Pyramid Analytics

Dynamic List and Remainder

Objective:

A list with dimension values and the corresponding measure values should only display a certain proportion of the total quantity, e.g. the "Top 10%", i.e. the minimum selection of values that together make up 10% of the total sum of the measure. The remainder of the list should be combined into one list entry ("All others"). The selection should be dynamic, i.e. it should be easy to switch to the "Top 25%" list, for example, without having to make any manual selections.

Solution: Dynamic top x% list

We use the sales data model of the Explore server and build a simple list of product names (dimension "Product") and their sales figures (key figure "Sales"). The percentage can be set using a slider. In the somewhat less dynamic variant also shown here, you have to decide on a fixed percentage.

Step 1:

In the Discover "Dynamic List and Remainder 1", we do not yet have a de facto dynamic, but we can easily see from the two additional columns whether the results generated in the end are correct. For example, a "Top 10%" list must contain these seven top-selling products.

In-Memory DB \ Training Models (2023) \ Sales Dynamische Liste und Rest 1								
	Sales, % Gesamtsumme Sales, Σ % Gesamtsumme Sales nach Product							
7	Product	Sales	% Gesamtsumme Sales	Σ % Gesamtsumme Sales				
+	Gesamtsummen	23,268,242.45	100.00%					
	Touring-2000 Blue, 60	415,371.68	1.79%	1.79%				
	Touring-3000 Yellow, 44	368,859.63	1.59%	3.37%				
	Touring-1000 Blue, 54	345,639.40	1.49%	4.86%				
	Touring-1000 Blue, 60	343,663.50	1.48%	6.33%				
	Touring-1000 Yellow, 60	341,502.15	1.47%	7.80%				
1::::,	Road-650 Red, 48	311,504.96	1.34%	9.14%				
lilly,	Mountain-200 Silver, 46	305,711.96	1.31%	10.45%				
F,	Mountain-200 Black, 46	297,467.29	1.28%	Top 10% 11.73%				
	Touring-3000 Blue, 44	292,144.55	1.26%	12.99%				
\sim	Road-650 Red 44	290 963 65	1.25%	14.22%				

Step 2:

In step 2, the dynamic lists are built using formulas. As we not only want to see the top selection in the final result, but also the remainder, we need a pair of formulas, for example the "Top 10%" list and the "Flop 90%" list or generally the "Top x%" list and the "Flop 100-x%" list.

The formulas consist of a standard list object to which a corresponding "Top percentage" filter is applied with the specification of the key figure (here: Sales). In the latter, the percentage can be hard-coded (see Formulate "List of top 10% products by sales") or kept dynamic via a parameter. To define the formulate counterpart, in the filter object has to be specified that the defined quantity is to be excluded from the result set, i.e. we receive a list without the top 10% or without the top x%!

For the variant with the dynamic percentage value parameter, it is therefore important that this parameter is created and saved first so that it can be used by both dynamic formulas (see formulas "List of top x% product by sales" and "List of flop 100-x% product by sales").

(i) In-Memory DB \ Training Models (2023) \ Sales	Liste	der Flop 100-x% Product nach Sales			
Standardliste Product - (All)	% 2entwe s - Sales				
Oberer Prozentwert Eigenschaften					
Liefert eine abgeleitete Liste der TOP-Elemente aus der Argumente					
vorhandenen Liste zurück, die äuf einen angegebenen Prozentsatz der Gesamtsumme der gesamten Liste addiert werden.	Prozentwert ☑ Parameterisieren	Parameter auswählen			
(A) Argumente eingeben	Prozentwert	 Image: Image: Ima			
Einen Datenpunkt wählen Wählen Sie einen Datenpunkt, der evaluiert werden sollte.	✓ Aus Ergebnisliste ausschießen	▼ ■ noz-next Content			
Zum Beispiel Vertrieb für 2010	rui riop ausschneben:	▼HOW TO ▼Dynamische Liste und Rest			
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In Discover "Dynamic List and Remainder 2", all formulate objects are now available in the business logic of the "Product" dimension. To try out the effects of the formulas for the list, only one of them should be selected in each case. All individual values of the dimension must be deselected. The slider only appears for dynamic formulas. If you select several formulas - especially the two of a pair - you will of course always see the complete list ("Top x" + "Flop 100-x").

<	Elemente			ies ? < (i) In-Memory DB \ Training Models (2023) \ Sales						
Elemente		⊠ • 🔽 Q • ⊖	III Spalten		k	η Prozentwert	15	0		
	Product		all Marka		+	Sales nach Product				
	Adjustable Race		Welle	5	'►	Product		Sales		
	All-Purpose Bike Stand					Gesamtsummen		3,593,660.88		
	AWC Logo Can					Touring-2000 Blue, 60		415,371.68		
	PR Pall Pearing					Touring-3000 Yellow, 44		368,859.63		
			# Product	×		Touring-1000 Blue, 54		345,639.40		
	Bearing Ball	 Bearing Ball Bike Wash - Dissolver 			10004	Touring-1000 Blue, 60		343,663.50		
	Bike Wash - Dissolver			: ×	hth,	Touring-1000 Yellow, 60		341,502.15		
	 Blade Cable Lock 				=	Road-650 Red, 48		311,504.96		
			II Sales			Mountain-200 Silver, 46		305,711.96		
	🗖 = Chain		^		Mountain-200 Black, 46		297,467.29			
	Maine lakelte				Touring-3000 Blue, 44		292,144.55			
		ruppen-Inhalte	√ Filter		, 1	Road-650 Red, 44		289,863.65		
	 R Arbeitsgruppen-Inhalte 		😯 Farbe		6	Mountain-200 Silver, 42		281,932.11		
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	🔻 🚞 Dynamische Liste und Res	nd Rest	Chi Größe							
	📃 🔚 Liste der Flop	100-x% Product nach Sales								
	🔲 🔚 Liste der Flop	90% Product nach Sales	🖵 Tooltip		Ш,					
	🔲 🔚 Liste der Top 1	10% Product nach Sales			5					
	🗹 🏣 Liste der Top 🗴	<% Product nach Sales								
Öffentlicher Inhalt										

Step 3:

In the last step, the two formulas of a pair are now selected so that the overall list appears - the individual formulas are still not selected! Then right-click on the "Top" formulae and select the grouping function "List & group all others". As a result, the list is now formed by the top list and the grouped elements, i.e. those combined into the rest ("All others").

In Discover "Dynamic List and Remainder 3", the steps described above have already been carried out, so the solution can be tried out directly!

