Few_Summary

Adam Bozman

September 27, 2016

Effectively Communicating Numbers

Summary

Effectively Communicating Numbers outlines the struggling graphs generally used in business and details a solution to this miscommunication of data. To begin, we learn the proper situation(s) in which to use a graph and/or a table. Generally, a table is necessary to analyze, generalize, and see trends in greater datasets. Moerover, graphing is necessary to address multiple variables and highlight more important data.

To make clear our journey into dataset analytics and visualization, we must first seperate *categorical* information from *quantitative* information. The first, categorical, deals primarely with labeling and grouping of non-numerical data. Categorical information may be thought of in three forms, Nominal, Ordinal, and Interval. These measure items within a common category, items linearly described within a common category, and items closely related/dependent within a common category, respectively.

Quantitative information encompasses that former categorical information, quantitative data, and numerical data. It is a broad scale. Fortunately, this data may be easily distinguished in seven unique relationships.

Time-Series Relationships - *This is a traditional linear graph. No relationship is more common. This is when quantitative values are espressed and measured across intervals of time.*
Ranking Relationships - These relationships usually come in some variation of a bar graph. They measure the size, spending, etc. of varying areas.

**Part-to-Whole Relationships* - Similar to *Ranking Relationships*, these measure size. They must measure all individual parts of a greater whole. A pie-chart often inappropriately represents this style of relationship.

**Deviation Relationships* - Here, data is shown to visualize the variance from predicted data.

**Distribuation Relationships* - If we must show how a set of quantitative values are spread across their entire range, we can this relationship a distribution. We use this information to identify any skew or atypical distribution of data.

**Correlation Relationships* - A correlation relationship describes how two unique variables are somehow linked and possibly dependent. The example used compares employee heights to their salaries, directly related.

**Nominal Comparison Relationships* - Much like our earlier measuring of growth or output, these relationships measure quantity. Specifically, they measure quantity between individual parts of a unique whole.

Our articles own summary dives into strategic formatting of graphs. To highlight, there are only four typically acceptable types of graphs, *point*, *line*, *bar*, and *box*. Among these choices, the decision should be made depending on the data available. To graph correctly, we must first be aware of our data and determine our message. Then, we must determine which combination of table(s) and graph(s) works best. The encoding proccess is the most precise and aesthetically inspiring. In order to avoid miscommunication we must appropriately place variables and eliminate unnecessary data. The greatest instruction here is to commincate effectively. The choice to graph well is what we must do.