Power BI
Cosa è stato, cosa sarà

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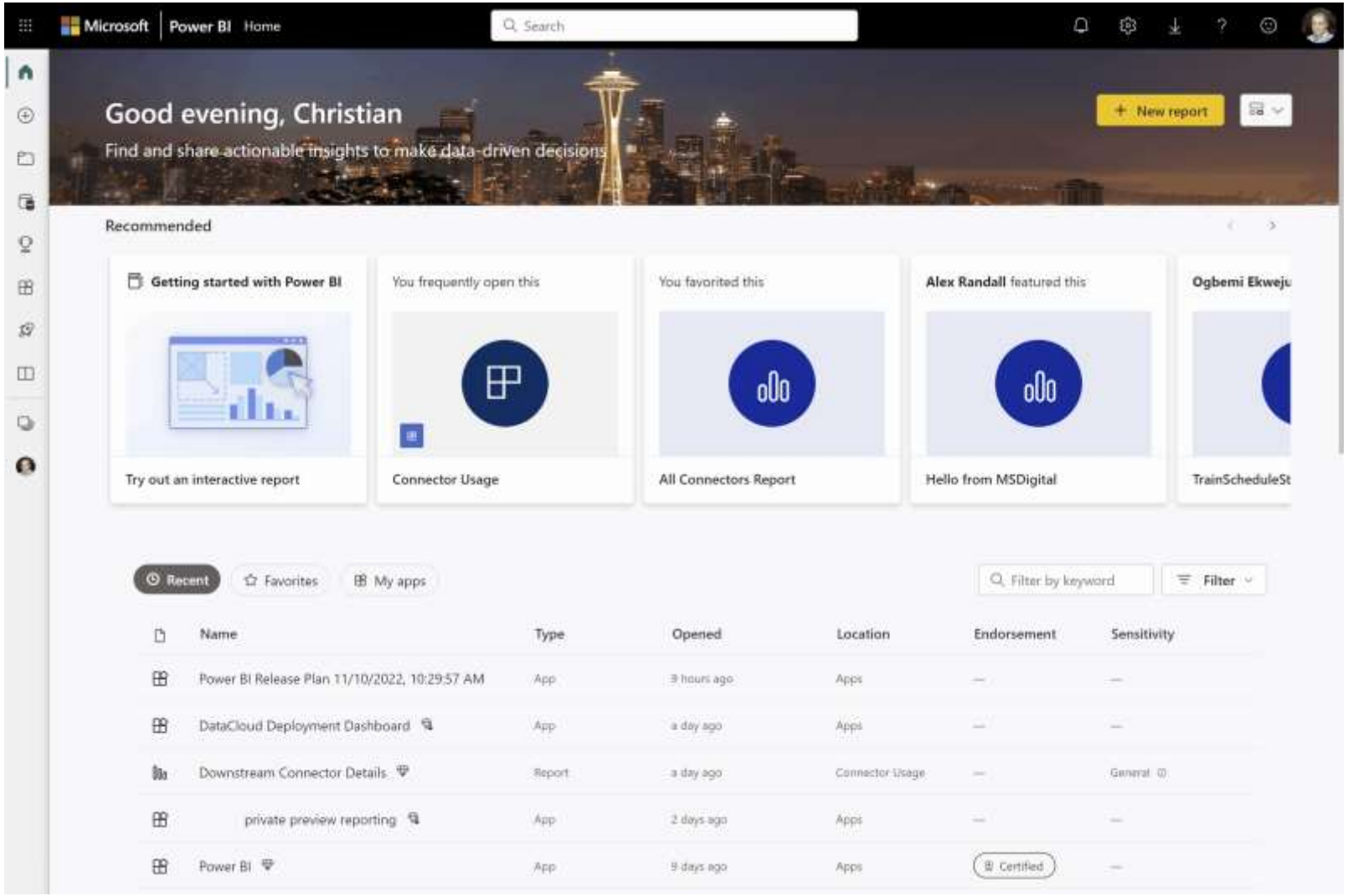
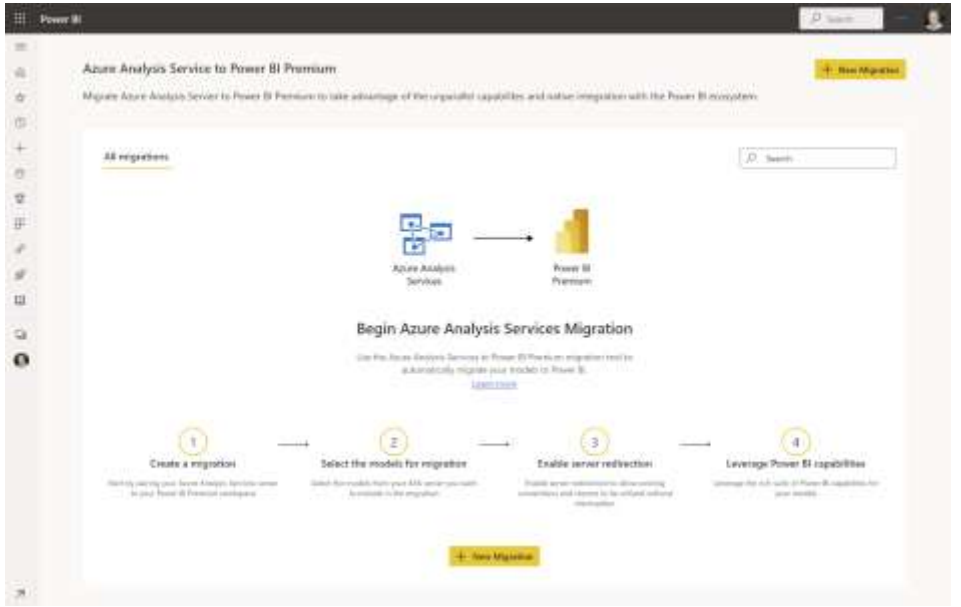
Migration experience from Azure Analysis Services to Power BI Premium



Migration experience from Azure Analysis Services to Power BI Premium

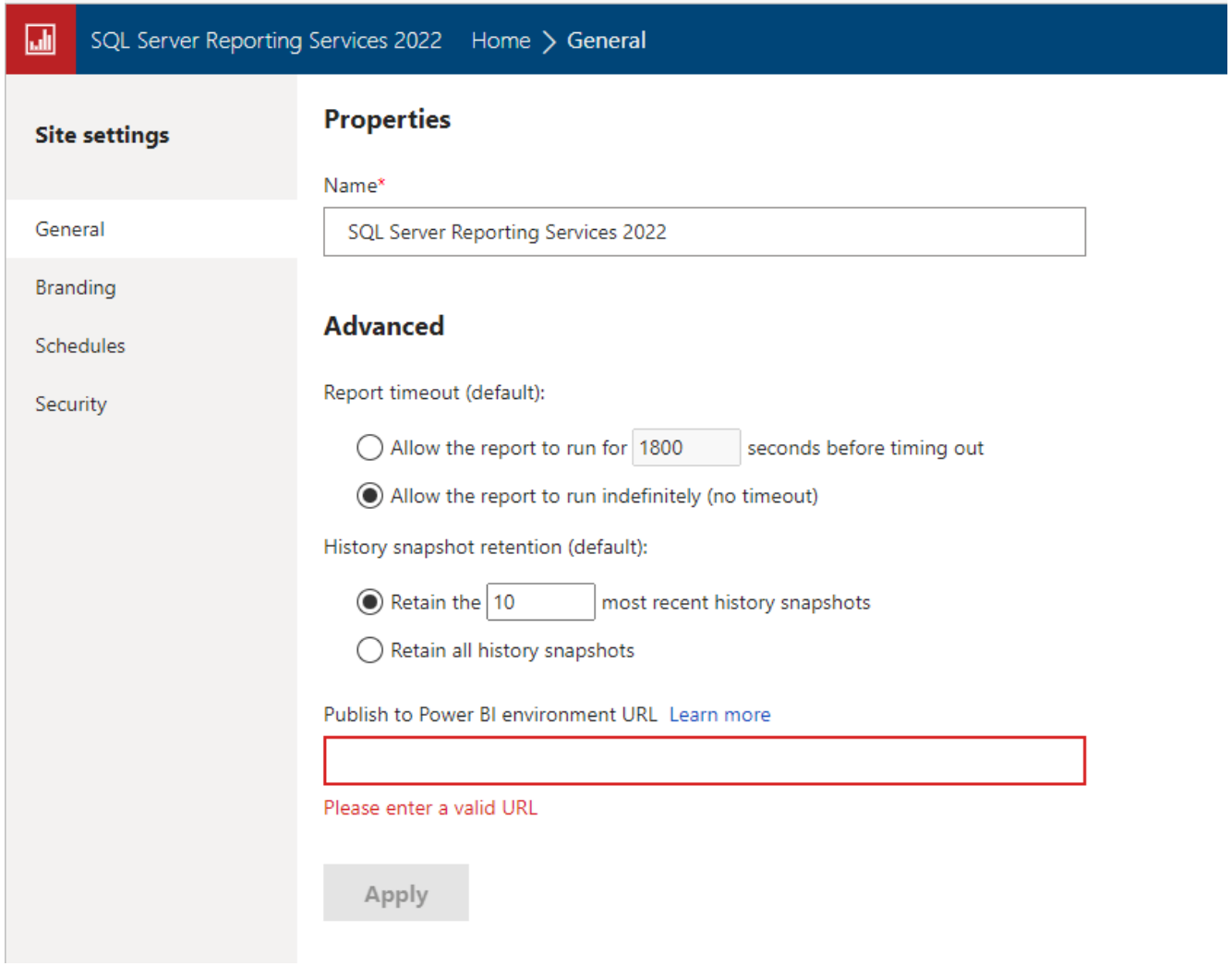
- Here are quick links you may find useful:
  - Azure AS migration main page: **https://aka.ms/AASMigration**
  - Azure AS migration guide: **https://aka.ms/AASMigrationGuide**
  - Azure AS migration scenarios: **https://aka.ms/AASMigrationScenarios**



Announcing support for paginated reports in Power BI Pro

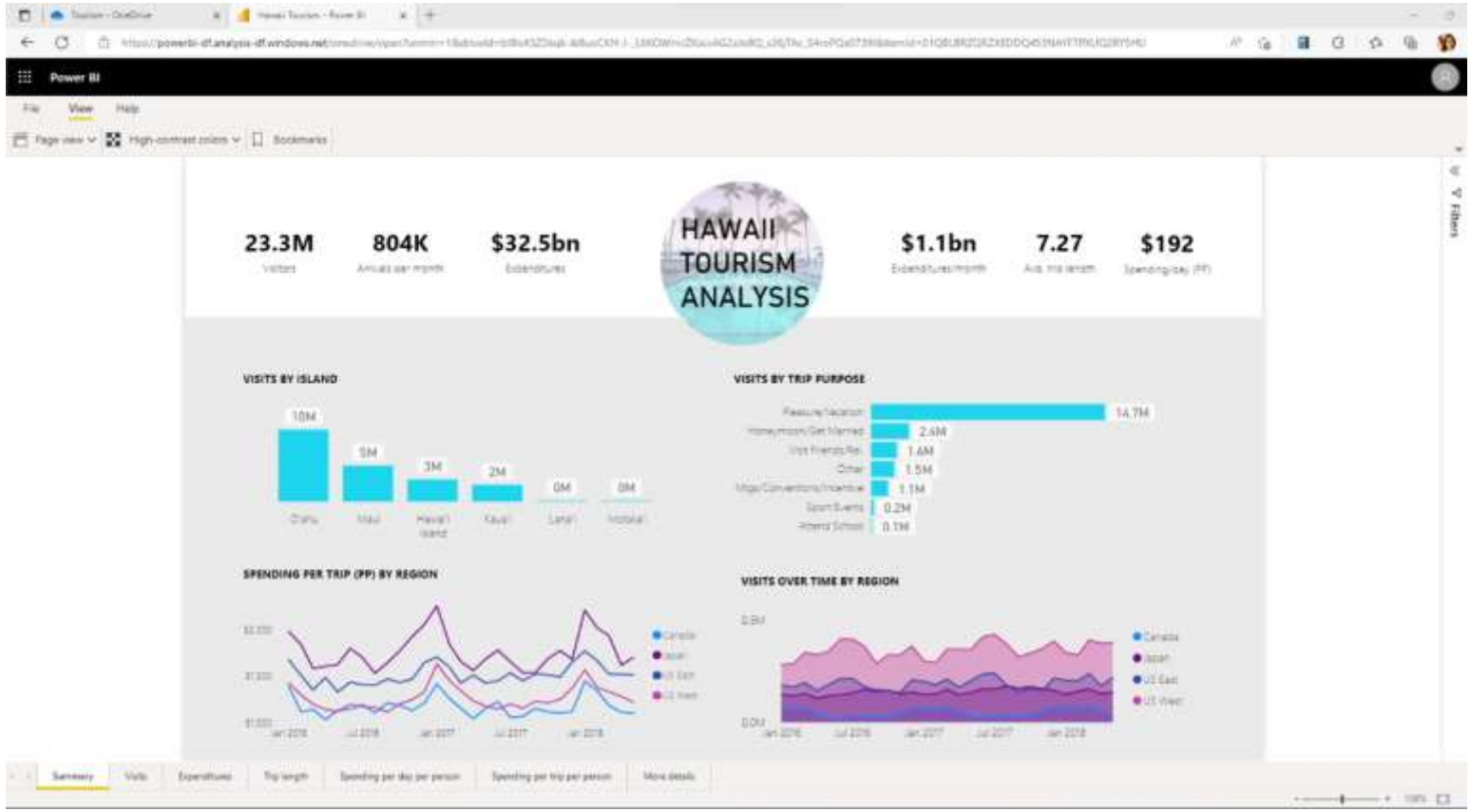
Migrate operational reports from SQL Server reporting services to Power BI

- There’s a new migration tool as part of SQL Server 2022. The migration tool will be rolling out to previous versions of SQL Server 2017 and SQL Server 2019 in the coming months.
- Useful link:
  - Migrate SQL Server Reporting Services reports to Power BI - Power BI | Microsoft Learn



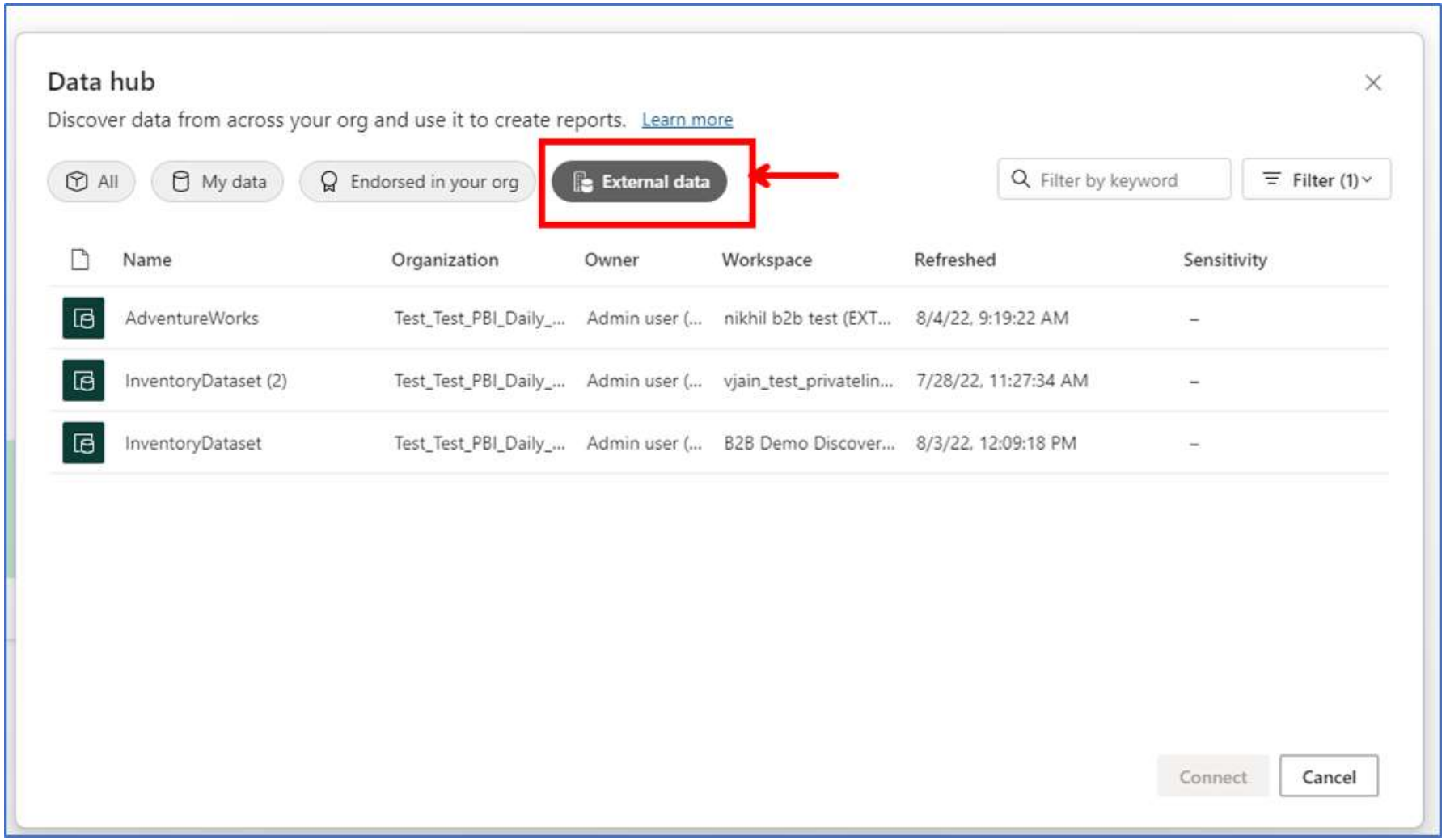
Explore and interact with Power BI reports directly from OneDrive and SharePoint

- In May 2022, we announced game-changing integrations with Microsoft **PowerPoint**, Microsoft **Outlook**, and Microsoft **Office Hub** that better help you tell amazing data stories. We are thrilled to announce even more integration with Microsoft 365—with **OneDrive** and **SharePoint**.



Cross-tenant dataset sharing

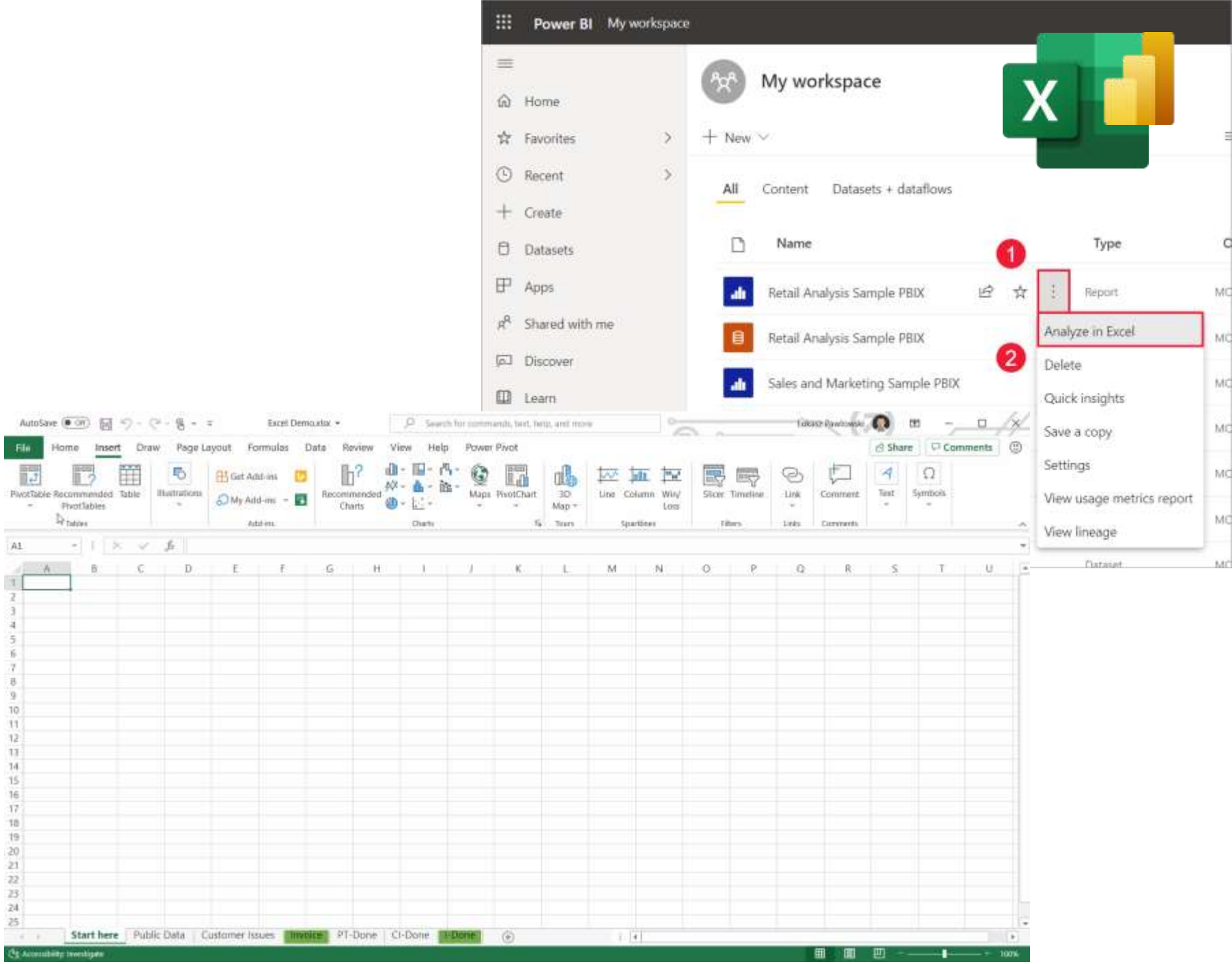
Cross-tenant dataset sharing enables you to share datasets with external organizations such as business partners, customers, and vendors in an easy, quick, and secure manner.



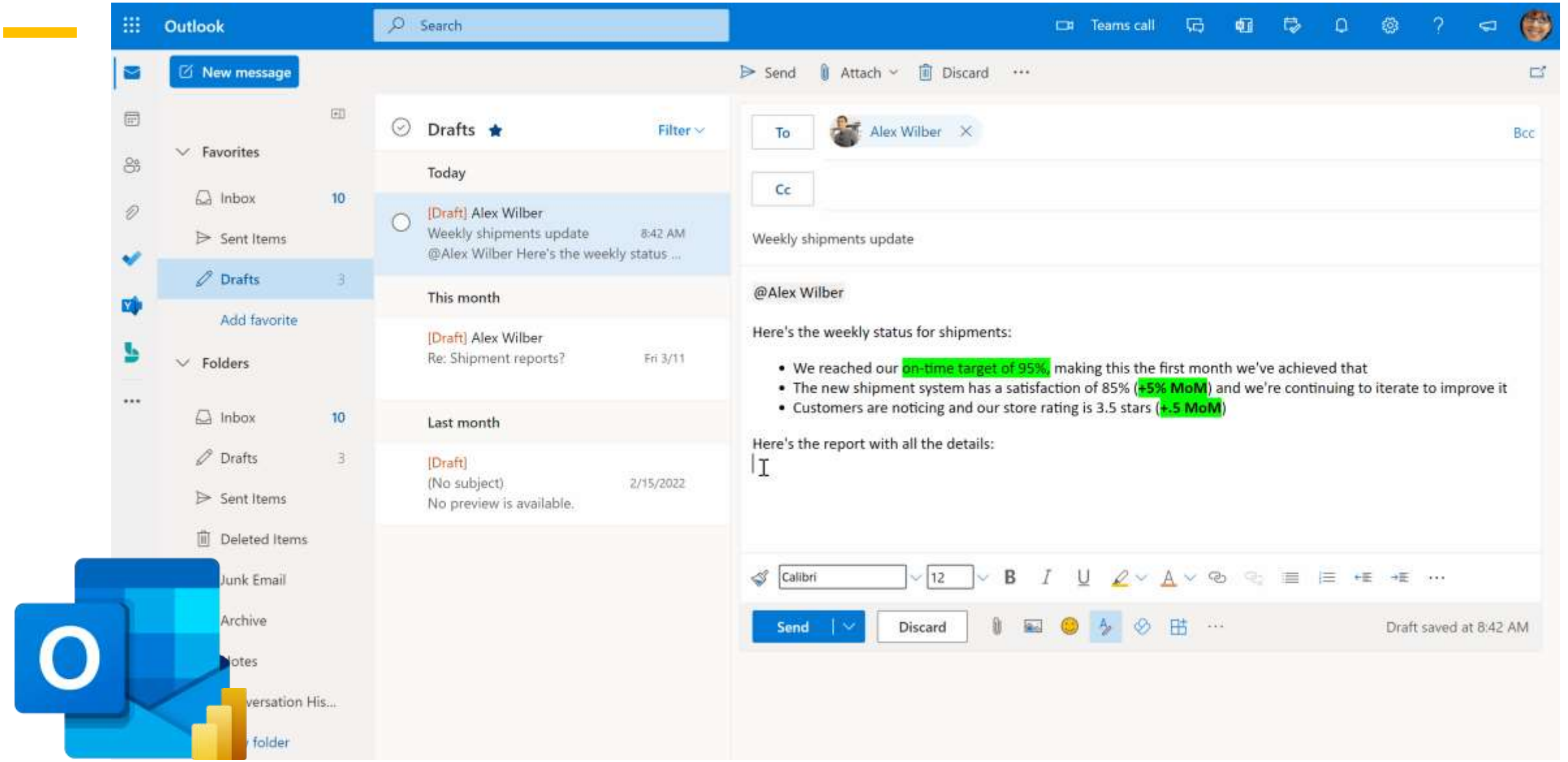
Power BI Integration

Analyze in Excel

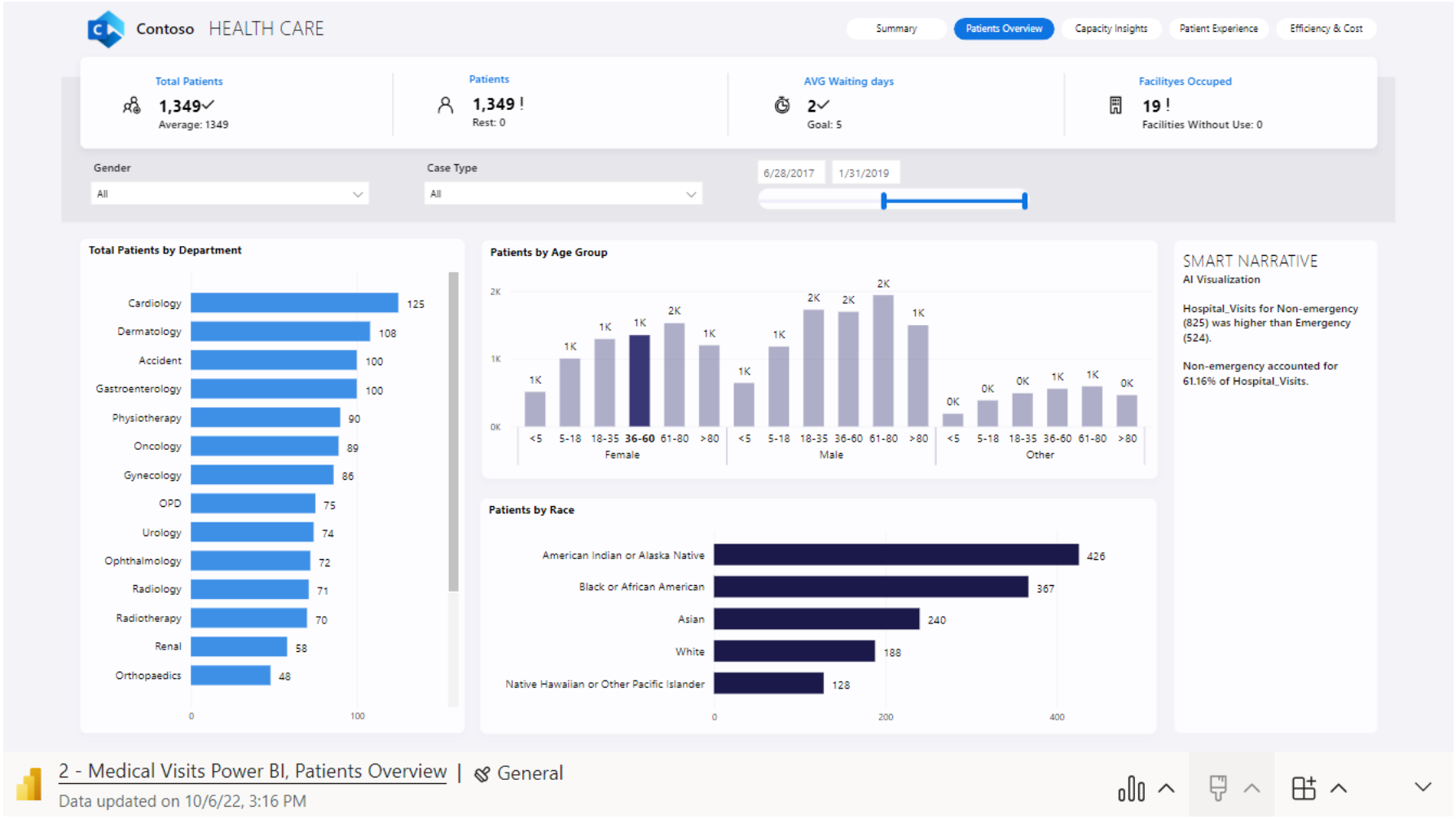
The Excel file has an MSOLAP connection string that connects to your dataset in Power BI. When you analyze or work with the data, Excel queries that dataset in Power BI and returns the results to Excel.
If that dataset connects to a live data source using DirectQuery, Power BI queries the data source and returns the result to Excel.



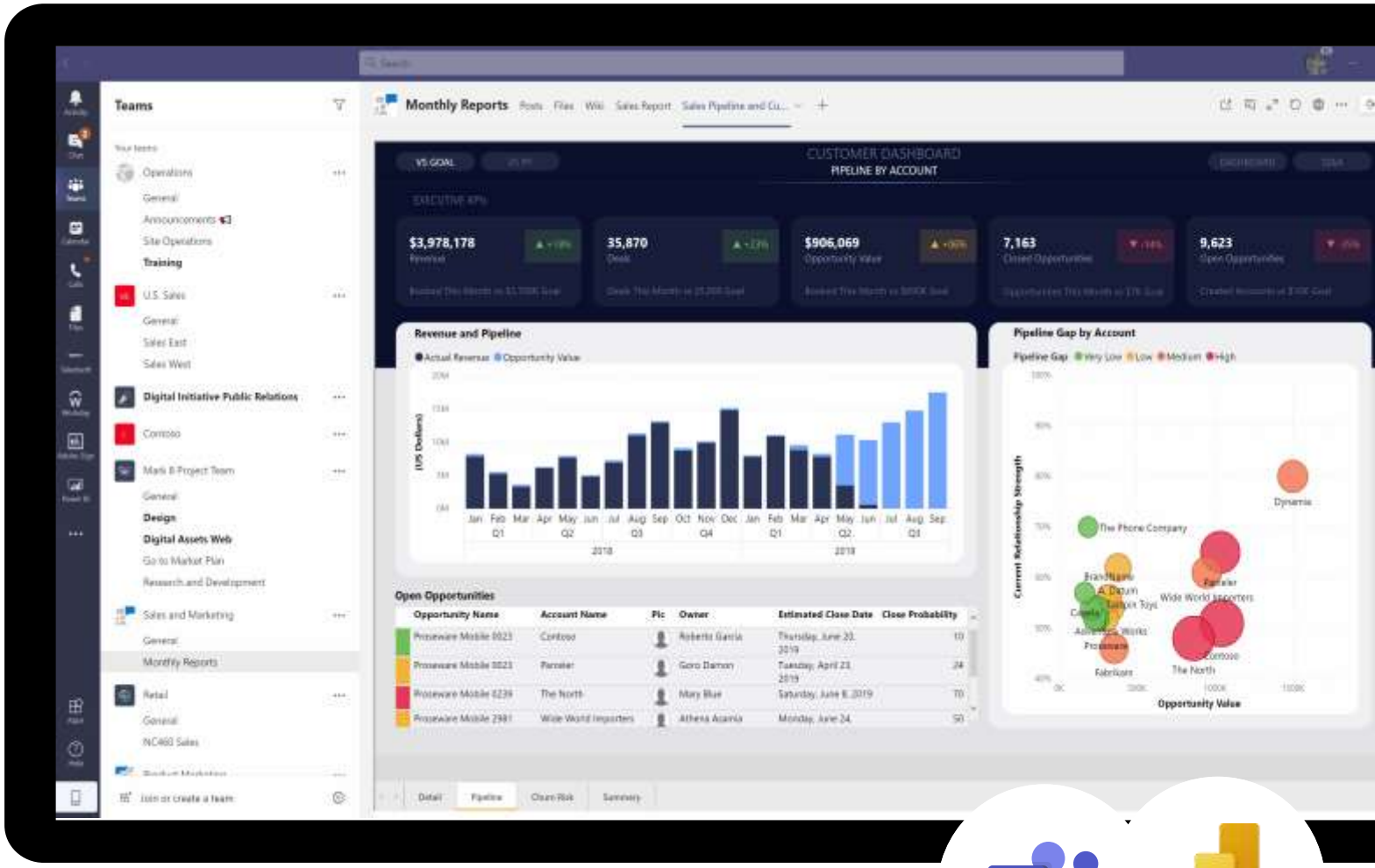
Power BI & Outlook



Power BI & Power Point



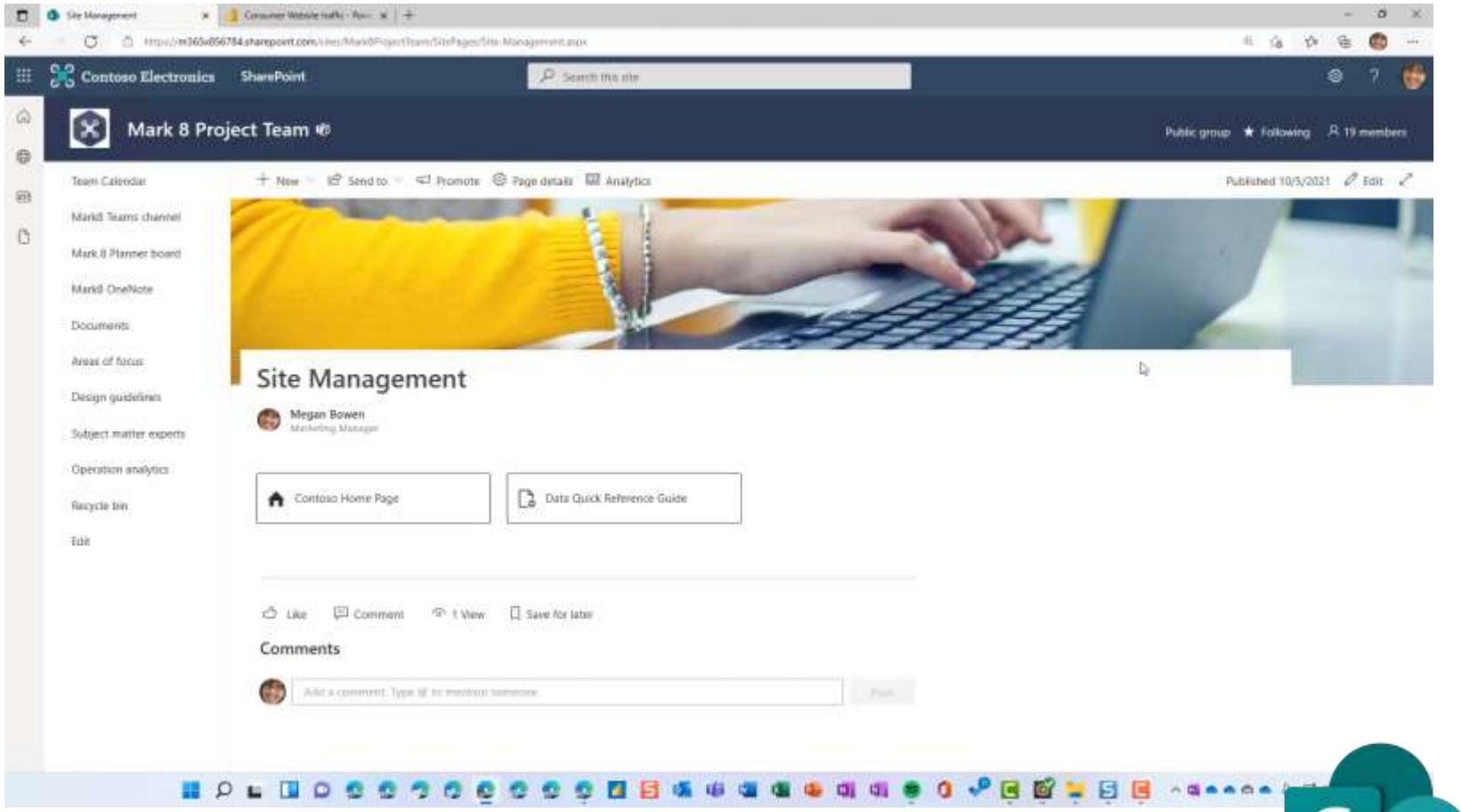
Power BI & Microsoft Teams



Power BI & SharePoint

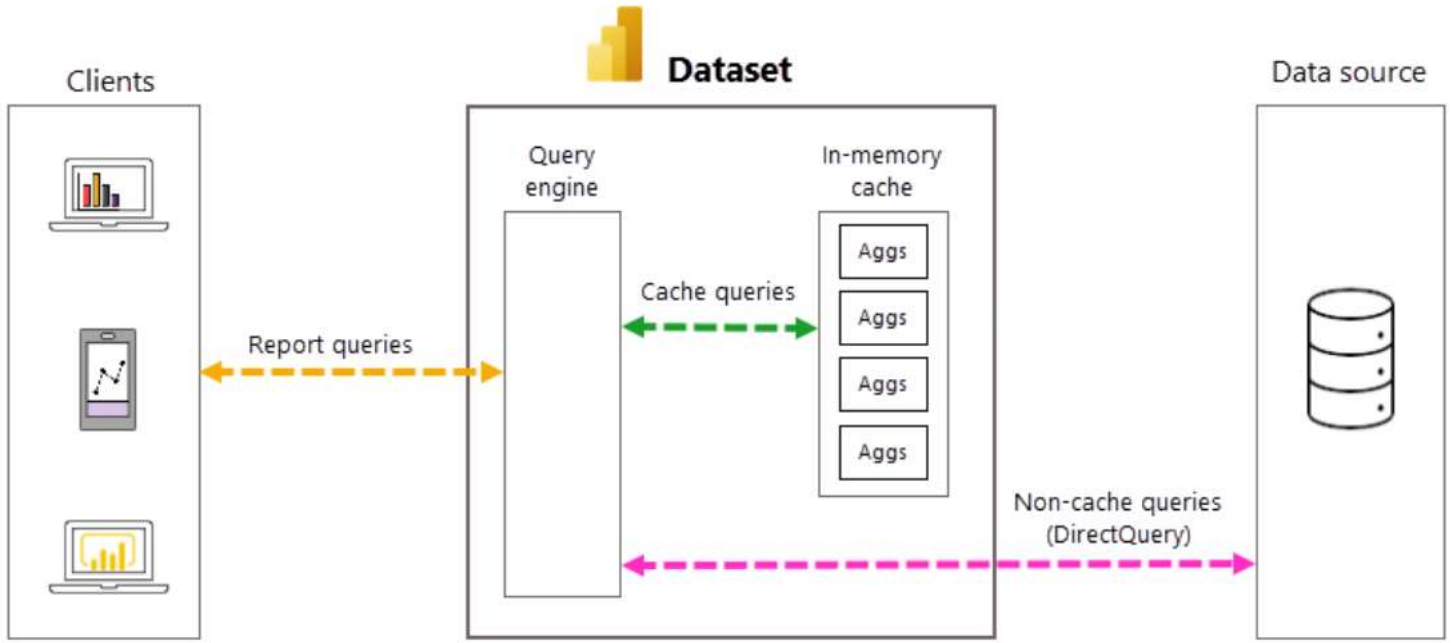
With the Power BI report web part for SharePoint Online, you can easily embed interactive Power BI reports in SharePoint Online pages.

When using the Embed in SharePoint Online option, the embedded reports respect all item permissions and data security through row-level security (RLS), so you can easily create secure internal portals.



Automatic aggregation

With **automatic aggregations**, Power BI will analyze query logs to automatically create and manage aggregations as an AI-driven system. By simply enabling the feature, Power BI will optimize performance and adapt to new usage patterns, so you don't have to.



Hybrid Tables in Power BI Premium (public preview)

Now you can have blazing fast performance in import mode and the latest data changes in the data warehouse reflected in user reports without having to perform a dataset refresh!

Granularity	Name	Row Count
Year	2011	295,489,717
Year	2012	297,678,498
Year	2013	295,575,442
Year	2014	292,477,875
Year	2015	297,780,469
Year	2016	294,060,081
Year	2017	300,419,682
Year	2018	296,541,108
Year	2019	292,787,420
Year	2020	299,273,979
Quarter	2021Q1	74,135,277
Month	2021Q104	24,939,498
Day	2021Q10501	820,805
Day	2021Q10502	826,885
Day	2021Q10503	821,043
Day-DirectQuery	2021Q10504-DQ	271,110
Total		**3,063,898,887**

Archived: **Import**

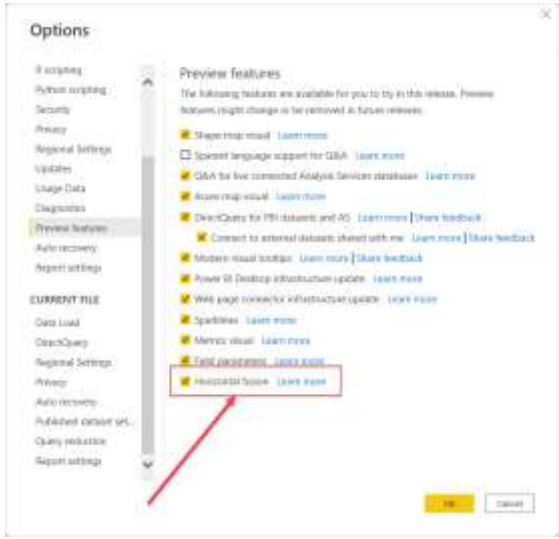
Incremental refresh: **Import**

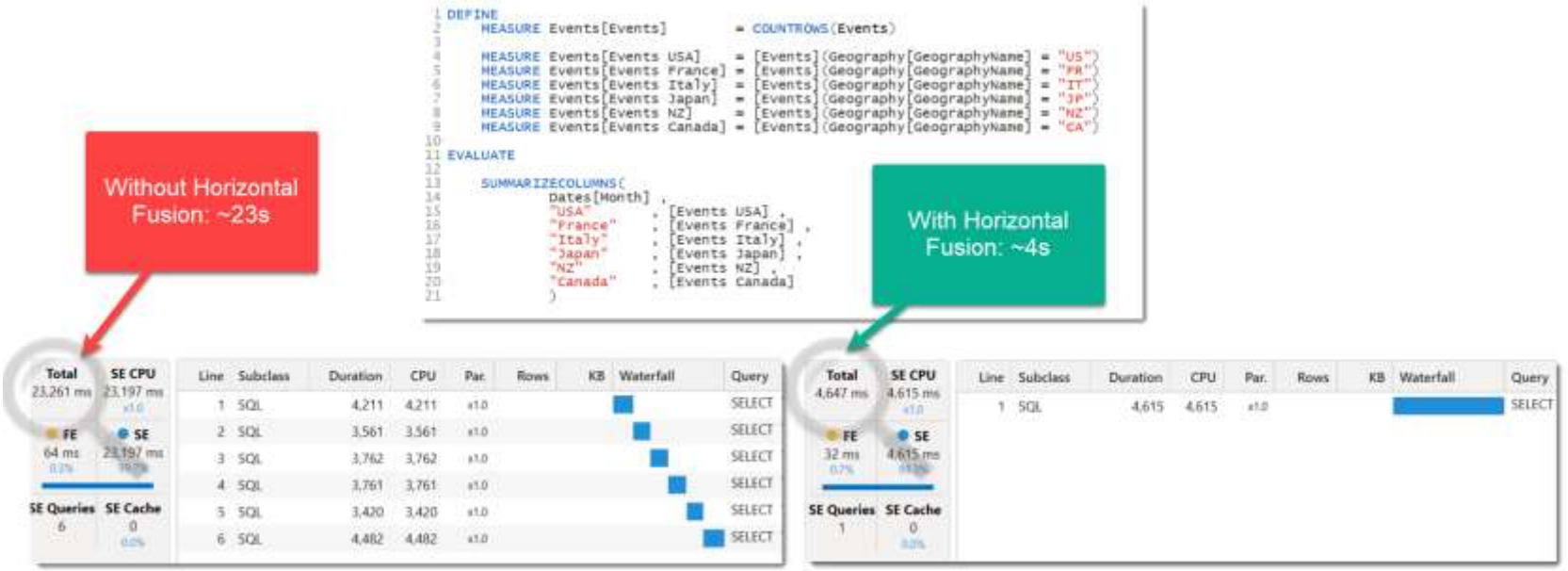
Real time: **DirectQuery**

Horizontal Fusion

Vertical fusion was already available in DAX a long time ago. In the September 2022 version of Power BI however, Microsoft introduced a different type of fusion optimization: horizontal fusion.

Horizontal fusion aims to reduce the number of storage engine queries when similar calculations differ only by the filters applied to a column in the filter context





[Introducing horizontal fusion in DAX - SQLBI]

New DAX function: NETWORKDAYS

This function returns the number of whole working days between two days.

[NETWORKDAYS function (DAX) - DAX | Microsoft Learn]

For example, the following will return a result of 20 working days:

```
WorkingDays := NETWORKDAYS(DATE(2022,10,1), dt"2022-10-30")
```

For reference, October 1st, 2022 is a Saturday, and October 30th, 2022 is a Sunday.

The following returns 21 working days, because it specifies the weekend to be Friday and Saturday:

```
WorkingDaysFriSat := NETWORKDAYS(DATE(2022,10,1), dt"2022-10-30", 7)
```

Finally, the following returns a result of 19 working days, because it specifies two working days in the timespan as holidays:

```
WorkingDaysFriSatHolidays :=
VAR _holidays = {DATE(2022, 10, 3), DATE(2022, 10, 4)}

RETURN NETWORKDAYS(DATE(2022, 10, 1), dt"2022-10-30", 7, _holidays)
```

Microsoft

New in Premium

Datamart in Power BI

Datamart in Power BI

Democratize data for every level of your organization

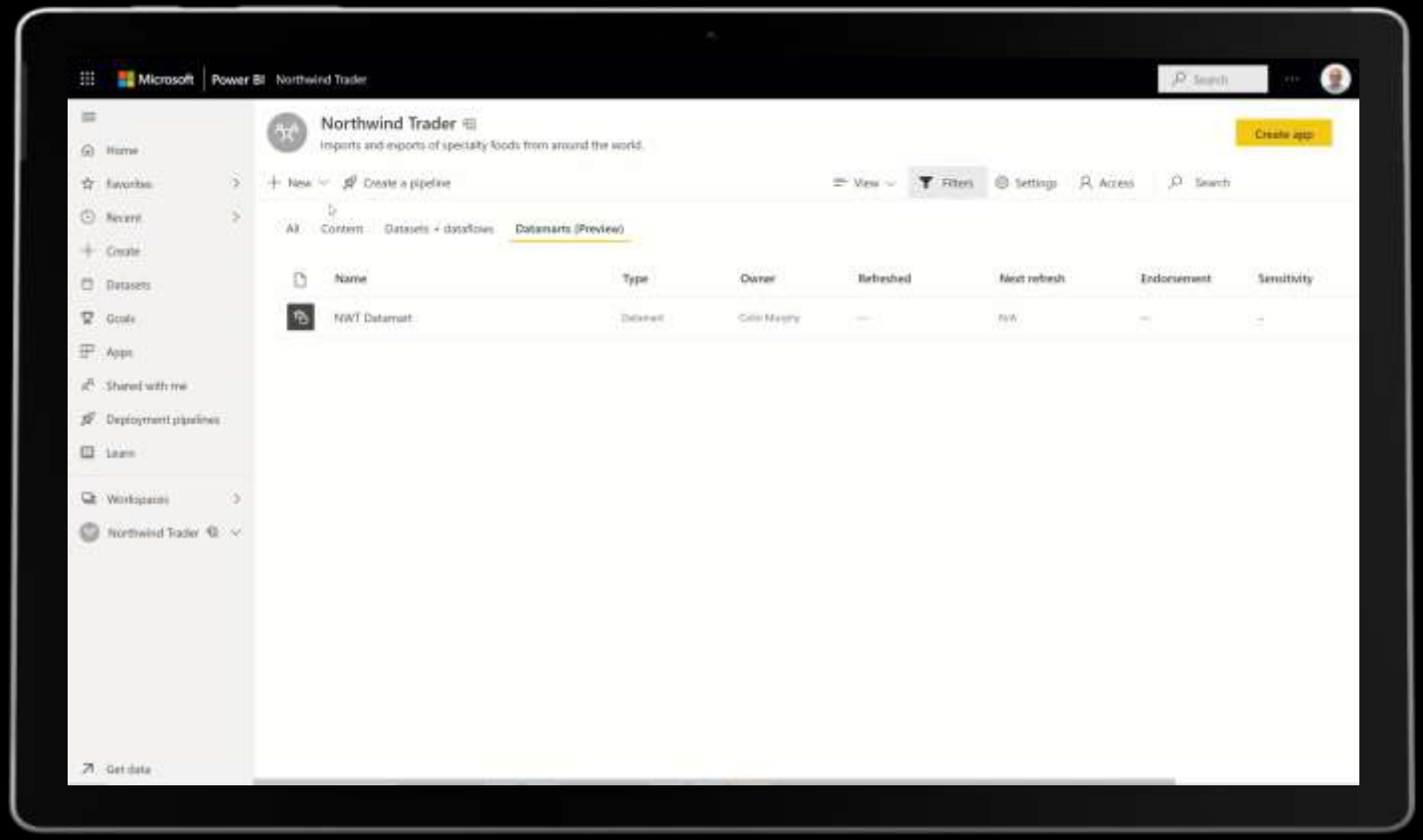
No-code experience

Integrated Power BI development

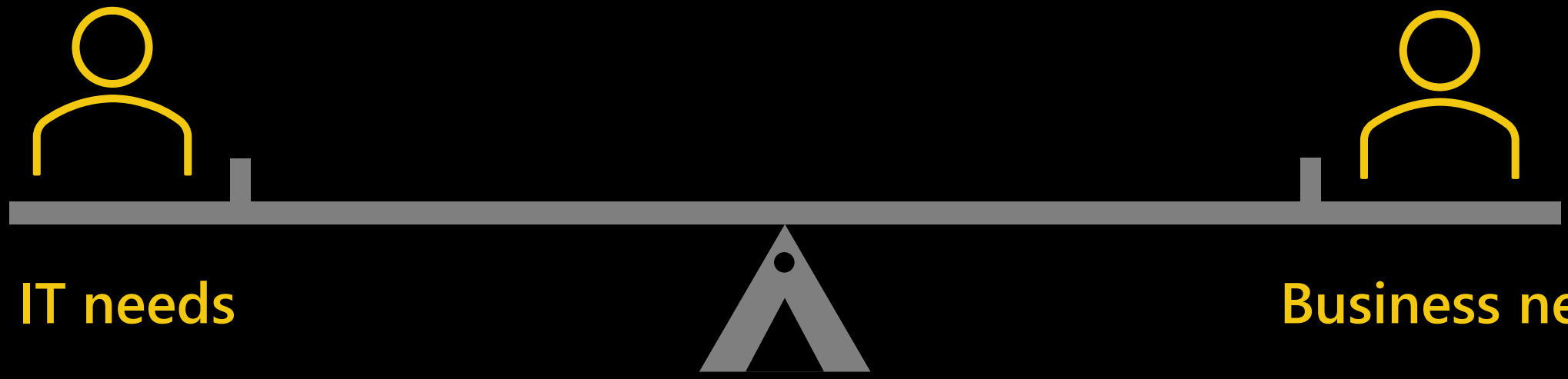
Unified relational database with BI semantic model

Easy to use

Integrated governance



The balance of self-service analytics



IT needs

Governance

Security

Scalability

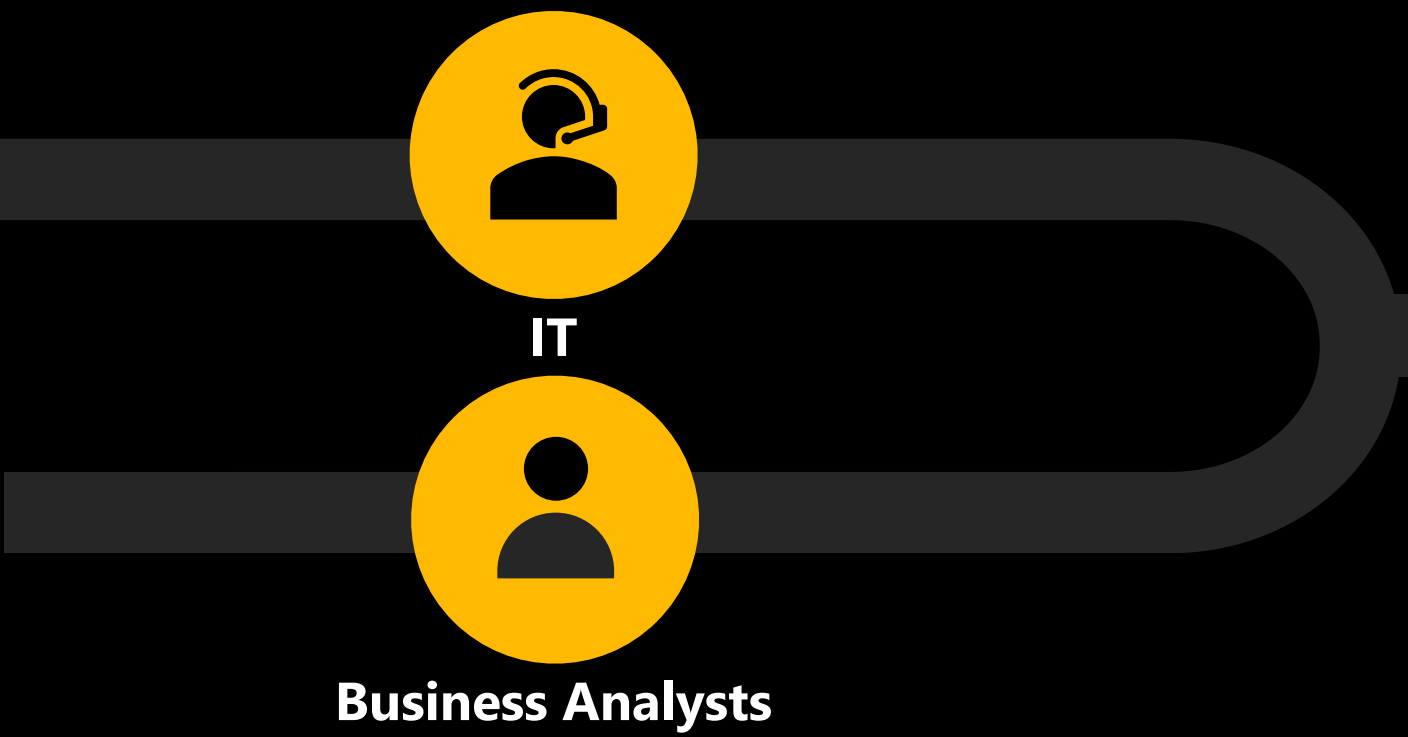
Business needs

Agility

Speed

Flexibility

Self-service datamart in Power BI



Datamart in Power BI

Low-code datamart

Integrated into Power BI

Full web authoring

Auto generate dataset

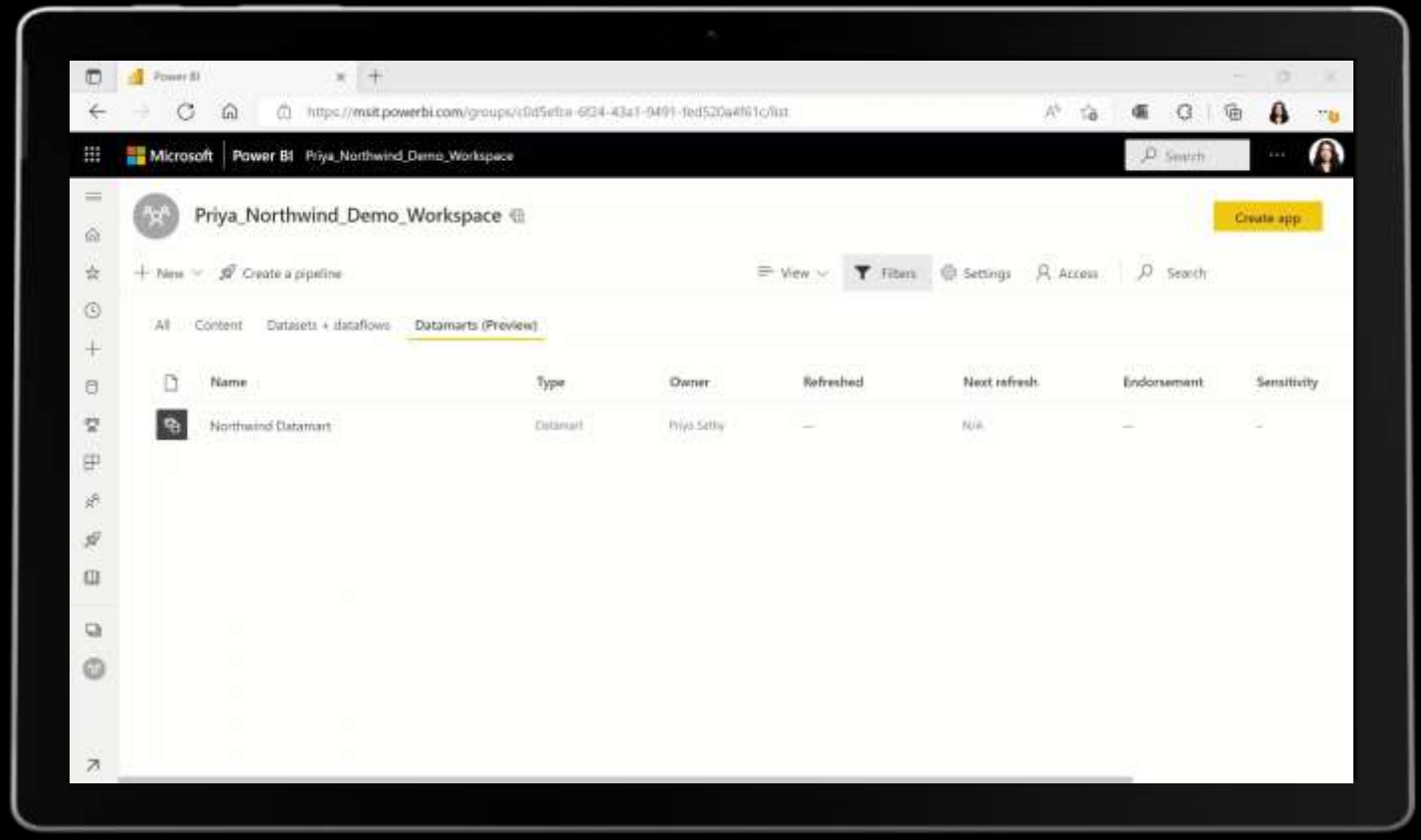
Insight in minutes not months

Datamart in Power BI

Democratize data for every level of your organization

Datamart in Power BI is a self-service capability, providing simple frictionless experiences for businesses to be more productive.

This out-of-the-box feature empowers business analysts to build a data mart over any data warehouse or multiple data sources that can be centrally governed and managed.

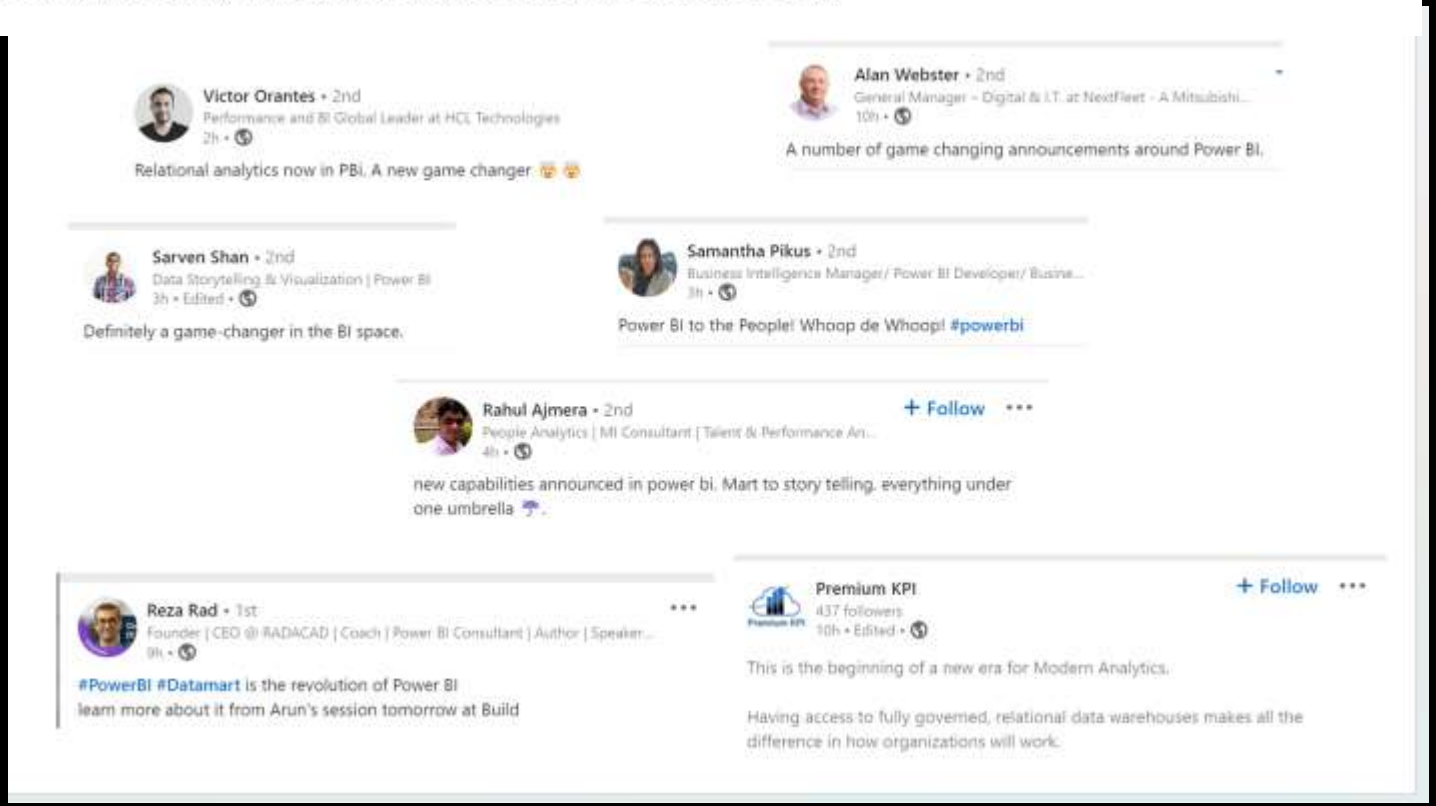


Datamart reaction at Build

Power BI

Arun Ulag pre-briefed Andrew Brust/The New Stack on the news, resulting in a positive article highlighting how the new datamart feature set is *"probably the biggest capability launched in Power BI in the last two to three years."* While the article was generally positive, he questioned how Power BI's dominance in the BI world can be transformative to Microsoft's position in the cloud market overall. Andrew commented, *"Power BI's momentum provides one potential route to such a victory"* but *"needs to do more than Build; it also needs to win."*

Datamart was also mentioned in articles from Kyt Dotson/SiliconANGLE and Usama Jawad/Neowin, who underscored it as a *"major step in building a turnkey data warehousing solution directly in Power BI."*



Add Data at Scale | Datamart in Power BI

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Exploring the preview of datamart in Power BI!

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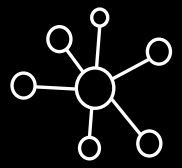
Datamart in Power BI

Democratize data for every level of your organization



Ingest & Prep

An intuitive no code experience to extract, transform, load and analyze data in a fully managed database

Unified semantic models

An autogenerated self-tuning dataset and an interface that enables defining BI measures, relationships and security rules kept in sync with the database

Integrated governance

Microsoft Purview Information Protection, sensitivity labels, lineage, endorsement, deployment pipelines and end to end monitoring built in

Ease of use

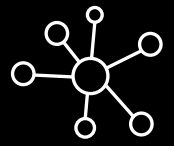
Includes full sharing, ready to build Power BI reports and is discoverable where users work – Data Hub, Excel, Teams

The benefits of a self-service datamart

Provide business users a simple, frictionless experience to ingest data from different data sources transform the data and deliver faster insights to increase productivity.

Faster Time to Insights

Free up time for your IT department, with a self service datamart.



Access for All

Unlock new insights by enabling everyone to ingest, transform, integrate, enrich, and explore their own mix of data. By using datamart in Power BI, every role in your business can drive clarity while reducing the load on IT.

Comprehensive Security and Control

With peace of mind, have total control over governance, manageability, and end-to-end data lineage

Datamart in Power BI allows business users to build end-to-end BI solutions by starting with the creation of a customized datamart that leverages existing Power BI capabilities for loading and modelling.

Simplify data ingestion, transformation, integration and enrichment for all

Accelerate creating a modern datamart

The solution to small data

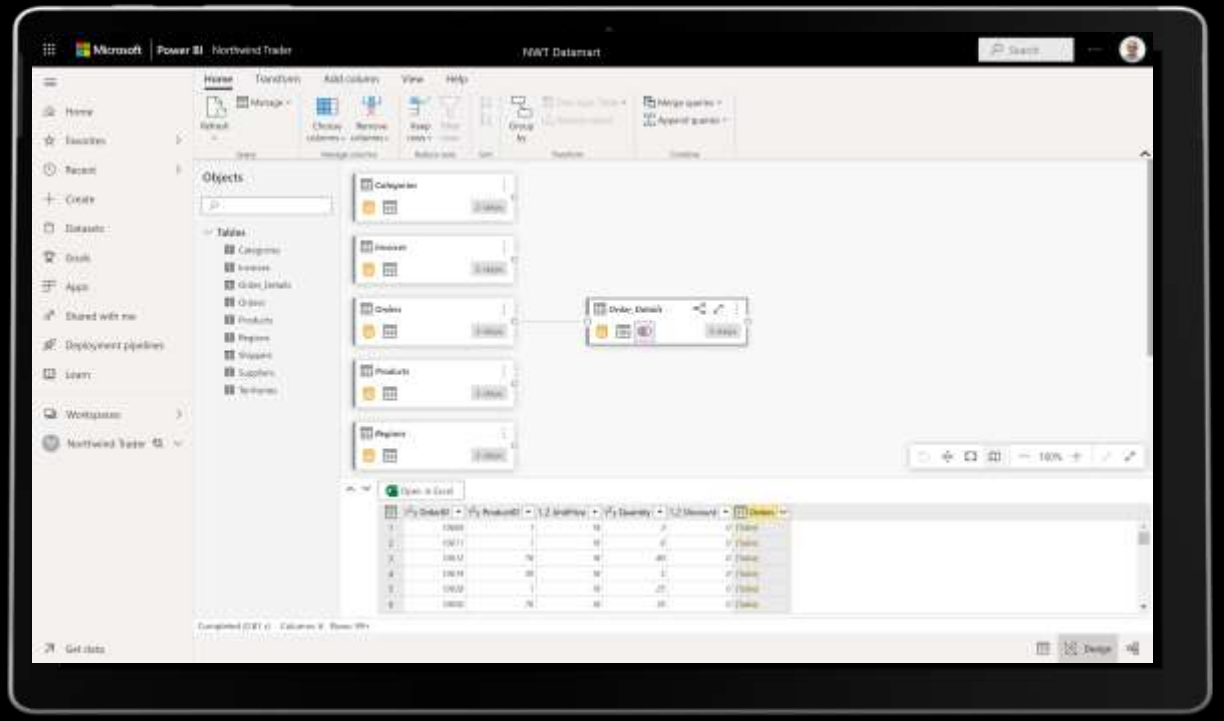
Securely uncover insights from workloads up to 100GB*

No tuning or optimization required

Ingest data from different data sources, ETL the data through Power Query and load the data into a SQL Database.

Familiarity enriched

Build a datamart on the same SaaS experience you know with Power BI.



*datamart size recommendation during public preview

Use Case

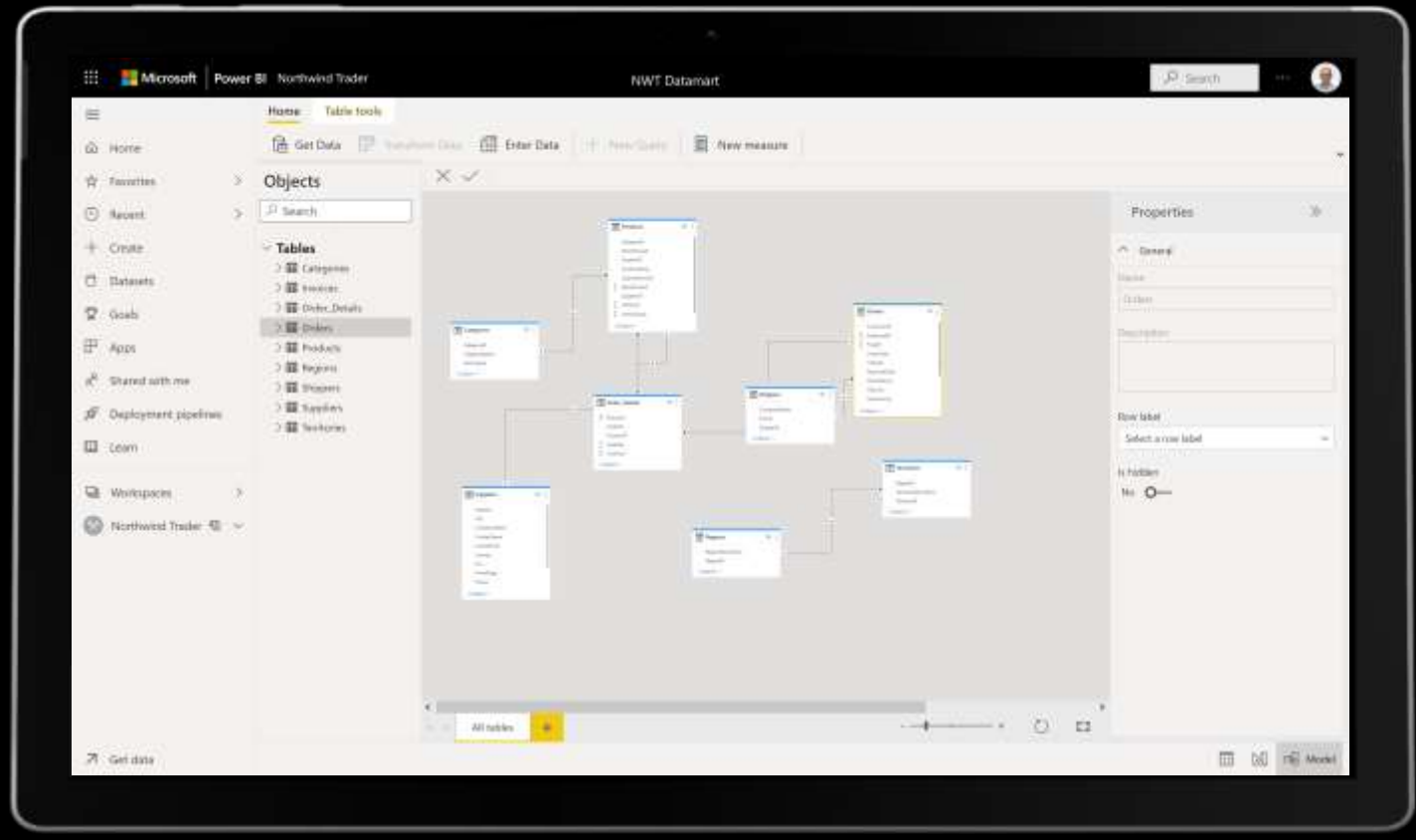
Data to value in minutes not months

The Challenge

An organization is having difficulties sharing data across various silos.

The Solution

Within a day the organization can build a datamart and share reports and insights with key stakeholders. A decision that would have taken them months was made overnight.



Use Case

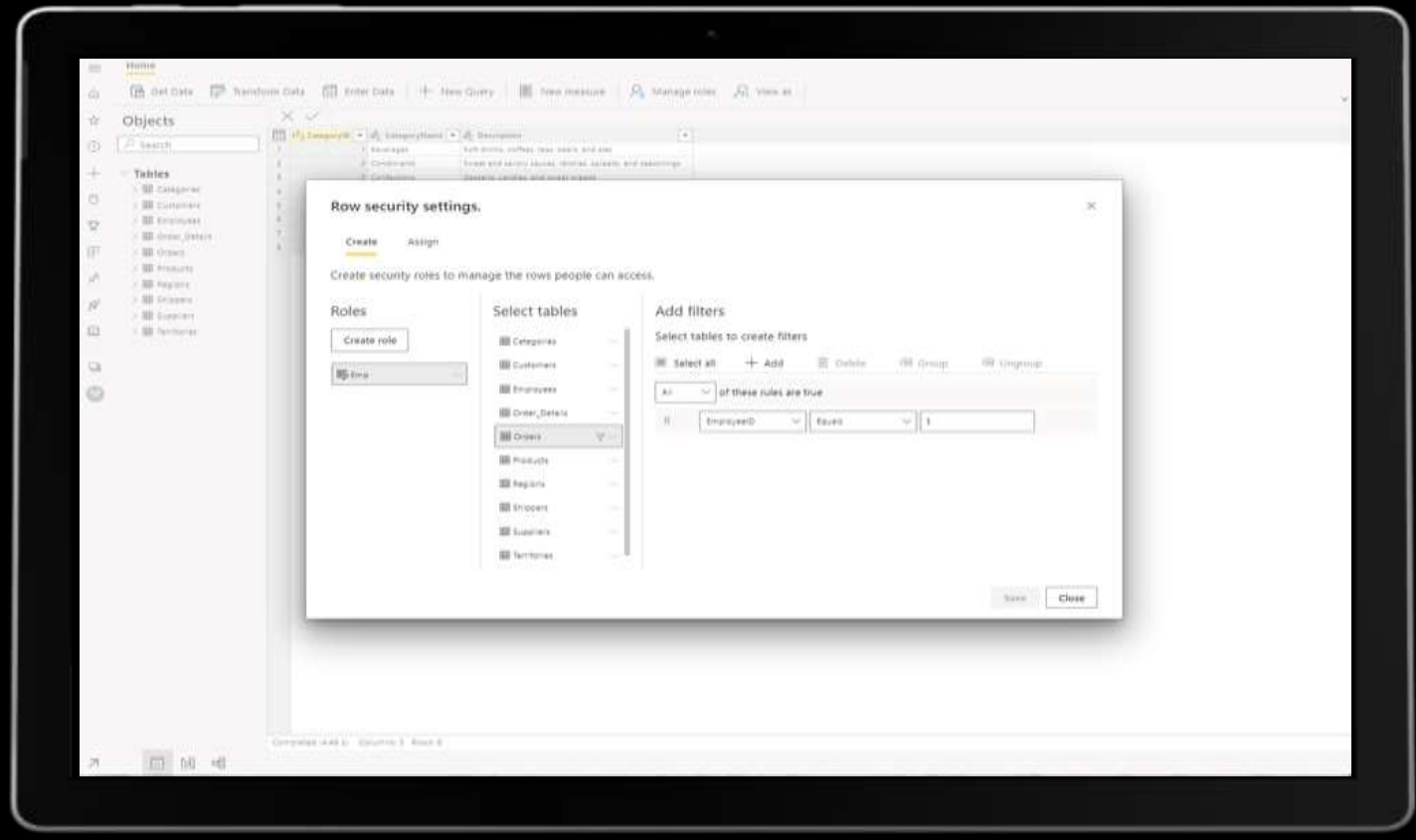
Manage and govern the data

The Challenge

An organization is having difficulties govern and securely sharing data across organization.

The Solution

You can create and assign row level security to restrict data access for given users and set sensitivity labels.
Also, you can view end-to-end lineage of the data.
You can include the datamart in existing deployment pipelines and move the datamart from development to test to production.



Grazie!