

Unit Two Memo Problem

To: Analysis Staff
From: Marketing Director
Date: August 25, 2014
Re: More on the shipping and unloading process at StateEx

As you know, we won the contract with StateEx a while ago and have been collecting data to help the manager investigate the unloading times at his warehouse. What you may not know is that the contract has expanded and we are looking at how the unloading process works not only at the primary warehouse, which has a loading dock, but also at the endpoints of the delivery process. As you can see from the data collected (see attachment) we have aggregated some of the information from many different data collection forms into a single spreadsheet for analysis, with one row of data on each delivery. All of the variables are described in the data file.

At present, we need to give the manager of StateEx's warehouse some preliminary analysis of the data on unloading times with some recommendations about the system as it currently stands. We'll be doing deeper analysis on this later and modeling the actual relationships among the variables in the future, but for now, we need to look at the various data collected and give the manager a rough idea of what the deliveries are like.

This should include numerical and graphical analyses of the data to describe what a typical delivery is like. You should also describe a typical daytime, evening, and night delivery and make recommendations on how to staff the deliveries during each of the three shifts StateEx currently runs. To do this, you may need to standardize the data with either z-scores, percentages, or both in order to ensure that you are comparing similar things across each shift. It may also help to break the data apart into the different types of trucks that are used in the deliveries.

Most importantly, though, the manager needs some information on the unloading times so that he can start to make better decisions for staffing. These data should be broken down in different ways in order to see if there are any particular types of deliveries that seem to be taking too long to unload.

Attachment: StateEx_Deliveries.xls