

Data Analytics vs. Data Analysis

The terms **Data Analysis** and **Data Analytics** are often used interchangeably, including in this course.

However it is important to note that there is a subtle difference between the terms and meaning of the words *Analysis* and *Analytics*. In fact some people go far as saying that these terms mean different things and should not be used interchangeably. Yes, there is a technical difference...

The dictionary meanings are:

Analysis - *detailed examination of the elements or structure of something*

Analytics - *the systematic computational analysis of data or statistics*

Analysis can be done without numbers or data, such as business analysis psycho analysis, etc. Whereas *Analytics*, even when used without the prefix "Data", almost invariably implies use of data for performing numerical manipulation and inference.

Some experts even say that *Data Analysis* is based on inferences based on historical data whereas *Data Analytics* is for predicting future performance. The design team of this course does not subscribe to this view, and you will see why later in the course as you become familiar with the terms like *predictive analytics*, *prescriptive analytics*, etc.

So in this course we take a more liberal view, and use the terms Data Analysis and Data Analytics to mean the same thing. For example, an earlier video is titled *Defining Data Analysis*, whereas the preceeding video with the viewpoints of several data professionals is titled *What is Data Analytics*. The difference in these titles is not intentional.