

*Expressions – Aggregations on the Fly*


2018 Q1

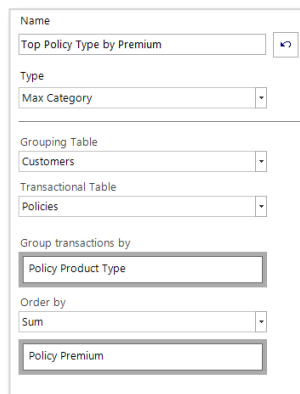
Summary

*On the fly aggregations can now include MaxCategory aggregation and Mode functions. Additionally DateTime variables are now supported in Recency/Relative aggregations.*

The three new features of 'on the fly' aggregations are accessed through the expression window in the same way that existing 'on the fly' aggregations are.

**Max Category: Scenario - identify the most expensive product someone has purchased.** To achieve this we can group records by **Destination** and order each group of records by **sum cost** to identify the most expensive Policy Product a customer purchased.

- Click on the  **Add Aggregation** button and then on the tab that opens up
- In the **Type** drop down select **Max Category**
- Group Transactions by **Policy Product Type**
- Drag **Policy Premium** on to the order by box and chose **Sum**



The screenshot shows a configuration window for an expression named "Top Policy Type by Premium". The settings are as follows:

- Name:** Top Policy Type by Premium
- Type:** Max Category
- Grouping Table:** Customers
- Transactional Table:** Policies
- Group transactions by:** Policy Product Type
- Order by:** Sum
- Field:** Policy Premium

The expression can now be utilised in all the places you would expect to be able to use expressions throughout the Market Insight Suite.

In this example we have grouped by Policies and asked for the Policy Premium in order to find a customer's most expensive Policy Premium.

The data grid allows us to check our expression has identified the correct policy.

Policy Product Type	Policy Premi...	Top Policy
PRODUCT A	5,063.15	PRODUCT A
PRODUCT A	1,645.52	PRODUCT A
PRODUCT B	1,518.94	PRODUCT A
PRODUCT B	1,139.21	PRODUCT A
PRODUCT D	1,012.63	PRODUCT A
PRODUCT B	886.05	PRODUCT A
PRODUCT C	759.47	PRODUCT A
PRODUCT D	632.89	PRODUCT A

Client Reference Number : 182990 (7 items)

Policy Product Type	Policy Premi...	Top Policy
PRODUCT D	742.50	PRODUCT D
PRODUCT B	712.80	PRODUCT D
PRODUCT D	623.70	PRODUCT D
PRODUCT C	415.80	PRODUCT D
PRODUCT A	267.30	PRODUCT D
PRODUCT A	207.90	PRODUCT D

**Mode Function in Value Aggregation type: Scenario – find the most commonly occurring transactional value.** To achieve this we will chose the **value** aggregation, **mode** function and an appropriate transactional value (**Policy Product Type**).

- Click on the **Add Aggregation** button and then on the tab that opens up
- Chose **Value** from the **Type** drop down
- Add **Product Type** as your value variable, **Mode** will be selected by default

Name  
Mode(Policy Product Type)

Type  
Value

Grouping Table  
Customers

Transactional Table  
Policies

Function  
Mode

Policy Product Type


Using these transactions  
Filtered to all transactions

The data grid allows us to check our expression has identified the modal Policy.

Client Reference Number : 130788 (4 items)	
Policy Product Type	Mode Policy
PRODUCT A	PRODUCT D
PRODUCT B	PRODUCT D
PRODUCT D	PRODUCT D
PRODUCT D	PRODUCT D
Client Reference Number : 130968 (2 items)	
Client Reference Number : 133290 (3 items)	
Client Reference Number : 134668 (6 items)	
Policy Product Type	Mode Policy
PRODUCT B	PRODUCT B
PRODUCT A	PRODUCT B
PRODUCT C	PRODUCT B
PRODUCT B	PRODUCT B
PRODUCT C	PRODUCT B
PRODUCT B	PRODUCT B

**Support for DateTime variables in Recency/Relative aggregations: Scenario – identify the last policy product type purchased.**

DateTime variables can be applied in an aggregation in the same way as Date variables have been previously. To tackle the scenario, we will create a **Recency** aggregation ordering the records by **Policy Renewal Date** and picking the **Policy Product Type**.

- Click on the  **Add Aggregation** button and then on the tab that opened up
- Choose **Recency** from the **type** drop down
- Choose the appropriate transactional **Table** in this case **Policies**
- Drag **Policy Renewal Date** on as the **ordering** variable
- Change the **From** option to **Latest to Earliest**
- Drag **Policy Product Type** on, as your **item variable**, to the box headed **Pick the**

The results can be sense checked on a data grid.

Client Reference Number : 255454 (6 items)		
Policy Product Type	Policy Renewal Date	Last Policy Product Type
PRODUCT B	05-06-2013 08:17:40	PRODUCT B
PRODUCT A	14-04-2013 04:49:17	PRODUCT B
PRODUCT A	21-02-2013 23:09:23	PRODUCT B
PRODUCT A	06-01-2013 18:36:29	PRODUCT B
PRODUCT A	03-12-2012 12:26:25	PRODUCT B
PRODUCT A	Unclassified	PRODUCT B

Client Reference Number : 255857 (2 items)		
Policy Product Type	Policy Renewal Date	Last Policy Product Type
PRODUCT B	14-12-2012 17:09:40	PRODUCT B
PRODUCT D	28-11-2012 03:41:08	PRODUCT B

Client Reference Number : 256169 (10 items)		
Policy Product Type	Policy Renewal Date	Last Policy Product Type
PRODUCT A	05-06-2013 02:56:19	PRODUCT A
PRODUCT C	16-03-2013 12:32:42	PRODUCT A
PRODUCT A	24-10-2012 20:16:19	PRODUCT A