



TIPS & TRICKS

(#36-40)



“Did you know” series Part 1
Smart ways creating and manage data items in SAS Visual Analytics

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VA Tips & Tricks available editions

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25. Forcing control objects NOT to load any data
26. How can I pre-select a value in my drop-down list without loosing any da
27. Creating advanced visualizations using container(s)
28. How to sort using non-displayed columns
29. Another sorting example using the same technique as #28

Today we have 3 different use-cases/scenarios

- How can I keep my totals intact when using filters?
- What about calculated items using Distinct Count?
- AggregateTable function, what is it good for?

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Tips & Tricks #33-35

Different use-cases using AggregateTable function

- #33 End users want to see sales % of the total, while comparing it between selectable weeks and by product group
A classic sub-totals and/or by-groups challenge
- #34 Creating a KPI for Average Sales by Continent based on Total Sales by count
A very good example explaining how inner and outer table works
- #35 Engineers want to review average milage by car model and production year based on service data
A great example where the "add" option is needed

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Tips & Tricks #36-39

Did you know...

- #36 - Create hierarchies on the fly
How to create hierarchies using the data panel only and the crosstab
- #37 - Quick Calculation
Take advantage of the build in quick calculation feature and create very complex calculations with just a few clicks
- #38 - Tired of creating wrong defined parameters
This might help you to create more correct defined parameters
- #39 - Setting attributes on data items
Setting attributes can be time consuming, but this little tip can speed up things for you

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Did you know – Part 1

Smart ways creating and manage data items in SAS Visual Analytics

Ahh, I didn't know you can
create hierarchies using the
crosstab object 😊

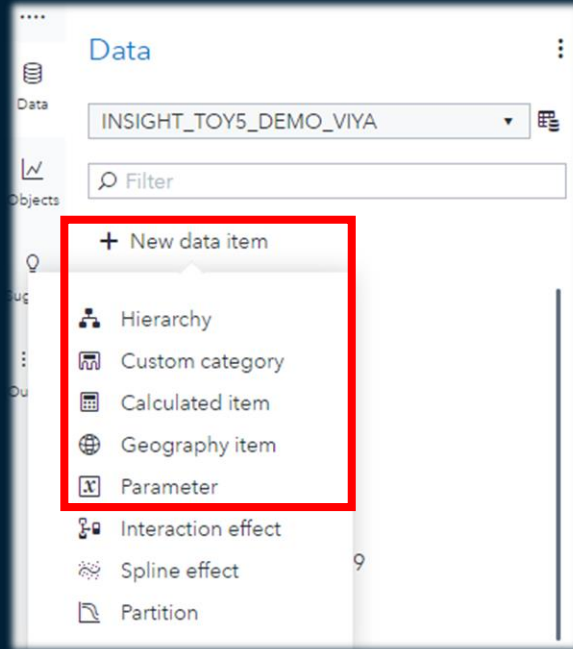


Smart data item creation and management

- Create calculated items on the fly
- Hierarchies
- Smart way to create parameters
- Setting attributes on data items
- Re-use calculated data items

Did you know – Part 1

Smart ways creating and manage data items in SAS Visual Analytics



When we want to create new data items, we normally start our journey by using the built in "New data item" feature.

The main purpose for this presentation is to show how you can create and manage data items in a more efficient way.

Tips & Tricks #36-39

Did you know...

- #36 - Quick Calculations**
Take advantage of the build in quick calculation feature and create very complex calculations with just a few clicks
- #37 - Create hierarchies on the fly**
How to create hierarchies using the data panel only and the crosstab
- #38 - Tired of creating wrong defined parameters**
This might help you to create more correct defined parameters
- #39 - Setting attributes on data items**
Setting attributes can be time consuming, but this little tip can speed up things for you
- #40 - Reuse calculated data items**
Using SAS Visual Analytics Data Views makes it possible to re-use calculated data items, hierarchies, parameters etc.

#36 – Quick Calculations

Take advantage of the build in quick calculation feature and create very complex calculations with just a few clicks



#36 – Quick Calculations

This is an example of a VA expression calculating product sale difference in % from previous year. Imagine creating this expression with just a few clicks 😊

The screenshot displays the SAS Quick Calculations interface for creating a Value At Risk (VA) expression. The expression is structured as follows:

$$\left[\begin{array}{l} \text{_Sum_} \\ \text{Product Sale} \\ \text{_IgnoreAllTimeFra...} \\ \text{Transaction Year} \\ \text{_Inferred_} \\ \text{0} \\ \text{_Full_} \\ \text{No selection} \end{array} \right] - \left[\begin{array}{l} \text{_Sum_} \\ \text{Product Sale} \\ \text{_IgnoreAllTimeFra...} \\ \text{Transaction Year} \\ \text{_Inferred_} \\ \text{-1} \\ \text{_Full_} \\ \text{No selection} \end{array} \right] / \text{Abs} \left(\left[\begin{array}{l} \text{_Sum_} \\ \text{Product Sale} \\ \text{_IgnoreAllTimeFra...} \\ \text{Transaction Year} \\ \text{_Inferred_} \\ \text{-1} \\ \text{_Full_} \\ \text{No selection} \end{array} \right] \right)$$

The interface shows three main components in brackets, separated by a minus sign and a division sign. Each component is a relative period selection tool. The first two components are identical, representing the current and previous year's product sales. The third component is the absolute value of the previous year's product sales, used for normalization. The relative period selection tools include dropdown menus for aggregation (Sum), measure (Product Sale), time frame (IgnoreAllTimeFra...), transaction year, inference (_Inferred_), and a numeric input field for the relative period (0 for current year, -1 for previous year). A 'Full' dropdown and a 'No selection' button are also present at the bottom of each tool.

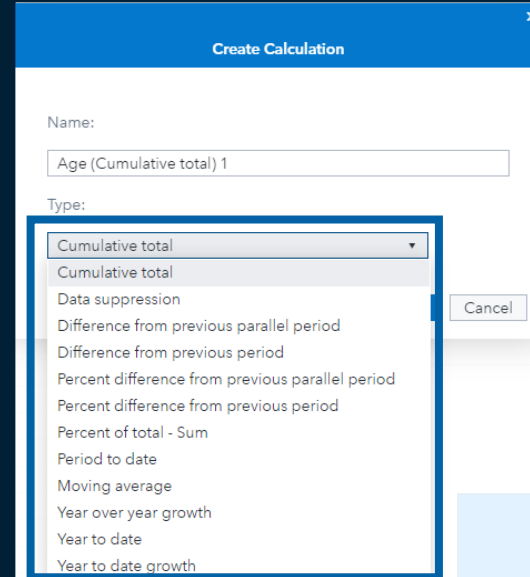


#36 – Quick Calculations

Take advantage of the build in quick calculation feature and create very complex calculations with just a few clicks

Did you know that you can right-click on a measure and have access to pre-defined calculations?

Perfect for creating advanced calculations with just a few clicks 😊 - a very good starting point to get started...



#36 – Quick Calculations

Take advantage of the build in quick calculation feature and create very complex calculations with just a few clicks

Different calculation types depending on what data item type you have selected:

Category

The screenshot shows a 'Create Calculation' dialog box with a blue header. The 'Name' field contains 'Customer (Distinct count) 1'. The 'Type' dropdown menu is open, showing options: 'Distinct count' (selected), 'Distinct count', 'Count', and 'Number missing'. 'OK' and 'Cancel' buttons are at the bottom right.

Measure

The screenshot shows a 'Create Calculation' dialog box with a blue header. The 'Name' field contains 'Product Sale (Cumulative total) 1'. The 'Type' dropdown menu is open, showing a list of calculation types: 'Cumulative total' (selected), 'Cumulative total', 'Data suppression', 'Difference from previous parallel period', 'Difference from previous period', 'Percent difference from previous parallel period', 'Percent difference from previous period', 'Percent of total - Sum', 'Period to date', 'Moving average', 'Year over year growth', 'Year to date', and 'Year to date growth'. 'Cancel' is visible on the right side.

#36 – Quick Calculations

Take advantage of the build in quick calculation feature and create very complex calculations with just a few clicks

Using the Crosstab object will also provide a possibility to create quick calculations 😊 Just right-click on specific column (i.e. Product Sale) and select “Create and add calculation...”

Facility Continent	Facility Country	Product Sale	Product Cost of Sale
Africa	Egypt	207747	
	Morocco	239816	
	Nigeria		
	South Africa		
Asia	China		
	India		
	Indonesia		
	Israel		
	Japan		98184
	Russia		157324
	Saudi Arabia		48643
	Singapore		51072
	South Korea		51288

Create and Add Calculation

Name:

Type:

Special THANKS to Torben Skov finding this nice little feature 😊

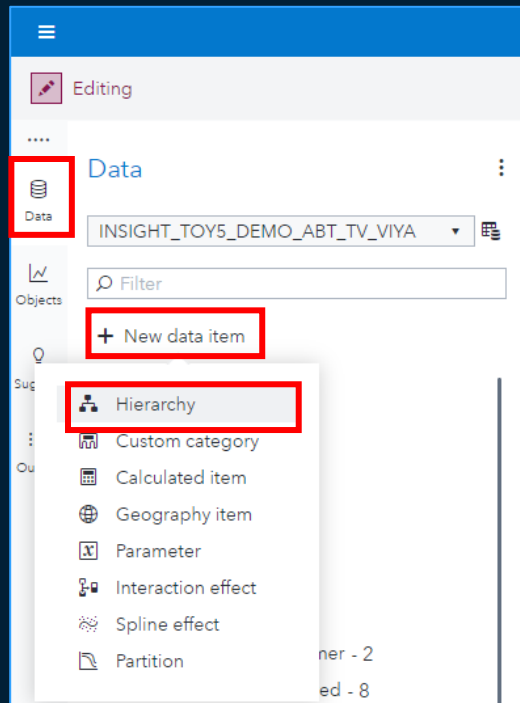
#37 - Create hierarchies on the fly

How to create hierarchies using the data panel only and the crosstab



#37 - Create hierarchies on the fly

How to create hierarchies using the data panel only and the crosstab



Normally when we create hierarchies, we use the built in “New data item” feature to define our hierarchies.

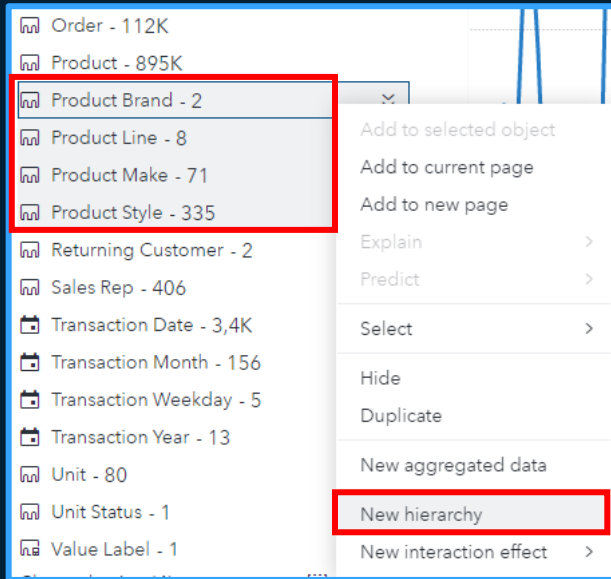
Are there any other ways (or smarter ways) to create hierarchies in VA?

Yes, there are 😊

#37 - Create hierarchies on the fly



How to create hierarchies using the data panel only and the crosstab



Why not use the right data panel, select the data items you want to be included in your hierarchy and then just right-click on them and select “New hierarchy” 😊

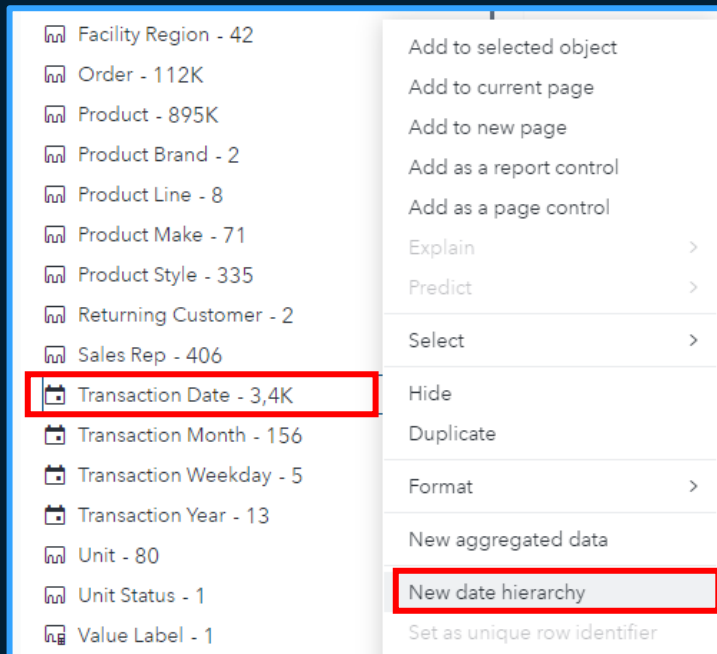
Please Note: The order of data items selected are also representing the order of your levels in the hierarchy!

#37 - Create hierarchies on the fly



How to create hierarchies using the data panel only and the crosstab

A smart way to create date hierarchies



Right-click on a date column/data item in the right data panel and select “New date hierarchy” and vola...

A date hierarchy is created with Year, Quarter, Month and Day

#37 - Create hierarchies on the fly



How to create hierarchies using the data panel only and the crosstab

The crosstab can also be used to create hierarchies (right-click in your category section of your crosstab and select “Create and add hierarchy to rows”)

Product Brand	Product Line	Product Make	Product Style	Product Sale	Product Cost of Sale
			Black Mixed	47 115	43 687
			Blue Mixed	42 139	39 054
			Gold Mixed	33 062	30 636
			Green Mixed	34 311	31 805
				31 181	28 865
		Party E		39 494	36 592
				44 527	41 268
				37 098	34 347
				36 367	33 677
				32 466	30 104
				34 810	32 260
				21 605	20 228
				17 543	16 436
				18 643	17 448
Novelty	Bead			17 371	16 263
				19 461	18 220
		Plastic		20 362	19 041
				17 918	16 759

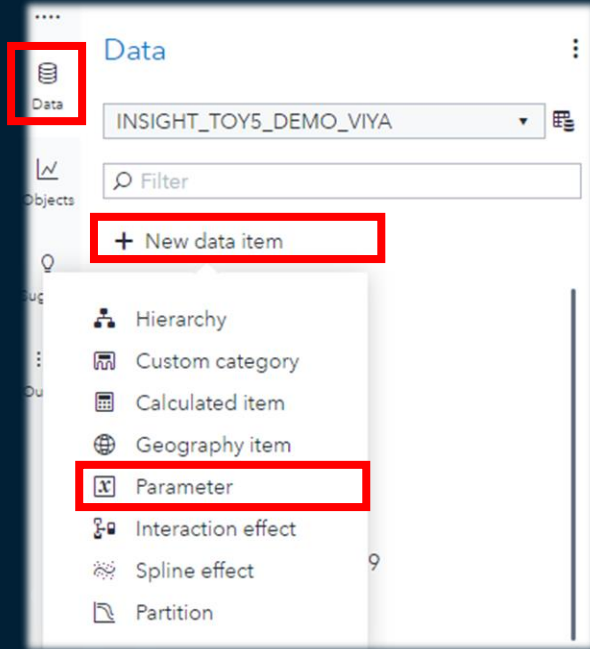
#38 – Tired of creating wrong defined parameters

This might help you to create more correct defined parameters



#38 – Tired of creating wrong defined parameters

This might help you to create more correct defined parameters



When we create parameters, I think most of us are using the “New data item” menu and create the parameters from scratch.

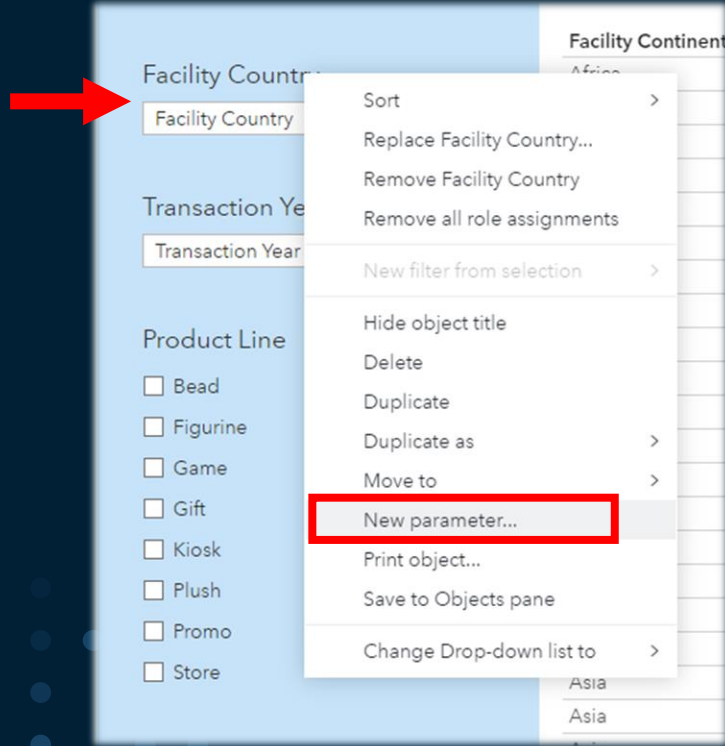
How many of you have created a wrong defined parameter? 😊

Here are some tips...

#38 – Tired of creating wrong defined parameters



This might help you to create more correct defined parameters



Did you know that you can use objects to create parameters?

Example: I have a drop-down list object in my report, and I want to create a parameter to be used in the specific drop-down list. Just right-click on the object and select “New parameter...” and VA will help you with the parameter definition 😊

Using the data panel will also give you some help with the data parameter definition.

#39 – Setting attributes on data items

Setting attributes can be time consuming, but this little tip can speed up things for you



#39 – Setting attributes on data items



Setting attributes can be time consuming, but this little tip can speed up things for you

The screenshot shows the SAS Data Studio interface. On the left, the 'Data' panel is highlighted with a red box. It contains a list of data items, with 'Product Cost of Sale' selected and also highlighted with a red box. A context menu is open over 'Product Cost of Sale', with 'Aggregation' and 'Format' options highlighted with red boxes. The main window displays a table with columns 'Country' and 'Product Line'. The table data is as follows:

Country	Product Line
Africa	Figurine
Africa	Plush

Did you know that you can manage multiple data items using the left data panel?

You can set format and aggregation type on multiple selected data items 😊

#40 – Reuse calculated data items

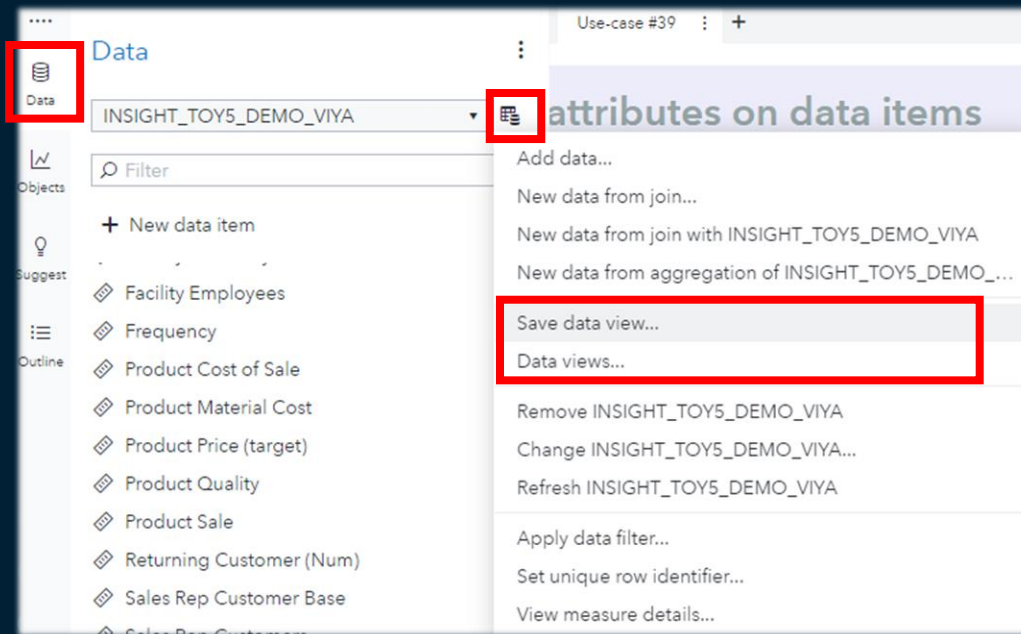
Using SAS Visual Analytics Data Views makes it possible to re-use calculated data items, hierarchies, parameters etc.



#40 – Reuse calculated data items



Using SAS Visual Analytics Data Views makes it possible to re-use calculated data items, hierarchies, parameters etc.



You can save your calculated data items and data item properties in a data view and re-use them later

Q&A