

# MBA8580: Business Analytics: Assignment 1

This assignment is designed to introduce you to data analysis for cross-sectional data. There are three objectives for this assignment. The first is to simply get you to think about how to work with large data sets in Excel and Tableau. The second is to set you up for doing these types of analyses for topics later in the course. The third is to get you to use Excel and Tableau. Some of the features that you will use in this assignment (e.g., pivot tables, making graphs, etc.) will come in handy for later topics and throughout the MSA program.

This is a team project. You can locate your team in the Groups area under Course Tools via the course menu.

## Instructions

Each group should turn in one **Word** document and one **Excel** file with all your analysis for **Problem 1**. The first page (or worksheet) should contain the names of all of your team members.

In your Excel file, you can have different sheets for different analysis. If you do that, please name your sheets appropriately. Each team member will post comments on the appropriate discussion boards individually for **Problem 2**.

See course schedule for due dates.

All discussion board posts must be made prior to submitting the assignment.

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## Problem 1

In 2009, APICS (the Association for Operations Management) conducted an online salary survey for operations management professionals. They have hired you as a consultant to summarize the survey data for compensation. To support the usefulness of the data, survey respondents were asked to provide demographic information including age, gender, education, and certifications achieved. Additional characteristics including the respondent's job category, years in industry, company size, and hiring/supervising responsibilities were also obtained. Throughout the year, 1,973 respondents completed the survey. The data lists total compensation for each respondent (i.e., salary plus bonus) in USD along with demographic information. The data is in [OMSalaries \(Excel\)](#).

Summarize the data and develop an executive summary for APICS on how compensation levels vary across operations management professionals. The summary should be a Word document that includes: 1) a title page with names of your group members; 2) the summary itself, which should be no more than 600 words, double-spaced, with one-inch margins and Times New Roman 12-point font; and, 3) an appendix that contains at least five figures (at least three from Excel and at least two from Tableau) that support your summary. Your summary should begin with a paragraph describing the purpose of this assignment and the analysis, followed by a discussion of the data available and if any observations were eliminated, then a brief discussion of each analysis performed with supporting figures, and finally the conclusions drawn. All figures in your appendix should be numbered sequentially and referenced in your summary.

## Problem 2

After completing Problem 1 (and reading the article [The Dark Side of Consumer Analytics](#)), contribute to the discussion board forums on Blackboard. Use the following points to guide your posts.

- A. Identify IFA's business problem and the ethical dimensions of the problem. Propose a solution for IFA.
- B. Identify Shopsense's business problem and the ethical dimensions of the problem. Propose a solution for Shopsense.
- C. Suppose you are the president of APICS. One of your advisors just handed you the executive summary submitted in problem 1. Identify ethical dimensions of the organization's business problem. Propose a solution for APICS.