

Starting
shortly

Please
wait!

ActivityInfo

**Understanding formulas and Pivot Tables for Calculated
measures in ActivityInfo**



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

```
SUMX(c4vegjwlk7x6o613, totalGirls+ totalWomen+ totalF  
+  
SUMX(c5o9vzilk8habx32, totalGirls+ totalWomen+ totalF
```

Pivot tables

Select visualization ▼

Name	Value
Harm Reduction	11900
Health services - Infrastructure	11800
Hygiene Promotion & Behaviour ...	23800
Water Supply - Community	23600
Water Supply - Household Level	23800

Calculated measures

Report design

Fields

Select forms

WASH Cluster SWS

WASH CLUSTER SWS
Count of all records

MONTH — WASH CLUSTER SWS
Reporting Month

DATE — WASH CLUSTER SWS
Activity Start Date

DATE — WASH CLUSTER SWS
Activity End Date

REFERENCE — WASH CLUSTER SWS
Activity Status

REFERENCE — WASH CLUSTER SWS
Donor

REFERENCE — WASH CLUSTER SWS
Implementing Partner

Measures

Drop your measures here

+ Add calculated measure

Rows

Measures

Columns

Drop your dimensions here

Filter by...

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

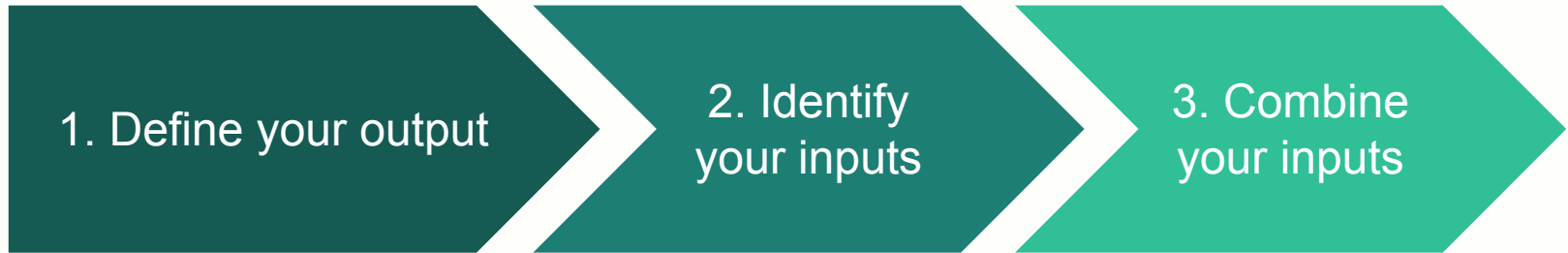
```
AGE < 18
```

```
AGE > 0 && AGE <= 18
```

```
Name == "Jeric" || Name == "Victoria"
```

Using formulas

How do you write a formula?



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:

- field label (with square brackets)
- field code
- internal ID of the field (accessed by exporting the form fields)

MONTH

Label **a**

Project start month

Code **b**

START_MONTH

Description

Add additional information about this field

Settings

- Key
- Required
- Hide from entry
- Hide in table
- Set relevance rules
- Set validation rules
- Reviewer only

Delete field Done

	A	B	C	D	E
1	FormId	FieldId c	FieldCode	FieldType	FieldName
9	c36sy26ljg0q4ih8n	cgkh1k5kq6k0gsmv	START_MONTH	month	Project start month
10	c36sy26ljg0q4ih8n	c197davkq6k0nomw	END_MONTH	month	Project end month
11	c36sy26ljg0q4ih8n	cpft1dwkq6k1vdl12	F1	single sele	Project status

Using formulas

How do you write a formula?

2. Identify your inputs

Selecting an option from single or multiple select fields

You can:

- Test equality with a text string
- Use the dot notation

```
GENDER == "Male"
```

```
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. ()

$$\text{WOMEN} / (\text{MEN} + \text{WOMEN}) * 100$$

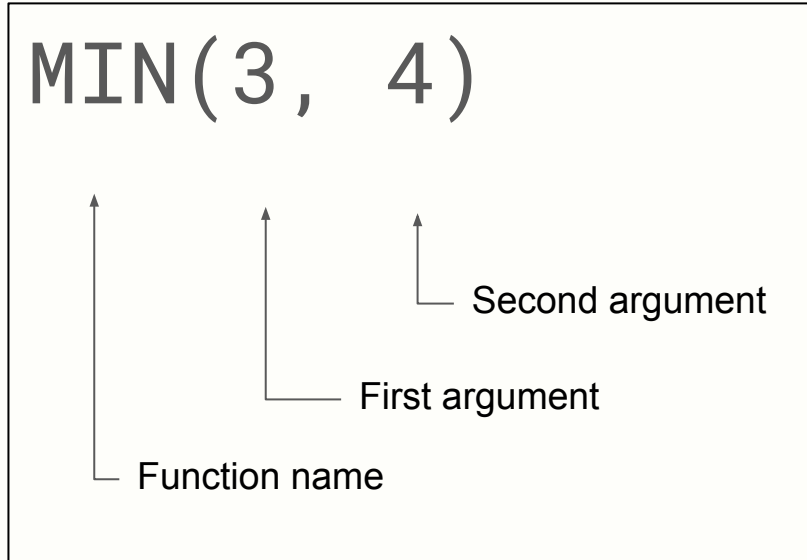
Using formulas

How do you write a formula?

3. Combine your inputs

Use a function

- Write the name of the function
- Enclose arguments between parentheses



Using formulas

How do you write a formula?

CALCULATED

Label

Code

Description

Add additional information about this field

Settings

- Key
- Required
- Hide from entry
- Hide in table
- Set relevance rules
- Set validation rules
- Reviewer only

Formula

[Formula editor](#)

Formula editor

Functions

Logical functions

- AND (&&)
- EQUAL (==)
- NOT EQUAL (!=)
- NOT (!)
- OR (||)
- GREATER (>)
- GREATER OR EQUAL (>=)
- LESS (<)
- LESS OR EQUAL (<=)

Enter your formula here...

Fields

- Reporting Month
- activityStartDate
- Activity Start Date
- activityEndDate
- Activity End Date
- Activity Status activityStatus
- Donor donor
- Implementing Partner
- implementingPartner
- Region, Zone & Woreda
- Response Type responseType
- Health Activity

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

Report design

Admin 2

- ADMIN 2
Count of all records
- REFERENCE — ADMIN 2
State/Region
- TEXT — ADMIN 2
Name
- TEXT — ADMIN 2
Name (Burmese)
- TEXT — ADMIN 2
P-CODE
- GEOGRAPHIC POINT — ADMIN 2
Centroid
- + Add calculated field

Admin 1

- ADMIN 1
Count of all records

Measures

- QUANTITY
Count of all records
SUM
- + Add calculated measure

Rows

Drop your dimensions here

Columns

- State/Region

Filter by...

- ADMIN 2 — P-CODE
MMR001D001

a) Add Measures

b) Add Dimension

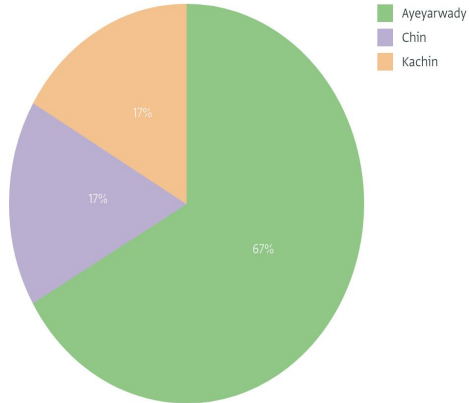
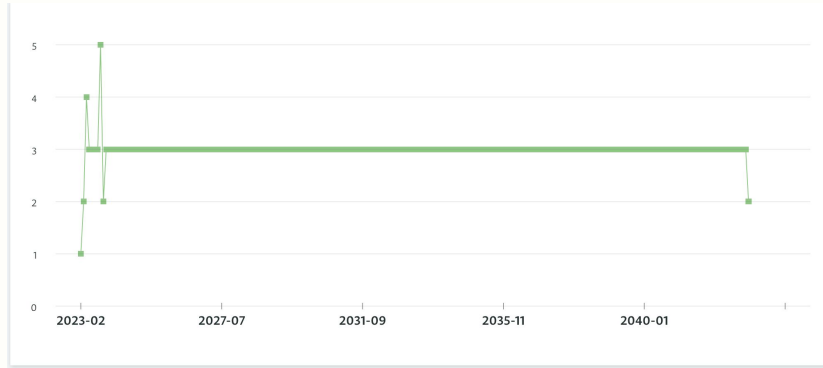
b) Add Dimension

c) Add Filter

Pivot tables, charts and lines

REPORT Distributions & Costs

Measures	Drenthe	Flevoland
# chairs	110	80
# desks	60	65
# lab kits	40	40
Total cost (€):	1550	1450
Cost of desks (€):	600	650
Costs of chairs (€):	400	400
Cost of lab kits (€):	400	400



Disseminating your insights

Saving your reports as a resource

Save report as copy

Report name

a Databases ▶

b My reports

DATABASE	2023 Wash Activities	▶	FOLDER	01 Example 1: Based on Spotlight
DATABASE	5. Activity 4: Winterization kits 2020	▶	FOLDER	Reference Data
DATABASE	AA. COVID-19	▶		
DATABASE	ActivityInfo Customer	▶		

✕ 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

The screenshot displays the ActivityInfo report design interface. At the top, there is a search bar and a breadcrumb trail: DATABASES > SIMPLE 3W > HEALTH CLUSTER 5WS > UNTITLED REPORT. Below this, the report title 'Untitled report' is shown. The main area is divided into two panels: 'Report design' on the left and 'Measures' on the right. The 'Report design' panel lists various fields under the 'Health Cluster 5Ws' category, including 'Count of all records', 'Reporting Month', 'Activity Start Date', 'Activity End Date', 'Activity Status', 'Donor', and 'Implementing Partner'. The 'Measures' panel is currently empty, with a red box highlighting the '+ Add calculated measure' button. Other sections like 'Rows' and 'Columns' are also visible but empty.

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

The screenshot shows the 'Formula editor' interface. On the left, there is a 'Functions' panel with 'Logical functions' expanded, listing: AND (&&), EQUAL (==), NOT EQUAL (!=), NOT (!), OR (||), GREATER (>), GREATER OR EQUAL (>=), LESS (<), LESS OR EQUAL (<=), IF, ISNUMBER, and ISBLANK. The main area contains the text 'Enter your formula here...'. On the right, a 'Forms' panel is expanded, showing a list of forms and their fields: Health Cluster 5Ws, Reporting Month (reportingMonth), Activity Start Date (activityStartDate), Activity End Date (activityEndDate), Activity Status (activityStatus), Donor (donor), Implementing Partner (implementingPartner), Region, Zone & Woreda, Response Type (responseType), Health Activity, Total beneficiaries targeted (totalBnf_targeted), and Total beneficiaries reached to.

Demo

Q&A

Up next

A hands-on practise approach to calculated measures



**Discover the power of
Calculated measures
in ActivityInfo**

Aug 2

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