**DATA ANALYSIS**

Data analysis is the method or methods that can be used to analyze data and the process of analyzing it. There are many different forms of data, but people usually think of quantitative data first. These are data such as census data or survey data. There is also scientific data, such as data physicists collect about the cosmos. These days, most people are interested in analyzing the vast amounts of data collected through transactions with a variety of companies and/or websites. Often, though, people forget about qualitative data, which is data that has not yet had any form imposed on it by humans.   
  
Big Data is a term for data sets so large and/or complex that they are difficult to process using traditional data processing software. Difficulties include analysis, capture, metadata, storage, search, sharing, transfer, visualization, and privacy. Hadoop is an application that helps manage big data.  
  
You'll need to develop skills in all aspects of data analysis. Learn how to manage data sets and how to manipulate them. Learn to computing new variables, merge data sets, recode data and so on. Learn about flat file databases and hierarchical databases and relational databases and how to build software or programs that manage them all.