# **Group Project Guidelines – Course #1**

#### Introduction

In order to develop a business analytics approach, you need to work on a real-world situation.

## **Objectives**

The project involves identifying a real-world business problem or opportunity and designing and implementing an analysis plan to address it using at least one of the modelling methods studied in the course. You are free to choose any business problem or opportunity or public policy issue that you consider challenging and useful to address using business analytics.

The data that you use should be readily available and verifiable.

Some examples of business problems or opportunities. Develop a model to:

- explain and predict sales
- explain and predict salary
- explain and predict churn, ...

#### Your data set

Your data set should be made of a minimum of 50 observations and contains both quantitative and qualitative variables.

You can find or build data sets from many online sources. Below is a list of a few sites that aggregates datasets:

- Google Dataset Search : <a href="https://datasetsearch.research.google.com/">https://datasetsearch.research.google.com/</a>
- Kaggle data science platform : <a href="https://www.kaggle.com/">https://www.kaggle.com/</a>
- French OpenData initiative : <a href="https://www.data.gouv.fr/fr/">https://www.data.gouv.fr/fr/</a>
- World Bank Open Data global development data : <a href="https://data.worldbank.org/">https://data.worldbank.org/</a>
- EU Open Data portal: <a href="https://data.europa.eu/euodp/data/">https://data.europa.eu/euodp/data/</a>

## Organization

This is a group effort. You should organize and submit your work as a group of 4 students.

## Presentation

You have to upload a zip file named name1-name2.zip

- your R project (data sets and script) file
- your ppt presentation will detail:
  - aim of the project and data source
  - how your data have been cleaned and/or recoded
  - descriptive statistics and/or graph on each variable
  - methodology used: from classical regression (linear/logit) to GAM
  - results and comparison of prediction accuracy
  - conclusion