

ANALYTICS IN FUNDRAISING

Group 1:

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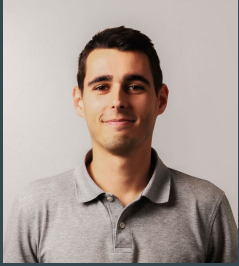
PYTHON
PREDICTIONS
A TOBANIA COMPANY



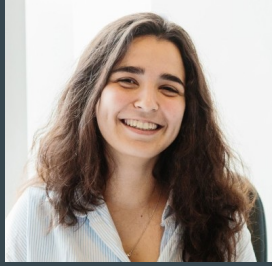
Direct Social Communication
your partner in fundraising



OUR TEAM:



Théau Bruno



Laura
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Thomas
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01 PROJECT DEFINITION

02 OUR MODEL

03 MODEL EVALUATION

04 CONCLUSION

01. PROJECT DEFINITION





ABOUT THE PROJECT

Create a predictive model based on past fundraising campaigns to select the best candidates for your new fundraising campaign.

TIMELINE

CAMPAIGN 6169

Launched on: 04/09/2018

Time Gap: 2 days

Average response time: 10 days

Features: **all past data** prior to the launch date of the campaign

Training set



CAMPAIGN 7244

Launched on: 18/06/2019

Time Gap: 2 days

Average response time: 11 days

Features : **all past data** prior to the launch date of the campaign

Test set



FUTURE CAMPAIGN

Features: all past data prior to the launch date of the campaign

Time Gap: estimated 2 days



02. OUR MODEL



WHAT WE DID



STEP 1:

- Cleaned tables
- Created Train test based on campaign 6169
- Created Test set based on campaign 7244

STEP 2:

- Created features
- Tested **78 features**
- Selected the **24 features** that were relevant

STEP 3:

- Tested the accuracy
- Compared different algorithms

STEP 4:

- Chose **Boosted Gradient Tree Algorithm**
- Use model to calculate probabilities

STEP 5:

- Created various graphs
- Gathered Insights

KEY FEATURES:



PERSONAL DATA

- Age
- Gender



AMOUNT FEATURES

- Previous donation Amount



TIME FEATURES

- Frequency of general donation
- Time of the year
- Time since the last donation
- Time and amount of the last 3 donations

KEY INSIGHTS



CALENDAR

December and January
+80% donation



GENDER

+48% females



AGE COUNT

40-50 years
25% of donations



FREQUENCY

80% of donors
gave within 3 years
9% of donor give 2 time a year



AGE AMOUNT

Senior
&
20-30 years old



TIME TO GET DONATIONS

70% of donation
<70 euros

BEST DONORS

Old or young
Female

IN THEIR 20S OR OVER 80

AGE

FEMALE

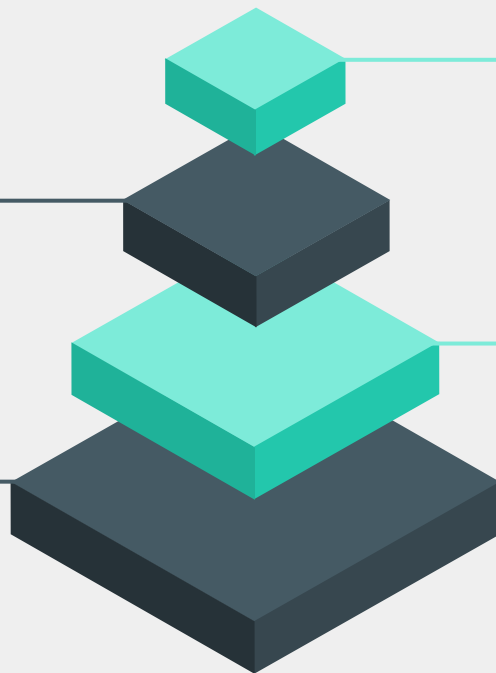
GENDER

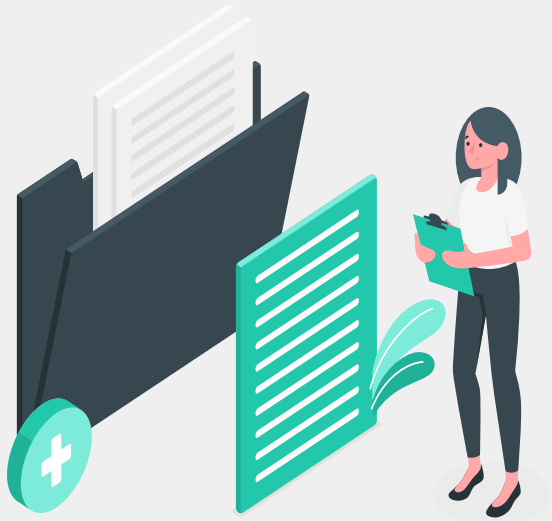
GOOD AVERAGE FREQUENCY

FREQUENCY OF DONATION

DONATED IN THE PAST YEAR

TYPE OF DONOR





03. EVALUATING OUR MODEL

Currently the
average response
rate for your
campaigns is 1.8%

HOW CAN WE MAXIMIZE THE PROFIT?



PAST CAMPAINGS

CAMPAIGN 6169 - 04/09/2018

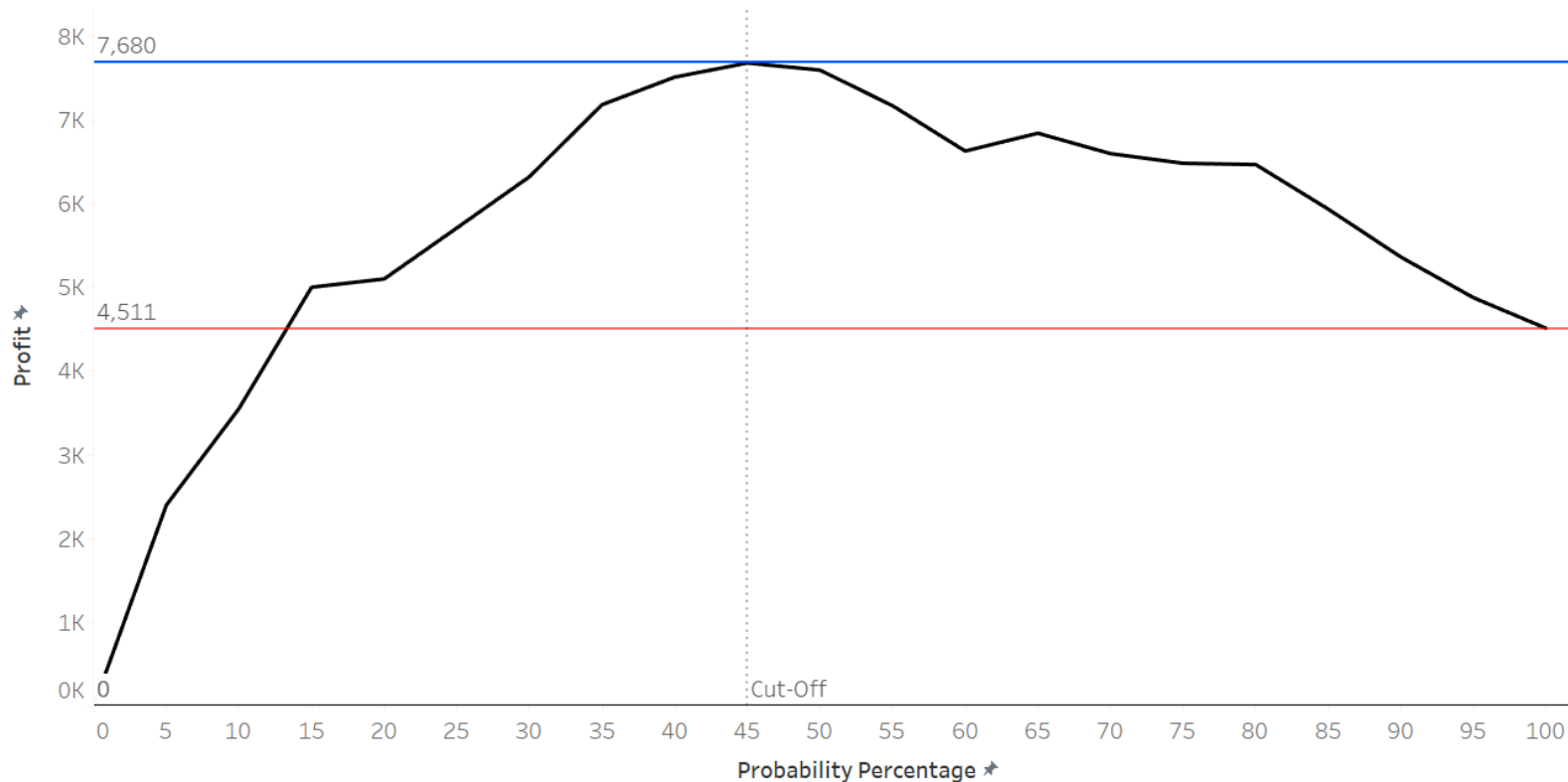
- 34 888 people contacted
- 1 991 responded
- **3.4 % Response Rate**
- Funding gathered : 98 653 €
- Costs: 30 352 €
- **Benefit: 63 301€**

CAMPAIGN 7244 - 18/06/2019

- 25 000 people contacted
- 361 responded
- **1.4 % Response Rate**
- Funding gathered : 18 616 €
- Costs: 14 104€
- **Benefit: 4 511€**

MAXIMIZING PROFIT:

Profit Maximization Table - 7244 Campaign



CAMPAIGN 7244- WITH OUR MODEL

- 11 540 people contacted
- 254 responses
- **2.2% Response Rate**
- Funding gathered : 14 027€
- Costs: 7 052€
- **Benefit: 7 680€**

→ **+70 %** of benefits



OUR STRATEGY PROPOSITION:

TARGET POPULATION:

- Donors that have the highest probability of donating
- In campaign 7244: over 45% we start losing money

TOP 10 DONORS:

- **WHO:** People who in the past have given the biggest amounts
- **STRATEGY:** Could call them instead of sending them letter
- **BUT:** make sure to not call or contact them too much



04. CONCLUSION

PROJECT STAGES



STEP 1:

Built the model for you to use

STEP 2:

Use the model for your next campaign

STEP 3:

Re-evaluate the model once we have the results of the campaign
(takes approximately a month)

OUR CONCLUSION



OUR MODEL

Calculation of the probability that donors will donate in the next campaign



ADVANTAGES OF OUR MODEL

- Priority list of clients
- Maximisation of profit
- Reduction in costs



CAMPAIGN 7244

With the data known we could have increased the benefits by 70%



DONORS

There are also a lot of donors with a low probability to donate



GETTING MORE DATA

Could collect additional data in the next campaign to get more features and a more specific model

THANK YOU

Any Questions?

