## Anatomy of the Formula Builder



You can create formulas with a variety of functions — from aggregations, boolean expression, conditional statements, data conversions, data manipulations, to calculations — all with the **Formula Builder**.

You can use the Formula Builder when adding or editing:

- a Formula Column in a schema table
- a Formula in a business schema view
- a Query in an internal session variable
- a Formula in a filter expression session variable
- a Formula in a **prompt** in a dashboard filter

- a Formula in an **applied filter** in a dashboard filter
- a Formula in a filter options for a dashboard
- a Formula in an **insight tray** such as grouping, coloring, pivot column, pivot row, sort, filter, and of course, measure
- a Formula in the **sort property** for a pill in a grouping or coloring tray

Sorting by a Formula Column is a very expensive operation that in certain situations can cause instability such as race conditions and out of memory errors. To enable sorting by a Formula Column, in the Incorta Analytics Service, an Administrator needs to modify the **engine.properties** file and add the following property:

engine.allow formula sorting in flat table = true

The Formula Builder is context aware. For example, the Formula Builder will show the same schema or business schema that is available already in the Analyzer's Data Panel. In addition, the Formula Builder enforces the user's view access permissions to Incorta objects including schemas, business schemas, external session variables, internal session variables, and filter expression session variables.

To invoke the Formula Builder, you can

Select the Formula link wherever found

• Drag & Drop the New Formula to a tray and then select the Formula property text box in the Properties Menu