

“PERFECT” DATA MODEL

The background of the slide features a complex network of thin, light-colored lines connecting numerous circular nodes. The nodes are primarily red and pink in the upper right quadrant, transitioning to shades of blue and purple in the lower left quadrant. The overall effect is a dynamic, interconnected web of data points.

Mihaly Kavasi - Budapest BI Forum 2022 – Tutorial Nap – 15. Nov. 2022

Introduction



Mihaly Kavasi

Group Manager

Delivery Lead and Trainer

Avanade

- ✓ 6+ Years of Power BI Experience
- ✓ 5+ Years of Training Experience
- ✓ Microsoft Certified Solution Expert – Data Management and Analytics
- ✓ Microsoft Certified Trainer since 2018
- ✓ Azure Enterprise Data Analyst
- ✓ Fasttrack Recognized Solution Architect since 2021



Content we use?

- Download the files:
 - <https://github.com/KavasiMihaly/Conference-Open>
 - Retail Model.pbix
 - Crime Data folder (optional)
- Install the following tools:
 - Power BI (latest version)
 - [Dax Studio](#)
 - [Tabular Editor \(free version\)](#)
 - [ALM Toolkit](#)

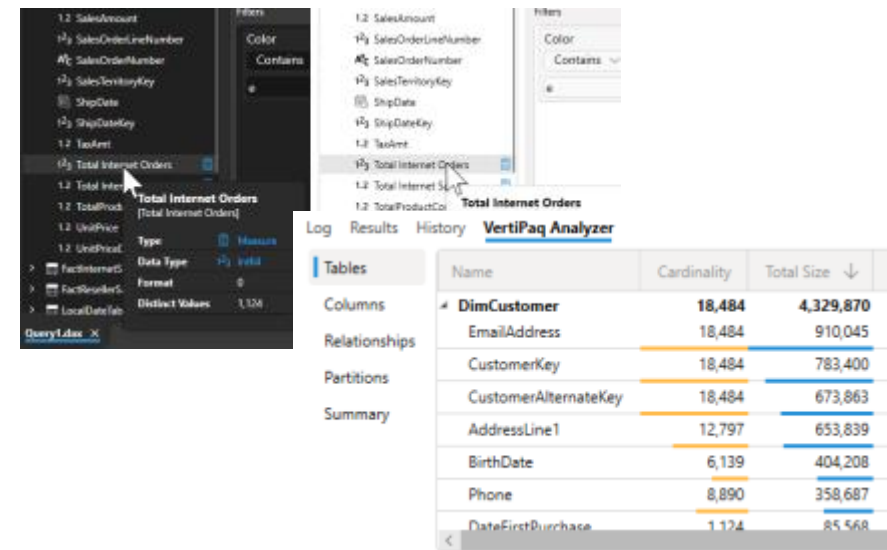
What makes a data model “perfect”?

- Reusability: Not specifically built to support a report but generic to support wide ranging analytics on a topic.
- Optimized for good performance
- Prepared for self-service (for other creator and end users)
- Clean, unambiguous naming convention
- All type of analytical usage considered
 - Power BI Report
 - Analyze in Excel
 - Natural Language Queries
 - Featured tables
 - Paginated Reports
 - Report Personalization
 - 3rd party tools

Tools – Dax Studio

The ultimate tool for working with DAX queries.

- Robust Query builder
- DAX Profiler
- Query Performance Analyzer
- Access to DMV
- Analyze models – Vertipaq Analyzer
- Data Export capabilities



The screenshot displays the DAX Studio interface. On the left, the 'Query Editor' pane shows a list of tables and measures, with 'Total Internet Orders' selected. The main area shows the query text for 'Total Internet Orders'. On the right, the 'Vertipaq Analyzer' tool is open, displaying a table with columns: Name, Cardinality, and Total Size. The table lists various dimensions and their associated cardinality and total size.

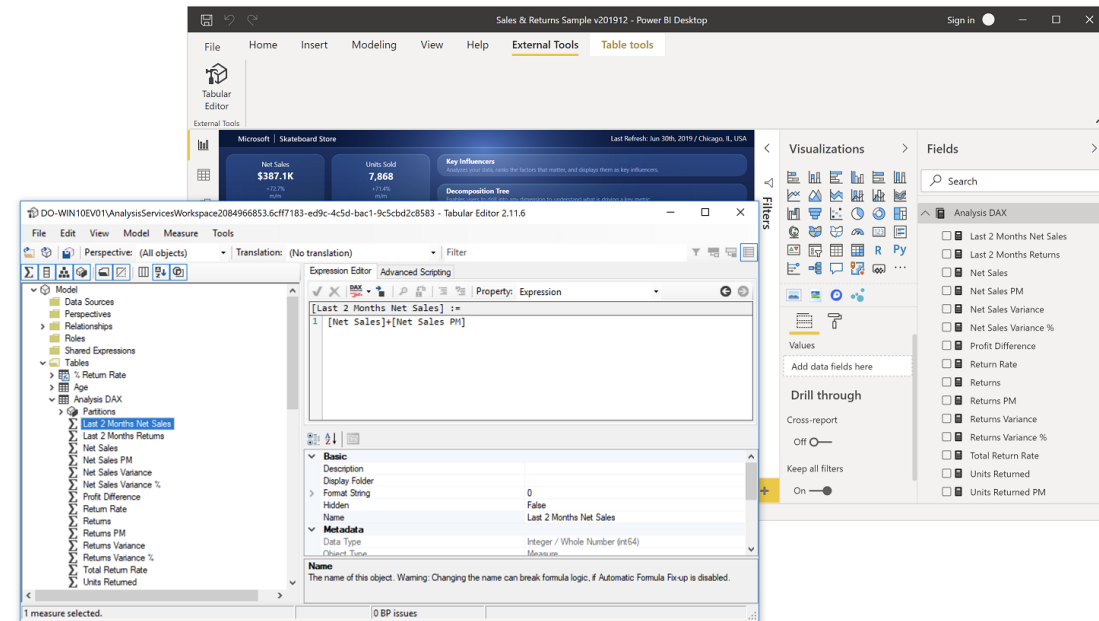
Name	Cardinality	Total Size
DimCustomer	18,484	4,329,870
EmailAddress	18,484	910,045
CustomerKey	18,484	783,400
CustomerAlternateKey	18,484	673,863
AddressLine1	12,797	653,839
BirthDate	6,139	404,208
Phone	8,890	358,687
DateFirstPurchase	1,124	85,568

<https://daxstudio.org/>

Tools – Tabular Editor

A lightweight editor for Tabular Models.

- Fast – only works with metadata
- Highly customizable
- Efficient – use C# Scripts for repeatable actions
- Best Practice Analyzer for model optimization

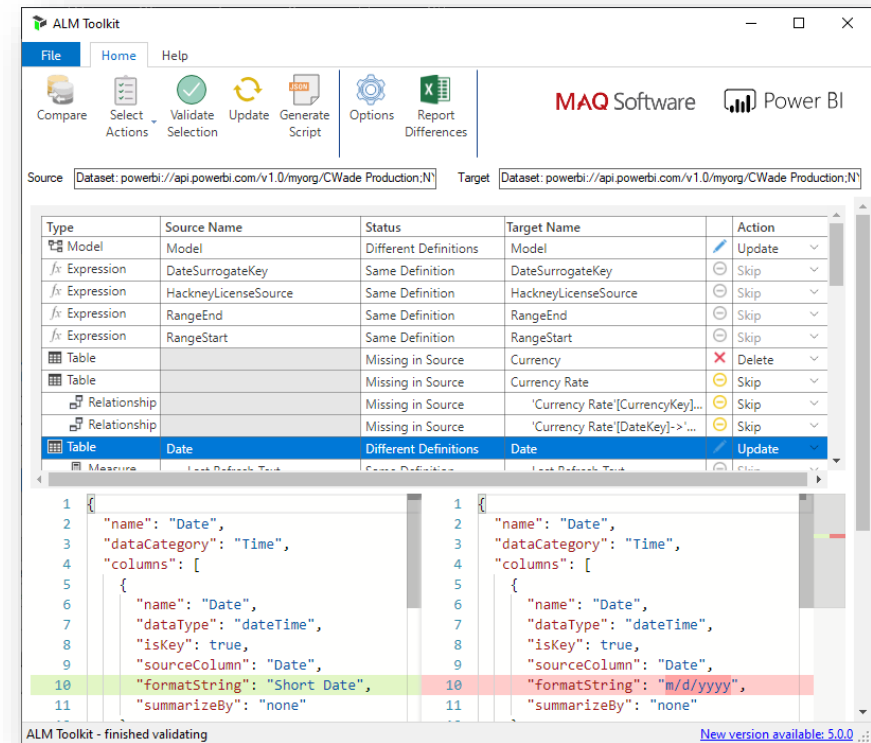


<https://tabulareditor.github.io/>

Tools – ALM Toolkit

Free and open-source tool to manage Microsoft Power BI datasets

- Schema compare
- Code merging
- Selective deployment
- Schema differences documentation



<http://alm-toolkit.com/>