IE 4362 Case Presentations

The purpose of this assignment is to practice communicating statistics to an audience with supporting visual aids. Groups of 2-4 students are assigned to a case and a general statistical analysis method. While each case is unique, each case should provide the following:

1. General background and problem statement: what are you trying to find out?
2. Description of the data collected.
3. Descriptive statistics such that the audience can understand the data collected. Be sure to note if any data is removed for any reason, particularly if your group has “real” data.
4. Statistical analysis chosen with justification of analysis and any distributions, significance levels, etc. required.
5. Outcomes of the statistical analysis, including how well the analysis “fits” the data.
6. Practical conclusions and decisions that result from the analysis.

Each student should speak to at least one item from points 3-6 listed above (students must do more than just explain the background and provided data). Groups should use JMP for analysis and use JMP, Excel, and Powerpoint as needed to create supporting visuals for their presentation. Presentations should be no longer than 5-10 minutes, and an additional 5 minutes will be allowed for questions and discussion with the audience.

Cases have been assigned randomly. The presentation day cannot be changed unless a team member has a valid excuse presented ahead of class time. Students missing the case presentation with a valid excuse may complete a make-up case at the end of the semester as shown on the syllabus.

Grading: The instructor will grade the presentation during class using the provided grade sheet. Upload any visuals to Moodle by class time on the day of the presentation.

IE 4362 Case Presentation Grade Sheet

Case #: \_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Component | Maximum Points | Points Received |
| Basic components (20 points)   * Uses visuals to enhance presentation (graphs, tables) * Uses JMP to conduct analysis * Each member speaks to a piece of the analysis (items 3-6) * The group covers all parts of the case   1. Problem statement, introduction   2. Data collected   3. Descriptive statistics   4. Statistical analysis chosen, with justification   5. Statistical analysis outcomes   6. Practical conclusions, decisions made based on analysis | 5  5  5  5 |  |
| Statistical Analysis (25 points)   * Quality of descriptive statistics * Justification for analysis assigned/chosen and any parameters (levels of significance, distributions, specific analysis types, etc.) * Accuracy of analysis, depth of analysis (is the analysis a good fit for the data? Were any data removed or problematic?) * Statistical conclusions (significance, models, etc.) | 6  4  10  5 |  |
| Quality of visuals (20 points)   * Do visuals enhance audience understanding of the data and descriptive statistics? * Do visuals enhance audience understanding of the statistical analysis and conclusions? (both statistical and practical conclusions) * Design of visuals: fonts, use of white space, color contrast, proper labeling, etc. | 5  5  10 |  |
| Quality of presentation skills (10 points)   * Physical quality: makes eye contact, avoids fidgeting, appropriate dress * Team coordination: Smooth flow between elements and between presenters, clear references to other speakers or visuals * Speaking and voice quality: everyone avoids “filler” words (uh, um, like), everyone projects to the audience and speaks clearly | 2  5  3 |  |
| Ability to translate statistical analysis results into meaningful, practical conclusions (20 points)   * Statistical analysis is accurate * Outcomes make sense based on the statistical analysis outcomes * Outcomes are clearly explained to the audience incorporating statistical and practical considerations | 5  5  10 |  |
| Step 3 check-in complete (end of module 4): at least one visual and one audio or video thread shared | 5 |  |

**Total: \_\_\_\_\_/100\_\_\_\_\_**

Comments: