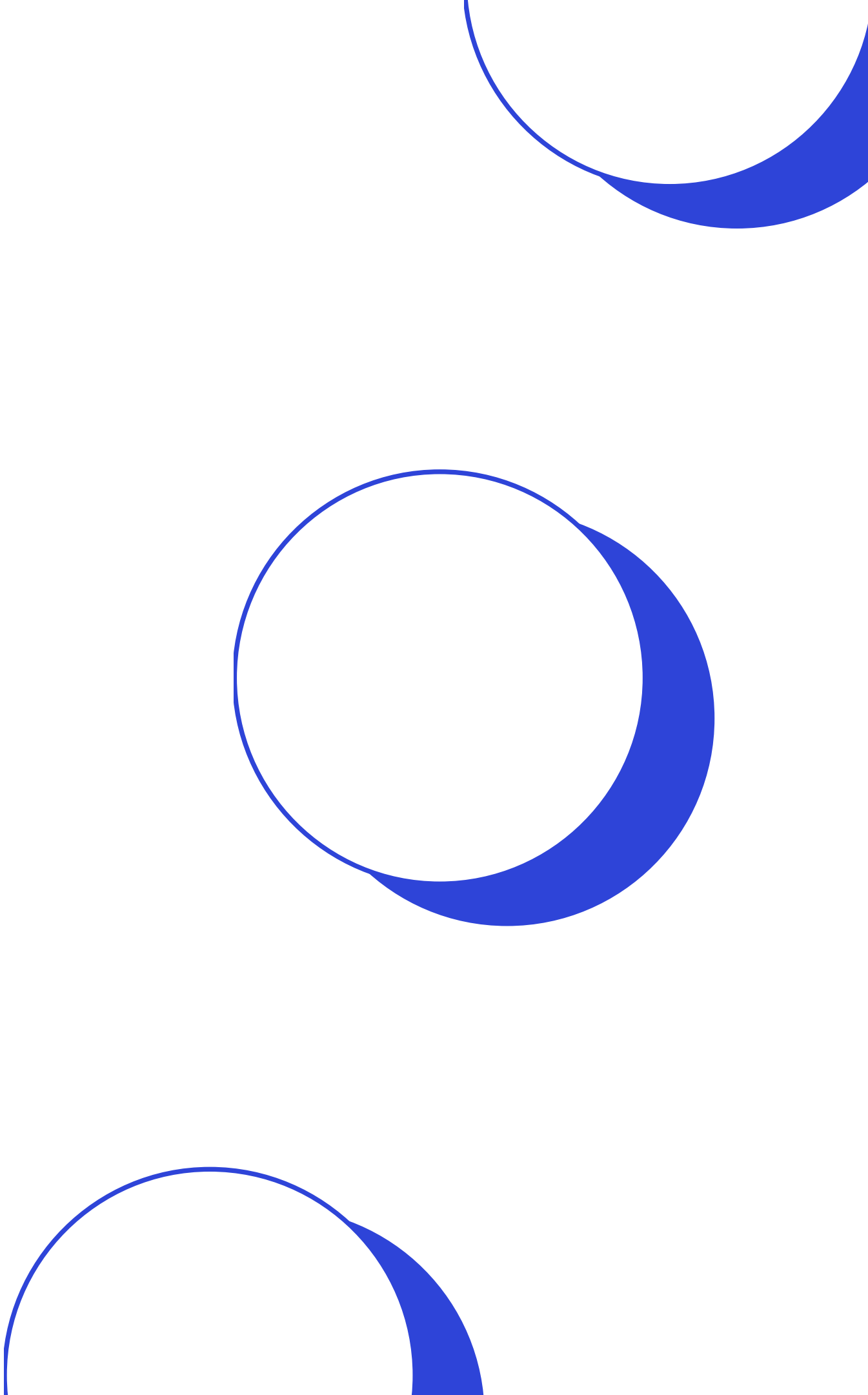


# Bank Marketing Campaign Prediction

Classification Models



# Today's agenda

- Project overview
  - Business Problem
  - Data
  - Methodology
  - Analysis
  - Results
  - Conclusion
  - Recommendations
  - Next Step
- 

# Project overview

This project focuses on building a classification model on a bank campaign dataset to predict how many will place term deposit in their bank.

A close-up photograph of several stacks of US dollar bills. The top stack is clearly a \$100 bill, showing the portrait of Benjamin Franklin and the large '100' denomination. Below it, another stack of \$100 bills is visible, with the serial number 'J 3639780' and the letter 'J10' partially visible. The bills are fanned out slightly, creating a sense of depth and texture. The lighting is soft, highlighting the intricate details and security features of the currency.

# Project overview

This project focuses on building a classification model on a bank campaign dataset to predict how many customers will place term deposits in their bank.



# Business Problem

The Portuguese banking organization has conducted a bank marketing campaign to all the customers through phone calls to place a term deposit. Now the organization needs help to know if a customer would place a term deposit or not.





It is a UCI dataset that describing Portugal bank marketing campaign results. It consists of around 41k bank customer information.

# APPROACH

1

OBTAIN

2

SCRUB

3

EXPLORE

4

MODEL

5

INTERPRET

# Analysis



# Feature

# Analysis

Age

Job

Marital

Education

Loan

Housing

Contact

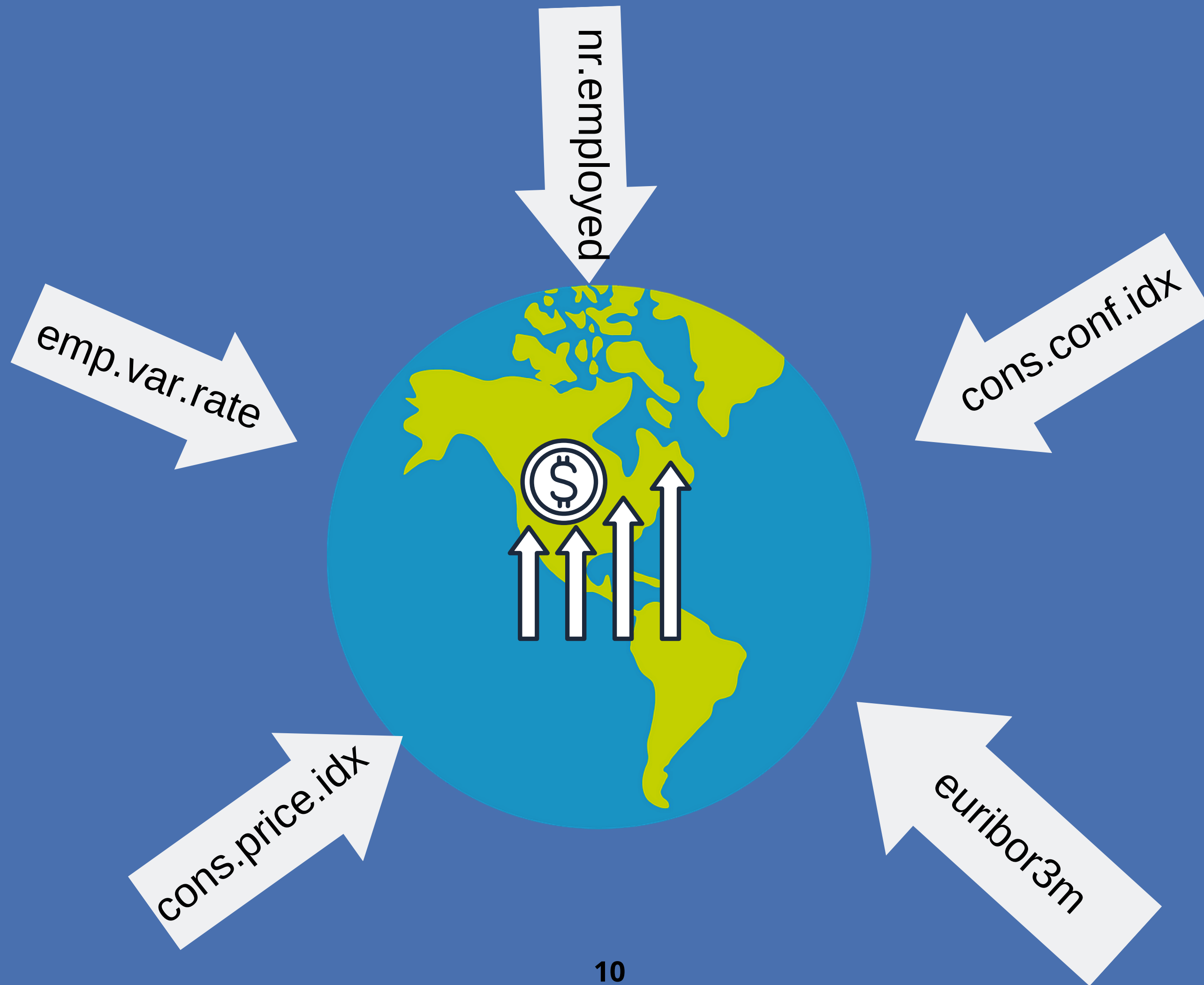
Poutcome

Month

Duration

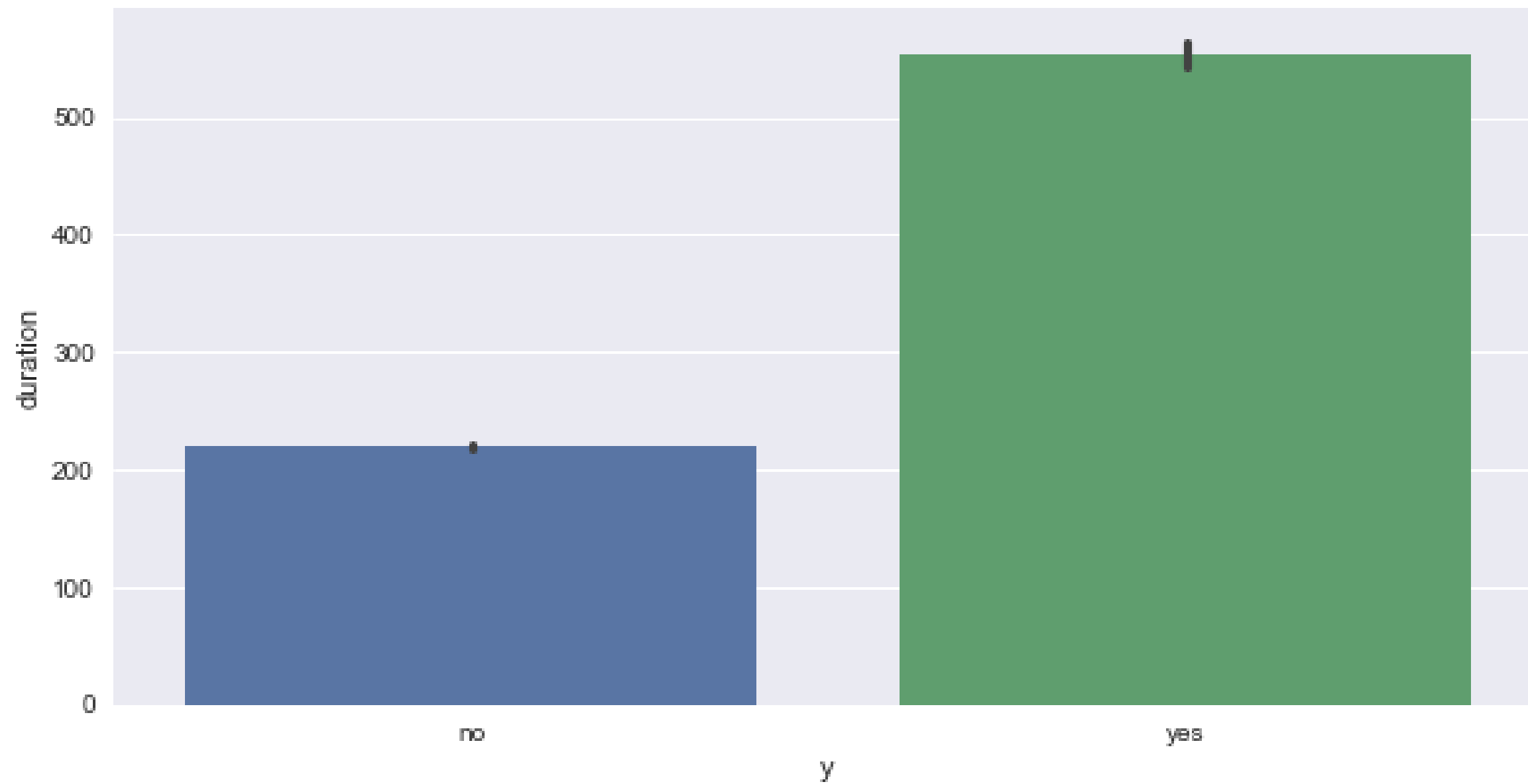
Campaign



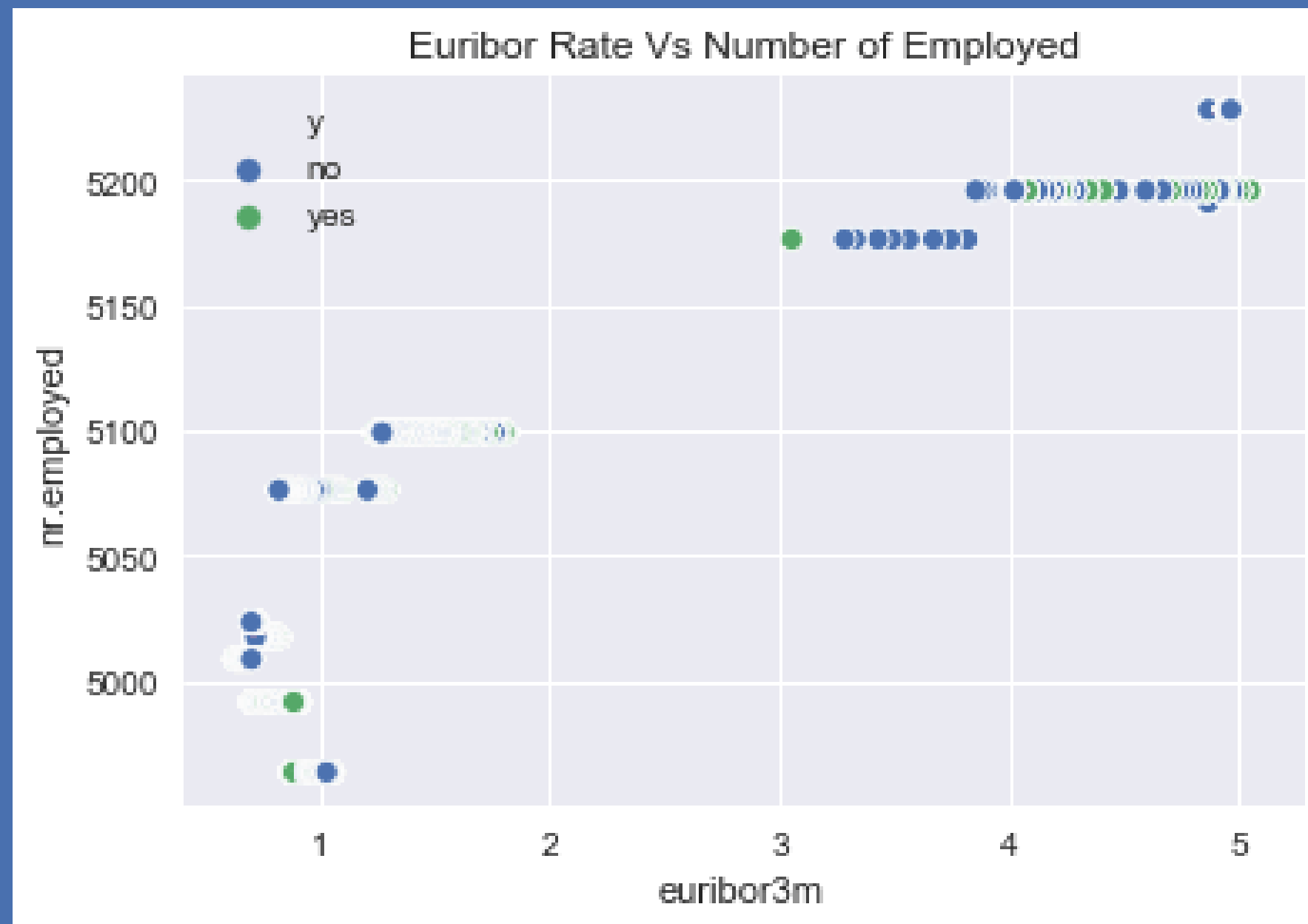


Relationship between the Target variable and the Duration

Target Vs Duration



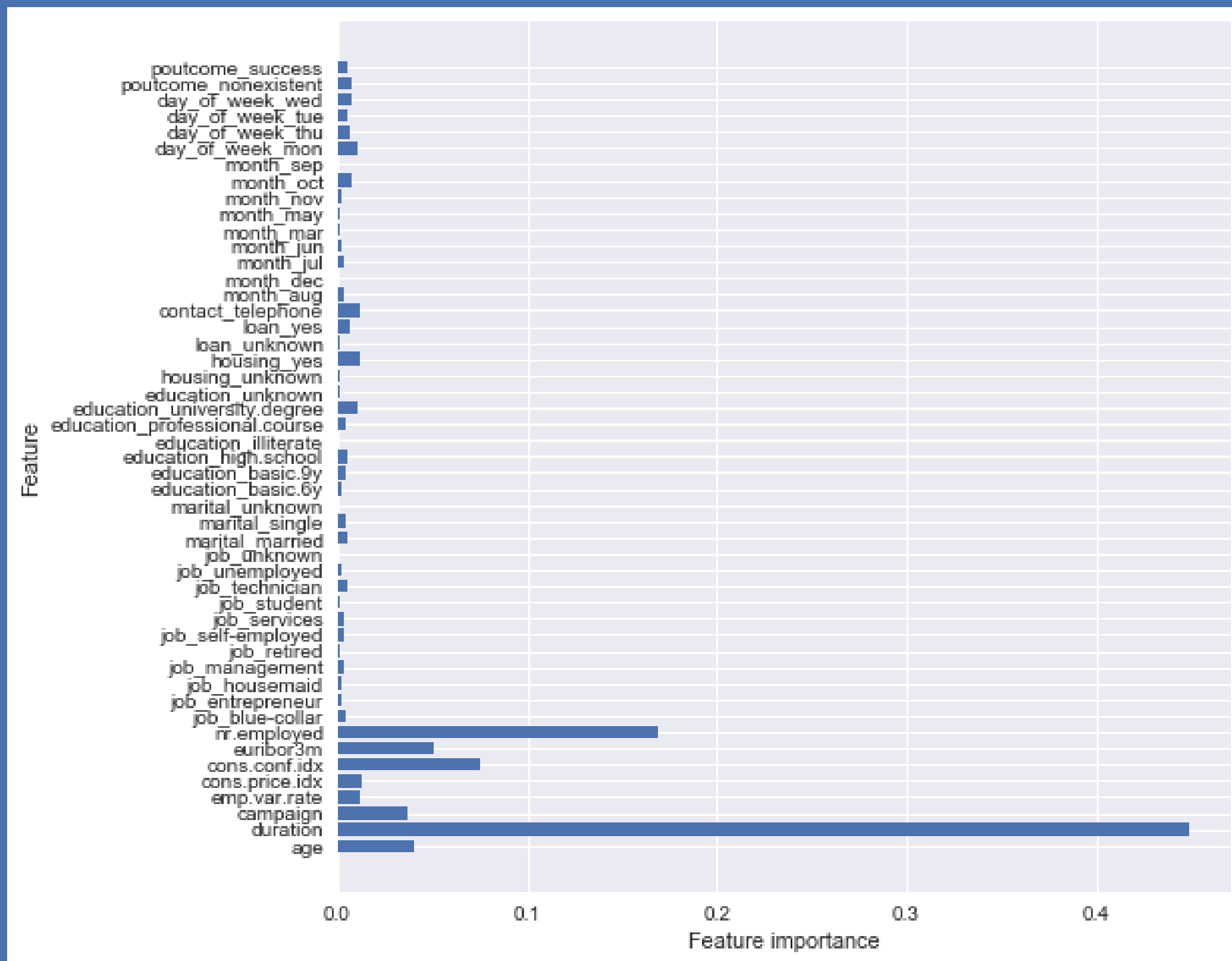
Duration seems to be an important feature in the dataset



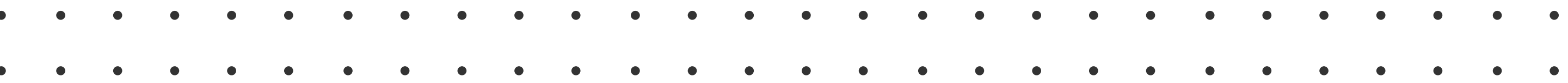


Admin roles, Blue-collar jobs and technicians are targeted more in the campaign



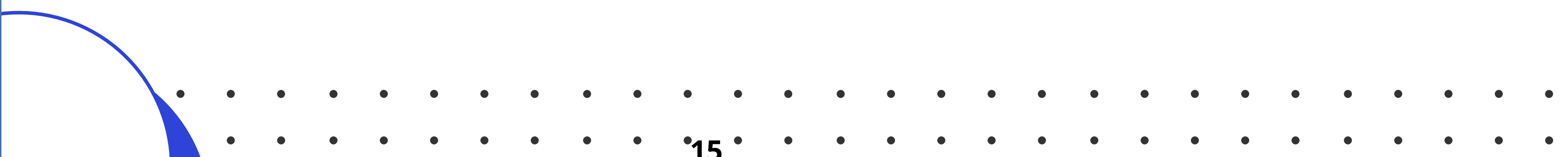


Model prediction on feature importance



Actual Value		Model Predicted	
		Not Deposited	Deposited
Not Deposited	6763	2381	
Deposited	100	1053	

Count of true deposit made by the customer and how our model predicted it correctly.



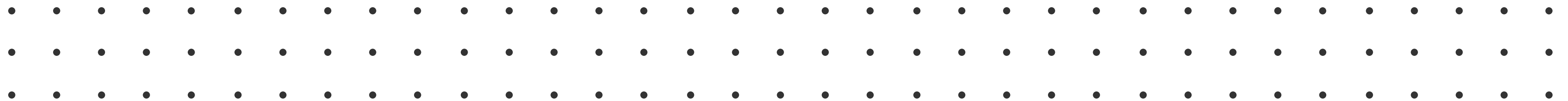


# Conclusion

- Duration of the call
- Customer's job role
- Model can be used for prediction



- Conducting campaign at the right time
- Targeted Customers
- Education background





# Next Step

- Analysis the pros and cons of the campaign
- To build more stable model to reduce false negative rate



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Thank You !

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