Oracular Consulting

Unit One Memo Problem

To: Analysis Staff

From: Marketing Director

Date: August 25, 2014

Re: Shipping and unloading process at StateEx

The warehouse manager for StateEx has contacted us to investigate their companies shipping and loading process in order to identify any inefficiency. The operation involves trucks picking up cargo from the airport, the shipyards and the train yards and transporting it to a central warehouse for distribution locally. The cargo is packed into various sized boxes that are weighed at the pickup location before being loaded onto the trucks.

The manager is convinced that unloading the trucks at the warehouse is taking too long, slowing down the processing of the cargo and its distribution. We need to come up with a preliminary proposal in order to win the contract with StateEx. I will review your proposal, give you some feedback, and then pass it on to the marketing team, who will cost it out. I will write the final cover letter and submit the final proposal to the manager of the warehouse.

The marketing team will need your proposal to address the following in order to accurately cost out this job for the contract bid:

- 1. What is the perceived problem we are to investigate?
- 2. What are some possible reasons for the problem?
- 3. What are some of the consequences of the problem?
- 4. What is your plan for gathering data to identify the problem? This should include data collection forms and a rough timeline for the whole data collection and analysis process.
- 5. Use your possible reasons and possible solutions as a way of ensuring that your data collection gets what you might need; that is, use these as a reality
- 6. Sample spreadsheets showing how the data will be coded and organized, with explanations for the codes used, units for the variables in the data, and at least 15 observations of each variable in each spreadsheet that you develop in order to "show off" the range of values. All spreadsheets should be in a single Excel workbook with relevant names for the sheets, so that the marketing team doesn't overlook them. Below the sample data for each variable you should also describe the type of variable (e.g. categorical, discrete continuous, etc.).
- 7. Identify any possible difficulties, problems, or expenses (there will indeed be some) that might be encountered in collecting and analyzing the data. Don't include dollar figures because our marketing team will handle this.

The final proposal should include a written report with data collection forms and spreadsheets incorporated into it.