



How to See Through Calculated Measures

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In love
and hate
relationship
with testing

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Community Days

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**“Borrow”
solutions**

**Disassemble &
examine**

**Demo how to
break up MDX**

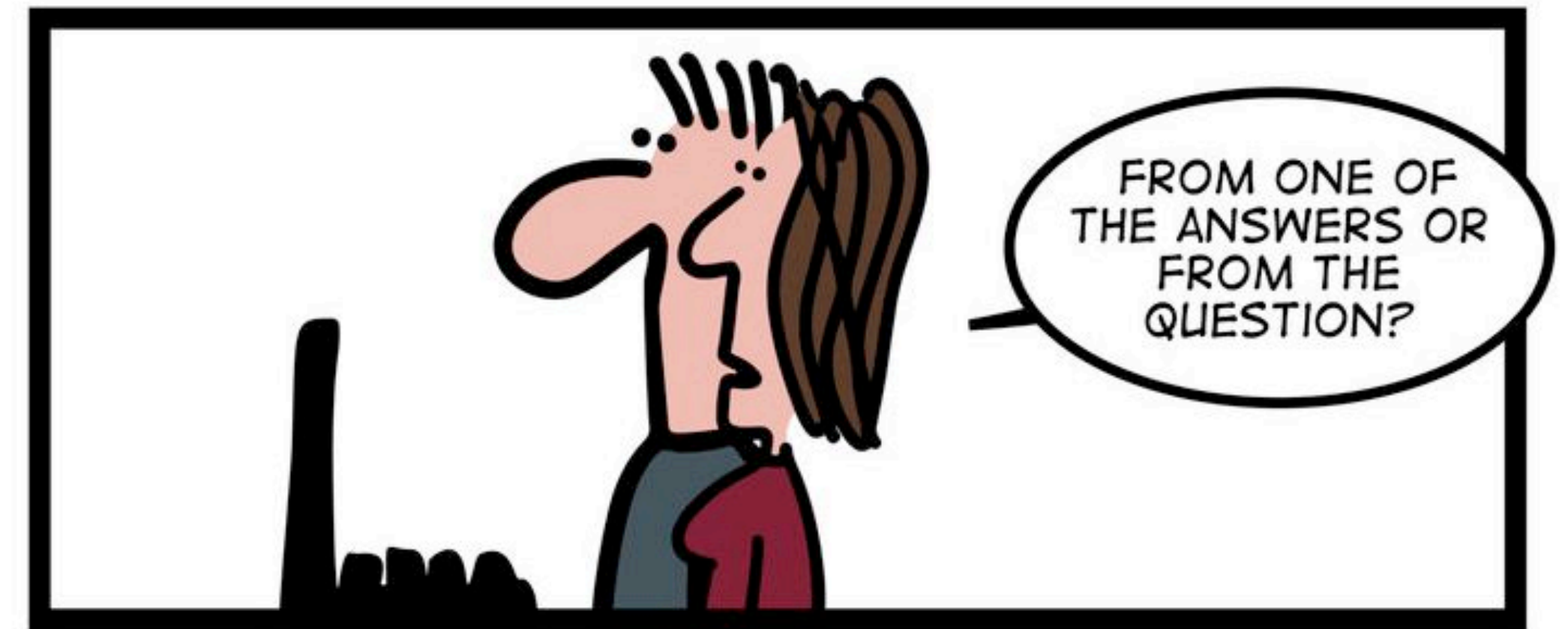
“

**Good artists copy, great
artists steal.**

PABLO PICASSO

“Borrow” solutions from internet

docs.eazybi.com, community.eazybi.com



GOOD QUESTIONS

“

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

FRUSTRATED CUSTOMER

“

If I run numbers in excel, it gives me a different average.



CURIOUS CUSTOMER

A row of white drawstring bags with the text 'easyBI' printed on them in blue and red. The text is partially obscured by the white text overlay.

**What to do when calculated
member doesn't work as
expected?**

**Examine
MDX
on your data**

Disassemble

Break up formula gradually and test each part separately



Examine MDX on your data

Disassemble

Break up formula gradually and test each part separately

Learn basics

Know function arguments and data types.



Examine MDX on your data

Disassemble

Break up formula gradually and test each part separately

Learn basics

Know function arguments and data types.

Understand measure

Understand what each measure means and how it is related to dimensions

Disassemble calculation

Data types

Functions

Measures

Break up

Data types for function arguments

- Number
- String
- Date
- Set
- Member

17h 38m **91.6%**

“Guns N’ Roses”

May 25 2018

{%,&,@,*,\$,!}

[Time].[Year].[2018]

Disassemble calculation

Data types

Functions

Measures

Break up

Know function syntax

- What goes **IN**, how many arguments
- What comes **OUT**
- Where function starts and where it ends.
Brackets (), curly brackets {}, dot .

```
Sum(  
  { PreviousPeriods ([Time].CurrentHierarchyMember),  
    [Time].CurrentHierarchyMember },  
  [Measures].[Issues resolved]  
)
```

Disassemble calculation

Data types

Functions

Measures

Break up

Measure meaning and relation to dimensions

- What each measure means: count of dogs or cats, count of beginnings, transitions or endings, time in days or hours, etc.
- How measure is related to Time and other dimensions

Disassemble calculation

Data types

Functions

Measures

Break up

Test each part separately

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

The screenshot shows a data visualization tool interface with a table view selected. The table has the following data:

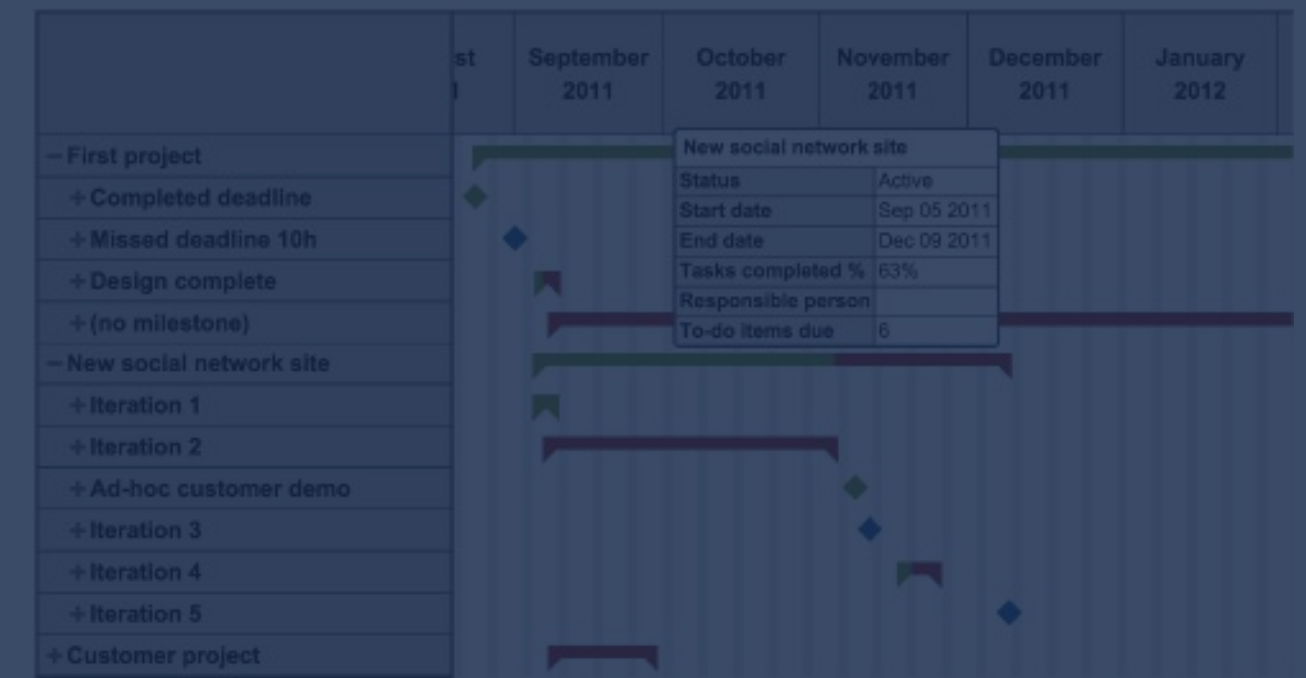
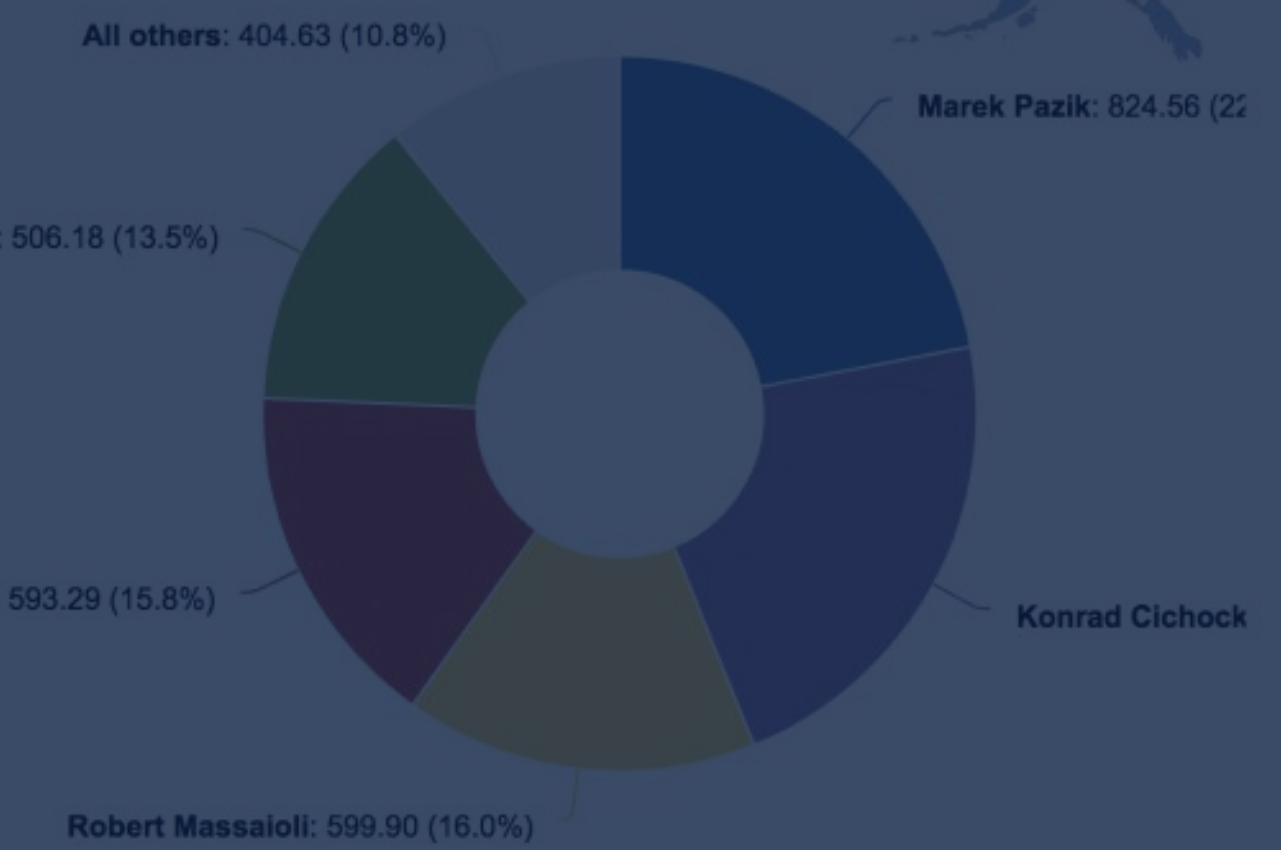
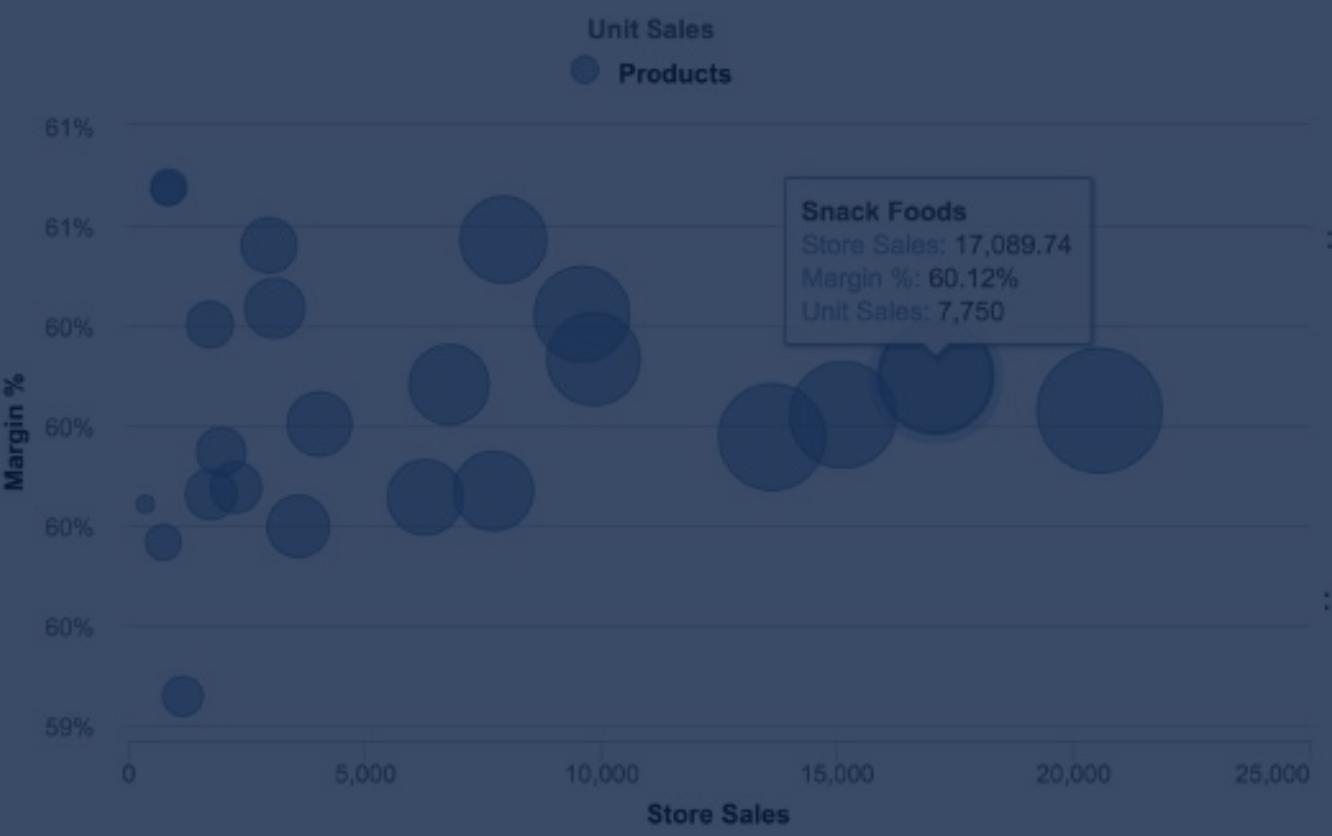
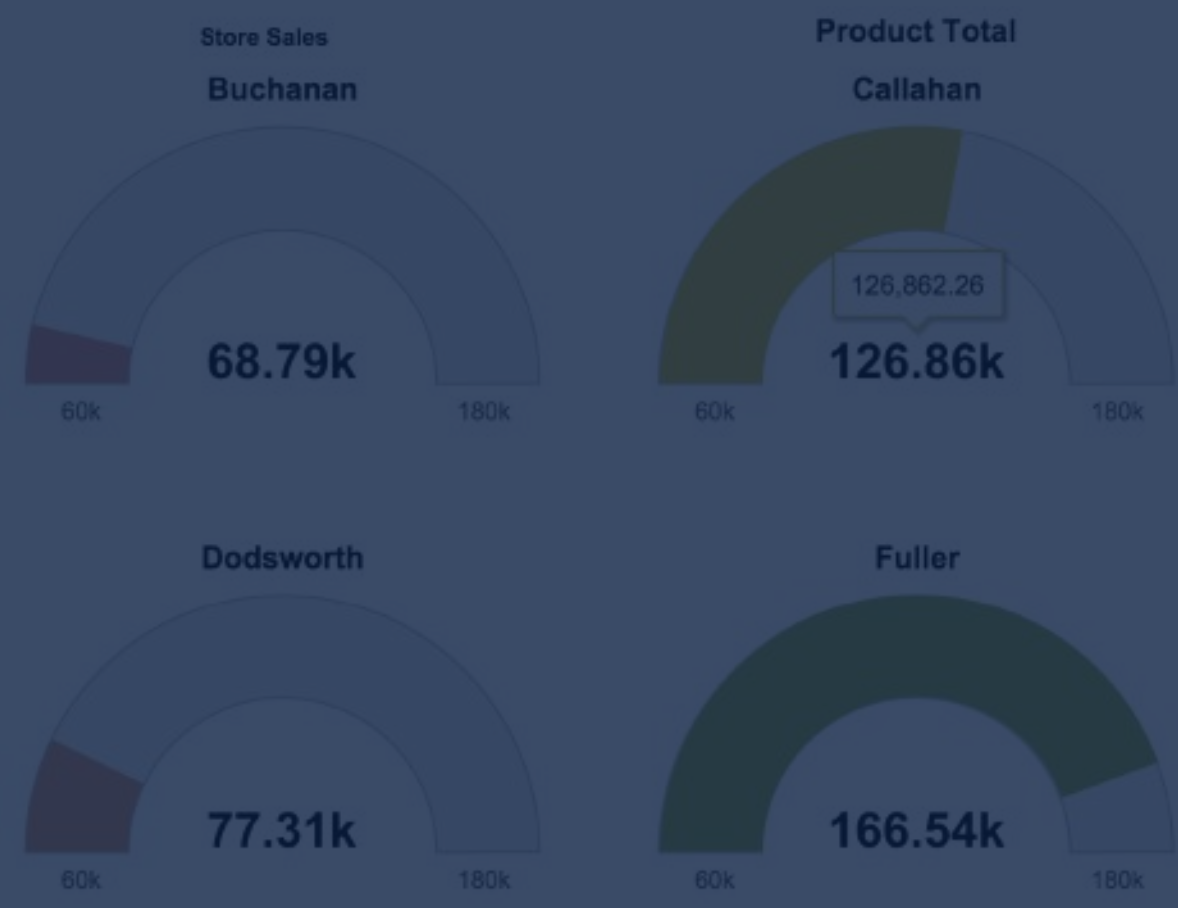
| | Average resolution workdays | Test - Total Resolution workdays | Test - Total Issues resolved | Test - Set of resolved issues |
|------------------------|-----------------------------|----------------------------------|------------------------------|--|
| PO-1 Account managment | 147.20 | 147.20 | 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]} |

| | Store Sales | Store Cost | Unit | Average |
|---------------|-------------|------------|-------|---------|
| All Customers | 139,628.35 | 55,752.240 | | |
| USA | 139,628.35 | 55,752.240 | | |
| CA | 36,175.20 | 14,431.085 | | |
| OR | 40,170.29 | 16,081.073 | | |
| Albany | 4,491.26 | 1,782.817 | | |
| Beaverton | 2,407.97 | 950.358 | | |
| Corvallis | 5,695.13 | 2,281.248 | | |
| Lake Oswego | 2,262.56 | 907.6483 | 1,102 | 6.41 |
| Lebanon | 5,934.62 | 2,390.0872 | 2,826 | 6.49 |
| Milwaukie | 2,892.32 | 1,155.6925 | 1,345 | 6.92 |
| Oregon City | 2,324.62 | 929.6752 | 1,113 | 6.55 |
| Portland | 2,122.12 | 847.5187 | 1,001 | 6.65 |
| Salem | 4,251.81 | 1,697.9039 | 2,104 | 6.28 |
| W. Linn | 2,161.61 | 871.0418 | 1,041 | 6.59 |



DEMO

How to Break Up





janis.plume eazyBI Staff

Oct '18

Irese,

Please, find here a formula calculating the rolling average velocity for the last 5 closed sprint in the board. The calculation is designed to work with the Sprint dimension, Board level:

```
Avg(
  Head(Order(
    Filter(
      [Sprint].CurrentHierarchyMember.Children,
      [Measures].[Sprint closed?]="Yes" AND
      NOT IsEmpty([Sprint].CurrentMember.get('Complete date'))
    ),
    [Measures].[Sprint start date],
    DESC
  ),5),
  [Measures].[Sprint Story Points completed]
)
```

Sep 2018

2 / 2

Oct 2018

Oct 2018

I attached a small example report to show how the measure work:

Rows: Sprint

| | Issues created | Last 5 closed sprints in board | Sprint Story Points completed | Sprint closed? |
|---------------|----------------|--------------------------------|-------------------------------|----------------|
| - All Sprints | 670 | | 1,178.00 | No |
| + (no board) | 161 | | | No |
| + D1 board | 170 | 22.00 | 379.00 | No |
| - D2 board | 167 | 21.40 | 396.00 | No |

“Borrow”!

Examine!

BE CREATIVE!



Questions?

community.eazybi.com

support@eazybi.com

An aerial view of a city at night, with a color gradient overlay transitioning from red on the left to blue on the right. The city lights are visible through the semi-transparent overlay.

Thank you!