

Writing About Operations Research – Model and Results – Simulation

1 Overview

- Recall that:
 - The purpose of the model section is to describe the operations research or statistical model you used to analyze your problem.
 - The purpose of the results section is to present and interpret your results in a reader-friendly way.
- We discussed how you would do this for a regression and optimization models.
- Here, we will focus on simulation models.

2 The model section

- Suggested outline:
 1. Provide a flow chart of the simulation model.
 2. In words, walk the reader through each step of the flow chart, describing the process in depth.
 3. Discuss any simplifying assumptions you made.

3 The results section

- Suggested outline:
 1. Describe the alternative scenarios that you run.
 2. Identify performance metrics that will be used to run the model.
 3. Run multiple replications of all alternative scenarios and generate the resulting performance metrics. Provide this output in a table.
 4. Using the table of performance metrics and/or graphs (e.g., SMORE plot, bar chart, etc.), describe the output in words. Discuss any interesting trends or trade-offs. Describe which alternative is the best and why.