

## Term Project Guidelines

### MSBA 310

#### **Overview**

The course project is your opportunity to explore an organizational topic of your interest and that you like. The overall goal is to develop an action-oriented solution supported by analytics results. You will work in groups of 3-4 students. Your project must have a well-defined objective / applied research question that will be addressed by using the analytical and statistical tools emphasized in the course.

#### **Key tasks**

1. Identify important opportunities to an organization based on the data it has
2. Understand the data landscape in an organization
3. Provide evidence through analytics to support your proposed solution
4. Pre-process clean, validate, visualize and partition your data
5. Develop your model considering alternative techniques, selecting the most appropriate one in the process
6. Interpret your results, and write a final report as a research paper
7. Prepare a 15 to 20 minute presentation

**What are the guidelines for the project report?**

The report should be no longer than 10 pages in length including tables and graphs (please use at most 12pt font size, 1.5 spacing, and 1 inch margins on all sides of the page). The report should have the following sections:

1. Abstract
2. Introduction and a Literature review related to your research goal. You should include at least 3 references published in peer-reviewed journals
3. Problem description, including existing/traditional way of addressing the issue
4. Brief description of the data, its source and its key characteristics.
5. Results and discussion
6. Conclusion and recommendation
7. List of references
8. Appendix for your R code and additional technical details

### **Where do we get the data for the project?**

The best scenario is to get real data from a local company and solve a business problem for this particular company based on the knowledge acquired in the course. In the absence of this, you can get the data from internet. The Internet offers data rich environments that enable new business intelligence opportunities. For instance, it is possible to collect information about how online retailers price differentiate, how airlines make pricing decisions, how consumers bid in a given auction or a series of auctions, etc. I leave it to your collective imagination to find something interesting for which you can collect some data.

### **What is the grading criterion?**

You will be graded on your ability to demonstrate your grasp of basic data analytics concepts and how they can be applied in a business context. Grades will be determined based on the presentations, and your final project report.

### **Important dates**

- Normally, you should hand in to me a **hard copy of your report** during the **last session of the course but an extension is possible**. You will have also to **submit a soft copy through Moodle**.
- Date of presentations to be determined