

# Bank Call Campaign

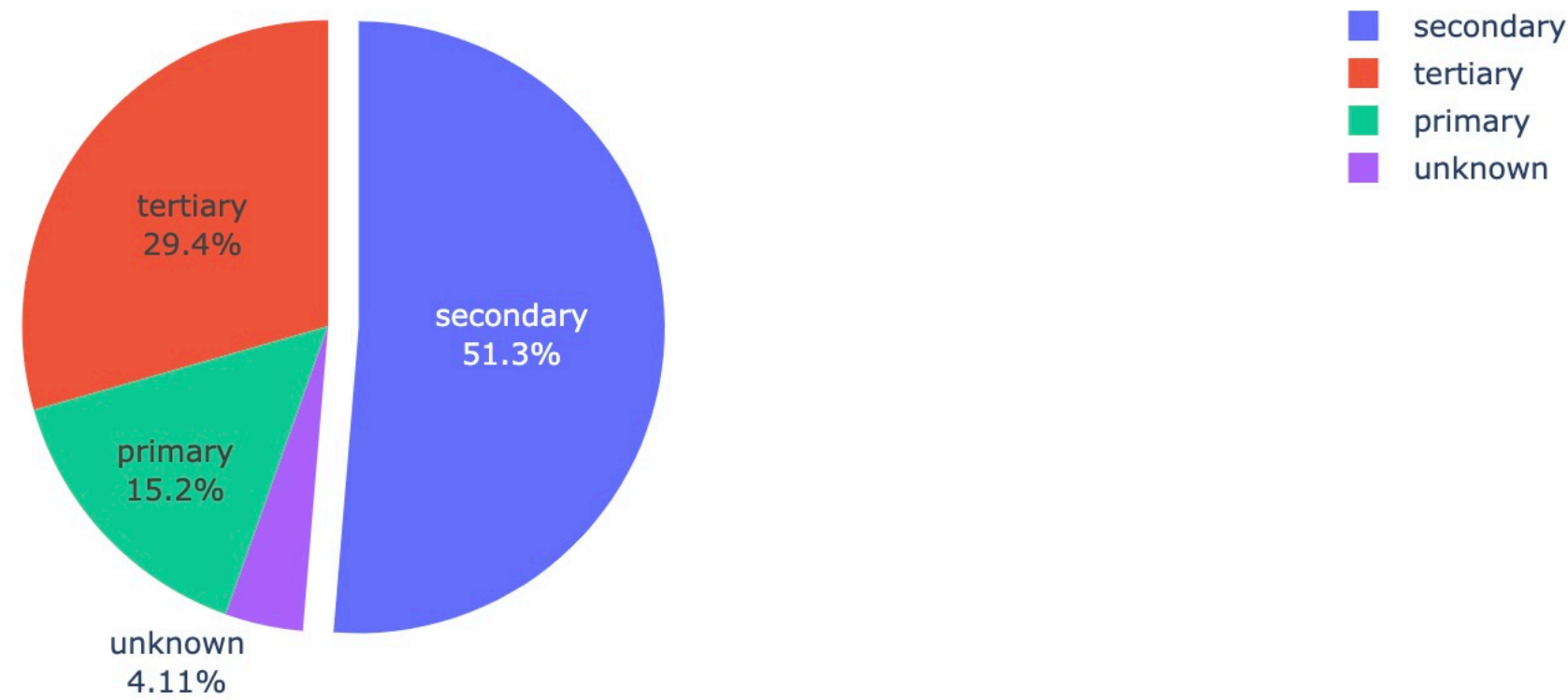
How many graphs would you like to see? (max. 6):

Submit

## Distribution by education level

To understand to which clients to target the campaign, we must understand which type of clients we have. One of the variables to find that is the education level:

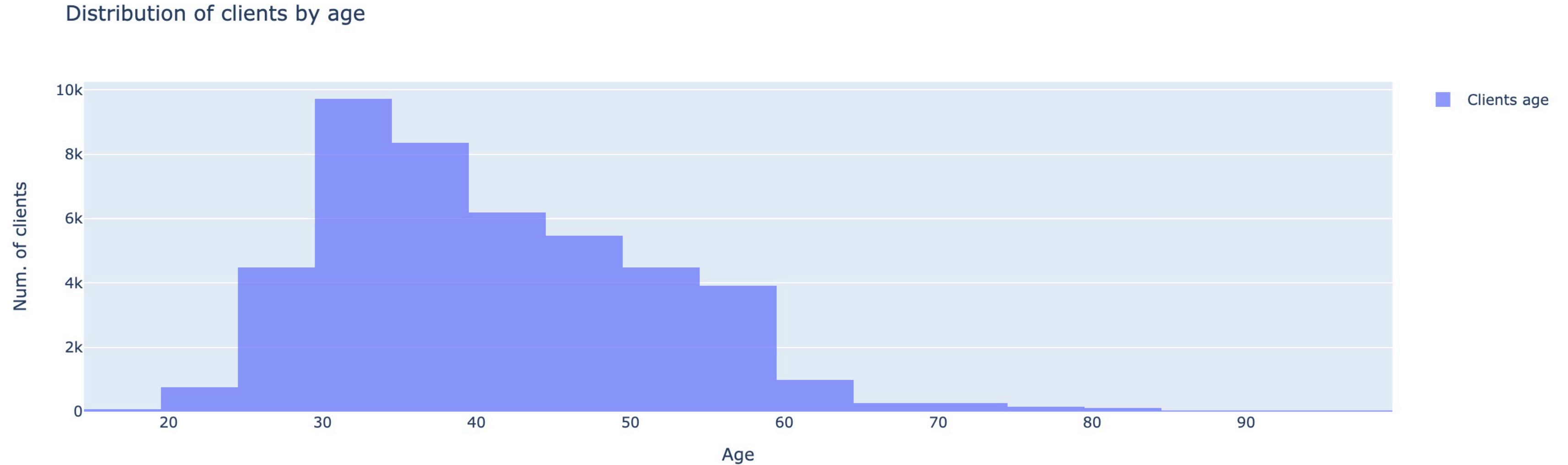
Distribution of clients by education level



As can be seen in the graph above, the biggest chunk of the clients have only up to **secondary education**.

# Distribution by age

Apart from the education level, it would be interesting to know how our clients are distributed based on their age:



We can see most of our clients are **young**, with more than half being under 40 years old.

# Balance in bank by job position

The job position may be a strong indicator of the income a person has. It may be interesting to see if this hold within our client list:

Balance in account by job

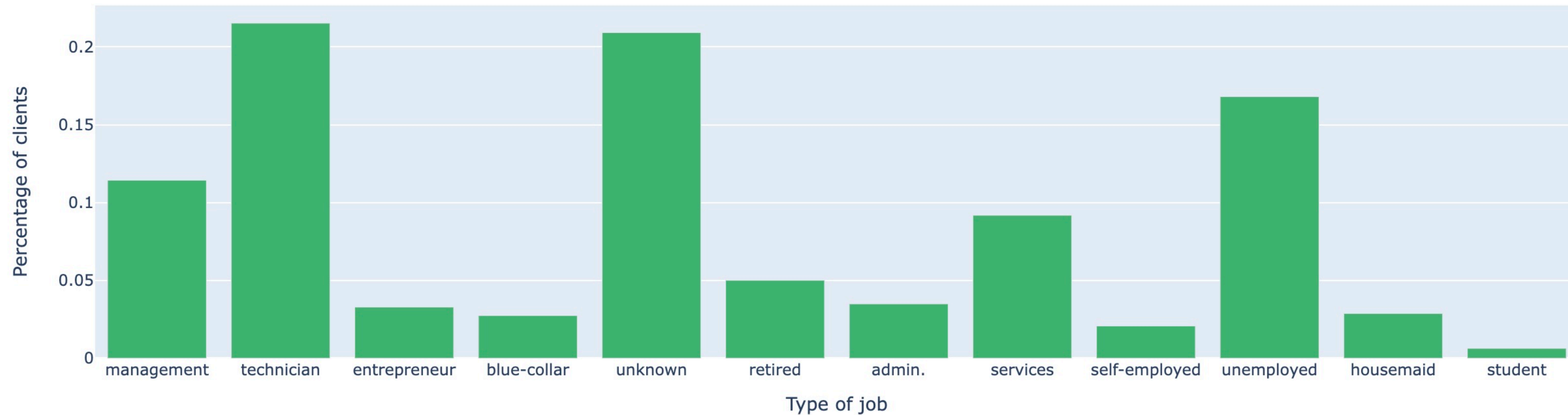


The vast majority of the clients have under **20k** in the bank.

# Taking a closer look on clients' jobs...

We saw clients do not have too much money in the bank. This may be due to hardship in their job. It could be interesting to understand what our clients work at to get more insights on what they may need.

Share of clients by job



The biggest group are **technicians** and, excluding those whose job we do not know, the next group is **unemployed**.



# Prediction of bank loans using all variables

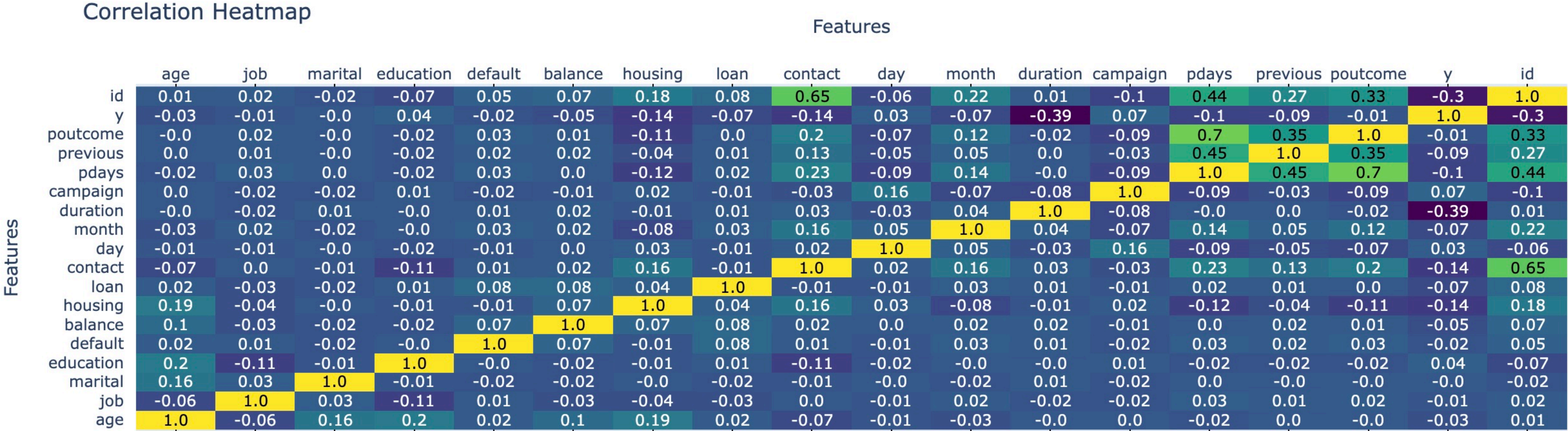
It finally could be interesting to predict whether clients are going to ask for a loan based on all the considered variables. To see this, we can create a Support Vector Machine (SVM) and plot the confusion matrix of the predictions



The model get very well the clients that will ask for the loan, not so much those that will not.

# Correlation Matrix of Variables

To see what variables might be good predictors for the fact of whether the clients would ask for a loan or not, we can look at the correlation matrix:



The most relevant variables to predict the service are **duration, housing and contact**.