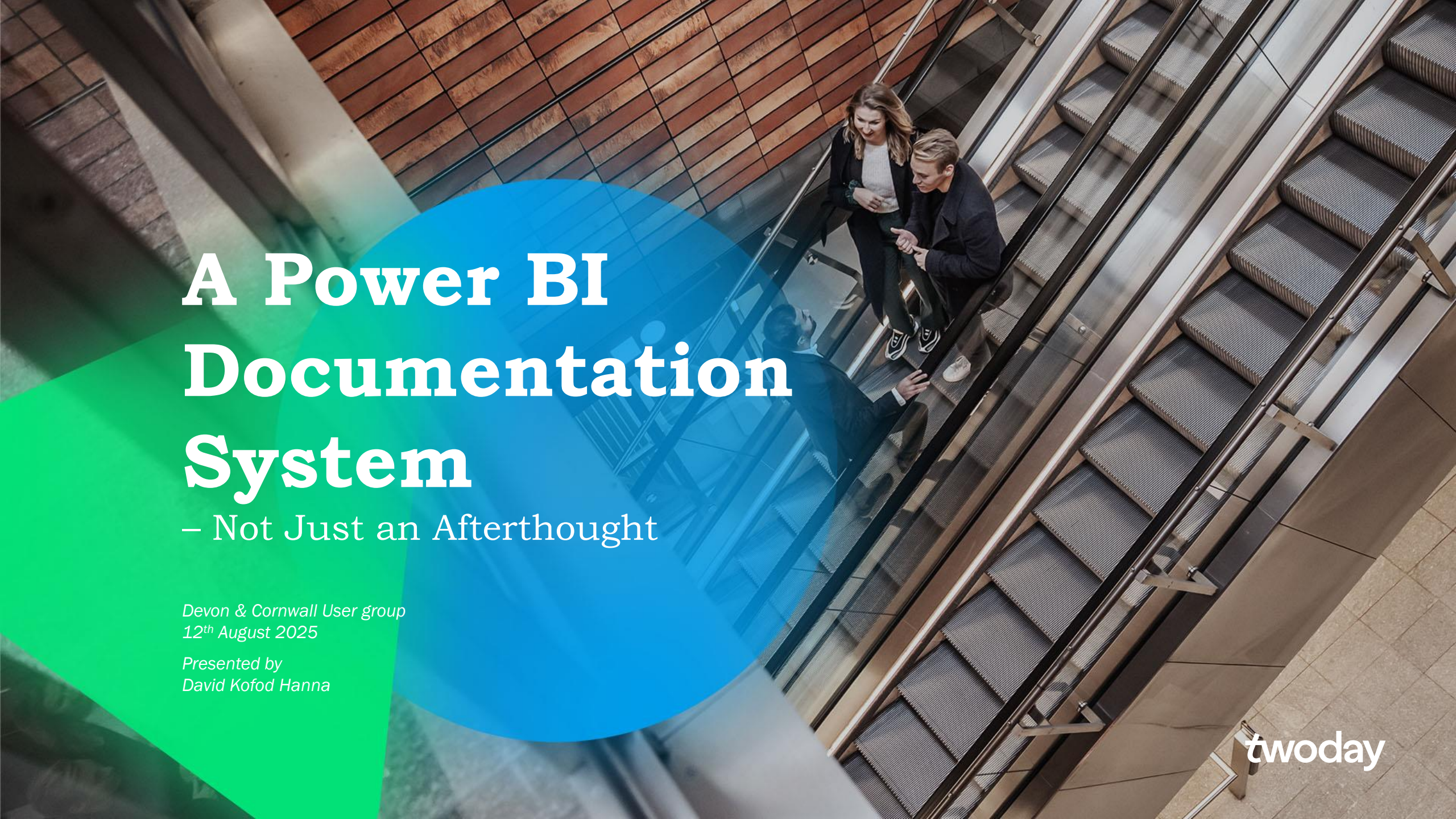

A Power BI Documentation System

– Not Just an Afterthought

Devon & Cornwall User group
12th August 2025

Presented by
David Kofod Hanna

twoday

David Kofod Hanna

Senior Advisor, Data Storytelling @ twoday
+200 courses as Academy Trainer and 10 years as consultant
MCT, Certified Tabular Editor 3 Trainer, DP-600, DP-700, PL-300, CPUX-F

Passionate about guiding self-service Power BI developers for more enterprise manageable concepts in a consumable and practical way

Born on beautiful “Sunshine island”: **Bornholm**
Lives in Silkeborg with wife and 3 kids
Love football and running half-marathons

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Who **loves** documentation?

Who **writes** documentation?

Who **updates** documentation?

Who **reads** documentation?

Who can **find** documentation?

Who can **understand** documentation?

A Power BI Documentation System

– Not Just an Afterthought

Who loves, writes, updates, reads, can find, can understand documentation?

Why do we need documentation and when and where?

Practical and live-demo

What can be scripted, should be automated, and what is manual?

Resources, link and where can I get all the scripts and system?

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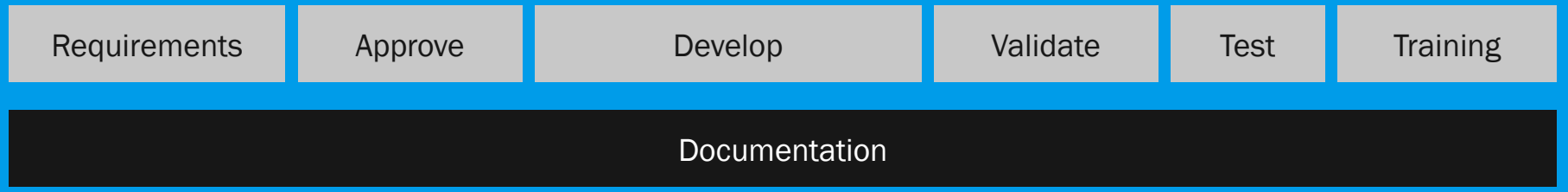
Example of project



Why documentation?

- Transparency
- Reproducibility
- Collaboration
- Compliance
- Scalability
- Easier debugging

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Please write my documentation

*"You do not rise to the level of your **goals**, you fall to the level of your **systems**."*

- James Clear, Atomic Habits

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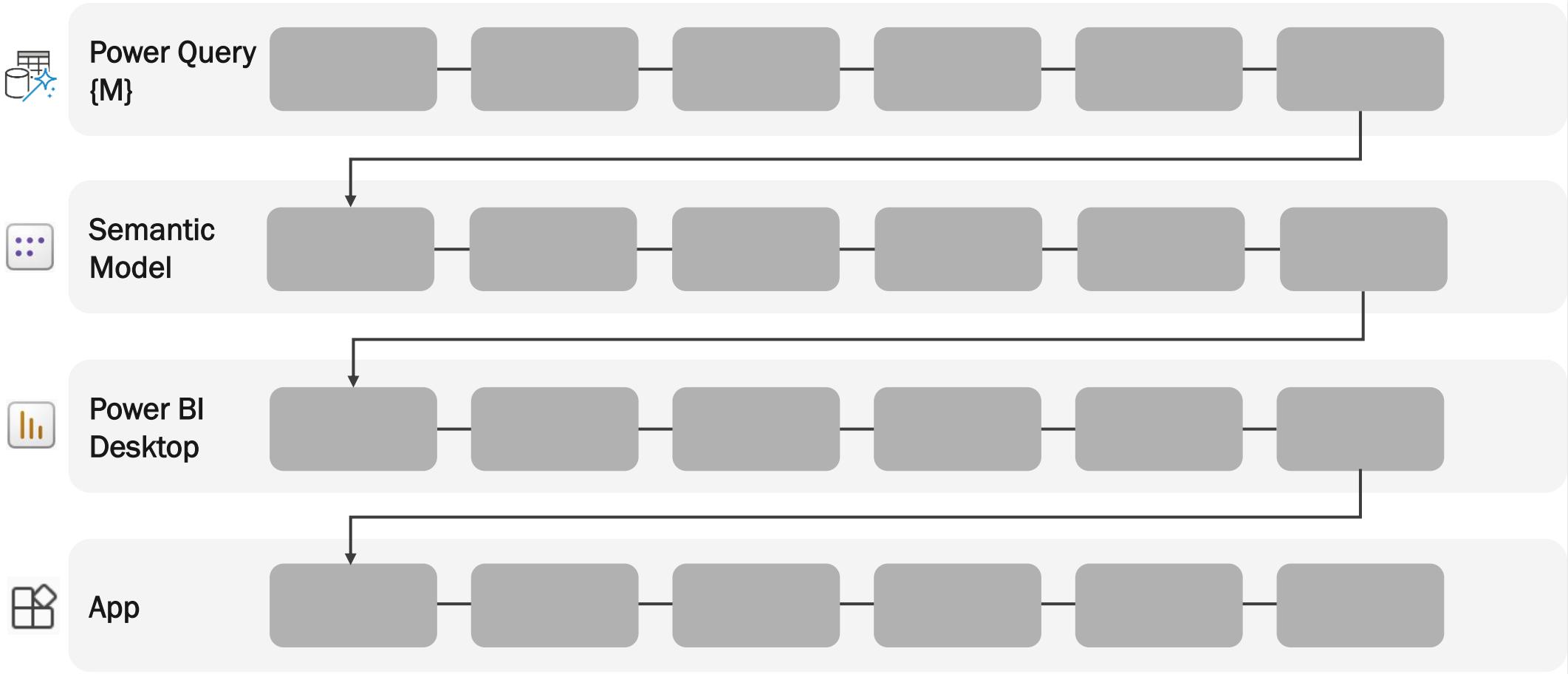
Power BI Documentation System – from Model to App



Purpose for docs:
Clear, Concise, Complete, Consistent, Correct, Consumable

Documentation and transparency from model to app

From report consumers to report developers to semantic model developers and data ingest

Best Practice Analyzer Rules to highlight violations and severity of best practices

Tabular Editor 2/3 for Semantic Model and DAX scripts

Semantic Link Labs in Fabric Notebooks for automation like never before

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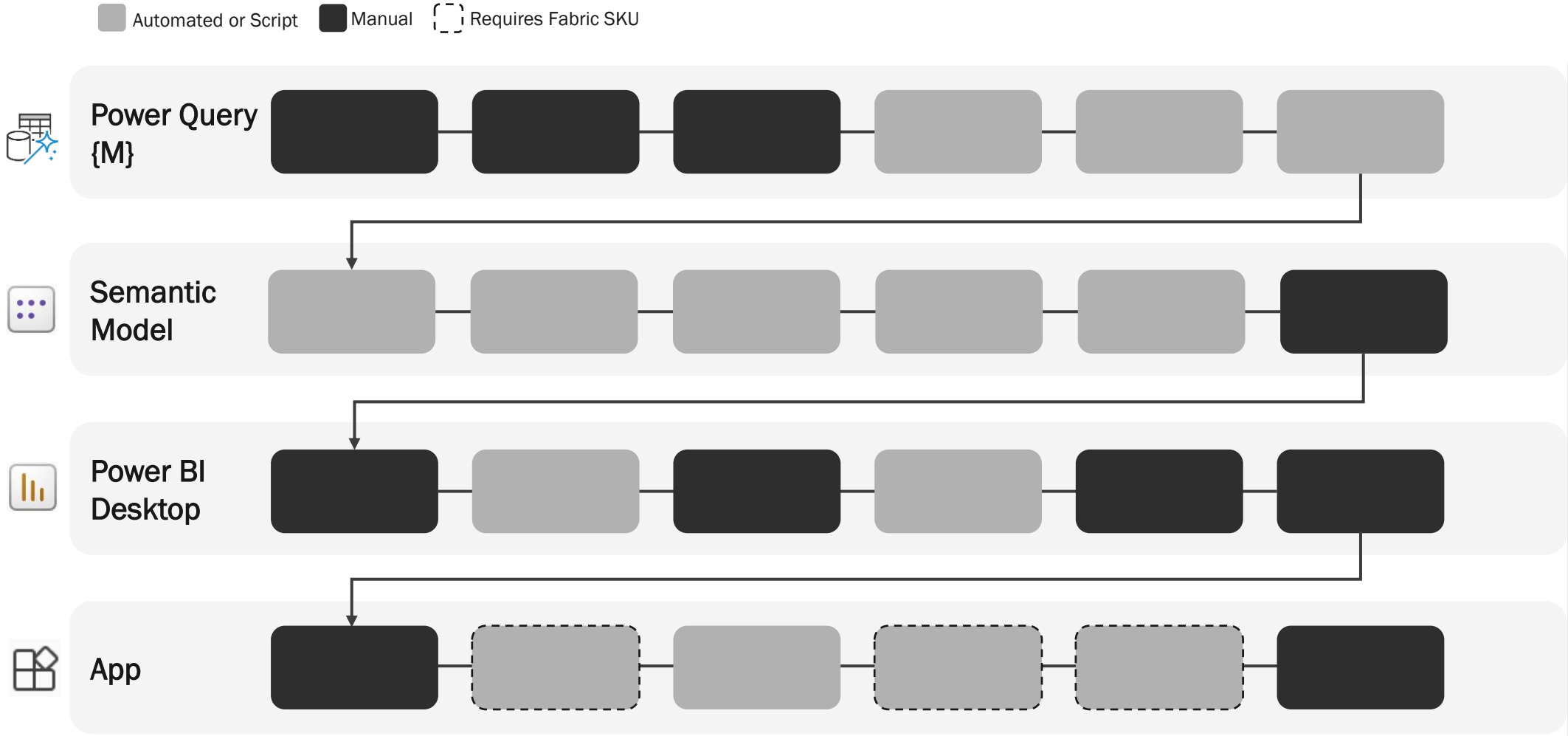
Power BI Documentation System – from Model to App



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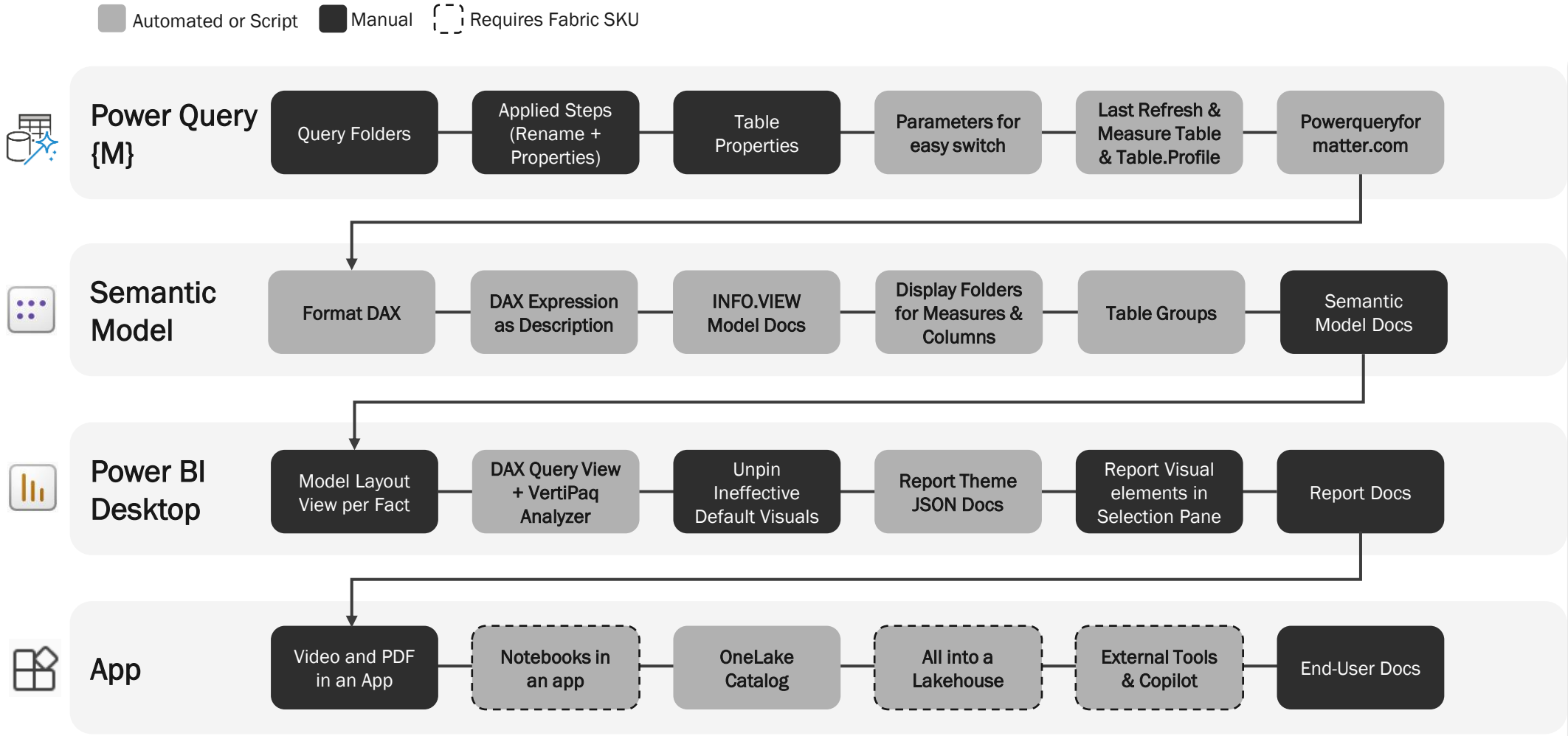

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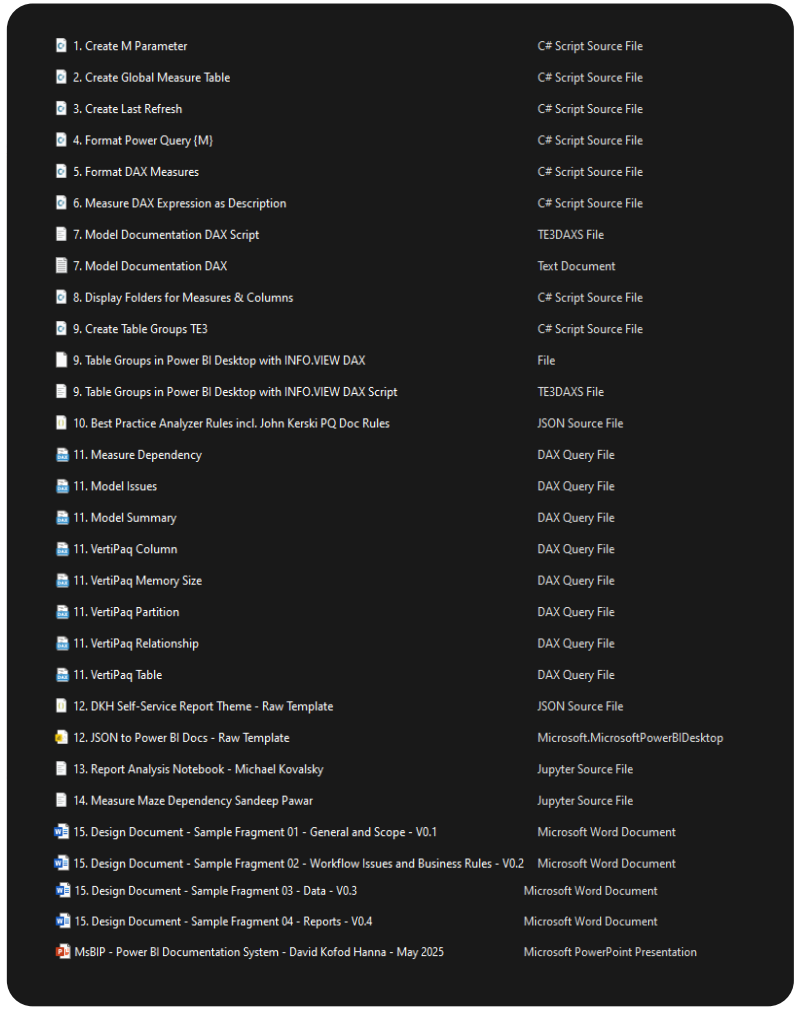
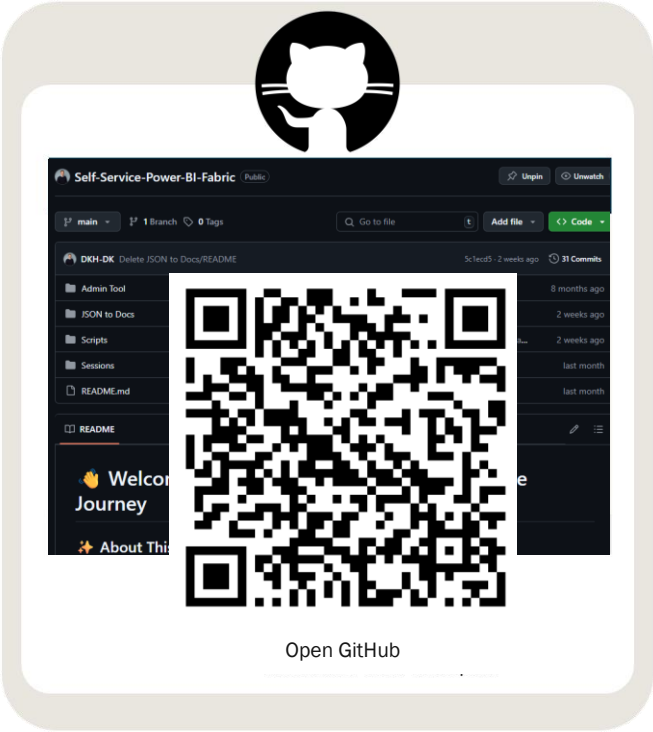
A Power BI Documentation System
– Not Just an Afterthought

Released on **GitHub**
and soon a LinkedIn article





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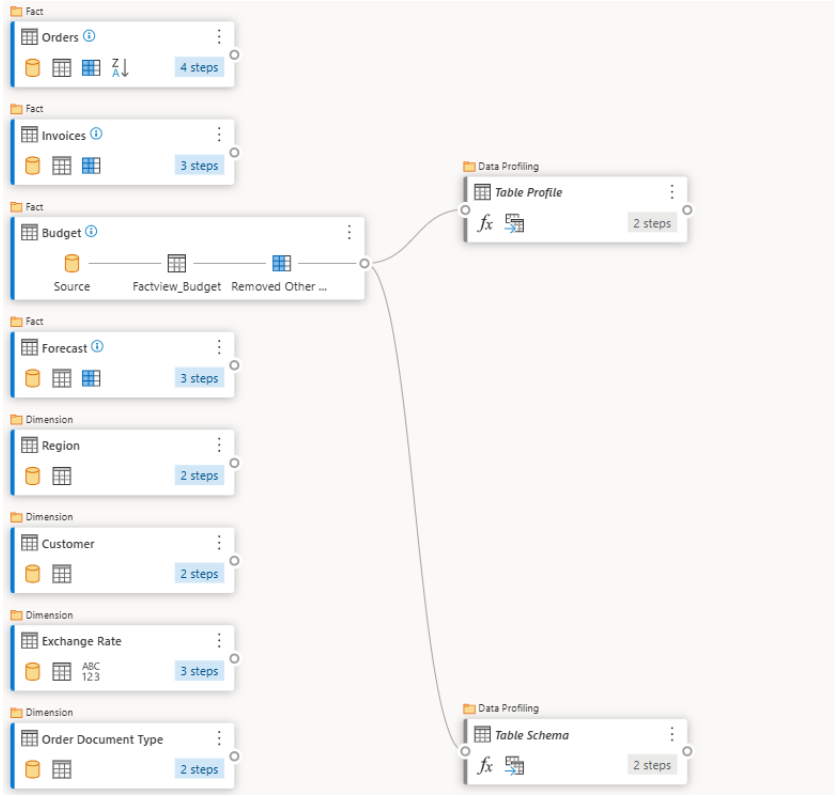
Query folders by type – and Diagram View in Dataflow Gen2

- Dimview Brands
- Dimview Budget Rate
- Dimview Customers
- Dimview Employees
- Dimview Exchange Rate
- Dimview Invoice Document Type
- Dimview Order Document Type
- Dimview Order Status
- Dimview Products
- Dimview Regions
- Factview Budget
- Factview Forecast
- Factview Invoices
- Factview Orders

- Fact [4]
  - Orders
  - Invoices
  - Budget
  - Forecast
- Dimension [8]
  - Date
  - Region
  - Product
  - Customer
  - Exchange Rate
  - Order Document Type
  - Order Status
  - Invoice Document Type
- Meta Data & Organize [3]
  - Last Refresh
  - Global Measures
  - Local Measures
- Functions & Parameters [1]
  - *fn Extended Date*
- Staging [2]
  - *Brands*
  - *Products*
- Data Profiling [2]
  - Table Profile
  - Table Schema



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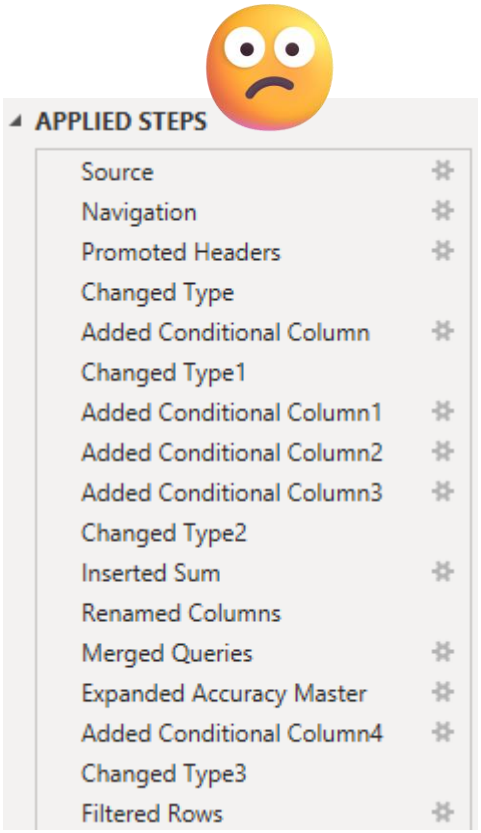
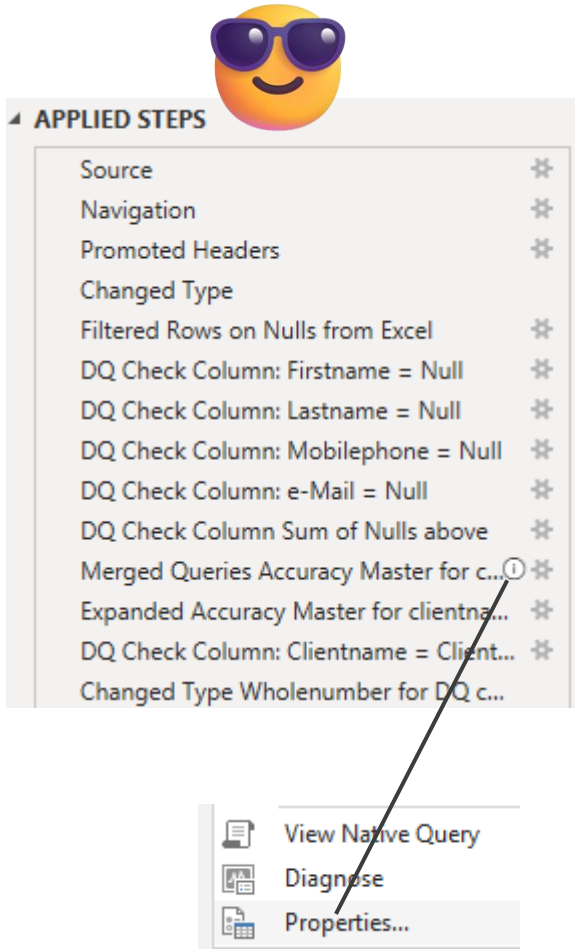
Applied Steps & Properties in step





My Standard:

Filter as early as possible (rows and columns)

Combine similar steps into one – instead of Changed Type1, Changed Type2, Changed Type3

Rename steps that are important for yourself or colleagues to understand
- Added Conditional Column
- Merge Queries
- Append Queries

Add more documentation for tooltip info at steps by right-clicking step and choose **Properties**– if you are needing more space than in the step name.

The **#””** in the steps can be avoided if you don’t use space

Query Folding for SQL DB and OData connection and always **Roche’s Maxim of Data Transformation**.

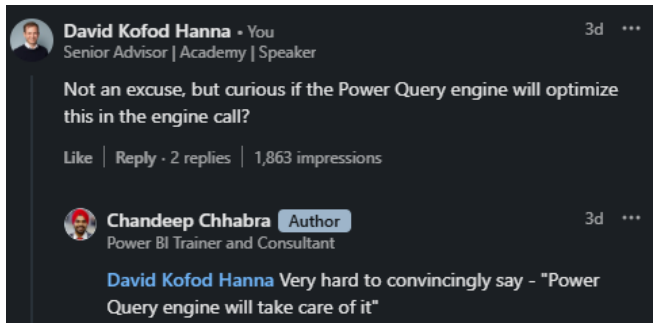


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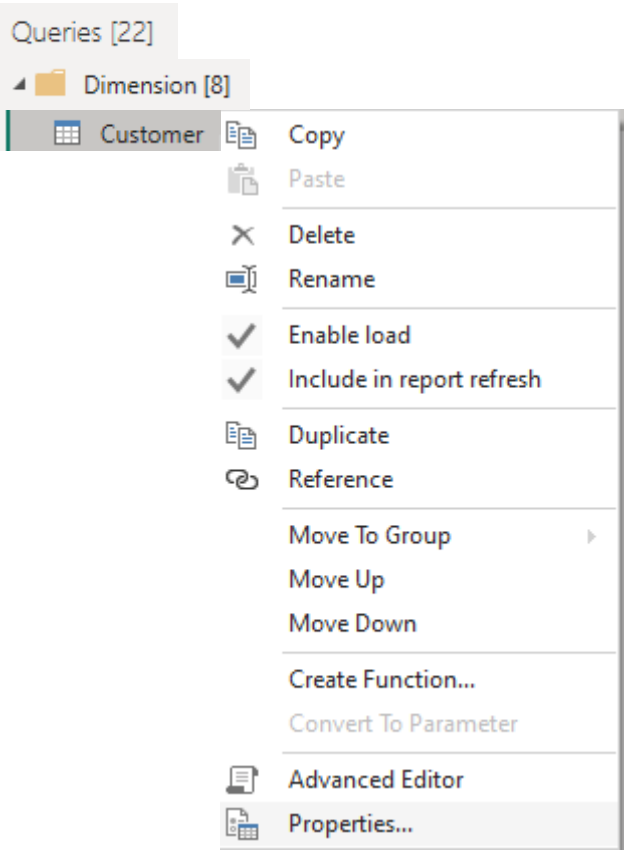
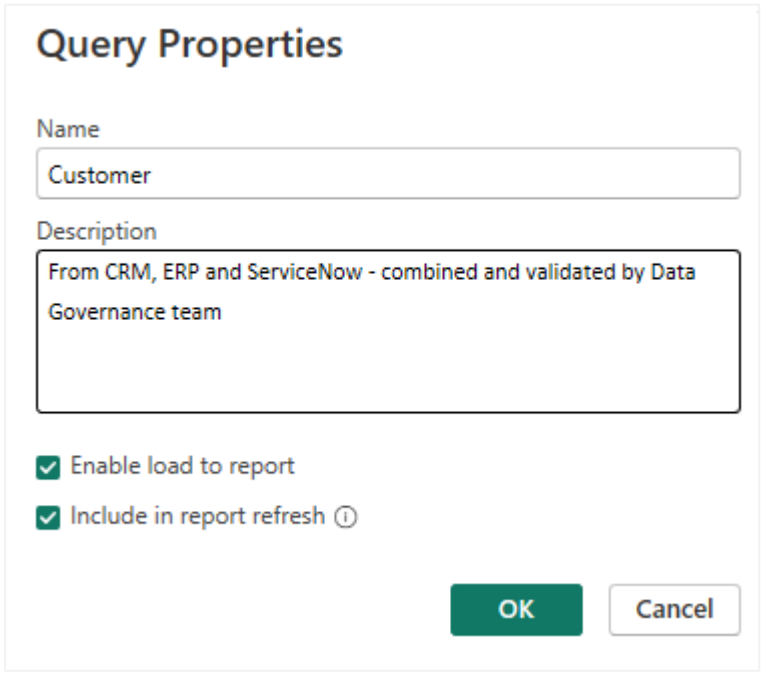
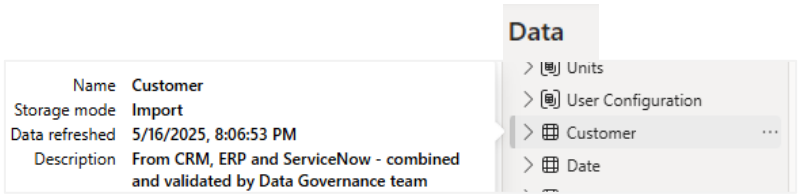
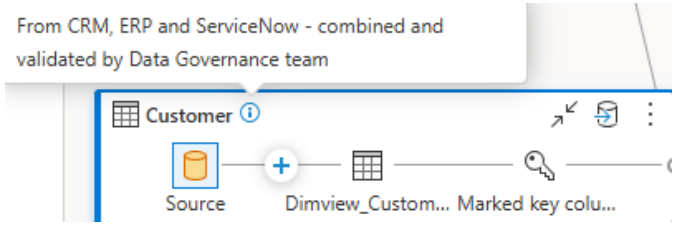
Table properties









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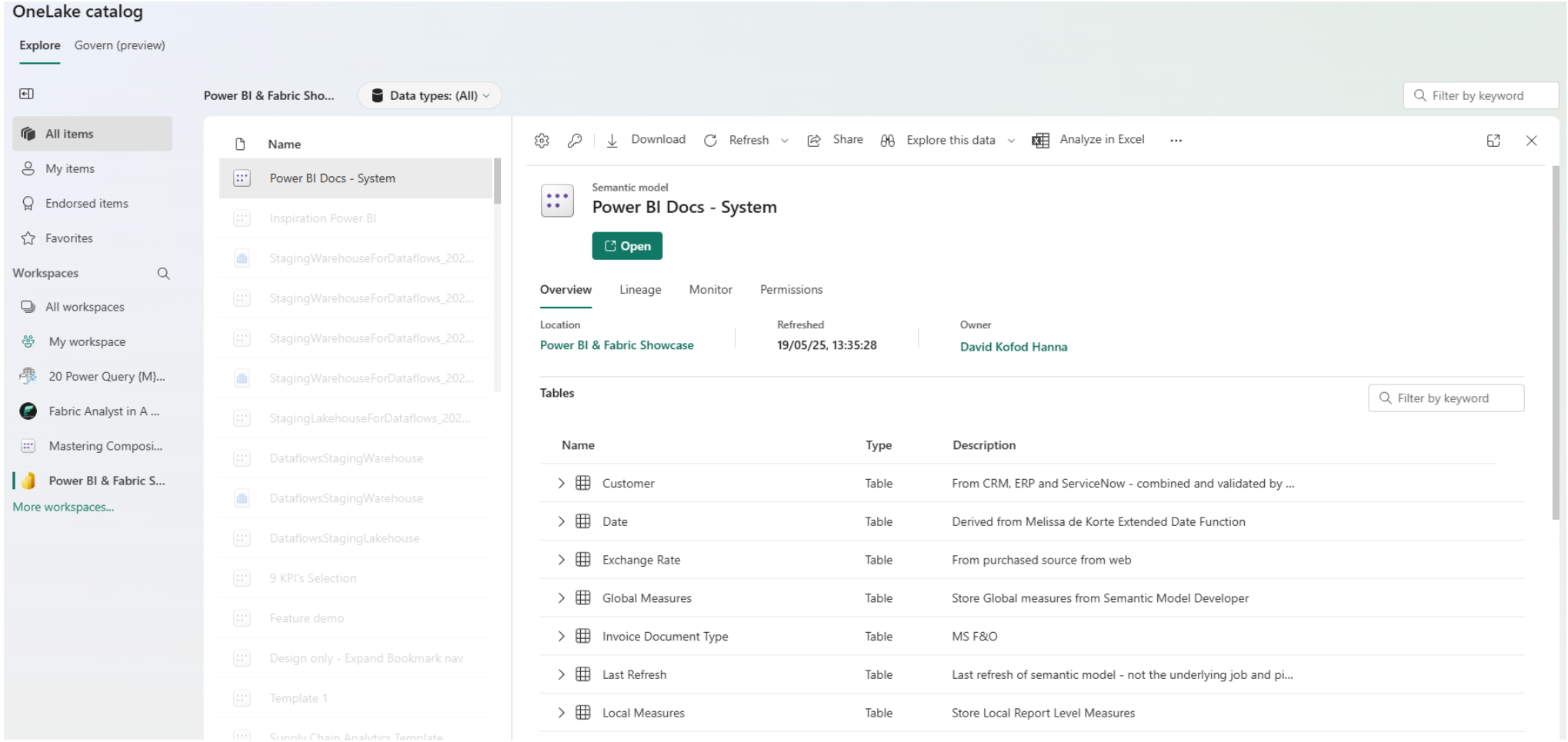
Semantic Model – OneLake catalog



OneLake Catalog: https://app.powerbi.com/onelake/explore?experience=power-bi

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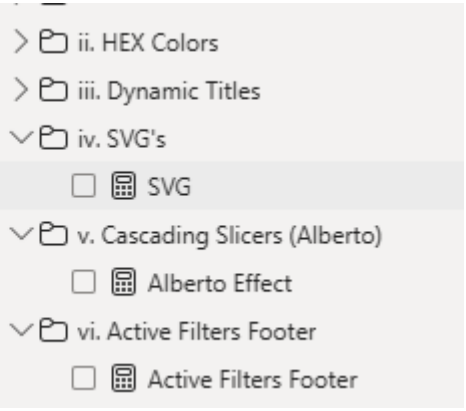
DAX expression as Measure Description

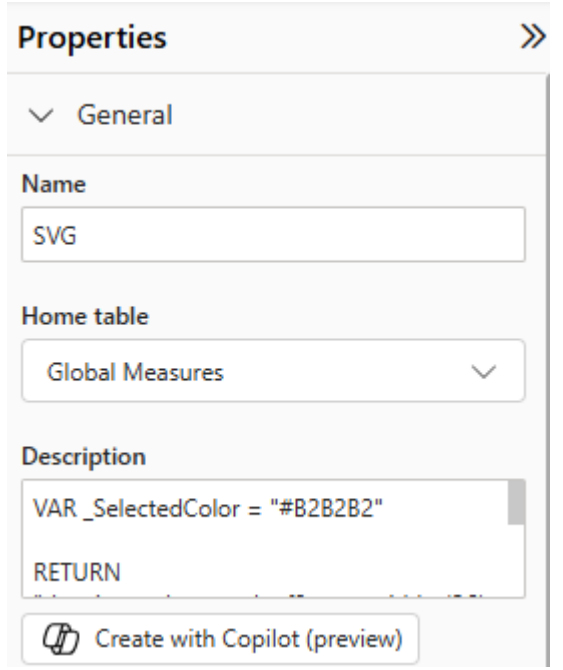
Name [SVG]
Description VAR _SelectedColor = "#B2B2B2"

RETURN
"data:image/svg+xml;utf8,<svg width='36' height='36' viewBox='0 0 36 36' fill='none' xmlns='http://www.w3.org/2000/svg'>
<rect width='36' height='36' rx='4' fill='" & _SelectedColor & "'/>
</svg>"



"There's a script for that"

```
foreach (var m in Model.AllMeasures)
{ m.Description = m.Expression; }
```



https://docs.tabulareditor.com/te2/Useful-script-snippets.html

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Model Docs DAX INFO.VIEW

"There's a script for that"

Model Documentation
by INFO.VIEW Functions

Filter by keyword

Column | Measure | Relationship | Table

Location	Name	Type	Expression	Description
Global Measures	Global Measures	Measure	"Locate them here my semantic model developer friend"	
Global Measures	Sum of Delivery Cost	Measure	SUM('Invoices'[Delivery Cost])	This measure is the sum of column 'Invoices'[Delivery Cost]
Global Measures	Sum of Forecast (EUR)	Measure	SUM('Forecast'[Forecast (EUR)])	This measure is the sum of column 'Forecast'[Forecast (EUR)]
Global Measures	Sum of Freight	Measure	SUM('Invoices'[Freight])	This measure is the sum of column 'Invoices'[Freight]
Global Measures	Sum of Late Delivery Penalti...	Measure	SUM('Invoices'[Late Delivery Penalties])	This measure is the sum of column 'Invoices'[Late Delivery Penalties]
Global Measures	Sum of Net Invoice COGS	Measure	SUM('Invoices'[Net Invoice COGS])	This measure is the sum of column 'Invoices'[Net Invoice COGS]
Global Measures	Sum of Net Invoice Cost	Measure	SUM('Invoices'[Net Invoice Cost])	This measure is the sum of column 'Invoices'[Net Invoice Cost]
Global Measures	Sum of Net Invoice Quantity	Measure	SUM('Invoices'[Net Invoice Quantity])	This measure is the sum of column 'Invoices'[Net Invoice Quantity]
Global Measures	Sum of Net Invoice Value	Measure	SUM('Invoices'[Net Invoice Value])	This measure is the sum of column 'Invoices'[Net Invoice Value]
Global Measures	Sum of Net Order Quantity	Measure	SUM('Orders'[Net Order Quantity])	This measure is the sum of column 'Orders'[Net Order Quantity]
Global Measures	Sum of Net Order Value	Measure	SUM('Orders'[Net Order Value])	This measure is the sum of column 'Orders'[Net Order Value]
Global Measures	Sum of Total Budget	Measure	SUM('Budget'[Total Budget])	This measure is the sum of column 'Budget'[Total Budget]
Local Measures	Local Measures	Measure	"Locate them here my report developer friend"	
Table Group DAX	Number of tables	Measure	COUNTROWS('Table Group DAX')	

💡 **INFO.VIEW DAX Functions make this possible**

INFO.VIEW.COLUMNS()

INFO.VIEW.MEASURES()

INFO.VIEW.TABLES()

INFO.VIEW.RELATIONSHIPS()

Model Documentation
- Attributes
  - Description
  - Expression
  - Location
  - Name
  - Type

```
Model Documentation =
VAR _columns =
    SELECTCOLUMNS(
        FILTER(
            INFO.VIEW.COLUMNS( ),
            [Table] <> "Model Documentation" && NOT ( [IsHidden] )
        ),
        "Type", "Column",
        "Name", [Name],
        "Description", [Description],
        "Location", [Table],
        "Expression", [Expression]
    )
VAR _measures =
    SELECTCOLUMNS(
        FILTER(
            INFO.VIEW.MEASURES( ),
            [Table] <> "Model Documentation" && NOT ( [IsHidden] )
        ),
        "Type", "Measure",
        "Name", [Name],
        "Description", [Description],
        "Location", [Table],
        "Expression", [Expression]
    )
VAR _tables =
    SELECTCOLUMNS(
        FILTER(
            INFO.VIEW.TABLES( ),
            [Name] <> "Model Documentation" && [Name] <> "Calculations"
                && NOT ( [IsHidden] )
        ),
        "Type", "Table",
        "Name", [Name],
        "Description", [Description],
        "Location", BLANK( ),
        "Expression", [Expression]
    )
VAR _relationships =
    SELECTCOLUMNS(
        INFO.VIEW.RELATIONSHIPS( ),
        "Type", "Relationship",
        "Name", [Relationship],
        "Description", BLANK( ),
        "Location", BLANK( ),
        "Expression", [Relationship]
    )
RETURN
    UNION( _columns, _measures, _tables, _relationships )
```

David Kofod Hanna: https://www.linkedin.com/pulse/model-documentation-automation-dax-scripts-tabular-editor-hanna-7bhyf/

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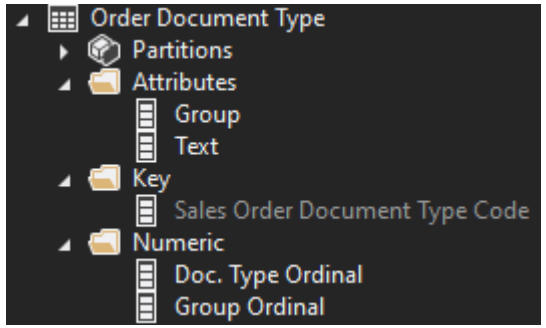
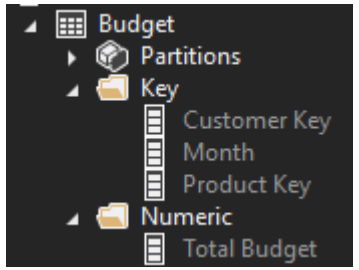
Display folders for measures and columns





"There's a script for that"

```
//Go through each table in the model
foreach(var table in Model.Tables)
{
    if(table.Name != "Date"){
    //First look at columns
    foreach( var column in table.Columns)
        {
        var keySuffix = "Key";
        var columnDateType = column.DataType.ToString();
            //DWCreatedDate column should be hidden in a sepearte folder
            if( column.Name == "DWCreatedDate")
            {
                column.DisplayFolder = "Attributes\\Metadata";
                column.IsHidden = true;
            }
            //Numeric columns should not be aggregated and float (double) data type should not be used
            if(column.DataType == DataType.Double || column.DataType == DataType.Decimal ||  column.DataType == DataType.Int64)
            {
                column.DisplayFolder = "Numeric";
                column.SummarizeBy = AggregateFunction.None;
                if(column.DataType == DataType.Double)
                {
                    column.DataType = DataType.Decimal;
                }
            }
            //Boolean data types into their own folder
            if(column.DataType == DataType.Boolean)
            {
                column.DisplayFolder = "Flags";
            }
            if(column.DataType == DataType.String)
            {
                column.DisplayFolder = "Attributes";
            }
            //Keys go into their own display folder, should not be aggregrated and hidden.
            if(column.UsedInRelationships.Any())
            {
                column.DisplayFolder = "Key";
                column.SummarizeBy = AggregateFunction.None;
                column.IsHidden = true;
            }
            //Date keys get their own folder and other dates go in attributes
           if( columnDateType == "DateTime" && column.Name != "DWCreatedDate")
            {
                if(column.UsedInRelationships.Any())
                {
                    column.DisplayFolder = "Key";
                    column.IsHidden = true;
                }
                else{
                    column.DisplayFolder = "Dates";
```

https://docs.tabulareditor.com/common/CSharpScripts/Beginner/script-create-table-groups.html

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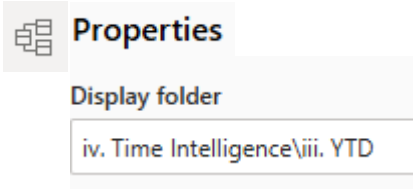
Display folders in Global and Local Measure Groups

To create subfolder use \



To order folders by ...

Number	Roman Numeral
1	i
2	ii
3	iii
4	iv
5	v
6	vi
7	vii
8	viii
9	ix
10	x

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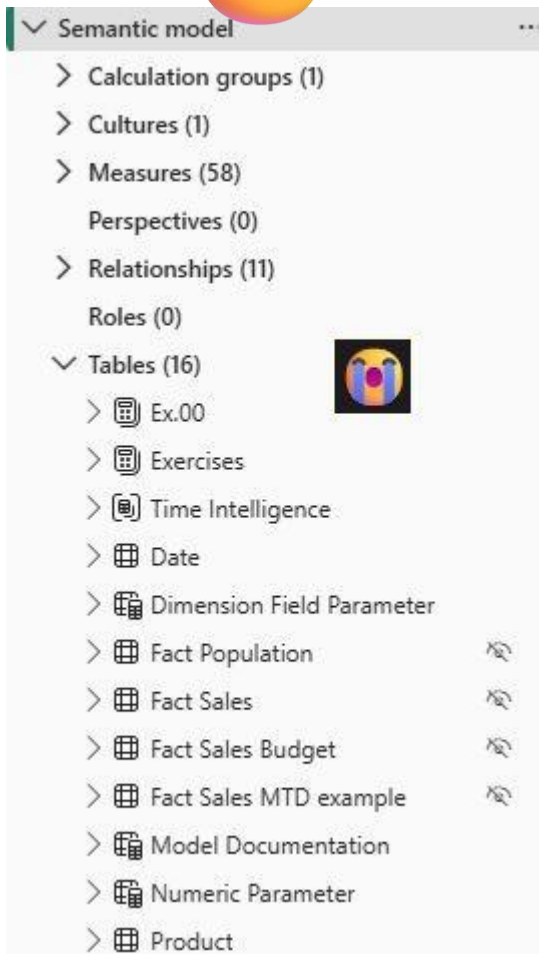
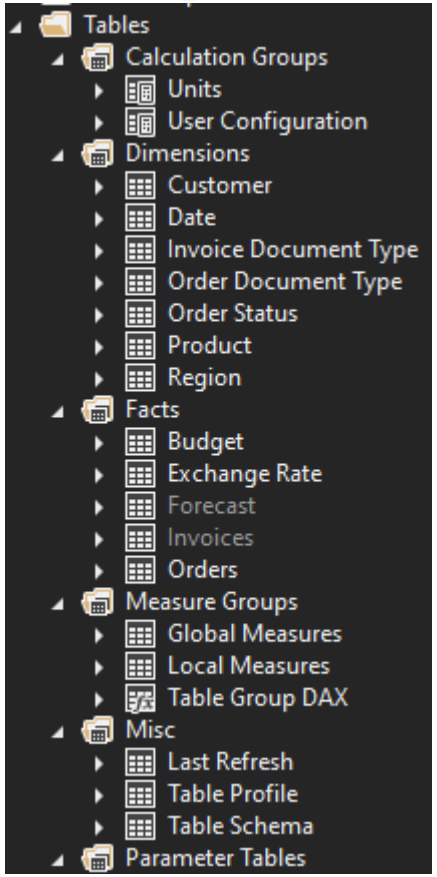
Table Groups in Tabular Editor 3



"There's a script for that"

```
// ********** CREATE TABLE GROUPS **********

// Loop through all tables in the model:
foreach (var table in Model.Tables)
{
    if (table is CalculationGroupTable)
    {
        // Assign table group for calculation groups:
        table.TableGroup = "Calculation Groups";
    }
    else if (!table.UsedInRelationships.Any() && table.Measures.Any(m => m.IsVisible))
    {
        // Tables containing visible measures, but no relationships to other tables:
        table.TableGroup = "Measure Groups";
    }
    else if (table.UsedInRelationships.All(r => r.FromTable == table) && table.UsedInRelationships.Any())
    {
        // Tables exclusively on the "many" side of relationships:
        table.TableGroup = "Facts";
    }
    else if (!table.UsedInRelationships.Any() && table is CalculatedTable && !table.Measures.Any())
    {
        // Tables without any relationships that are calculated tables
        // and do not have measures:
        table.TableGroup = "Parameter Tables";
    }
    else if (table.UsedInRelationships.Any(r => r.ToTable == table))
    {
        // Tables on the "one" side of relationships:
        table.TableGroup = "Dimensions";
    }
    else
    {
        // All other tables:
        table.TableGroup = "Misc";
    }
}
```



https://docs.tabulareditor.com/common/CSharpScripts/Beginner/script-create-table-groups.html

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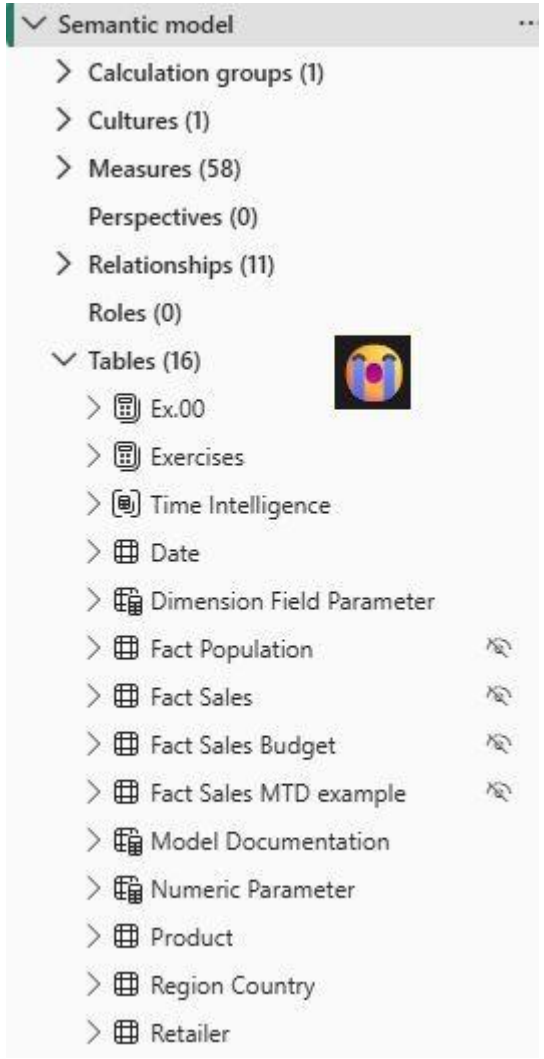
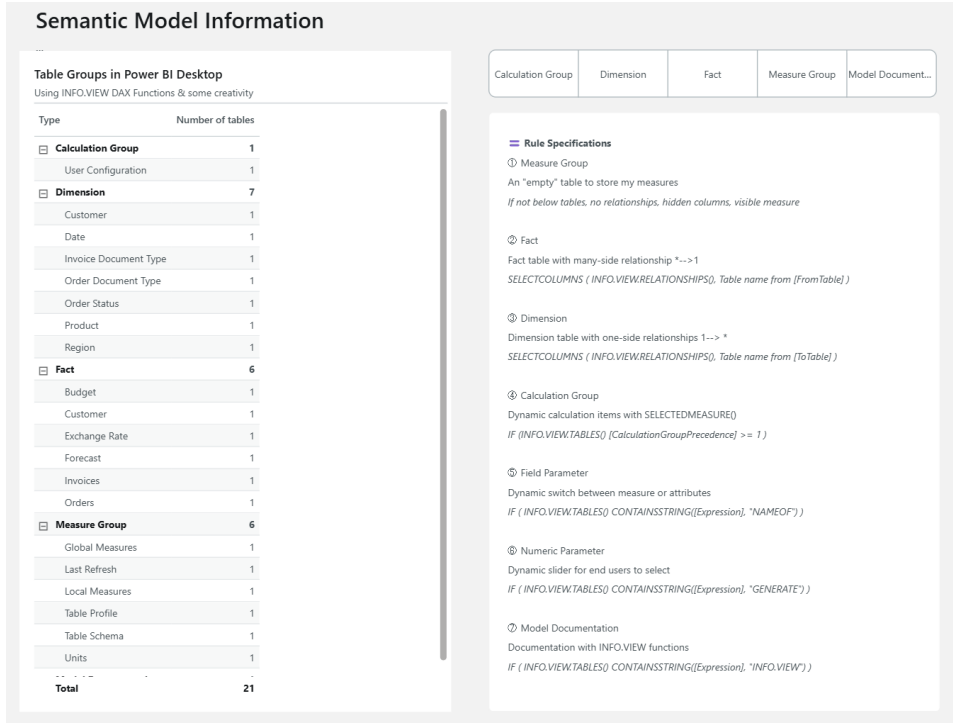
Table Group in Power BI Desktop with INFO.VIEW



"There's a script for that"

Description	Type	Order	Table Name
Classified as Measure Group	Measure Group	1	Exercises
Classified as Measure Group	Measure Group	1	Ex.00
Fact with many-side relationship	Fact	2	Fact Sales
Fact with many-side relationship	Fact	2	Fact Sales Budget
Fact with many-side relationship	Fact	2	Fact Population
Fact with many-side relationship	Fact	2	Fact Sales MTD example
Dimension with one-side relationship	Dimension	3	Sales Size
Dimension with one-side relationship	Dimension	3	Retailer
Dimension with one-side relationship	Dimension	3	Product
Dimension with one-side relationship	Dimension	3	Date
Dimension with one-side relationship	Dimension	3	Region Country
Dynamic calculation items	Calculation Group	4	Time Intelligence
Dynamic switch between measure or attributes	Field Parameters	5	Dimension Field Parameter
Dynamic slider for end users to select	Numeric Parameter	6	Parameter
Documentation with INFO.VIEW functions	Model Documentation	7	Model Documentation



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David Kofod Hanna: https://www.linkedin.com/pulse/table-groups-power-bi-desktop-infoview-david-kofod-hanna-aotof/

Table Group with TMDL Annotations & DAX Query View

Annotations in TMDL View (created by Tabular Editor or do it yourself)

```
partition Budget = m
    mode: import
    queryGroup: Fact
    source =
            let
                Source = Sql.Database(Server, Database),
                Factview_Budget = Source{[Schema="Factview",Item="Budget"]}[Data],
                #"Removed Other Columns" = Table.SelectColumns(Factview_Budget,{"Month", "Total Budget", "Customer Key", "Product Key"}),
                #"Calculated End of Month" = Table.TransformColumns(#"Removed Other Columns",{{"Month", Date.EndOfMonth, type date}})
            in
                #"Calculated End of Month"

annotation PBI_NavigationStepName = Navigation

annotation PBI_ResultType = Table

annotation TabularEditor_TableGroup = Facts
```

DAX Query to filter on Table Group Annotations and merge with INFO.TABLES()

```
// Author - David Kofod Hanna
// Create DAX Query Table on Table Groups Feature in Tabular Editor from TMDL Annotations
// Contact - https://www.linkedin.com/in/davidkofod/

EVALUATE

// Extract all table-level metadata: ID, Name, and Description
VAR _tables =
    SELECTCOLUMNS(
        INFO.TABLES(),
        "TableID", [ID],
        "TableName", [Name],
        "Description", [Description]
    )

// Extract annotations where the name matches "TabularEditor_TableGroup"
// These annotations are assigned to tables via Tabular Editor scripts https://docs.tabulareditor.com/te3/features/table-groups.html#metadata-and-scripting
// Alternatively, you can manually assign an annotation in TMDL view for each table/partition
VAR _annotations =
    SELECTCOLUMNS(
        FILTER(
            INFO.ANNOTATIONS(),
            [Name] = "TabularEditor_TableGroup"
        ),
        "TableID", [ObjectID],
        "Annotation Name", [Name],
        "Annotation Value", [Value]
    )

// Join tables and annotations based on matching Table IDs
RETURN
    NATURALINNERJOIN(_tables, _annotations)
    ORDER BY [Annotation Value]
```

“There’s a script for that”

David Kofod Hanna: GitHub

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DAX Query View for testing

DAX Query View

DAX queries will be saved to your model They won't be visible when published in the Power BI service. Learn more

Run | Update model with changes (0)

```
// Author - Hariharan Rajendran
// Name - Model Summary in DAX Query View
// Version - 1.0
// Contact - https://www.linkedin.com/in/imhariharanr/
//This query will provide details about your model like propery, value and comment to execute the DAX query to see the complete list
//Define the properties
EVALUATE
    VAR _tableCount = COUNTROWS(INFO.TABLES())
    VAR _columnCount = COUNTROWS(INFO.COLUMNS())
    VAR _CalcColumnCount = COUNTROWS(FILTER(
        INFO.COLUMNS(),
        [Type] = 2
    ))
    VAR _Measures = COUNTROWS(INFO.MEASURES())
    VAR _Relationships = COUNTROWS(INFO.RELATIONSHIPS())
    VAR _Composite = IF(
        COUNTROWS(SUMMARIZE(
            INFO.VIEW.TABLES(),
            [StorageMode]
        )) > 1,
        "Yes",
        "No"
    )
    VAR _daxTables = COUNTROWS(FILTER(
```

Model Summary

	[Property]	[Value]	[Comment]
1	Tables	21	EVALUATE INFO.TABLES()
2	Columns	197	EVALUATE INFO.COLUM...
3	--CalculatedColumns	0	EVALUATE FILTER(INFO....
4	--DirectColumns	197	EVALUATE FILTER(INFO....
5	Measures	17	EVALUATE INFO.MEASU...
6	Relationships	13	EVALUATE INFO.RELATI...
7	IsCompositeModel	No	EVALUATE INFO.VIEW.T...
8	DAXTables	2	EVALUATE FILTER(INFO....
9	IsPartitioned	No	EVALUATE FILTER(INFO....
10	Perspectives	0	EVALUATE FILTER(INFO....
11	Calculation Groups	2	EVALUATE FILTER(INFO....
12	Roles	0	EVALUATE FILTER(INFO....
13	PBIDesktopVersion	2.142.1277.0 (25.04)+014fde45...	EVALUATE FILTER(INFO....

Model Issues

	[Property]	[Value]	[Comment]	[Status]
1	Is Partition Required?	Yes	EVALUATE VAR _dt_parti...	Fail
2	Dedicated Date Table	No	EVALUATE FILTER(INFO....	Fail
3	Is there any Redundant Columns	Yes	EVALUATE FILTER(GROU...	Fail
4	Are descriptions added?	No	EVALUATE FILTER(INFO....	Fail
5	Calculated Columns		EVALUATE FILTER(INFO....	Pass
6	Local Date Tables (Auto Time Intelligence)	0	EVALUATE FILTER(INFO....	Pass
7	In Active Relationships	0	EVALUATE FILTER(INFO....	Pass
8	Bi-directional Relationships	0	EVALUATE FILTER(INFO....	Pass
9	Many to Many Relationships	0	EVALUATE FILTER(INFO....	Pass

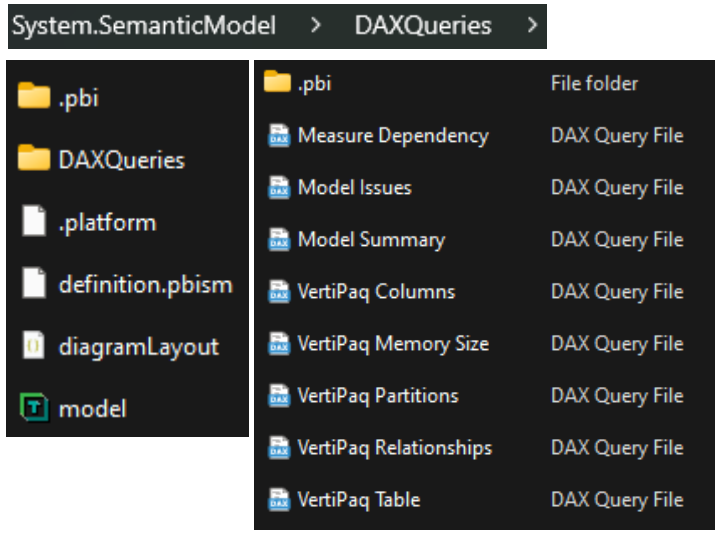
Measure Dependency

	[MeasureName]	[Expression]	[SourceMeasure]	[SourceExpression]	[Type]	[ReferenceTable]	[ReferenceObject]
1	Net Invoice Value YTD	CALCULATE([Sum of Ne...	Sum of Net Invoice Value	SUM('Invoices'[Net Invo...	TABLE	Invoices	Invoices
2	Net Invoice Value YTD	CALCULATE([Sum of Ne...	Sum of Net Invoice Value	SUM('Invoices'[Net Invo...	COLUMN	Invoices	Net Invoice Value
3	Net Invoice Value MTD	CALCULATE([Sum of Ne...	Sum of Net Invoice Value	SUM('Invoices'[Net Invo...	TABLE	Invoices	Invoices
4	Net Invoice Value MTD	CALCULATE([Sum of Ne...	Sum of Net Invoice Value	SUM('Invoices'[Net Invo...	COLUMN	Invoices	Net Invoice Value
5	Net Invoice Value QTD	CALCULATE([Sum of Ne...	Sum of Net Invoice Value	SUM('Invoices'[Net Invo...	TABLE	Invoices	Invoices
6	Net Invoice Value QTD	CALCULATE([Sum of Ne...	Sum of Net Invoice Value	SUM('Invoices'[Net Invo...	COLUMN	Invoices	Net Invoice Value
7	Number of tables	COUNTROWS('Table Gr...			CALC_TABLE	Table Group DAX	Table Group DAX
8	Sum of Total Budget	SUM('Budget'[Total Bud...			TABLE	Budget	Budget
9	Sum of Total Budget	SUM('Budget'[Total Bud...			COLUMN	Budget	Total Budget
10	Sum of Net Order Quan...	SUM('Orders'[Net Order...			TABLE	Orders	Orders

VertiPaq Memory Size

	[Size in MB]
1	1017.25

Visible in **.PBIR** and for easy copy/paste



Hariharan Rajendran: https://www.linkedin.com/feed/update/urn:li:activity:7307061810375925760/
https://github.com/alexbadiu-insightsinmotion/PBI-Documentation/tree/main/DAX%20Query%20View

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Run DAX Query and save as delta table in Lakehouse 😲

DAX Query x Semantic Link Labs x DAX INFO Functions

Purpose of notebook is to collect, analyze and store semantic model INFO functions and DAX Queries in a Lakehouse and share with semantic model or report owners or "*crazy solution documenters*"

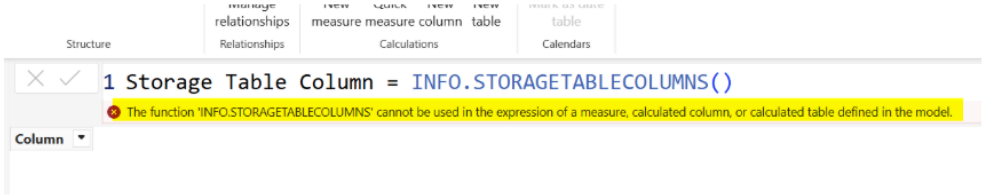
This can be run in a Python notebook

Credit to following

- Michael Kovalsky - Semantic Link Labs
- List of all DAX INFO functions
- Fourmoo on Python Notebook advantages vs spark notebooks
- Hariharan Rajendran's DAX Query on Models Issues and Model Summary
- Power BI Tips on Save to Delta table with Python
- Reza Rad's take on Power BI model analysis using DAX INFO functions
- David Kofod Hanna's GitHub on Power BI Documentation System

If you feel frustrated like me, not all DAX Info functions can be used like INFO.VIEW functions by adding a calculated DAX table.

Then we have been forced to used DAX Query View.



Save your frustration, because I found a way to store DAX Query results back to a lakehouse 😳

Manual DAX Query

In [ ]:
```
# Define DAX Query to execute
dax_query = """
 EVALUATE
 INFO.TABLES()
 """
```

In [ ]:
```
# Run DAX Query against Semantic Model
df_result_manual = fabric.evaluate_dax(
    dataset=SemanticModelName,
    dax_string=dax_query,
    workspace=WorkspaceName
    )

# Display the result
display(df_result_manual)
```

In [ ]:
```
labs.save_as_delta_table(
    dataframe=df_result_manual,
    delta_table_name="daxquery",
    write_mode="overwrite",   # or "append" based on your requirement
    merge_schema=False,       # Set to True if you want to merge schema
    schema=None,              # Provide schema if needed
    lakehouse=LakehouseName,
    workspace=None
)
```

Automated DAX Query loop and save to delta table

In [ ]:
```
# Defining DF of all INFO DAX Functions and descriptions

dataDAX = [
    ("INFO.ALTERNATEOFDEFINITIONS()", ""),
    ("INFO.ANNOTATIONS()", "Returns a list of all annotations in t
    ("INFO.ATTRIBUTEHIERARCHIES()", "Represents the TMSCHEMA_ATTRI
    ("INFO.ATTRIBUTEHIERARCHYSTORAGES()", ""),
```

David Kofod Hanna: https://www.linkedin.com/posts/davidkofod_semanticlinklabs-notebook-activity-7348950238671306752-klPh

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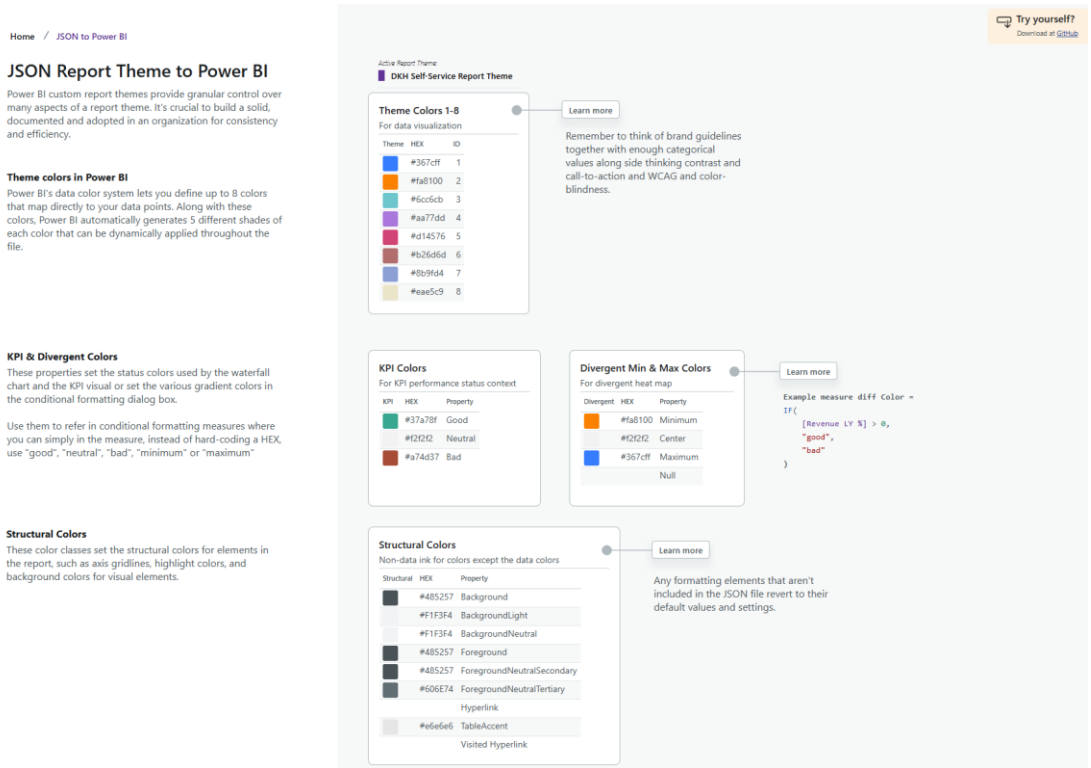
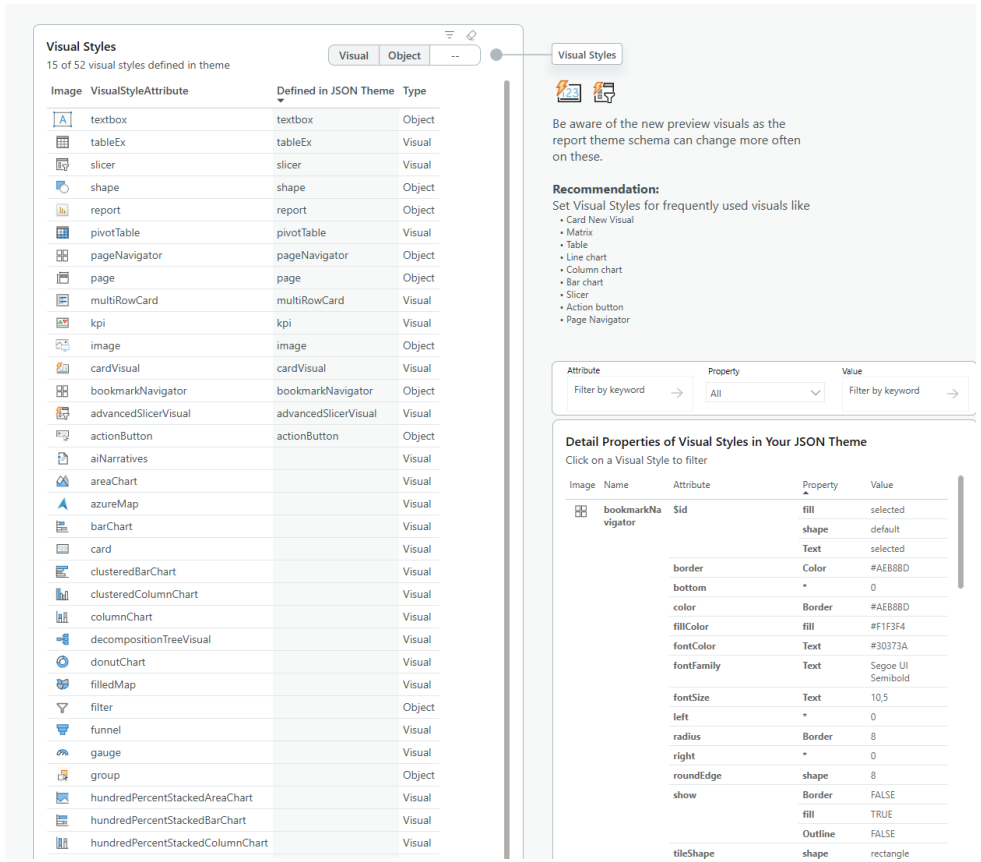
JSON Report Theme – For the Nerdy Data Storytellers





David Kofod Hanna: JSON to Docs Live report

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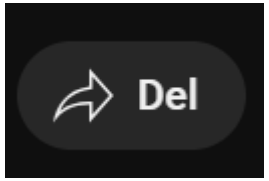
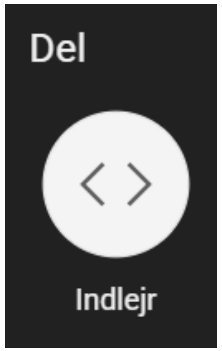
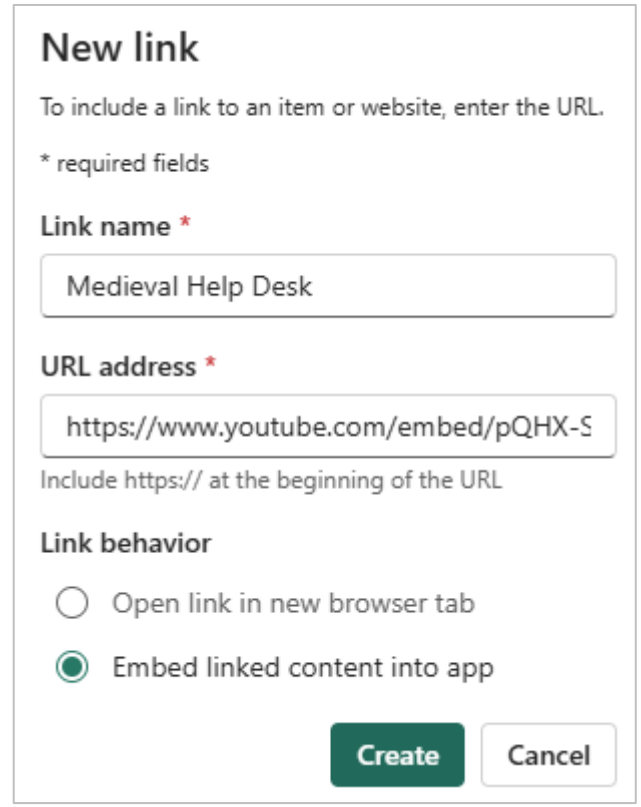
Embed videos





Helpdesk support back in the day of the middle age



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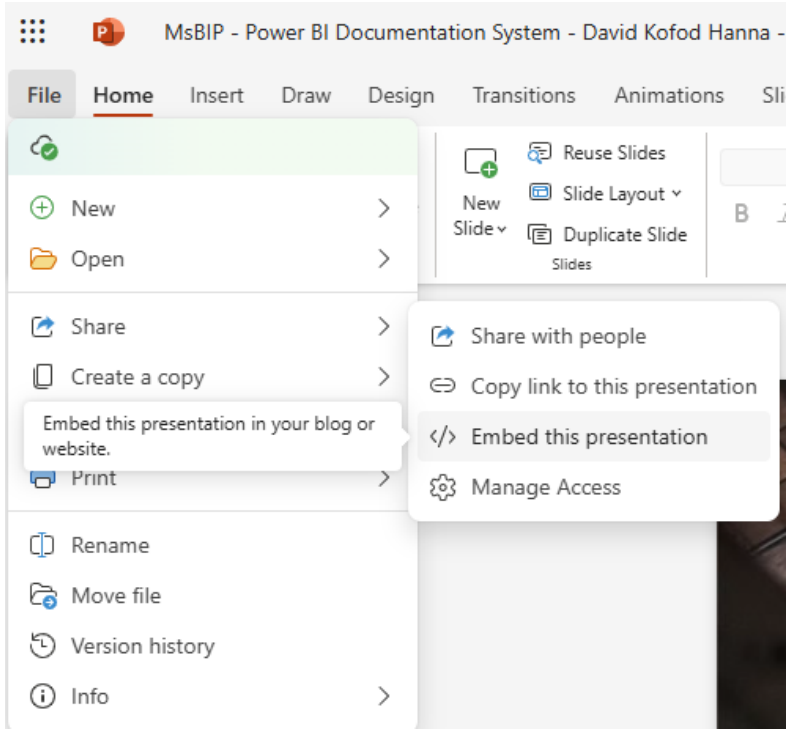
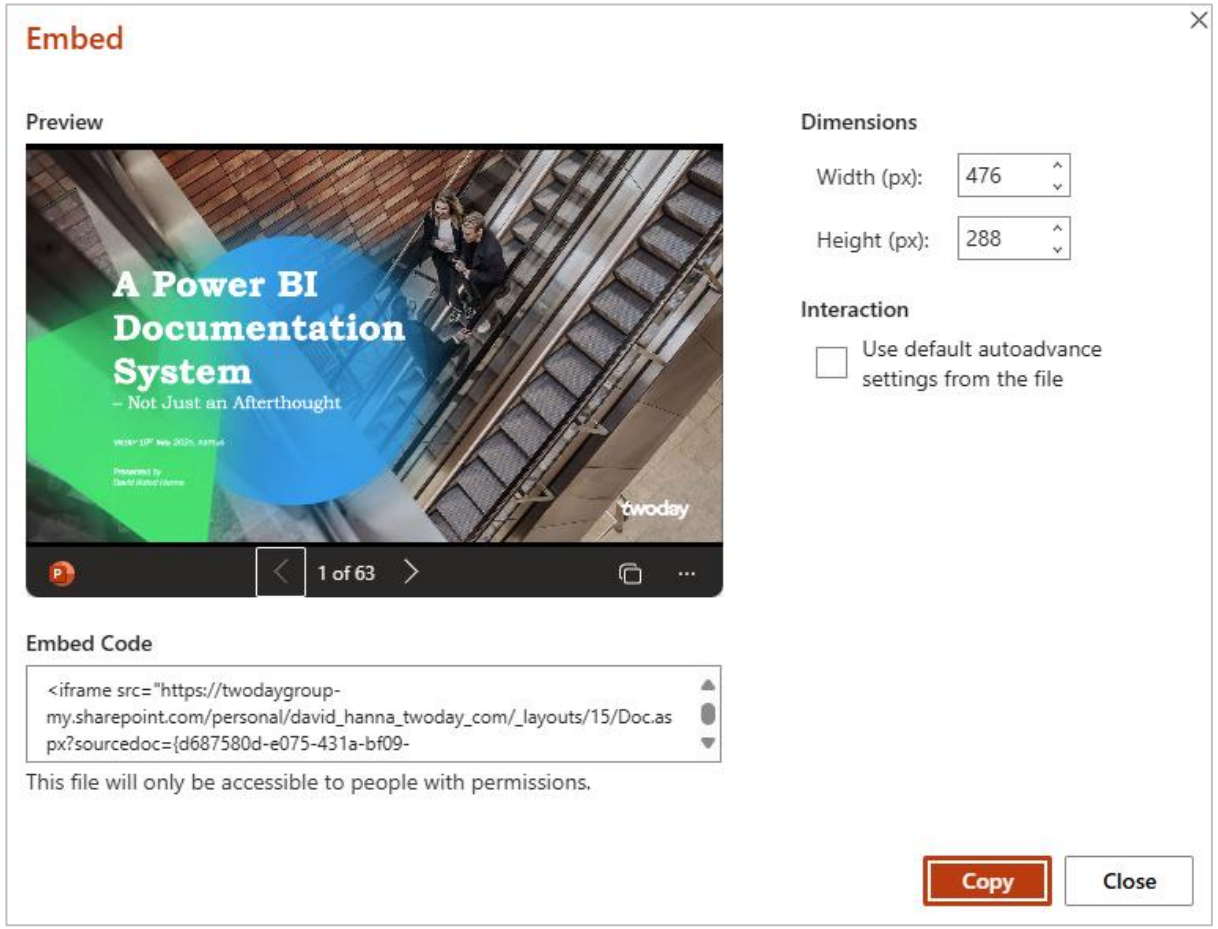
Embed PowerPoint, Excel, PDF





Guy in a Cube: https://www.youtube.com/watch?v=fr1yjm-uFRE

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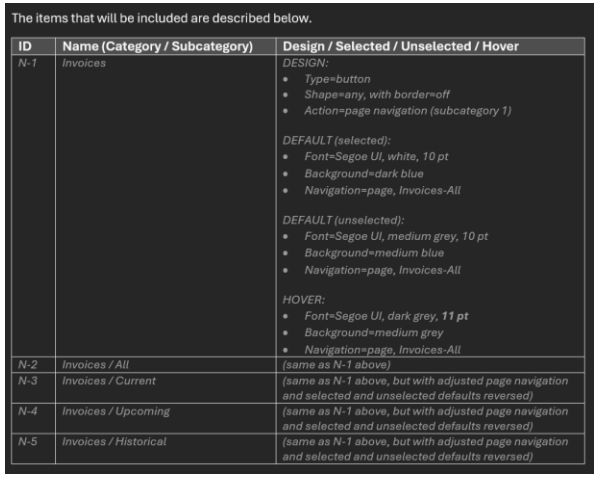
Design Documents – Samples

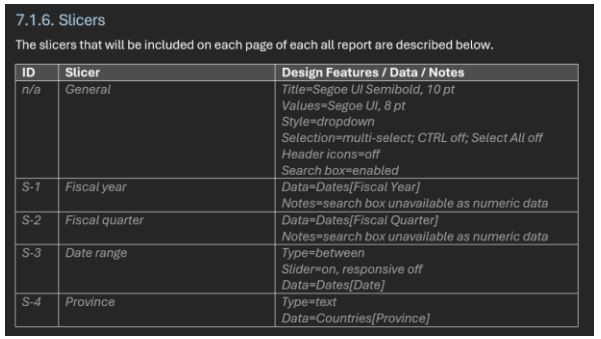
Power BI Documentation – Design Document
Sample Fragment 04 – Reports

Table of Contents



The items that will be included are described below.

ID	Name (Category / Subcategory)	Design / Selected / Unselected / Hover
N-1	*Invoices*	*DESIGN:* • *Type=button* • *Shape=any, with border=off* • *Action=page navigation (subcategory 1)* *DEFAULT (selected):* • *Font=Segoe UI, white, 10 pt* • *Background=dark blue* • *Navigation=page, Invoices-All* *DEFAULT (unselected):* • *Font=Segoe UI, medium grey, 10 pt* • *Background=medium blue* • *Navigation=page, Invoices-All* *HOVER:* • *Font=Segoe UI, dark grey, **11 pt*** • *Background=medium grey* • *Navigation=page, Invoices-All*
N-2	*Invoices / All*	*(same as N-1 above)*
N-3	*Invoices / Current*	*(same as N-1 above, but with adjusted page navigation and selected and unselected defaults reversed)*
N-4	*Invoices / Upcoming*	*(same as N-1 above, but with adjusted page navigation and selected and unselected defaults reversed)*
N-5	*Invoices / Historical*	*(same as N-1 above, but with adjusted page navigation and selected and unselected defaults reversed)*



7.1.6. Slicers

The slicers that will be included on each page of each all report are described below.

ID	Slicer	Design Features / Data / Notes
n/a	*General*	*Title=Segoe UI Semibold, 10 pt* *Values=Segoe UI, 8 pt* *Style=dropdown* *Selection=multi-select; CTRL off; Select All off* *Header icons=off* *Search box=enabled*
S-1	*Fiscal year*	*Data=Dates[Fiscal Year]* *Notes=search box unavailable as numeric data*
S-2	*Fiscal quarter*	*Data=Dates[Fiscal Quarter]* *Notes=search box unavailable as numeric data*
S-3	*Date range*	*Type=between* *Slider=on, responsive off* *Data=Dates[Date]*
S-4	*Province*	*Type=text* *Data=Countries[Province]*

Alex Badiu and Greg Philips GitHub on Documentation: https://github.com/alexbadiu-insightsinmotion/PBI-Documentation/tree/main

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Embed Notebooks for technical documentation

```
#Author and MVP: Sandeep Pawar
#https://fabric.guru/measure-maze-visualizing-measure-dependencies-using-semantic-link-network-analysis
```

+ Code + Markdown

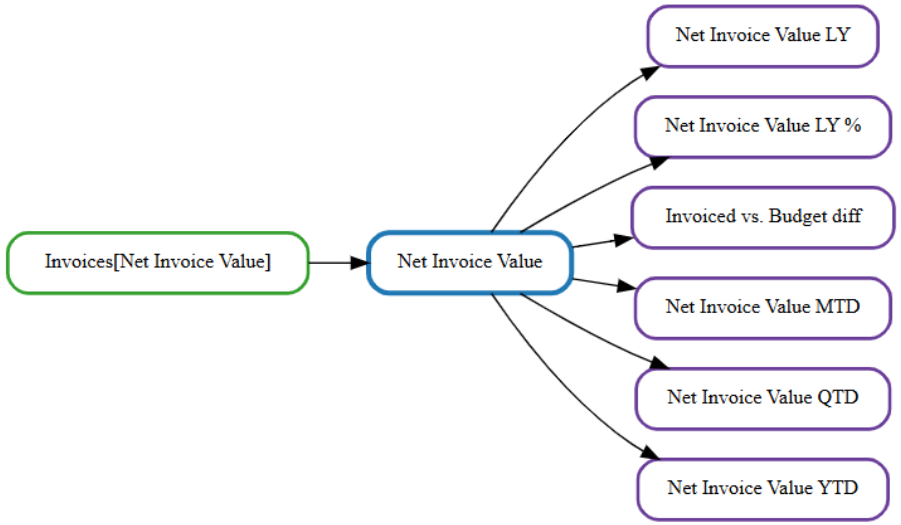
```
#Install Measure Maze in a Fabric Notebook
!pip install https://github.com/pawarbi/MeasureMaze/raw/main/measuremaze-0.0.1-py3-none-any.whl --q

```

✓

```
#Change the layout
all_objects.plot('Net Invoice Value', layout='horizontal')
```

[7] ✓ - Command executed in 375 ms by David Kofod Hanna on 1:02:35 PM, 8/12/25



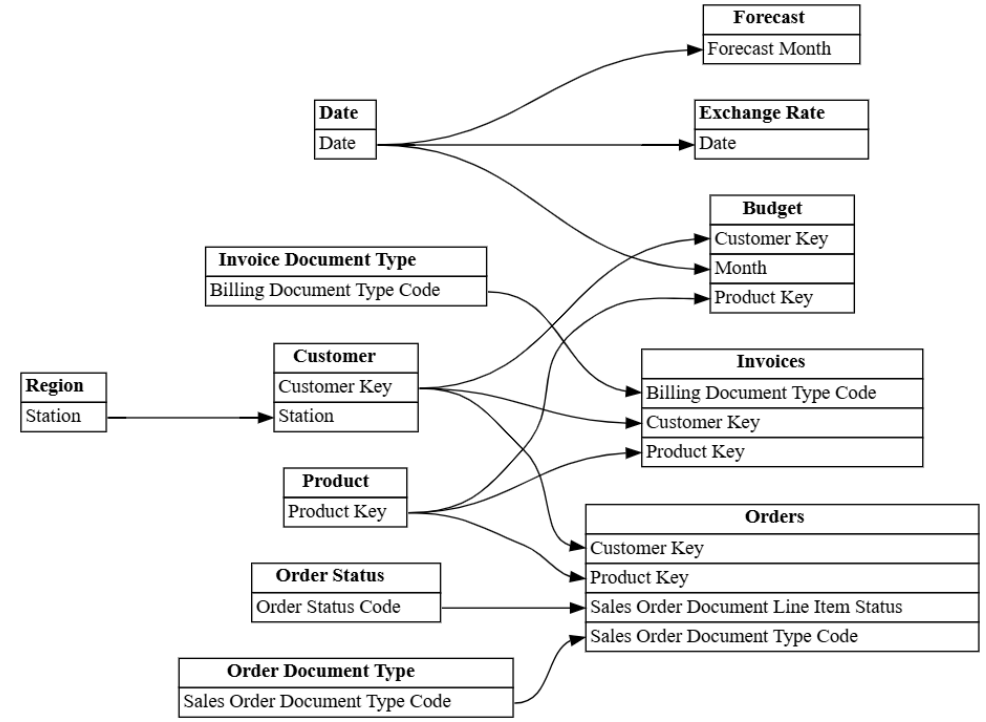

```
#Semantic Link can also be used to plot relationships between tables.

from sempy import fabric
from sempy.relationships import plot_relationship_metadata


relationships = fabric.list_relationships(workspace=ws, dataset=ds)
plot_relationship_metadata(relationships)

```

[10] ✓ - Command executed in 1 sec by David Kofod Hanna on 1:02:59 PM, 8/12/25



Sandeep Pawar: https://fabric.guru/measure-maze-visualizing-measure-dependencies-using-semantic-link-network-analysis

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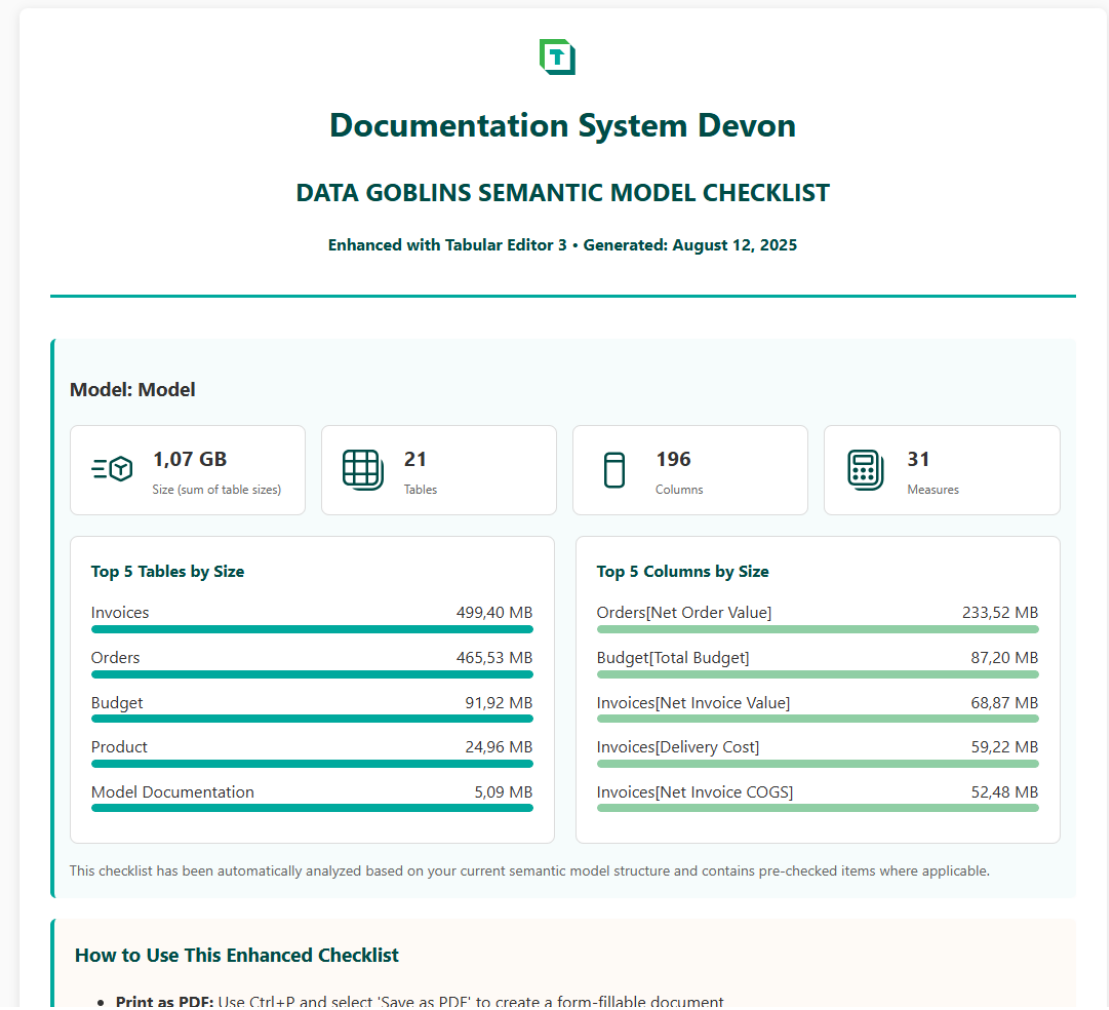
HTML Documentation script – Kurt Buhler x Tabular Editor



Documentation System Devon

DATA GOBLINS SEMANTIC MODEL CHECKLIST

Enhanced with Tabular Editor 3 • Generated: August 12, 2025

Model: Model

1,07 GB	21	196	31
Size (sum of table sizes)	Tables	Columns	Measures

Top 5 Tables by Size

Invoices	499,40 MB
Orders	465,53 MB
Budget	91,92 MB
Product	24,96 MB
Model Documentation	5,09 MB

Top 5 Columns by Size

Orders[Net Order Value]	233,52 MB
Budget[Total Budget]	87,20 MB
Invoices[Net Invoice Value]	68,87 MB
Invoices[Delivery Cost]	59,22 MB
Invoices[Net Invoice COGS]	52,48 MB

This checklist has been automatically analyzed based on your current semantic model structure and contains pre-checked items where applicable.

How to Use This Enhanced Checklist

- **Print as PDF:** Use Ctrl+P and select 'Save as PDF' to create a form-fillable document

"There's a script for that"

Kurt Buhler & Tabular Editor: https://tabulareditor.com/blog/power-bi-semantic-model-checklist

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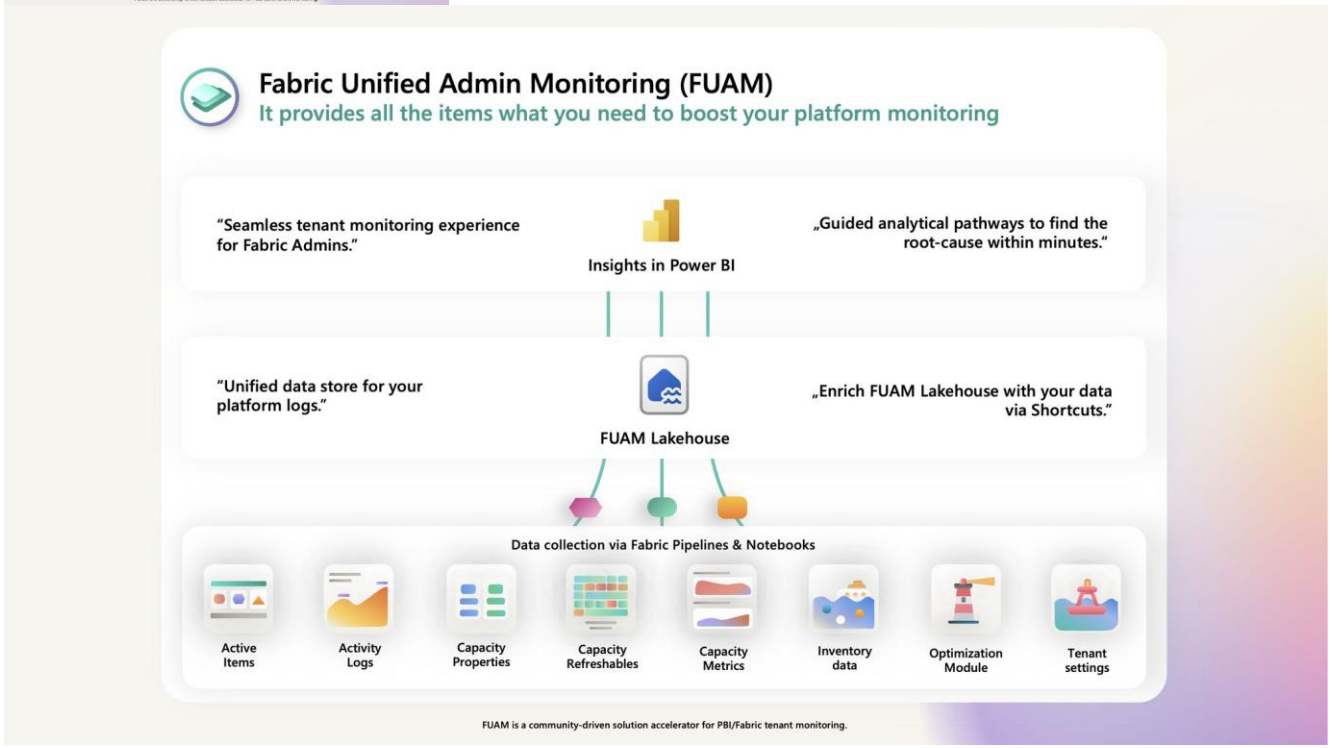
All into a Lakehouse

- Semantic Link Labs
- Dataflow Gen2
- DAX Queries
- FUAM – Fabric Unified Admin Monitoring
- Copilot – Now with F2 SKU
- Copilot to be trained on Model.Bim file
- .PBIR meta data into
- Report Best Practice Analyzer
- Best Practice Analyzer Semantic Model
- VertiPaq Analyzer
- Usage Metrics for activity logs
- Data Agents and Copilot on top of your data in Fabric



FUAM & Fabric Toolbox: https://github.com/microsoft/fabric-toolbox

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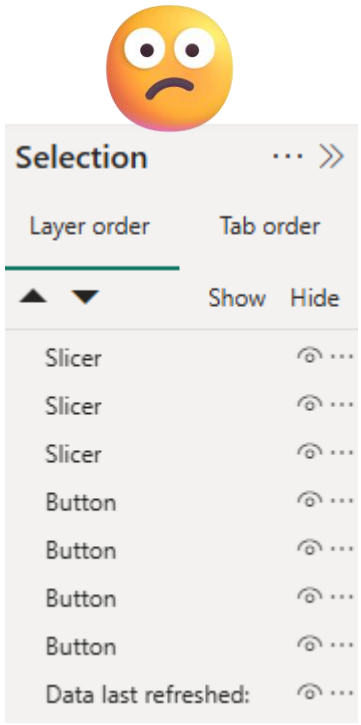
Report Visual Elements



David Kofod Hanna: https://www.linkedin.com/pulse/introducing-bookmark-killer-david-kofod-hanna-90quf/

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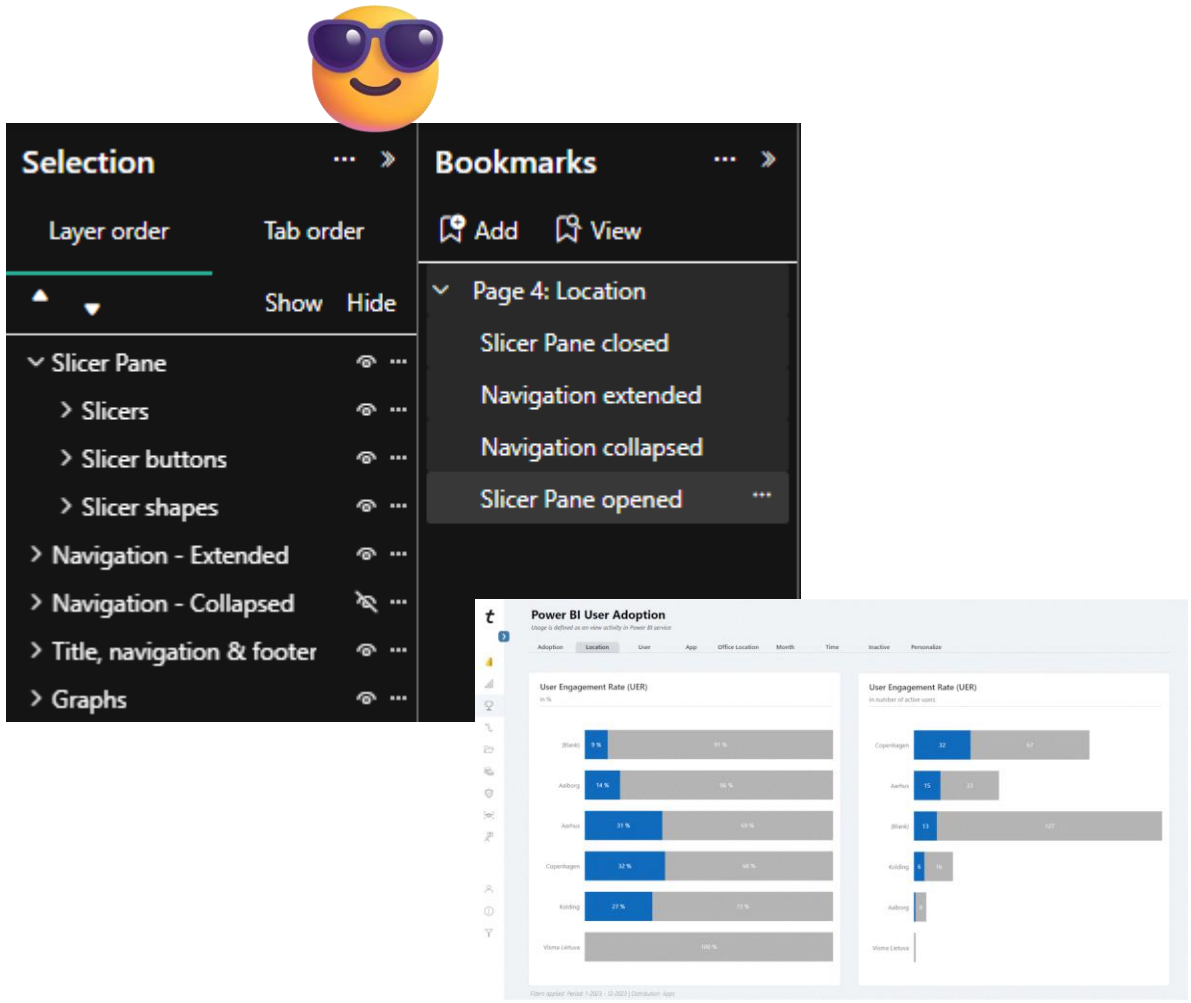
Report Visual Elements – especially important if using bookmarks



My Standard:

For non-visual objects:
Use the visual object as Prefix + "-" and then a meaningful name for the object "Slicer – Year" or "Image – Logo"
Relevant for: Slicer, Textbox, Shapes, Images, Button, Page Navigator, Bookmark Navigator, etc.

For **visual elements** the name of the object is the Title in the visual, thus can't be prefixed with Bar chart, etc.

Group visual elements into e.g.
"Slicer Pane",
"Title, Navigation & Footer",
"KPI's"
"Graphs".

Layer order from top left corner to bottom right corner (F or Z structure)

For use cases where only **Bookmarks** can solve the report user need and counting the total cost of ownership, use Selected Visuals and the Group of visuals.
Group Bookmarks together and name it prefix of page no and page name **"Page 4: Sales Region Analysis"**

David Kofod Hanna: https://www.linkedin.com/pulse/introducing-bookmark-killer-david-kofod-hanna-90quf/

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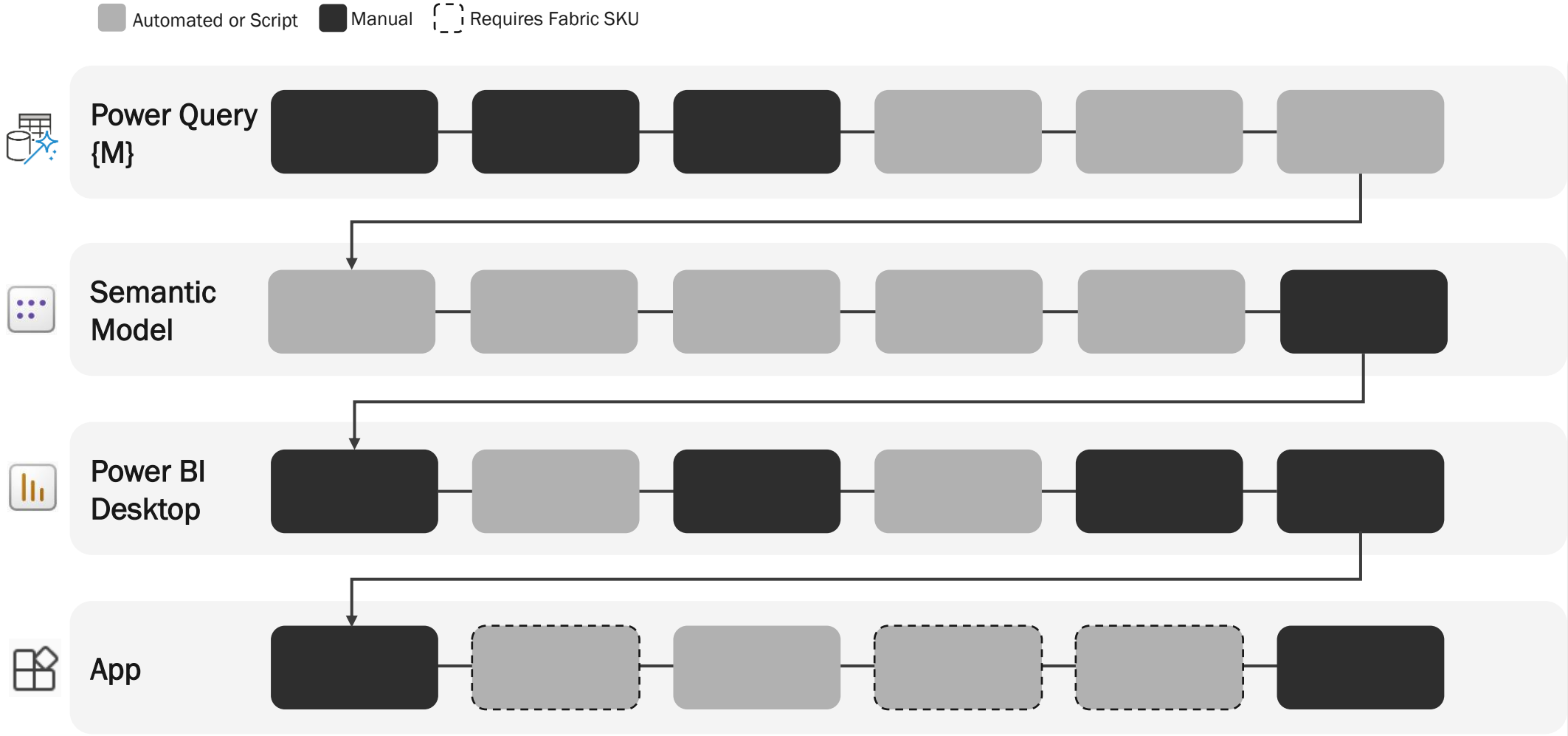
Please write my documentation

Power BI Documentation System – from Model to App



Purpose for docs:
Clear, Concise, Complete, Consistent, Correct, Consumable

Documentation and transparency from model to app

From report consumers to report developers to semantic model developers and data ingest

Best Practice Analyzer Rules to highlight violations and severity of best practices

Tabular Editor 2/3 for Semantic Model and DAX scripts

Semantic Link Labs in Fabric Notebooks for automation like never before

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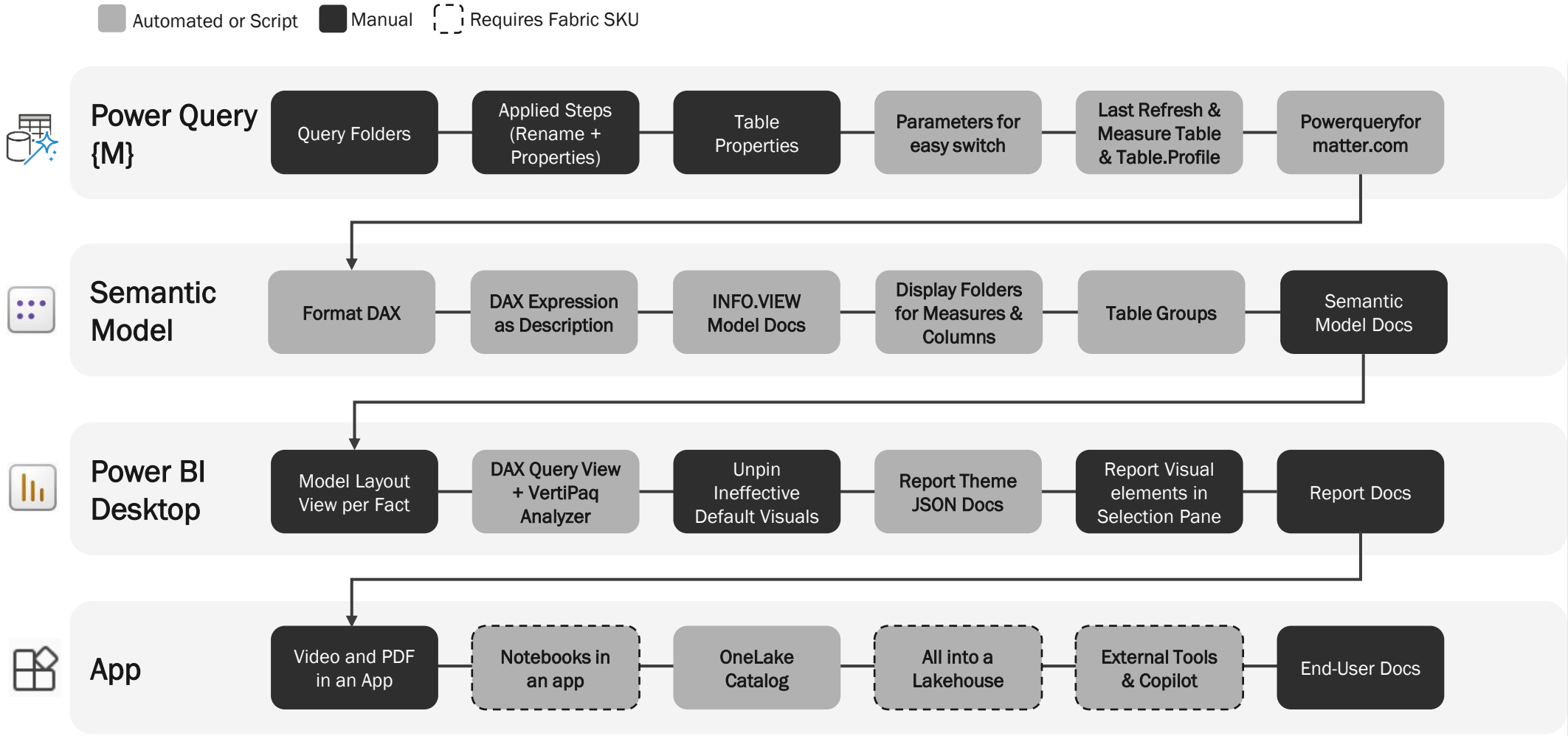
Power BI Documentation System – from Model to App



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*"You do not rise to the level of your **goals**, you fall to the level of your **systems**."*

- James Clear, Atomic Habits

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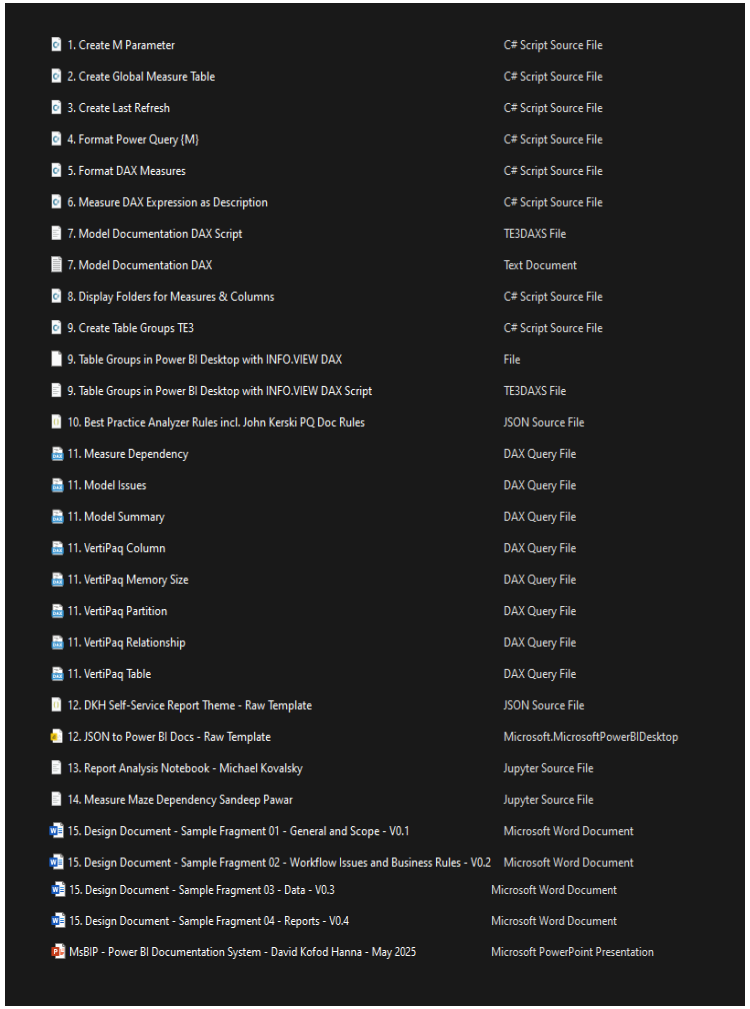
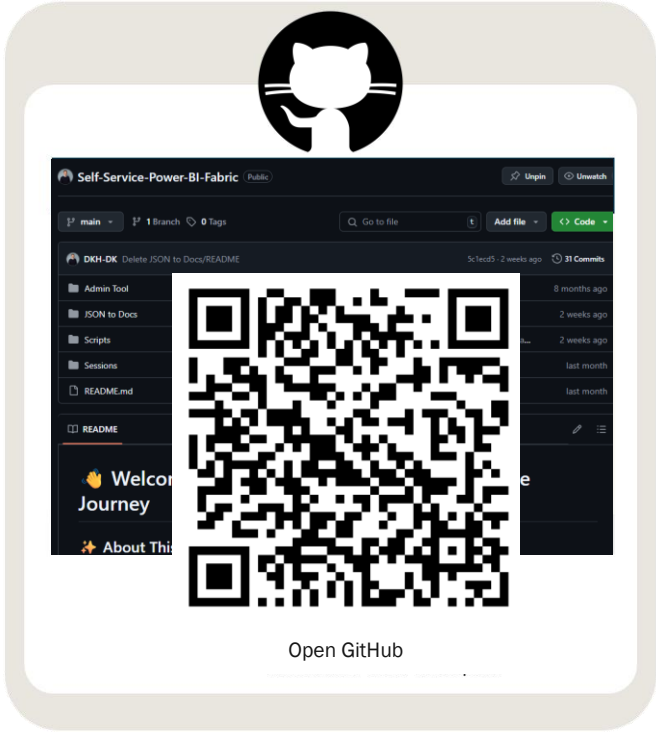
A Power BI Documentation System
– Not Just an Afterthought

Released on **GitHub**
and soon a LinkedIn article





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Credit and resources

- **Alex Badiu and Greg Philips GitHub on Documentation:** https://github.com/alexbadiu-insightsinmotion/PBI-Documentation/tree/main
- **Kurt Buhler Data Goblin:** https://data-goblins.com/power-bi/dataset-checklist
- **JSON to Docs Template:** https://www.linkedin.com/feed/update/urn:li:activity:7323594556698968064/
- **Table Groups in Power BI Desktop**: https://www.linkedin.com/pulse/table-groups-power-bi-desktop-infoview-david-kofod-hanna-aotof
- **Model Documentation in DAX:** https://www.linkedin.com/pulse/model-documentation-automation-dax-scripts-tabular-editor-hanna-7bhyf/
- **David's GitHub**: https://github.com/DKH-DK/Self-Service-Power-BI-Fabric/tree/main
- **One App to Rule Them All:** https://www.linkedin.com/pulse/one-app-rule-them-all-david-kofod-hanna-pvopf/
- **Best Practice Analyzer**: https://powerbi.microsoft.com/da-dk/blog/best-practice-rules-to-improve-your-models-performance/
- **Michael Kovalsky BPA Rules:** https://github.com/m-kovalsky/Tabular?tab=readme-ov-file
- **Sandeep Pawar:** https://fabric.guru/measure-maze-visualizing-measure-dependencies-using-semantic-link-network-analysis
- **Hariharan Rajendran:** https://www.linkedin.com/feed/update/urn:li:activity:7307061810375925760/
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