Case study: Next Best Action

# Intro

Large Telco company would like to improve their campaign management system with more precise targeting of marketing campaigns. You are asked by the head of their marketing department to prepare next best action model. The idea is to determine for which campaign the clients, or client groups have the highest response rate. For simplicity, we abstract from the fact that campaigns can have different costs as well as other constraints.

After weeks of struggling, they finally provided data for this project. You received a table of clients and their behavioral, demographic and campaign reaction data. Granularity of the data is customer monthly snapshot. Reaction is measured as a binary outcome for each campaign. As usually, the data is far from perfect...

Please provide us with your solution of the next best action model. The result should tell the marketing department which customers should be targeted by which campaign.

# Questions

1. What algorithms / modelling approaches will you use and why?
2. What are the main challenges and problems of this data sample?
3. How would you measure the performance of your model in this exercise?

# Tasks / Deliverables

1. Brief report covering your approach, main problems and challenges as well as your proposed solutions and results. Document your approach in a brief and easy to understand form - imagine board members who do not understand data science, programming or math will read it.
2. R or Python script covering the whole modelling process from data cleaning to exporting the scored data. It should be able to load the sample of test data (in the same format as the data attached) and output the best campaign for each client.

# Appendices

Data sample can be found in file sample.csv. You will receive a link for downloading the file via email.