

Kapacity Telco

In connection with the hiring process to be part of the AI team at Capacity A/S you receive a task that relates closely to the life of a data scientist in consulting.

The task is to illustrate how you work with and present data science projects.

You will be provided with a data set that addresses the task and it is your job to create a solution. You therefore choose which tool(s) you want to use.

The solution you come up with is presented for Capacity A/S. You have 10-20 min for your presentation. We will proceed with a joint discussion afterwards.

Plan to present to a stakeholder (manager from marketing) with limited technical knowledge of data science. However you want to do this is up to you.

Even though your presentation is to a stakeholder, you are allowed to include more technical details - if you find it important. *We are aware this is part of a hiring session and not a real project/stakeholder.*

We are well aware that you have very limited time compared to a real task as a consultant. However, with this in mind, show off your skills and note that the presentation of the findings and/or interpretation is at least as important as the technical difficulty/complexity of the solution/model/output you choose.

Assessment

Making a precise prediction is valuable but we need more than a prediction.

Assessment will be placed on:

- The extent to which you as a data scientist can familiarize you with the business case
- Understand and relate to the various variables in the data set
- Selecting one or more methods as well as utilizing results
- Able to present and enter into dialogue with your customer (manager from marketing) about why your solution creates the most business value

We would appreciate for you to take the time at the end of the presentation to reflect on the whole process in obtaining the results. From business aspects, data, method(s), choice of tools, code, guidelines – towards the final presentation.

Description of the task

The Telco company “Capacity Telco” has a churn challenge. The manager from marketing intends to launch an attractive offer to get a discount.

The marketing manager knows that there is a limited number of customers he/she should reach so he/she is not sure how many to contact or what the discount should be.

The marketing manager does not have a great understanding of data science and is in the process of evaluating various solutions.

Right now, he/she is looking at a solution that uses some considerations about revenue and the number of products in the household, based on his business estimates, to form some segments to communicate to.

Your job is to convince the marketing manager to use your data science solution to find the right number of customers to communicate to. Also, to select the specific customers to send messages to - hereby creating the most value for Capacity Telco.

Data

To reduce the workload in preparing data we use a publicly available data set obtained from Kaggle - ready in tabular form to be used in data science methods.

You will find the data set attached in the email together with this description. We have altered the data set compared to the one found on Kaggle - use the attached data (**not** the data found on Kaggle).

The description of the data can be found here: [Kaggle](#)

The “Churn” column is the target.

Any clarifications must be handled before the presentation.