

# PREDICTING BANK PRODUCTS CAMPAIGN OUTCOME

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## METHODOLOGY

- ▶ A full bank market data set was used in this study, with 41188 rows and 21 columns. It includes customer information such as their education level, job, age, whether they have a personal loan, etc. It also include the outcome of the campaign effort, i.e. if the customer has purchased the term deposit product. We use this data set to:
  1. find **the best statistical model** to predict whether the customer will purchase the banks' term deposit product
  2. gain **insights** into customer propensity to purchase the product and make **suggestions** for the marketing team

## CUSTOMER PROPENSITY TO PURCHASE

- ▶ In general, **younger** customers (<40 years old) are more likely to purchase the term deposit
- ▶ **Education level and profession** affect customers' participation. For example people are more willing to participate in the campaign if they:
  - hold an admins, blue-collar, or technicians job
  - have a university degree or high school diploma
- ▶ **Repeated campaigns** are more effective in some professions such as entrepreneurs
- ▶ **Two** attempted campaigns is enough for the majority of the population

## INSIGHTS FOR MARKETING TEAM

- ▶ **Create** different strategies based on the most predictive customer features:
  - job: focus on the population with professions that are more likely to join the campaign
  - age: attracts more customers who are under 40 years old
  - education level: the higher the education level is, the more likely customers join the campaign
- ▶ **Save** resources in:
  - collecting some features that are highly correlated with others, such as pdays
  - limit campaign efforts for majority of the population to two times except for entrepreneurs