

## **[Big]-Data Analytics for Businesses Group Project: More Guidelines**

As part of the course, all participants must find 2 or 4 partners (hence create a group of 3 or 5) and study the use of data analytics in a specific context.

### **Deliverables and Deadlines:**

**SESSION 2:** Please report your group before session 2 by email to the course assistant.

**SESSION 4:** Please prepare a 1-page report. You will need to send this report by email **before sessions 4-5** to the course assistant. For this report you can consider the following questions:

1. Name of the company you are studying (if it is for a new venture, please briefly describe the business model, market, and key processes).
2. Which business processes and management decisions are affected from your data analytics proposal that you are sending to that company?
3. What changes (e.g. organizational, processes, systems) do you expect the company will need to make order to effectively use the results of data analytics? What types of resistance do you expect, if any?
4. How will you measure the value of your proposed data analytics project (e.g. process efficiency, predictive improvement with specific business impact, etc)?

Also be prepared to briefly describe your project in class (no presentation needed, only brief answers to these questions as well as any other information you may find necessary).

**SESSION 8:** Please prepare a final report (less than word 5 pages, unless necessary to make it longer) as well as a 10 minutes ppt presentation. You will need to send the presentation and the report **before session 8** to the course assistant. Your report/presentation should include a final version of your answers to all the previous questions above, as well as answers to the following questions. The report and presentation should be written either in a business proposal format to “present to the company’s management team”, or in an intermediate/final report of a project hypothetically already completed for the company. In either case, you should provide hypothetical “performance results” and conclusions.

1. What data issues do you expect (e.g. privacy, missing data, data ownership issues, data integration, etc) *mostly*, why, and how do you plan to resolve them?
2. What are some data transformations you may need to make in order to generate new “features”?
3. What will be the key analyses you are proposing to drive business success? What methods from the class would you use? Why?
4. Define some key questions you will need to ask the company, any issues you expect to face, any possible “traps”, any difficulties you expect, etc.

**Extra credit (+30%): groups that find real data (even if it is a small subset of what is necessary) are encouraged to analyze the data using the tools we cover in class.**

3 Groups will present during the last session. In addition to making a presentation, every group will also play the role of the “company’s management team” for the presentation of another group. Groups will be matched in class.