

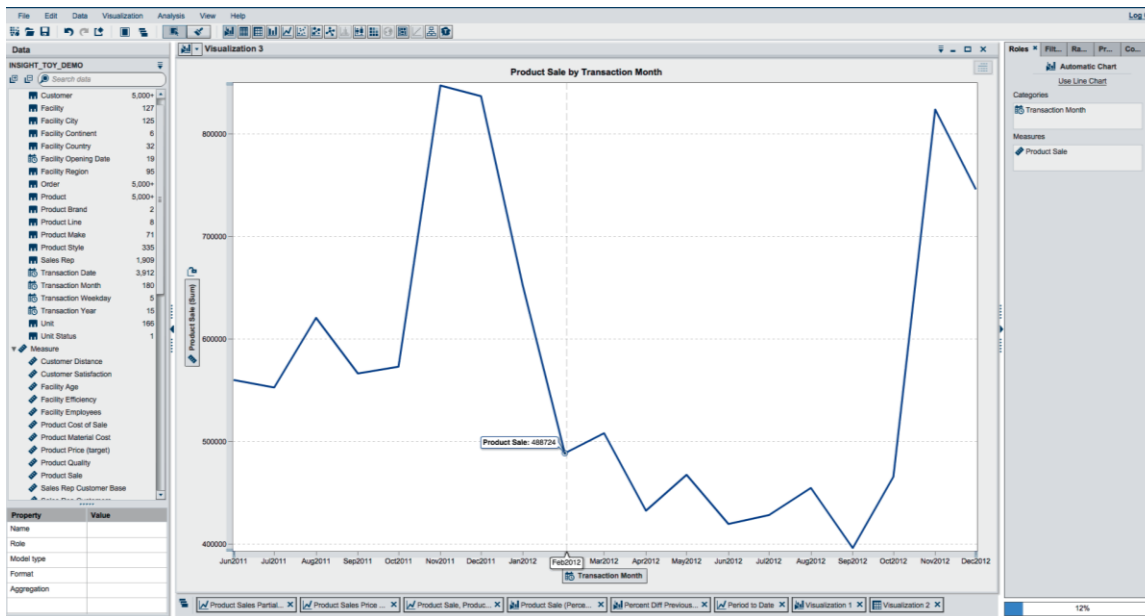
## Period to Date Calculations

Period to date calculations can help business analysts spot trends over time. These calculations are especially powerful when combined with visualizations and cross-tab reports available in SAS Visual Analytics. VA interfaces now deliver some “shortcuts” and predefined calculations to enable users to create and visualize these high-value calculations without facing a steep learning curve on the complex formulas and relationships.

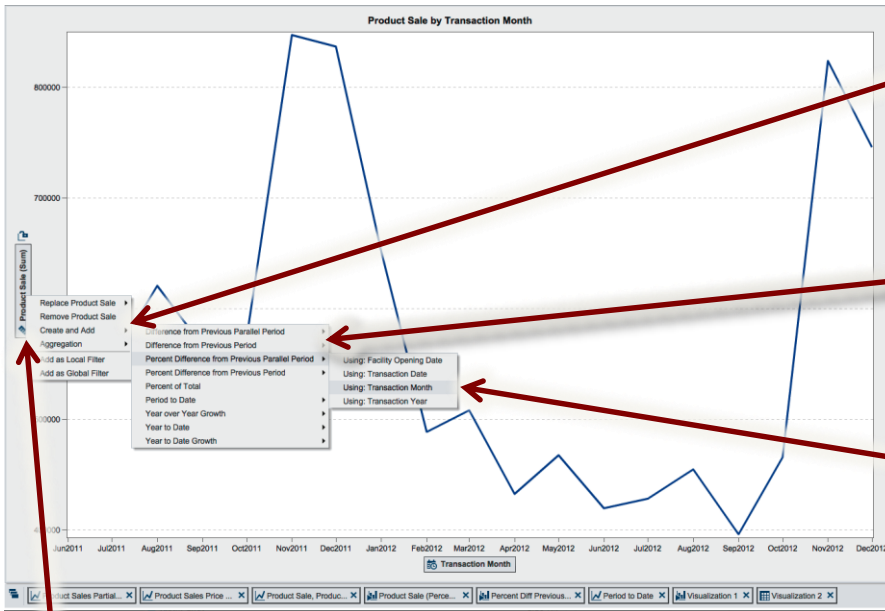
This document highlights tips that can help simplify the use of period to date calculations. Because there are options to select some of the most common calculations via a right click on a measure, users can easily generate visualizations that compare results over various time periods. Examples of pre-defined time periods include Prior Month, Prior Year, and Year to Date. You can also use the calculation editor to create very sophisticated functions, but the right-click functions are excellent for getting you started.

In the examples below, you will see:

- Adding period to date calculations to a graph
- Adding period to date calculations of a crosstab



Create a simple line chart with 1.5 years. Maybe you want to see the prior month of sales or prior year to the corresponding month. All are possible with period to date calculations.

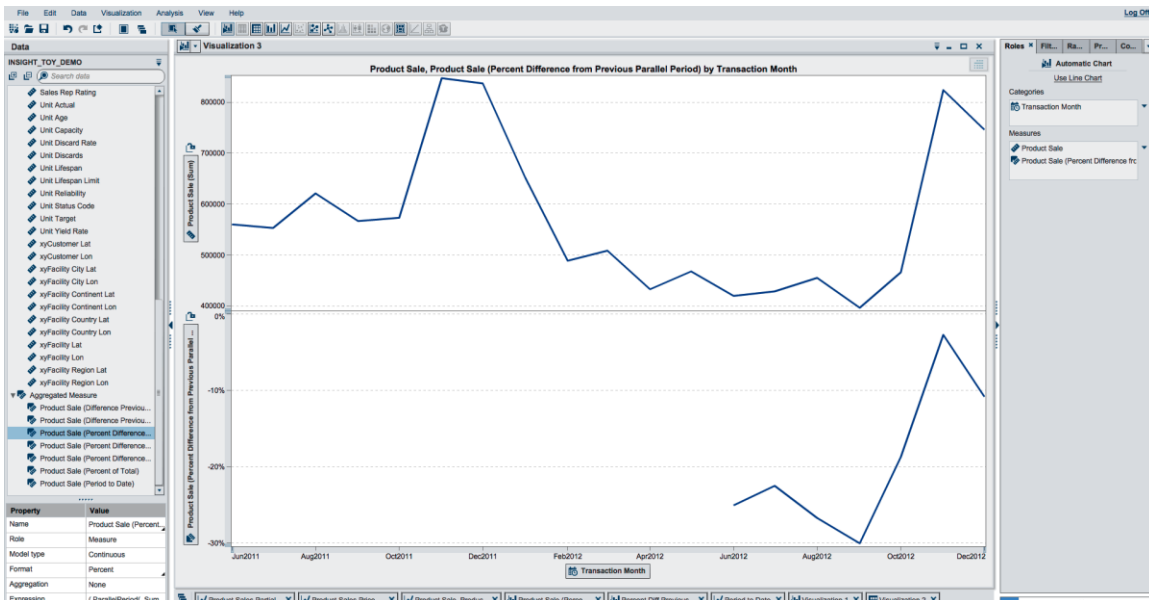


Select Create and Add.

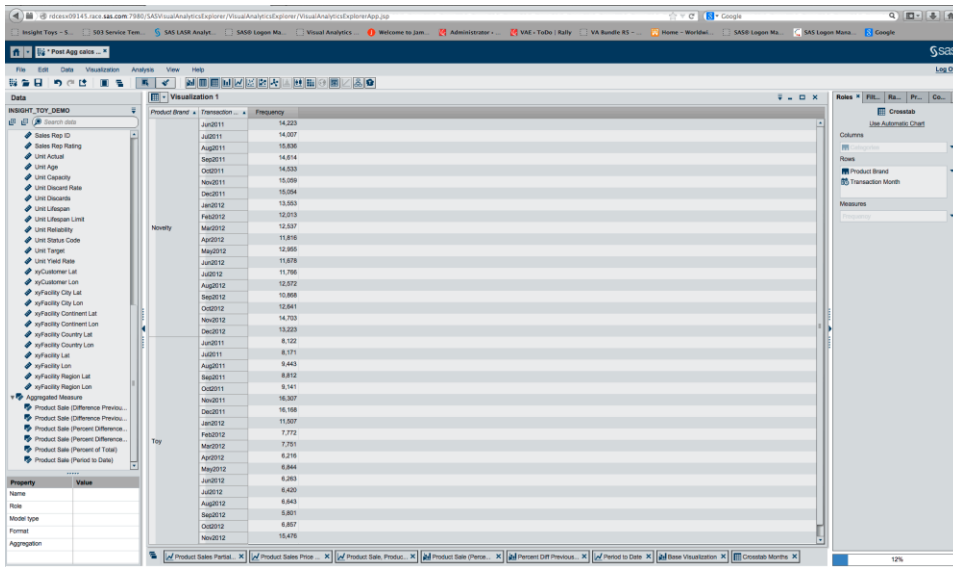
Then select your time period calculation.

Now select your time frame group-by.

Right click on the measure in the Chart. This is an excellent way to create Aggregated measures (period to date Calculations). Those measures can now be used in Visualizations and Crosstabs. Try them out and create four or five.

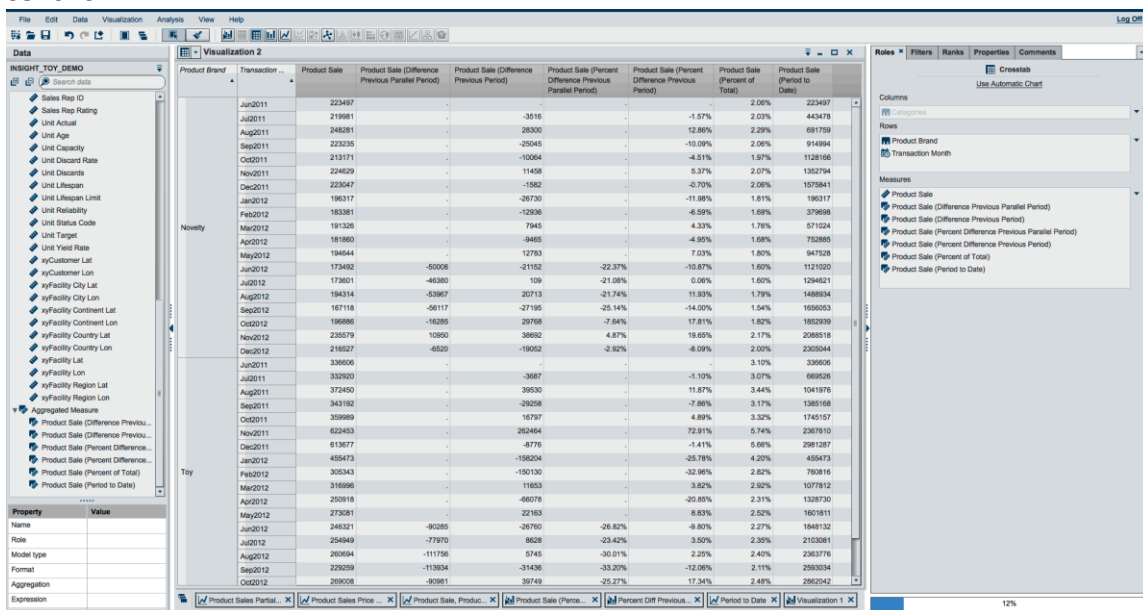


- Create a line chart of the period to date calculation.
- Add the PTD to Aggregate Measures.
- Add the PTD to the Measure role.



Create a crosstab. The data is filtered to 1.5 years and one Category (Product Brand) and Transaction Month. You can see this in the roles section as well. Now add your aggregate Measure at the bottom.

When you add new measures to the crosstab, it will populate that crosstab the same as below. This is an excellent way to view the calculations if you are more numbers-centric.



Below shows an example of what the simple right-click period calculations are creating. You can use the calculation editor to create very sophisticated functions, but the right-click functions are excellent for getting you started.

# Anchor Period █ Period to Date

The screenshot shows the SAS configuration interface for the `RelativePeriod` function. It features two side-by-side panels for configuration. Red arrows point to the following elements:

- `_Sum_` dropdown menu in both panels.
- `Product Sale` data item selection in both panels.
- `Transaction Month` dropdown menu in both panels.
- `_Inferred_` dropdown menu in both panels.
- `0` and `1` numeric input fields in the left and right panels, respectively.
- `_Full_` dropdown menu in both panels.

Informational text boxes provide details for several parameters:

- `Parameter: The aggregation applied to the data item` (points to `_Sum_`)
- `Data item: Transaction Month` (points to `Transaction Month`)
- `Parameter: The date data item for the period calculation. Only dates that include the year value are available.` (points to `Transaction Month`)
- `Parameter: The interval for which the values are aggregated` (points to `_Inferred_`)
- `Parameter: The number of intervals to offset from the current period. A negative value specifies a previous period. For example, if your interval is by month, then -1 specifies the previous month.` (points to `0` and `1`)
- `Parameter: Whether the period is measured over full intervals or only up to the position of a date in its interval. For example, if your interval is by month and you select _ToDate_, and specify 15OCT2013, then the aggregated values for each month include only the dates up to the 15th day of the month.` (points to `_Full_`)

If date is supplied you can pass that parameter.

08Nov2013  
Parameter: For `_ToDate_`, the particular date to use