**Design a Data Science Process Activity**

Data Science Process - Marketing Campaign

Question: Record the question you want to answer.

Can we improve the profit of the next marketing campaign using the results and public preferences about previous campaigns ?

Framing for Data Science

Domain knowledge

Data literacy

Hypothesis

* H0: In that kind of campaign, always we will make the same result, without growth relevant.
* H1: Using the results about previous campaigns, we can improve our profit and dont spent money out our public target.

*Domain knowledge*

*Hypothesis testing*

*Data Modeling*

*Data literacy*

Experiment

Develop a machine learing model using the results about previous campaigns to understand our public target. After that, for example, we can select the most relevants features to prioritize and dont spend money with any lead out our target. So we can focus our budget better.

*Domain knowledge*

*Data Manipulation*

*Data Transformations*

*Programming*

*Data Modeling*

Analyze and interpret results

Evalueate the model performace and the results predictions, we apply the trained model to compare the previoslys results with the predict result in a test sample. After we choose a new sample of our database, redefining the marketing campaing and take care of public's metrics for the next campaing using the trained model.

*Domain knowledge*

*Data Manipulation*

*Data Transformations*

*Programming*

*Data Modeling*

*Model Evaluation*

Communicate and deliver results

* Describe model and process to marketing departament
* Monitor results in real-time via a dashboard
* Modeling new results to improve the "accuracy" of the model, to one possible next campaign

Domain knowledge

Data Manipulation

Data Visualization

Programming

Streaming

Dashboarding

Storytelling

Business Analytics