



easyBI

How to Debug a Report

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"Start simple and then dig deeper"



Community Days
May 24-25, 2018

**Problem
symptoms**

**Main error prone
areas**

**Demo how to
debug MDX**

“

My report is broken =(
But yesterday it was working.

SAD CUSTOMER

“

**It is not what I wanted.
This doesn't make sense!**

DISAPPOINTED CUSTOMER

“

**I can't save my measure!
It keeps telling me something
about set.**

FRUSTRATED CUSTOMER

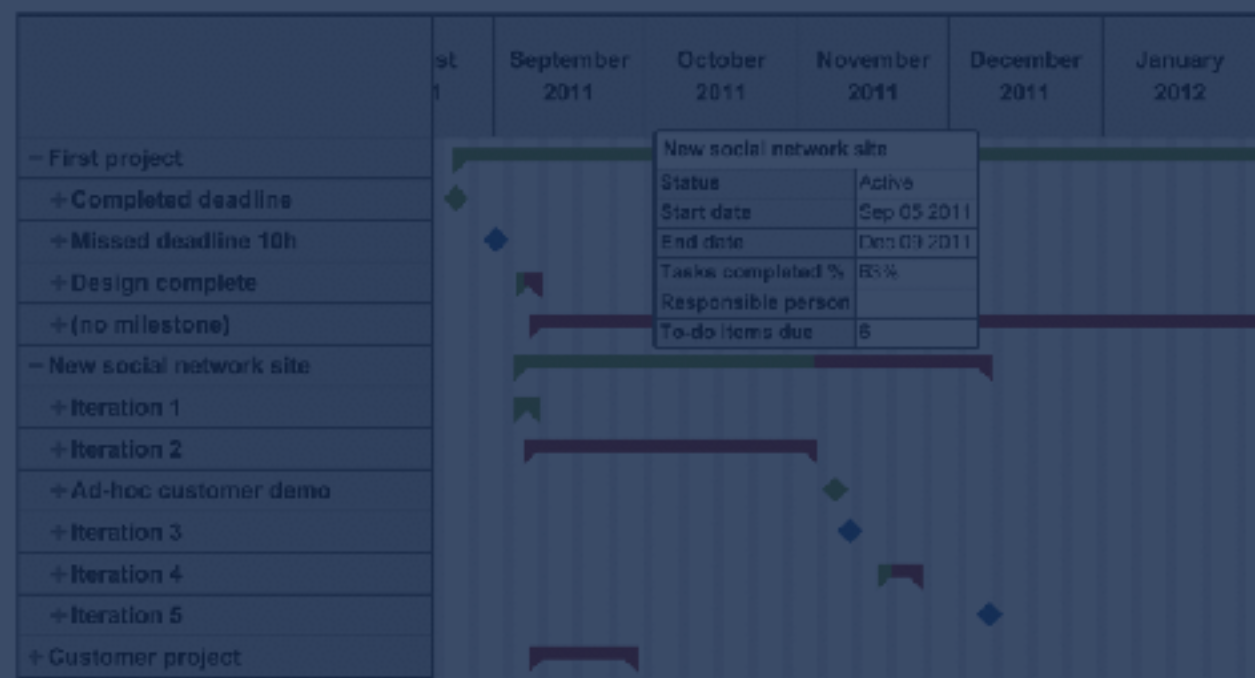
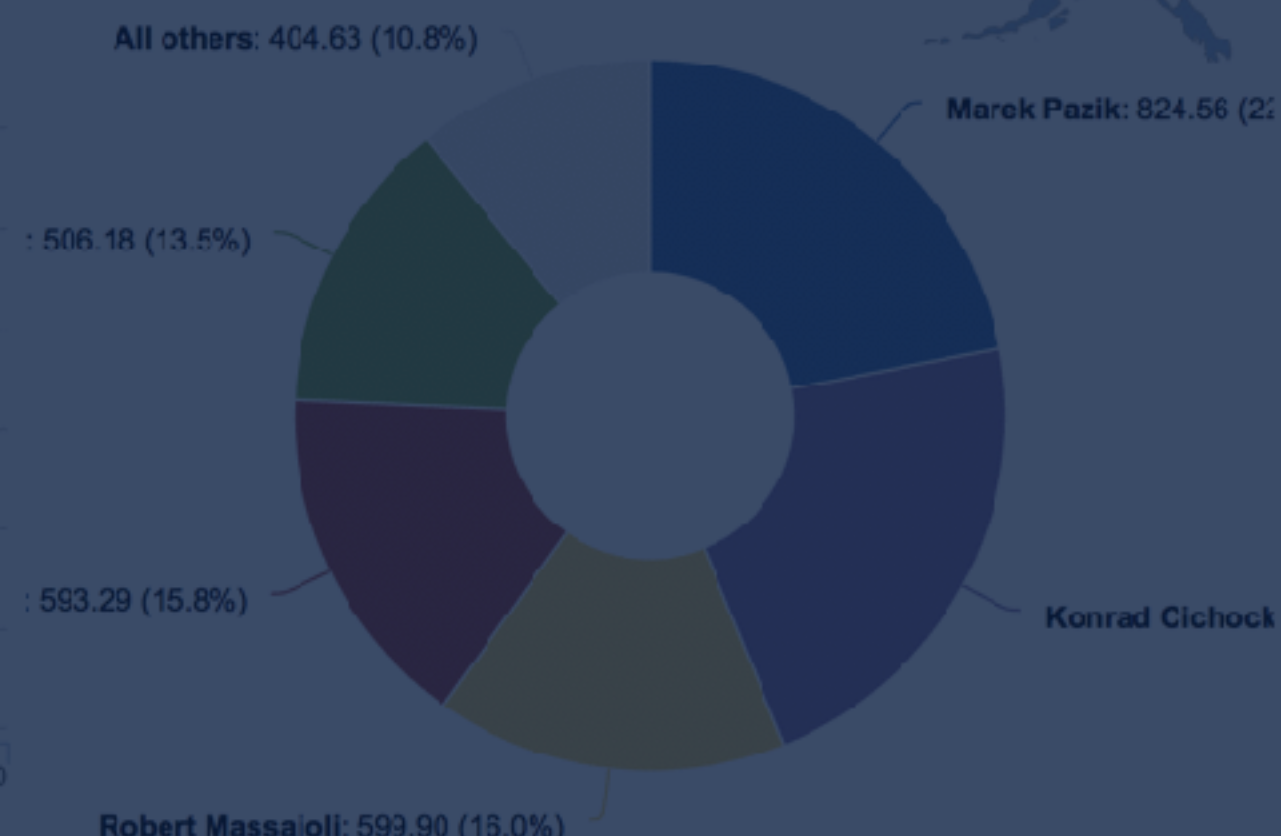
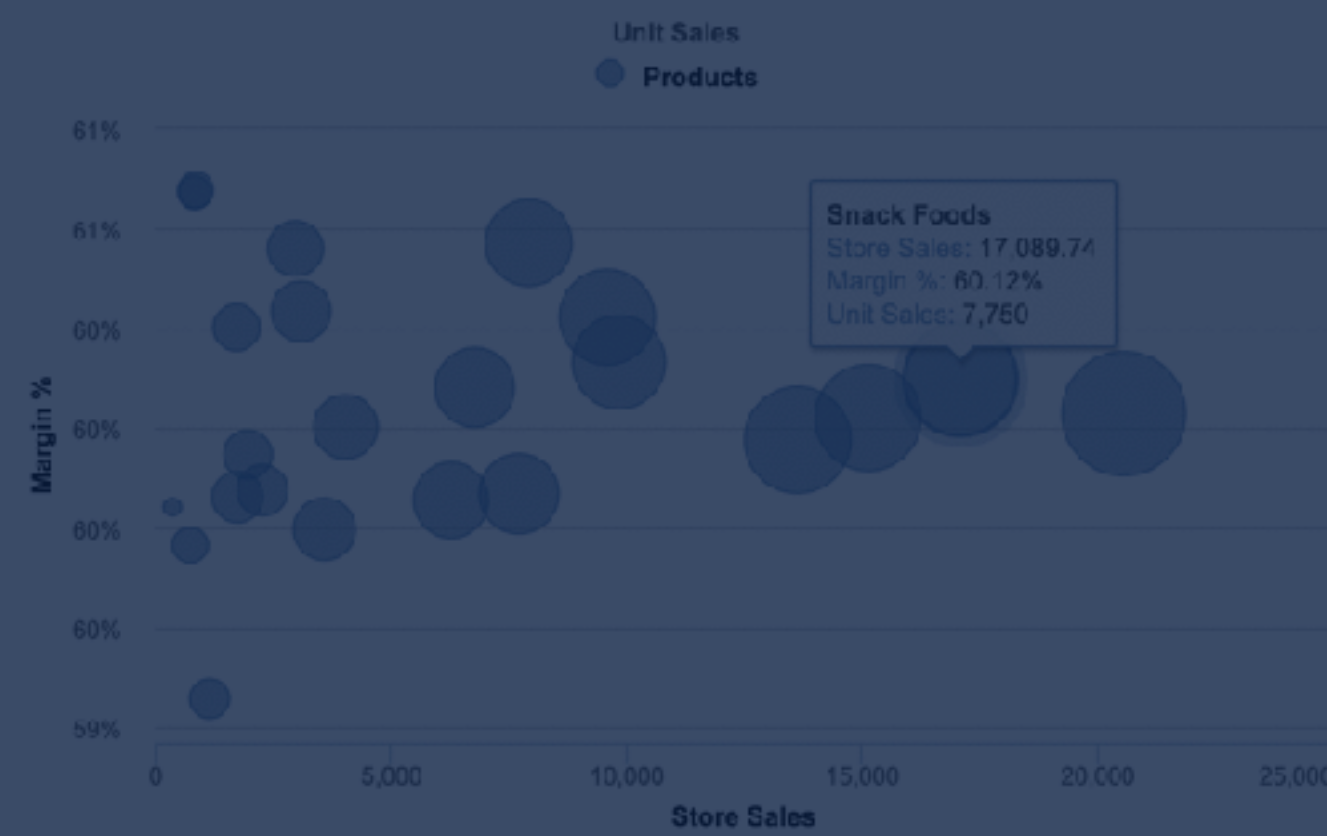
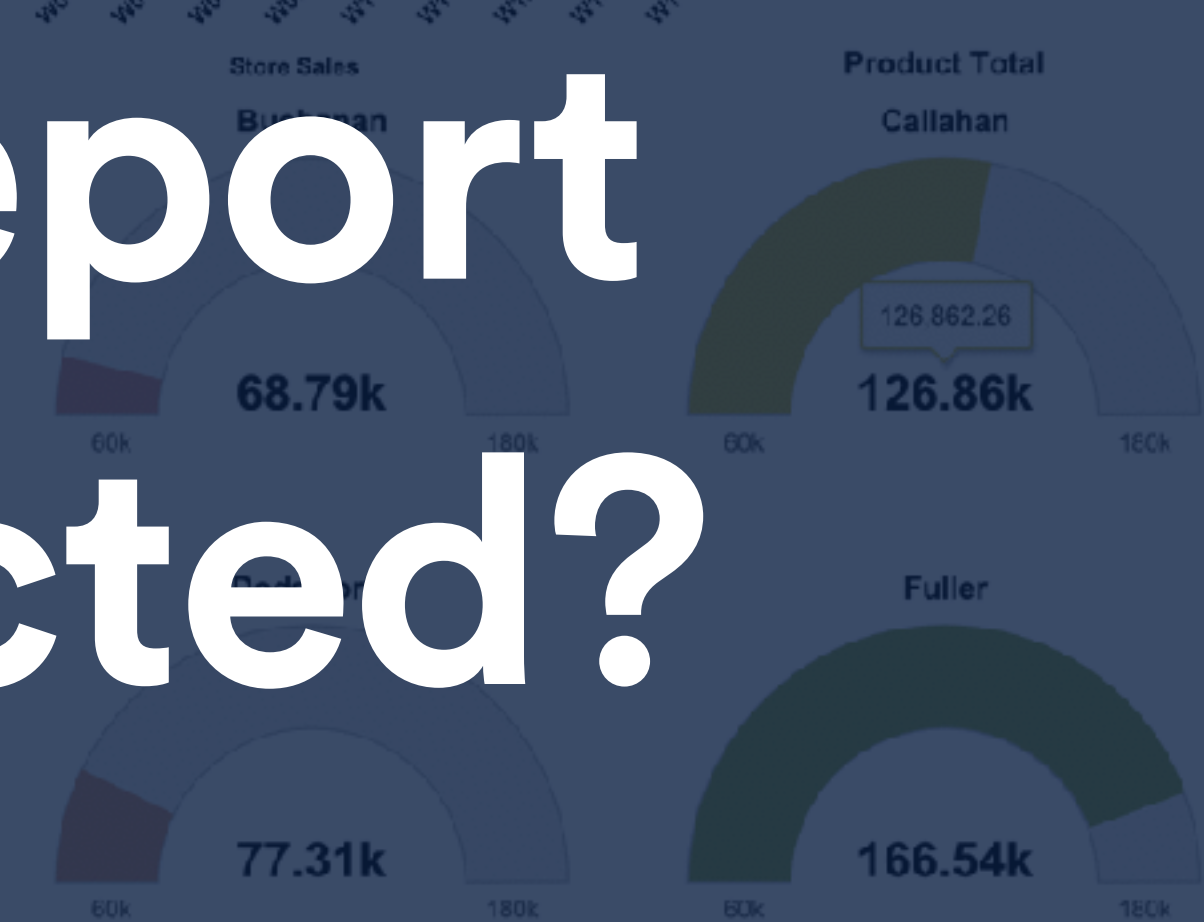
“

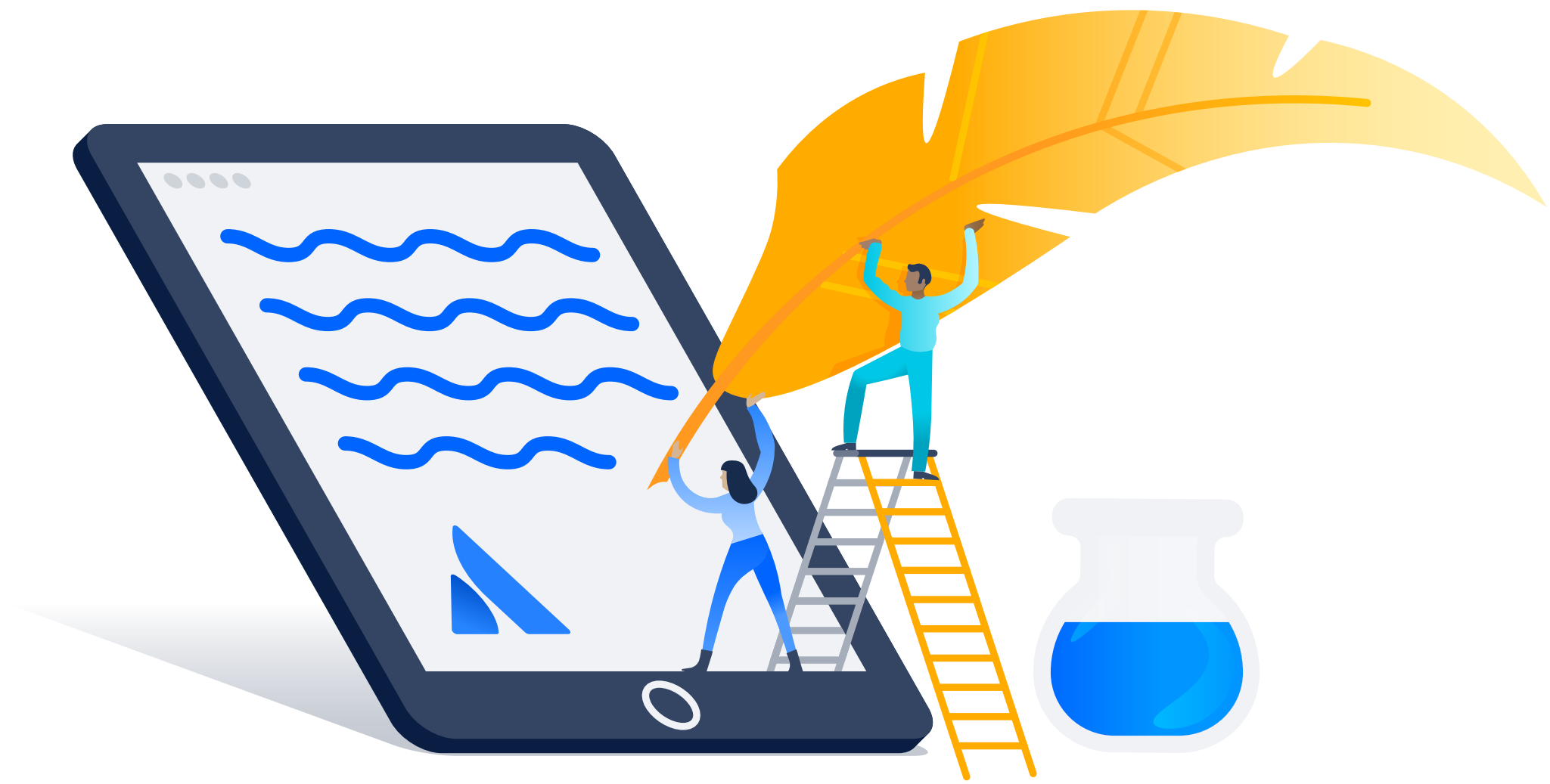
Why is my report empty?

CONFUSED CUSTOMER

What to do when a report doesn't work as expected?

	Store Sales	Store Cost	Unit	Average
— All Customers	130,626.35	55,752.240	→ Drill across	
— USA	130,626.35	55,752.240	→ Select this	
→ CA	36,175.20	14,431.085	→ Remove	
— OR	40,170.28	16,081.073	→ Order by	
→ Albany	4,491.26	1,782.817	→ Top rows	
→ Beaverton	2,407.97	950.359	→ Bottom rows	
→ Corvallis	5,695.13	2,281.248	→ Filter rows	
→ Lake Oswego	2,262.56	907.8483	→ Call formatting	
→ Lebanon	5,934.62	2,390.0572		1,102 6.41
→ Milwaukie	2,892.32	1,155.6925		2,525 6.49
→ Oregon City	2,324.62	929.0752		1,345 6.92
→ Portland	2,122.12	847.5187		1,001 6.55
→ Salem	4,251.81	1,697.6039		2,104 6.28
→ W. Linn	2,161.81	871.0418		1,041 6.59





Write to Support

Wait for replay

Perform instructions

(Repeat)

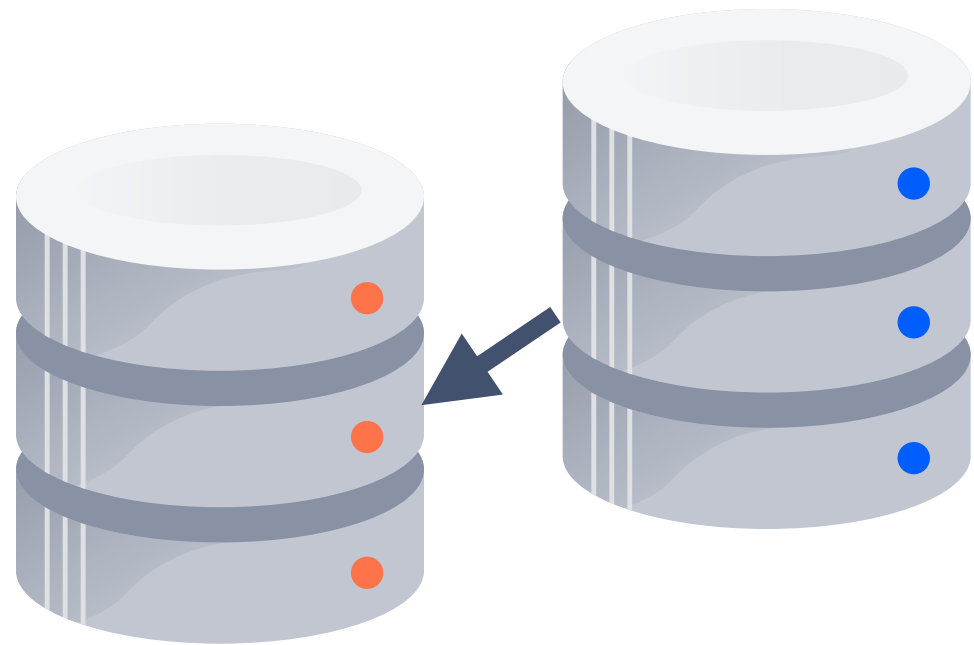
Fix the problem



Find & fix it by yourself

**(and gain freedom
using eazyBI)**

Debugging Areas



Data Availability



Report Structure

$2 + 2 = 5$

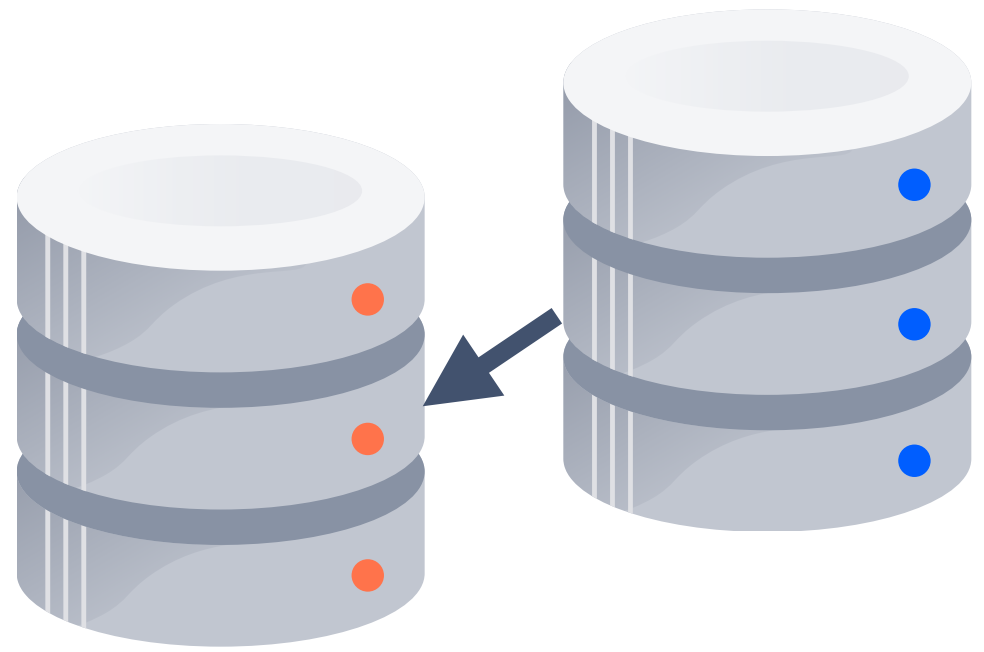
Calculations

“

My report is broken =(
But yesterday it was working.



SAD CUSTOMER



$$2 + 2 = 5$$

Data Availability

- Data updated after the data import
- Data are not selected for data import
- Data import failed

Data
Availability

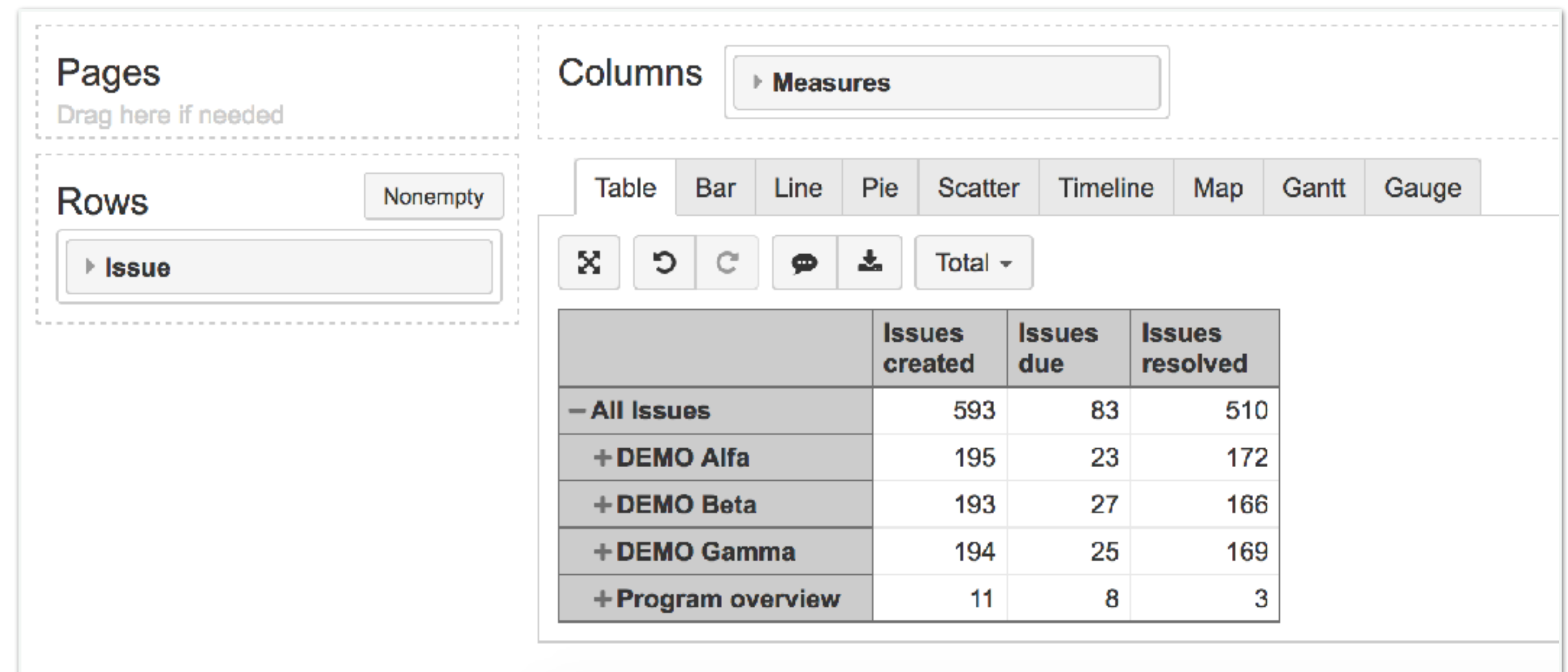
New Report

Search &
Bookmark

Import options

Create a new report for testing

- Select one dimension as rows
- Drag and drop Measure dimension
- Evaluate total date volume



Data Availability

New Report

Search &
Bookmark

Import options

Select particular data for testing

- In the source system chose one issue for testing
- In report search and bookmark that issue
- Check what you have in eazyBI
- Calculated measure **AllProperties**

The screenshot shows the eazyBI interface. On the left, the 'Rows' panel is expanded to 'Issue', and the 'Bookmarked members' section is highlighted with a red box. A red arrow points from this section to the 'Columns' panel, which shows a table view with the following data:

Issues due	Original estimated hours	Issue Story Points	Story Points created	Issue updated date	Issue AllProperties
DA-180	1	8.00	7	Mar 10 2018	KEY: DA-180 DISPLAY_KEY: DA-180 Created at: 2018-01-27 16:28:45 Updated at: 2018-03-10 21:58:23 Updated at UTC: 2018-03-10 19:58:23 Status updated at: 2018-02-19 12:38:15 Resolved at: Closed at: Due date: 2018-03-14 Age timestamp: 1517063325 Resolution seconds: Reporter name: alinda Assignee name: dsnow Issue type ID: 10103 Priority ID: 2 Status ID: 10200 Resolution ID: -1 Security level ID: -1 Parent issue key: Sub-task keys: DA-181,DA-182 Open sub-task keys: DA-181,DA-182 Epic Link: DA-116 Epic Name: Epic Status: Sprint: D1 Sprint 17 Sprint Status: Active Story Points: 7

Data Availability

New Report

Search & Bookmark

Import options

Check import status and settings

- Import is successfully completed (last import date)
- Project and custom fields are selected
- JQL import limitations

The screenshot displays the eazyBI web interface for configuring Jira imports. The main navigation bar includes 'eazyBI', 'Analyze', and 'Dashboards'. The left sidebar shows 'Source Applications' with a count of 1, and 'Source Files'. The 'Application' list includes Jira, with 'Automatic daily import' status. The 'Jira import options' dialog is open, showing four tabs: 'General', 'Add-ons', 'Custom fields', and 'Additional options'. The 'Additional options' tab is selected, showing a 'JQL query' field with the text 'project in (DEMO, DA) AND created >= 2017-05-01'. Below the query field, there is a note: 'Optional additional JQL query to limit which issues from selected projects to import. By default all issues from selected projects will be imported.' and a link to 'Add custom JavaScript code'. In the background, a 'Select Jira projects' dialog is visible, showing a list of projects with checkboxes: 'Demo' (unchecked), 'DEMO' (checked), 'DEMO' (checked), 'DEMO' (checked), 'Folio' (unchecked), and 'IT Ser' (unchecked).

“

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This doesn't make sense!**

DISAPOINTED CUSTOMER





Report Structure



- How do you pair Measures and Dimensions
- How do you filter data

$$2 + 2 = 5$$

Report Layout

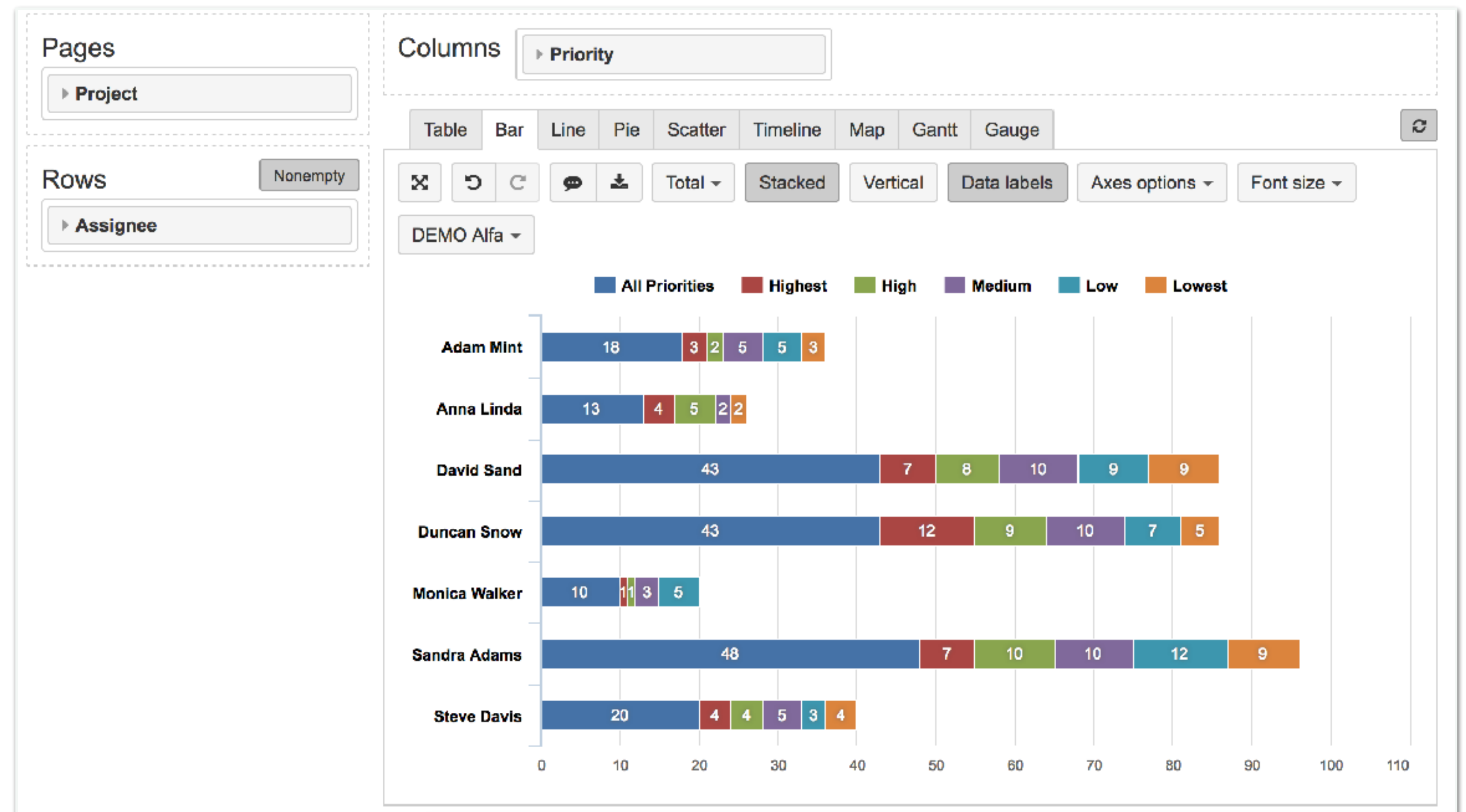
Measure Is a Treasure!

Columns & Rows

Multiple Filters

Measure is a treasure!

- Have at least one Measure
- Understand the Measure



Report Layout

Measure Is a Treasure!

Columns & Rows

Multiple Filters

Check Measure and Dimensions relation

- Some Measures and Dimensions are designed to work together, some not
- How Measure is related to Time dimension
- Check data model in documentation

The screenshot shows a report layout interface. On the left, there are three sections: 'Pages' with a 'Time' filter, 'Columns' with a 'Measures' filter, and 'Rows' with a 'Logged by' filter and a 'Nonempty' button. On the right, there is a table with columns 'Original estimated hours', 'Hours spent', and 'Remaining estimated hours'. The table is filtered for the year '2018' and shows data for various users.

	Original estimated hours	Hours spent	Remaining estimated hours
— All Users	310.00	272.00	192.00
Adam Mint		14.00	
Anna Linda		9.00	
David Sand		108.00	
Duncan Snow		74.00	
Sandra Adams		38.00	
Steve Davis		29.00	

Report Layout

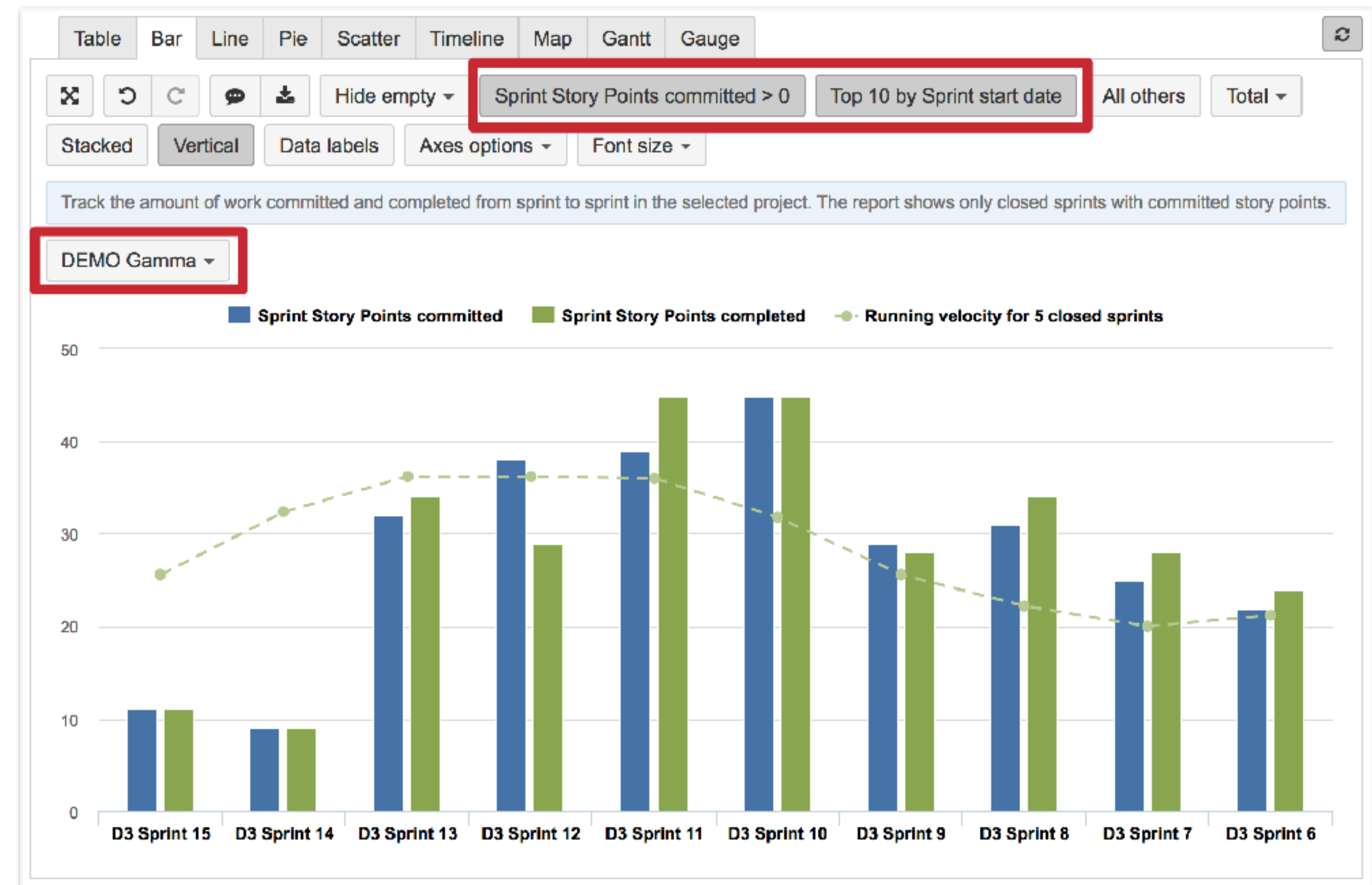
Measure Is a Treasure!

Columns & Rows

Multiple Filters

Clear the filters in report

- Page filters
- Column filters



“

I can't save my measure!
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about set.

FRUSTRATED CUSTOMER


$$2 + 2 = 5$$



Calculations

- Know function arguments and data types
- Correctly refer to dimension members
- Build gradually and test each step



$$2 + 2 = 5$$

Custom Calculations

Data types

Break Up
Formula

Data types for function arguments

- Number
- String
- Date
- Set
- Member

17h 38m 91.6%

'Shinigami love apples'

May 25 2018 {%,&,@,*,\$,!,}

[Time].[Year].[2018]

Custom Calculations

Data types

Break Up Formula

Test each part separately

- Select items for testing
- Break up each formula by arguments
- Use **SetToStr()** to test a set

Table Bar Line Pie Scatter Timeline Map Gantt Gauge				
✕ ↺ ↻ ⚙ ⬇ Hide empty ▾ Total ▾ Freeze header				
Program overview ▾				
	Average resolution workdays	Test - Total Resolution workdays	Test - Total Issues resolved	Test - Set of resolved issues
PO-1 Account managment	147.20	147.20	1	{[Issue].[Program overview].[PO-1 Account managment]}
PO-4 INTRO 78				{}
+ All Issues	158.20	474.59	3	{[Issue].[Program overview].[PO-1 Account managment], [Issue].[Program overview].[PO-2 Accounts overview], [Issue].[Program overview].[PO-3 Account subscription]}



Demo: How to debug a corrupted measure

“

My report is broken =(
But yesterday it was working.



SAD CUSTOMER

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This doesn't make sense!**

DISAPOINTED CUSTOMER



“

**I have an error in the report!
It keep telling me something
about set.**

FRUSTRATED CUSTOMER


$$2 + 2 = 5$$

“

Why may report is empty?



$2 + 2 = 5$

CONFUSED CUSTOMER

A top-down view of a person's hands typing on a laptop keyboard. The laptop screen displays a dashboard with two charts: a green bar chart on the left and a line chart on the right. The desk is cluttered with various items: a calculator, a leather wallet, a ruler, a pen holder with several pens, a ball of colorful string, a pair of glasses, a blue pen, and some papers. A cup of coffee is visible near the laptop. The entire scene is overlaid with a semi-transparent blue filter.

Test reports!

Have fun!

DON'T PANIC



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