**Box and Whisker**

Box and whisker charts are useful for quickly comparing distributions between several sets of data, for example comparing a series of medical trial results or students’ test scores. The chart consists of two parts: the main body called the box, and the vertical lines coming out of the box called whiskers. The first quartile forms the bottom of the box and the third quartile forms the top.

In addition to showing the median, first and third quartiles, and the maximum and minimum values, Box and Whisker by MAQ Software displays the mean, standard deviation, and quartile deviation.

The lower whiskers can range anywhere in between the least value and the first quartile while the upper whisker can range between the third quartile and the maximum value.While other Power BI box plots have the capability to display some of these statistics, Box and Whisker by MAQ Software provides additional user controls such as the ability to add a parent axis and flip the visual horizontally or vertically based on the reporting requirements.

Let’s see an example of Box and Whisker in action. Company XYZ wants to see detailed chart of sales and profit data for ABC product. The company wants the data sorted by city on a yearly, quarterly, monthly, and daily basis. Box and Whisker chart is the perfect solution for company XYZ. It can even display the data by region or county.

Box and Whisker provides an option to calculate the quartile either by including or excluding the median.

The type of whiskers can also be varied to display:

1. The upper whisker at maximum value and the lower at minimum value
2. The upper and lower whiskers at 1.5 times the value of the inter quartile range (IQR) (which is the difference between third quartile (Q3) and first quartile (Q1))
3. The upper whisker at the highest value (which is less than 1.5 IQR) and the lower whisker at the lowest value (which is less than 1.5 IQR)
4. One standard deviation whisker type
5. Custom whisker type

Other features include:

* Option to enable or disable mean dot
* Option to choose shapes of mean and data points: circle, square, or triangle
* Option to hide or show all data points
* Option to hide or show outliers
* Option to control the opacity of boxes

Thus, Box and Whisker by MAQ Software allows you to see a complete picture of your data distribution at a glance.

Thanks for watching our video. If you have any questions about this visual or need a similar business solution, feel free to contact MAQ Software at sales@maqsoftware.com