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 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.

Data

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

Information collected from the customer during the campaign

Age

Job

Marital

Education

Loan

Housing

Contact

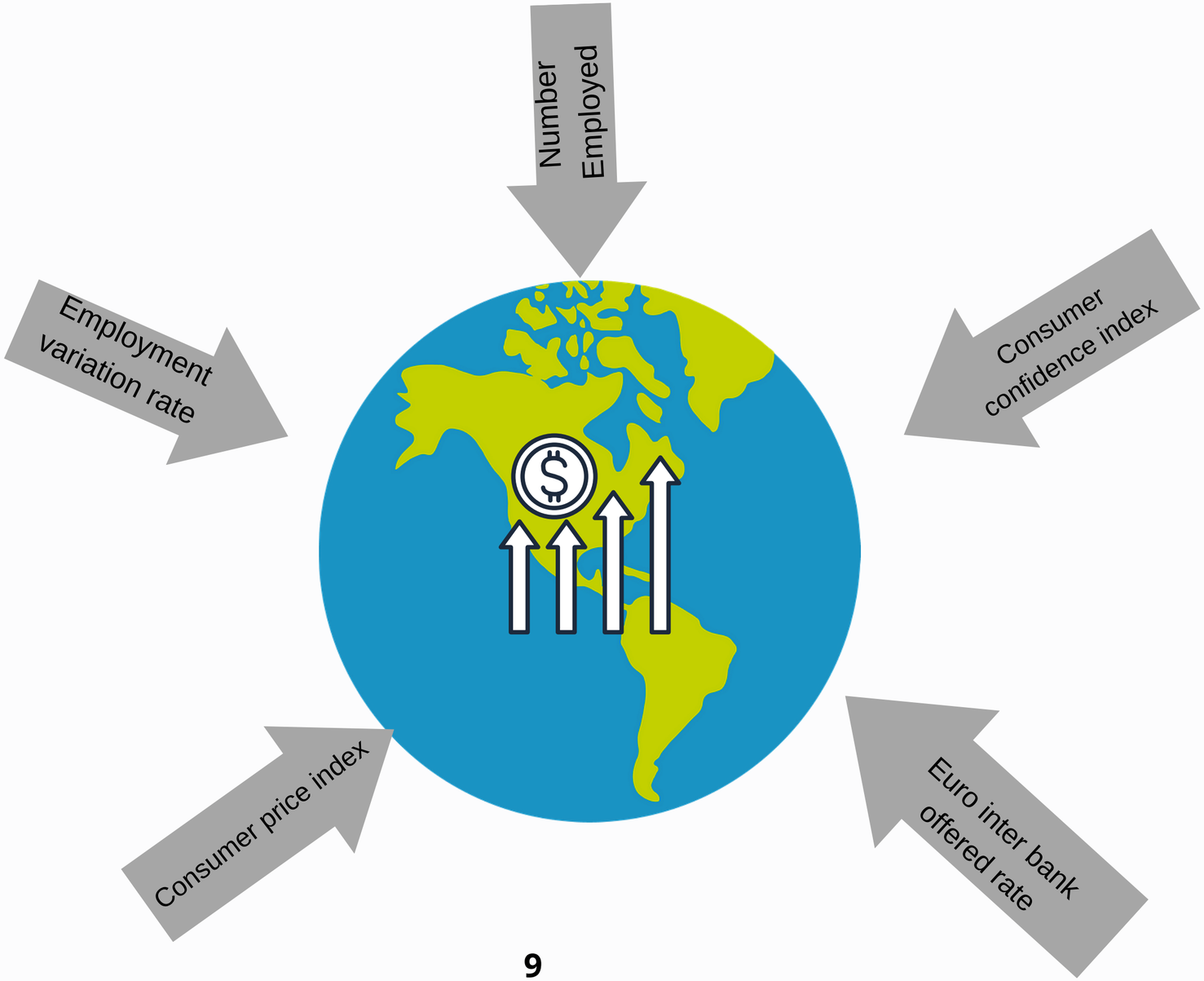
Poutcome

Month

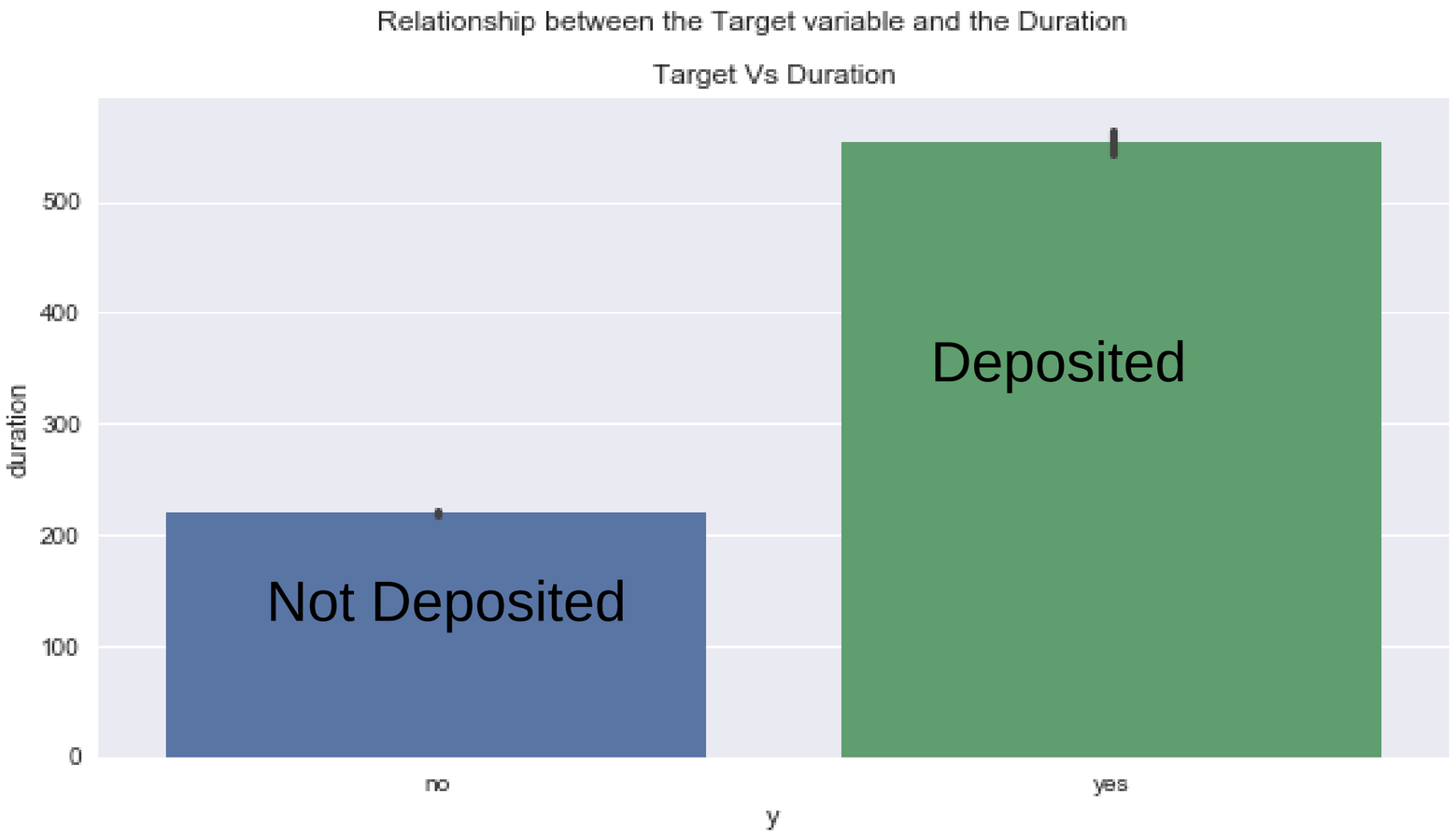
Duration

Campaign

Economy status information



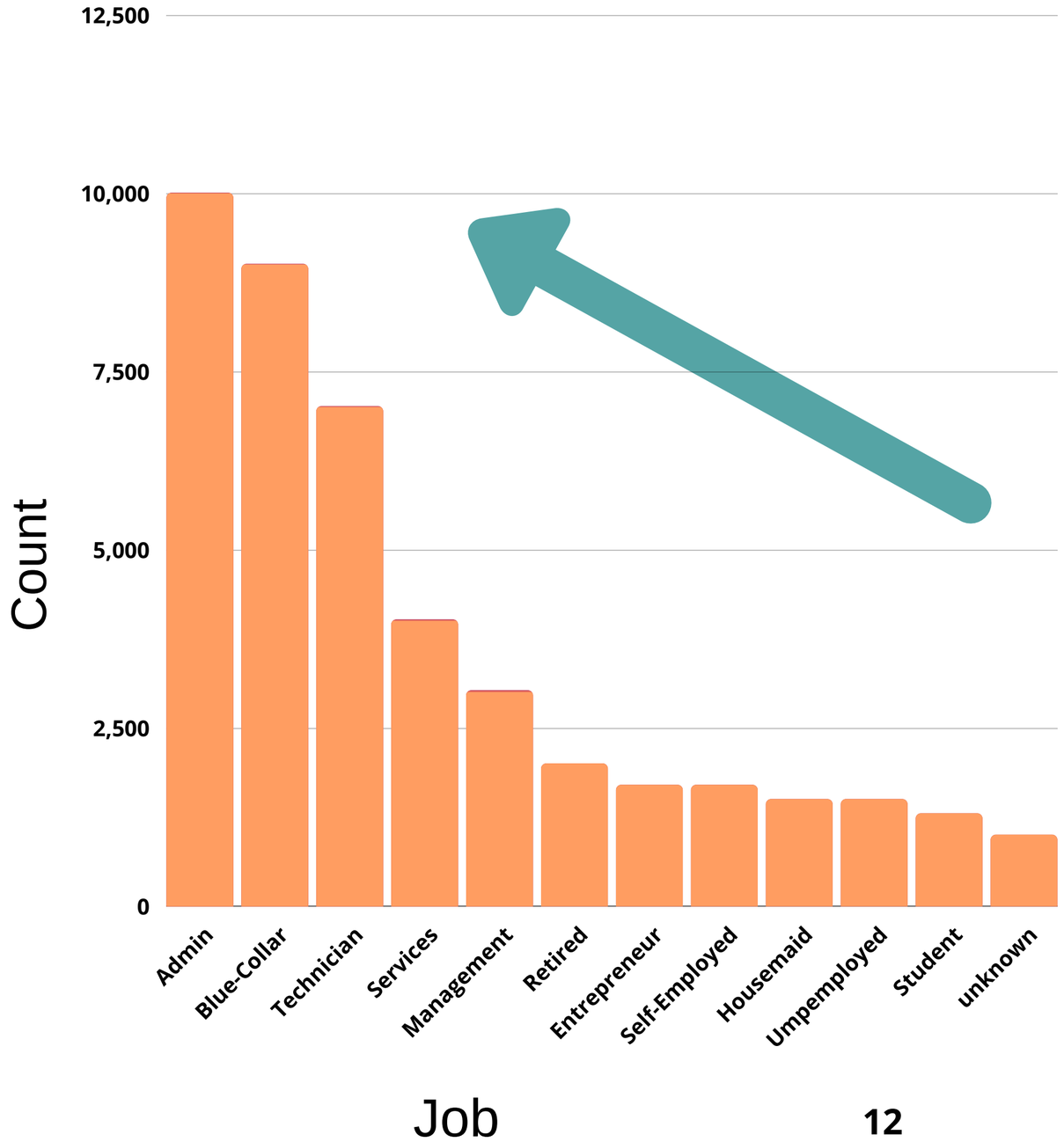
How the call Duration plays a major role in our data



Duration seems to be an important feature in the dataset

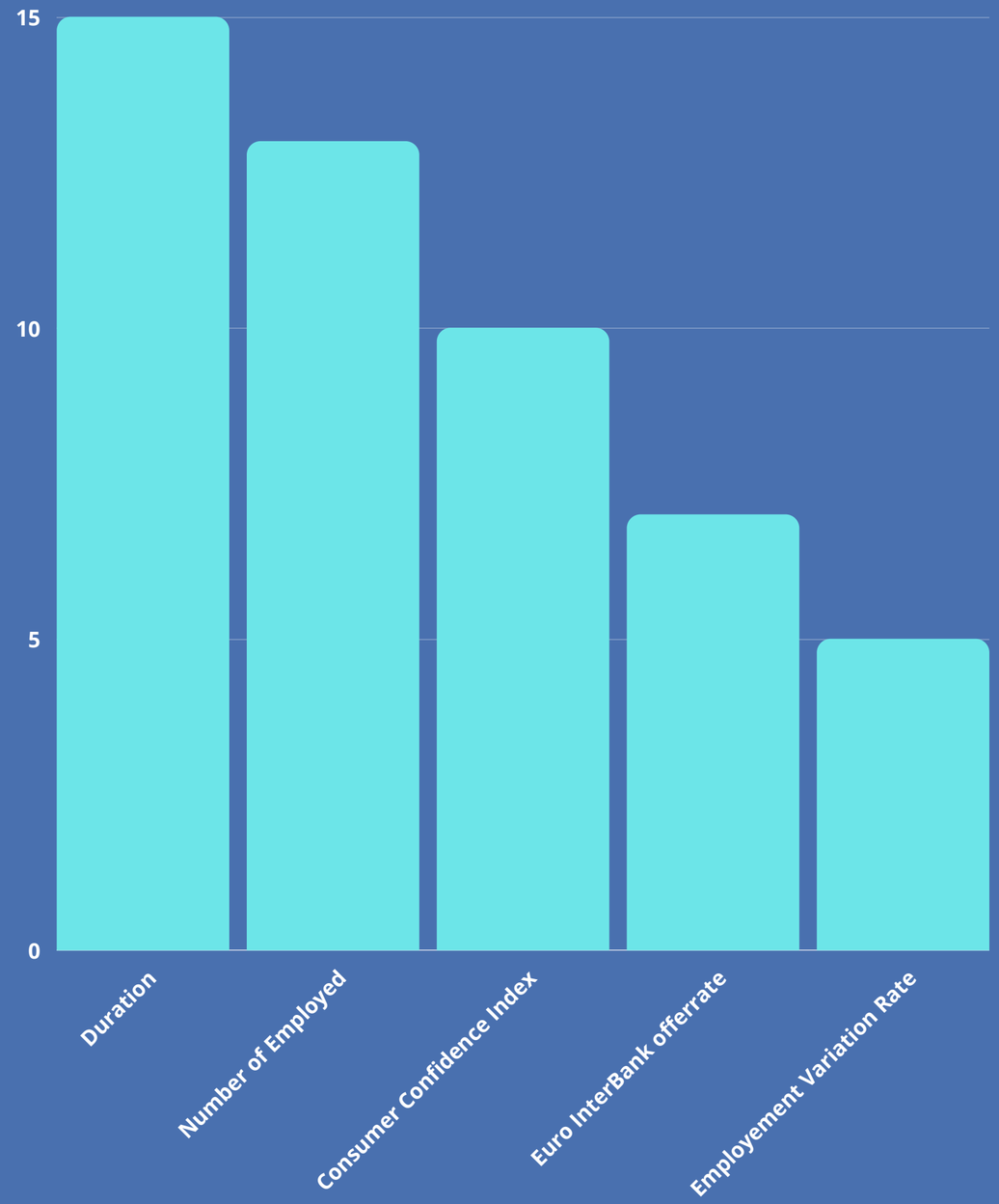
How the State of the country's economy has a huge impact on the customers

Overall count of the Job Roles



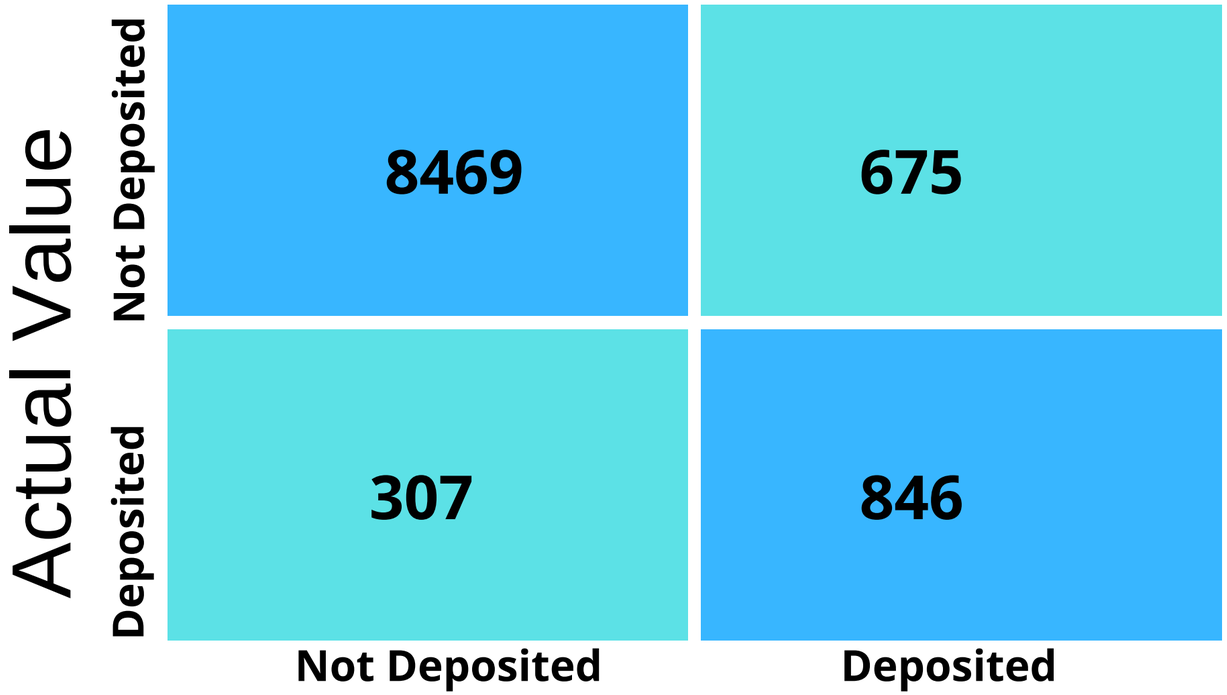
Admin roles, Blue-collar jobs and technicians are targeted more in the campaign

Model prediction on feature importance



Our model predicts the duration of the call as the top feature

Model Result



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

Recommendation

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

Next Step

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

Thank You !

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