The index formula creates a number between 0 and 100

Utilizing a line formula

\[ Y = MX + b \]

Positive and Negative X values

If outliers are a concern, you can use quartiles to restrict the data set considered

Example outlier removal subset formula:

\[
\text{LARGE(IF($X$3:INDIRECT("x"&(COUNTA($X$3:$X$200)+2))<=QUARTILE($X$3:INDIRECT("x"&(COUNTA($X$3:$X$200)+2)),3),$X$3:INDIRECT("x"&(COUNTA($X$3:$X$200)+2))),1)}
\]

Slope (M)

Use Algebra to determine the value:

\[ M = \frac{Y_2 - Y_1}{X_2 - X_1} \]

b

Use Algebra to determine the value:

\[ b = y_2 - M \times X_2 \]
The method creates a composite score from all metrics considered.

Each metric uses the line formula and then all of those scores are summed to create a single index score.

For this example, we are using 6 metrics and all have even weighting

- You can use as many metrics as you think is appropriate
  - Be cautious though as using too many metrics can dilute the results

- You can use whatever weighting you want
  - Difficulties can be encountered when determining what are the most important metrics and quantifying how much more important one metric is over another
Report and Uses

- Quartiles and conditional formatting can be enabled to give a quick visual of relative performance of objects to one another.
- The primary use of this index method is to take many attributes of a single object and create a composite score that considers the relative performance of each attribute and shows this result as a whole value.
  - The index scores are benchmarked against themselves.
- This is one of several tools that can be utilized and please remember that there isn’t a “silver bullet” report/method/metric that will always be 100% accurate.
Thank you all for your time and for allowing me to speak about some of the methods we are trying to implement at Visit Wichita.

Questions or comments?

Contact: William Graves

wgraves@visitwichita.com

316.660.6305