Starting shortly

Please wait!

ActivityInfo

Understanding formulas and Pivot Tables for Calculated measures in ActivityInfo
Meet your instructors

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Calculated Measures Webinar Series

1. Understanding formulas and Pivot Tables for Calculated measures in ActivityInfo
   July 26

2. Discover the power of Calculated measures in ActivityInfo
   Aug 2

3. Unleashing data insights - Office hour session on Calculated measures in ActivityInfo
   Aug 9
Presentation outline

Overview

● Explaining concepts
● Using formulas in ActivityInfo
● Designing a pivot table using ActivityInfo
  ○ Adding a filter to a pivot table
● Introducing Calculated measures in ActivityInfo
Concepts

Formulas, Pivot tables and Calculated measures

Formulas

\[ \text{SUM}((c4vegjwlk7x6o613, totalGirls + totalWomen + totalF) + \text{SUM}((c5o9vzik8habx32, totalGirls + totalWomen + totalF)} \]

Pivot tables

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm Reduction</td>
<td>11900</td>
</tr>
<tr>
<td>Health services - Infrastructure</td>
<td>11800</td>
</tr>
<tr>
<td>Hygiene Promotion &amp; Behaviour ...</td>
<td>23800</td>
</tr>
<tr>
<td>Water Supply - Community</td>
<td>23600</td>
</tr>
<tr>
<td>Water Supply - Household Level</td>
<td>23800</td>
</tr>
</tbody>
</table>

Calculated measures
Speed quiz

● What is a formula?
  ○ A) A recipe that tells the computer what to do with the data
  ○ B) A visual representation of data in a structured manner
  ○ C) A tool for grouping and summarizing data

● What is the primary purpose of Pivot tables?
  ○ A) To create custom calculations based on existing data
  ○ B) To reorganize and summarize large amounts of data
  ○ C) To perform complex data analysis using formulas

● How do Calculated measures differ from calculated fields in ActivityInfo?
  ○ A) Calculated measures are not tied to a form context, while calculated fields are.
  ○ B) Calculated measures allow you to group and summarize data, while calculated fields enable advanced calculations.
  ○ C) Calculated measures are only useful for quantity fields, while calculated fields are used for advanced insights.
Using formulas
Using formulas

What can you do with formulas?

Calculating values
- Data entry
- Data analysis

Defining rules
- relevance
- validation
- permissions
- locks
Using formulas

What can you do with formulas?

Calculating values

FIELD_CODE + 1

FIRST_A + FIELD_B

WOMEN / (MEN + WOMEN) * 100
Using formulas

What can you do with formulas?

Defining rules

AGE < 18

AGE > 0 && AGE <= 18

Name == “Jeric” || Name == “Victoria”
How do you write a formula?

1. Define your output
2. Identify your inputs
3. Combine your inputs
Using formulas

How do you write a formula?

1. Define your output

Calculating values
- Use arithmetic or statistical operators
- Combine multiple values together
- Should return a single value

Defining rules
- Use logical operators (IF statements, comparisons)
- Should evaluate to TRUE or FALSE
Using formulas

How do you write a formula?

2. Identify your inputs

Refer to a field using a symbol.

You can use:

a. field label (with square brackets)

b. field code

c. internal ID of the field (accessed by exporting the form fields)
Using formulas

How do you write a formula?

2. Identify your inputs

Selecting an option from single or multiple select fields

You can:
   a. Test equality with a text string
      GENDER == “Male”
   b. Use the dot notation
      GENDER.Male
      AGE_GROUP.[Children under 5]
Using formulas

How do you write a formula?

3. Combine your inputs

Use arithmetic operators

a. +
b. -
c. *
d. /
e. ( )

WOMEN / (MEN + WOMEN) * 100
Using formulas

How do you write a formula?

3. Combine your inputs

Use a function

a. Write the name of the function
b. Enclose arguments between parentheses

MIN(3, 4)

- Function name
- First argument
- Second argument
Using formulas

How do you write a formula?

**Formula editor**

Enter your formula here...

**Functions**

Logical functions:

- AND (\&\&)
- EQUAL (=)
- NOT EQUAL (\!\!=)
- NOT (\!)
- OR (||)
- GREATER (>)
- GREATER OR EQUAL (\geq)
- LESS (<)
- LESS OR EQUAL (\leq)
Demo
ActivityInfo is a Data Analysis and Visualization Tool
Analyzing your data in ActivityInfo

Create Pivot tables report that connects to your data in real-time

Designing Pivot tables

- **a)** Add Measures
- **b)** Add Dimension
- **c)** Add Filter
Pivot tables, charts and lines

Distributions & Costs

<table>
<thead>
<tr>
<th>Measures</th>
<th>Drenthe</th>
<th>Flevoland</th>
</tr>
</thead>
<tbody>
<tr>
<td># chairs</td>
<td>110</td>
<td>80</td>
</tr>
<tr>
<td># desks</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td># lab kits</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Total cost (€):</td>
<td>1550</td>
<td>1450</td>
</tr>
<tr>
<td>Cost of desks (€):</td>
<td>600</td>
<td>650</td>
</tr>
<tr>
<td>Costs of chairs (€):</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Cost of lab kits (€):</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>
Disseminating your insights

Saving your reports as a resource

Save report as copy

Report name

Pivot table report on beneficiaries

a. Databases
   - 2023 Wash Activities
   - 5. Activity 4: Winterization kits 2020
   - AA. COVID-19
   - ActivityInfo.Customers

b. My reports

FOLDER
   - 01 Example 1: Based on Spotlight
   - Reference Data

Cancel
Save report
Watchouts while Using Pivot Tables

When you design a pivot table, you should note:

✓ The behaviour differs depending on the field type inserted in measures
✓ The row context
Demo
Expanding the analytical capabilities of Pivot Tables with Calculated Measures
Introducing Calculated Measures

Expanding your analysis

When you create a calculated measure, you add a new measure to your data model that goes beyond the fields already added to your forms.

Calculated measures are not bound by row context, thus opening up a range of new analytical possibilities.
Introducing Calculated Measures

Expanding your analysis

When you create a Calculated Measure, you can:

 ✓ **Combine data** from different forms into one measure
 ✓ **Use different types of aggregations** together in the same measure
 ✓ **Aggregate data multiple times** at different levels
 ✓ **Apply an explicit filter** to run a calculation on a subset of data
Introducing Calculated Measures

Supported functions

Aggregation

- SUMX
- AVERAGEX
- COUNTX
- COUNTDISTINCTX
- MINX
- MAXX

Syntax

(Table, Expression)
Introducing Calculated Measures

Supported functions

Table

- SUMMARIZE
- UNION
- SELECTCOLUMNS
- PIVOTLONGER
Introducing Calculated Measures

Creating a calculated measure

Calculated measures are added in Pivot Tables
Introducing Calculated Measures

Creating a calculated measure

In the formula editor, you will see both the list of forms and the fields in each form.
Demo
Q&A
Up next

A hands-on practise approach to calculated measures

What you’ll learn:

- Combine data from different forms into a single measure
- Utilize different types of aggregations in the same measure
- Aggregate data at multiple levels for comprehensive insights
Feedback