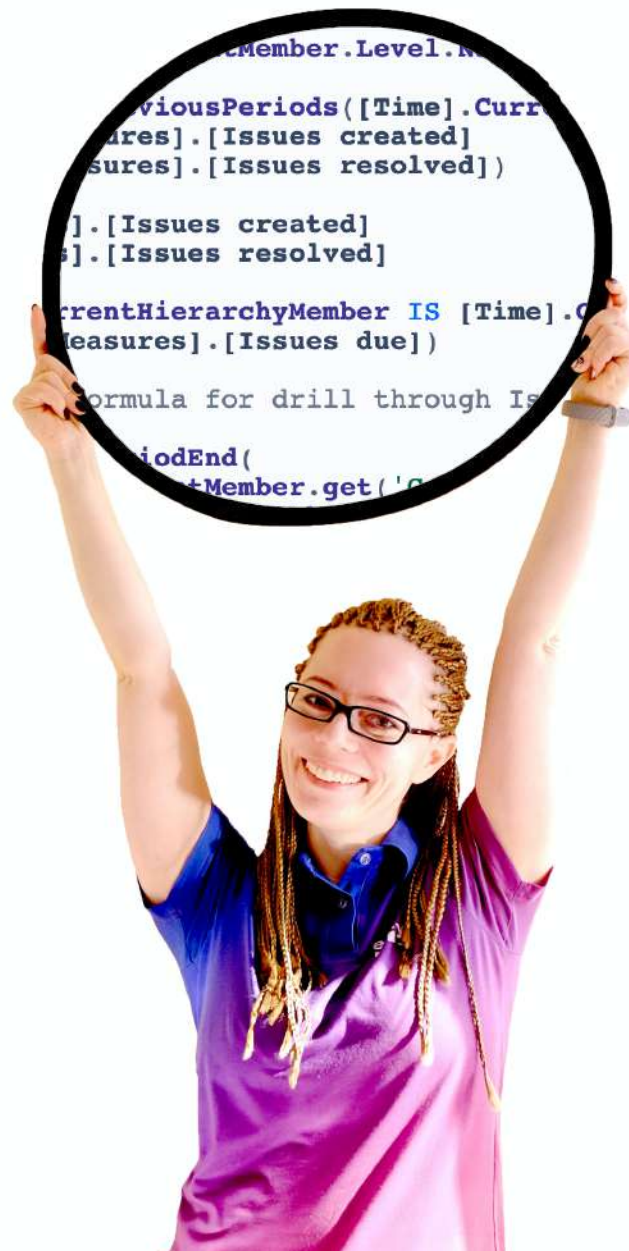




# Hidden Gems of MDX

Lauma Cīrule



**Lauma Cīrule**



**Community Day**  
**May 6, 2021**

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**Why to hide  
anything?**

**What is hidden?**

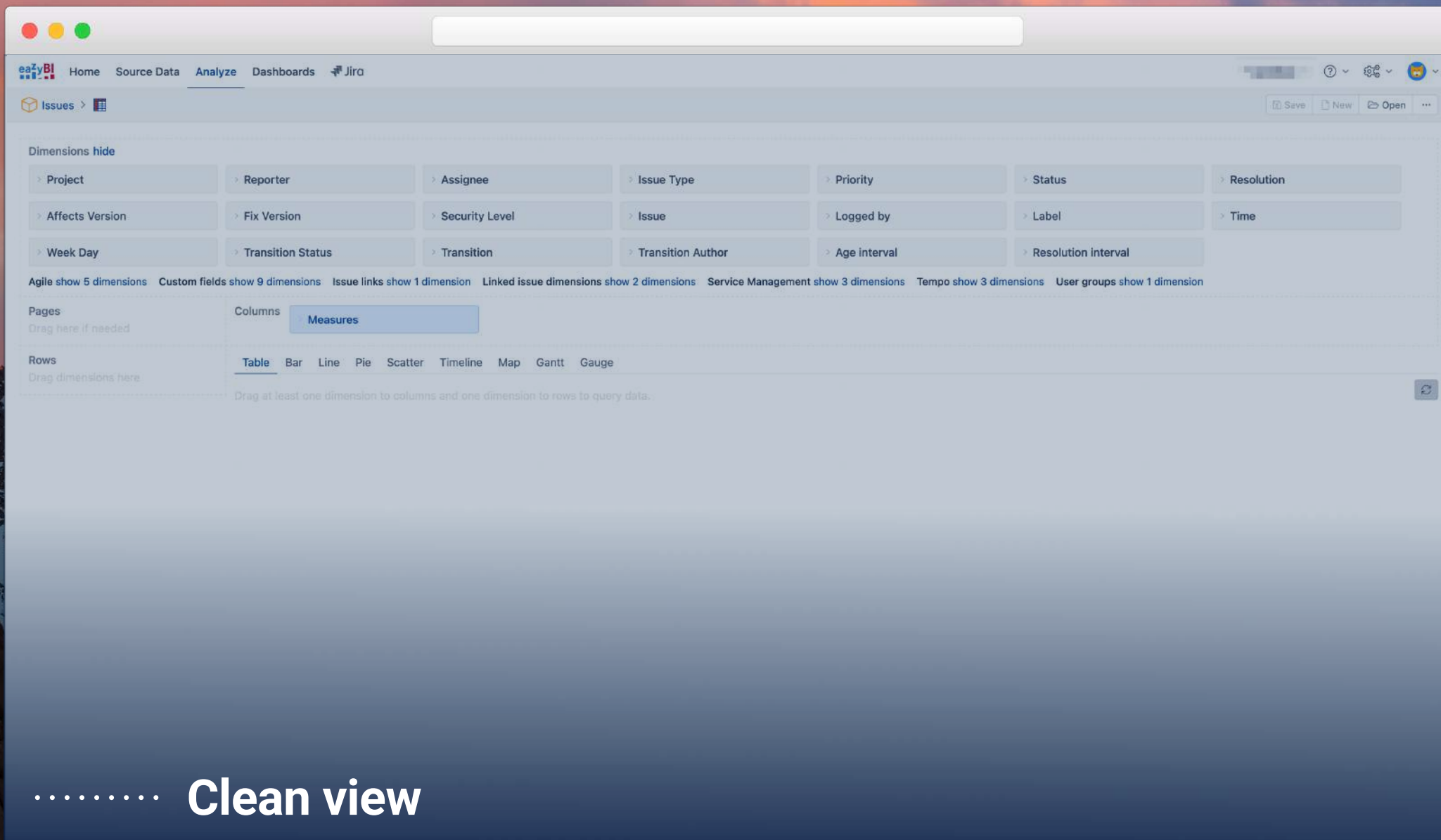
**How to find it?**

**The cube...**









..... Clean view

Issues >

Save

Pages

Drag here if needed

Rows

Nonempty

Project

Select individual members

All hierarchy level members

Select all members at level

Project 3Component 16

Category

Category 2Project 3

Component 16

Add custom hierarchy

Drill into or expand

Pages

Columns

Measures

Filter measures by name

Predefined

Issues createdIssues dueIssues resolvedIssues closedIssues with due dateIssues last updated

Original estimated hoursRemaining estimated hoursHours spentSub-tasks createdSub-tasks due

Sub-tasks resolvedSub-tasks closedTransitions to statusTransitions from statusDays in transition status

Workdays in transition statusRemaining estimated hours changeOpen issues = show

Average resolution days = showAverage resolution workdays = showAverage closing days = show

Average age days = showAverage age workdays = showOriginal estimated hours with sub-tasks = show

Remaining estimated hours with sub-tasks = showHours spent with sub-tasks = showRemaining hours = show

Remaining overestimated hours = showIssues history = showAverage days in transition status = show

Average workdays in transition status = showTransition to status first date = show

Transition to status last date = showTransition from status first date = show

Transition from status last date = showTransitions to assignee = showTransitions from assignee = show

Remaining estimated hours history = show

Agile show 36 measures

Custom fields show 9 measures

Distinct issues count show 7 measures

Issue properties show 30 measures

Other properties show 7 measures

User defined

Time tracking show 2 measures

Define new calculated measure

Report specific

Table

Bar

Line

Pie

Scatter

Timeline

Map

Gantt

Gauge

Measures

.....

The most saturated dimension of all

Columns

Measures

Filter measures by name

Predefined

Issues created

Issues due

Issues resolved

Issues closed

Issues with due date

Issues last updated

Original estimated hours

Remaining estimated hours

Hours spent

Sub-tasks created

Sub-tasks due

Sub-tasks resolved

Sub-tasks closed

Transitions to status

Transitions from status

Days in transition status

Workdays in transition status

Remaining estimated hours change

Open issues = show

Average resolution days = show

Average resolution workdays = show

Average closing days = show

Average age days = show

Average age workdays = show

Original estimated hours with sub-tasks = show

Remaining estimated hours with sub-tasks = show

Hours spent with sub-tasks = show

Remaining hours = show

Remaining overestimated hours = show

Issues history = show

Average days in transition status = show

Average workdays in transition status = show

Transition to status first date = show

Transition to status last date = show

Transition from status first date = show

Transition from status last date = show

Transitions to assignee = show

Transitions from assignee = show

Remaining estimated hours history = show

Agile show 38 measures

Custom fields show 30 measures

Distinct issues count show 7 measures

Issue properties show 50 measures

Other properties show 7 measures

Service Management show 7 measures

Service Management - Time to resolution show 9 measures

Tempo show 1 measure

User defined

Table

Bar

Line

Pie

Scatter

Timeline

Map

Gantt

Gauge

Organising Measures



Columns

Measures

Filter measures by name

Predefined

Issues created

Issues due

Issues resolved

Issues closed

Issues with due date

Issues last updated

Original estimated hours

Remaining estimated hours

Hours spent

Sub-tasks created

Sub-tasks due

Sub-tasks resolved

Sub-tasks closed

Transitions to status

Transitions from status

Days in transition status

Workdays in transition status

Remaining estimated hours change

Open issues = show

Average resolution days = show

Average resolution workdays = show

Average closing days = show

Average age days = show

Average age workdays = show

Original estimated hours with sub-tasks = show

Remaining estimated hours with sub-tasks = show

Hours spent with sub-tasks = show

Remaining hours = show

Remaining overestimated hours = show

Issues history = show

Average days in transition status = show

Average workdays in transition status = show

Transition to status first date = show

Transition to status last date = show

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Timeline

Map

Gantt

Gauge

Organising Measures

Columns

Measures

Filter measures by name

Predefined

User defined

Bug created date = edit Bug resolution date = edit Patches = edit Was in status = edit

avg time until next issue created = edit avg time since previous issue created = edit FirstQ resolution days = edit

ThirdQ resolution days = edit Issue Actual Start = edit sd2 = edit Durtaiion of Tasks (created to Done) = edit

Last closed by any hierarchy = edit Issues created since yesterday = edit

Time tracking hide

Cumulative Hours spent within Sprint = edit Sprint Remaining Estimates committed = edit

Sprint Estimated guideline = edit

Define new calculated measure

Define new report specific calculated measure

Table Bar Line Pie Scatter Timeline Map Gantt Gauge

# Organising Measures

Drag at least one dimension to columns and one dimension to rows to query data.

Columns

Measures

Filter measures by name

> Predefined

> User defined

Report specific

Unestimated issues = edit   Estimated issues = edit

Define new report specific calculated measure

Table Bar Line Pie Scatter Timeline Map Gantt Gauge

Drag at least one dimension to columns and one dimension to rows to query data.

## Organising Measures

Columns

Measures

Filter measures by name

Predefined

Issues created

Issues due

Issues resolved

Issues closed

Issues with due date

Issues last updated

Original estimated hours

Remaining estimated hours

Hours spent

Sub-tasks created

Sub-tasks due

Sub-tasks resolved

Sub-tasks closed

Transitions to status

Transitions from status

Days in transition status

Workdays in transition status

Remaining estimated hours change

Open issues = show

Average resolution days = show

Average resolution workdays = show

Average closing days = show

Average age days = show

Average age workdays = show

Original estimated hours with sub-tasks = show

Remaining estimated hours with sub-tasks = show

Hours spent with sub-tasks = show

Remaining hours = show

Remaining overestimated hours = show

Issues history = show

Average days in transition status = show

Average workdays in transition status = show

Transition to status first date = show

Transition to status last date = show

Transition from status first date = show

Transition from status last date = show

Transitions to assignee = show

Transitions from assignee = show

Remaining estimated hours history = show

Agile show 38 measures

Custom fields show 30 measures

Distinct issues count show 7 measures

Issue properties show 50 measures

Other properties show 7 measures

Service Management show 7 measures

Service Management - Time to resolution show 9 measures

Tempo show 1 measure

User defined

Table

Bar

Line

Pie

Scatter

Timeline

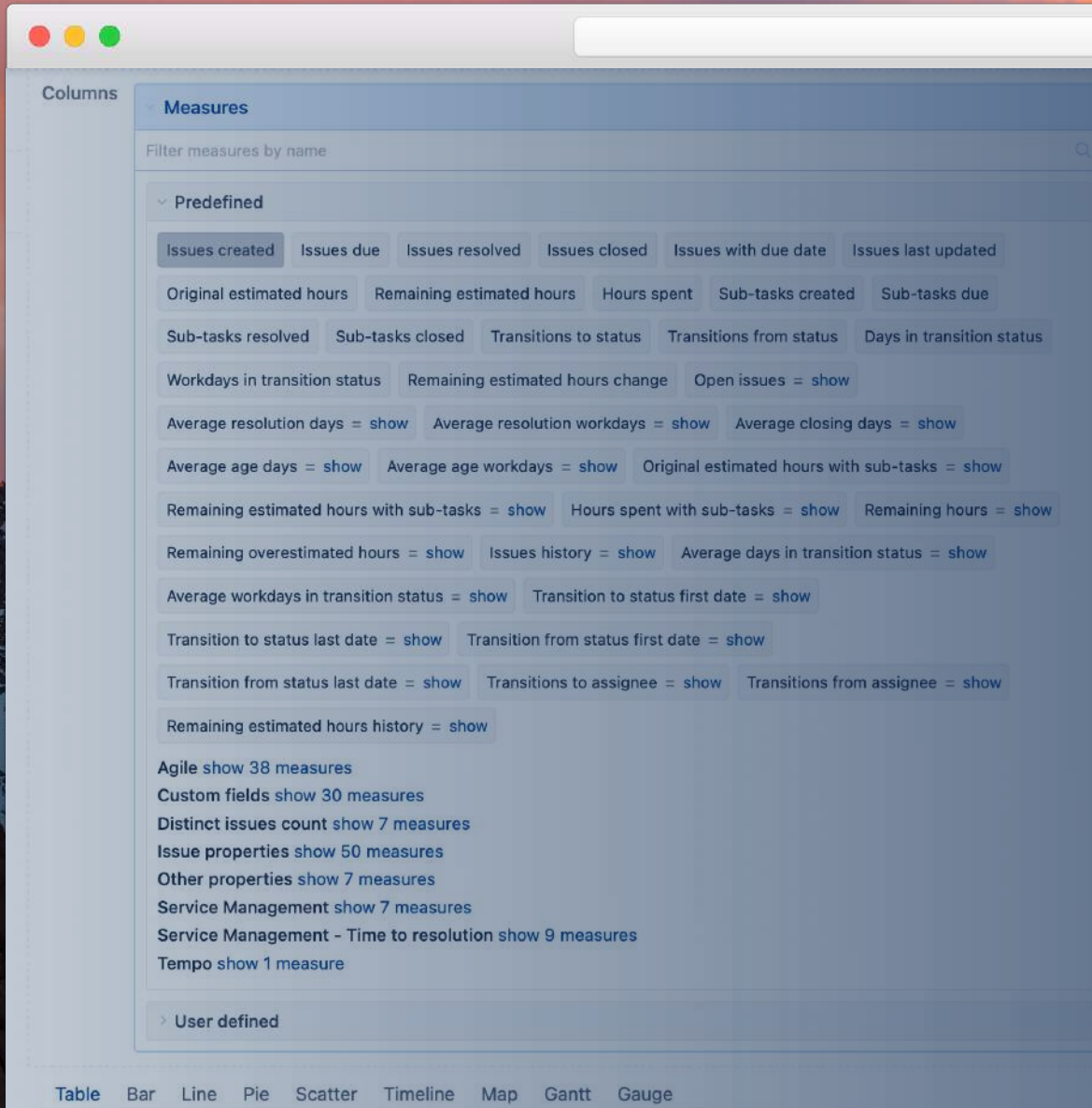
Map

Gantt

Gauge

# Organising Measures





# Hidden measures

.....

**Counters** : issues with

**Historical** : added, removed,  
transition

**Properties**





easyBI

**Autocomplete  
- to the rescue!**

# HOW TO FIND HIDDEN GEMS WITH MDX

## Issues with ...

count issues with custom number fields for created, due, resolved and closed dates

Define report specific calculated member formula

[Measures].[ ] =

1 [Measures].[Issues with]

- Issues with due date
- Issues with hours spent
- Issues with start date
- Issues with Score value created
- Issues with Score value due
- Issues with Score value resolved
- Issues with Score value closed
- Issues with Story Points created**
- Issues with Story Points due
- Issues with Story Points resolved
- Issues with Story Points closed

Formatting default

Read [calculated members tutorial](#) to learn about calculated member formulas. You can select members, operators and frequently used functions from sidebar to insert them into calculated member formula.

Root members

- Issues created
- Issues due
- Issues resolved
- Issues closed
- Issues with due date
- Issues last updated
- Original estimated hours
- Remaining estimated hours
- Issues created count
- Issues due count
- Issues resolved count
- Issues closed count
- Hours spent
- Issues with hours spent

Create cancel

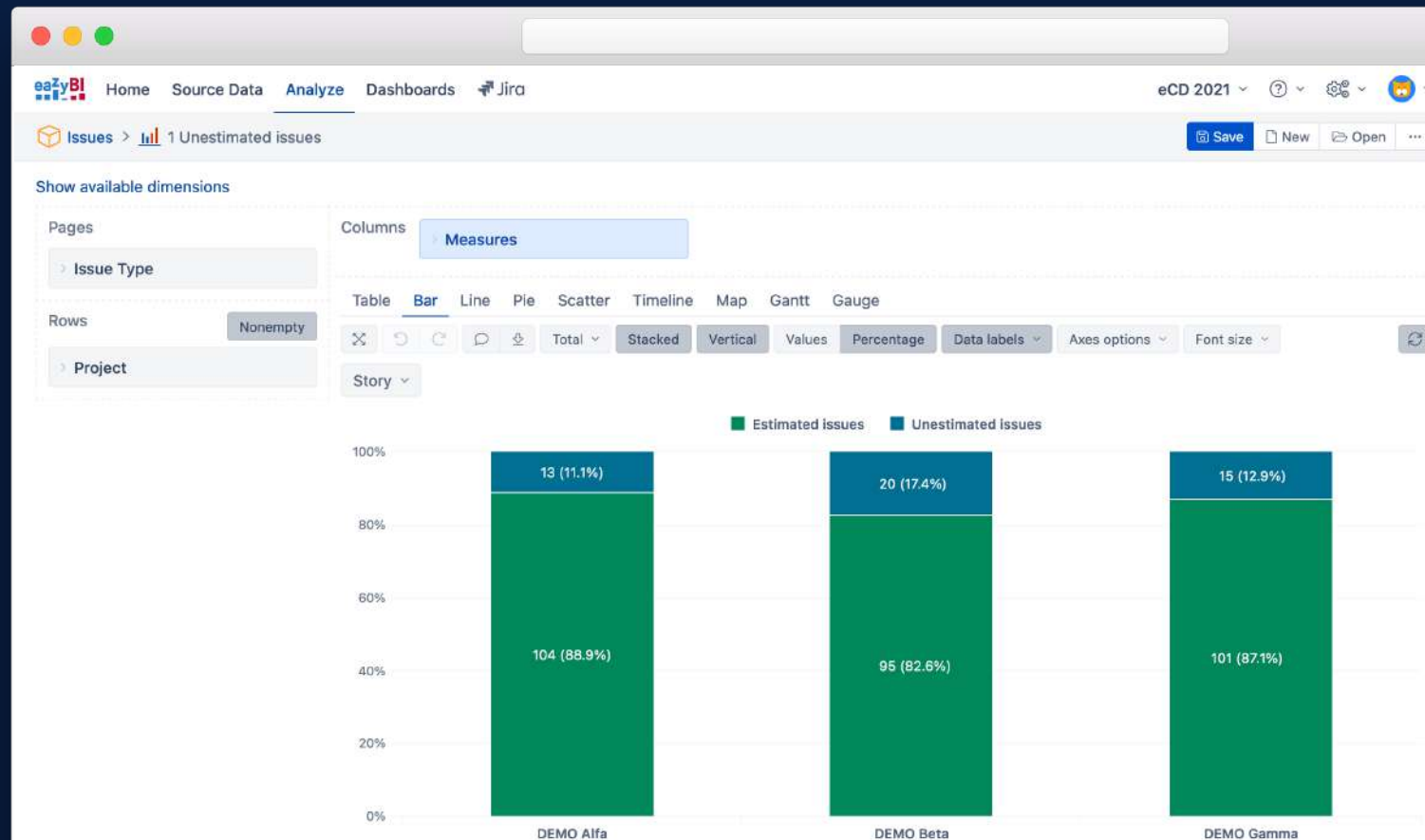
Drag at least one dimension to columns and one dimension to rows to query data.

# HOW TO FIND HIDDEN GEMS WITH MDX

Issues with ...

count issues with custom  
number fields for created,  
due, resolved and closed  
dates

Find un-estimated  
issues



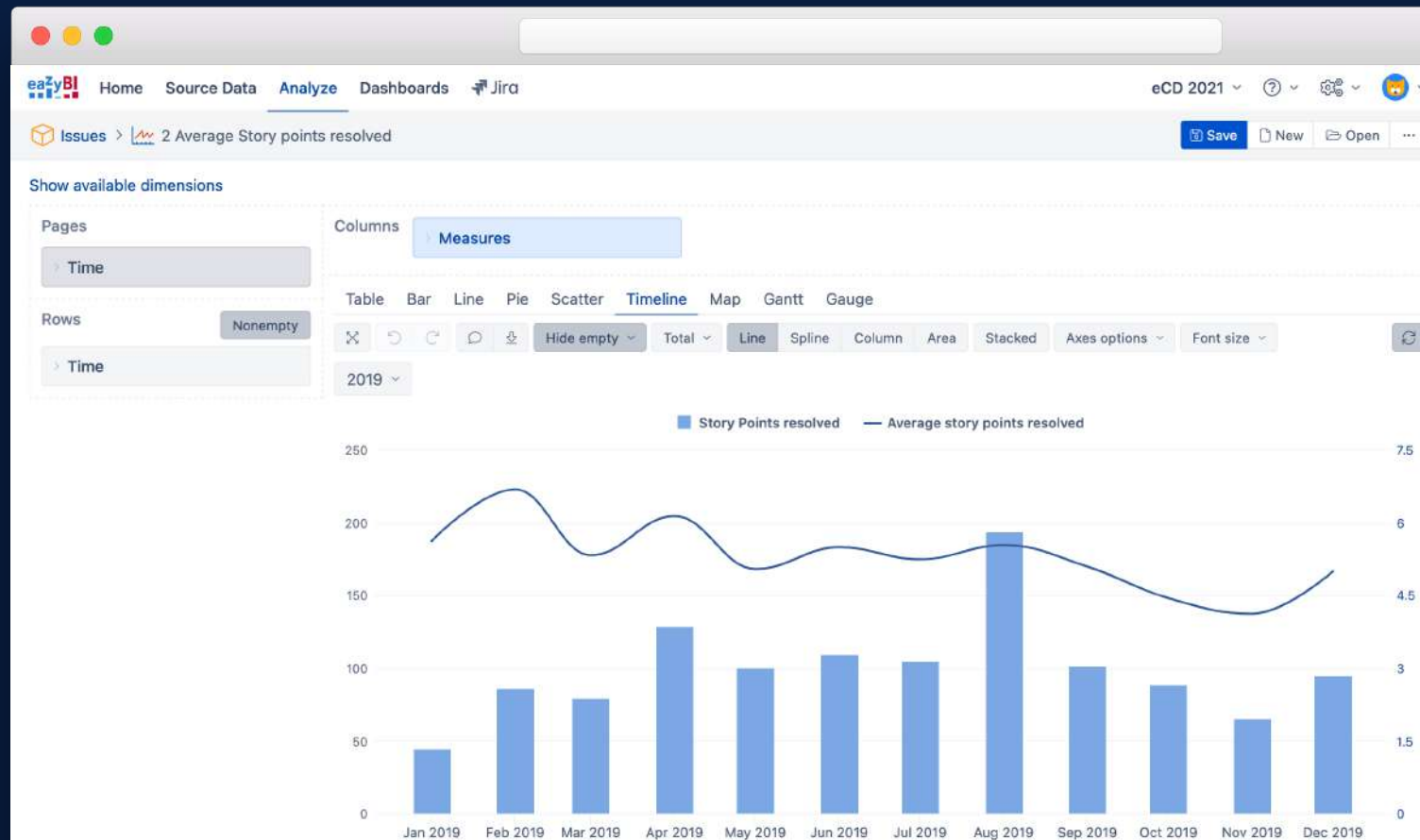
# HOW TO FIND HIDDEN GEMS WITH MDX

Issues with ...

count issues with custom number fields for created, due, resolved and closed dates

Find un-estimated issues

Calculate average story points resolved





# HOW TO FIND HIDDEN GEMS WITH MDX

... added  
... removed

can be used for all custom  
number fields with imported  
value changes

Define report specific calculated member formula

[Measures].[ ] =

1 [Measures].[added]

Sprint Story Points added

Sprint issues added

Sprint remaining estimated hours added

Remaining estimated hours added

Score value added

Story Points added

Formatting default

Read [calculated members tutorial](#) to learn about calculated member formulas. You can select members, operators and frequently used functions from sidebar to insert them into calculated member formula.

Root members

Issues created

Issues due

Issues resolved

Issues closed

Issues with due date

Issues last updated

Original estimated hours

Remaining estimated hours

Issues created count

Issues due count

Issues resolved count

Issues closed count

Hours spent

Issues with hours spent

Create cancel

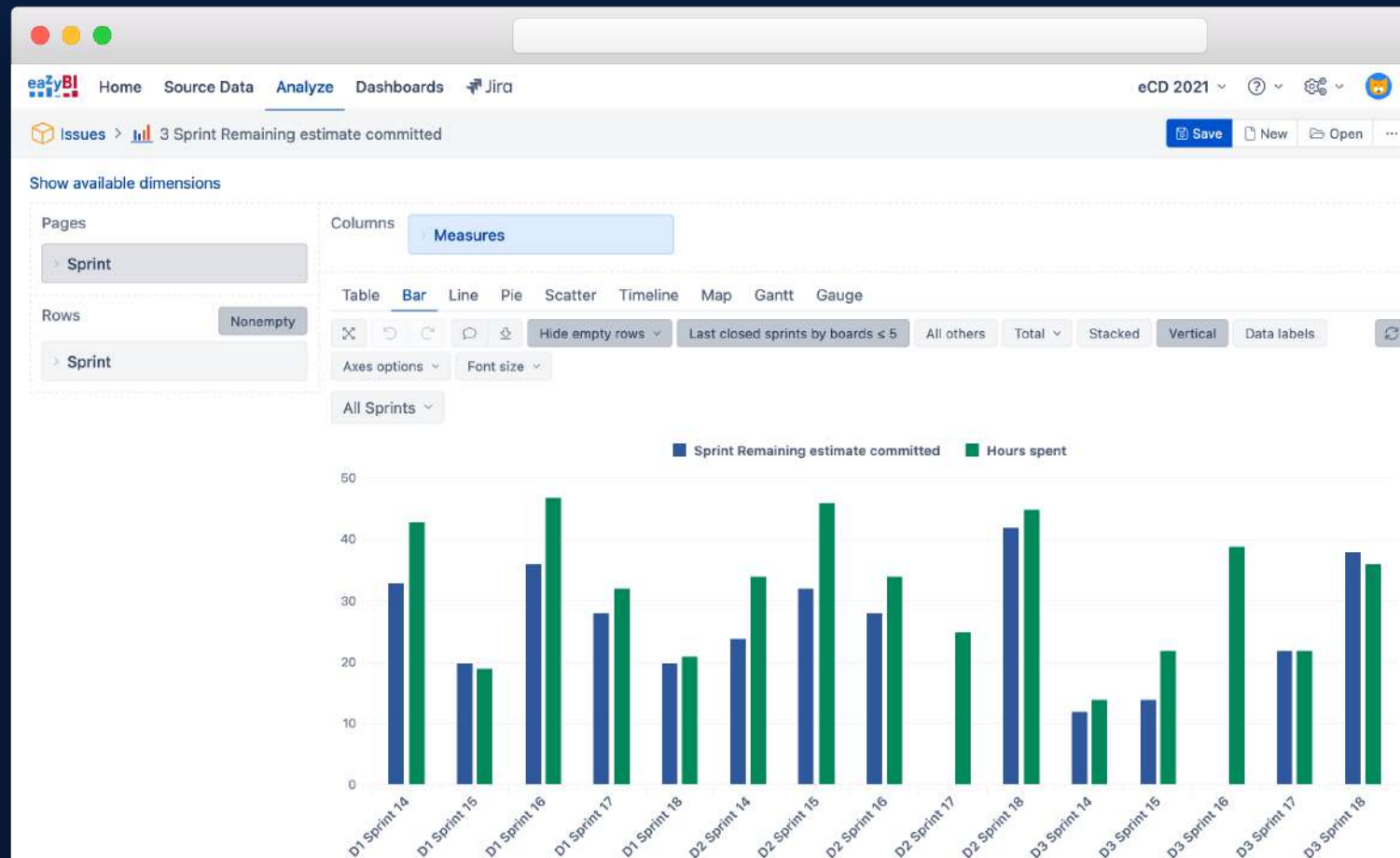


# HOW TO FIND HIDDEN GEMS WITH MDX

... added  
... removed

for all custom number fields,  
can be used to calculate  
committed and removed  
during Sprint time

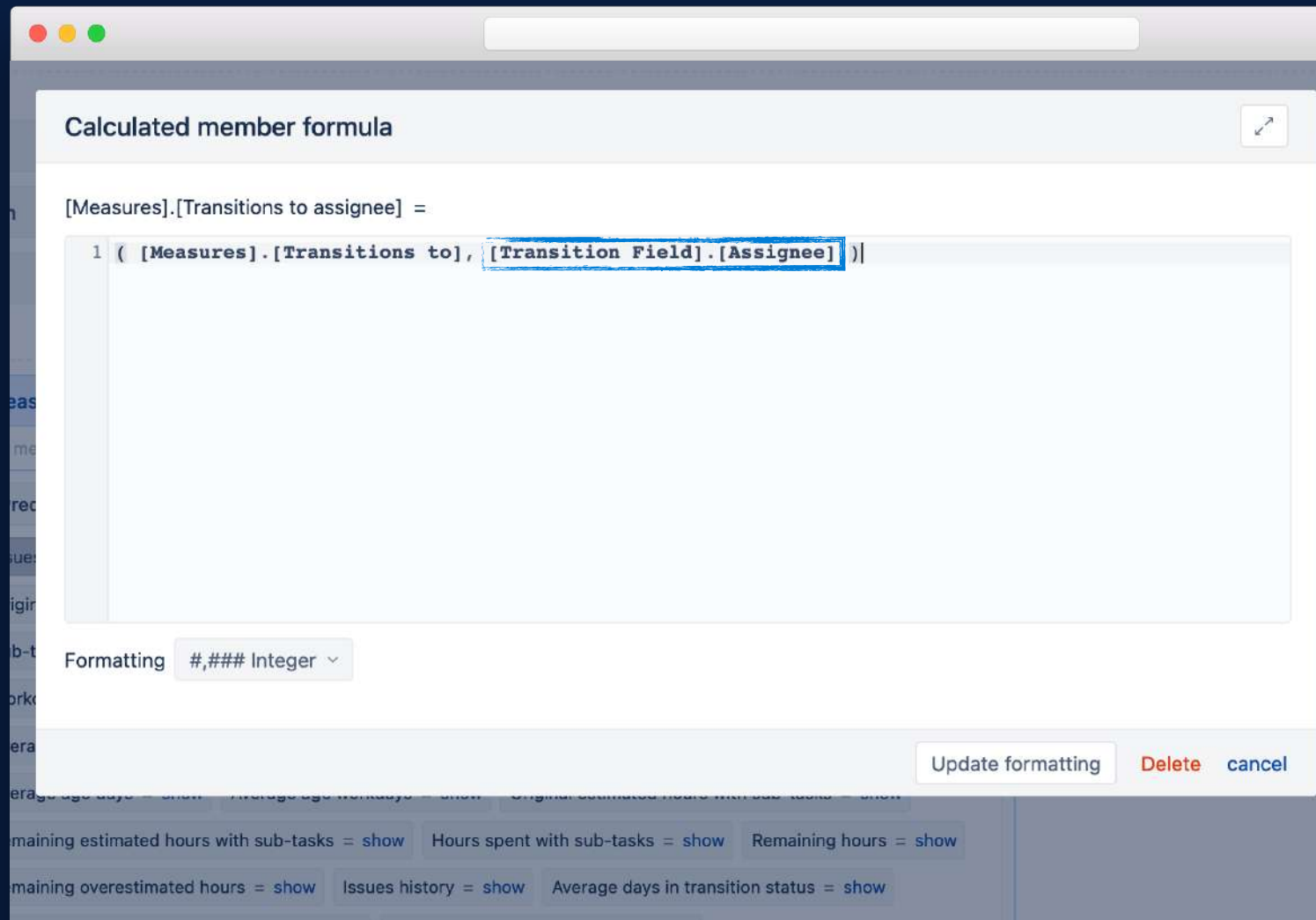
**Sprint Remaining  
estimate committed**



# HOW TO FIND HIDDEN GEMS WITH MDX

## Hidden dimension [Transition Field]

used in the calculated measures to limit changes to particular dimension only



# HOW TO FIND HIDDEN GEMS WITH MDX

## Hidden dimension [Transition Field]

used in the calculated  
measures to limit changes to  
particular dimension only

## SetToStr()

to see the members of  
hidden dimension

Define report specific calculated member formula

[Measures].[SetToStr] =

```
1 SetToStr(  
2   [Transition Field].[Transition Field].Members  
3 )
```

# HOW TO FIND HIDDEN GEMS WITH MDX

## Hidden dimension [Transition Field]

used in the calculated  
measures to limit changes to  
particular dimension only

## SetToStr()

to see the members of  
hidden dimension

transition... measures

see all count and timestamps

Define report specific calculated member formula

[Measures].[ ] =

1 [Measures].[transition]

- Transitions to assignee
- Transitions from assignee
- Transition to status first timestamp
- Transition to status last timestamp
- Transition from status first timestamp
- Transition from status last timestamp
- Transitions to
- Transitions from**
- Transition timestamp
- Transition to first timestamp
- Transition to last timestamp
- Transition from first timestamp
- Transition from last timestamp
- Transitions to issues count

Formatting default

Read calculated member formulas. You can select members, operators and frequently used functions from sidebar to insert them into calculated member formula.

Root members

- Issues created
- Issues due
- Issues resolved
- Issues closed
- Issues with due date
- Issues last updated
- Original estimated hours
- Remaining estimated hours
- Issues created count
- Issues due count
- Issues resolved count
- Issues closed count
- Hours spent
- Issues with hours spent

Create cancel

Table Bar Line Pie Scatter Timeline Map Gantt Gauge

Drag at least one dimension to columns and one dimension to rows to query data.

# HOW TO FIND HIDDEN GEMS WITH MDX

## Hidden dimension [Transition Field]

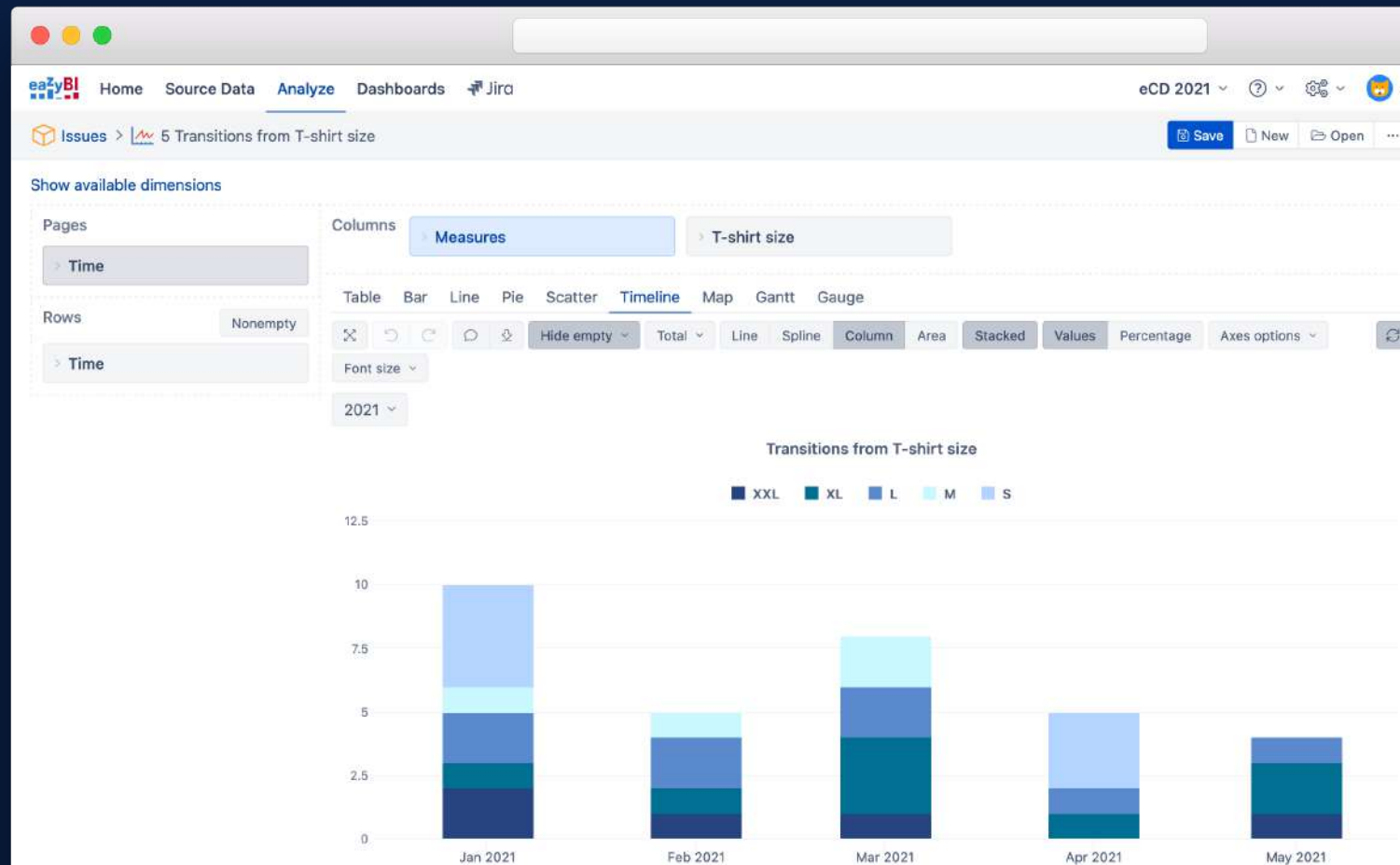
used in the calculated  
measures to limit changes to  
particular dimension only

## SetToStr()

to see the members of  
hidden dimension

**transition... measures**

see all count and timestamps





# HOW TO FIND HIDDEN GEMS WITH MDX

## Properties

Issue properties are available for dimensions with issues

Define report specific calculated member formula

[Measures].[ Epic Link created date ] =

1 [Epic Link].CurrentMember.get()

- DISPLAY\_KEY
- Project key
- Created at
- Updated at
- Updated at UTC
- Status updated at
- Resolved at
- Closed at
- Due date
- Age timestamp
- Resolution seconds
- Reporter name
- Assignee name
- Issue type ID

Formatting default ▾

Read [calculated members tutorial](#) to learn about formulas. You can select members, operators and frequently used functions from sidebar to insert them into calculated member formula.

Root members

- Issues created
- Issues due
- Issues resolved
- Issues closed
- Issues with due date
- Issues last updated
- Original estimated hours
- Remaining estimated hours
- Issues created count
- Issues due count
- Issues resolved count
- Issues closed count
- Hours spent
- Issues with hours spent

Create can

Table Bar Line Pie Scatter Timeline Map Gantt Gauge

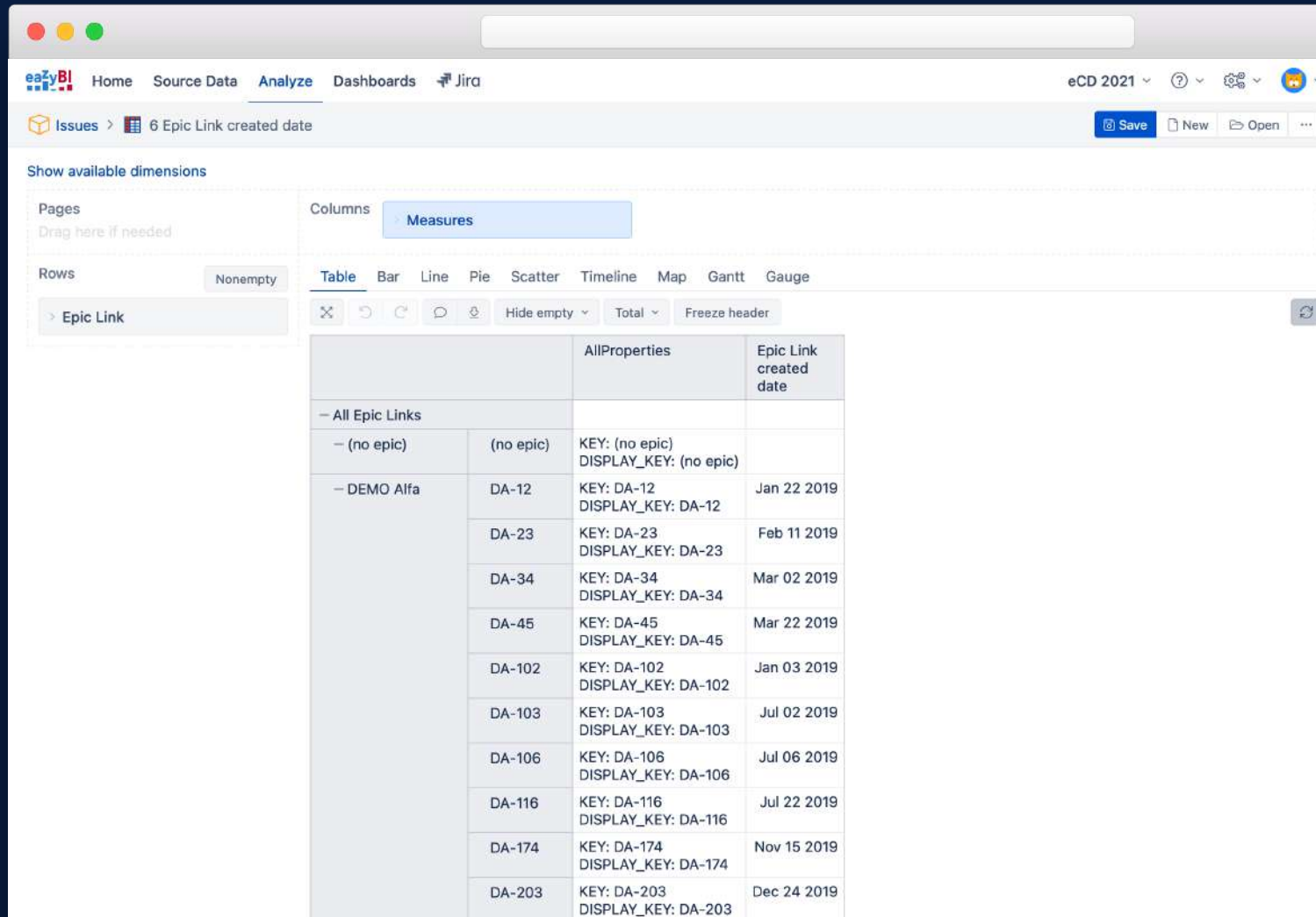
✕ ↶ ↷ 💬 ⬇️ Hide empty ▾ Total ▾ Freeze header

# HOW TO FIND HIDDEN GEMS WITH MDX

## Properties

Issue properties are available for all issue dimensions

These properties are not visible from AllProperties; find them with autocomplete



Qlik Sense interface showing a table of Epic Link data. The table is filtered to show 'Epic Link' data. The table has a header row with 'AllProperties' and 'Epic Link created date'. Below the header, there are rows for 'All Epic Links', '(no epic)', and 'DEMO Alfa'. The 'DEMO Alfa' row is expanded, showing a list of sub-rows with keys and display keys.

		AllProperties	Epic Link created date
- All Epic Links			
- (no epic)	(no epic)	KEY: (no epic) DISPLAY_KEY: (no epic)	
- DEMO Alfa	DA-12	KEY: DA-12 DISPLAY_KEY: DA-12	Jan 22 2019
	DA-23	KEY: DA-23 DISPLAY_KEY: DA-23	Feb 11 2019
	DA-34	KEY: DA-34 DISPLAY_KEY: DA-34	Mar 02 2019
	DA-45	KEY: DA-45 DISPLAY_KEY: DA-45	Mar 22 2019
	DA-102	KEY: DA-102 DISPLAY_KEY: DA-102	Jan 03 2019
	DA-103	KEY: DA-103 DISPLAY_KEY: DA-103	Jul 02 2019
	DA-106	KEY: DA-106 DISPLAY_KEY: DA-106	Jul 06 2019
	DA-116	KEY: DA-116 DISPLAY_KEY: DA-116	Jul 22 2019
	DA-174	KEY: DA-174 DISPLAY_KEY: DA-174	Nov 15 2019
	DA-203	KEY: DA-203 DISPLAY_KEY: DA-203	Dec 24 2019

## IN CONCLUSION

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**eazyBI hides complimentary dimensions and measures**

For uncluttered, simple, and easy to navigate UI

**These hidden gems are not useful by themselves, but combined in MDX calculations can give us very powerful results**

**Hidden dimensions and measures are visible with autocomplete**

Or find them in the documentation under Measures, History, Custom field import, and App integration descriptions



# Thank you!

[community.eazybi.com](https://community.eazybi.com)  
[support@eazybi.com](mailto:support@eazybi.com)