
Learning A Skill Of Applying Statistics

Statistics in Business

The use of statistics is not only in a business environment but in your everyday life is extremely beneficial. According to Merriam-Webster dictionary, statistics are “a branch of mathematics dealing with the collection, analysis, interpretation, and presentation of masses of numerical data” (Merriam-Webster). Using statistics can help make your life so much simpler. Using a perfect example from my everyday life, I apply statistics to exactly find out how long my daughters box of diapers will last. As long as she doesn't get sick, she uses about six diapers a day, and there are about two hundred and twenty two diapers in the box. If you divide those two, you get thirty seven, so her box of diapers will last roughly about thirty seven days. Using simple statistics just made my life a little bit easier.

Quantitative and Qualitative Data

Two forms of statistical data are quantitative and qualitative data. Quantitative data is a much simpler form of statistical data to use. “DATA ANALYSIS aims to make large amounts of data comprehensible to the reader by organizing and condensing it. Analysis of quantitative data enables one of four things: to describe what is there, to make a prediction about what will occur, to generate a model to make a claim about whether a situation works and to demonstrate how strong the evidence is for a particular claim” (Devitt, September 2015). What makes quantitative data much easier to use and read is because you can break the analyses down into numbers easily readable.

Qualitative data is different than quantitative data because most of the time it's too broad to find an almost exact numerical statistic. “Quantitative and qualitative research differ somewhat in their approach to data analysis. In quantitative research, data analysis often only occurs after all or much of data have been collected. However, in qualitative research, data analysis often begins during, or immediately after, the first data are collected, although this process continues and is modified throughout the study (Burnard, April 26th, 2008). For example, it is very difficult to analyze an entire population and every aspect of the people within that population to come up with a statistical number.

There are many tables and charts that can be used to evaluate both quantitative and qualitative data. Frequency charts, bar charts and pie charts are the most popular when using qualitative data. David Lane expresses “quantitative variables are variables measured on a numeric scale. Height, weight, response time, subjective rating of pain, temperature, and score on an exam are all examples of quantitative variables” (Lane). Box plots, stem and leaf displays, dot plots and bar charts are just a few examples of charts that can be used with quantitative data.

Data Management

There are about four different levels of data measurement. “It is important for the researcher to understand the different levels of measurement, as these levels of measurement play a part in determining the arithmetic and the statistical operations that are carried out on the data”

(Statistics Solutions). These four levels of data management are nominal, ordinal, interval and ratio. With nominal management, the numbers are actually used to classify the data collected. Ordinal management “depicts some ordered relationship between the number of items” (Statistics Solution). Interval level of management does two things. The first thing is that it classifies the orders of each measurement but it also specifies the distance between them from highest to lowest. The fourth and final level is ratio management. In this level of measurement, you can have a value of zero, which makes this level of management unusual from the other three (Statistics Solutions)

Business Decision Making and Research

Statistics play a very important role in business decision making. Without statistics, it would be very hard to design new products or even decide what customers want or don't want. “Whether designing new products, streamlining a production process or evaluating current vs. prospective customers, today's business managers face greater complexities than ever before. Running a shop on instinct no longer suffices. Statistics provide managers with more confidence in dealing with uncertainty in spite of the flood of available data, enabling managers to more quickly make smarter decisions and provide more stable leadership to staff relying on them” (Williams, 2016). Two different ways business research can be applied to statistical analysis are mass data analyzing and anything in the politics world. A great example of mass data collecting is how often teenagers text on a daily basis. With politics, collecting the data of all the people that attend rallies or voted for a candidate would be great statistical business research.

Conclusion

Learning the skill of applying statistics can and will be very beneficial in your life. It teaches you how to create, properly read and analyze all types of graphs. Statistics will even help individuals succeed in business environments by providing them with skills to develop new products.