Cross tabulation is a method to quantitatively analyze the relationship between multiple variables.

Also known as contingency tables or cross tabs, cross tabulation groups variables to understand the correlation between different variables. It also shows how correlations change from one variable grouping to another. It is usually used in statistical analysis to find patterns, trends, and probabilities within raw data.

When you can use cross tabulation
Cross tabulation is usually performed on categorical data — data that can be divided into mutually exclusive groups.

An example of categorical data is the region of sales for a product. Typically, region can be divided into categories such as geographic area (North, South, Northeast, West, etc) or state (Andhra Pradesh, Rajasthan, Bihar, etc). The important thing to remember about categorical data is that a categorical data point cannot belong to more than one category.

Cross tabulations are used to examine relationships within data that may not be readily apparent. Cross tabulation is especially useful for studying market research or survey responses. Cross tabulation of categorical data can be done with through tools such as SPSS, SAS, and Microsoft Excel.

An example of cross tabulation
"No other tool in Excel gives you the flexibility and analytical power of a pivot table."

Bill Jalen
One simple way to do cross tabulations is Microsoft Excel's pivot table feature. Pivot tables are a great way to search for patterns as they help in easily grouping raw data.

2020-07-01