



# Power BI

## Cosa è stato, cosa sarà

2022.12.01

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 /in/abenedetti

 @anBenedetti

 <https://github.com/anbened>

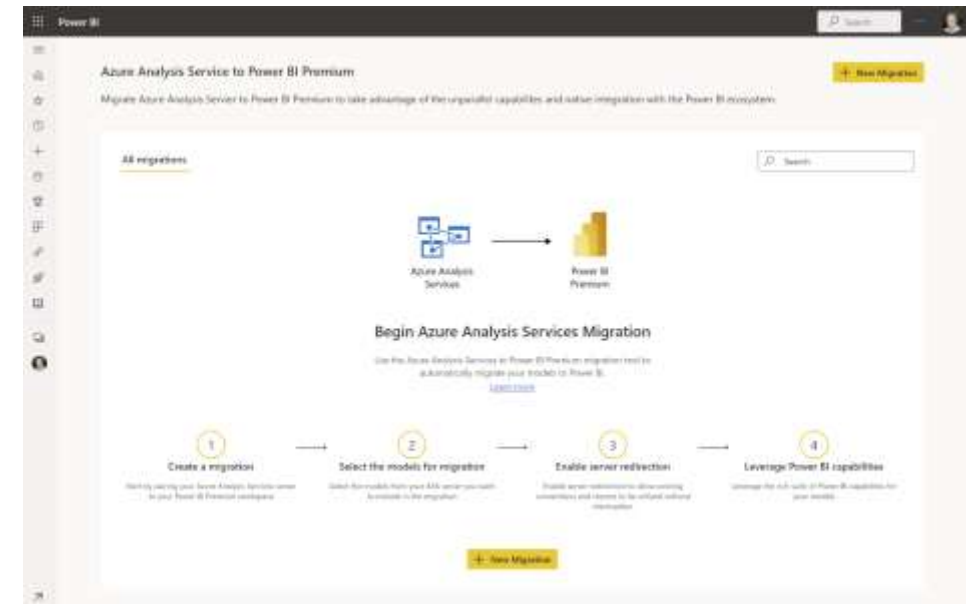
# Migration experience from Azure Analysis Services to Power BI Premium

The screenshot shows the Microsoft Power BI Home interface. At the top, there's a navigation bar with the Microsoft logo, 'Power BI Home', a search bar, and various utility icons. Below this, a personalized header greets the user 'Good evening, Christian' with a background image of the Seattle skyline and a 'New report' button. The main content area is divided into several sections: 'Recommended' with five tiles for getting started, connector usage, and featured reports; a 'Recent' tab with a table of recent apps and reports; and a 'Favorites' and 'My apps' section. The table below lists recent items with columns for Name, Type, Opened, Location, Endorsement, and Sensitivity.

Name	Type	Opened	Location	Endorsement	Sensitivity
Power BI Release Plan 11/10/2022, 10:29:57 AM	App	9 hours ago	Apps	—	—
DataCloud Deployment Dashboard	App	a day ago	Apps	—	—
Downstream Connector Details	Report	a day ago	Connector Usage	—	General
private preview reporting	App	2 days ago	Apps	—	—
Power BI	App	9 days ago	Apps	Certified	—

# 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

Select company: Contoso Suites

**Contoso**

Owl Wholesales  
123 Violet Road, Phoenix, CO 85003 USA

Contoso Suites  
123 Coffee Street  
Buffalo, NY 98052  
USA  
Telephone 012345678  
<http://www.contoso-suites.com>

**Invoice CIV-000676 000007-1**  
**30 November 2019**  
Payment terms: Net 65 days  
Payment due: 1/14/2020  
**\$321,113.52**

ITEM	DESCRIPTION	QUANTITY	SALES PRICE	DISCOUNT	AMOUNT
D011	Lens	2 Each	2	0	4.00
S0001	Mid-Range Speaker	25 Each	900	0	17,500.00
R0001	Automatic Fuser Panel	117 Each	37	0	4,329.00
S0003	Standard Speaker	23 Each	235	0	5,405.00
T0001	Speaker cable 10'	65 Each	500	0	32,500.00
S0004	High End Speaker	12 Each	2000	0	24,000.00
T0004	Television M120 37" Silver	33 Each	350	0	11,550.00
T0002	Projector Television	23 Each	1720	0	39,560.00
T0005	Television HDTV X500 52" White	33 Each	2890	0	95,370.00
T0003	Surround Sound Receiver	18 Each	470	0	8,460.00
SALES SUBTOTAL AMOUNT					4.00
SALES TAX					12,350.52

**Sales invoice notes**

**METHODS OF PAYMENT**

Electronic payment: Payment **US-008** Sort code **34567** Account No. **34567**

Check: Make check payable to **Contoso Suites**

**OTHER INFORMATION**

Tax registration no. **5234123400**  
Our reference **Ref Rytroon**

Disclaimer: This is a sample and is provided 'as is' without warranty of any kind. Sample data included are for illustration only and are fictitious. No real association is intended or inferred.

Page 1 of 1

# 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](#)

SQL Server Reporting Services 2022 Home > General

**Site settings**

- General
- Branding
- Schedules
- Security

**Properties**

Name\*

SQL Server Reporting Services 2022

**Advanced**

Report timeout (default):

☐ Allow the report to run for 1800 seconds before timing out

☒ Allow the report to run indefinitely (no timeout)

History snapshot retention (default):

☒ Retain the 10 most recent history snapshots

☐ Retain all history snapshots

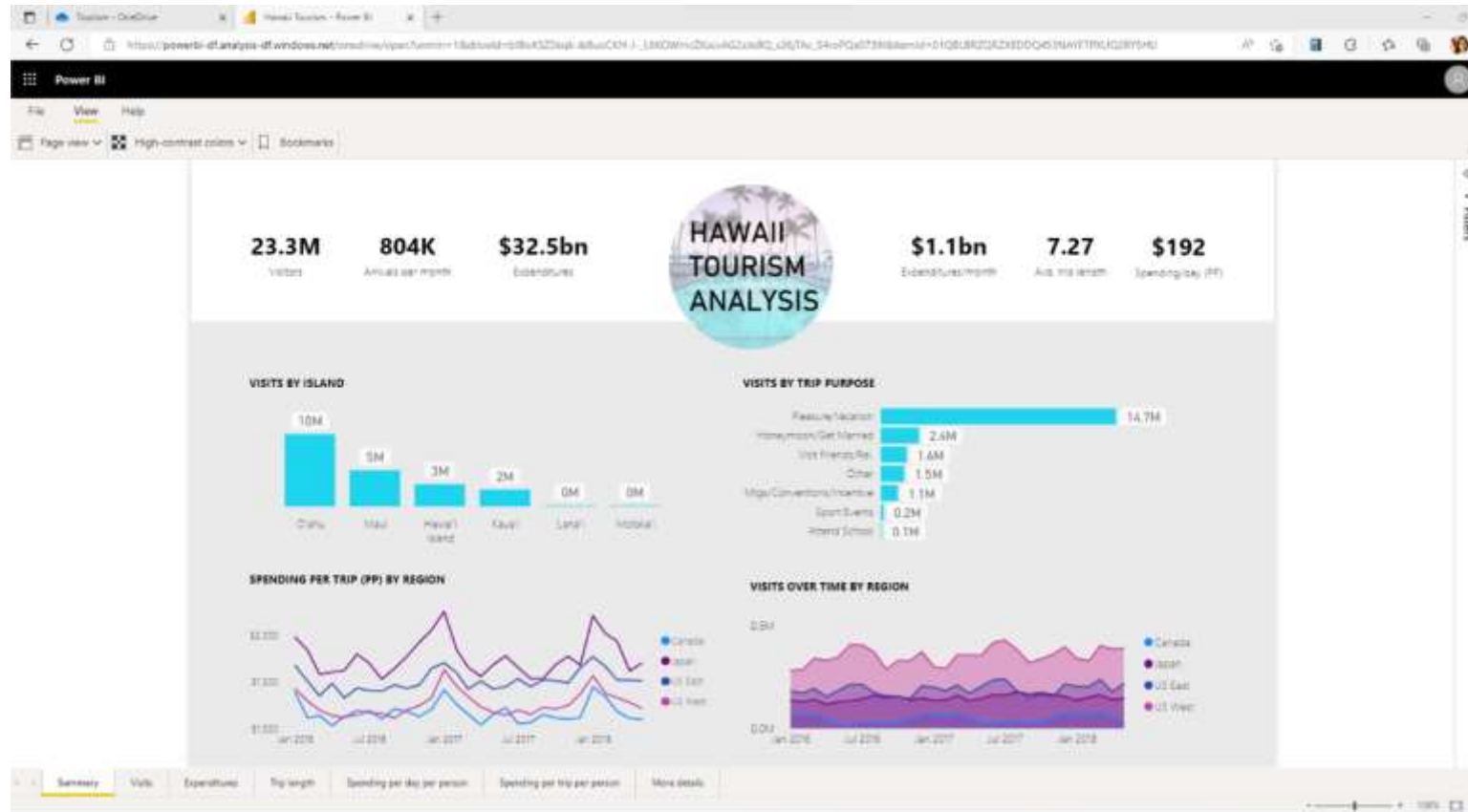
Publish to Power BI environment URL [Learn more](#)

Please enter a valid URL

Apply

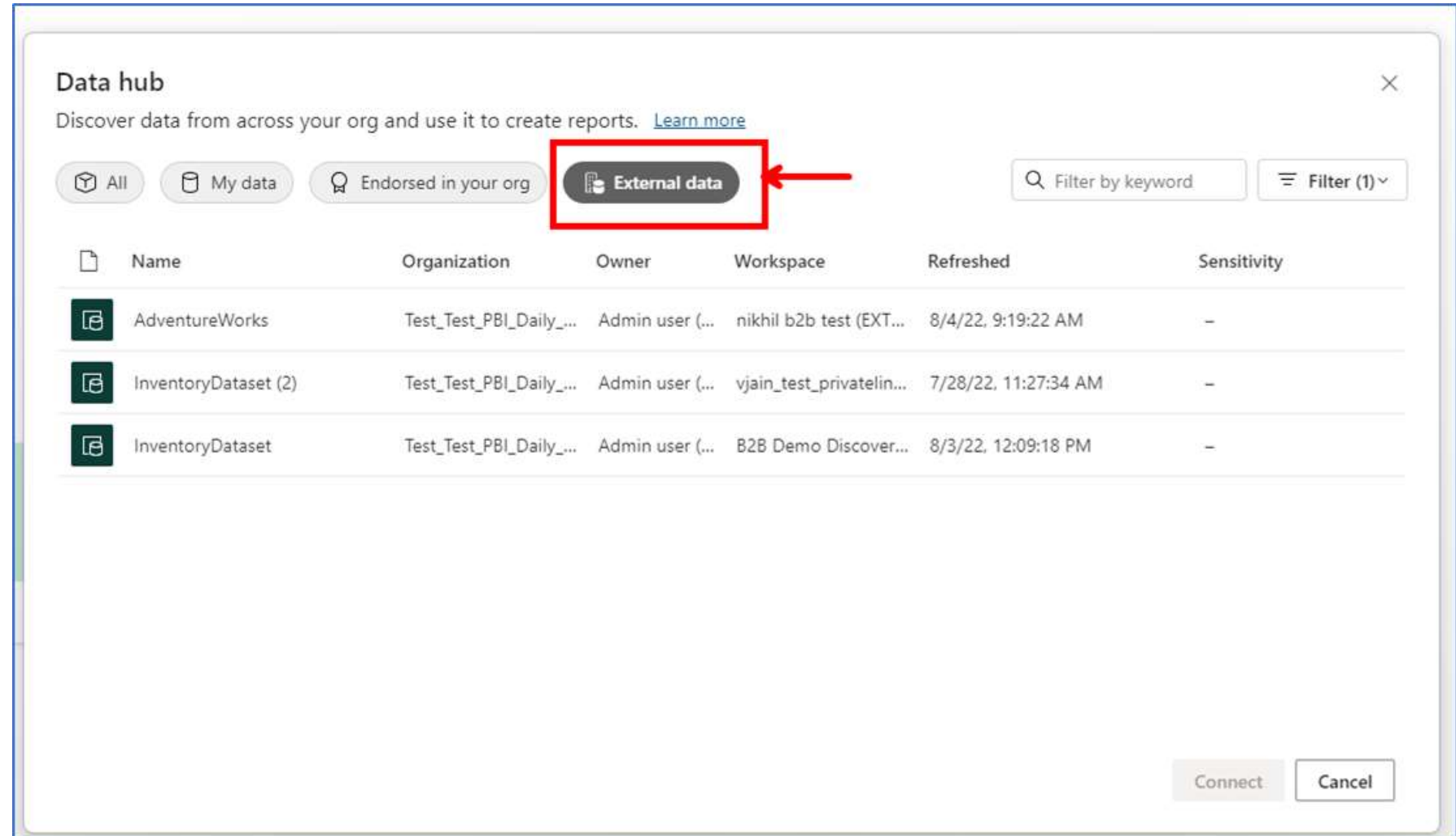
# Explore and interact with Power BI reports directly from OneDrive and SharePoint

- 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.



The screenshot shows the 'Data hub' interface. At the top, it says 'Discover data from across your org and use it to create reports. [Learn more](#)'. Below this are four tabs: 'All', 'My data', 'Endorsed in your org', and 'External data'. The 'External data' tab is highlighted with a red box and a red arrow points to it. To the right of the tabs are two search filters: 'Filter by keyword' and 'Filter (1)'. Below the tabs is a table with the following columns: Name, Organization, Owner, Workspace, Refreshed, and Sensitivity. The table contains three rows of data:

Name	Organization	Owner	Workspace	Refreshed	Sensitivity
AdventureWorks	Test_Test_PBI_Daily_...	Admin user (...)	nikhil b2b test (EXT...	8/4/22, 9:19:22 AM	-
InventoryDataset (2)	Test_Test_PBI_Daily_...	Admin user (...)	vjain_test_privatelin...	7/28/22, 11:27:34 AM	-
InventoryDataset	Test_Test_PBI_Daily_...	Admin user (...)	B2B Demo Discover...	8/3/22, 12:09:18 PM	-

At the bottom right of the interface are two buttons: 'Connect' and 'Cancel'.

# Power BI Integration

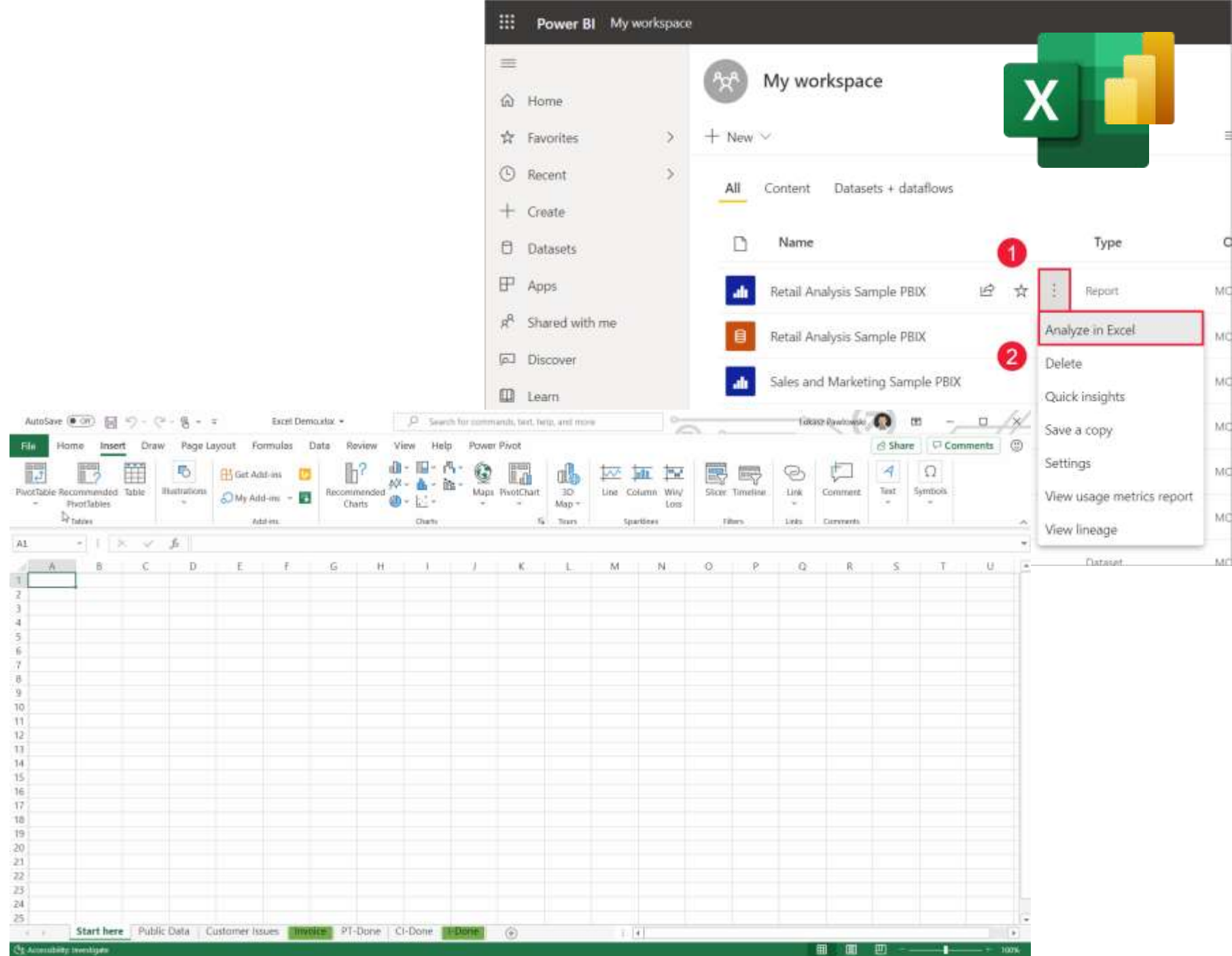




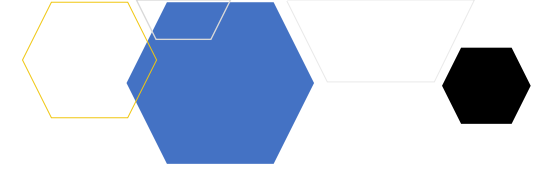
# Analyze in Excel

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

A screenshot of the Microsoft Outlook web interface. The interface is divided into three main sections: a left sidebar, a central list of drafts, and a right pane for editing a selected draft.

**Left Sidebar:** Contains navigation icons for Mail, Calendar, People, and Tasks. Under 'Favorites', there are links to 'Inbox' (10 items), 'Sent Items', and 'Drafts' (3 items). Under 'Folders', there are links to 'Inbox' (10 items), 'Drafts' (3 items), 'Sent Items', and 'Deleted Items'. At the bottom, there are links to 'Junk Email', 'Archive', 'Notes', 'Conversation His...', and 'y folder'.

**Central List:** Titled 'Drafts' with a star icon and a 'Filter' dropdown. It shows three draft emails:

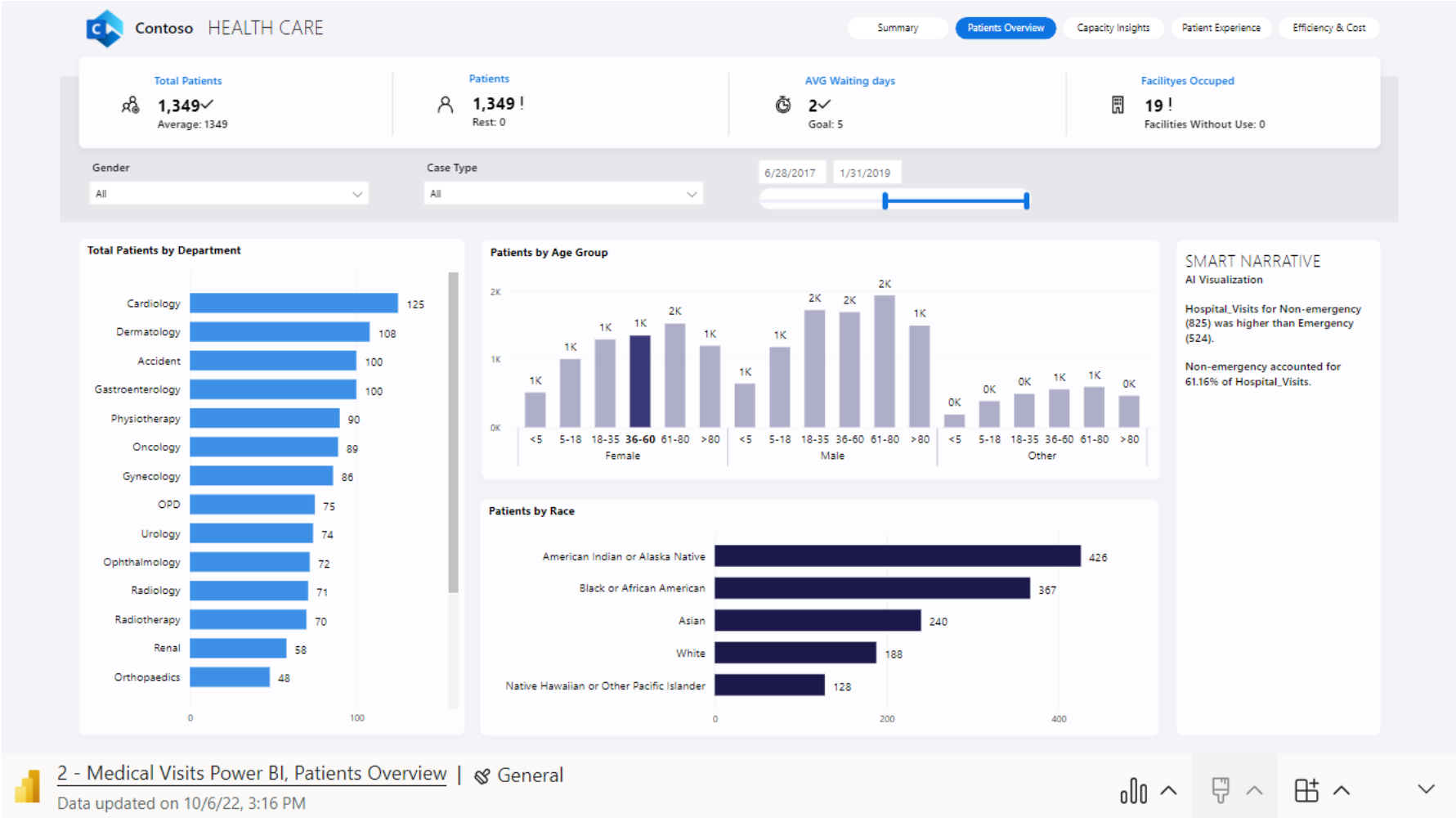
- Today:** A draft from Alex Wilber with the subject 'Weekly shipments update' and a preview '@Alex Wilber Here's the weekly status ...'. It is dated 8:42 AM.
- This month:** A draft from Alex Wilber with the subject 'Re: Shipment reports?' and a date of 'Fri 3/11'.
- Last month:** A draft with the subject '(No subject)' and a date of '2/15/2022'. The preview says 'No preview is available.'

**Right Pane:** Shows the composition area for the selected draft. It includes a 'To' field with 'Alex Wilber' and a 'Cc' field. The subject is 'Weekly shipments update'. The body text starts with '@Alex Wilber' followed by 'Here's the weekly status for shipments:' and a bulleted list:

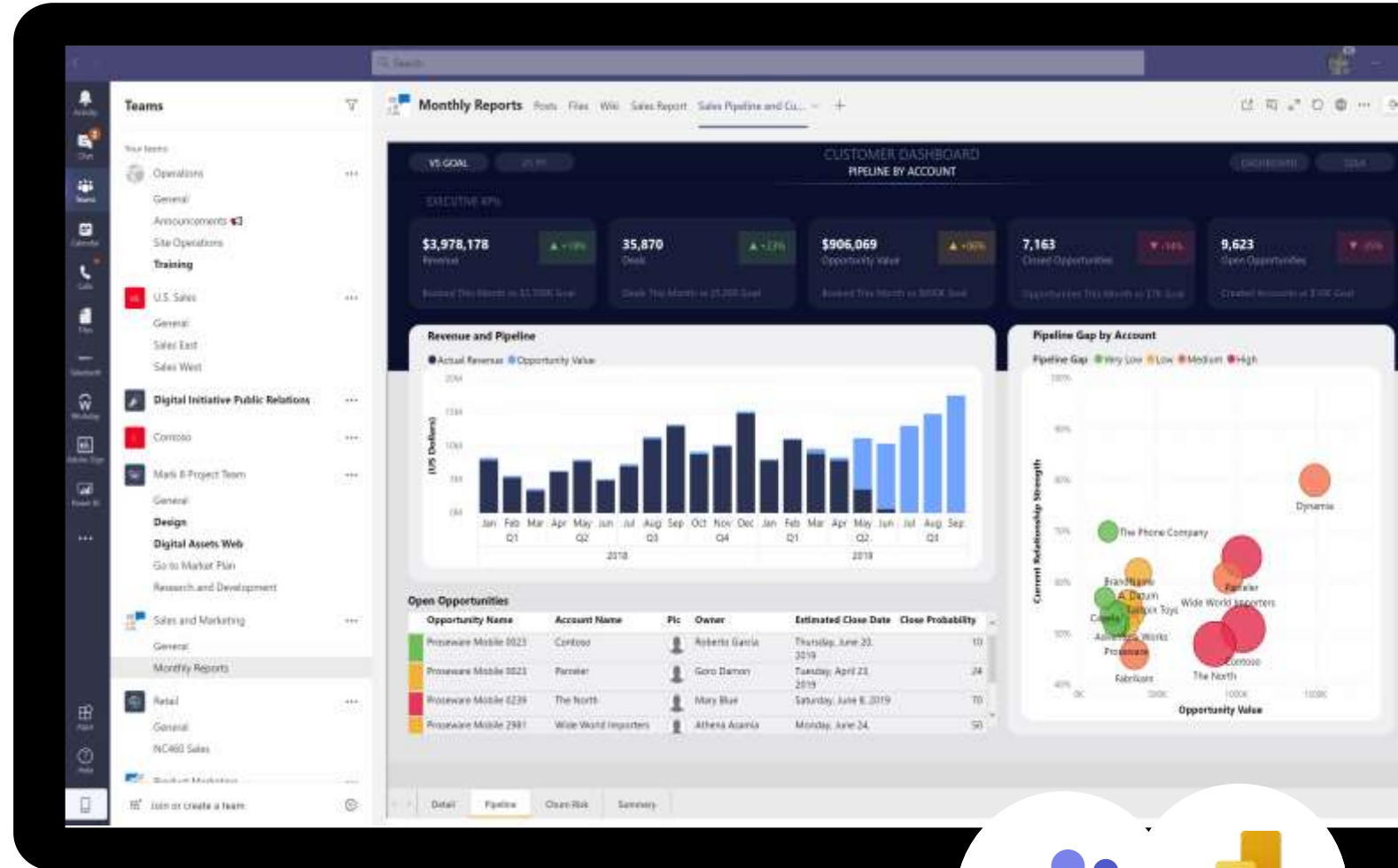
- We reached our on-time target of 95%, making this the first month we've achieved that
- The new shipment system has a satisfaction of 85% (+5% MoM) and we're continuing to iterate to improve it
- Customers are noticing and our store rating is 3.5 stars (+.5 MoM)

Below the list, it says 'Here's the report with all the details:' followed by a cursor. At the bottom, there is a rich text toolbar with options for font (Calibri), size (12), bold, italic, underline, color, background color, link, unlink, list, and indent. There are 'Send' and 'Discard' buttons. A status bar at the bottom right says 'Draft saved at 8:42 AM'.

# Power BI & Power Point



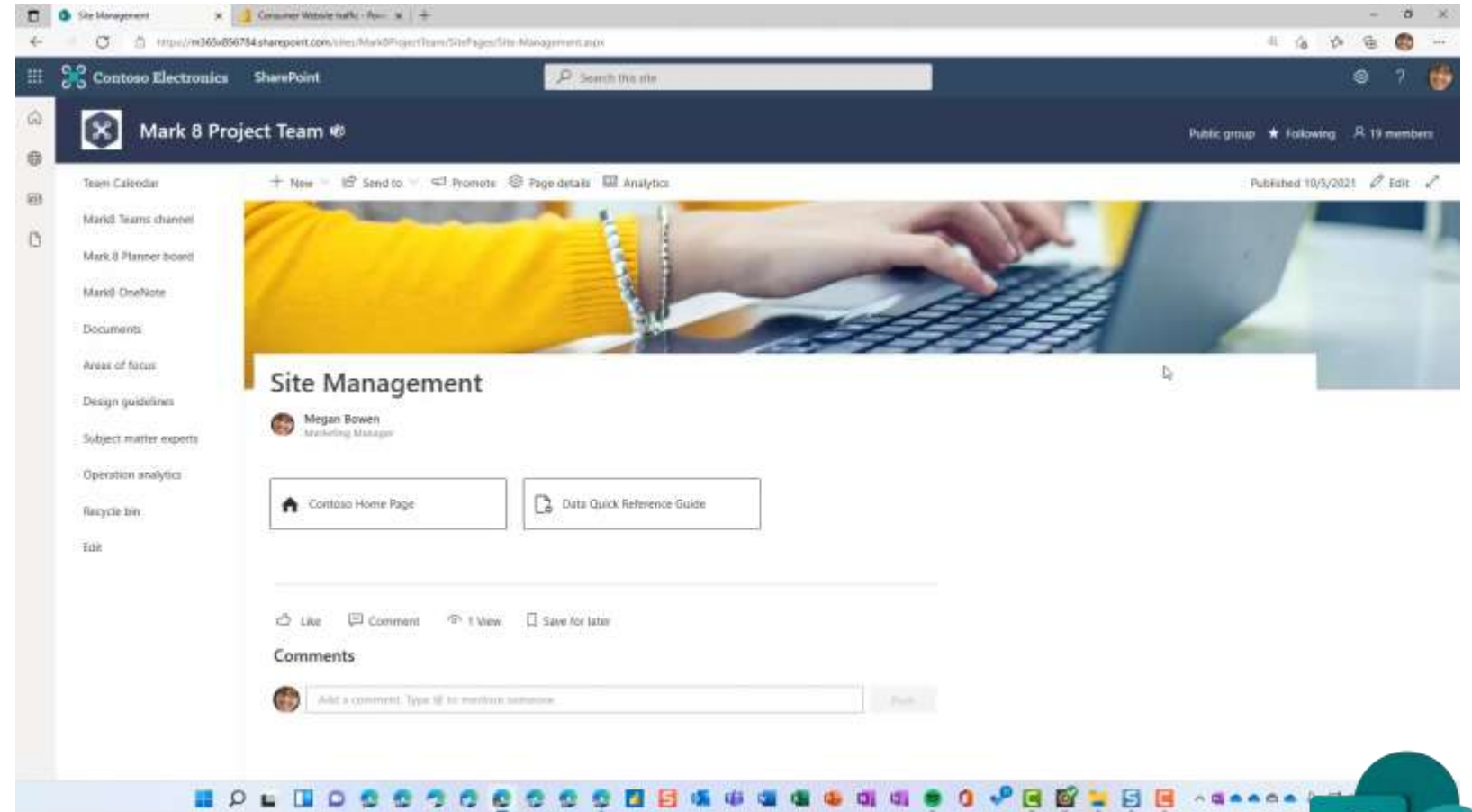
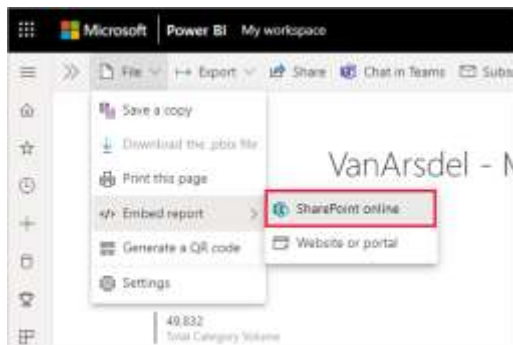
# Power BI & Microsoft Teams



# Power BI & SharePoint

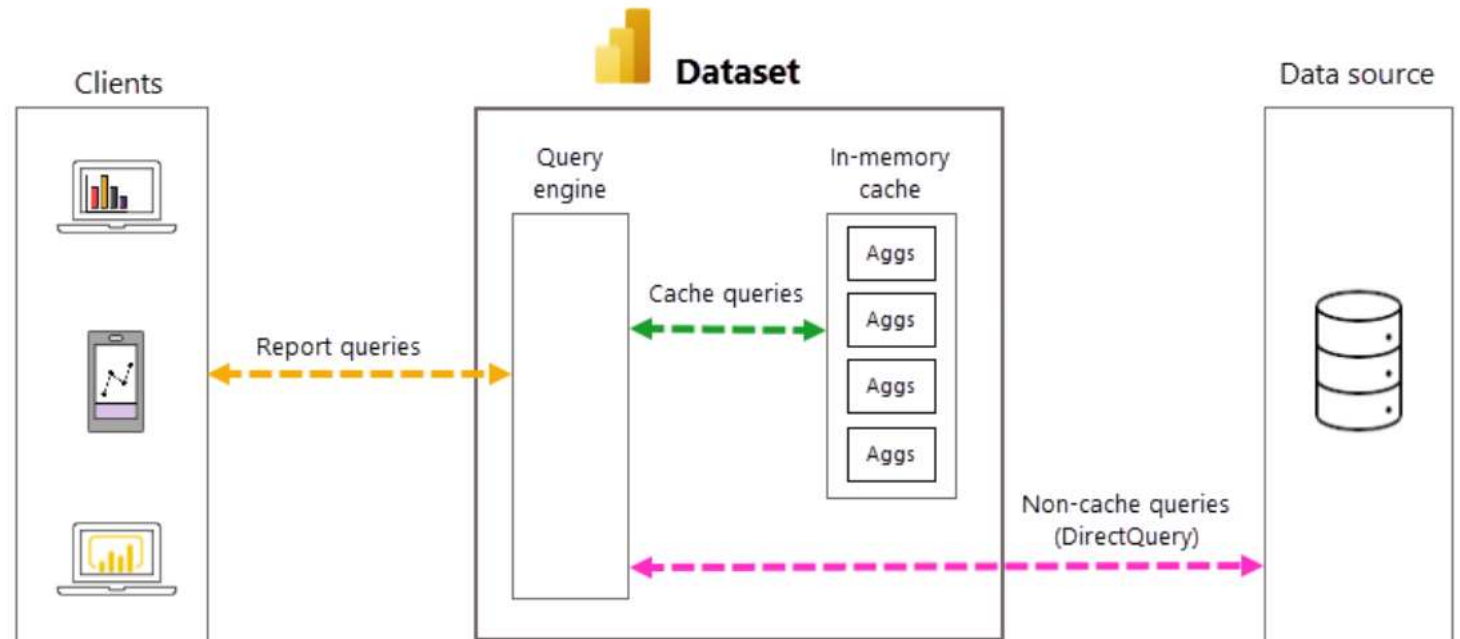
With the Power BI report web part for SharePoint Online, you can easily embed interactive Power BI reports in SharePoint Online pages.

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.



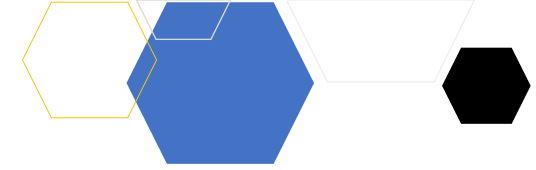
# Automatic aggregation

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.



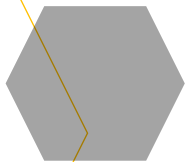


# Hybrid Tables in Power BI Premium (public preview)



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!

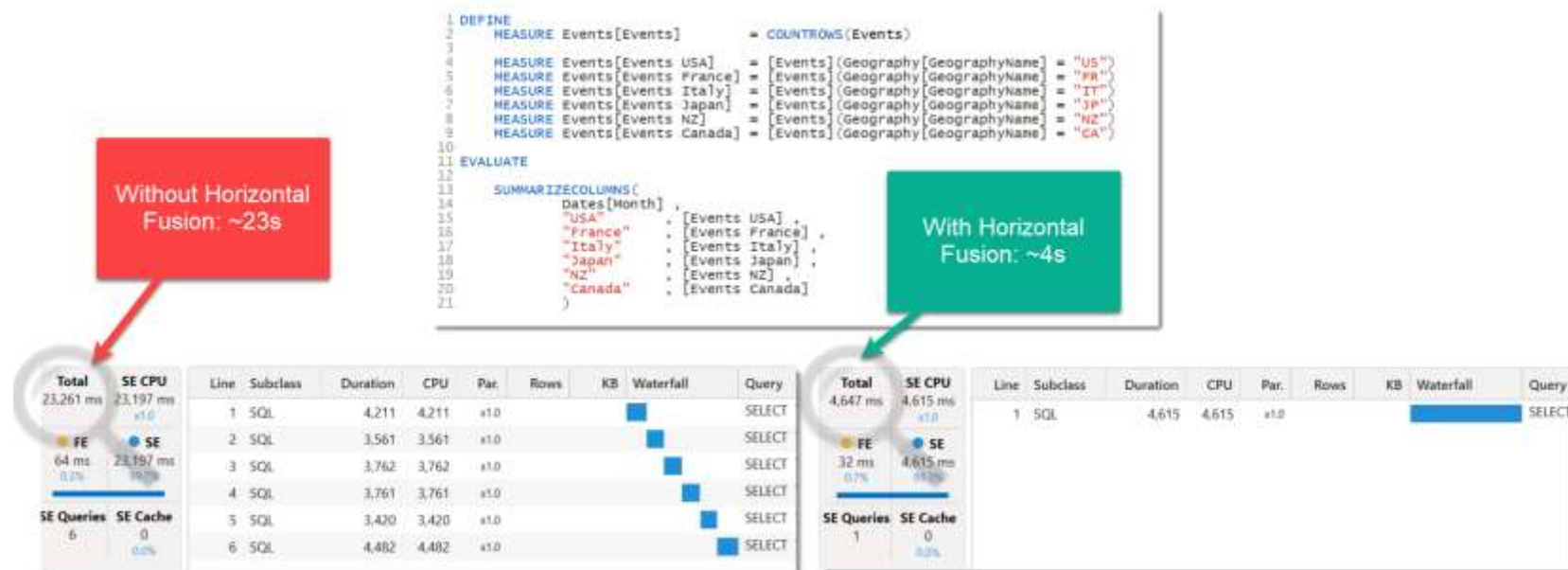
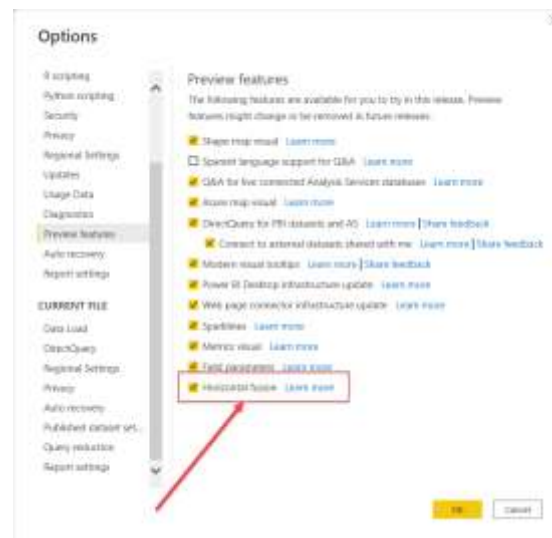
Granularity	Name	Row Count	
Year	2011	295,489,717	Archived: <b>Import</b>
Year	2012	297,678,498	
Year	2013	295,575,442	
Year	2014	292,477,875	
Year	2015	297,780,469	
Year	2016	294,060,081	
Year	2017	300,419,682	
Year	2018	296,541,108	
Year	2019	292,787,420	
Year	2020	299,273,979	
Quarter	2021Q1	74,135,277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



# 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.

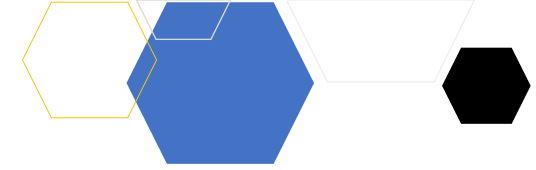
**Horizontal fusion** aims to reduce the number of storage engine queries when similar calculations differ only by the filters applied to a column in the filter context



[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")
```

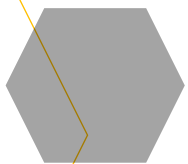
For reference, October 1st, 2022 is a Saturday, and October 30th, 2022 is a Sunday.

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)
```





# New in Premium

Datamart in Power BI



# Datamart in Power BI

Democratize data for every level of your organization

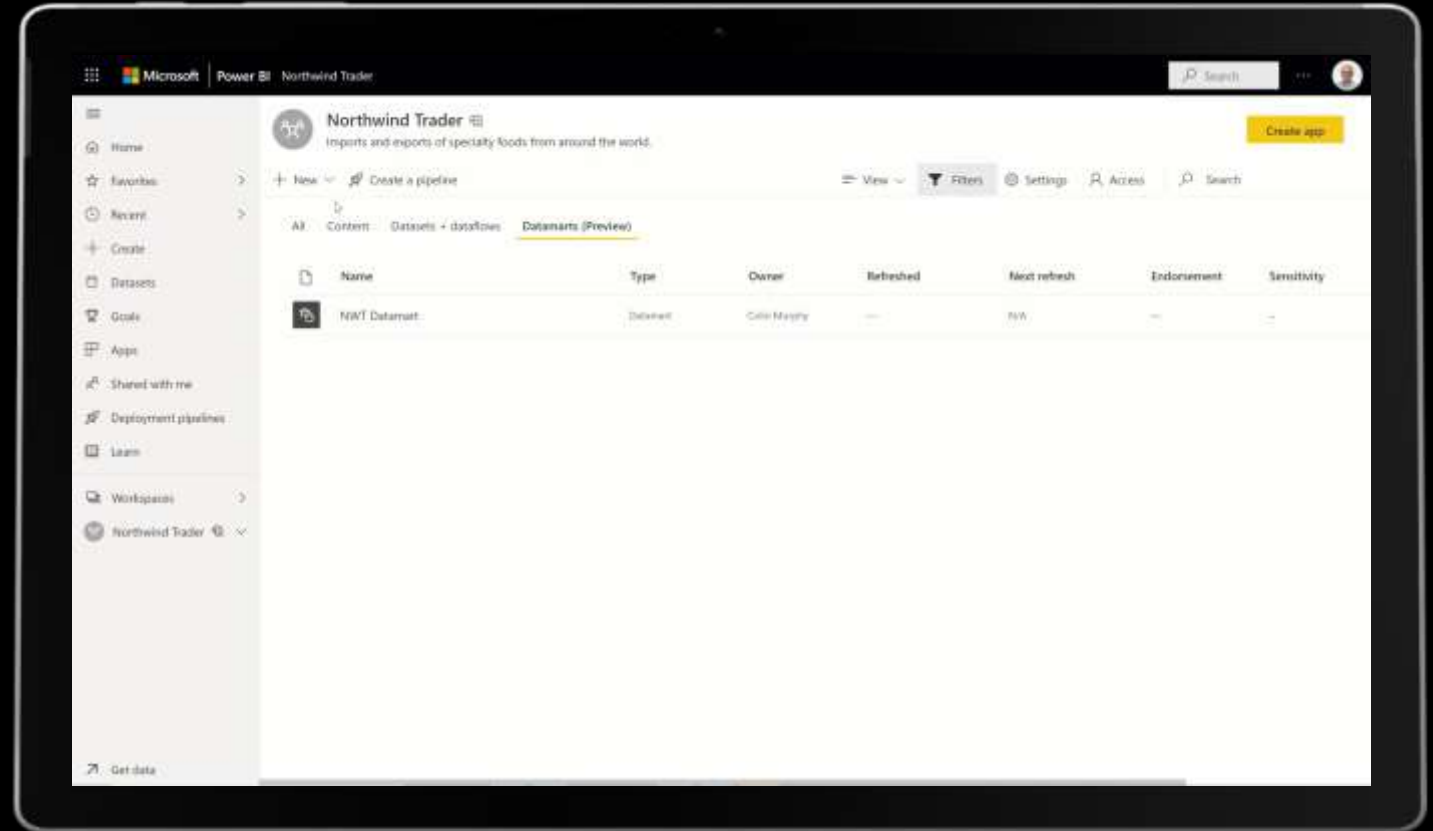
No-code experience

Integrated Power BI  
development

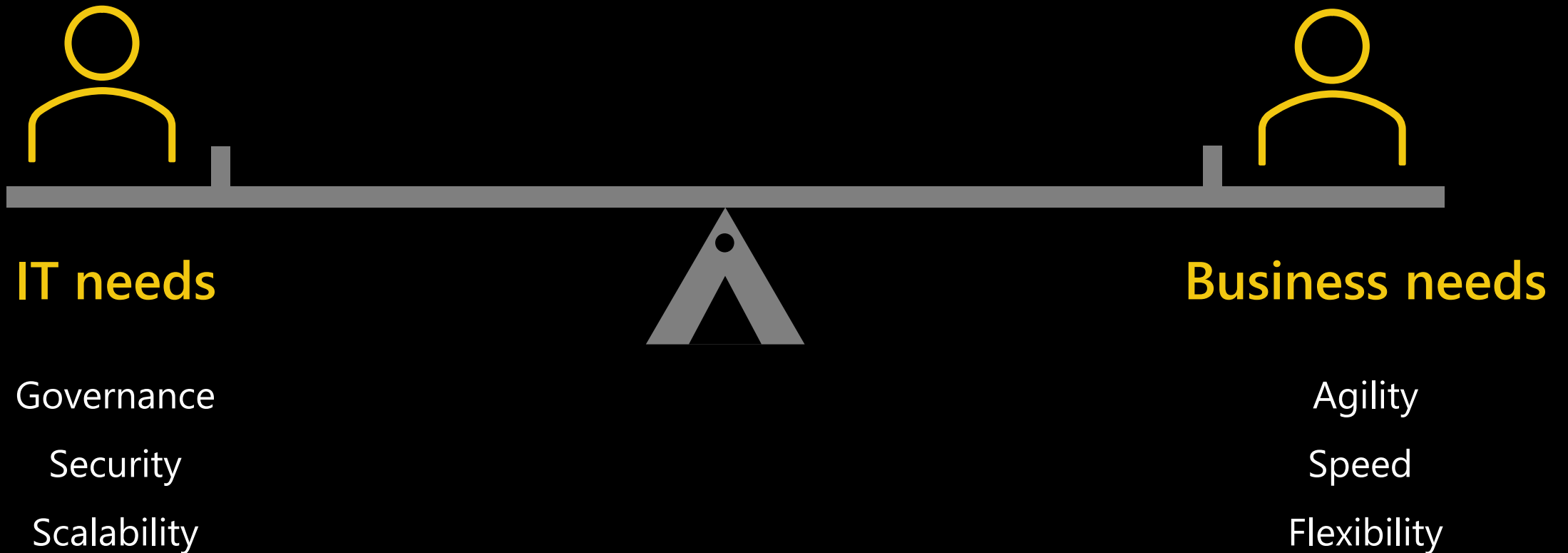
Unified relational database with  
BI semantic model

Easy to use

Integrated governance



# The balance of self-service analytics



# Self-service datamart in Power BI



IT



**Business Analysts**



**Datamart in Power BI**

Low-code datamart

Integrated into Power BI

Full web authoring

Auto generate dataset

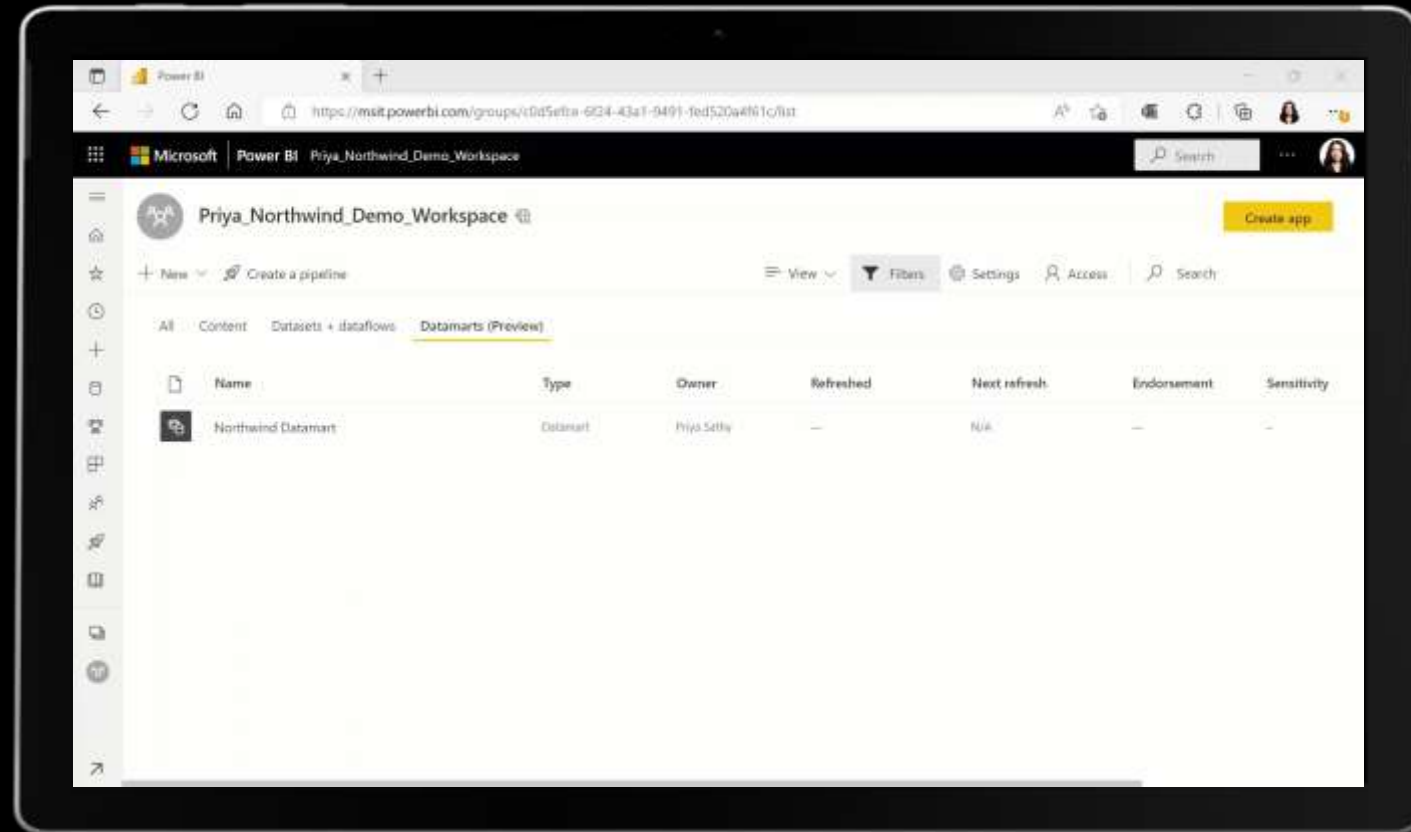
**Insight in minutes not months**

# 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.*”



Victor Orantes • 2nd  
Performance and BI Global Leader at HCL Technologies  
2h • 🌐

Relational analytics now in PBI. A new game changer. 🤖🤖



Alan Webster • 2nd  
General Manager - Digital & I.T. at Nextfleet - A Mitsubishi...  
10h • 🌐

A number of game changing announcements around Power BI.



Sarven Shan • 2nd  
Data Storytelling & Visualization | Power BI  
3h • Edited • 🌐

Definitely a game-changer in the BI space.



Samantha Pikus • 2nd  
Business Intelligence Manager / Power BI Developer / Busine...  
3h • 🌐

Power BI to the People! Whoop de Whoop! #powerbi



Rahul Ajmera • 2nd  
People Analytics | MI Consultant | Talent & Performance An...  
4h • 🌐

+ Follow ...

new capabilities announced in power bi. Mart to story telling. everything under one umbrella 🌂



Reza Rad • 1st  
Founder | CEO @ RADACAD | Coach | Power BI Consultant | Author | Speaker...  
9h • 🌐

#PowerBI #Datamart is the revolution of Power BI  
learn more about it from Arun's session tomorrow at Build



Premium KPI  
437 followers  
10h • Edited • 🌐

+ Follow ...

This is the beginning of a new era for Modern Analytics.

Having access to fully governed, relational data warehouses makes all the difference in how organizations will work.

## Add Data at Scale | Datamart in Power BI

25,450 views • May 24, 2022



Microsoft Mechanics ✓  
256K subscribers

#PowerBI #PowerBIfromRookieToRockStar #PowerQuery  
Getting Started with Power BI Datamart

7,669 views • May 24, 2022



RADACAD  
28.3K subscribers

#PowerBI #datamart #GuyInACube

Exploring the preview of datamart in Power BI!

49,986 views • May 25, 2022

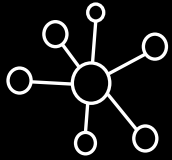
👍 1.5K 🗨 DISLIKE



Guy in a Cube ✓  
275K subscribers

# 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



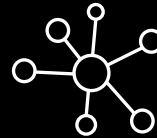
# The benefits of a self-service datamart

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

101010  
010101  
101010

## The solution to small data

Securely uncover insights from workloads up to 100GB\*



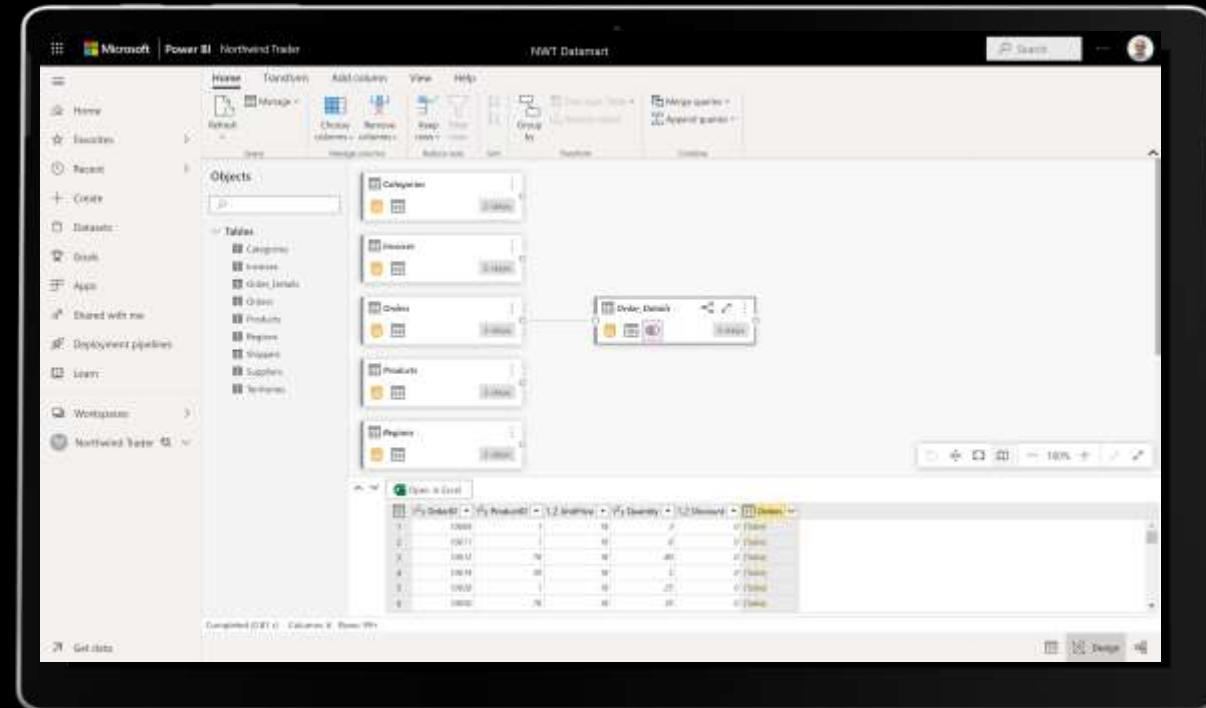
## No tuning or optimization required

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

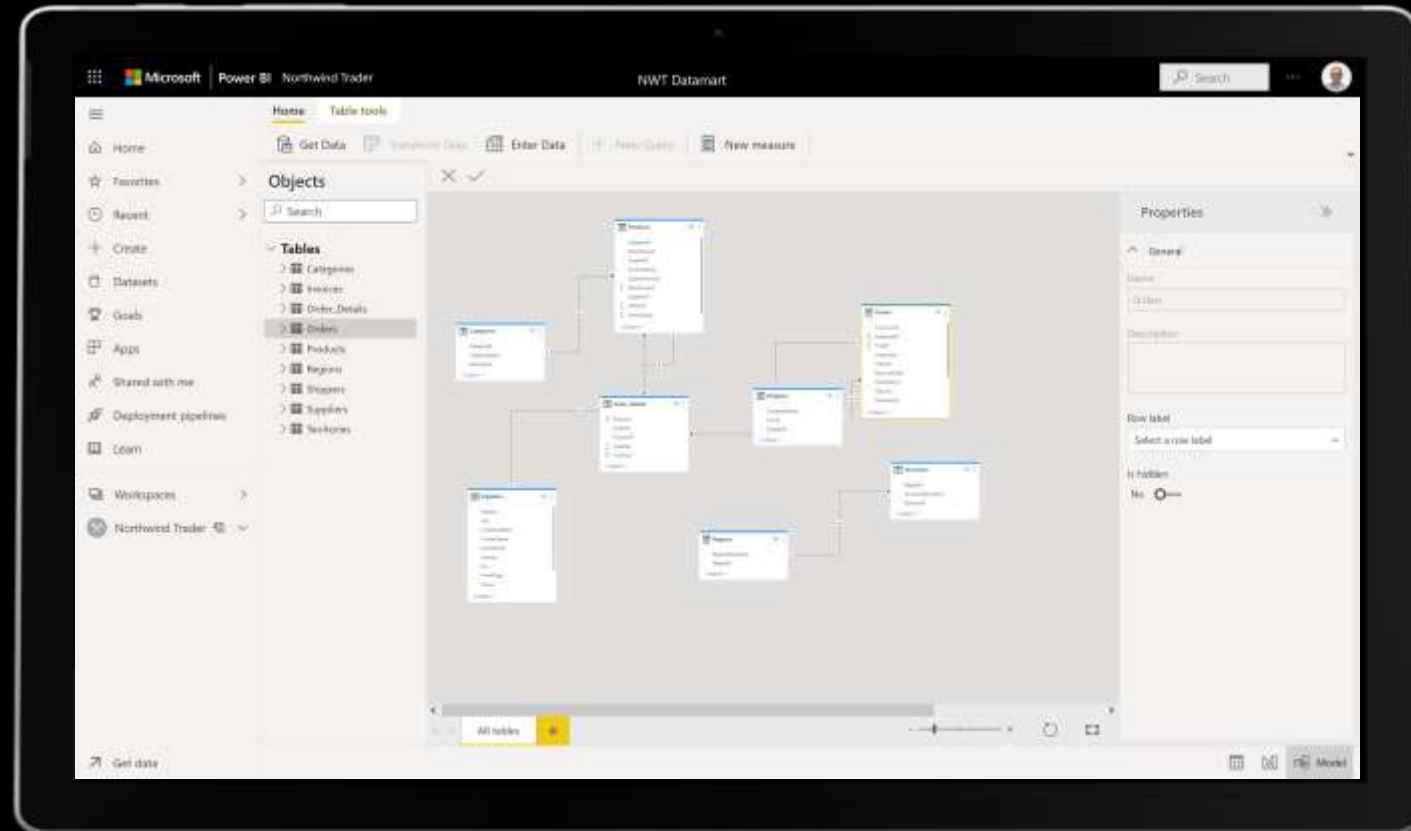
Data to value in minutes not months

## 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

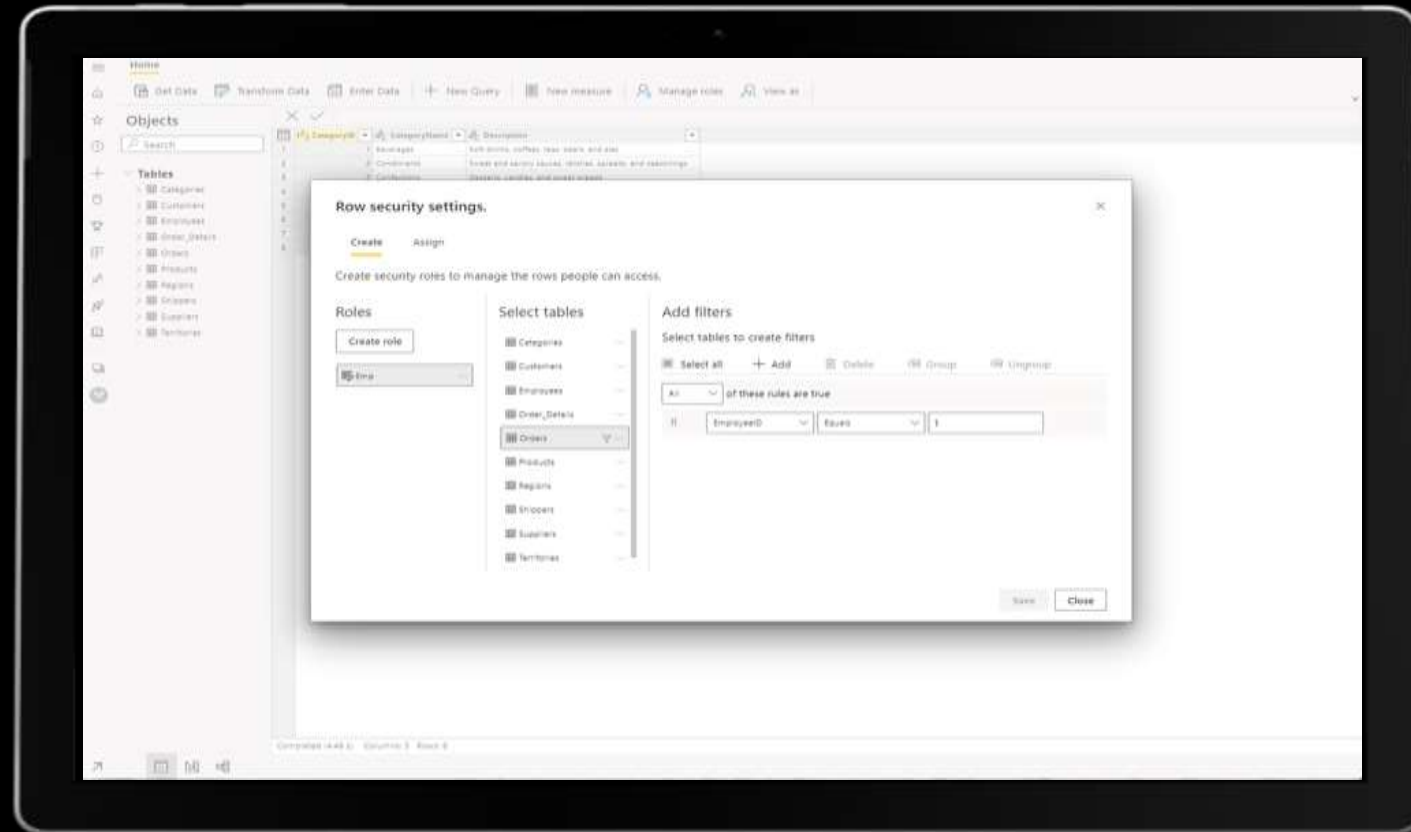
An organization is having difficulties govern and securely sharing data across organization.

---

### 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!