



# Work smarter with Power BI, Teams and Office

Lars Andersen, Microsoft





# twoday capacity

## Fellowwind



## INSPARI



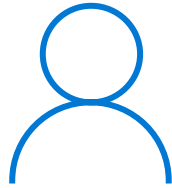
# Agenda

- Working with Power BI in Teams
- Integration of Power BI & Excel
- Power BI & other Office tools



# Working with Power BI in Teams

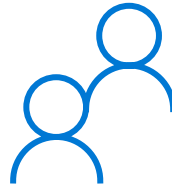
# Data + Culture = Transformation



Empower every  
**individual**

Provide one-click access  
to data and insights

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Empower every  
**team**

Infuse data into their  
online workplaces

---



Empower every  
**organization**

Entrust everyone  
with data, everywhere

---

# Power BI in Teams

Bringing together teamwork with data-driven insights to help your organization respond and adapt



## Build

**Enhance teamwork and productivity with data**

Provide intelligent, intuitive experiences to improve sharing, collaboration, and use of data



## Share

**Enable team members to access insights fast**

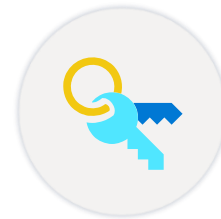
Provide intelligent, intuitive experiences to improve sharing, collaboration, and use of data



## Track

**Accomplish tasks by making goals more visible**

Build scorecards that automatically or manually track individual and team activities and assign specific responsibilities



## Trust

**Benefit from a trusted source of truth**

Ensure access to trusted data sources by enforcing governance and security



**Build**



# Enhance teamwork and productivity with data

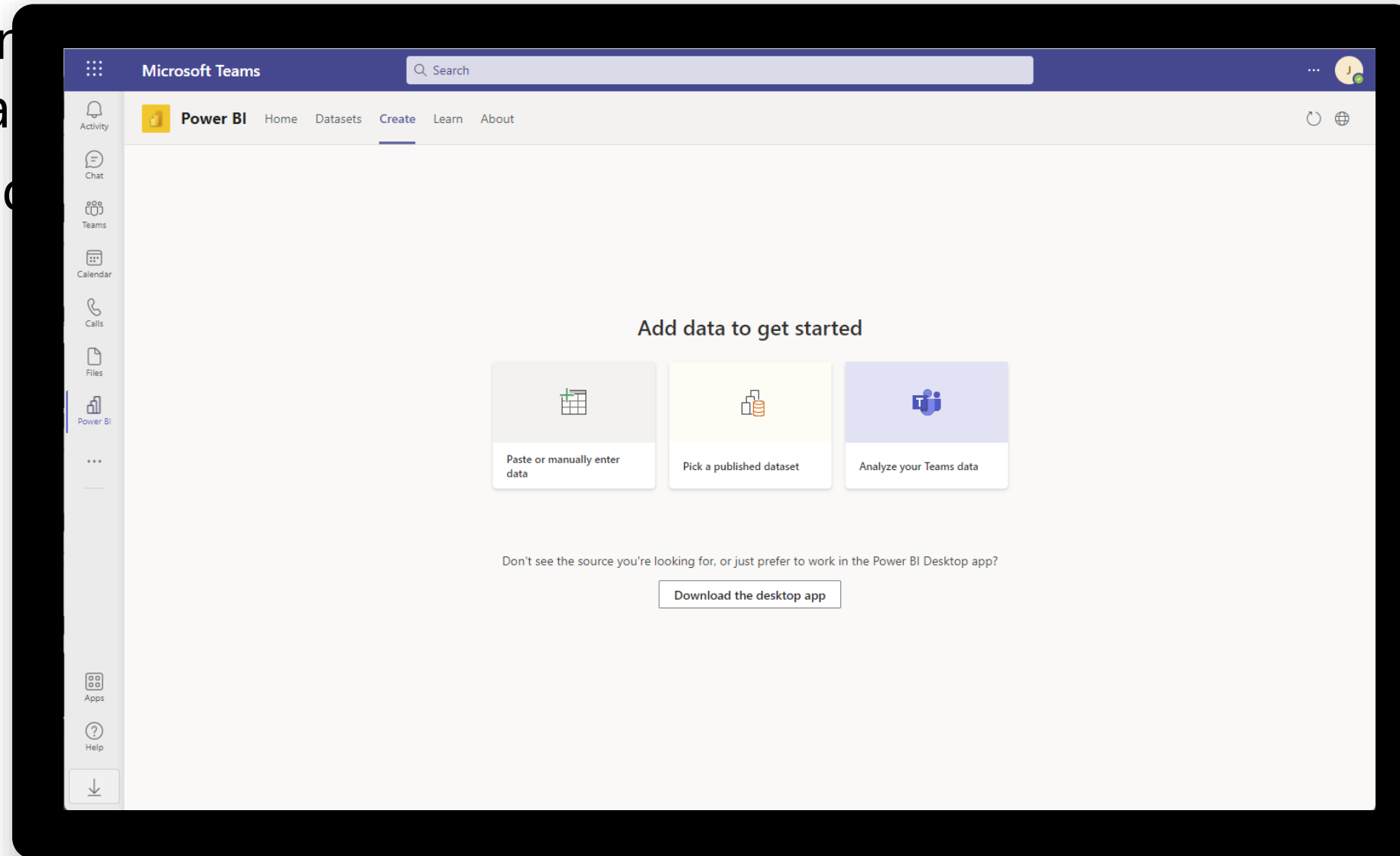
- Bring the full capabilities of Power BI to your organization in the Teams environment
- Find and start analyzing data directly from Teams



# Enhance teamwork and productivity with data



- Bring your data into the Teams app
- Find the data you need



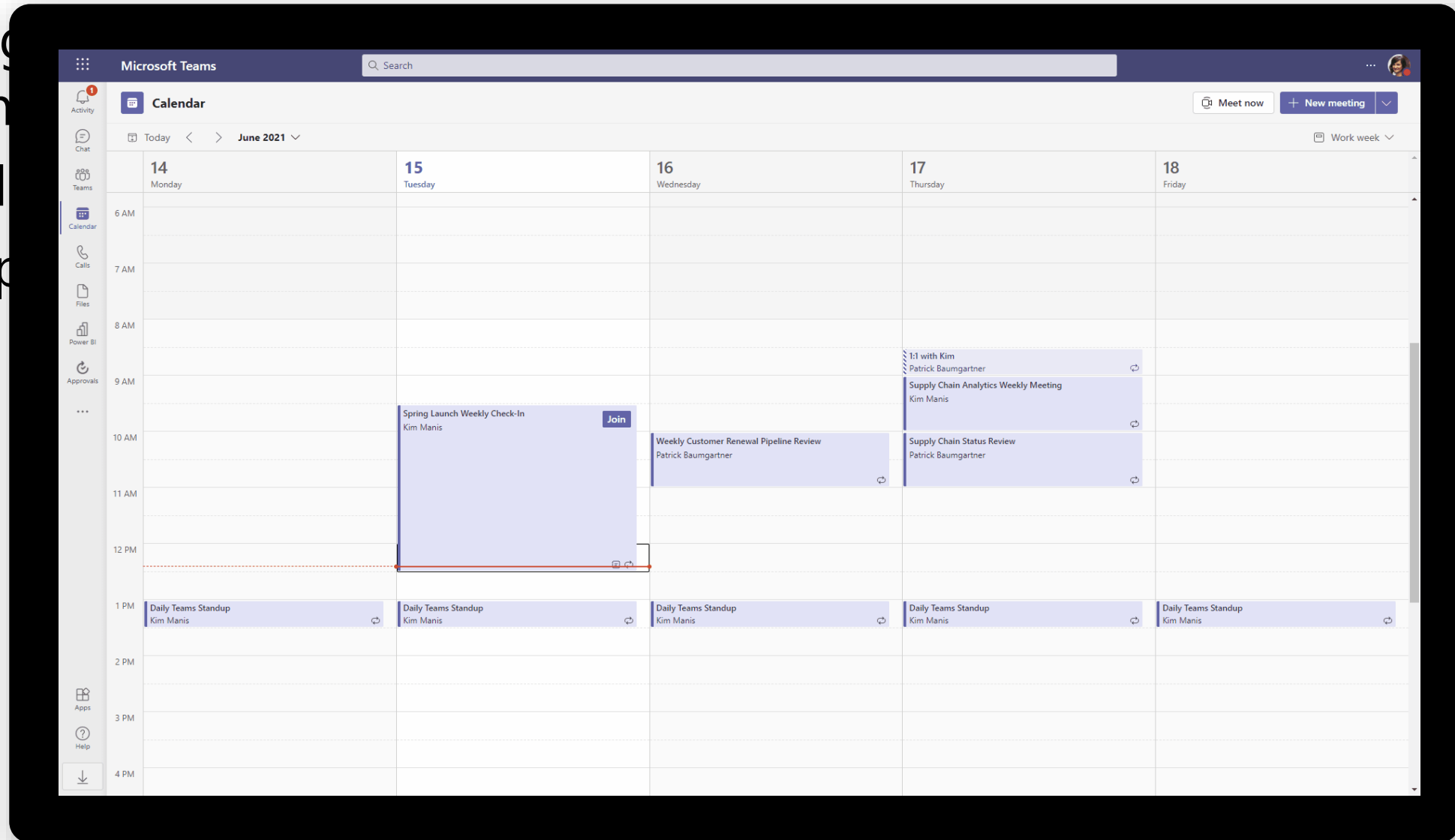


# Enhance teamwork and productivity with data

- Bring the full capabilities of Power BI to your organization in the Teams environment
- Find and start analyzing data directly from Teams
- Keep everyone aligned with data-driven meetings

# Enhance teamwork and productivity with data

- Bring
- Team
- Find
- Keep





**Share**

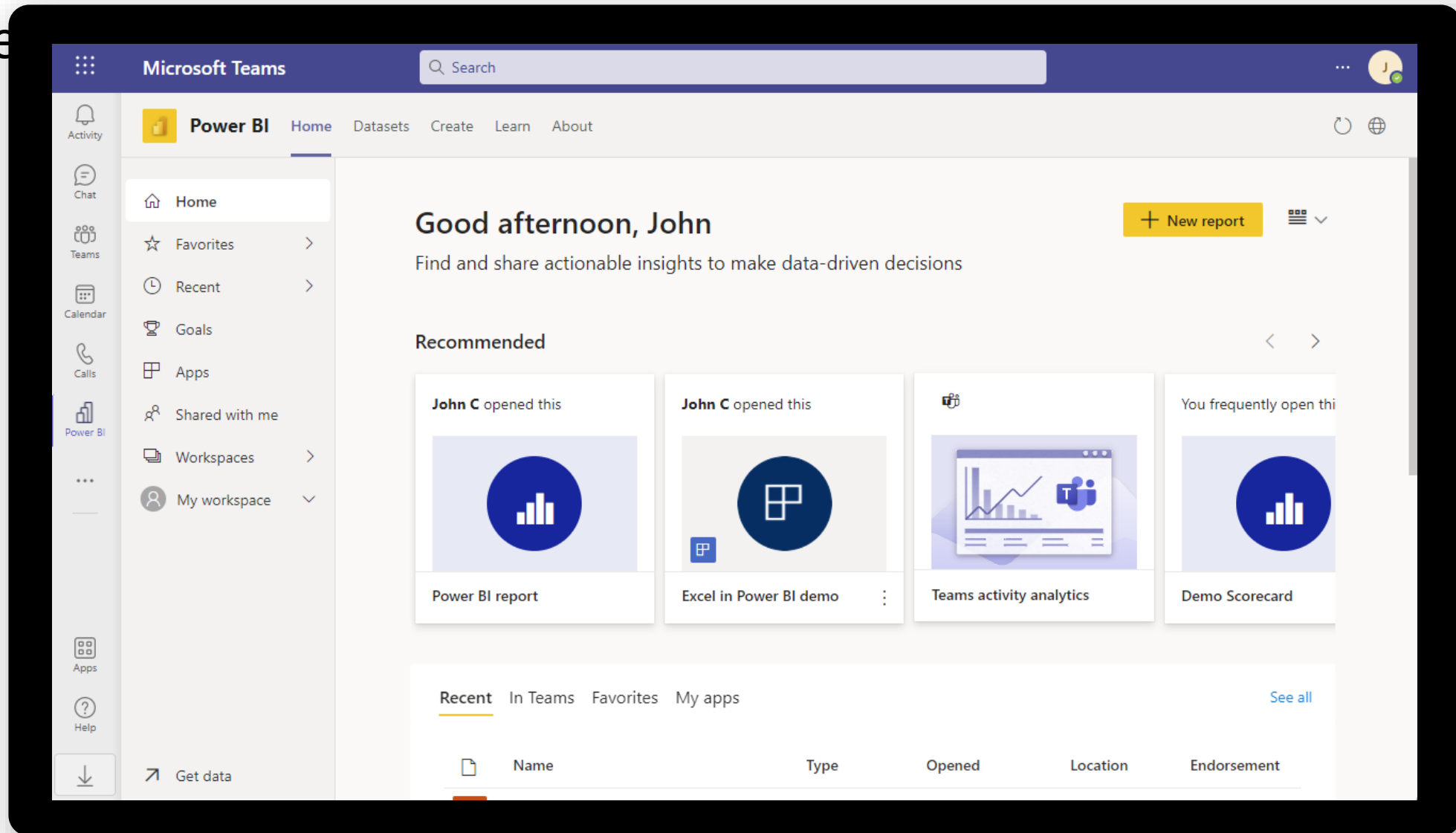


# Enable team members to access insights fast

- Meet users where they are

# Enable team members to access insights fast

- Meeting



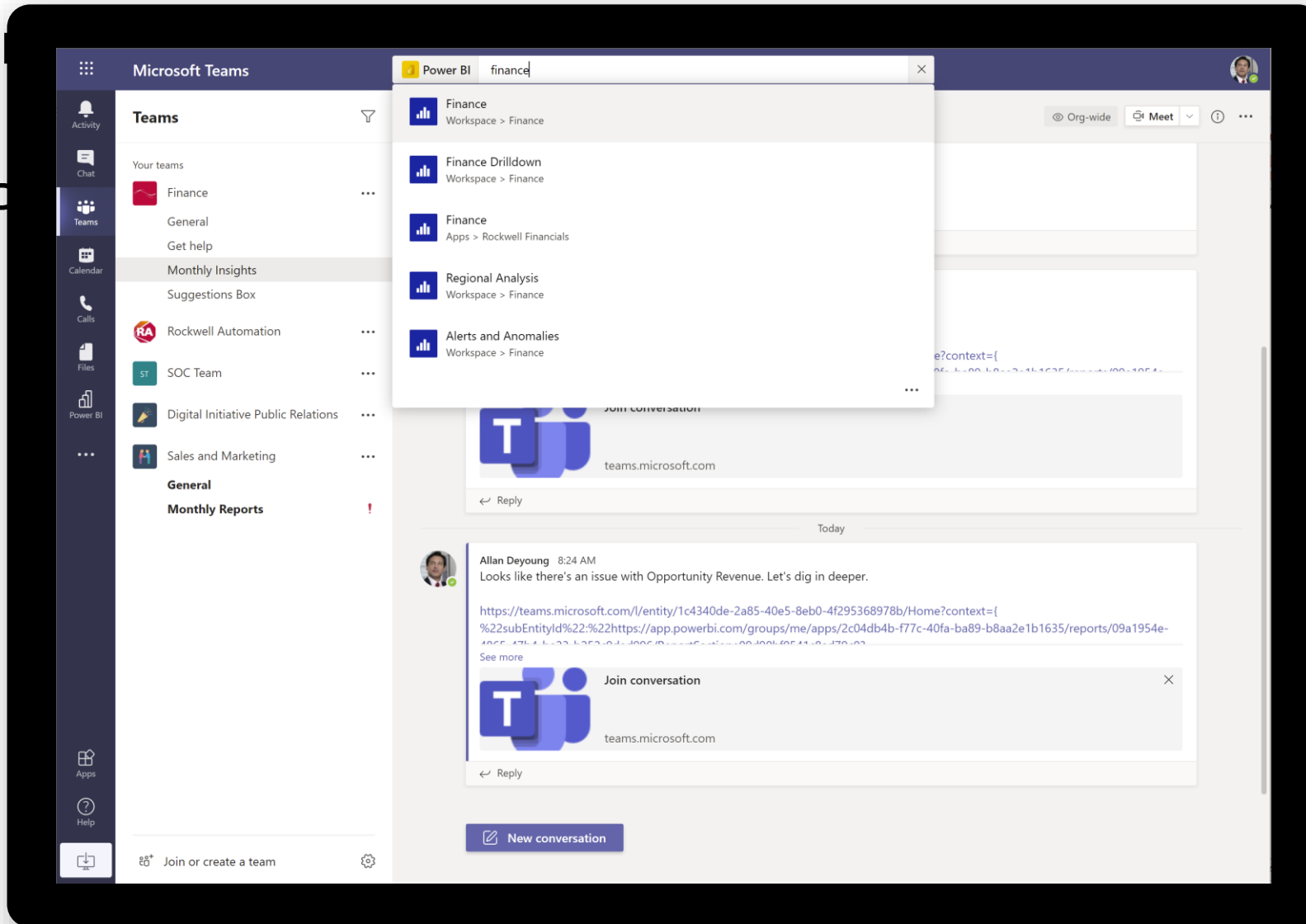


# Enable team members to access insights fast

- Meet users where they are
- Find data and insights to drive better decision-making right in Teams with the Power BI search extension in Teams

# Enable team members to access insights fast

- Meet users
- Find data with the Power BI



nt in Teams



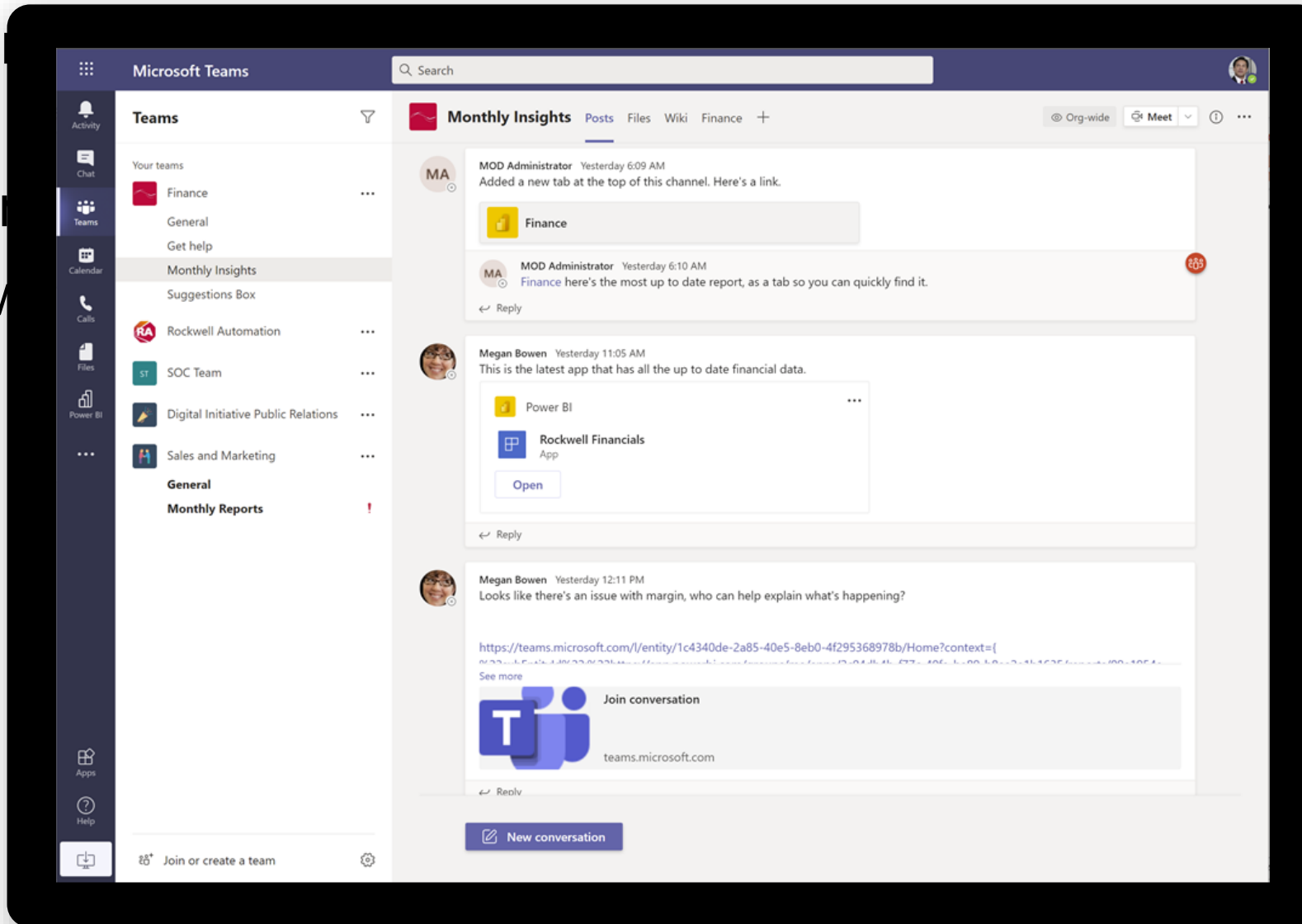


# Enable team members to access insights fast

- Meet users where they are
- Find data and insights to inform discussions and drive better decision-making right in Teams
- Share Power BI reports directly in chats

# Enable team members to access insights fast

- Meet users
- Find data for decision-making
- Share Power BI reports



ter



Track

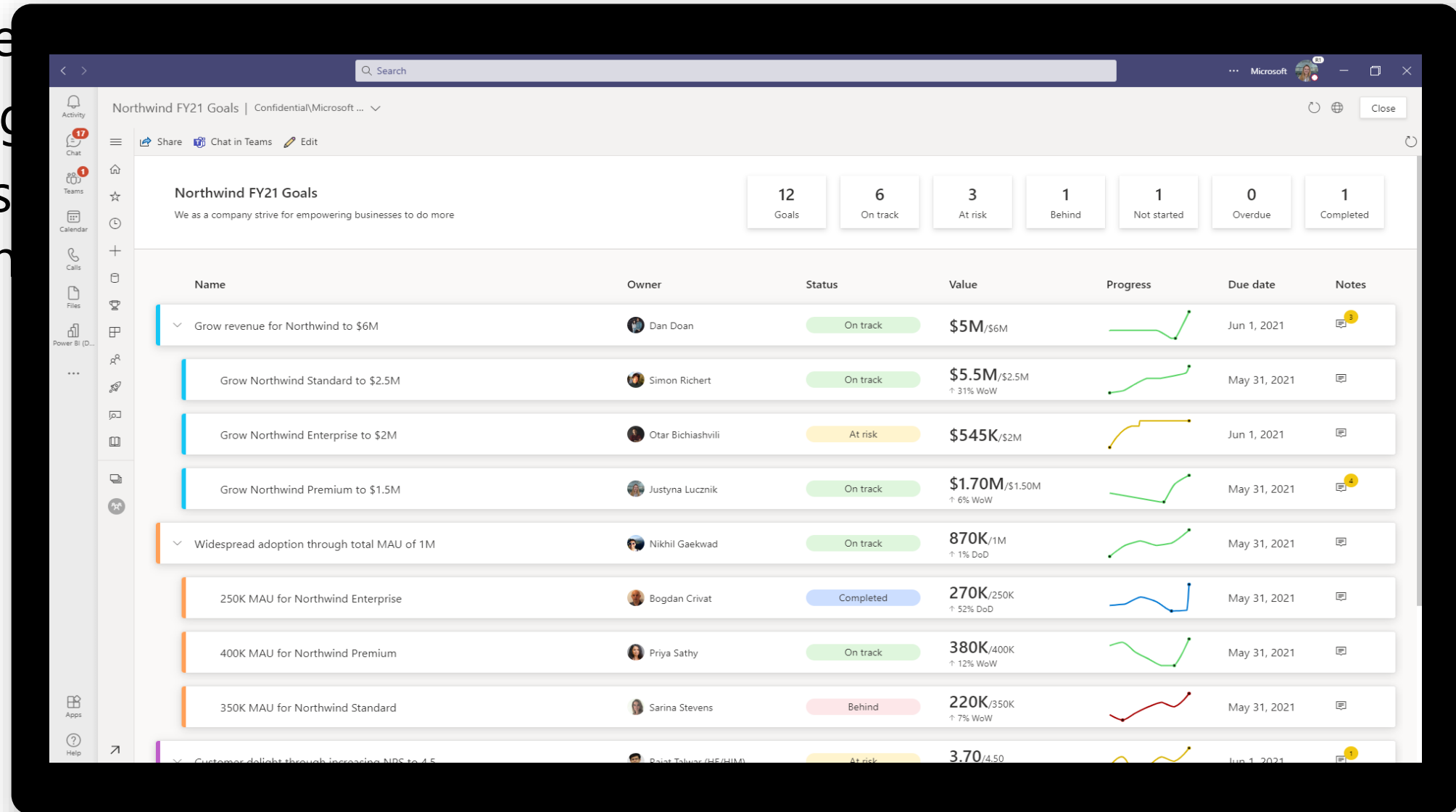


# Accomplish tasks by making goals more visible

- Keep everyone aligned on project goals
- Flag risks, and generate actions like notifications to goal owners
- Assign specific goals to owners and add notes to provide additional context

# Accomplish tasks by making goals more visible

- Keep
- Flag
- Ass
- com



onal





# Benefit from a trusted source of truth

- Centrally distribute governed and secure data
- Encourage use of trusted data sources



# Benefit from a trusted source of truth

- Centralized
- Encouraged

The screenshot shows the Microsoft Teams interface with the Power BI Datasets tab selected. The page displays a list of recommended datasets, each with a 'Certified' badge and an orange database icon. Below this, there is a table of datasets with columns for Name, Endorsement, Owner, Workspace, Refreshed, and Sensitivity.

**Recommended datasets**

- Finance dataset (Certified)
- Supply Chain dataset (Certified)
- Sales dataset (Certified)
- PBI Dataset (Certified)

**Dataset Table**

Name	Endorsement	Owner	Workspace	Refreshed	Sensitivity
Sales dataset	Certified	John C	Dataset Workspace	12/21/21, 1:42:44 PM	-





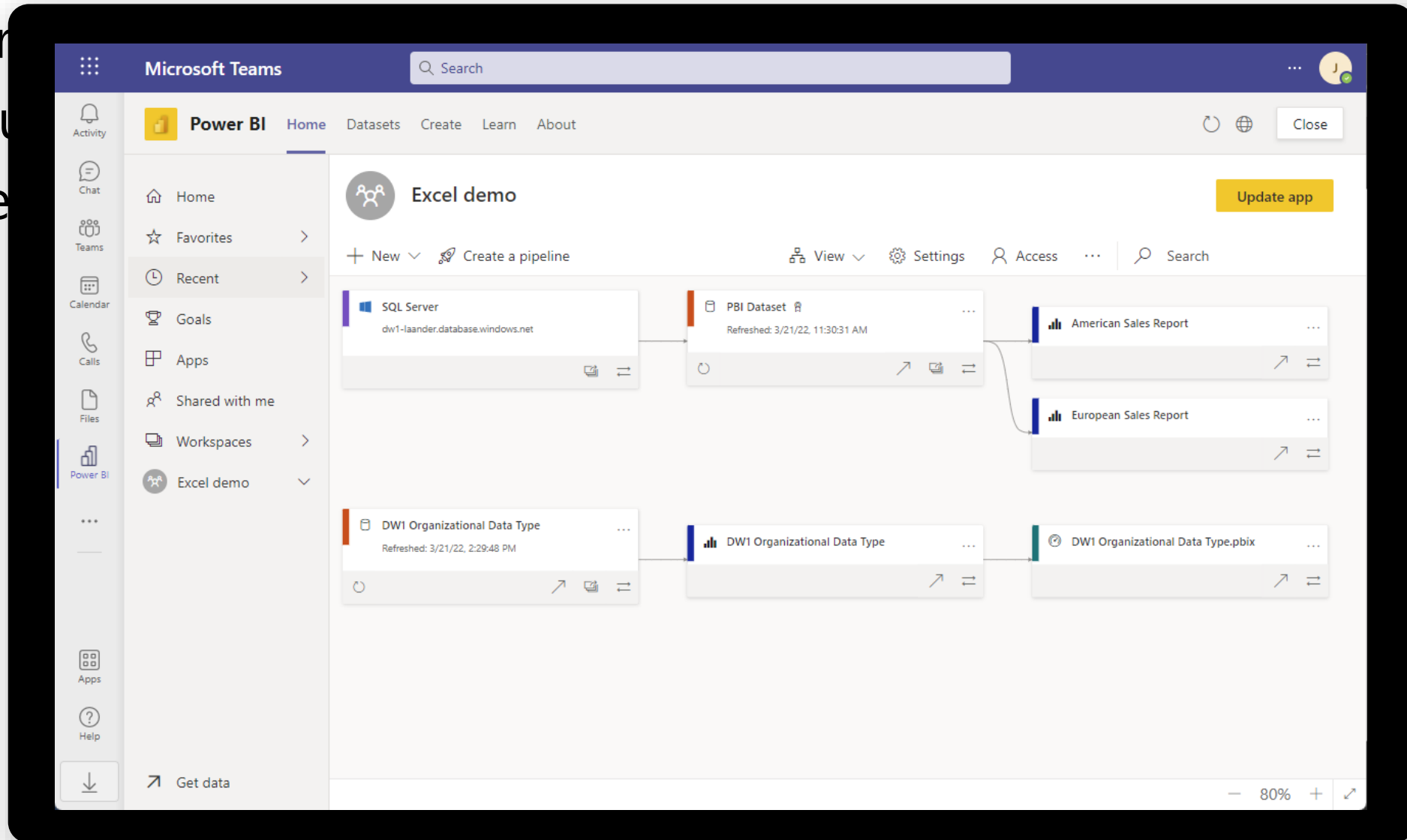
# Benefit from a trusted source of truth

- Centrally distribute governed and secure data
- Encourage use of trusted data sources
- Understand your data and its relationships in a holistic view



# Benefit from a trusted source of truth

- Centralized
- Encourages
- Underpins



Demo



# Integration of Power BI & Excel

# Power BI & Excel

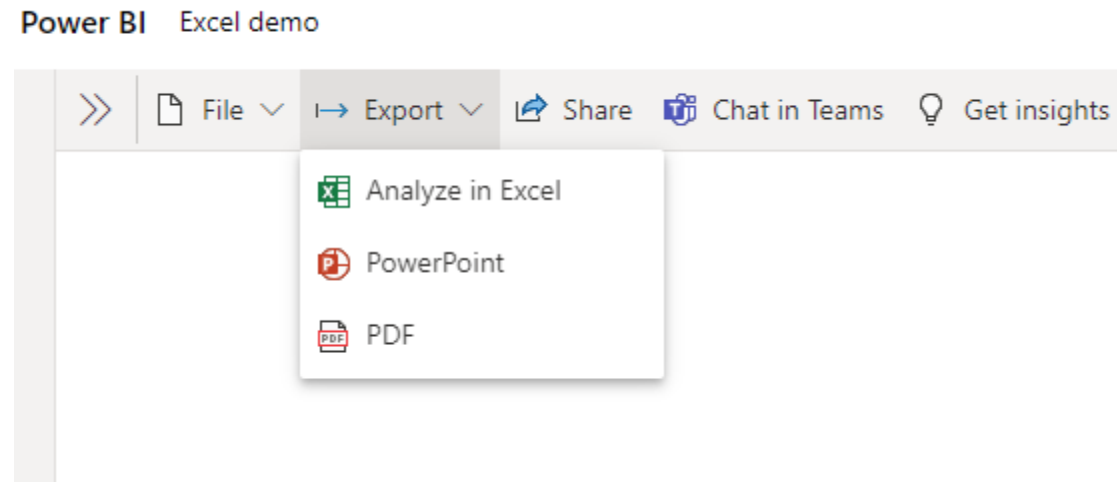
- Power BI datasets in Excel
- Excel in Power BI content
- Data Types in Excel

# Power BI datasets in Excel

- Analyze in Excel

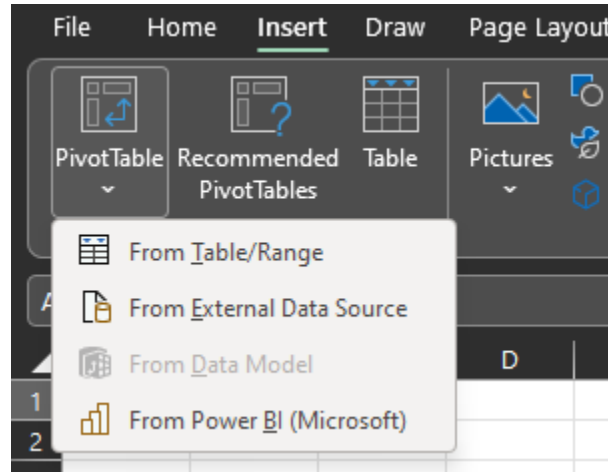
# Power BI datasets in Excel

- Analyze in Excel



# Power BI datasets in Excel

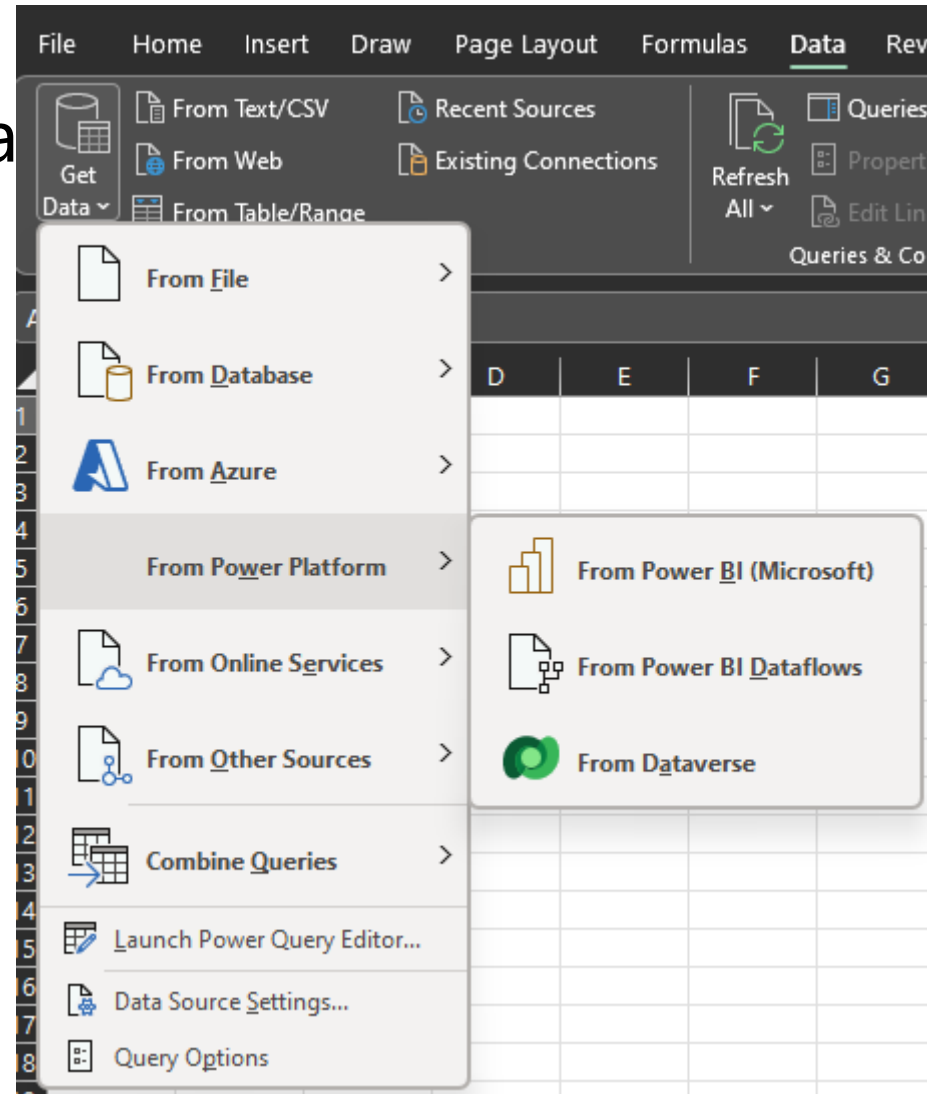
- Analyze in Excel
- Excel Desktop – easy connect to Power BI dataset
  - Insert ribbon





# Power BI datasets in Excel

- Analyze in Excel
- Excel Desktop – easy to use
  - Insert ribbon
  - Data ribbon



set

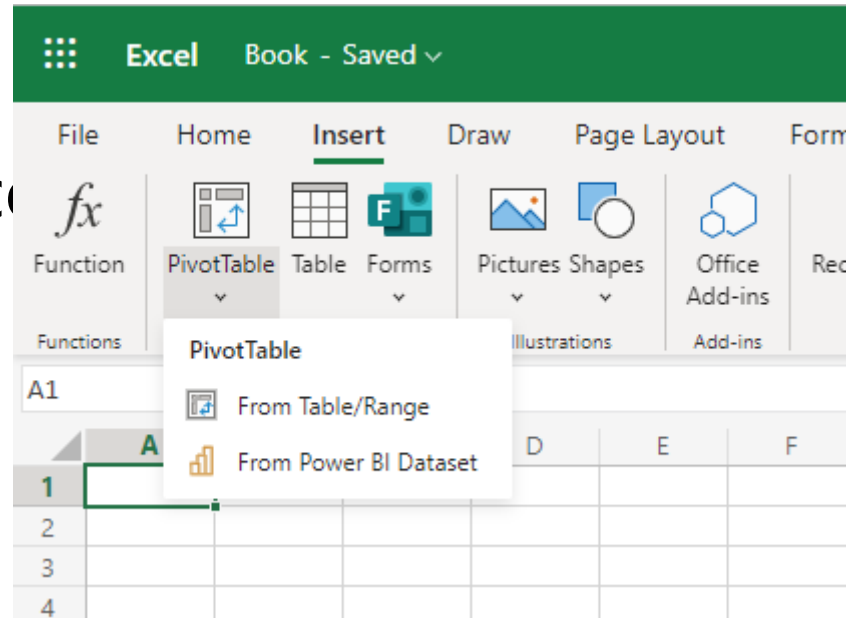
# Power BI datasets in Excel

- Analyze in Excel
- Excel Desktop – easy connect to Power BI dataset
  - Insert ribbon
  - Data ribbon
- Excel Online – easy connect available since November 2021\*

\* [Create Connected PivotTables in Excel for the web](#)

# Power BI datasets in Excel

- Analyze in Excel
- Excel Desktop – easy connect to Power BI dataset
  - Insert ribbon
  - Data ribbon
- Excel Online – easy connect to Power BI dataset
  - Insert ribbon



November 2021\*

\* [Create Connected PivotTables in Excel for the web](#)

# Power BI datasets in Excel

- Analyze in Excel
- Excel Desktop – easy connect to Power BI dataset
  - Insert ribbon
  - Data ribbon
- Excel Online – easy connect available since November 2021\*
  - Insert ribbon
- Microsoft Information Protection label is inherited

\* [Create Connected PivotTables in Excel for the web](#)

# Excel in Power BI content

- Since mid 2021\* it has been possible to have a live connection to a Power BI dataset from Excel Online
- Add Excel to your workspace with live connection to dataset

\* [Power BI May 2021 Feature Summary](#) & [Connected PivotTable refresh in Excel for the web is now 100% available to Office tenants](#)

# Excel in Power BI content

Power BI demo

Power BI Excel demo

Home

Create

Datasets

Goals

Apps

Shared with me

Deployment pipelines

Learn

Workspaces

Excel demo

Get data

Excel demo

Create a pipeline

Create app

View Filters Settings Access Search

All Content Datasets + dataflows

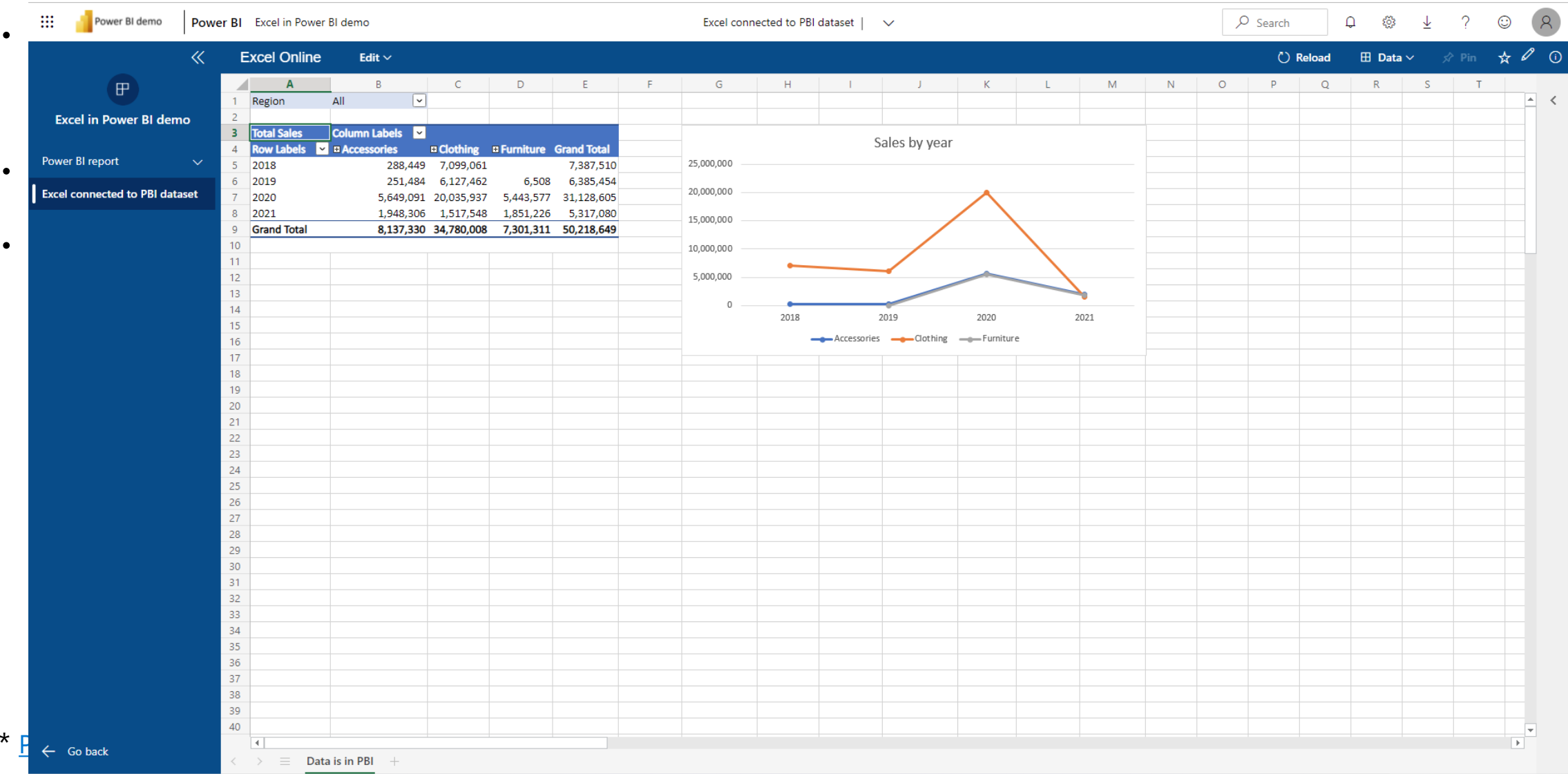
Name	Type	Owner	Refreshed	Next refresh	Endorsement	Sensitivity	Include in app
Excel connected to PBI dataset	Workbook	Excel demo	3/21/22, 11:38:57 AM	—	—	—	Yes
PBI Dataset	Dataset	Excel demo	3/21/22, 11:30:31 AM	N/A	Certified	—	
Power BI report	Report	Excel demo	3/21/22, 11:30:31 AM	—	—	—	Yes

# Excel in Power BI content

- Since mid 2021\* it has been possible to have a live connection to a Power BI dataset from Excel Online
- Add Excel to your workspace with live connection to dataset
- Use Excel in Power BI app

\* [Power BI May 2021 Feature Summary](#) & [Connected PivotTable refresh in Excel for the web is now 100% available to Office tenants](#)

# Excel in Power BI content












Demo

# Data Types in Excel

- Three categories of Data Types
  - Linked Data Types
  - Custom Data Types
  - Organizational Data Types

# Linked Data Types

- Built-in, launched in 2018
  - Stocks
  - Currency
  - Geography

B	C
Cities of the World	
 Paris	=B3.
 London	<div><div>Area</div><div>Country/region</div><div>Division 1</div><div>Latitude</div><div>Leader(s)</div><div>Longitude</div><div>Name</div><div>Population</div><div>Time zone(s)</div></div>
 Rome	
 Tokyo	
 Beijing	
 Los Angeles	
 Seattle	

# Custom Data Types

- Build using Power Query in Excel
- Combine columns to a Custom Data Type, e.g. details about a customer

Cost	Customer	Product
35	⚡ Muhammed MacIntyre	⚡ Eldon Base for stackable storage shelf, platin
68.02	⚡ Barry French	⚡ 1.7 Cubic Foot Compact "Cube" Office Refrige
2.99	⚡ Barry French	⚡ Cardinal Slant-D® Ring Binder, Heavy Gauge
3.99	⚡ Clay Rozendal	⚡ R380
5.94	⚡ Carlos Soltero	⚡ Holmes HEPA Air Purifier
4.95	⚡ Carlos Soltero	⚡ G.E. Longer-Life Indoor Recessed Floodlight f
7.72	⚡ Carl Jackson	⚡ Angle-D Binders with Locking Rings, Label Ho
6.22	⚡ Carl Jackson	⚡ SAFCO Mobile Desk Side File, Wire Frame
35	⚡ Monica Federle	
8.33	⚡ Dorothy Badders	
6.18	⚡ Neola Schneider	
2	⚡ Neola Schneider	
5.94	⚡ Carlos Daly	
3.61	⚡ Carlos Daly	
2.99	⚡ Claudia Miner	
3.04	⚡ Neola Schneider	
1.39	⚡ Allen Rosenblatt	
26.22	⚡ Sylvia Foulston	
69	⚡ Sylvia Foulston	
5.26	⚡ Jim Radford	
8.99	⚡ Jim Radford	
0.5	⚡ Carlos Soltero	
0.7	⚡ Carlos Soltero	
13.18	⚡ Carl Ludwig	
4.93	⚡ Carl Ludwig	
0.7	⚡ Don Miller	
0.93	⚡ Annie Cyprus	
49	⚡ Carl Ludwig	
4.51	⚡ Carlos Soltero	
1.17	⚡ Carlos Soltero	

### Monica Federle

Customer Name  
Monica Federle

Province  
Nunavut

Region  
Nunavut

Customer Segment  
Corporate

# Organizational Data Types

- Build your own Data Types
- Created in Power BI as Featured Table
  - Configure Featured Table in Model view in Power BI Desktop

# Organizational Data Types

- Build your own Data Types
- Created in Power BI as Featured Table
  - Configure Featured Table in Model view in Po

The screenshot displays the Power BI Model view. On the left, a table named 'CustomerDateType20...' is highlighted with a yellow border. It contains columns: BirthDate, CustomerKey, FirstName, Gender, GeographyKey, LastName, MaritalStatus, and Occupation. To its right, a relationship is shown with a 'DimGeo' table, which has columns: City, Country, GeographyKey, Region, and StateProvince. The relationship is marked with a '1' on the 'DimGeo' side and a '\*' on the 'CustomerDateType20...' side. On the far right, the 'Properties' pane is open, showing the 'General' tab for the selected table. The 'Name' field is set to 'CustomerDateType2022'. The 'Description' field is empty, with a placeholder 'Enter a description'. The 'Synonyms' field contains 'customer date type 2022'. The 'Row label' dropdown is set to 'Select a row label'. The 'Key column' dropdown is set to 'Select a column with unique values'. The 'Is hidden' toggle is set to 'No'. The 'Is featured table' toggle is also set to 'No' and is highlighted with a red rectangle. An 'Edit' button is visible at the bottom right of the 'Is featured table' section. The 'Advanced' section is partially visible at the bottom.

**Properties**

General

Name: CustomerDateType2022

Description: Enter a description

Synonyms: customer date type 2022

Row label: Select a row label

Key column: Select a column with unique values

Is hidden: No

**Is featured table: No**

Edit

Advanced

# Organizational Data Types

- Build your own Data Types
- Created in Power BI as Featured Tables
  - Configure Featured Table in Model view in Power BI

×

Set up this featured table

The data in featured tables is discoverable in connected products. [Learn more](#)

All fields marked with \* are required.

Description \*

Row label \*

Key column \*

Save Cancel

# Organizational Data Types

- Build your own Data Types
- Created in Power BI as Featured Table
  - Configure Featured Table in Model view in P

×

Set up this featured table

The data in featured tables is discoverable in connected products. [Learn more](#)

All fields marked with \* are required.

Description \*

Demo of Featured Table created in Power BI and used in Excel as Data Type

Row label \*

Name ▼

Key column \*

CustomerKey ▼

Save

Cancel



# Organizational Data Types

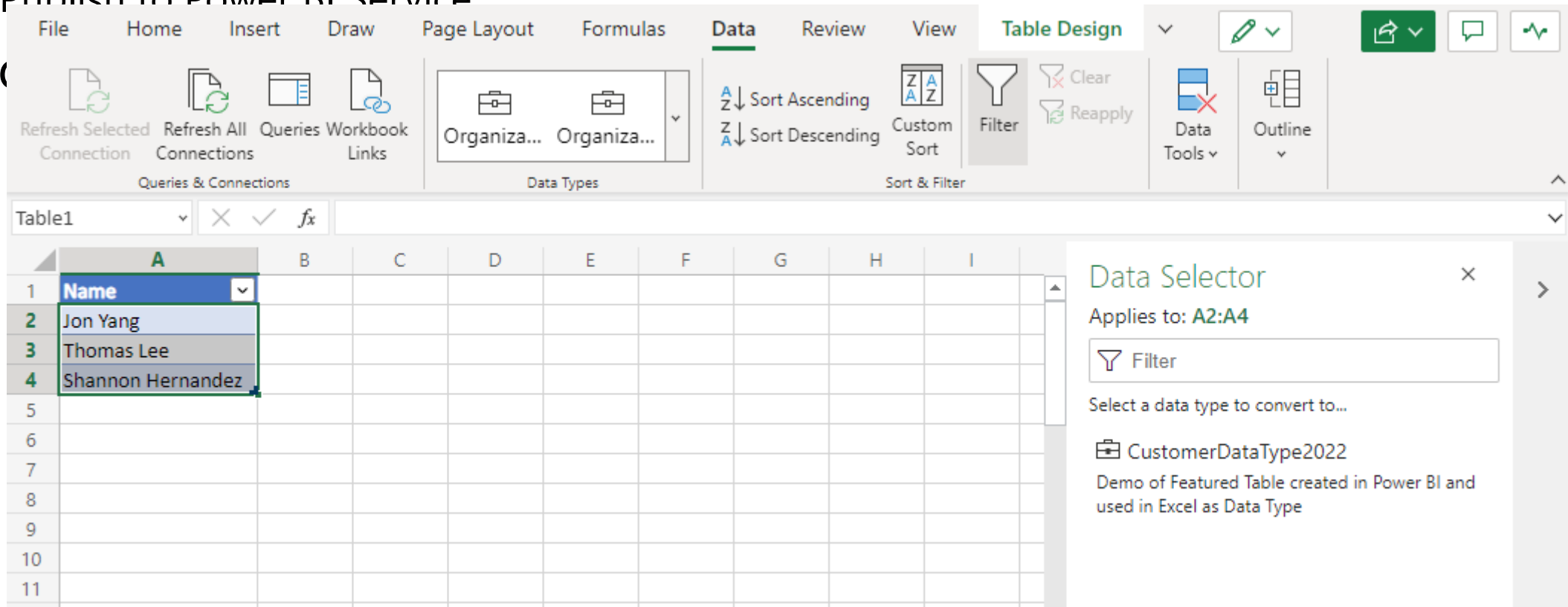
- Build your own Data Types
- Created in Power BI as Featured Table
  - Configure Featured Table in Model view in Power BI Desktop
  - Publish to Power BI Service

# Organizational Data Types

- Build your own Data Types
- Created in Power BI as Featured Table
  - Configure Featured Table in Model view in Power BI Desktop
  - Publish to Power BI Service
- Consumed in Excel as Data Type

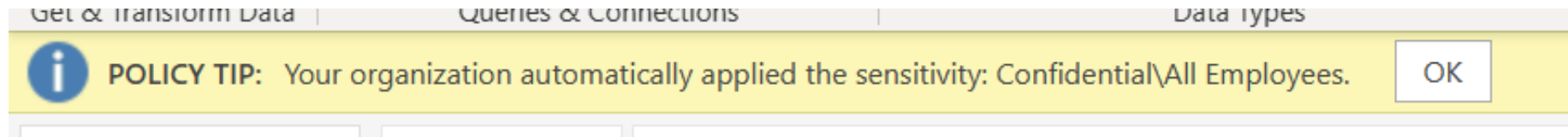
# Organizational Data Types

- Build your own Data Types
- Created in Power BI as Featured Table
  - Configure Featured Table in Model view in Power BI Desktop
  - Publish to Power BI Service



# Organizational Data Types

- Build your own Data Types
- Created in Power BI as Featured Table
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  - Publish to Power BI Service
- Consumed in Excel as Data Type
- Microsoft Information Protection label is inherited



Demo



# Power BI & other Office tools

# Office Aligned On-Object Formatting

## Simplify and align visual formatting for all Office users

The screenshot displays the Microsoft Office interface, specifically the 'Format' pane on the right side. The main window shows a line chart titled 'Total Sales by CalendarYear' with data points for 2019, 2020, and 2021. The y-axis is labeled 'Total Sales' and ranges from 0 to 30M. The x-axis is labeled 'CalendarYear'. A context menu is open over the chart, showing options for 'Fill' and 'Line'. The 'Line' option is selected, and a color palette is displayed below it, showing 'Theme colors' and 'Recent colors'. The 'Format' pane on the right is open to the 'Visual' tab, showing settings for 'Lines', 'Shape', 'Colors', and 'Markers'. The 'Lines' section is expanded, showing settings for 'Apply settings to', 'Series', 'Line style', 'Join type', 'Stroke width', and 'Stepped'. The 'Shape' section is also expanded, showing settings for 'Line style', 'Join type', 'Stroke width', and 'Stepped'. The 'Colors' section is collapsed, and the 'Markers' section is collapsed. The 'Format' pane is titled 'Format' and has a search bar and a 'Filters' icon. The bottom of the screen shows the 'Report' and 'Table' tabs, and a 'New Page' button. The status bar at the bottom indicates 'Page 3 of 3' and '82%' zoom.

**Format**

Search

**Visual** Properties

**Lines**

Apply settings to

Series

All

**Shape**

Line style

Solid

Join type

Round

Stroke width

3 px

Stepped

Off

**Colors**

Reset to default

**Markers**

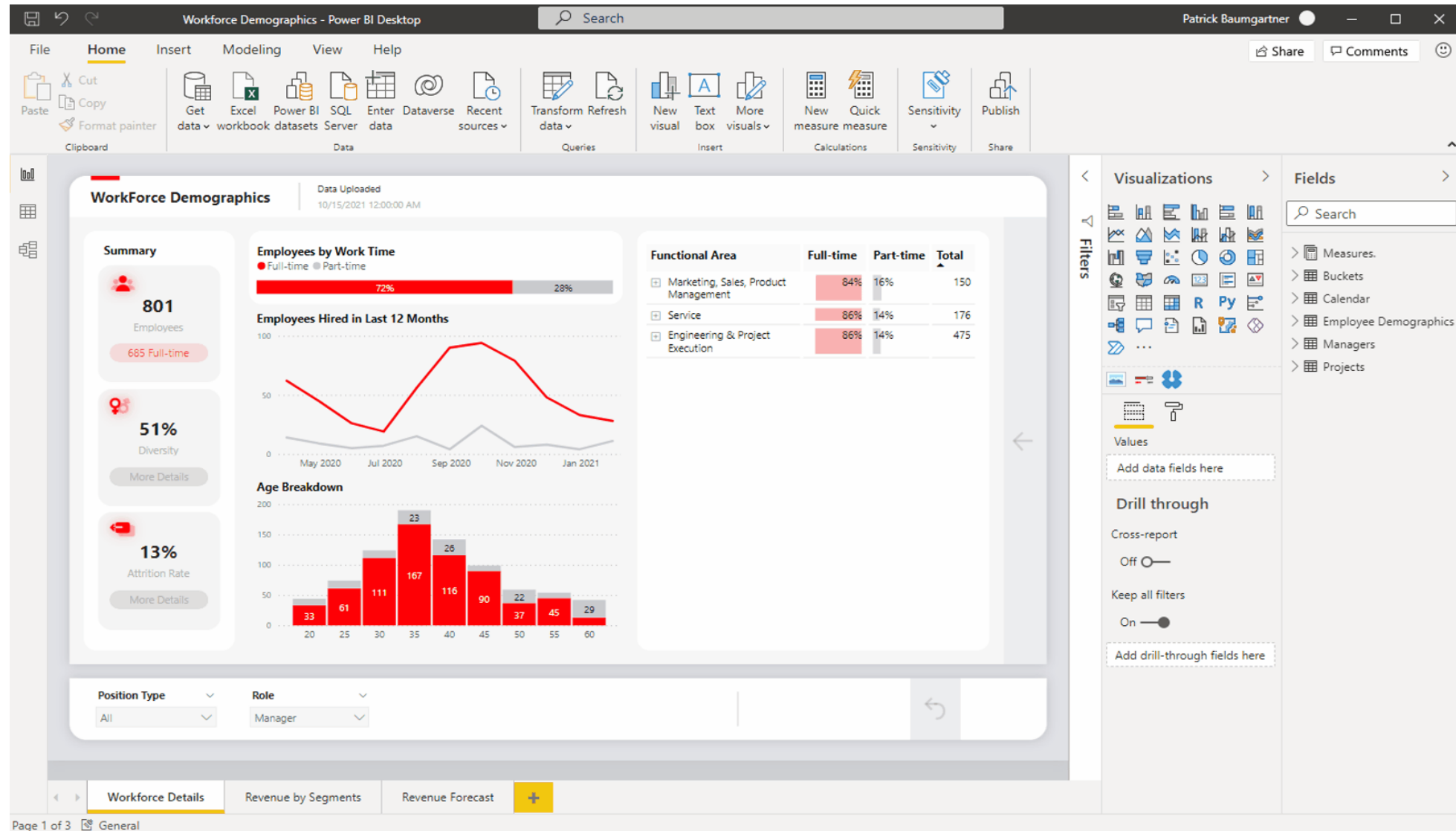
Off

Report Table New Page +

Page 3 of 3 82%

# Roadmap; Sharing and consuming through OneDrive

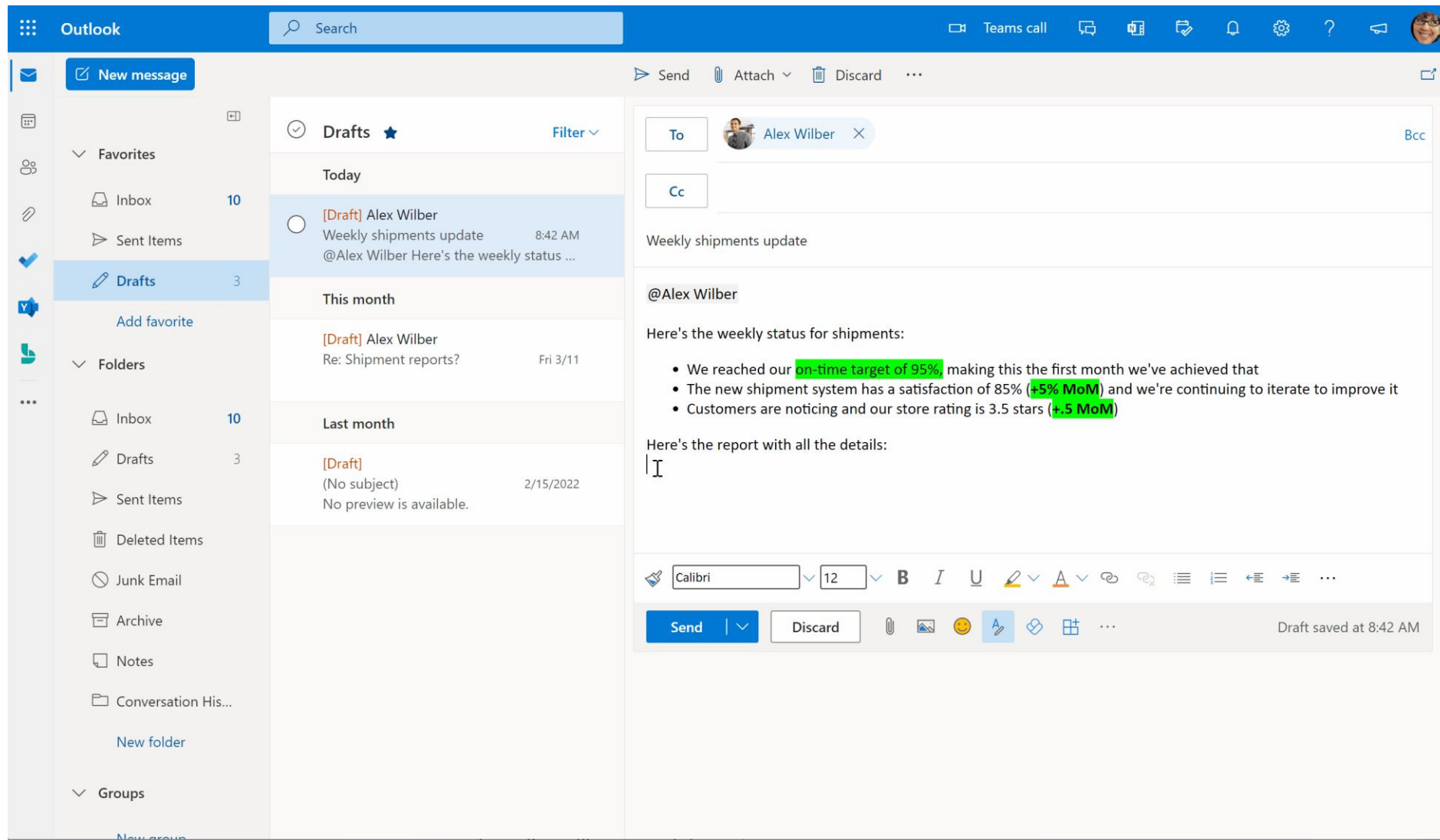
## Collaborating with Power BI reports as easy as any Office document





# Power BI in Outlook and Office hubs

## Your data is where you communicate



# Storytelling with PowerPoint

AutoSave On Sales execs review - Saved Search (Alt+Q) Anna Tsiganchuk

File Home Insert Draw Design Transitions Animations Slide Show Review View Help Script Lab Shape Format

Share Comments

New Slide Reuse Slides Table Pictures Screenshot Photo Album Shapes Icons 3D Models SmartArt Chart Forms Get Add-ins My Add-ins Zoom Link Action New Comment Text Box Header & Footer WordArt Date & Time Slide Object Equation Symbol Video Audio Screen Recording High Video Presentations

55 Method and Participant Profile

56 Experimental Approach

57 Scenario - Overview

58

59 Model performance designs tested

60 Overfitting

Click to add notes

**Tell a story with Power BI data**

Insert your Power BI data into a slide. Paste the URL of a Power BI report page you want to show in the slide.

[Learn more](#)

Paste report URL here Insert

Slide 58 of 67 English (United States) Accessibility: Investigate General Notes Display Settings 1:11 PM 3/10/2021

# Storytelling with PowerPoint

