Tell us about your PDF experience.

Power BI documentation for business users

As a business user or consumer, you receive dashboards and reports from colleagues. You work in Power BI to review and interact with this content to make business decisions.

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The Power BI service for business users

Article • 02/08/2024

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

You live in a data culture where business decisions are based on facts, not opinions. You need data to make these decisions, and your colleagues don't let you down. They send you all types of reports, spreadsheets, emails with charts, and even printed handouts.

As the data piles up, it becomes harder to find what you need quickly, and you worry that you might not have the most recent information.

Overview of the Power BI service

Power BI makes your job easier and more impactful. All the content you receive becomes charts and graphs that visualize your data for you. Instead of long lists or tables of numbers and words, your data insights are beautiful, colorful, and compelling visuals. They tell stories about your data.

Open the Power BI service in a browser or on a mobile device. You and your colleagues work from the same trusted dashboards and reports. Power BI updates the data automatically, so you're always working with the freshest content.

The content isn't static, so you can dig in and look for trends, insights, and other business intelligence. Slice and dice the content, and even ask it questions in your own words. Or, sit back and let your data discover interesting insights, send you alerts when data changes, or email reports to you on a schedule that you set. All your content is available to you anytime, in the cloud or on-premises, from any device. That's just the beginning of what Power BI can do.

Are you a Power BI business user?

How you interact with Power BI depends on your job role. As a consumer or business user, you receive content, like dashboards, reports, and apps, from colleagues. You work in the Power BI service, which is the online or mobile version of Power BI. You review and interact with your content to make business decisions.

As a business user, you might not have access to all the capabilities of Power BI. That's ok, because your job isn't building semantic models and reports. You use the Power BI service for analysis, monitoring, exploration, and decision making.

You might hear the term "Power BI Desktop" or just "Desktop." Designers use this stand-alone tool to build and share dashboards and reports. It's important to know that there are other Power BI tools out there. But if you're a business user, you typically work only with the Power BI service. Because you're working with content that is shared with you, at least one of the following scenarios is true:

- You have a Power BI Pro or Premium Per User (PPU) license.
- Your organization has a Power BI Premium subscription, and the content being shared with you comes from Premium capacity.

> ⓘ **Note**
>
> Users with PPU capacity subscriptions can only share content with other users who also have a PPU license.

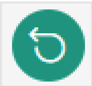
For more information about licenses and subscriptions, see Which license do I have?

Safely interact with content

As you filter, slice, subscribe, and export, your work doesn't impact the underlying semantic model or the original shared content.

You can't corrupt your data. Power BI is a great place to explore and experiment without worrying that you might break something.

That doesn't mean that you can't save your changes. You can, but those changes only affect your view of the content. To revert to the default view, select the **Reset** button.



Related content

Take a tour of the Power BI service for business users.

Power BI service training for business users.

Terminology and concepts for Power BI business users.

Basics of the Power BI service

Article • 04/14/2025

Use this article to familiarize yourself with some of the terms and concepts associated with the Power BI service. Understanding these terms and concepts makes it easier for you to read through the other Power BI articles and to work in the Power BI service (app.powerbi.com).

What you can do in the Power BI service

The Power BI service enables users to perform a variety of tasks, which can be broadly categorized into two main activities: **creating and sharing content** and **consuming and interacting with content**.

Create and share content

Users who create and share content in Power BI service are often referred to as **designers** or **creators**. They play a key role in building and organizing content within the Power BI service, enabling others to consume and interact with data effectively.

- **Build reports and dashboards**: Use data from semantic models to design interactive visuals and dashboards that convey insights effectively.
- **Organize content**: Group related reports, dashboards, and datasets into workspaces or apps for better management and sharing.
- **Collaborate with others**: Share content with colleagues or teams, assign roles, and manage permissions to ensure secure collaboration.
- **Publish apps**: Bundle dashboards, reports, and datasets into apps for streamlined sharing with larger audiences.

Consume and interact with content

Users who consume and interact with the content in Power BI service are often referred to as **end users**, **consumers**, or **business users**. They primarily focus on interacting with and deriving insights from the content created by designers, enabling data-driven decision-making and collaboration within their organization.

- **View and explore reports**: Interact with visuals, apply filters, and drill down into data to uncover insights.
- **Monitor dashboards**: Stay updated on key metrics and trends by viewing live dashboards with real-time data.
- **Use apps**: Access collections of reports and dashboards shared by others to gain insights relevant to your role or organization.

- **Collaborate on goals**: Track progress and contribute to shared scorecards and metrics for team or organizational objectives.

By understanding these capabilities, users can maximize their productivity and collaboration within the Power BI service.

Power BI service concepts

The following table lists some of the key concepts and terms used in the Power BI service. Understanding these terms will help you navigate the Power BI service more effectively.

Expand table

Term	Definition	Learn more
Visualization	A type of chart built by Power BI designers to display data from reports and semantic models; visualizations are interactive and allow slicing, filtering, and drilling into data	Interact with visuals in reports, dashboards, and apps
Semantic model (formerly known as dataset)	A container of data used by designers to build reports, dashboards, and apps; can combine multiple data sources into a single model	How do designers assign permissions to semantic models? How semantic models are shared with colleagues
Dashboard	A single screen with tiles of interactive visuals, text, and graphics, often used to monitor metrics or tell a story.	Dashboards for the Power BI service business users
Report	One or more pages of interactive visuals, text, and graphics based on a single semantic model, often organized to address specific questions or areas of interest.	Reports in Power BI Reports versus dashboards
App	A collection of dashboards, reports, and semantic models bundled together for sharing with individuals, groups, or organizations.	End-user apps
Workspace	A collaborative area where designers store and manage collections of dashboards and reports. Business users are assigned roles to interact with the content.	Learn more about workspaces
License and subscription	Determines the level of access and features available to users in the Power BI service, such as free, Pro, or Premium licenses.	Organizational licenses and subscriptions for Fabric and Power BI

Term	Definition	Learn more
		Licenses and subscriptions for business users
Capacity	A dedicated set of resources used to enhance performance and scalability for Power BI content, often associated with Premium features.	Manage your Fabric capacity
Workbook	An Excel file uploaded to the Power BI service, which can be viewed or used as a data source for reports and dashboards.	Get data from Excel workbook files Publish to Power BI from Microsoft Excel
Dataflow	A collection of data transformation steps stored in the Power BI service, enabling reusable and centralized data preparation.	Creating a dataflow Introduction to dataflows and self-service data prep

Related content

- What is Power BI?
- Get around in Power BI service
- Tour the report editor in Power BI
- More questions? Ask the Power BI Community

Quickstart: learn about the Power BI capabilities for *business users*

Article • 01/09/2025

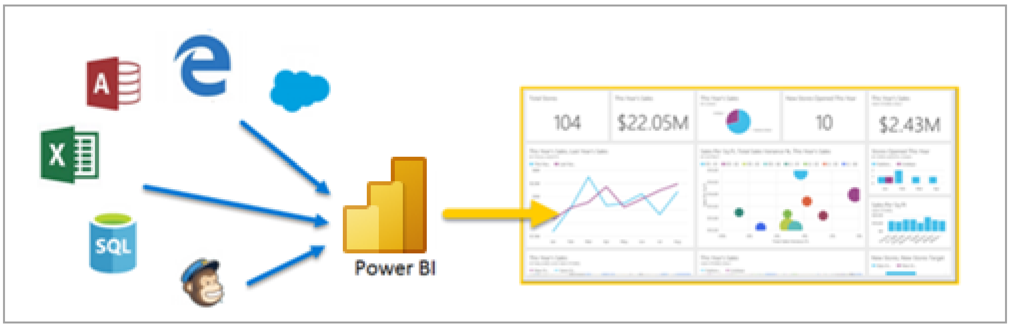
APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

This quickstart demonstrates how to interact with the Power BI service to discover data-driven business insights. This article isn't intended to be a deep dive, but rather a quick trip through many of the actions available for Power BI **business users**.

If you're not signed up for the Power BI service, sign up for a free trial before you begin.

What is Power BI?

Power BI is a collection of software services, apps, and connectors that work together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights. Your data might be a simple Excel spreadsheet or a collection of data from different data sources. No matter, Power BI lets you easily connect to your data sources, visualize (or discover) what's important, and share that with anyone or everyone you want.



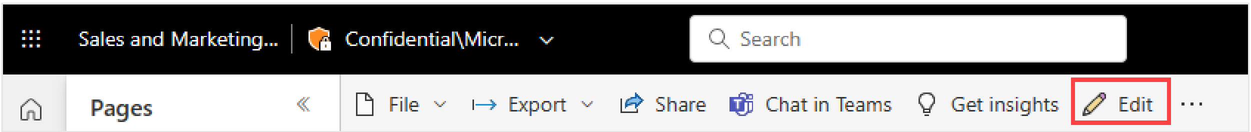
Open the Power BI service, in a browser or on a mobile device. You and your colleagues work from the same trusted apps, dashboards, and reports, that update and refresh automatically, so you're always working with the freshest content.

Reading view

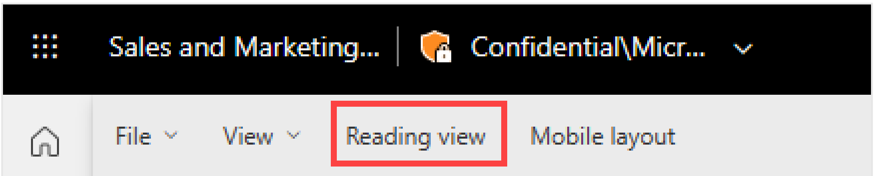
There are two modes for interacting with reports in the Power BI service: Editing view and Reading view. If you're a *business user*, then you're more likely to use Reading view to consume reports created by others. Editing view is used by report *designers*, who create the reports and share them with you. Reading view is your way to explore and interact with reports created by colleagues.

Select Editing view and Reading view

Most reports open in Reading view. To switch from Reading view to Editing view, select **Edit** from the action bar. If **Edit** is grayed out, that means that you don't have permissions to edit the report.



To switch back to Reading view, select **Reading view** from the action bar.



Even in Reading view, the content isn't static. You can dig in, looking for trends, insights, and other business intelligence. Slice and dice the content, and even ask it questions using your own words. Or, sit back and let your data discover interesting insights for you; send you alerts when data changes, and email reports to you on a schedule you set. All your data, anytime, in the cloud or on-premises, from any device.

Read on to learn about these features and more.

Power BI content

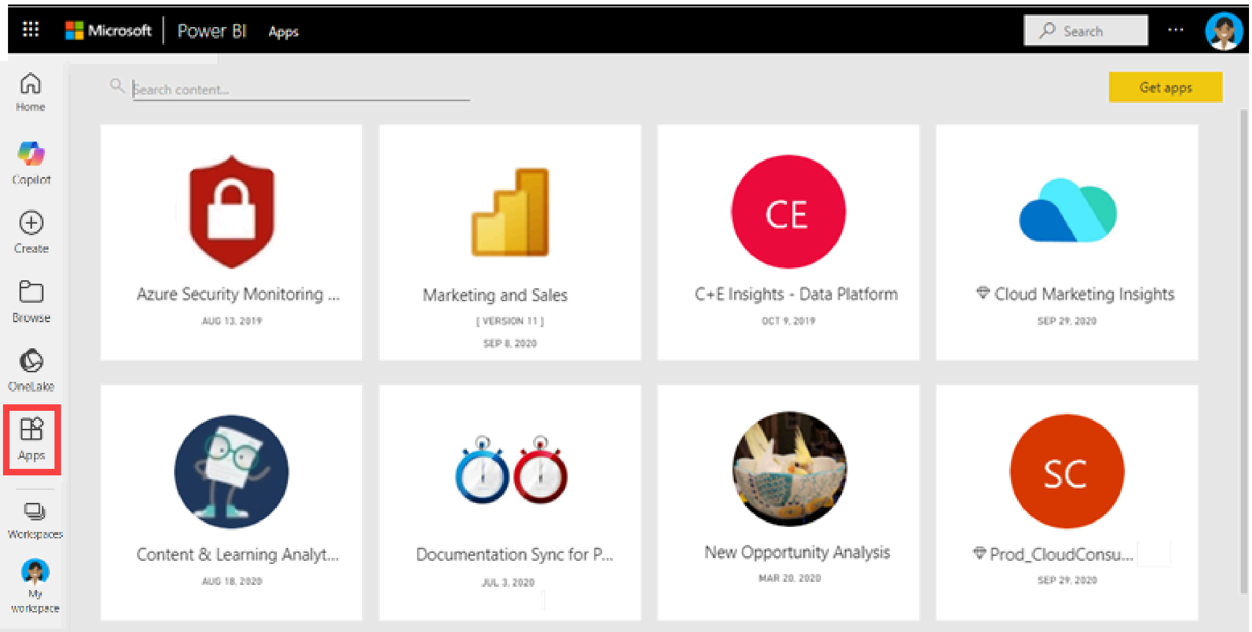
When we use the term "content" in Power BI, we're referring to items such as reports, dashboards, and apps. This content is the building blocks you use to explore your data and make business decisions.

> ⓘ **Note**
>
> Dashboards, reports, and apps can be viewed and shared on mobile devices, too.

Apps

An *app* is a Power BI content type that combines related dashboards, reports, workbooks, and more all in one place. An app can have one or more dashboards and one or more reports, all bundled together. Power BI *designers* create apps and distribute and share the apps with *business users* like you.

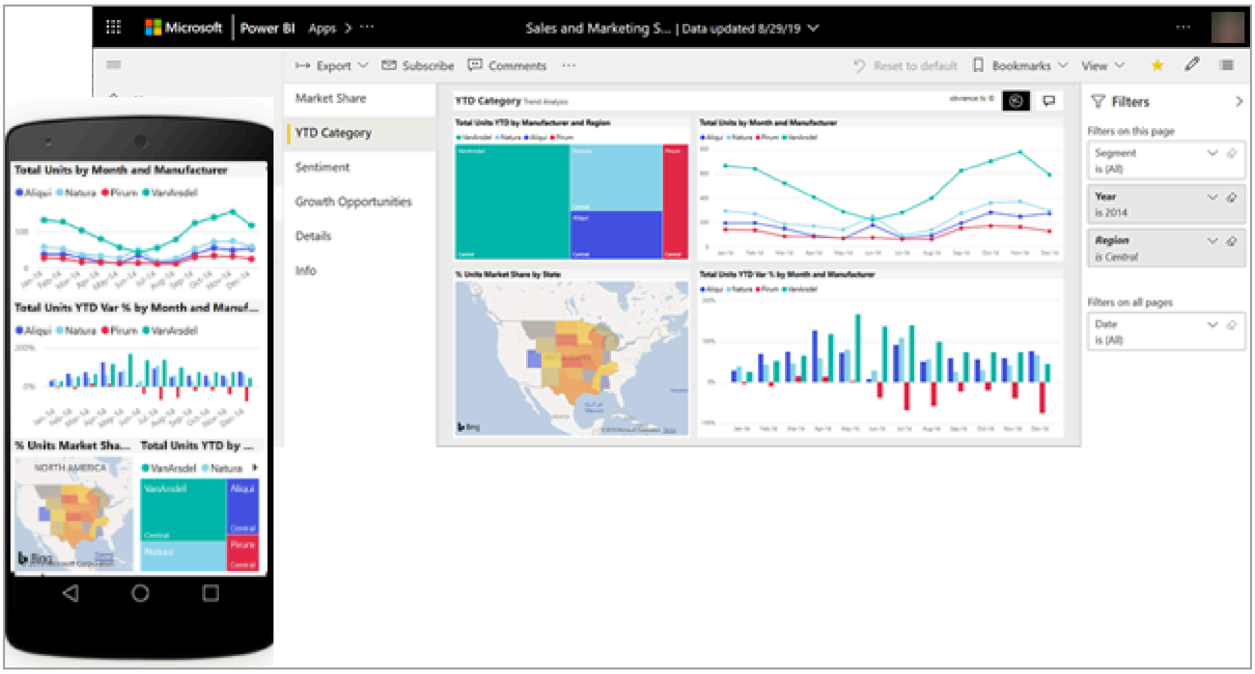
One way to view your apps is to select **Apps** from the nav pane and choose an app to open.



To learn more about viewing apps, see Power BI apps.

Reports

A Power BI report is a multi-perspective view into a semantic model, with visuals that represent different findings and insights from that semantic model. A report can have a single visual or pages full of visuals. Power BI *designers* create reports and distribute and share the reports with *business users* like you.

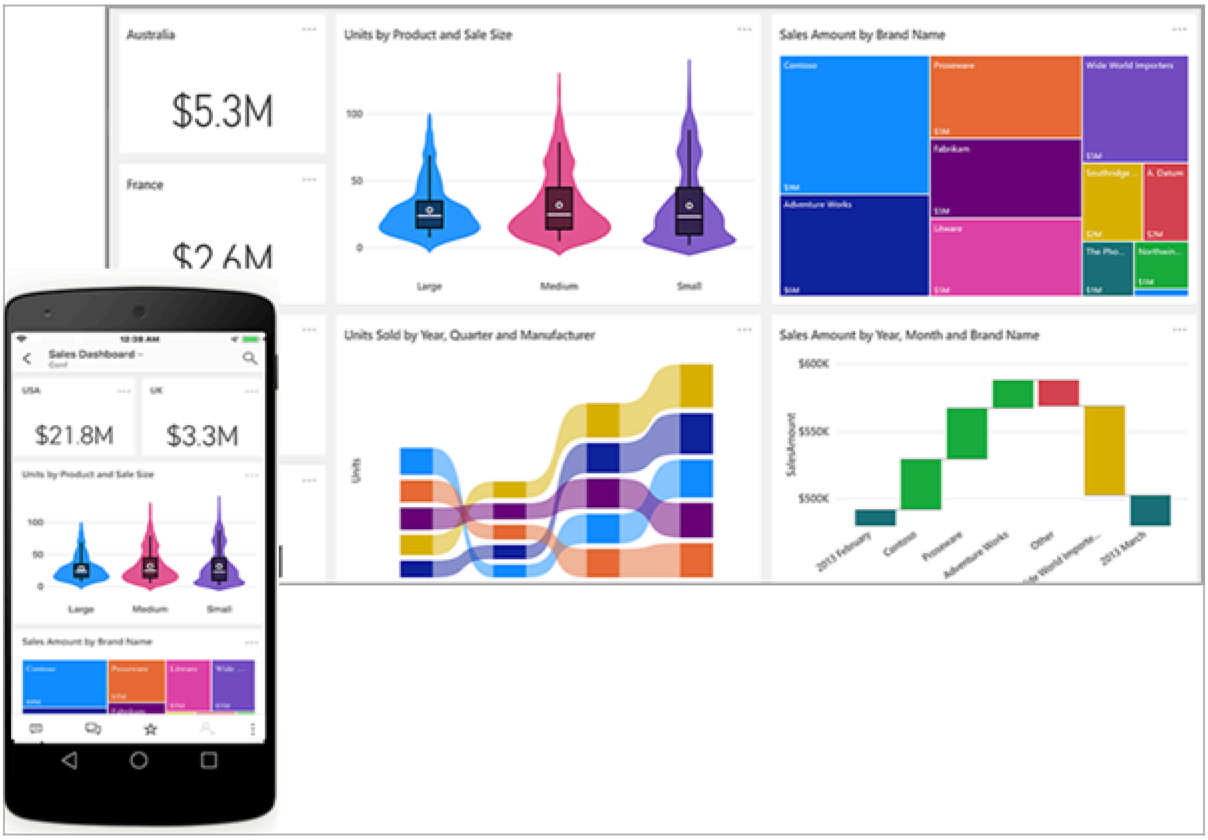


To learn how to view reports, see Power BI reports.

Dashboards

A Power BI dashboard is a single page, often called a canvas, that uses visualizations to tell a story. Because it's limited to one page, a well-designed dashboard contains only the most-important elements of that story.

The visualizations you see on the dashboard are called tiles and are pinned to the dashboard by report *designers*. In most cases, selecting a tile takes you to the report page where the visualization was created.

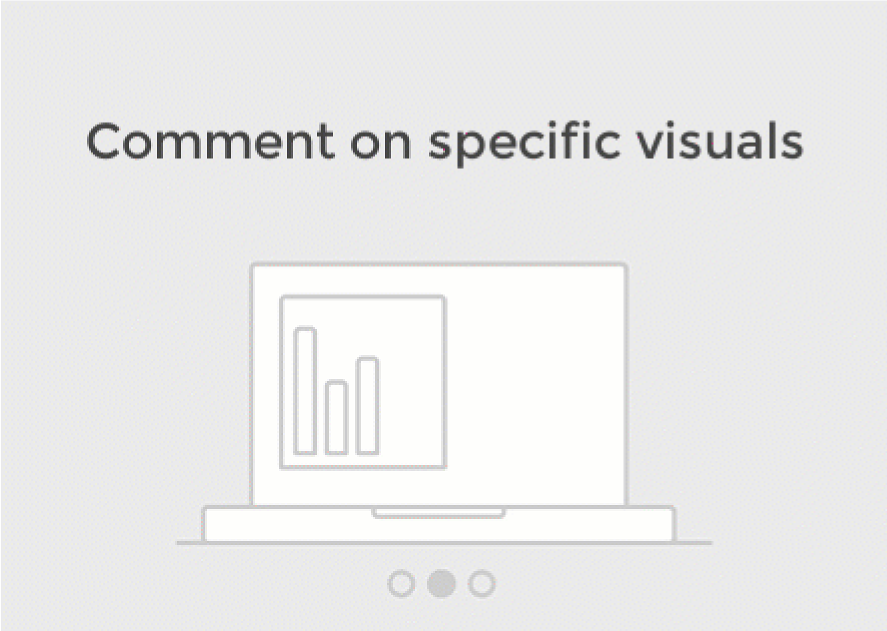


To learn how to view dashboards, see Power BI dashboards.

Interact in the Power BI service

Collaborate with colleagues

Skip the email. Add a personal comment or start a conversation with colleagues about a dashboard, right there on that dashboard. The comment feature is just one of the ways you can collaborate with others.



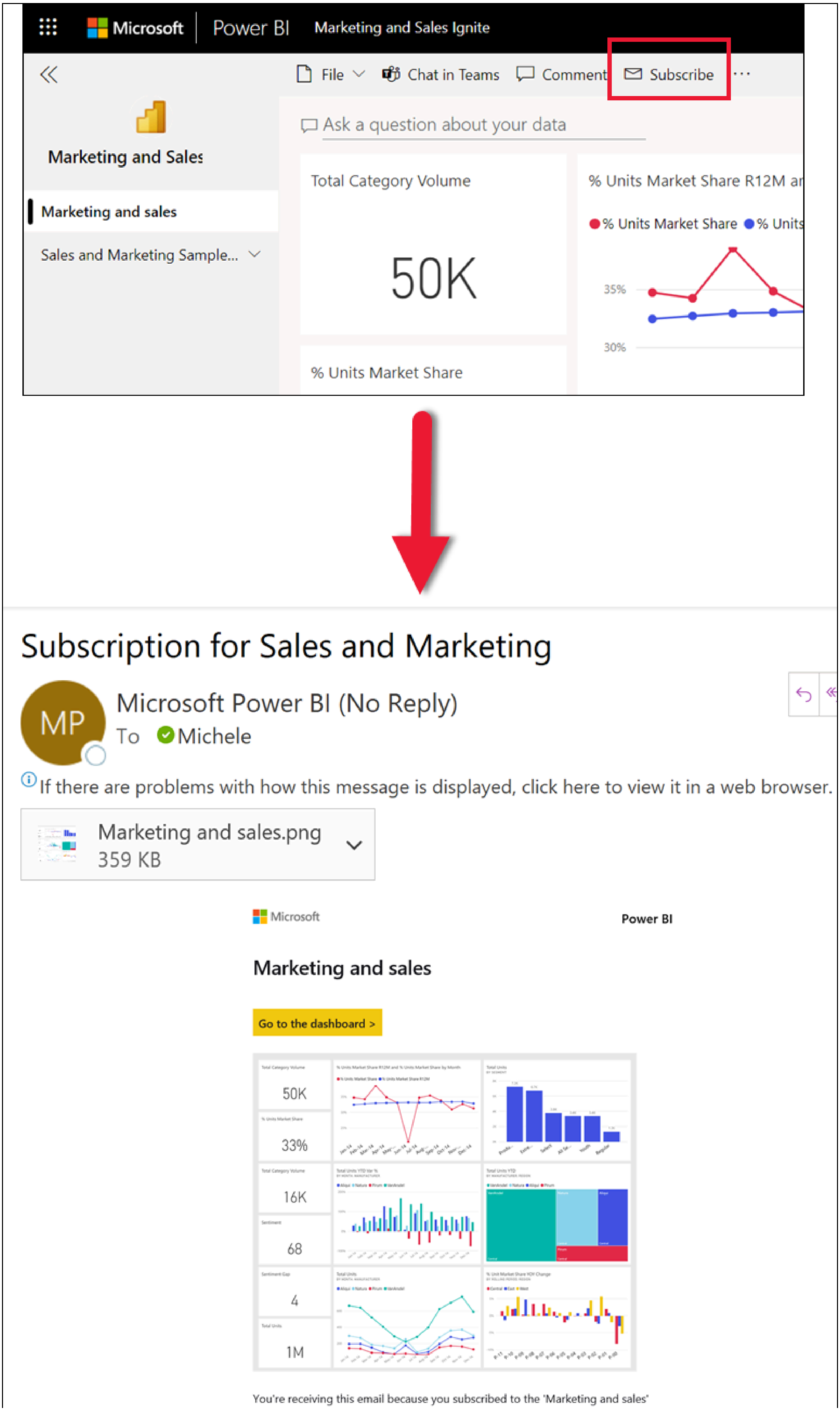
Learn more about commenting.

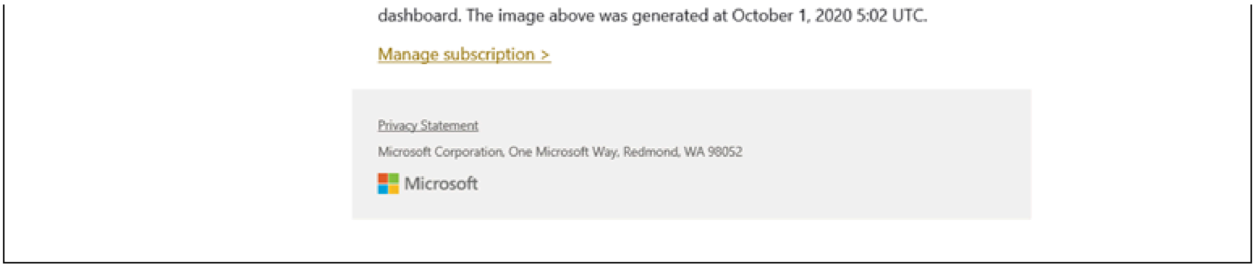
Sit back and let Power BI work for you

Two of the ways that the Power BI service does the work for you is with subscriptions and alerts.

Subscribe to a dashboard (or report)

It's not necessary to open Power BI to monitor a dashboard. You can subscribe instead, and Power BI emails you a snapshot of that dashboard on a schedule you set.


Microsoft
Power BI
Marketing and Sales Ignite
File
Chat in Teams
Comment
Subscribe
Ask a question about your data
Marketing and Sales
Marketing and sales
Sales and Marketing Sample...
Total Category Volume
50K
% Units Market Share R12M a
% Units Market Share
% Units
35%
30%
% Units Market Share
Subscription for Sales and Marketing
MP
Microsoft Power BI (No Reply)
To Michele
If there are problems with how this message is displayed, click here to view it in a web browser.
Marketing and sales.png
359 KB
Microsoft
Power BI
Marketing and sales
Go to the dashboard >
50K
33%
16K
68
4
1M
You're receiving this email because you subscribed to the 'Marketing and sales'

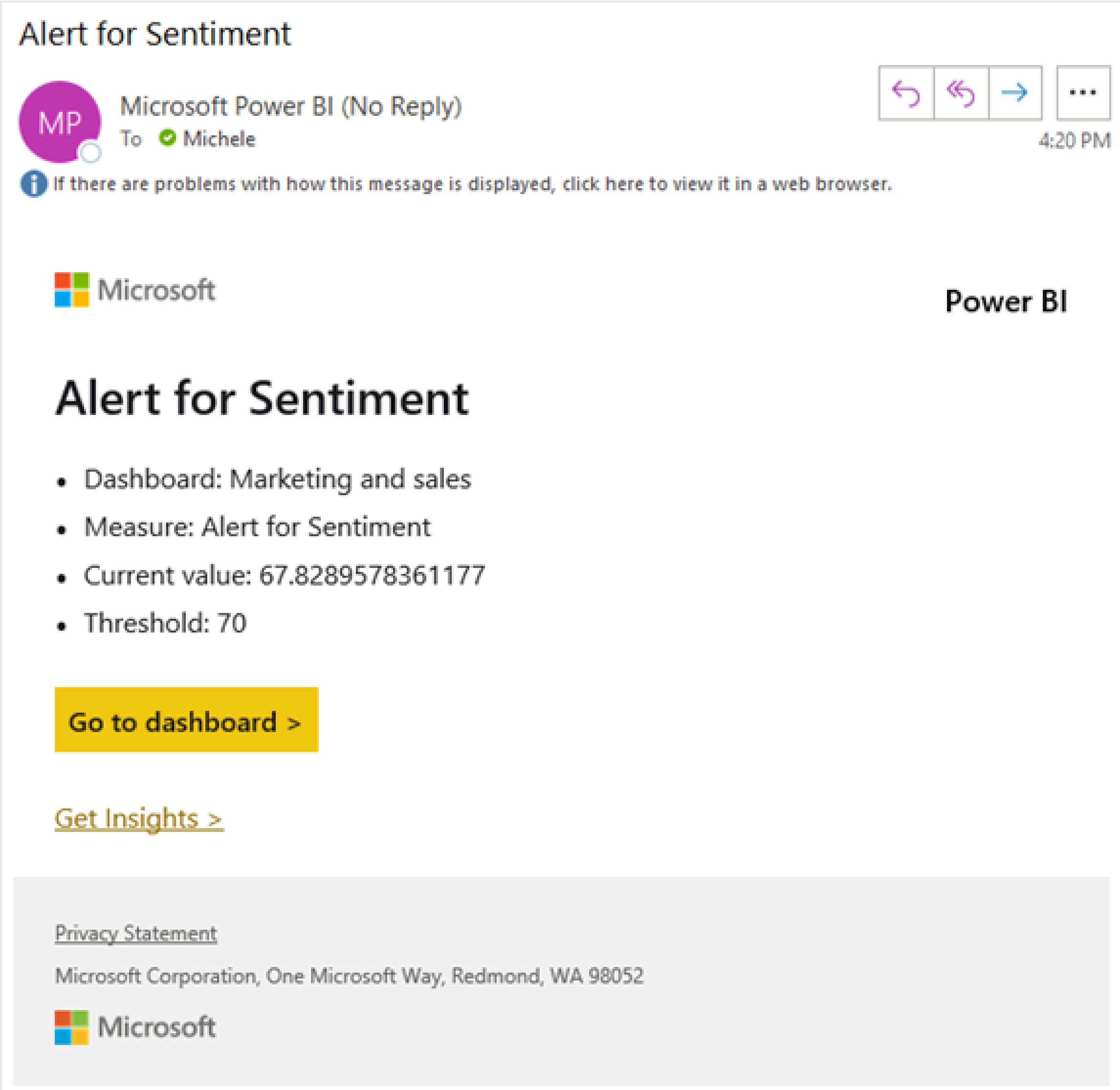


Learn more about Power BI subscriptions.

Get alerts when your data reaches a threshold

Your data is live, and your visuals update automatically. If you want to get notified when data changes above or below a threshold you set, use data alerts. Alerts work on gauges, KPIs, and cards.

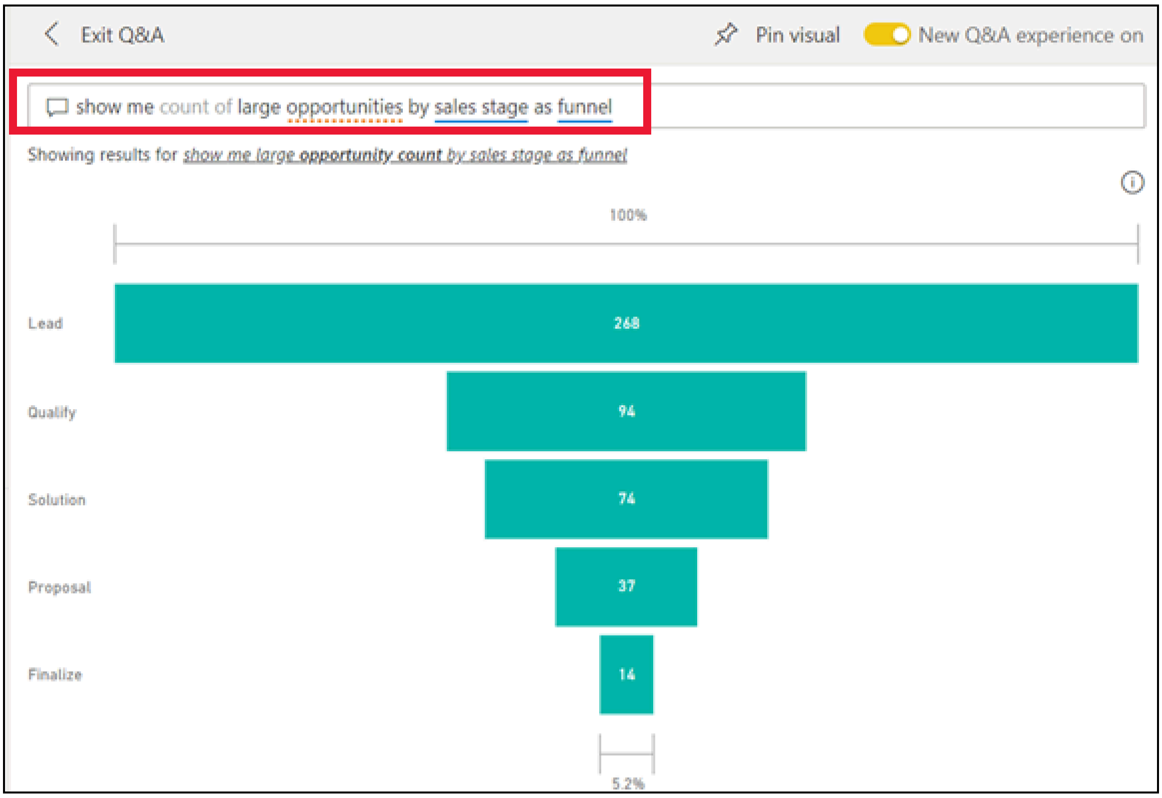
Power BI sends you an email when the value increases or decreases past the limit you set.



Learn more about Power BI alerts.

Use Q&A to ask questions using natural language

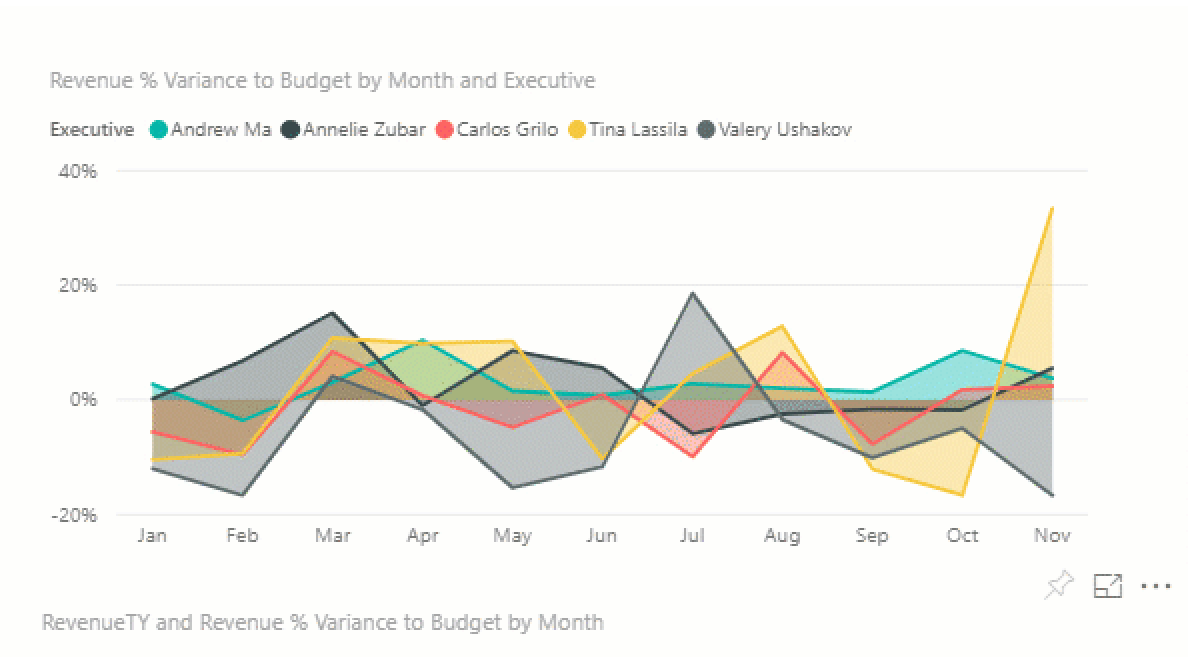
Sometimes the fastest way to get an answer from your data is to ask a question using natural language. The Q&A question box is available at the top of your dashboard. For example, "show me count of large opportunities by sales stage as a funnel."



Learn more about Power BI Q&A.

Display details on a visualization

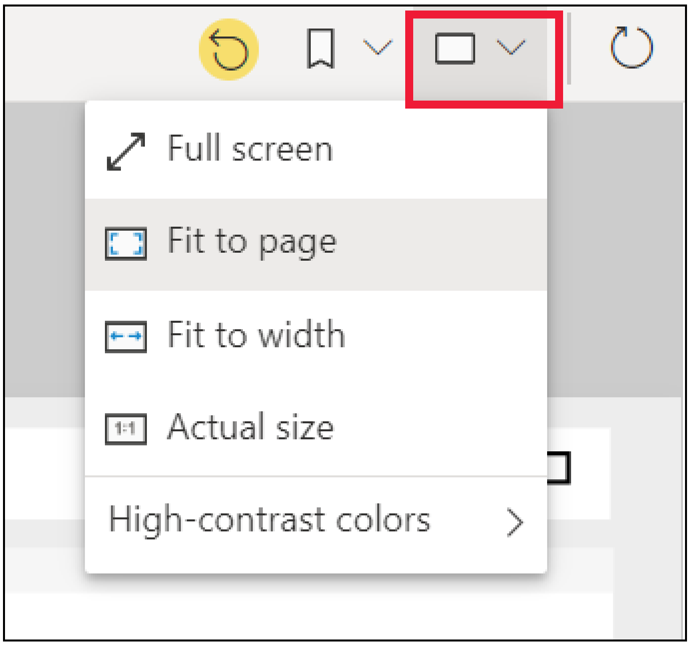
Visuals are made up of datapoints, and by hovering over a datapoint, you can view the details.



Adjust the display dimensions

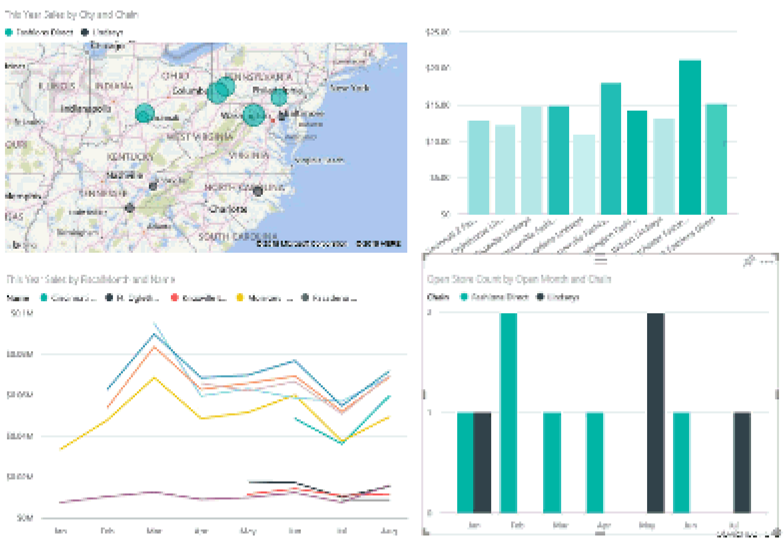
Reports are viewed on many different devices, with varying screen sizes and aspect ratios. The default rendering may not be what you want to see on your device.

To adjust, from the upper right menu bar select the **View** icon and choose one of the display options.



See how all the visuals on a page are interconnected

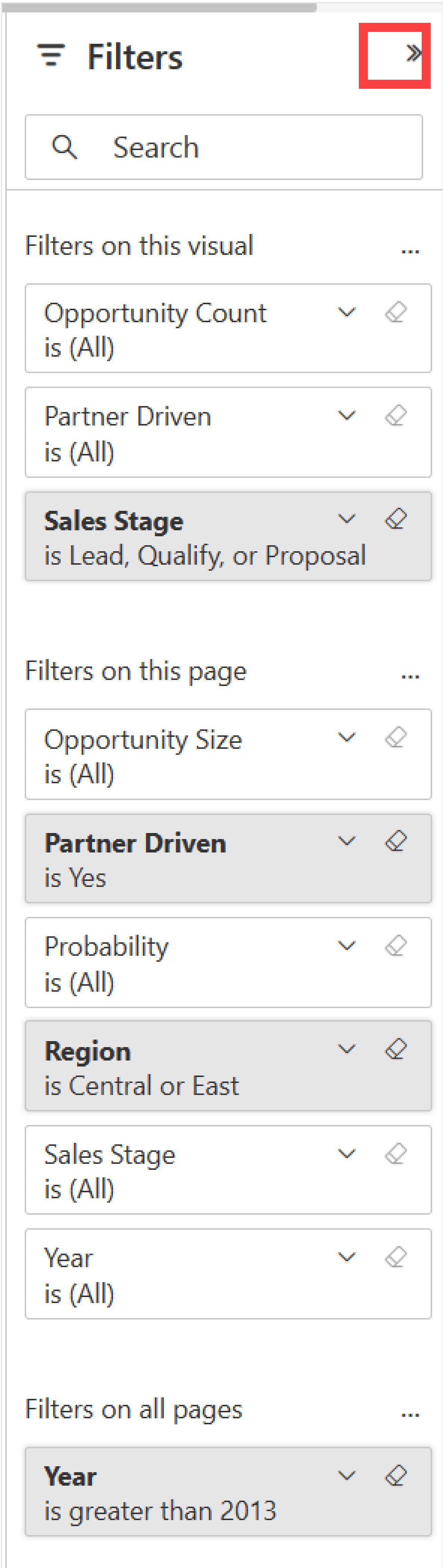
Cross-highlight and cross-filter the related visualizations on a report page. The visualizations on a single report page are all "connected" to each other. What this means is that if you select one or more values in one visualization, other visualizations that use that same value change based on your selection.

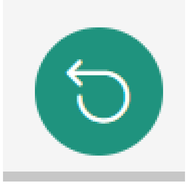


Learn more about visual interactions.

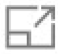
Update the filters used in the report

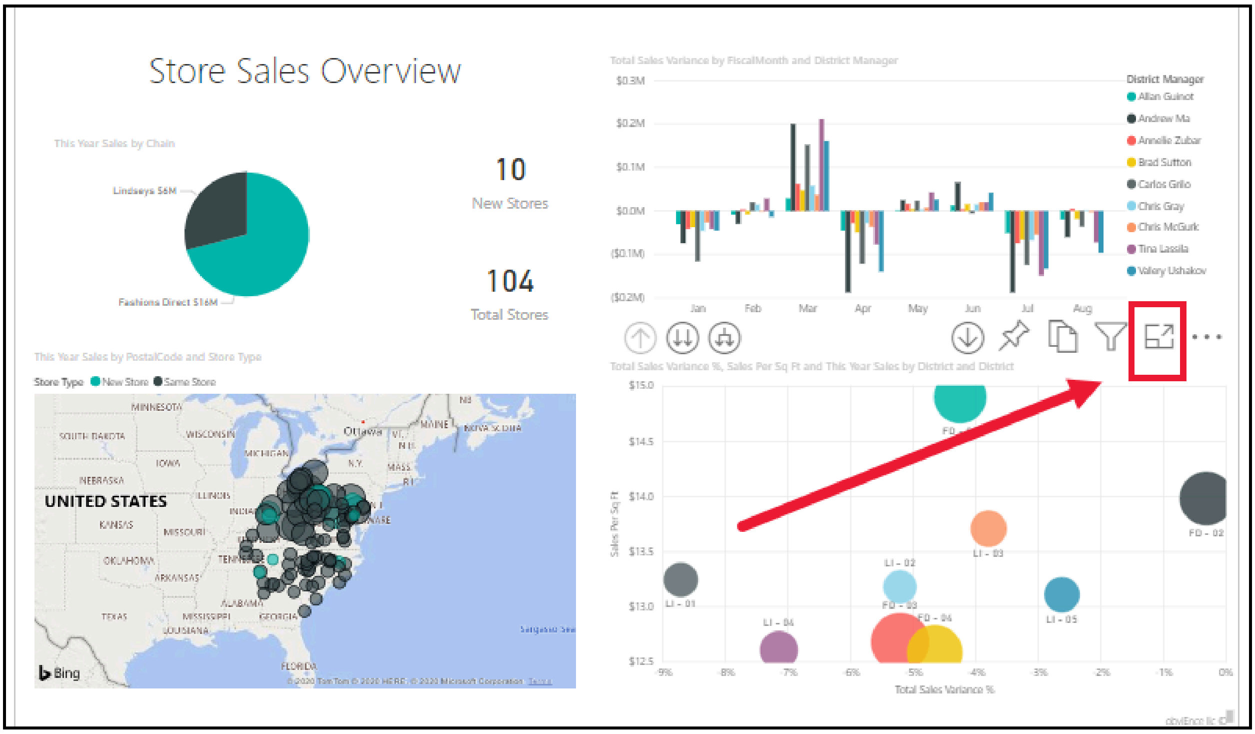
Open the **Filters** pane to reveal the filters applied to the page, report, and visualization.

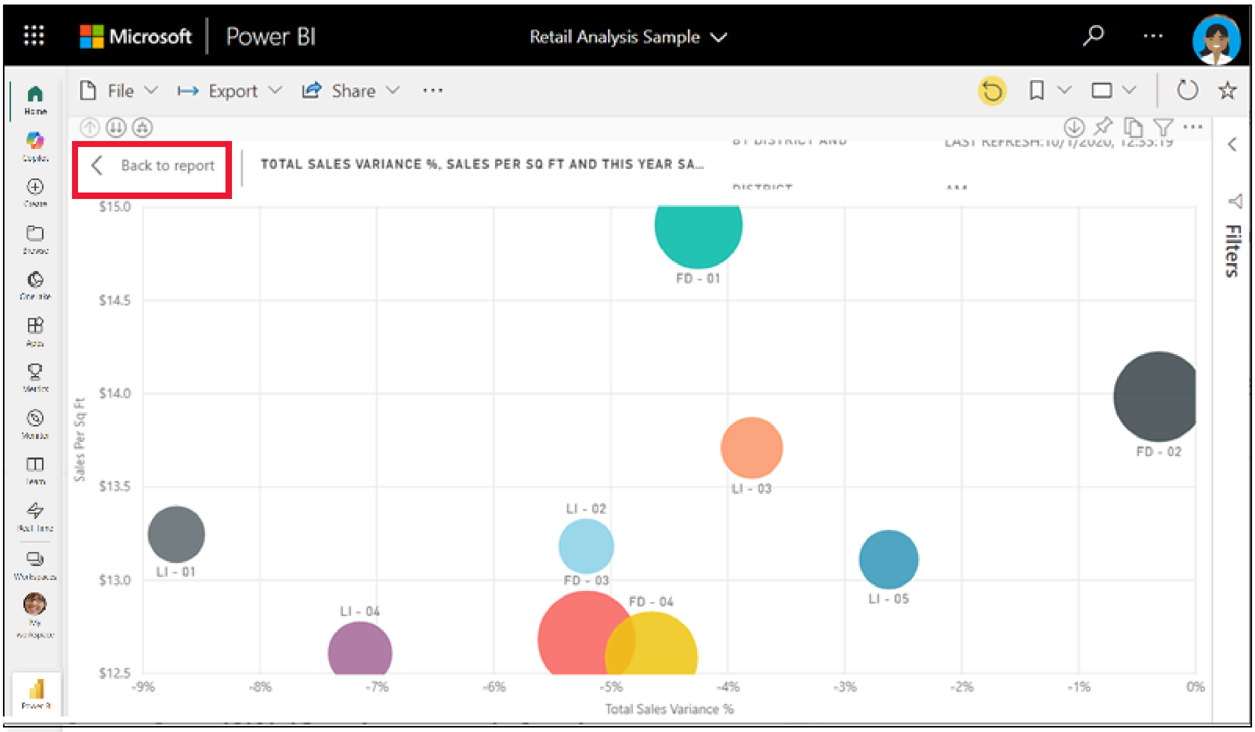

Filters
Search
Filters on this visual
Opportunity Count
is (All)
Partner Driven
is (All)
Sales Stage
is Lead, Qualify, or Proposal
Filters on this page
Opportunity Size
is (All)
Partner Driven
is Yes
Probability
is (All)
Region
is Central or East
Sales Stage
is (All)
Year
is (All)
Filters on all pages
Year
is greater than 2013

If the report has filters applied, they'll display in the **Filters** pane. Make changes to the filters to see the effect on the visuals. Save your changes, or use the  to revert to the default report page state.

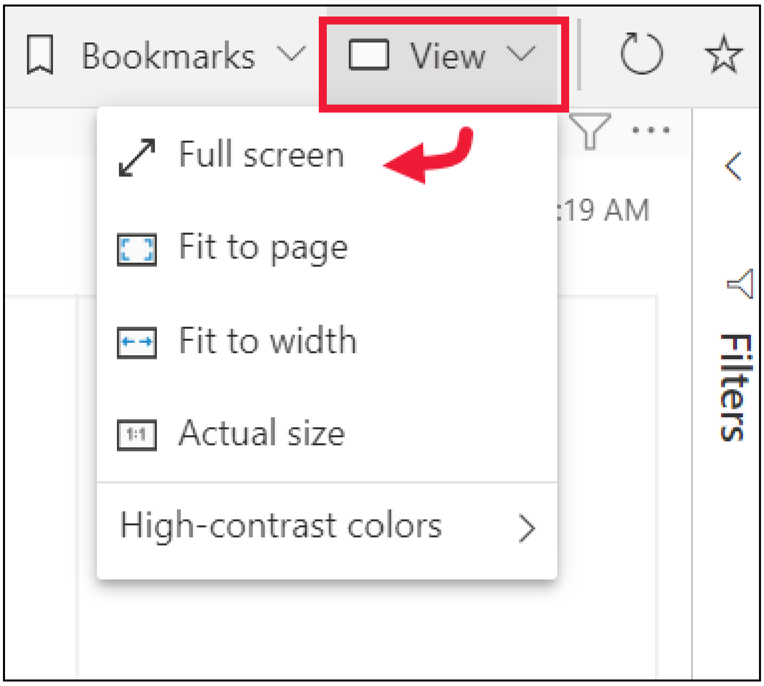
Zoom in on individual visuals

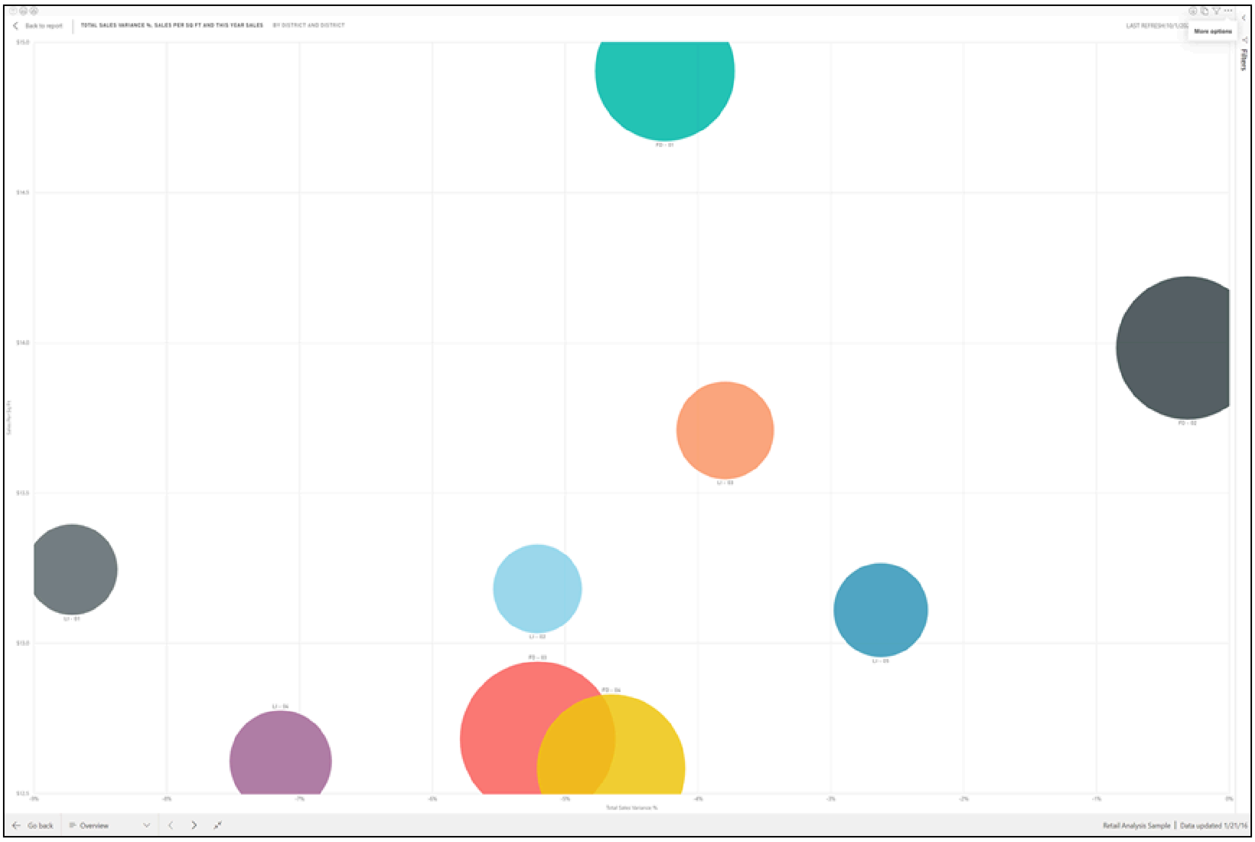
Hover over a visual and select the **Focus mode** icon . When you view a visualization in Focus mode, it expands to fill the entire report canvas.





To display that same visualization without the distraction of menu bars, filter pane, and other chrome--select **Full screen** from the View dropdown.



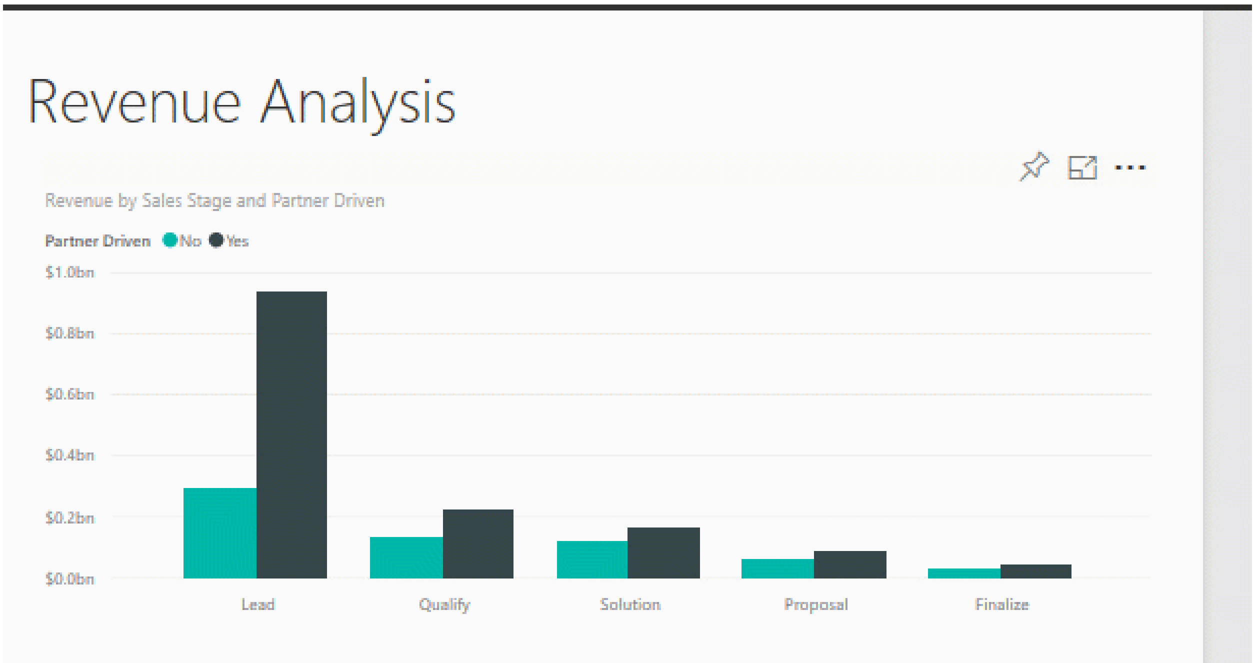


Learn more about focus mode and full screen mode.

Sort a visualization

Visuals on a report page can be sorted and saved with your changes applied.

Hover over a visual to make it active, and select **More options** (...) to open sorting options.

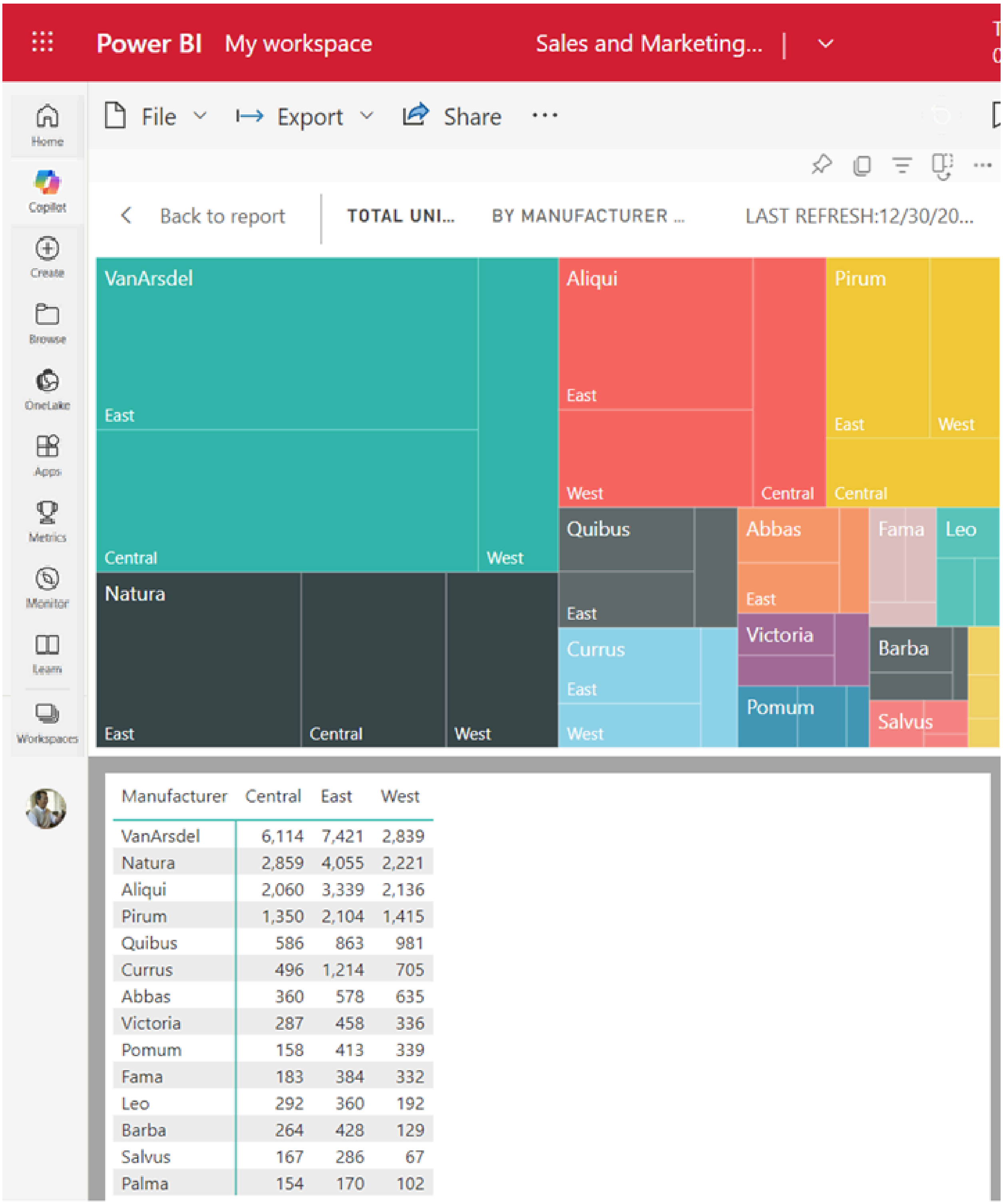


Learn more about sorting visuals.

Show the data used to create a visualization

A Power BI visualization is constructed using data from underlying semantic models. If you're interested in seeing behind-the-scenes, Power BI lets you *display* the data that is being used to create the visual. When you select **Show as a table**, Power BI displays the data below (or next to) the visualization.

With a visual active, select **More options** (...) and choose **Show as a table**.



Export data to Excel

In addition to showing the data that is used to create a visual, you can also export that data and view it in Microsoft Excel. When you export to Excel, you're creating a separate document, a spreadsheet that isn't part of Power BI. Any changes that you make in the Excel file don't impact the data in Power BI. Whether you want to take a closer look at the data, or you want to use the data in another application or for another purpose, Power BI gives you that flexibility. For more information, visit Export the data that was used to create a visualization.

Exporting isn't limited to individual visuals; you can export entire reports to Excel or PowerPoint to share with your colleagues. For more information, see Analyze in Excel and Power BI in PowerPoint.

This article is a quick overview of just some of the things *business users* can do with the Power BI service.

Clean up resources

- If you connected to an app, from the nav pane, select **Apps** to open the Apps content list. Hover over the app to delete, and select the trashcan icon.
- If you imported or connected to a Power BI sample report, from the nav pane, open **My workspace**. Using the tabs at the top, locate the dashboard, report, and semantic model, and select the trashcan icon for each.

Related content

- Power BI for business users

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Tutorial - Getting around in Power BI service

Article • 01/06/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

Now that you know the basics of Power BI, let's take a look around the **Power BI service**. As mentioned in the previous article, colleagues on your team might spend all of their time in Power BI Desktop, combining data and creating reports, dashboards, and apps for others. They're *designers* and *creators*. You, on the other hand, might spend all of your time in the Power BI service, viewing and interacting with content created by others (**consuming** experience). You're a *business user*. This tutorial is for *business users* of the Power BI service.

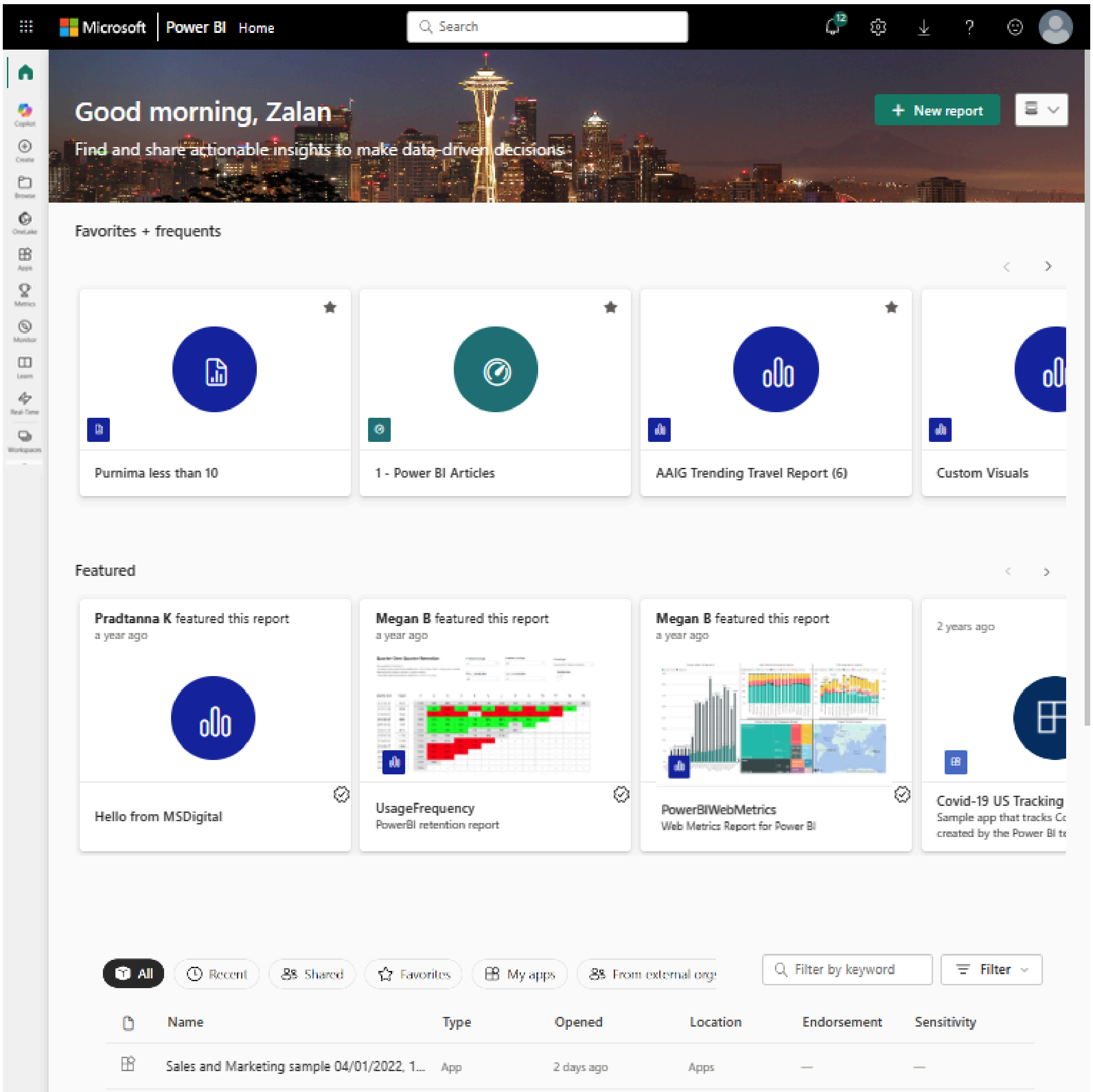
Prerequisites

- If you're not signed up for Power BI, sign up for a free trial before you begin.
- Read Power BI service basic concepts.
- Viewing Power BI content (reports, dashboards, apps) created by *designers* requires one of two conditions:
  - A Power BI Pro or Premium Per User (PPU) license.
  - Your organization to have a Power BI Premium subscription, and the content to be shared with you from a Premium capacity. Learn about licenses and subscriptions.

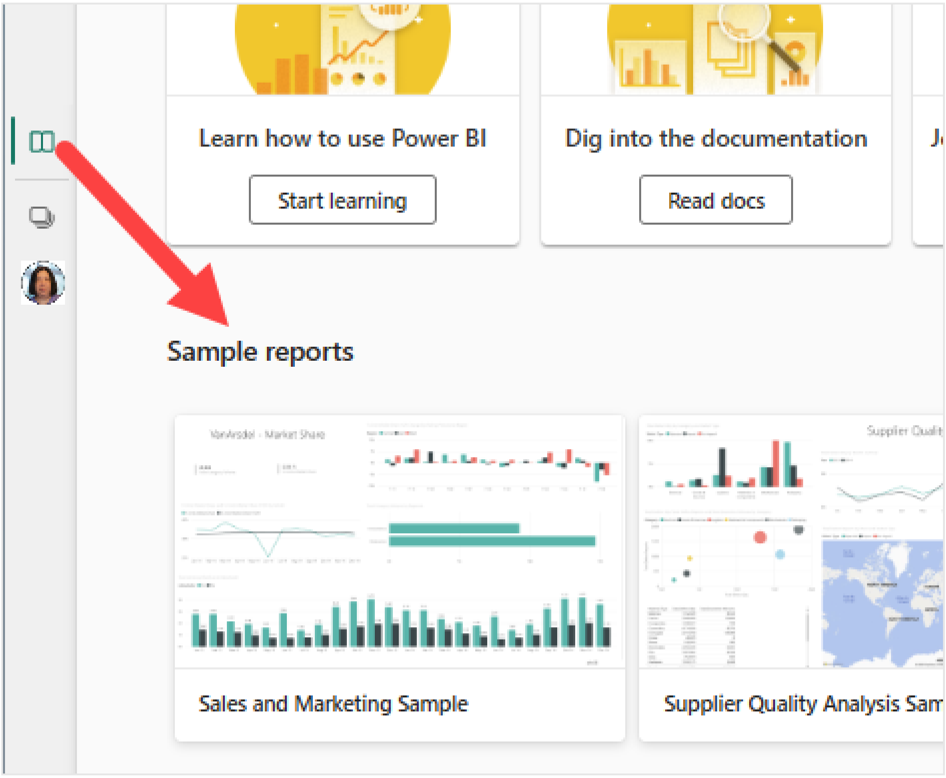
  For the purposes of this tutorial, we aren't requiring either of these conditions to be met. Microsoft has sample content available to you directly from the Power BI service interface. Use this sample content to learn your way around the Power BI service.

Open the Power BI service

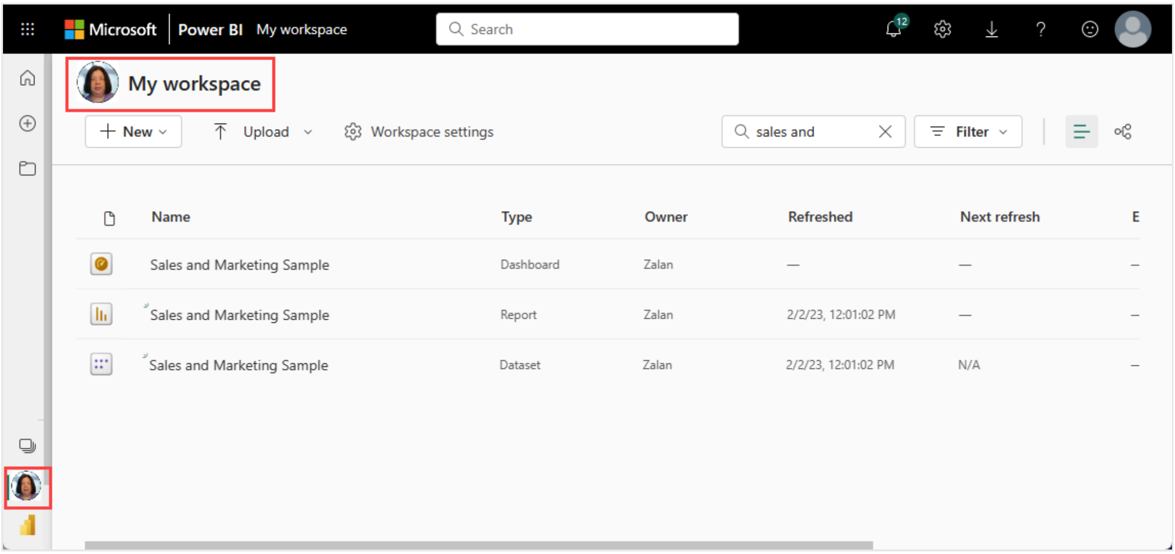
1. To begin, open the Power BI service (app.powerbi.com), and sign in if you're prompted.



2. Open a Power BI sample. From the navigation pane, select the **Learn** icon and in the **Learning center**, scroll down to **Sample reports**. Select the right arrow until you get to **Sales and Marketing Sample**. Select the sample to open it.



3. The Power BI service installs the sample in **My workspace**, your private sandbox for learning and experimenting. Only you can see your workspace. Select **My workspace** to see details about this sample.



The sample includes one report, one dashboard, and one semantic model. Most content shared with business users doesn't include direct access to the underlying semantic models, but the samples, which are designed for all users, include semantic models.

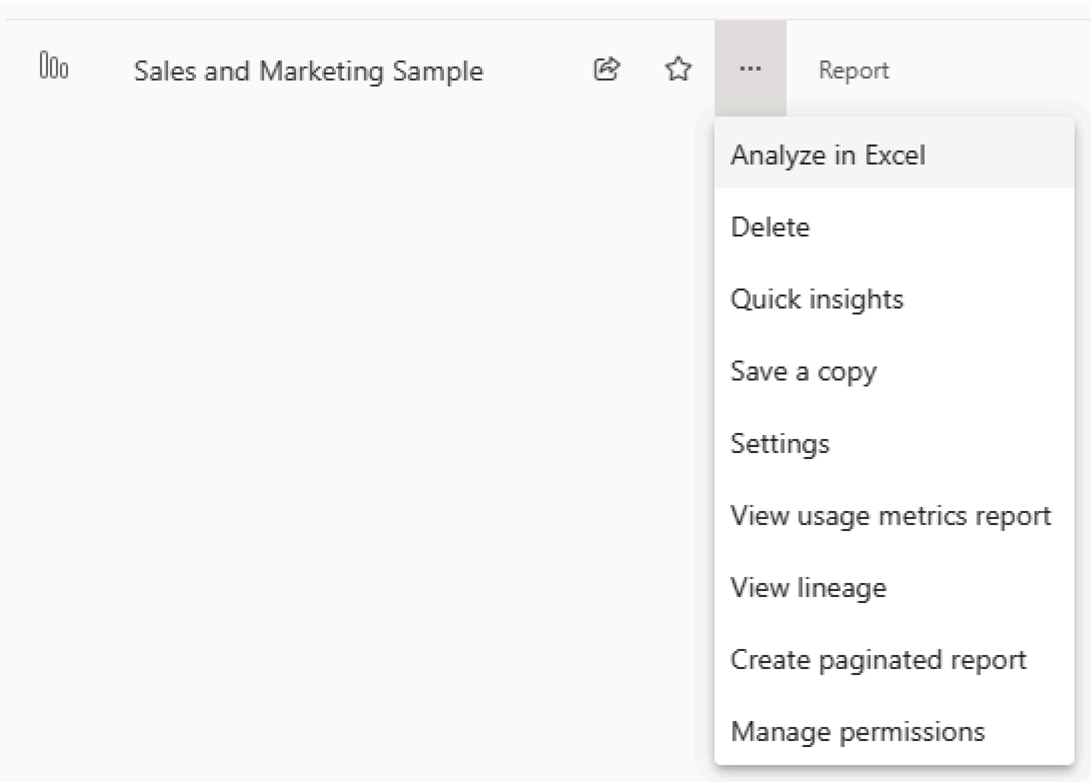
View workspace content

The sample content is organized within the context of a workspace named **My workspace. My workspace** stores all of the content that you own and create. Think of it as your personal sandbox or work area for your own content. Any sample data that you download from the Power BI Learning Center is saved in your **My workspace**.

You acquire more workspaces when designers share content with you. For example, if designers assign you access permissions to one of their workspaces, that workspace shows up in your Power BI site.

My workspace

Workspaces are more than storage locations. From a workspace you can learn a lot about the included dashboards, reports, and semantic models. Workspace owners assign permissions to content in a workspace. Your permissions may allow you to take **More actions (...)** on the content in a workspace. Since we're using sample content that is saved in your **My workspace**, you have owner-level permissions by default.



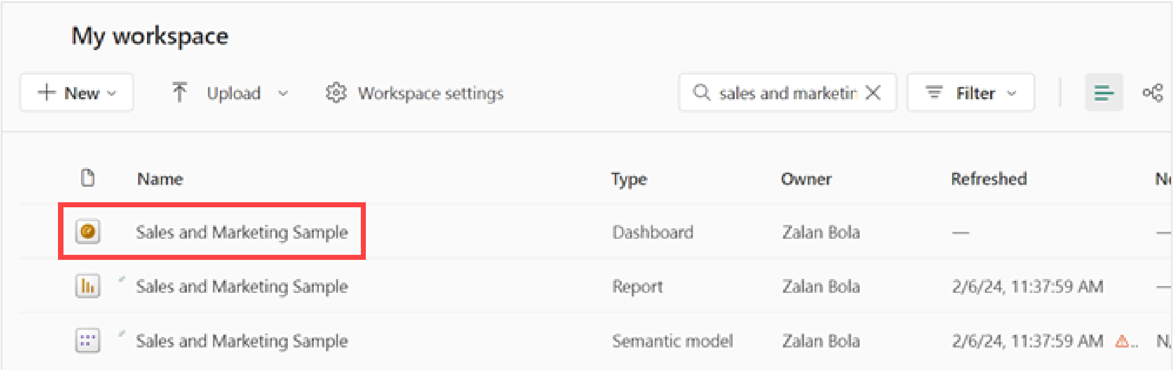
From a workspace, you can open a dashboard or report by selecting it from the list. You can favorite a dashboard or report by hovering and selecting the star icon. If a workspace *owner* gave you sharing permissions, you can share from here as well.

Learn more about Workspaces.

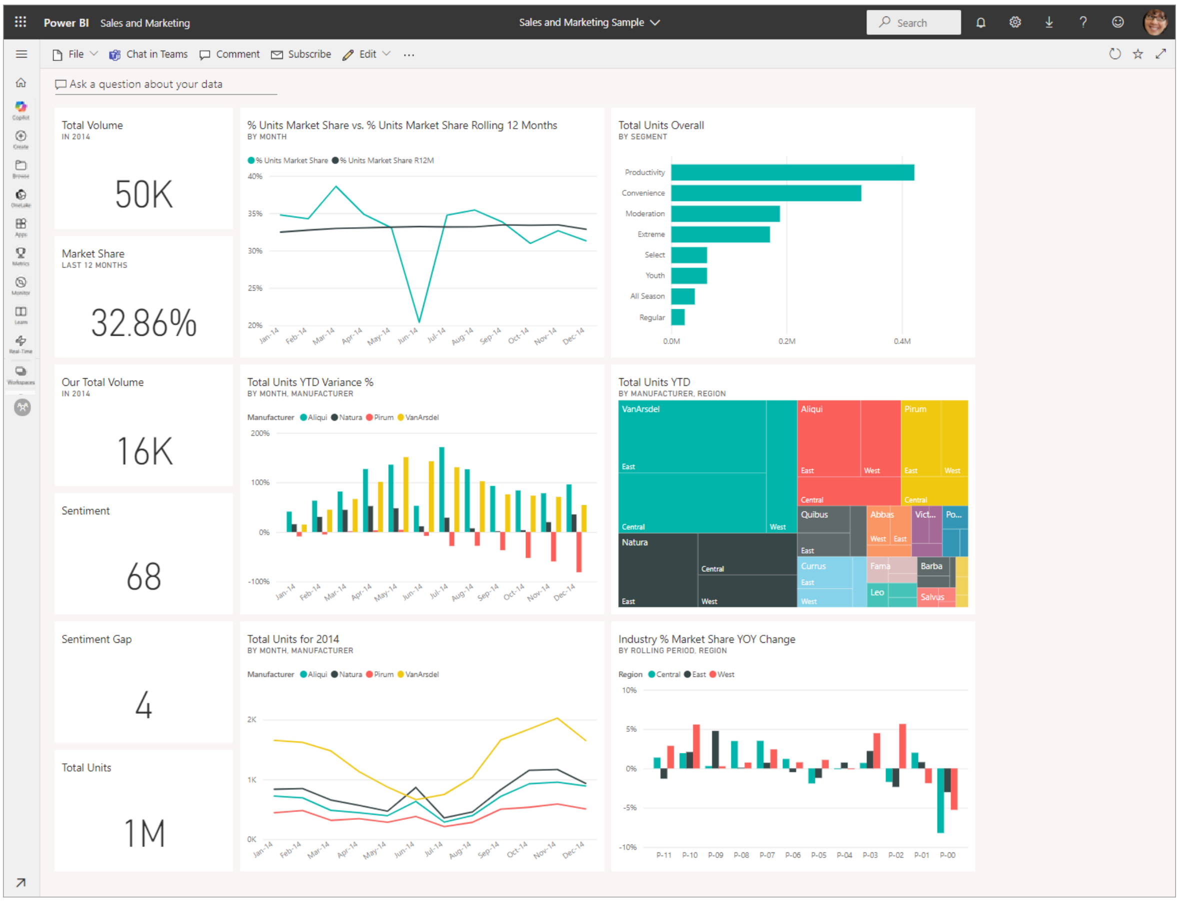
Open a dashboard and a report

A dashboard is a single page that shows visualizations of the most important elements from one or more reports.

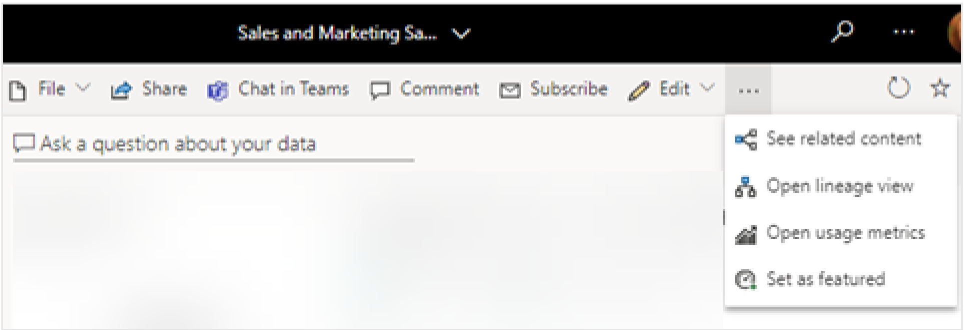
1. The Sales and marketing sample has one dashboard. To open the dashboard, select it.



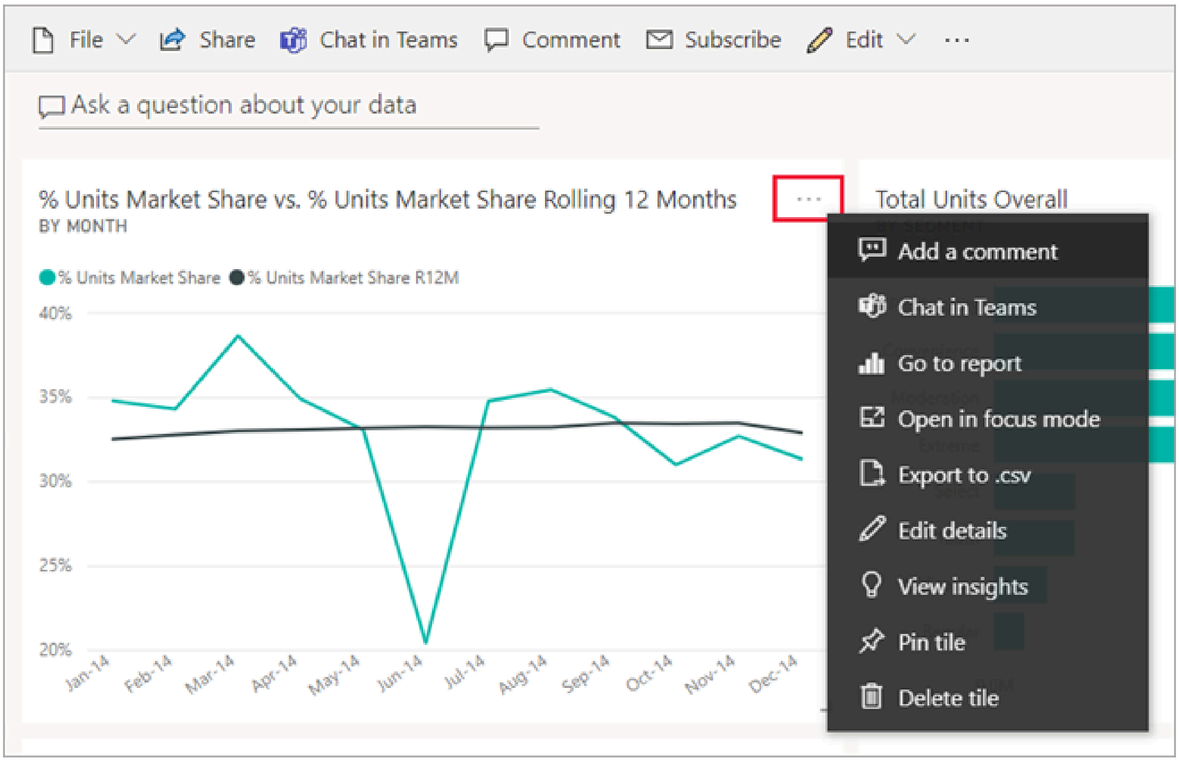
2. The dashboard opens in the Power BI service. Dashboards are something that differentiates the Power BI service from Power BI Desktop. Learn about dashboards.



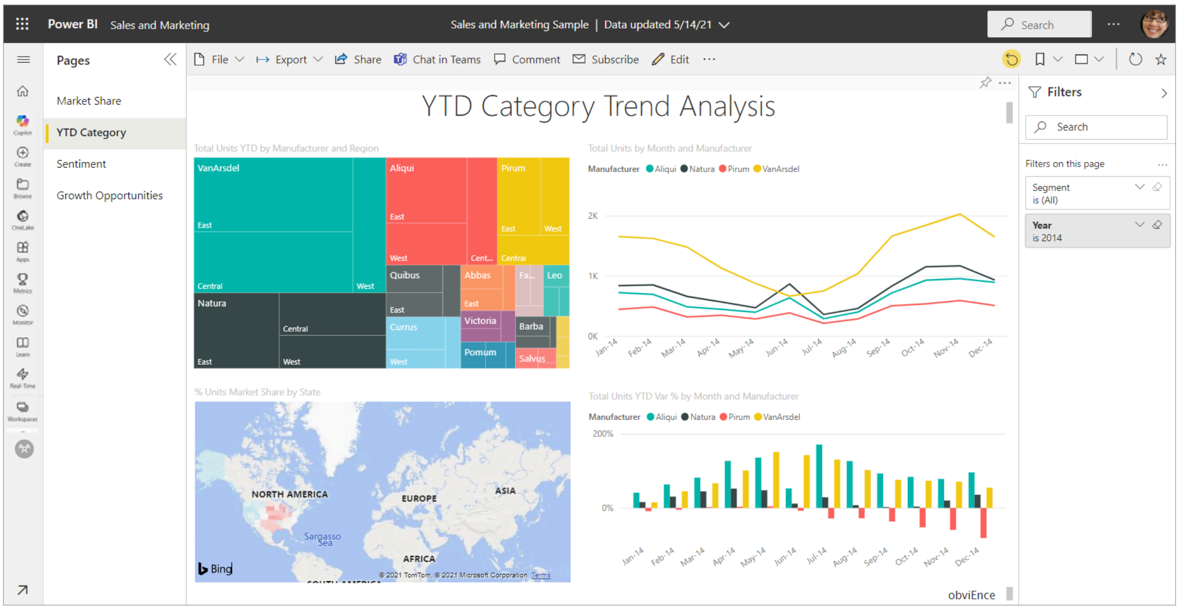
3. The actions you can take on a dashboard are displayed in the top menu bar. Select **More options (...)** to see the complete list.



4. The visuals on the dashboard are arranged as *tiles*. Hover over a dashboard tile and select **More options (...)** to see the options you have for interacting with that tile.



5. Select a dashboard tile to open the report that was used to create that tile. The report opens to the page that contains the visual that is on the tile. In this example, selecting the dashboard tile with the treemap opens the **YTD Category** report page.



A report is made up of one or more pages. In most cases, each page is designed to tell a story and that story is told with visualizations, text, shapes, and images.

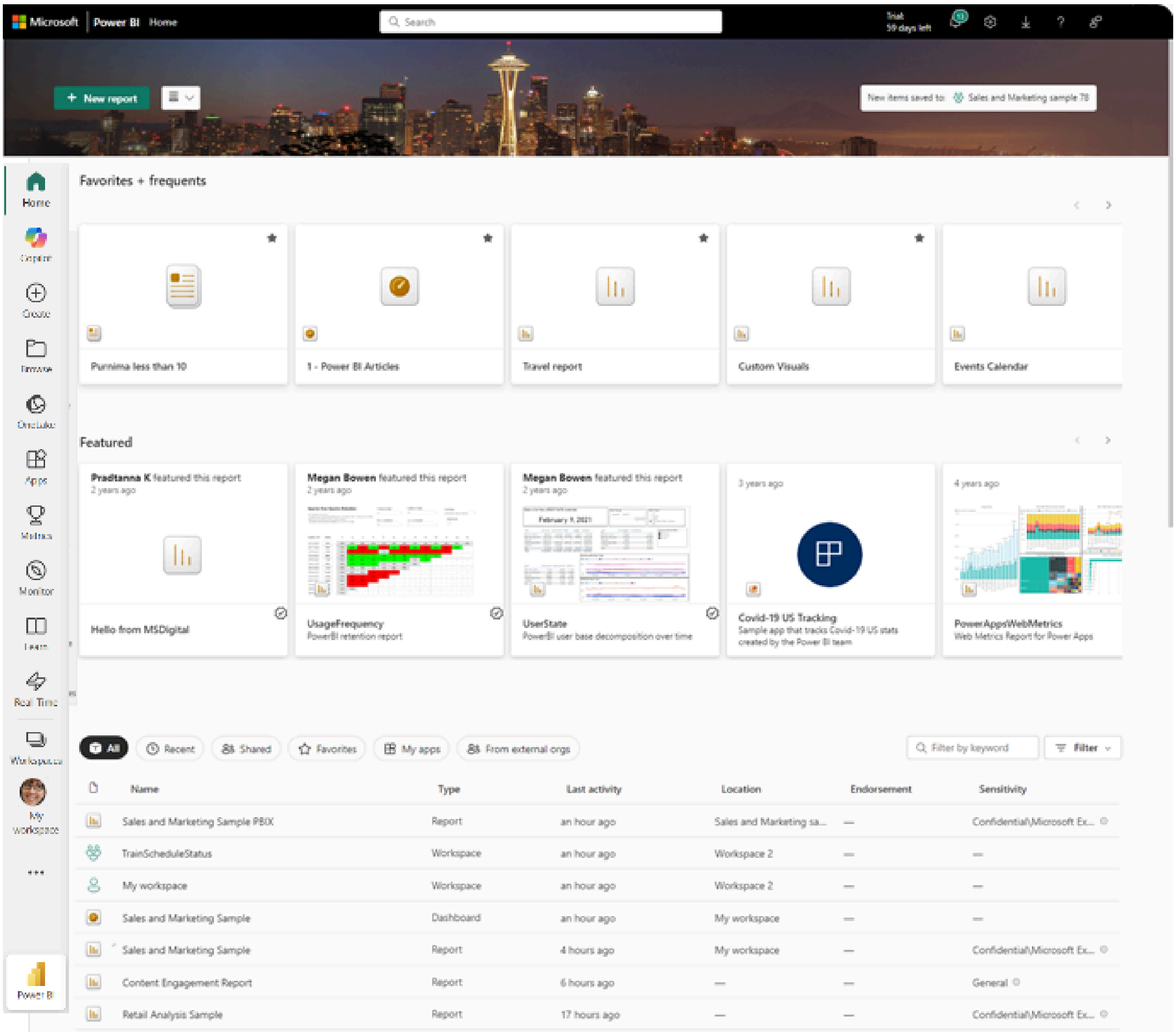
Reports have several sections. On the left is the clickable list of report pages. Across the top, is the menu bar containing actions you can take with the report. The options available depend on the role and permission the report *designer* assigned to you. On the right side is the **Filters** pane. And the center canvas contains the report itself. Similar to the dashboard, there are actions that you can take for the entire report, for individual visuals, and also for a single report page.

Learn more about Power BI reports.

Using the left navigation pane (nav pane)

The nav pane becomes more useful as colleagues share content with you. In this section of the tutorial, we look at the Power BI service for a *business user* who works with colleagues who share lots of reports, dashboards, and apps.

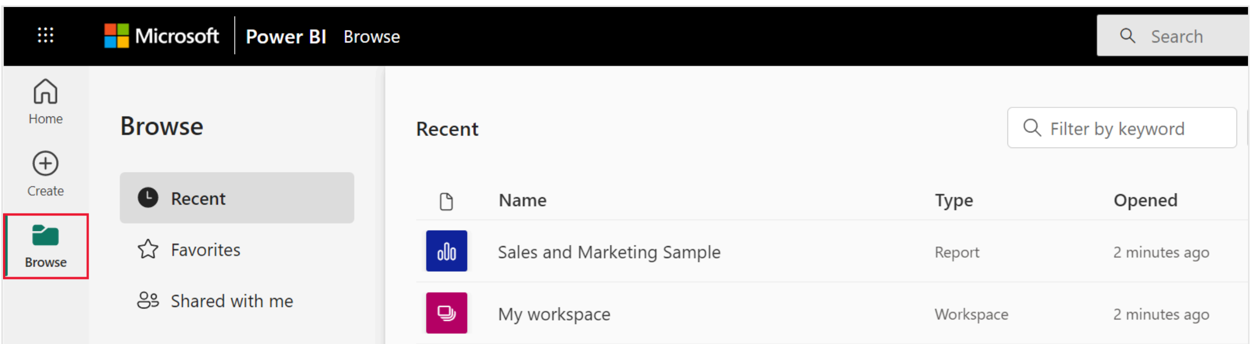
The top icon in the nav pane is your Power BI **Home**. It's the default landing page when you log in to the Power BI service. **Home** is a great starting point for viewing and navigating to your content. **Home** bring together the searching and sorting tools, the nav pane, and a canvas with *cards* that you can select to open content. At first, you might not have many cards on your Home canvas, but that changes as you start to use Power BI with your colleagues.



To learn more, see Power BI Home.

Browse

See your full list of favorites, recent, and shared content by selecting **Browse** on the nav pane. Here you find content lists that provide details about reports, apps, and dashboards.



Recent content is the last reports, dashboards, apps, and other Power BI content that you've visited. For more information about tagging content as a *favorite*, see Favorites and for more information about how content is shared by colleagues, see Shared with me.

Open Apps

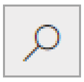
Go directly to your apps by selecting **Apps** on the navigation pane. You might not have any apps yet. The **Apps** pane contains apps that are shared with you or that you install.

For more information, see Apps in Power BI.

Open the Learning center

For new users, the Learning center is especially helpful, with getting started content, samples, and links to videos.

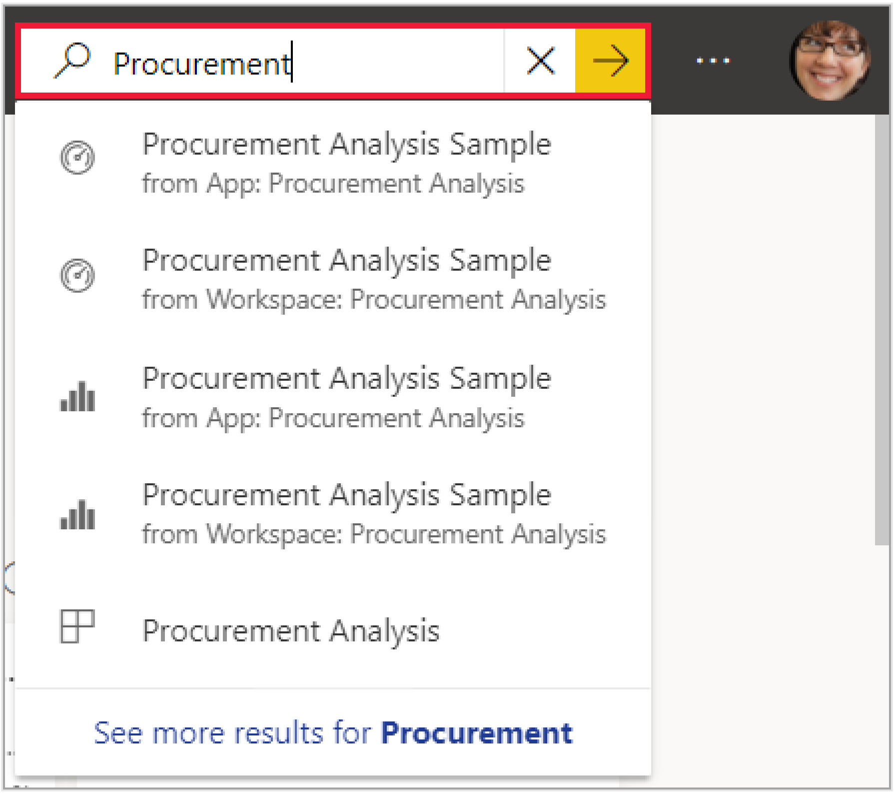
Search and sort content



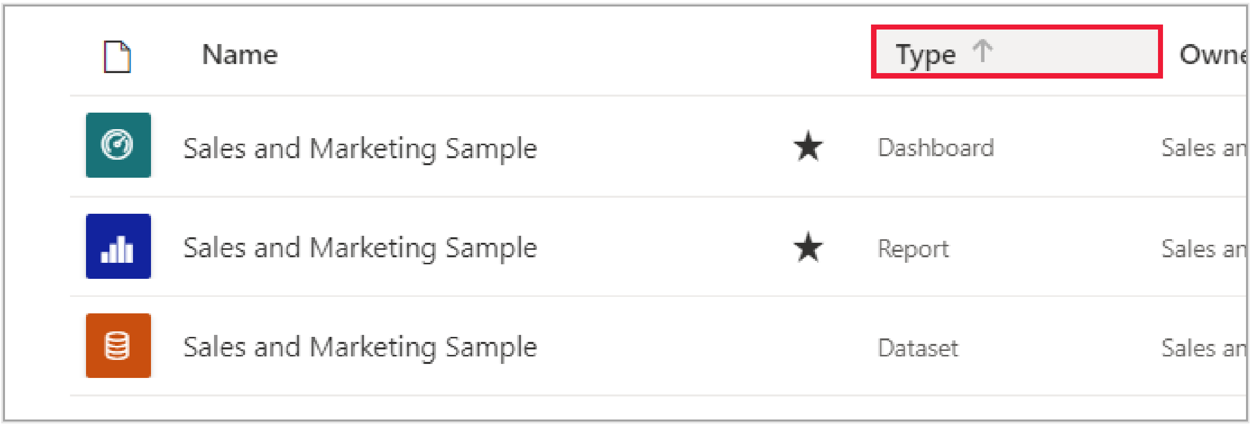
When you're new to the Power BI service, you only have a few pieces of content. But as colleagues begin sharing data with you and you begin downloading apps, you might end up with long lists of content. That's when you find searching and sorting helpful.

Search is available from almost every part of the Power BI service. Just look for the search box or search magnifying glass icon.

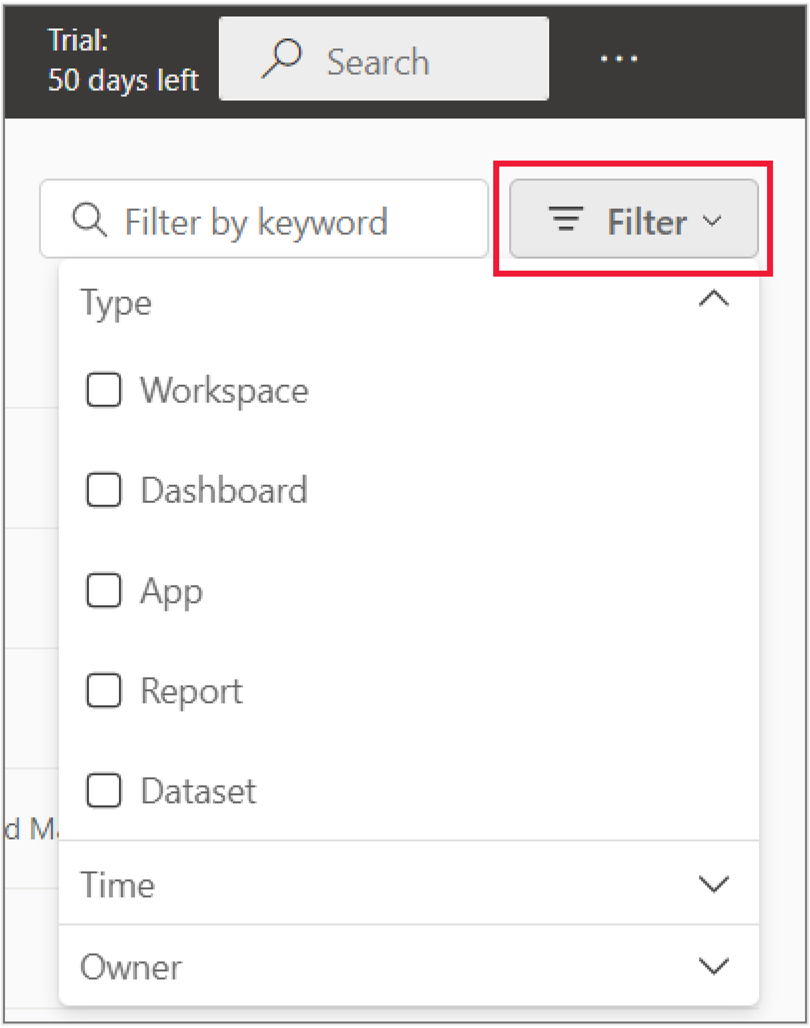
In the Search field, type all or part of the name of a dashboard, report, workbook, app, or owner. Power BI searches all of your content.



There are also many ways to sort content. Hover over column headers and look for arrows indicating that the column can be sorted. Not all columns can be sorted.



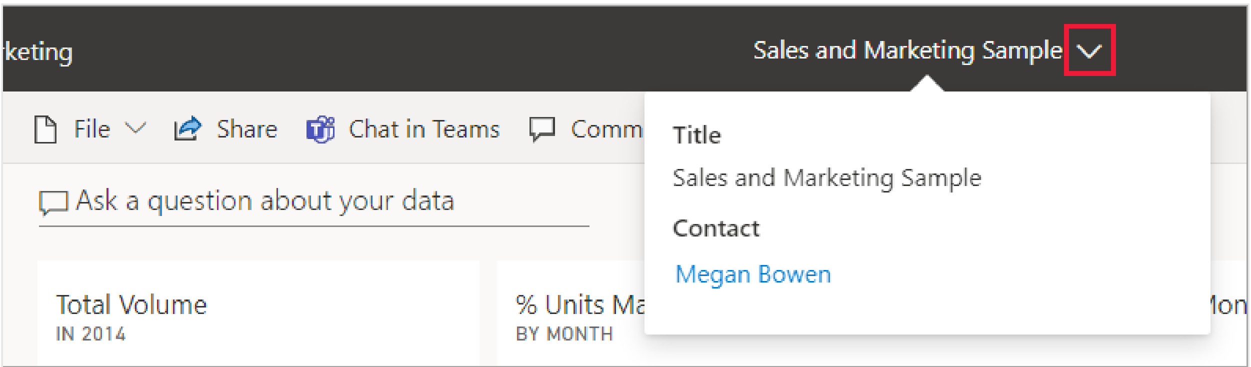
Or, look for the search **Filters** near the upper right corner of your content lists. Find content quickly by filtering categories, like type of content or owner.



For more information, see Navigation for Power BI business users: global search.

Find the owner

Let's end this tutorial with a helpful tip. If you have questions about a dashboard, report, app, or other content--you can look up the owner or contact email. With the content open, select the title menu to display the owner's contact link. The owner or contact may be a person or a group.

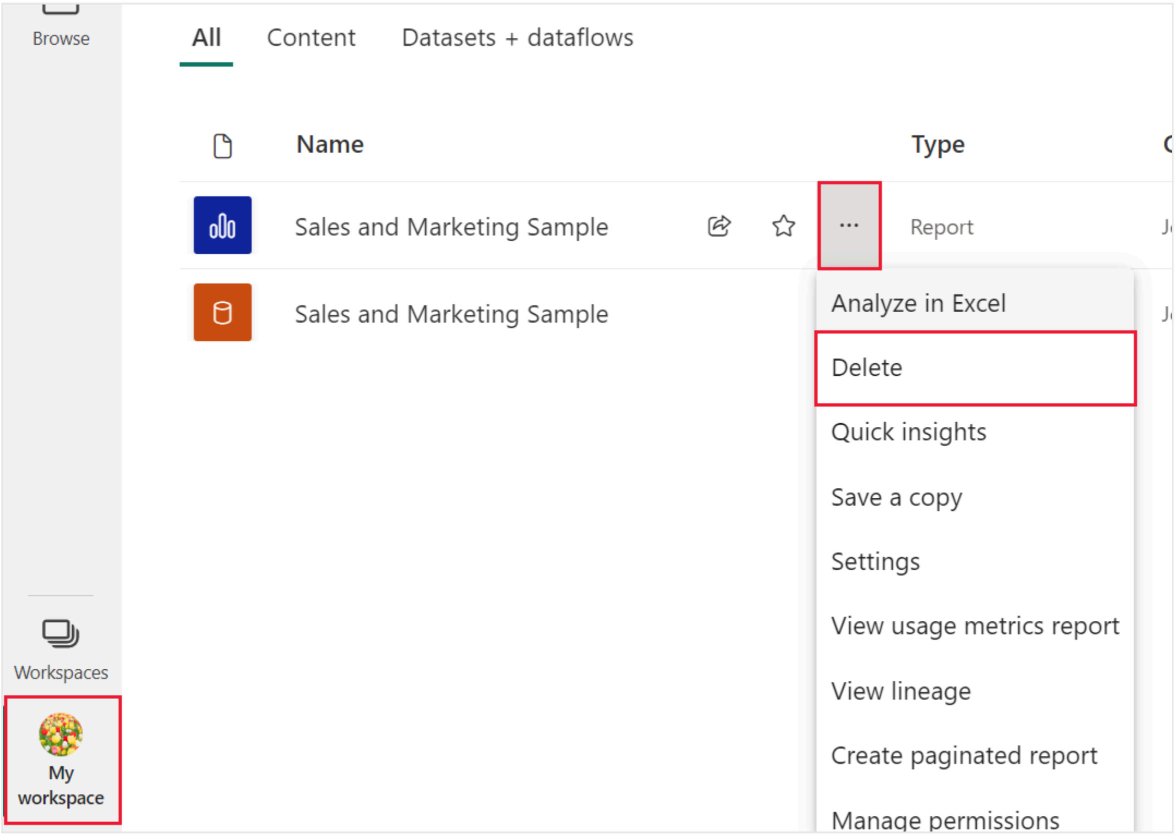


Clean up resources

You can now delete the sample report, dashboard, and semantic model from your **My workspace** if you wish.

1. Open the Power BI service (app.powerbi.com) and select **My workspace**.

2. Hover over the report and select **More options (...)** > **Delete**. Repeat to remove the dashboard and semantic model.



Related content

Learn about the Power BI capabilities for business users

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Find your dashboards, reports, and apps

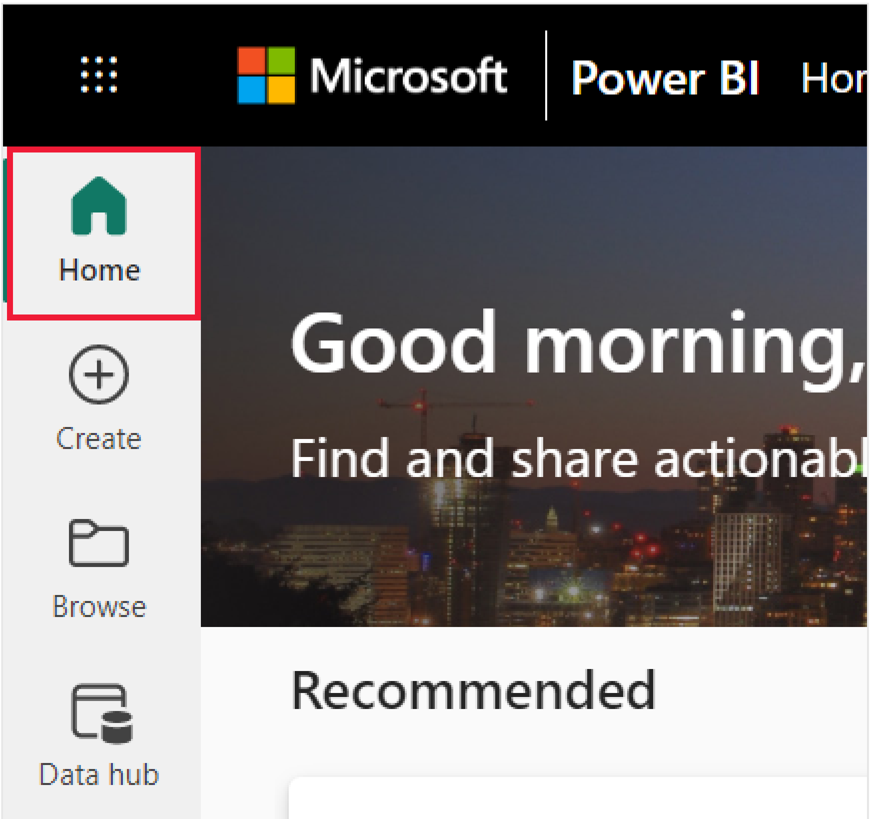
Article • 02/19/2024

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

In Power BI, the term *content* refers to visuals, apps, dashboards, and reports. Power BI designers create content and share that content with their colleagues. Your content is accessible and viewable in the Power BI service, and often the best place to start working in the Power BI service is from Power BI **Home**.

Explore Power BI Home

After you sign in to the Power BI service, select **Home** from the navigation pane.



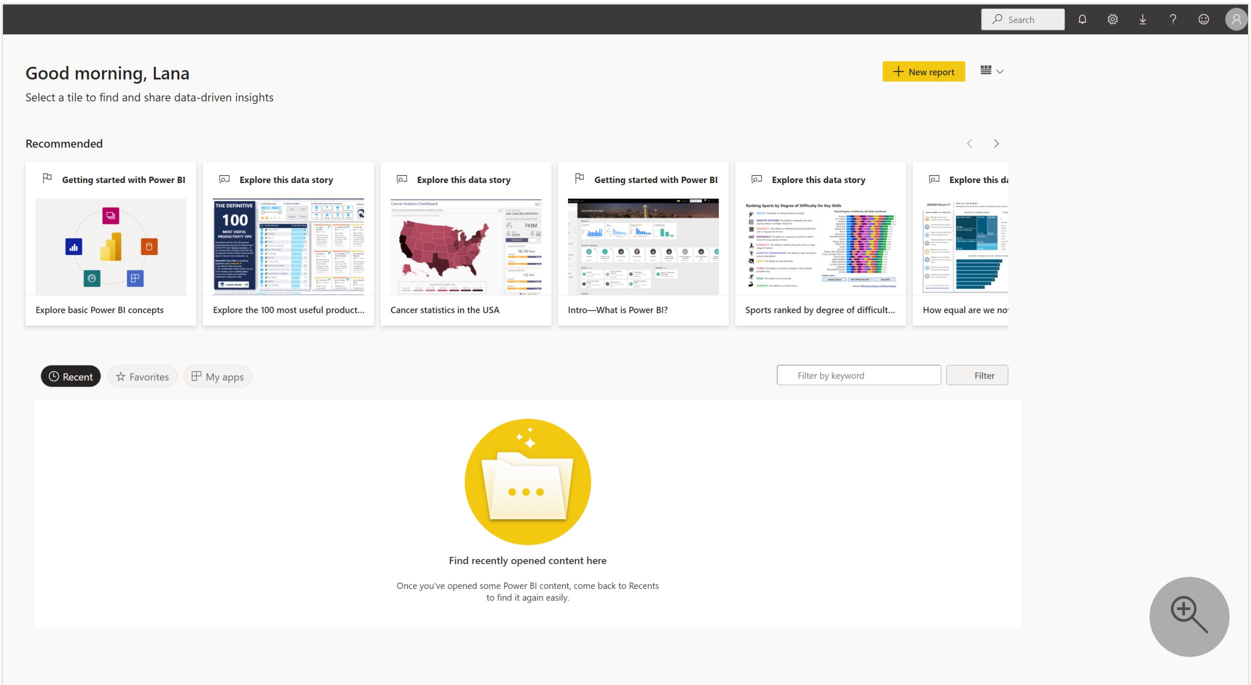
Your Home page opens. The layout and content on Home is different for every user. New users have less content, but that changes as they use Power BI more often. Only the content that you can access appears on your Home. For example, if you don't have permissions to a report, that report doesn't appear on Home.

Simplified layout and Expanded layout

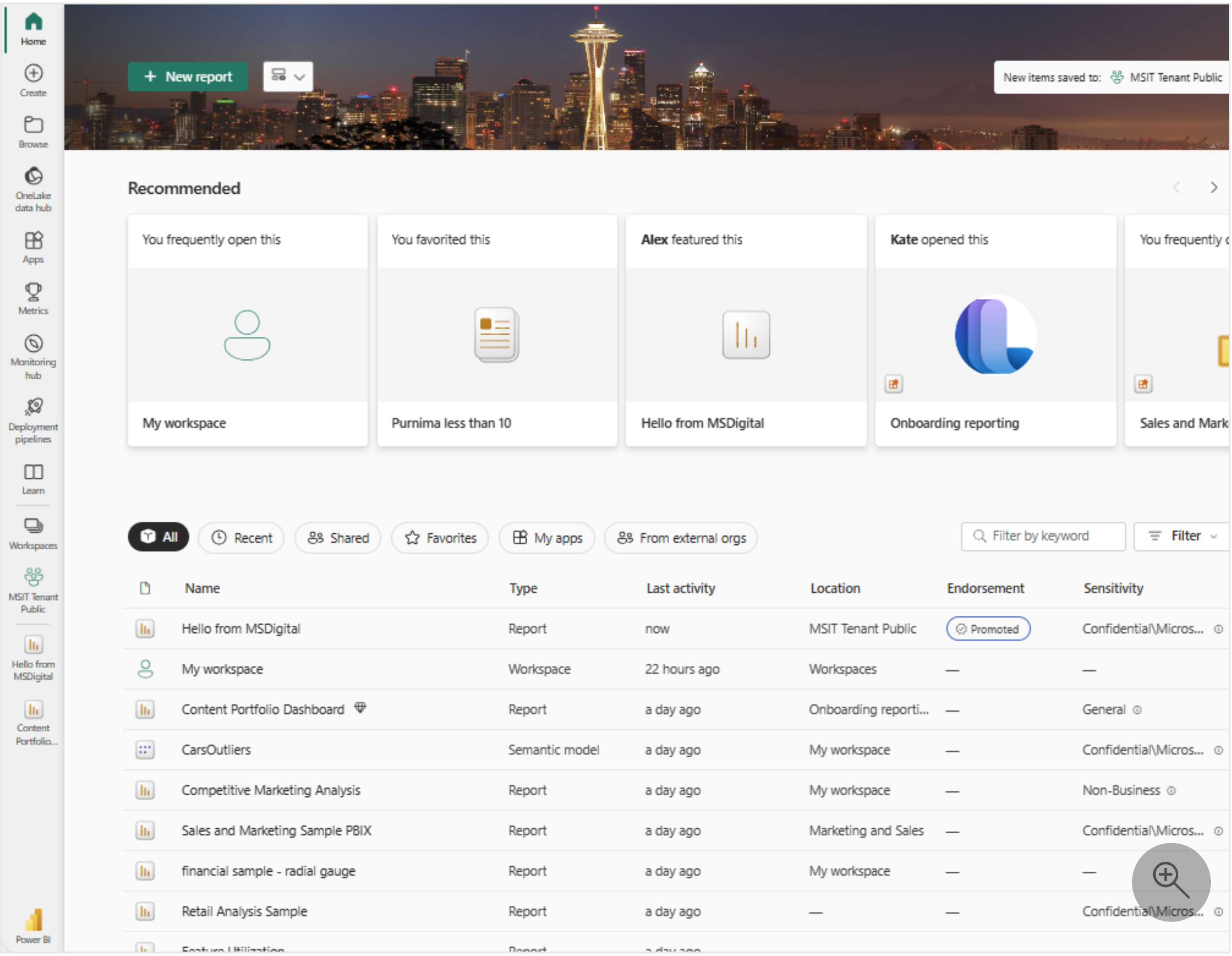
Your Home view depends on the layout you select. The **Simplified** view is the default. This view shows **Recommended** content at the top with tabs for **Recent**, **Favorites**, and **My apps**. **Recommended** content might include content that:

- Is marked as a favorite
- Is visited often
- Is visited often by colleagues in your organization
- Is featured on Home
- Is used frequently by your closest colleagues
- Is *getting started* content

The following example shows a **Simplified** layout for a new user.

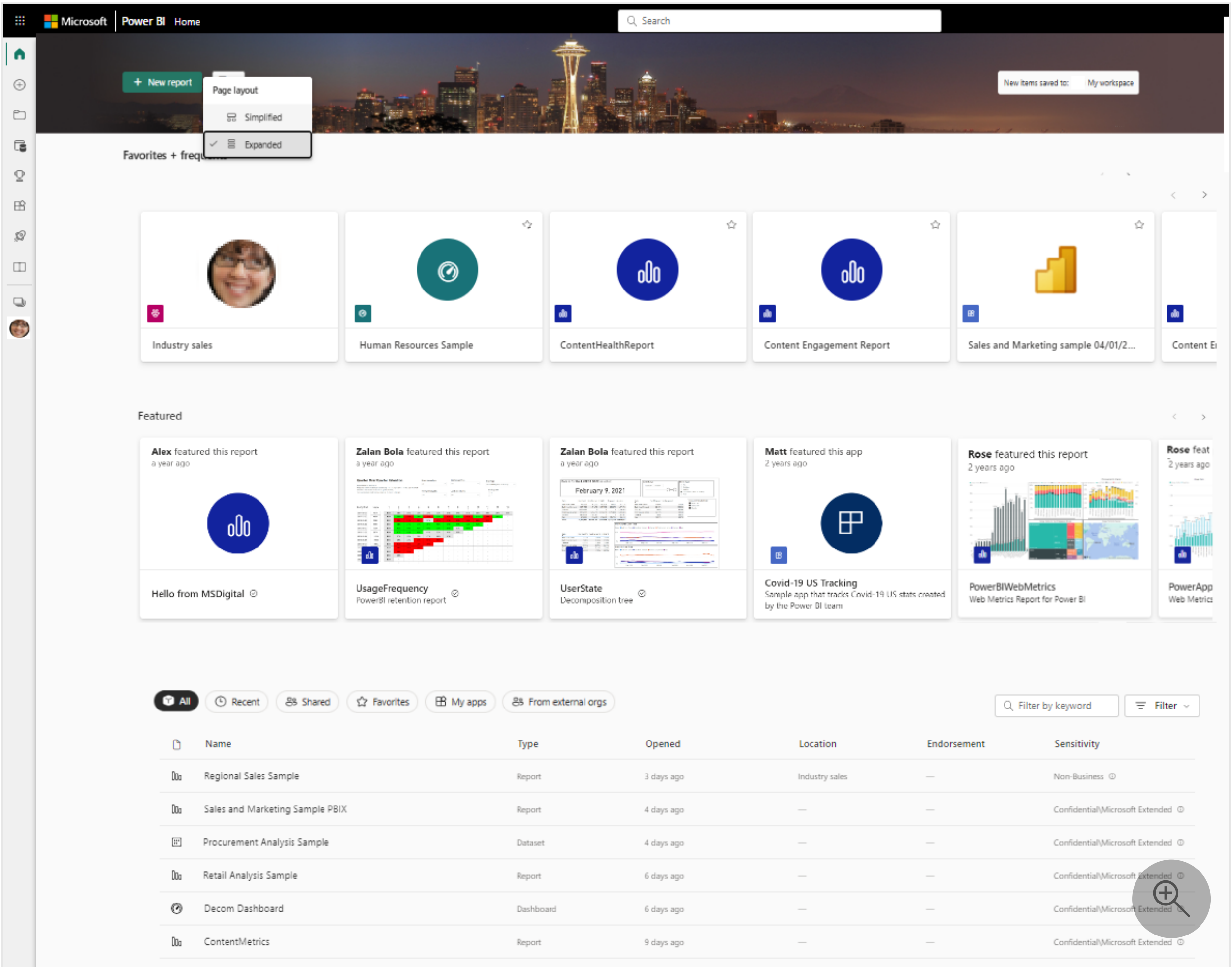


The next example shows a **Simplified** layout for an experienced user.



The **Expanded** layout includes a different set of information. If you select the **Expanded** view from the View menu, the expanded layout becomes your default Home layout.

The following example shows the **Expanded** view for an experienced user.



Locate content from your Home canvas

Power BI Home offers three ways of locating and viewing your content. All three approaches access the same pool of content in different ways. Searching is sometimes the easiest and quickest way to find something, while other times, selecting a card on the Home canvas is your best option.

- The Home canvas shows your favorite, frequent, recent, recommended, apps, and workspaces. If you're new to the Power BI service, you also have *getting started* content. To open content, select a card or an item in a list.
- Along the left side is a navigation pane, referred to as the nav pane. The nav pane has the same content as Home, but organized differently. Select **Browse** to see your recent, favorite, and shared content. Select **Data hub** to see data available to you from across your organization. Select **Apps** to see a list of apps available to you. And select **Learn** to see learning materials, sample reports, and training.
- At the top of Home, use the global search box to search for content by title, name, or keyword.

The following sections review these options for finding and viewing content.

Home canvas

On the Home canvas, view all content that you have permission to use. At first, you might not have much content, but that changes as you start to use Power BI with your colleagues.

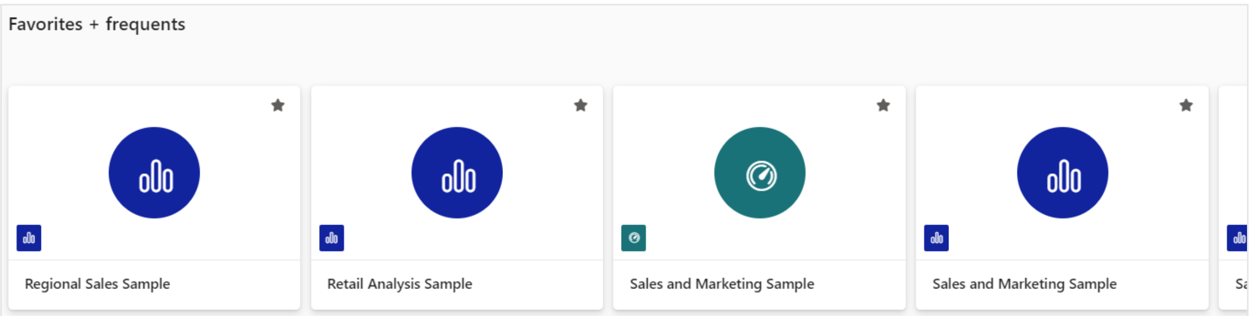
As you work in the Power BI service, you receive dashboards, reports, and apps from colleagues, and Power BI Home fills in with content.

Every Home landing page looks different. Power BI optimizes Home based on your usage, settings, and the layout you select.

Most important content at your fingertips

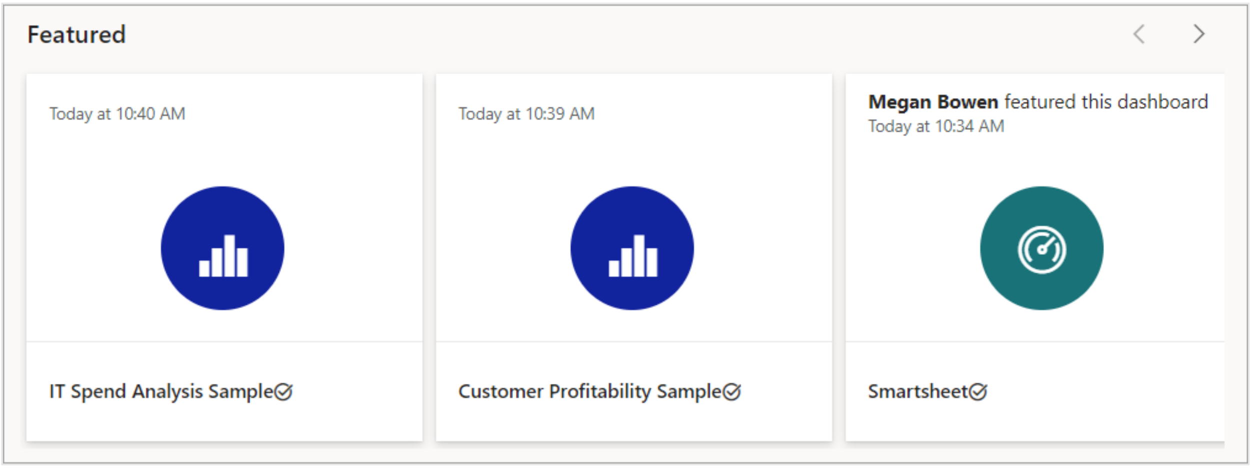
Favorites and frequents

The **Favorites + frequents** section of Home contains links to the content that you visited most often or that you tagged as a favorite. These cards have black stars because they're tagged as favorites.



Featured

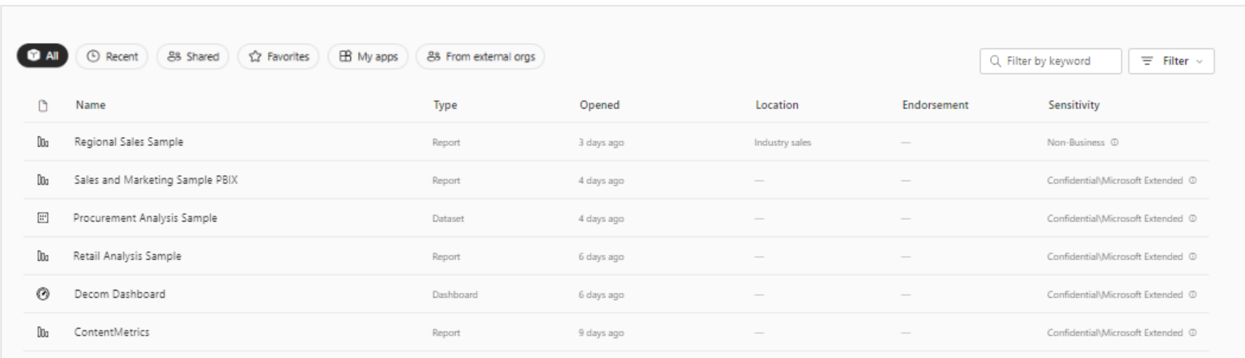
The **Featured** section contains content that your administrator or colleagues promoted to your Home. Typically, the content that they feature is important or helpful for you to do your job. In this example, the featured content includes metrics to track success. Unless it's been disabled by your administrator, any user with Administrator, Member, or Contributor permissions to a workspace can feature content on Home. For more information about featuring content on Home, see Feature content on colleagues' Power BI Home.



Categorized content

The next section of Home contains two or more tabbed lists.

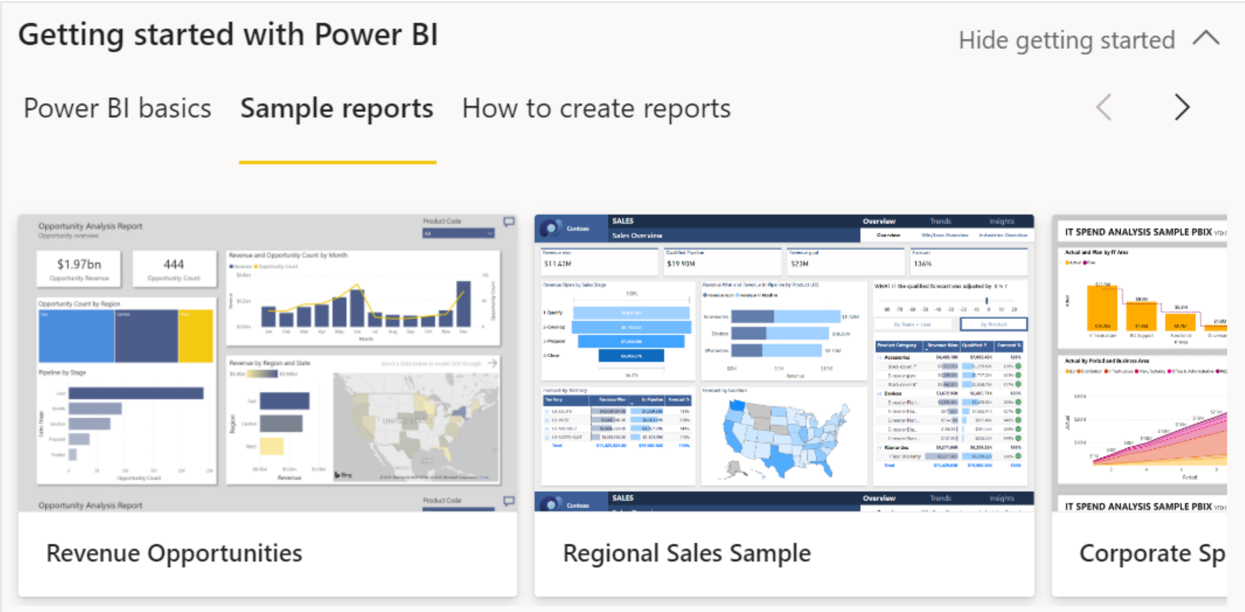
- **All** displays content from all the other tabs combined.
- **Recent** displays content you visited most recently. Notice the timestamp for each item.
- **Shared** displays content that your colleagues shared with you.
- **Favorites** displays content you tagged as a Favorites.
- **My apps** lists apps that are shared with you or that you downloaded from AppSource. The most recent apps are listed here.
- **From external orgs** (Preview) lists shared semantic models available from other tenants. Use this list to discover and connect to data from external providers.



Getting started learning resources

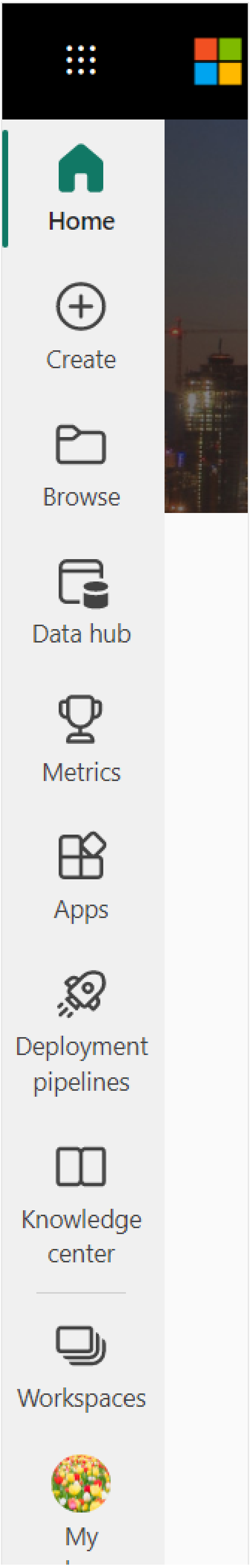
The exact resources that appear depend on your activity, settings, and Power BI administrator. If you're a new user, you might see *getting started* content. If you don't want to see *getting started* content on Home, select **Hide getting started**.

Getting started resources, samples, and other learning content is always available from the **Learn** tab in your nav pane.



Explore the navigation pane

The nav pane classifies your content in ways that help you find what you need quickly.


Home
Create
Browse
Data hub
Metrics
Apps
Deployment pipelines
Knowledge center
Workspaces
My

Use the nav pane to locate and move between dashboards, reports, apps, and other content. Occasionally, using the nav pane is the quickest way to get to content. The nav pane is there when you open your Home landing page and remains there as you open other areas of the Power BI service.

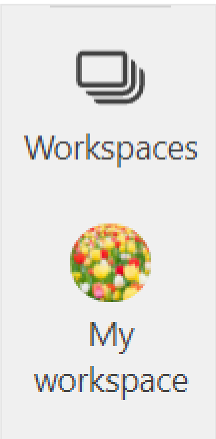
The nav pane organizes your content into containers that are similar to what you also see on the Home canvas. Select the **Browse** tab to display lists of your **Recent**, **Favorites**, and **Shared with me** content.

The number of visible buttons on the nav pane depends on space. To view hidden buttons, select the ellipses (...). As you open workspaces, they appear below **My workspace**. To remove the workspace from the nav pane, select the X. Selecting the X doesn't delete the workspace, it only removes it from the nav pane. To reopen a workspace, select it from **Workspaces**.

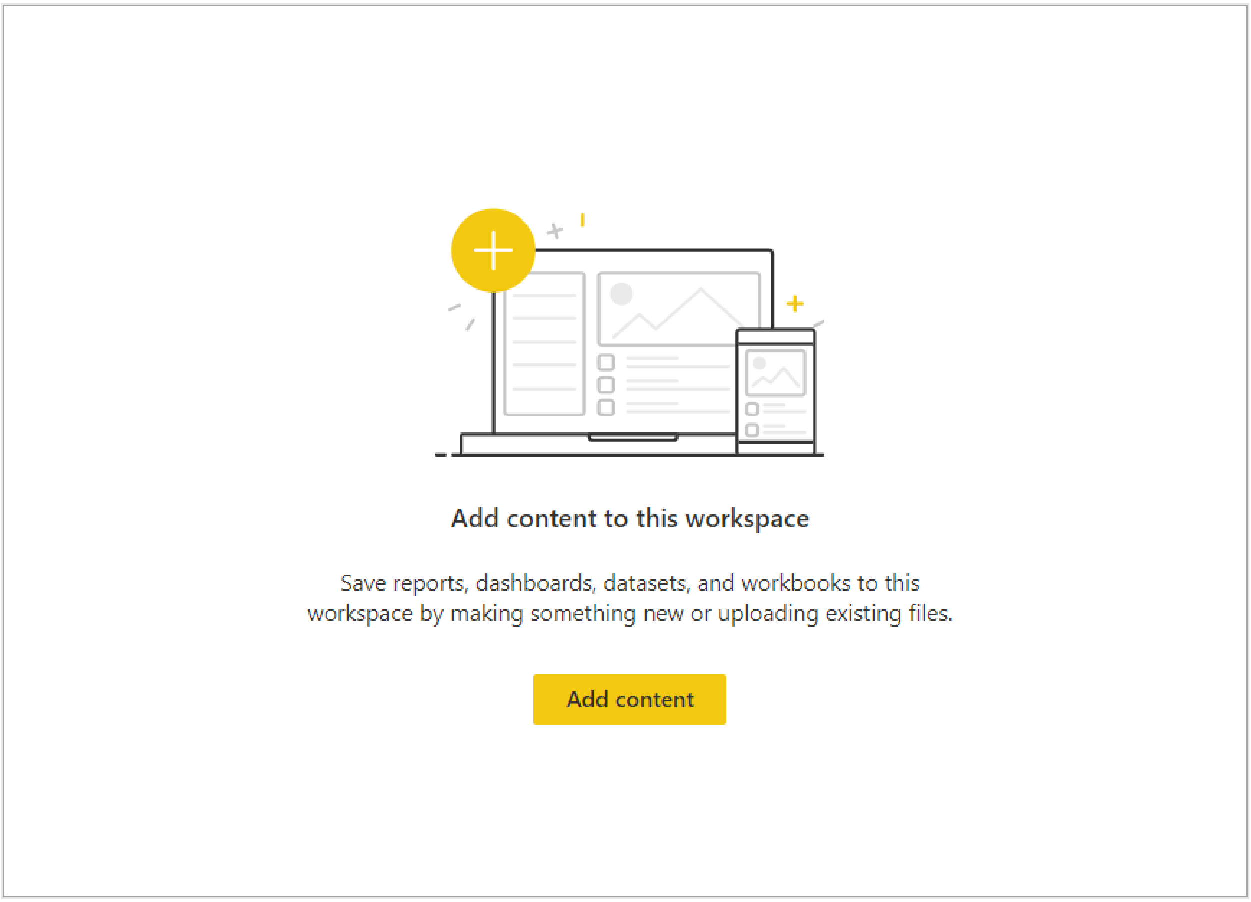
Quickly find the content you want on the nav pane. Content is organized similar to the Home canvas, but shows lists instead of cards.

Workspaces

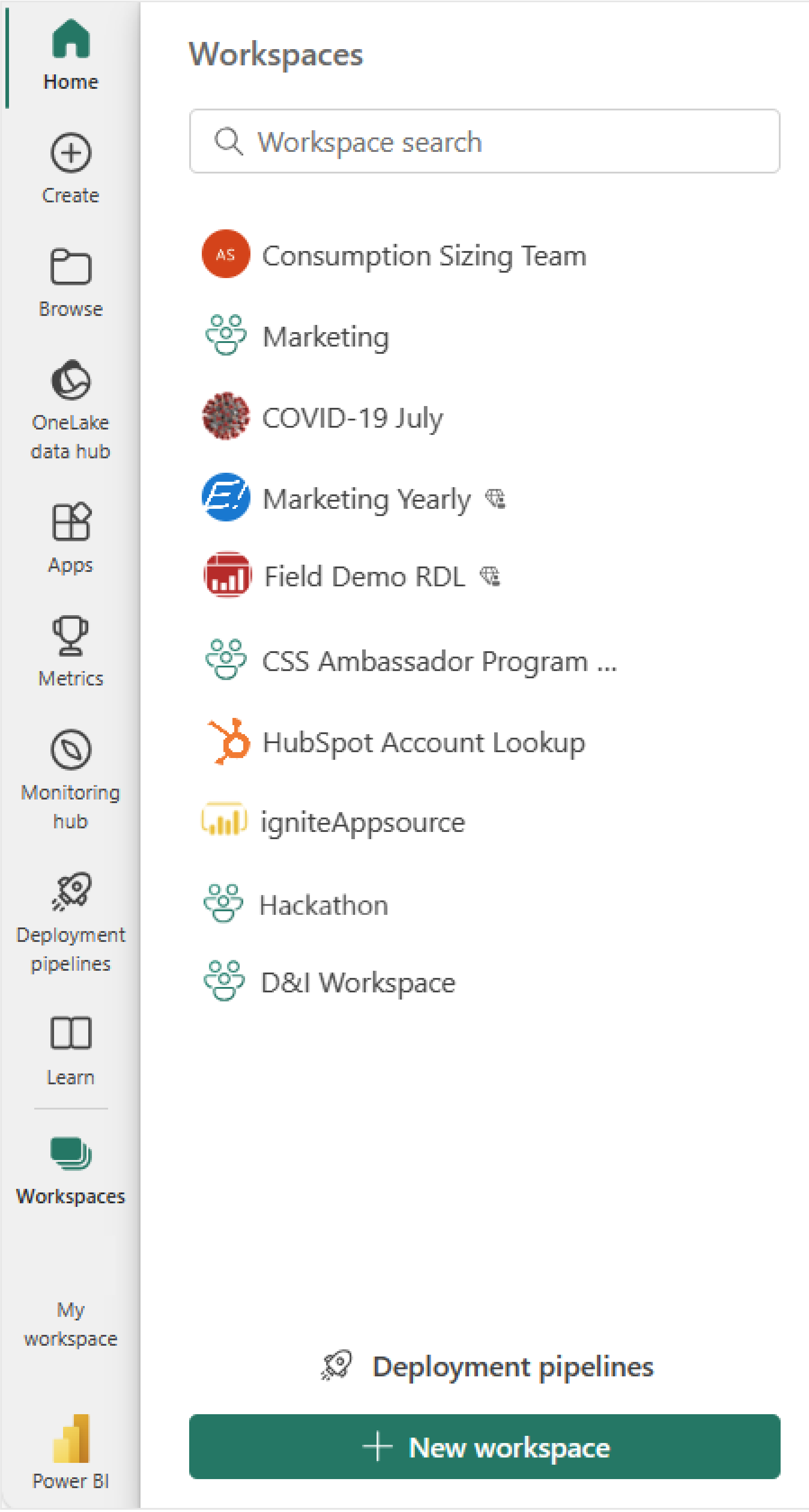
Every Power BI service user has one **My workspace**. **My workspace** only contains content that you download from Microsoft samples or that you create yourself. For many business users, **My workspace** is empty and remains empty.



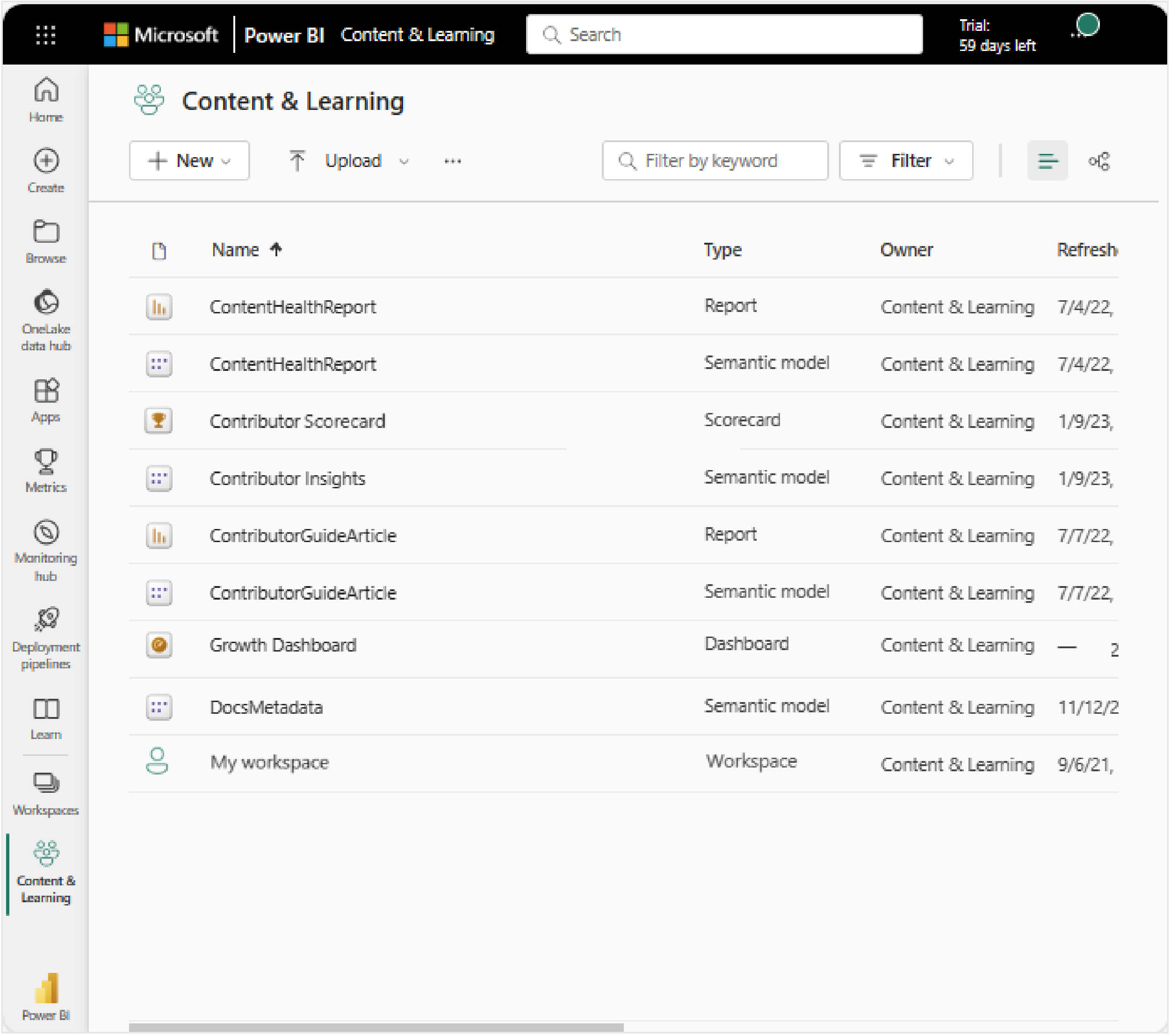
The following example shows what your workspace looks like if it's empty.



If someone in your organization adds you to a workspace, it appears in your list of workspaces. Over time, you might have more than one workspace. For example, your coworkers can add you to a workspace by giving you a role, such as Member, Contributor, or Viewer. If you download a template app from outside your organization, you get an app and a new workspace. You can also create workspaces if you have a paid license. To open a workspace, select it from the nav pane.



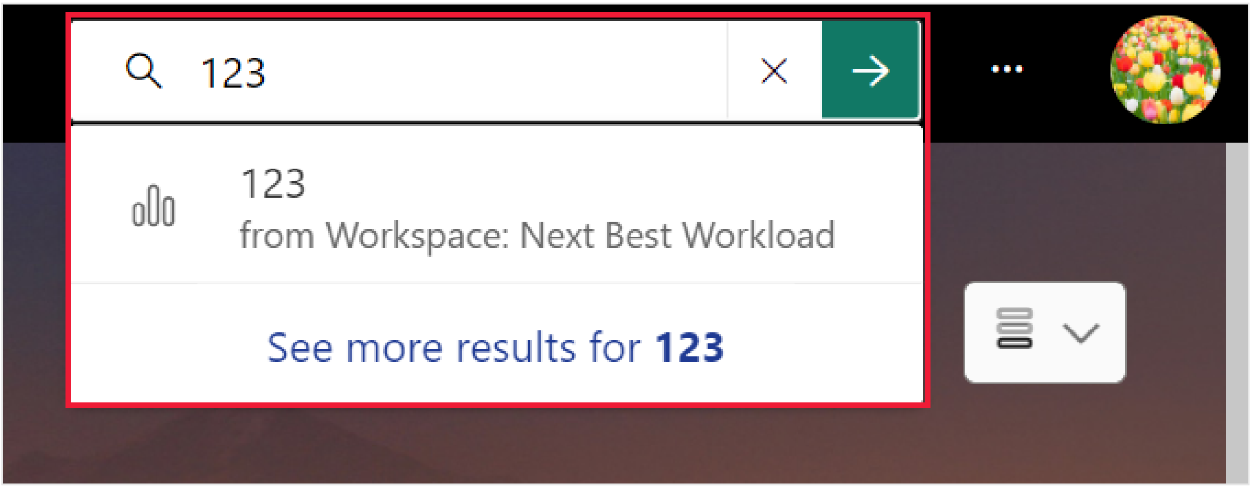
The workspace opens on your canvas, and the name of the workspace is listed on your nav pane. When you open a workspace, you can view its content. It includes content such as dashboards, reports, worksheets, and dataflows. In the following example, the **Content & Learning** workspace is open and it contains several types of content.



Search all your content

Sometimes, the fastest way to find your content is to search for it. For example, if a dashboard that you don't use often isn't showing up on your Home canvas. Or, if your colleague shared something with you, but you don't remember the title or what type of content they shared. Sometimes, you might have so much content that it's easier to search for it rather than scrolling or sorting.

To search, use the search field, which is in the upper right corner of the Home menu bar. Enter the full or partial name of the content you're looking for. You can also enter your colleague's name to search for content that they shared with you. The search finds matches in all the content that you own or have access to.



Related content

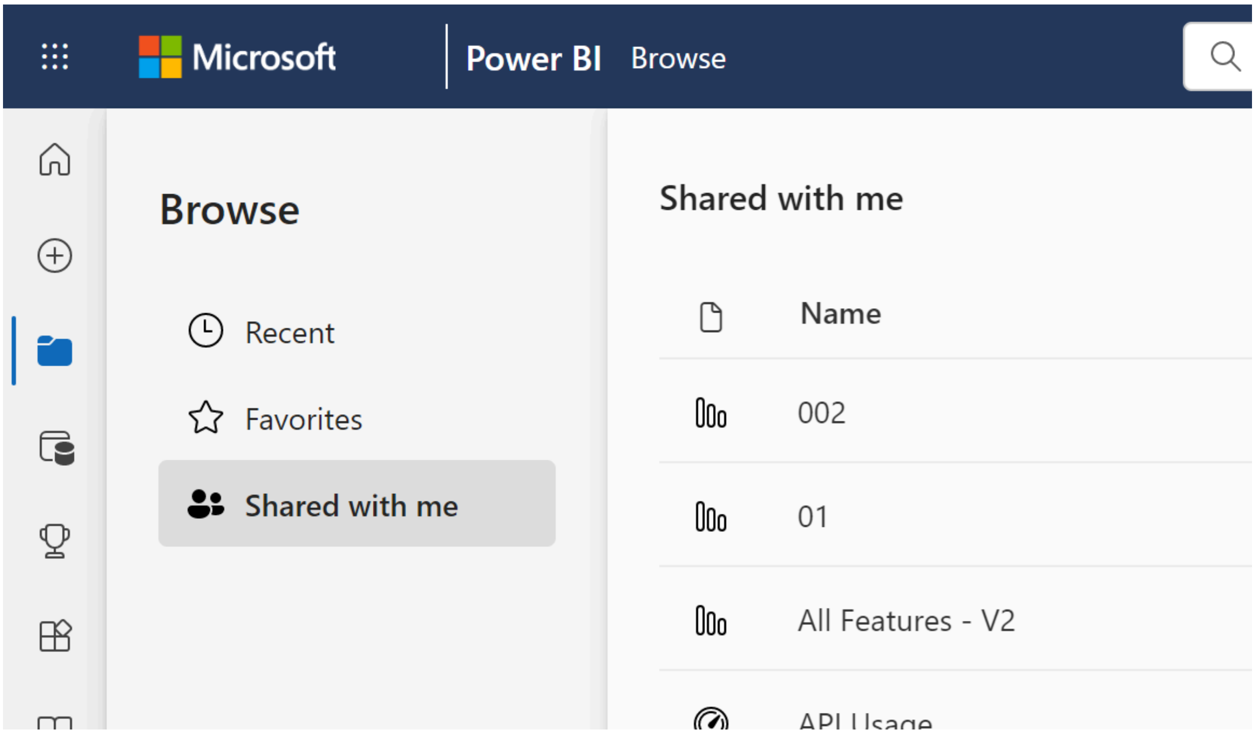
- Overview of the Power BI basic concepts

Interact with the Power BI service as a *Free user*

Article • 12/30/2024

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

As a Power BI service user with a free license, you explore content (such as reports, apps, scorecards, dashboards, and more) in order to make business decisions. That content is created by *designers* who have Power BI Pro or Premium Per User (PPU) licenses. In order to share it with users with free licenses, designers need to publish that content to a group workspace backed by a Premium capacity. Premium capacity provides the benefit of unlimited content sharing. Sometimes, designers share content by sending you links to content such as a Power BI app Apps in the Power BI service, and sometimes the content automatically installs and appears in Power BI under **Apps** or **Browse** > **Shared with me**. There are many different ways designers can share content. But this article is for Power BI users with a free license, and therefore only describes how "free users" receive and interact with content. For more information on other ways to share content, see Ways to share your work in Power BI.



In the previous article, you learned that what you can do with dashboards, reports, and apps (content) in the Power BI service depends on three things: your licenses, your roles and permissions, and where content is stored.

This article lists which features in the Power BI service are available to users with Free licenses.

> ⓘ **Note**
>
> In sovereign cloud environments with Power BI Premium capacity, all users can view content without needing an assigned license.

Quick review of terminology

Let's review some Power BI concepts before we get to the list. This will be a quick review and if you need more details, visit Licenses for consumers or Power BI basic concepts.

Workspaces and roles

Collaborating and sharing in workspaces requires that workspace owners, who have Pro or Premium Per User (PPU) licenses, assign you a *role* in that workspace.

Roles determine who can do what in that workspace. Free users are assigned the **Viewer** role. Being assigned any other role requires that a free user upgrade to Pro or PPU.

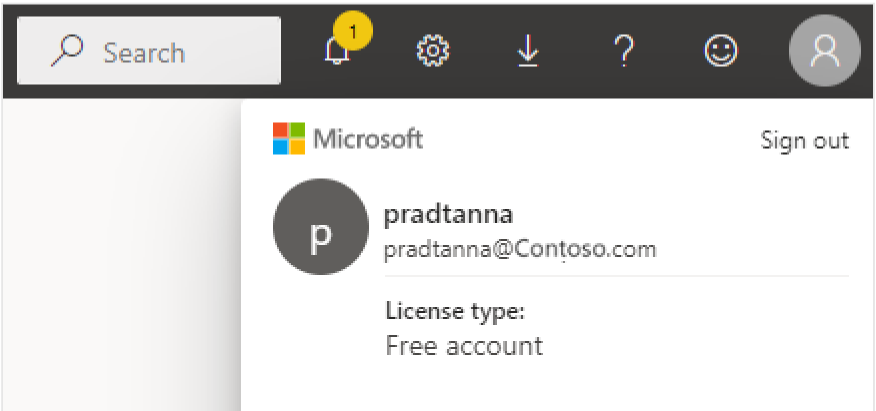
Premium capacity

When an organization has a Premium capacity subscription, admins and Pro users can assign workspaces to the Premium capacity. Content in workspaces hosted in Premium capacity can be accessed by users with any Power BI license as long as they have appropriate permissions to access the content.

Licenses

Each Power BI service user has at least one of the following: a free license, a Power BI Pro license, a Premium Per user license. As long as your colleagues use Premium capacity workspaces to share content, free users can view and interact with that content.

To find out what type of license is assigned to your account, select your profile picture from the page header in Power BI service. If **Pro account** or **Premium Per User account** is displayed, you can share content with other users. When **Free** is shown, you can only create content in My Workspace and consume content that is hosted in a Premium workspace. Select **View account** to see more details about your account.



Power BI feature list for users with a free license

The following chart identifies which tasks can be performed by a user with a **free** license interacting with content in their own **My Workspace** or in **Premium** capacity.

The first column represents a free user only working with content in **My workspace**. This user cannot collaborate with colleagues in the Power BI service. Colleagues cannot directly share content with this user, and this user cannot share from **My workspace**.

The second column represents a free user working with content in a workspace that is saved in Premium capacity. This free user:

- has a free user license type
- is part of an organization that has a Premium capacity subscription
- gets content (apps, dashboards, reports, etc.) from Pro or PPU users who share that content using group workspaces in Premium capacity.
- is assigned the **Viewer** role to those app workspaces.

> Note
>
> Content hosted in a PPU workspace can only be used by users with PPU licenses.

Legend

feature is available in the current scenario feature is not available in the current scenario MWO feature availability is limited to **My workspace**. Content in **My workspace** is for the owner's personal use and cannot be viewed by anyone else in Power BI. * access to this feature can be turned on or off by a Pro user or an admin.

Feature list

Expand table

Features	**Scenario 1: Free user who has no access to content hosted in Premium capacity.**	**Scenario 2: Free user with** Viewer **permissions to content stored in Premium capacity.**
Apps		
Installs automatically	✗	●*
Open	✗	●
Favorite	✗	●
Edit, update, republish	✗	✗
Create new app	✗	✗
AppSource: download and open	✗	✗
Organization store: download and open	✗	●
Reshare an app	✗	●
Workspaces in Premium capacity		
Create, edit, or delete workspace or content	✗	✗
Add endorsements	✗	✗
Open and view	✗	●
Read data stored in workspace dataflows	✗	●
Dashboards		
Receive, view, and interact with dashboards from colleagues	✗	●
Add alerts to tiles	MWO	●

Features	**Scenario 1: Free user who has no access to content hosted in Premium capacity.**	**Scenario 2: Free user with** Viewer **permissions to content stored in Premium capacity.**
View and respond to comments from others: add your own comments	✗	● *
Save a copy	MWO	✗
Copy visual as an image?	MWO	●
Create, edit, update, delete	MWO	✗
Export tile to .csv	MWO	●
Favorite	MWO	●
Full screen and focus modes	MWO	●
Global search	● *	● *
Insights on tiles	MWO	● *
Q&A: use on dashboard	MWO *	● *
Q&A: add featured and saved questions	✗	✗
Q&A: review asked questions	✗	✗
Pin tiles from Q&A or reports	MWO	✗
Print	MWO *	● *
Refresh	MWO	●
Reshare	✗	✗
Subscribe yourself	MWO *	● *
Subscribe others	✗	✗
View dashboards that have been embedded into	✗	●

Features	**Scenario 1: Free user who has no access to content hosted in Premium capacity.**	**Scenario 2: Free user with** Viewer **permissions to content stored in Premium capacity.**
PowerApps or SharePoint pages		
Datasets		
Add, delete, edit	MWO	✗
Create a report in another workspace based on a dataset in this workspace	✗	✗
Insights on datasets	MWO	✗
Schedule refresh	MWO	✗
Analyze in Excel	MWO	● *
Create a report	MWO	✗
Create a paginated report	MWO	✗
Share	✗	✗
Manage permissions	✗	✗
Save a copy	✗	✗
Create from template	✗	✗
Reports		
Receive reports from colleagues	✗	●
Analyze report in Excel	MWO *	● *
View bookmarks created by others, and add your own bookmarks	✗	●
View and respond to comments from others: add new comments	✗	●

Features	**Scenario 1: Free user who has no access to content hosted in Premium capacity.**	**Scenario 2: Free user with** Viewer **permissions to content stored in Premium capacity.**
Change display dimensions	MWO	●
Save a copy	✗	✗
Copy visual as an image*		
Cross-highlight and cross-filter report visuals	MWO	●
Drill	MWO	●
Drillthrough	MWO *	● *
Embed (publish to web, public)	MWO *	✗
Export summarized data from report visuals*	MWO	●
Export underlying data from report visuals*	MWO	●
Favorite the report	MWO	●
Filters: change types	MWO *	● *
Filters: interact	MWO	●
Filters: persistent	MWO *	● *
Search on the filter pane	MWO *	● *
Full screen and focus modes	MWO	●
Insights on reports[1]	MWO	●
Lineage view	MWO	✗
Export to PDF*	MWO	●
Performance Inspector	MWO	●
Export to PowerPoint*	MWO	●

Features	**Scenario 1: Free user who has no access to content hosted in Premium capacity.**	**Scenario 2: Free user with** Viewer **permissions to content stored in Premium capacity.**
Promote content to Home	✗	✗
Print report pages*	●	●
Interact with Q&A visual	MWO	●
QR Code	MWO	●
Refresh	MWO	●
Share content with external users	✗	✗
Share: allow others to reshare items	✗	✗
Show as table (show data)	MWO	●
Slicers: add or delete	MWO	✗
Interact with slicers	MWO	●
Sort report visuals	MWO	●
Subscribe yourself to reports*	MWO	●
Subscribe others to reports	✗	✗
View related	MWO	●
View reports that have been embedded into PowerApps or SharePoint pages	✗	●
Visuals: change types in reports	MWO *	● *
Change visual interactions	MWO	✗
Visuals: add new	MWO	✗
Visuals: add new fields	MWO	✗

Features	**Scenario 1: Free user who has no access to content hosted in Premium capacity.**	**Scenario 2: Free user with** Viewer **permissions to content stored in Premium capacity.**
Visuals: change type	MWO	
Visuals: hover to reveal details and tooltips	MWO	

Related content

- Power BI for *business users*

Feedback

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Provide product feedback | Ask the community

Sign in to the Power BI service

Article • 01/11/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

This article is for Power BI business users who are signing in to the Power BI service for the first time. A *business user* is someone who uses the data and visualizations in reports that are created by their colleagues. A business user relies on this data to make data-driven business intelligence decisions.

Power BI accounts

Before you can sign in to the Power BI service, you need an account and a license. There are several ways to get an account and license. This article describes a common scenario where employees at a corporation use their work email to sign in to their Power BI account. And, the employees use licenses that were purchased and allocated for them by their corporation.

Sign in for the first time

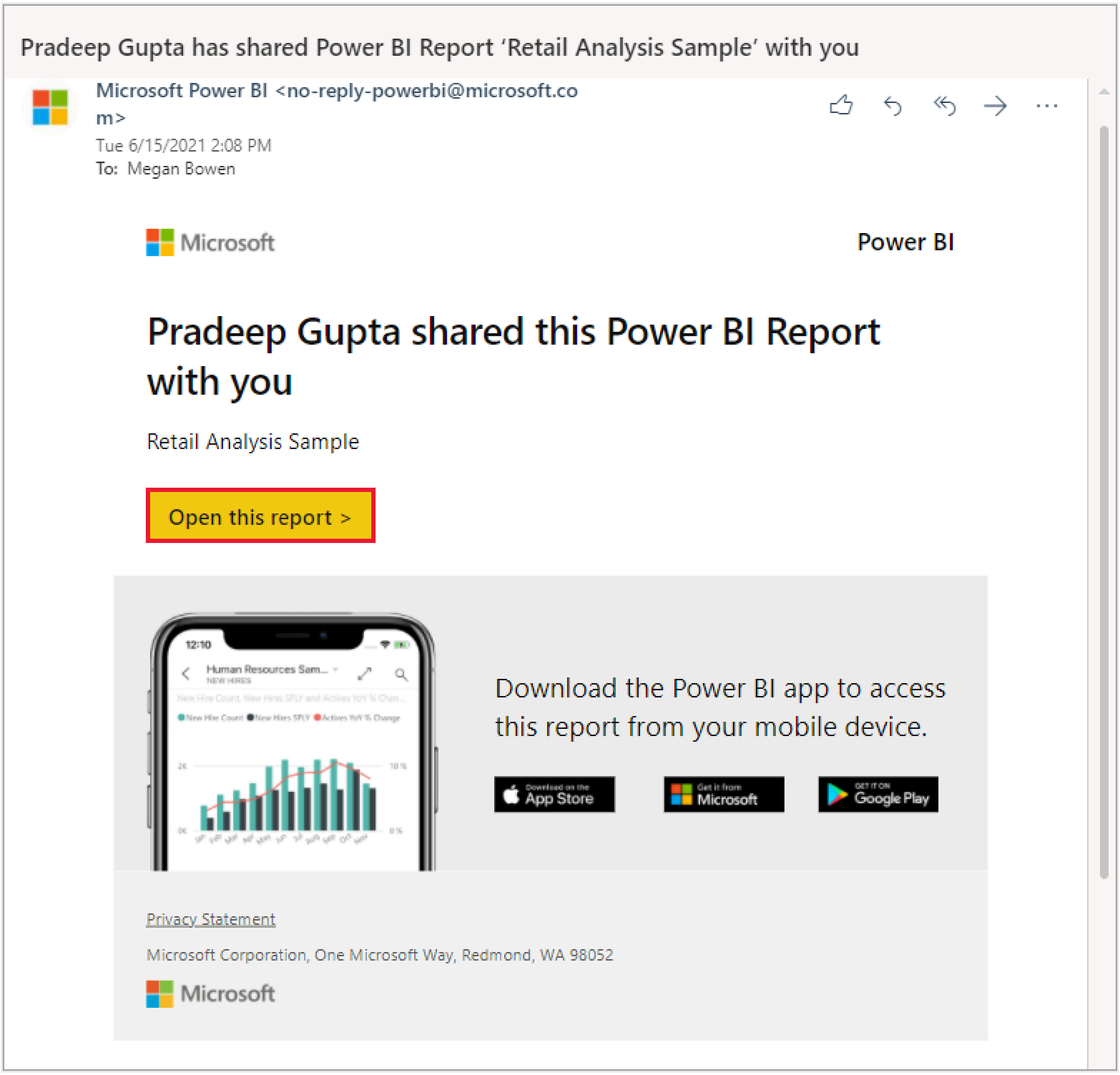
Use your work email to log in to the Power BI service for the first time. Follow the steps here for general guidance. The exact screens may vary from what you see here, depending on your version of Microsoft software, browser version, and how your admin set up your license and environment.

> ⓘ **Important**
>
> Use a work or school account to sign in to the Power BI service. Commercial accounts like @hotmail and @gmail aren't supported.

Step 1: Open the Power BI service

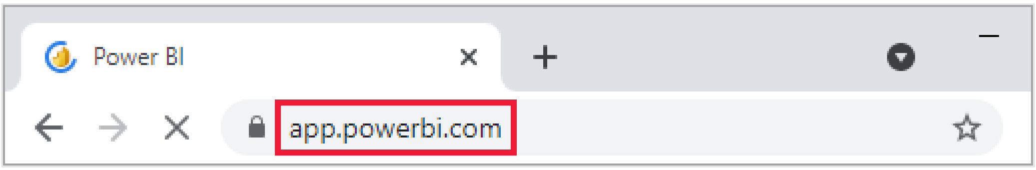
The Power BI service runs in a browser. There are several ways to get started.

- If you receive an email from a colleague, with a link to a dashboard or report, select the link to **Open this report** or **Open this dashboard**.



- Sometimes, your administrator assigns you a Power BI license and sends you an email with this information. Look in your inbox for a welcome email and follow the instructions to sign in for the first time. Use this same email account for your sign-in.

- Otherwise, open your favorite browser and type **app.powerbi.com**.

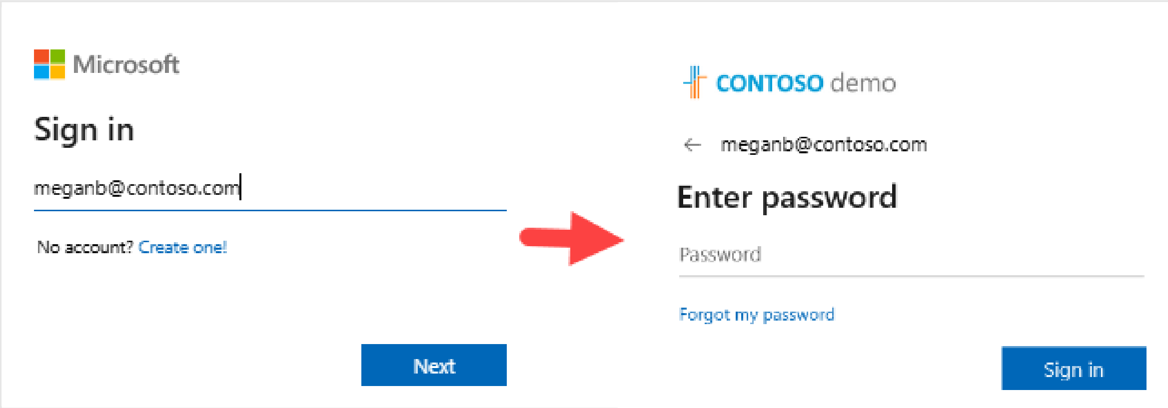


Step 2: Type your email address

1. The first time you sign in, Microsoft checks to see if you already have a Microsoft account. Enter your work or school email address.

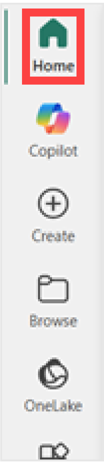
2. Enter your Microsoft account password. It's the same email and password that you use for other Microsoft products, like Outlook and Office. Depending on how your

account is set up, you might be prompted to enter a code sent to your email or mobile device.

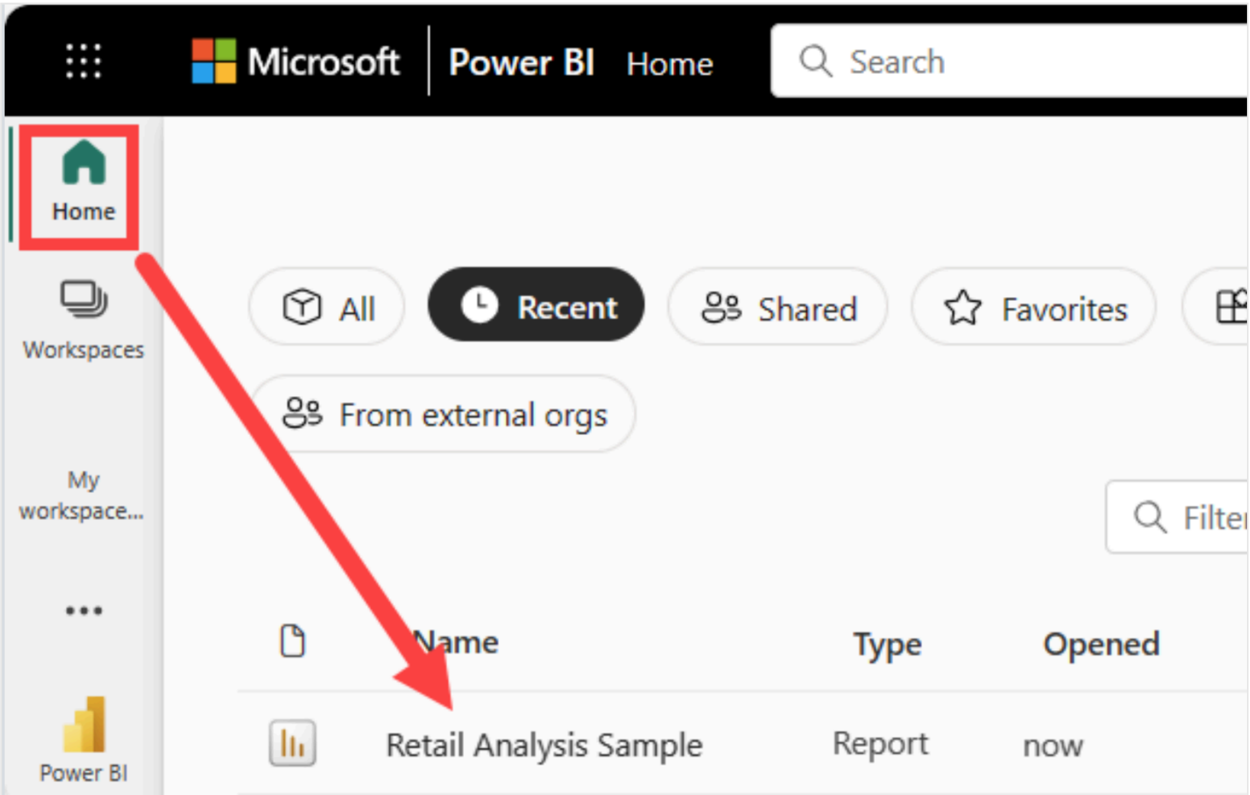


Step 3: Review your Home landing page

On your first visit, Power BI opens your **Home** landing page. If **Home** doesn't open, select it from the navigation pane.



On Home, you see all the content that you have permission to use. There might not be much content at first, but that changes as you continue to use Power BI with your colleagues. If your colleagues have already shared content with you, you find it under **Recent** on **Home**.

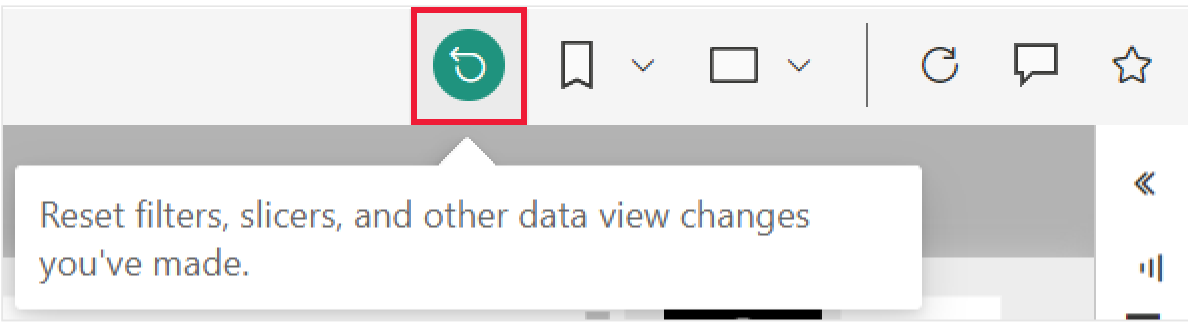


Reports shared with you are also stored under **Shared with me** on the **Browse** page.

Safely interact with content

As a business user, others share content with you and you interact with that content to view data and make business decisions. As you filter, slice, subscribe, export, and resize, your changes don't impact the underlying semantic model or the original shared content. Power BI is a safe space where you can explore and experiment.

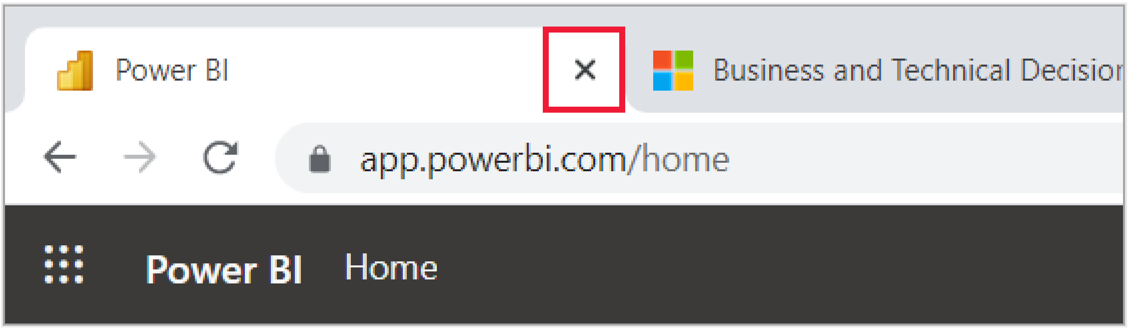
That doesn't mean that you can't save your changes. You can, but those changes only affect your view of the content. And you can always reset your changes back to the default view by selecting **Reset**.



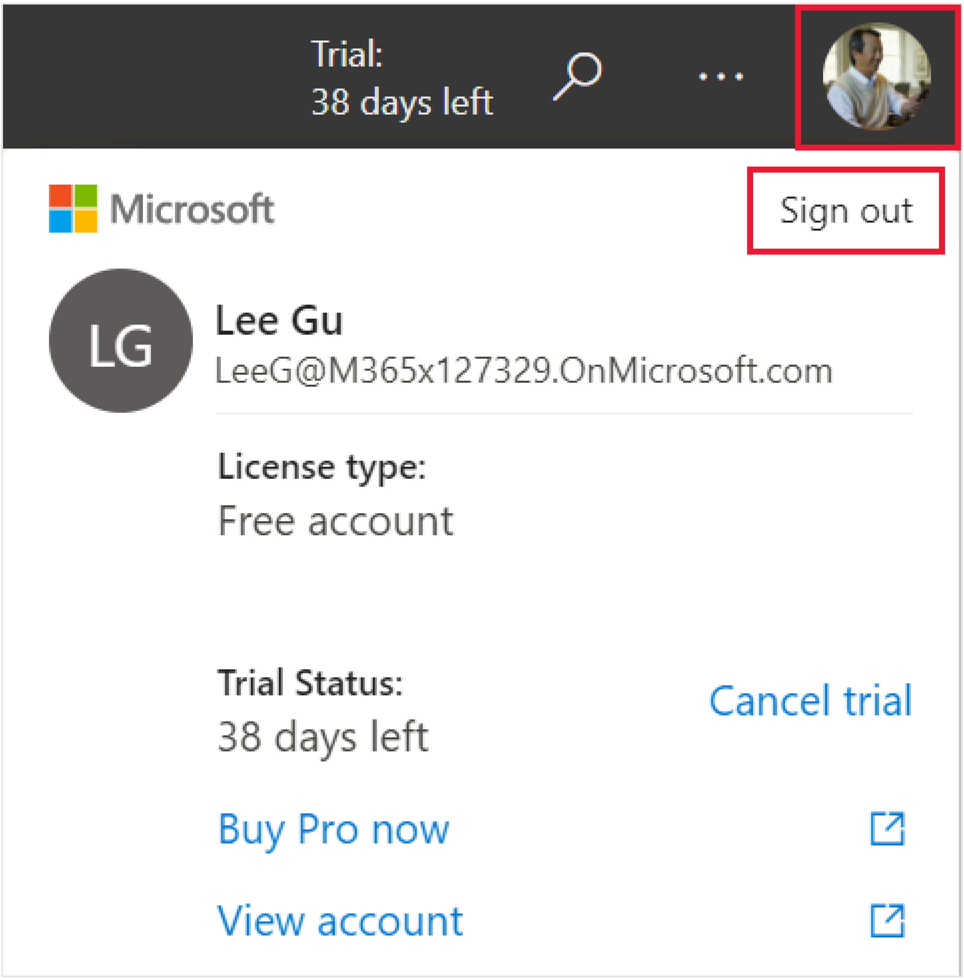
Sign out of the Power BI service

When you close or sign out of the Power BI service, your changes are saved. You can pick up where you left off.

To close Power BI, close the browser tab where you're working.



If you share a computer, we recommend signing out each time you close Power BI. In the upper right corner, select your profile picture, and then choose **Sign out**.



Considerations and limitations

- If you don't have a work or school account, you can still sign up for Power BI with a Microsoft 365 trial.
- If you signed up for Power BI as an individual, sign in with the email address that you used to sign up.

- Some people use more than one Power BI account. If you do, you're prompted to select an account from a list when signing in.
- If sign up is disabled, use this article to get help.

Related content

- Power BI Basic concepts

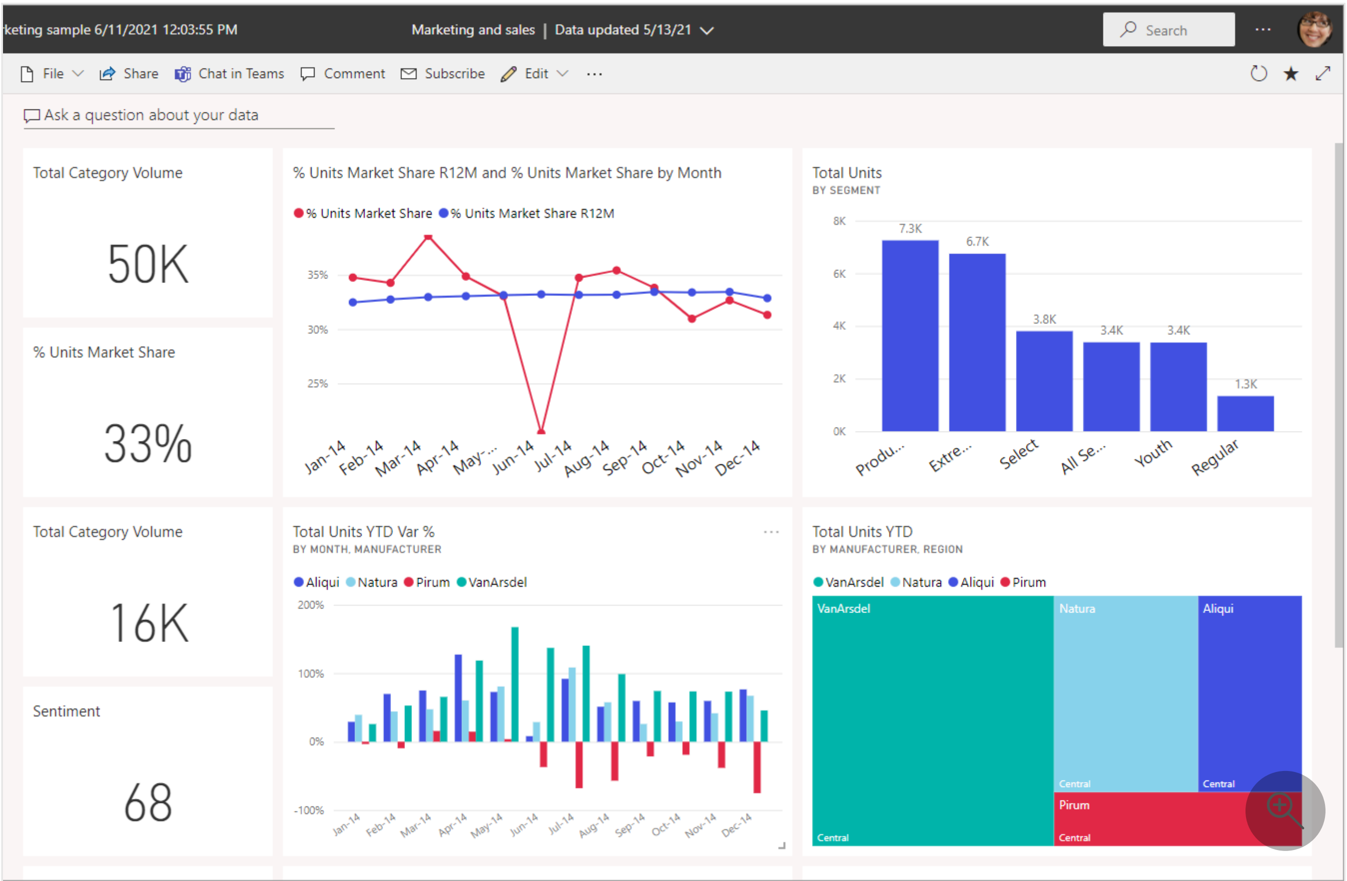
Interact with visuals in reports, dashboards, and apps

04/14/2025

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

At its most basic, a visualization (or visual) is a chart built by Power BI designers using the data in reports and semantic models.

You can find visuals on dashboards and in reports, and you can create them instantly using Power BI Q&A. When a designer creates a visual in a report, they can pin it to a dashboard. For more information, see Dashboard tiles in Power BI. The following example shows a dashboard with eight tiles.



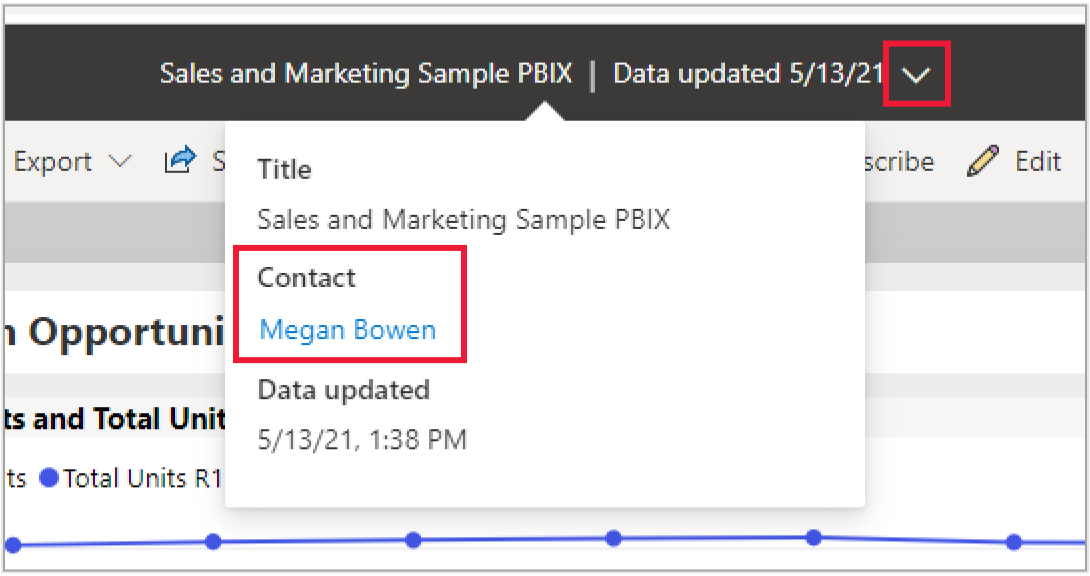
> 💡 **Tip**
>
> We recommend reading the overview topic Basics of the Power BI service before reading this more detailed content.

What can I do with visuals

Report and dashboard designers create and share visuals with colleagues. The designer assigns different permissions to their colleagues, depending on how each colleague uses the report or dashboard. For example, the designer can assign a *developer* different permissions than a *business user*.

The following table lists the most common tasks for a business user with links to step-by-step instructions. Business users have many options for interacting with visuals to uncover insights and make data-driven business decisions.

The administrator or the designer can disable your ability to see or use these features. And some of these features only work on specific visual types. If you have any questions, contact your administrator or the owner of the report or dashboard. To find the owner, select the dashboard or report dropdown.



ⓘ **Important**

Q&A is Power BI's natural language search tool. You type a question using natural language, and Q&A answers the question in the form of a visual. Q&A allows business users to create their own visuals instantly. However, you can't save the visuals you create with Q&A. But if there's something specific you want to learn from the data, and the designer didn't include it in a report or on a dashboard, Q&A is a great option. For more information, see [Q&A for Power BI business users](#).

Expand table

Task	On a dashboard	In a report	In Q&A
Add comments to a visual or start a conversation with colleagues about it.	Yes	Yes	No
Open and explore the report where the visual was created.	Yes	n/a	No
View all the filters and slicers affecting the visual.	Yes, if you open in focus mode.	Yes	No
Open and explore a visual in Q&A (if the designer used Q&A to create the visual).	Yes	n/a	n/a
Explore and create a visual in Q&A (visuals created with Q&A can't be saved).	Yes	If designer adds Q&A to the report.	Yes
Use Power BI to find interesting facts or trends (automatically generated visuals are called insights).	Yes, for tiles.	No	No
View one visual at a time using focus mode.	Yes, for tiles.	Yes, for visuals.	n/a
Check the visual's timestamp and see the latest refresh time.	Yes	Yes	n/a
View one visual at a time, without borders or nav panes, using full screen mode.	Yes	Yes	By default
How to Print from the Power BI service.	Yes	Yes	No
Dig into the visual by adding and modifying visual filters.	No	Yes	No
Hover over a visual to reveal more details and tooltips.	Yes	Yes	Yes
How visuals cross-filter and cross-highlight each other in a Power BI report.	No	Yes	n/a
Show the data used to create the visual.	No	Yes	No
Change the way the visual is sorted.	No	Yes	You can change sort by rewording the question.
Add a spotlight to a visual.	No	Yes	No

Task	On a dashboard	In a report	In Q&A
Export data to Excel from a Power BI dashboard tile or a report visual.	Yes	Yes	No
Create an alert to notify you when a value crosses a limit you set.	Yes	No	No
Cross filter and cross highlight the other visuals on the page.	No	Yes	n/a
Drill a visual that has a hierarchy.	No	Yes	No

Related content

- Basics of the Power BI service
- Open a report in the Power BI service
- Visualization types in Power BI

Licenses and subscriptions for business users

06/30/2025

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

As a business user, you use the Power BI service to explore reports and dashboards so you can make data-backed business decisions. If you've been using Power BI for a while, you probably discovered that there are some features that only work if you have a certain type of license, subscription, or permissions.

What you can do in the Power BI service depends on three things:

- The type of license and subscription you're using
- The type of workspace that stores the content
- The roles and permissions you have in a workspace

This article describes the capabilities of each license type and how the location where content is stored affects what you can do with it. You learn how to look up your license and subscription information, and figure out where your content is stored. For more information about workspace *roles* and *permissions*, see Collaborate in workspaces.

Licenses

Each user of the Power BI service has either a *free* license, a *Pro* license, or a *Premium per-user (PPU)* license. If you're a Power BI business user, you're probably using a free license managed by your Power BI administrator.

It's possible to have more than one license at the same time. The service always delivers you the experience equal to the most permissive license you currently have.

> **Note**
>
> - A paid license, either Power BI Pro or Premium Per User (PPU), is required for publishing content to a Power BI app workspace, editing content, and for sharing content with others.

For a more detailed overview of licenses and subscriptions, see License types for Power BI and Fabric.

Power BI Premium capacity subscription

Premium is an organizational subscription that provides a way to store content in a virtual container called a Power BI Premium capacity. With Premium capacity, anyone granted permissions, whether they're inside or outside your organization, can access content stored in this virtual container. This access includes users with free licenses.

Premium capacity enables widespread distribution of content by users with paid licenses without requiring paid licenses for the recipients who view the content. The person who is creating the content in the Premium capacity uses a paid license to connect to data sources, model data, and create reports, dashboards, and apps that are saved to a workspace in Premium capacity. Users without a paid license can access a workspace that's in Power BI Premium capacity, as long as they have a role in that workspace. When users with a free license attempt to access a workspace in Premium capacity, and they aren't assigned a role in that workspace, they receive a prompt to upgrade their license to Pro, PPU, or a trial.

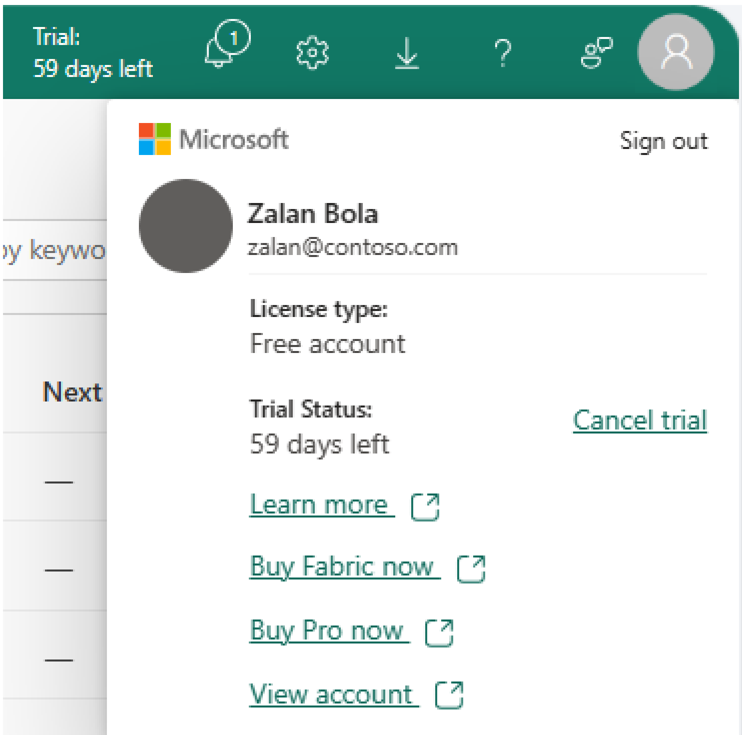
Within the workspaces in Premium capacity, creators assign roles, like **Viewer**, **Contributor**, **Member**, and **Administrator**. The roles creators assign to their colleagues, and the licenses the colleagues have, determine the extent to which those colleagues can interact with the content. For more information, see workspace permissions and roles.

When a creator creates and publishes an app, they grant access to individuals or entire organizations. The extent to which you can interact with the app's content depends on the specific access permissions given to you. For example, you might be given access to view the app, connect to the underlying semantic models, make copies of reports, or share the content.

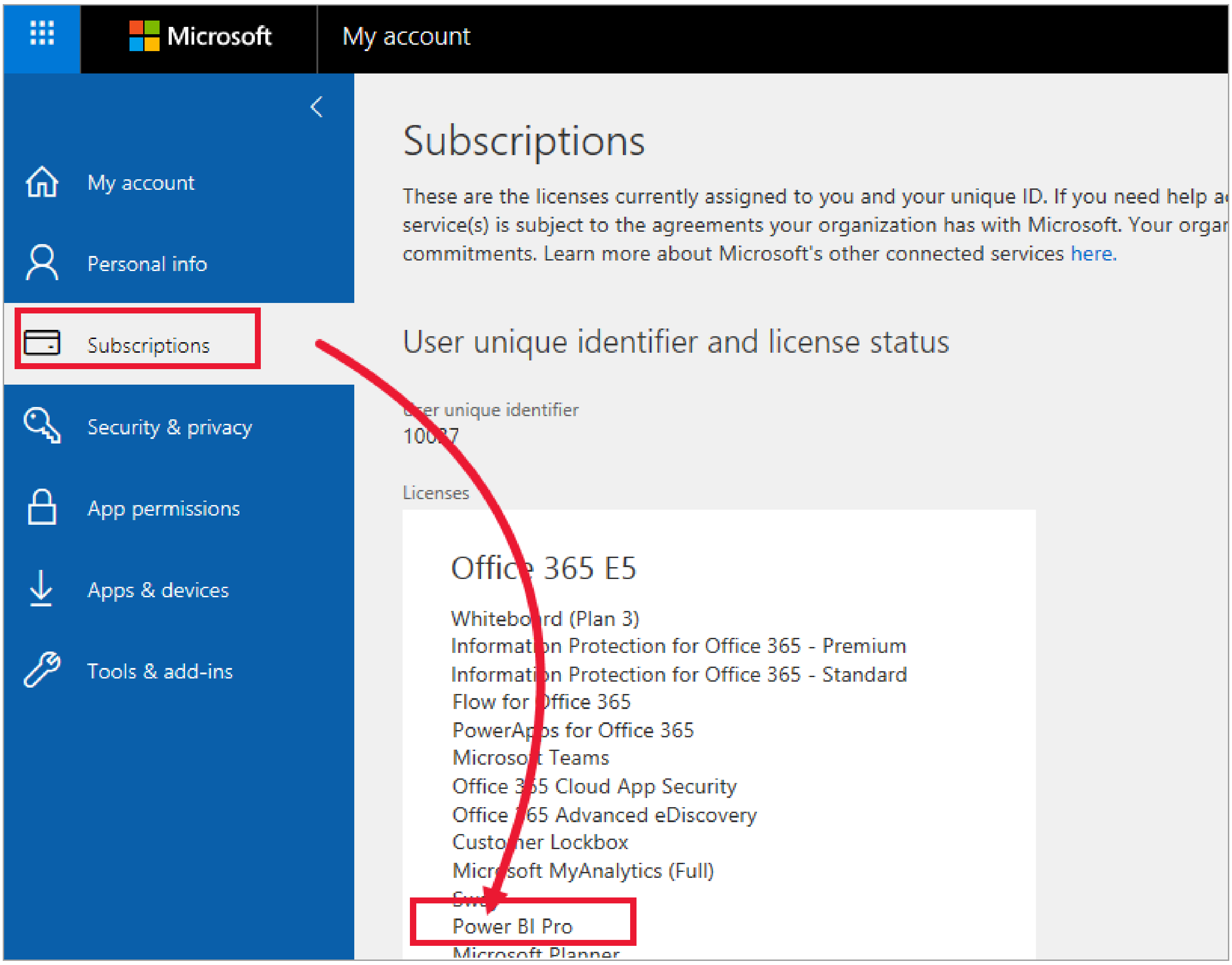
For more info about Premium capacity, see What is Microsoft Power BI Premium?.

Find out which licenses you have

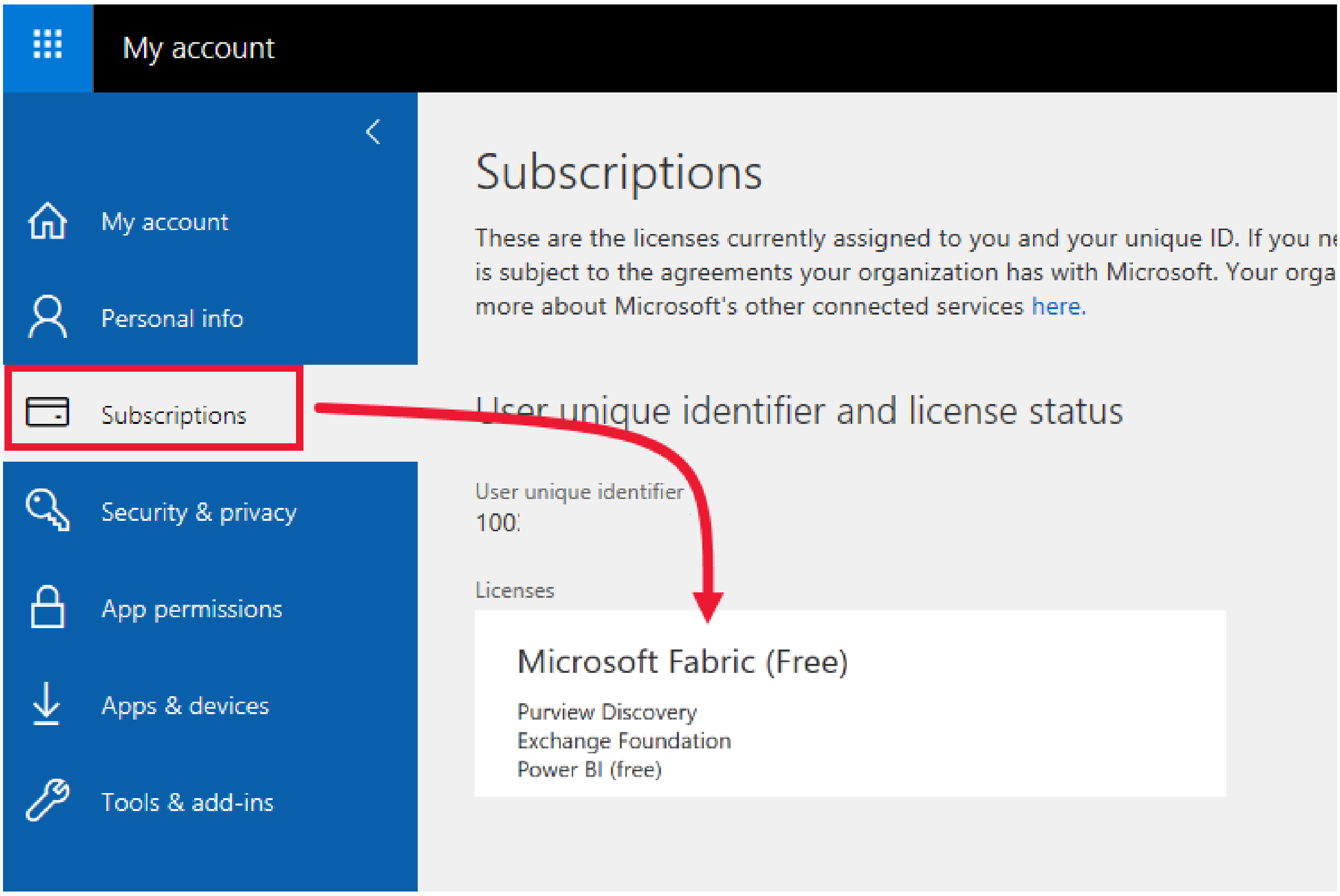
To display your account information, log in to Power BI in your browser (app.powerbi.com). Select your profile picture in the upper right corner. In the following screenshot, a user named Zalan has a free account and is signed up for a free trial. Other types of licenses are Pro and Premium per-user. To see more details about your account, select **View account** > **Subscriptions.**



This first user, Pradtanna, has Office 365 E5, which includes a Power BI Pro license.



This second user, Zalan, has a free license. The name of the license is Fabric (Free).



Microsoft Power BI and Microsoft Fabric

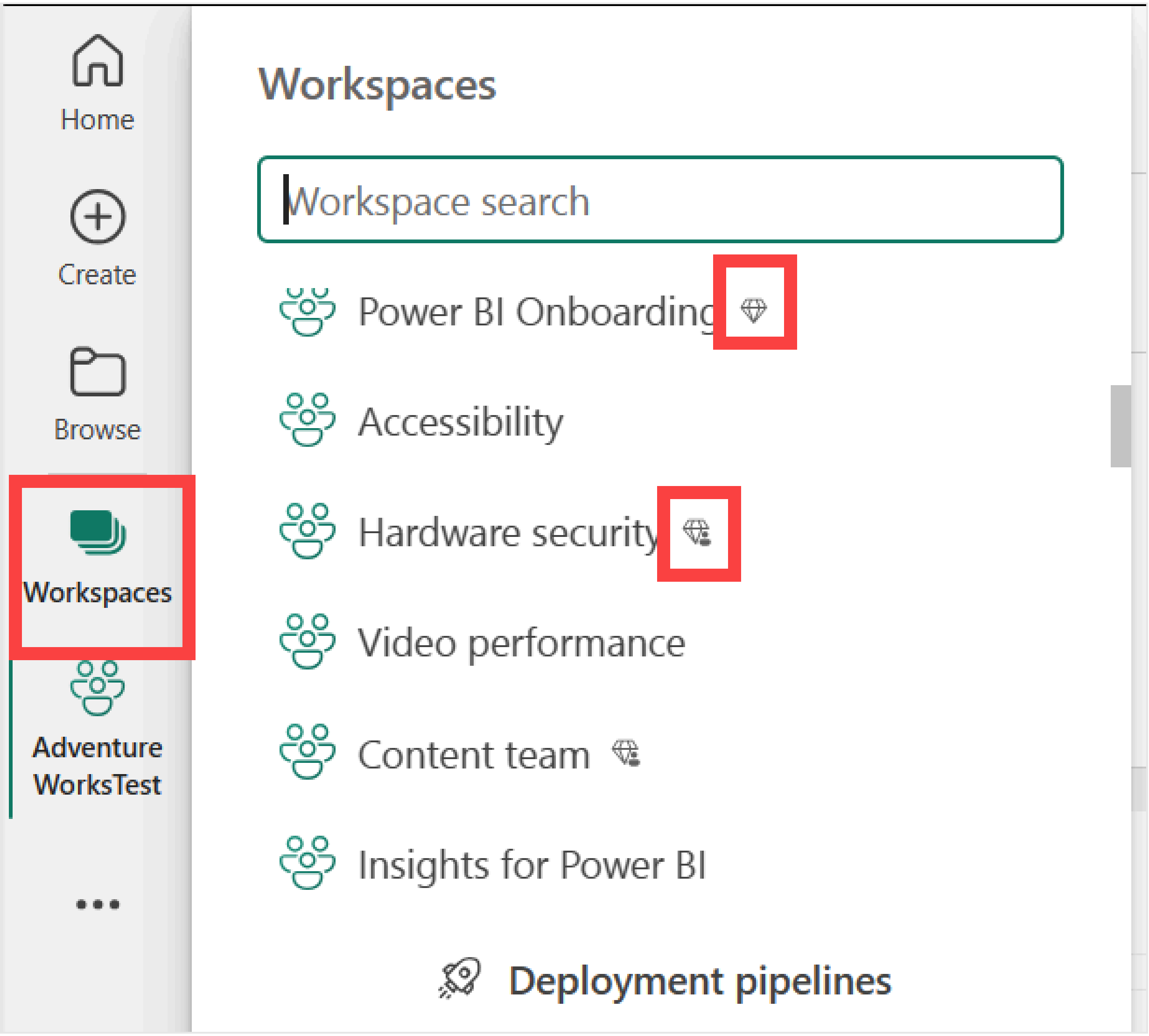
Power BI is one of the experiences available in Microsoft Fabric. Power BI is one component of Fabric. Power BI is also available as a standalone service. You might be someone who uses only the Power BI experience and you might be someone who works with more than one of the Fabric experiences.

For more information, see What is Microsoft Fabric.

Find out if you have access to Premium capacity

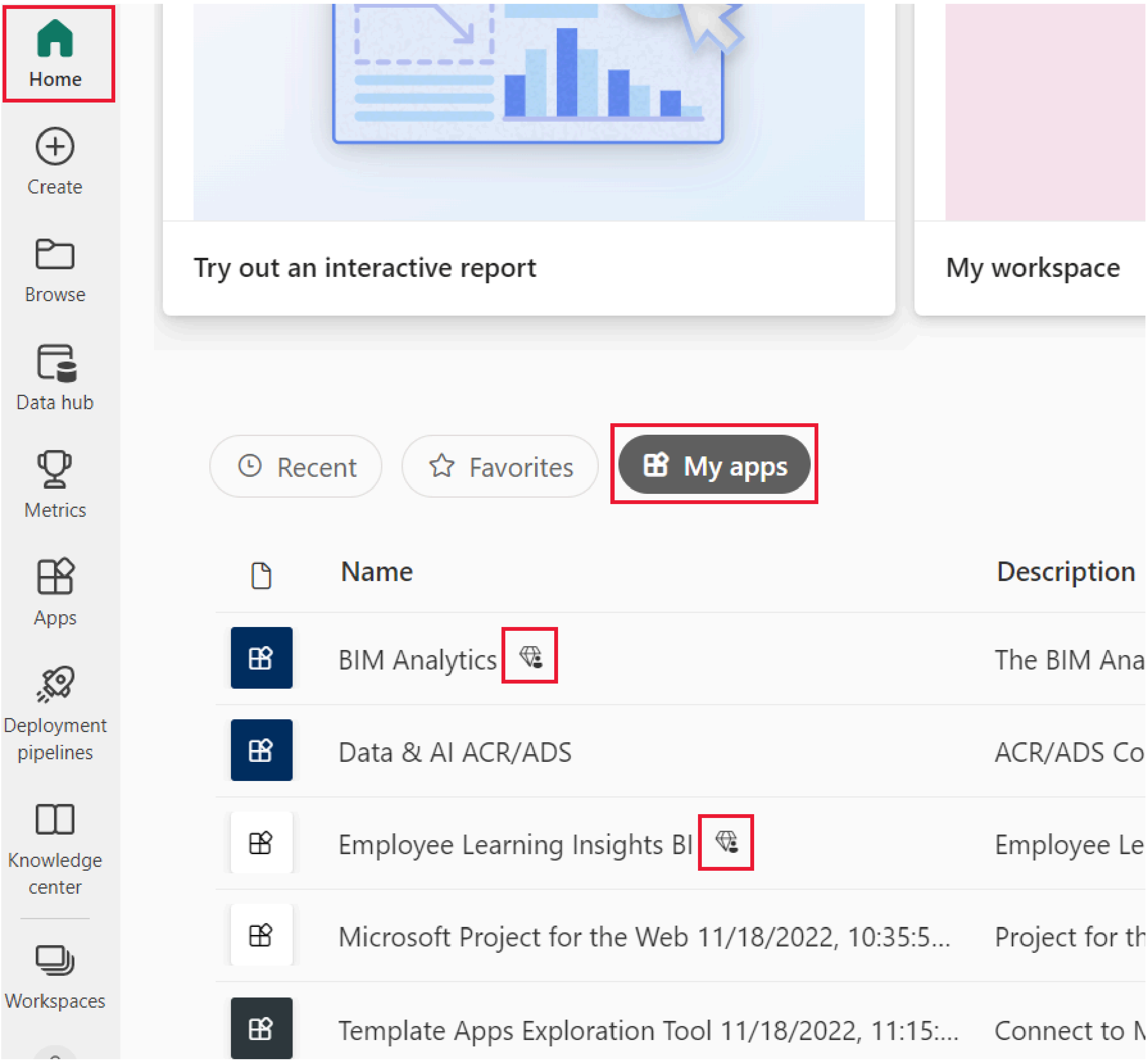
Next, check to see if you have access to content in Premium capacity. Either of the users, Pro or free, can belong to an organization that has Premium capacity.

Select **Workspaces** and scroll through the list of workspaces shared with you. Workspaces in Premium capacity are marked with a diamond icon. To open a Premium workspace, select it.



Not only workspaces are marked with a diamond icon. Apps and app workspaces saved in Premium capacity also have a diamond icon.

In the following image, two of the apps are stored in Premium capacity.



If you don't see any diamond icons, it may mean that no colleague has shared content with you from Premium capacity.

Put it all together

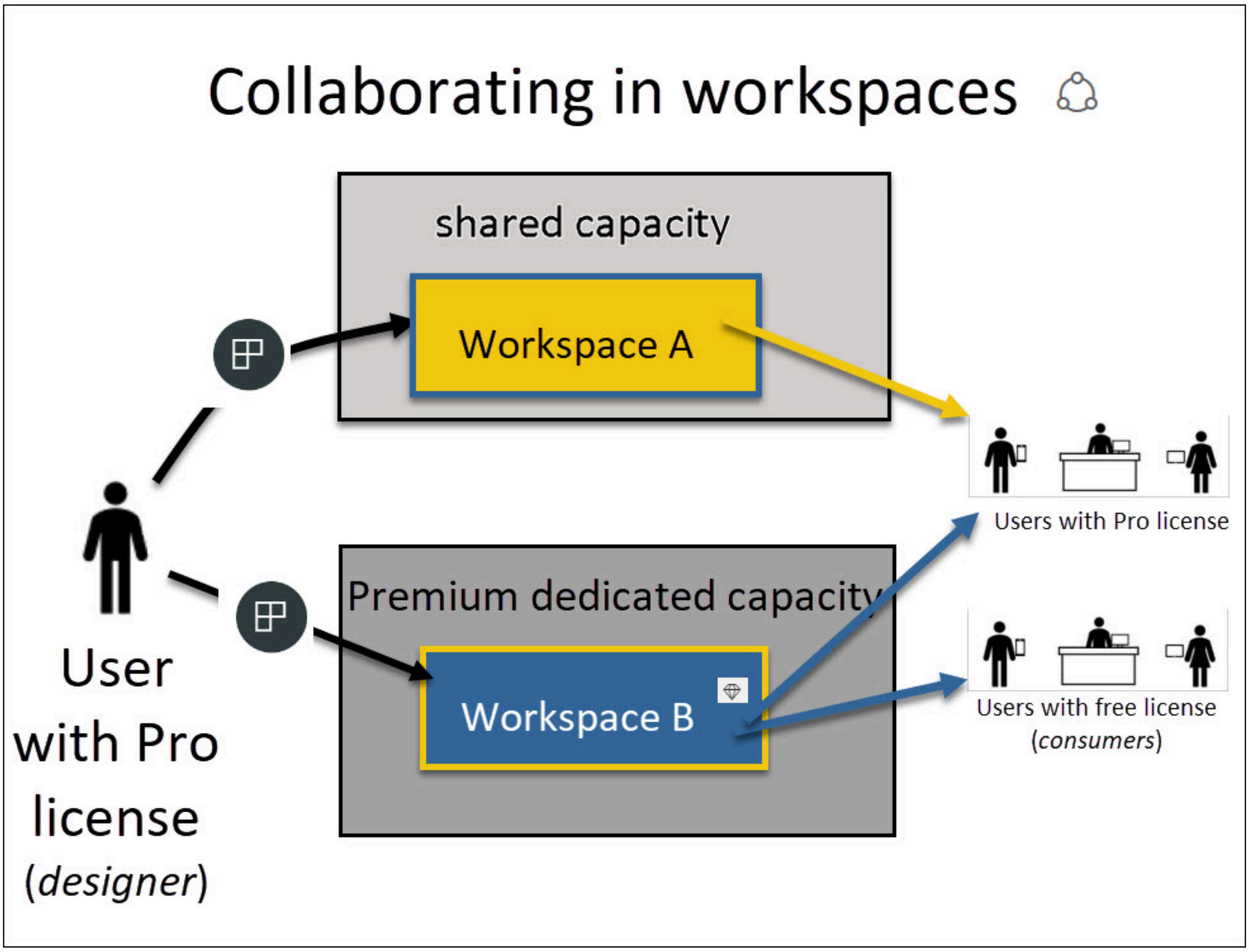
There are many ways organizations set up their Power BI subscriptions and licenses. From a business user's perspective, one common scenario gives you a free license. Your organization buys a Premium subscription, the administrator assigns Pro licenses to a small group of users, and all the other users have free licenses. Typically, the administrator assigns a Pro license to employees who create and share content. The Pro users create workspaces and add dashboards, reports, semantic models, apps, and other content to those workspaces. To allow free users to collaborate in those workspaces, the administrator or Pro user then assigns the workspaces to Premium capacity and gives free users permissions (roles) to that workspace.

Expand table

License type	Not in Premium capacity	Premium capacity
Free	Use as a personal sandbox to create content for yourself and interact with that content. A free license is a great way to try out the Power BI service. You can't consume content from anyone else or share your content with others.	Interact with content assigned to Premium capacity and shared with you. Free, Premium per-user, and Pro users can collaborate without requiring the free user to have a paid license.
Pro	Collaborate with Premium per-user and Pro users by creating and sharing content.	Collaborate with free, Premium per-user, and Pro users by creating and sharing content.

In the following diagram, the left side represents Pro users who create and share content in app workspaces.

- **Workspace A** isn't in Premium capacity.
- **Workspace B** was created and saved in Premium capacity. This workspace has a diamond icon.



The Power BI Pro creators can share and collaborate with other Pro users in either of the workspaces. The Power BI Pro user can only share and collaborate with free users by using

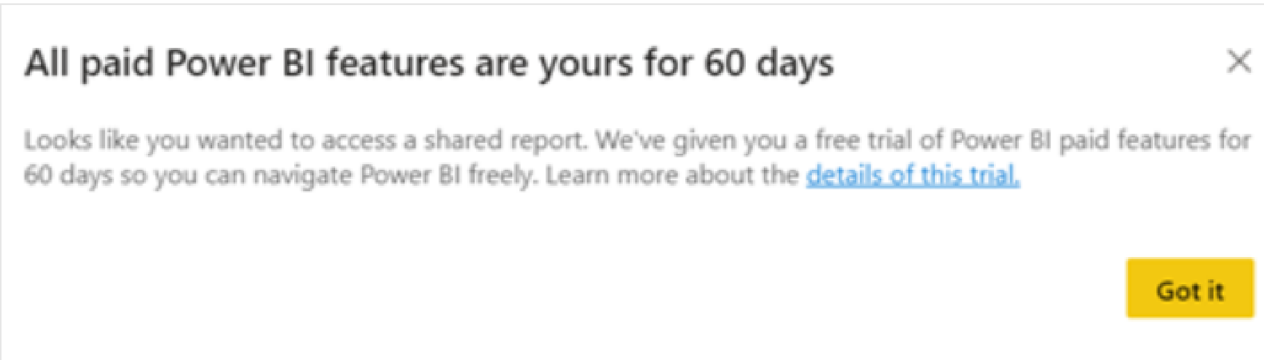
Workspace B, which is in Premium capacity. The creator assigns roles to collaborators within the workspace. Your role determines what actions you can take. Power BI business users are usually assigned the Viewer role. For more information, see Permissions in the workspaces.

Considerations and limitations

- It's possible to have more than one Power BI license. The Power BI service always delivers the experience equal to the best license that you currently have. For example, if you have both a Pro and a free license, the Power BI service uses the Pro license.

- Only SKUs (Stock Keeping Units) equivalent or higher than a **F64 SKU** allow free Power BI users to consume Power BI apps and shared content in Premium capacity in the Power BI service. Smaller **F SKU**s require a paid license to

- You want to create and share content, or open content that someone else shared with you. That content isn't in Premium capacity. You must have a paid license. Either purchase a license or sign up for a trial, if there's one available. One option that might be available is the free trial of Power BI paid features. If your organization has self-service trials enabled, you can select the upgrade dialog that appears in the Power BI service when you try to use a Pro feature.

  When the trial expires, your license reverts back to the previous version, either free or Pro. You no longer have access to features that require a paid license. If you want to continue with a paid license, contact your administrator or IT Help Desk about purchasing an upgrade. If you don't have an administrator or IT Help Desk, visit the Power BI pricing page.

- If you sign up for a free license by selecting a **Try it free** button, it never expires unless you cancel it. If your trial upgrade ends or if your organization removes your Pro or Premium license, your free license is still available to you.

- A free user license for the Power BI service is perfect for someone exploring or using it for personal data analysis and visualizations by using **My workspace**. A free standalone user doesn't use Power BI to collaborate with colleagues. Standalone users with free licenses can't view content shared by others or share their own content with other Power BI users.

Related content

- Am I a Power BI business user?
- Purchase Power BI
- Features for free users

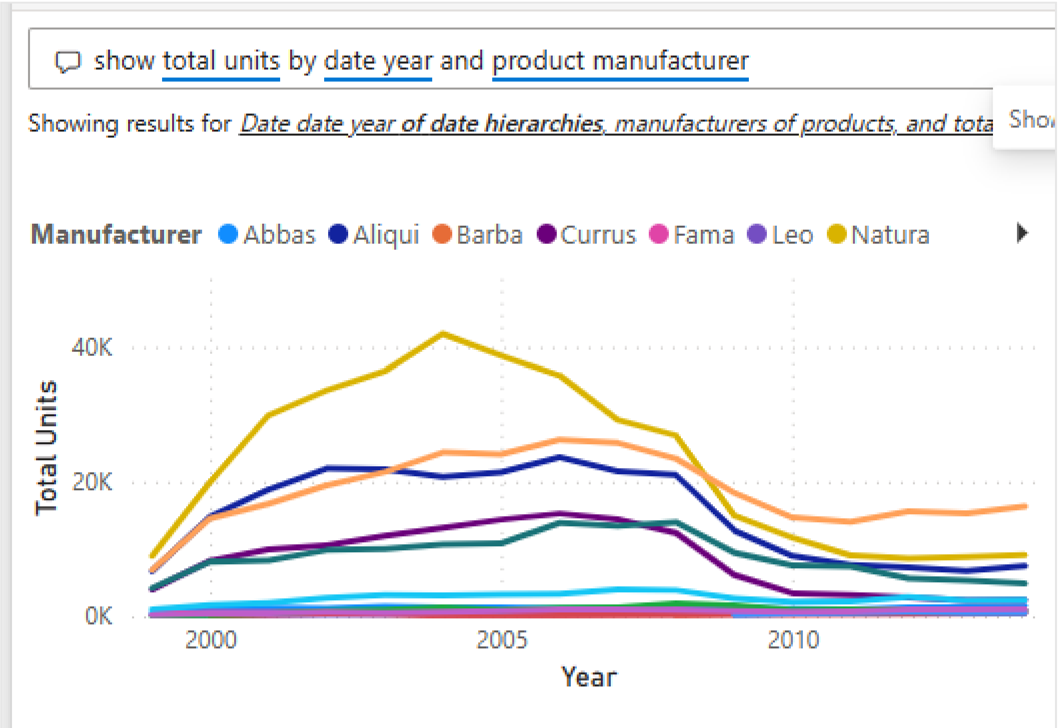
Q&A for Power BI business users

Article • 01/10/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

What is Q&A?

Sometimes the fastest way to get an answer from your data is to ask a question using natural language. For example, "show total units by year and product manufacturer."



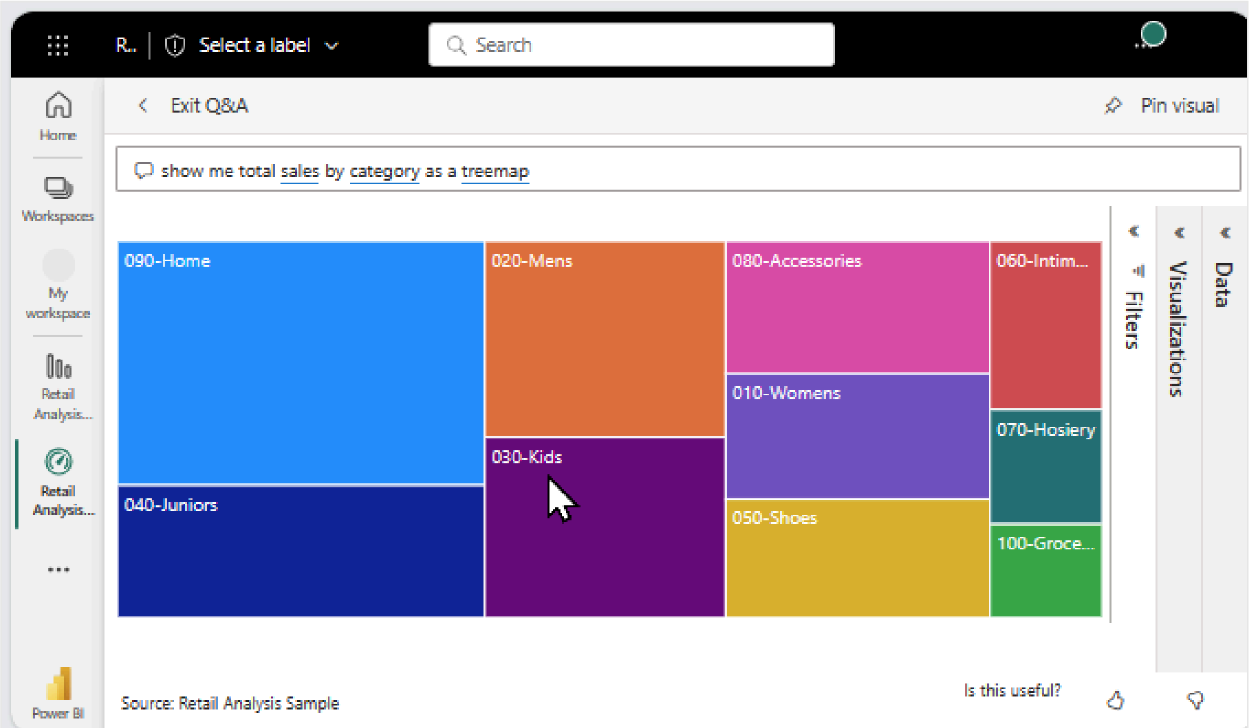
Use Q&A to explore your data using natural language capabilities and receive answers in the form of charts and graphs. Unlike a search engine, Q&A only provides results about the data in Power BI semantic models.

To learn how to use Q&A, see Explore your data and create visuals using Q&A.

Which visualizations does Q&A use?

Q&A picks the best visual based on the data. Sometimes data is defined as a certain type or category, which helps Q&A know how to display it. For example, if data is defined as a date type, it's more likely to be displayed as a line chart. Data that is categorized as a city is more likely to be displayed as a map.

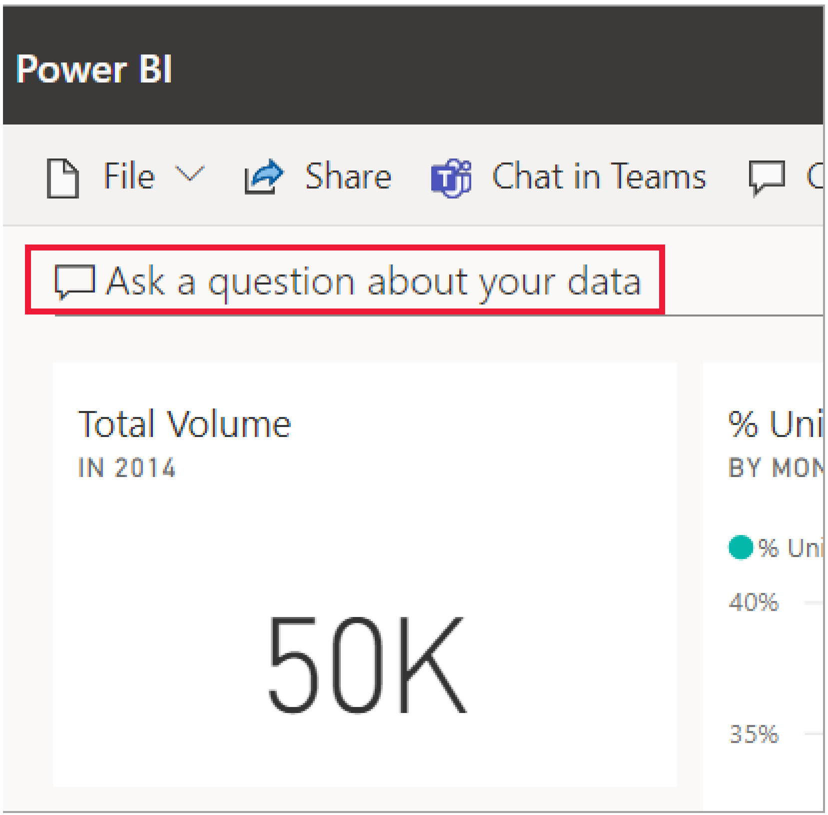
If you want a specific type of visual, tell Q&A which one to use by adding it to your question. For example, "show me total sales by category as a treemap." But keep in mind that it isn't always possible for Q&A to display the data using the visual type you requested. Q&A prompts you with a list of workable visual types.



Where can I use Q&A?

Use Q&A on a dashboard

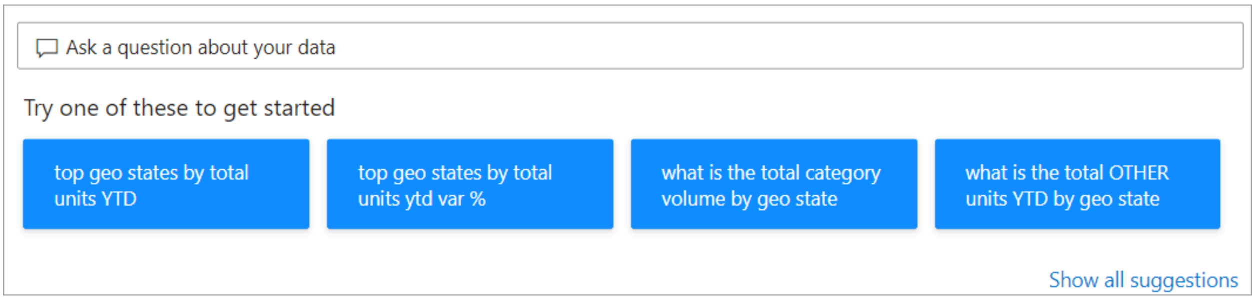
Q&A is available on dashboards in the Power BI service, and at the bottom of the dashboard in Power BI mobile. If the dashboard designer gave you edit permissions, save the visual by pinning it to your dashboard.



To learn more, see Use Q&A on a dashboard.

Use Q&A in a report

Q&A is available in reports if the report designer added a specific type of interactive visual called a Q&A visual or added a Q&A button. Ask natural language questions and create new report visuals that represent the answers to your questions. If you have edit permissions for the report, turn the results into a new visual in the report.



To learn more, see Use Q&A in a report.

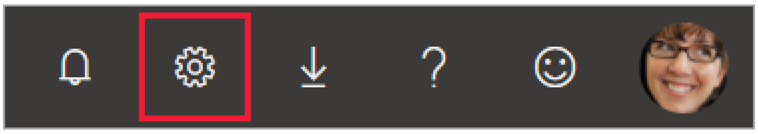
Use Q&A in mobile apps and embedded reports

Q&A is available in Power BI iOS apps and in Power BI embedded analytics as well.

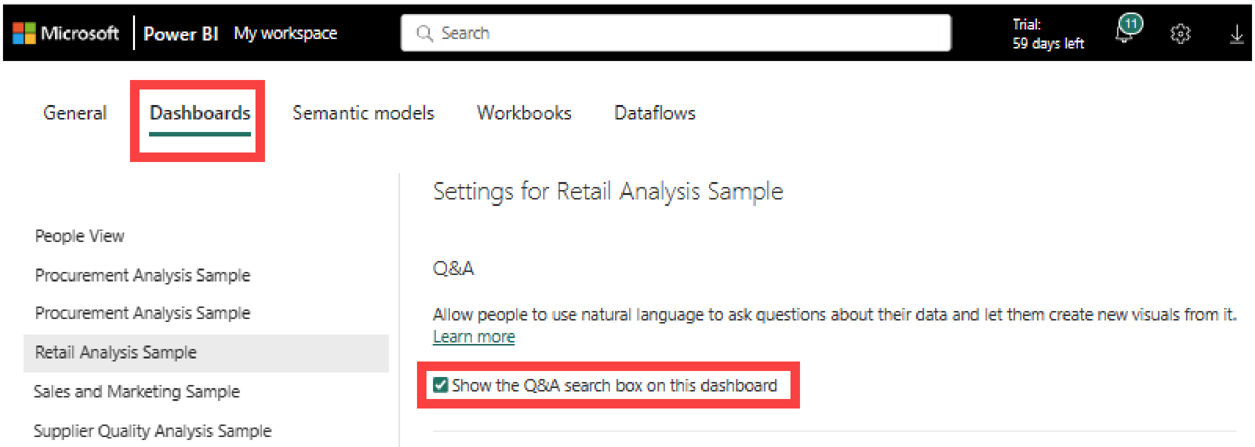
Considerations and limitations

Question: I don't see Q&A on this dashboard.

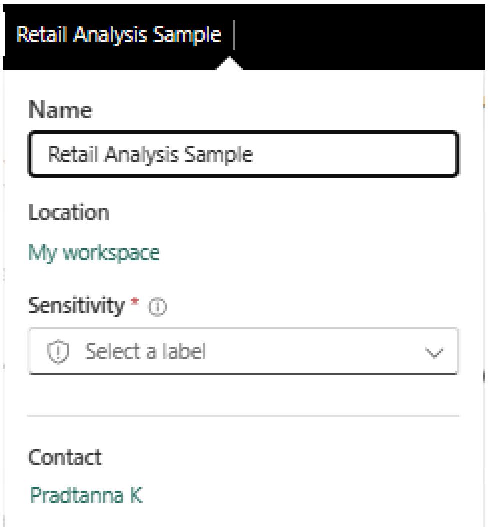
Answer 1: If you don't see a question box, check your settings. Select the **Settings** icon in the upper right corner of your Power BI toolbar.



Choose **Power BI Settings** > **Dashboards**. Highlight the dashboard that doesn't have a Q&A question box. Make sure there's a check mark next to **Show the Q&A search box on this dashboard**.

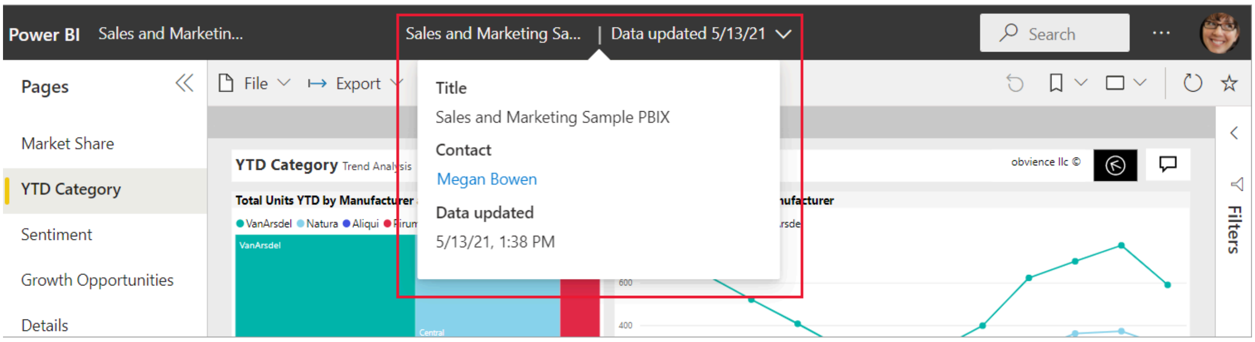


Answer 2: Sometimes you don't have access to the settings. If the dashboard owner or your administrator turned Q&A off, check with them to see if it's OK to turn it back on. To look up the owner, select the name of the dashboard from the top menu bar.



Question: I'm not getting the results I'd like to see when I type a question.

Answer: Select the option to contact the report or dashboard owner. You can find the report or dashboard owner from the Q&A dashboard page or the Q&A visual. Or, you can look up the owner from the Power BI header. There are many things the owner can do to improve the Q&A results. For example, the owner can rename columns in the semantic model to use terms that are easily understood (`CustomerFirstName` instead of `CustFN`). Since the owner knows the semantic model, they can also come up with helpful questions and add them to the Q&A suggested questions.



Privacy

Microsoft might use your questions to improve Power BI. For more information about how Microsoft uses your questions, see the Microsoft Privacy Statement for more information.

Related content

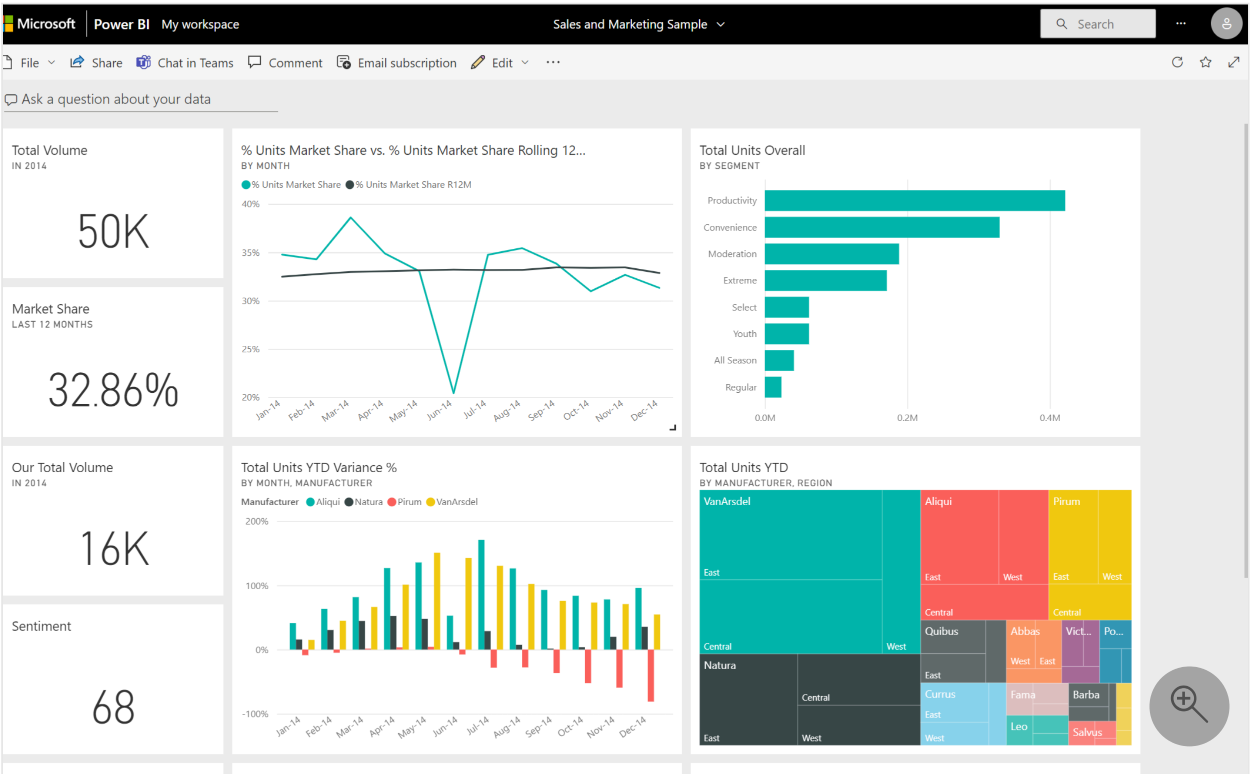
- To learn how to ask your own natural language questions and create answers in the form of visuals, see Use Q&A on a dashboard or Use Q&A in a report.
- For tips on forming questions, see How to ask questions with Q&A.
- If you have edit permissions, learn how to create a Q&A visual on a dashboard and add a Q&A visual in a report.

Dashboards for business users of the Power BI service

Article • 01/06/2025

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

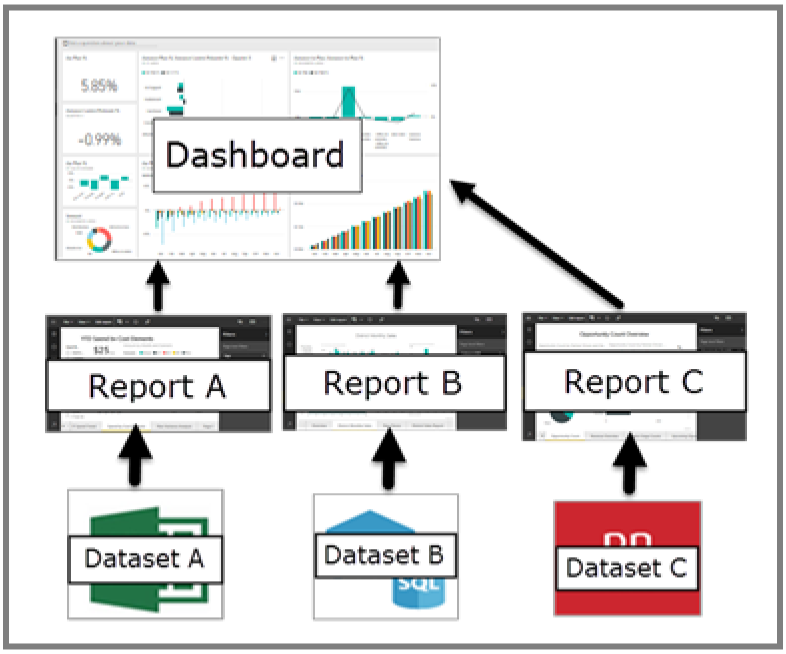
A Power BI *dashboard* is a single page, often called a canvas, that uses visualizations to tell a story. Because it's limited to one page, a well-designed dashboard contains only the most important elements of that story.



The visualizations on the dashboard are called *tiles*. Report designers *pin* tiles to the dashboard. In most cases, selecting a tile takes you to the report page where the visualization was created. If you're new to Power BI, start with Power BI basic concepts to get a good foundation. Hovering over an element on a dashboard displays a tooltip.

> ⓘ **Note**
>
> You can view and share dashboards on mobile devices.
>
> To view dashboards that colleagues share with you, you must have a Pro or Premium Per User (PPU) license or the content must be shared with you from a workspace in Premium capacity. For more information, see Power BI license types.

The visualizations on a dashboard come from reports, and each report is based on one semantic model. You can think of a dashboard as an entryway into the underlying reports and semantic models. Select a visualization to take you to the report that was used to create it.



Advantages of dashboards

Dashboards are a great way to monitor your business, find answers, and see your most important metrics at a glance. The visualizations on a dashboard can come from one or more underlying semantic models or reports. A dashboard can combine on-premises and cloud data, which provides a consolidated view regardless of where the data lives.

A dashboard isn't just a pretty picture, it's an interactive canvas. The tiles update as the underlying data changes.

Dashboards vs. reports for Power BI business users

How you interact with Power BI depends on your job role. As a consumer or business user, you receive content, like dashboards, reports, and apps, from colleagues who are designers. Reports can be confused with dashboards because they're both canvases filled with visualizations, but there are major differences from a Power BI business user's point of view. The following table shows an overview of the different capabilities of dashboards and reports.

Expand table

Capability	Dashboards	Reports
Pages	One page	One or more pages
Ask a question about your data (Power BI Q&A) field	Yes, almost always available	No Q&A field
Data sources	One or more report or semantic model per dashboard	A single semantic model per report
Filtering	No, you can't filter or slice	Yes, there are many ways to filter, highlight, and slice
Set alerts	Yes, you can create email alerts when certain conditions are met	No, you can't set alerts
Can see underlying semantic model tables and fields	No. Can export data but can't see the semantic model tables and fields in the dashboard itself	Yes. Can see semantic model tables and fields and values that you have permissions to see

Related content

- View a dashboard.
- Learn about dashboard tiles and what happens when you select one.
- Track and receive email alerts for individual dashboard tiles by Creating alerts on tiles.
- Learn how to use Power BI Q&A to ask a question about your data and get the answer in the form of a visualization.

> **Tip**
>
> Use the table of contents available on this page to find even more information.

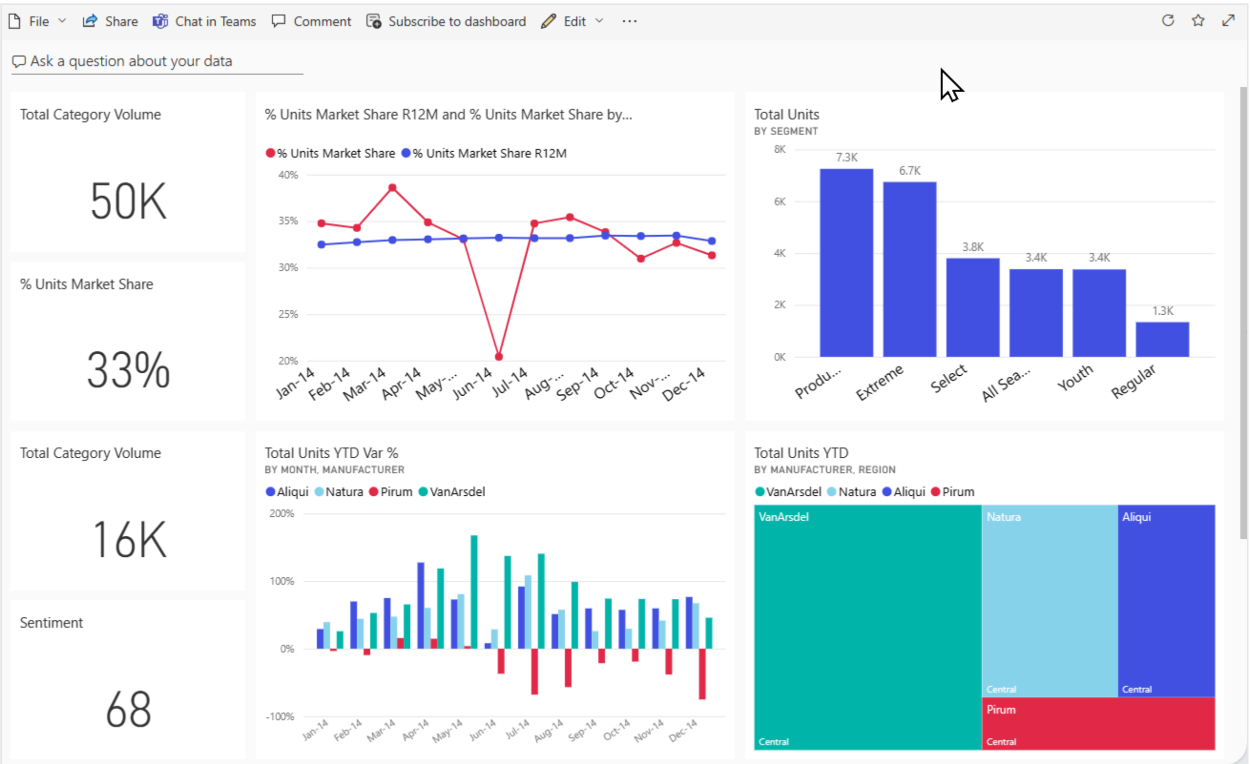
Feedback

View a dashboard

Article • 01/06/2025

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

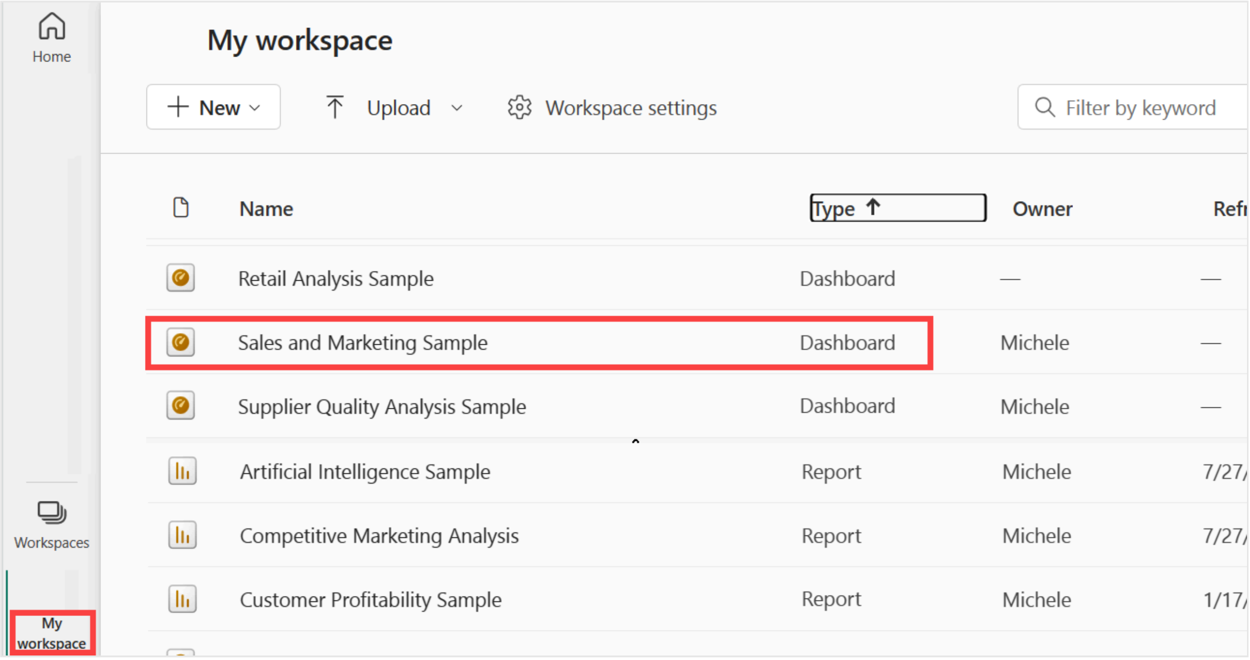
Power BI *business users* spend a lot of time viewing dashboards. Dashboards are designed to highlight specific information from the underlying reports and semantic models. And Power BI business users rely on that information for tracking, monitoring, answering questions, testing, and more--in order to make data-driven business decisions.



A Power BI Pro or Premium license is required for both sharing a dashboard and viewing a shared dashboard. Which license do I have?.

Open a dashboard

Dashboards can be opened from many locations in the Power BI service. One way to open a dashboard is to select and open a workspace.



If that workspace contains a dashboard, you see the following icon.

Once you identified a dashboard, open it by selecting it and the dashboard fills your Power BI canvas.

On the left navigation pane, view and open dashboards from:

- **Home**
- **Browse**,
  - **Recent** - if you recently visited a dashboard
  - **Favorites** - if you set a dashboard as a favorite
  - **Shared with me** - if a colleague shared a dashboard with you
- **Data hub** - contains content from across your organization
- **Apps** - most apps contain both dashboards and reports
- **Workspaces**, including **My workspace** - if you downloaded any of the Power BI samples or other content or if colleagues have shared content with you.

Related content

- Back to dashboard overview.
- Get comfortable with dashboards by taking a tour of one of our sample dashboards.
- Learn about dashboard tiles and what happens when you select one.

Feedback

Was this page helpful? Yes No

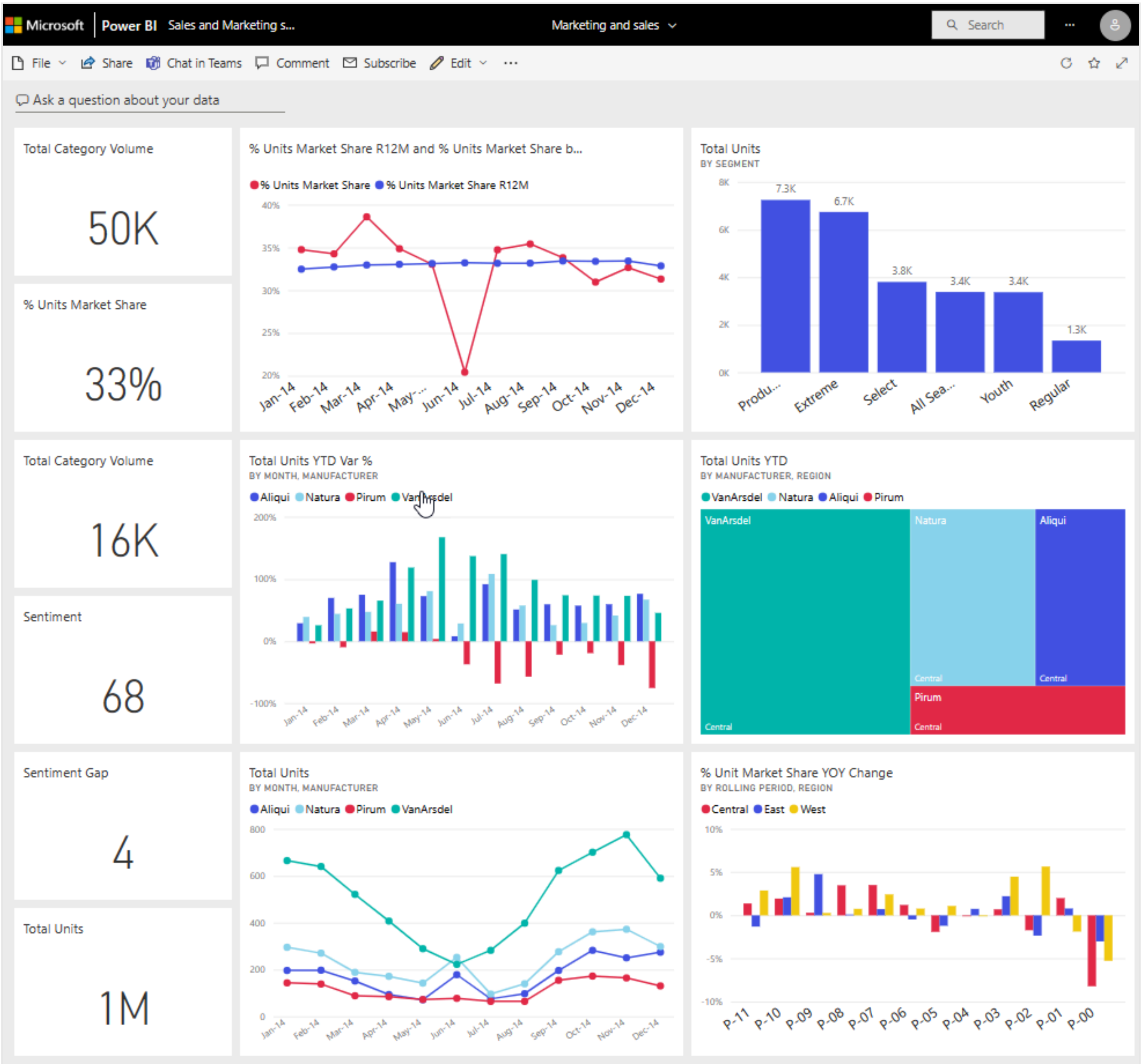
Provide product feedback | Ask the community

Dashboard tiles in Power BI

Article • 01/17/2025

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

A tile is a snapshot of your data, pinned to a dashboard by a *designer*. *Designers* can create tiles from a report, semantic model, dashboard, the Power BI Q&A question box, Excel, SQL Server Reporting Services (SSRS), and more. This screenshot shows many different tiles pinned to a dashboard.

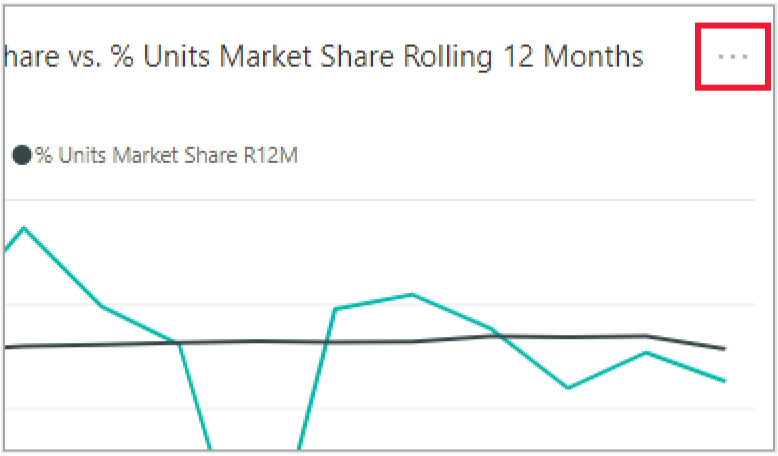


Besides tiles pinned from reports, *designers* can add standalone tiles directly on the dashboard using **Add tile**. Standalone tiles include: text boxes, images, videos, streaming data, and web content.

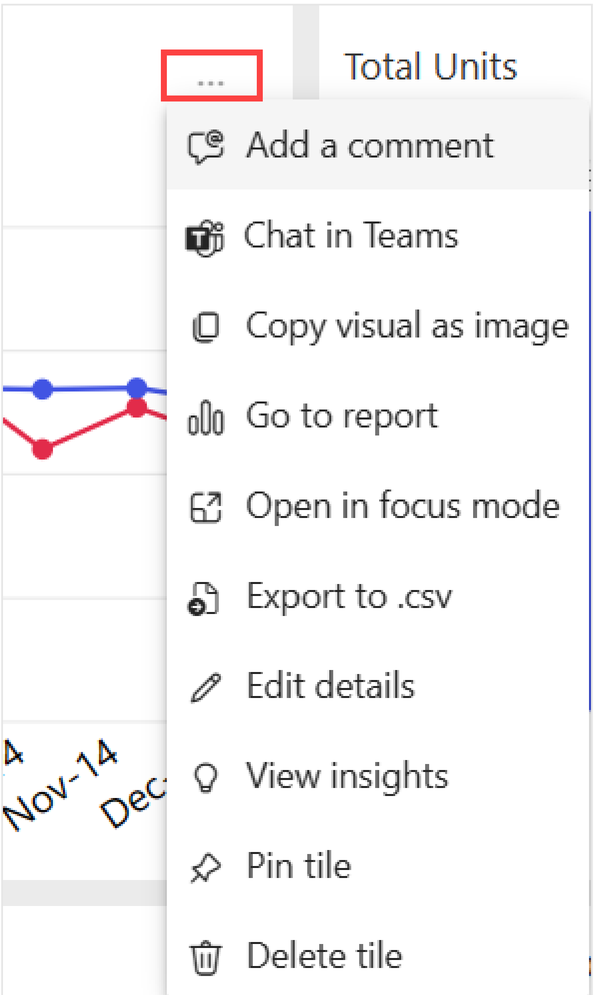
Need help with understanding the building blocks that make up Power BI? See Basic concepts for the Power BI service business user.

Interacting with tiles on a dashboard

1. To display the ellipsis, hover over the tile.



2. Select the ellipses to open the tile action menu. The options available vary by your permissions, the visual type, and the method used to create the tile.



Some of the actions available from these menus are:

- Open the report that was used to create the tile
- View the tile in focus mode

- View insights
- Add a comment and start a discussion
- Export the data to Excel

3. To close the action menu, select a blank area in the canvas.

Select a tile

When you select a tile, what happens next depends on how the tile was created and if it has a custom link. If it has a custom link, selecting the tile takes you to that link. Otherwise, selecting the tile takes you to the report, Excel Online workbook, SSRS report that is on-premises, or Q&A question that was used to create the tile.

> ⓘ **Note**
>
> The exception to this is video tiles added to dashboards by *designers*. Selecting a video tile (that was created this way) causes the video to play right there on the dashboard.

Considerations and troubleshooting

- If nothing happens when you select a tile, or you receive an error message, here are some possible reasons:
  - The report that was used to create the visualization wasn't saved, or has been deleted.
  - The tile was created from a workbook in Excel Online, and you don't have at least Read permissions for that workbook.
  - If the tile is created from SSRS, and you don't have permission to access the SSRS report. Or, if you don't have access to the network where the SSRS server is located.
- If you are the creator of the dashboard, you can rearrange the tiles. As a viewer of a dashboard, you can't rearrange the tiles. To have tiles rearranged, contact the dashboard creator.
- For tiles created directly on the dashboard using **Add tile**, if a custom hyperlink has been set, selecting the title, subtitle, or tile opens that URL. Otherwise, by default, selecting one of these tiles created directly on the dashboard for an image, web code, or text box produces no action.
- If the original visualization used to create the tile changes, the tile doesn't change. For example, if the *designer* pinned a line chart from a report and then changed

the line chart to a bar chart, the dashboard tile continues to show a line chart. The data refreshes, but the visualization type doesn't.

- If a workspace is moved to Premium capacity, the existing dashboard refresh cache doesn't move with the workspace. The new cache is created the first time a user visits the dashboard in the new Premium capacity. After that, every data refresh will refresh the cache and update the data.
- If a tile is pinned from a workbook, you can't turn off the display of the title and subtitle. The option to **Edit details** > **Display title and subtitle** is greyed out.

Related content

- Data refresh in Power BI
- Basic concepts for the Power BI service business user

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

Add comments to a dashboard or report

Article • 01/06/2025

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

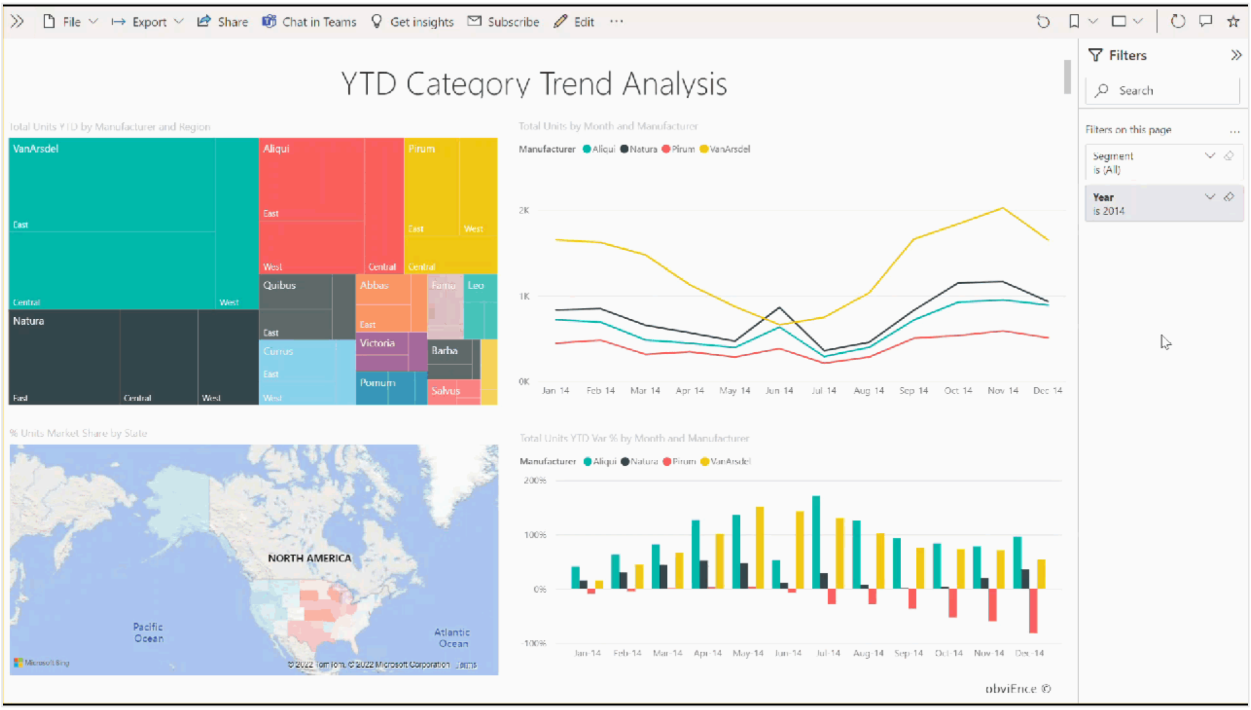
Add a personal comment or start a conversation about a dashboard or report with your colleagues. The **comment** feature is just one of the ways a *business user* can collaborate with others.

> ⓘ **Note**
>
> Collaborating with others, including adding comments to shared reports, requires a Power BI Pro license or for the content to be hosted in Power BI Premium capacity. [Which license type do I have?](#)

How to use the Comments feature

Comments can be added to an entire dashboard, individual visuals on a dashboard, a report page, a paginated report, and individual visuals on a report page. Add a general comment or add a comment targeted at specific colleagues. Comments can be up to 2,000 characters, including @mentions of other users and spaces.

When you add a comment to a report, Power BI captures the current filter and slicer values, and creates a bookmark. So, when you select or respond to a comment, the report page or report visual might change to show you the filter and slicer selections that were active when the comment was first added.



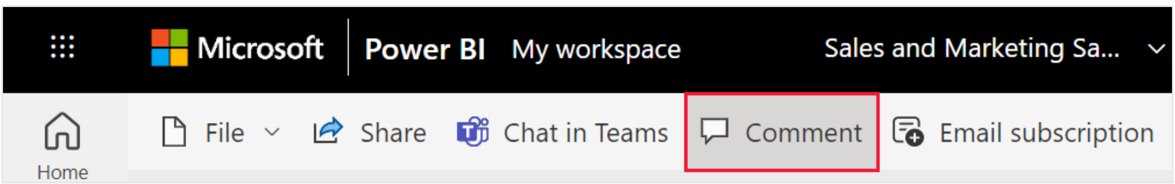
Why is this feature important? If a colleague applied a filter that revealed an insight to share with the team, the comment might not make sense without that filter selected.

If you're using a paginated report, you can only leave a general comment about your report. Support for leaving comments on individual paginated report visuals isn't available.

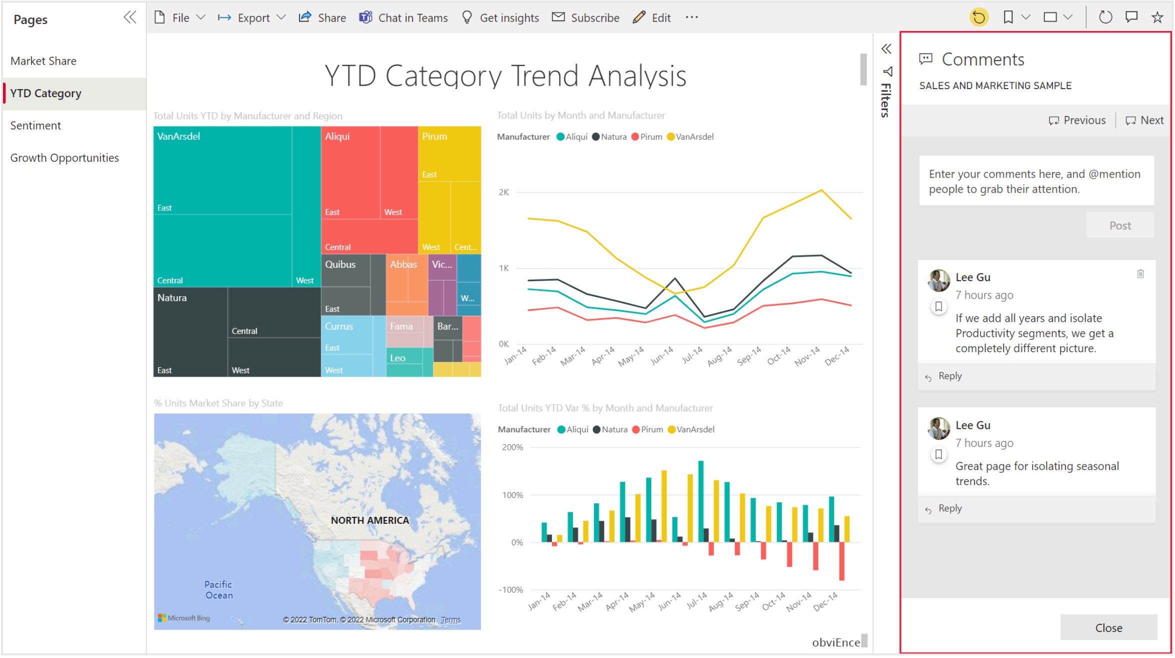
Add a general comment to a dashboard or report

The process for adding comments to a dashboard or report is similar. In this example, we're using a dashboard.

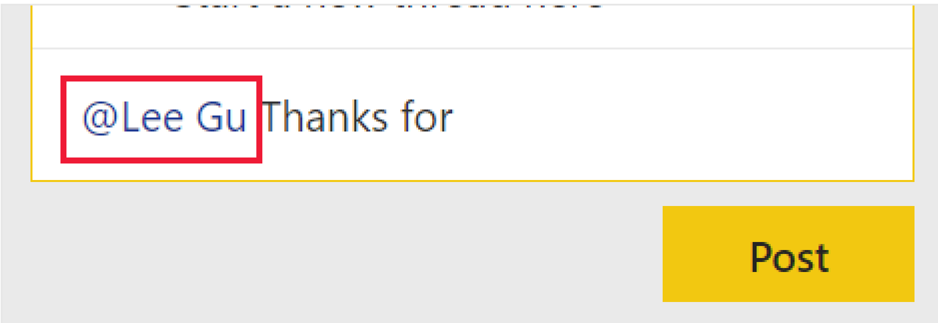
1. Open a Power BI dashboard or report and select the **Comment** icon. This action opens the Comments section.



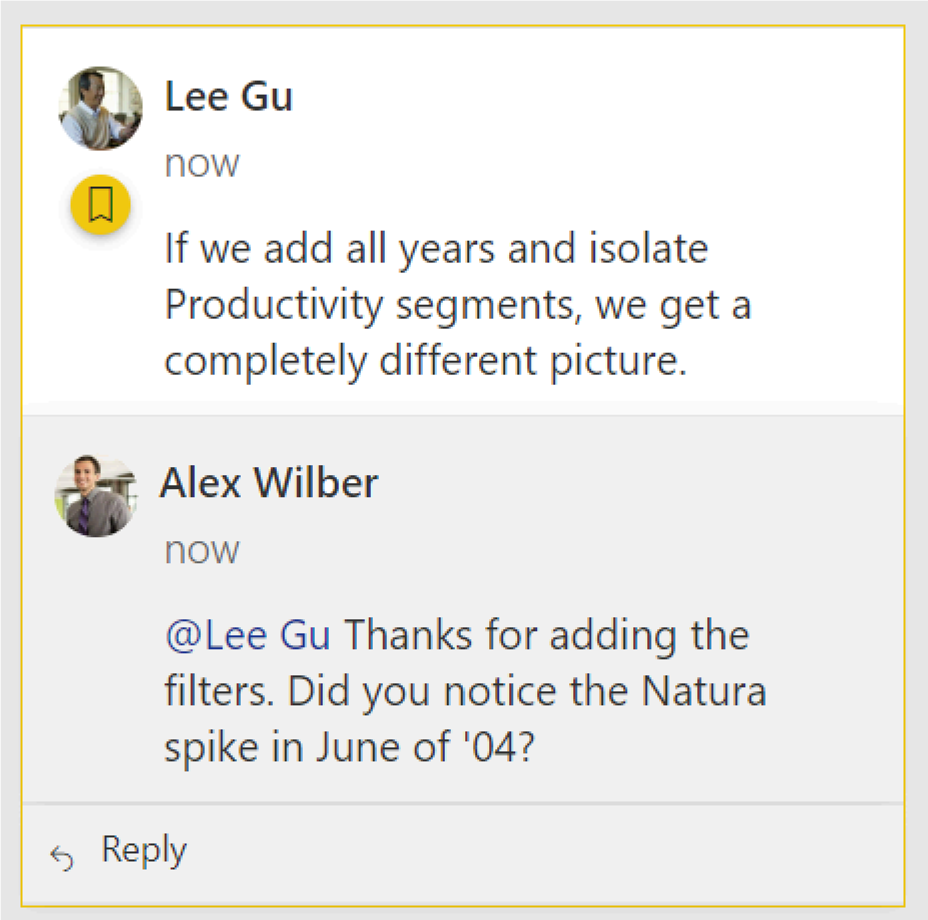
Here we see that the dashboard creator has already added a general comment. Anyone with access to this dashboard can see this comment.



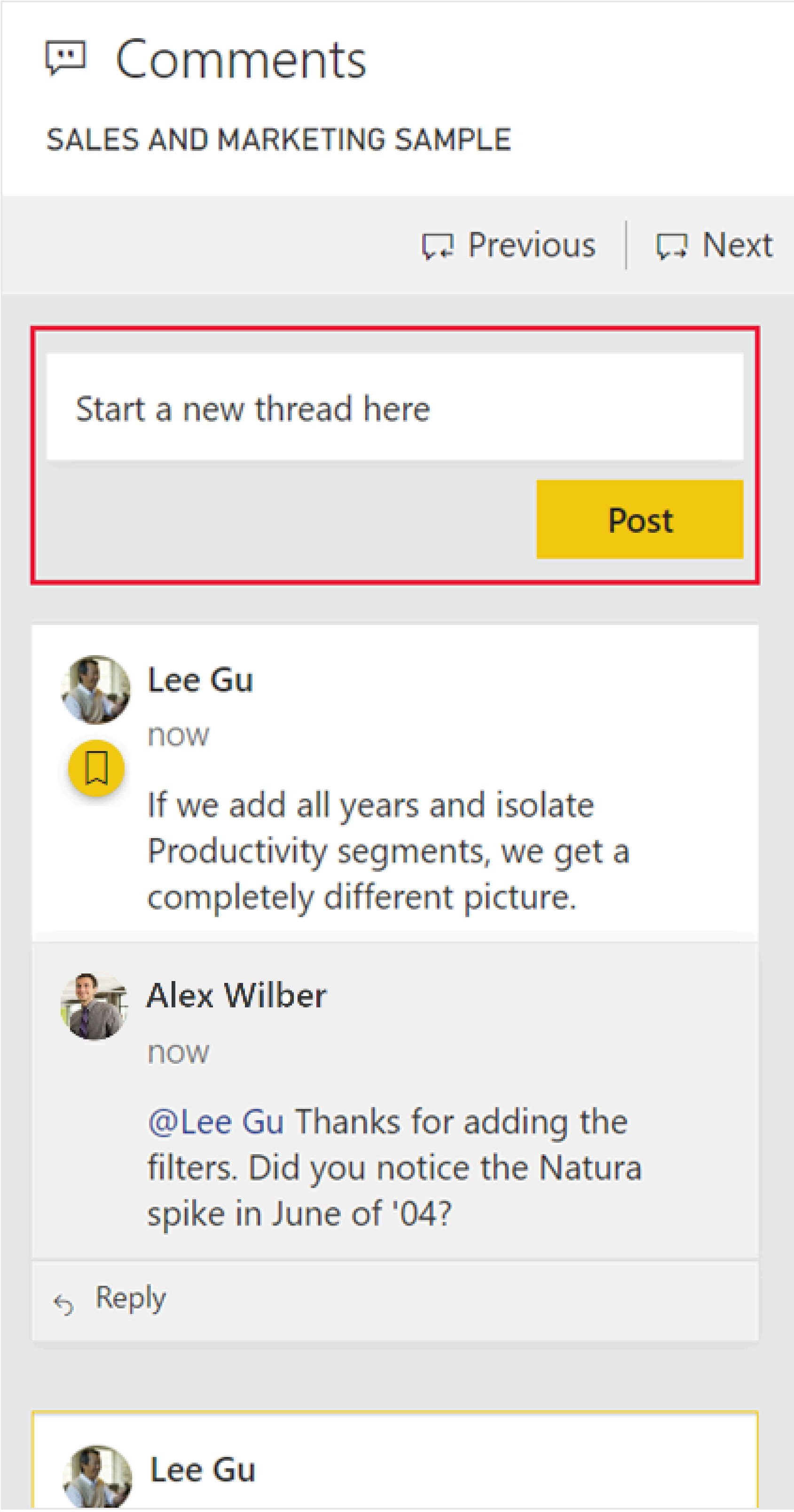
2. To respond, select **Reply**, type your response, and then select **Post**.



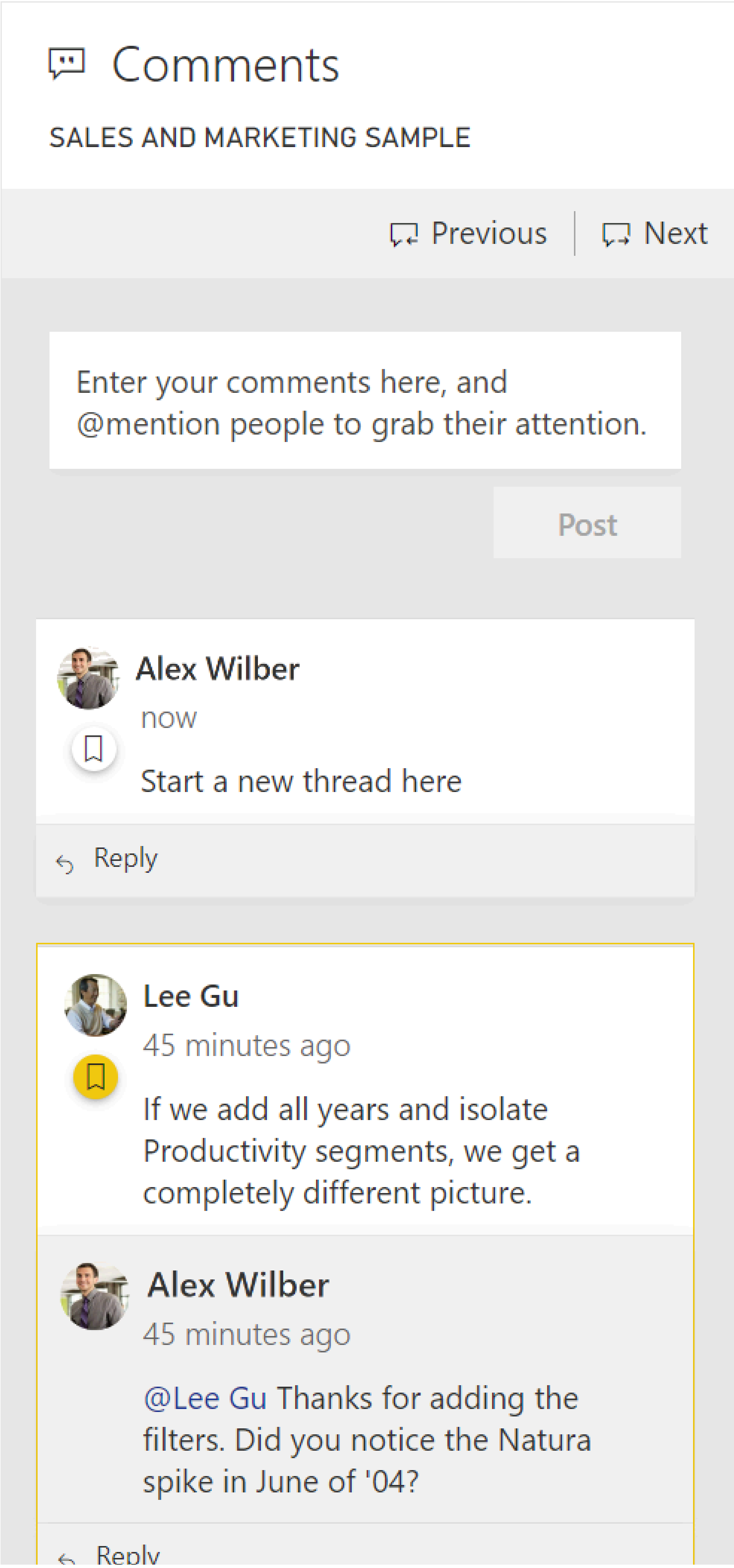
By default, Power BI directs your response to the colleague who started the comment thread, which is Lee in this case.

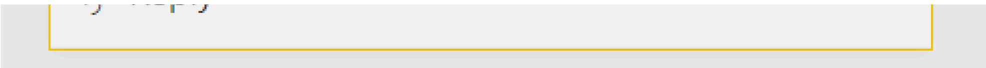


3. If you want to add a comment that isn't part of an existing thread, enter your comment in the upper text field.



The comments for this dashboard now look like the following example.


Comments
SALES AND MARKETING SAMPLE
Previous
Next
Enter your comments here, and @mention people to grab their attention.
Post
Alex Wilber
now
Start a new thread here
Reply
Lee Gu
45 minutes ago
If we add all years and isolate Productivity segments, we get a completely different picture.
Alex Wilber
45 minutes ago
@Lee Gu Thanks for adding the filters. Did you notice the Natura spike in June of '04?
Reply

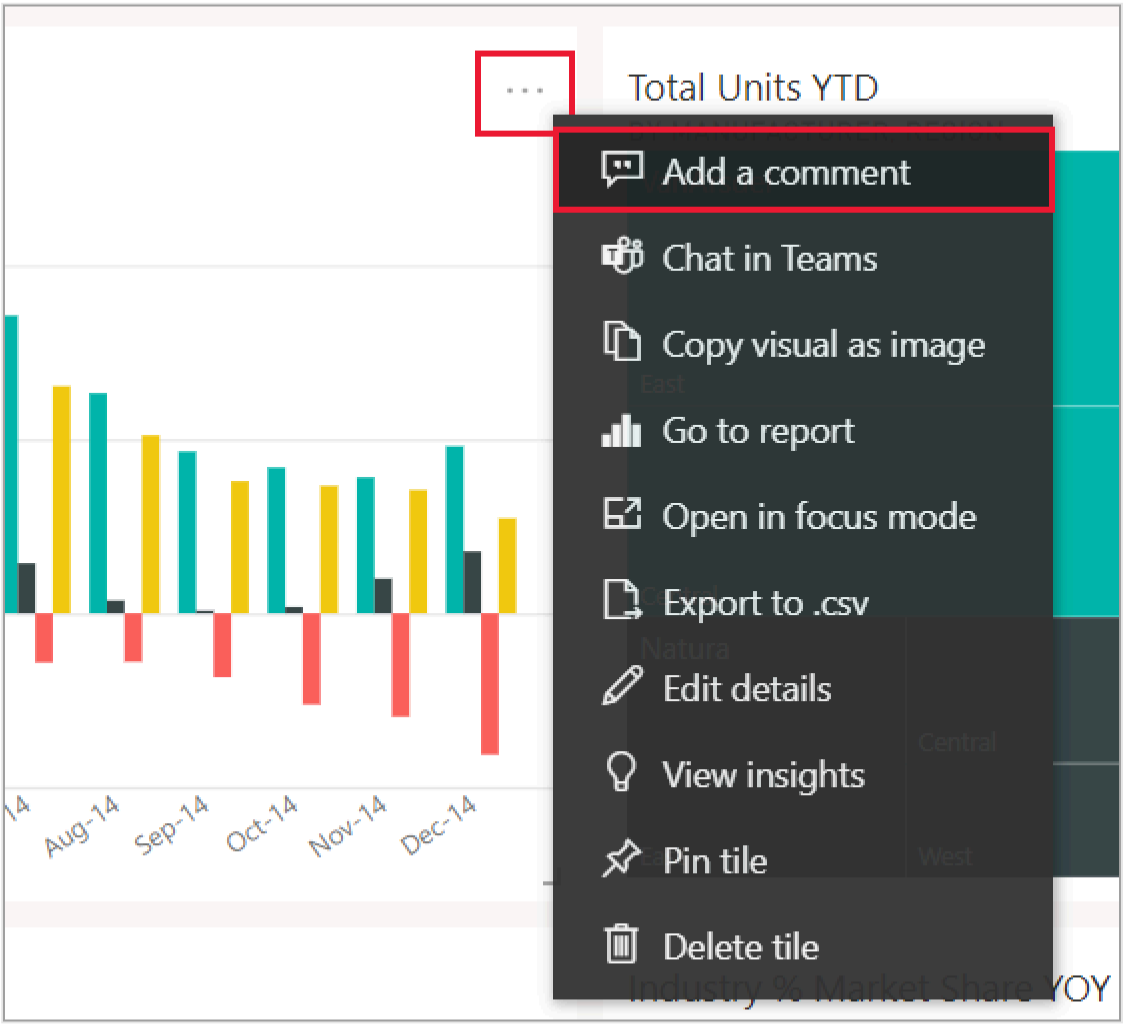


Add a comment to a specific dashboard or report visual

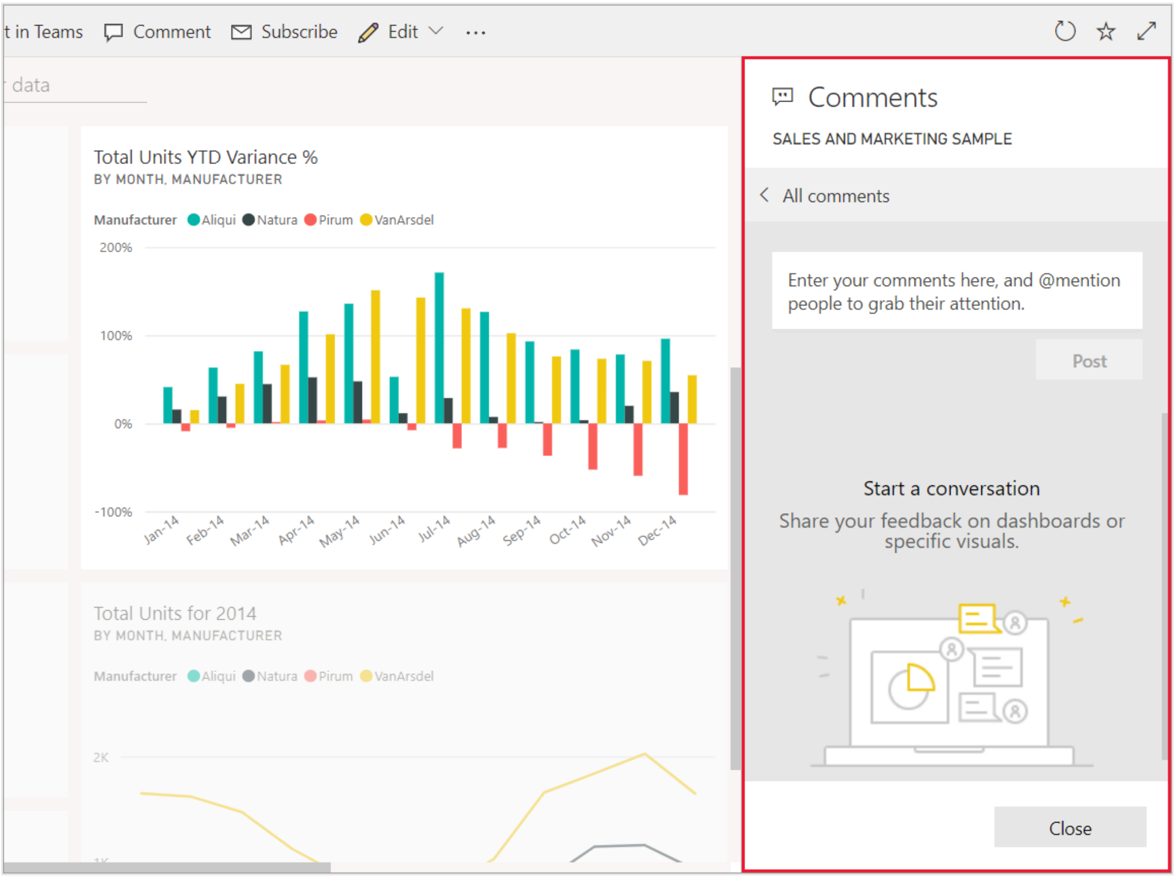
In addition to adding comments to an entire dashboard or to an entire report page, you can add comments to individual dashboard tiles and individual report visuals. The processes are similar, and in this example we're using a dashboard.

1. Hover over the visual and select **More options** (...).

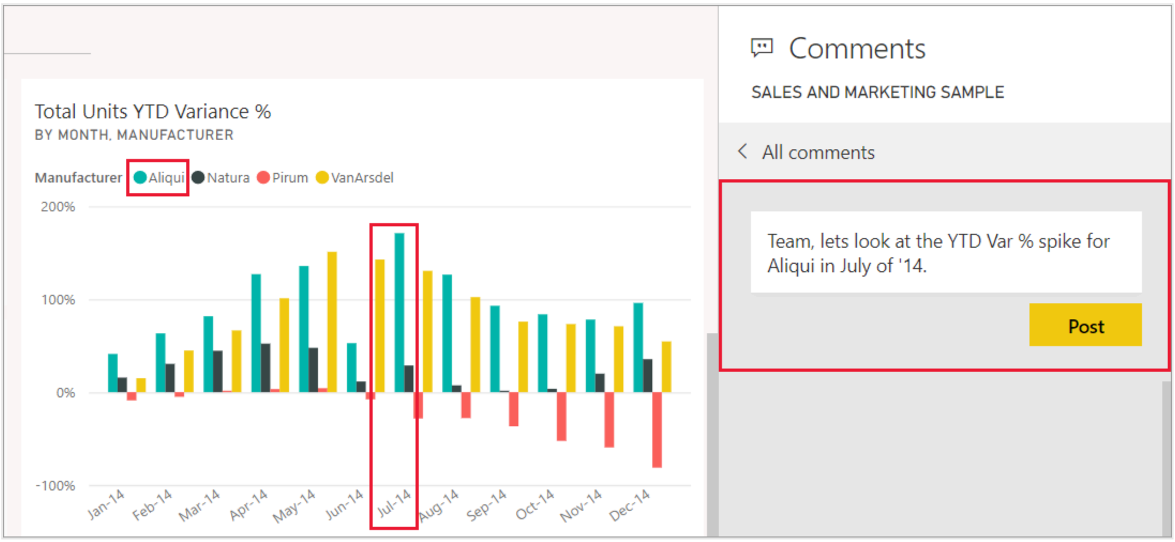
2. From the menu, select **Add a comment**.



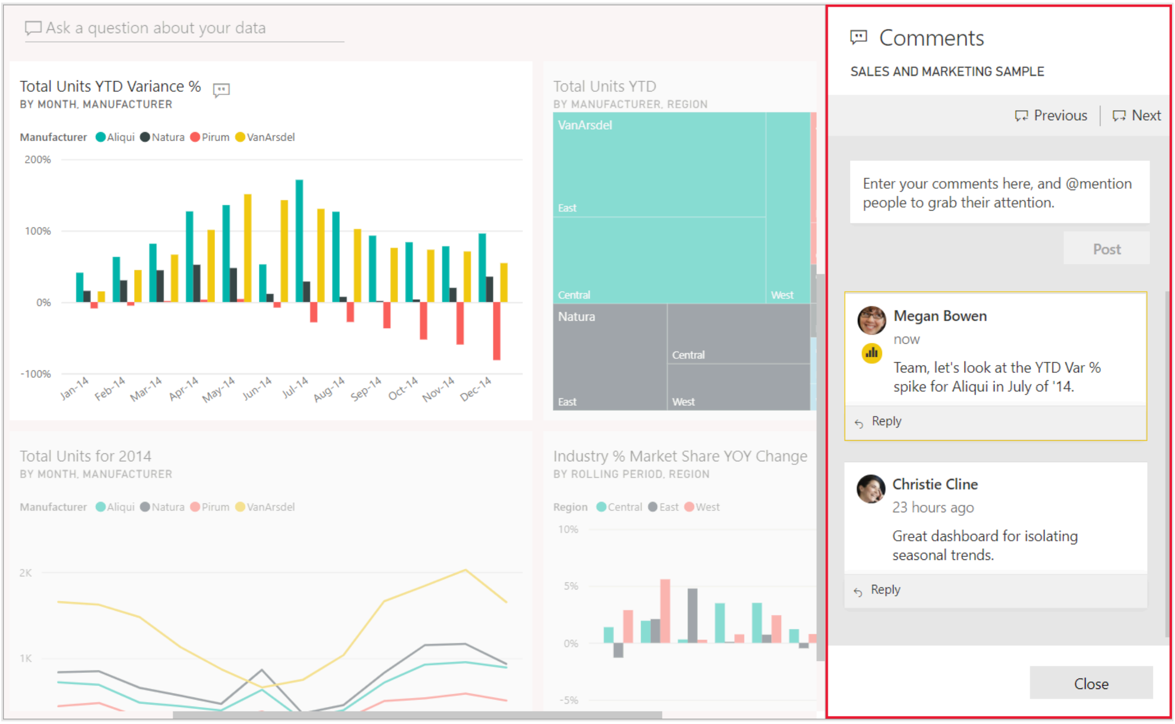
3. The **Comments** section opens, and the other visuals on the page are greyed out. This visual doesn't have any comments yet.



4. Enter your comment and select **Post**.



- On a report page, when you select a comment on a visual, that visual is highlighted (see the following example).
- On a dashboard, the chart icon shows that a comment is tied to a specific visual. Comments that apply to the entire dashboard don't have a special icon. Selecting the chart icon highlights the related visual on the dashboard.

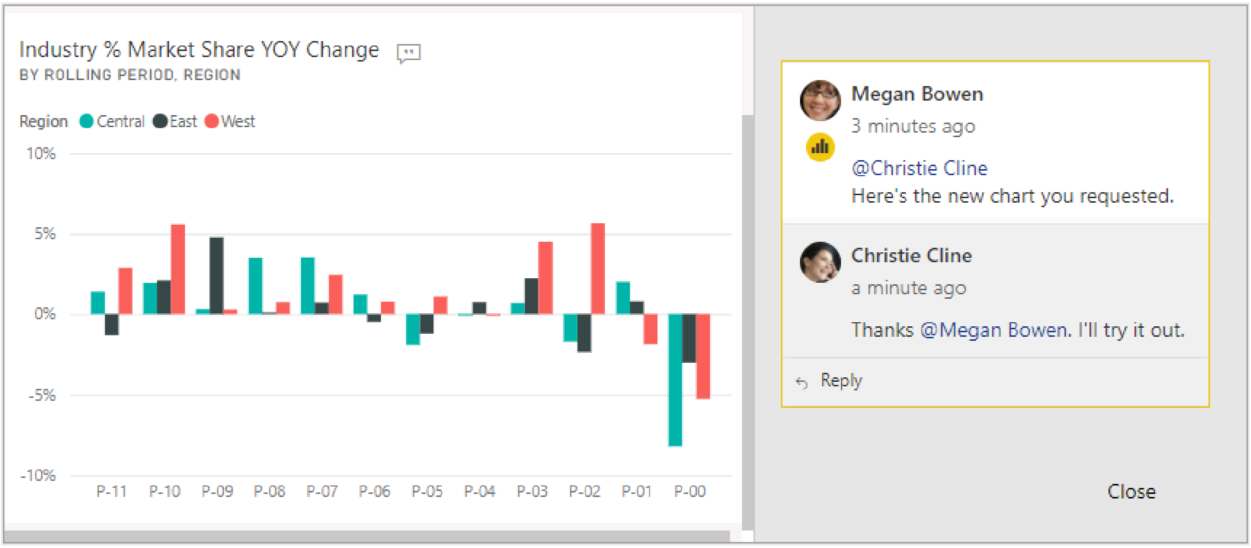


5. Select **Close** to return to the dashboard or report.

Get your colleagues attention by using the @ symbol

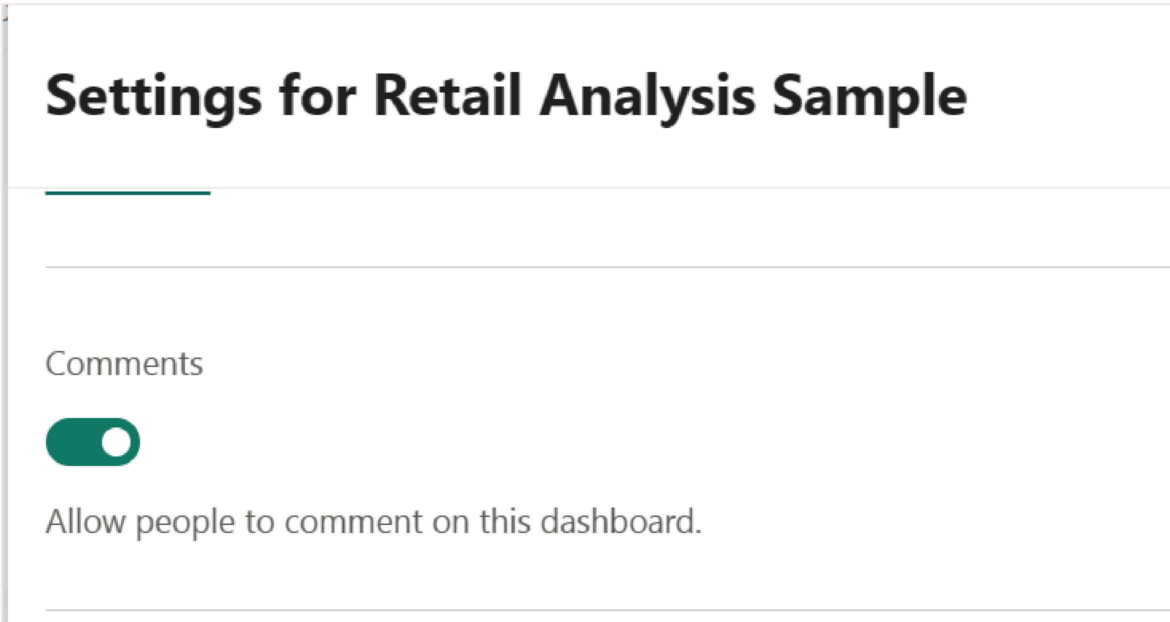
Whether you're creating a dashboard, report, tile, or visual comment, grab your colleagues' attention by using the "@" symbol. When you type the "@" symbol, Power BI opens a dropdown menu where you can search for and select individuals from your organization. Any verified name prefaced with the "@" symbol appears in blue font. The @mentioned individuals immediately receive an e-mail in their inbox. If they're using a Power BI Mobile app, they receive a push notification on their device. They can open the report or dashboard directly from the notification, see the comment, view the data, and reply accordingly.

Here's a conversation I'm having with the visualization *designer*. They're using the @ symbol to ensure I see the comment. I receive a notification and select the link to open this dashboard and the relevant conversation.



Considerations and troubleshooting

- Users with edit access to the report settings can disable the commenting feature. Select **File** > **Settings** and deselect *Allow people to comment on this report or dashboard*.



- Comments are limited to 2,000 characters, including @mentions of other users and spaces.
- The maximum number of conversations on a dashboard or report is 100. The maximum number of comments per conversation is 1000. To add a new conversation or comment, delete prior conversations or comments.
- Bookmarks aren't captured when you reply to a conversation. Only the first comment in a conversation creates a bookmark.

- If you're using a paginated report, you can only leave a general comment about your report. Support for leaving comments on individual paginated report visuals isn't available.

Related content

- Back to visualizations for business users
- Select a visualization to open a report

Feedback

Was this page helpful? Yes No

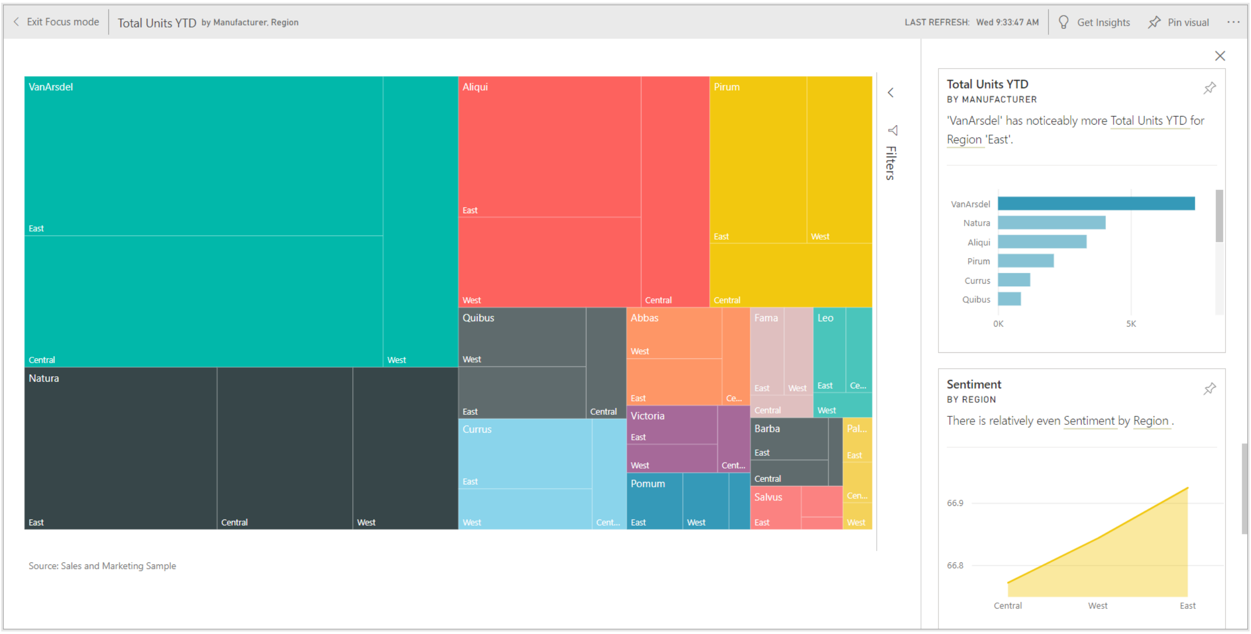
Provide product feedback | Ask the community

View data insights on dashboard tiles with Power BI

Article • 02/14/2024

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

Each visual tile on your dashboard is a doorway into data exploration. For more information, see Dashboard tiles in Power BI. When you select a tile, it opens a report or Q&A (Q&A for Power BI Business users), where you can filter and dig into the semantic model behind the report. And when you run insights, Power BI does the data exploration for you.



When you run insights on tiles, Power BI looks at the data used to render that tile. If Power BI finds interesting facts or trends in that data, you see those facts or trends in the form of interactive visuals. Insights can run on a specific dashboard tile and you can even run insights on an insight.

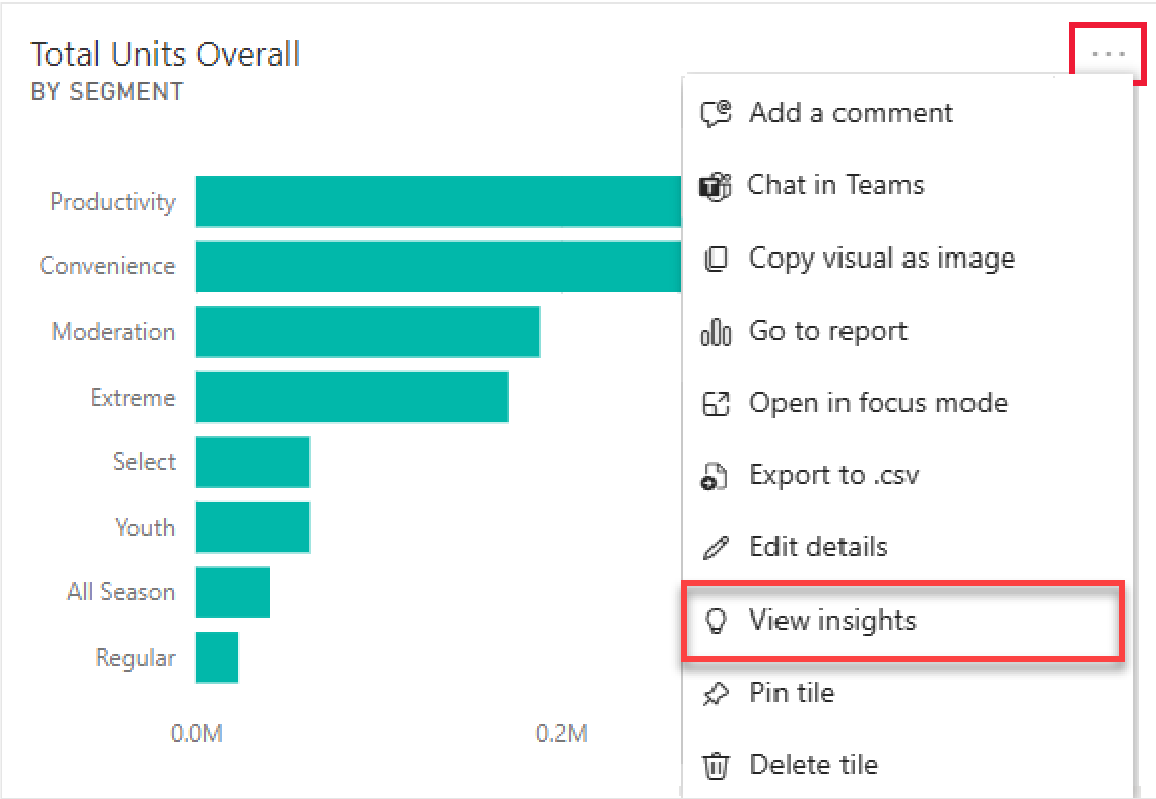
The insights feature is built on a growing set of advanced analytical algorithms developed with Microsoft Research. These algorithms allow people to find insights in their data in new and intuitive ways. For more information, see Types of insights supported by Power BI. The dashboard insights feature is similar to the semantic model **quick insights** feature. To see how to run quick insights on an entire semantic model, see Generate data insights on your semantic model automatically with Power BI.

Run insights on a dashboard tile

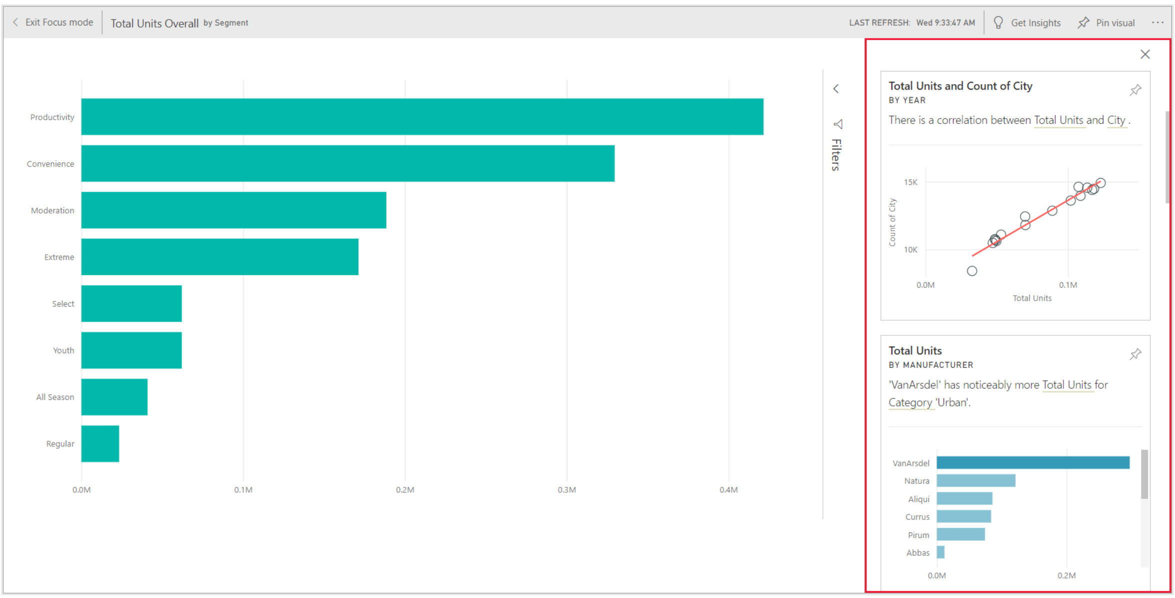
When you run insights on a dashboard tile, Power BI searches just the data used to create that single dashboard tile.

1. Open a dashboard. For more information, see Dashboards for business users of the Power BI service.

2. Hover over a tile, select the **More options** (...) feature on the tile, then choose **View insights** from the dropdown menu.



3. The tile opens in Focus mode with the insights cards displayed along the right. Select the pin icon to save any of these insight tiles to your dashboard. For more information, see Display content in more detail: focus mode and full screen mode.

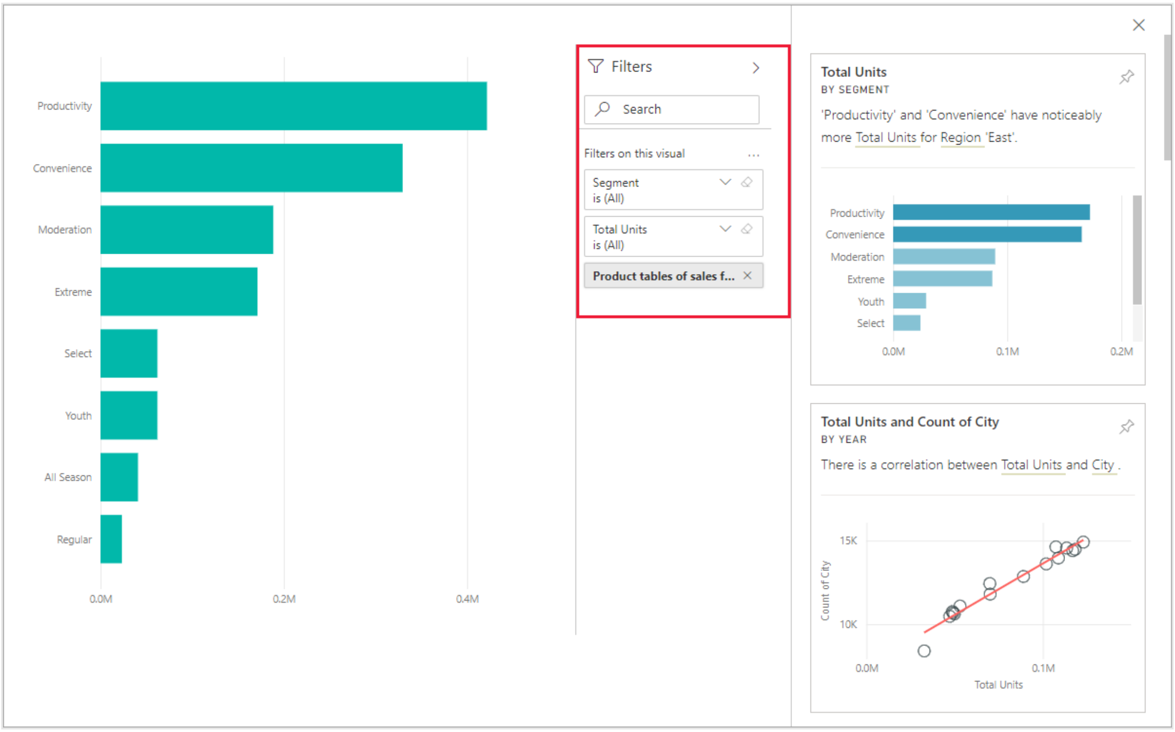


4. After you decide which insight card to explore, select it. The selected insight appears on the canvas, and new insight cards, based solely on the data in that single insight, display along the right.

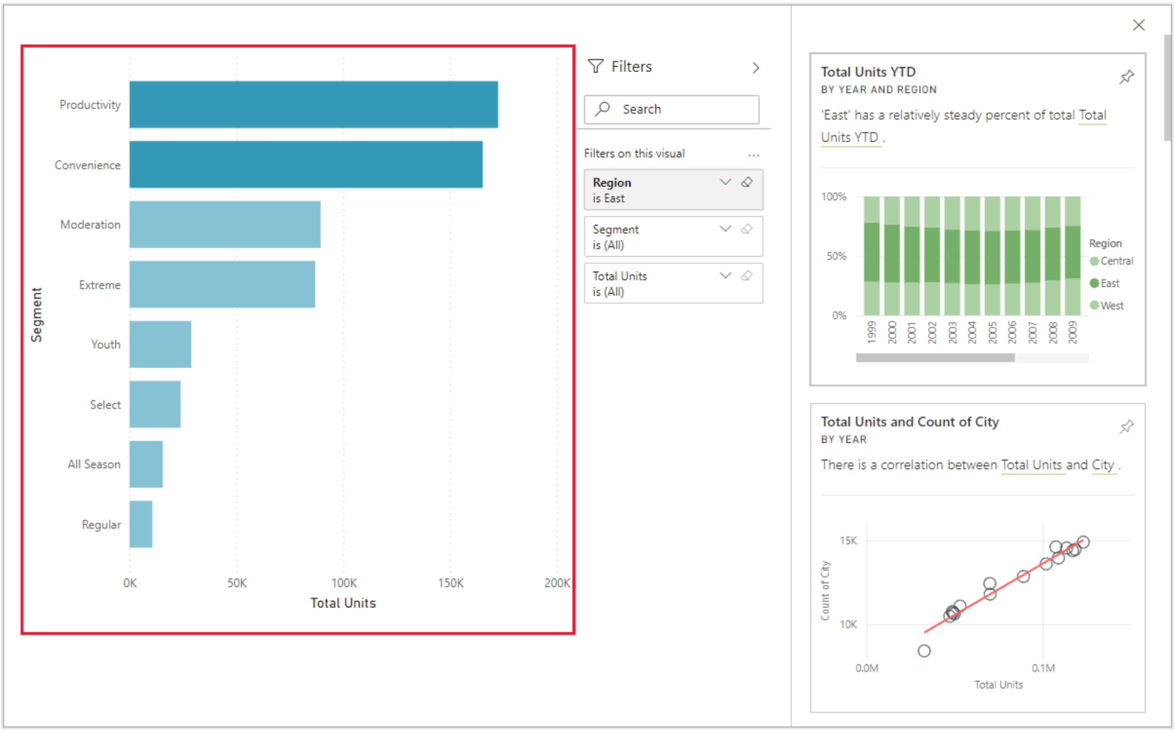
Interact with the insight cards

Now that you have an insight open, continue exploring.

- Filter the visual on the canvas. To see the filters, go to the Filter's pane and select the arrow in the upper right corner.



- You can run insights on the insight card itself. Insights on insights is often referred to as **related insights**. To generate related insights, select an insight card to make it active. It moves to the left side of the report canvas, and new cards, based solely on the data in that single insight, display along the right. Filters are available for the new insight card as well.



To return to your report, select **Exit Focus mode**, located in the upper left corner of the screen.

Considerations and troubleshooting

View insights doesn't work with all dashboard tile types. For example, it isn't available for Power BI custom visuals, streaming data, DirectQuery tiles, or data protected with RLS (row-level security).

Related content

- Use the Analyze feature to explain fluctuations in report visuals
- Types of insights supported by Power BI

Tutorial: Set alerts on Power BI dashboards

Article • 08/08/2024

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

Use this tutorial to set alerts in the Power BI service to notify you when data on a dashboard changes above or below limits you set. Alerts can be set on tiles pinned from report visuals or from Power BI Q&A. Alerts can be set only on gauges, KPIs, and cards. When you set an alert, the only person who sees those alerts is you.

Alerts only work on data that is refreshed. When data refreshes, Power BI looks to see if an alert is set for that data. If the data reaches an alert threshold, an alert is triggered.

This tutorial covers the following.

- ✓ Who can set dashboard alerts
- ✓ Which visuals support alerts
- ✓ Who can see my alerts
- ✓ Do alerts work on Power BI Desktop and mobile
- ✓ How to create an alert
- ✓ Where will I receive my alerts

Prerequisites

- A Power BI license. To sign in to Power BI, sign up for a free trial before you begin.
- Access to a dashboard with one of the following types of tile: gauge, KPI, or card.
- A semantic model that refreshes.

Who can set alerts

Alerts can be created in the Power BI service by customers with any license type. Set alerts on dashboard tiles:

- created in **My workspace**.
- shared with you in a Premium reserved capacity.
- saved in any workspace you can access, if you have a Power BI Pro or Premium Per User (PPU) license.

Who can see alerts I create?

Only you can see the alerts you set, even if you share your dashboard. Data alerts are fully synchronized across platforms; set and view data alerts in the Power BI service, in the Power BI mobile apps, and in Power BI for Teams.

> ⚠ **Warning**
>
> These alerts provide information about your data. If you view your Power BI data on a mobile device and that device gets stolen, we recommend using the Power BI service to turn off all alerts.

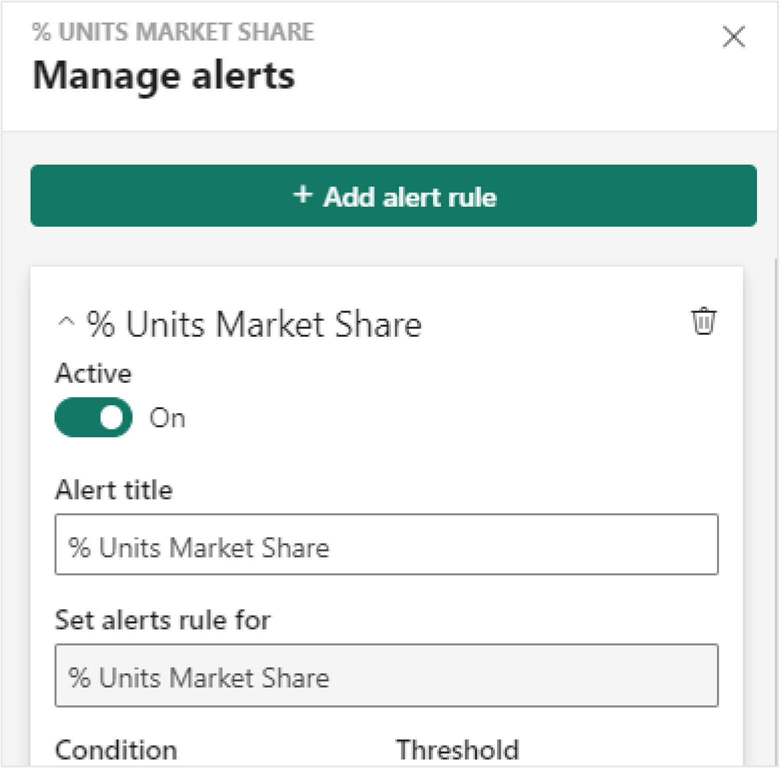
Add an alert to a dashboard tile

Alerts can be set on three types of tiles (gauges, KPIs, and cards) on a Power BI dashboard. This tutorial uses the Sales and Marketing sample. To follow along, open the sample from the left nav pane **Learn** tab. Open the *Market share* report page and pin the **% Units Market Share** card to a dashboard.

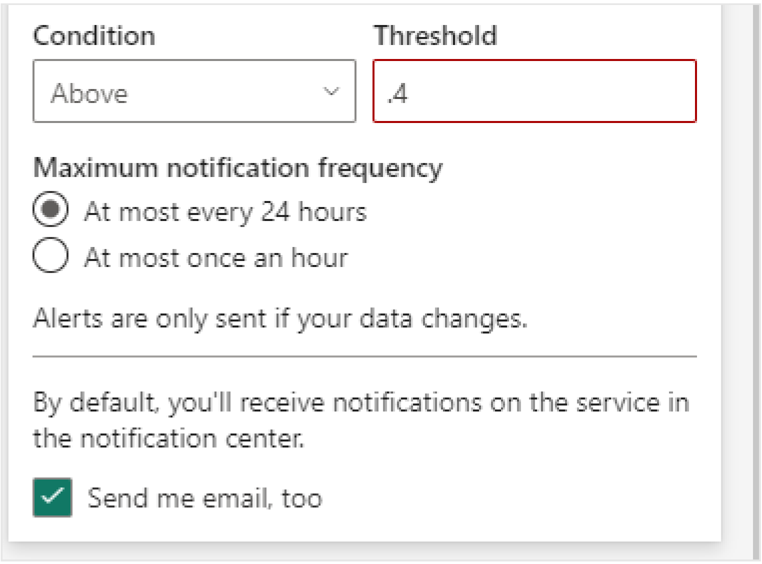
1. From a dashboard gauge, KPI, or card tile, select the ellipses (...).

2. Select the alert icon,  or **Manage alerts**, to add one or more alerts for the **Market share** card.

3. On the **Manage alerts** pane, select **+ Add alert rule**. Ensure the slider is set to **On**, and give your alert a title. Titles help you easily recognize your alerts.



4. Scroll down and enter the alert details. In this example, we create an alert that notifies us once a day if our market share increases to 40% (.4) or higher. We opt to have Power BI send us an email when an alert is triggered. Triggered alerts also appear in our Notification center.



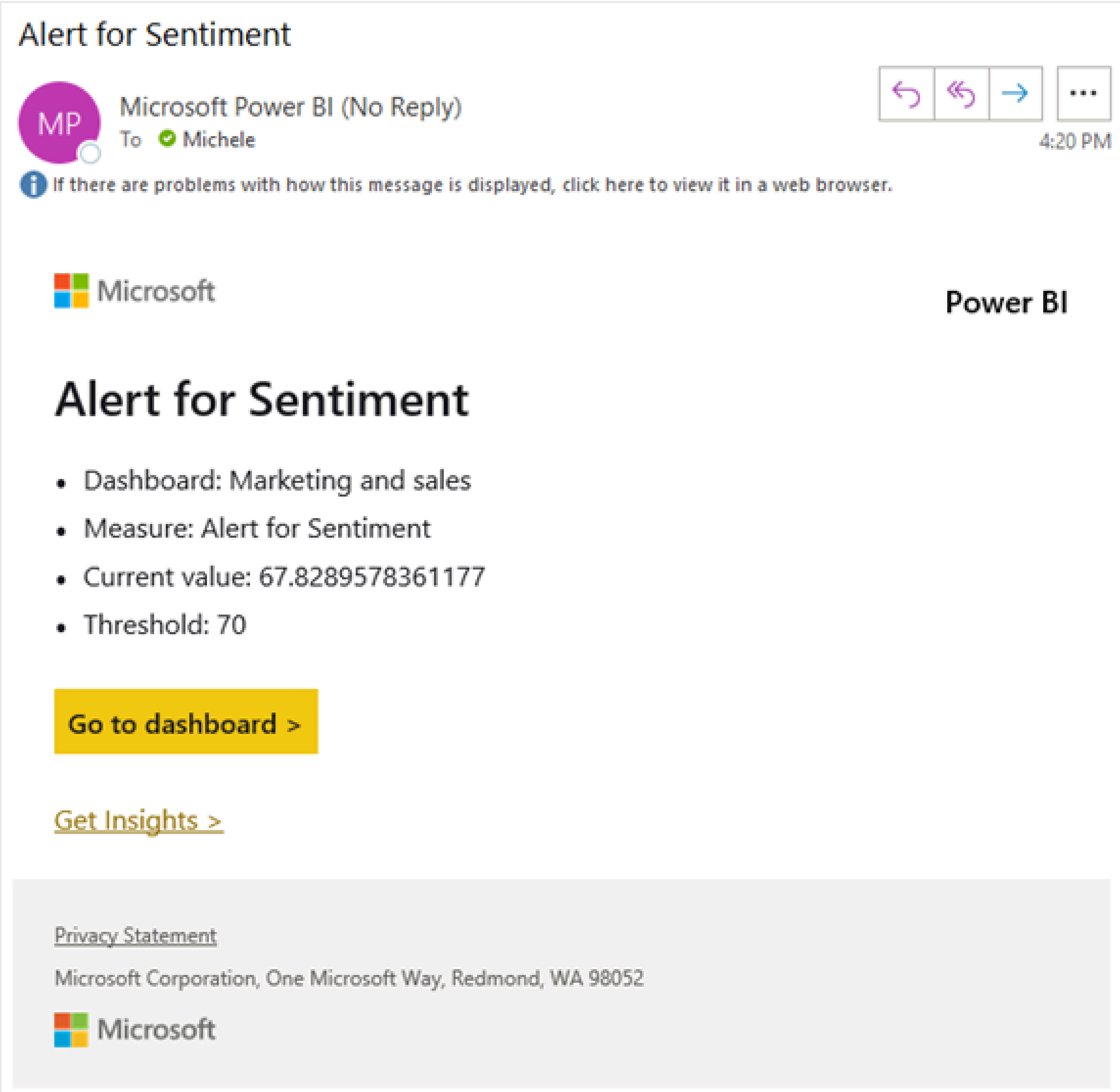
5. Select **Save and close**.

Receiving alerts

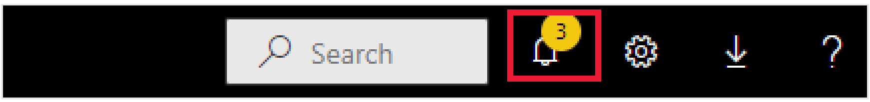
When the data being tracked reaches one of the thresholds you set, several things happen. First, Power BI checks to see if more than an hour has passed, or more than 24 hours (depending on the option you selected), since the last alert was sent. As long as the data is past the threshold, you get an alert.

Next, Power BI sends an alert to your Notification center and, optionally, in email. Each alert contains a direct link to your data. Select the link to see the relevant tile.

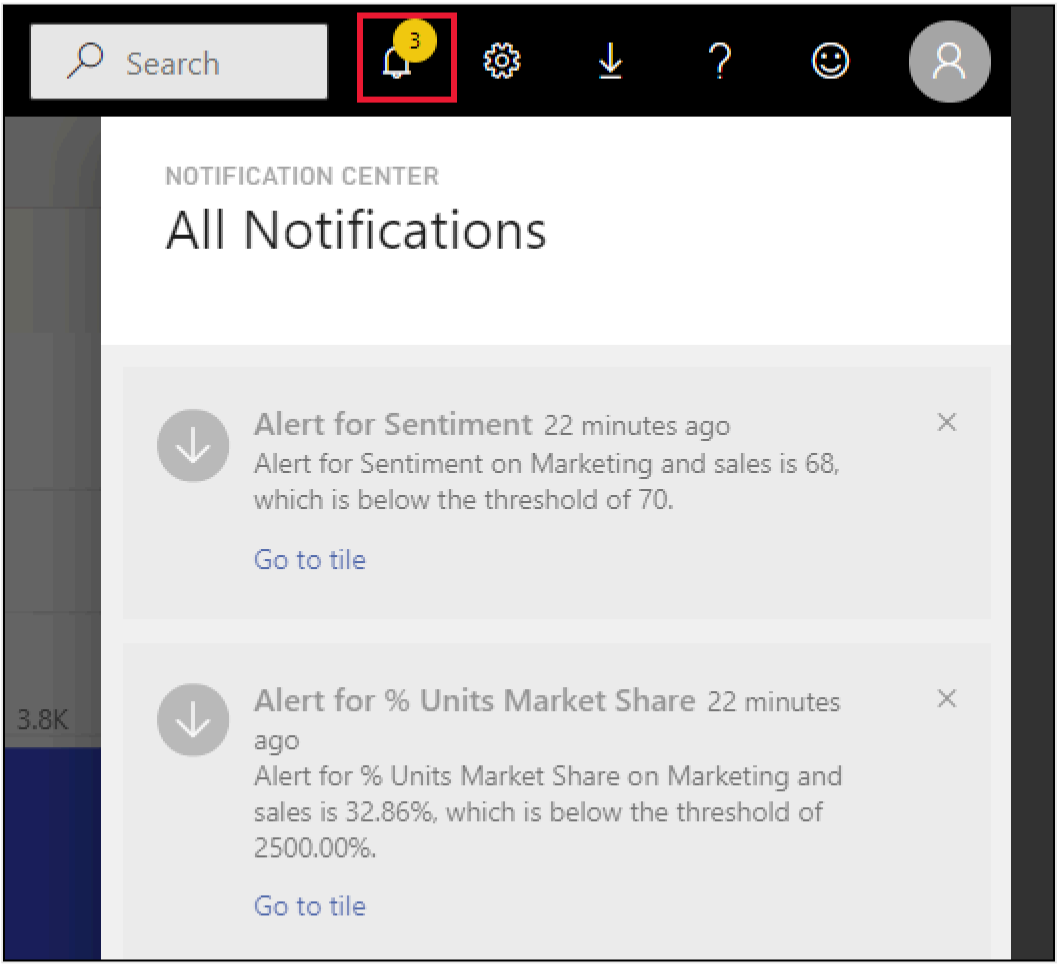
1. When you set the alert to send you an email, you find something like this in your Inbox. This email is from an alert we set for the **Sentiment** card.



2. Power BI also adds a message to your **Notification center**.



3. Open your Notification center to see the alert details.

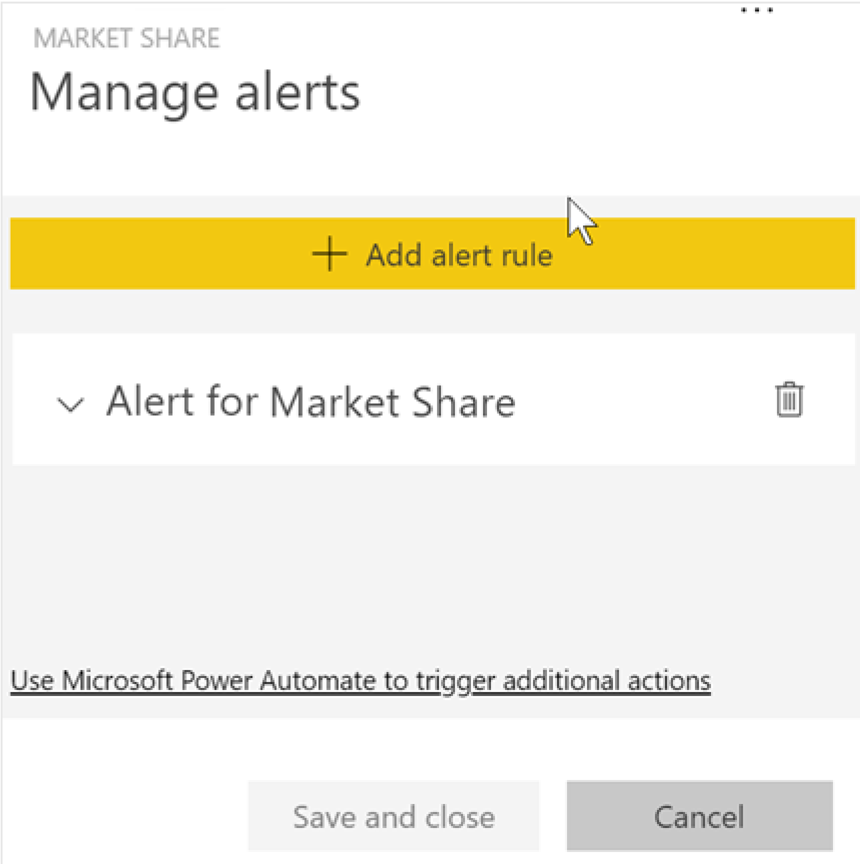


Managing alerts

There are many ways to manage your alerts: from the dashboard tile itself, from the Power BI Settings menu, on an individual tile in the Power BI mobile app on the iPhone, or in the Power BI mobile app for Windows 10.

From the tile itself

1. If you need to change or remove an alert for a tile, reopen the **Manage alerts** window. All the alerts that you set for that tile are displayed.

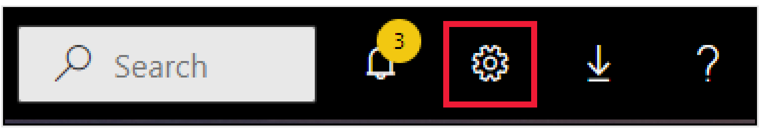


2. To modify an alert, select the arrow to the left of the alert name.

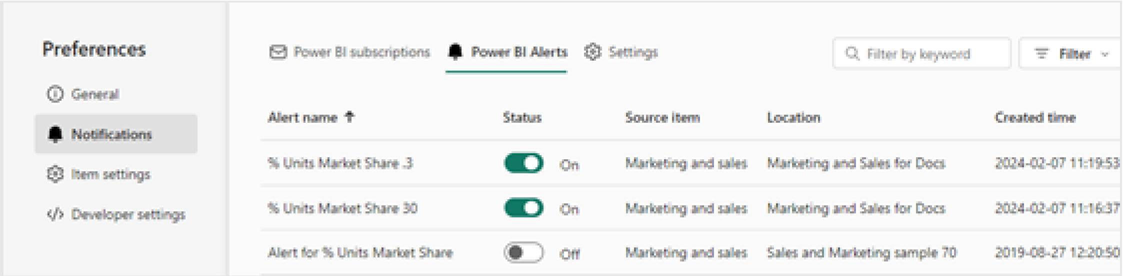
3. To delete an alert, select the trashcan to the right of the alert name.

From the Power BI settings menu

1. Select the gear icon from the Power BI menubar.



2. Under **Settings** select **Notifications** > **Power BI Alerts**.



3. From here you can turn alerts on and off, open the **Manage alerts** window to make changes, or delete the alert.

Considerations and limitations

- If you're unable to set an alert for a gauge, KPI, or card, contact your Power BI admin or IT help desk for help. Sometimes alerts are turned off or unavailable for your dashboard or for specific types of dashboard tiles.
- Alerts only work on data that is refreshed. They don't work on static data. Most of the samples supplied by Microsoft are static.
- The ability to receive and view shared content requires a few conditions to be met. Those conditions are that you have a Power BI Pro license, a Premium Per User license, or the report is saved in Premium reserved capacity. For more information, read Which license do I have?.
- Alerts can be set on visuals created from streaming datasets that are pinned from a report to a dashboard. Alerts can't be set on streaming tiles created directly on the dashboard using **Add tile** > **Custom streaming data**.

Clean up resources

Delete the alerts you created in this tutorial. Select the gear icon from the Power BI menubar. Under **Settings** select **Notifications** > **Power BI Alerts** and delete the alert.

Set data alerts on your mobile device

Feedback

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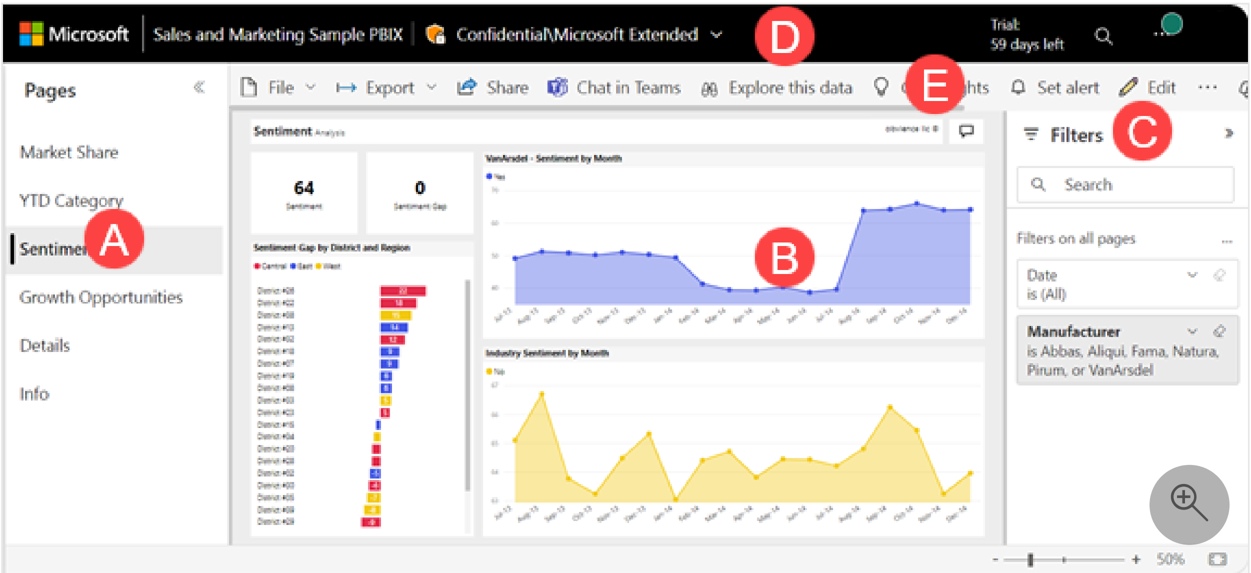
Reports in Power BI

Article • 02/06/2024

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop

A Power BI report is a multi-perspective view into a semantic model, with visuals that represent findings and insights from that semantic model. A report can have a single visual or many pages full of visuals. Depending on your job role, you might be someone who designs reports, or you might be a business user who consumes reports. This article is for business users.

The parts of a report



A. This report has six pages (or tabs). The example shows the **Sentiment** page.
B. This page has five visuals and a page title.
C. The **Filters** pane shows all applied filters. To collapse the **Filters** pane, select the arrow (>).
D. The Power BI banner shows the title of the report and the sensitivity label. Select the title to open a menu that shows the report location, date it was last updated, and contact information for the report creator.
E. The action bar contains links to numerous actions you can take on this report. Some actions require extra permissions. For example, based on your permissions you may be able to edit, subscribe, and share the report. All users can add a comment, view a bookmark, or generate automatic insights. Select **More options** (...) to see the full list of report actions.

If you're new to Power BI, read Basic concepts for the Power BI service business users to get a good foundation. You can view, share, and annotate reports on mobile devices. For more information, see Explore reports in the Power BI mobile apps.

Advantages of reports

Power BI bases a report on a single semantic model. Report designers create the visuals in a report to represent pieces of information. Presenting data as visuals makes it easier to grasp the meaning of what you're seeing. And, the visuals aren't static. They update as the underlying data changes. The designers do the pre-work, adding visuals that they believe are interesting. But you get to explore and dig deeper. You interact with the visuals and filters as you dig into the data to discover insights and find answers. The extent of what you can do with a report depends on your role and the permissions the report designer assigns to you.

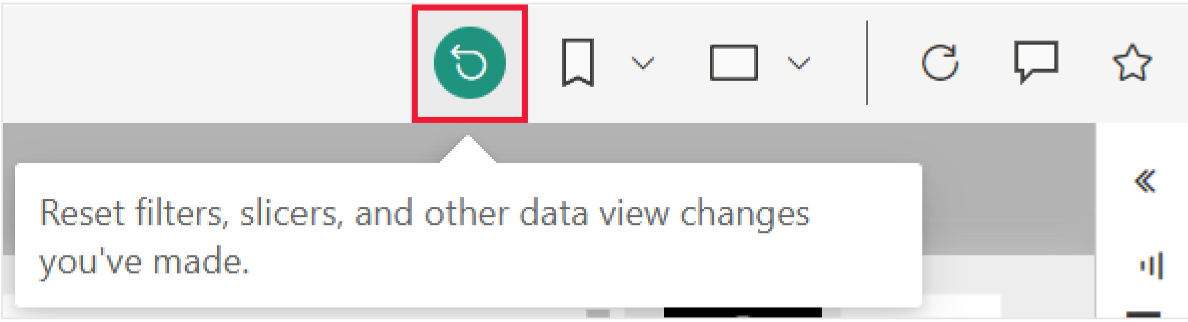
Safely interact with content

As you explore and interact with your content by filtering, slicing, subscribing, and exporting, you can't corrupt the reports. Your work doesn't affect the underlying semantic model or the original shared dashboards, reports, and apps.

> **Note**
>
> You can't damage your data. The Power BI service is a great place for you to explore and experiment without worrying about breaking something.

Save your changes or revert to the default settings

Your changes don't affect underlying data, but that doesn't mean you can't save your changes. You can, but those changes only affect your view of the content. To revert to the default view of the report, select the **Reset** icon.



Dashboards versus reports

Dashboards can be confused with reports because they're both canvases filled with visualizations. But there are major differences. The following table shows an overview of the different capabilities of dashboards and reports:

Expand table

Capability	Dashboards	Reports
Pages	One page	One or more pages
Data sources	One or more report or semantic model per dashboard	A single semantic model per report
Filtering	No, you can't filter or slice	Yes, there are many ways to filter, highlight, and slice
Can see underlying semantic model tables and fields	No. Can export data but can't see the semantic model tables and fields in the dashboard itself	Yes. Can see semantic model tables and fields and values that you have permissions to see
Customization	No	Yes, depending on your permissions you can cross-filter, change visual type, apply design features, add bookmarks and comments, generate QR codes, analyze in Excel, and much more
Pinning	Can pin existing visuals (tiles) only from current dashboard to your other dashboards	Can pin visuals (as tiles) and entire report pages to any of your dashboards

Related content

Depending on your role, you may be a *designer*, someone who creates reports for your own use or to share with colleagues. You want to learn how to create and share reports.

Or you might be a *business user*, someone who receives reports from others. You want to learn how to understand and interact with the reports. If you're a report *business user*, these links are for you:

- Start with a tour of the Power BI service, so you know where to find reports and report tools.
- Learn how to open a report and all the interactions available to business users.
- Get comfortable with reports by taking a tour of a sample.
- Explore Dashboards in the Power BI service.
- See which semantic model the report is using and which dashboards are showing visuals from the report, see View related content in the Power BI service.

Tip

If you didn't find what you're looking for here, use the table of contents on this page to browse more articles.

Open a report in the Power BI service

Article • 01/09/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

A Power BI report is one or more pages of organized visuals. All Power BI users can create and edit their own reports. However, opening reports created by others requires a paid license (Power BI Pro or Premium Per User) or special access to a Premium capacity.

This article teaches you how to open reports that are shared with you. The most common scenarios are covered. The first scenario is when a Power BI designer creates a report and shares it directly. The second scenario is when a designer shares a report as part of an app.

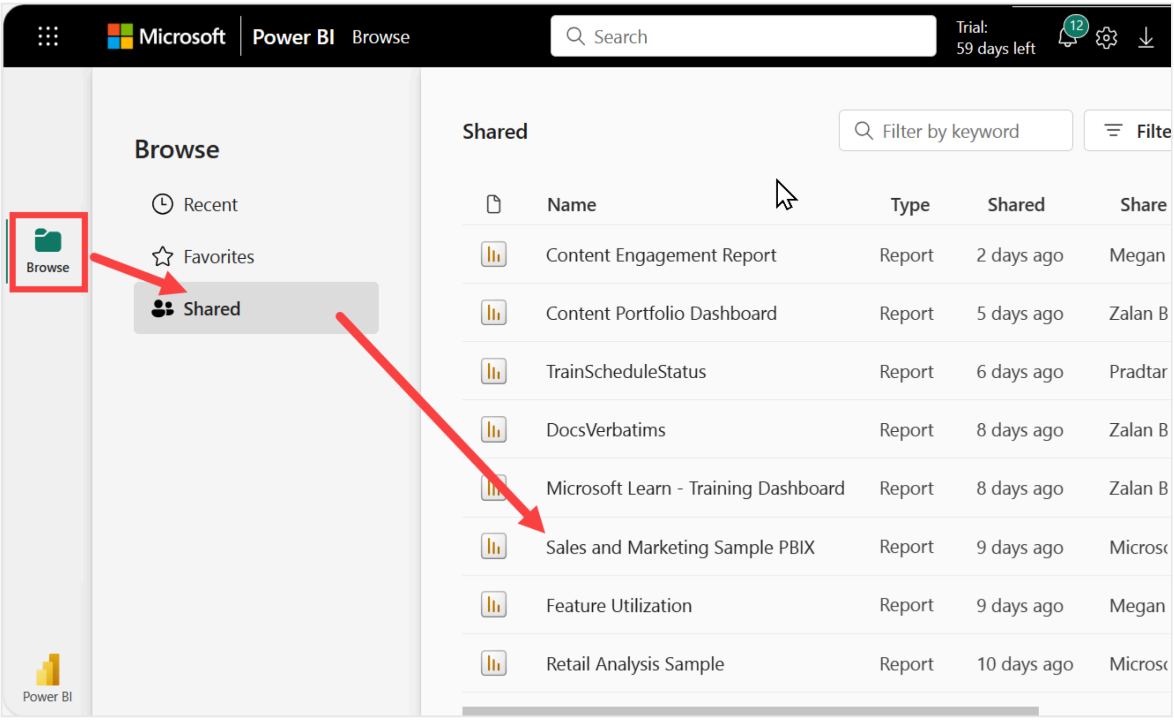
For more information about sharing reports, see Licenses and subscriptions for business users.

Open a report that is shared with you

Power BI designers share reports with you by sending an email link or by adding the report to your Power BI content. These reports are located under **Shared** in the **Browse** tab.

1. Open the Power BI service (app.powerbi.com), and sign in if you're prompted.

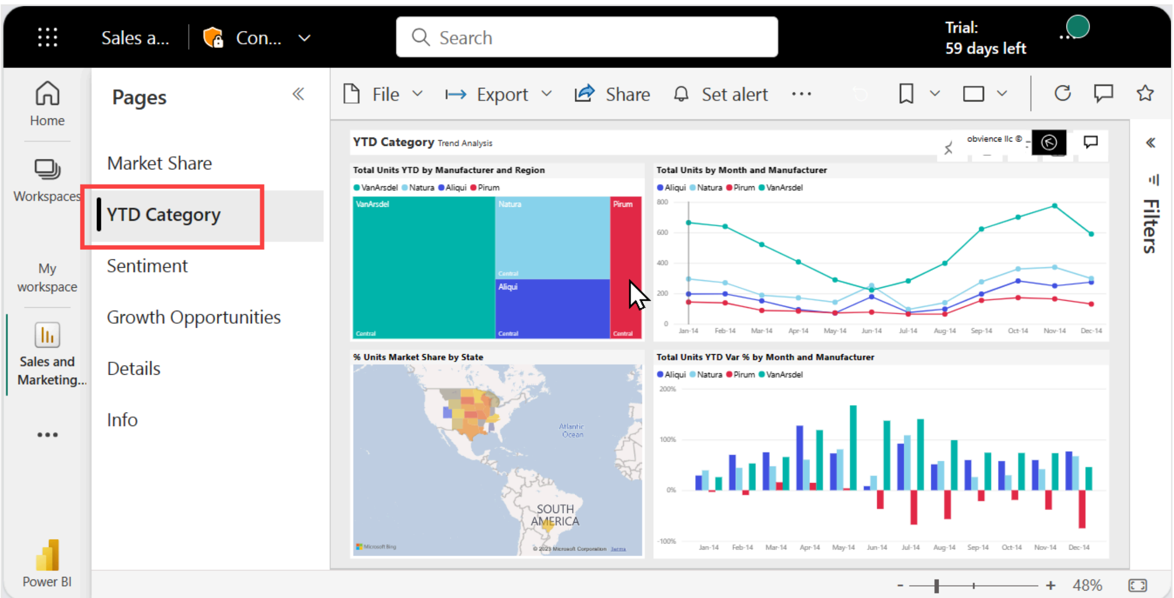
2. On the navigation pane, select **Browse**, and on the **Browse** page, select **Shared**.



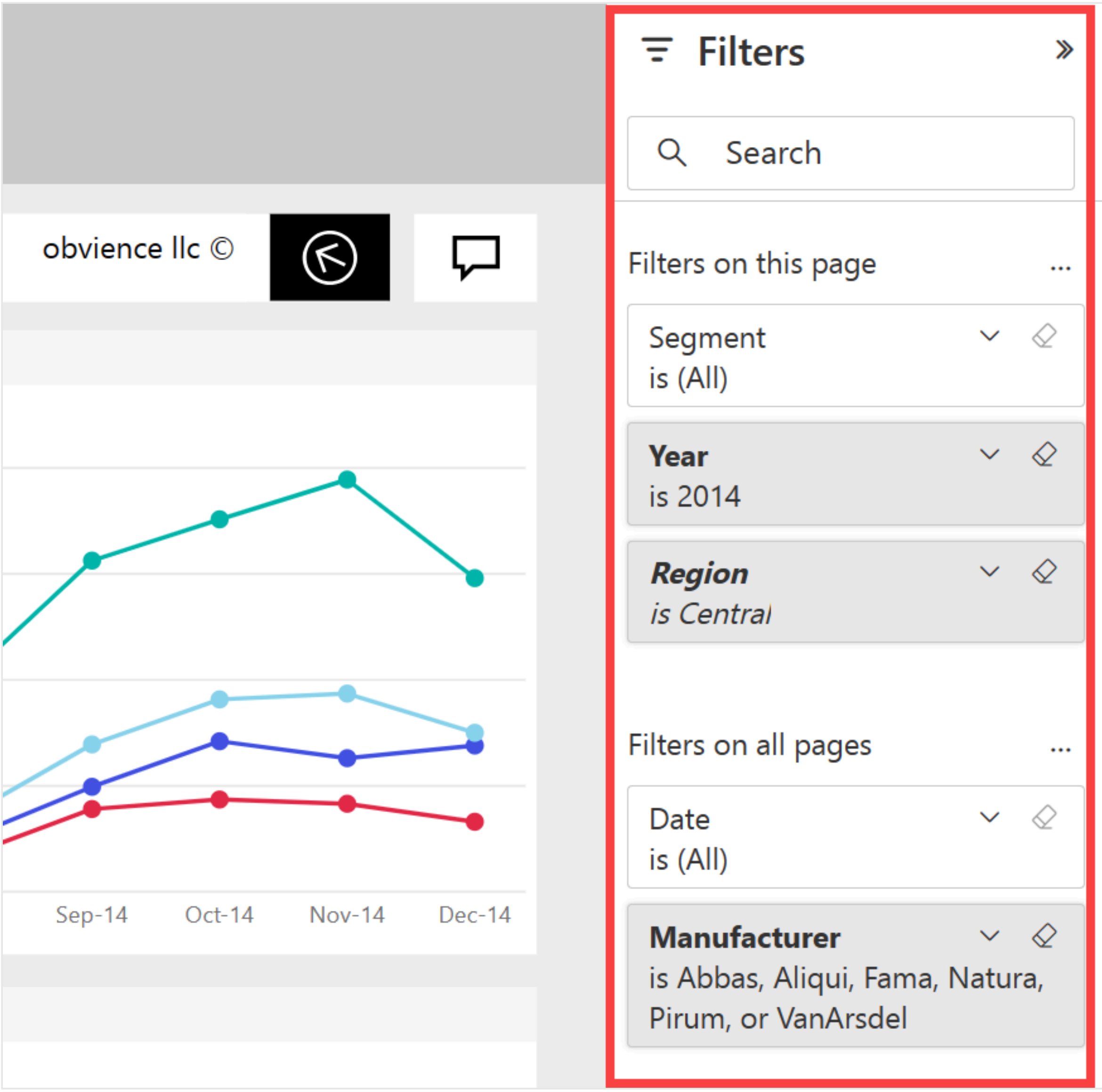
3. The report icon  is displayed next to the report name. Select a report to open it.

Explore the report

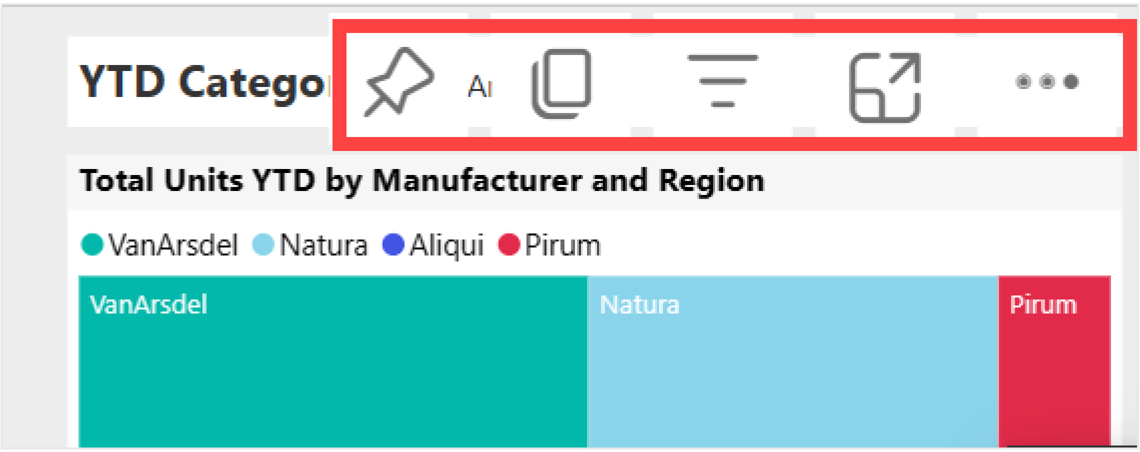
1. Notice the tabs along the left side. Each tab represents a report page or a dashboard. Selecting the **YTD Category** tab opens the **YTD Category Trend Analysis** page.



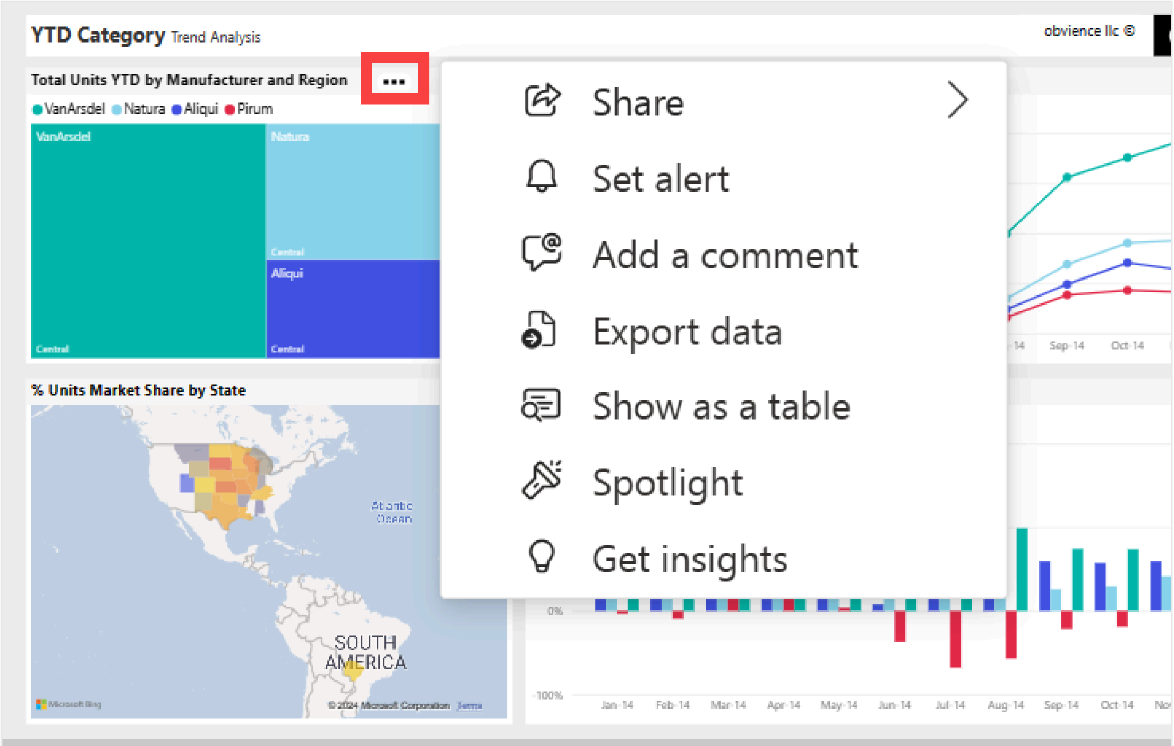
2. Expand the **Filters** pane along the right side. Filters that are applied to this report page, or to the entire report, are displayed here. If you have permissions, change these filters to see the impact on your report and visuals.



3. Hover over a visual to show the actions you can perform. For this treemap, we see pin, copy, filter, display the visual at full size, and an ellipsis (...).

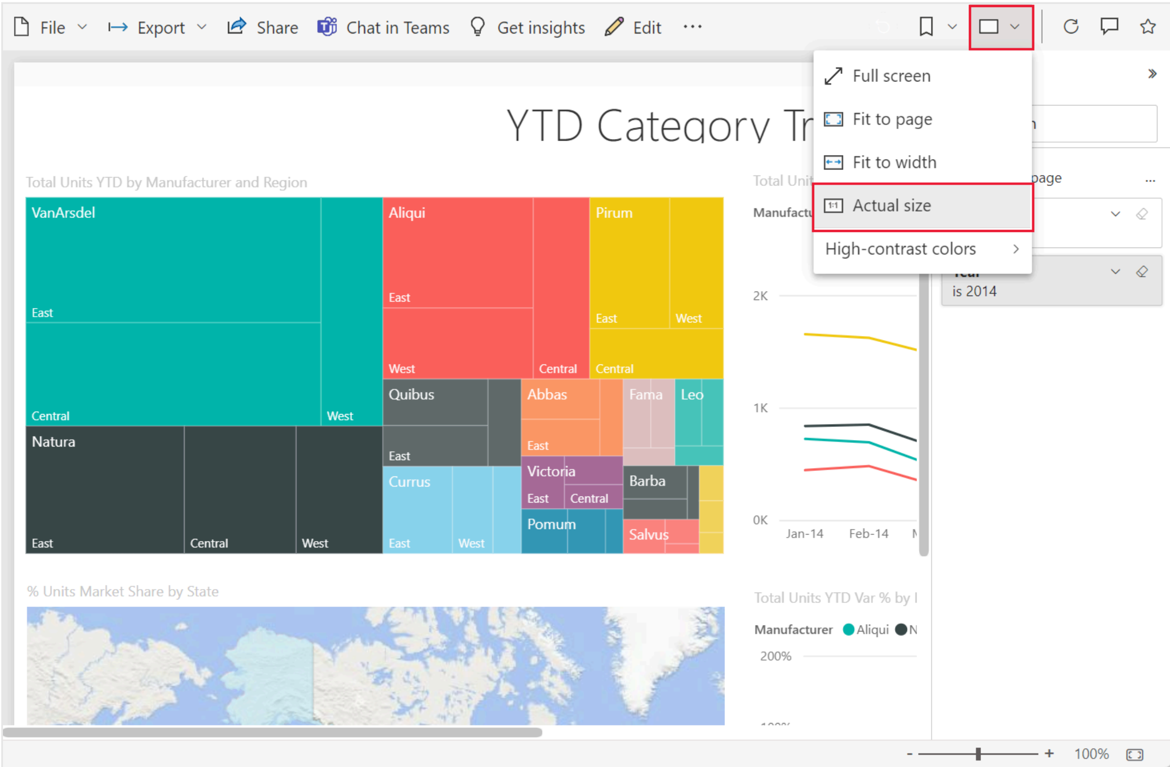


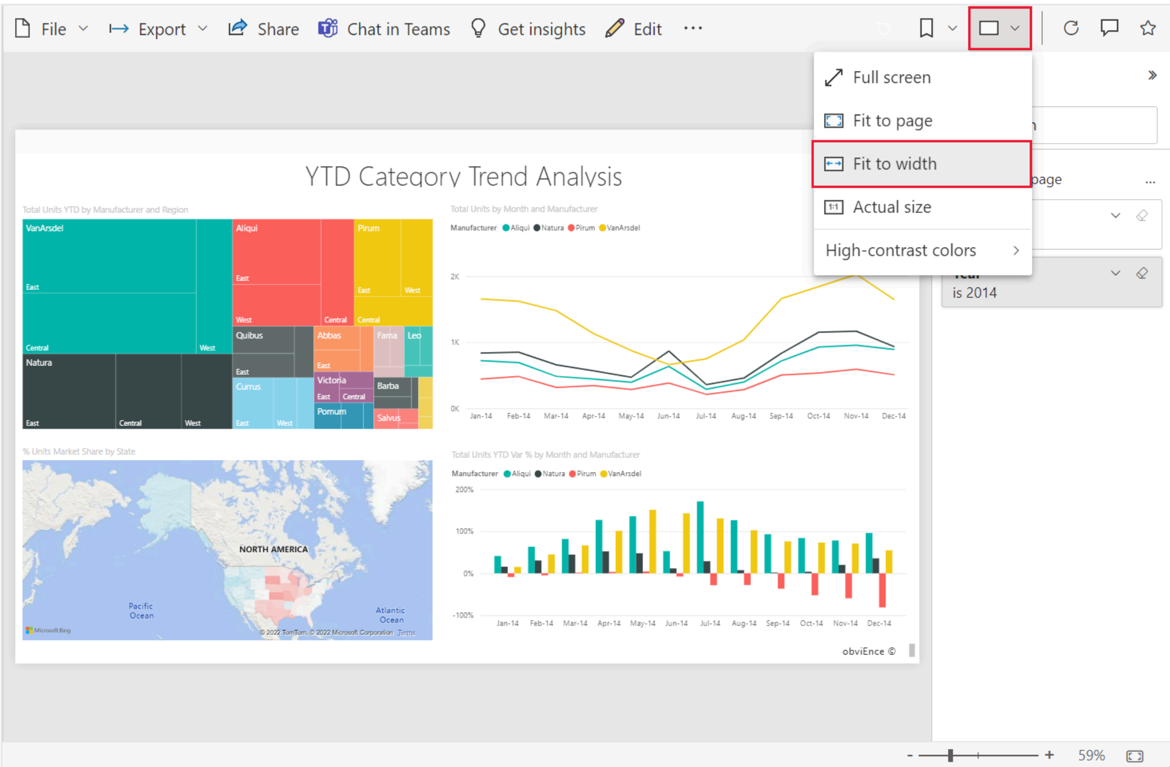
Select the ellipsis (...) to see more options.



4. Explore the action bar at the top of your report. From the **File** menu, you can make copies and print. If you have permissions, **Export** your report to PowerPoint or **Share** your report with colleagues. Select **Get insights** and Power BI searches for and displays interesting information from the report data. All of the features available from the action bar are explained in separate Power BI articles.

5. Change the size and display of your report. To adjust the report display size, use the slider in the bottom right. To select display options from a menu, open the **View** menu and choose a display option. Your choices are **Full screen**, **Actual size**, **Fit to page**, and **Fit to width**. Notice the difference that each display options makes.





There are many ways for you to interact with a report to discover insights and make business decisions. Other articles about Power BI reports are available from the Power BI Learn table of contents.

Open a report that's part of an app

The apps you receive from colleagues are located on the **Home** page and in the **Apps** container on your navigation pane. An app is a collection of dashboards and reports that a Power BI designer compiles for you.

You must have a Power BI Pro license to open an app unless the app workspace is stored in Premium capacity. A user with any Power BI license can have access to reports stored in Premium capacity.

Follow along with Microsoft sample content.

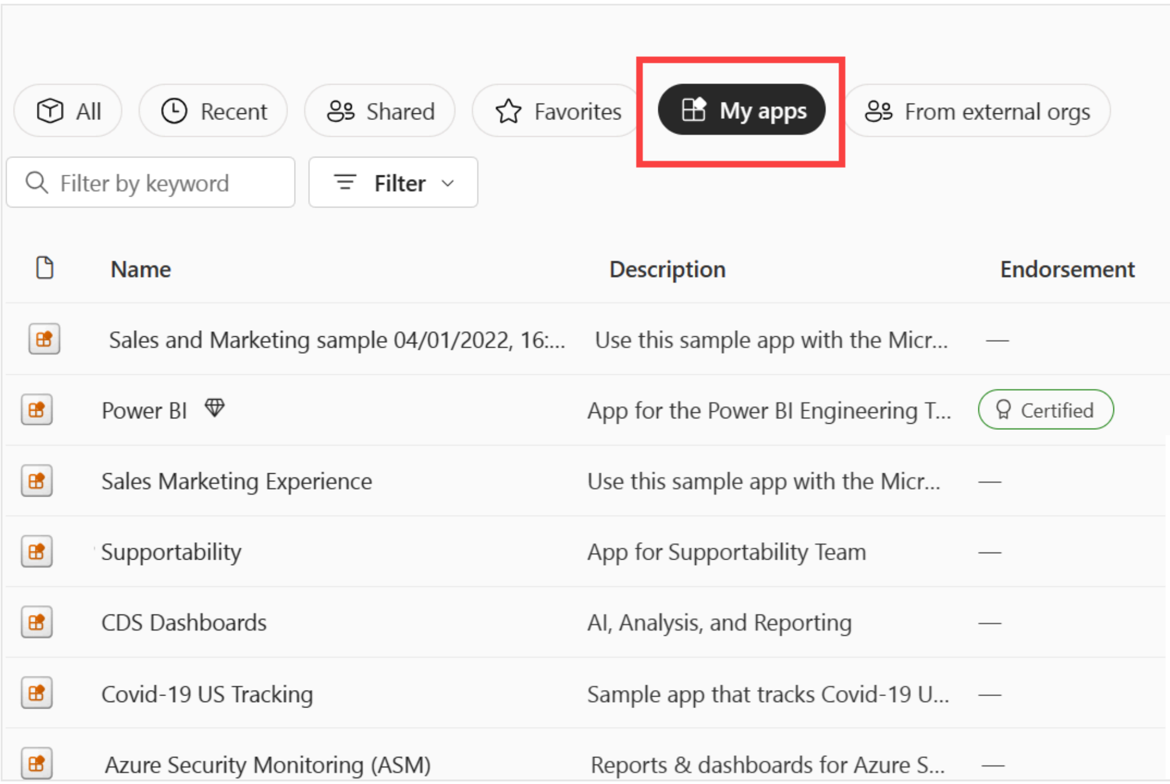
1. In your browser, go to appsource.microsoft.com.

2. Search for "Sales & Marketing" and select **Microsoft sample - Sales & Marketing**.

3. Select **Get it now** > **Continue** > **Install** to install the app in your Apps container.

4. Go back to Home by selecting **Home** from the navigation pane.

5. Scroll down and select **My Apps**.

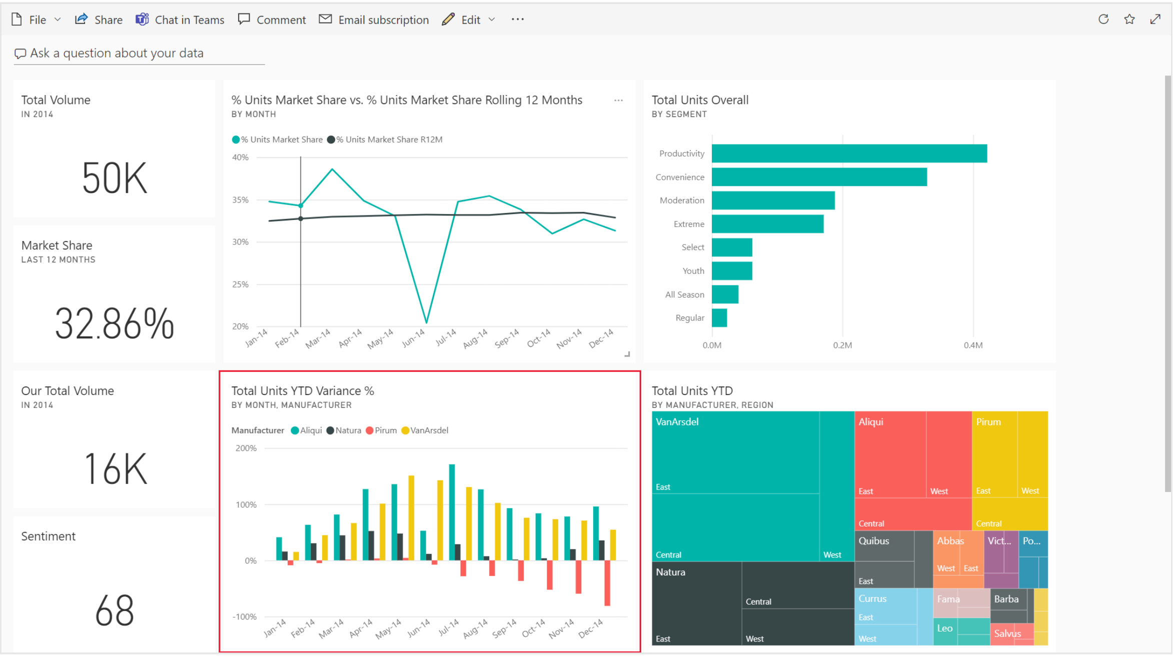


6. Select your new **Sales and Marketing** app to open it. Depending on the options set by the app designer, the app opens to a dashboard or a report. This app opens to a dashboard.

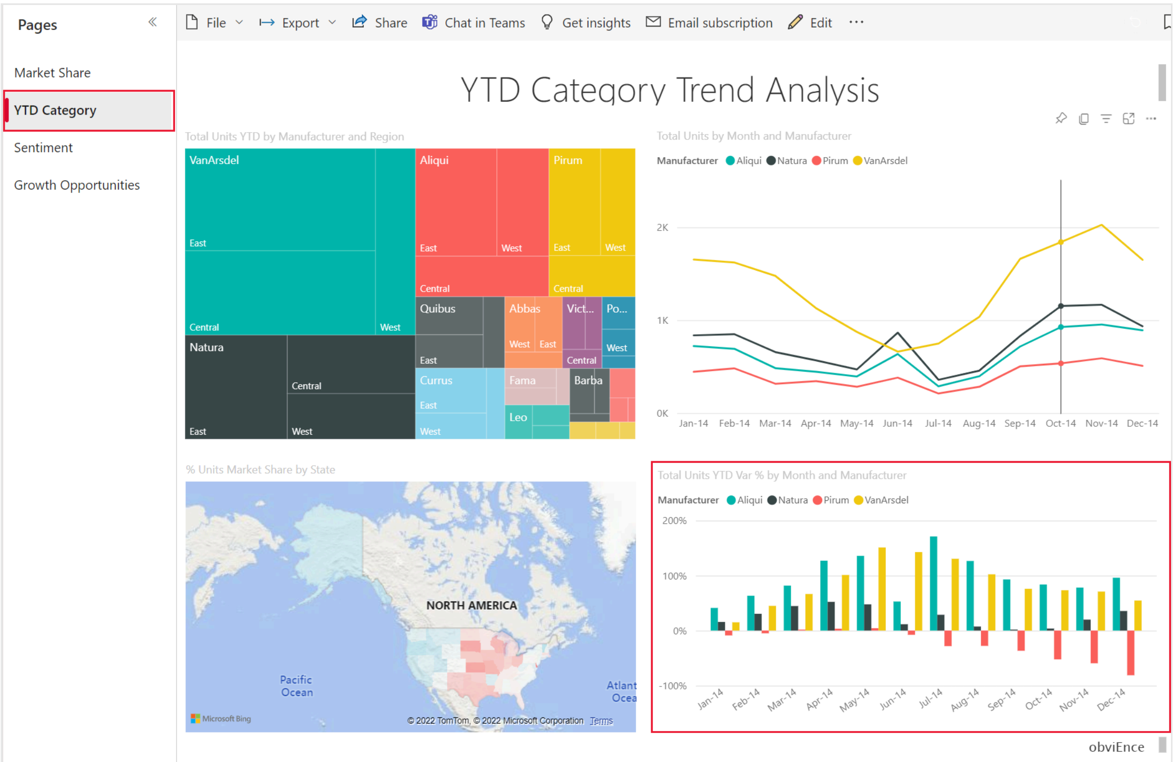
Open a report from a dashboard

Most dashboard tiles are pinned from reports. Selecting a tile opens the report that was used to create the tile.

1. To open an underlying report, select a tile from a dashboard. From the **Sales and Marketing** dashboard, we select the *Total Units YTD Variance %* column chart tile.



2. The associated report opens to the *YTD Category Trend Analysis* page. This is the source page for the column chart tile.



ⓘ **Note**

Not all tiles lead to a report. If you select a tile that was created with Q&A, the Q&A screen opens. If you select a tile that was created using the dashboard Add tile widget, a video, website, or other content might open.

More ways to open a report

As you get more comfortable navigating the Power BI service, you figure out workflows that are best for you. A few other ways to access reports:

- Using the related content pane.
- In an email, when someone shares with you or you set an alert or you create or receive a subscription.
- From your Notification center
- From a workspace

Related content

- Open and view a dashboard
- Explore the report Filters pane

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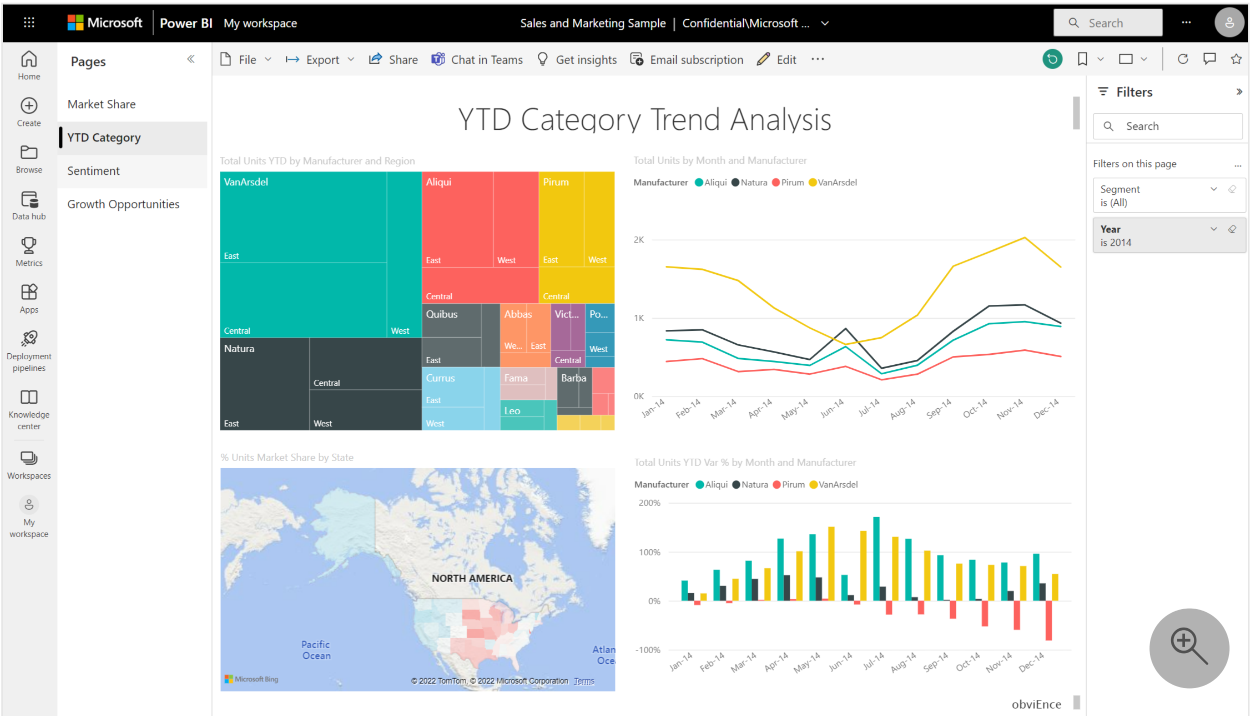
Change the display of a report page

Article • 02/14/2023

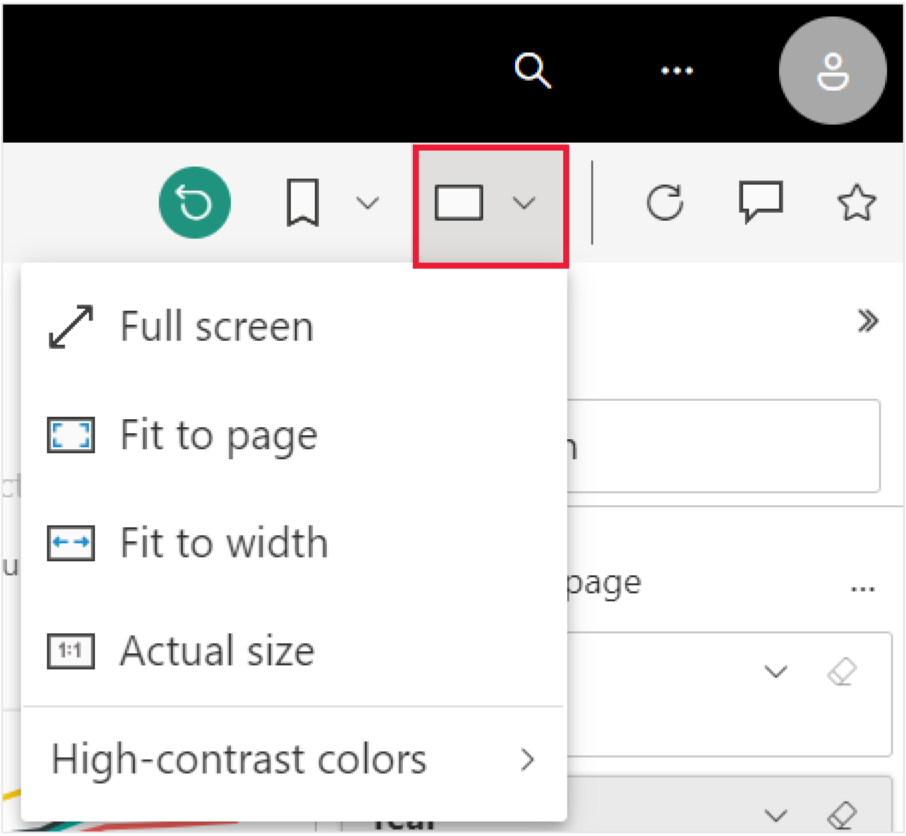
APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

You can view reports on many devices with varying screen sizes and aspect ratios. Learn how to change the display of a report page, so it fits your needs.

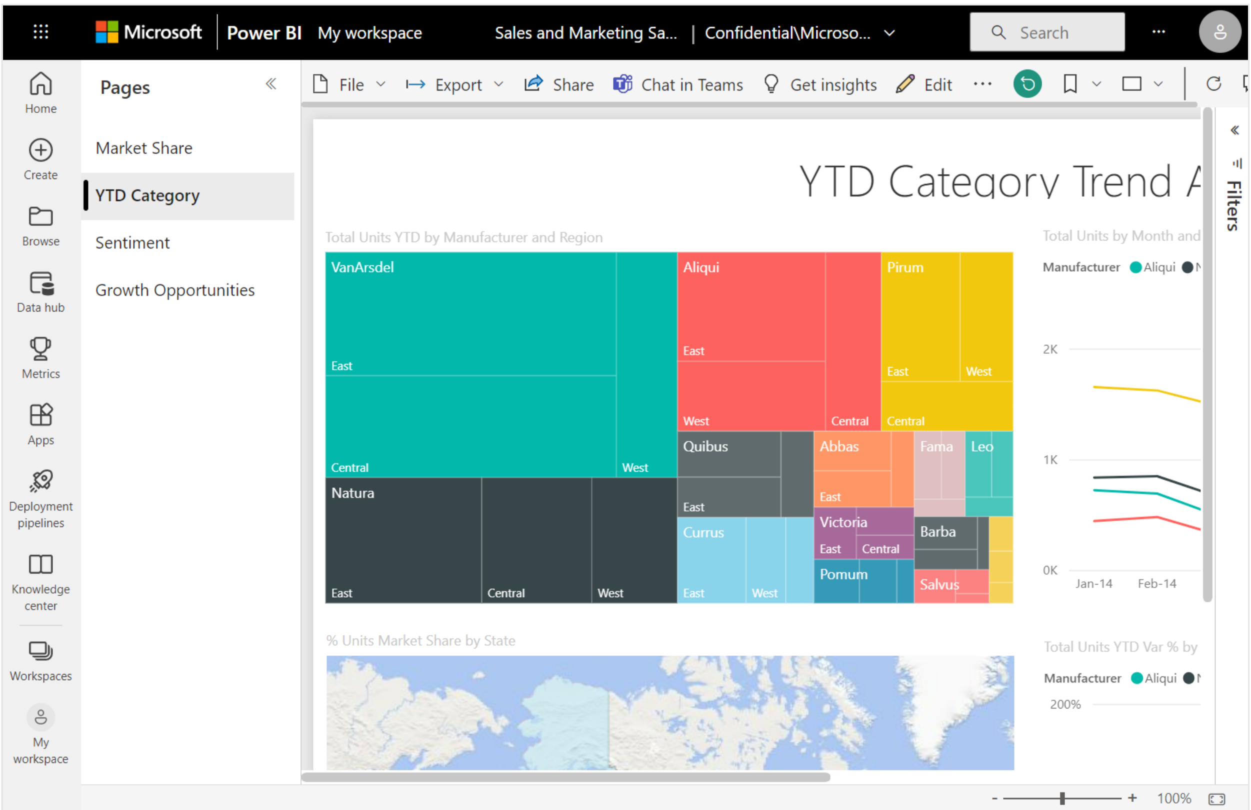


Explore the View menu

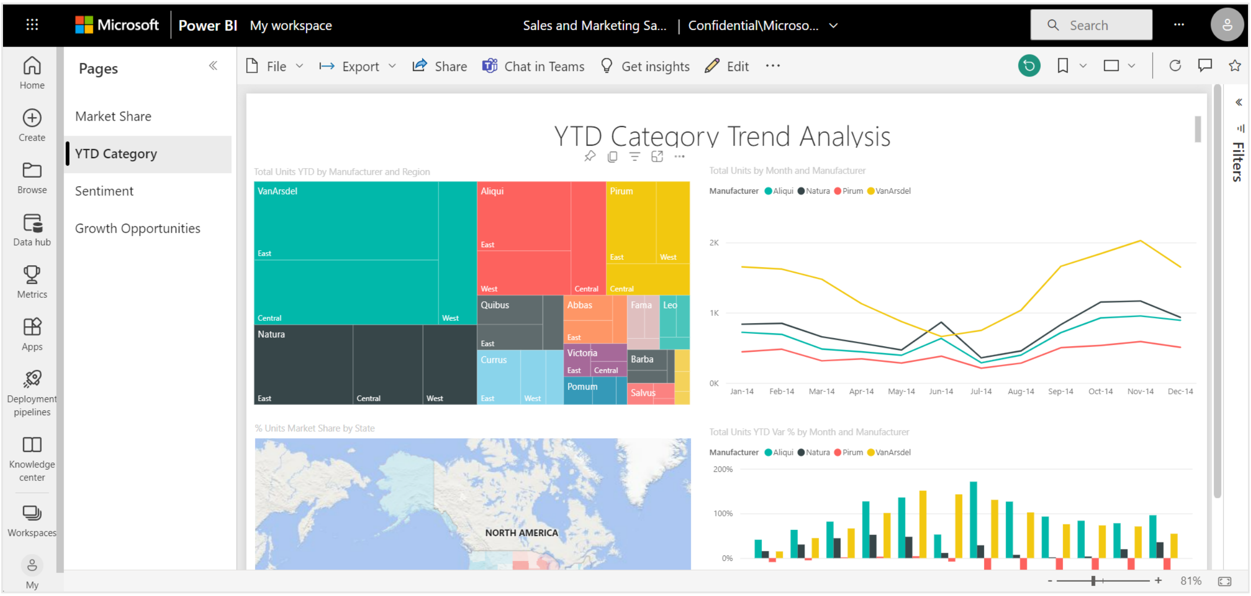
The options in the **View** menu give you flexibility to display report pages at the size and width you choose.



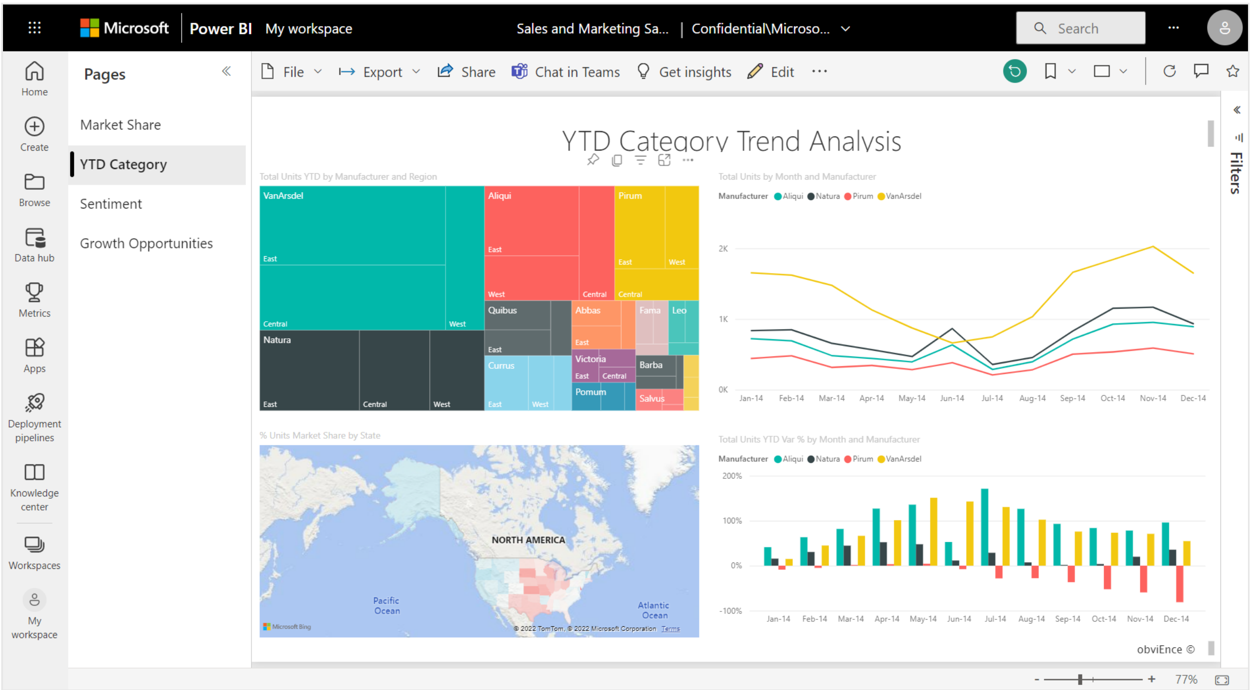
If you view a report on a small device, it might be hard to see titles and legends. Select **View** > **Actual size** to increase the size of the report page. Use the scroll bars to move around the report.



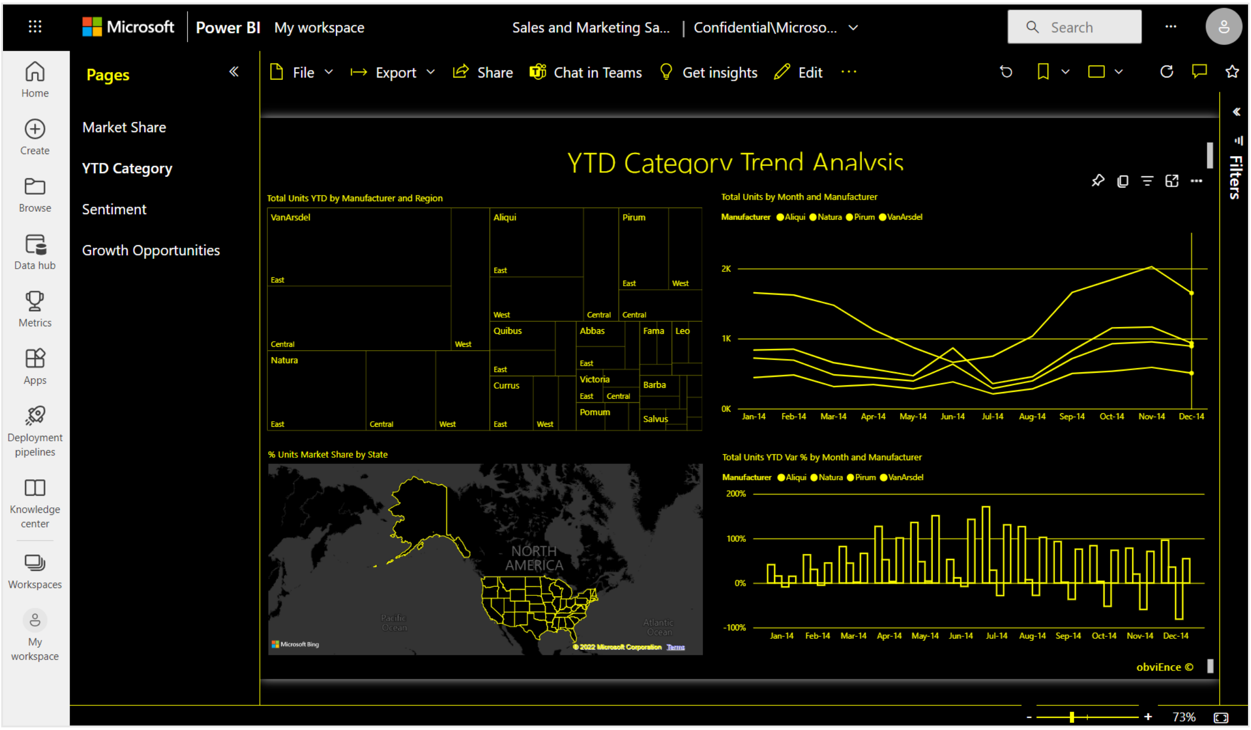
Fit the report to your screen width by selecting **Fit to width** from the **View** menu. Because it adjusts the width and not the height, you might need to use the vertical scroll bar.



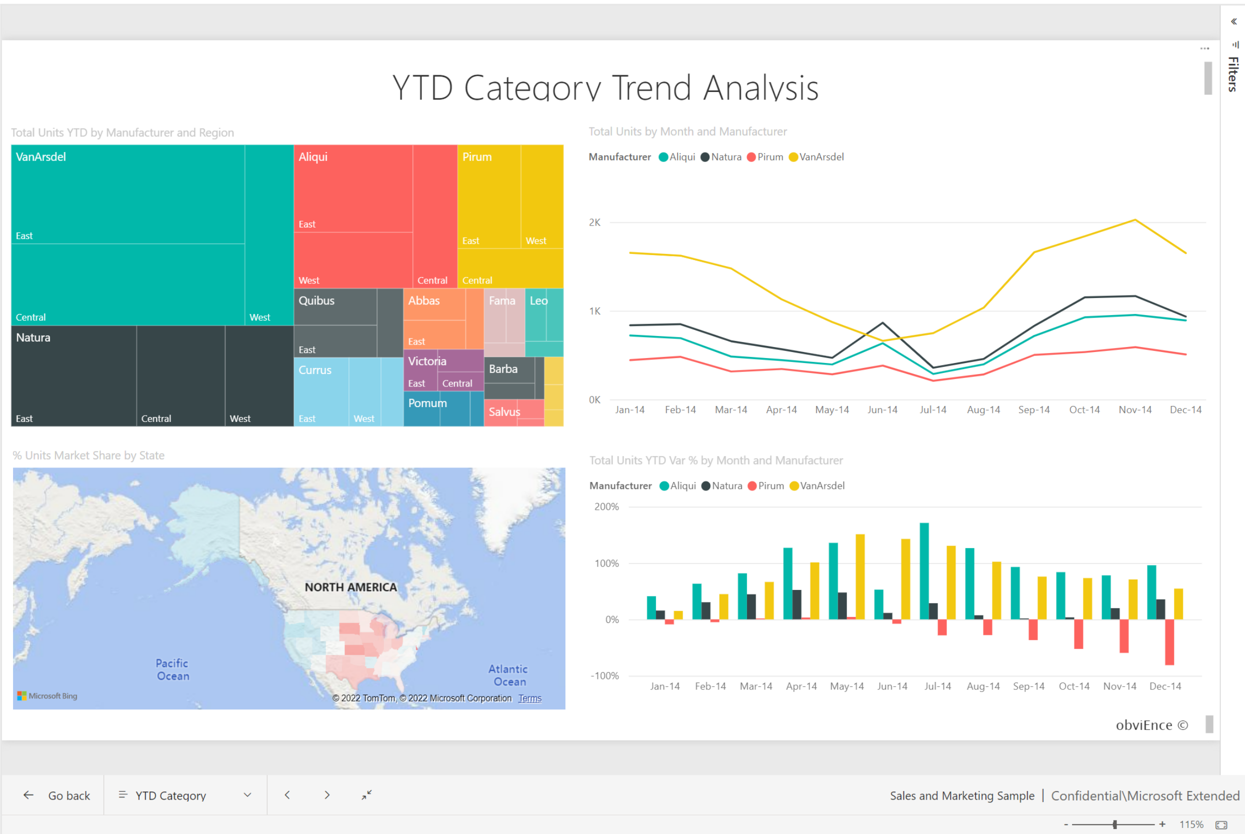
If you don't want any scroll bars, but you want to make the best use of your screen size, select **Fit to Page** from the **View** menu.



Change your display colors by selecting **High contrast colors** in the **View** menu. Select one of the options, such as High-contrast #1, High-contrast #2, High-contrast black, or High-contrast white. This feature gives people with impaired vision options to see the reports better. The example below is the High-contrast #1 option.



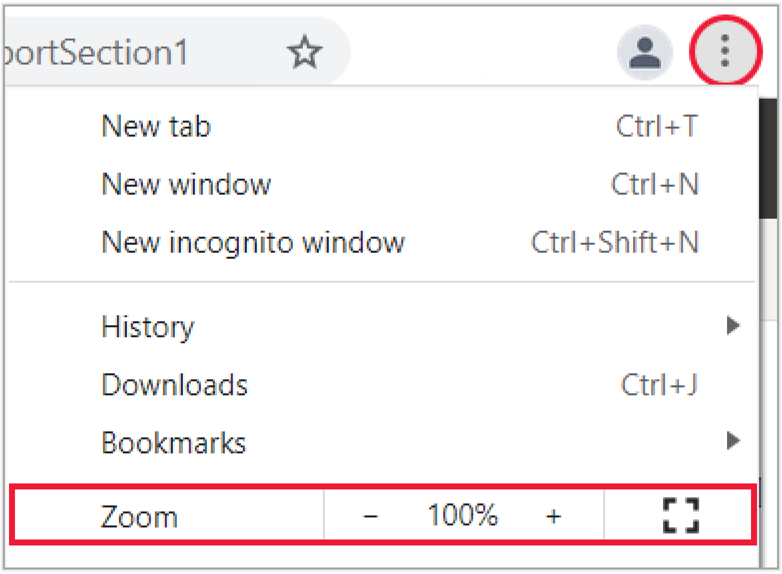
Select **Full screen** in the **View** menu to display your report page without menu bars and headers. Full screen is a good choice for small screens where the details might be hard to see. Full screen can also be a good choice when projecting report pages on a large screen for people to view but not interact with.



When you exit the report, your **View** settings aren't saved. The changes revert to the default view settings. If you want to save these settings, you can preserve them as a bookmark.

Use your browser to change page display

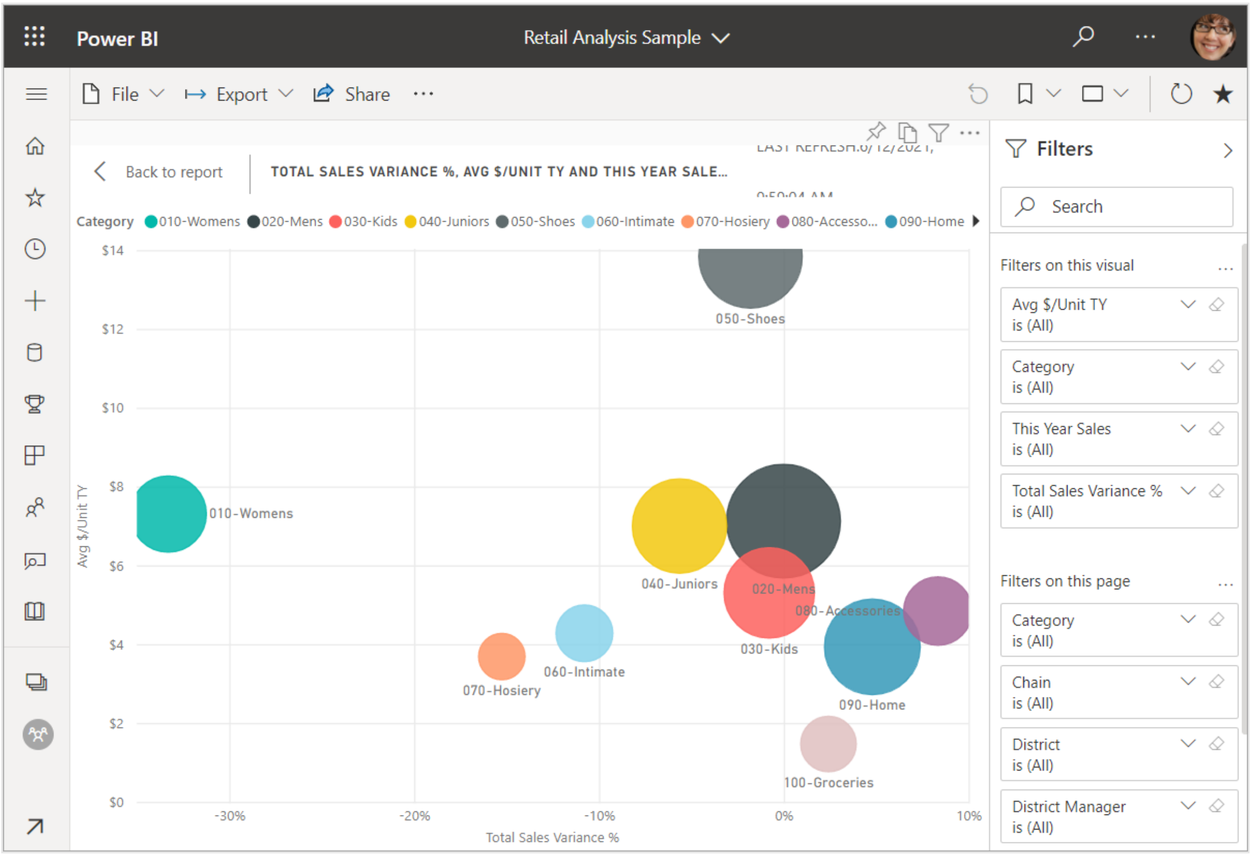
Use the zoom controls in your browser to increase or decrease the available canvas area. Decreasing the zoom expands the available canvas area, and increasing the zoom decreases the available canvas area.



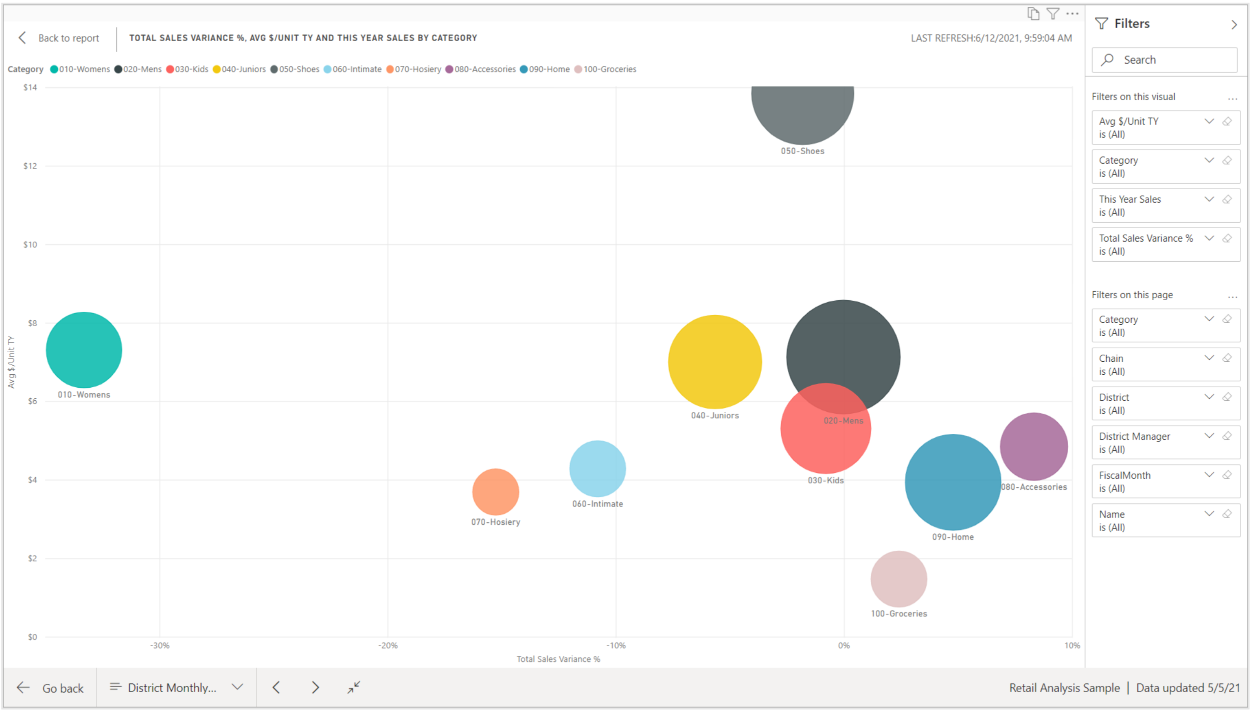
Zoom in on a visual

Sometimes it's difficult to see the details in a visual. You can focus on one visual by itself to make it bigger by using Focus mode. For more information, see Focus mode and Full screen mode.

The following example shows a visual in Focus mode.



The next example shows a visual in Full screen mode.



Next steps

- Compare focus mode and full screen mode
- Take a tour of the report Filters pane

Change how a chart is sorted in a Power BI report

Article • 01/06/2025

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

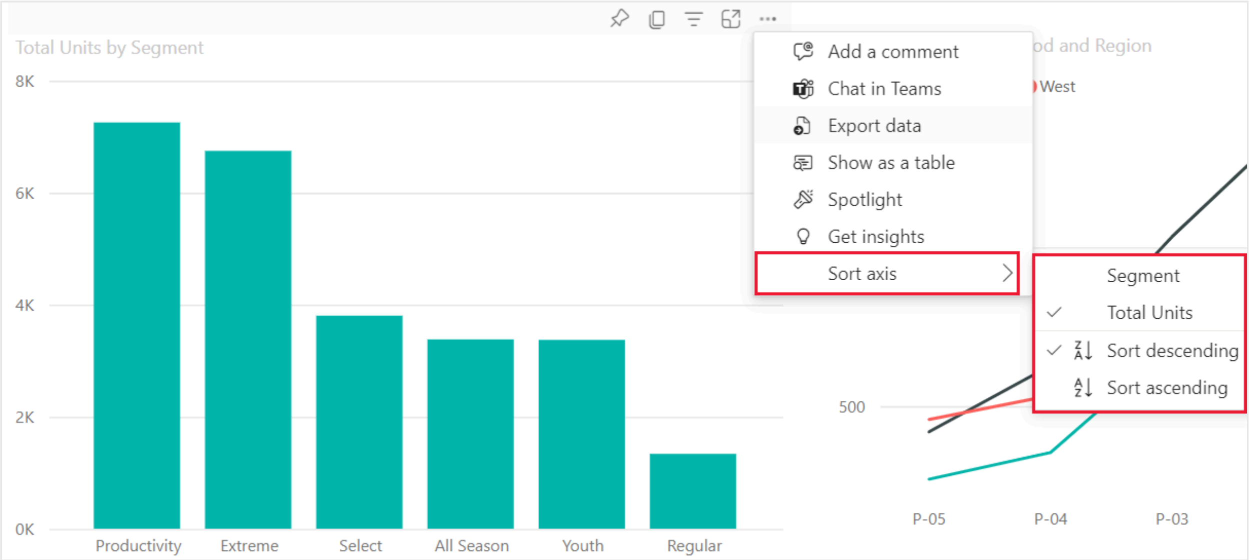
> ⓘ **Important**
>
> **This article is for Power BI service users who don't have edit permissions for a report or semantic model. If you're a report designer, administrator, or owner, see [Sort one column by another column in Power BI] for information that is more relevant to you.**

In the Power BI service, you can highlight important information in a visual by sorting data fields. Some fields contain numeric data (such as sales figures) and some contain text data (such as state names). After you sort a visual, you can save a personalized version of your changes. The Power BI service provides flexibility and quick menus that allow you to efficiently sort your visuals.

In a Power BI report, you can sort most visuals by one, and sometimes two fields. But some visuals can't be sorted, like treemaps, filled maps, scatter charts, gauge charts, waterfall charts, cards, and visuals on a dashboard.

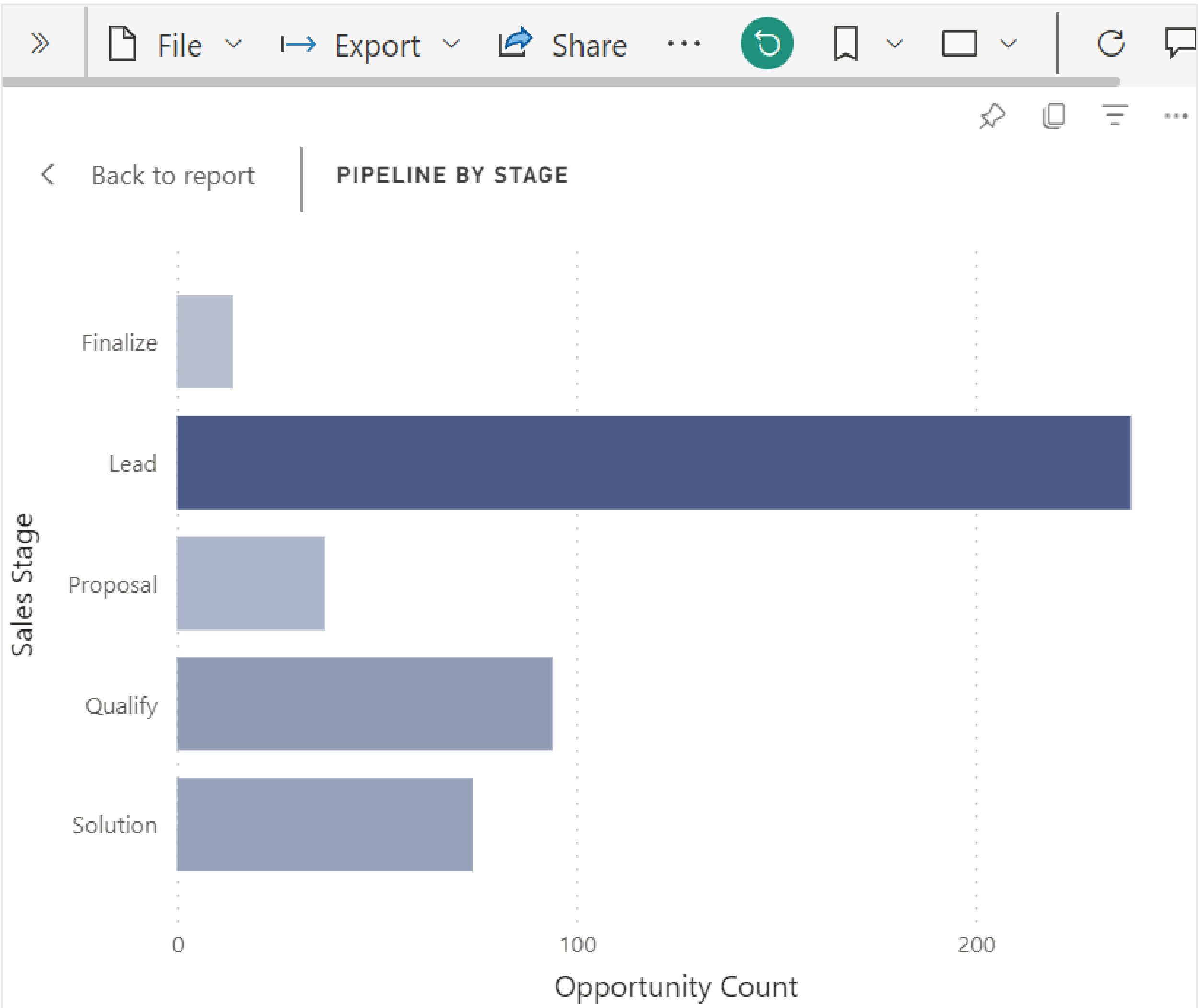
Get started

To choose a sorting option, open any report that you created or that is shared with you. Select a visual that can be sorted, and choose **More options** (...). Depending on the type of visual, the sorting options are **Sort descending**, **Sort ascending**, **Sort by,** and **Sort axis**.

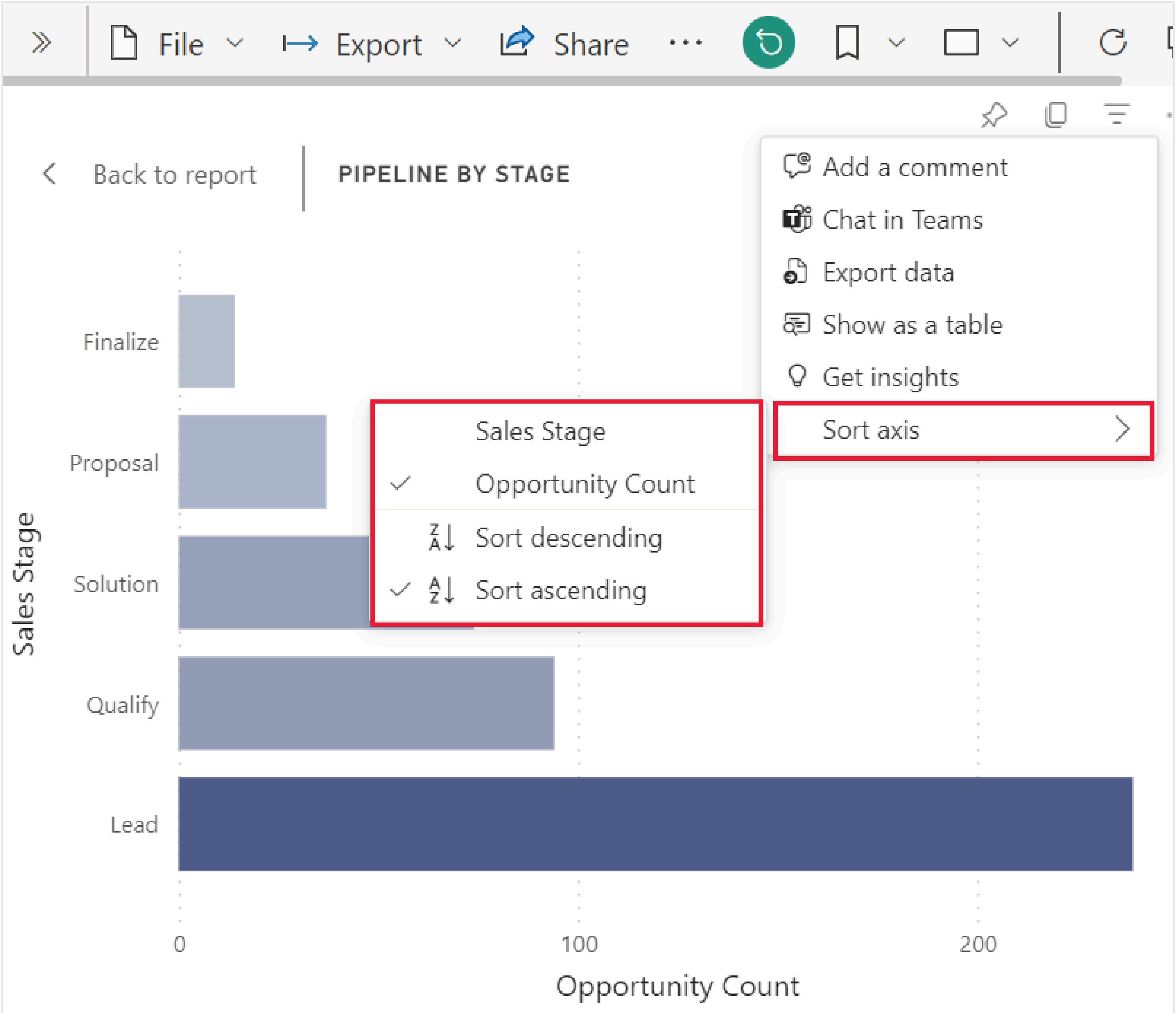


Sort alphabetically or numerically

Visuals can be sorted alphabetically or numerically. If the content is text, sort alphabetically from Z to A. If the content is numbers, sort low to high. For example, in this chart's Y-axis, the **Sales Stage** text and is sorted alphabetically A to Z.



To change the sort order, select either **Sort ascending** or **Sort descending**. The following example shows the visual sorted by **Opportunity Count** in ascending order. The field and order that are sorted are indicated with a checkmark.



In some cases, the report designer sets up the visual to sort by month. If this is true, sort the visual ascending or descending. Your visual sorts the months by calendar order. To learn more, see Sort by other criteria.

Sort by multiple columns

Certain types of visualizations can be sorted by more than one column. The order you select the columns determines sort priority.

The data in this table is sorted by **Number of customers**. The small arrow in the column header indicates that the column is sorted. The arrow points down because the column is sorted in descending order.

Number of Customers	Product	Total Revenue	Executive
30	Primus	$55,961,396	Andrew Ma
17	MI-72	$664,935	Andrew Ma
13	Primus	$64,781,560	Carlos Grilo
9	Gladius	$55,760,290	Annelie Zubar
9	Gladius	$3,336,146	Carlos Grilo
8		$2,846,610	Carlos Grilo
8		$17,162,683	Valery Ushakov
7		$17,026,576	Tina Lassila
7	Doroga	$7,362,616	Andrew Ma
5	Sova	$455,668	Carlos Grilo
5	Sova	$3,215,194	Tina Lassila
4		$903,019	Annelie Zubar
2		$676,726	Andrew Ma
2	Gunner	$17,190	Andrew Ma
2	MI-72	$25,615	Annelie Zubar
2	Sova	$4,840,440	Annelie Zubar
1	Gunner	$49,800	Allan Guinot
1	Gunner	$11,310	Valery Ushakov
1	Primus	$111,225	Tina Lassila
90		**$235,208,999**	

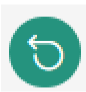
You can sort multiple columns to create a sorting sequence. To add more columns to the sort order, select the Shift key while also selecting the column header you would like to add next in the sort order. For example, if you select **Number of customers** and then select Shift and **Total revenue**, then the table is sorted first by customers, then by revenue. The red outlines show areas where the sort order changed.

Number of Customers	Product	Total Revenue	Executive
30	Primus	$55,961,396	Andrew Ma
17	MI-72	$664,935	Andrew Ma
13	Primus	$64,781,560	Carlos Grilo
9	Gladius	$55,760,290	Annelie Zubar
9	Gladius	$3,336,146	Carlos Grilo
8		$17,162,683	Valery Ushakov
8		$2,846,610	Carlos Grilo
7		$17,026,576	Tina Lassila
7	Doroga	$7,362,616	Andrew Ma
5	Sova	$3,215,194	Tina Lassila
5	Sova	$455,668	Carlos Grilo
4		$903,019	Annelie Zubar
2	Sova	$4,840,440	Annelie Zubar
2		$676,726	Andrew Ma
2	MI-72	$25,615	Annelie Zubar
2	Gunner	$17,190	Andrew Ma
1	Primus	$111,225	Tina Lassila
1	Gunner	$49,800	Allan Guinot
1	Gunner	$11,310	Valery Ushakov
90		**$235,208,999**	

If you select Shift and then select the same column a second time, the sort direction (ascending or descending) is changed. If you select Shift and select a column you previously added to the sort order, that column moves to the back of the sort order.

Save your sort order changes

Power BI reports retain the filters, slicers, sorting, and other data view changes that you make, even if you're working in Reading view. So, if you navigate away from a report, and return later, your sorting changes are saved. To revert your changes back to the report designer's settings, select **Reset to default** from the top menu on the report page.



The report designer can prevent changes from being saved. If they do, the **Reset to default** button is greyed out.

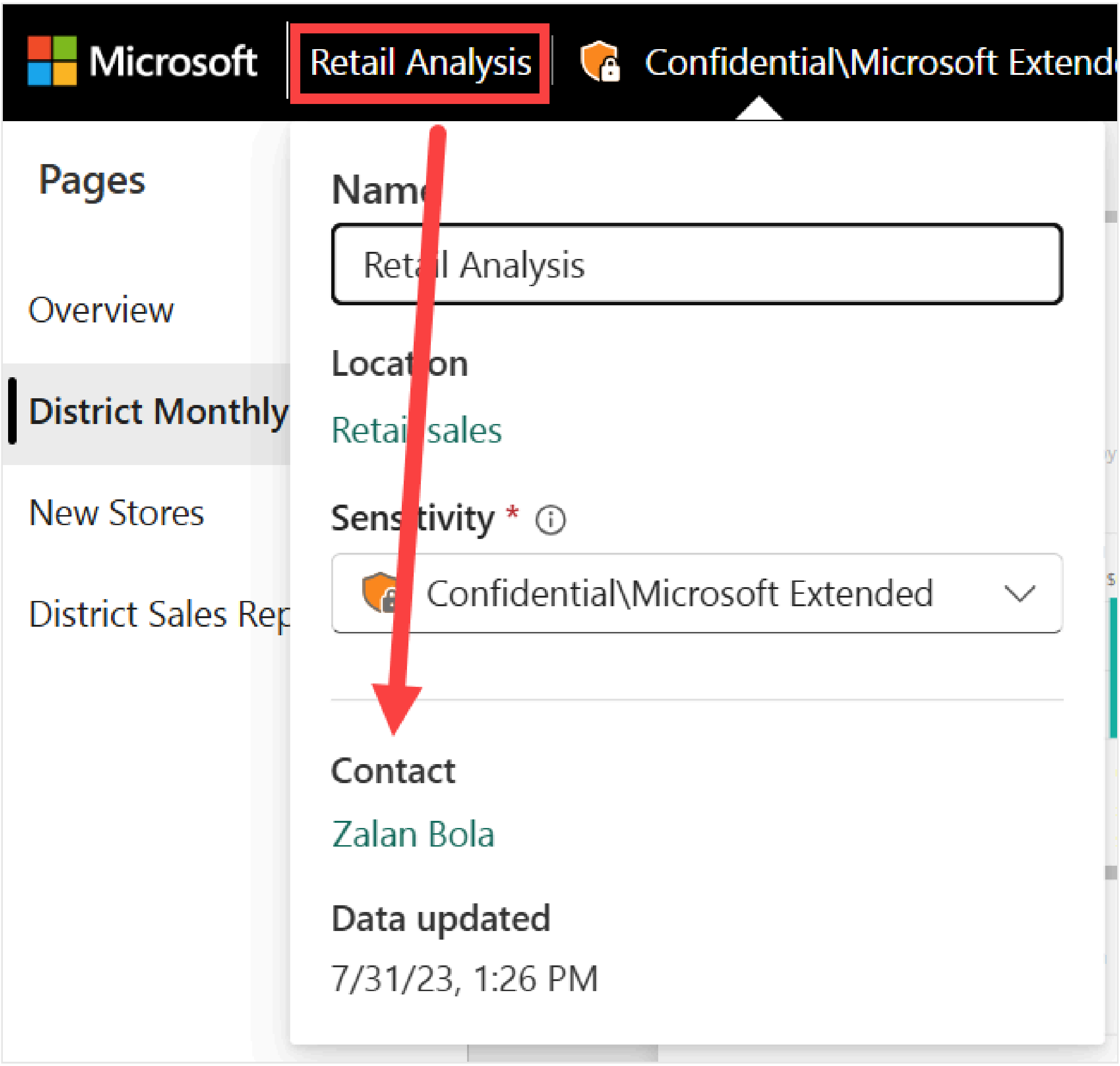
You can also save your changes with bookmarks, if the report designer enables the **Personalize visual** feature for the report. You can change the sort order of a visual and save it as a bookmark. If you see the personalize visual icon  in the visual's header, this feature is enabled. You don't need edit permissions to use this feature.

For more information, see Personalize visuals in a report.

Sort by other criteria

Sometimes you want to sort your data by using a field that isn't included in the visual. For example, you might want to sort by month in sequential order (and not in alphabetical order) or you might want to sort by entire numbers instead of by digit (example, 0, 1, 9, 20 and not 0, 1, 20, 9).

- To learn how to sort by a different field in the semantic model, see Sort one column by another column in Power BI. To use this feature, you must have edit permissions for the report.
- Ask the report designer to create new columns in the semantic model to address sorting issues. The designer's contact information is listed in the report title's menu.



Related content

- More about Interactions with visuals in reports, dashboards, and apps.
- Basic concepts for the Power BI service business user.

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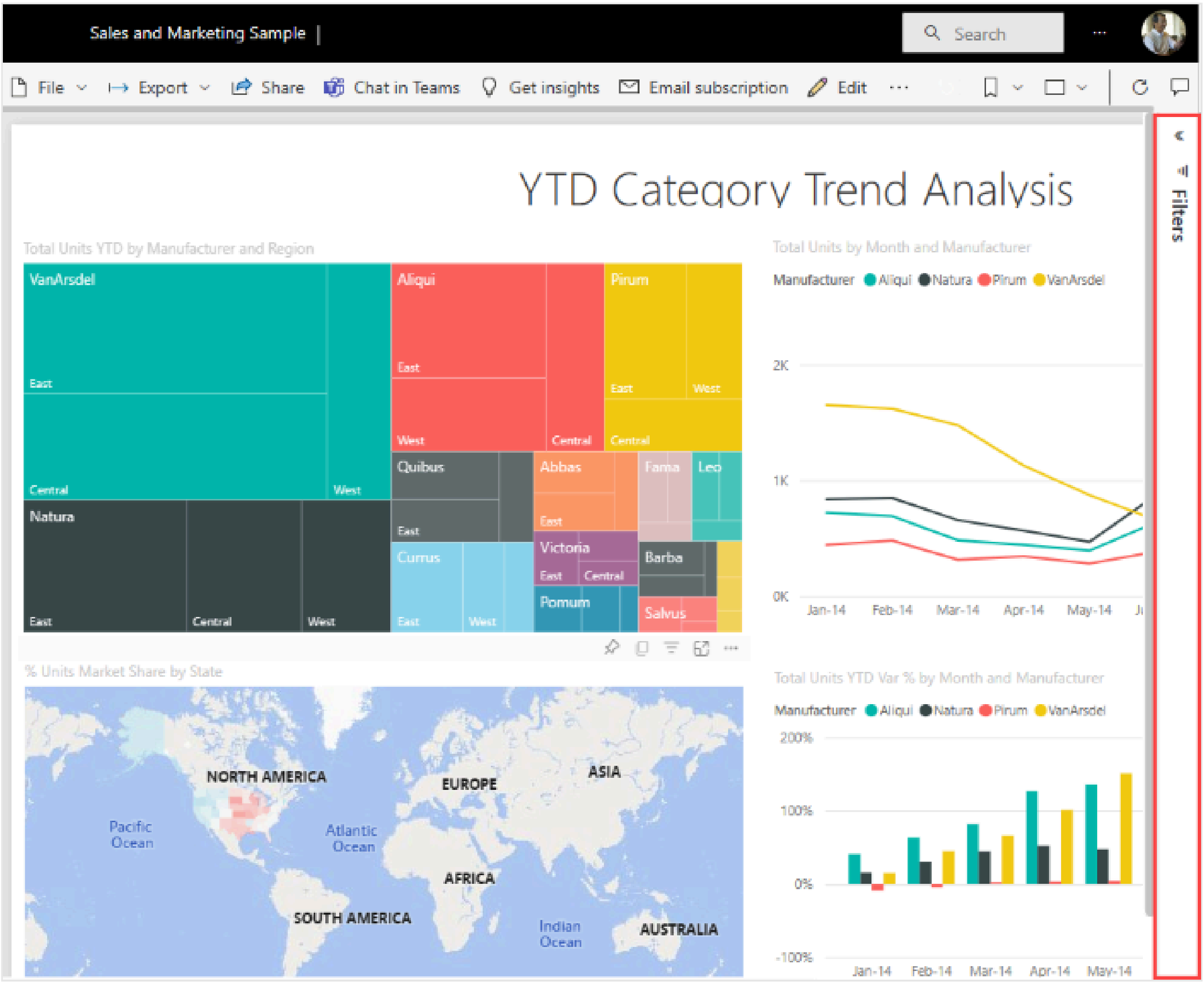
Take a tour of the report Filters pane

Article • 01/09/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

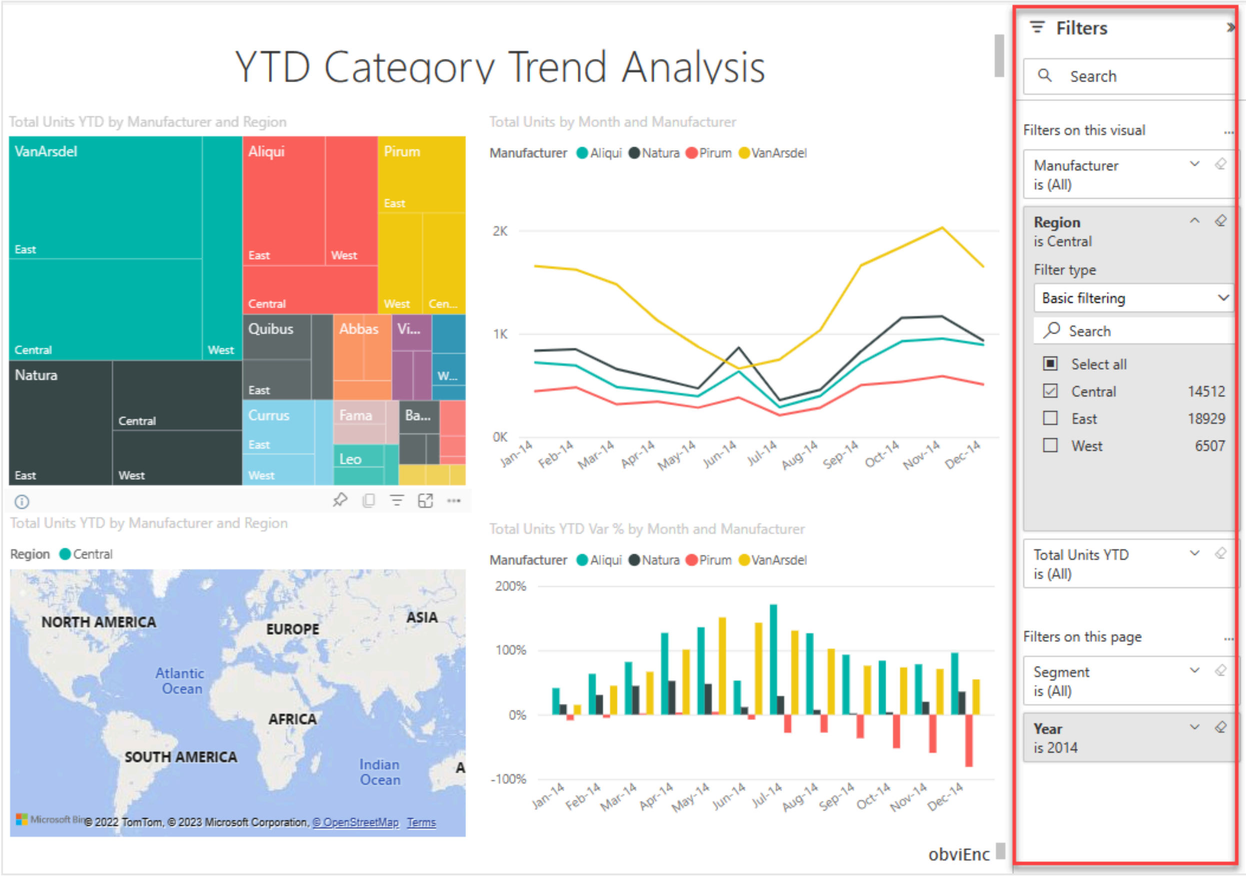
This article explains how to use the report **Filters** pane in the Power BI service. You can use filters to discover new insights in your data.

There are many different ways to filter data in Power BI. For example, you can filter data by selecting data points on a report visual to filter other visuals on the page—this is called **cross-filtering** and **cross-highlighting**. For more information, see [How visuals cross-filter each other in a Power BI report](#).



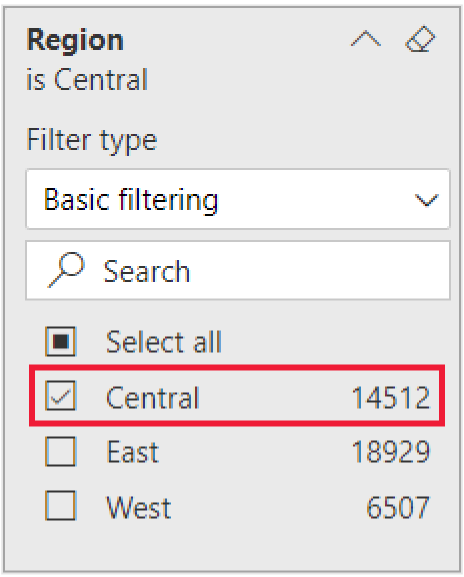
Work with the report Filters pane

When a colleague shares a report with you, make sure to look for the **Filters** pane. Sometimes it's collapsed along the right edge of the report. Select the Filers pane to expand it.



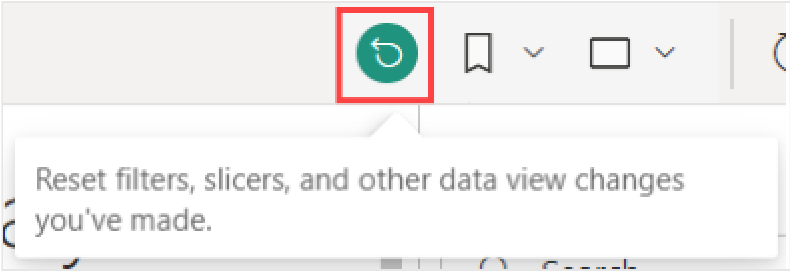
The **Filters** pane contains filters that the report *designer* adds to the report. *Business users* can interact with the existing filters and save changes. However, they can't add new filters to the report. In the previous example, the designer added three page-level filters: **Segment is All**, **Year is 2014**, and **Region is Central**. You can interact and change these filters, but you can't add a fourth page-level filter.

Some of the filters are shaded, and some aren't. If a filter is shaded, it means a filter has been applied, and some data is excluded. In the following example, the **Region** filter card is shaded and expanded. The **Central** option is the only option selected from the dropdown. Since Region is under the **Filters on this page** heading, all visuals on this page aren't displaying. The data from **West** and **East** regions are excluded.



In the Power BI service, reports keep any changes you make in the **Filters** pane. The service carries those changes through to the mobile version of the report.

To reset the **Filters** pane to the designer's defaults, select the **Reset** icon from the top menu bar.



> ⓘ **Note**
>
> If you don't see the **Reset to default** option, the report *designer* might have disabled it. The *designer* can lock specific filters so that you can't change them.

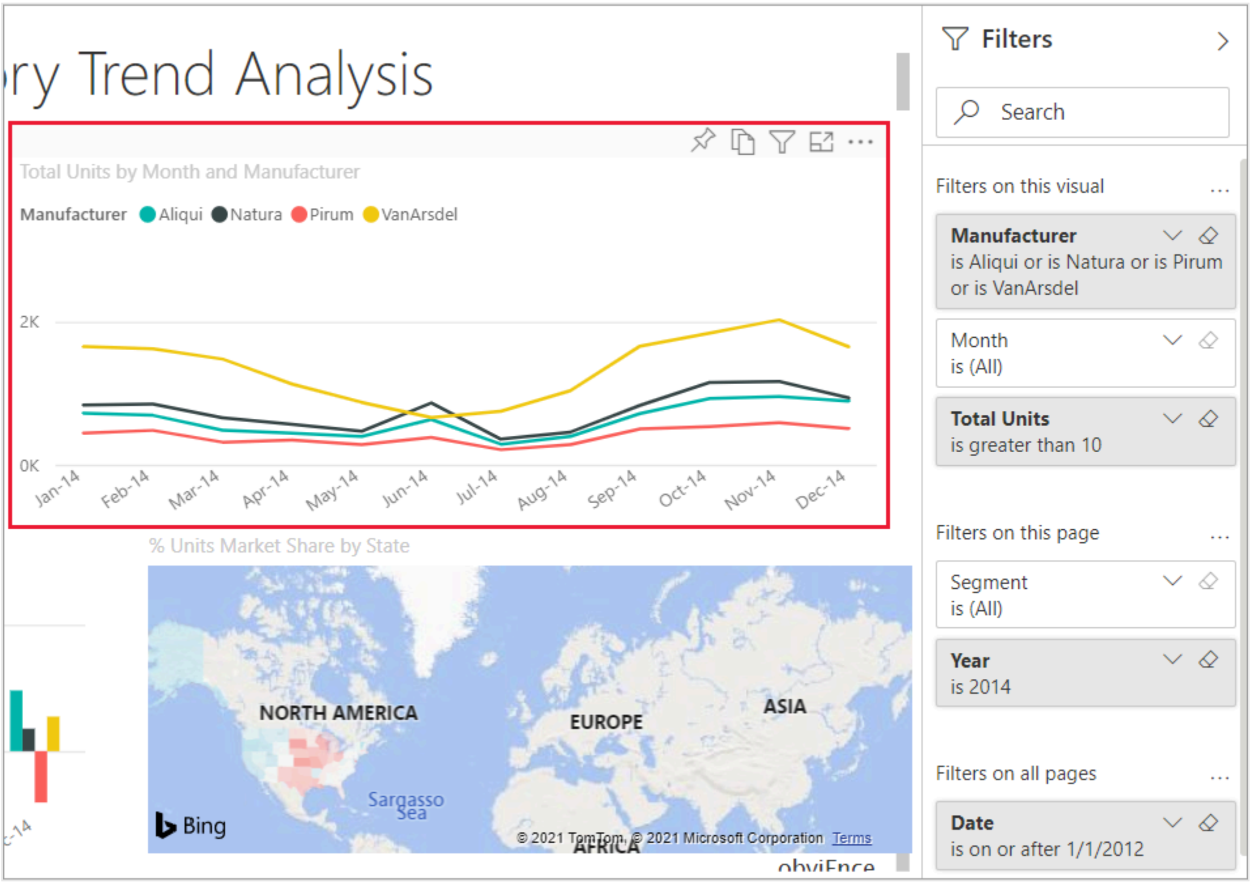
View all the filters for a report page

The **Filters** pane displays all filters added by the designer to the report. The **Filters** pane is also the area where you can view information about the filters and interact with them. You can save changes or use **Reset to default** to revert to the original filter settings.

If there are changes you'd like to save, you can also create a personal bookmark. For more information, see Bookmarks in the Power BI service.

The **Filters** pane displays and manages several types of report filters: report, report page, and visual.

In the following example, you can see a visual that has three filters: **Manufacturer**, **Month**, and **Total units**. The report page also has filters listed under the **Filters on this page** heading. The entire report has a filter for **Date**, listed under **Filters on all pages**.

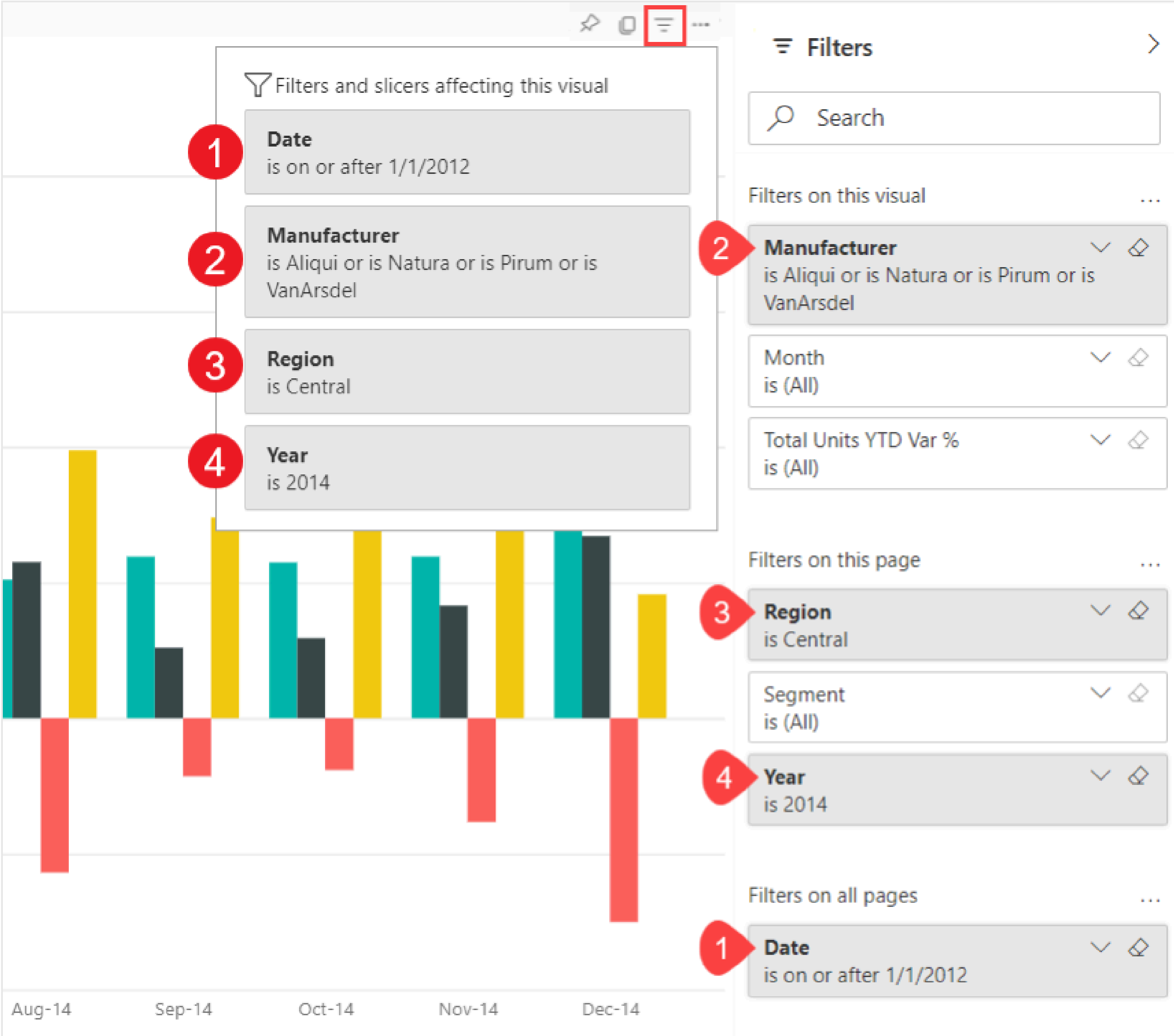


Some of the filters have **(All)** next to them. **(All)** means all values are being included in the filter. In the previous screenshot, **Segment(All)** tells us this report page includes data about all the product segments.

Anyone with permissions to view this report can interact with these filters.

View filters applied to a visual

To get a closer look at the filters affecting a specific visual, hover over the visual to reveal the filter icon . Select that filter icon to see a pop-up window with all the filters and slicers affecting that visual. The filters in the pop-up window are the same filters displayed on the **Filters** pane, plus any other filters affecting the selected visual.



Types of filters in the pop-up window include:

- Basic filters
- Slicers
- Cross-highlighting
- Cross-filtering
- Advanced filters
- Top N filters
- Relative Date filters
- Sync-slicers
- Include/Exclude filters
- Filters passed through a URL

In this example:

1. **Date** is a filter applied to all pages in this report.

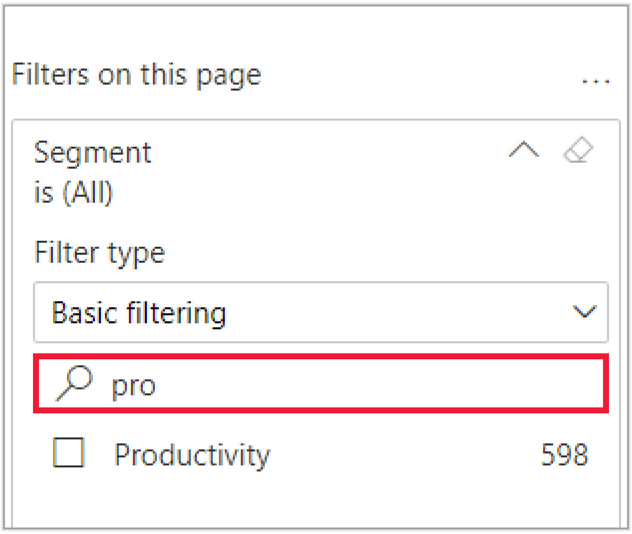
2. **Manufacturer is VanArsdel, Natura, Aliqui, or Pirum** is a filter applied to this visual.

3. **Region is Central** and **Year is 2014** are filters applied to this report page.

4. **Year** is a filter applied on this report page.

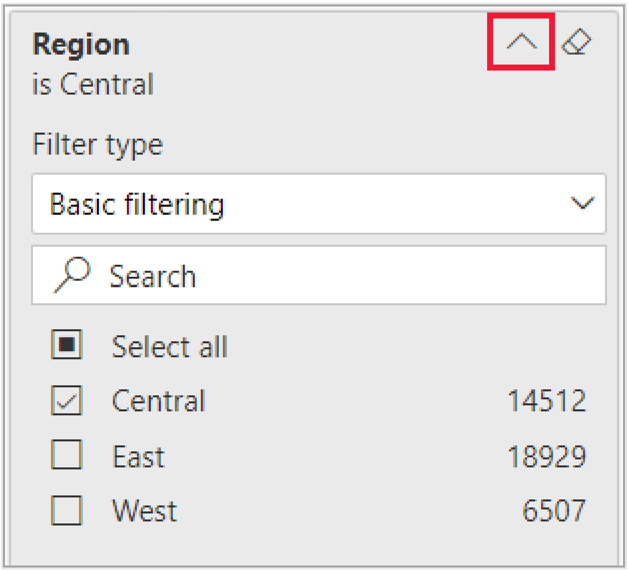
Search in a filter

Sometimes a filter can have a long list of values. Use the search box to find and select the value you want.



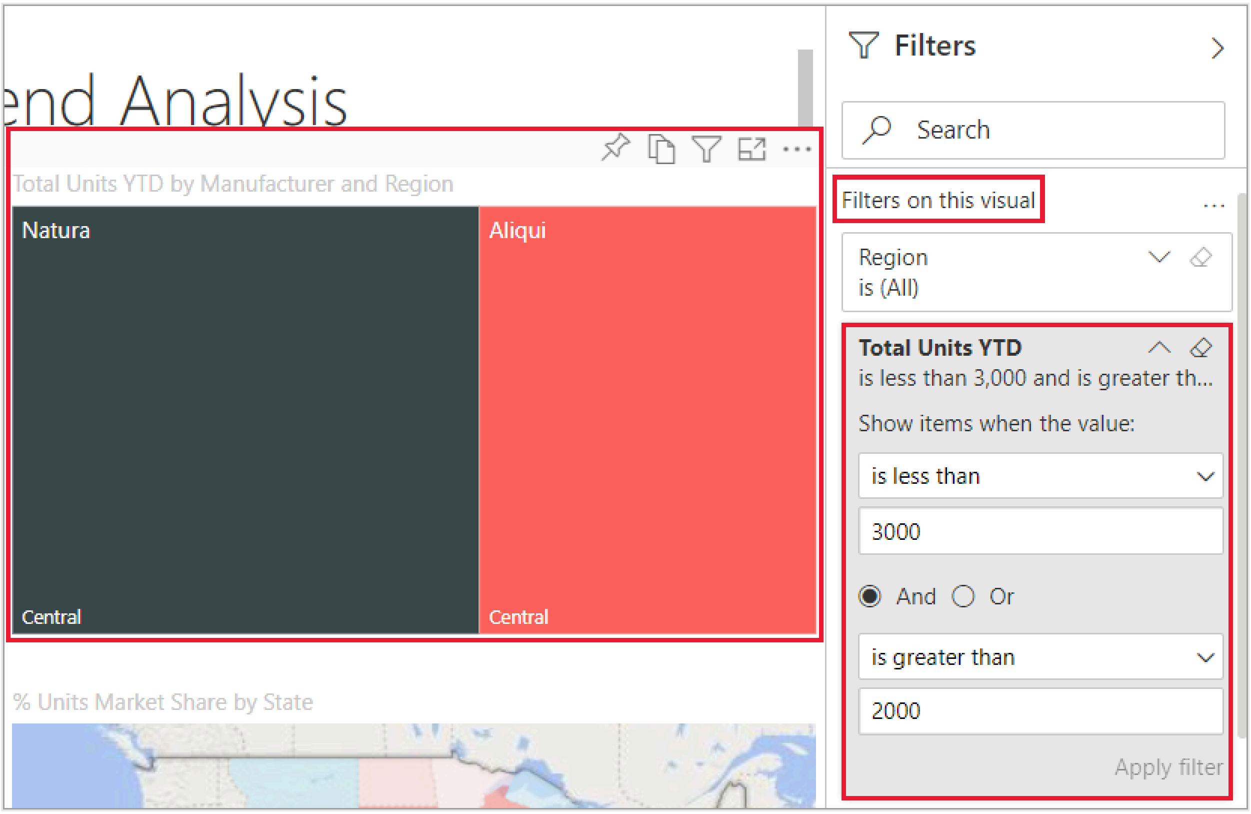
Display filter details

To understand a filter, expand it and look at the available values and counts. To expand the filter, select the arrow next to the filter name.



Change filter selections

One way to search for data insights is to interact with the filters. You can change filter selections by using the drop-down arrow next to the field name. Depending on the filter and type of data that Power BI is filtering, your options range from simple selections from a list, to identifying ranges of dates or numbers. See the advanced filter example. Notice the change in the **Total Units YTD** filter on the treemap between 2,000 and 3,000. This change removes Pirum and VanArsdel from the treemap.

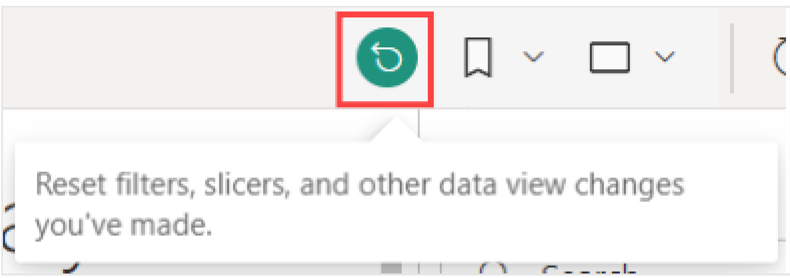


💡 **Tip**

To select more than one filter value at a time, hold down the **CTRL** key. Most filters support multi-select.

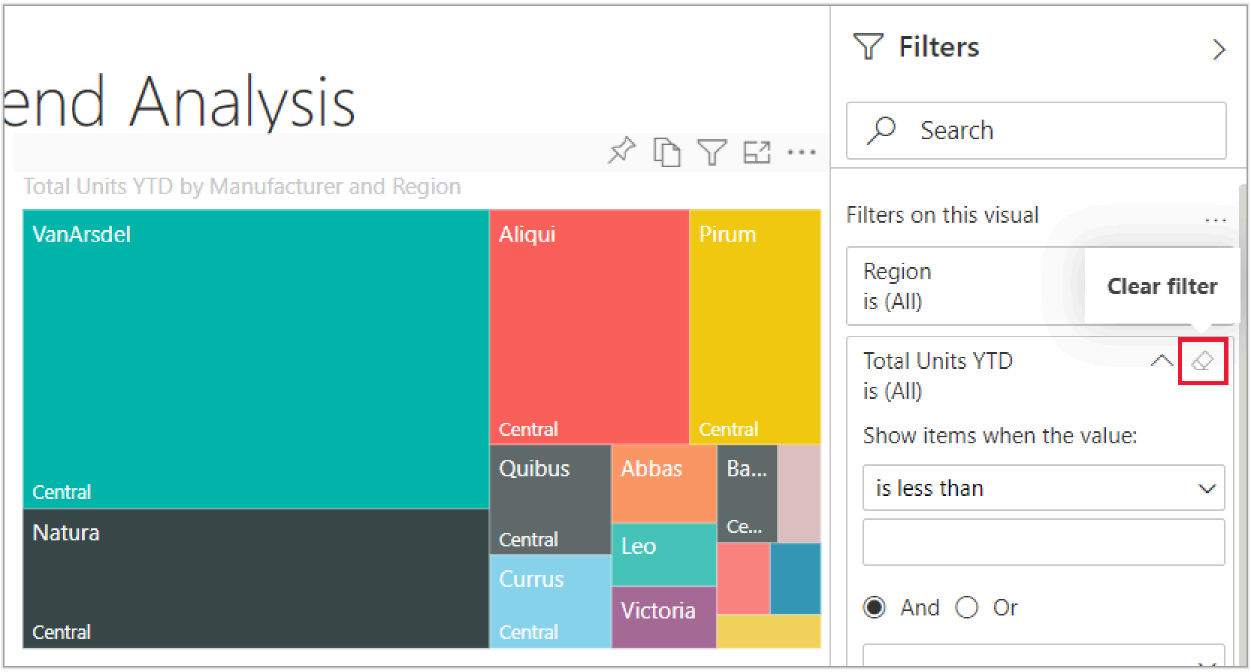
Reset filter to default

If you don't want to keep the changes you've made to the filters, select the **Reset** icon from the top menu bar. This selection reverts the filters to their original state, as set by the report designer.



Clear a filter

To reset a filter to (All), clear it by selecting the eraser icon next to the filter name.



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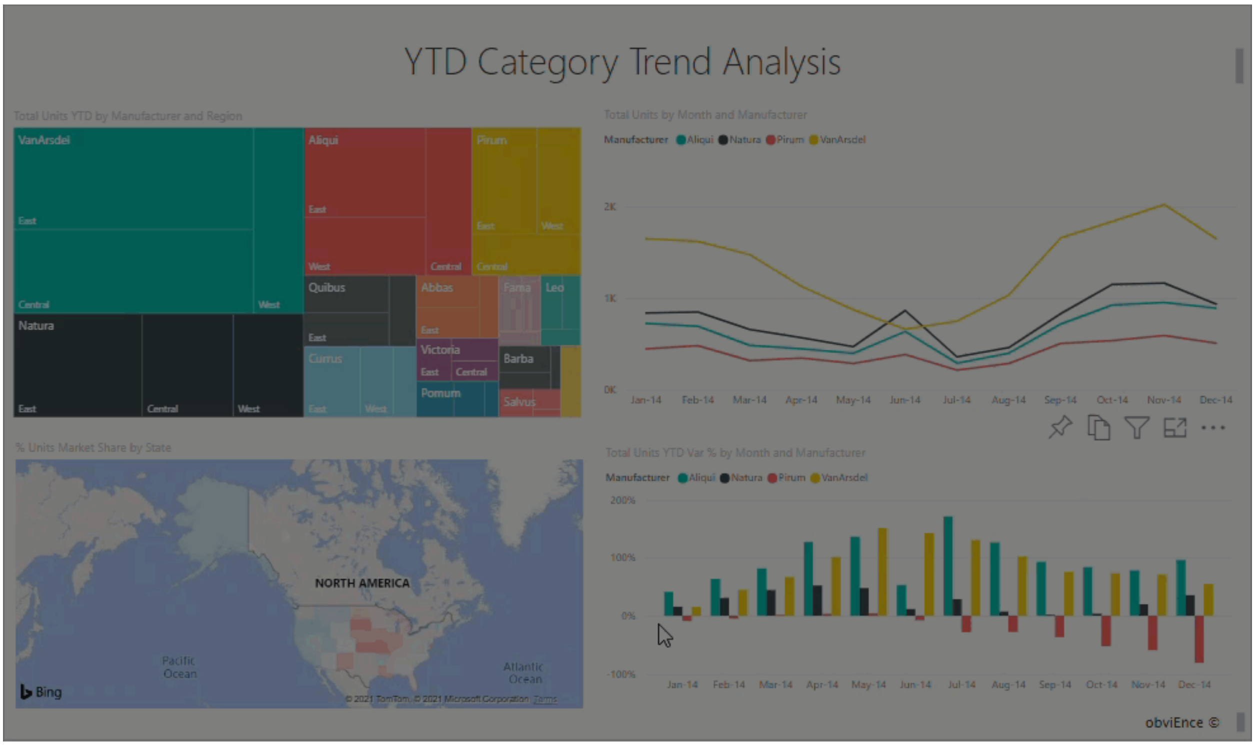
How visuals cross-filter each other in a Power BI report

Article • 01/23/2024

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❎ Power BI Desktop ✅ Requires Pro or Premium license

One of the great features of Power BI is the way all visuals on a report page are interconnected. If you select a data point on one of the visuals, all the other visuals on the page that contain the same data change based on your selection.



How visuals interact with each other

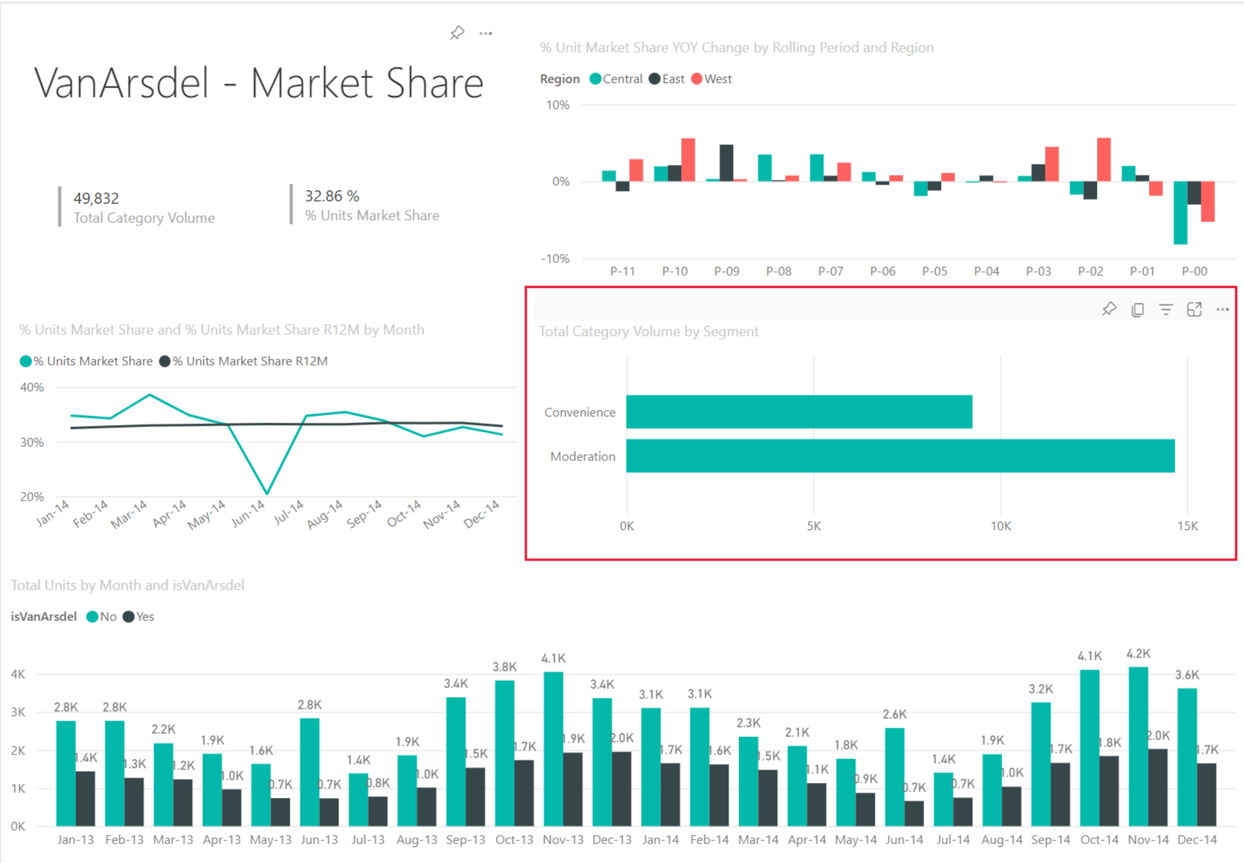
By default, selecting a data point in one visual on a report page will cross-filter or cross-highlight the other visuals on the page. The report *designer* sets how the visuals on a page interact. *Designers* have options to turn visual interactions on and off, and to change the default cross-filtering, cross-highlighting, and drilling behavior.

If you haven't encountered hierarchies or drilling yet, you can learn all about them by reading Drill down in Power BI.

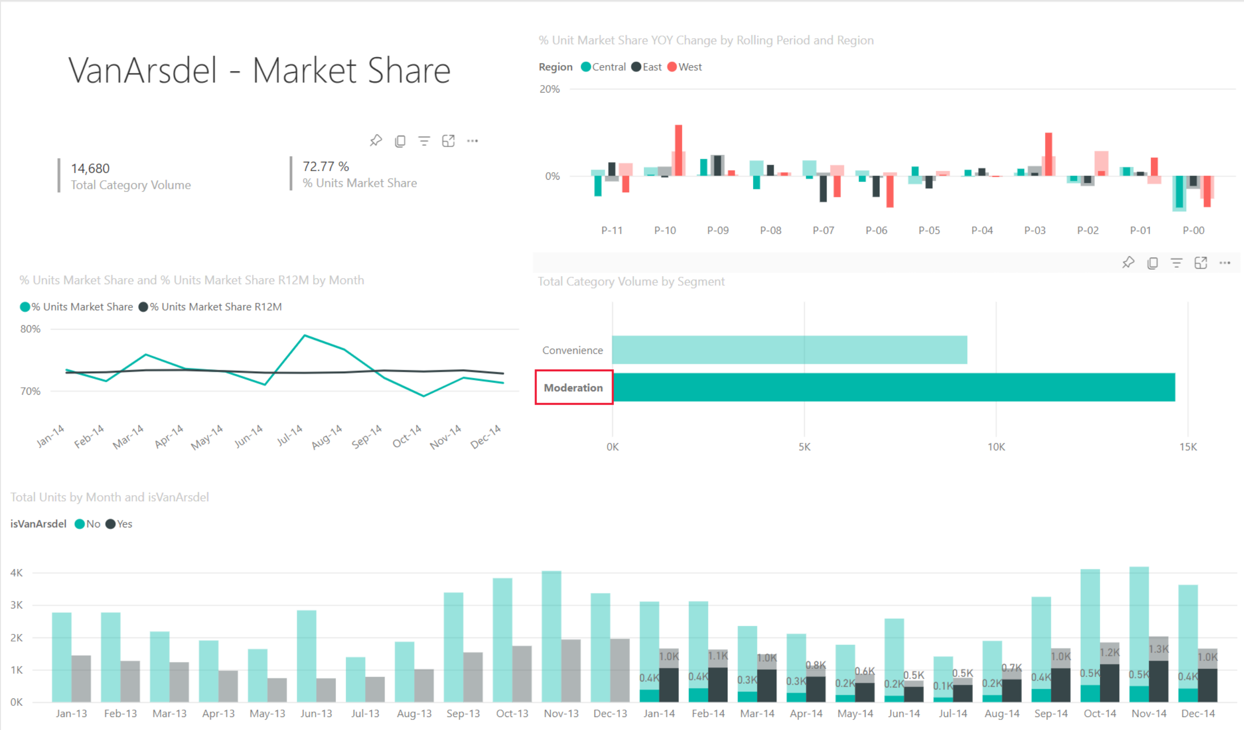
Cross-filter and cross-highlight

Cross-filtering and cross-highlighting can be useful to identify how one value in your data contributes to another. The terms *cross-filter* and *cross-highlight* are used to distinguish the behavior described here from what happens when you use the **Filters** pane to filter and highlight visuals.

The following report pages show examples of cross-filtering and cross-highlighting. The **Total Category Volume by Segment** bar chart has two values, **Moderation** and **Convenience**.



In the following example, **Moderation** is selected.



Because **Moderation** is selected on the bar chart:

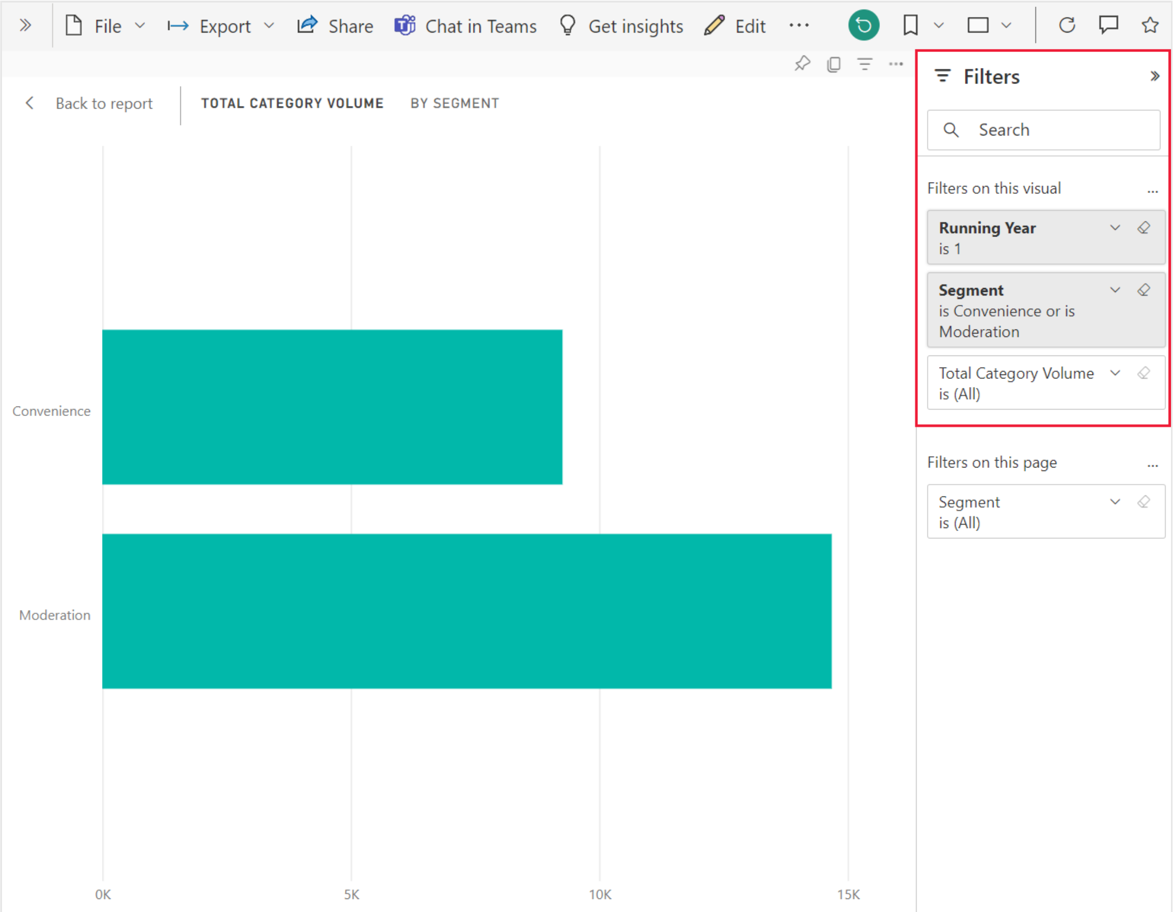
- **Cross-filtering** removes data that doesn't apply. Selecting **Moderation** in the bar chart cross-filters the line chart. The line chart now only displays data points for the Moderation segment.

- **Cross-highlighting** retains all the original data points but dims the portion that doesn't apply to your selection. Selecting **Moderation** in the bar chart cross-highlights the column chart. The column chart dims all the data that applies to the Convenience segment and highlights all the data that applies to the Moderation segment.

Considerations and troubleshooting

- If your report has a visual that supports drilling, by default, drilling one visual has no effect on the other visuals on the report page. However, the report *designer* can change this behavior, so check your drillable visuals to see if **drilling filters other visuals** has been enabled by the report *designer*.

- Visual-level filters are retained when cross-filtering and cross-highlighting other visuals on the report page. So, if VisualA has visual-level filters applied by the report designer or by you, and you use VisualA to interact with VisualB, visual-level filters from VisualA will be applied to VisualB.



- If the tables have no hierarchical relationships, slicing up the measures (often referred as complex slicers) might result in an error. If you have access to the logs, you'll see the message "Measures are not allowed with complex slicers unless they have a filter context change". To avoid this situation, don't use complex slicers or remodel the relationships to get the desired output.

Related content

- Take a tour of the report Filters pane

Slicers in the Power BI service

Article • 01/23/2024

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

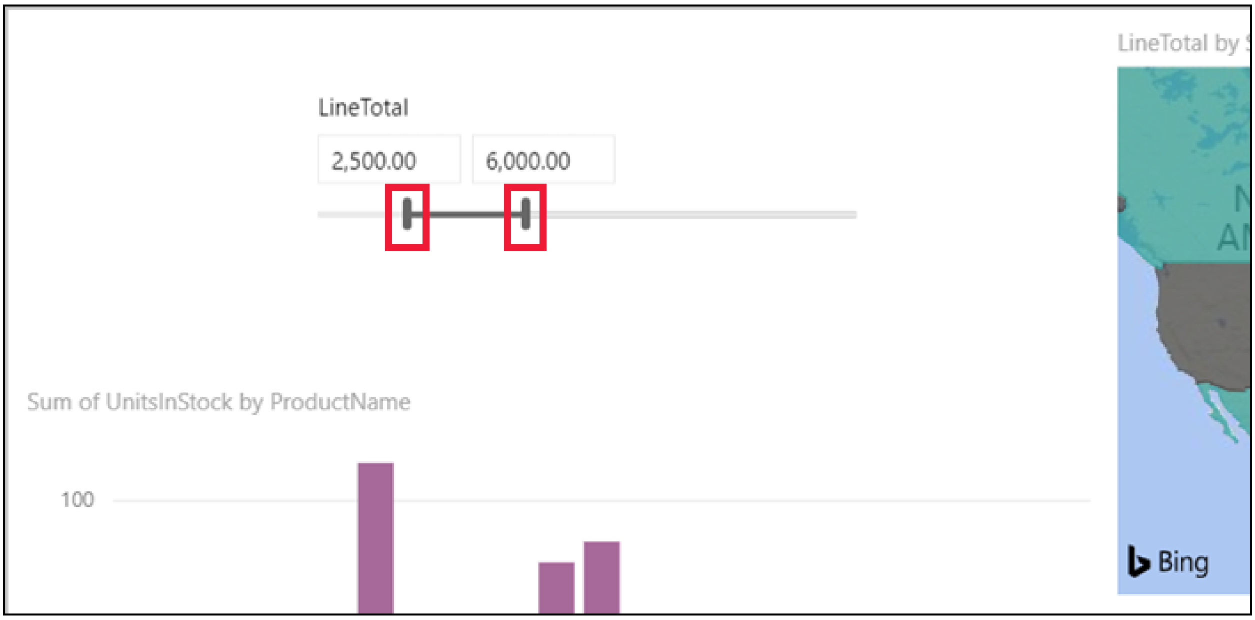
A slicer is a type of visual that filters the other visuals on a report page. When using Power BI reports, you'll discover many types of slicers. The image, above, shows the same slicer but with different selections. Notice how each selection filters the other visuals on the page.

How to use slicers

When creating reports, *designers* add slicers to help tell a story and to give you tools to explore your data.

Numeric range slicer

The numeric range slicer helps you explore quantitative data such as total sales by: geography, units in stock, and order date. Use the handles to select a range.



Basic vertical checkbox slicer

In a basic checkbox slicer, select one or more checkboxes to see the impact on the other visuals on the page. To select more than one, use CTRL-select. Sometimes, the report *designer* will set the slicer to only allow you to select one value at a time.

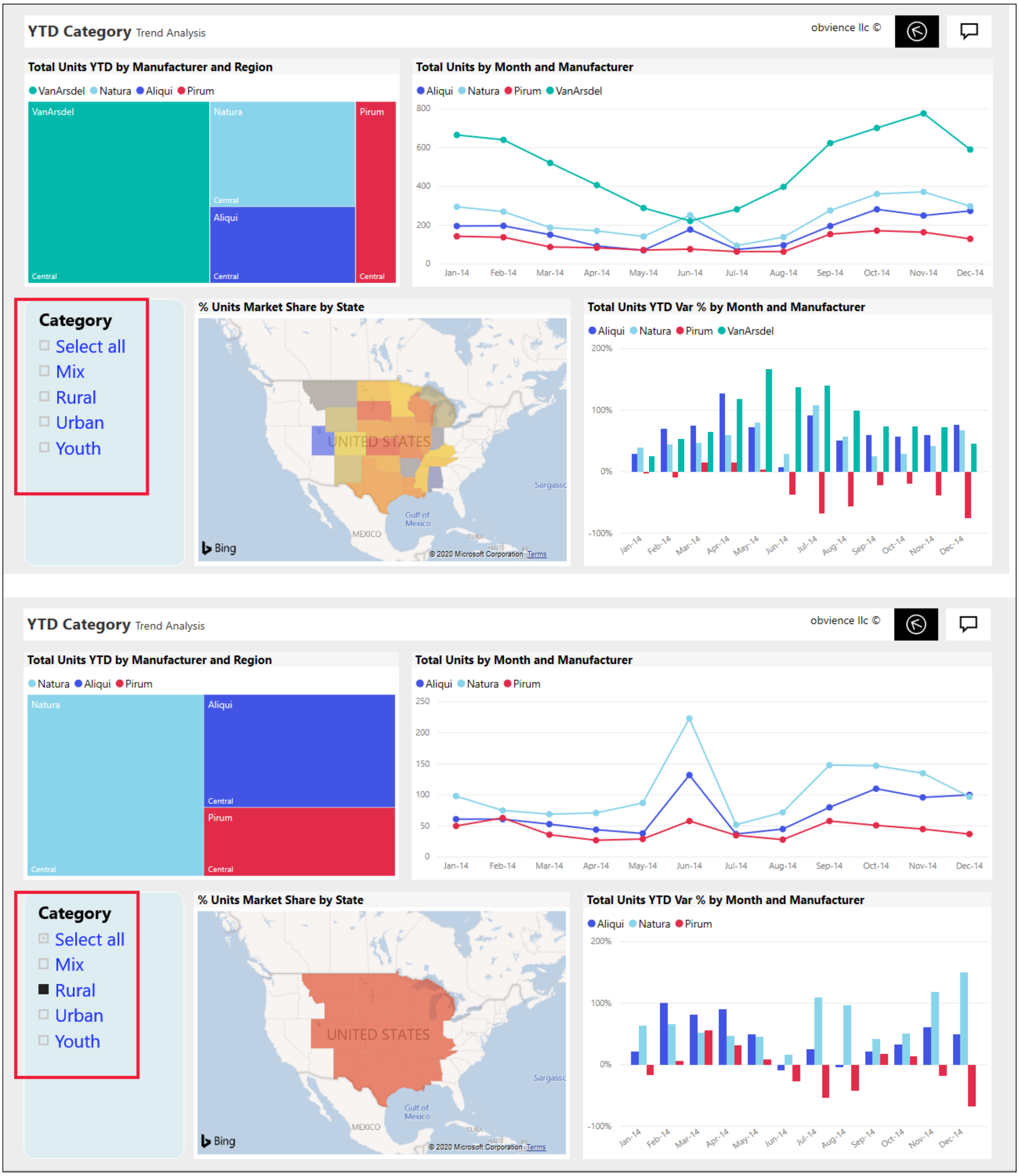
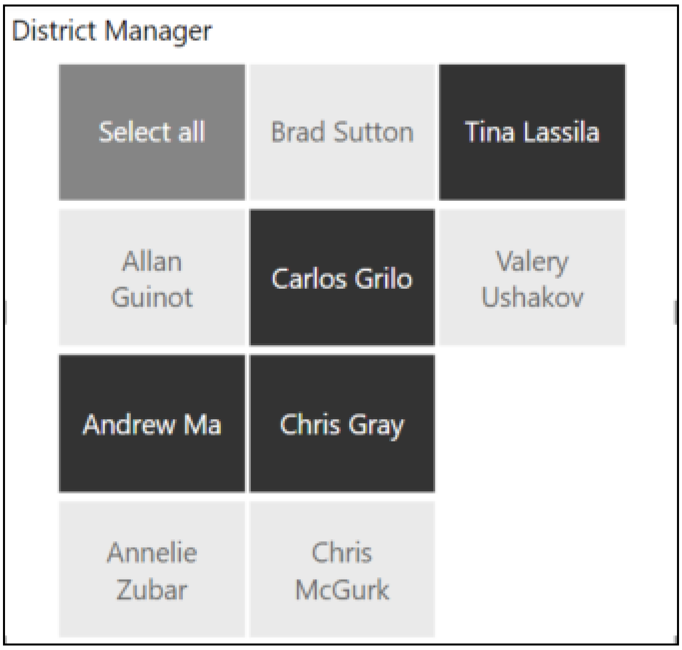


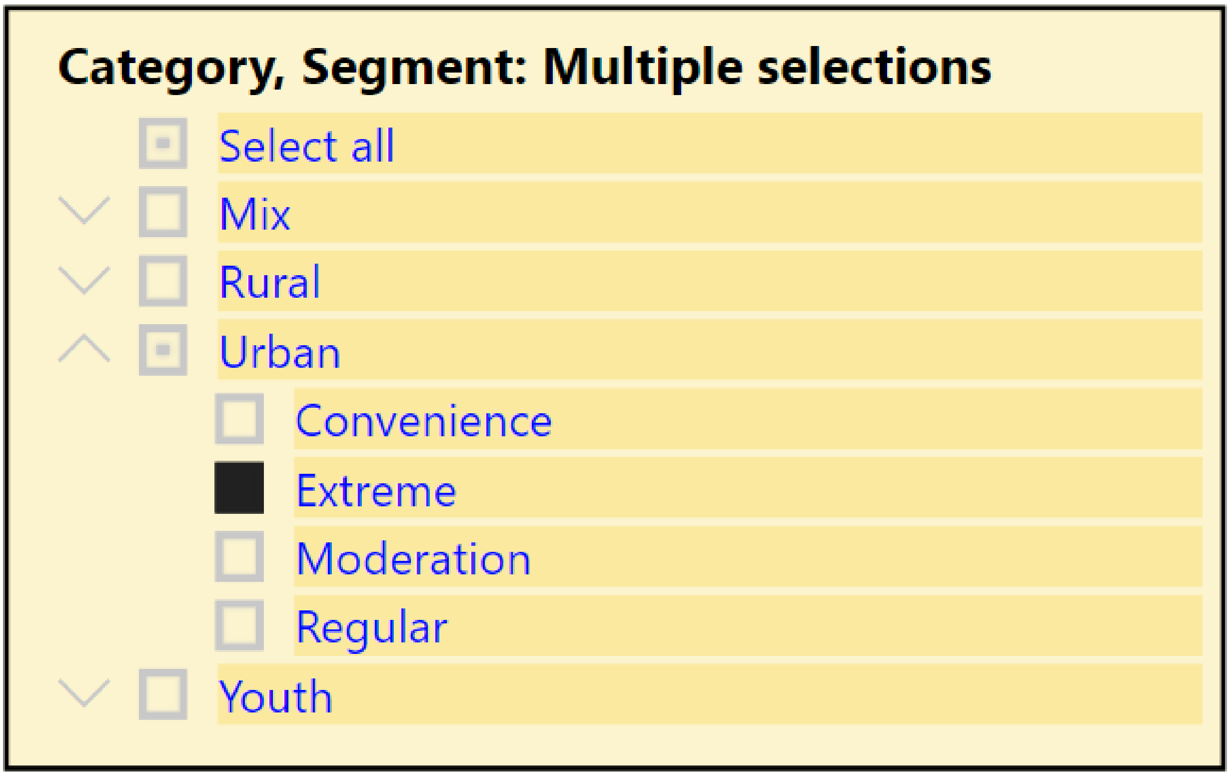
Image and shape slicers

When the slicer options are images or shapes, making your selections is similar to using checkboxes. You can choose one or more image or shape to apply the slicer to the other visuals on the page.



Hierarchy slicer

In a slicer with a hierarchy, use the chevrons to expand and collapse the hierarchy. The header updates to show your selections.

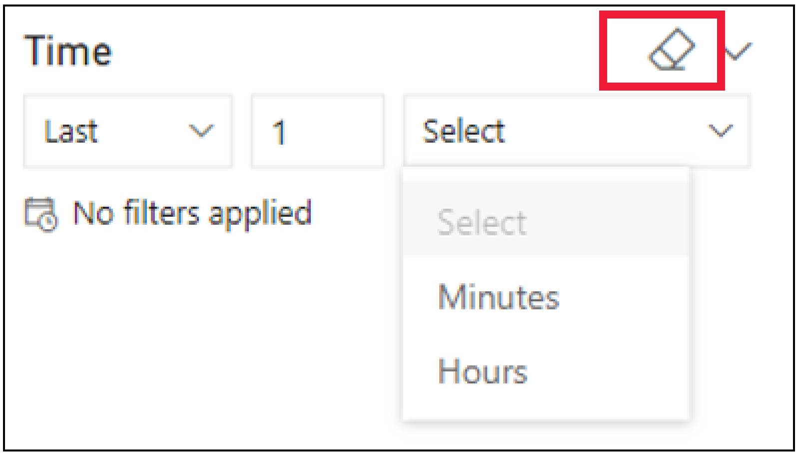


Relative time slicer

With emerging fast refresh scenarios, the ability to filter to a smaller window of time can be very useful. Using the relative time slicer, you can apply time-based filters to any date or time data in your report. For example, you can use the relative time slicer to show only video views within the last 2 days, hours, or even minutes.

Deactivate a slicer

To deactivate a slicer, select the eraser icon.



Related content

For more information, see the following articles:

- Visualization types in Power BI

Identify and use buttons in the Power BI service

Article • 12/20/2024

In the reports you receive from colleagues, you might notice buttons and wonder how to use them. Some buttons have words, some have arrows, others have graphics, and some even have dropdown menus. This article shows you how to recognize and use buttons.

For information on how to add buttons to reports, see Create buttons in Power BI reports.

Recognize a button

A button can resemble a shape, image, or icon from a report page. If an action occurs when you select it, then it's probably a button.

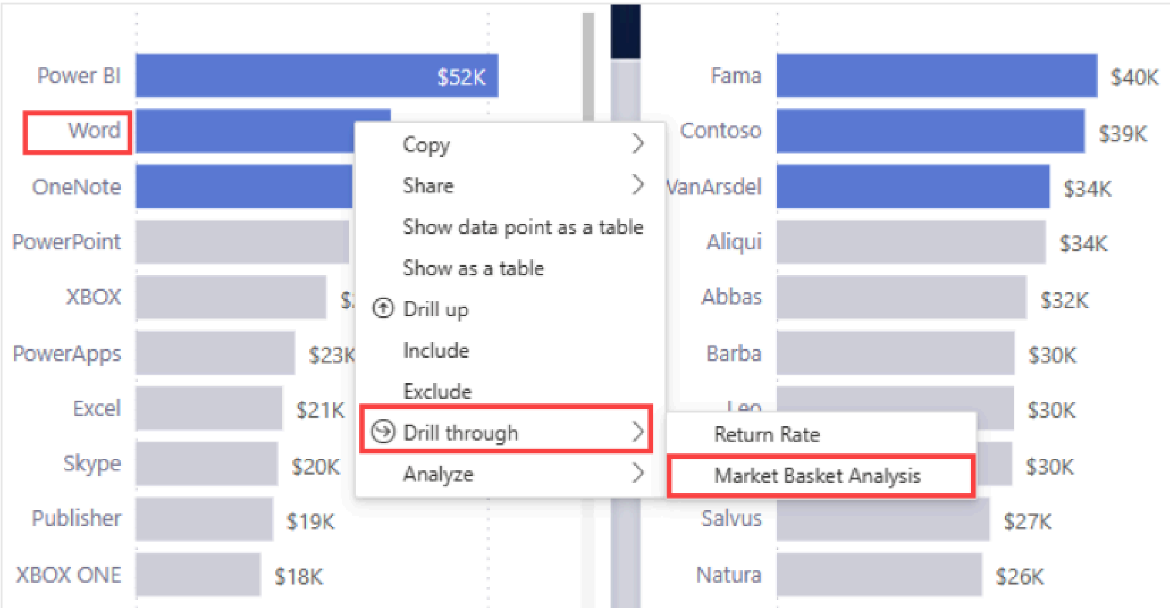
Types of buttons

Report creators add buttons on reports to help you with navigation and exploration. Here are some button types: back, bookmark, arrow, Microsoft Power BI Q&A (Q&A), help, and blank.

Back buttons

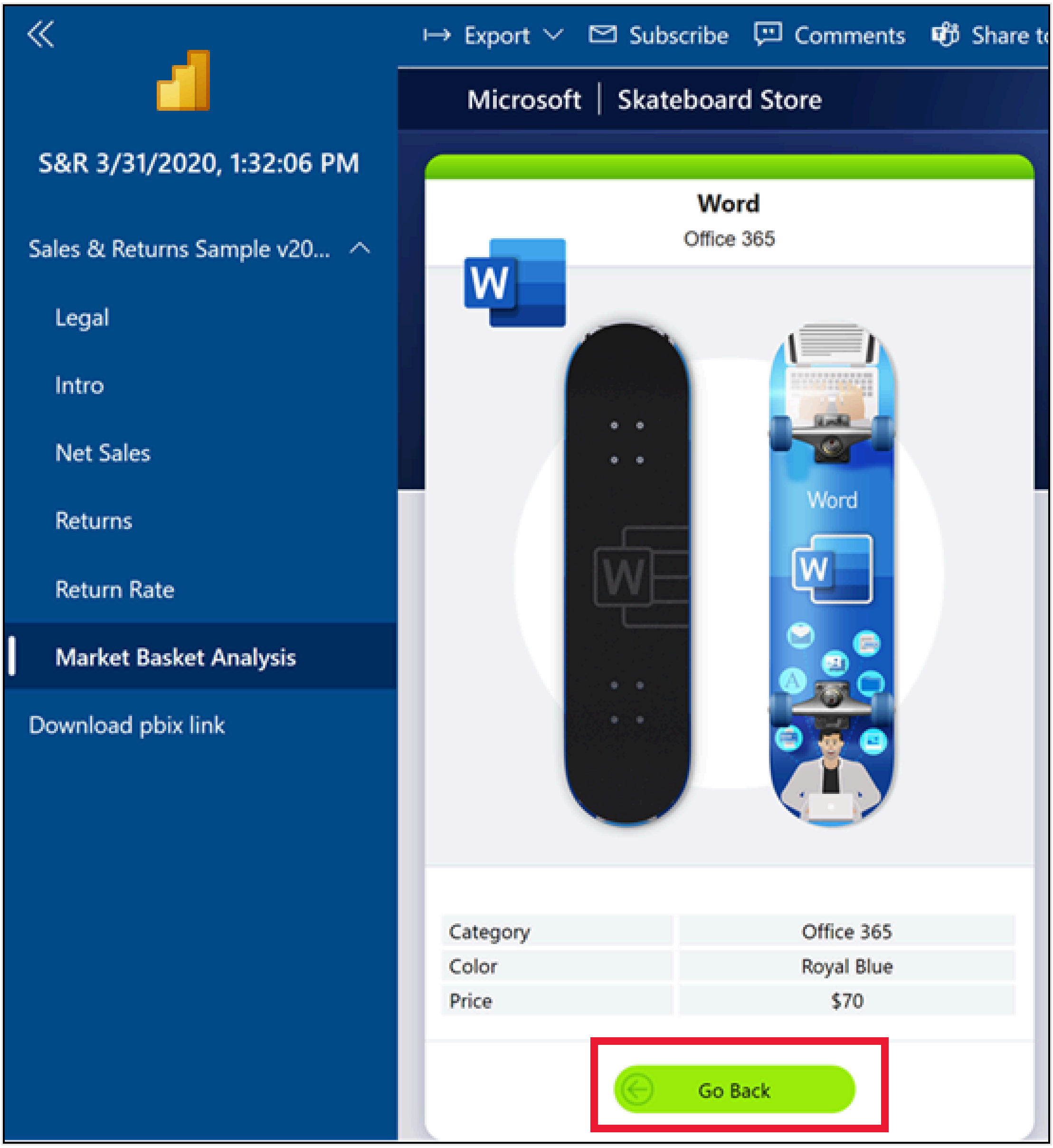
A back button can have an arrow icon. When you select it, Power BI takes you to the previous page. Back buttons are often used with drillthrough. Here's an example of the steps of a back button used with drillthrough.

1. Select **Word** in the bar chart and drill through to **Market basket analysis**.



2. Power BI opens the *Market basket analysis* report page and uses the selections made on the source page to filter what displays on the destination page. In this example, the **Market basket analysis** report page is filtered for **Word**.

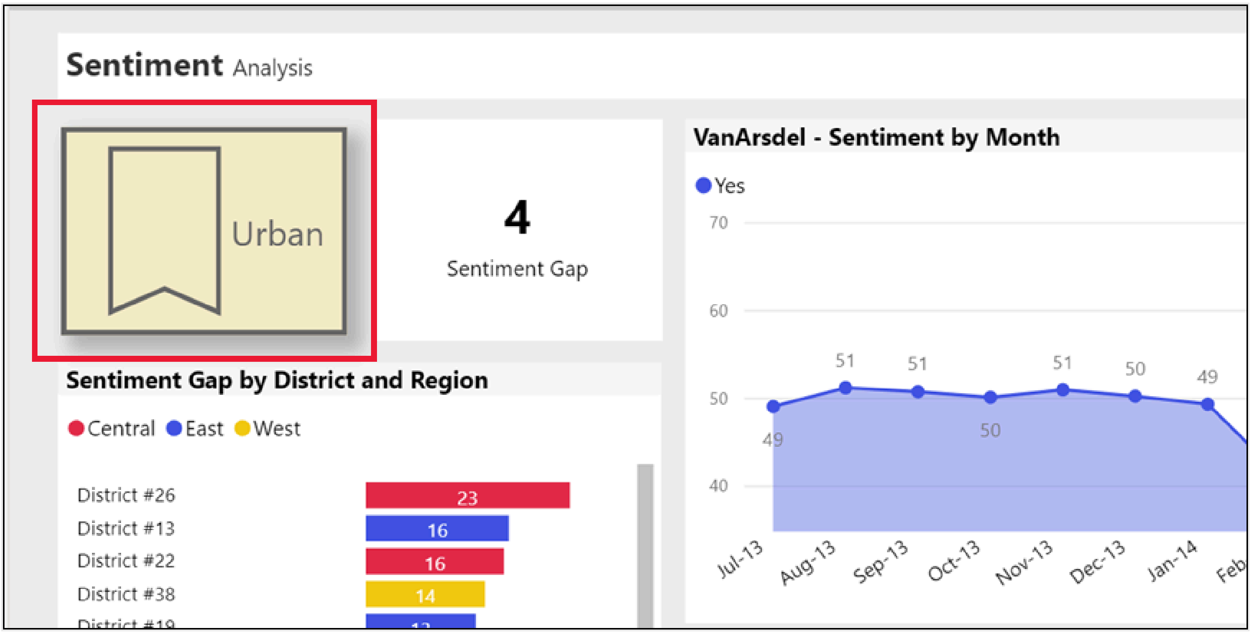
3. Select the back button labeled **Go back** to return to the previous page.



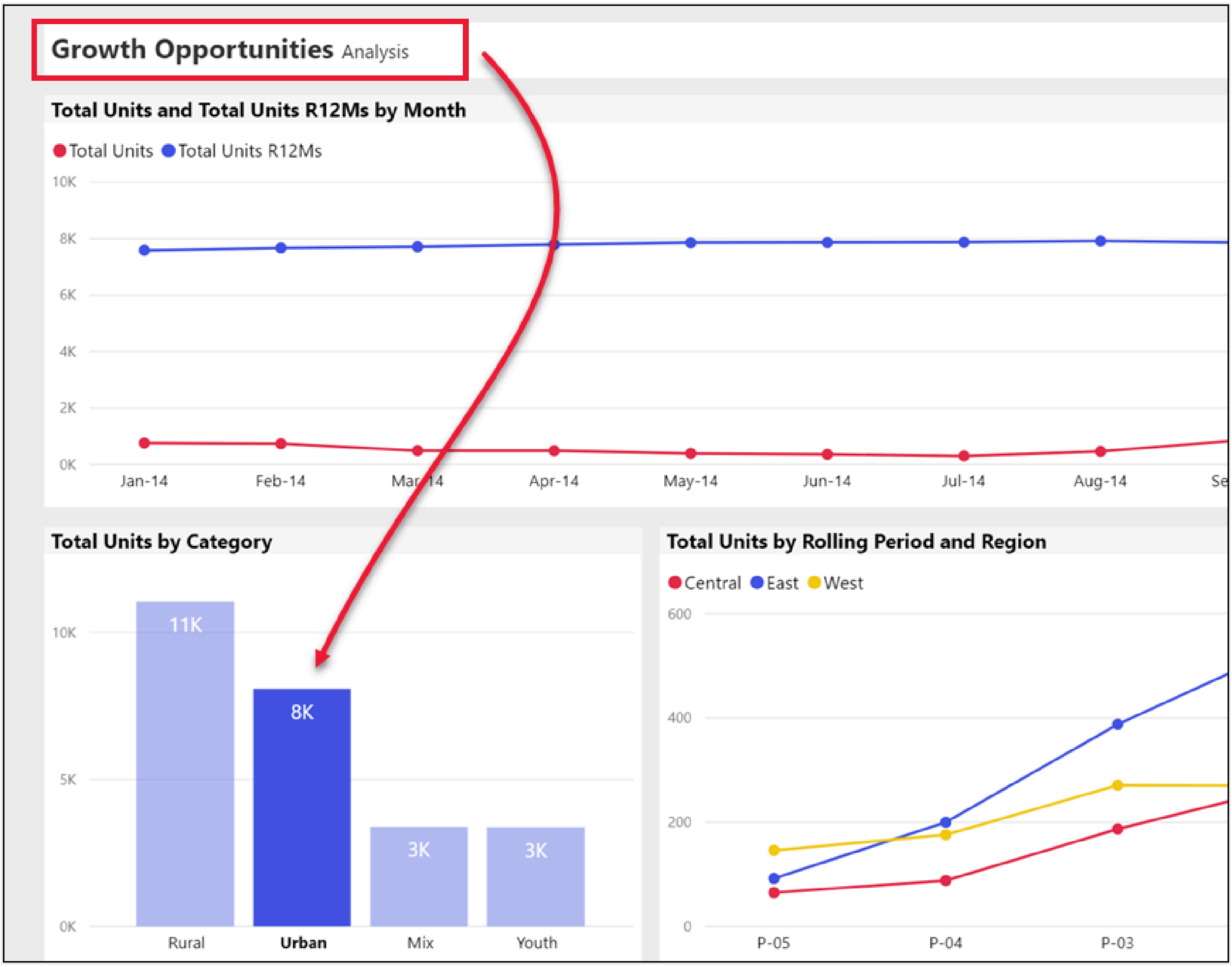
Bookmark buttons

Report *designers* often include bookmarks with their reports. You can view the list of report bookmarks by selecting **Bookmarks** from the upper right corner. When a report designer adds a bookmark *button*, it's just an alternate way to navigate to a particular report page associated with that bookmark. The page has the applied filters and settings captured by the bookmark. For more information, see Bookmarks in the Power BI service.

In the following example, the button has a bookmark icon and the bookmark name *Urban*.



When selected, the bookmark button takes you to the location and settings defined for that bookmark. In this example, the bookmark is on the *Growth opportunities* report page and it's already cross-filtered for **Urban**.



Drillthrough buttons

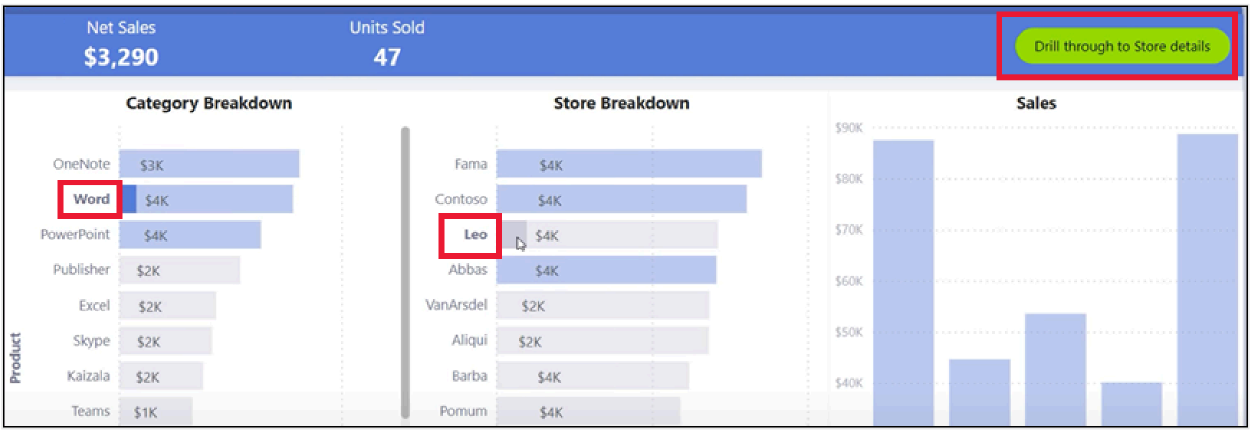
There are two ways to drill through in the Power BI service. Drilling through takes you to a different report page. The data on that destination page displays according to the filters and selections you made on the source page.

One way to drill through in a report is to right-click a data point in a visual, select **Drill through**, and choose the destination. For more information on this method, see Back buttons. The second method report designers use is to add a drillthrough *button*. The button makes the action more obvious and calls attention to important insights.

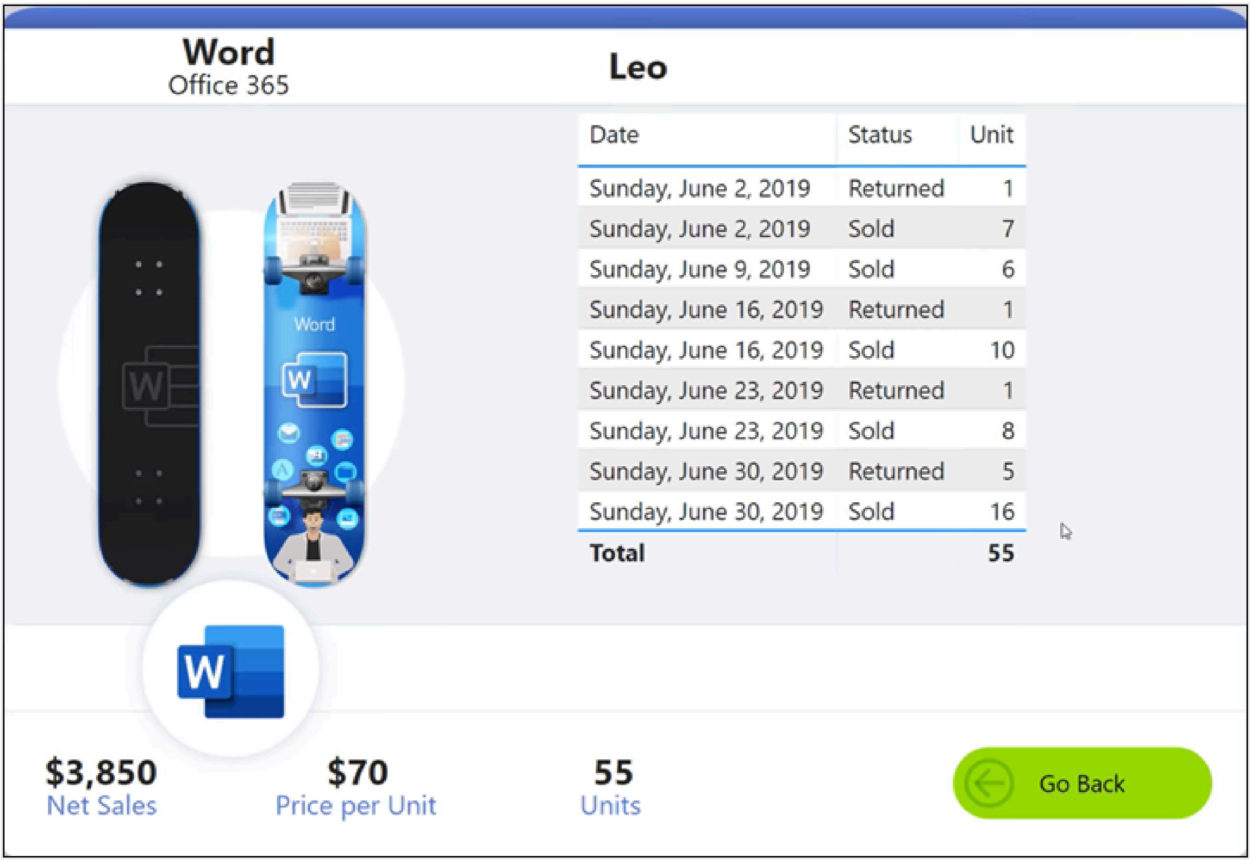
Drillthrough buttons can have more than one prerequisite. If you don't fulfill all the prerequisites, the button doesn't work. Let's look at an example.

Here the drillthrough button is designed to take you to the *Store details* page. Hovering over the button reveals a tooltip with the prerequisites. You need to select both a store and a product. Until you select one of each, the button remains inactive.

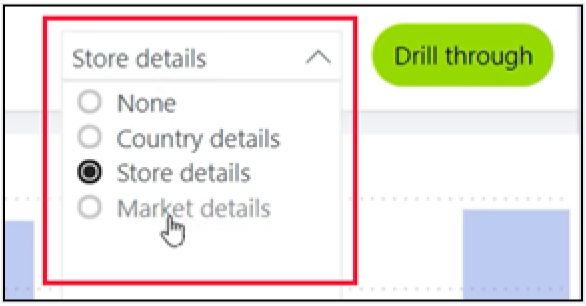
After you select one product (**Word**) and one store (**Leo**), the button changes color, signifying it's now active.



Selecting the drillthrough button takes you to the *Store* report page. The *Store* page displays according to your filters of **Word** and **Leo**.

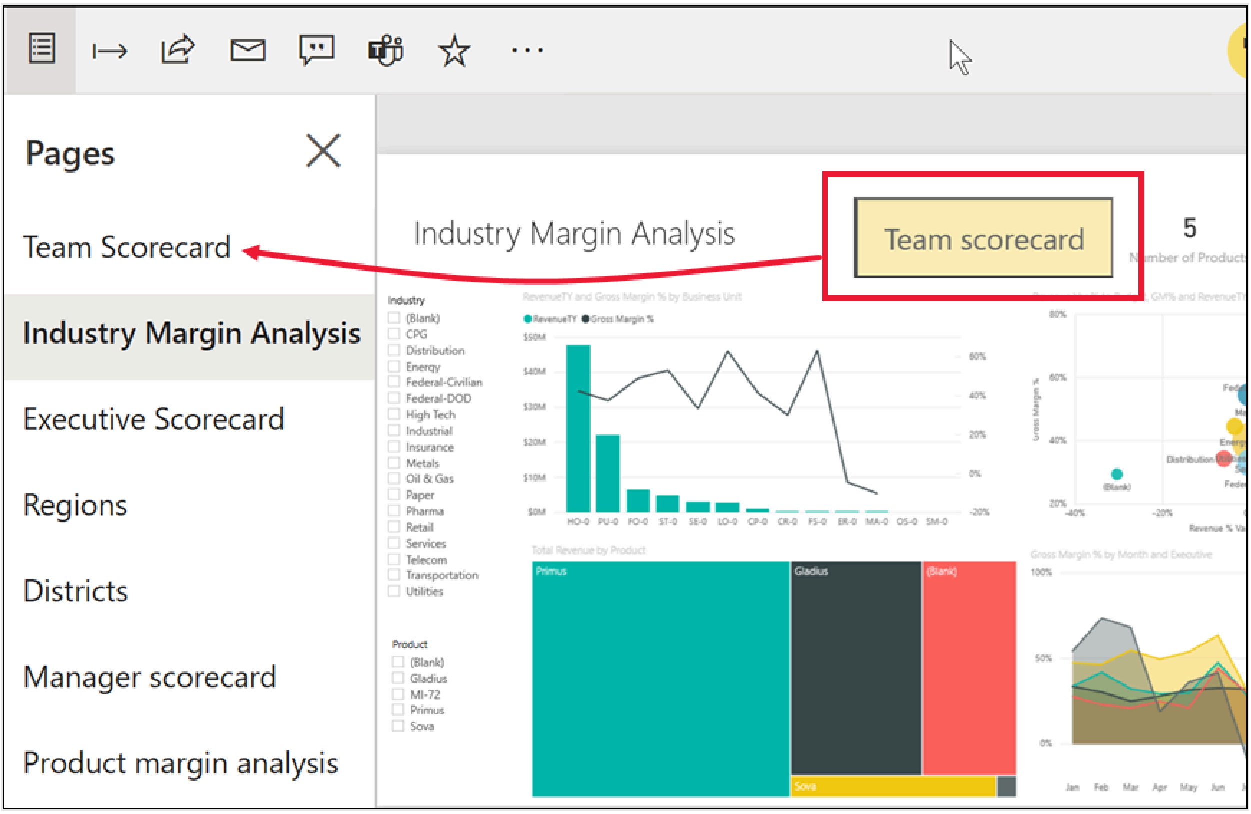


Drillthrough buttons can also have dropdown menus that offer a choice of destinations. After you make your selections on the source report page, select the destination report page for the drillthrough. The following example shows the selection change to drillthrough to the *Market details* report page.



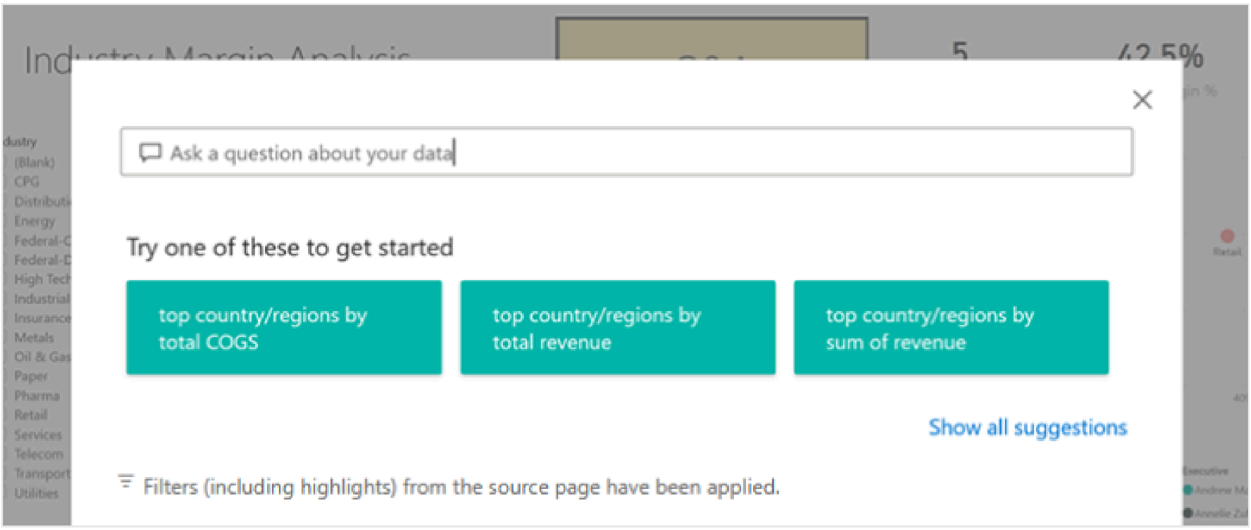
Page navigation buttons

Page navigation buttons take you to a different page in the same report. Report designers often create navigation buttons to tell a story or guide you through the report insights. In the following example, the report designer added a button on each report page. The button takes you back to the first page (the top-level summary page) of the report. The page navigation button is helpful when there are multiple pages in a report.



Q&A buttons

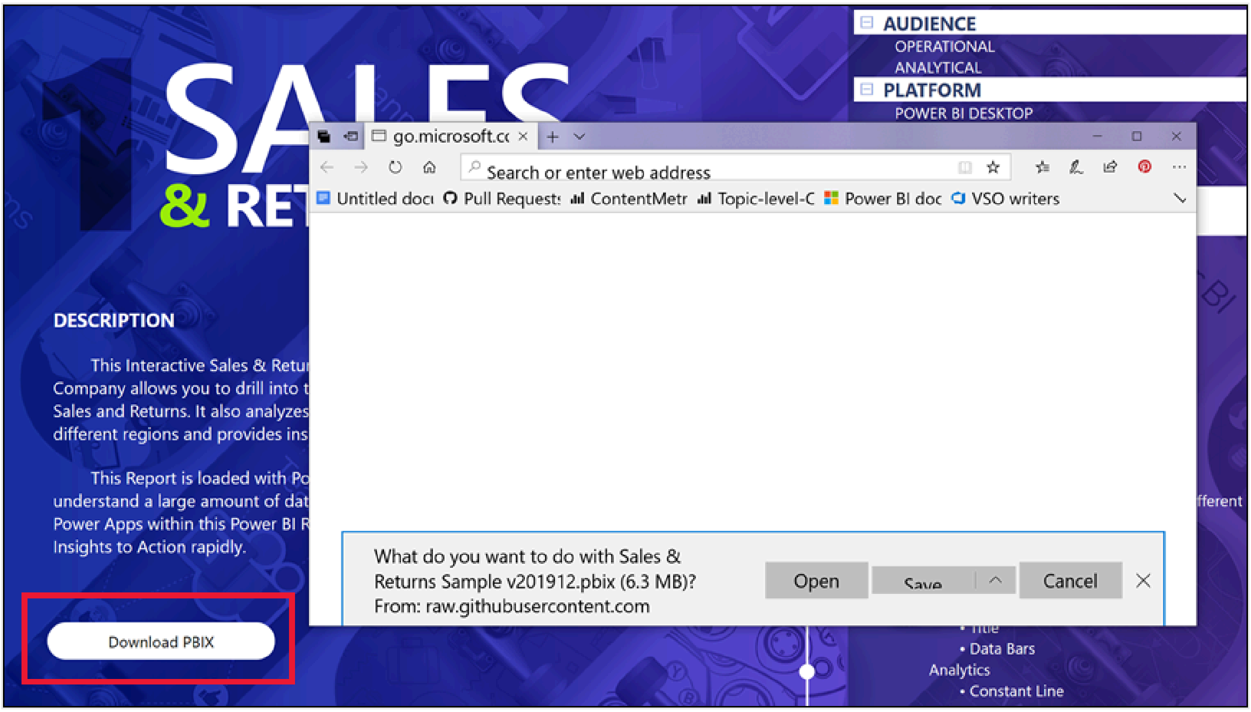
If you select a Q&A button, it opens the Power BI Q&A Explorer window. The Q&A window displays on top of the report page and closes when you select the X. For more information, see Q&A for Power BI business users.



Web URL buttons

Web URL buttons open a new browser window. Report designers might add this type of button as a reference source, to link to the corporate website or a help page, or even as a link to a different report or dashboard. In the following example, the Web URL button lets you download the source file for the report.

Since the page opens in a separate window, to return to the Power BI report, close the window, or select your Power BI tab.



Related content

- Bookmarks in the Power BI service
- Drill mode in the Power BI service

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Bookmarks in the Power BI service

Article • 03/29/2024

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ◓ Requires Pro or Premium license

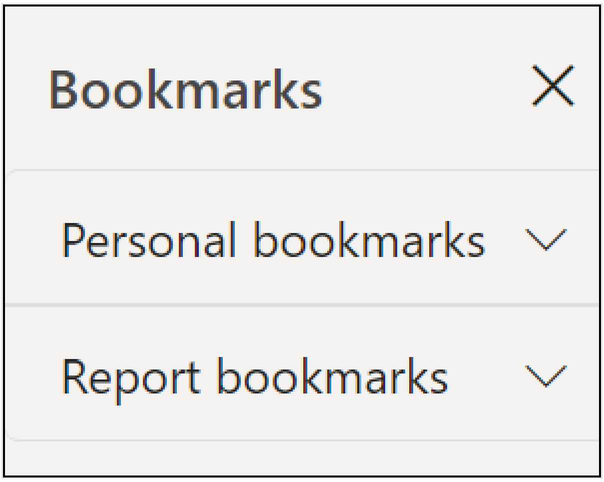
Introduction to bookmarks

A bookmark captures the state of a report page. It includes the changes you made to filters, slicers, and visuals on that page. After the report page is set the way you want, give it a friendly name. Now you can easily return to that state of the report page. Select a bookmark, and Power BI takes you back to that view.

Types of bookmarks

There are two types of Power BI bookmarks: *personal* and *report*. Report designers add the report bookmarks. When the designers share their reports with colleagues, the bookmarks travel with the reports. Everyone who can open and view that report can also see and use the report bookmarks. Anyone who can open a report can create personal bookmarks; you don't even need edit permissions. However, if you create personal bookmarks and share your report, the personal bookmarks don't travel with the report. Personal bookmarks are for your use only.

> **Tip**
>
> There are some ways for you to share your personal bookmarks with others. See Share changes later in this article for tips and tricks.



This article explains how to create and use personal bookmarks. It also explains how to interact with report bookmarks that someone else creates and shares with you. Viewing shared reports and report bookmarks requires one or both of the following prerequisites:

- a Power BI Pro or a Premium Per User (PPU) license Which license do I have?
- a report that is saved in Premium capacity and shared with you.

If you're designing reports and creating report bookmarks for others to use, see Create report bookmarks.

Other articles about bookmarks

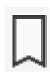
- In the Power BI service and Power BI Desktop, report owners can create report bookmarks. For more information, read about report bookmarks.
- If you have edit permissions for the report, you can quickly build a bookmark navigation experience. Bookmark navigation is available for both personal and report bookmarks. Each bookmark converts to a customizable button or dropdown menu.

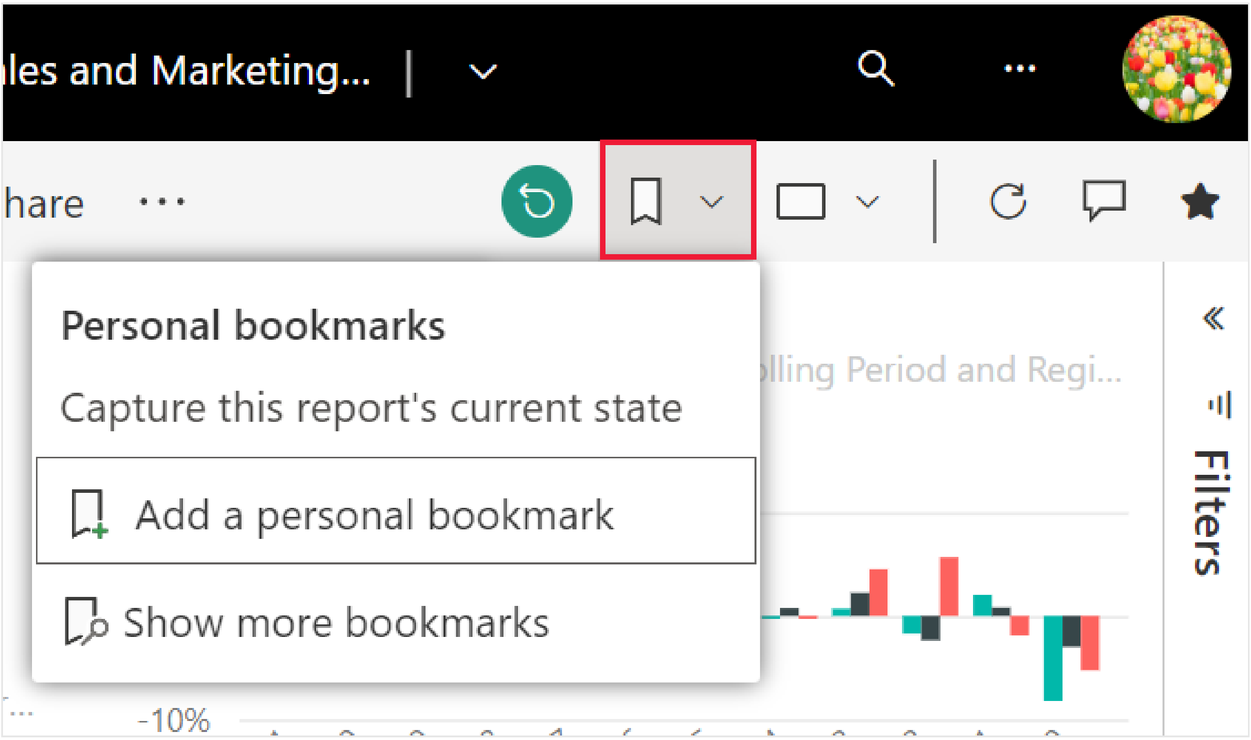
Use personal bookmarks to save insights and build stories in Power BI

There are many uses for personal bookmarks. If you discover an interesting insight and want to preserve it, create a personal bookmark so you can return later. If you need to leave and want to preserve your current work, create a personal bookmark. You can even make a personal bookmark your default view of a report, so each time you return that view of the report page opens first.

You can also create a collection of personal bookmarks and arrange them in the order you want. Then you can step through each bookmark in a presentation to highlight a series of insights that tell a story. This feature works like a slideshow, where you select an arrow to go forward or backward. There's a limit of 20 personal bookmarks per report. For more information about creating a bookmark slide show, see Bookmarks as a slide show.

Open the Bookmarks pane

To open the **Bookmarks** pane, start on a report page and select the bookmarks icon  and choose **Show more bookmarks**.



Create personal bookmarks in the Power BI service

If you can view a report, then you can also add personal bookmarks. The maximum number of personal bookmarks per report is 20. When you create a bookmark, the following elements are saved with the bookmark:

- The current page
- Filters
- Slicers, including slicer type (for example, dropdown or list) and slicer state
- Visual selection state (such as cross-highlight filters)
- Sort order
- Drill location

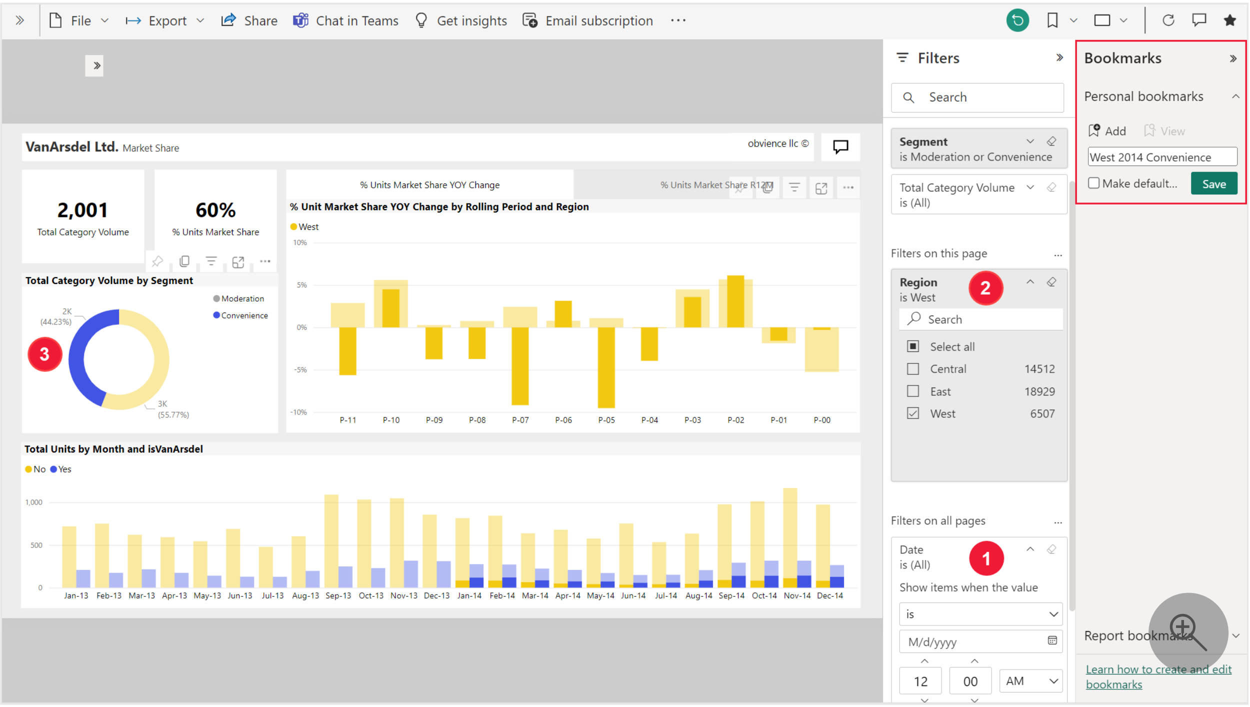
If you have edit permissions for a report, you can set and save other elements that are saved with a bookmark. For example, you can decide which visuals on the page are visible when the bookmark is selected. To learn more about report bookmarks and the Selection pane, see Using the Selection pane.

Create two different personal bookmarks

Configure a report page the way you want it to appear in the bookmark. The following example has filters applied to the default report page:

1. **Date** is changed to include All dates.

2. **Region** filter is changed to include only **West** .
3. A specific data point on the doughnut chart visual is selected. This selection cross-filters and cross-highlights the other visuals on the report canvas.



Create the first bookmark

1. After your report page and visuals are arranged how you want them, select the bookmarks icon and choose **Show more bookmarks** to open the **Bookmarks** pane.

2. From the **Bookmarks** pane, select **Personal bookmarks** > **Add**.

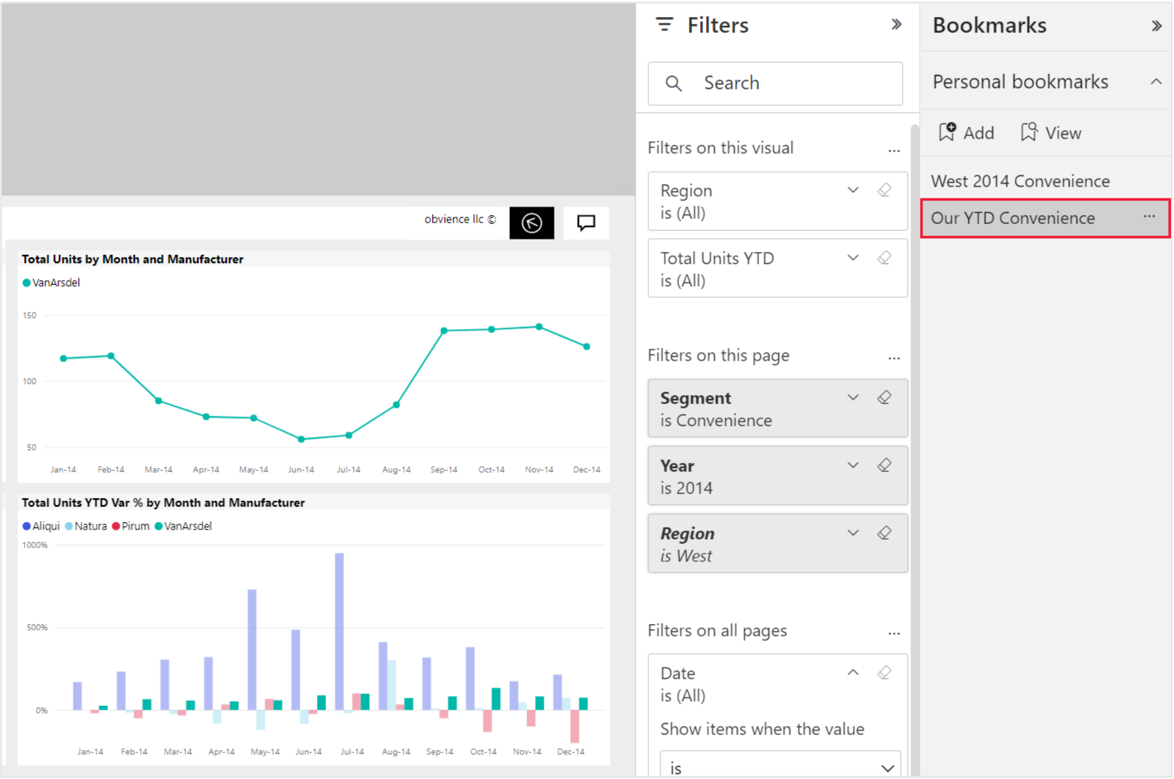
3. The personal bookmark gets a generic name, or you can enter a name. If you want this bookmarked view to be your default view, select the **Make default** check box.

4. Select **Save**. To edit your bookmark, select the ellipses next to the bookmark's name and choose **Update**, **Make default**, **Rename**, or **Delete**.

> ⓘ **Note**
>
> You can also add and edit bookmarks directly from the bookmark menu, without opening the **Bookmarks** pane.

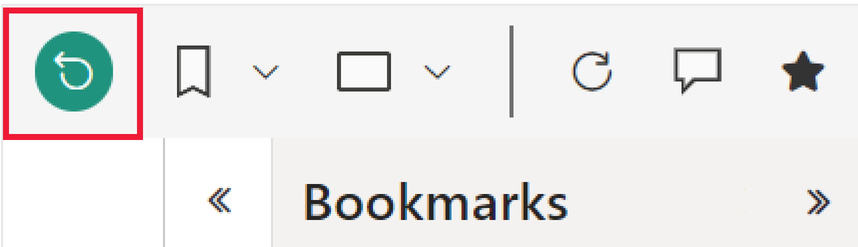
Create the second bookmark

1. Open a different report page and create another personal bookmark. The bookmark in the following example captures the YTD information for the VanArsdel company.



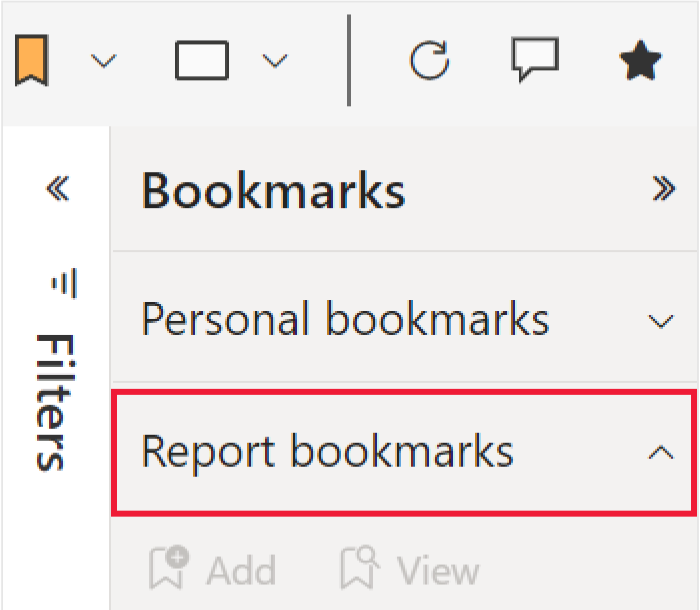
2. Now that you have two bookmarks, switch between them by selecting the bookmark in the **Bookmarks** pane or in the bookmarks menu.

3. To return to the original published view of the report, select the **Reset** icon, and then select **Reset** on the dialog.



Open report bookmarks

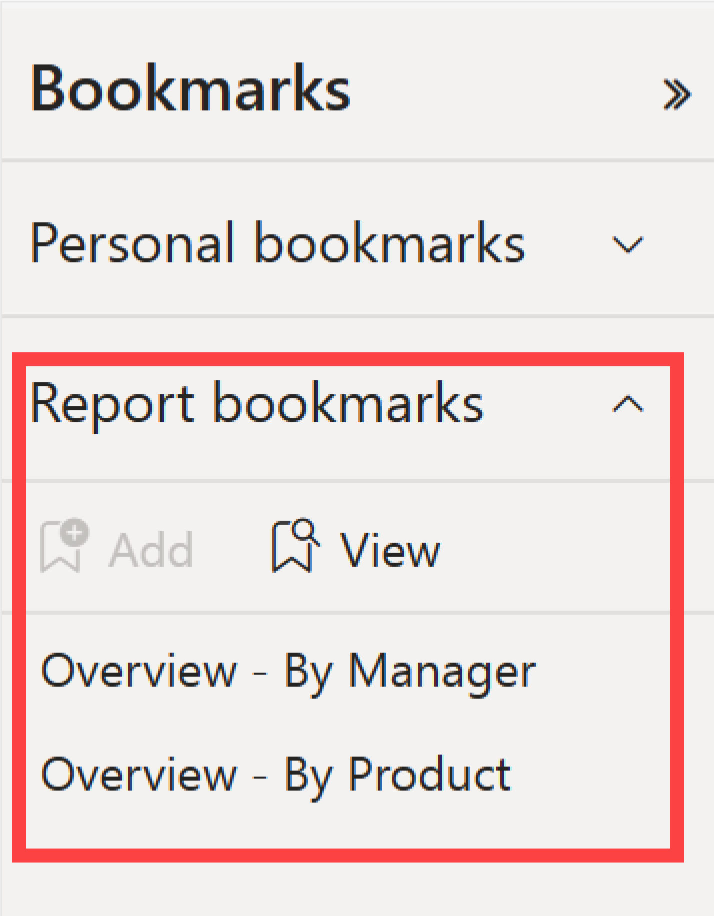
To view the report bookmarks created by the report designer, from the **Bookmarks** pane, select **Report bookmarks**.



> ⓘ **Note**
>
> To view shared reports, or to save reports in Premium capacity, you need a Power BI Pro or Premium Per User license. To learn more, see Licenses and subscriptions for business users.

Report bookmarks

If the report designer included report bookmarks, they appear under the **Report bookmarks** heading. This report page has two report bookmarks: Overview- By Manager and Overview-By Product.

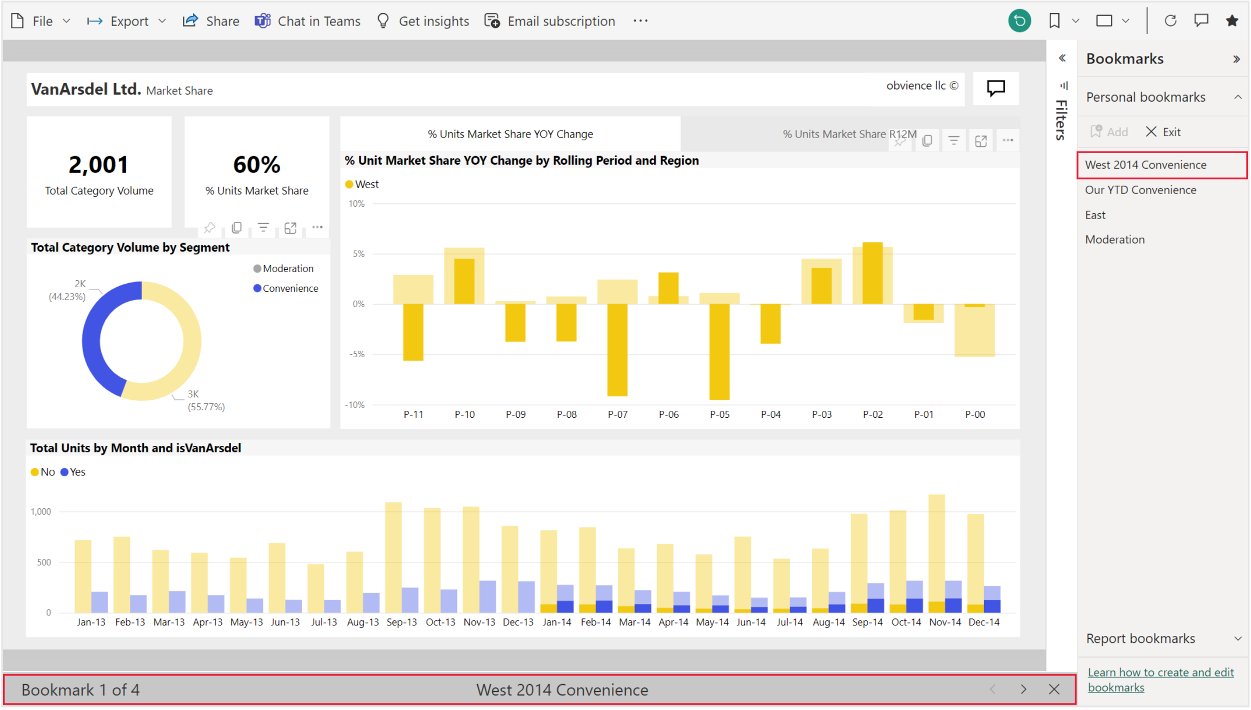


Bookmarks as a slideshow

To present or view bookmarks in order, select **View** from the **Bookmarks** pane to begin a slideshow.

When in **View** mode, notice the following features:

- The name of the bookmark appears in the bookmark title bar, which appears at the bottom of the canvas.
- The bookmark title bar has arrows where you can move to the next or previous bookmark.
- To exit **View** mode, select **Exit** from the **Bookmarks** pane, or select the **X** in the bookmark title bar.



In **View** mode, you can collapse the **Bookmarks** pane to provide more space for your presentation. While in **View** mode, all visuals are interactive and available for cross-highlighting, like they are when you interact with them in other modes.

Share changes

While you can't directly share your personal bookmarks with others, there are some workarounds. These workarounds require that you have one or both of the following prerequisites:

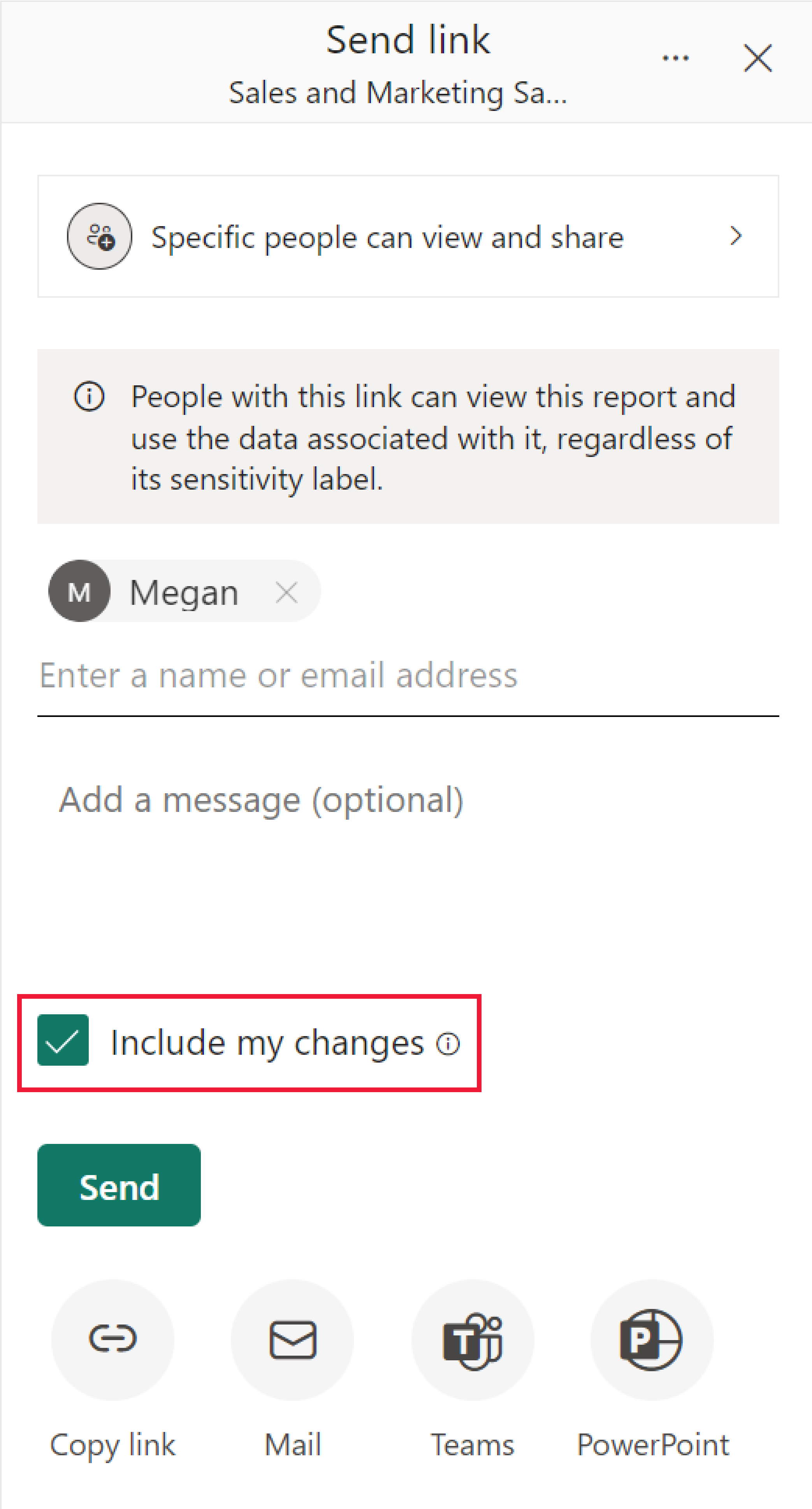
- Pro or PPU license
- Permissions to content saved in a workspace in Premium capacity

Here are a few ways you can share your view with others:

- **Share your active view**. If you have a personal bookmark active when you share a report, recipients who have read access to the report see the bookmarked version of that report page. Recipients don't see your bookmark in their "Personal bookmarks" list. They see the result of your personal bookmark.

  This personalized view of the report doesn't override the designer's original report or the designer's report bookmarks. Sharing with colleagues who don't already have read access requires reshare permissions. If you're unable to share your view of the report, contact the report owner to request reshare permission.

  When you select **Share** from the top menu of the report, you can choose to include your changes.



- **Chat in teams**. Like the previous method, with a personal bookmark active, you can share a report in Microsoft Teams. Select **Chat in Teams** from the top menu. In the

Share to Microsoft Teams dialog, enter the name of the person, group, or channel that you want to share to. The URL automatically appears in the **Say something about this** box; you can enter additional information and edit the way the report link appears, and then select **Share**. For more information, see Share a filtered Power BI report.

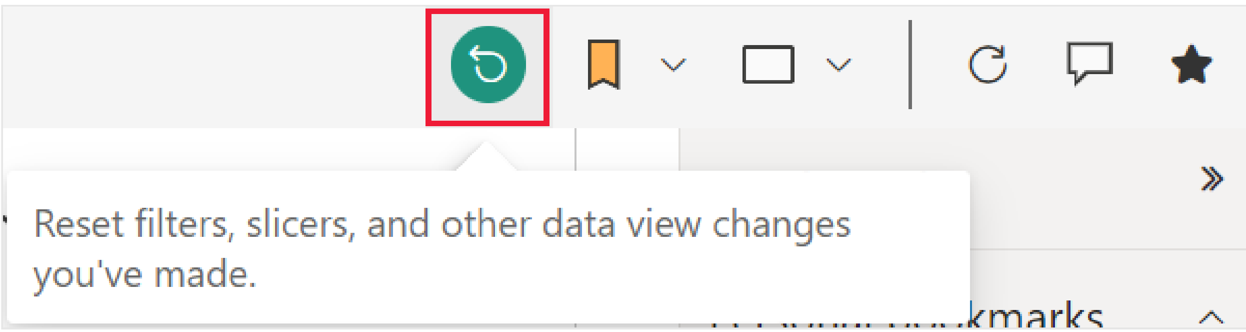
- **Use the comment feature**. With a personal bookmark active, add a comment. When other users select the comment, they see your personal bookmark view. For more information, see Add comments to a dashboard or reports.

If you make changes to your personal bookmark after you share a report, it has no effect on your recipients' view. For example, if you share a report with a 2021 date filter applied and then change the year to 2022 in your bookmark, your recipient still sees the 2021 filter.

> ⓘ **Note**
>
> To share reports, you will need a Power BI Pro or Premium Per User license, or for the report to be saved in reserved capacity. To learn more, see Licenses and subscriptions for business users.

Reset all your changes to a report

From the upper-right corner of your report canvas, select **Reset to default**. This action removes all your changes in the report and sets it back to the designer's last saved view of the report. Resetting the report doesn't delete the bookmarks.



Considerations and limitations

In this release of **personal bookmarks**, there are a few considerations and limitations to keep in mind.

- The bookmark captures the state of the page at the time the bookmark is created. When someone selects the bookmark, Power BI attempts to show them that bookmark in its original report state. However, there are situations where showing the bookmark isn't possible. For example, if the report owner changes the name of a field that the bookmark uses, Power BI no longer displays visuals, filters, or slicers that use that field. Certain visuals display no data for the renamed field. Filtered or sliced visuals revert to the default view.

- Most Power BI custom visuals should work well with personal bookmarking. If you run into trouble with bookmarking and a Power BI custom visual, contact the creator of that visual, and ask them to add support for bookmarks.

- Generally, your personal bookmarks aren't affected if the report designer updates or republishes the report. However, if the designer makes major changes to the report, such as removing fields used by a personal bookmark, you'll receive an error message the next time you attempt to open that bookmark.

- Report bookmarks and personal bookmarks created in Power BI Desktop or in the Power BI service are recognized in the Power BI mobile apps for iOS and Android tablets and phones, and in the Power BI Windows app. However, you can't create bookmarks in these apps. For information about using bookmarks in the Power BI mobile apps and the Power BI Windows app, see Explore reports in the Power BI mobile apps - bookmarks.

- Because personal bookmarks capture the exploration state of the current page, personal bookmarks don't capture changes to other pages. For example, if you have sync-slicers in your report and you personalize the sync-slicer to use a different field and capture a personal bookmark, then the personal bookmark only captures the slicer change on the current page.

- You can create up to 20 bookmarks for a single report.

Related content

- Personalize visuals in a report

Feedback

Add spotlights to Power BI reports

Article • 02/19/2024

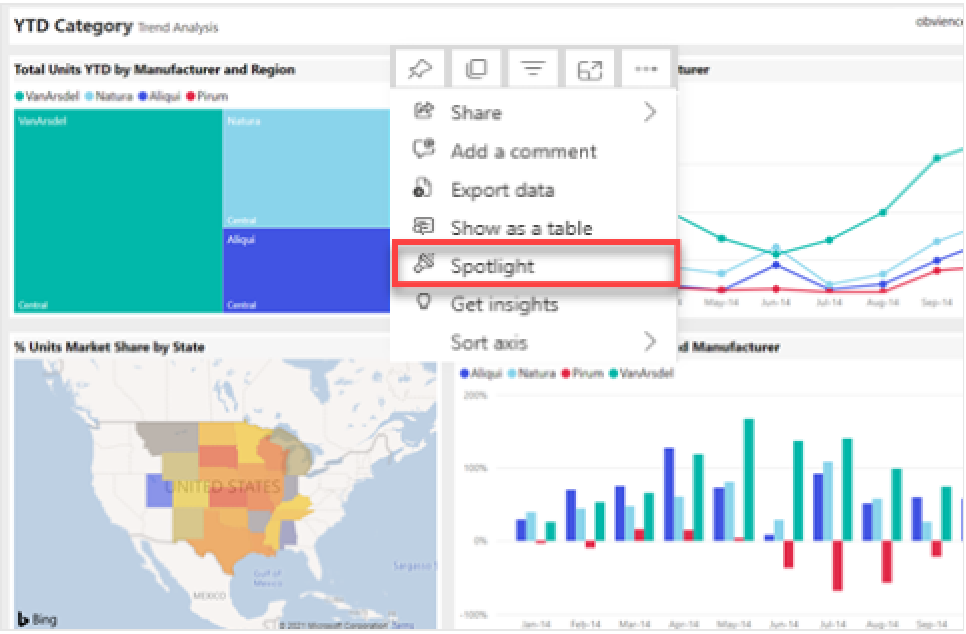
APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

Use spotlights to draw attention to a specific visual on a report page.

Add a spotlight

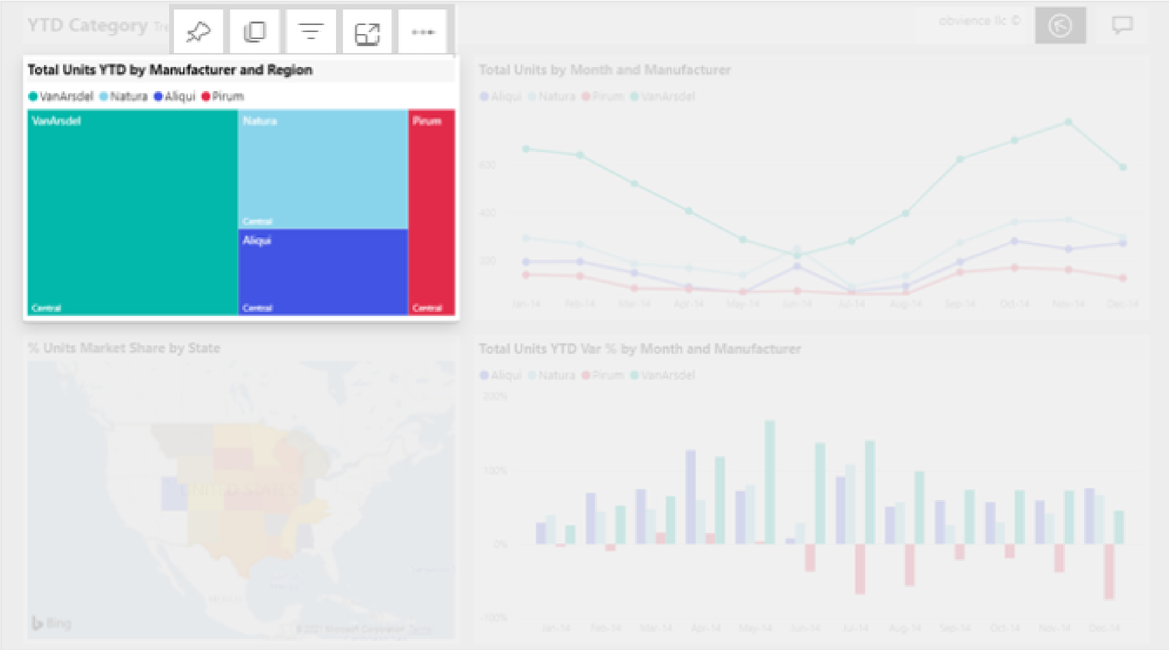
1. [Open a report](#) in the Power BI service.

2. Select the visual that you want to highlight. Select the **More options (...)** dropdown, then choose **Spotlight**.



> **Note**
>
> If the spotlight mode is active when you add a bookmark, that mode is retained in the bookmark.

3. The selected visual is highlighted, which causes all other visuals on the page to fade to near transparency.



Related content

- Display content in more detail: focus mode and full screen mode

Set alerts on Power BI reports (public preview)

Article • 11/22/2024

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Premium or Fabric license

With Fabric Activator, you can set data alerts on the reports that you're interested in following. Read more about it in What is Activator?

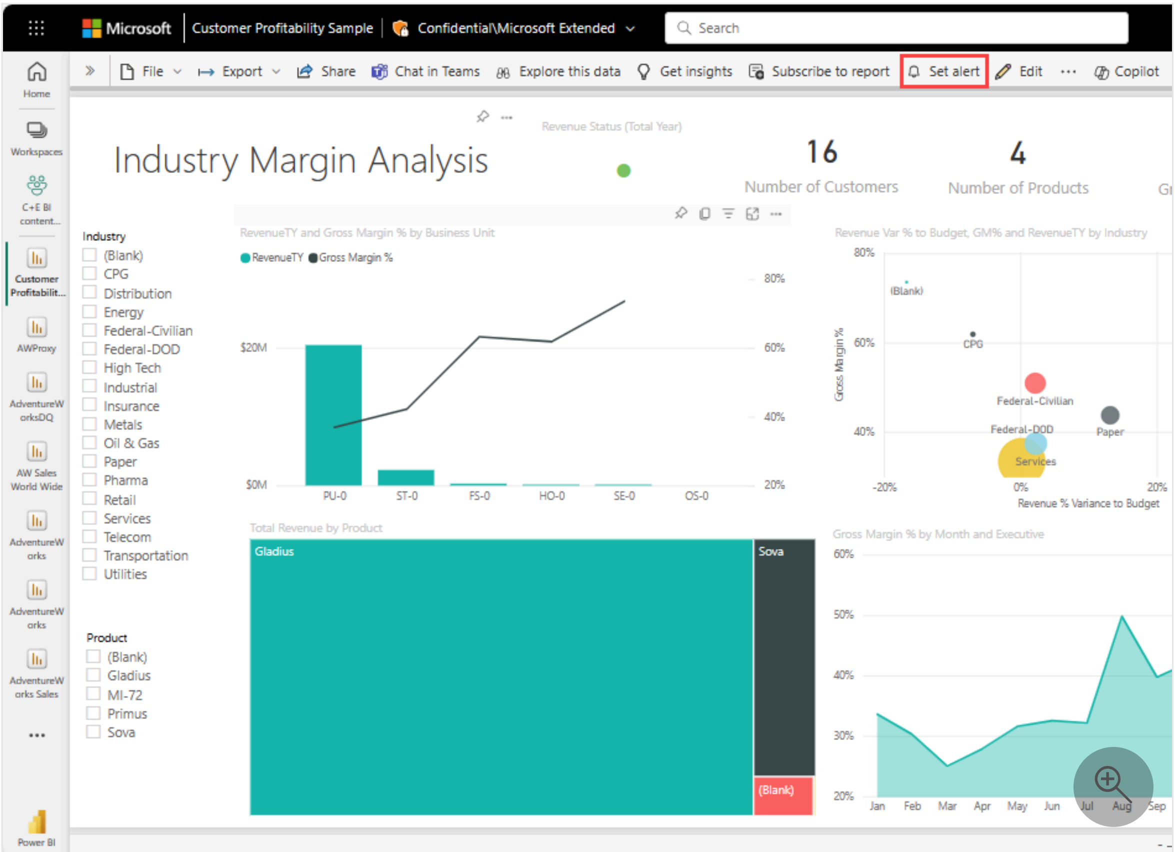
Prerequisites

- You need to have write permission for a workspace with a Fabric capacity license.

You can sign up for a Microsoft Fabric free trial.

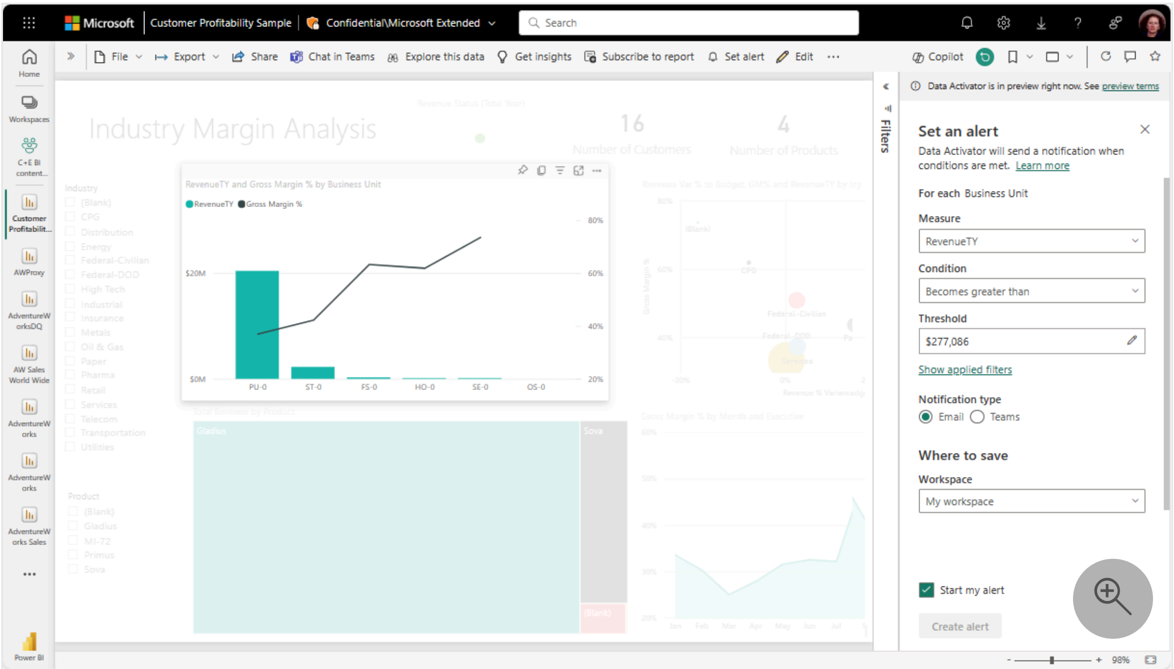
Set a data alert

1. From the visual context menu or report toolbar, tap a visual in the report, and then select **Set alert**.



A pane opens where you can set the measure you want to monitor in that visual, and the conditions you want to detect.

2. In the **Set an alert** pane, choose:



- A measure to monitor.
- A condition to evaluate.
- A threshold to pass.

3. Decide whether to be notified by email or in Teams.

4. Save the alert to a workspace with a Fabric capacity license.

5. Select **Start my alert**, then select **Create alert**.

Power BI creates an Activator item and connects it to the data in your Power BI semantic model. Activator automatically starts monitoring your data and notifies you when the condition is met.

Customize the trigger

You can further customize the trigger to:

- Watch for more complex conditions
- Notify different users
- Even launch a Power Automate workflow.

For more information, read the Activator documentation.

Related content

- Fabric Activator

Feedback

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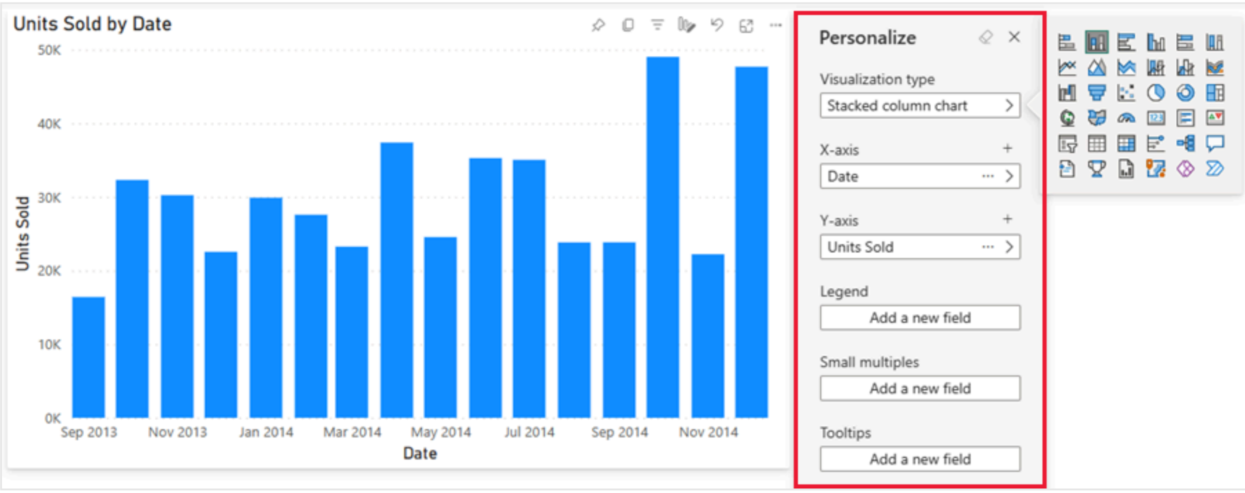
Personalize visuals in a report

Article • 11/12/2024

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

It's hard to make one visual that satisfies everyone's requirements. So, when a colleague shares a report with you, you might want to make changes to the visuals—without having to ask your colleague to make the changes for you.

Maybe you'd like to swap what's on the axis, change the visual type, or add something to the tooltip. With the **Personalize this visual** feature, make the changes yourself and when you have the visual the way you want it, save it as a bookmark to come back to. You don't need edit permission for the report.



What you can change

This feature helps you gain further insights through ad-hoc exploration of visuals on a Power BI report. The following are some of the modifications that you can make. The available options vary by visual type.

- Change the visualization type.
- Swap out a measure or dimension.
- Add or remove a legend.
- Compare two or more measures.
- Change aggregations, and more.

Not only does this feature allow for new exploration capabilities, it also includes ways for you to capture and share your changes:

- Capture your changes.

- Share your changes.
- Reset all your changes for a report.
- Reset all your changes for a visual.
- Clear out your recent changes.

> ⓘ **Important**
>
> The ability to personalize a visual must be enabled by the report *designer*. If you don't see the **Personalize this visual** icon, then the report designer didn't enable this feature for the current report. Check with the report owner or your administrator to have the feature enabled. To display contact information for the report owner, select the name of the report from the Power BI menu bar.

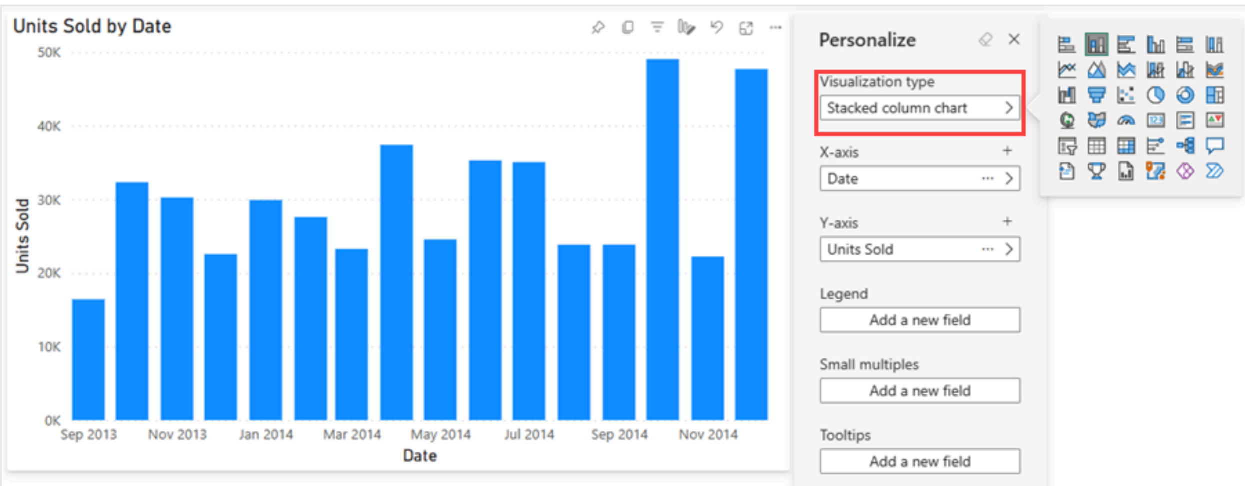
Personalize visuals in the Power BI service

By personalizing a visual, you can explore your data in many ways, without leaving report reading view. The following examples show different ways you can modify a visualization to meet your needs.

1. Open a report in reading view in the Power BI service.
2. In the menu bar for the visual, select the **Personalize this visual** icon.

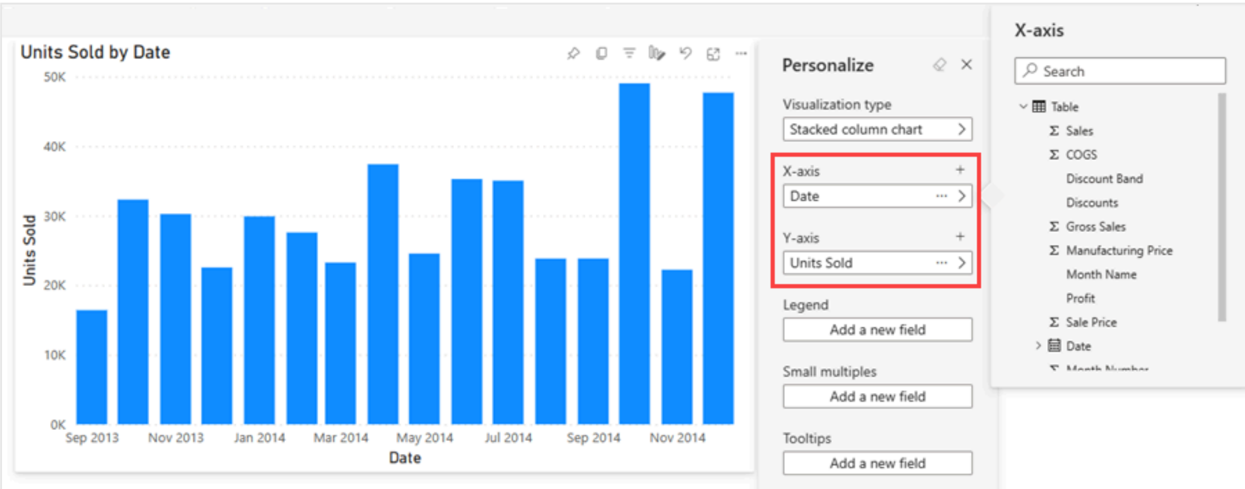
Change the visualization type

Do you think the data would display better as a Stacked column chart? Change the **Visualization type**.



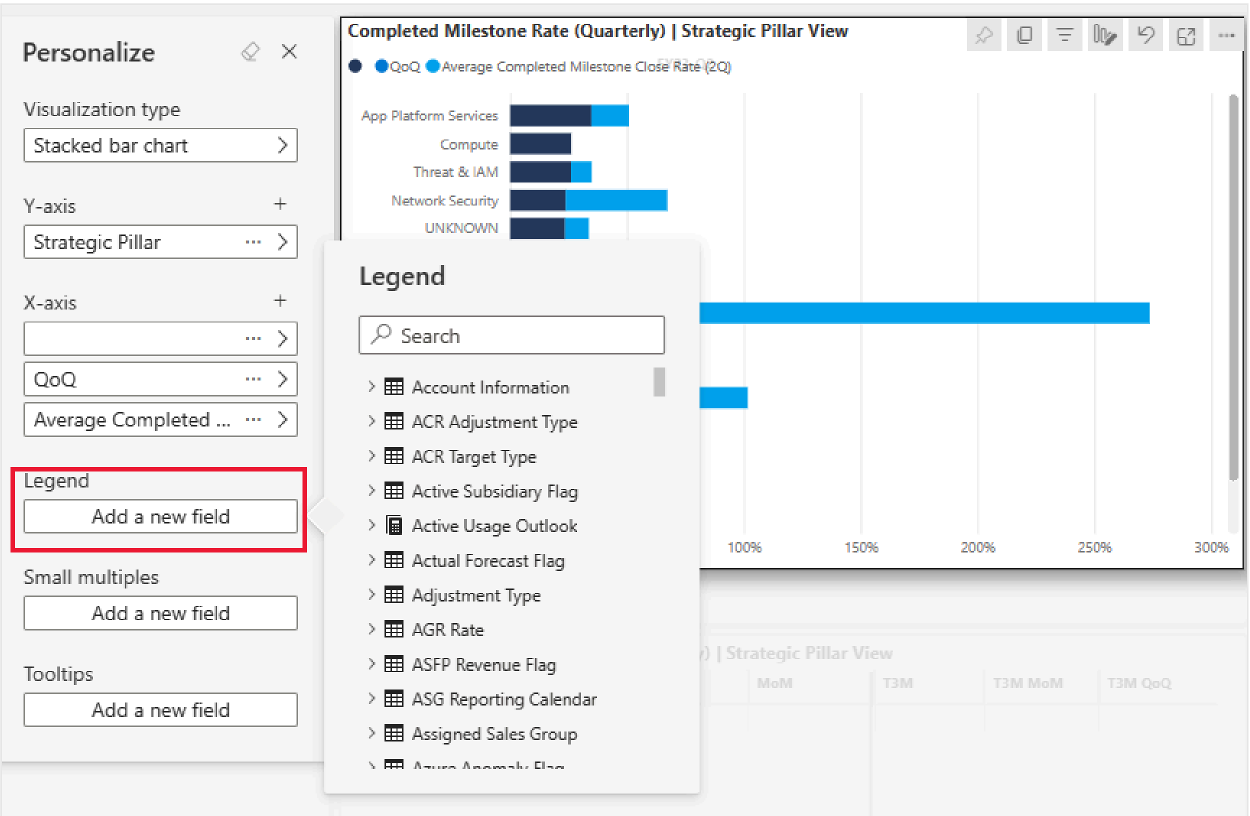
Swap out a measure or dimension

Replace the field being used for the X axis or Y axis by selecting the field that you want to replace, then selecting a different field.



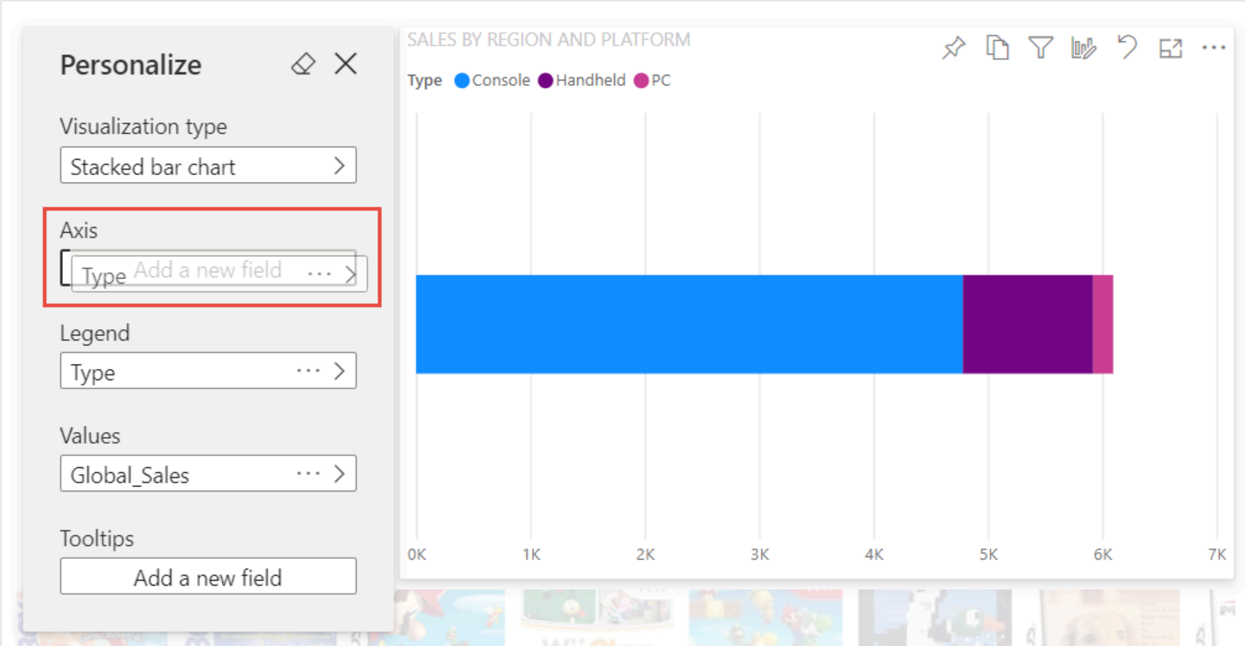
Add or remove a legend

By adding a legend, you can color-code a visual based on a category. In this example, we're color-coding based on company name.

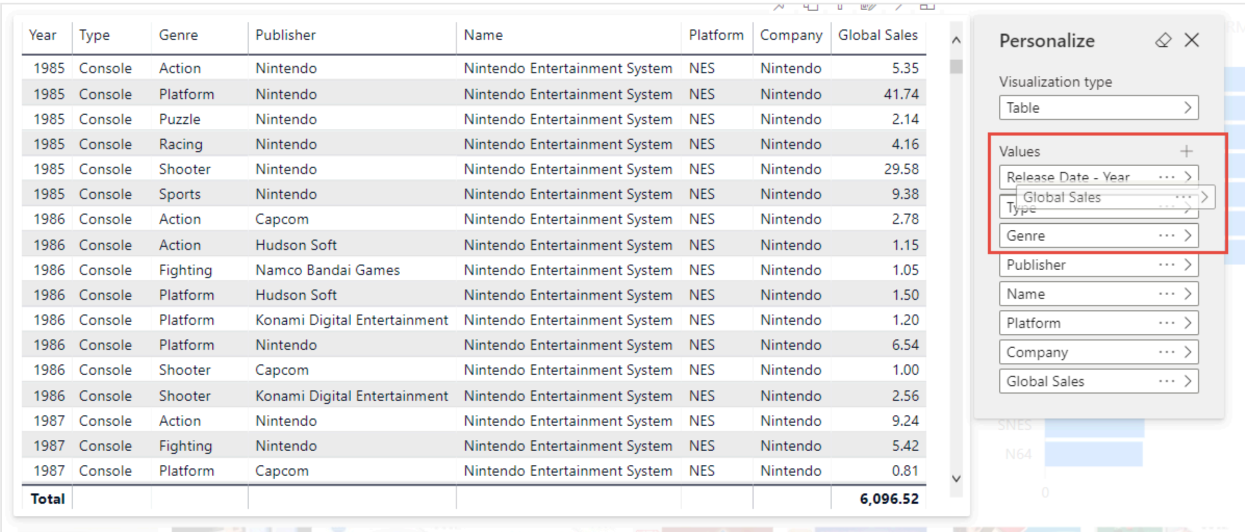


Change the placement of fields

By using drag and drop, you can change the placement of fields within the same visual property or even across different visual properties. For example, you can quickly move a field in the legend to the axis of a visual.



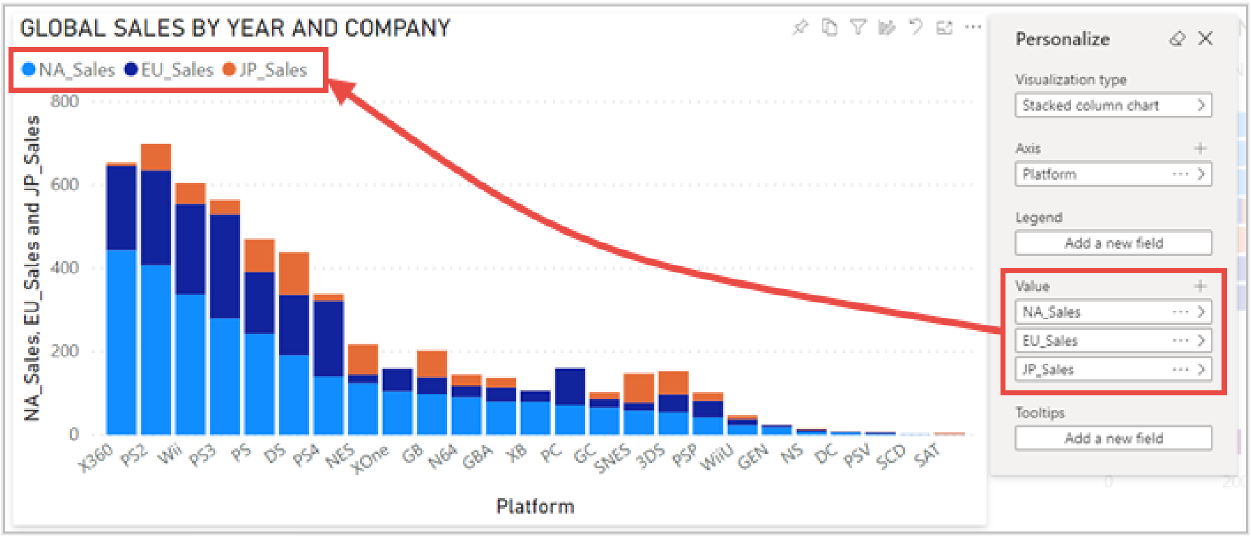
You can also quickly reorder the columns of a table or matrix.



Year	Type	Genre	Publisher	Name	Platform	Company	Global Sales
1985	Console	Action	Nintendo	Nintendo Entertainment System	NES	Nintendo	5.35
1985	Console	Platform	Nintendo	Nintendo Entertainment System	NES	Nintendo	41.74
1985	Console	Puzzle	Nintendo	Nintendo Entertainment System	NES	Nintendo	2.14
1985	Console	Racing	Nintendo	Nintendo Entertainment System	NES	Nintendo	4.16
1985	Console	Shooter	Nintendo	Nintendo Entertainment System	NES	Nintendo	29.58
1985	Console	Sports	Nintendo	Nintendo Entertainment System	NES	Nintendo	9.38
1986	Console	Action	Capcom	Nintendo Entertainment System	NES	Nintendo	2.78
1986	Console	Action	Hudson Soft	Nintendo Entertainment System	NES	Nintendo	1.15
1986	Console	Fighting	Namco Bandai Games	Nintendo Entertainment System	NES	Nintendo	1.05
1986	Console	Platform	Hudson Soft	Nintendo Entertainment System	NES	Nintendo	1.50
1986	Console	Platform	Konami Digital Entertainment	Nintendo Entertainment System	NES	Nintendo	1.20
1986	Console	Platform	Nintendo	Nintendo Entertainment System	NES	Nintendo	6.54
1986	Console	Shooter	Capcom	Nintendo Entertainment System	NES	Nintendo	1.00
1986	Console	Shooter	Konami Digital Entertainment	Nintendo Entertainment System	NES	Nintendo	2.56
1987	Console	Action	Nintendo	Nintendo Entertainment System	NES	Nintendo	9.24
1987	Console	Fighting	Nintendo	Nintendo Entertainment System	NES	Nintendo	5.42
1987	Console	Platform	Capcom	Nintendo Entertainment System	NES	Nintendo	0.81
Total							**6,096.52**

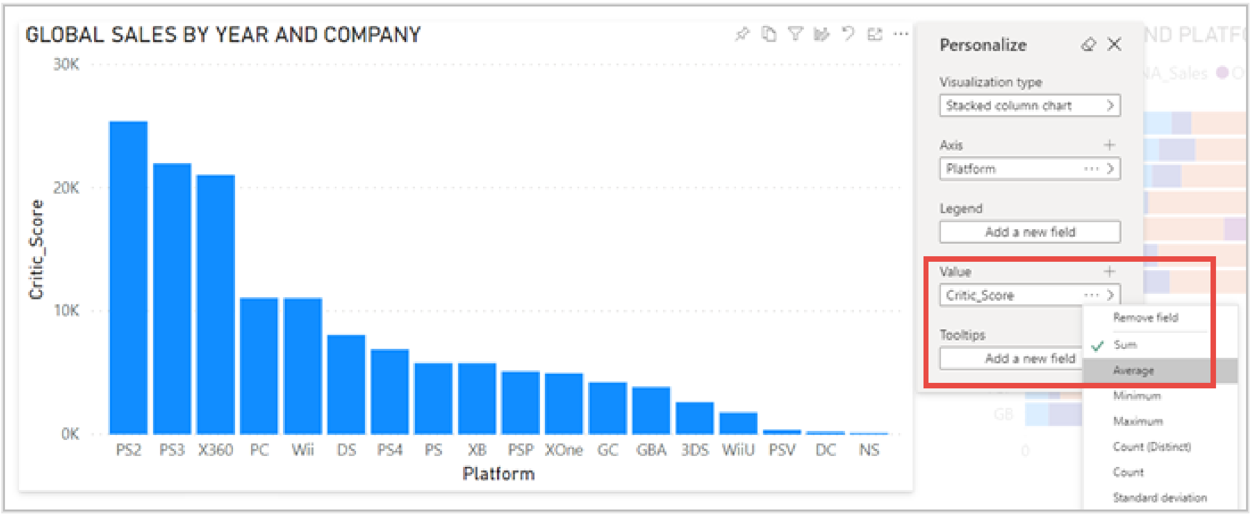
Compare two or more different measures

Compare and contrast values for different measures by using the + icon to add multiple measures for a visual. To remove a measure, select **More options (...)** and choose **Remove field**.



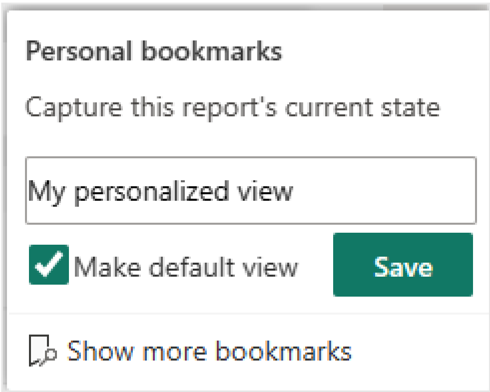
Change aggregations

Change how a measure is computed by changing the aggregation in the **Personalize** pane. Select **More options (...)** and choose the aggregation to use.



Capture changes

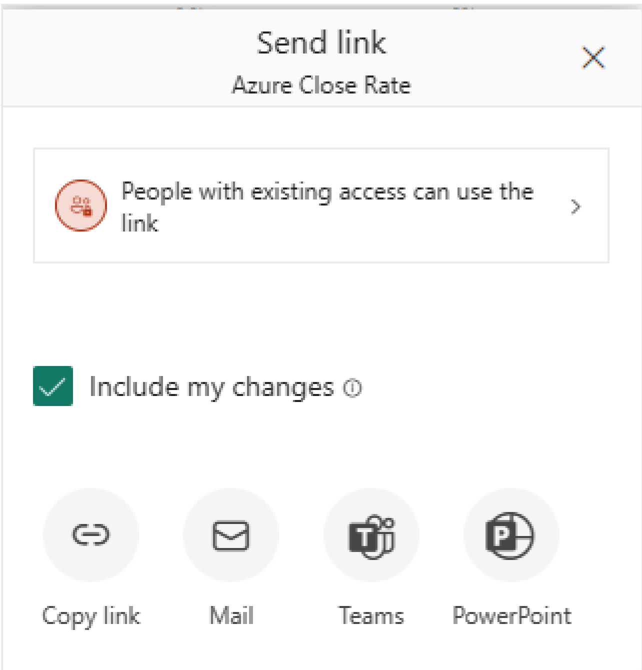
Using personal bookmarks, capture your changes so you can return to your personalized view. Select **Bookmarks** > **Add a personal bookmark** and give the bookmark a name.



You can also make the bookmark your default view.

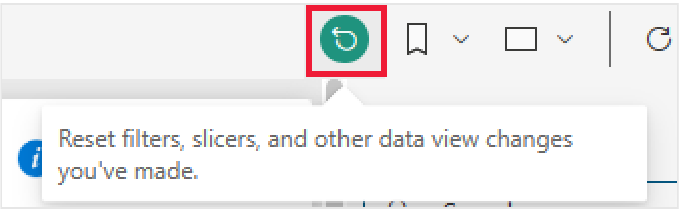
Share changes

If you have reshare and read permissions, when you share the report you can choose to include your changes. This personalized version doesn't overwrite the author's version. The colleague who is viewing your personalized report can select **Reset to default** and return to the author's version of the report. If the colleague has editing permissions, they can save your personalized version as a new report.



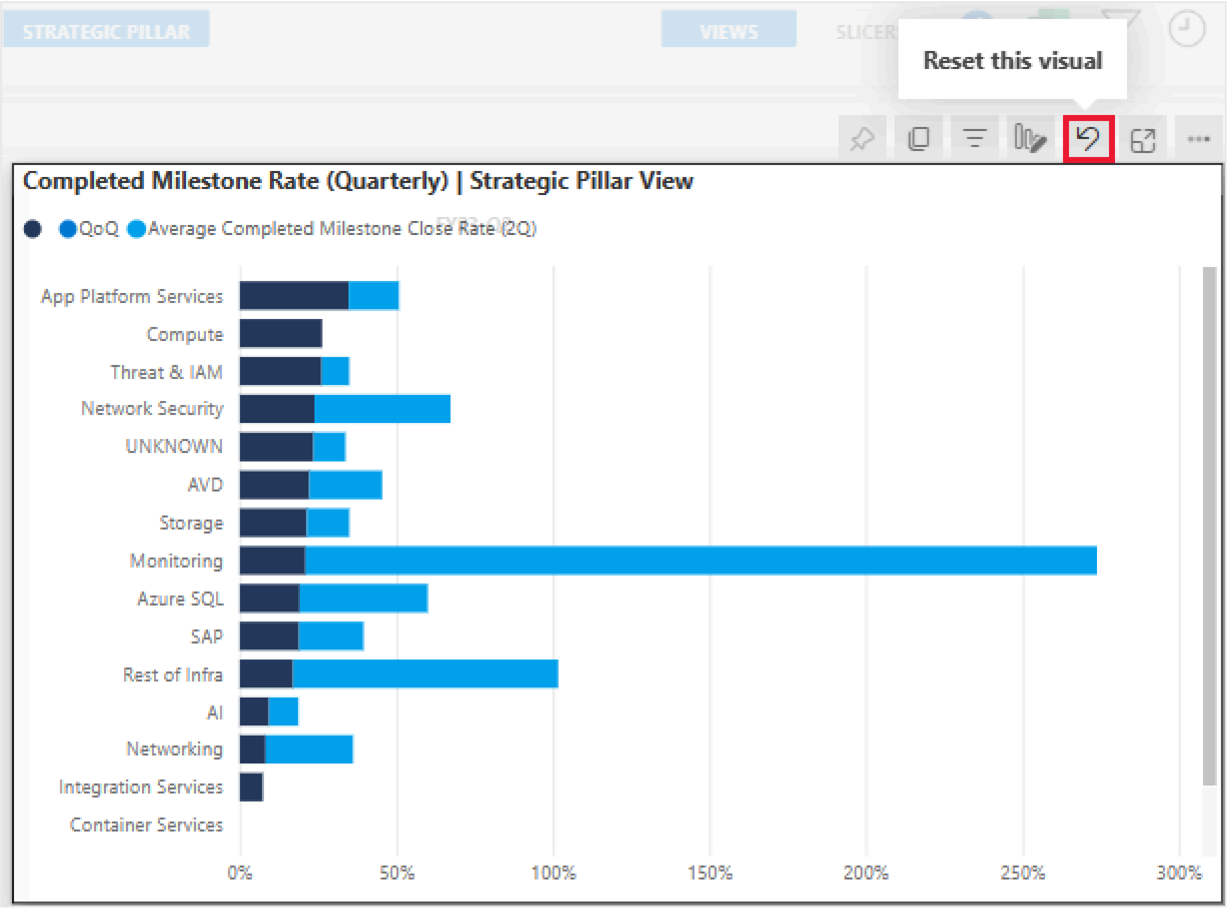
Reset all your changes to a report

From the upper-right corner of your report canvas, select **Reset to default**. Resetting removes all your changes in the report and sets it back to the author's last saved view of the report.



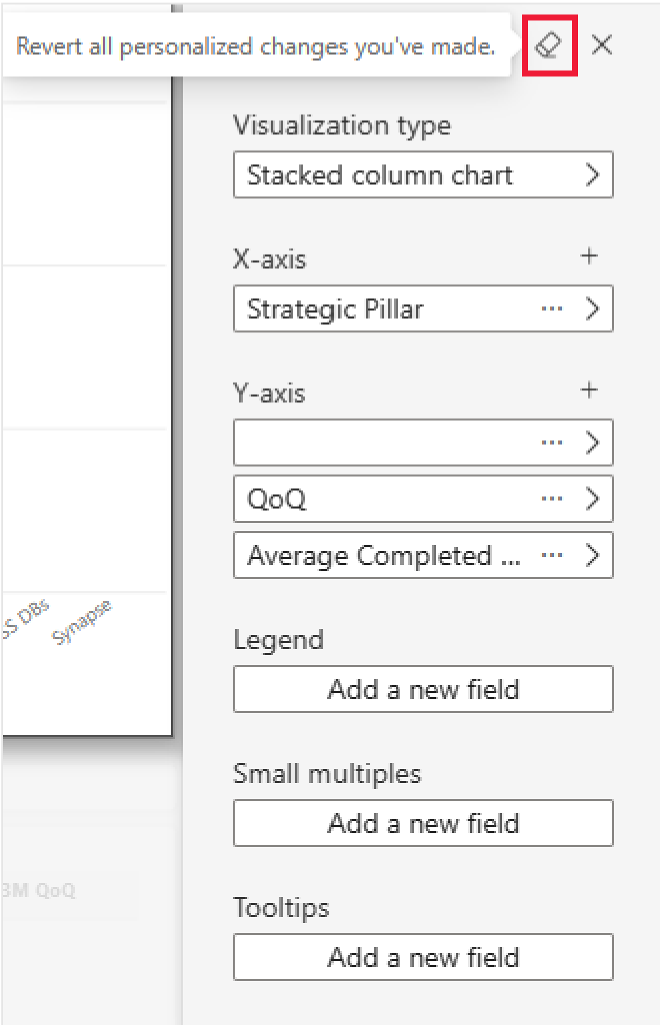
Reset all your changes to a visual

From the menu bar for the visual, select **Reset this visual** to remove all your changes to a particular visual and set it back to the author's last saved view of that visual.



Clear recent changes

Select the eraser icon to clear all changes since you opened the **Personalize** pane.



Considerations and limitations

Currently the feature has a few limitations to be aware of.

- **Personalize this visual** can be turned off for an entire report or for a particular visual. If you don't have permissions to personalize a visual, check with your Power BI admin or the report owner. To display contact information for the report owner, select the name of the report from the Power BI menu bar.
- User explorations don't automatically persist. You need to save your view as a personal bookmark to capture your changes.
- This feature is supported in the Power BI mobile apps for iOS and Android tablets and in the Power BI Windows app. It isn't supported in the Power BI mobile apps for phones. However, any change to a visual you save in a personal bookmark while in the Power BI service is respected in all the Power BI mobile apps.
- This feature is not available in Report Server.

Related content

- Copy and paste a report visualization

- More questions? Ask the Power BI Community

Feedback

Was this page helpful? Yes No

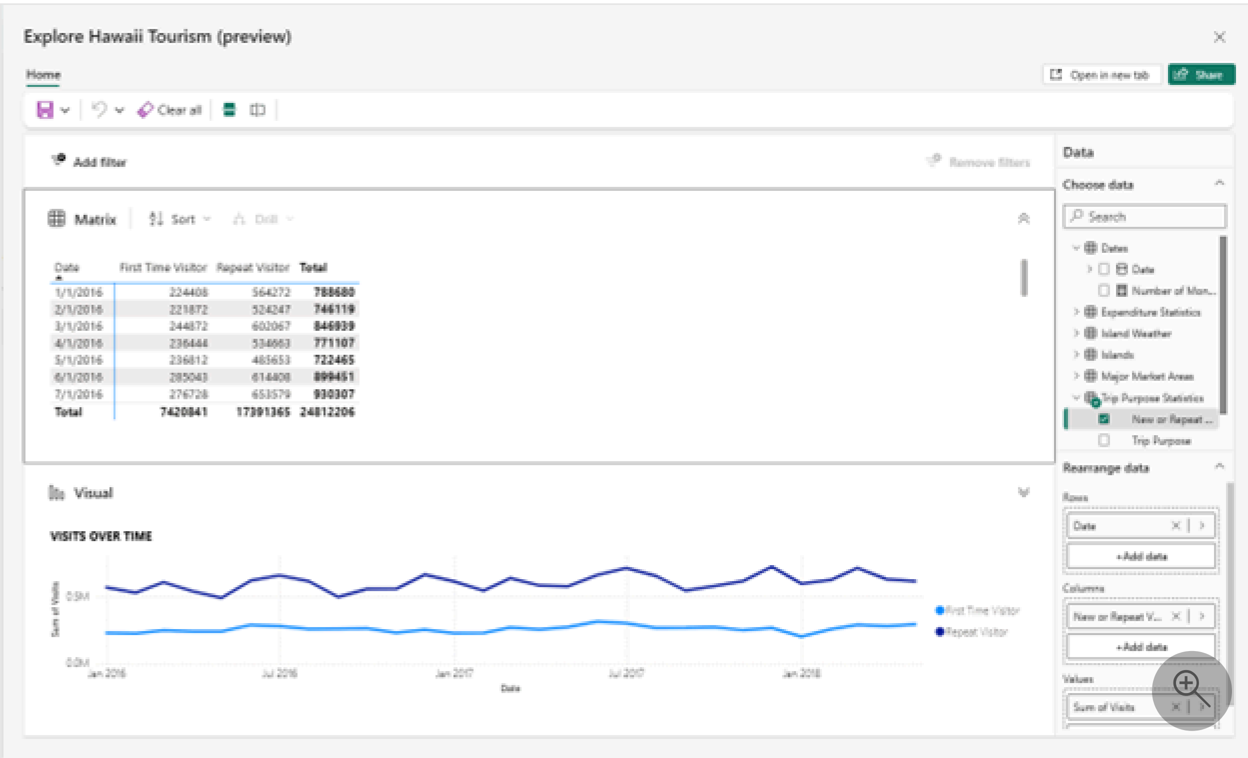
Provide product feedback | Ask the community

Use Explore (preview) in the Power BI service

06/10/2025

> **Note**
>
> The Explore feature in the Power BI service is currently in preview.

Explore in the Power BI service is a new experience that allows you to explore your data in a focused way. It's designed to be easy to use, so you can quickly get the answers you need without having to be a Power BI expert. You can use Explore on an existing visual to dig into the underlying data, or you can start with a blank canvas and pull in the data you want to explore.



A few scenarios when you could benefit from Explore include:

- You want to see the underlying data behind a visual in a report or a Copilot-generated visual.
- You want to explore a new semantic model (dataset) to learn about it.
- You want to create a new visual or matrix from scratch, but you don't want to create a report.
- You want to explore a subset of data from a datamart query result.
- You want to explore a semantic model that you don't have permission to edit, but you want to create a new visual or matrix from it.

Follow the steps in this article to learn how to use Explore to build a matrix or visual, customize your Exploration, and then save it to a workspace or as a report to share with others.

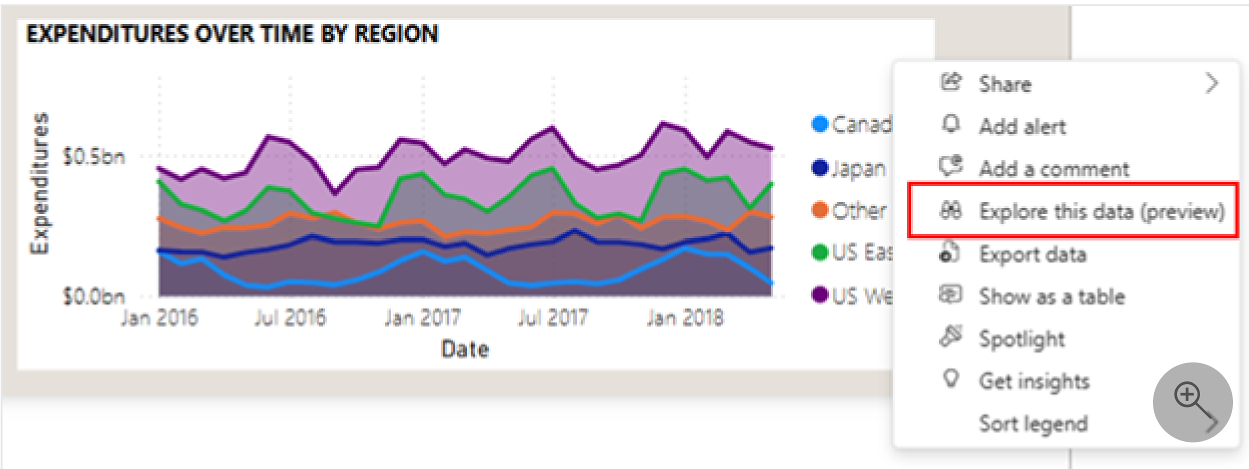
Step 1. Navigate to the Explore experience

> ⓘ Note
>
> You can explore data from any supported Fabric artifact where you have **View** permission on the data, unless restricted by your tenant admin. If restricted, you can only use artifacts where you have **Build** permission. *Exception: **Build** permission is always required for Lake Houses.*

You can start your experience with Explore from various entry points:

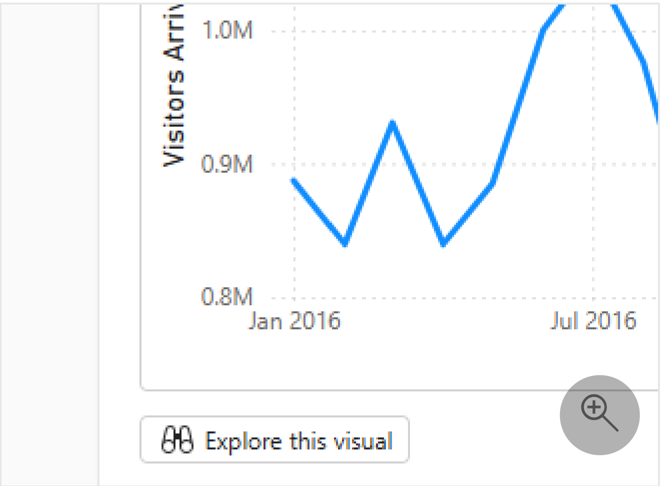
- **Visual in a report**:

  1. Select **...** for more options.
  2. Select **Explore this data**.



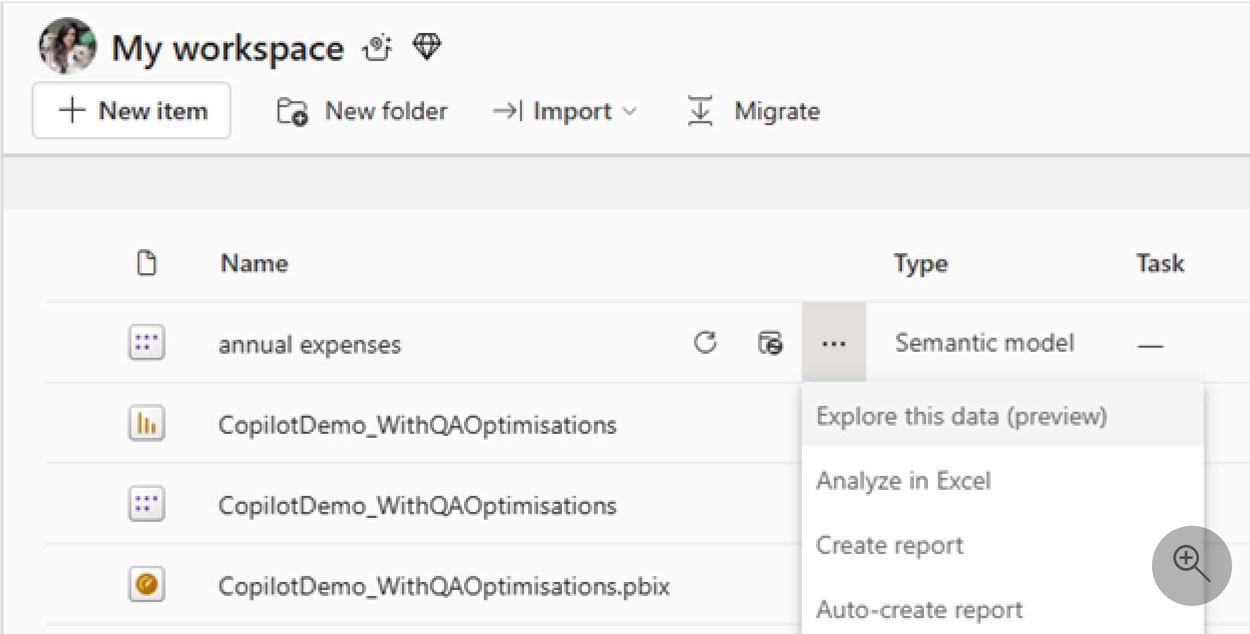
- **Visual generated by Copilot**:

  1. Select the **Explore this visual button**.



- **Artifact**:
  - **From a list**:

    1. Select **...** for more options.
    2. Then select **Explore this data**.

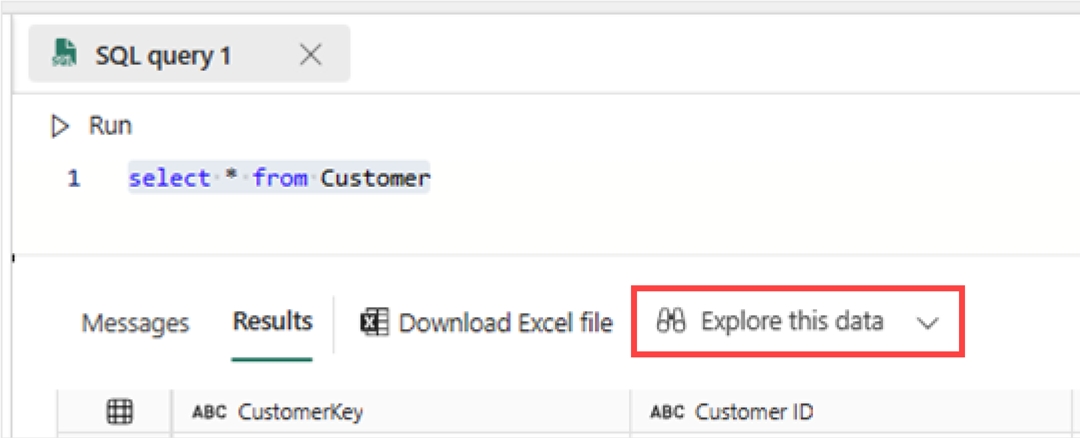


  - **From a report**:

    1. Select **Explore this data**.

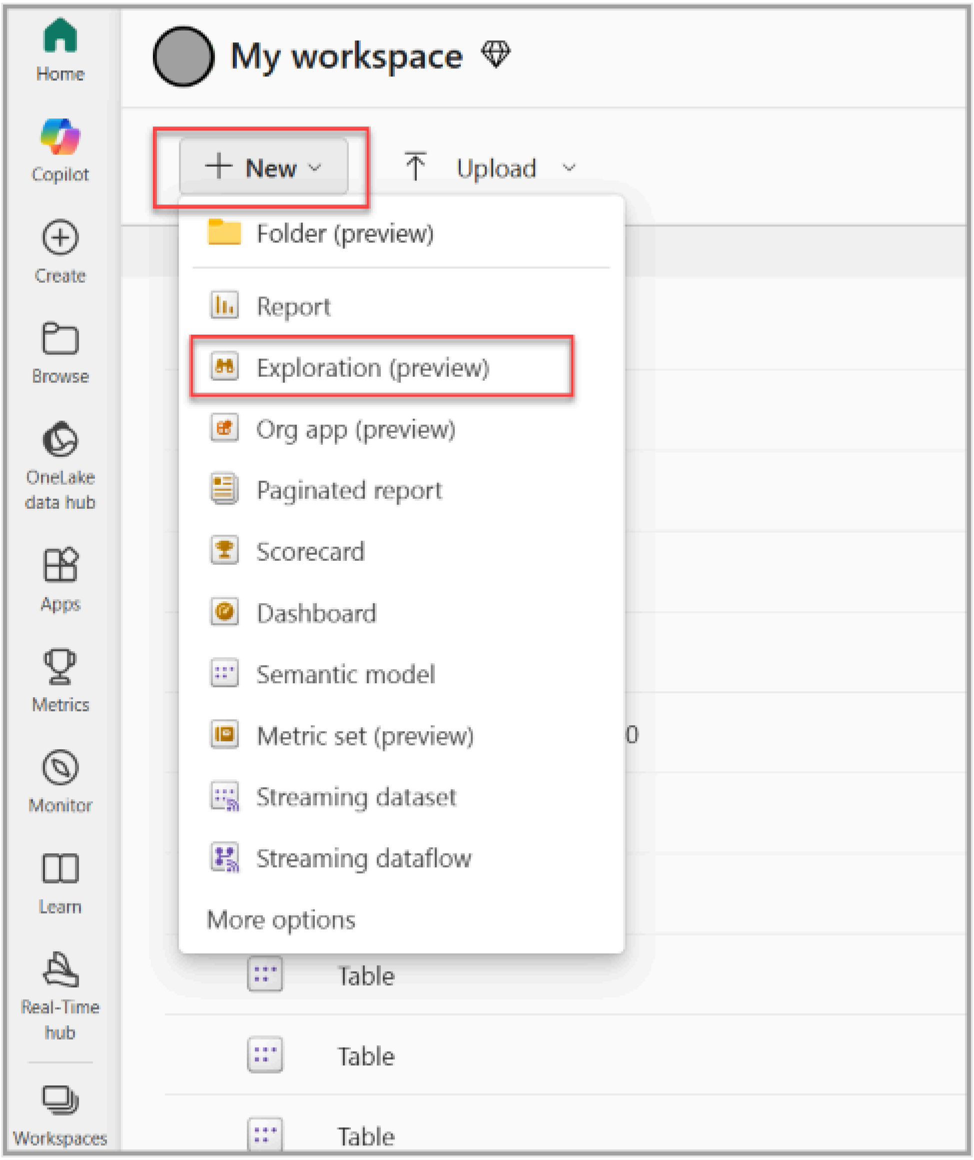
  - **From a datamart**:

    1. Select **Explore this data**.



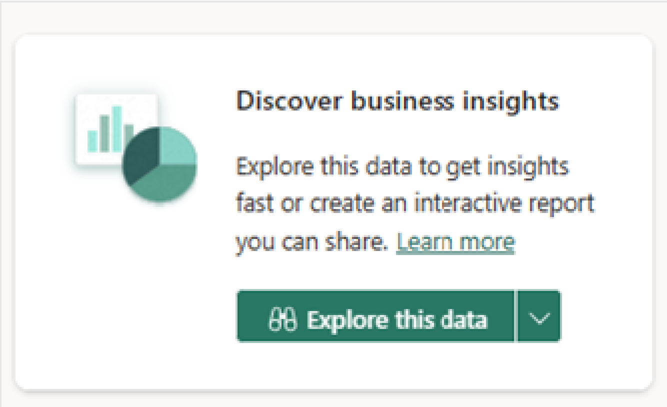
- **Workspace**:

  1. Select the **New** button at the top of a workspace.
  2. Then select **Exploration**.



- **Data hub**:

  1. From the **Discover business insights** action card on the **Details** page, select the **Explore this data** button.

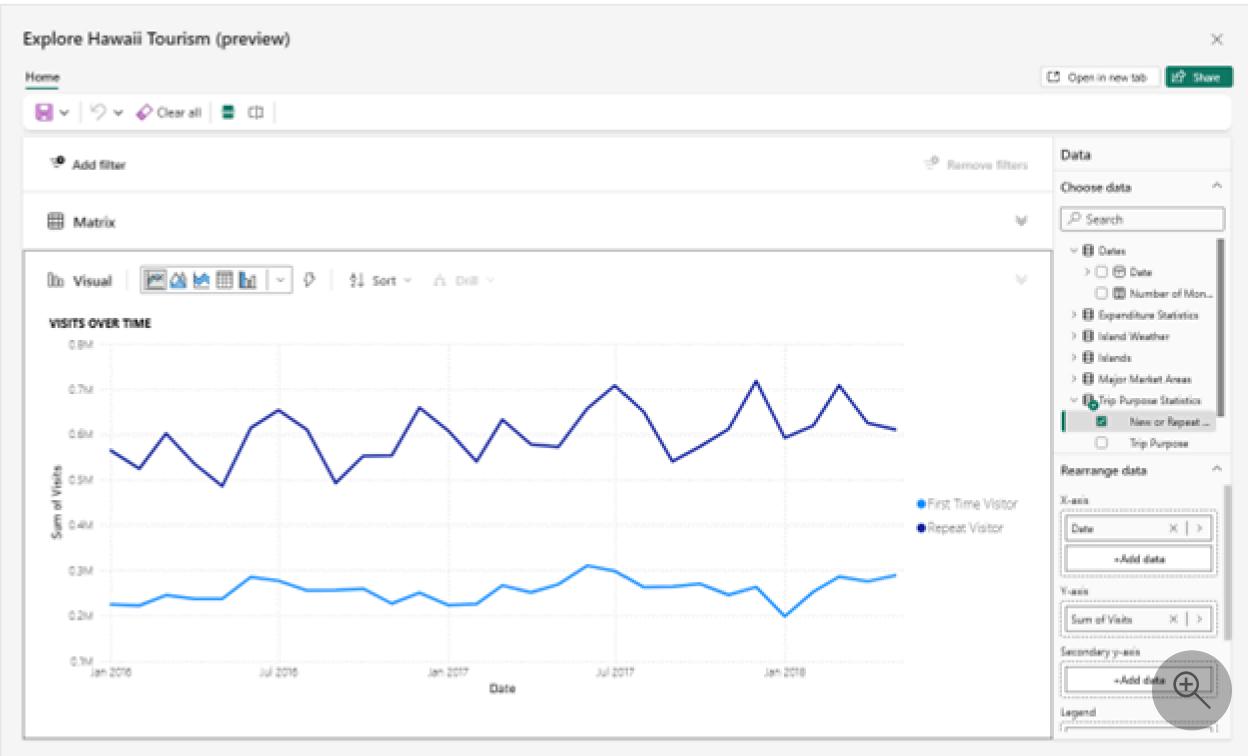


Step 2. Build your matrix or visual with Explore (preview)

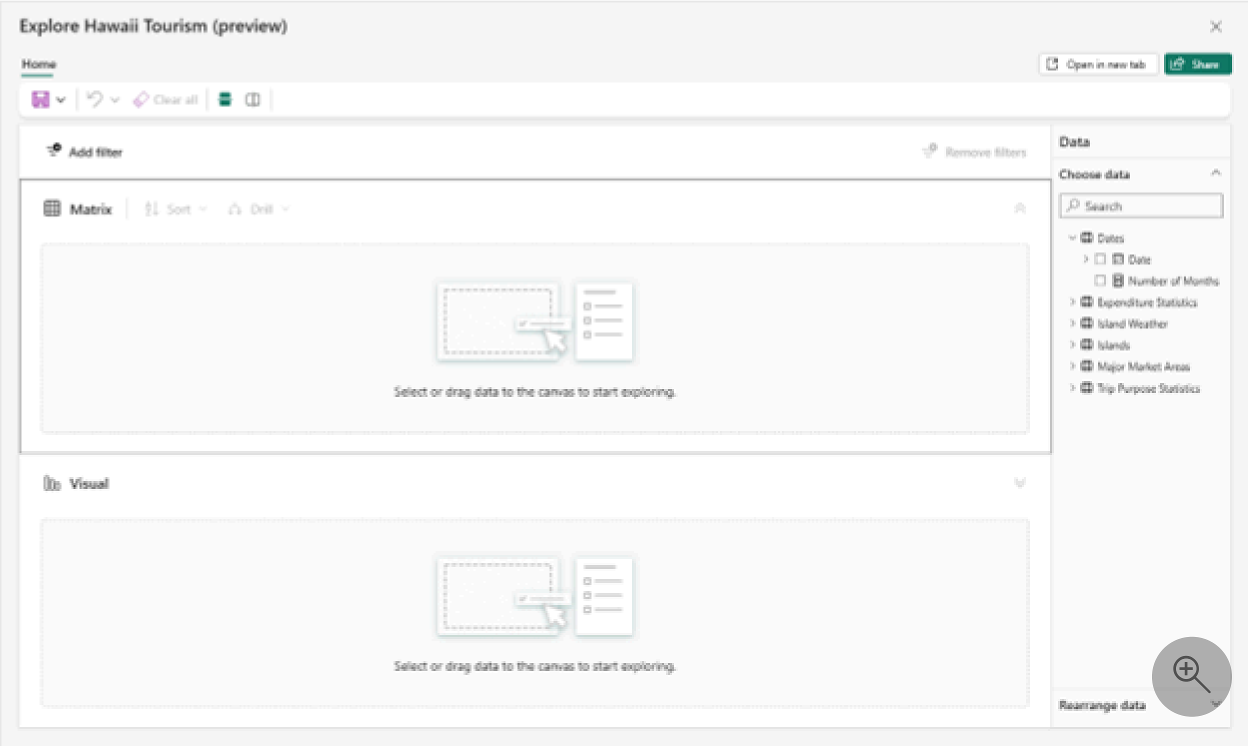
Regardless of your starting point in Step 1, when you launch the Explore experience, you land in the new focused view. Your data appears in the data pane, and you can edit, drag and drop, or select fields to start building a matrix or visual.

Matrix and visual fields

If you start from a visual, you see that visual on this page. Get a matrix of the underlying data by expanding the **Matrix** section.

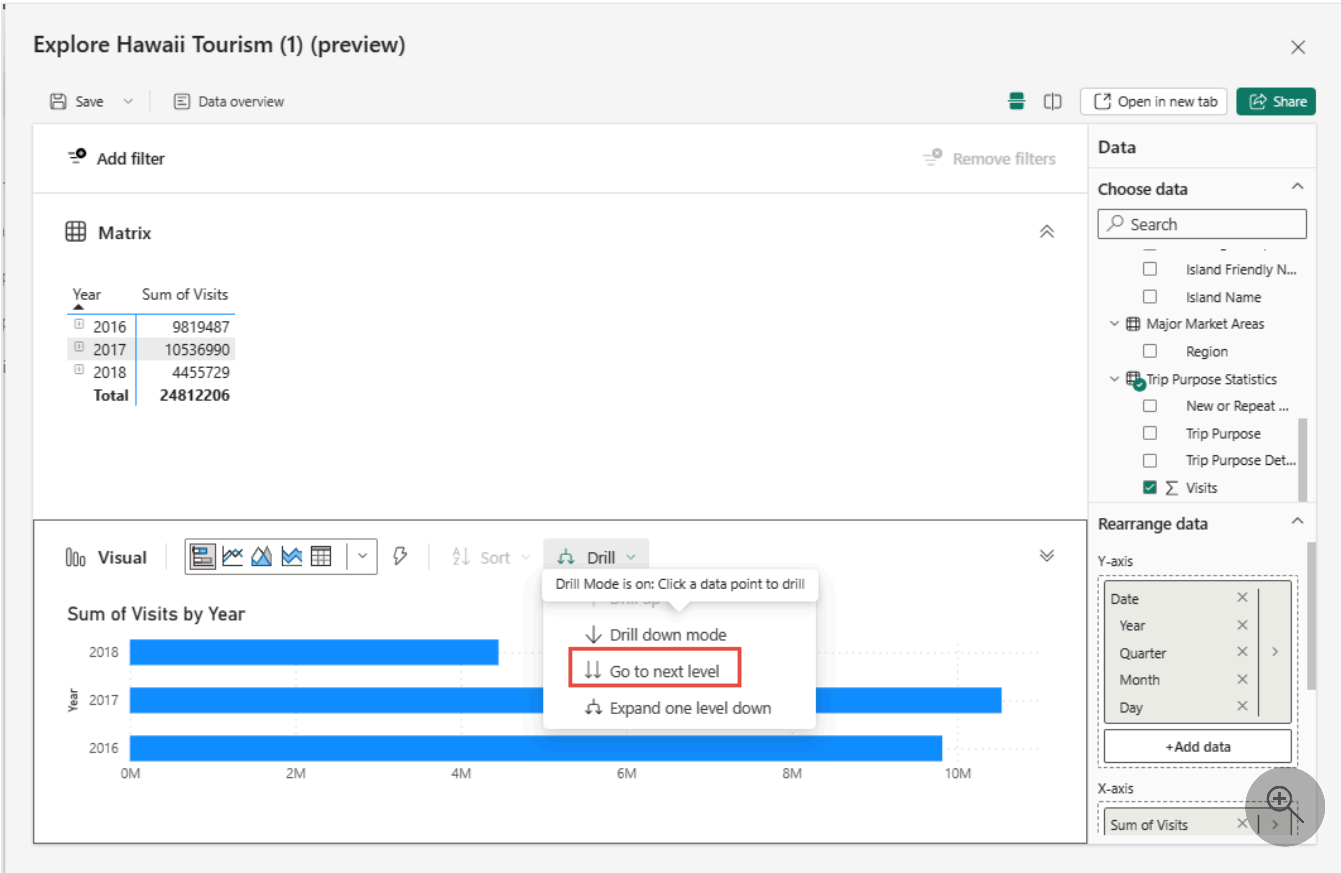


If you didn't start from a visual, you see a blank canvas with matrix and visual fields. You can drag and drop fields from the data pane to the matrix or visual, or select other fields to add.



The matrix and visual are linked. So as you add fields, sort, and drill into to one, the other one is updated automatically, as long as the visual can accurately reflect the sort or drill state.

For example, you might have a visual with a date hierarchy and you want to drill down to quarters. When you drill down on the visual, the matrix updates accordingly.

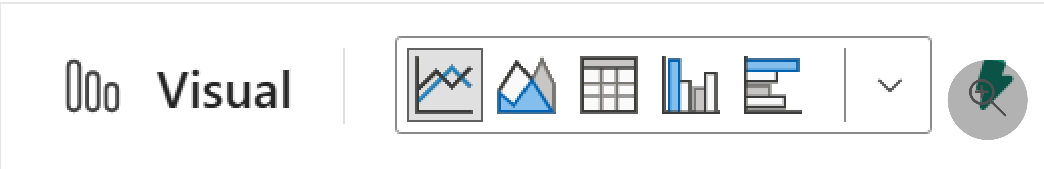


ⓘ Note

Some interactions between the matrix and visual aren't currently supported. For example, if you drill down on a visual, the matrix might not update to reflect the drill state. The matrix and visual are linked, but if you notice that your visual doesn't reflect the drill state you applied to your matrix, it means that the interaction isn't currently supported.

Visual types

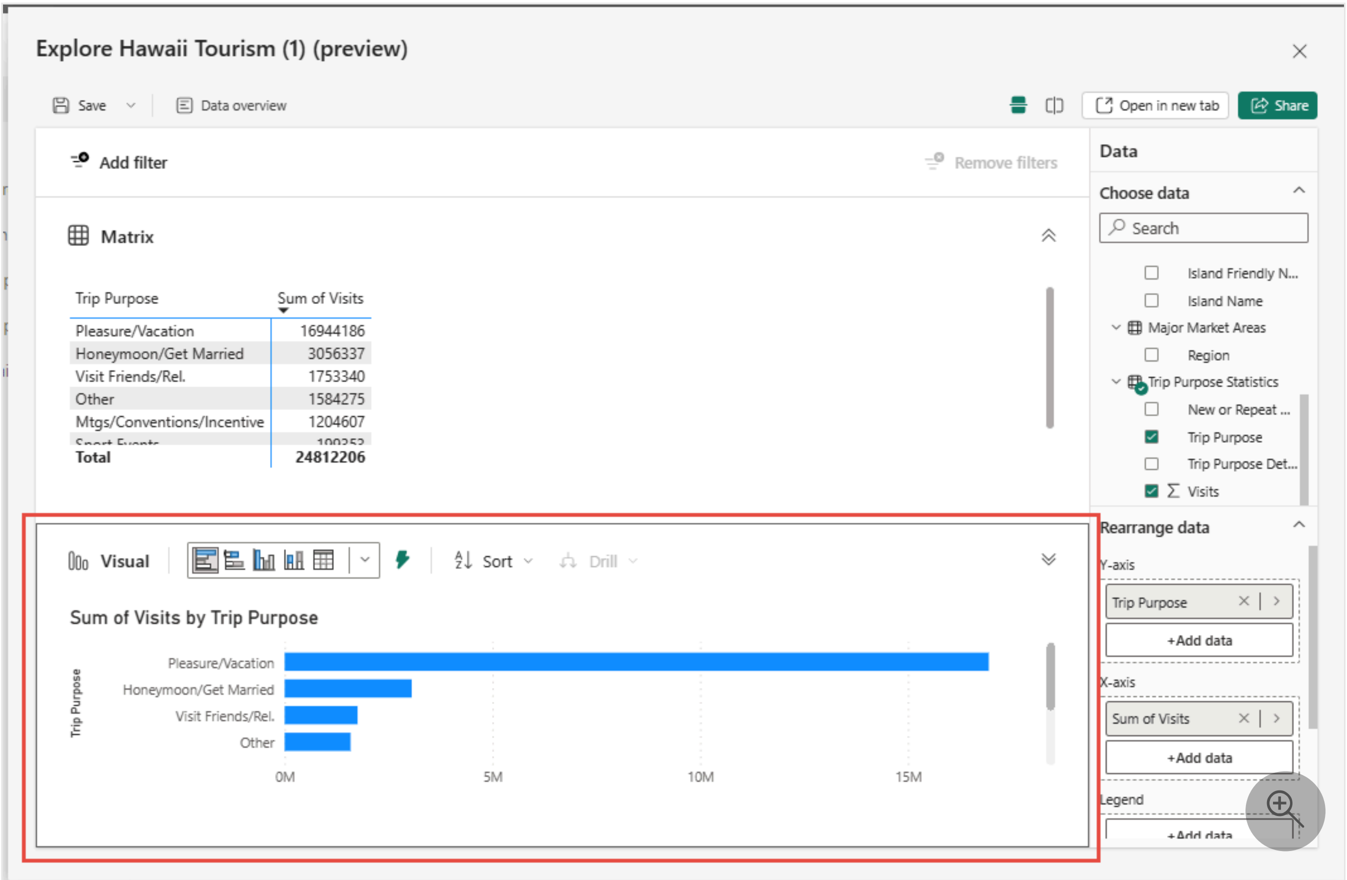
You can also change the type of visual, like stacked bar chart, pie chart, or funnel, by using the options in the visual type gallery. If you don't choose a visual type, Explore autoselects the type that best suits your selected data. To turn off this autoselection, deselect the **lightning bolt** icon.



Data pane

Use the **Choose data** section to add or remove data from your Exploration.

Use the **Rearrange data** section of the data pane to make adjustments. Drag and drop fields from the **Choose data** section to the **Rows**, **Columns**, and **Values** wells, or use the **+ Add data** button. You only see the field wells for the outlined selection (that is, the matrix or the visual). Select the other side to see its field wells.

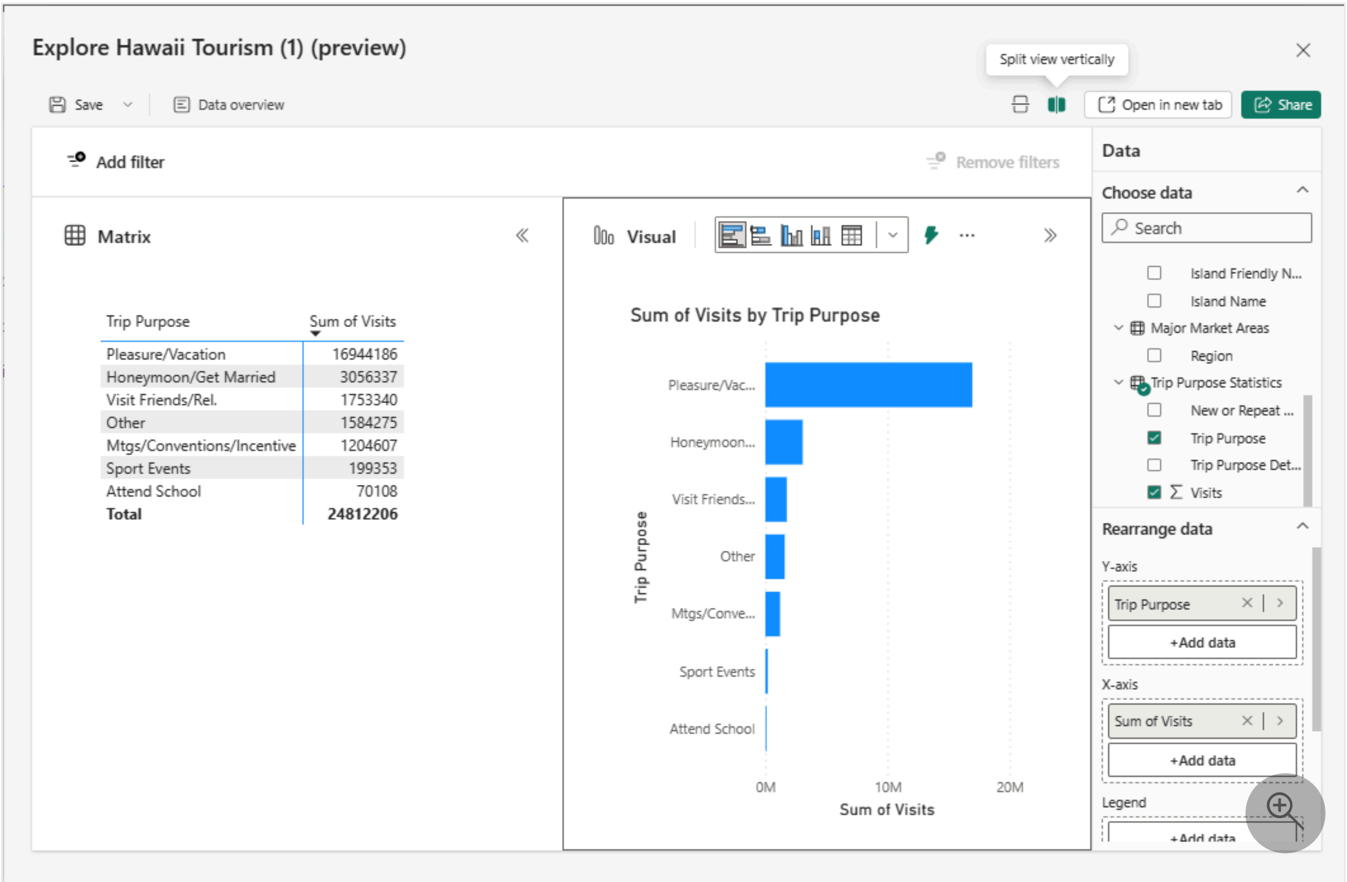


ⓘ **Note**

Some users might see the data pane on the left as we experiment with placement to optimize the experience.

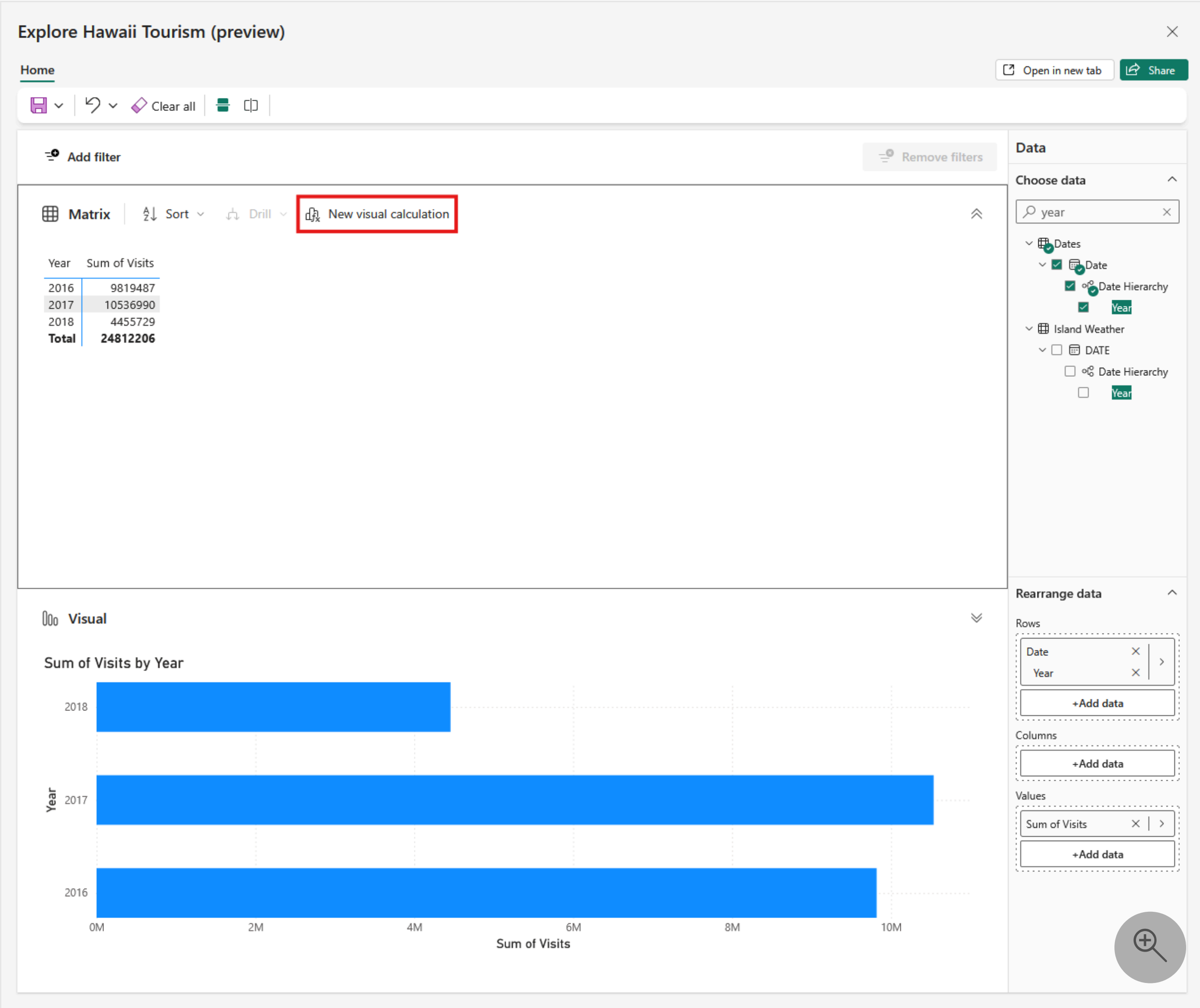
Layout options

Switch between a horizontal or vertical orientation by using the **Split view horizontally** and **Split view vertically** buttons along the top.

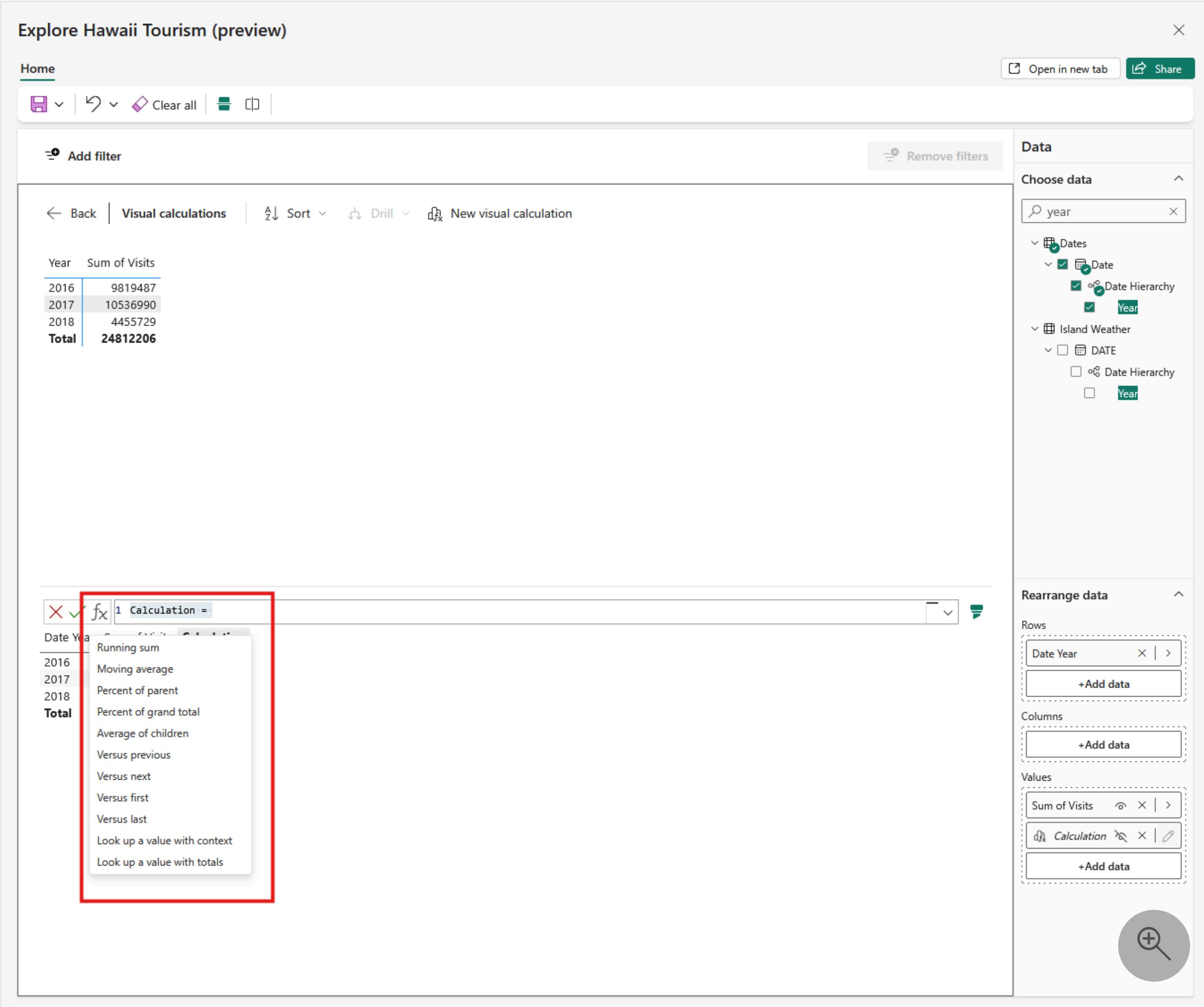


Step 3. Add calculations to your Exploration

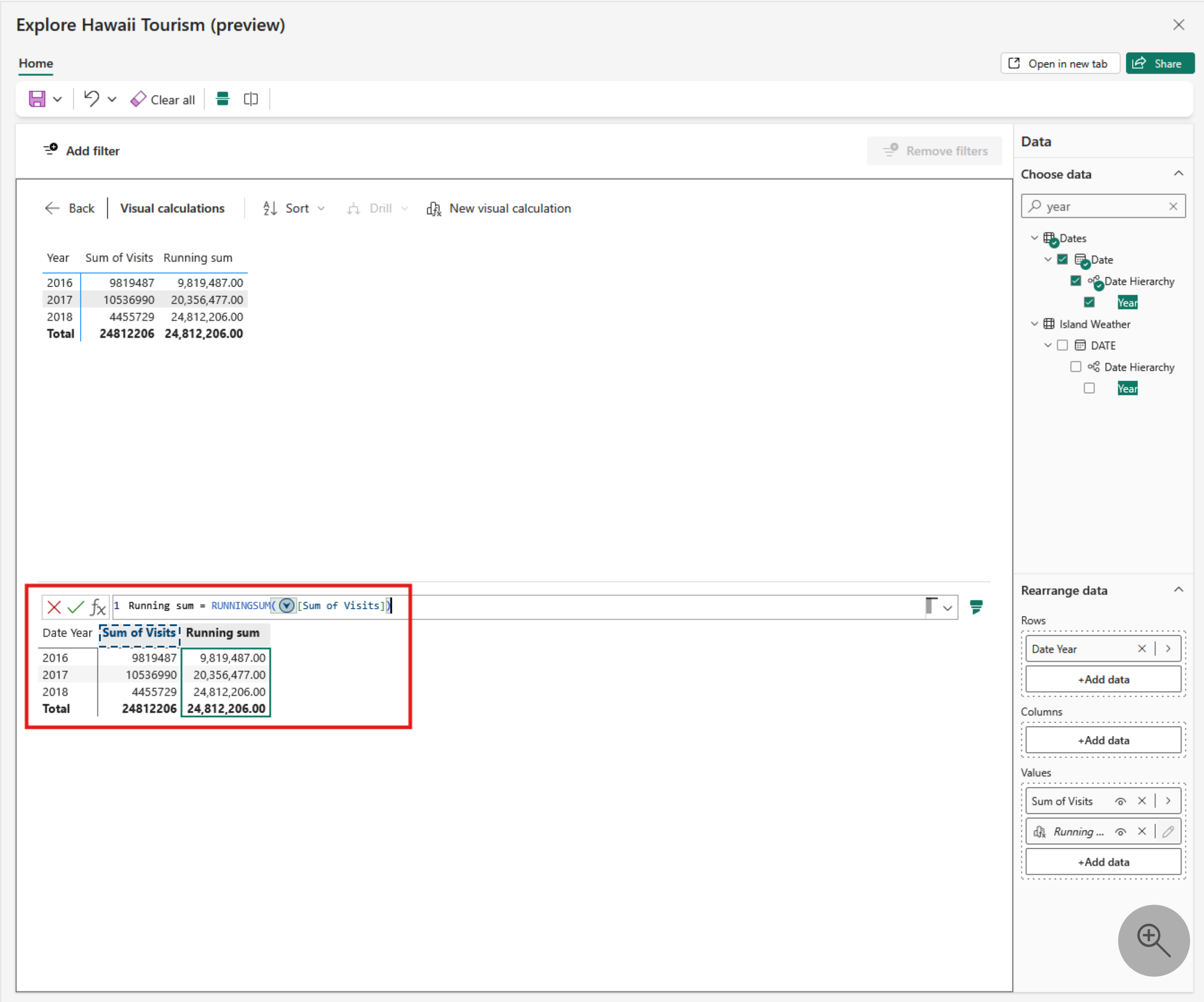
You can add visual calculations to your visuals. Select the **New visual calculation** button on any visual to enter visual calculations edit mode.



Here, enter the calculation or use the provided templates.

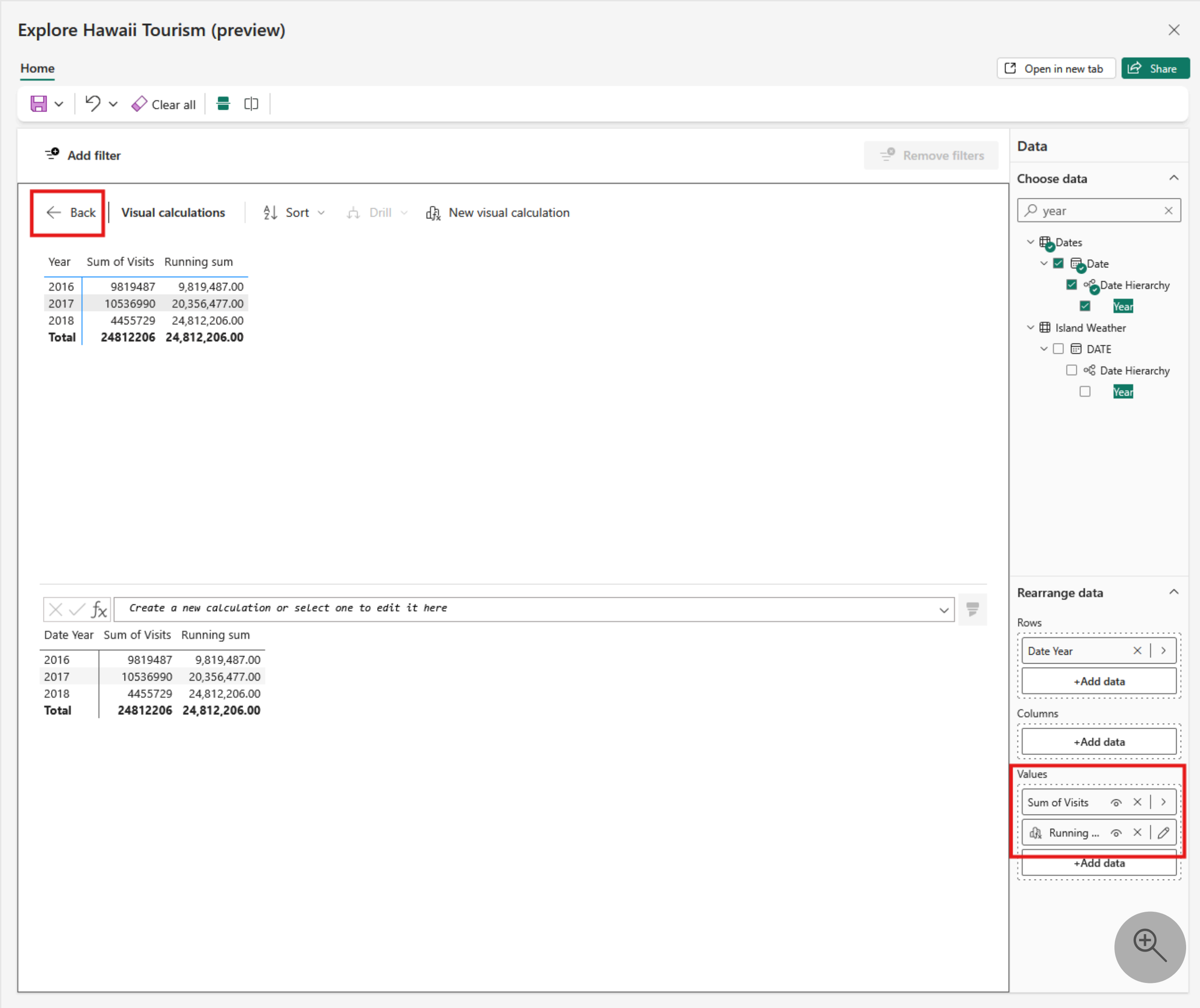


For example, to calculate a running sum of visits, use the **Running sum** template:

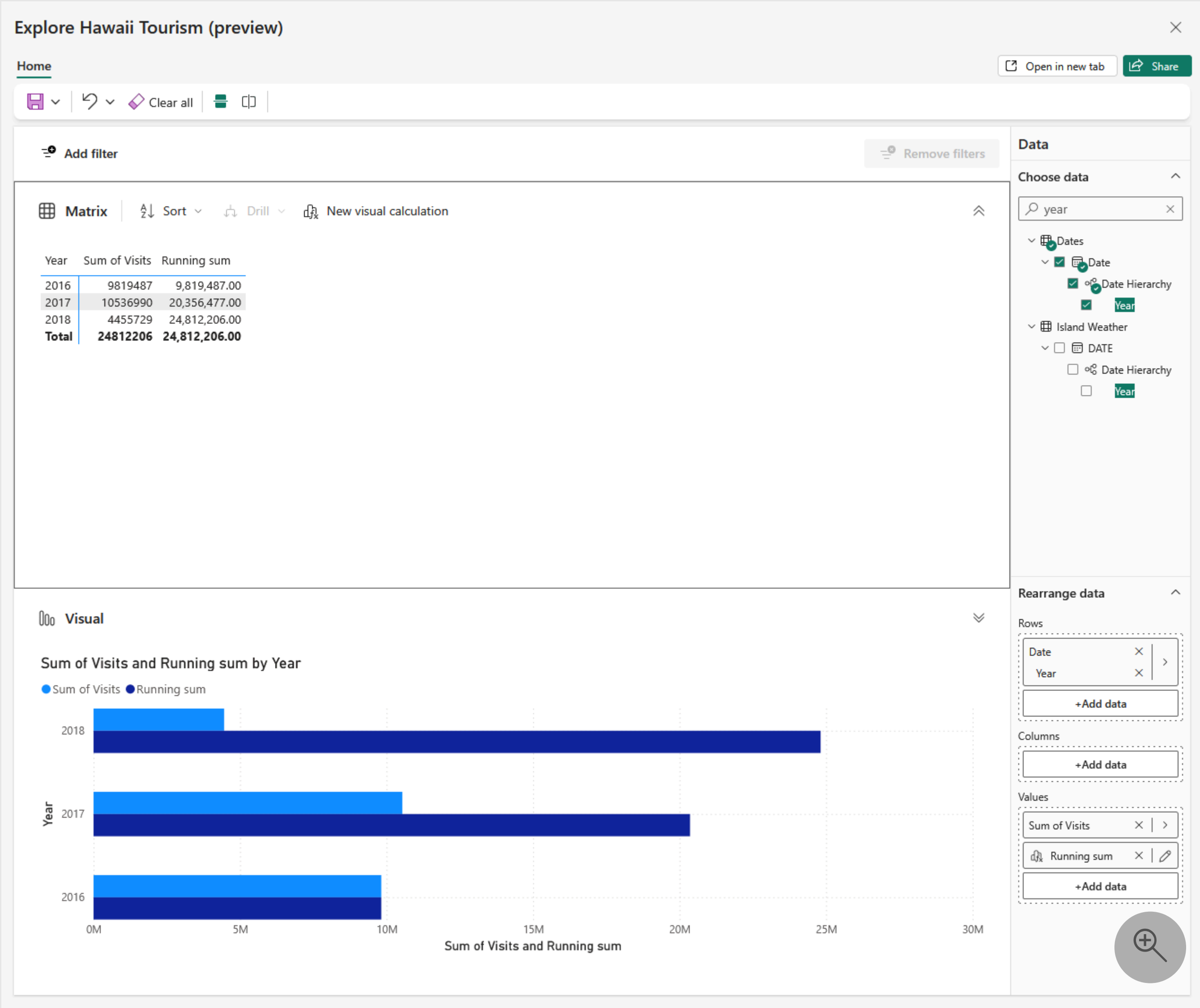


> ⓘ **Note**
>
> In this view, you can hide fields as well using the **Rearrange data** menu.

Once you have added your calculations, select **Back** to go back to your Exploration.

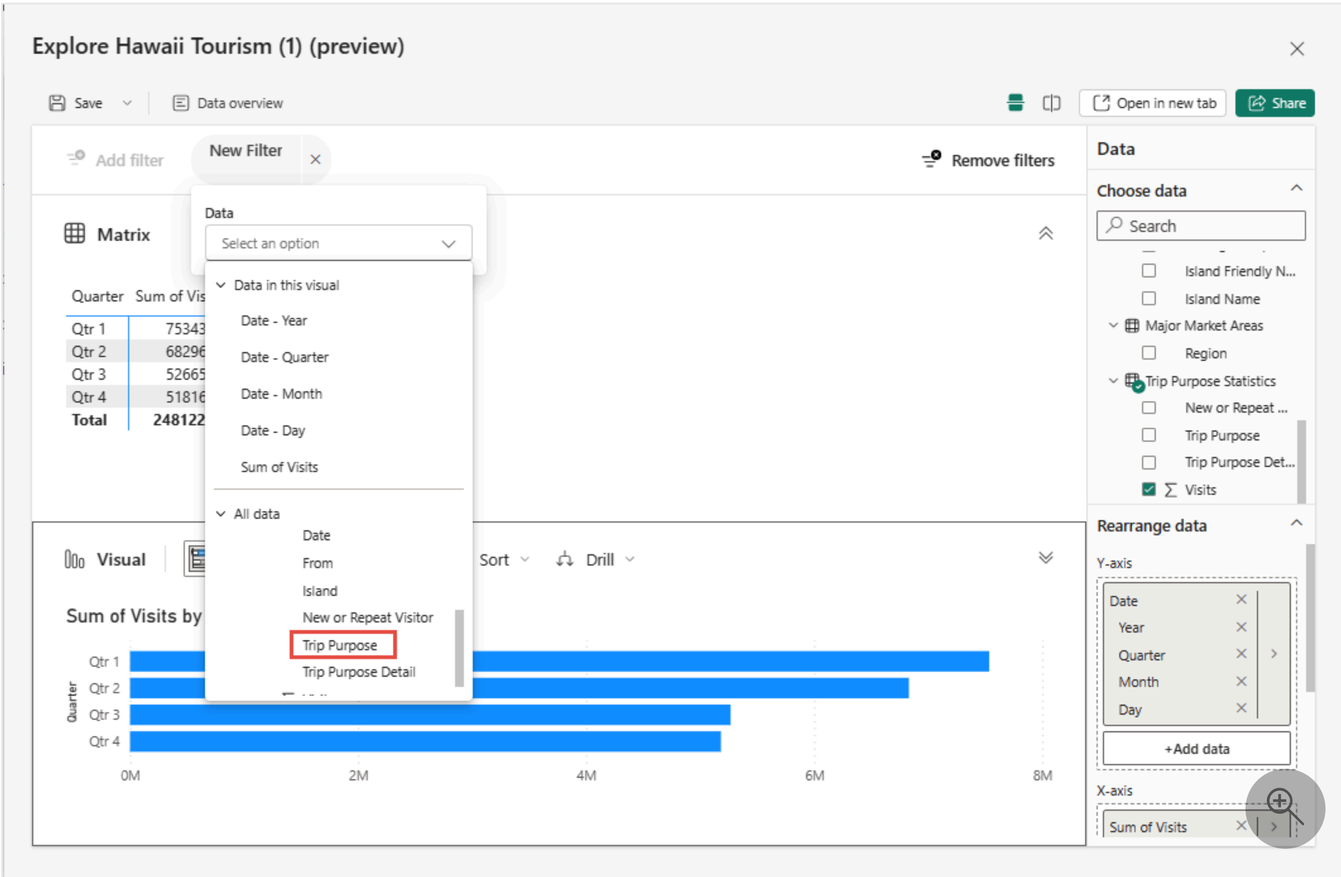


Your calculation is shown on both visuals, unless it can't be displayed on the other visual.

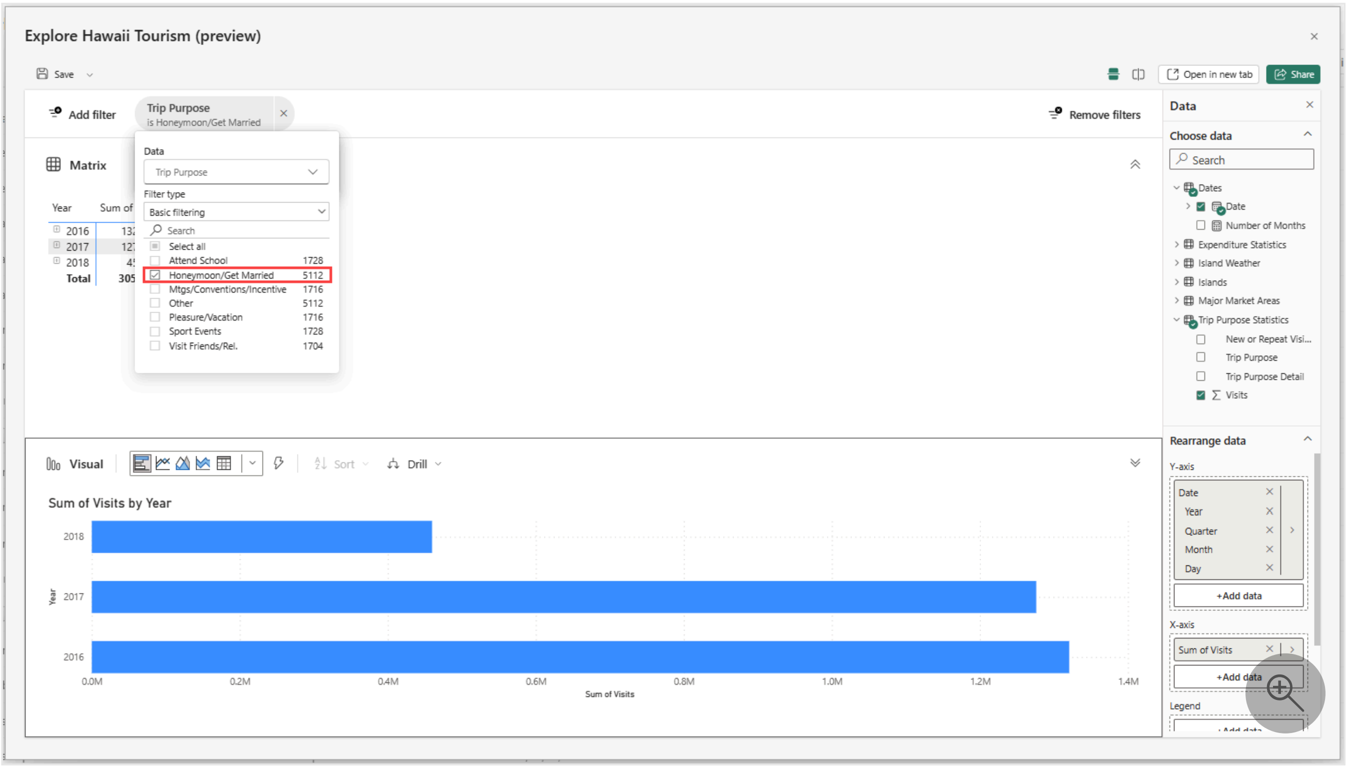


Step 4. Apply filters to your Exploration

As you build out your Exploration, you can also filter your data. Select the **Add filter** button on the top left to quickly add filters on the fields already in your visual or pick from any fields in your semantic model in the **All data** section.



In this Exploration experience, the filters are added as pills at the top of view, so you can clearly see what the current filter state is and modify it.

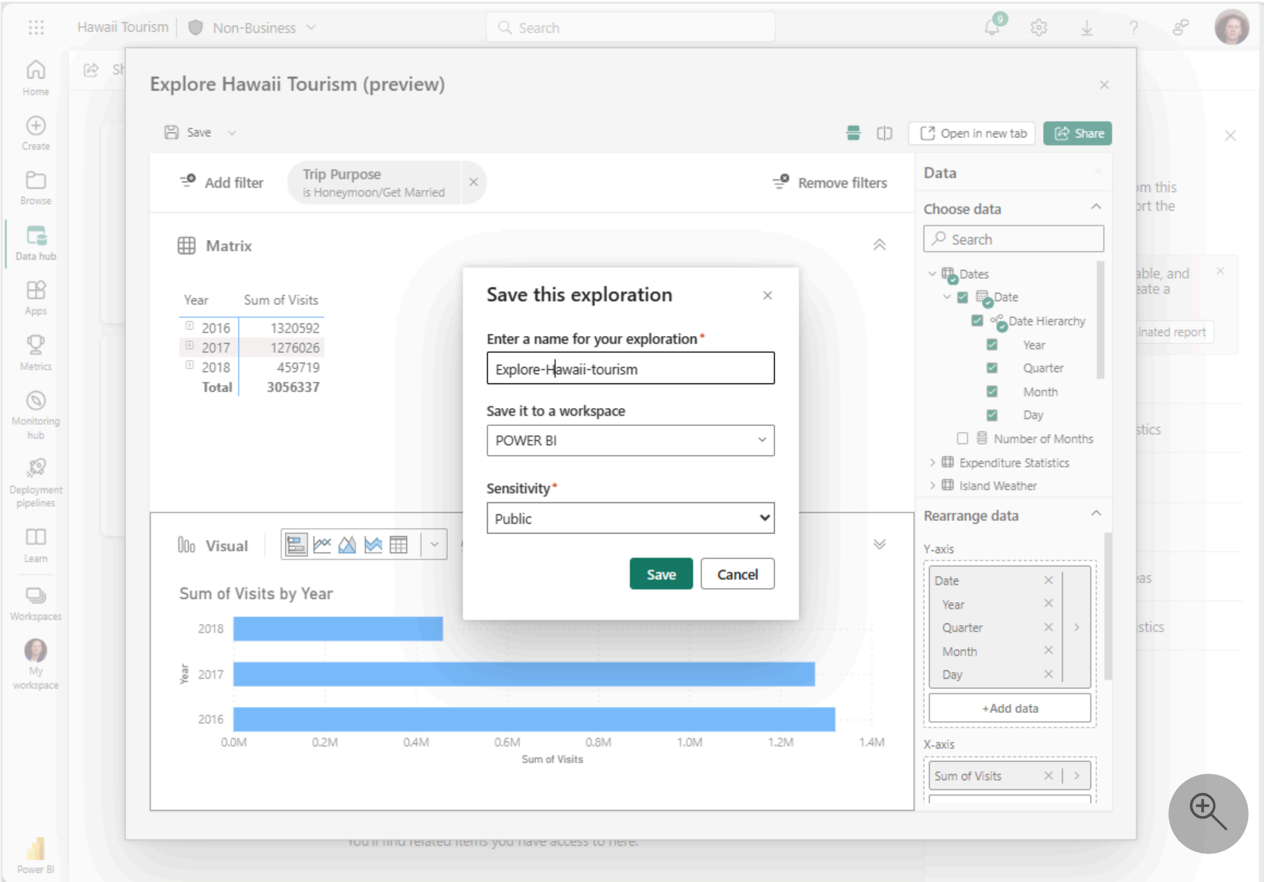


Step 5. Save your Exploration

Save your Exploration to a workspace or as a report.

- **Save to a workspace**:

  1. Select the **Save** button in the upper-left corner. A dialog box appears.
  2. Name the Exploration, pick a workspace to save it to, and add a sensitivity label, if applicable. This also saves your current canvas layout (horizontal or vertical) of the Exploration.



- **Save as a report**:

  1. Select **Save**.
  2. Select **Save as report**. This saves your Exploration as a one-page report matching the layout on the screen.

> ⓘ Note
>
> You need **Build** permission on the underlying semantic model to save as a report.

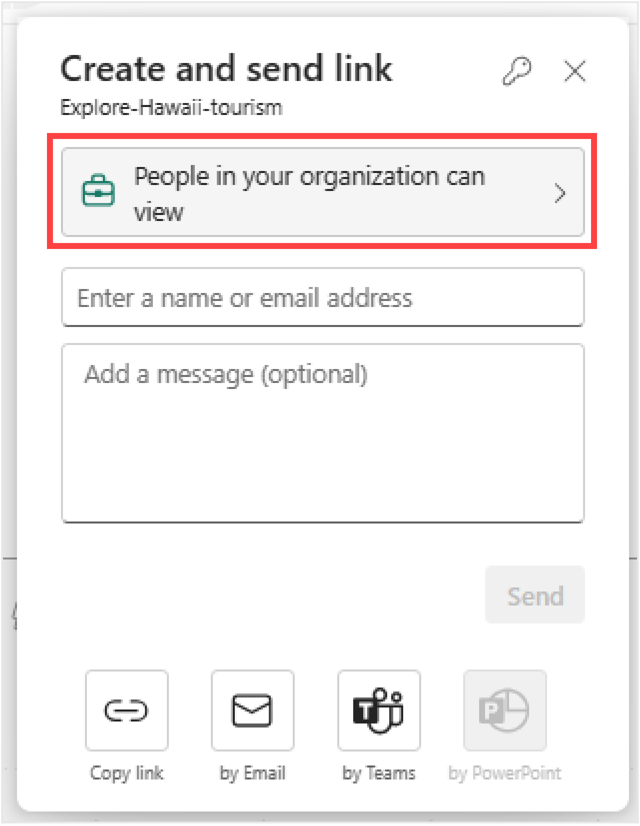
Step 6. Share your Exploration with others

If you want to share your Exploration with others, follow these steps:

1. Select the **Share** button in the upper-right corner.

2. Select the people who can view your Exploration, such as **People in your organization can view**, **People with existing access**, or **Specific people**.
3. Choose more permissions such as **share** or **edit**.
4. Add your recipients' email addresses and an optional message.
5. Select **Send**. You can send via email or Teams, or select **Copy link** to share it on your own.

> ⓘ Important
>
> You should be immediately prompted to share the underlying semantic model so the recipients can view the contents of your Exploration. If you're not prompted, you can manually share the semantic model with read permissions. For reports, sharing the underlying semantic model is done automatically.



Permissions, requirements, and limitations

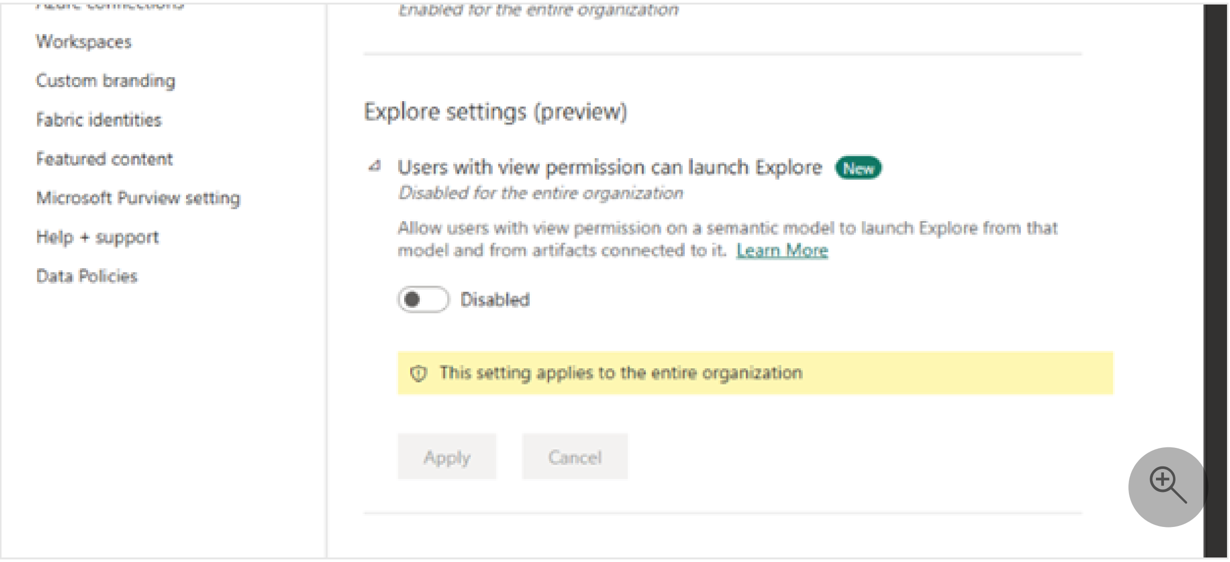
To fully benefit from Explore in the Power BI service, be aware of the following permissions, requirements, and limitations.

Permissions and requirements

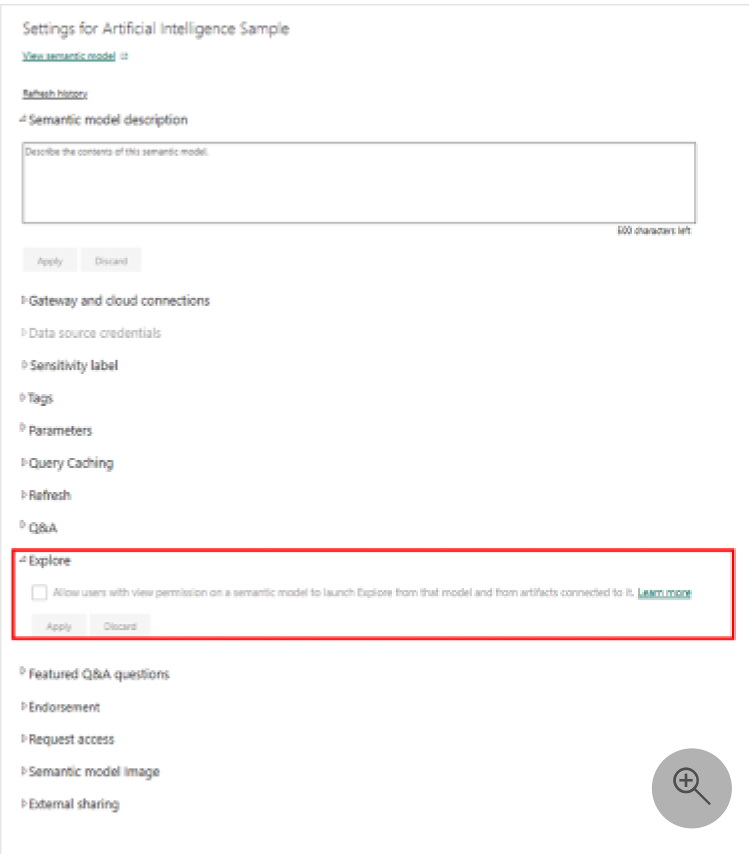
Explore requires the following permissions and considerations:

- **Accessing Explore (preview)**:

- By default, people with **View** permissions on the data can access Explore (preview).
- Admins can limit the experience to people with **Build** permissions if they choose by disabling the **Users with view permission can launch Explore** setting in the admin portal.
- Exception: For Lake Houses, **Build** permissions are always required.



- Semantic model owners can also limit exploration of their models to people with **Build** permissions on an artifact-by-artifact basis. They can do this by disabling the **Allow users with view permissions** setting in the **Explore** section of semantic model settings.



- **Saving an Exploration to a workspace**:

  - Changing a sensitivity label on a semantic model doesn't currently propagate down to the Exploration that you create for it.
  - If you save to **My workspace**, you might need to refresh your page to see the newly saved Exploration artifact.

- **Saving an Exploration as a report**:
  - You need **Build** permissions on the underlying semantic model.

- **Sharing an Exploration**:
  - You need a Power BI Pro or Premium Per User (PPU) license.
  - You need to grant **View** permissions to the underlying semantic model so your recipients can view the Exploration.
    - If you skip this step, your recipients have to request permissions to view the Exploration.
  - Explorations aren't currently shown in lineage view as related to the semantic model.

Limitations

Explore has some limitations. Here are some important things to keep in mind.

- It's not supported in the Power BI mobile app
- There's no entry point from artifacts in the list view of semantic models and reports on the Power BI service Home
- Custom visuals aren't supported
- The following native visuals aren't supported:
  - Matrix
  - Slicers
  - Q&A
  - Smart narratives
  - Metrics
  - Paginated reports
  - Power Apps
  - Power Automate
- It doesn't currently support streaming datasets
- There's a known issue when you attempt to save an Exploration from the Datamart SQL editor entry point

Related content

- Personalize visuals in a report
- Organizational licenses and subscriptions for Fabric and Power BI

- Power BI Premium Per User FAQ
- Visual calculations overview

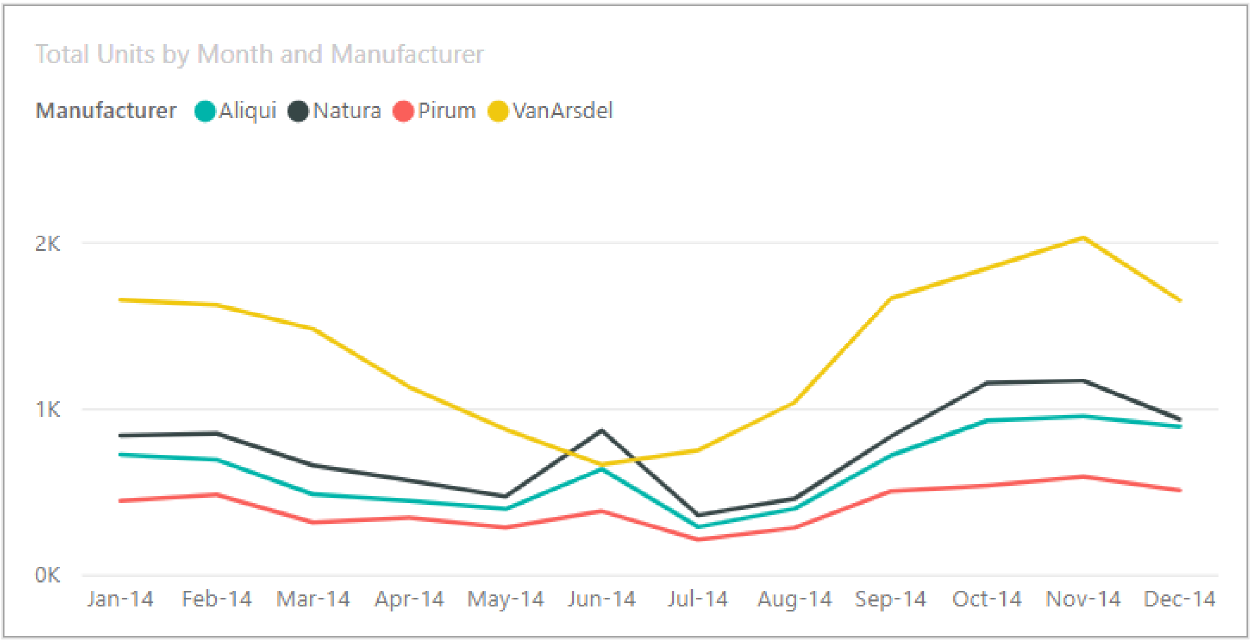
Use the Analyze feature to explain fluctuations in report visuals (Preview)

Article • 07/17/2024

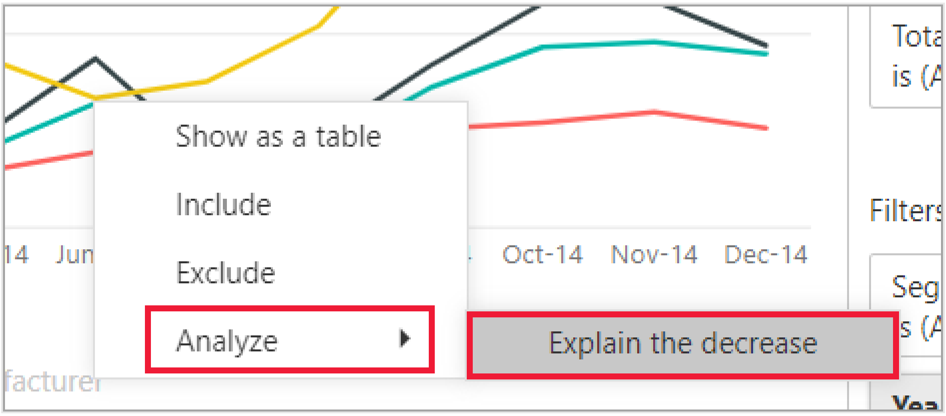
APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

When there are large increases and sharp drops in values on report visuals, you might wonder about the cause of such fluctuations. With **Analyze** in **the Power BI service**, you can easily find the reason.

For example, consider the following visual that shows *Total units* by *Month* and *Manufacturer*. VanArsdel is outperforming its competitors but has a deep dip in June 2014. In such cases, you can explore the data and help explain the change that occurred.



You can ask the Power BI service to explain increases, decreases, or unusual distributions in visuals, and get fast, automated, insightful analysis about your data. Right-click on a data point, select **Analyze** > **Explain the decrease** (or increase if the previous bar was lower), or **Analyze** > **Find where this distribution is different**. Then the insight is displayed in an easy-to-use window.



The Analyze feature is contextual, and is based on the immediately previous data point —such as the previous bar or column.

> ⓘ **Note**
>
> This feature is in preview, and is subject to change. The insight feature is enabled and on by default (you don't need to check a Preview box to enable it).

Which factors and categories are chosen

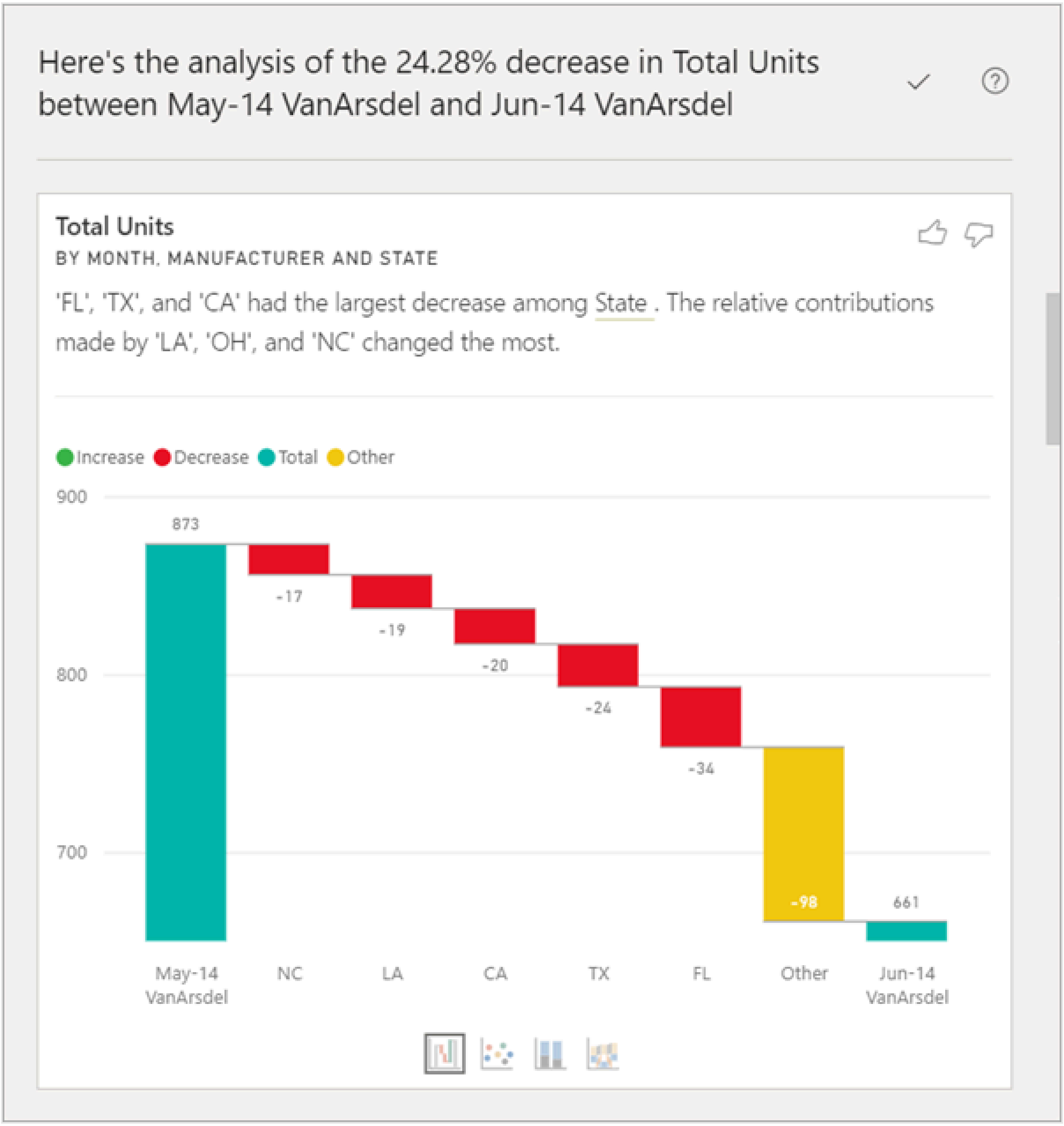
After Power BI examines different columns, the factors that show the biggest change to relative contribution display. For each, the values that have the most significant change to contribution are called out in the description. In addition, the values that have the largest actual increases and decreases are also called out.

To see all of the insights generated by Power BI, use the scrollbar. The order is ranked with the most significant contributor displayed first.

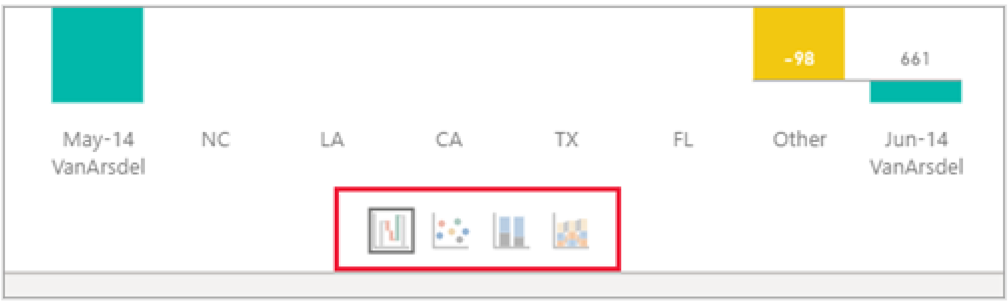
Using insights

To use insights to explain trends seen on visuals, right-click on any data point in a bar or line chart and select **Analyze**. Then choose an option that appears: **explain the increase**, **explain the decrease**, or **explain the difference**.

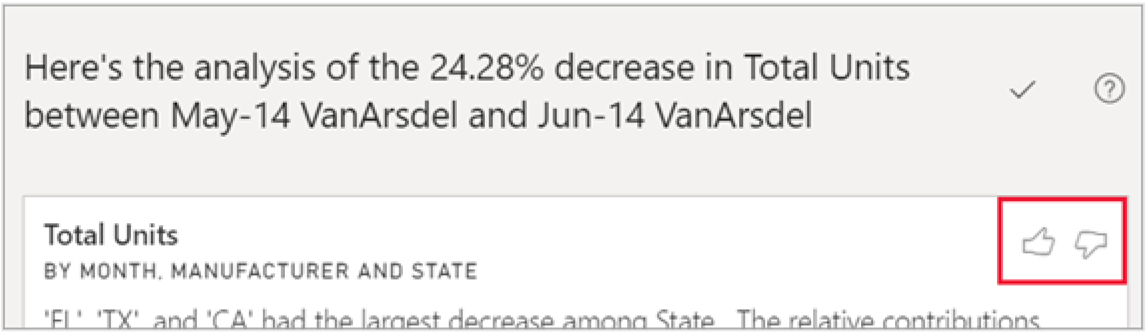
Power BI then runs its machine learning algorithms over the data and populates a window with a visual and a description. The description details which categories most influenced the increase, decrease, or difference. In the following example, the first insight is a waterfall chart.



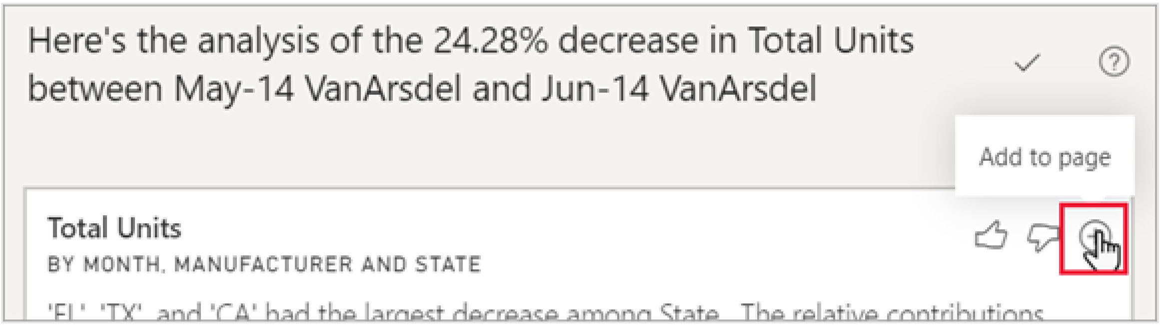
To have insights display a scatter chart, stacked column chart, or ribbon chart, select the small icons at the bottom of the waterfall visual.



Use the *thumbs up* and *thumbs down* icons at the top of the page to provide feedback about the visual and the feature.



You can use insights when your report is in Reading or Editing view. It's versatile for analyzing data and creating visuals you can easily add to your reports. If the report is open in Editing view, you see a plus icon next to the thumb icons. Select the plus icon to add the insight to your report as a new visual.



Details of the results returned

The details returned by insights are intended to highlight the differences between the two time periods to help you understand the change between them.

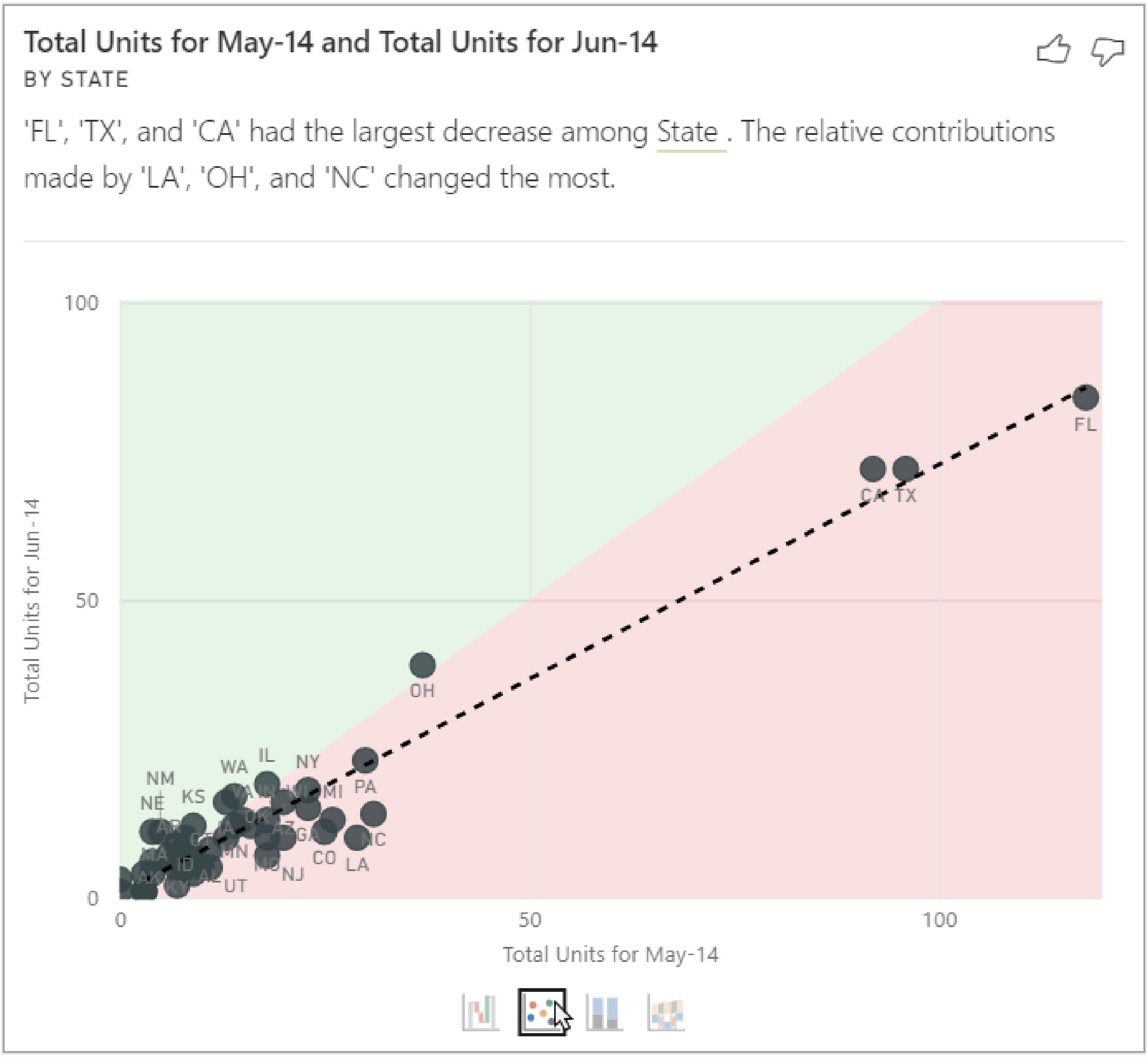
You can think of the algorithm like this—it takes all the other columns in the model and calculates the breakdown by that column (for the *before* and *after* time periods) to determine how much change occurred in that breakdown. Then returns those columns with the biggest change. In the previous example, *State* is selected in the waterfall insight, as the contribution made by Louisiana, Texas, and California fell from 13% to 19% from June to July. This change contributed the most to the decrease in *Total units*.

For each insight returned, there are four visuals that can be displayed. Three of those visuals are intended to highlight the change in contribution between the two periods, such as the explanation of the increase from *Qtr 2* to *Qtr 3*. The ribbon chart shows change both before and after the selected data point.

The scatter plot

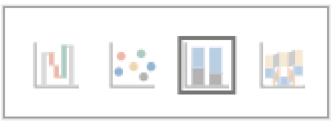
The scatter plot visual shows the value of the measure in the first period (x-axis) against the value of the measure in the second period (y-axis) for each value of the column (*State* in this case). Data points are in the green region if they increased and in the red region if they decreased.

The dotted line shows the best fit, and data points above this line increased by more than the overall trend and those below this line by less.

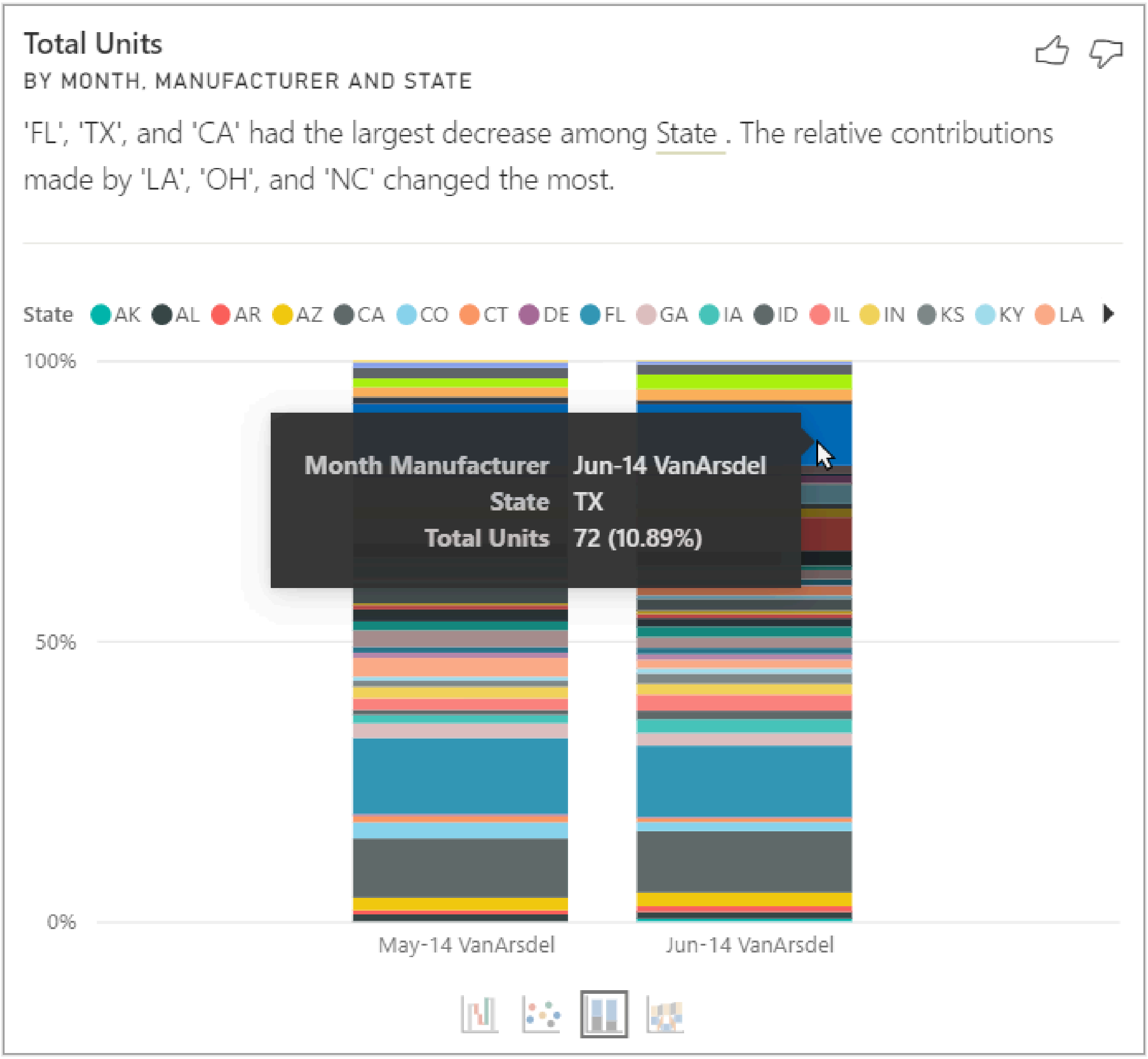


Data items whose value was blank in either period don't appear on the scatter plot.

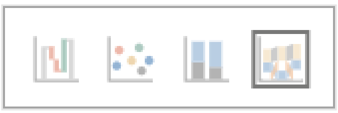
The 100% stacked column chart



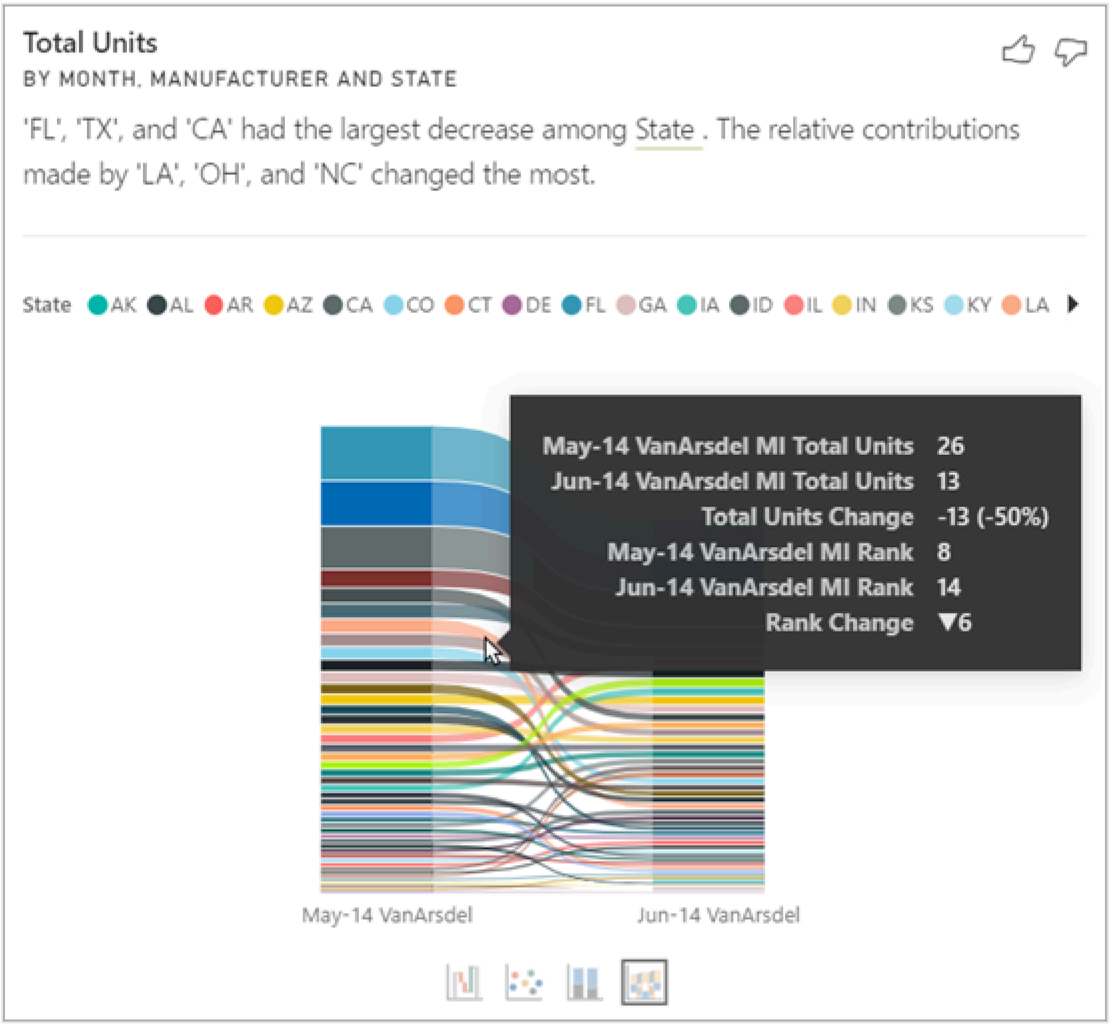
The 100% stacked column chart visual shows the value of the contribution to the total (100%) for the selected data point and the previous. This view allows side-by-side comparison of the contribution for each data point. In the following example, tooltips shows the actual contribution for the selected value of Texas. Because the list of states is long, tooltips helps you see the details. With the use of tooltips, you see that Texas contributed about the same percent to the total units (31% and 32%), but the actual number of total units decreased from 89 to 71. Remember, the Y axis is a percentage, not a total, and each column band is a percentage, not a value.



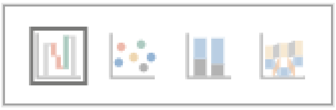
The ribbon chart



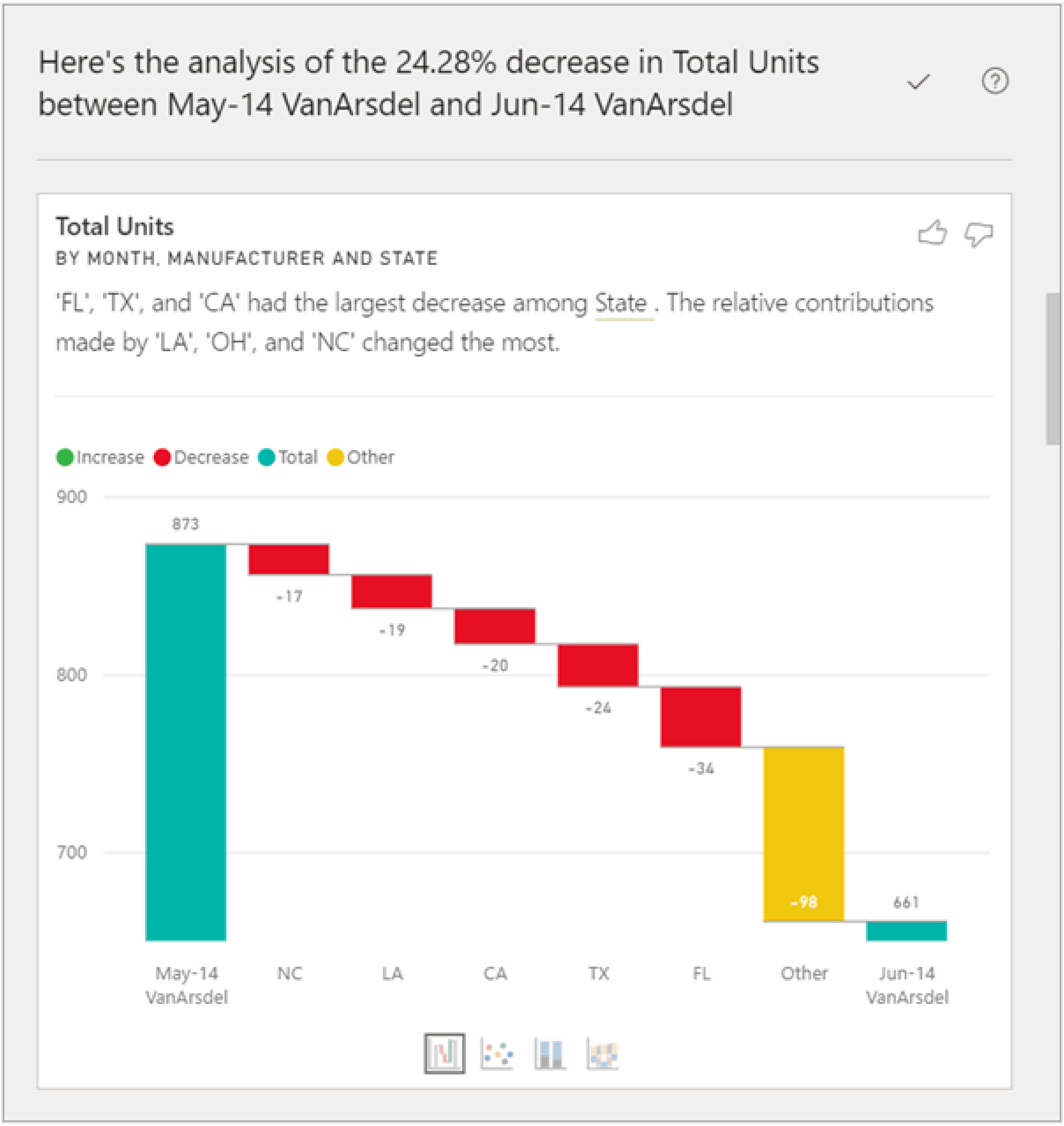
The ribbon chart visual shows the value of the measure before and after. It helps show the changes in contributions when the *ordering* of contributors changed (for example, *LA* dropped from number two contributor to number 11). *TX* is represented by a wide ribbon at the top, signifying that it's the most significant contributor before and after. The drop shows that the value of the contribution dropped both during the selected period and after.



The waterfall chart



The fourth visual is a waterfall chart, showing actual increases or decreases between the periods. This visual clearly shows one significant contributor to the decrease for June 2014—in this case, **State**. And the particulars of **State**'s influence on total units are that declines in Louisiana, Texas, and Colorado played the most significant role.



Considerations and limitations

Since these insights are based on the change from the previous data point, they aren't available when you select the first data point in a visual.

The **Analyze** feature isn't available for all visual types.

The following list is the collection of currently unsupported scenarios for the **Analyze** feature (**Explain the increase, Explain the decrease, Find where the distribution is different)**:

- TopN filters
- Include or exclude filters.
- Measure filters
- Non-numeric measures

- Use of "Show value as."
- Filtered measures. Filtered measures are visual level calculations with a specific filter applied (for example, *Total Sales for France*) and are used on some of the visuals created by the insights feature.
- Categorical columns on X-axis unless it defines a sort by column that is scalar. If using a hierarchy, then every column in the active hierarchy has to match this condition.
- RLS (Row Level Security) or DirectQuery enabled data models

Related content

- Waterfall charts in Power BI
- Scatter charts, bubble charts, and dot plot charts in Power BI
- Visualizations in Power BI reports
- Create ribbon charts in Power BI

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Visualization types in Power BI

Article • 06/05/2024

APPLIES TO: ✅ Power BI Desktop ✅ Power BI service

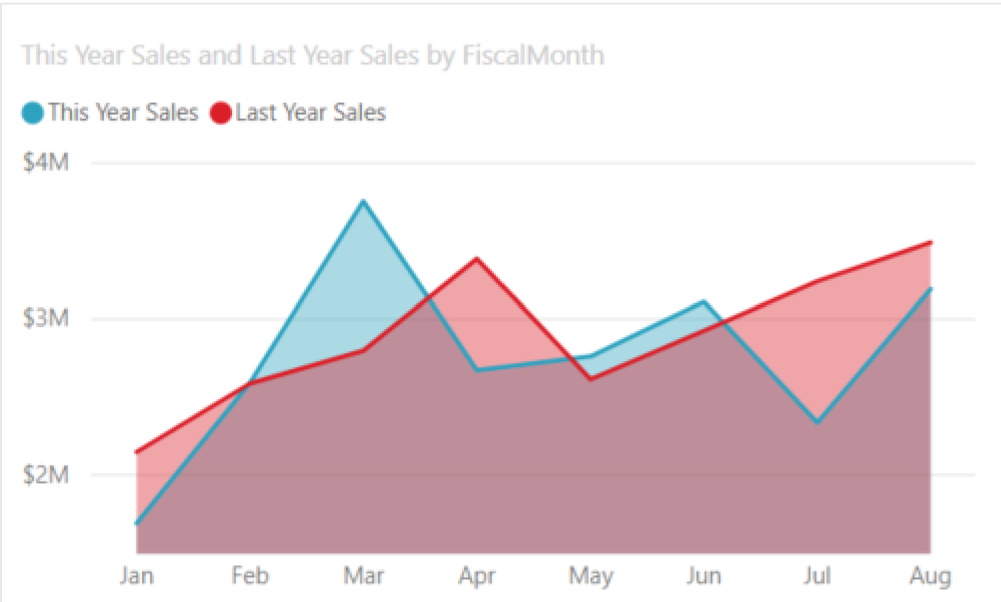
A visualization is an image created from data. Visualizations are also called "visuals." Some examples of visuals are: pie chart, line chart, map, and KPI. This article lists visualizations available in Power BI. We add new visualizations. Stay tuned!

And check out the Microsoft AppSource, where you find a growing list of Power BI visuals you can download and use in your own dashboards and reports. Feeling creative? Learn how to create and add your own visuals to this community site.

Visualizations in Power BI

All of these visualizations can be added to Power BI reports, specified in Q&A, and pinned to dashboards.

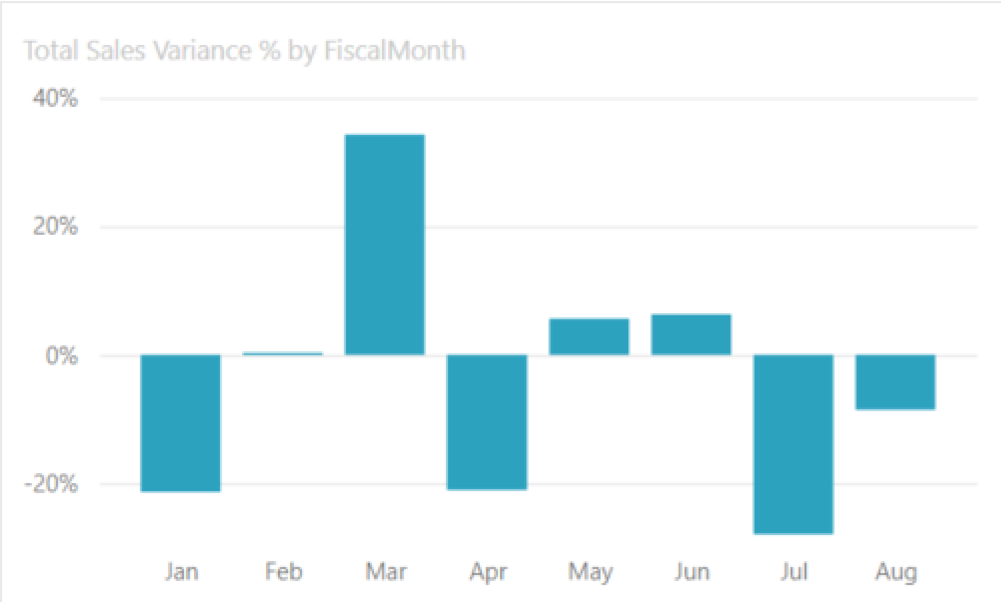
Area charts: Basic (Layered) and Stacked

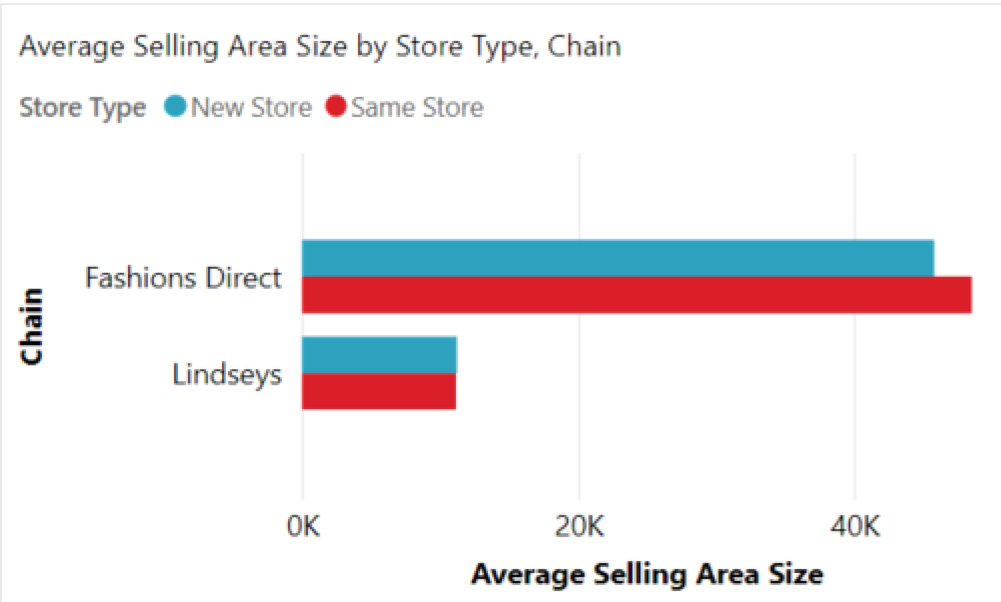


The basic area chart is based on the line chart with the area between the axis and line filled in. Area charts emphasize the magnitude of change over time, and can be used to draw attention to the total value across a trend. For example, data that represents profit over time can be plotted in an area chart to emphasize the total profit. On the other hand, stacked area charts display the cumulative total of multiple data series stacked on top of each other, showing how each series contributes to the total.

For more information, see Basic Area chart.

Bar and column charts

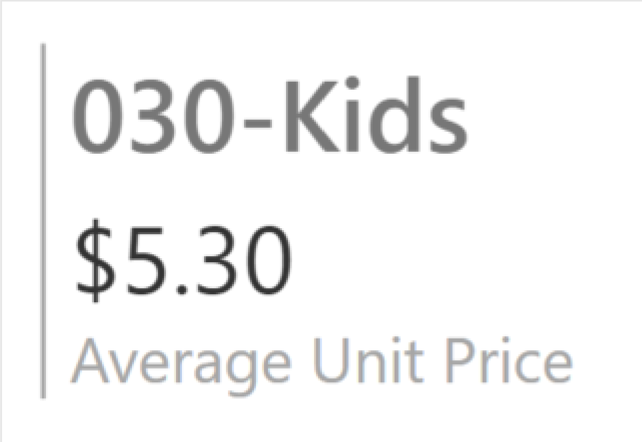




Bar charts are the standard for looking at a specific value across different categories.

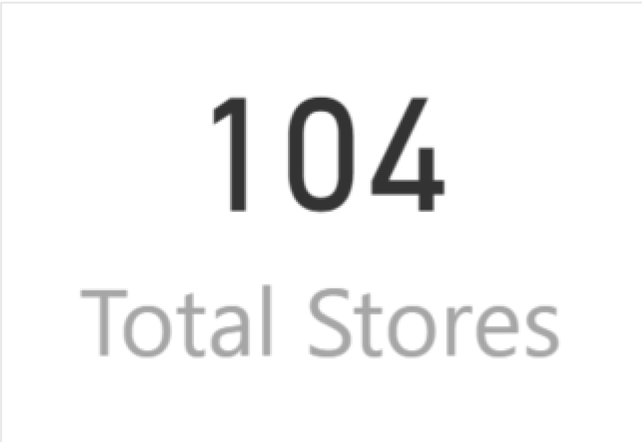
Cards

Multi row



Multi row cards display one or more data points, one per row.

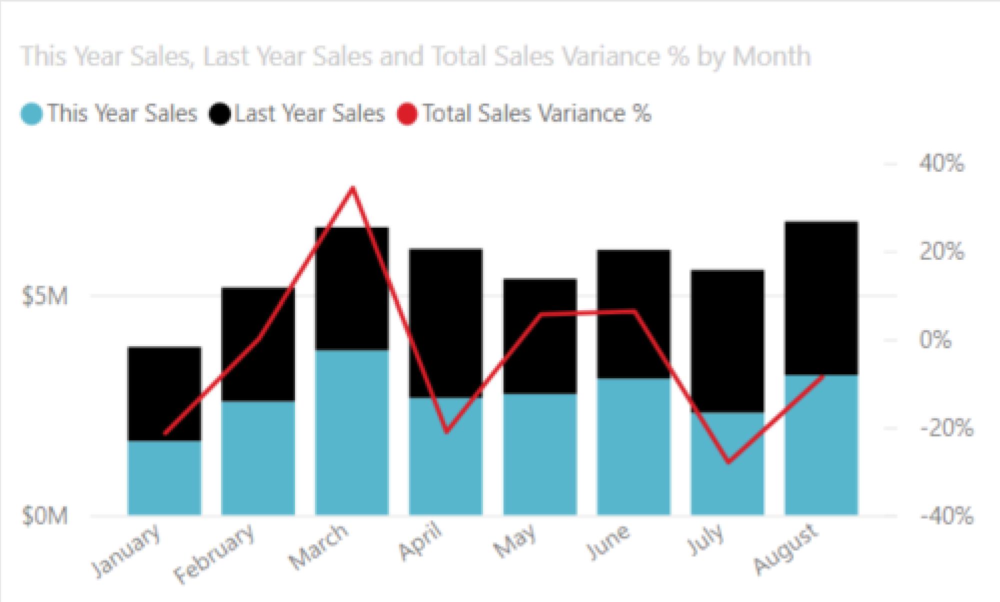
Single number



Single number cards display a single fact, a single data point. Sometimes a single number is the most important thing you want to track in your Power BI dashboard or report, such as total sales, market share year over year, or total opportunities.

For more information, see Create a Card (big number tile).

Combo charts



A combo chart combines a column chart and a line chart. Combining the two charts into one lets you make a quicker comparison of the data. Combo charts can have one or two Y axes, so be sure to look closely.

Combo charts are a great choice:

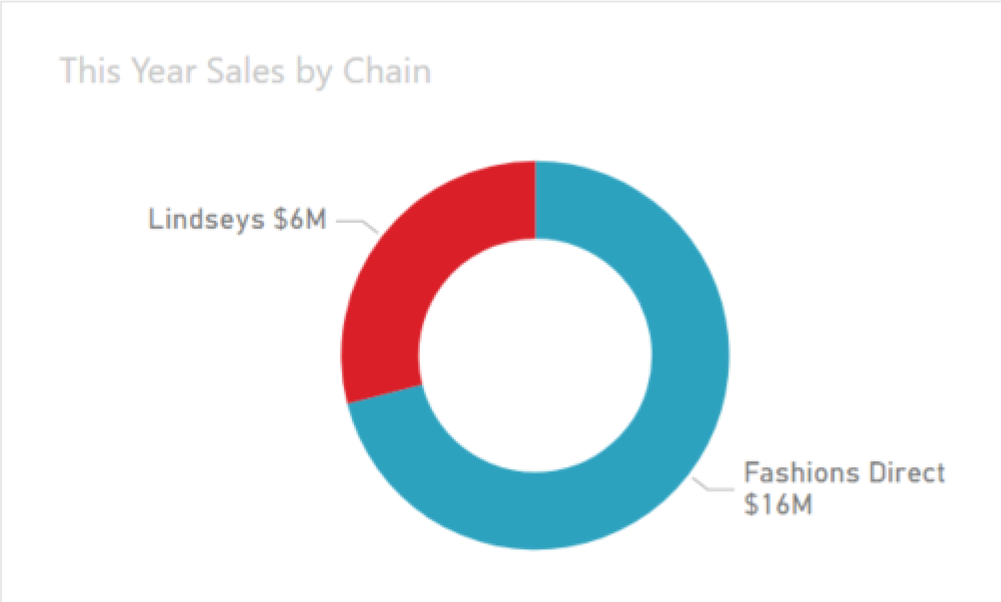
- When you have a line chart and a column chart with the same X axis.
- To compare multiple measures with different value ranges.
- To illustrate the correlation between two measures in one visual.
- To check whether one measure meets the target, which is defined by another measure.
- To conserve canvas space.

For more information, see Combo charts in Power BI.

Decomposition tree

The decomposition tree visual lets you visualize data across multiple dimensions. It automatically aggregates data and enables drilling down into your dimensions in any order. It is also an artificial intelligence (AI) visualization, so you can ask it to find the next dimension to drill down into based on certain criteria. This capability makes it a valuable tool for ad hoc exploration and conducting root cause analysis.

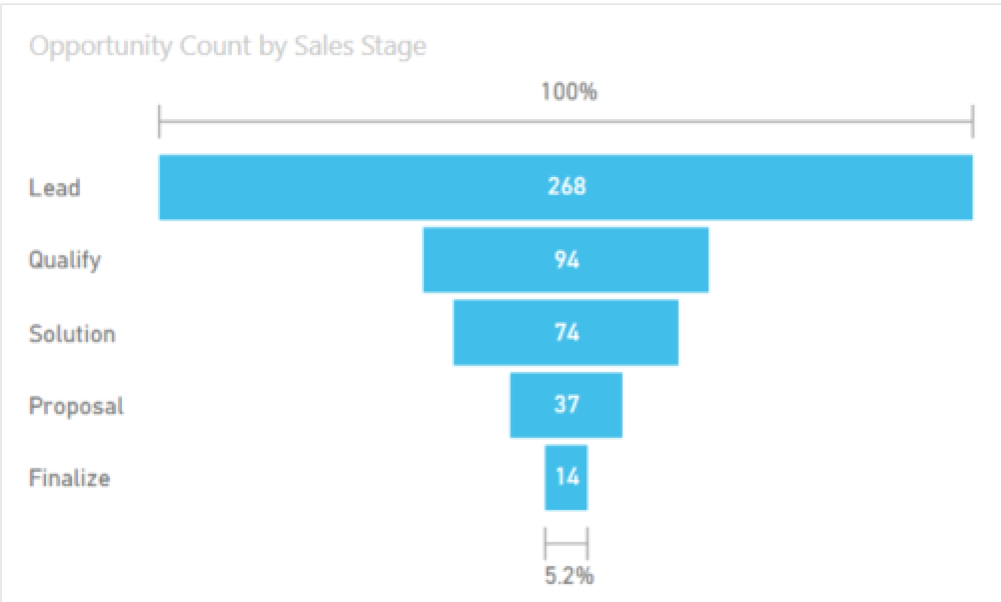
Doughnut charts



Doughnut charts are similar to pie charts. They show the relationship of parts to a whole. The only difference is that the center is blank and allows space for a label or icon.

For more information, see Doughnut charts in Power BI.

Funnel charts

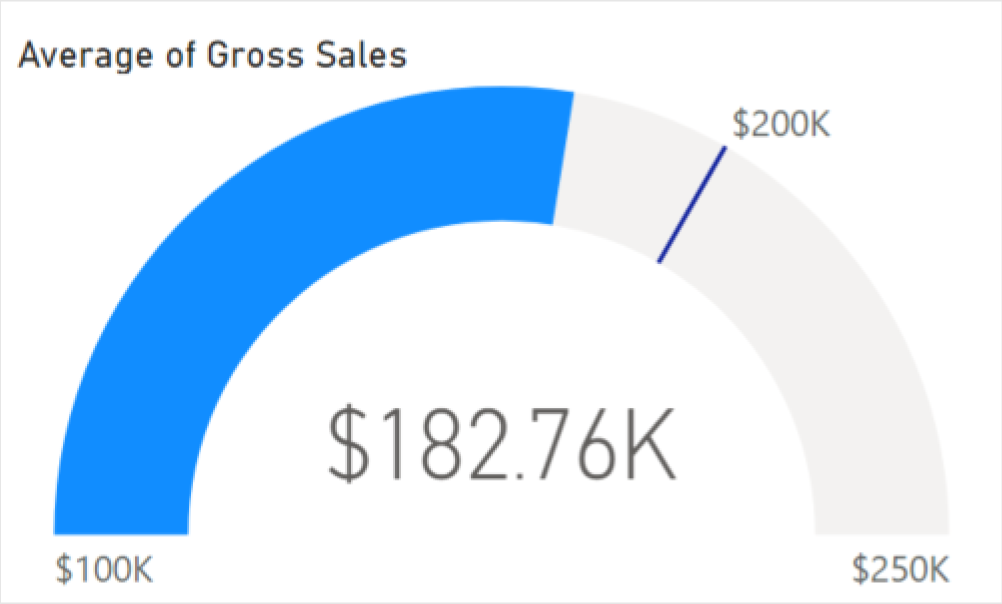


Funnels help visualize a process that has stages, and items flow sequentially from one stage to the next. One example is a sales process that starts with leads and ends with purchase fulfillment.

For example, a sales funnel that tracks customers through stages: Lead > Qualified Lead > Prospect > Contract > Close. At a glance, the shape of the funnel conveys the health of the process you're tracking. Each funnel stage represents a percentage of the total. So, in most cases, a funnel chart is shaped like a funnel -- with the first stage being the largest, and each subsequent stage smaller than its predecessor. A pear-shaped funnel is also useful -- it can identify a problem in the process. But typically, the first stage, the "intake" stage, is the largest.

For more information, see Funnel Charts in Power BI.

Gauge charts



A radial gauge chart has a circular arc and displays a single value that measures progress toward a goal. The goal, or target value, is represented by the line (needle). Progress toward that goal is represented by the shading. And the value that represents that progress is shown in bold inside the arc. All possible values are spread evenly along the arc, from the minimum (left-most value) to the maximum (right-most value).

In the example, we are a car retailer, tracking our Sales team's average sales per month. Our goal is 200,000 and represented by the location of the needle. The minimum possible average sales is 100,000 and we set the maximum as 250,000. The blue shading shows that we're currently averaging approximately $180,000 this month. Luckily, we still have another week to reach our goal.

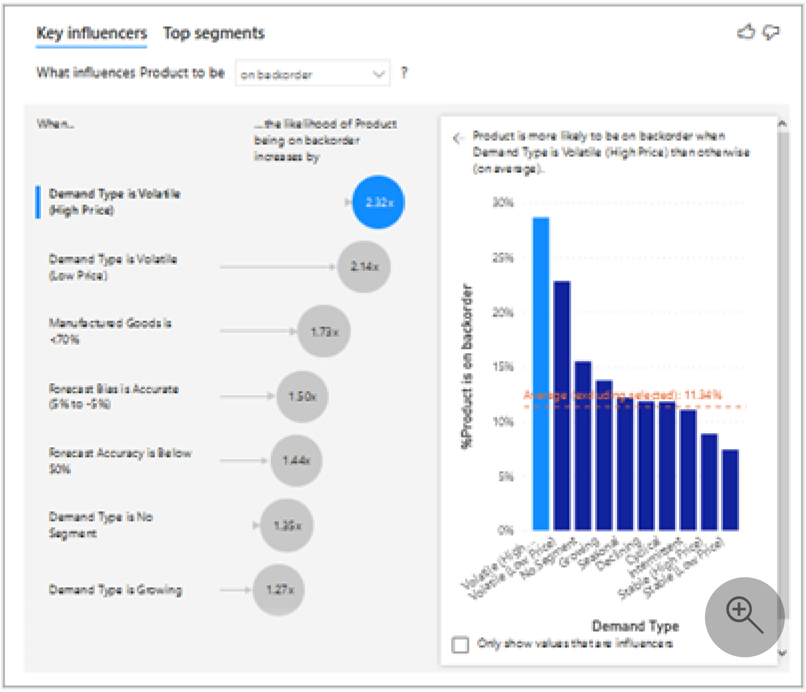
Radial gauges are a great choice to:

- Show progress toward a goal.

- Represent a percentile measure, like a KPI.
- Show the health of a single measure.
- Display information that can be quickly scanned and understood.

For more information, see Gauge Charts in Power BI.

Key influencers chart



A key influencer chart displays the major contributors to a selected result or value.

Key influencers are a great choice to help you understand the factors that influence a key metric. For example, *what influences customers to place a second order* or *why were sales so high last June*.

For more information, see Key influencer charts in Power BI

KPIs

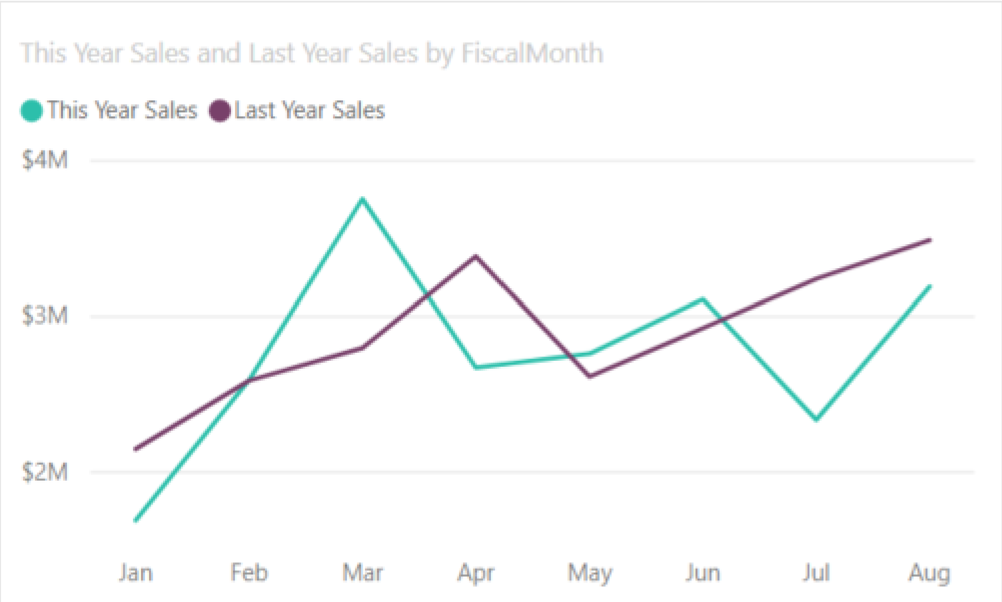
A Key Performance Indicator (KPI) is a visual cue that communicates the amount of progress made toward a measurable goal.

KPIs are a great choice:

- To measure progress (what am I ahead or behind on?).
- To measure distance to a metric (how far ahead or behind am I?).

For more information, see KPIs in Power BI.

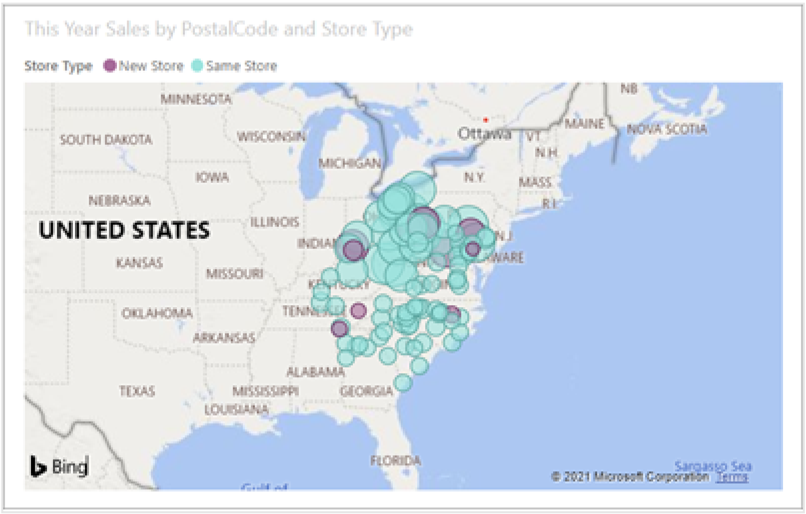
Line charts



Line charts emphasize the overall shape of an entire series of values, usually over time.

Maps

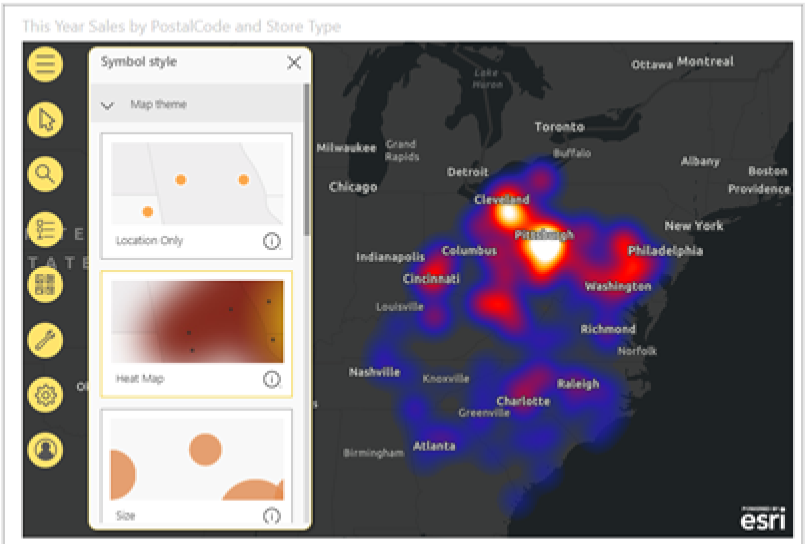
Basic map



Use a basic map to associate both categorical and quantitative information with spatial locations.

For more information, see Tips and tricks for map visuals.

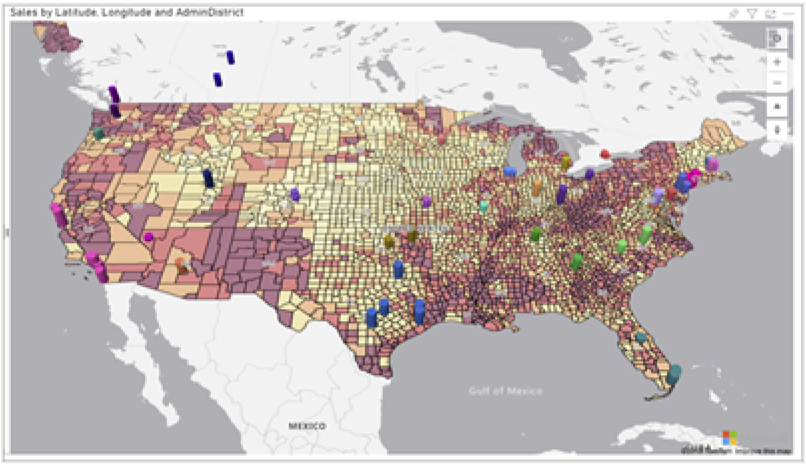
ArcGIS map



The combination of ArcGIS maps and Power BI takes mapping beyond the presentation of points on a map to a whole new level. The available options for base maps, location types, themes, symbol styles, and reference layers creates gorgeous informative map visuals. The combination of authoritative data layers (such as census data) on a map with spatial analysis conveys a deeper understanding of the data in your visual.

For more information, see ArcGIS maps in Power BI.

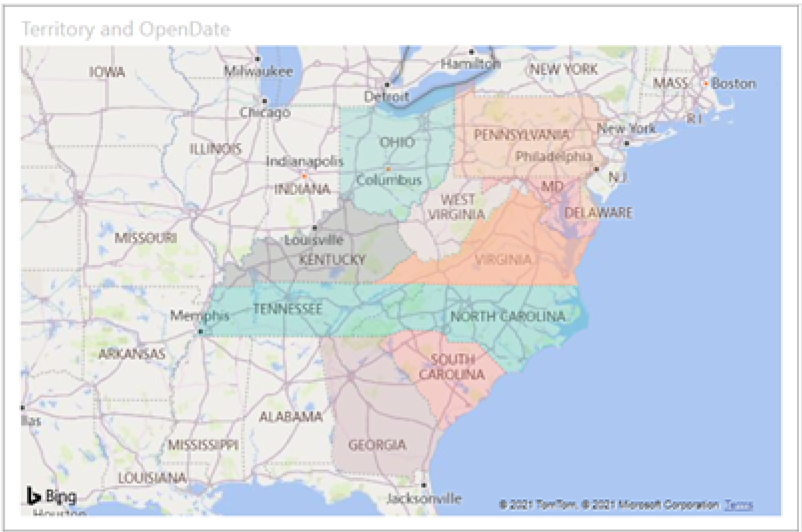
Azure map



> 💡 **Tip**
>
> Used to associate both categorical and quantitative information with spatial locations.

For more information, see [Azure Maps visual for Power BI](#).

Filled map (Choropleth)

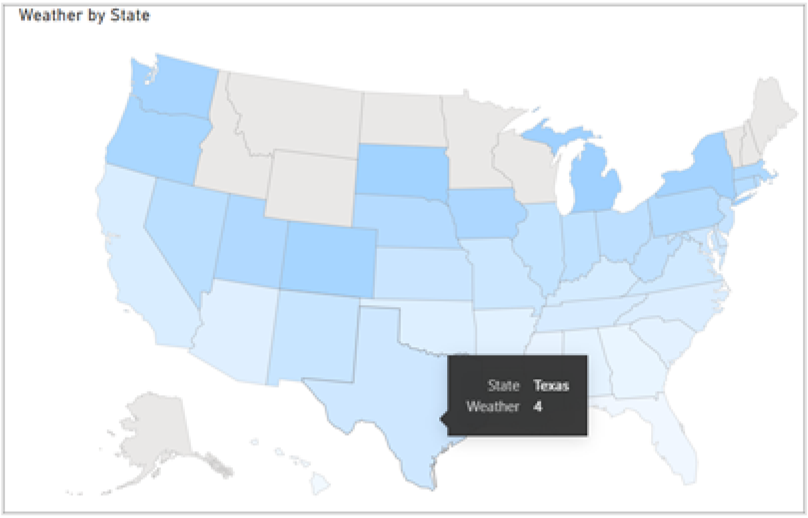


A filled map uses shading or tinting or patterns to display how a value differs in proportion across a geography or region. Quickly display these relative differences with shading that ranges from light (less-frequent/lower) to dark (more-frequent/more).

> 💡 **Tip**
>
> The more intense the color, the larger the value.

For more information, see [Filled Maps in Power BI](#).

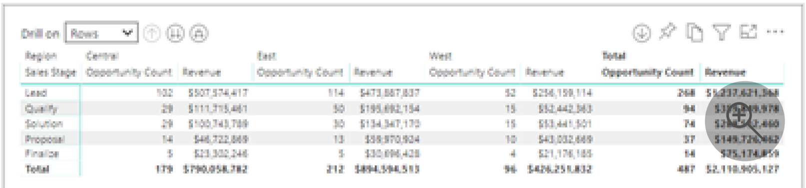
Shape map



Shape maps compare regions on a map using color. A shape map can't show precise geographical locations of data points on a map. Instead, its main purpose is to show relative comparisons of regions on a map by coloring them differently.

For more information, see Shape Maps in Power BI.

Matrix



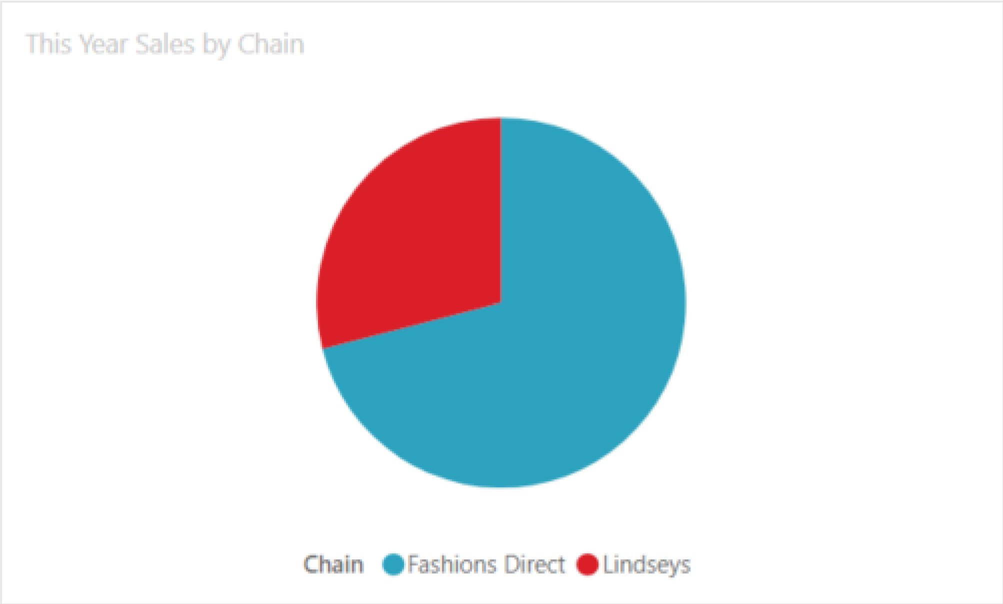
Region	Central		East		West		Total	
Sales Stage	Opportunity Count	Revenue	Opportunity Count	Revenue	Opportunity Count	Revenue	Opportunity Count	Revenue
Lead	102	$507,574,417	114	$473,887,837	52	$256,159,114	268	$1,237,621,368
Qualify	29	$111,715,461	50	$195,892,154	15	$52,442,363	94	[illegible]
Solution	29	$100,743,789	30	$134,347,170	15	$53,441,501	74	[illegible]
Proposal	14	$46,722,869	13	$59,970,924	10	$43,032,669	37	[illegible]
Finalize	5	$23,302,246	5	$30,696,428	4	$21,176,185	14	$75,174,859
Total	179	$790,058,782	212	$894,594,513	96	$426,251,832	487	$2,110,905,127

The matrix visual is a type of table visual (see Tables in this article) that supports a stepped layout. A table supports two dimensions, but a matrix makes it easier to display data meaningfully across multiple dimensions. Often, report designers include matrixes in reports and dashboards to allow users to select one or more element (rows, columns, cells) in the matrix to cross-highlight other visuals on a report page.

> **Tip**
>
> The matrix automatically aggregates the data and enables drilling down into the data.

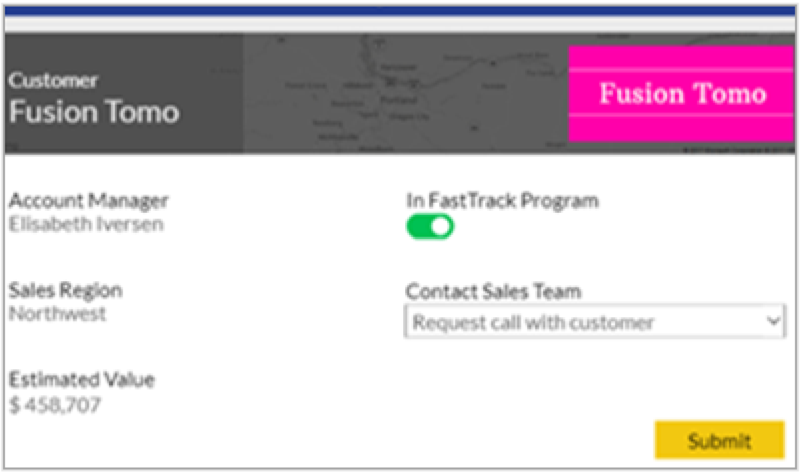
For more information, see Matrix visuals in Power BI.

Pie charts



Pie charts show the relationship of parts to a whole.

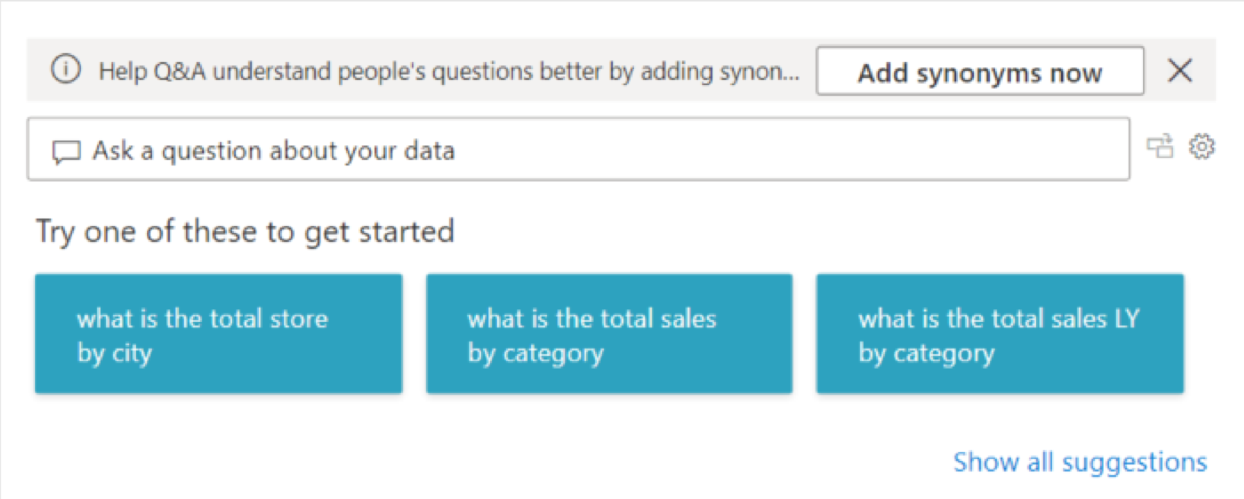
Power Apps visual



Report designers can create a Power App and embed it into a Power BI report as a visual. Consumers can interact with that visual within the Power BI report.

For more information, see Add a Power Apps visual to your report.

Q&A visual



The Q&A visual provides users with a text box to query data in Power BI reports. Users can use natural language to query data, and the Q&A visual interprets the query and provides an appropriate visualization.

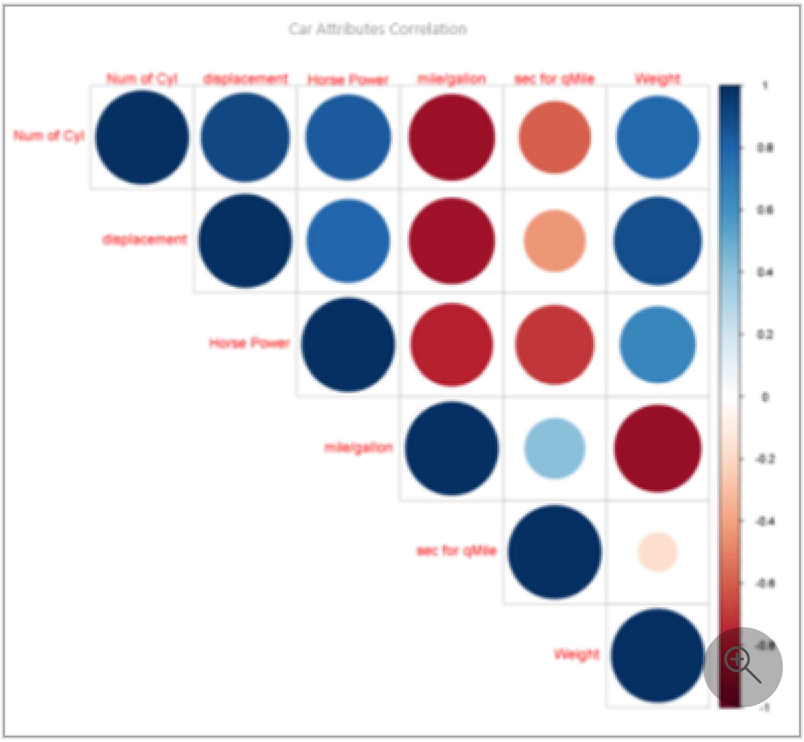
For example, if a user asks a question like "What were the product sales in 2019?" the Q&A visual queries the relevant data and create an appropriate visualization to display the results. This visualization can be in many different formats, such as a chart or a table.

Tip

Similar to the Q&A experience on dashboards, the Q&A visual lets you ask questions about your data using natural language.

For more information, see Q&A visuals in Power BI.

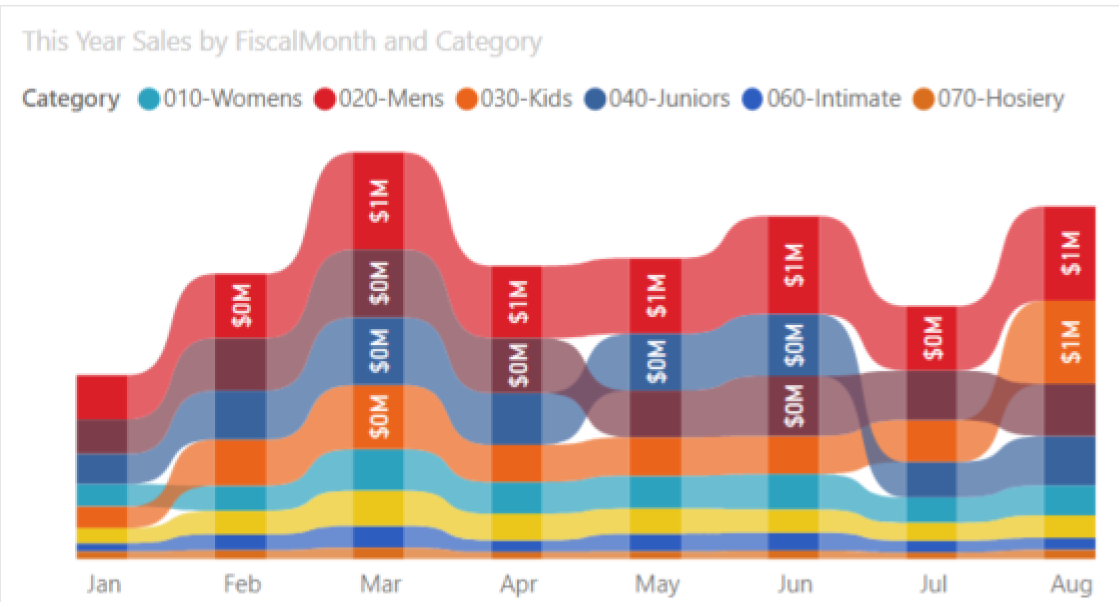
R script visuals



> 💡 **Tip**
>
> Visuals created with R scripts, commonly called *R visuals*, can present advanced data shaping and analytics such as forecasting, using the rich analytics and visualization power of R. R visuals can be created in Power BI Desktop and published to the Power BI service.

For more information, see R visuals in Power BI.

Ribbon chart



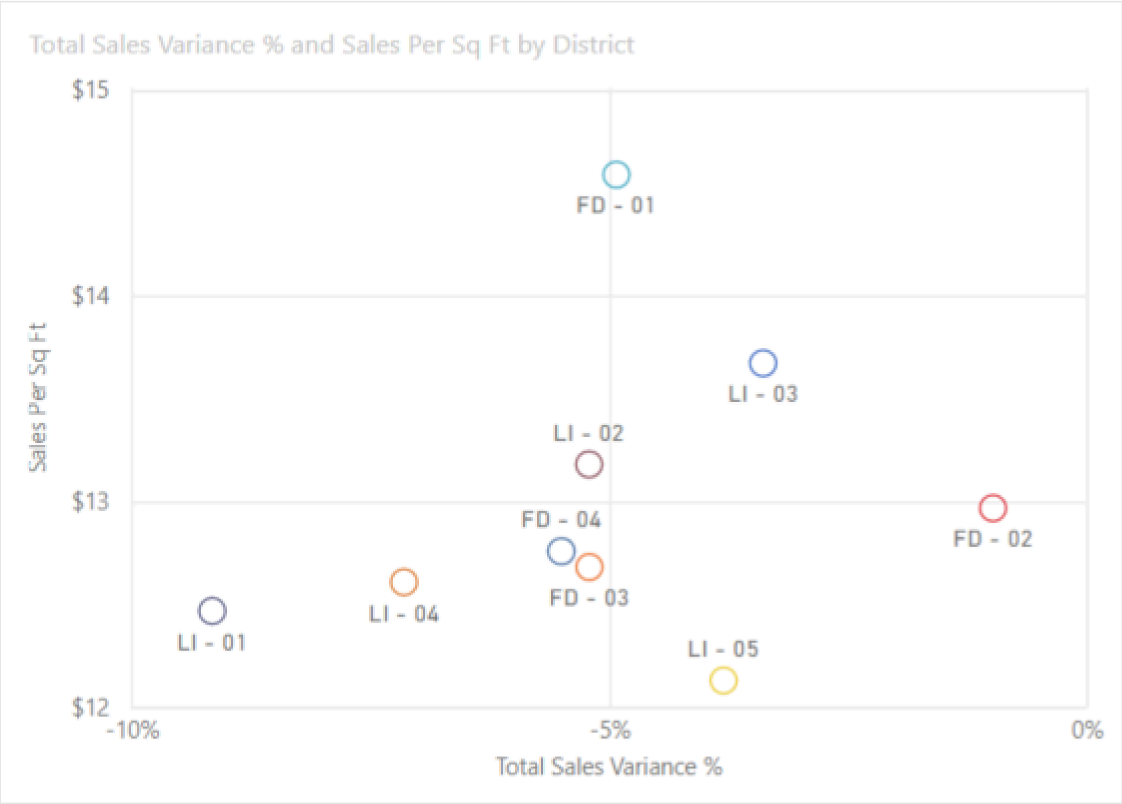
Ribbon charts show which data category has the highest rank (largest value). Ribbon charts are effective at showing rank change, with the highest range (value) always displayed on top for each time period.

For more information, see Ribbon charts in Power BI.

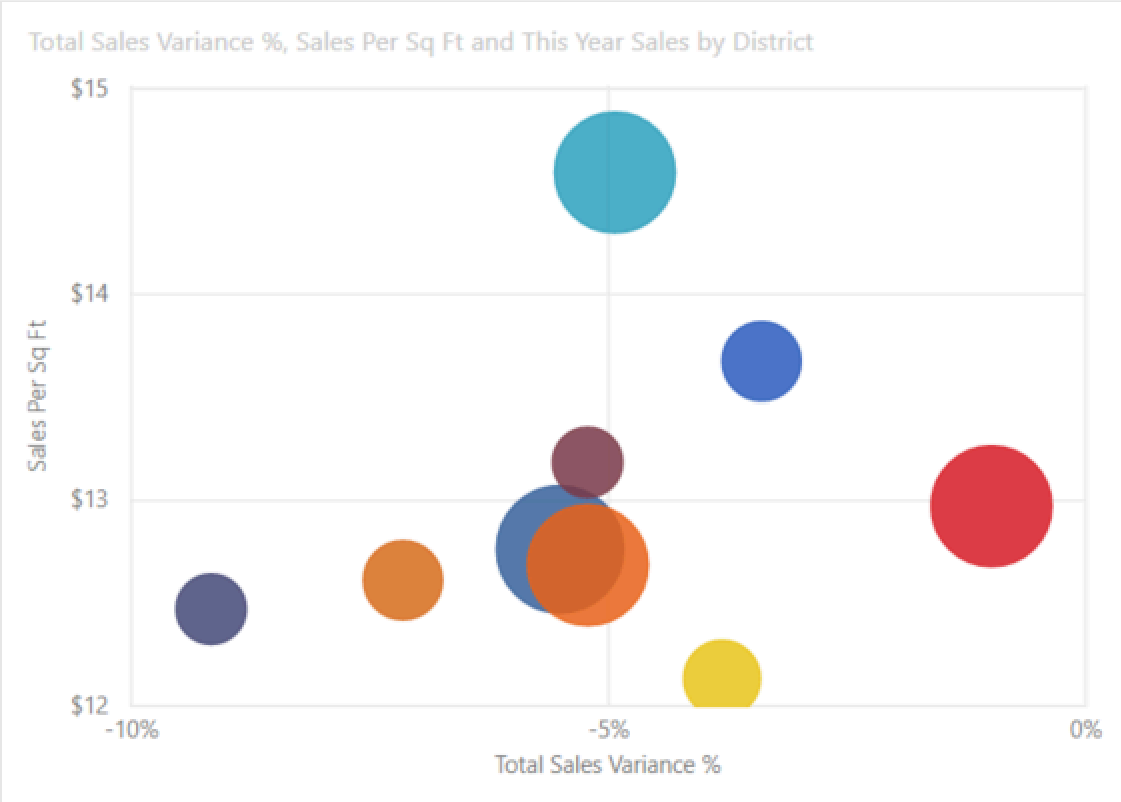
Scatter

Scatter, bubble, and dot plot chart

A scatter chart always has two value axes to show one set of numerical data along a horizontal axis and another set of numerical values along a vertical axis. The chart displays points at the intersection of an x and y numerical value, combining these values into single data points. These data points might be distributed evenly or unevenly across the horizontal axis, depending on the data.

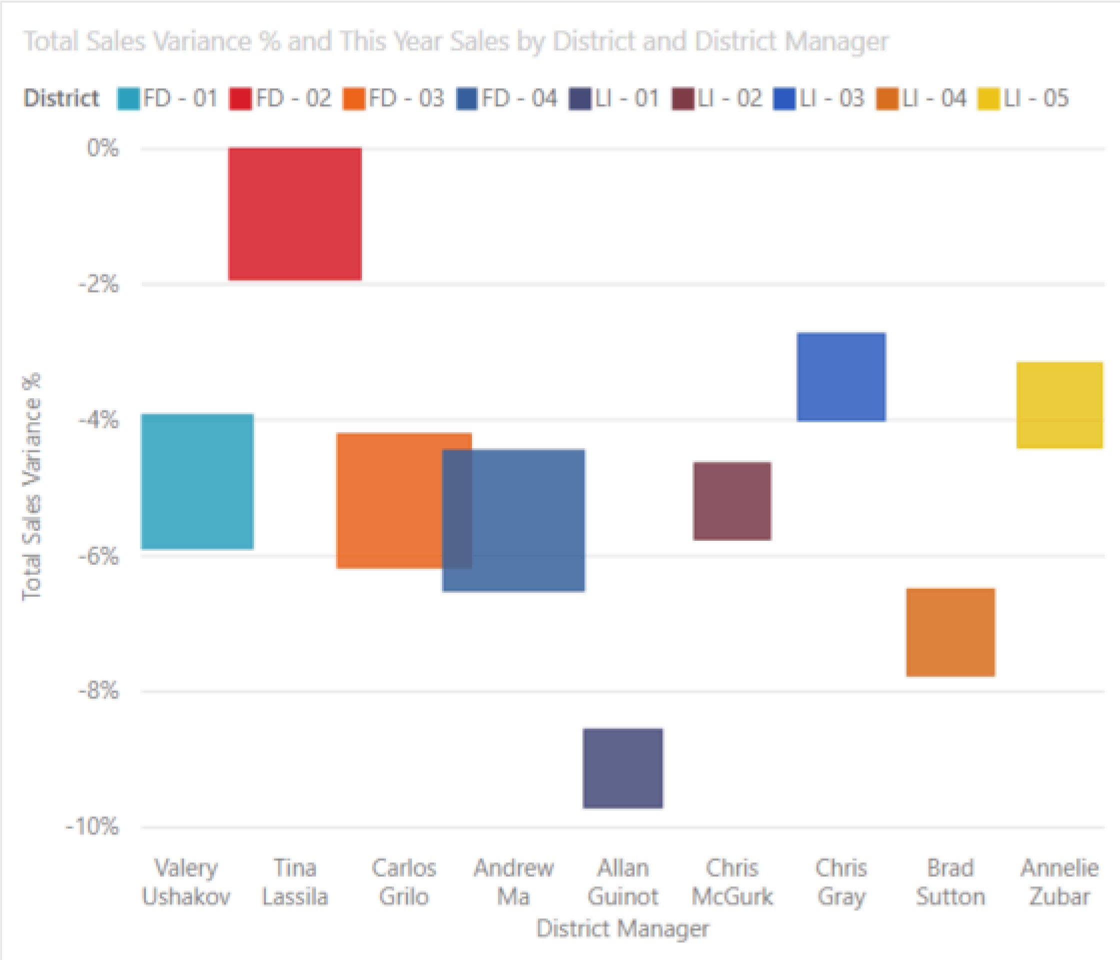


A bubble chart replaces data points with bubbles, with the bubble size representing an additional dimension of the data.



Both scatter and bubble charts can also have a play axis, which can show changes over time.

A dot plot chart is similar to a bubble chart and scatter chart except that it can plot numerical or categorical data along the X axis. This example happens to use squares instead of circles and plots sales along the X axis.



For more information, see Scatter charts in Power BI.

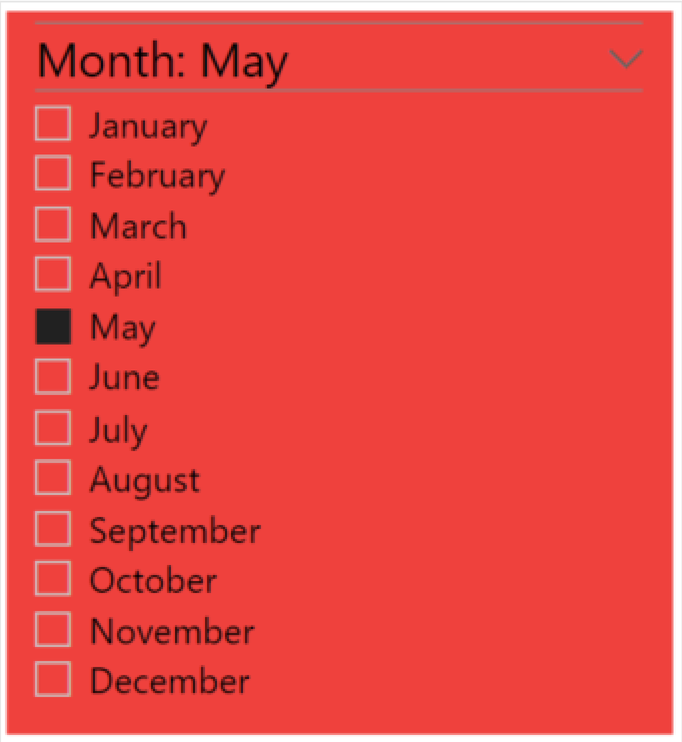
Scatter-high density

By definition, high-density data is sampled to quickly create visuals that are responsive to interactivity. High-density sampling uses an algorithm that eliminates overlapping points, and ensures that all points in the data set are represented in the visual. It doesn't just plot a representative sample of the data.

This ensures the best combination of responsiveness, representation, and clear preservation of important points in the overall data set.

For more information, see High Density Scatter charts in Power BI.

Slicers



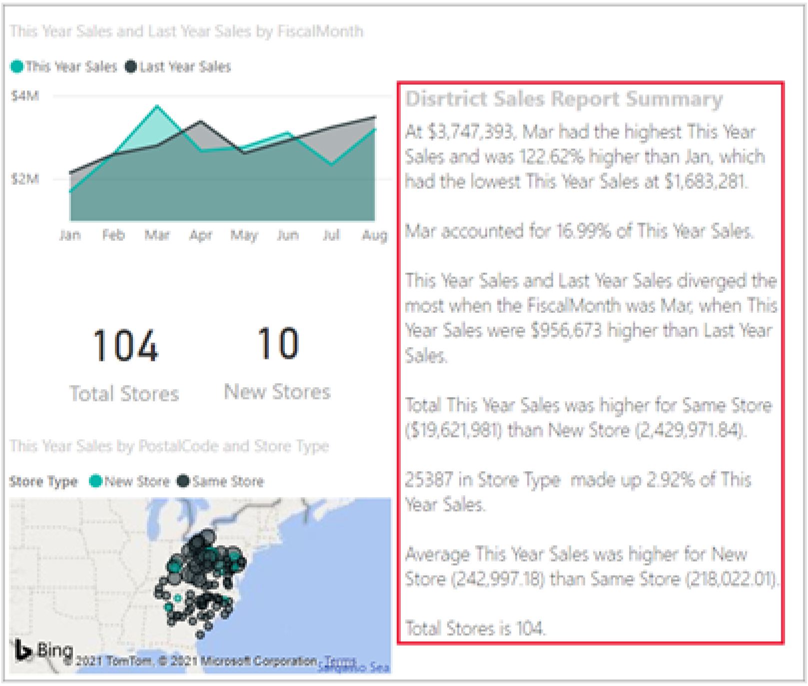
A slicer is a standalone chart that can be used to filter the other visuals on the page. Slicers come in many different formats (category, range, date, etc.) and can be formatted to allow selection of only one, many, or all of the available values.

Slicers are a great choice to:

- Display commonly used or important filters on the report canvas for easier access.
- Make it easier to see the current filtered state without having to open a drop-down list.
- Filter by columns that are unneeded and hidden in the data tables.
- Create more focused reports by putting slicers next to important visuals.

For more information, see Slicers in Power BI.

Smart narrative



The Smart narrative adds text to reports to point out trends, key takeaways, and add explanations and context. The text helps users to understand the data and identify the important findings quickly.

For more information, see Create smart narrative summaries.

Standalone images

A standalone image is a graphic that is added to a report or dashboard.

For more information, see Add an image widget to a dashboard.

Tables

Category	This Year Sales Status	Average Unit Price	Last Year Sales	This Year Sales	This Year Sales Goal
080-Accessories		$4.84	$1,273,096	$1,379,259	$1,273,096
090-Home		$3.93	$2,913,647	$3,053,326	$2,913,647
100-Groceries		$1.47	$810,176	$829,776	$810,176
020-Mens		$7.12	$4,453,133	$4,452,421	$4,453,133
030-Kids		$5.30	$2,726,892	$2,705,490	$2,726,892
050-Shoes		$13.84	$3,640,471	$3,574,900	$3,640,471
010-Womens		$7.30	$2,680,662	$1,787,958	$2,680,662
040-Juniors		$7.00	$3,105,550	$2,930,385	$3,105,550
060-Intimate		$4.28	$955,370	$852,329	$955,370
070-Hosiery		$3.69	$573,604	$486,106	$573,604
Total		**$5.49**	**$23,132,601**	**$22,051,952**	**$23,132,601**

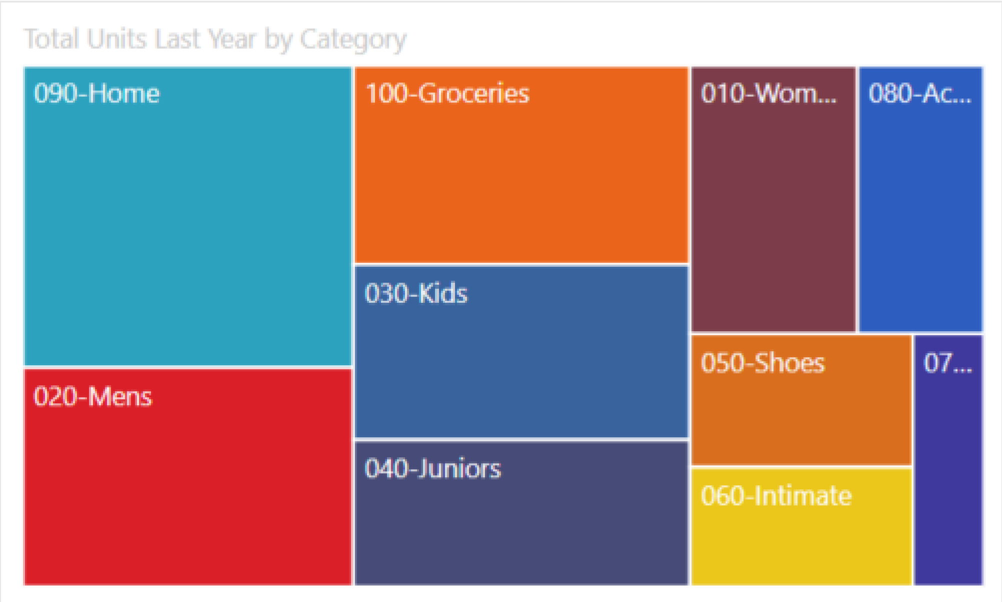
A table is a grid that contains related data in a logical series of rows and columns. It might also contain headers and a row for totals. Tables work well with quantitative comparisons where you are looking at many values for a single category. For example, this table displays five different measures for Category.

Tables are a great choice:

- To see and compare detailed data and exact values (instead of visual representations).
- To display data in a tabular format.
- To display numerical data by categories.

For more information, see Working with tables in Power BI.

Treemaps



Treemaps are charts of colored rectangles, with size representing value. They can be hierarchical, with rectangles nested within the main rectangles. The space inside each rectangle is allocated based on the value being measured. And the rectangles are arranged in size from top left (largest) to bottom right (smallest).

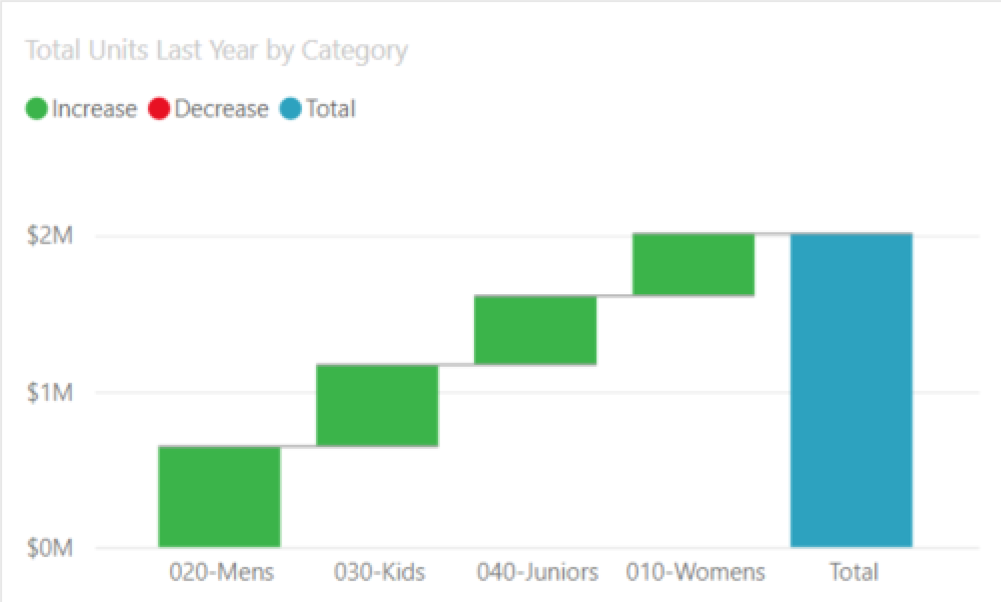
Treemaps are a great choice:

- To display large amounts of hierarchical data.
- When a bar chart can't effectively handle the large number of values.
- To show the proportions between each part and the whole.
- To show the pattern of the distribution of the measure across each level of categories in the hierarchy.
- To show attributes using size and color coding.

- To spot patterns, outliers, most-important contributors, and exceptions.

For more information, see Treemaps in Power BI.

Waterfall charts



A waterfall chart shows a running total as values are added or subtracted. It's useful for understanding how an initial value (for example, net income) is affected by a series of positive and negative changes.

The columns are color coded so you can quickly tell increases and decreases. The initial and the final value columns often start on the horizontal axis, while the intermediate values are floating columns. Because of this "look", waterfall charts are also called bridge charts.

Waterfall charts are a great choice:

- When you have changes for the measure across time or across different categories.
- To audit the major changes contributing to the total value.
- To plot your company's annual profit by showing various sources of revenue and arrive at the total profit (or loss).
- To illustrate the beginning and the ending headcount for your company in a year.
- To visualize how much money you make and spend each month, and the running balance for your account.

For more information, see Waterfall charts in Power BI.

Related content

- Visualizations in Power BI reports
- Power BI Visuals Reference from sqlbi.com, guidance for picking the right visual for your data

Feedback

Drill mode in the Power BI service

Article • 12/25/2023

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

This article shows you how to use the *drill mode* in the Microsoft Power BI service. You can explore in-depth details about your data by using the drill-down, drill-up, and expand features on your visual. To learn how to create a hierarchy, read hierarchies in Power BI

Drill mode requirements

To use the drill mode, the Power BI visual must have an explicit or implicit hierarchy. Report designers often add explicit date hierarchies to reports. Those hierarchies are marked with the hierarchy icon. A common date hierarchy is one that contains fields for the year, quarter, month, and day. A report might have implicit hierarchies too. These informal hierarchies don't have the icon. But the relationship, and therefore a drill path, exists. For example, you might have a visual that shows the number of medals won in a sports competition. The drill path in this example is the sport, which has specific unique types of the sport, and the events. By default, the visual shows the medal count by sport, like gymnastics, skiing, and aquatics. Then, you can select one of the visual elements, like a bar, line, or bubble, to display the individual sports. For example, selecting the aquatics element shows you data for swimming, diving, and water polo. Then, selecting the diving element opens the next level in the hierarchy and shows you details for springboard, platform, and synchronized diving events.

You can tell if a visual has a hierarchy by hovering over it. If the drill control options appear in the action bar, your visual has a hierarchy.

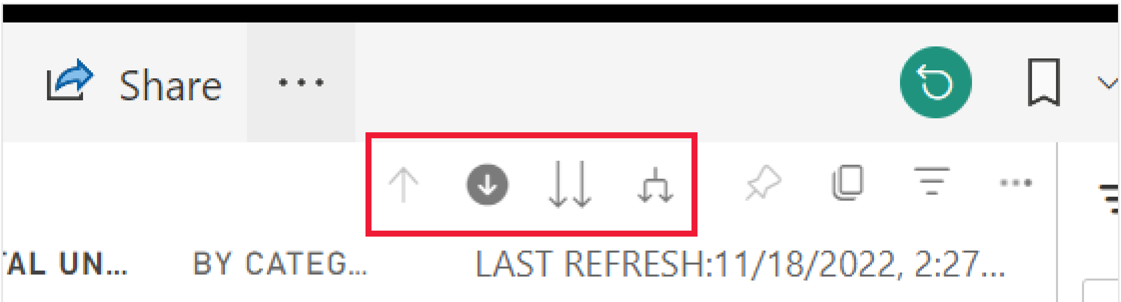
Drill down and up

The following example is a bar chart that has a hierarchy made up of category, manufacturer, segment, and product. The bar chart shows the total number of units sold in the year 2014 by category. Category is the top level of the hierarchy. The chart is filtered by the categories Rural and Urban.

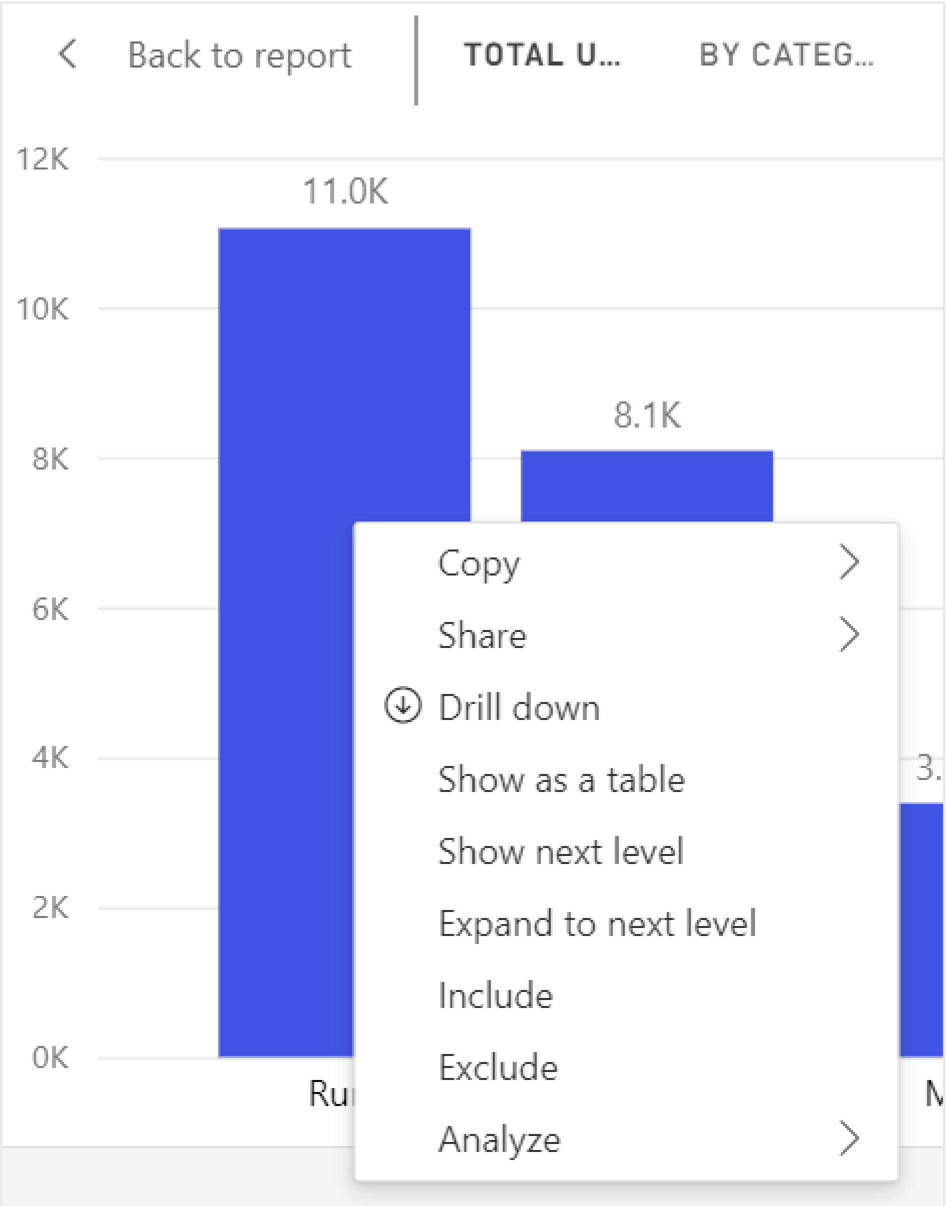
Ways to access the drill features

There are two ways to access the drill-down, drill-up, and expand features for visuals.

One way is to hover over a visual to use the icons in the action bar. Turn on the drill-down option by selecting the single downward arrow. The grey background indicates that the drill-down option is turned on.

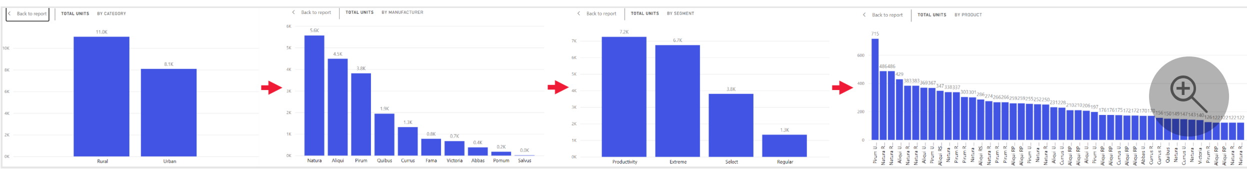


Another way to access the drill features is by right-clicking a data point on the visual to open a menu with available options.



Drill down all fields at once

There are many ways to drill into your visual. Selecting the double arrow drill-down icon  takes you to the next level in the hierarchy. For example, if you're at the category level, you can drill down to the manufacturer level, then the segment level, and, finally, the product level for all categories. Each step in the path shows you new information.



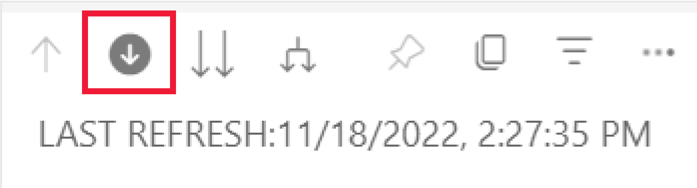
To go up a level in the hierarchy, select the drill-up icon. 

Drill down one field at a time

The double arrow drill-down icon drills down all fields on the canvas at once. This example shows how to drill down one field at a time.

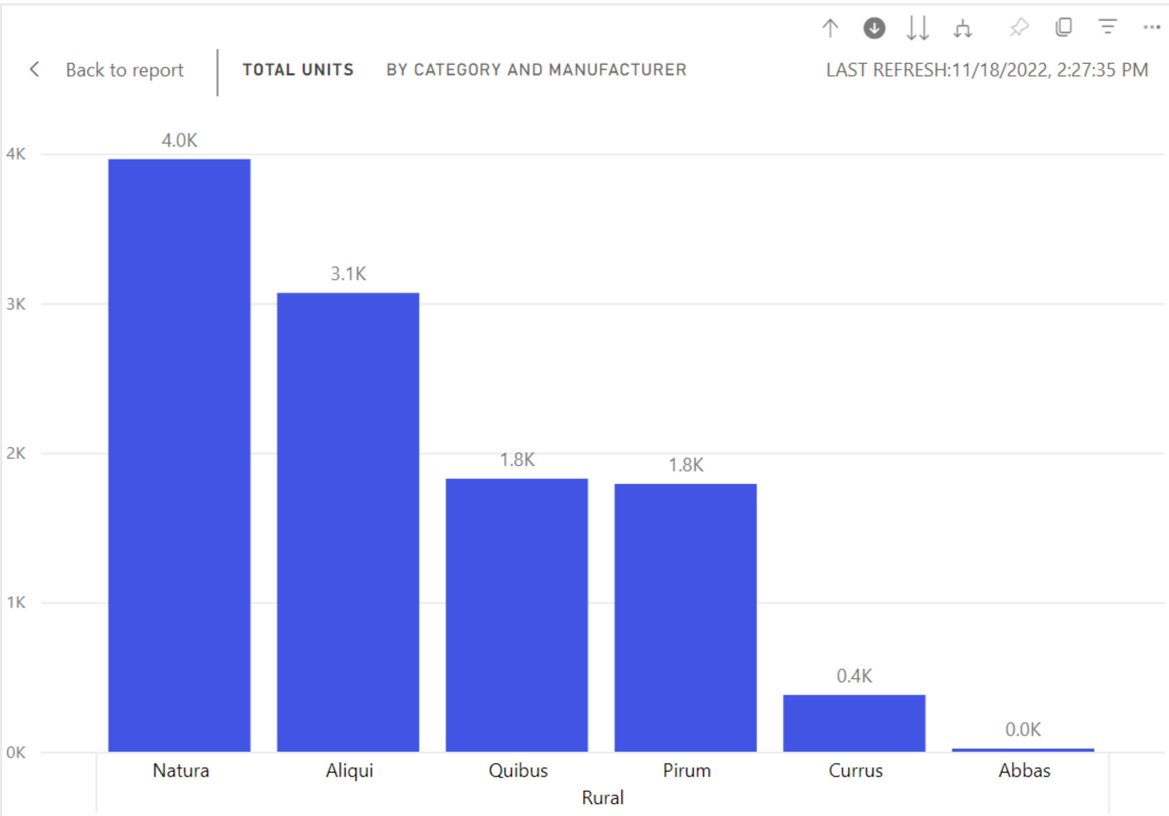
1. From the category level, where the chart shows Rural and Urban, select the drill-down icon  to turn it on.

   Now you have the option of drilling down **one field at a time** by selecting a visual element, like a bar, bubble, or leaf.

   > ⓘ **Note**
   >
   > If you don't turn on the drill-down option and you select a visual element, it cross-filters the other charts on the report page rather than drilling down.

2. Select the bar for Rural. The bar chart now shows all the Rural manufacturers.

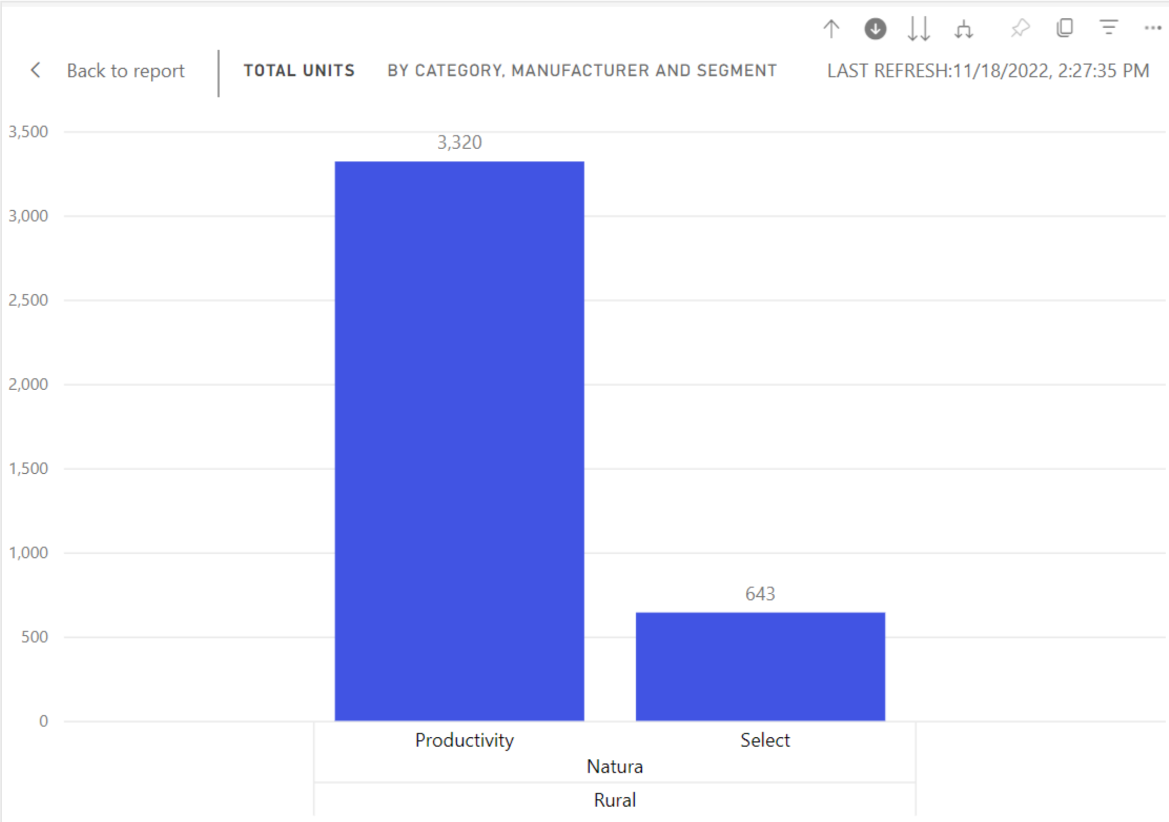
3. At this point, you can:

   - Continue drilling down for Rural.

- Drill down for a particular Rural manufacturer.

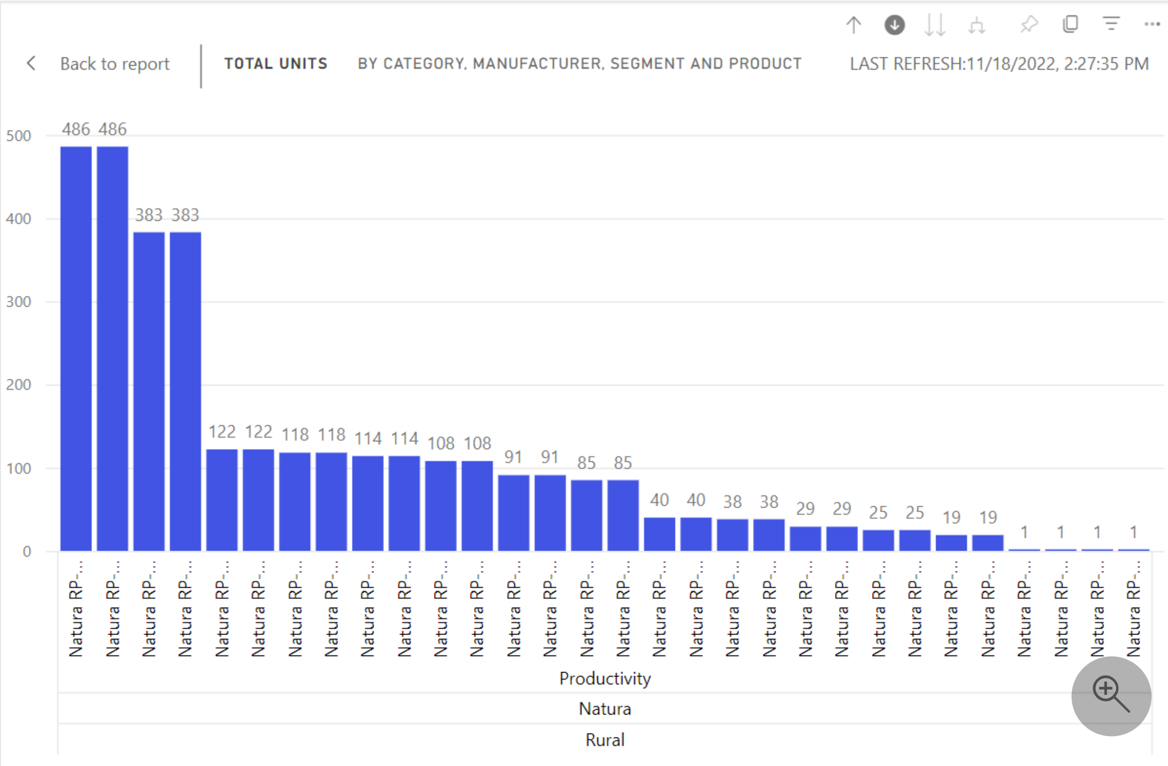
- Expand.

Continue to drill down one field at a time by selecting **Natura**. The bar chart now shows the segments for the Natura manufacturer in the Rural category.

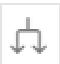


Notice that the title changes to show which level you are on as you drill down and back up again.

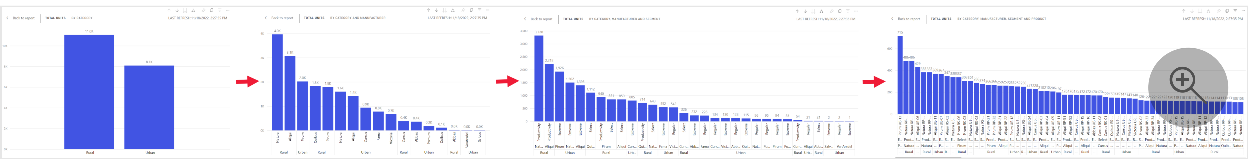
4. Drill down to the products by selecting the **Productivity** bar. Now you are at the product level.



Expand fields



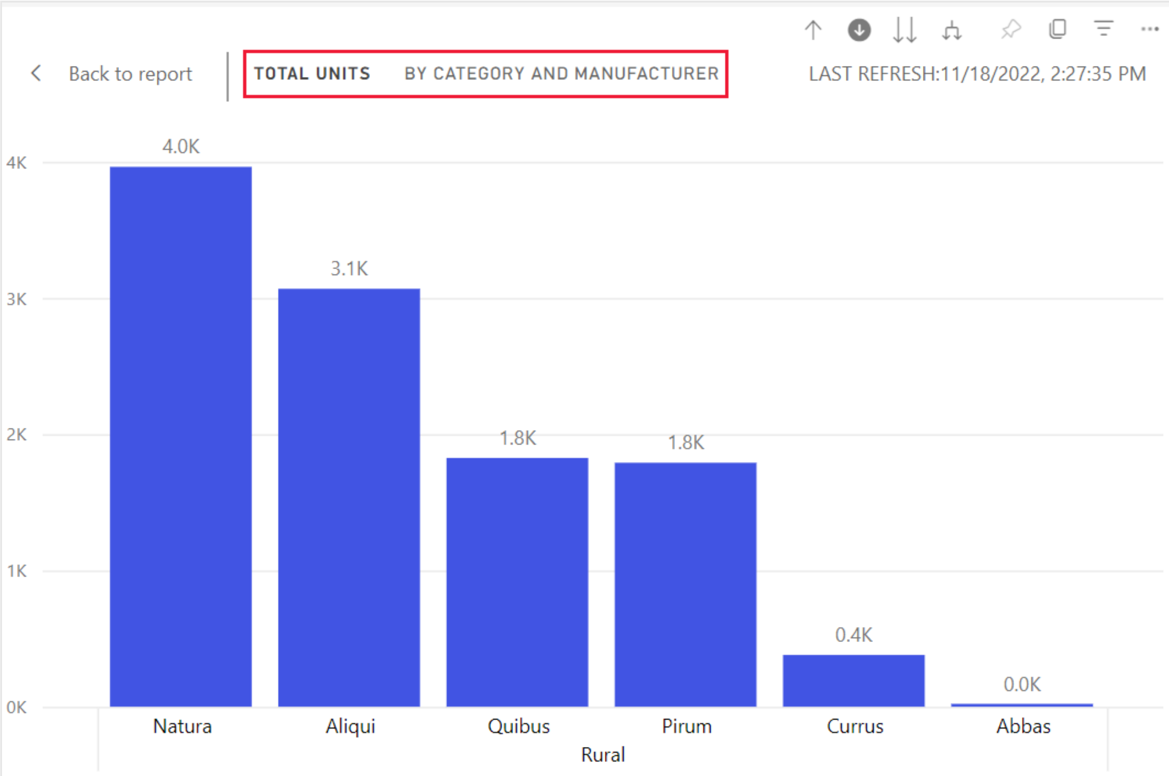
The **Expand** option adds another hierarchy level to the current view. If you're at the category level, which shows Rural and Urban, you can expand all current bars at the same time. The first time you expand, the manufacturer is added for both Rural and Urban. Expand again and, in addition to the manufacturer, segment data is added for both Rural and Urban. Each step in the path shows the previous information and adds on one level of new information.

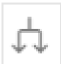


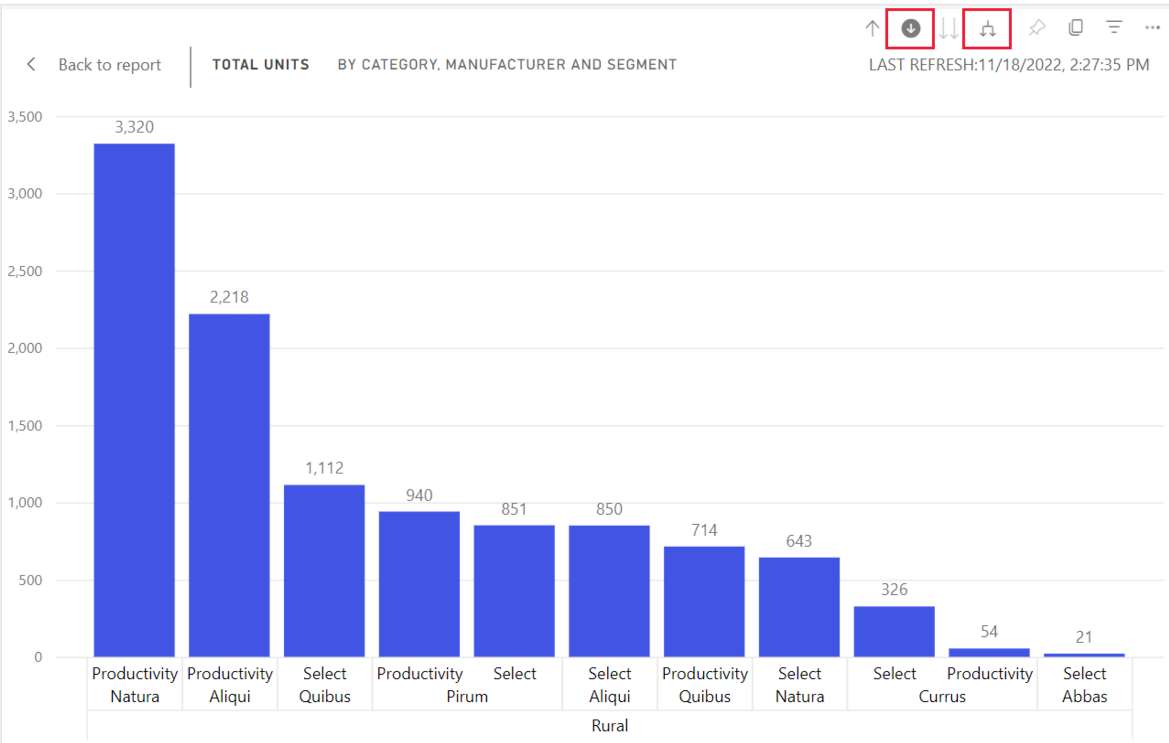
Expand all fields at once

The following example shows how to use this feature to expand all fields at one time.

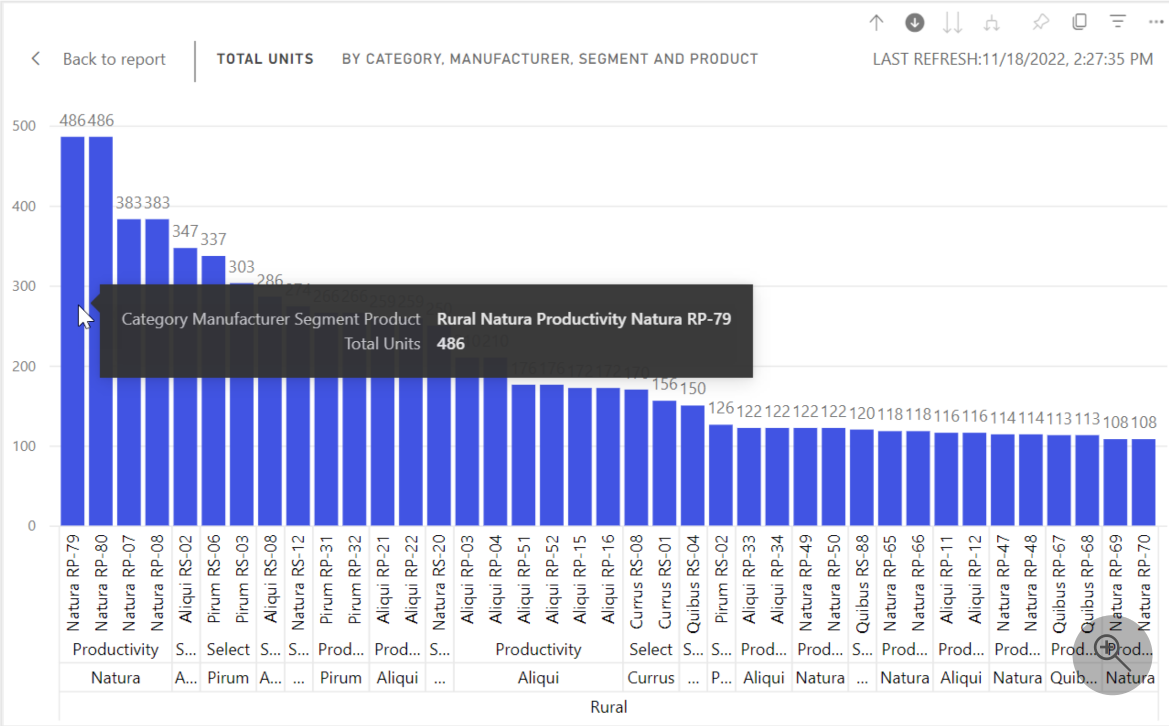
1. From the previous step, select the drill-up arrow until you reach the second level, **Total Units by Category and Manufacturer**.



2. Confirm that the drill-down option  is still turned on and select the expand down icon.  The bar chart shows more detail. It now shows category, manufacturer, and segment.

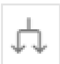


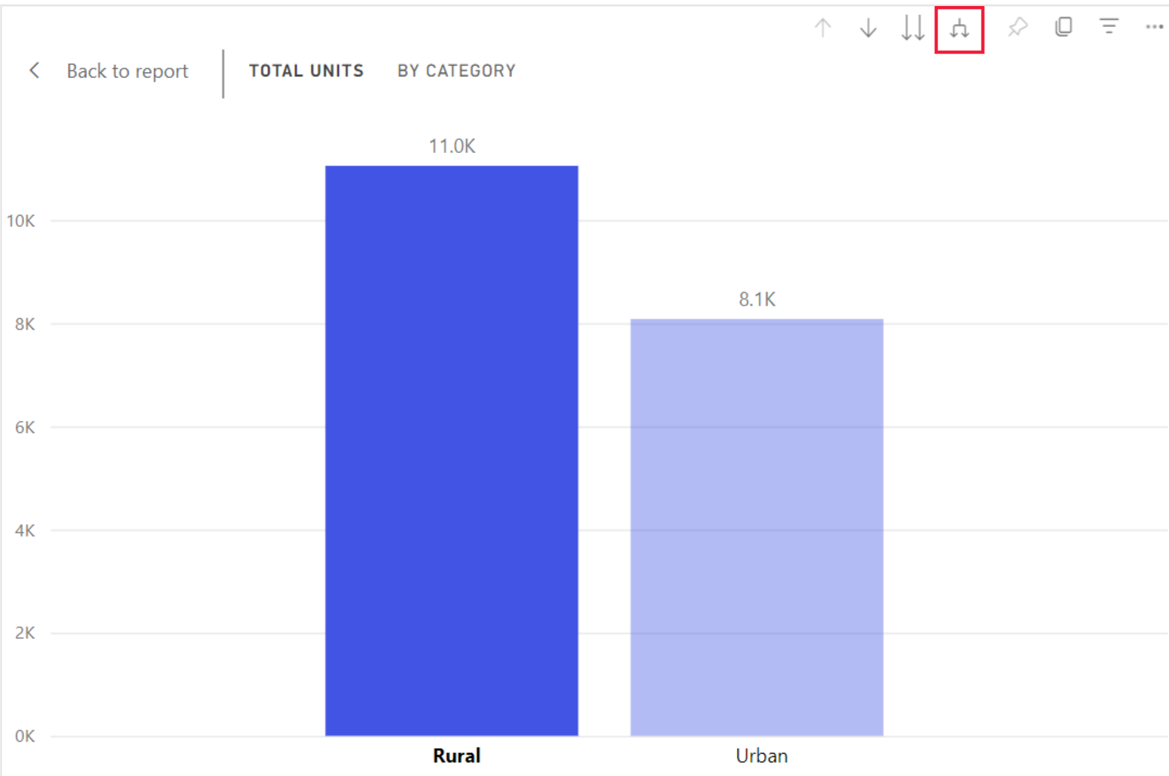
3. Select the expand down icon  one more time to display all four hierarchy levels of detail for Rural. To see more detail, hover over a bar.



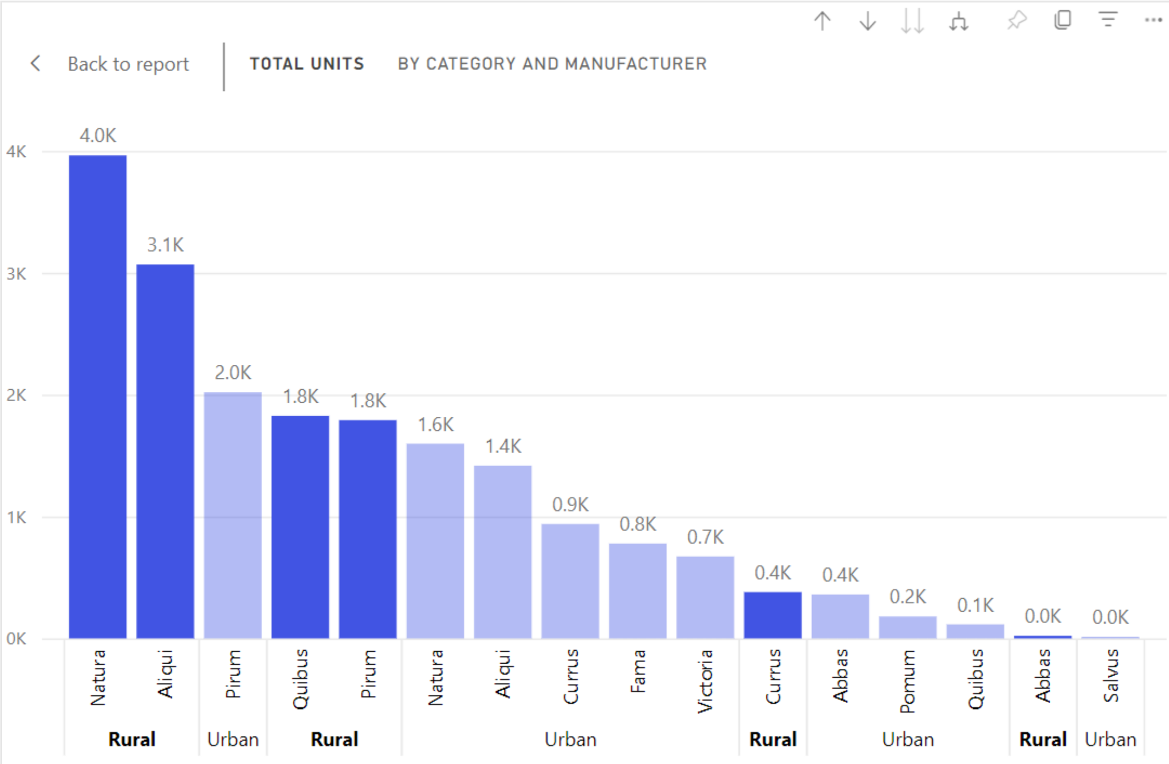
Expand one field at a time

To get detailed data for one field, you can expand down one level in the hierarchy.

1. From the previous step, select the drill-up icon until you reach the category level.
2. With the drill-down icon turned off, select the Rural bar, and then select the expand down icon. 



On the next level, the data for the field you selected is emphasized.

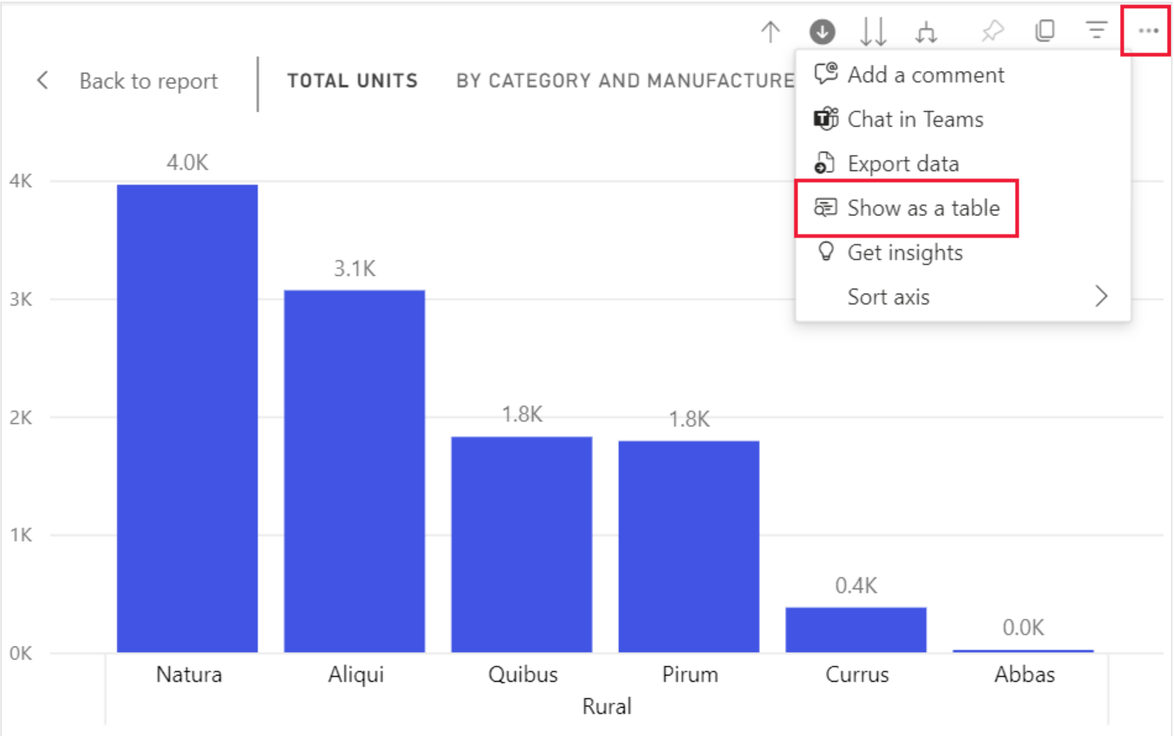


When you drill down, you only go to the next level of the hierarchy. When you expand, you go to the next level of the hierarchy while also preserving the data of the level you're on.

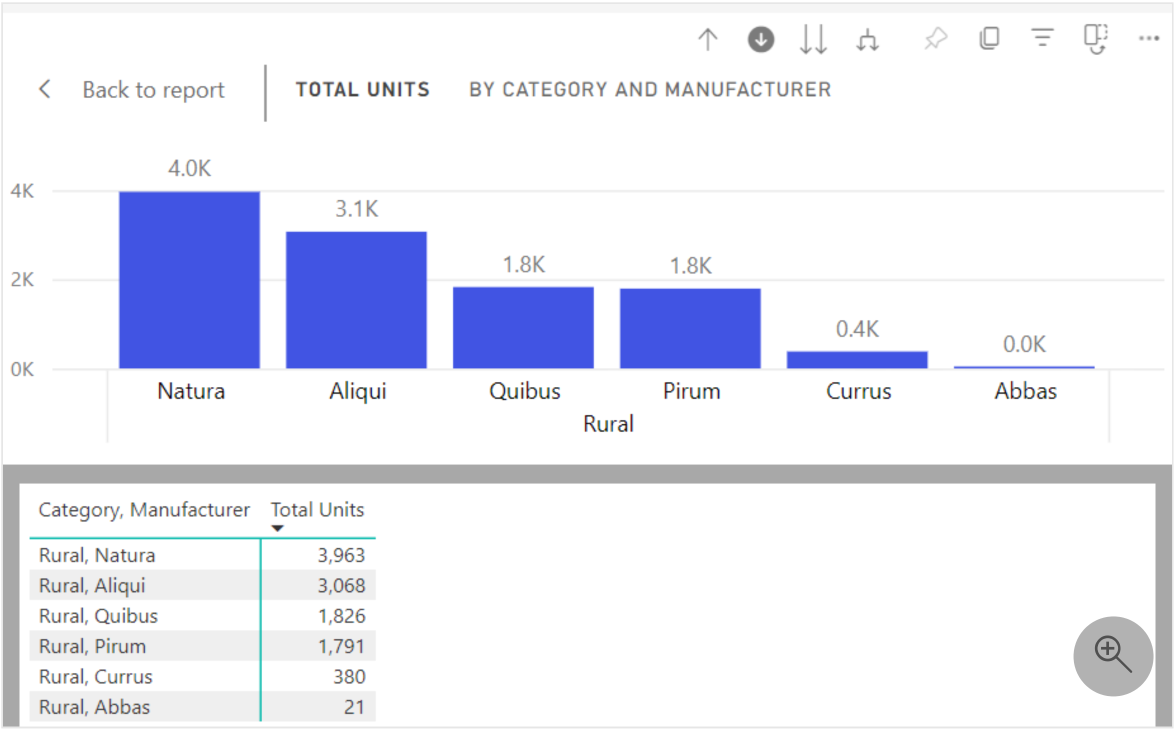
Show the data in a table as you drill

Use **Show as a table** to get a look behind the scenes. Each time you drill or expand, **Show as a table** displays the data used to build the visual. This feature makes it easier to see how hierarchies, drill, and expand work together to build visuals.

1. In the upper right corner, select **More options** (...), and then select **Show as a table**.

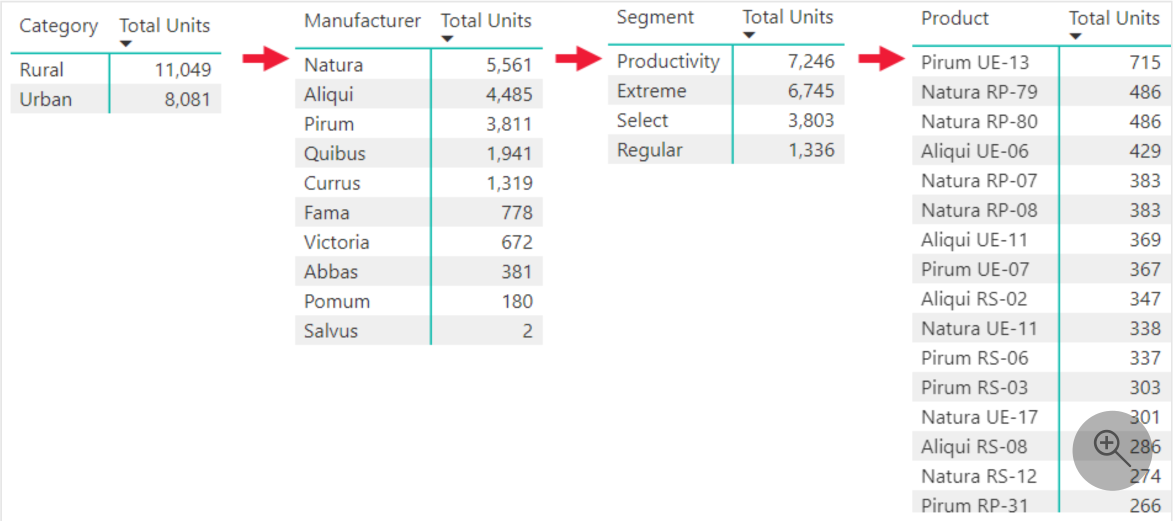


The data that makes up the bar chart appears below the visual.



2. Select the double arrow icon to drill down all fields at once. Watch the data in the table change to reflect the data that's being used to create the bar chart. The following table shows the results of drilling down all fields at once from the category level to the product level.

   The first table represents the top level of the hierarchy. It shows the categories Rural and Urban. The next three tables represent the bar chart's data as you drill down all levels at once, from category to manufacturer to segment to product.



Considerations and limitations

- By default, drilling doesn't filter other visuals in a report, but the report designer can change this setting. As you drill, look to see if the other visuals on the page are cross-filtering or cross-highlighting.
- To view a report that is shared with you, a Power BI Pro or Premium license is required, or the report must be stored in Power BI Premium capacity. For more information, see Find out which licenses you have.

Related content

Using inline hierarchies

Set and use date tables

Power BI - Basic Concepts

More questions? Visit the Power BI Community

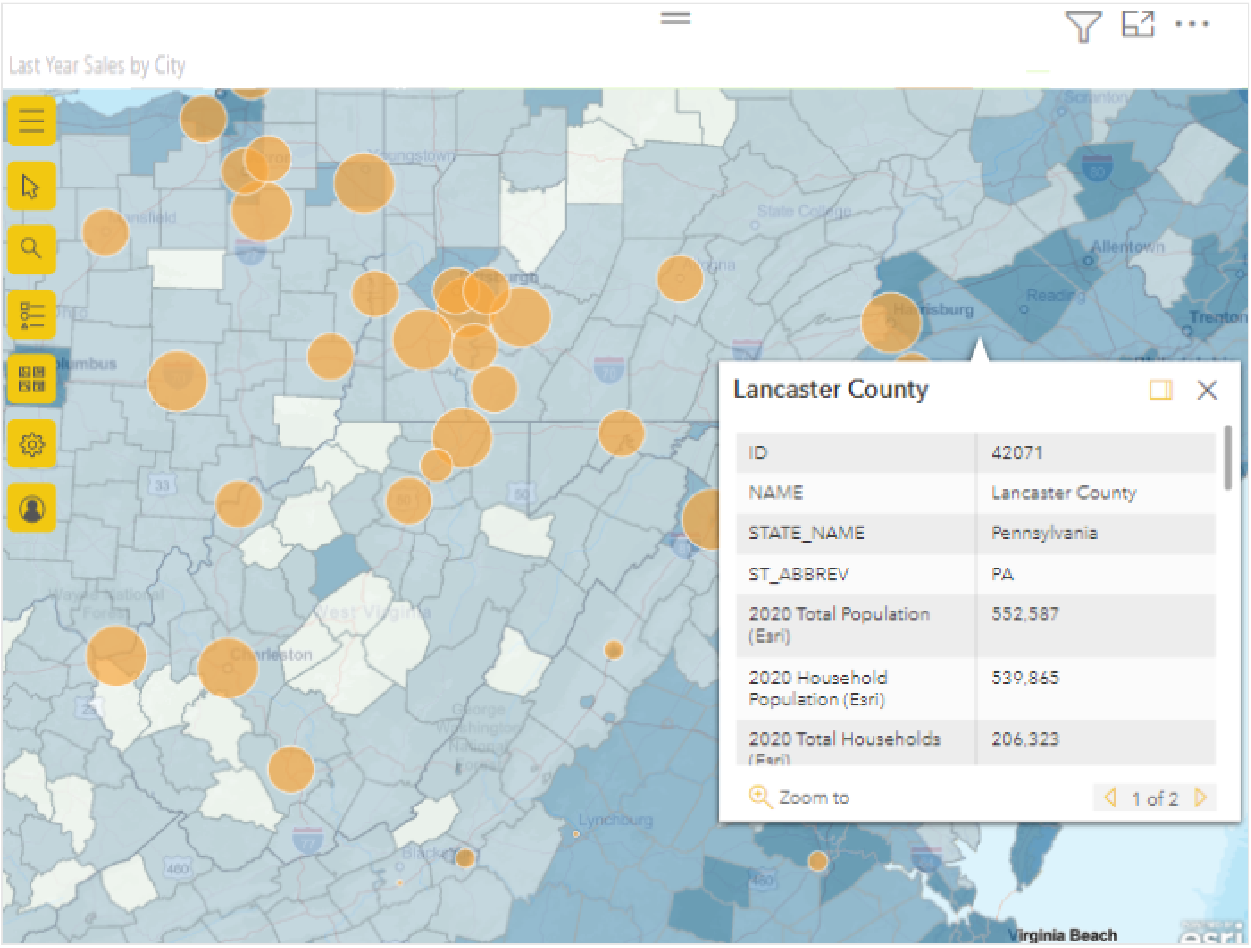
Interact with an ArcGIS map in Power BI

Article • 03/09/2023

This article describes different ways a business user can consume ArcGIS Maps in the Power BI service. ArcGIS Maps in Power BI is also available on Power BI Desktop and mobile. Once a creator shares an ArcGIS map with you, there are many ways to interact with that map. For more information, see Create ArcGIS maps in Power BI.

ArcGIS for Power BI is a map visualization used to enrich data, reports, and dashboards. ArcGIS for Power BI adds geographic, location, and regional demographic data, smart map themes, and analytic features such as drive time, infographics, and points of interest. Combining authoritative data layers on an ArcGIS for Power BI map with spatial analysis provides more complex insight onto your Power BI data.

For example, you can use ArcGIS for Power BI to provide regional insight into sales figures. The following ArcGIS map shows regional sales by size against a demographic layer of the 2020 Esri Diversity Index. An interactive tooltip for Lancaster County shows total population, household population, and total households for the selected area.



💡 **Tip**

To learn more, explore **Esri's Get Started page for the ArcGIS for Power BI visual**, or visit **Esri's Marketing site** to see examples and read testimonials. For training and documentation, see **Esri's online help**.

User consent

Here are some things you should know if this is your first time using ArcGIS for Power BI. ArcGIS Maps for Power BI is provided by Esri. Your use of ArcGIS Maps for Power BI is subject to Esri's terms and privacy policy. Power BI users wanting to use the ArcGIS Maps for Power BI visuals need to accept the consent dialog.

Interact with an ArcGIS map

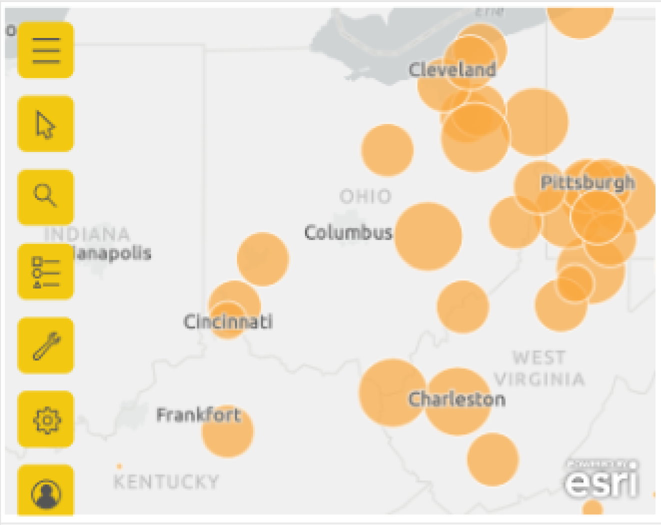
The features available depend on whether you're the report designer (person who made the map) or a business user (someone shared an ArcGIS map with you). If you're interacting with an ArcGIS map as a business user, you're more likely to use Reading view to consume ArcGIS Maps in the Power BI serve. Here are the actions available to you:

Action	Premium customer (with view permissions)	Power BI Pro customer
View the data used to create the visual	Y	Y
Subscribe for reports and dashboards	Y	Y
See the map in focus mode and full screen mode	Y	Y
View related content	Y	Y
Interact with the filters set by the report designer	Y	Y
Share the report	Y	Y
Export the underlying data	N	Y
Get usage metrics	N	Y
Publish to the web	N	Y
Save a copy	N	Y

Display the Map tools

When you first open an ArcGIS for Power BI map visualization in Reading view, the Map tools button is typically collapsed.

Select the map tools button to expand the tools.

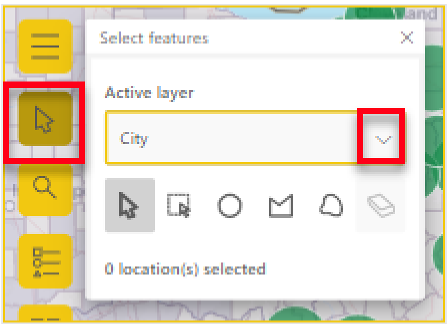


The map tools expand to show the available options. When selected, each tool opens a task pane that provides detailed options.

> **Tip**
>
> Esri provides **comprehensive documentation about using ArcGIS for Power BI**.

Select locations

There are multiple ways to select locations on the map. The options available depend on the type of layer selected. If the map contains more than one layer, the selection tool will apply the action to the active layer. A maximum of 250 data points can be selected at a time. For more information, see Select locations on the map.



Single select. This is the default tool. You can select individual data points and individual features.

Select by rectangle. With this tool, you can draw a rectangle on the map and select the contained data points and features. Use **CTRL** to add or remove selections.

Select by circle. With this tool, you can draw a circular shape on the map and select the contained data points and features. Use **CTRL** to add or remove selections.

Select by polygon. With this tool, you can draw boundaries or polygons within reference layers to select contained data points and features. Double-click your mouse to complete a selection. Use **CTRL** to enable snapping.

Select by freehand polygon. With this tool, you can draw a freehand shape on the map and select the contained data points and features. Use **CTRL** to add or remove selections.

Select by reference layer. This tool is only visible if there's a reference layer on the map and that reference layer is the active layer. Select features on the reference layer to highlight them. For more information, see Work with map layers—ArcGIS for Power BI.

Drive time select This tool is only visible if there's a search area layer (buffer or drive time area) on the map and the search area layer is the active layer. Draw to select data points and features within the defined area. For more information, see Find Nearby Locations.

The eraser tool. This tool clears all selections. It's only active after selections have been made on the map.

Pin a location

Pin a specific address, place, or point of interest on the map. In this example, we're looking for the Washington Monument.

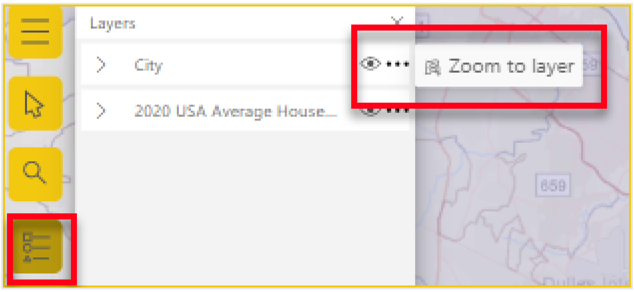
1. Expand the map tools and select the Search button to open the search pane.
2. Type the keywords **Washington Monument** in the search field. Keywords can include an address, place, or point of interest. As you type, recent searches or suggestions based on similar keywords appear.
3. From the results list, choose **Washington Monument, 2 15th St NW, Washington DC 20024 USA** and select **Close**. A symbol appears on the map, and the map automatically zooms to the location, pinning it during your session. Pins remain in place on the map only during the current session. You can't save a pinned location with the map. For more information, see Pin a location—ArcGIS for Power BI.

View, show, or hide layers

As a business user, you can show or hide a layer, change the sequence in which a layer is shown, and zoom to a layer's data boundaries. To view your map's layers, follow these steps:

Expand the map tools and select the Layers button to open the **Layers** pane.

- To hide a layer, select the **Hide** button.
- To show a hidden layer, select the **Show** button .
- To change the sequence in which a layer is shown on the map, for example, to display a Demographic reference layer on top of the data layer, drag the reference layer to the top of the list of layers in the **Layers** pane.
- To zoom to the extent of the layer's data boundaries, select **More options (...)** and select **Zoom to layer**.



You can also use the **Filters** pane to filter layer content on your ArcGIS for Power BI map based on the available data added by the report designer.

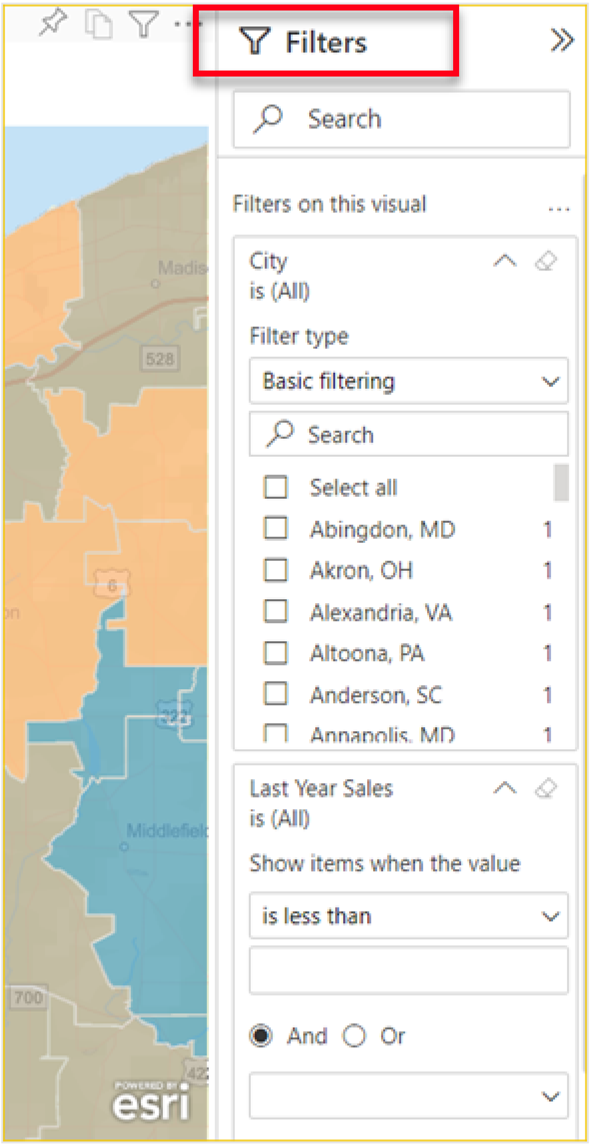
> **Note**
>
> If you find that you can't perform these tasks, it may be that the report designer has disabled these features. Contact the report designer if you have questions.

For more information about working with layers, visit Work with map layers—ArcGIS for Power BI .

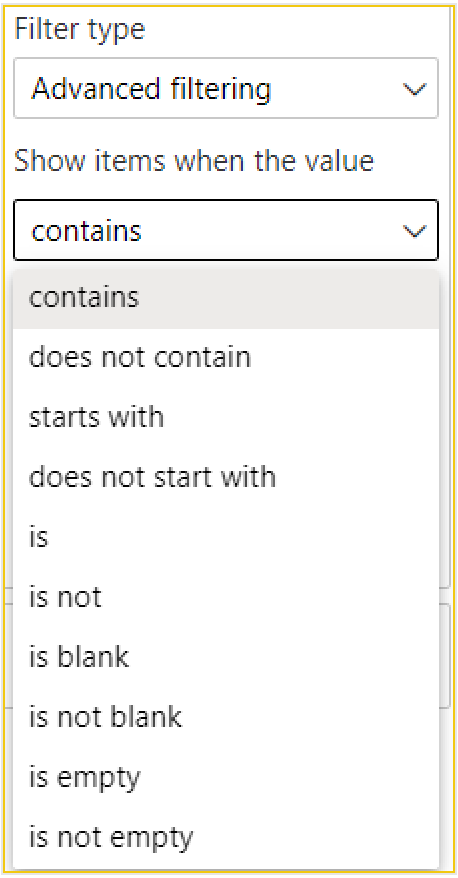
Filter map layers

The **Filters** pane contains data added by the report designer. There are many different ways to filter your map content.

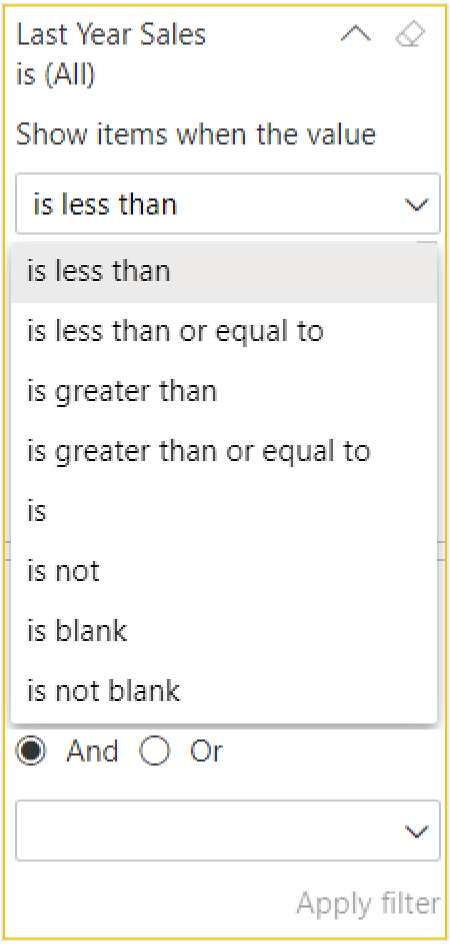
1. Expand the **Filters** pane to the right of the map visualization.



2. Select fields to filter the map. Use **Basic filtering**, to choose from data shown on the map. Use **Advanced filtering** to narrow content by specific parameters.



3. Some filters have value parameters (Boolean) available.



4. When you've selected your filter options, select **Apply filter**. The map is filtered by your selections.

Change the basemap

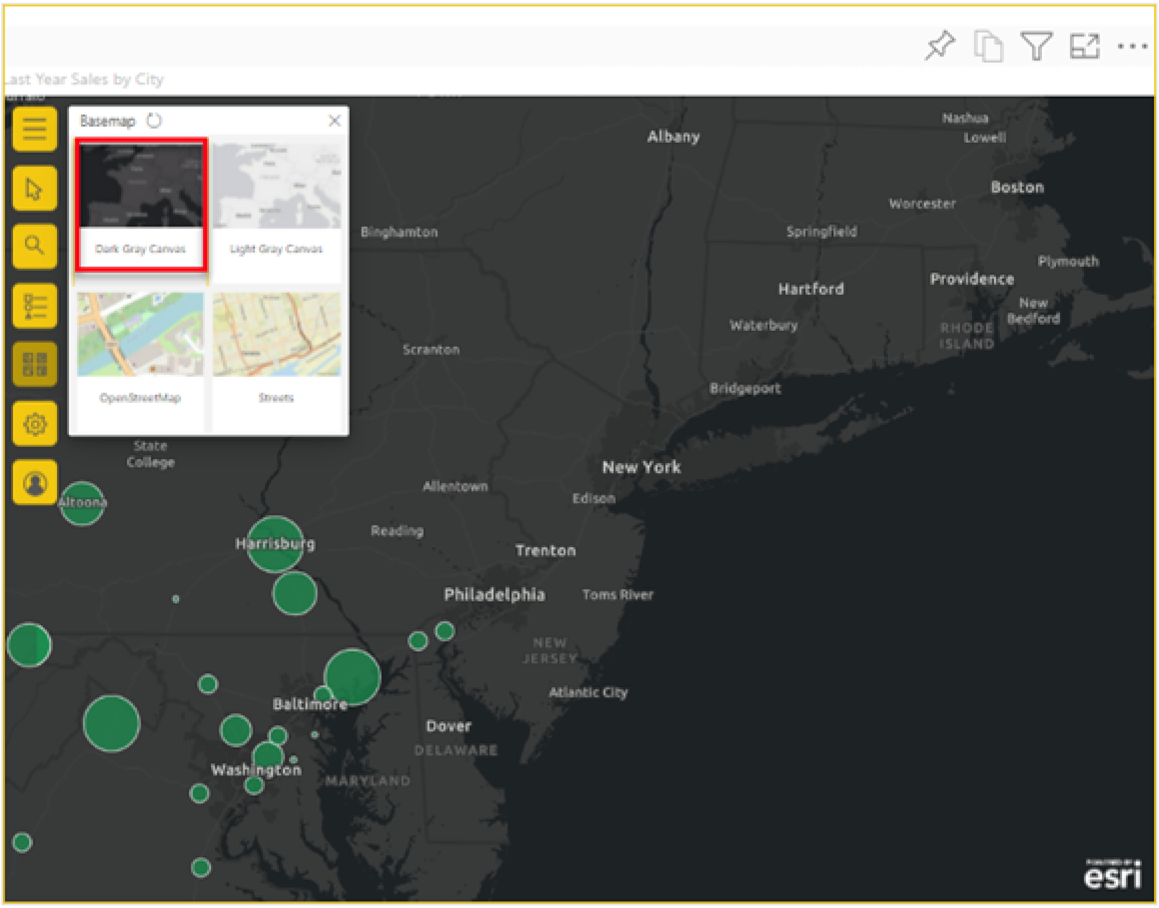
A basemap provides a background, or visual context, for the data in a map. For example, a basemap that shows streets can provide context for address data. As a Power BI business user, there are four basemaps provided: Dark Gray Canvas, Light Gray Canvas, OpenStreetMap, and Streets.

> ⓘ **Note**
>
> For access to basemaps, the report designer must make them available when designing the report. If the basemaps are unavailable, you will not see the **Basemap** button in the Map tools.

To change the basemap, follow these steps:

1. Expand the map tools and select the **Basemap** button to display the gallery of available basemaps.

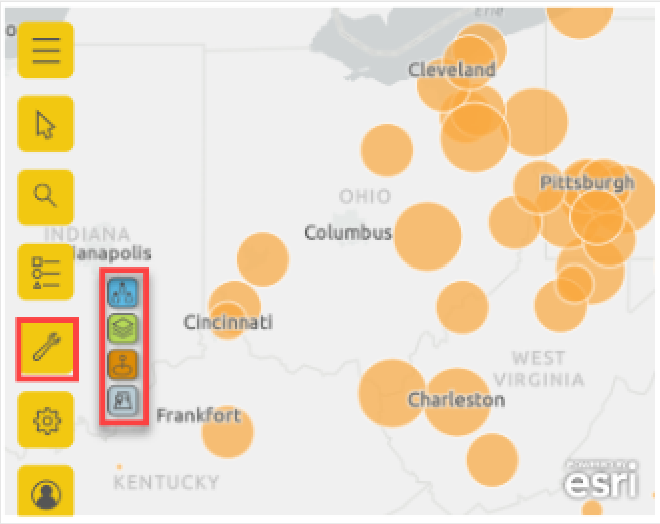
2. Select the **Dark Gray Canvas** basemap.



3. The map updates to the new basemap. For more information, see [Change the basemap—ArcGIS for Power BI](#).

Select Analysis tools

This tool option appears only if the report designer includes data to perform a Find Similar analysis. For more information on the features of the Analysis tools, see Create ArcGIS in Power BI.



Infographics. With this tool, you can provide interactive cards with specific details about the areas on the map.

Reference Layer. With this tool, you can add a demographic layer to help contextualize your data from Power BI or add a reference layer from ArcGIS to enrich your data.

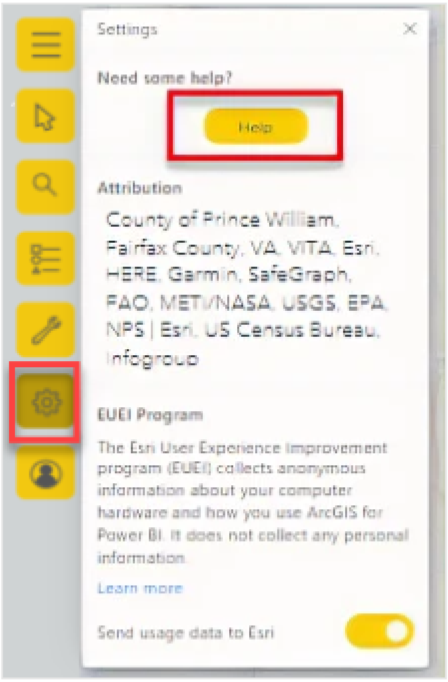
Buffer/Drive time. With this tool, you can find locations on your map within a specific distance, or ring buffer, of the point of origin.

Find similar. With this tool, you can quickly identify locations with attributes comparable to those locations currently selected on the map.

Get help

Esri provides comprehensive online documentation for ArcGIS for Power BI. To access the ArcGIS for Power BI online help from the visualization, follow these steps:

1. Expand the map tools and select the **Settings** button .
2. In the **Settings** pane, select the **Help** button.



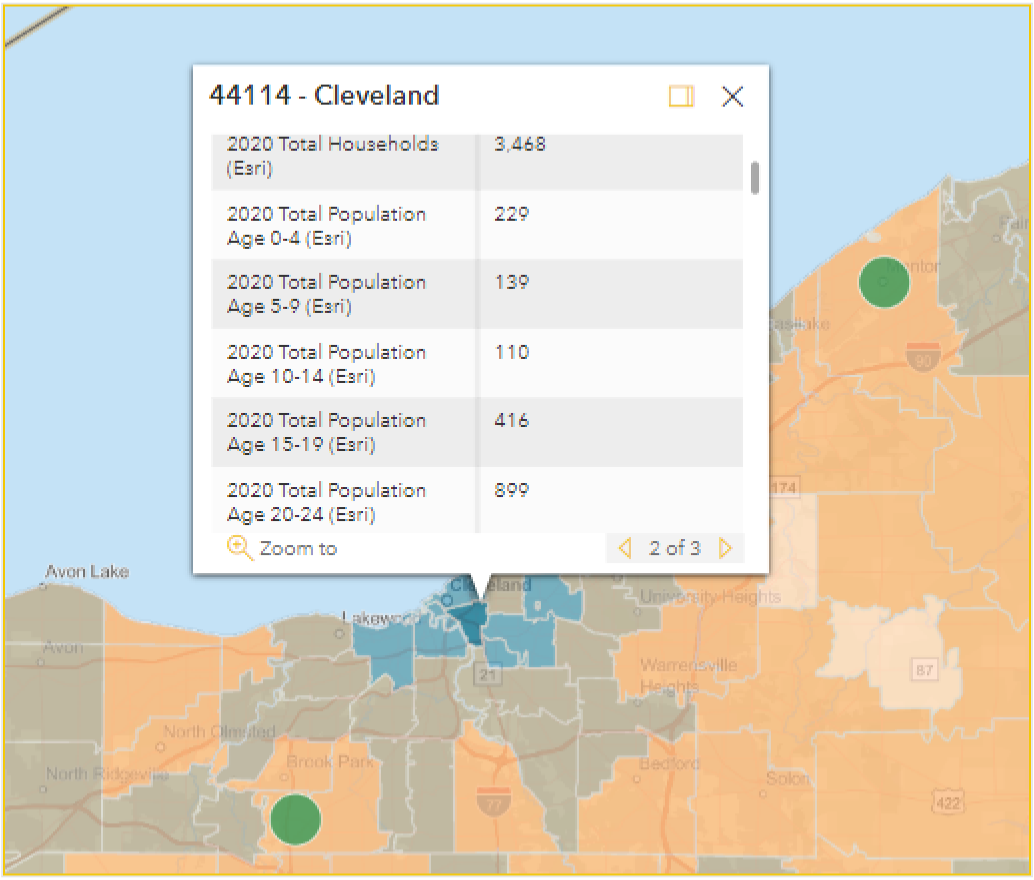
3. Select **OK** in the confirmation window that appears. The ArcGIS for Power BI online help opens in a browser window. Then you can:

   - Find answers to frequently asked questions about ArcGIS for Power BI.
   - Report issues, find the latest information, ask questions, and find answers on the Power BI community thread related to ArcGIS for Power BI.
   - Suggest improvements by submitting it to the Power BI Ideas list.

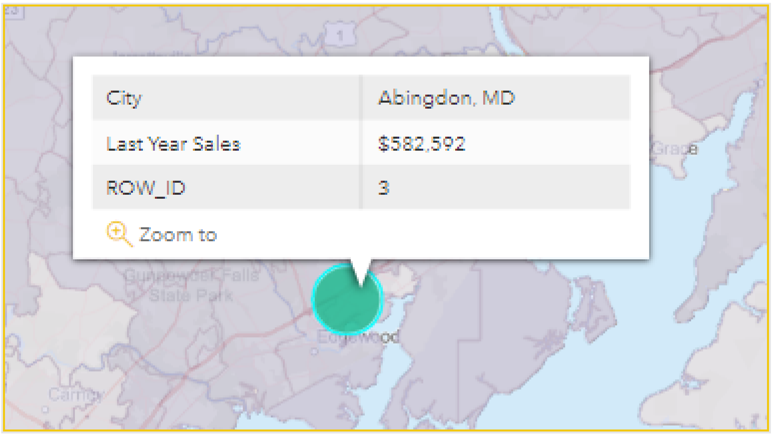
On the **Settings** pane, you can also view attribution for your map, read about the Esri EUEI (End User Experience) program, and turn **Send usage data** to Esri on or off.

Use tooltips

If the map has a reference layer and the report designer has added tooltips, you can select a location to display its details. The following example shows a tooltip for the **Cleveland, Ohio, 2020 Total Population** broken down by five-year age increments.

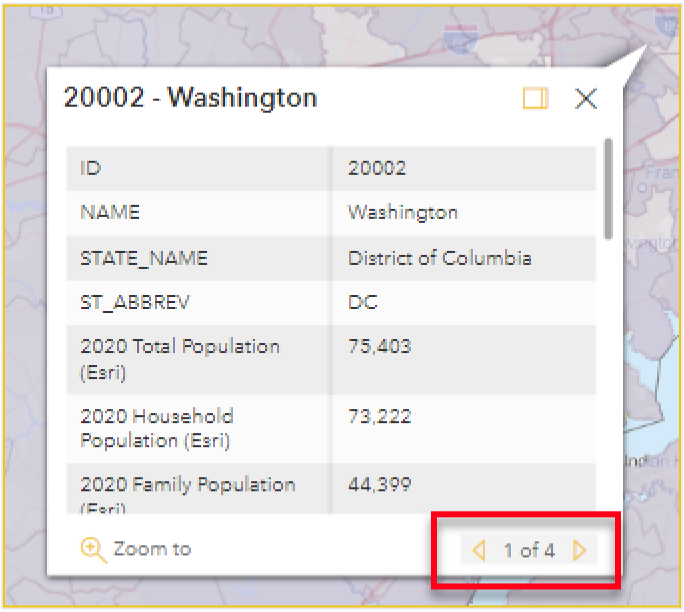


Hover your pointer over basemap location symbols to display symbol details in a tooltip.



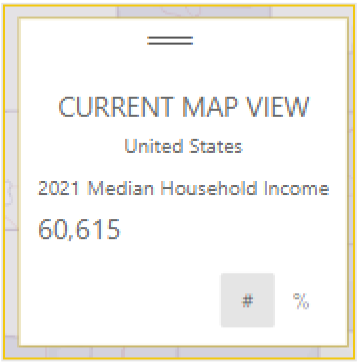
💡 **Tip**

You might have to zoom in to select a specific location. If there are overlapping locations, Power BI will present you with more than one tooltip at a time. Select the arrows to move between the tooltips.



Use infographics

If the report designer adds an Infographics layer to the ArcGIS map, you'll see additional data displayed in the upper right corner of the map. Here's an example where the report designer added the **2021 Median Household Income**.



Considerations and Limitations

ArcGIS Maps for Power BI is available in the following services and applications:

Service/Application	Availability
Power BI Desktop	Yes
Power BI service (app.powerbi.com)	Yes
Power BI mobile applications*	Yes

Service/Application	Availability
Power BI publish to web	Yes, for designers signed in to a valid licensed ArcGIS account.
Power BI Embedded	Yes, for designers signed in to a valid licensed ArcGIS account.
Power BI service embedding (powerbi.com)	No
Power BI Report Server	Yes, when signed into a valid ArcGIS Enterprise account through Report Server (online environment only). Not supported in a disconnected environment or with ArcGIS Online. Accessing Report Server with ArcGIS for Power BI consumes ArcGIS credits. For more information about credits, see Understand credits

*In mobile environments, you can view maps created using the ArcGIS for Power BI visualization included with Power BI (Standard account). Maps that contain premium content from ArcGIS aren't supported in mobile environments.

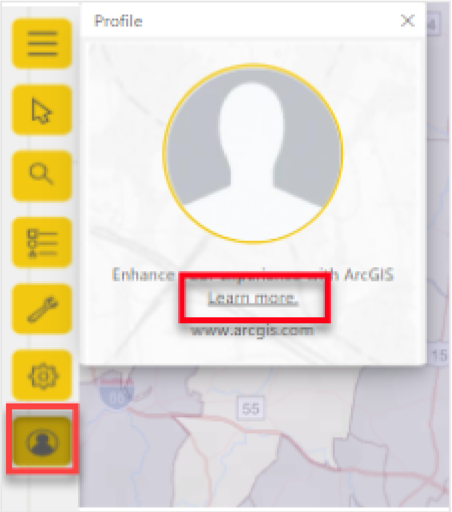
In services or applications for which ArcGIS for Power BI isn't available, ArcGIS visualizations will show as an empty visual with the Power BI logo.

How do ArcGIS Maps for Power BI work together?

ArcGIS Maps for Power BI is provided by Esri. When you provide your consent, any data you use that is connected to the map visualization is sent to Esri's services for geocoding. This means that location information is transformed into latitude and longitude coordinates that can be represented on a map. Through ArcGIS for Power BI, Esri provides services to enrich your data. These include basemaps, spatial analytics, location services, demographic data, and other authoritative data layers. ArcGIS for Power BI interacts with Power BI using an SSL connection protected by a certificate provided and maintained by Esri. For more information about ArcGIS Maps for Power BI, see Esri's ArcGIS Map for Power BI product page.

What is an ArcGIS account?

Esri offers an Esri ArcGIS account through ArcGIS for Power BI. Adding an ArcGIS account to Power BI can greatly enhance your mapping visualization capabilities by adding an extensive library of data reference layers and geo enrichment.



Power BI doesn't send personal information about you to Esri. This is a separate relationship with a third-party vendor. Once you add ArcGIS account content to your ArcGIS for Power BI visualization, you'll have access to all the Esri content and data associated with your account, role, and organization. Any other Power BI user with whom you share that data-whether within your organization or the public-might also need an ArcGIS account to view shared, potentially licensed content. For details about account types and data limitations, see ArcGIS for Power BI online help.

For technical or detailed questions about ArcGIS for Power BI, see ArcGIS for Power BI get started or reach out to Esri Technical Support.

The following table compares the standard features available to all Power BI users to those features available to users signed in to a valid, licensed ArcGIS account.

Feature	Standard, included with Power BI	Requires ArcGIS account
Basemaps	Four basic basemaps	All Esri basemaps, access to your organization's basemaps, custom basemaps.
Geocoding	3,500 locations per map, 10,000 locations per month	10,000 locations per map, no monthly limit
Reference layers	10 curated reference layers that contain U.S. demographic data and publicly shared feature layers in ArcGIS	Access to all global web maps and layers as defined by your ArcGIS organization or account. This includes access to ArcGIS Living Atlas of the World maps and layers (feature services) and publicly shared feature layers in ArcGIS.

Feature	Standard, included with Power BI	Requires ArcGIS account
Infographics	A curated gallery of U.S. demographic data variables, a maximum of two variables, support for drive time and radius settings	Access to all global demographic data variables as defined by your ArcGIS organization or account. This includes access to the ArcGIS GeoEnrichment data browser, a maximum of five variables, and support for all distance and travel settings.

The ArcGIS map is not showing up

In services or applications where ArcGIS Maps for Power BI isn't available, the visualization will show as an empty visual with the Power BI logo.

I'm not seeing all of my information on the map

When geocoding latitude and longitude on the map, up to 30,000 data points are displayed. When geocoding data points such as zip codes or street addresses, only the first 15,000 data points are geocoded. Geocoding place names or countries/regions aren't subject to the 15,000 address limit.

Is there any charge for using ArcGIS Map for Power BI?

ArcGIS Maps for Power BI is available to all Power BI users at no extra cost. It's a component provided by **Esri**, and your use is subject to the terms and privacy policy provided by **Esri**, as noted earlier in this article. If you sign up for an Esri ArcGIS account, there are costs associated.

I'm getting an error message about my cache being full

This is a bug that is being addressed. In the meantime, select the link in the error message for instructions on clearing your Power BI cache.

Can I view my ArcGIS maps offline?

No, Power BI needs network connectivity to display the maps.

Next steps

- Get started: Esri documentation and tutorials for ArcGIS for Power BI.
- More questions? Try asking the community thread related to **ArcGIS Maps for Power BI**.
- ArcGIS Map for Power BI product page

Paginated reports in the Power BI service

Article • 03/17/2023

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

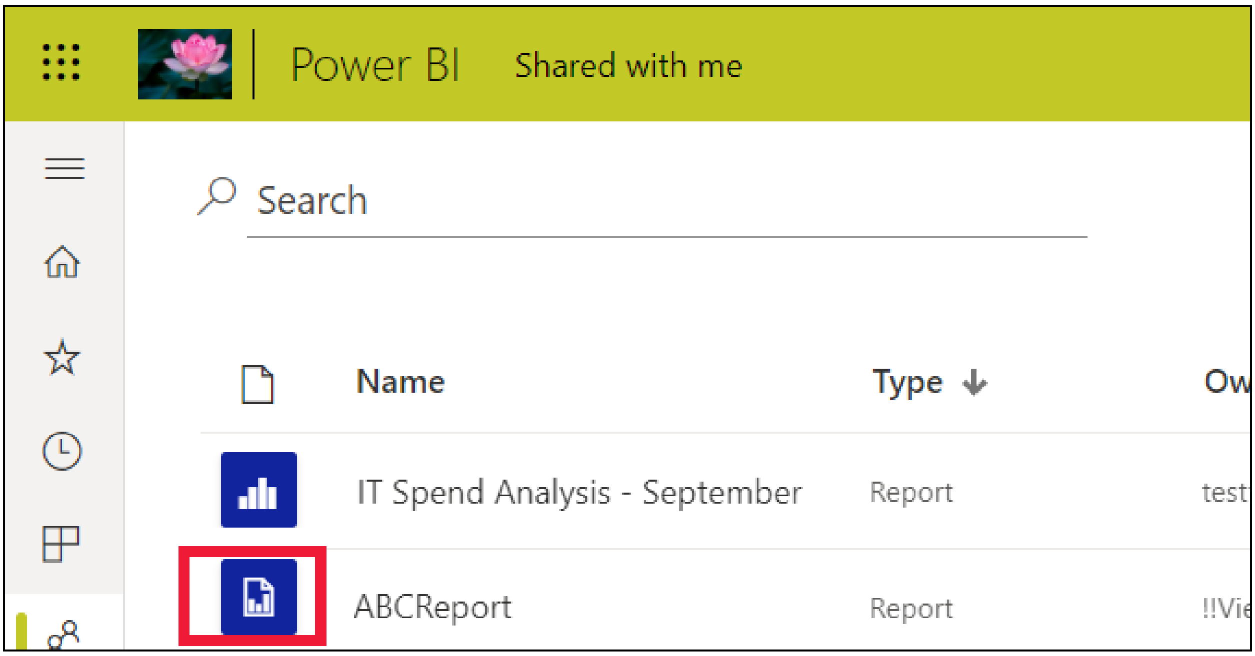
There are two types of reports available on Power BI, Power BI reports and *paginated reports*.

Power BI reports are optimized for exploration and interactivity. A sales report where different salespeople want to slice the data in the same report for their specific region/industry/customer and see how the numbers change would be best served by a Power BI report.

Paginated reports are well suited for viewing reports as pages, printing as PDF, exporting to Excel, or generating documents. A sales detail report where you want to see row-level detail data for specific region/industry/customer and perhaps export it to Excel or print as accessible PDF would be best served by a paginated report.

Identify a paginated report

In content lists and on your Home landing page, paginated reports can be identified by their icon . A paginated report can be shared with you directly, or as part of a Power BI app. If the report *designer* gave you permissions, you'll be able to re-share the paginated report and subscribe yourself and others.



What is a paginated report?

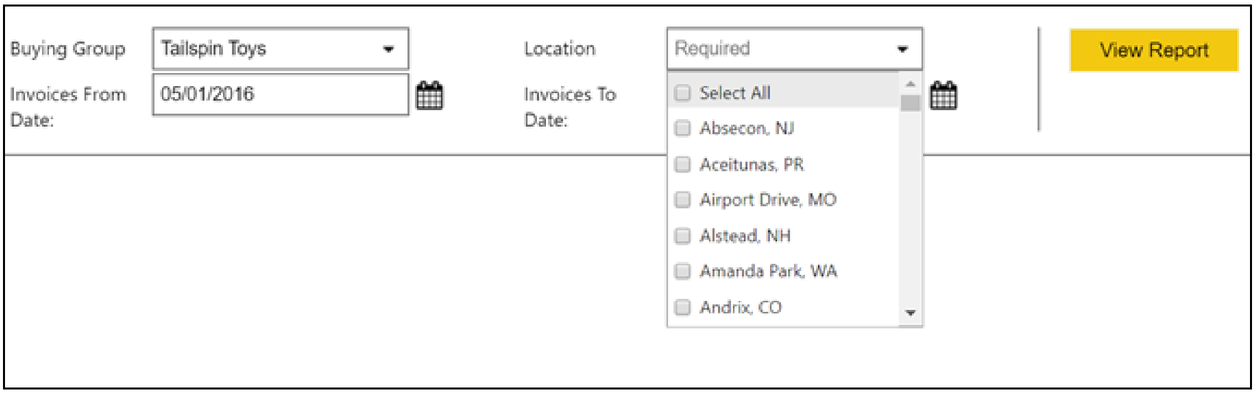
These reports are called *paginated* because they're formatted to fit well on a printed page. One advantage is that they display all the data in a table, even if the table spans multiple pages. Report *designers* can control the report page layout exactly.

Paginated reports are best for scenarios that require a highly formatted, pixel-perfect output optimized for printing or PDF generation. A profit and loss statement is a good example of the type of report you would probably want to see as a paginated report.

How do paginated reports work?

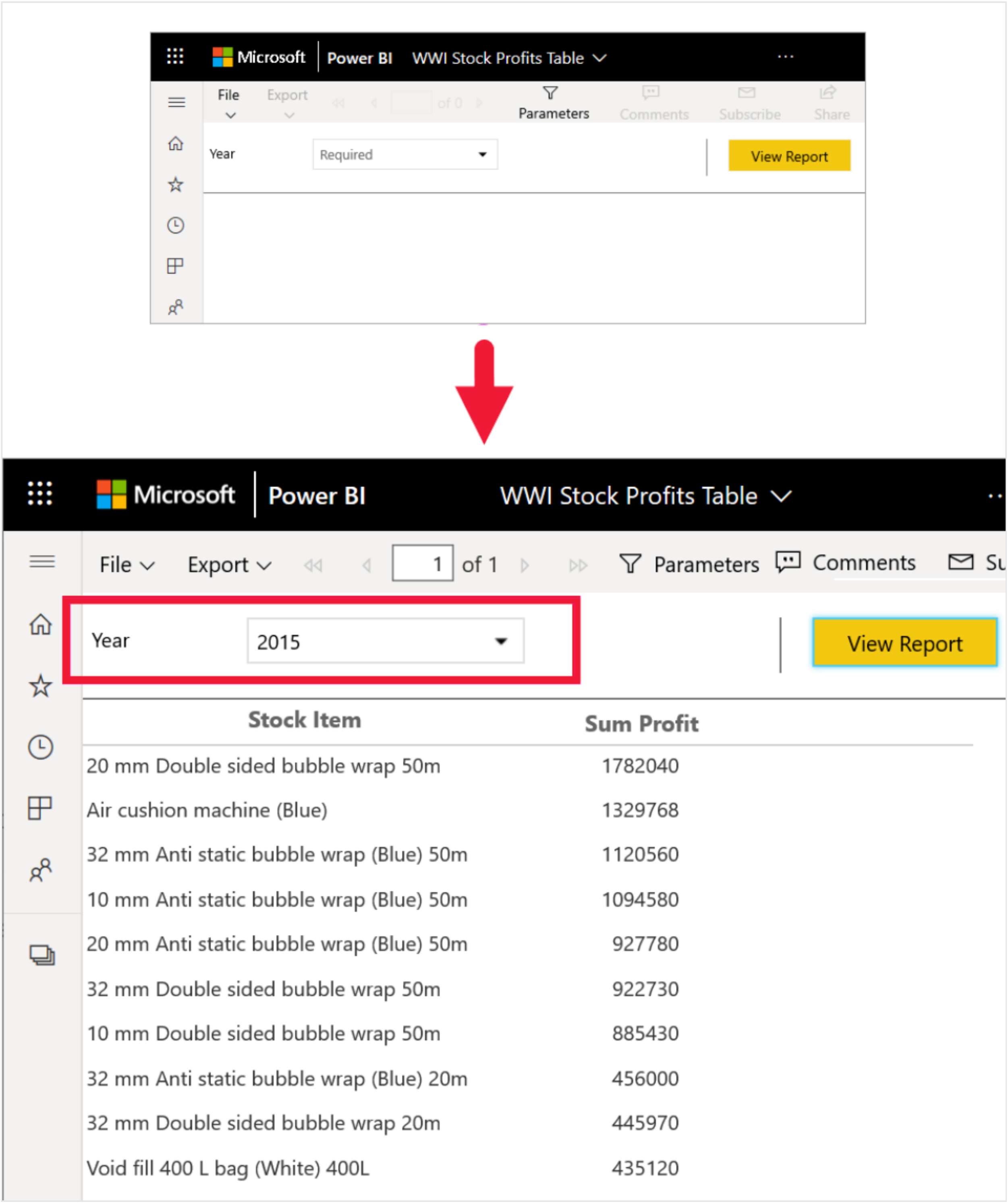
When report *designers* create a paginated report, they're really creating a *report definition*. It doesn't contain the data. It specifies where to get the data, which data to get, and how to display the data. When you run the report, the report processor takes the report definition, retrieves the data, and combines it with the report layout to generate the report. Sometimes, the report displays default data. Other times you need to enter parameters before the report can display any data.

Select a paginated report to open it in the Power BI service. If it has parameters, you need to select them before you can view the report.



And that's typically the extent of the interaction - setting the parameters. If you're a billing analyst, you might use paginated reports to create or print invoices. If you're a sales manager, you might use paginated reports to view orders by store or sales person.

This simple paginated report generates profit by year after you select the **Year** parameter.



Compared to paginated reports, Power BI reports are much more interactive. Power BI reports allow for ad hoc reporting, and support more types of visuals, including custom visuals.

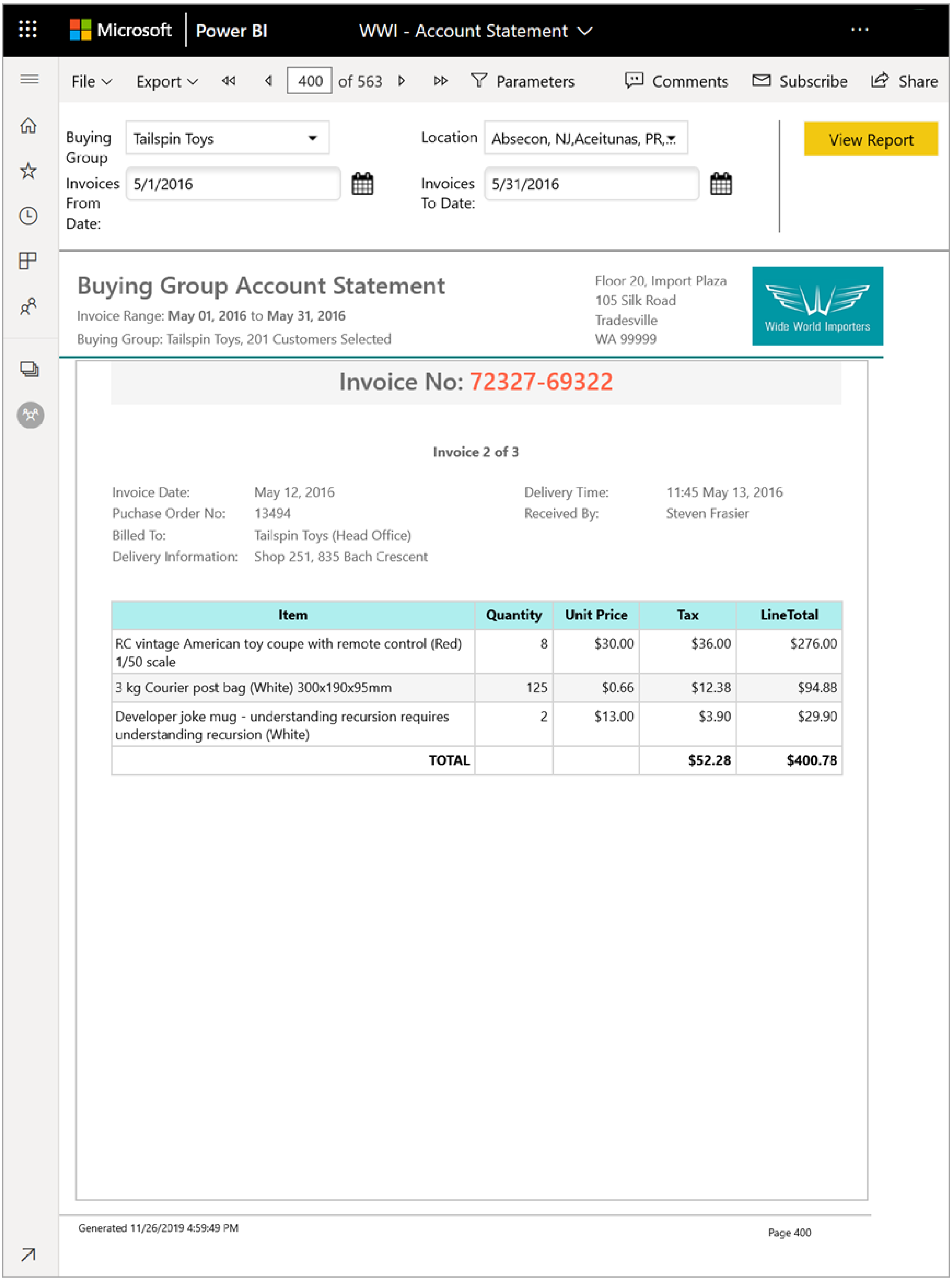
Interact with a paginated report

The way you interact with a paginated report is different from other reports. You can do things like print, bookmark, export, and comment, but there's less interactivity. Often, paginated reports require input from you to populate the report canvas. Other times the report displays default data and you can enter parameters to see different data.

Print a paginated report

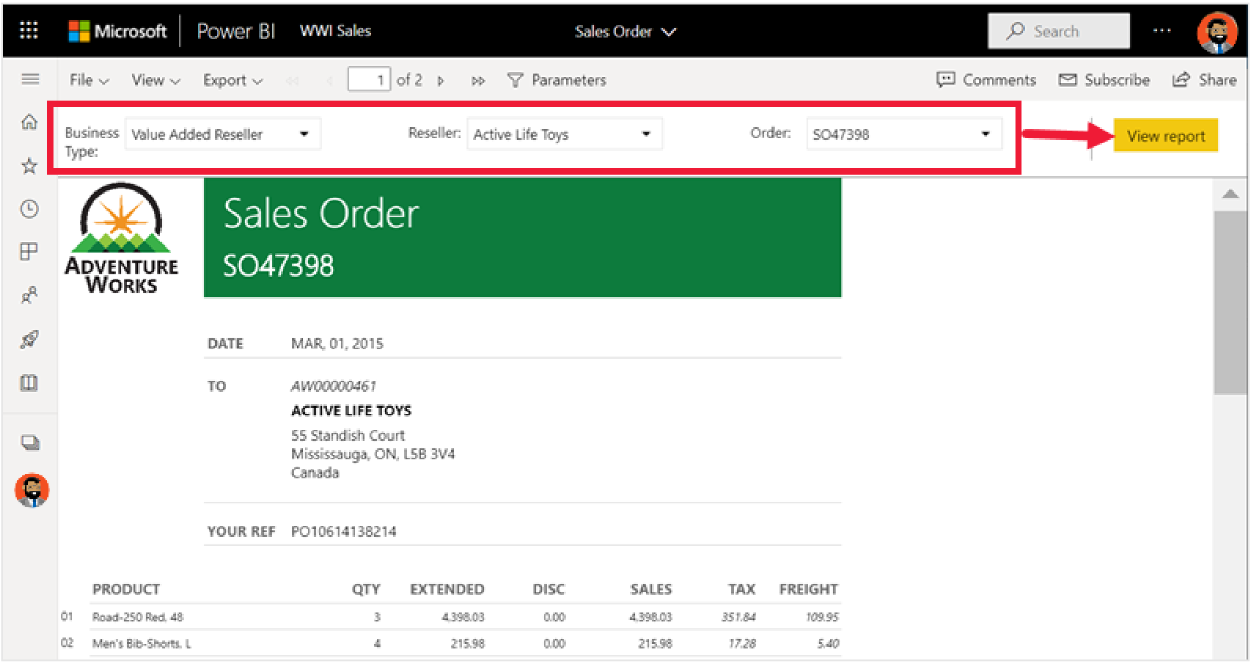
Paginated reports are formatted to fit well on a page and to print well. What you see in the browser is what you see when you print. Plus, if the report has a long table, the entire table prints, even if it spans multiple pages.

Paginated reports can have many pages. For example, this report has 563 pages. Each page is laid out exactly, with one page per invoice and repeating headers and footers. When you print this report, you'll get page breaks between invoices.

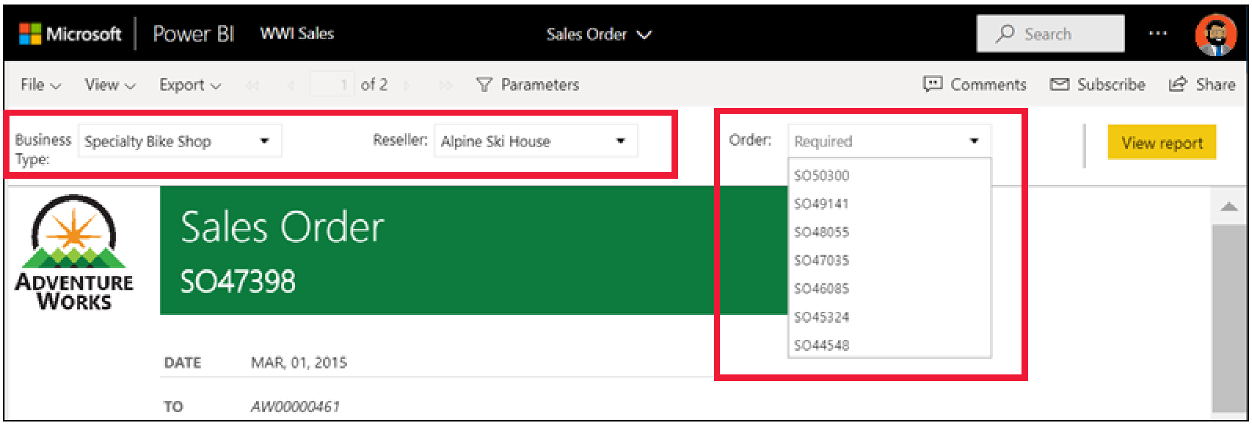


Navigate the paginated report

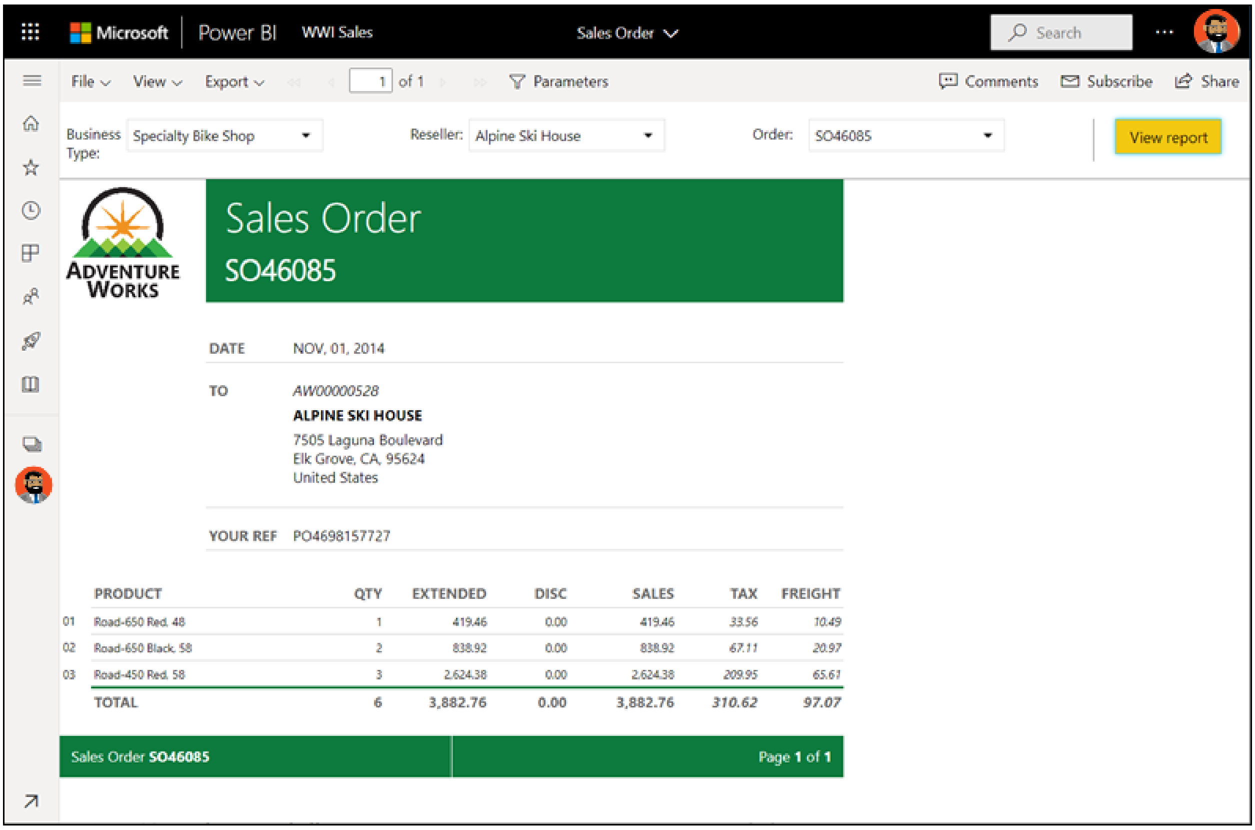
In this sales order report, there are three parameters: Business type, Reseller, and Order number.



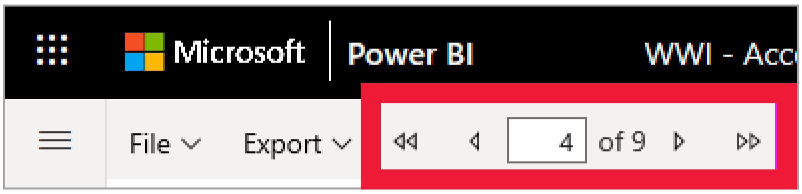
To change the information shown, enter new values for the three parameters and select **View report**. Here, we've selected **Specialty bike shop**, **Alpine Ski House**, and order number **SO46085**. Select **View report** to refresh the report canvas with the new sales order.



The new sales order shows the parameters we selected.

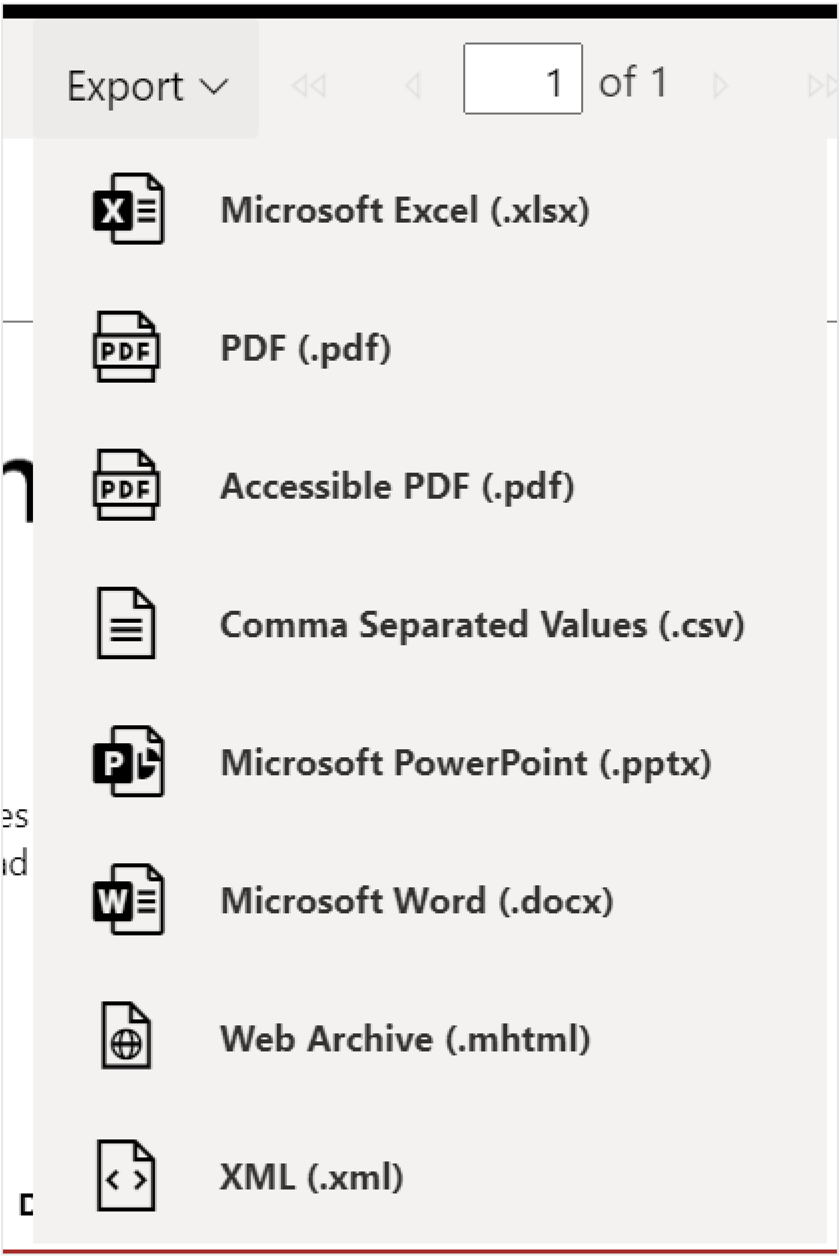


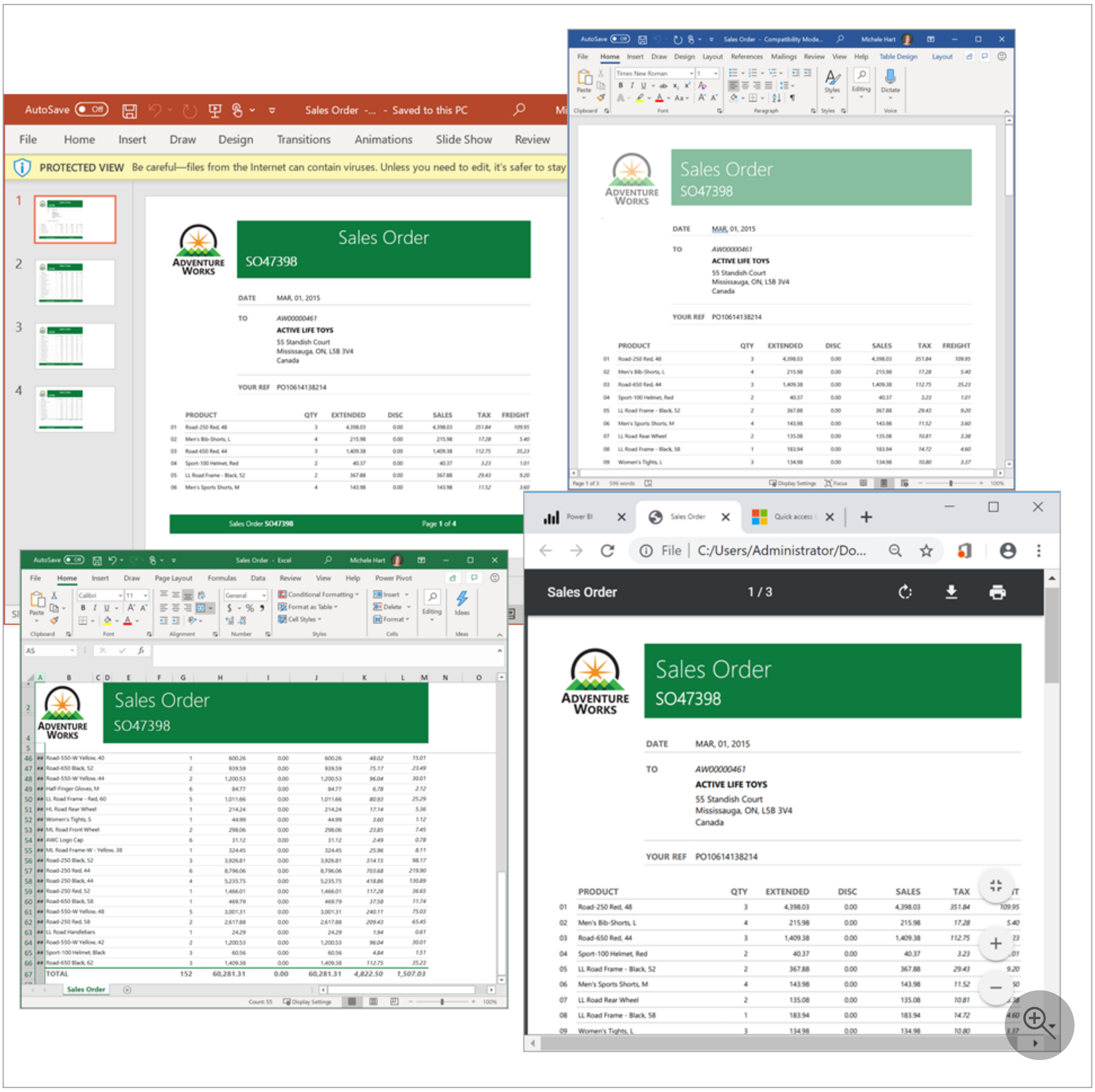
Some paginated reports have many pages. Use the page controls to navigate through the report.



Export the paginated report

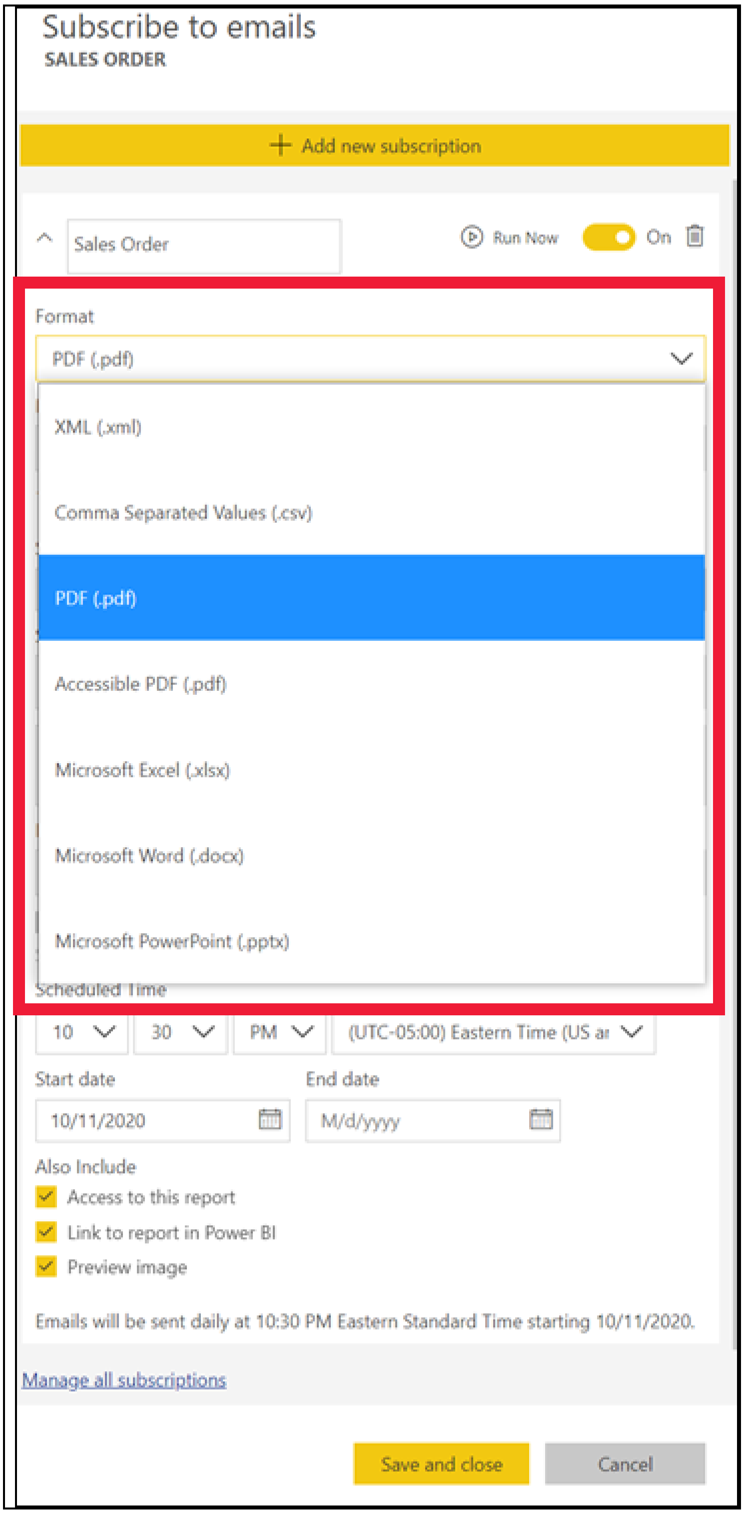
You have a variety of options for exporting paginated reports, including PDF, Word, XML, PowerPoint, and Excel. When you export, as much of the formatting as possible is preserved. Paginated reports exported to Excel, Word, PowerPoint, MHTML, and PDF, for example, keep their formatting.


Export
1
of 1
Microsoft Excel (.xlsx)
PDF (.pdf)
Accessible PDF (.pdf)
Comma Separated Values (.csv)
Microsoft PowerPoint (.pptx)
Microsoft Word (.docx)
Web Archive (.mhtml)
XML (.xml)



Subscribe to the paginated report

When you subscribe to a paginated report, Power BI sends you an email with the report as an attachment. When you set up your subscription, you choose how often you want to receive the emails: daily, weekly, hourly, or monthly. The subscription contains an attachment of the entire report output, up to 25MB in size. Export the entire report, or choose the parameters ahead of time. Choose from many attachment types, like Excel, PDF, and PowerPoint.



Considerations and troubleshooting

- A paginated report can appear blank until you select parameters and choose **View report**.
- If you don't have any paginated reports, check out these sample paginated reports that you can import to your workspace.

Next steps

- Power BI reports
- Paginated reports in Power BI: FAQ
- More questions? Try the Power BI Community .

View a paginated report in the Power BI service

Article • 01/09/2024

In this article, you learn about viewing a paginated report in the Power BI service. Paginated reports are reports created in Report Builder. They can be uploaded to any Power BI workspace.

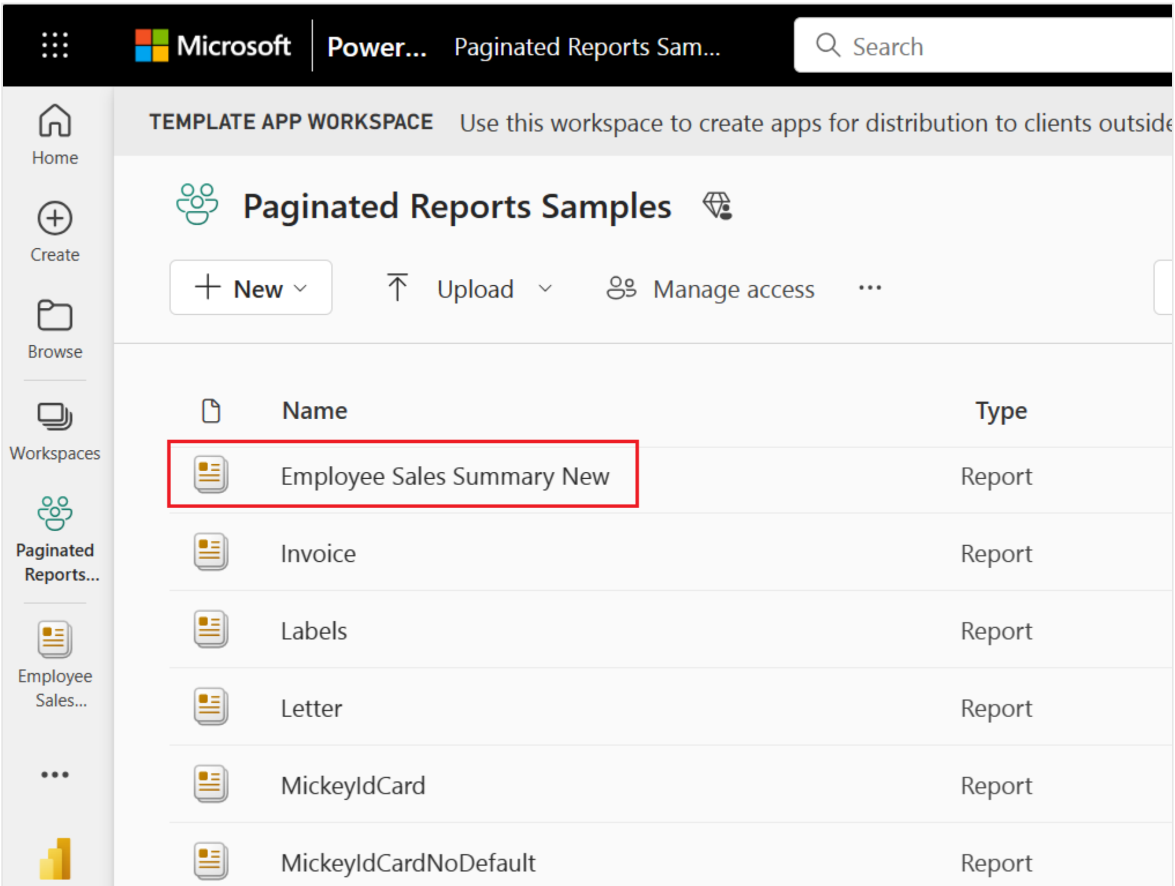
Paginated reports have their own icon  .

You can also export paginated reports to many formats:

- Microsoft Excel
- Microsoft Word
- Microsoft PowerPoint
- PDF (and Accessible PDF, or PDF/UA)
- Comma-separated values
- XML
- Web archive (.mhtml)

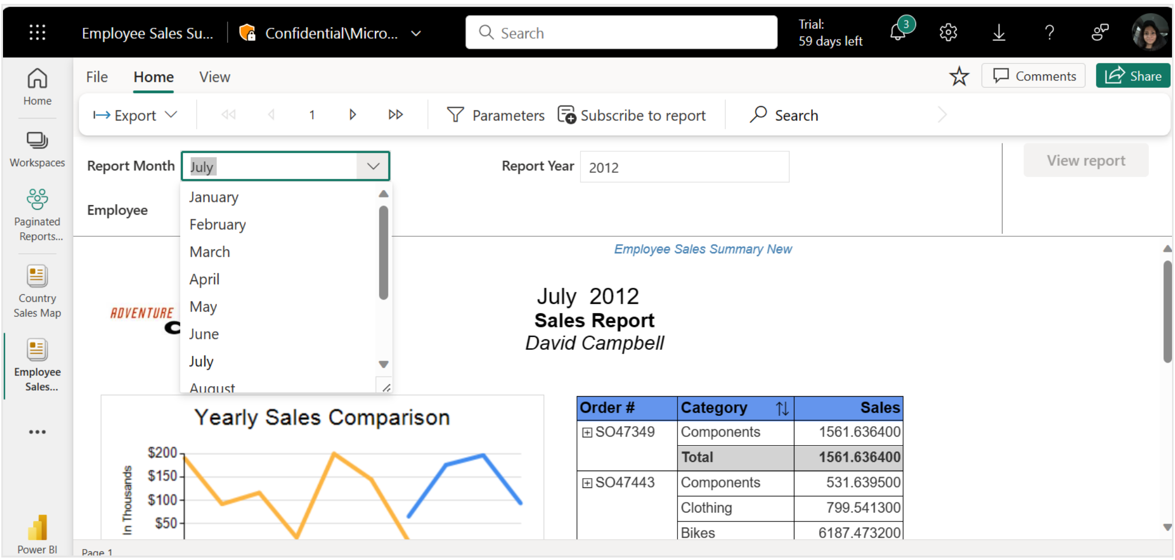
View a paginated report

1. Open the Power BI service, then select the paginated report in the workspace.



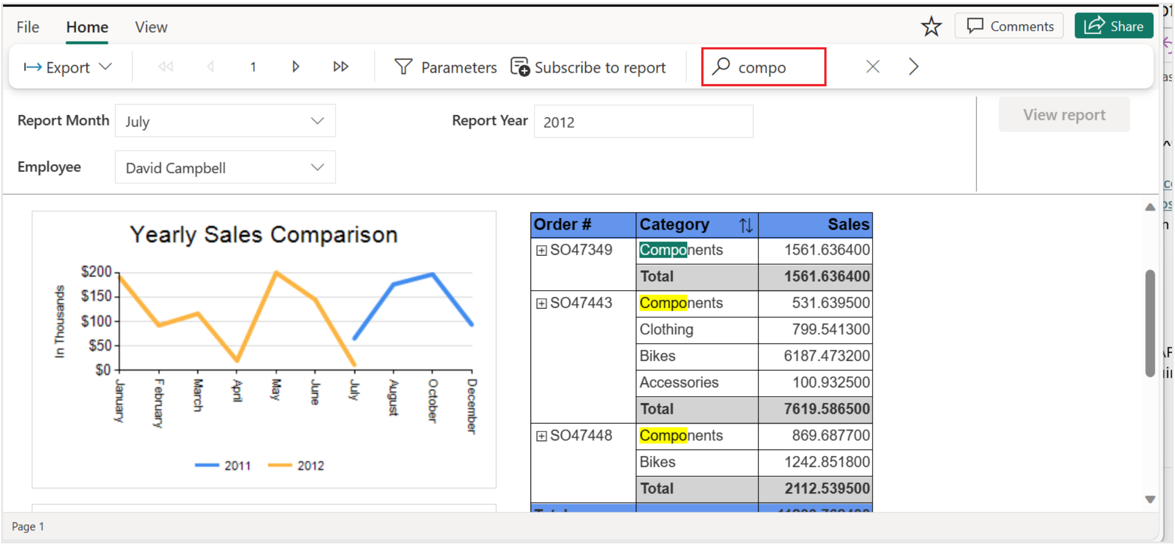
2. If the report has **Required** parameters, they won't appear when you first open it. Select **Parameters**, then select **View Report**. You see a notification of the fields required to open the report. You can change the parameters at any time.

   The following example shows a report with a parameter that requires you to select a month.

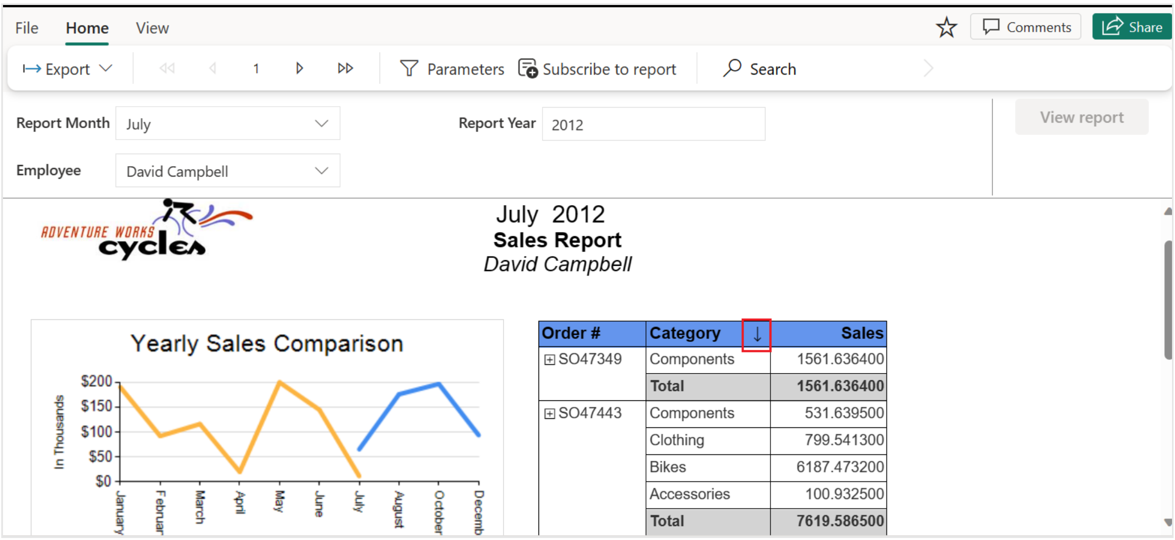


3. When you have a multiple-page report, use the page through feature. You can use the arrows at the top of the page or type a page number in the box. The following example shows where to find the page through feature.

4. To **Search**, type all or part of the content you're looking for in the report. You're searching for the content across all the pages of the report.



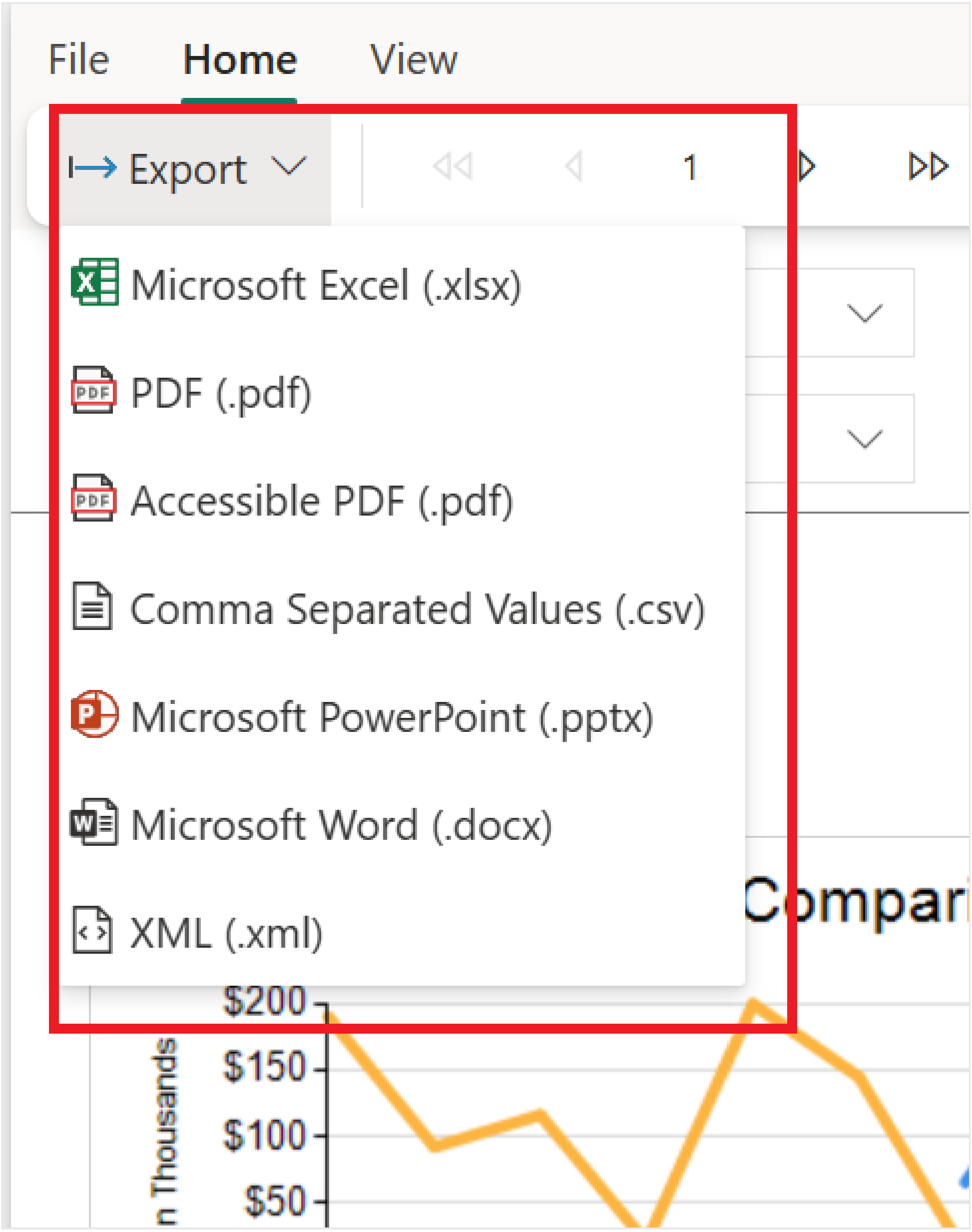
5. You can also sort by selecting the **sort** icon on the report.



ⓘ **Note**

The report author may have limited sorting for reports created in Power BI Report Builder. You have to update sort in Power BI Report Builder to be able to sort on all columns on the Power BI service.

6. To export your report to a different format, select **Export**. Then choose the format you want to use from the dropdown menu.



Considerations and limitations

- You can only search and sort in "Web layout."
- Search doesn't work if there are over 300 rows per page.
- Sort:
  - You can only sort on one column at a time.
  - If a report was created in the service before December 2023, you have to edit the report for sorting to be available during consumption.

Next steps

Paginated reports in the Power BI service

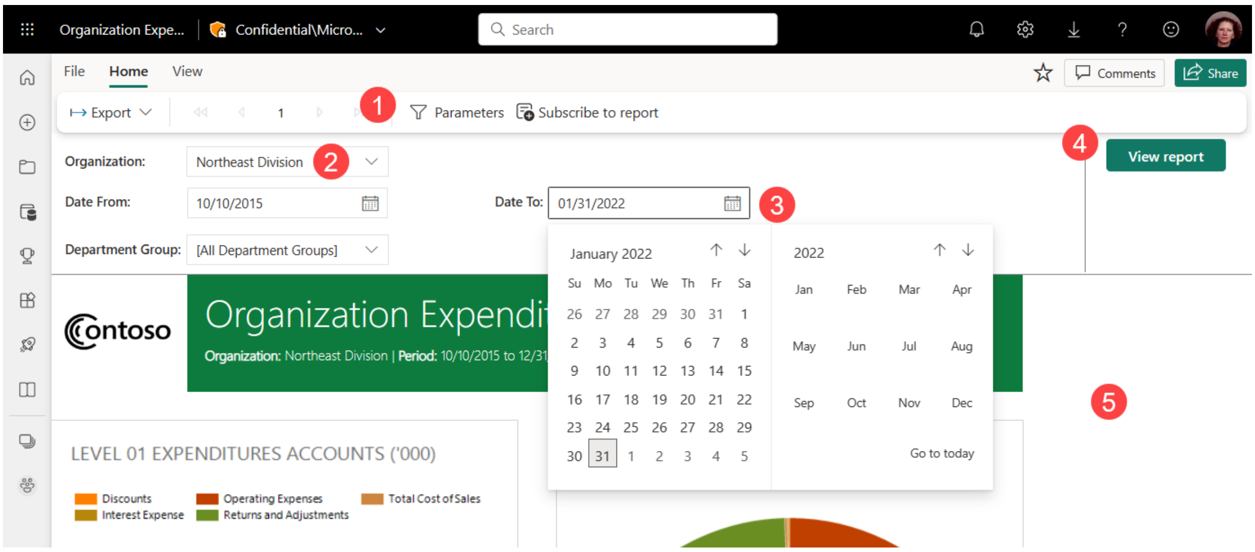
View parameters for paginated reports in the Power BI service

Article • 03/17/2023

In this article, you learn how to interact with parameters for paginated reports in the Power BI service. A report parameter provides a way to filter report data. Parameters offer a list of available values. You can choose one or many values, or type in a parameter text box to search for values. Sometimes parameters have a default value, and sometimes you have to choose a value before you see the report.

When you view a report that has parameters, the report viewer toolbar displays each parameter so you can interactively specify values. The following illustration shows the parameter area for a report with parameters for **Buying Group**, **Location**, a **From Date**, and a **To Date**.

Parameters pane in the Power BI service



1. **Parameters pane** Select **Parameters** to show or hide the Parameters pane.

2. **Organization parameter** The Organization parameter is set to allow you to select only one value.

3. **Date From / Date To parameters** The two date parameters have default values. To change the date, type a date in the text box, choose a date in the calendar, or select **Go to today**.

4. **View Report** After you enter or change parameter values, select **View Report** to run the report.

5. **Default values** If all parameters have default values, the report runs automatically on first view. The parameters in this report have default values, so you see the report with those values.

Next steps

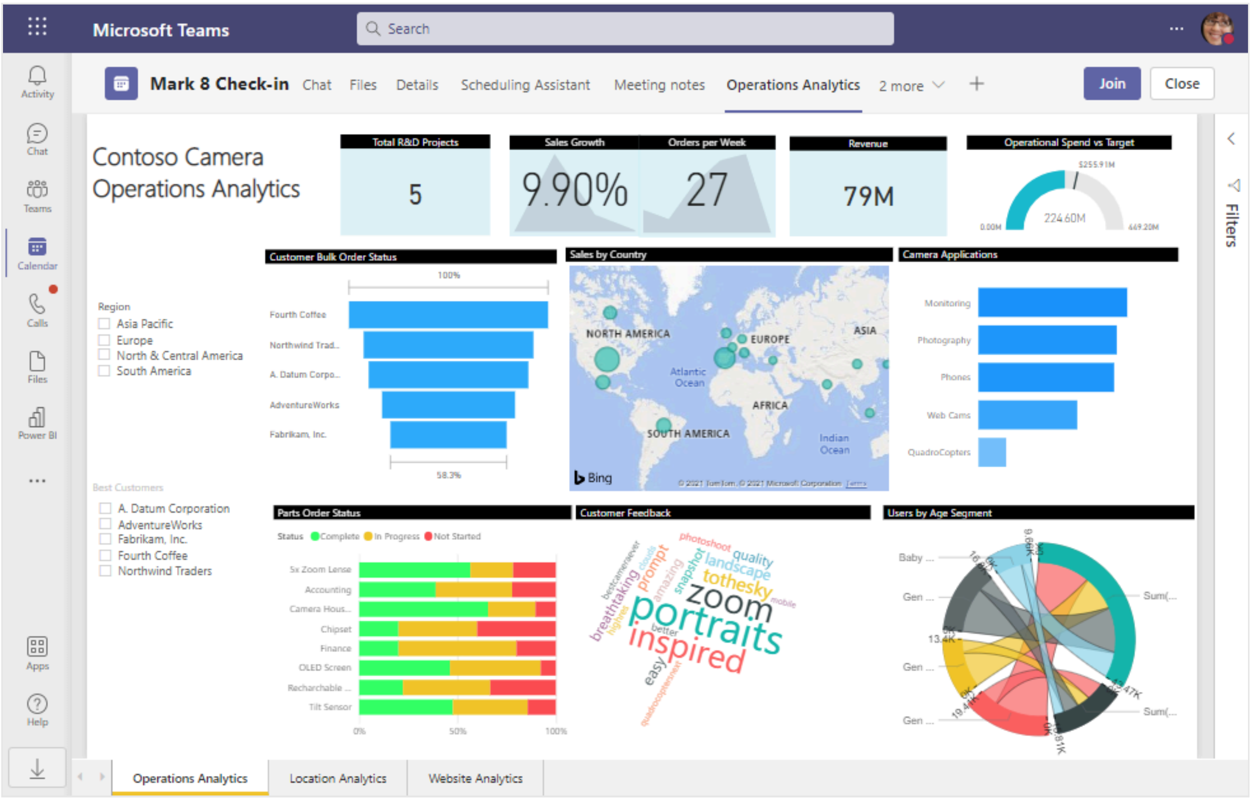
Paginated reports in the Power BI service

Use data to make meetings productive in Microsoft Teams

Article • 02/25/2025

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

In meetings, keeping everyone on track towards shared objectives is important. This article shows you how to use data, trends, and metrics to show the impact of the work you and your team are doing. It’s easy to use Power BI in meetings to help keep crucial data top of mind. It helps everyone know which data is the most important and builds skills that help your team make agile decisions based on your progress toward objectives. By staying focused on driving towards measurable outcomes, your team gains a sense of the positive impact of their work.



Here's how you can use data before, during, and after your meetings.

- **Before the meeting**. Add the reports and scorecards directly to the meeting invite so everyone can access them.
- **During the meeting**. Open and present these reports from the calendar. You can even use chat to share more reports and scorecards or to find answers to questions raised in the meeting.
- **After the meeting**. Send a summary with the key results discussed and actions the team decided to take to help achieve the desired outcomes.

Ask data-driven questions

Here are some questions you can add to your meeting agenda to start discussion and determine the best actions to take to achieve your desired outcomes:

- Are we making progress toward our objectives as quickly as we expected to?
- What actions can we take in the next week or month that are most likely to improve our metrics?
- What metrics can we start tracking to get a better sense of progress toward our desired outcomes?

Review your data weekly, or at least monthly, to get in the habit of asking questions and discussing the best actions to take in the next week or two. It helps the team learn to use data as they plan their work.

Before the meeting

To get ready for the meeting, add a Power BI report or scorecard to the meeting invite. Review the data in the report or scorecard and encourage other participants to do the same. Then everyone is ready for the meeting.

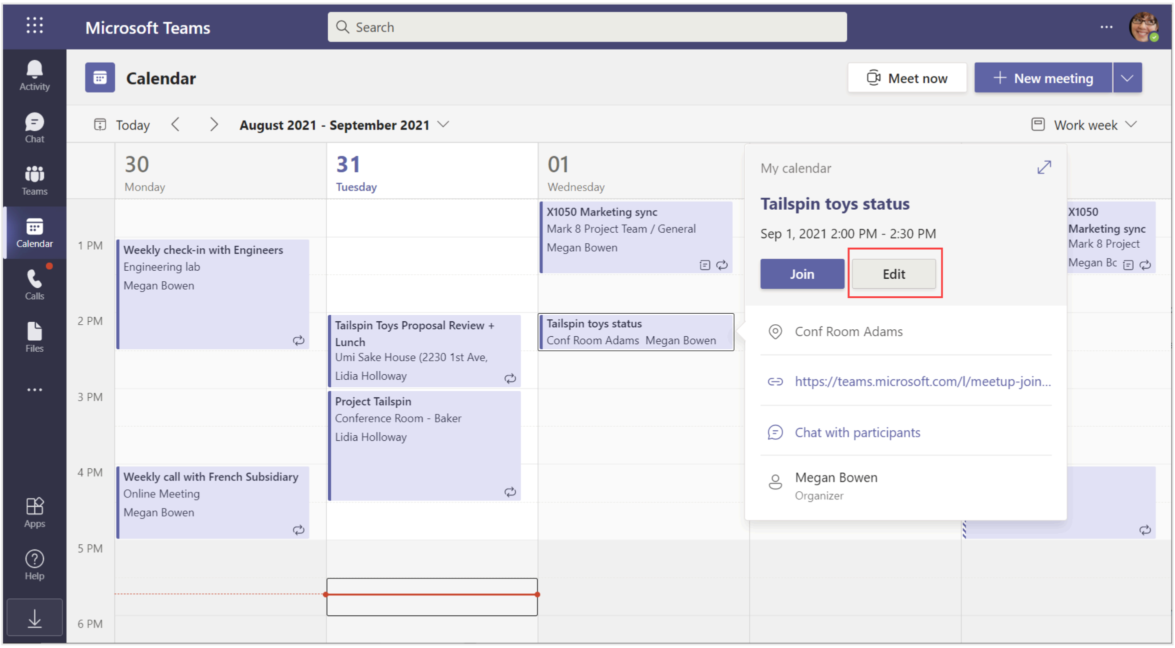
Add Power BI

Here's how to add a Power BI report or scorecard to a meeting.

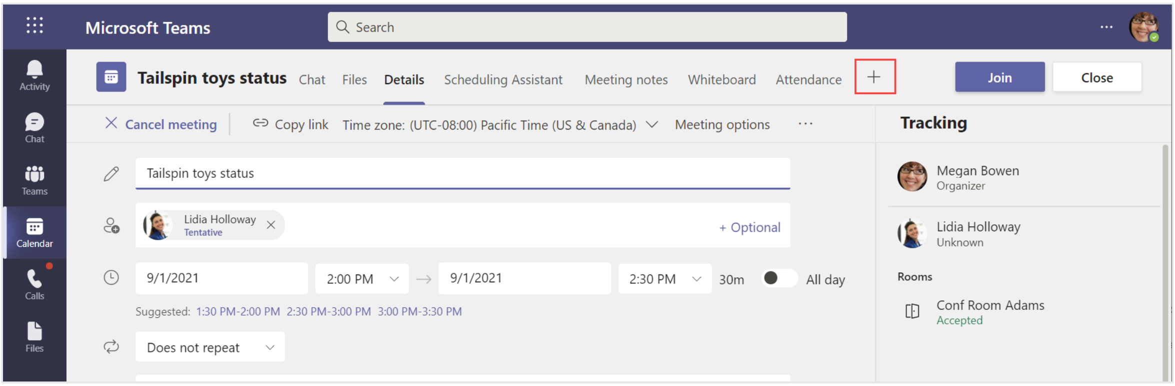
1. Schedule a meeting in Teams.

2. Send the meeting invite.

3. Select **Edit** to open the meeting in the calendar. You only see the option to edit if you're the meeting organizer.

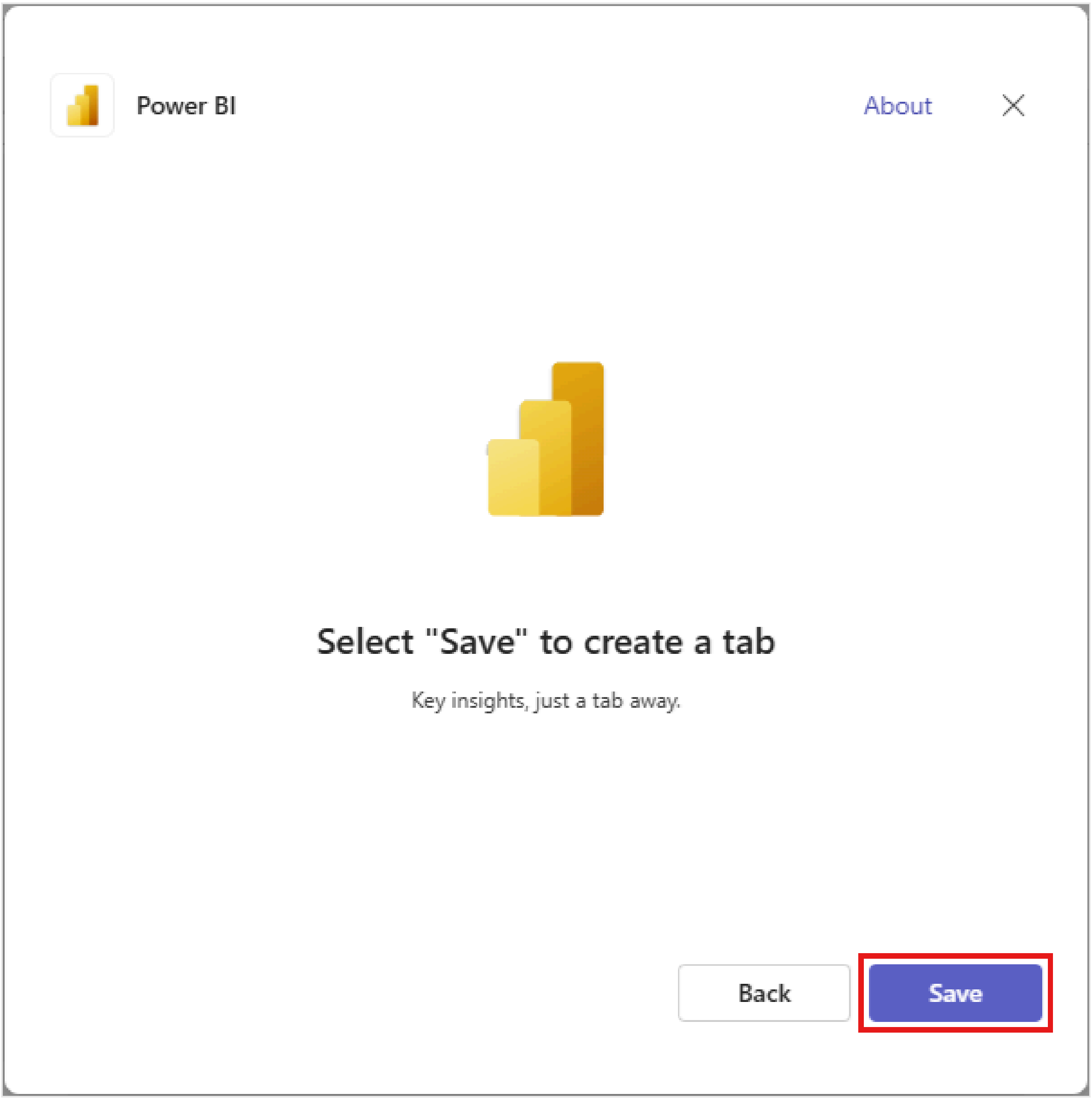


4. Select the **+ Add a tab** button.



5. Select **Power BI**. On the screen that opens, select **Add**.

6. In the confirmation dialog, select **Save**.



7. On the new Power BI tab that you created, select **Browse workspaces** to navigate to the report or scorecard that you want to add, or enter the link in the **Paste a Power BI link** field.

8. Select **Add**. The name displayed on the tab in Teams changes to the name of the report or scorecard that you selected.

9. See Give team members permission for how to share with your colleagues.

10. Add an agenda item to the meeting to review and discuss the data.

Review the data

It's a good idea to review your data in Power BI before a meeting.

1. Open the meeting from the calendar.

2. Open the Power BI tab that has the report or scorecard.

3. Review the report or scorecard.

Consider setting a reminder for your meeting so attendees can also read the data before the meeting. It helps everyone be aware of the latest data and improves the discussion during the meeting.

During the meeting

When you're in a meeting, data can help guide the discussion or answer questions raised by attendees. It's easy to present data in Power BI during the meeting, share links to data with meeting attendees, and find data that can answer questions.

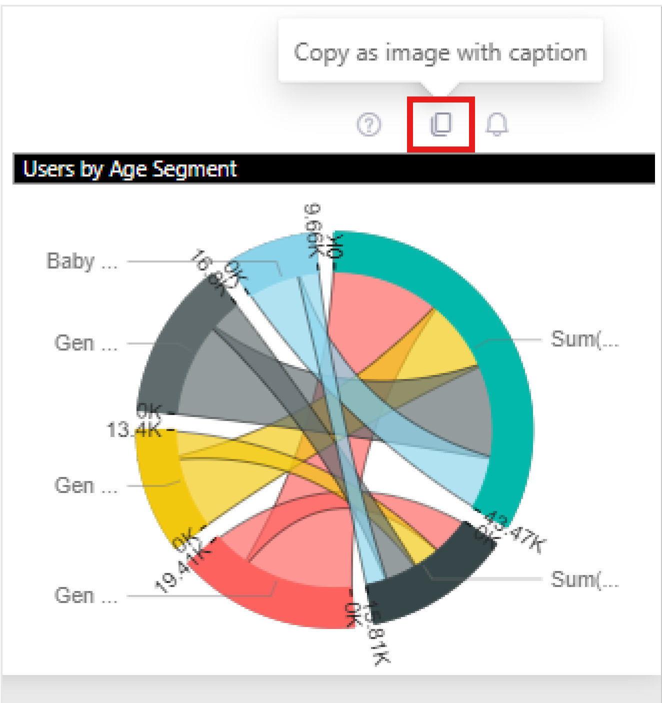
1. After joining the meeting, navigate to the Teams window.
2. Open the calendar in Teams.
3. Open the meeting in the calendar.
4. Anyone in the meeting can select the Power BI tab to view the report you added to the meeting.
5. Use the meeting window to present your screen.

Capture visuals that are important for everyone to see

1. View the report in the Power BI app in Teams.

2. Select a visual.

3. Select **Copy as image with caption** to copy the visual.



4. In the **Image with caption created** dialog, select **Copy** to copy the visual to the clipboard.

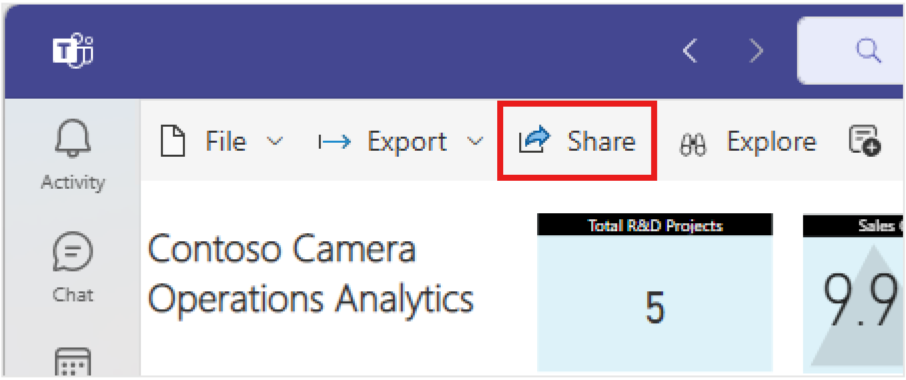
5. Paste the visual into the meeting chat.

Send a message in the meeting chat from a report

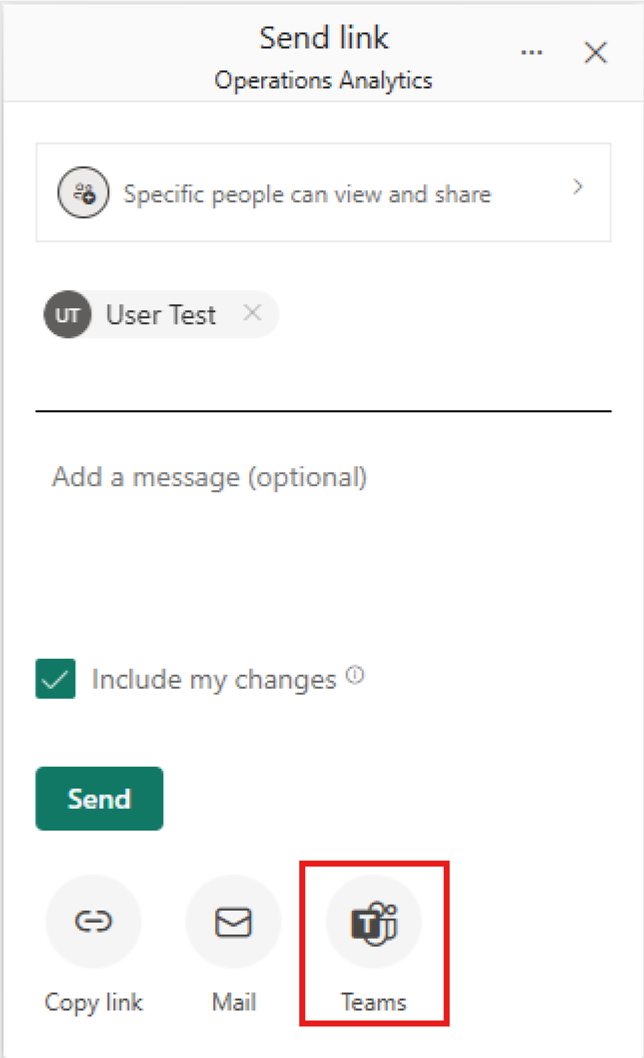
1. View the report in the Power BI app in Teams or in the Power BI service.

2. Select the report or a specific visual.

3. Select the **Share** button.



4. In the **Send link** dialog, enter a name or email address to activate the Send button and icons for sharing.



5. Select the Teams icon. In the **Share** dialog that opens, you can search for and select a Teams channel or conversation to share the report in. Then select **Share**.

6. Type your message above the link that's provided.

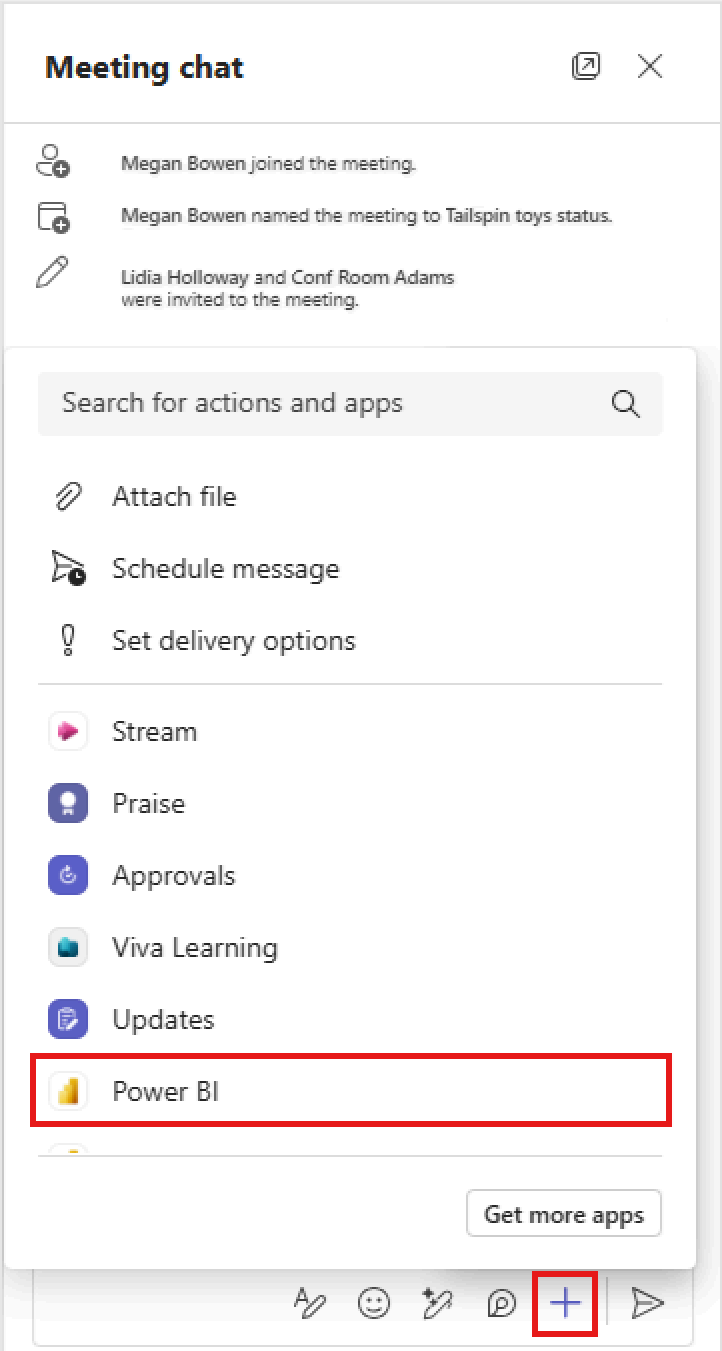
7. Select **Send**.

Your message appears as part of the meeting chat. Attendees can open it to see the data with the filters and slicers applied.

Answer questions with data in chat

1. Open the meeting chat.

2. Select **Actions and apps** icon with the plus sign.



3. Select **Power BI**.

4. Search for content, or select from your list of recent items.

5. Pick a Power BI item.

6. Select **Send**.

7. In the sent message, select the **Open** button for the report or scorecard.

After the meeting

It's useful to share a summary of the most important data points discussed and the actions the team plans on taking to help achieve outcomes. If you captured visuals during the meeting in chat, you can pull them into a meeting summary post in the chat or in a follow-up message.

Consider using key data points to create metrics and track them in a scorecard. Consistently tracking progress against a metric through a series of meetings is a great way to keep your team or project on track.

Related content

- Add the Power BI app to Microsoft Teams
- Use Power BI metrics to improve results in Microsoft Teams
- Lead data-driven discussions in Microsoft Teams
- Create reports from data in Microsoft Teams
- Analyze your Teams collaboration data

Use Power BI metrics to improve results in Microsoft Teams

Article • 02/25/2025

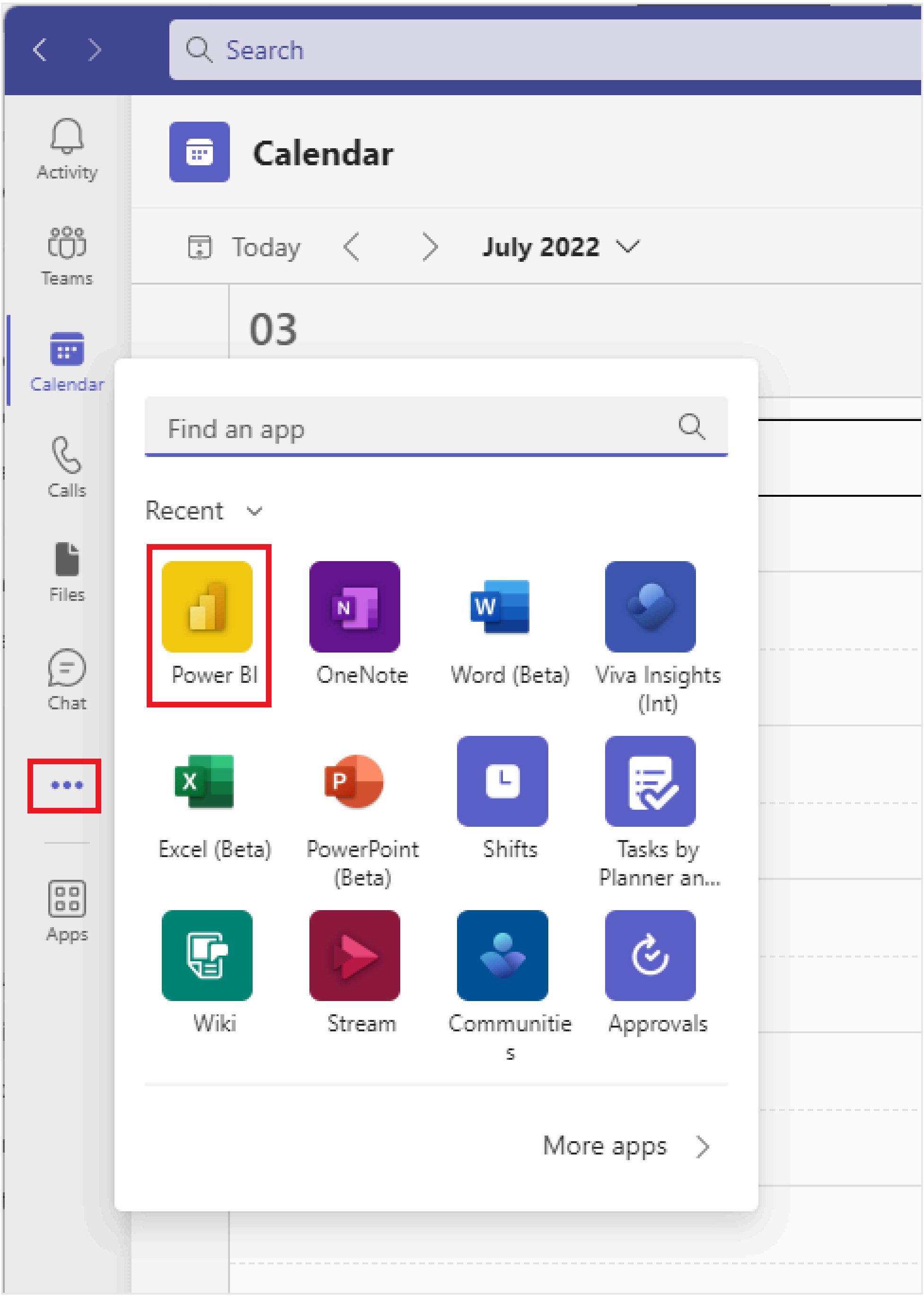
APPLIES TO: ❌ Power BI Desktop ✅ Power BI service

Your team benefits from having clear and measurable objectives. Tracking metrics in Microsoft Teams with your team helps the team stay on track, promoting accountability, alignment, and visibility. By tracking progress towards key objectives together, the team can engage in creative and agile decision-making that helps achieve objectives faster.

It takes just a minute to create a metric in Power BI. Each metric has a name, owner, the current value, the target, and a status. You can even add start and end dates for the metric. Submetrics help you track key objectives that are needed to support a bigger metric.

Add the Power BI personal app to Teams

- In Microsoft Teams, select **More added apps ...** > **Power BI**.



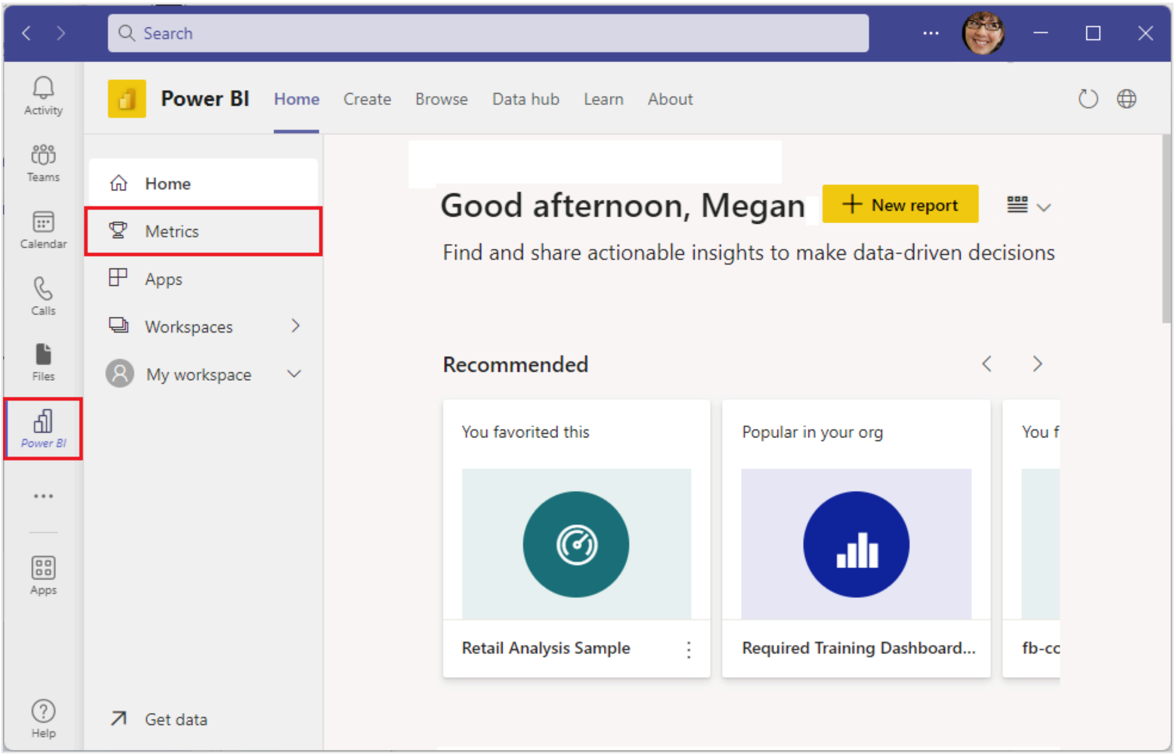
Now Power BI opens right inside Microsoft Teams.

Create your first metric in a scorecard

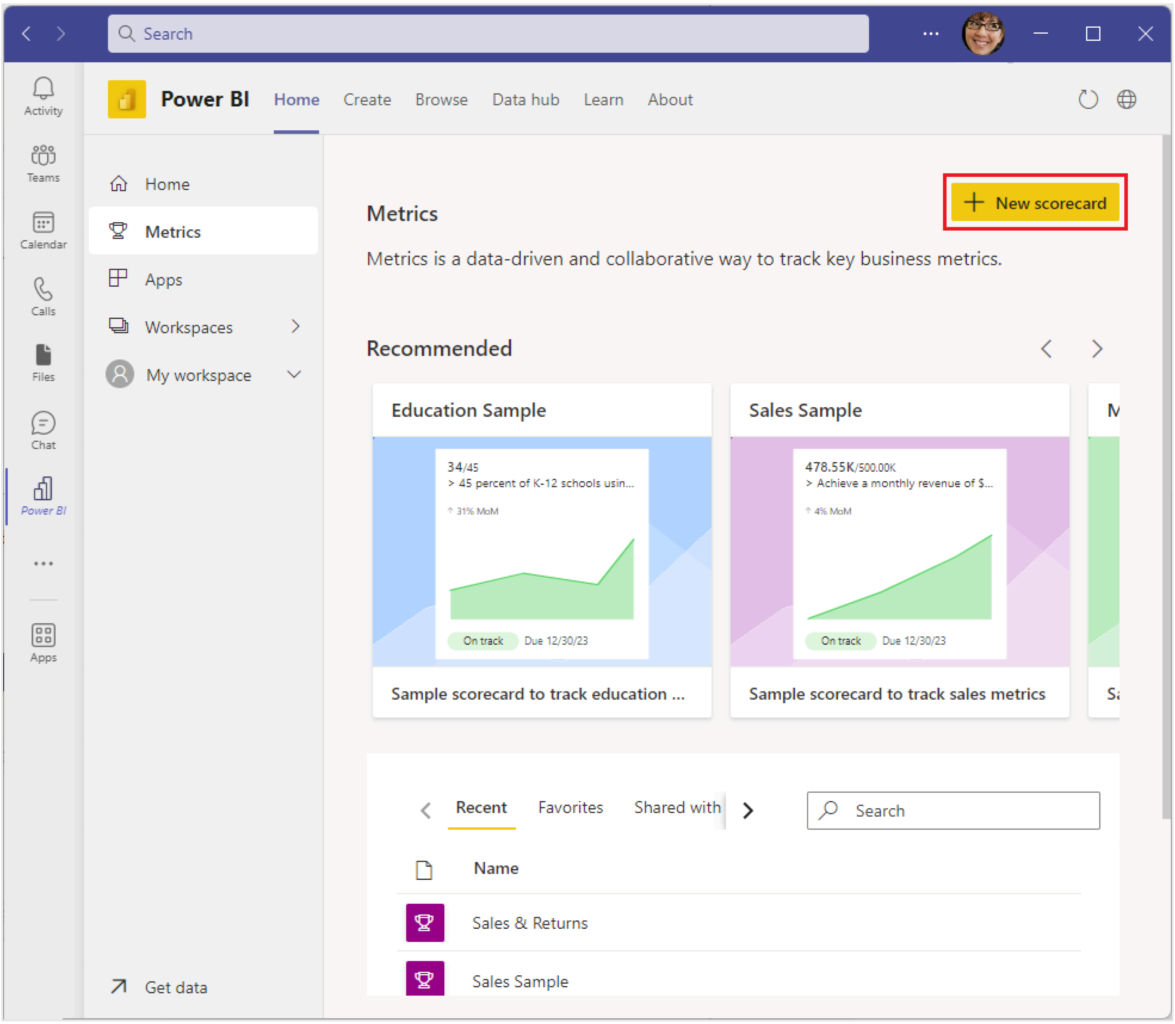
It's simple to start tracking metrics by creating a scorecard.

1. Open Power BI in Teams.

2. Select **Metrics** in the navigation pane to open the Metrics hub.

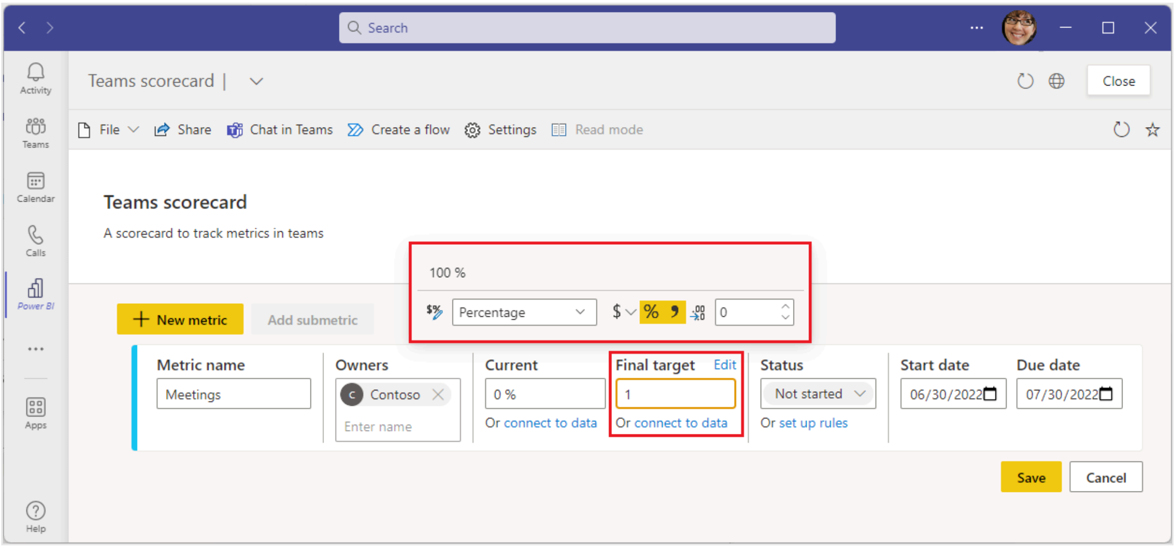


3. Select **New scorecard**.

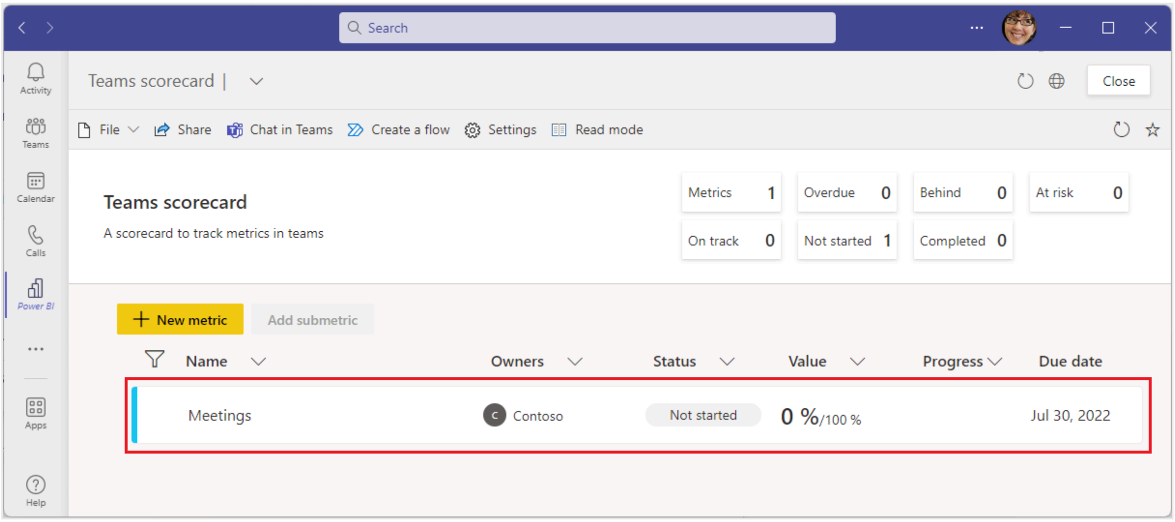


4. Give the scorecard a name and description.

5. Create a metric in the scorecard, with a **Metric name**, **Owners**, **Current** and **Final target** values, **Status**, **Start date**, and **Due date**. You can type in numbers, or select **connect to data** to get values from your reports.



6. Select **Save**.



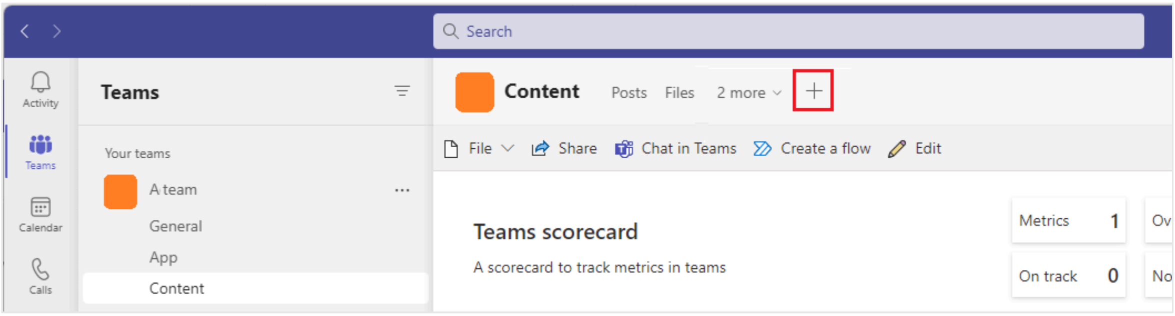
After saving your scorecard with its metrics, you can share with your team by adding it to a Teams meeting, channel, or chat as a tab or as a link in the meeting chat. Read more about creating scorecards and metrics in Power BI.

Track metrics with your team

To keep your metrics top of mind for your team, add your scorecards as tabs to your channels and meetings.

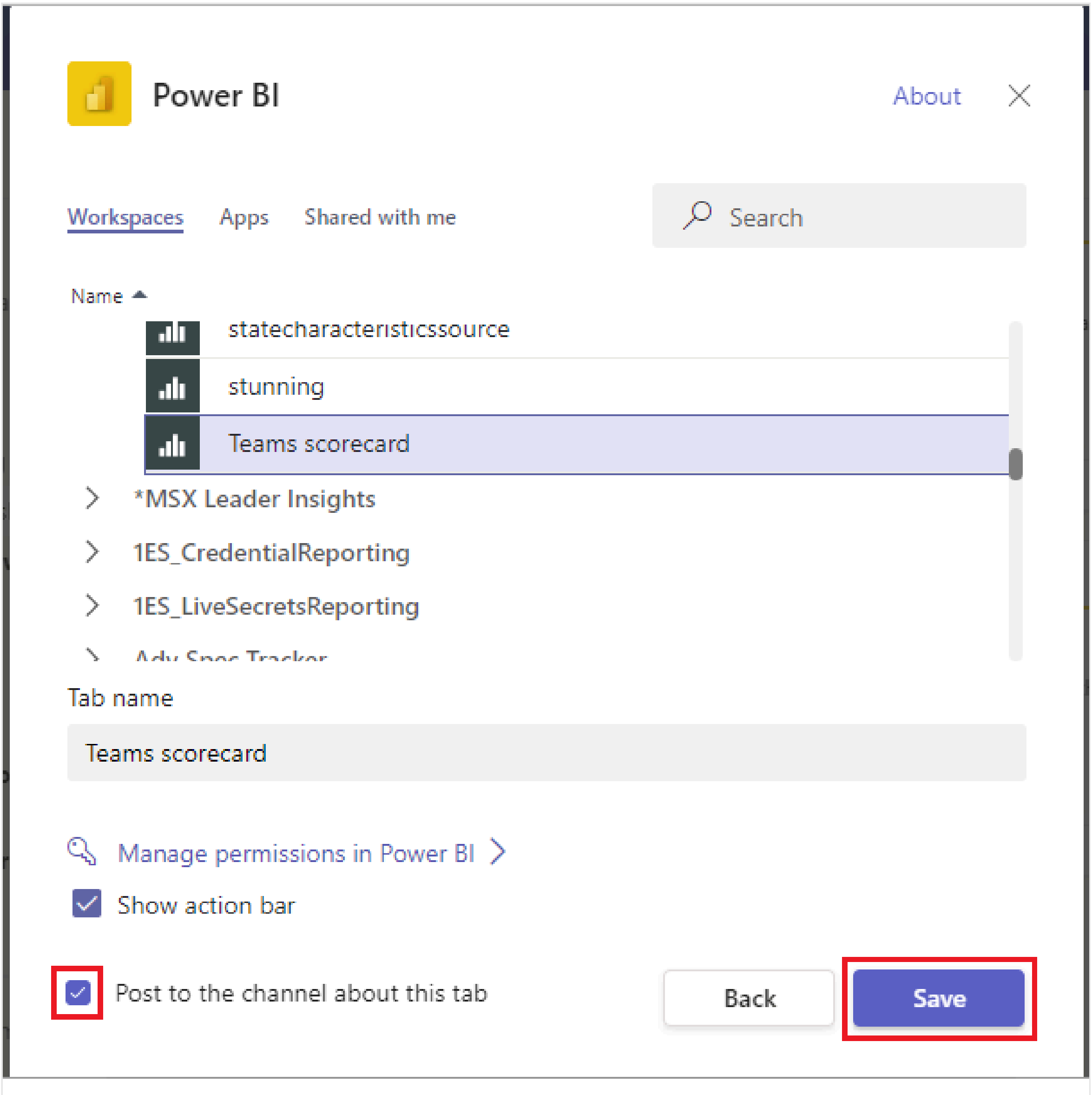
1. Open a channel or meeting.

2. Select the + **Add a tab** button and add the Power BI tab.

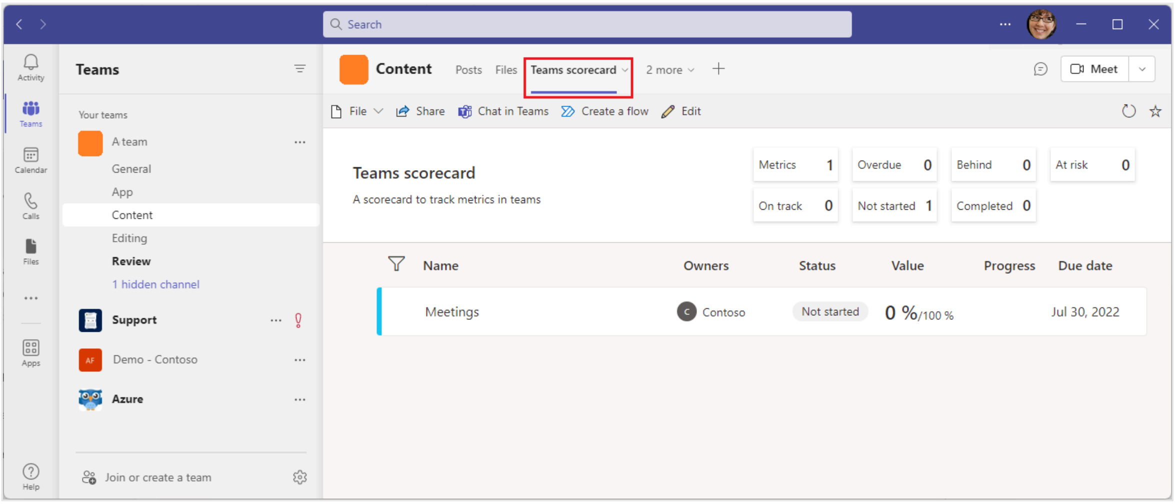


3. Pick a scorecard. If you keep **Post to the channel about this tab** selected, Teams adds a post to the chat, about the new tab.

4. Select **Save**.

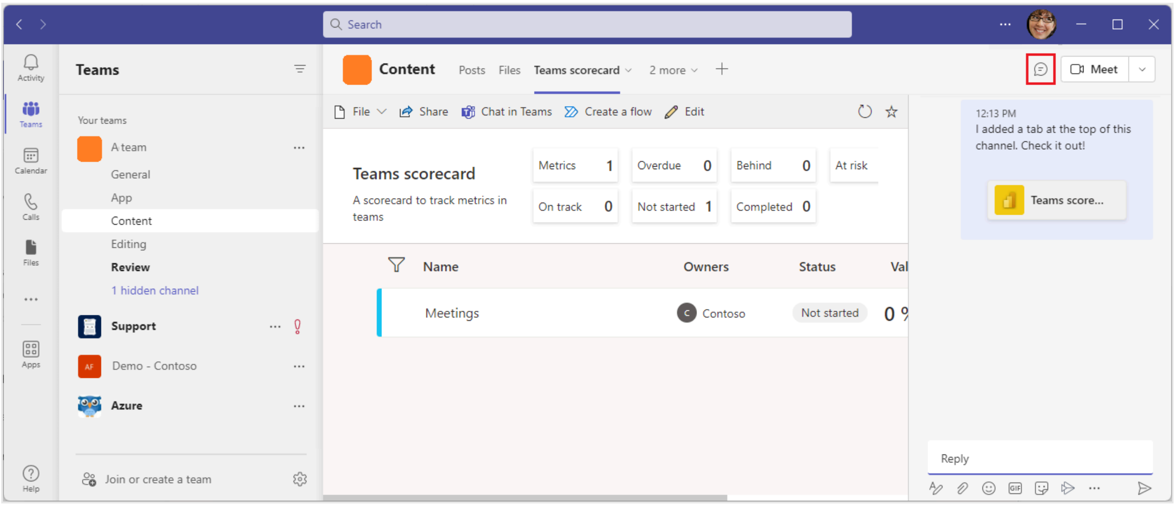


5. Now you see the scorecard as a tab in the channel.



6. You may need to share it with colleagues. See Give team members permission in the "Lead data-driven discussions in Microsoft Teams" article for how to share with your colleagues.

7. Open the chat window in Teams to see the post about the scorecard.



Make tracking metrics part of your team rhythm

Make keeping your metrics up to date easier with just a little more work. Here are a few capabilities to explore:

- Use check-ins for metrics to share context about metrics. When your team encourages and reviews check-ins on metrics, they can share the reasons behind the numbers so they're visible to everyone.
- Automatically update your goals' current values. When you connect your metric to a report, whenever the data in the report refreshes, the goal's current value is automatically kept up to date.

- Set the metric status automatically. You can create automated rules to set the status of metrics, so the goal's status always reflects the data correctly.

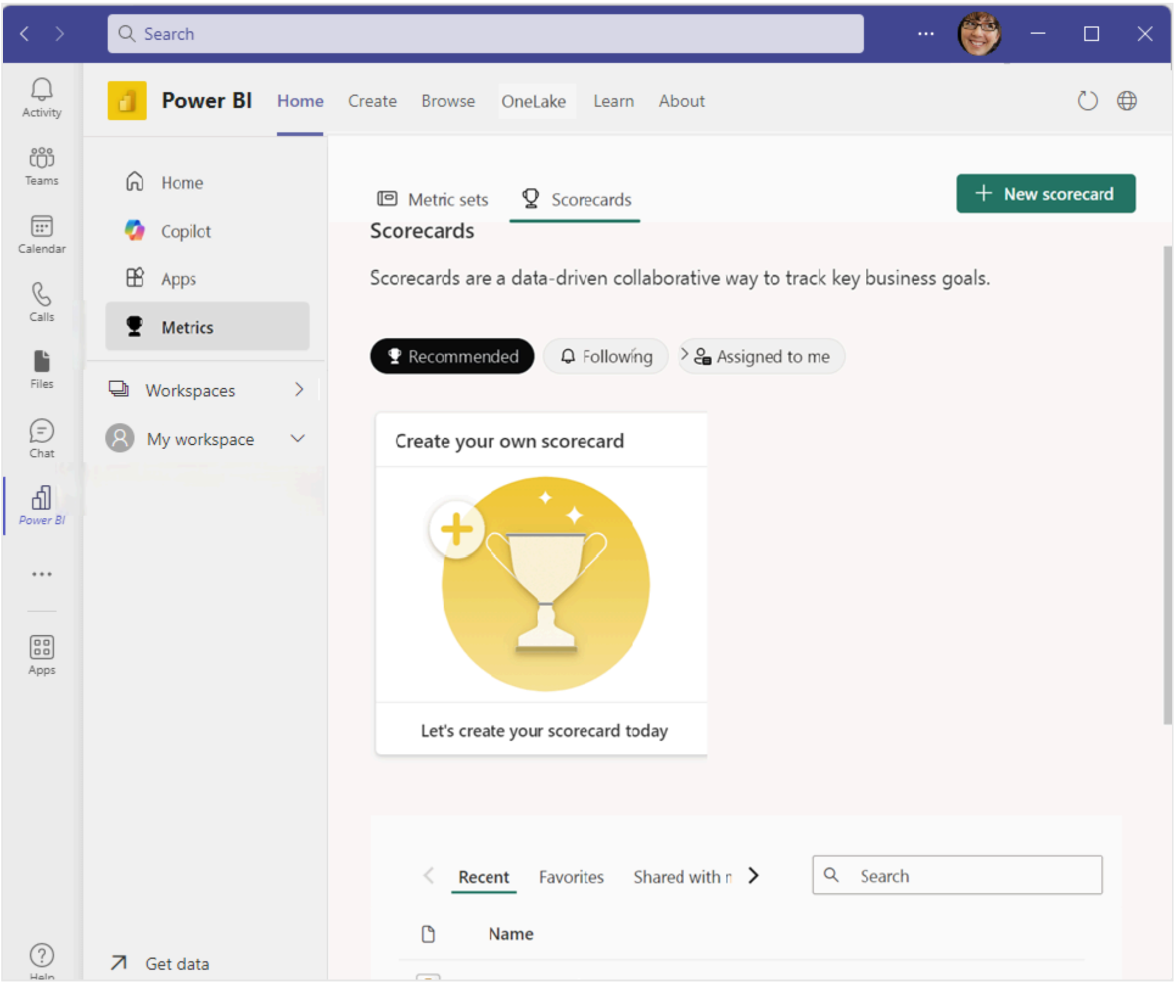
These capabilities help your team save time by eliminating manual updates, and help keep scorecards fully updated.

Find all your metrics in the Metrics hub

Each project and organization can have its own metrics. You can find all your metrics in one place in the Metrics hub that is part of the Power BI app for Microsoft Teams. Here's how to find it.

1. Open the Power BI app for Teams from the Teams left navigation.

2. Select **Metrics** in the Power BI navigation pane to open the Metrics hub.



Related content

- Add the Power BI app to Microsoft Teams
- Create scorecards and metrics in Power BI
- Use data to make better meetings in Microsoft Teams

- Share a data-driven discussion in Microsoft Teams
- Create reports from data in Microsoft Teams
- Analyze your Teams collaboration data

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Lead data-driven discussions in Microsoft Teams

06/30/2025

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

Data helps everyone get on the same page before important decisions. Sharing data with your team is important and easy with Power BI in Microsoft Teams. You can share data in Teams in channels, in chats, and in meetings.

Share in channels, chats, and meetings

1. Open the channel, chat, or meeting where you'd like to share.
2. Select the **+ Add a tab** button and add the Power BI tab.
3. Pick the Power BI item you'd like to share.
4. Select **Save**.

You can share in channels, meetings, and even in chats.

Give team members permission

Make sure your team has permission to the report or scorecard by sharing it with them.

1. Open the item in Power BI in Teams, or in the Power BI service, and select **File** > **Manage Permissions**.

   If you don't see this option, you might not have permission to share the item. If you do not, don't worry. The attendees can request access themselves when they try to view the report.

2. Select **Direct access**.

3. Select **Add user**.

4. Add the names of your colleagues. Decide what permissions you want them to have, whether to send them an email, and select **Grant access**.

Chat about data with rich links and cards

When discussing data, it's important that your colleagues can open the underlying data to see and explore trends. This helps them answer questions and understand the full context of requests you're making. It's also an easy way to encourage more use of data in decision making. For information on sharing and chatting about Power BI content in Teams, see Chat in Microsoft Teams directly from the Power BI service.

Send your colleagues links to reports

1. In the Teams channel or chat, start a new conversation.

2. In the command bar for the editor, select **Messaging extensions (...)**.

3. Select **Power BI**.

4. Search for the content you want to share, or select from your list of recent items.

5. Pick a Power BI item.

6. Select **Send**.

   A rich card is added to the conversation, making it easy for anyone to open the item.

   It's a great way to help without leaving the conversation, and saves everyone time.

Create rich cards to paste in chat

If you use Power BI in a web browser, it's easy to send a link to a colleague.

1. Open a report in the Power BI service in the browser, and copy the link.
2. Start a conversation and paste the link. Teams automatically creates a rich card.
3. Select **Send**.
4. Your colleague sees a rich card with a link to open the report.

Related content

- Add the Power BI app to Microsoft Teams
- Use data to make better meetings in Microsoft Teams
- Use Power BI metrics to improve results in Microsoft Teams
- Create reports from data in Microsoft Teams
- Analyze your Teams collaboration data

Create reports from data in Microsoft Teams

Article • 11/10/2023

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

It's easy to create Power BI reports in Microsoft Teams. This article has a few examples of reports you can create. When you're ready, you can also use tools like Power BI Desktop for more advanced report authoring.

Create an automatic report from data you have

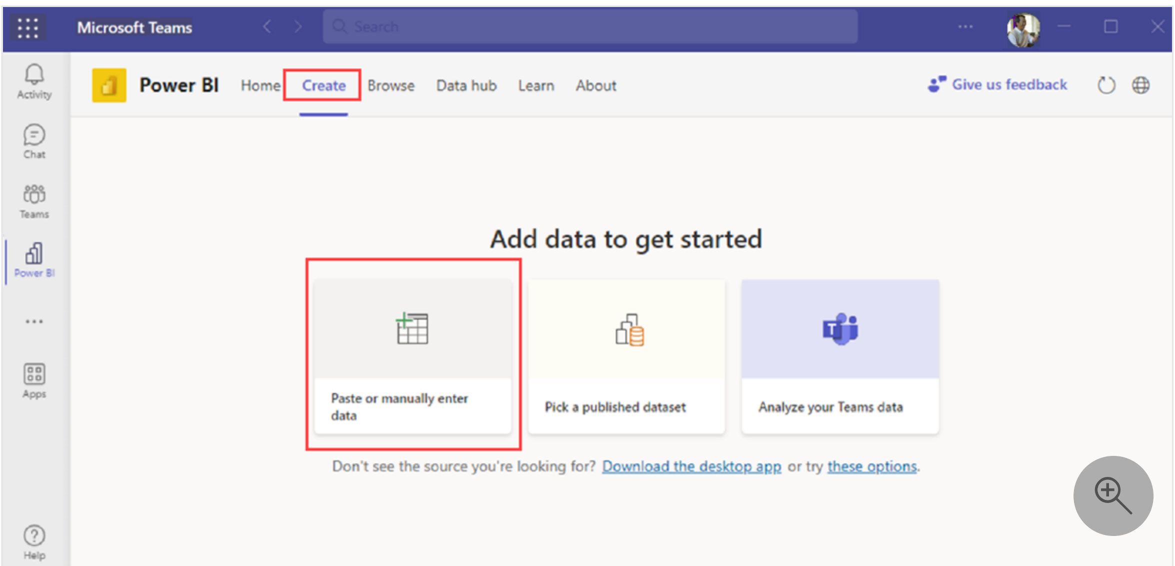
If you have a table with data, such as an Excel spreadsheet, and want to try visualizing in Power BI, create your report with the help of Microsoft Teams. You can start in Microsoft Teams or the Power BI service.

Create an automatic report with Microsoft Teams

1. Open the Power BI app from Microsoft Teams.

   Need to install the Power BI app? Install the app, then pin it to the Teams navigation pane.

2. Select the **Create** tab, then choose **Paste or manually enter data** to open the Power BI service on your browser.

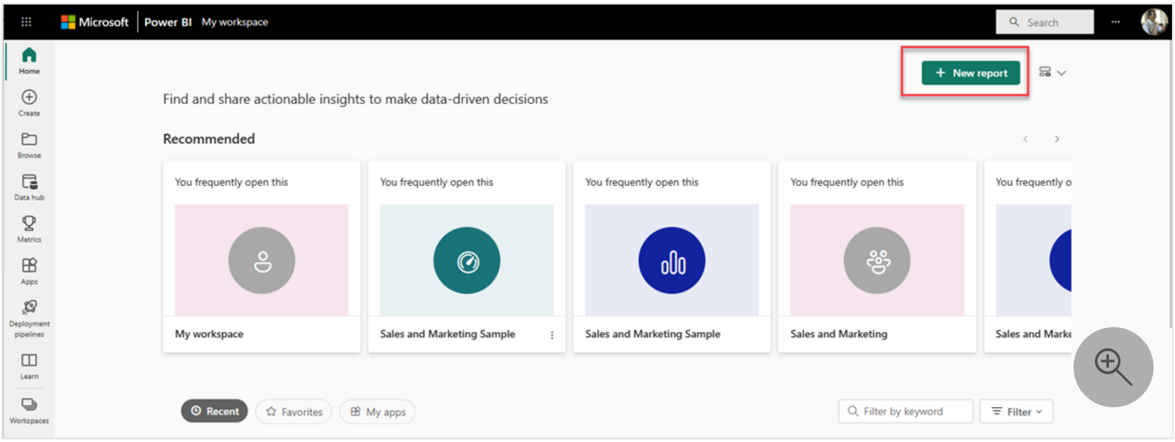


3. After the Power BI service opens in your browser, go to Step 3 in Create an automatic report with the Power BI service to finish creating your report.

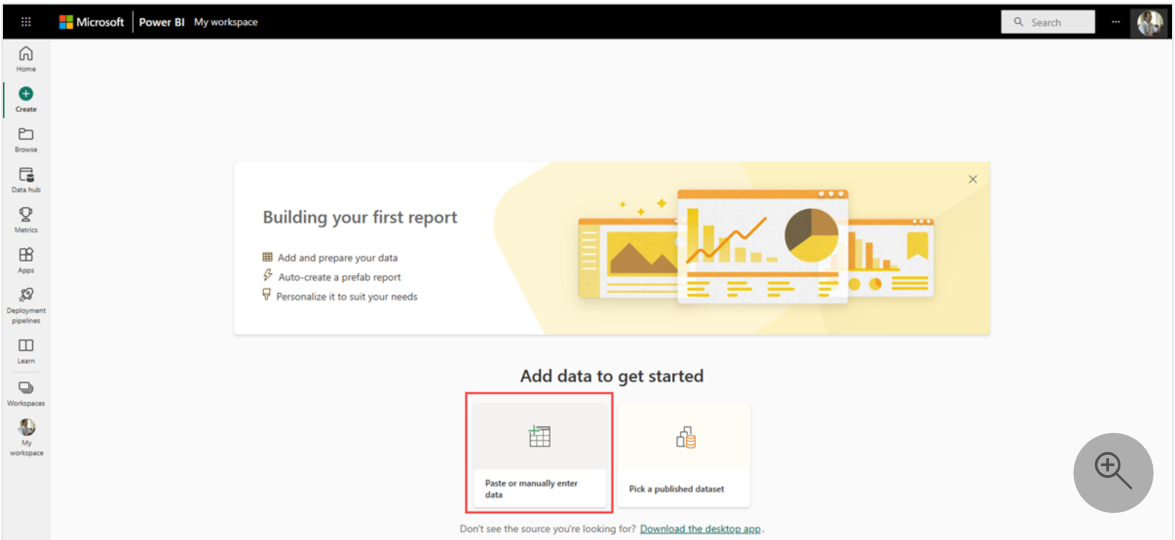
Create an automatic report with the Power BI service

1. Open the Power BI service.

2. Select the **New report** button.

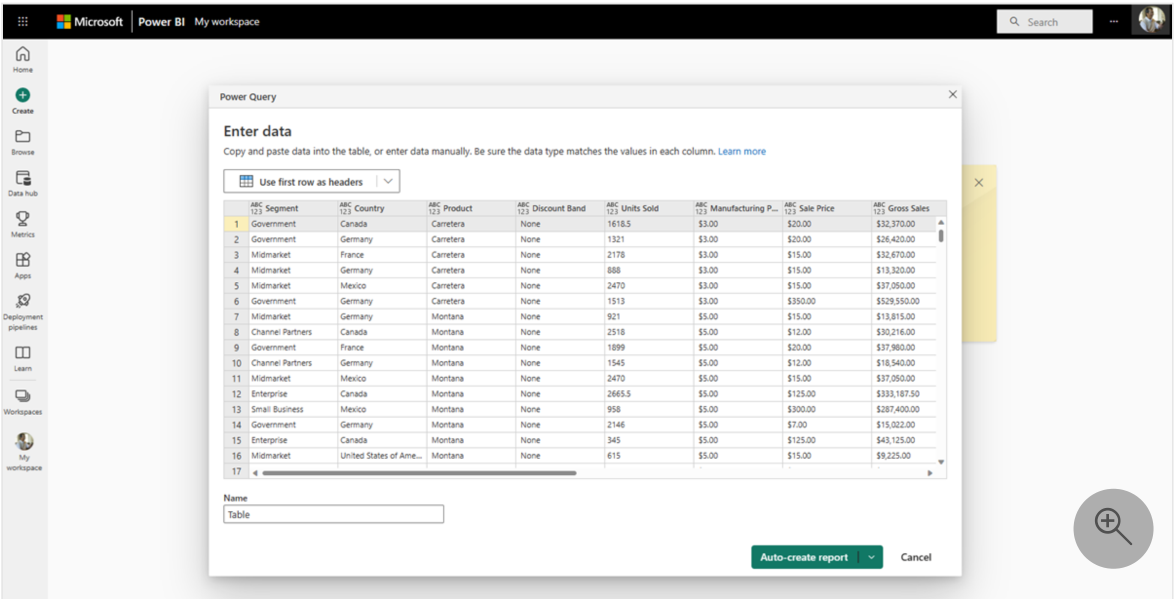


3. Select **Paste or manually enter data**.



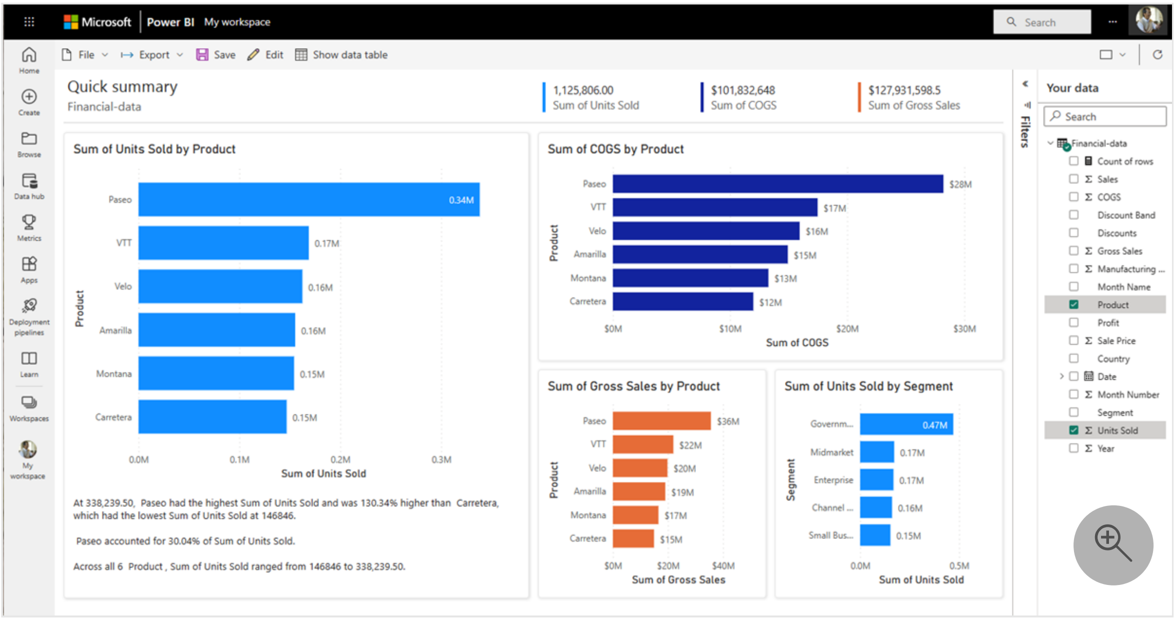
4. Copy the data or spreadsheet you want to visualize, then select the first cell in the Power Query dialog box and paste the data.

5. Select **Use first row as headers** from the dropdown menu if you want to apply the setting. Then name your table and choose **Auto-create report**.

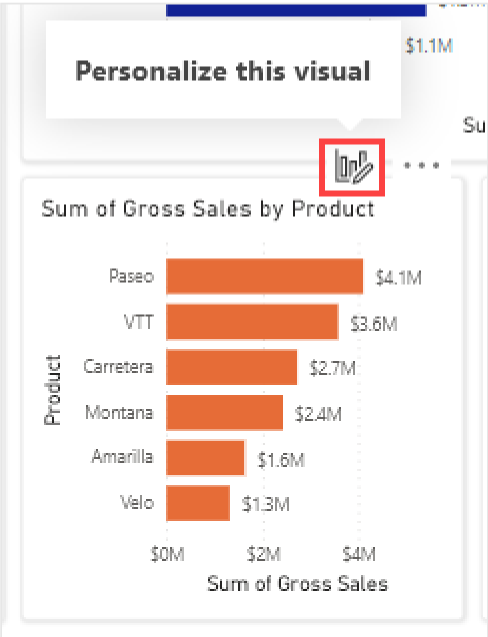


6. Set a sensitivity label, if prompted.

Power BI automatically analyzes and visualizes your data in a prebuilt report.

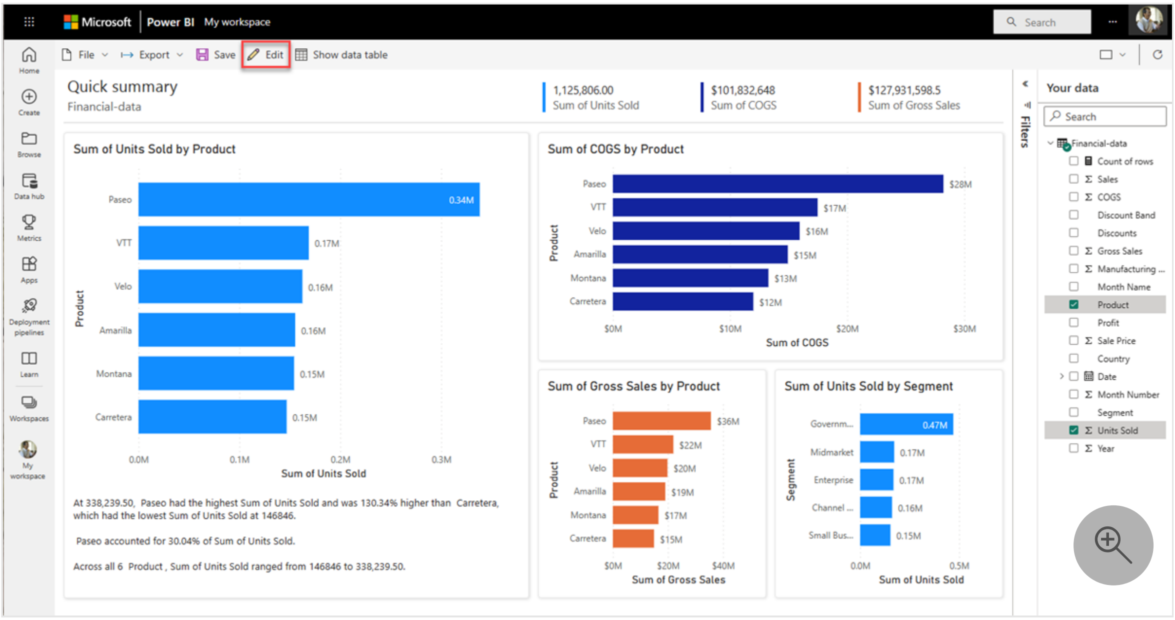


7. Customize your visuals. If you want to customize a single visual on your report, select the **Personalize this visual** icon.



8. **Save** the report.

9. After you save the report, you can customize the whole report by selecting **Edit**.



When you're done, save and share the report with your colleagues in Teams.

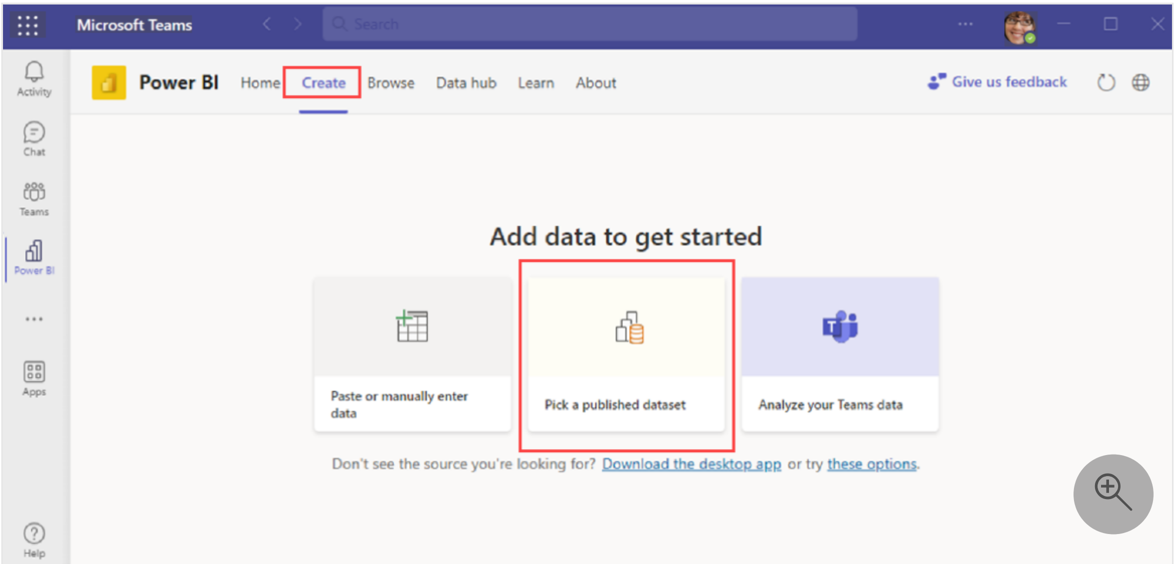
Create a report from a semantic model in your organization

Many organizations share semantic models that you can use to build your reports. These semantic models are great because they offer up-to-date authoritative data. Semantic models marked *certified* or *promoted* are likely to be higher quality and better maintained, so your reports keep working longer.

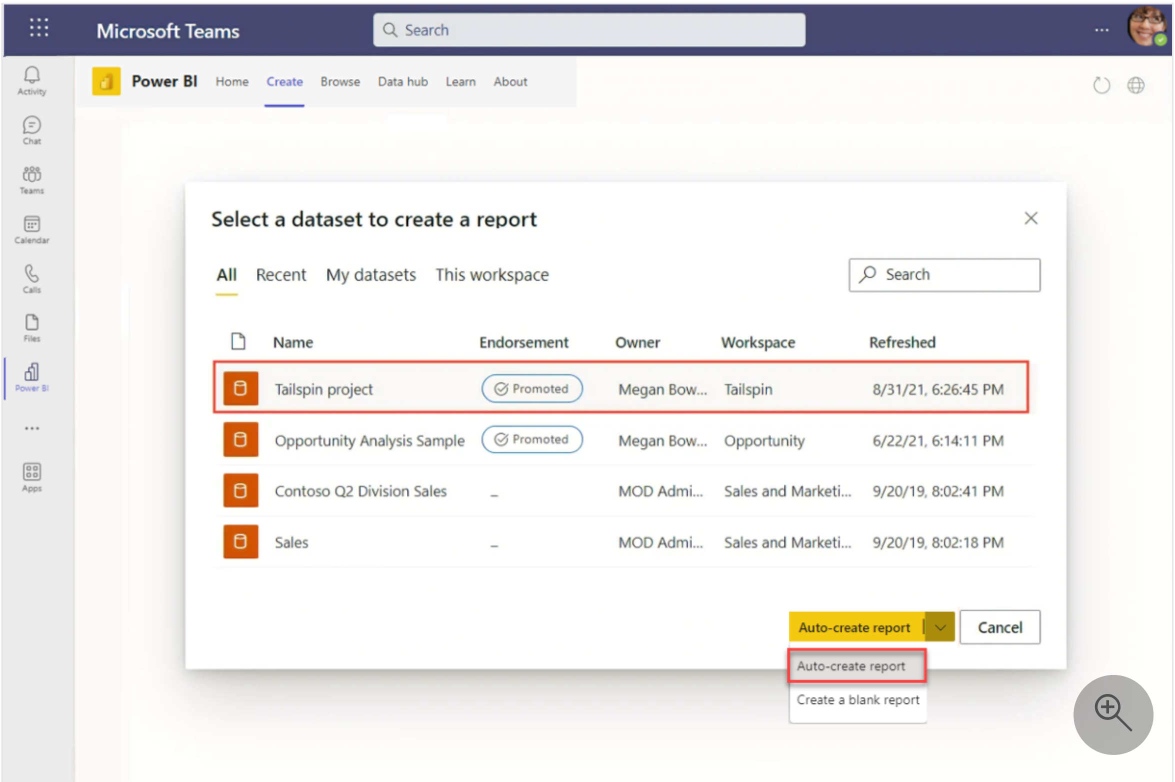
To build a report from a semantic model shared with you, follow these steps.

1. Open the Power BI app for Microsoft Teams.

2. Select the **Create** tab > **Pick a published semantic model**.



3. Select a semantic model > **Auto-create report**.



4. Start exploring the data.

   - Use visualizations like charts, tables, and maps to show data in various ways.
   - Select data points to see other visuals update to filter data to your selection. Change formatting to make the report useful and readable by your colleagues.

5. After you complete your work, save and share the report.

Explore semantic models and reports shared with you

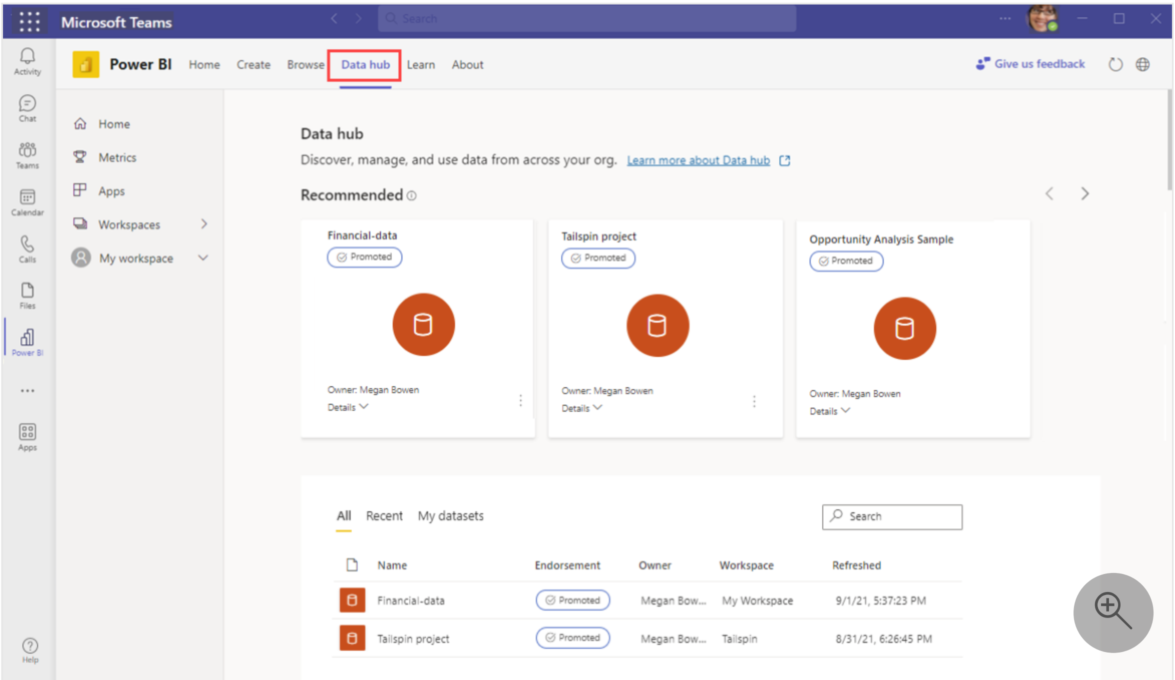
It's easy to find all the semantic models your organization has shared with you. They're in the OneLake data hub in the Power BI app for Microsoft Teams. Again, semantic models marked *certified* or *promoted* are likely to be higher quality and better maintained.

1. Open the Power BI app for Microsoft Teams.

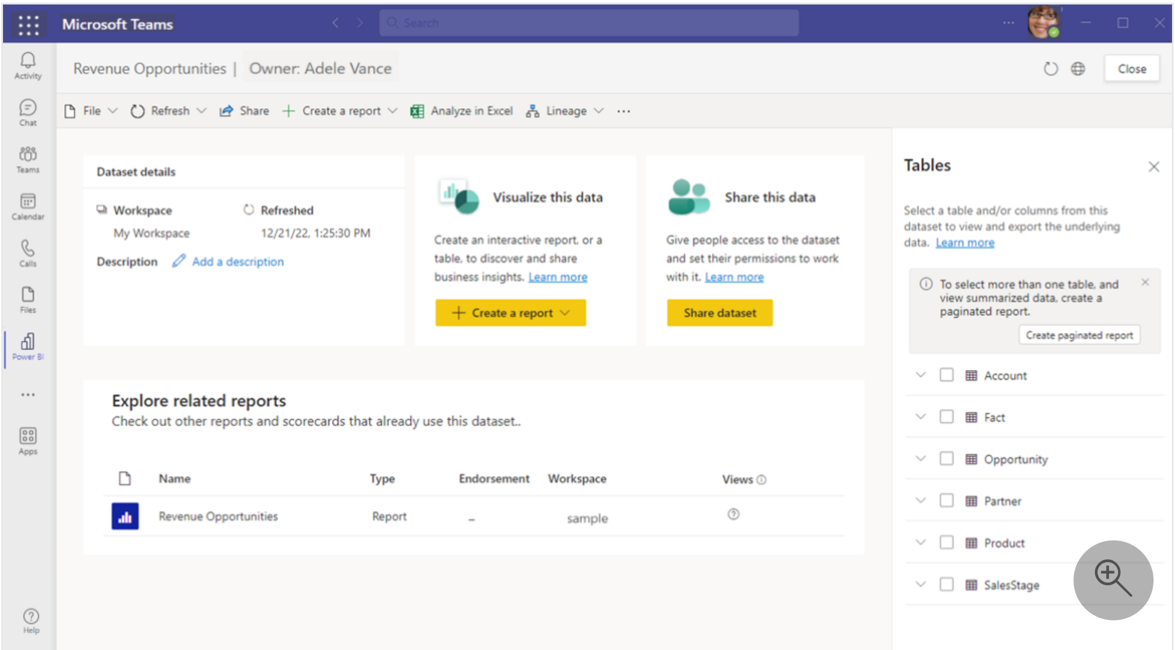
   Need to install the Power BI app? Install the app, then pin it to the Teams navigation pane.

2. Go to the **OneLake data hub** tab.

3. Select a semantic model from the list or from the recommended semantic models.

4. Explore the **Semantic model details** page.



- Discover prebuilt reports that use the semantic model.
- Create a report in Power BI from the semantic model with **Create a report**.
- Share data and give people access to the semantic model to work.
- Select a table or column to export data or select more than one table to create a paginated report.

When you find interesting reports relevant to your team, bring them into your collaboration. Add them to channels, meetings, and chats as tabs or in a conversation.

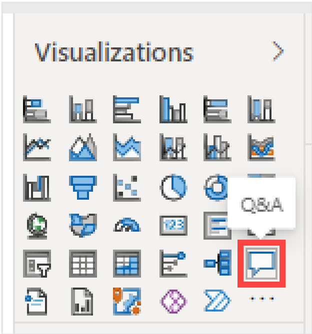
Enhance reports in the Power BI service and in Teams

It's easy to keep working on your reports right in the Power BI service and Power BI in Teams. Take advantage of the artificial intelligence capabilities built into Power BI.

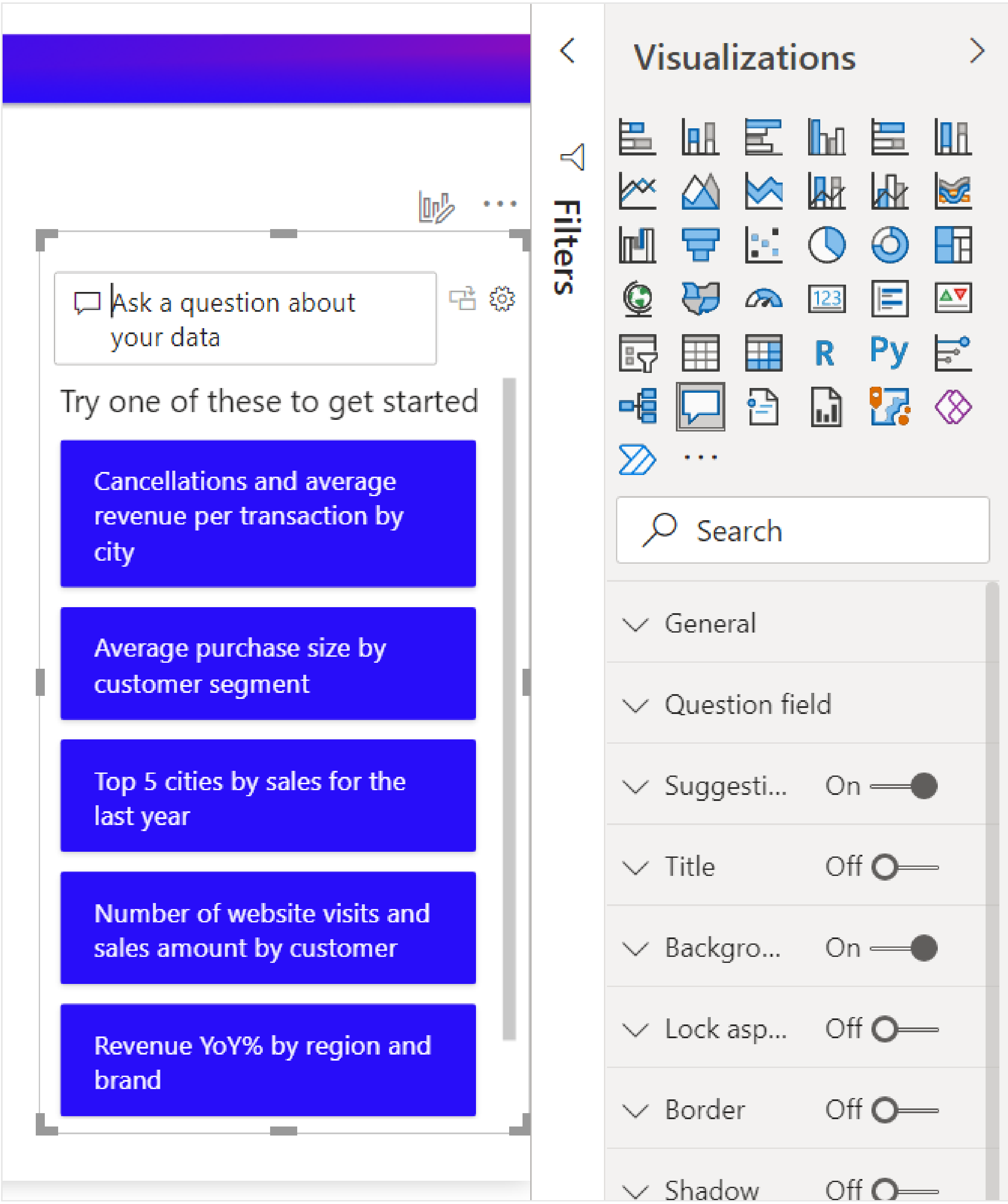
Q&A visual

For example, ask a question about your data by adding a *Q&A visual*, where you can ask natural language questions and get answers in the form of a visual.

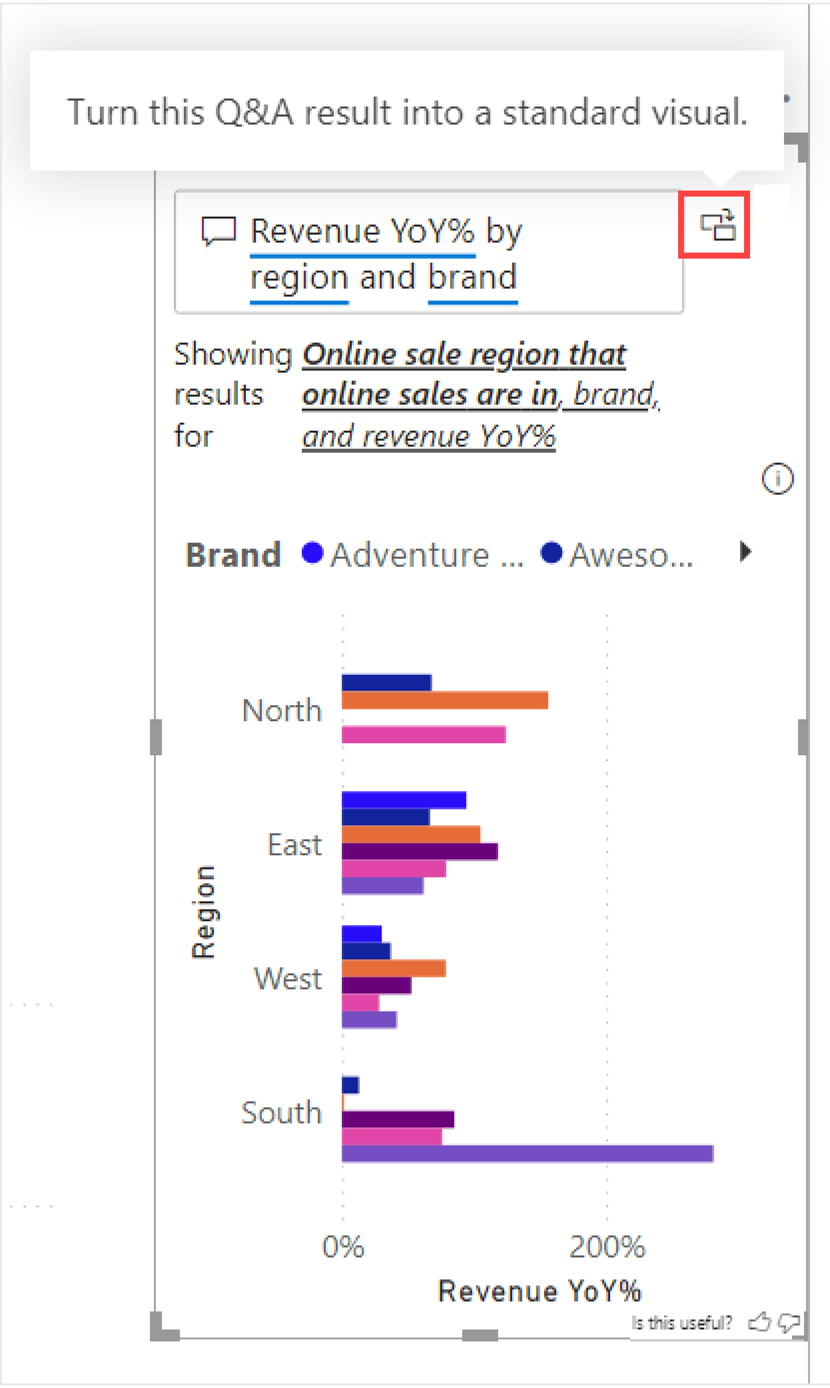
1. In the Visualizations pane, select the **Q&A** icon.



Power BI generates a list of suggested questions you can choose from or type your own.



2. If you like the visual that Power BI creates, you can convert it from a Q&A visual to a standard visual on the page.

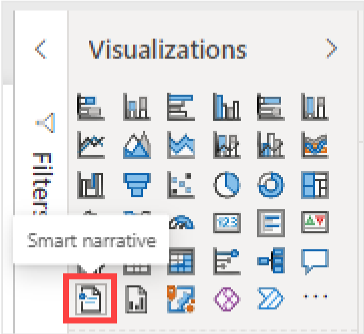


For more information, see [Create a Q&A visual in a report in Power BI](#).

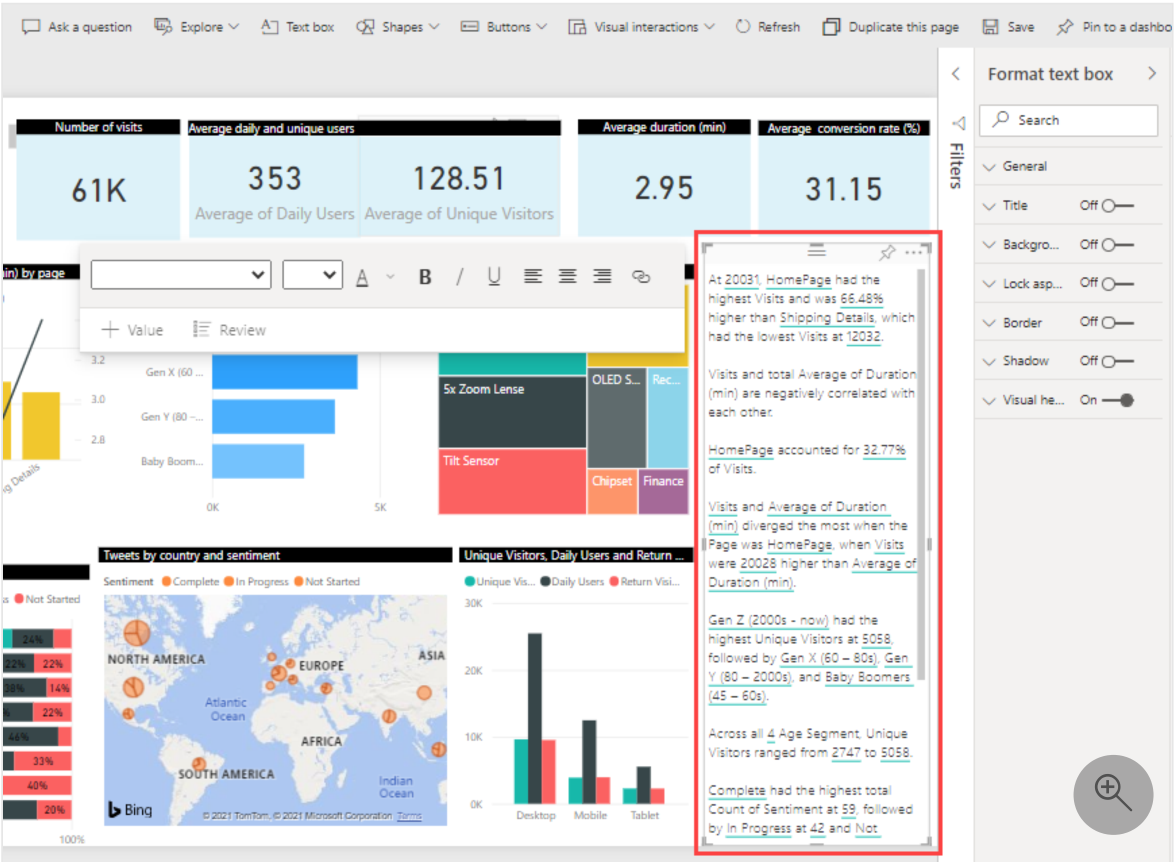
Smart narrative visual

You can also easily create a *smart narrative* visual, a dynamically generated text box that provides relevant insights that you can customize.

1. In the Visualizations pane, select the **Smart narrative** visual icon.



Power BI generates a text description of key takeaways in your report.



2. You can edit the visual, change the way it looks, and change the inline values it generates.

For more information, see Create smart narrative summaries.

Create sophisticated reports in Power BI Desktop

Power BI Desktop is a downloadable Windows app to make sophisticated reports. It's like PowerPoint, but it uses data visualizations to help you gain insights into your data. Power BI Desktop has powerful capabilities like data import, cleaning, modeling, and much more.

To get started with Power BI Desktop, follow these steps.

1. Install Power BI Desktop. You can download it from the Microsoft Store .

   Get Power BI Desktop

2. Create a report in Power BI Desktop.
   In the following tutorial sample, you prepare and model your data. Then create a report based on the model you've created. You can't do both tasks in a report in the Power BI service.

   Tutorial: From dimensional model to stunning report in Power BI Desktop

3. Publish the report to the Power BI service.

4. Share the report with your colleagues in Teams.

Next steps

- Add the Power BI app to Microsoft Teams
- Use data to make meetings productive in Microsoft Teams
- Use Power BI metrics to improve results in Microsoft Teams
- Lead data-driven discussions in Microsoft Teams
- Analyze your Teams collaboration data

How to determine that content is up to date

Article • 01/09/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

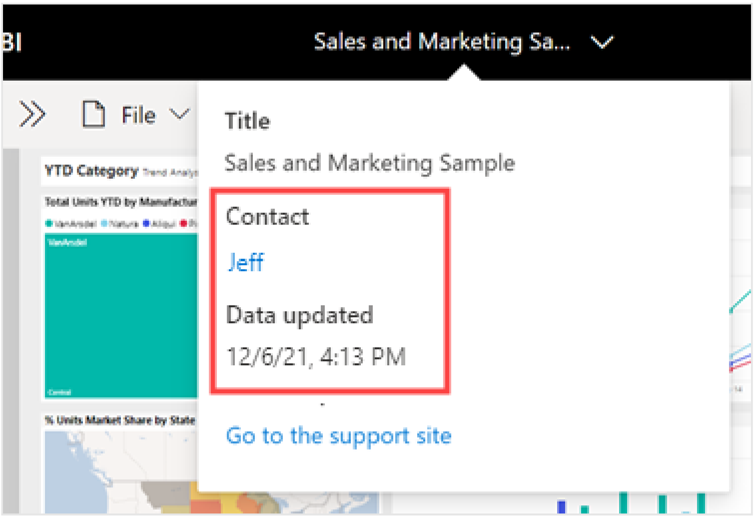
This article shows you how to determine when your content was last updated or refreshed and also suggests ways to stay in sync with your most important data.

Timestamps in the Power BI service

As a business user, you interact with content that's created by designers and made available to you. The content contains timestamps, so you know when it was published, shared, or last updated. Knowing that you're working with the freshest content gives you confidence and is often critical in making the right decisions.

What can you do to ensure you're using the latest content? In most cases, you don’t need to do anything at all. Content, like apps, dashboards, scorecards, or reports, is shared with you by designers. And the designers refresh and update the content. The designers either manually update content, or they update it automatically by setting an automated refresh schedule.

If you have questions about content freshness, contact the designer directly. The examples show you how to identify and contact the owner of your content.



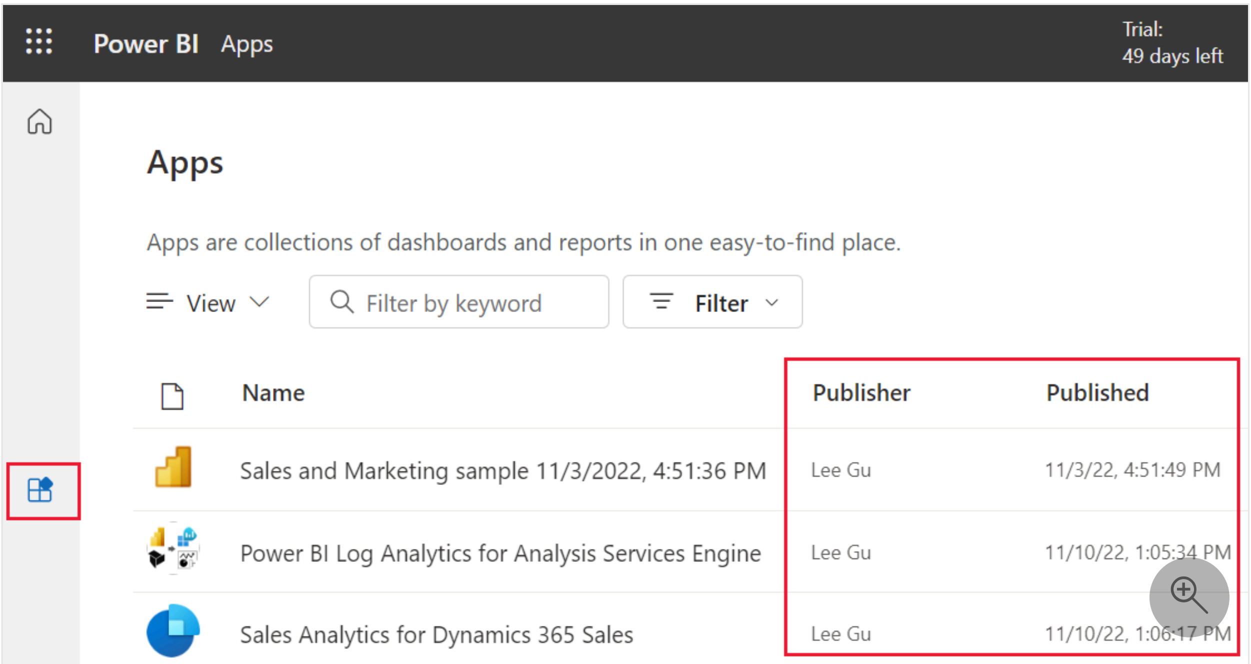
Different types of timestamps

Power BI adds date and time information when content is published, shared, updated, and refreshed. The type of date depends on the content. For example, apps have a published date and the content within an app has an updated date. Other types of content display shared and refreshed dates.

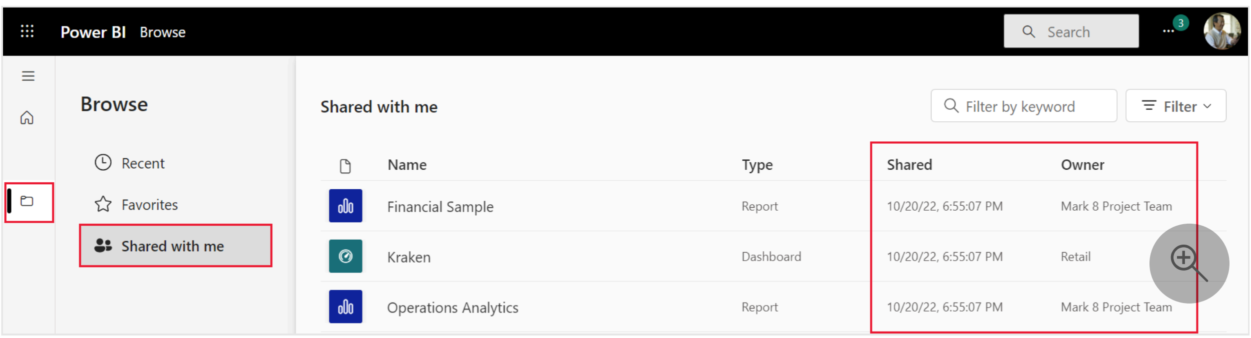
It's less helpful to know which type of timestamp goes where, and more helpful to know where to find a timestamp. The following are general guidelines to help you determine the freshness of your content.

Content lists

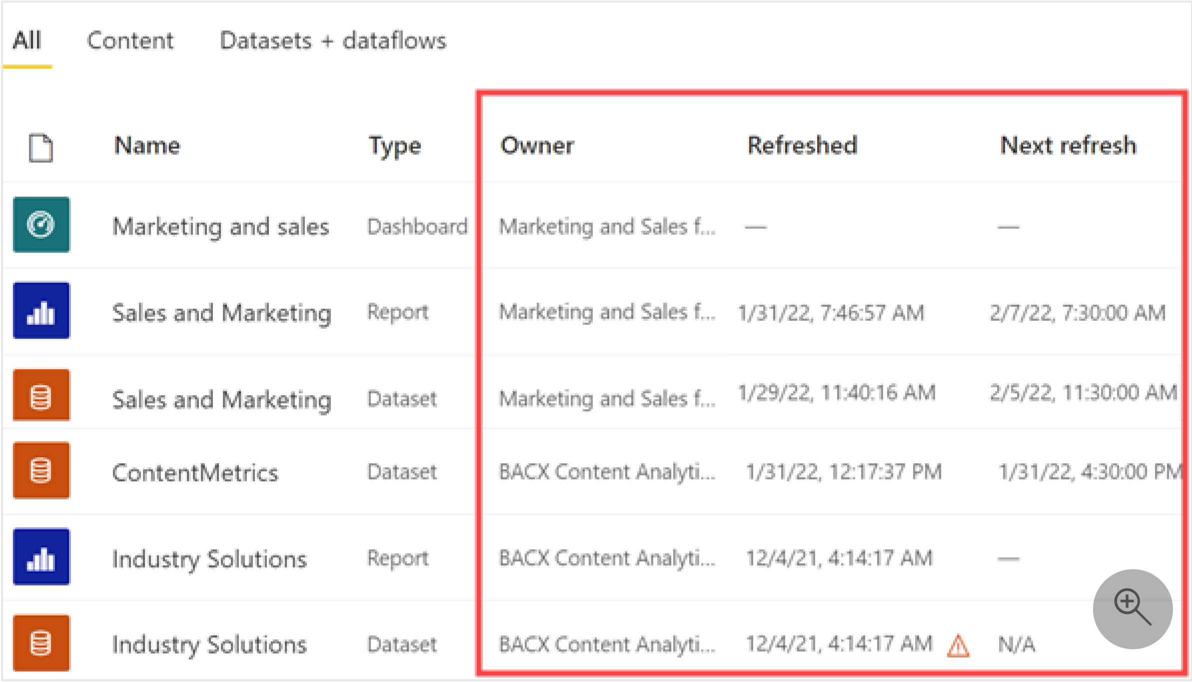
In a list of content in the Power BI service, there's an owner column and a timestamp column. The type of owner and timestamp depends on the content. The following example shows the Publisher name and Published date on the **Apps** page.



The next example shows the Owner of the content and the Shared date when you go to the **Browse** page and then the **Shared with me** tab.



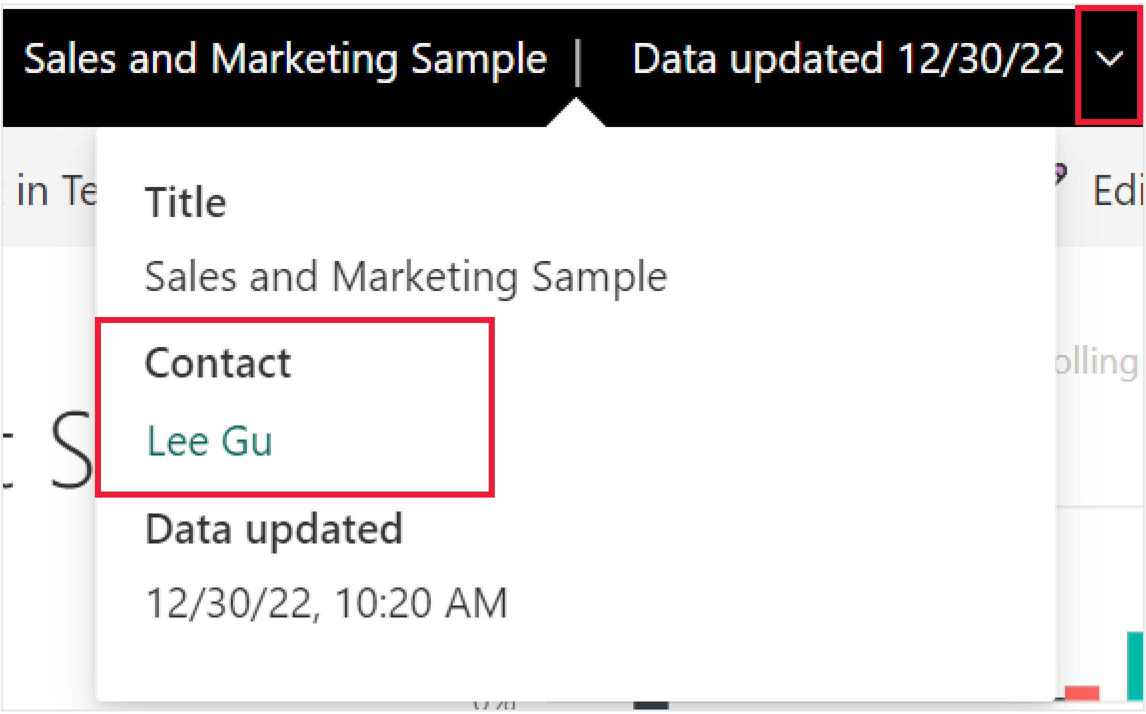
The final example shows a content list in a workspace. The Owner of the content, the Refreshed date, and the date of the Next refresh are listed.



The designer sets up the refresh schedule for content. Some content gets updated continually and other content might refresh daily, weekly, or not at all. Not all content is scheduled for refreshing, so you might see empty entries. If an error occurs during a refresh, an error icon appears in the timestamp column.

View reports

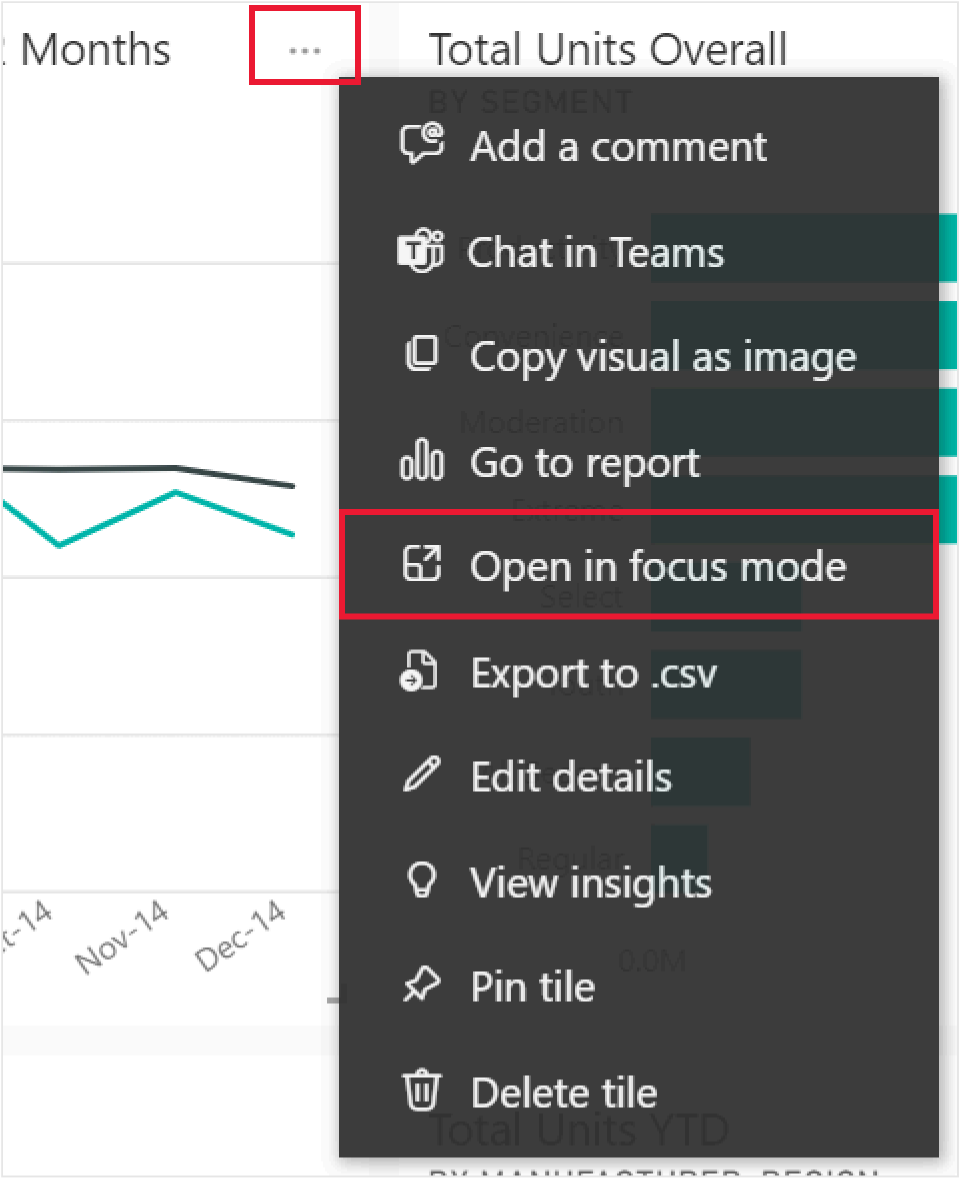
In a report, there's an arrow on the title bar. Select the arrow to see contact information and a timestamp. Dashboards, worksheets, and scorecards show the owner but not a timestamp. Select the **Owner** or **Contact** link if you have questions or suggestions for the owner of the report.



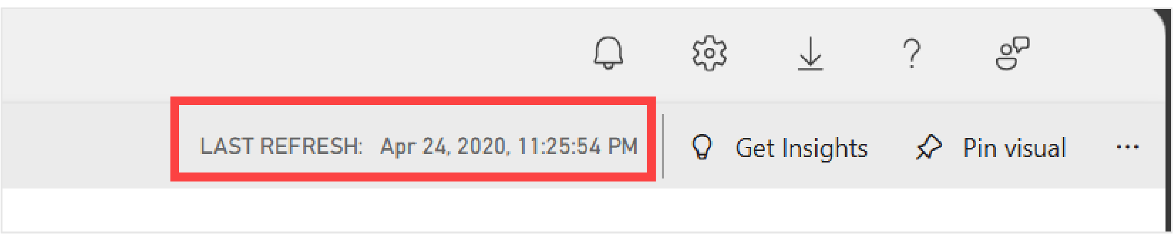
View dashboards

The dashboard title menu shows a contact, but not a timestamp. However, you can view the last refresh date for individual dashboard tiles and for the underlying semantic model.

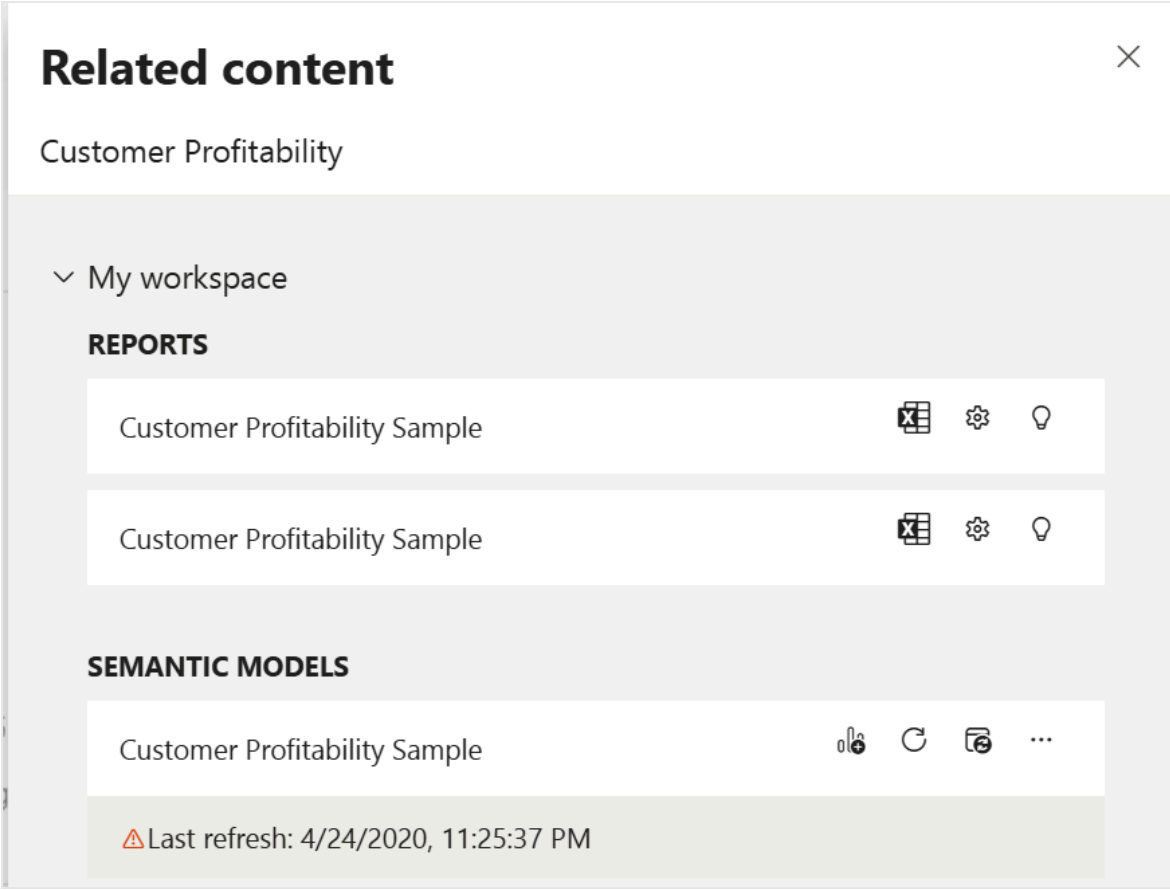
1. View a tile in Focus mode to see the Last refresh timestamp. On a dashboard tile, select **More options** (...) and choose **Open in focus mode**.



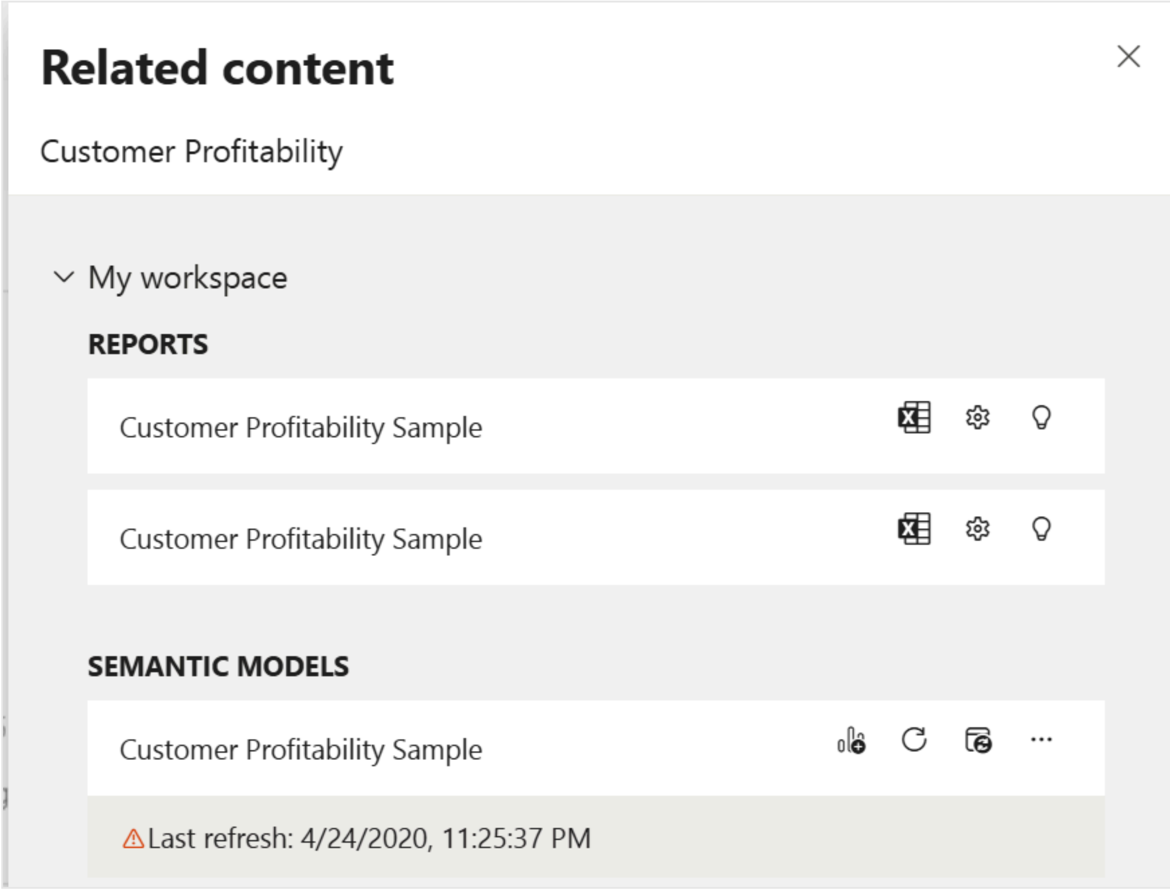
The last refresh date is in the upper right corner. If you don't see it, expand your browser to make it wider.



2. Open a dashboard, select **More actions (...)**, and then choose **See related content** from the Power BI upper menu bar.



The **Related content** pane shows the last refresh information for the dashboard or report's underlying semantic model.



Stay in sync with your content

There are built-in Power BI features available that can help you stay up-to-date with your most important content.

Set data alerts

To be notified if data goes above or below a specified limit, Create a data alert for a dashboard. Stay up-to-date by using data alerts. Adjust your settings, so Power BI sends you an email if a value on a dashboard passes a specific threshold. For example, receive an alert if inventory falls below 25 units or if sales exceed a specified goal.

Subscribe to see changes

Another way to stay up-to-date is to subscribe to a report or dashboard. Instead of logging in to view a report or dashboard, have a snapshot sent to you on a schedule that you set. For more information, see subscribe to dashboards and reports.

Considerations and limitations

Each individual piece of content within an app has its own updated date and owner. That information might be different from the published date and app owner for the entire app.

Related content

- Create a data alert
- Subscribe to dashboards and reports
- View related content

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Display content in more detail: focus mode and full screen mode

Article • 01/07/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

You want your reports, dashboards, visuals, and tiles to display a certain way. Power BI offers you many options to get it just right. Two of those options: the **View** menu and **Focus mode** are discussed in this article. Used together, you can achieve the display that you want. And these display options aren't just for viewing, you can interact with the reports, dashboards, and visuals in all of these display modes. Most of these display options are also available in Power BI Desktop.

> **Tip**
>
> Reports can be navigated using keyboard shortcuts.

Focus mode versus full screen mode

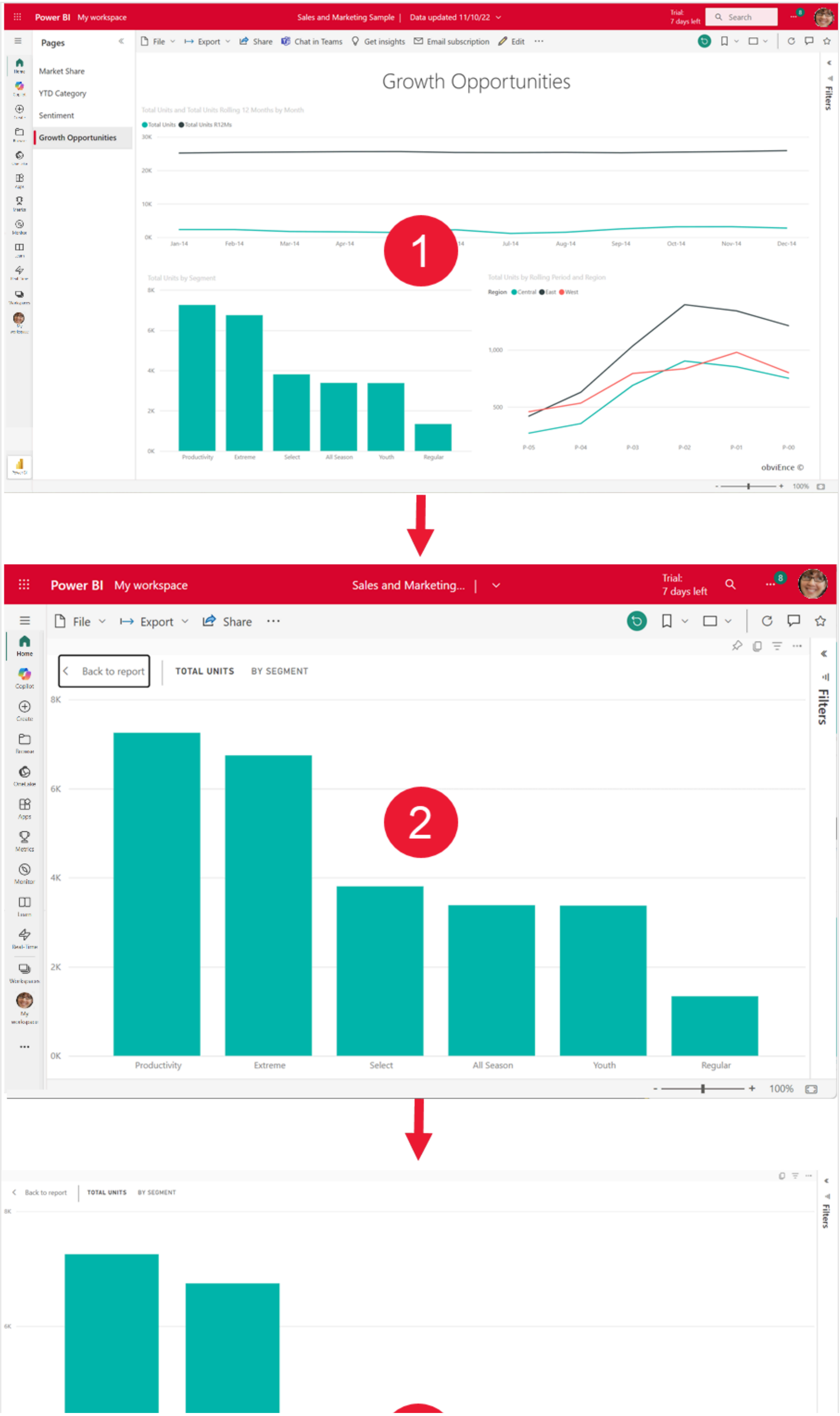
Focus mode and full screen mode are two different ways to see more detail in your visuals, reports, and dashboards. Full screen mode is applied to the current contents of a report canvas or dashboard. It removes all the panes surrounding your content. Focus mode is applied to individual report visuals or dashboard tiles. It enlarges the tile or visual along with filters, menus, and navigation panes. Let's take a closer look at the similarities and differences.

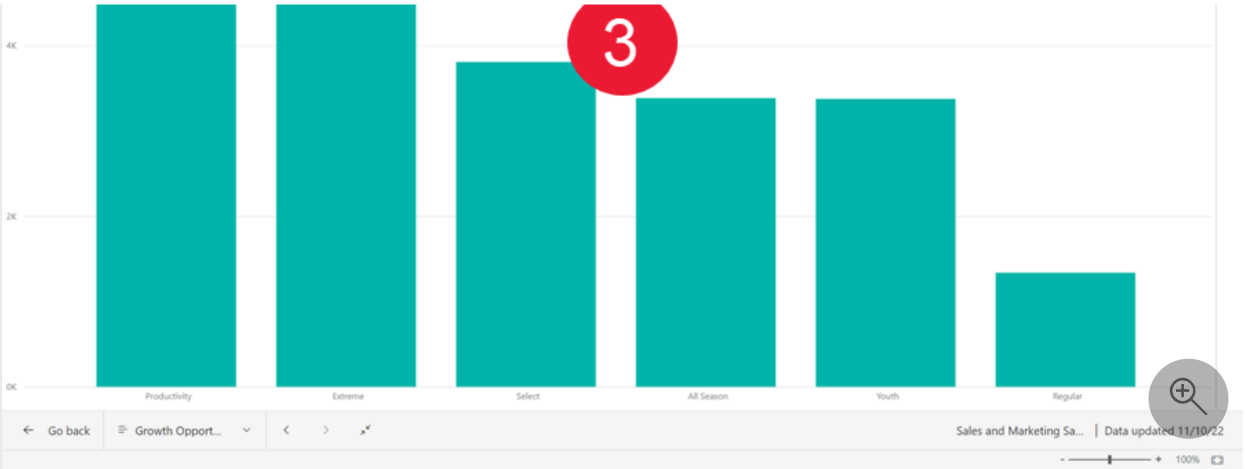
Expand table

Content	Focus mode	Full screen mode
Dashboard	No	Yes
Report page	No	Yes
Report visual	Yes	Yes, if it's already in focus mode and therefore the only visual on the report canvas.
Dashboard tile	Yes	No

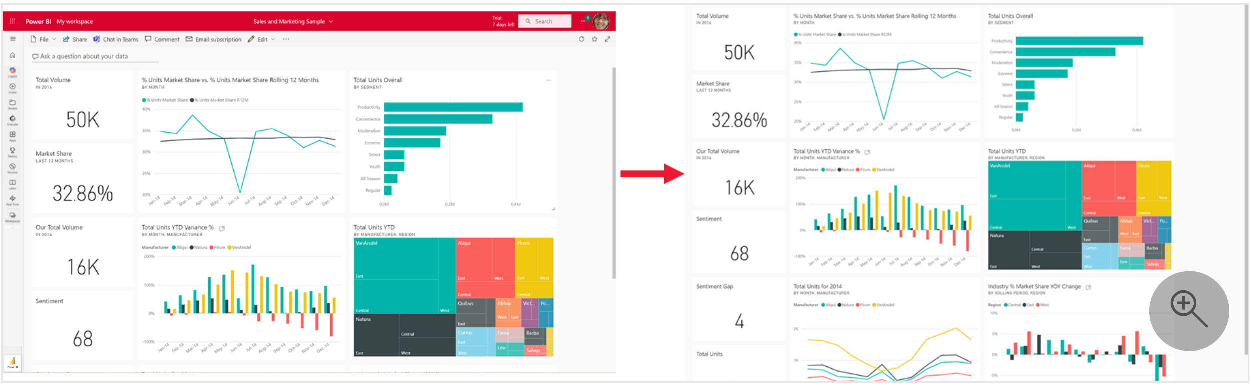
Content	Focus mode	Full screen mode
Windows 10 mobile	No	Yes

In the following example, we started with a report (1), opened one of the visuals in focus mode (2) and then opened that same visual in full screen mode (3).


Power BI My workspace
Sales and Marketing Sample | Data updated 11/10/22
Trial: 7 days left
Search
File
Export
Share
Chat in Teams
Get insights
Email subscription
Edit
Pages
Market Share
YTD Category
Sentiment
Growth Opportunities
Growth Opportunities
Total Units and Total Units Rolling 12 Months by Month
Total Units
Total Units R12Ms
Total Units by Segment
Productivity
Extreme
Select
All Season
Youth
Regular
Total Units by Rolling Period and Region
Region
Central
East
West
obviEnce ©
Filters
1
Power BI My workspace
Sales and Marketing... |
Trial: 7 days left
File
Export
Share
Back to report
TOTAL UNITS
BY SEGMENT
8K
6K
4K
2K
0K
Productivity
Extreme
Select
All Season
Youth
Regular
100%
Filters
2
Back to report
TOTAL UNITS
BY SEGMENT
Filters



When to use full screen mode



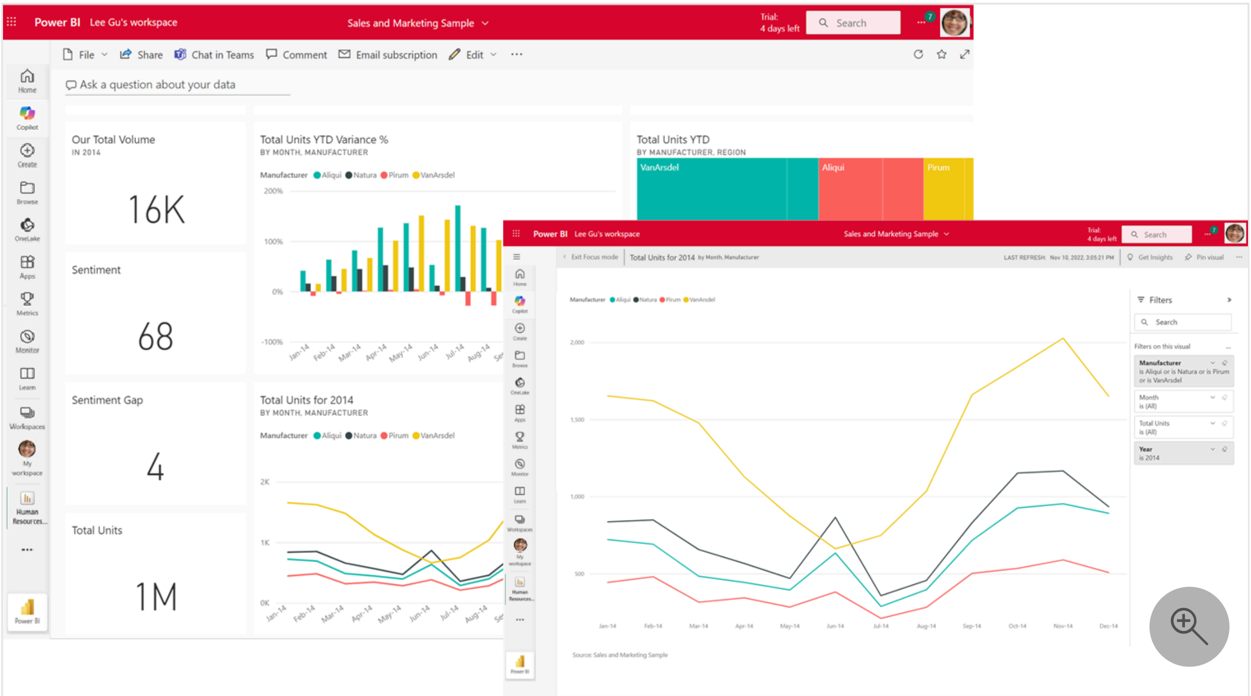
Display your Power BI service content (dashboards, report pages, and visuals) without the distraction of menus and nav panes. You get an unadulterated, full view of your content at a glance, all the time. This view is sometimes referred to as TV mode.

Use full screen mode to:

- Present your dashboard, visual, or report at a meeting or conference.
- Display in an office on a dedicated large screen or projector.
- View on a small screen.
- Review in locked mode--you can touch the screen or mouse over tiles without opening the underlying report or dashboard.

When to use focus mode

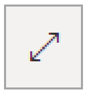
Focus mode lets you expand (pop out) a visual or tile to see more detail. Maybe you have a dashboard or report that is a little crowded and you want to zoom in on only one visual. This function is a perfect use of focus mode.

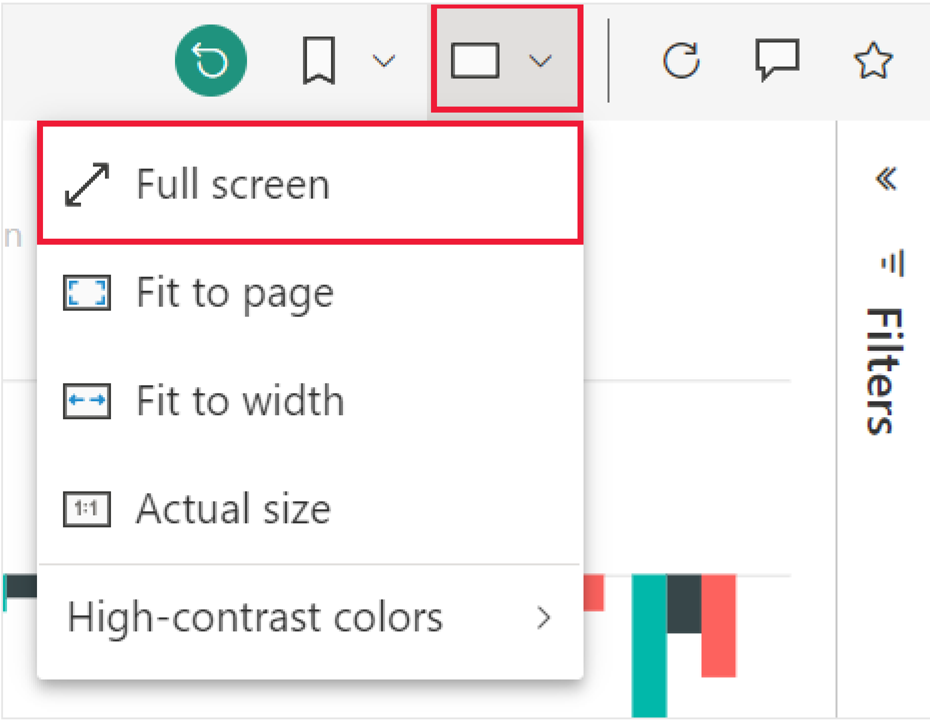


While in focus mode, you can interact with any filters that were applied when this visual was created.

Work in full screen mode

Full screen mode is available for dashboards and report pages.

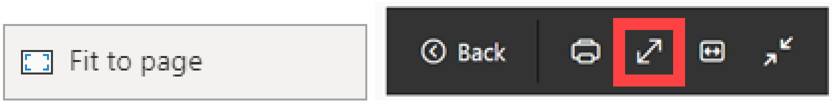
- To open a dashboard in full screen mode, select the full screen icon  from the top menu bar.
- To open a report page in full screen mode, select the View icon and choose **Full screen**.



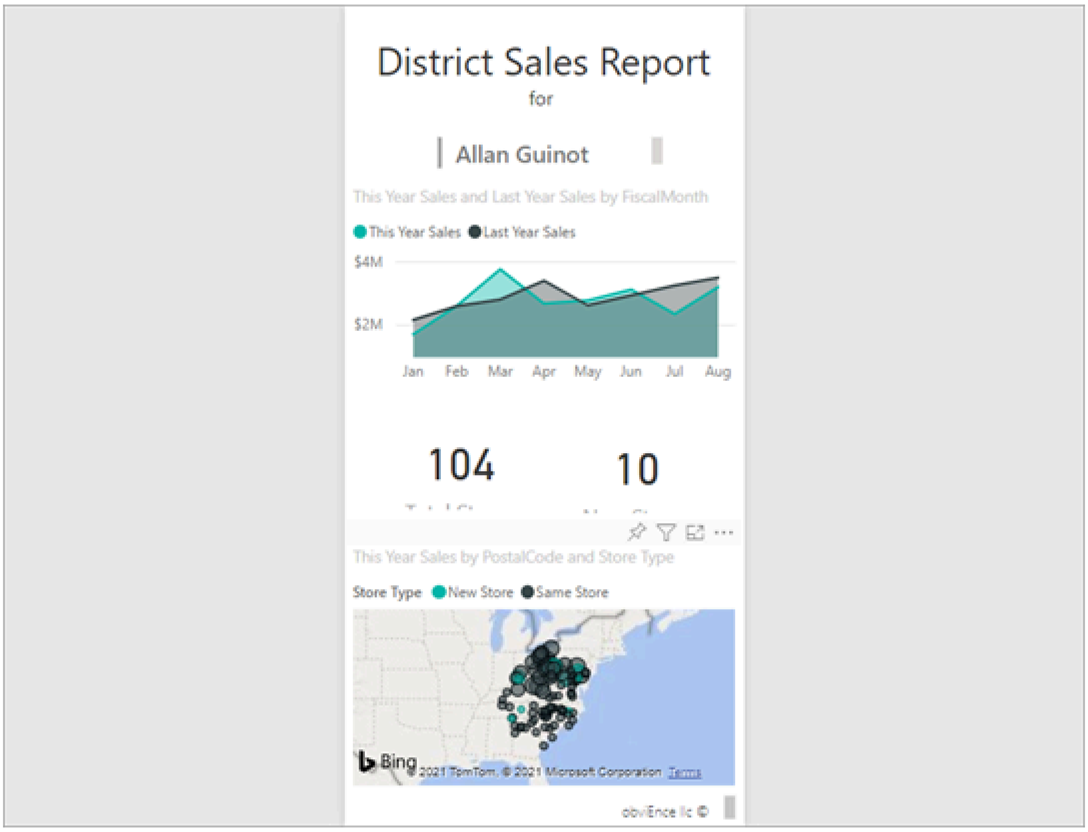
- To see a visual in full screen mode, first open it in focus mode so that it's the only visual on the report page. Then open that report page in full screen mode.

Your selected content fills the entire screen. When you're in full screen mode, navigate using the menu bar at the bottom. If you don't see menu options for a dashboard, move your cursor, and the menu appears. Because full screen is available for such a wide variety of content, the navigation options vary. Some of the options are:

- Select the **Back**, **Go back**, or **Back to report** button to navigate to the previous page in your browser. If the previous page was a Power BI page, it too displays in full screen mode. Full screen mode persists until you exit out.

- 

Use the **Fit to page** or **Fit to screen** option to display your selected content at the largest size possible without resorting to scrollbars.



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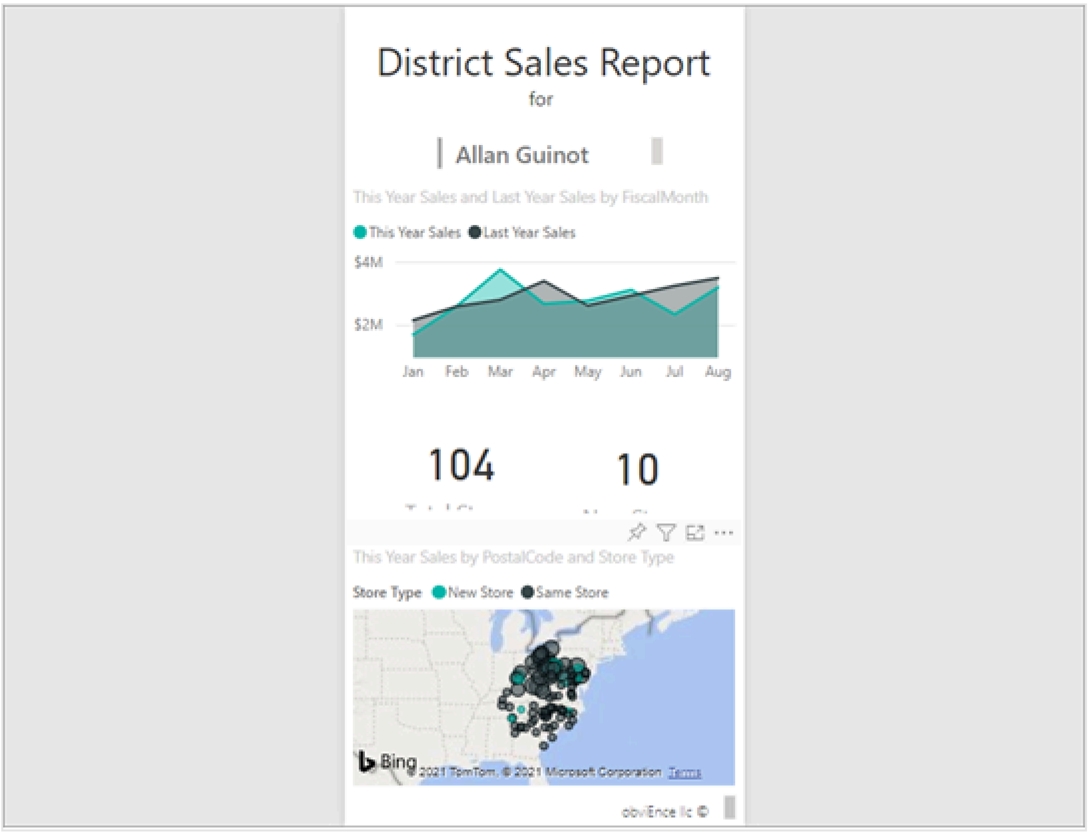
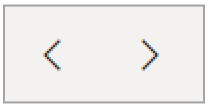
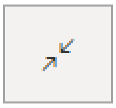
Sometimes you don't care about scrollbars, but you want the dashboard to fill the entire width of the available space. Select the **Fit to width** button.

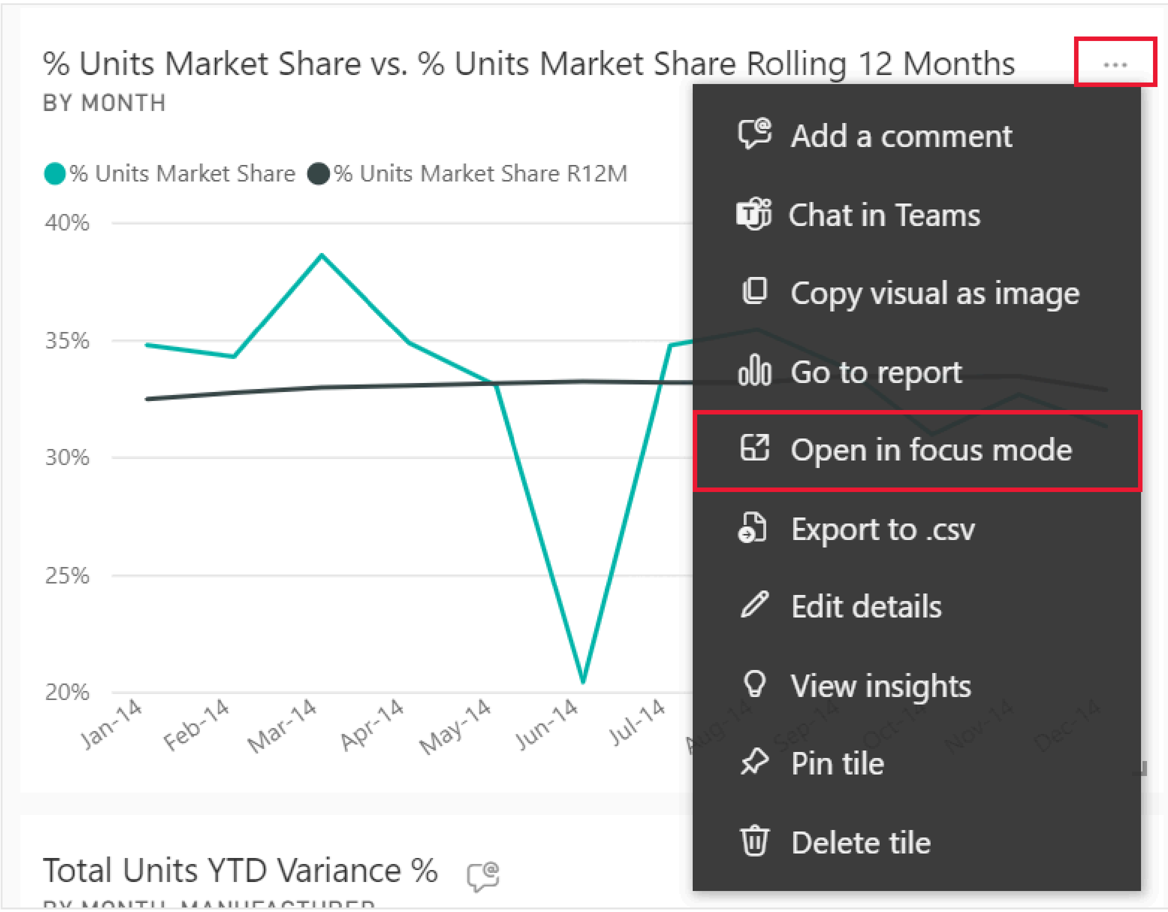


- 
  In full screen reports, use these arrows to move between the pages in the report. Each page displays in full screen mode. Full screen mode persists until you exit full screen mode.
- 
  To exit full screen mode, select the **Exit full screen** icon.

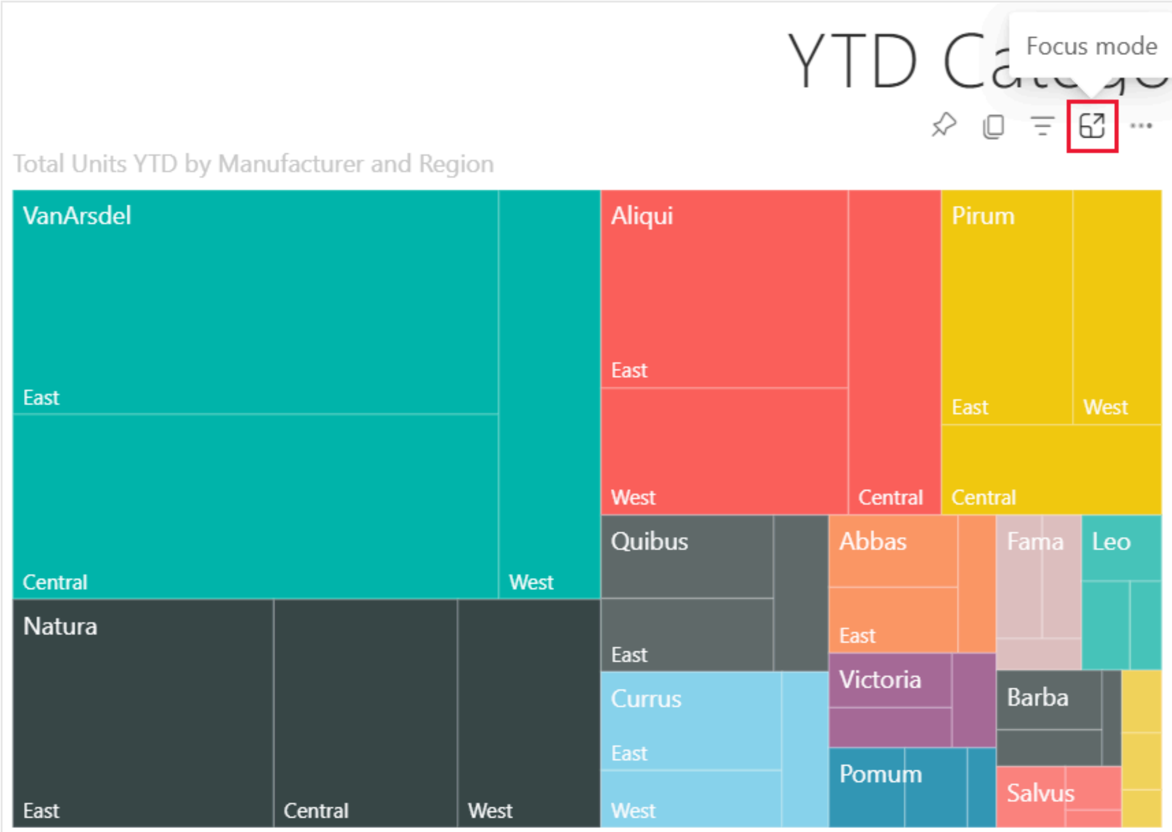
Work in focus mode

Focus mode is available for dashboard tiles and report visuals.

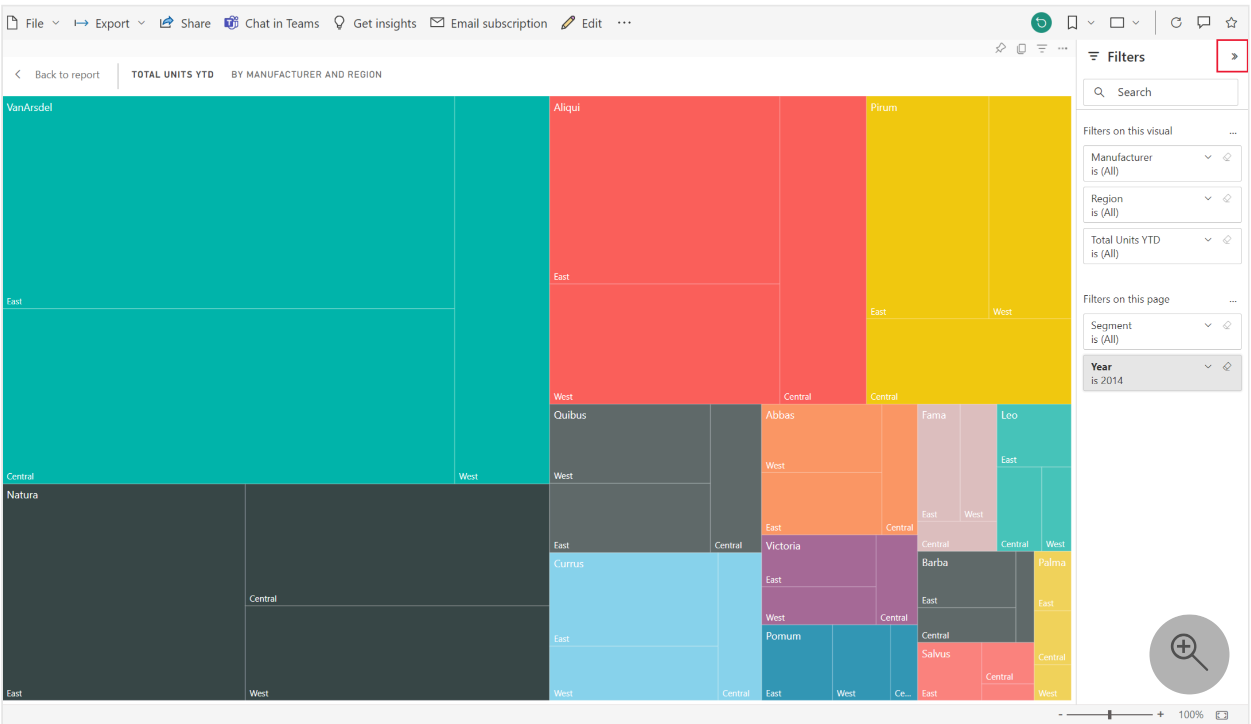
- To open a dashboard tile in focus mode, hover over a tile, select **More options** (...) and choose **Open in focus mode**.

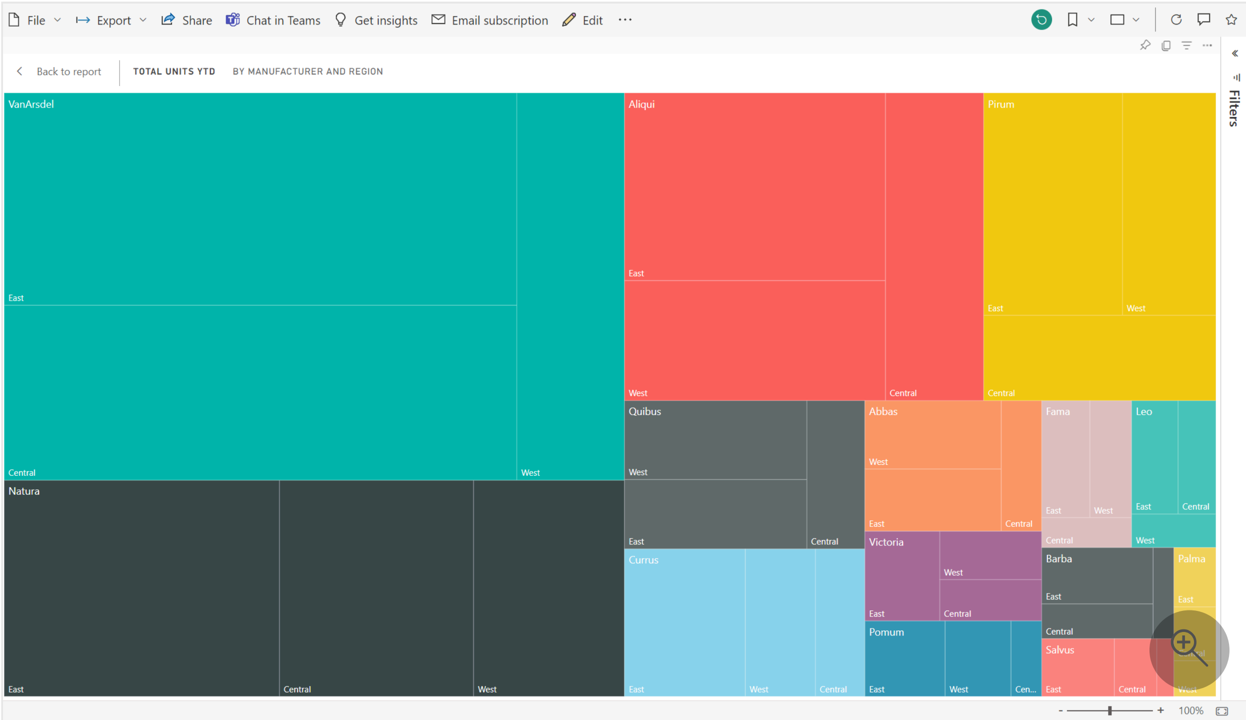


- To open a report visual in focus mode, hover over the visual and select the **Focus mode** icon. 

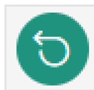


The visual opens and fills the entire canvas. Notice that your report canvas still has a **Filters** pane that you can use to interact with the visual. The **Filters** pane can be collapsed.

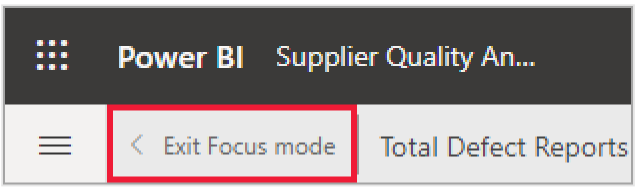


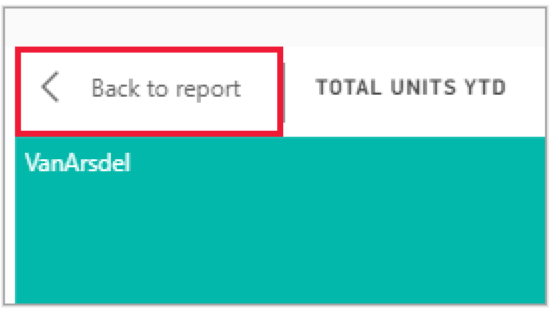


Explore further by modifying the filters and looking for interesting discoveries in your data. In reading view, you can't add new filters, change the fields being used in the visuals, or create new visuals. However, you can interact with the existing filters, cross-filter, pin, subscribe, comment, and much more.

For a dashboard tile, your changes can't be saved. For a report visual, any modifications you make to the existing filters are saved when you exit Power BI. If you don't want Power BI to remember your modifications, select the **Reset to default** button. 

Leave focus mode and return to the dashboard or report by selecting either **Exit focus mode** or **Back to report** (in the upper left corner of the visual).





Considerations and troubleshooting

- When using focus mode with a visual in a report, you can view and interact with all filters: Visual level, Page level, Drillthrough, and Report level.
- When using focus mode with a visual on a dashboard, you can view and interact with only the Visual level filter.

Related content

- Change the View settings for reports

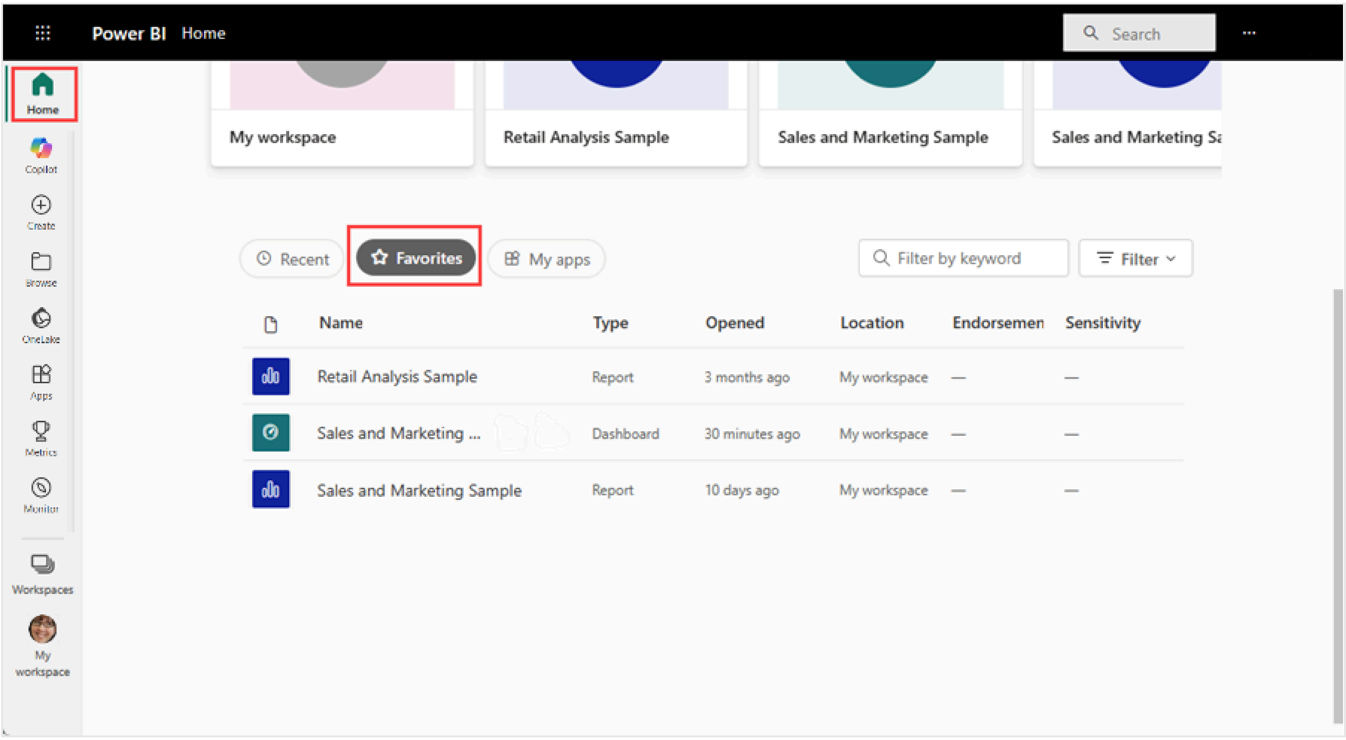
Feedback

Favorite dashboards, reports, and apps in the Power BI service

Article • 04/14/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

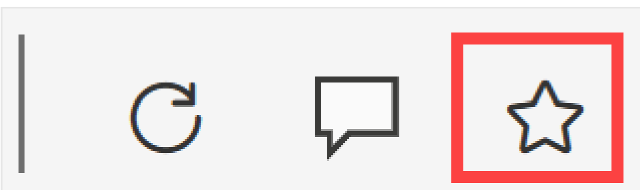
When you make content a *favorite*, you can access it quickly from the **Favorites** content list. Favorites are typically content that you visit most often and are identified with a filled star.



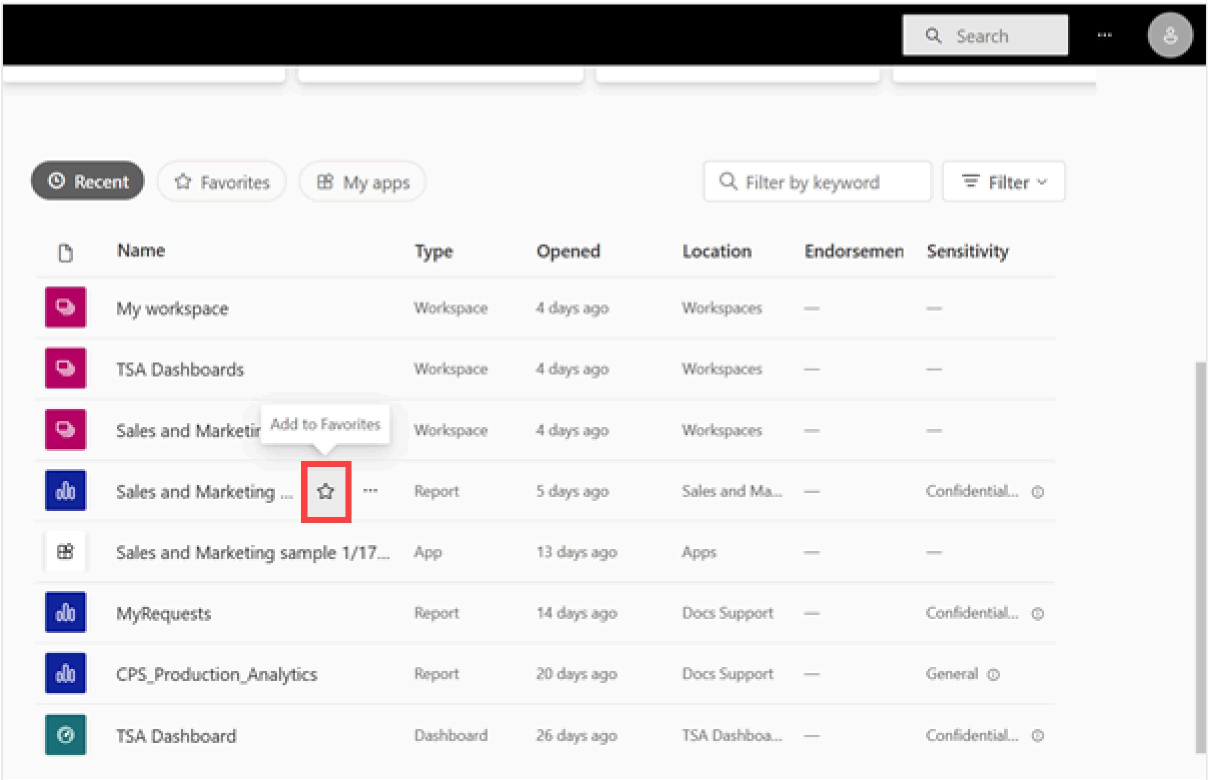
Add a dashboard or report as a favorite

1. Open a dashboard or report that you use often. Even content that is shared with you can be a favorite.

2. From the upper menu bar of the Power BI service, select **Add to Favorites** or the star  icon.

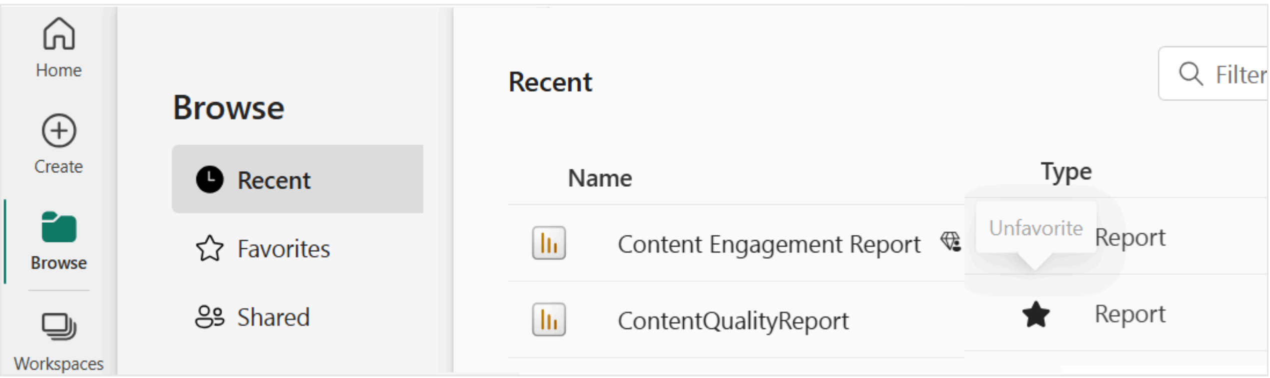
   You can also favorite a dashboard or report from anywhere you see the star icon, such as Home, Recent, Apps, and Shared with me.



Work with favorites

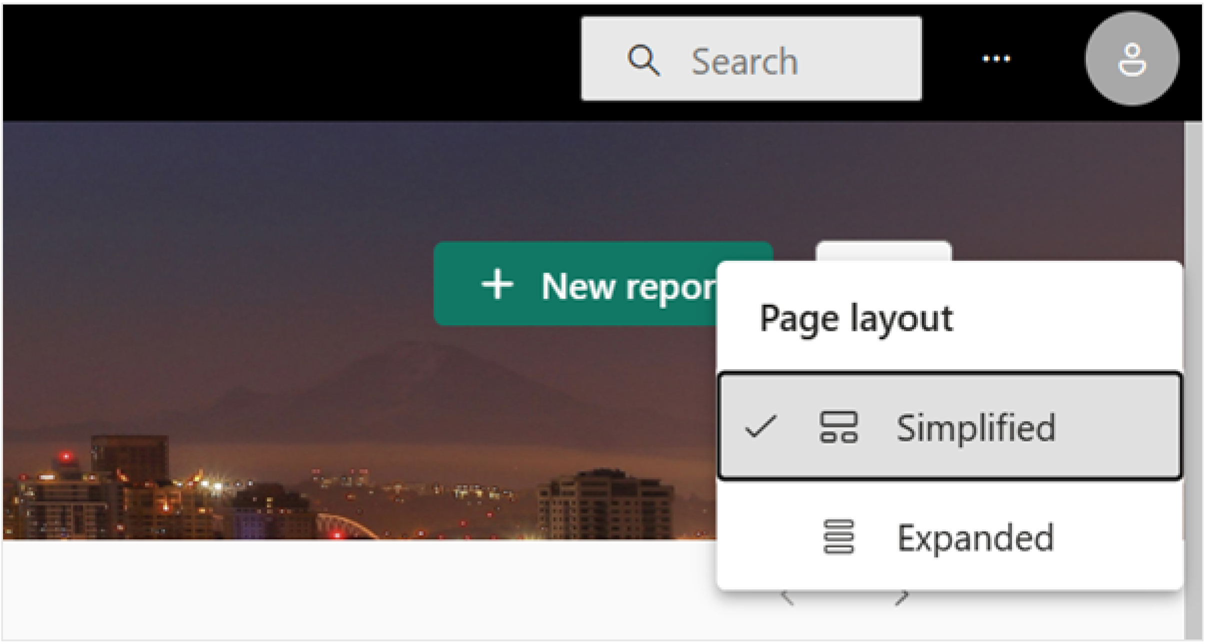
You have several options for viewing your favorites.

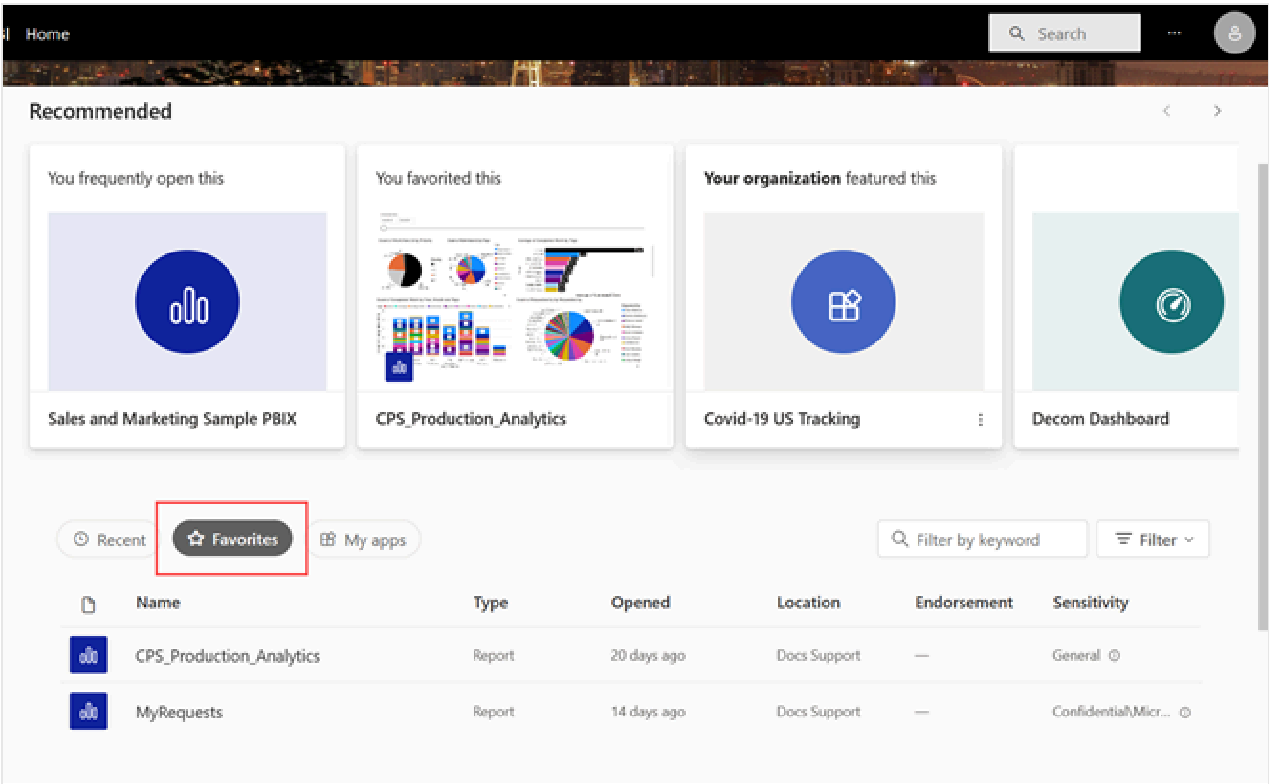
1. To see all the content that you added as favorites, on the **Browse** pane, select the **Favorites** tab.



From here, you can take action. You can open a favorite, identify owners, and even share favorites with your colleagues.

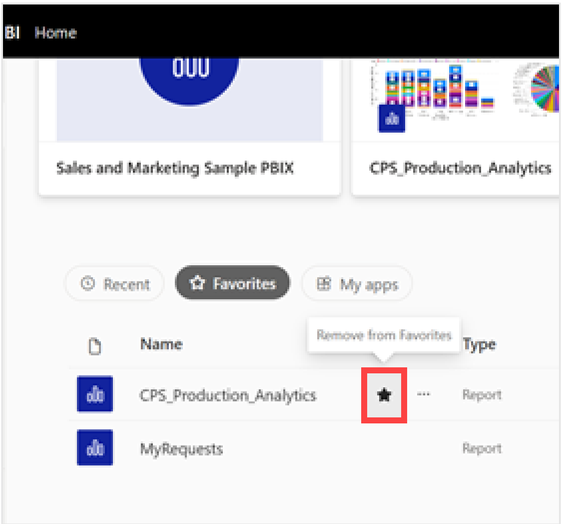
2. Favorites are also available from Power BI Home. If you selected the **Expanded** display mode, your favorites are listed in the **Favorites + frequents** section. If you selected the **Simplified** display mode, your favorites are listed in the **Favorites** tab.





Unfavorite content

If you no longer use a report, dashboard, or app as often as you used to, you can unfavorite it. When you unfavorite content, it's removed from your Favorites list but not from Power BI. Just select the black star to turn it back to a white star.



Considerations and limitations

When you set an app as a favorite, it automatically favorites all the reports and dashboards for that app. It isn't possible to favorite individual app reports or dashboards.

Related content

- Basics of the Power BI service
- More questions? Ask the Power BI Community .

Print from the Power BI service

Article • 01/17/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ❌ Requires Pro or Premium license

Print an entire dashboard, a dashboard tile, a report page, or a report visual from the Power BI service. If your report has more than one page, you need to print each page separately. Printing isn't available from Power BI Desktop.

Print considerations

Report *designers* create most Power BI dashboards and reports for use online. They look amazing on any device used to view them. However, when it comes time to print the content, you might not get the results you want.

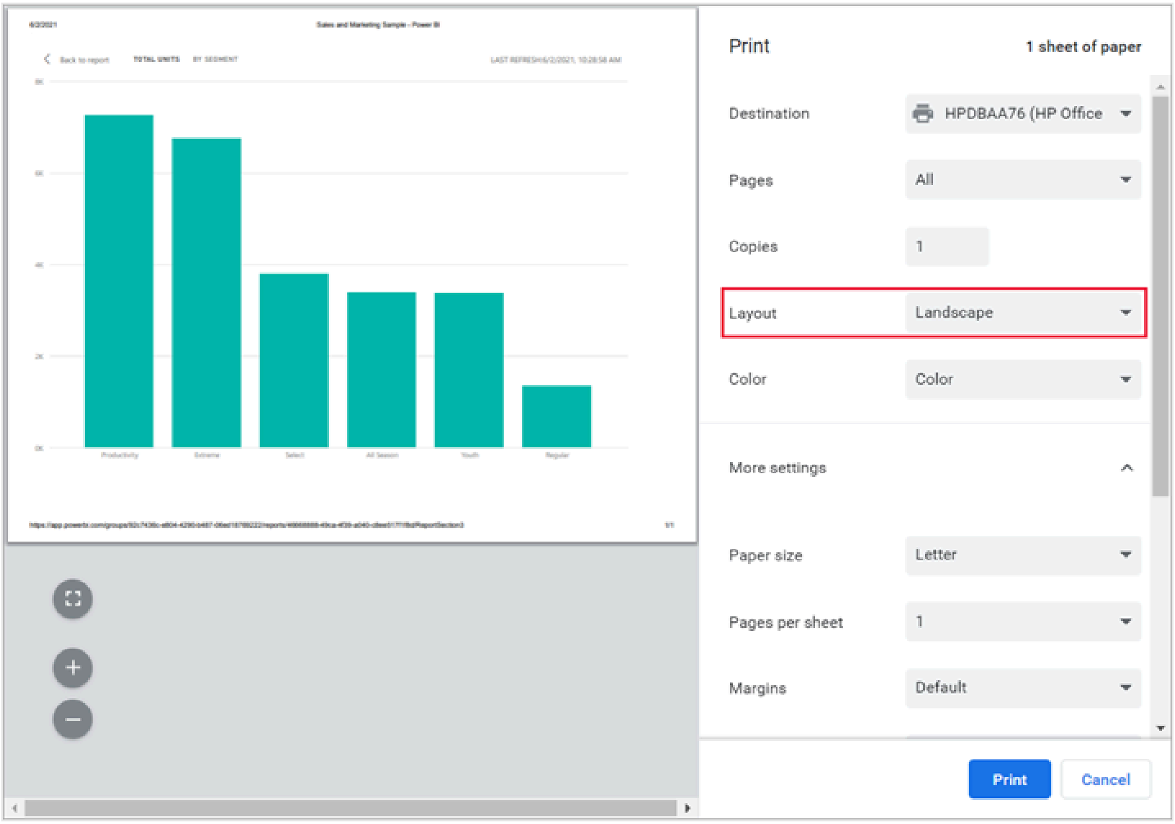
You can make changes to your browser and print settings to adjust the print job. But to ensure your printouts match what you see in your browser, consider exporting to PDF and then printing the PDF instead.

Adjust your browser print settings

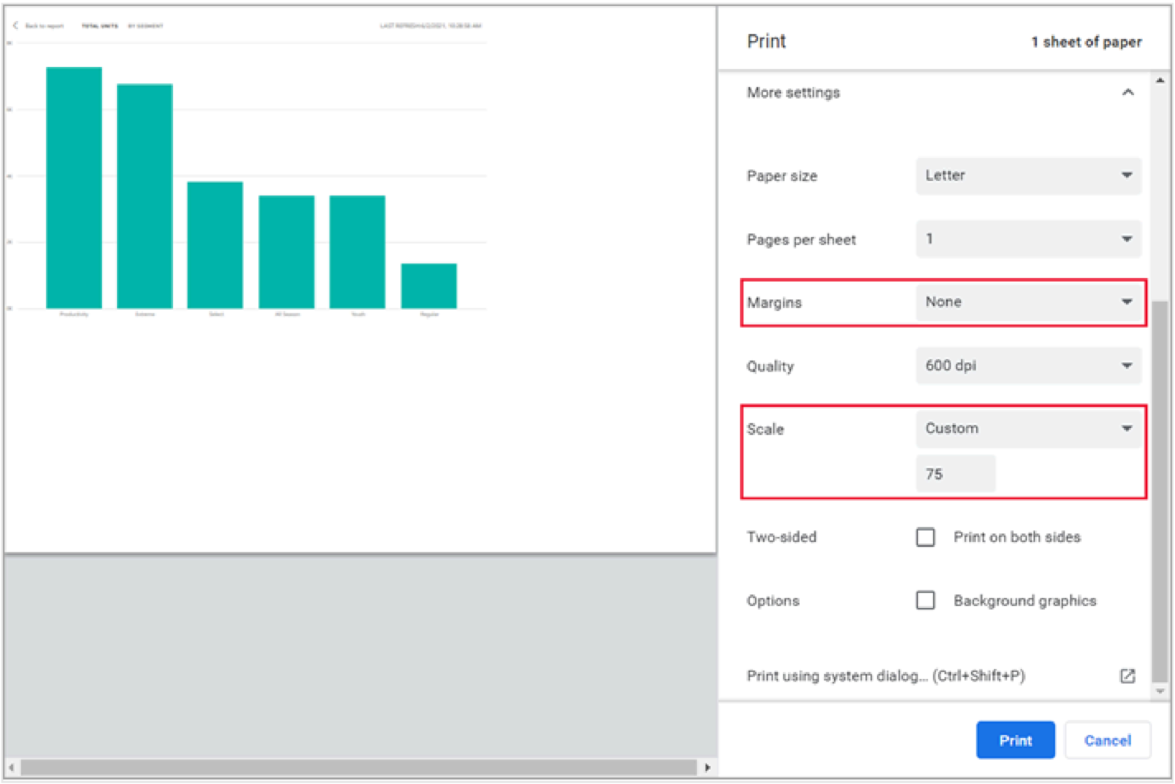
When you print from Power BI, your browser opens a Print window. Every browser has a different Print window, but they all have similar options available to use and control the look of your printout.

Here are a few quick tips you can use to format your printout.

1. Use the **Landscape** layout if your dashboard, report, or visual is wider than it's tall.



2. Adjust the margins and scale settings to fit more onto a printed page. For example, if your tile doesn't fit on the page, you might want to change the scale to 75%.



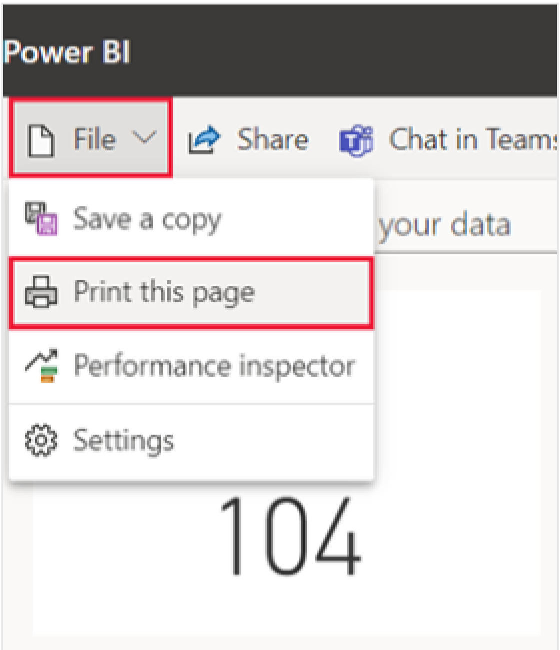
Experiment with your browser's settings until you get the look you like. Some browsers even have options to print background graphics.

Dashboard

Print a dashboard

1. Open the dashboard that you'd like to print.

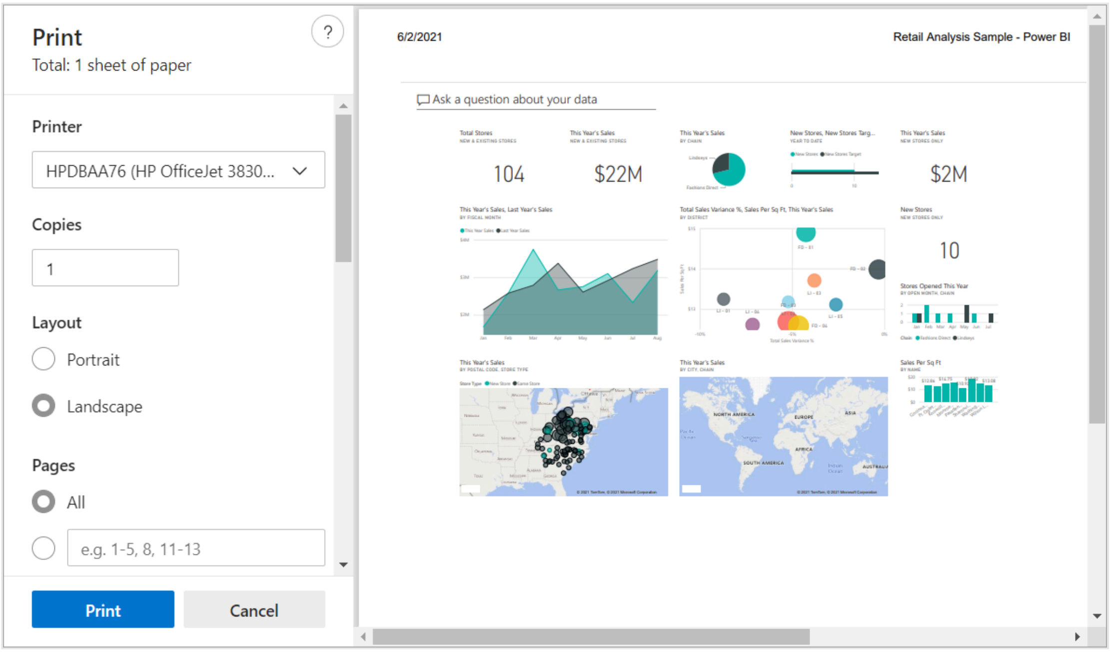
2. In the upper left corner, select **File** > **Print this page**.



3. If your report has a sensitivity label, decide whether you should print the report or not.

4. Adjust your print settings.

5. Select **Print**.



Considerations and troubleshooting

Q: Why can't I print all the report pages at once?
A: Report pages can only be printed one page at a time.

Q: Why can't I print to PDF?
A: You have this option only if you already configured the PDF driver in your browser. If you don't see this option, check to see if your administrator has disabled print to PDF.

Q: Why doesn't my browser match the screenshots when I select **Print**?
A: The Print screens vary by browser and software version.

Q: Why am I having scaling and orientation issues (such as incorrect scaling or the dashboard doesn't fit on the page)?
A: We can't guarantee the printed copy is exactly the same as it appears in the Power BI service. Things like scaling, margins, visual details, orientation, and size aren't controlled by Power BI. Try adjusting the print settings for your browser. Some of the print settings we suggest include page orientation (portrait or landscape), margin size, and scale. If these setting adjustments don't help, refer to the documentation for your specific browser.

Q: Why don't I see the print option when I hover over the visual in full screen mode?
A: Go back to the dashboard or report in default view and reopen the visual in Focus mode and then Full screen mode.

Related content

- Share Power BI reports and dashboard with coworkers and others
- More questions? Ask the Power BI Community

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

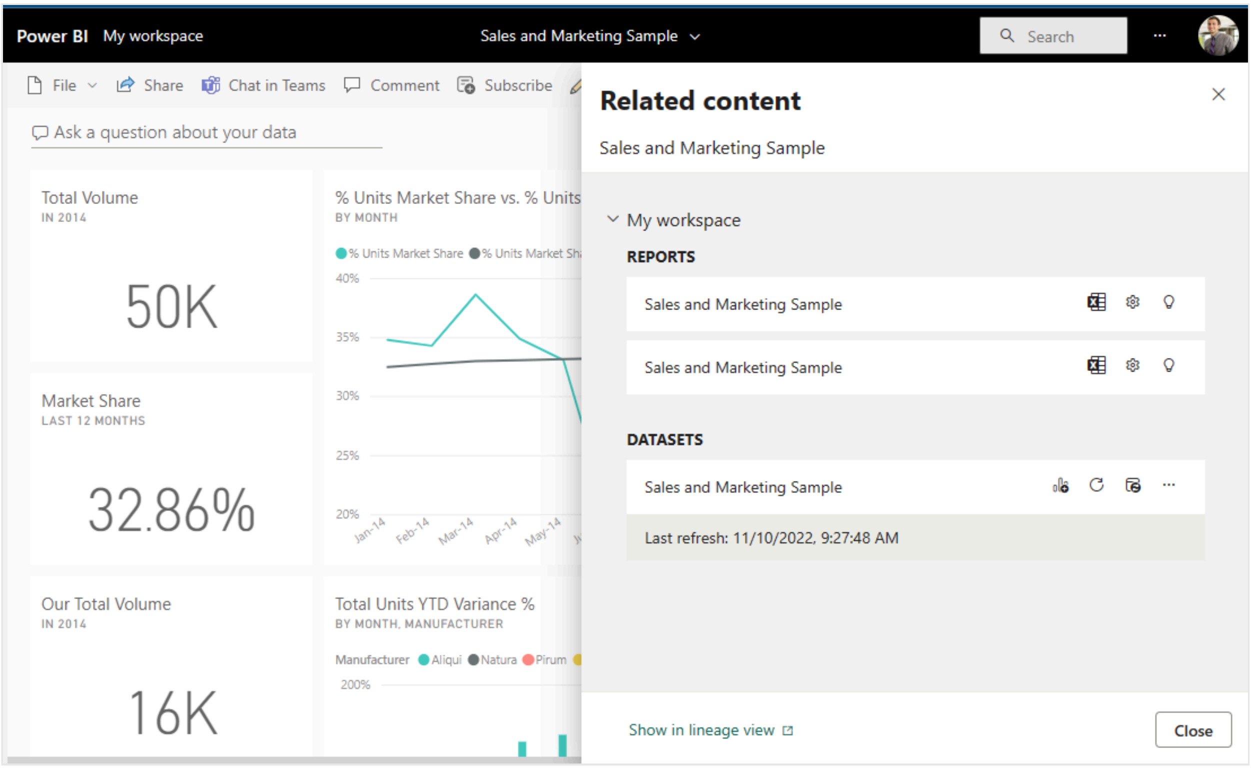
See related content in the Power BI service

Article • 01/17/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

The **Related content** pane shows you how your Power BI service content -- dashboards, reports, and semantic models -- are interconnected. The **Related content** pane is also a launching pad for taking action. From here you can do things like open a dashboard, open a report, generate insights, analyze the data in Excel, and more.

In the Power BI service, reports are built on semantic models, report visuals are pinned to dashboards, and dashboard visuals link back to reports. But how do you know which dashboards are hosting visuals from your Marketing report? And how do you locate those dashboards? Is your Procurement dashboard using visuals from more than one semantic model? If so, what are they named and how can you open and edit them? Is your HR semantic model being used in any reports or dashboards at all? Or, can it be moved without causing any broken links? Questions like these can be answered on the **Related content** pane. Not only does the pane display the related content, it also allows you to take action on the content and easily navigate between the related content.

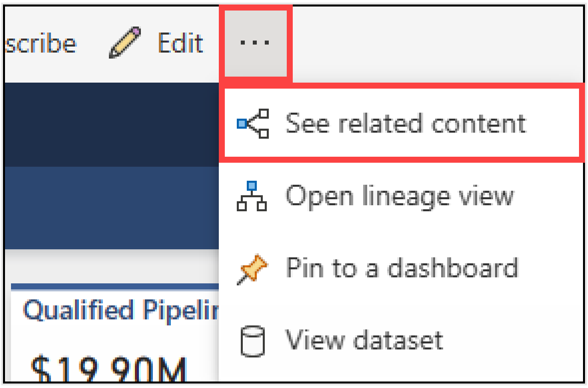


ⓘ Note

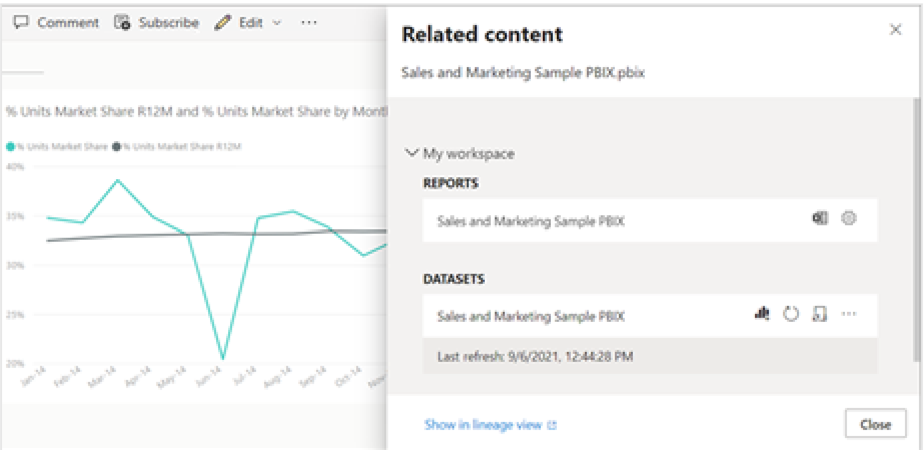
The related content feature does not work for streaming semantic models.

See related content for a dashboard or report

With a dashboard or report open, select **More options** (...) in the menu bar, and choose **See related content** from the dropdown.



The **Related content** pane opens. For a dashboard, it shows all the reports that have visualizations pinned to the dashboard and their associated semantic models. For this dashboard, there are visualizations pinned from only one report and that report is based on only one semantic model. If you look at the image at the beginning of this article, you'll see related content for a dashboard that has visualizations pinned from two reports, and one semantic model.



From here, you can take direct action on the related content, depending on your permissions. For example, select a report or dashboard name to open it. For a listed report, select an icon to open and edit the settings for the report, get insights, and more. For a semantic model, review the last refresh date and time, analyze in Excel, get insights, refresh, and more.

Considerations and limitations

- If you don't see "See related", look for the icon instead . Select the icon to open the **Related content** pane.
- To open related content for a report, you need to be in Reading view.
- The related content feature doesn't work for streaming datasets.

Related content

- Tutorial: Get started creating in the Power BI service
- More questions? Ask the Power BI Community

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

Navigation for Power BI business users: global search

Article • 01/11/2025

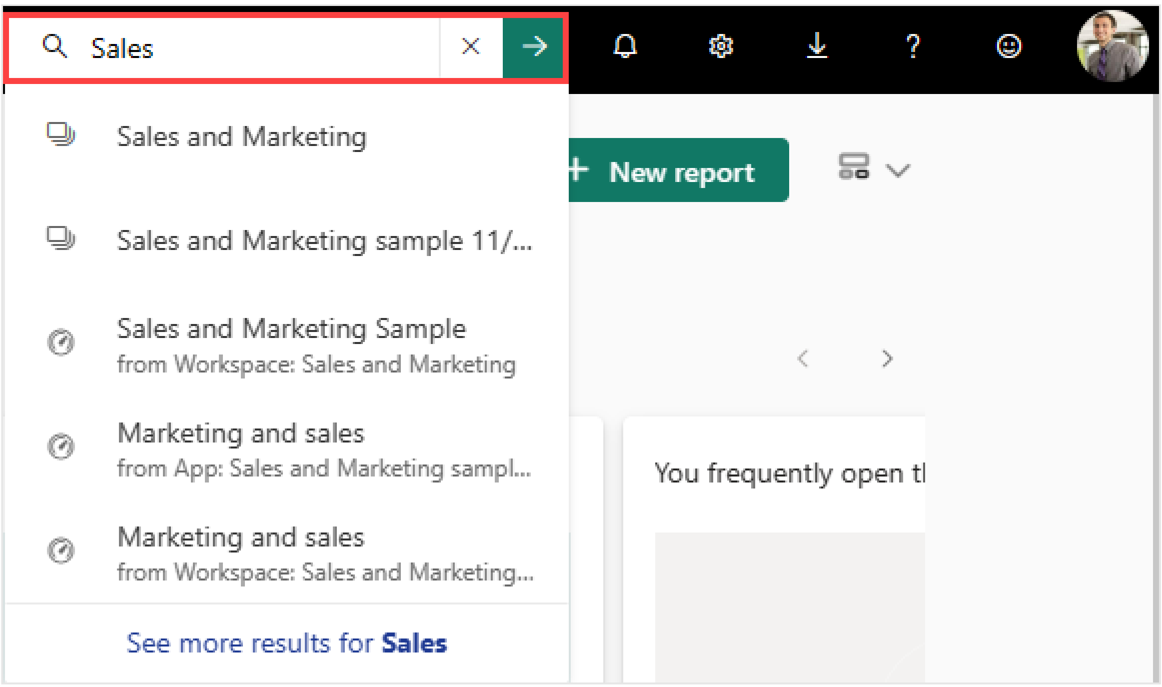
APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

When you're new to the Power BI service, you have only a few pieces of content (dashboards, reports, apps). But as colleagues begin sharing content with you and you begin downloading apps, you can end up with long lists of content. That's when you find searching and sorting helpful.

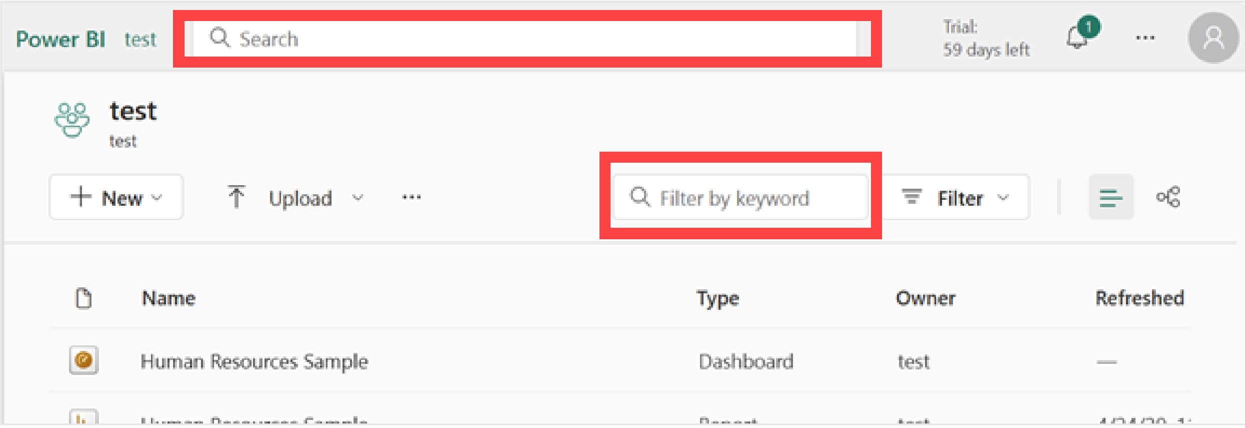
Search for content

Search is available from almost every part of the Power BI service. Just look for the search box or search icon. 

In the **Search** field, type all or part of the name of a dashboard, report, workbook, workspace, app, or owner. Power BI searches all of your content.



In some Power BI areas, such as workspaces, you find two different **Search** fields. The **Search** field in the menu bar searches all of your content while the **Search** field on the workspace canvas searches only that workspace.

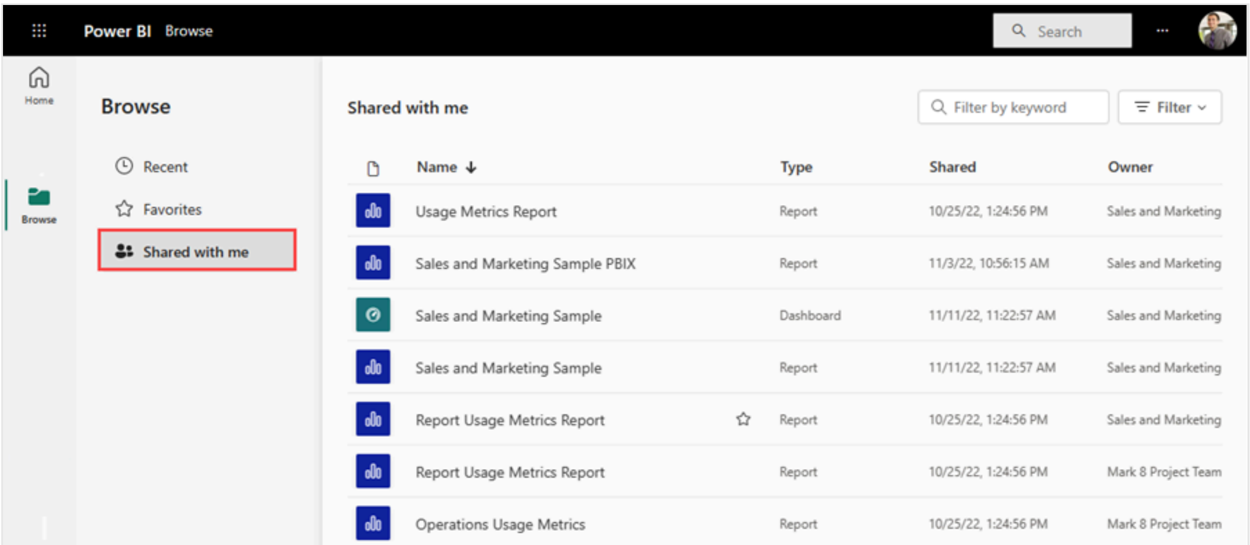


ⓘ Note

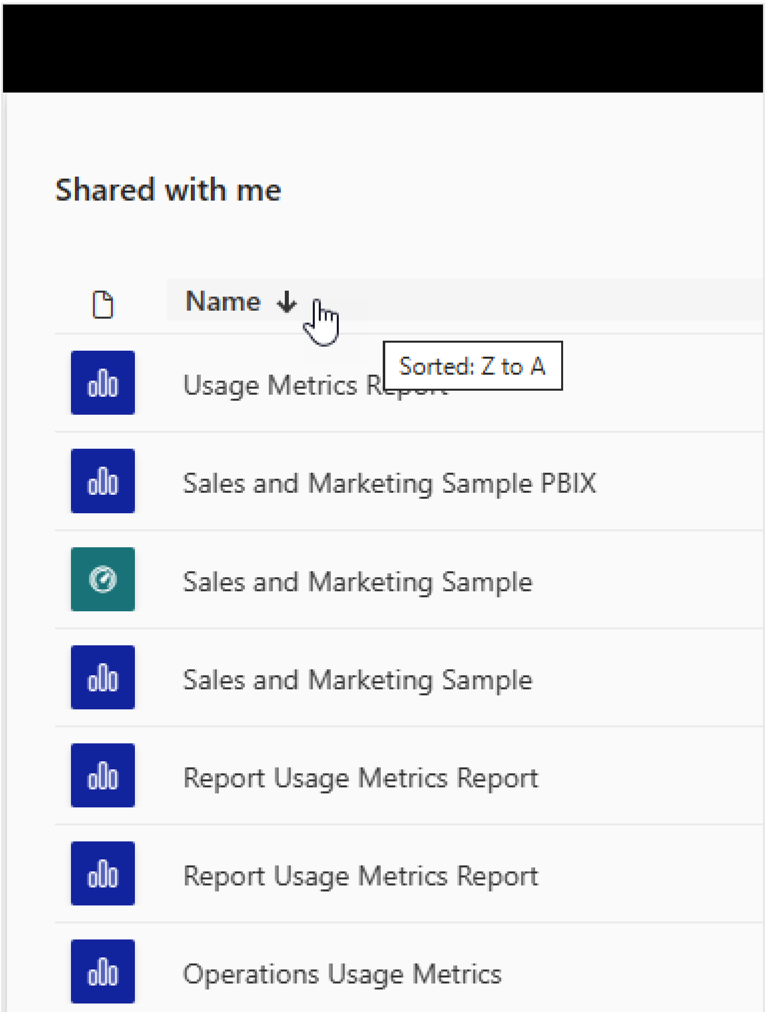
Search is disabled for B2B guest users. If a guest user enters a search term, no results are shown.

Sort content lists

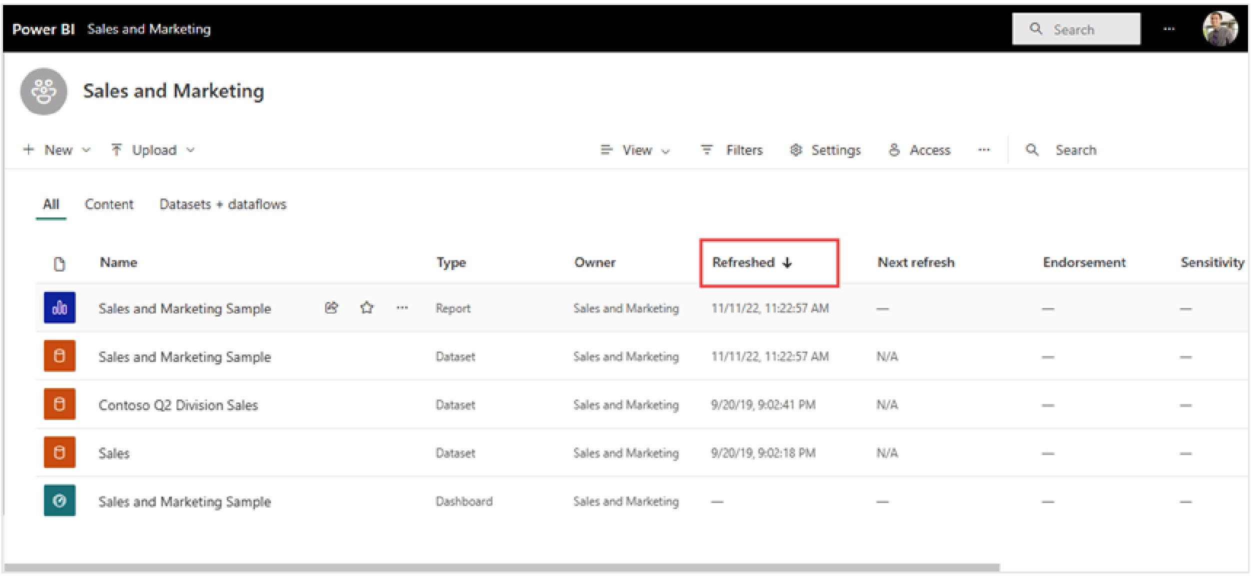
If you have only a few pieces of content, sorting isn't necessary. But when you have long lists of dashboards and reports, sorting helps you find what you need. For example, this **Shared with me** content list has many items.



Right now, this content list is sorted alphabetical by name, from Z to A. To change the sort criteria, select the arrow to the right of **Name**.



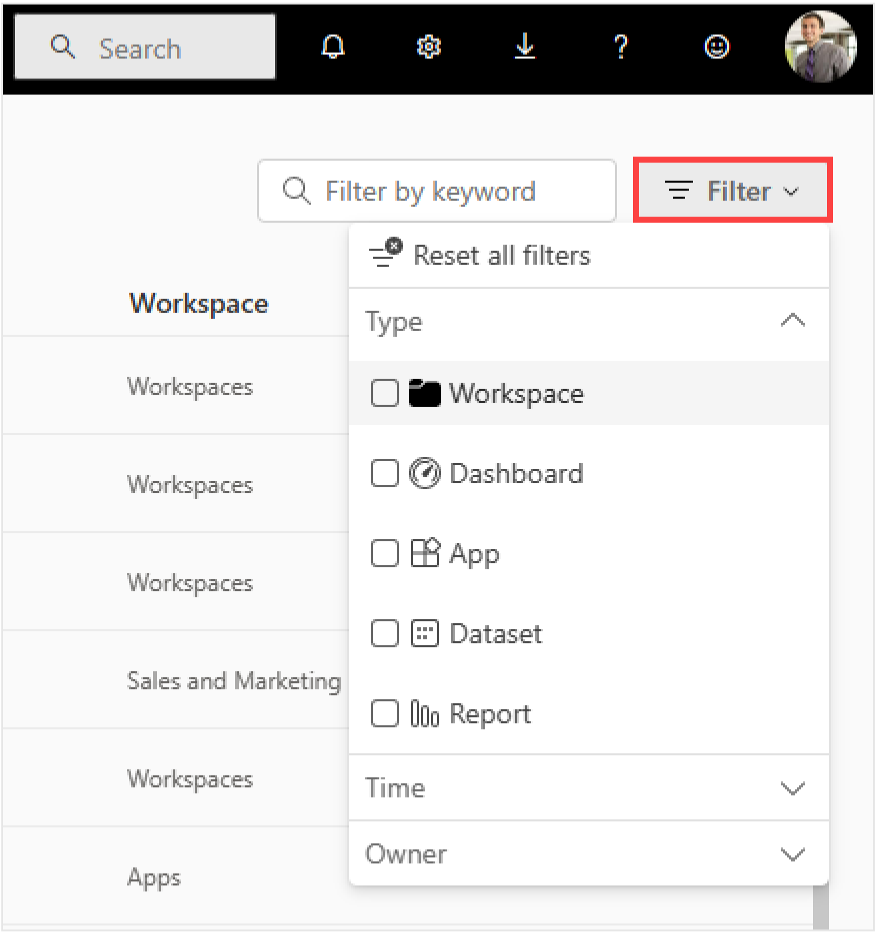
Sorting is also available in workspaces. In this example, the content is sorted by the **Refreshed** date. To set sorting criteria for workspaces, select a column header, and then select again to change the sorting direction.



Not all columns can be sorted. Hover over the column headings to discover which can be sorted.

Filter content lists

Another way to locate content quickly is to use the content list **Filter**. Display the filters by selecting **Filter** from the upper right corner. The filters available depend on your location in the Power BI service. This example is from a **Recent** content list. It allows you to filter the list by content **Type**, **Time**, or **Owner**.



Limitations

- Search isn't enabled for B2B users
- Search currently supports only English characters
- Global search is currently supported only in Public cloud

Related content

- Change how a chart is sorted in a Power BI report
- More questions? Ask the Power BI Community

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

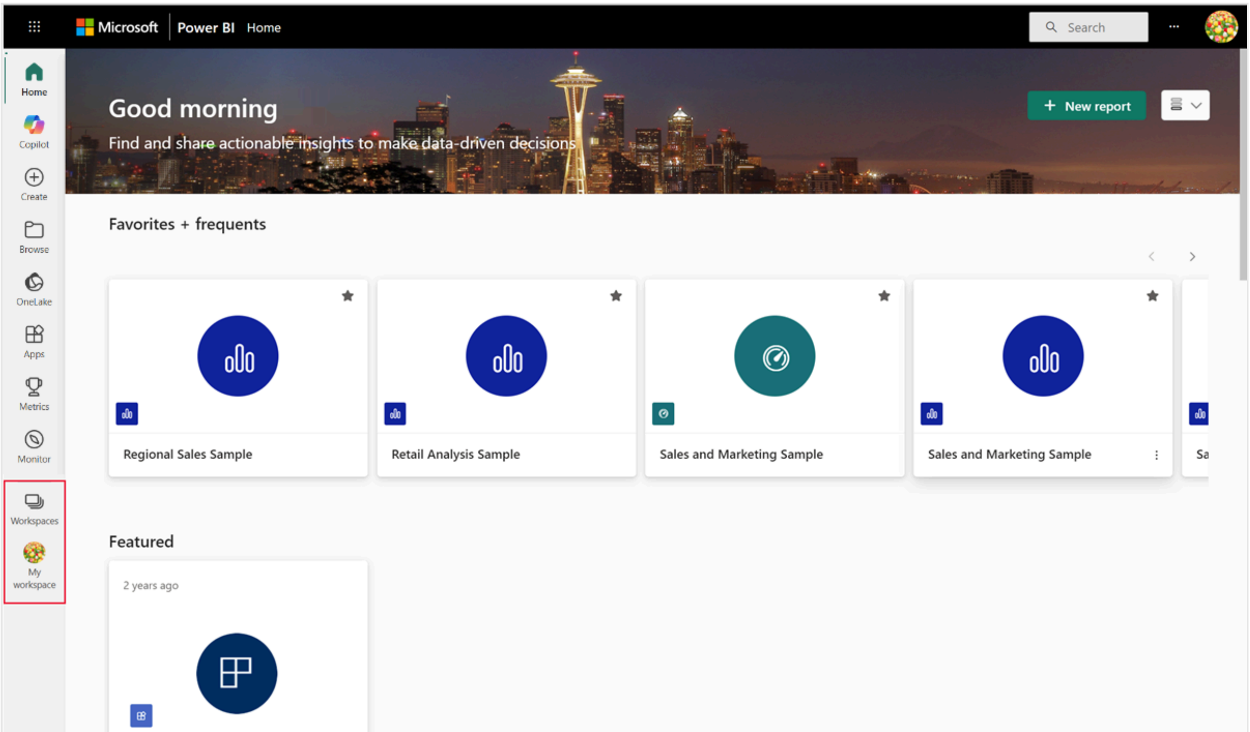
Collaborate in workspaces

Article • 01/11/2025

Workspaces are places to collaborate with colleagues on specific content. Power BI *designers* create workspaces to hold collections of dashboards and reports. The designer can then share the workspace with colleagues. Designers can also bundle a collection of dashboards and reports into an *app* and distribute it to the entire community, to their organization, or to specific people or groups. Certain types of apps called *template apps*, create a workspace when the app is installed. Learn more about apps.

Everyone using the Power BI service also has a **My workspace**. My workspace is your personal sandbox where you can create content for yourself.

You can see your workspaces in Power BI by selecting **Workspaces** from your navigation pane.



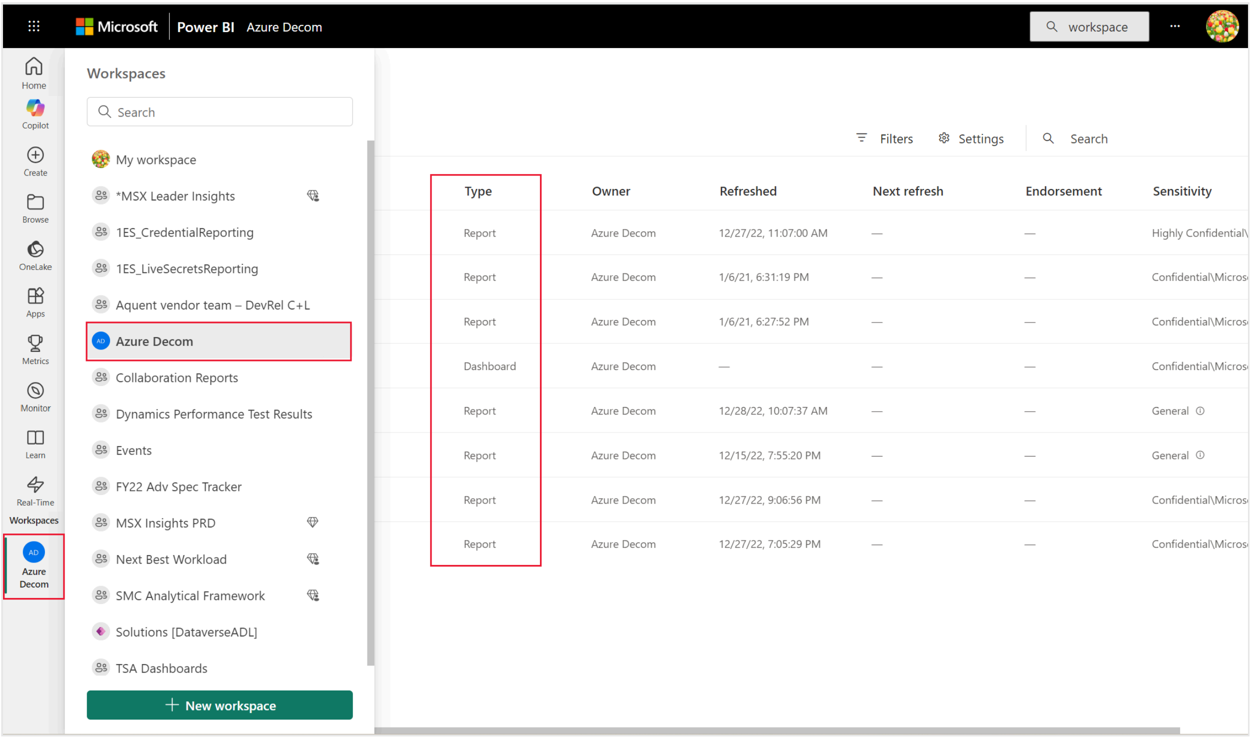
Types of workspaces

My Workspace stores all the content that you own and create. Think of it as your personal sandbox or work area for your own content. For many Power BI *business users*, **My workspace** remains empty because your job doesn't involve creating new content. *Business users*, by definition, consume data created by others and use that data to make business decisions. If you find that you're creating content, consider reading the Power BI articles for designers instead.

Workspaces contain content that can be use by one person or many. Because the designer of the workspace can assign permissions to a workspace, it's a great place for collaboration. Designers can share the workspace, invite collaborators, and even create and distribute apps based on the workspace contents.

When a *designer* creates an app, they bundle together all the content that's necessary for that app to be utilized. Content might include dashboards, reports, and semantic models. Not every app contains these three pieces of content. An app might contain only one dashboard, or three of each content type, or even 20 reports. It all depends on what the *designer* includes in the app. Commonly, app workspaces shared with *business users* don't include the semantic models.

The following **Azure Decom** workspace contains several reports and a dashboard.



Permissions in the workspaces

Access permissions determine what you can do in a workspace, so teams can collaborate. When *designers* grant access to a workspace, they add individuals or groups to one of the workspace roles: **Viewer**, **Member**, **Contributor**, or **Admin**.

As a Power BI *business user*, you typically interact in workspaces using the **Viewer** role. But *designers* can also assign you to the **Member** or **Contributor** role. The Viewer role lets you view and interact with content (dashboards, reports, apps) created by others and shared with you. And because the Viewer role can't access the underlying semantic model, it's a safe way to interact with content and not have to worry that you'll "hurt" the underlying data.

For a detailed list of what you can do as a *business user* with the Viewer role, see Power BI features for business users.

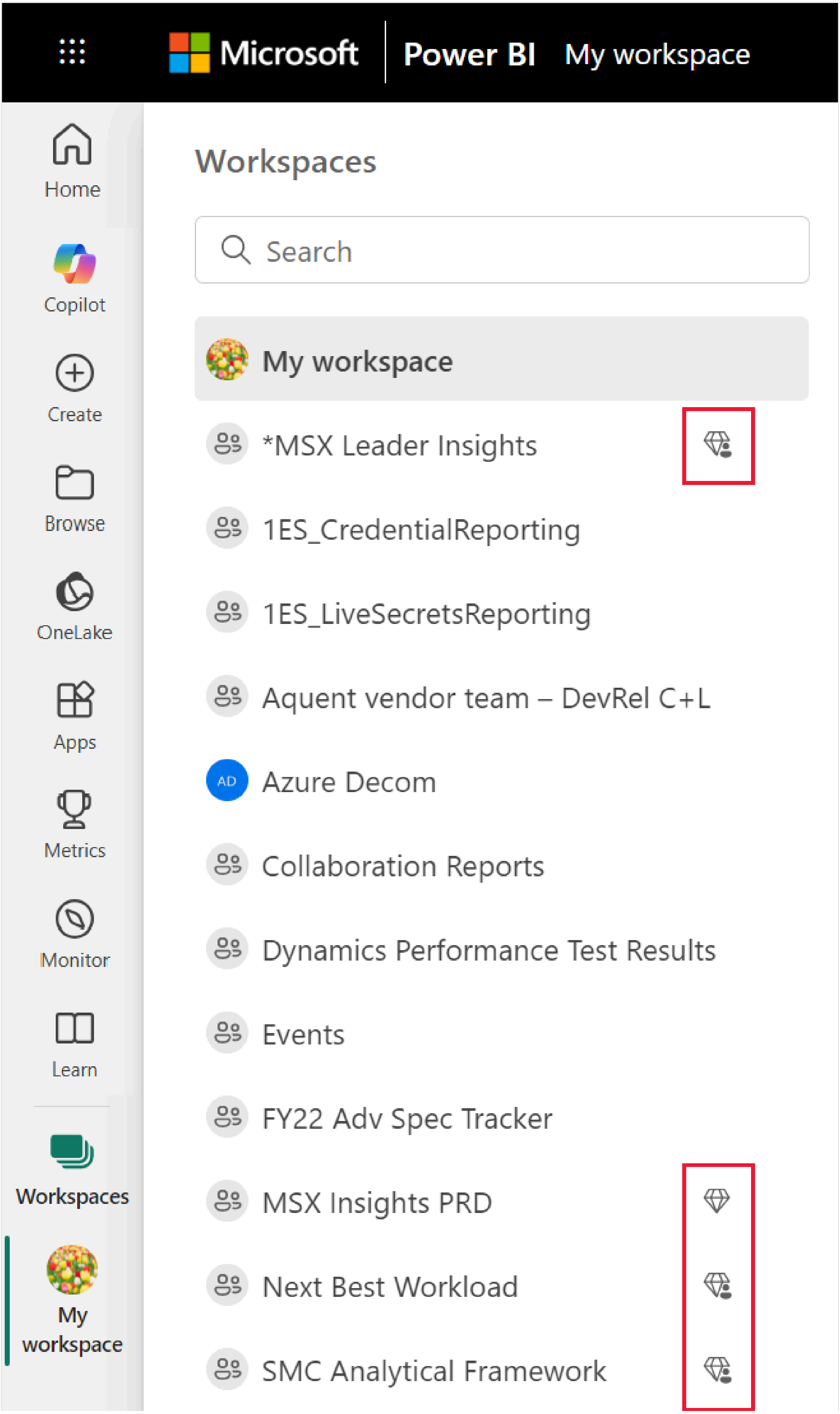
For a detailed list of all four roles and their capabilities, see Workspace roles.

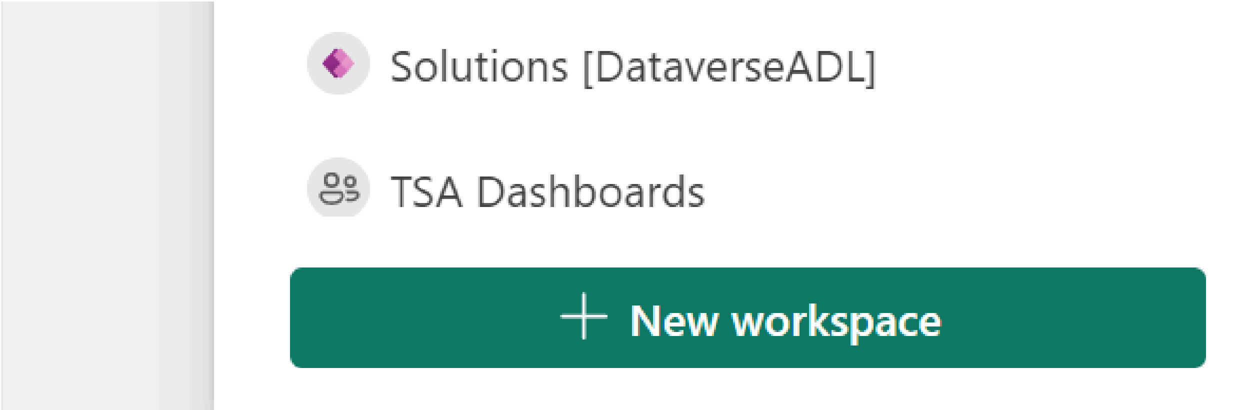
Licensing, workspaces, and capacity

Licensing also plays a part in determining what you can and can't do in a workspace. Many sharing and collaborating features require that the user has a Power BI *Pro* or *Premium Per User (PPU)* license or for the workspace to be stored in Premium capacity.

Often, *business users* work with a free license. Learn more about licensing. If the content isn't stored in Premium capacity, the business user doesn't have access.

If the workspace is stored in Premium capacity, *business users* who are granted permission by the designer, are able to view and interact with the content in that workspace. This icon identifies Premium workspaces. This icon identifies Premium Per User workspaces.


Microsoft
Power BI
My workspace
Home
Copilot
Create
Browse
OneLake
Apps
Metrics
Monitor
Learn
Workspaces
My workspace
Workspaces
Search
My workspace
*MSX Leader Insights
1ES_CredentialReporting
1ES_LiveSecretsReporting
Aquent vendor team – DevRel C+L
AD
Azure Decom
Collaboration Reports
Dynamics Performance Test Results
Events
FY22 Adv Spec Tracker
MSX Insights PRD
Next Best Workload
SMC Analytical Framework



To learn more, see Which license do I have?.

Related content

- Apps in Power BI
- Questions? Try asking the Power BI Community

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

Apps in Power BI

Article • 01/06/2025

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

What is a Power BI app?

Power BI designers create official packaged content, then distribute the content to a broad audience organized as an *app*. Apps are created in workspaces where members collaborate on Power BI content with their colleagues. They publish the finished app to individuals, large groups of people in an organization, or an entire organization. An app can have permissions that are different than the permissions set on a workspace. This capability makes it easier for designers to manage permissions on an app.

An app combines related content, like dashboards, spreadsheets, semantic models, and reports, all in one place. An app has one or more of each content type bundled together. There are many ways a designer can share an app. You can learn more about how apps are shared in the Get a new app section below.

There's a unique type of app called a template app. A Power BI Pro or Premium Per User license is required to install, customize, and distribute a template app. Power BI partners use the content from template apps to build and package analytical data into a new app. They then deploy that app to other Power BI tenants through an available platform, like AppSource or their own web service.

App designers and app users

Depending on your role, you might be a designer who creates apps for your own use or to share with colleagues. Or, you might be a business user who receives and downloads apps created by others. The resources in this article are for business users.

Viewing and opening an app requires certain permissions. The recipient must have a Power BI Pro or Premium Per User (PPU) license, or the app must be shared with the recipient in a type of cloud storage called **Premium capacity**. To learn more about licenses and Premium capacity, see Licensing for the Power BI service.

Advantages of apps

Apps are an easy way for designers to share many types of content at one time. App designers create dashboards and reports and then bundle them together into an app. The designers share or publish the app to a location where you, the business user, can access it. It's easier to find and install content in the Power BI service or on your mobile device when it's organized together as an app. After you install an app, you don't have to remember the names of several dashboards or reports because they're all together in one app. You can easily access the app in your browser or on your mobile device.

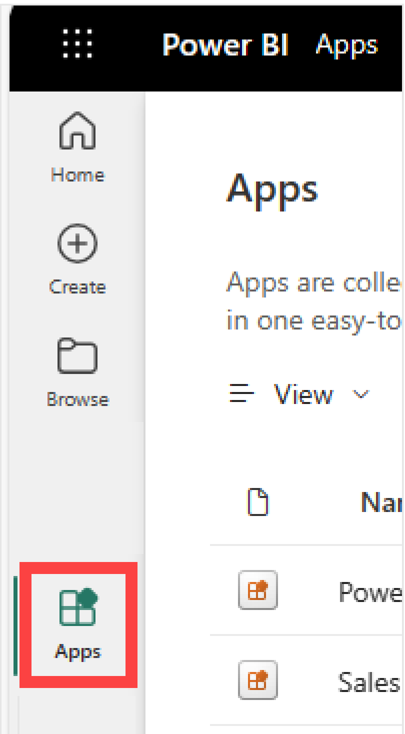
When the app author releases updates, you get a notification or you automatically see the changes. The author controls how often the data is scheduled to refresh, so you don't need to worry about keeping it up to date.

Get a new app

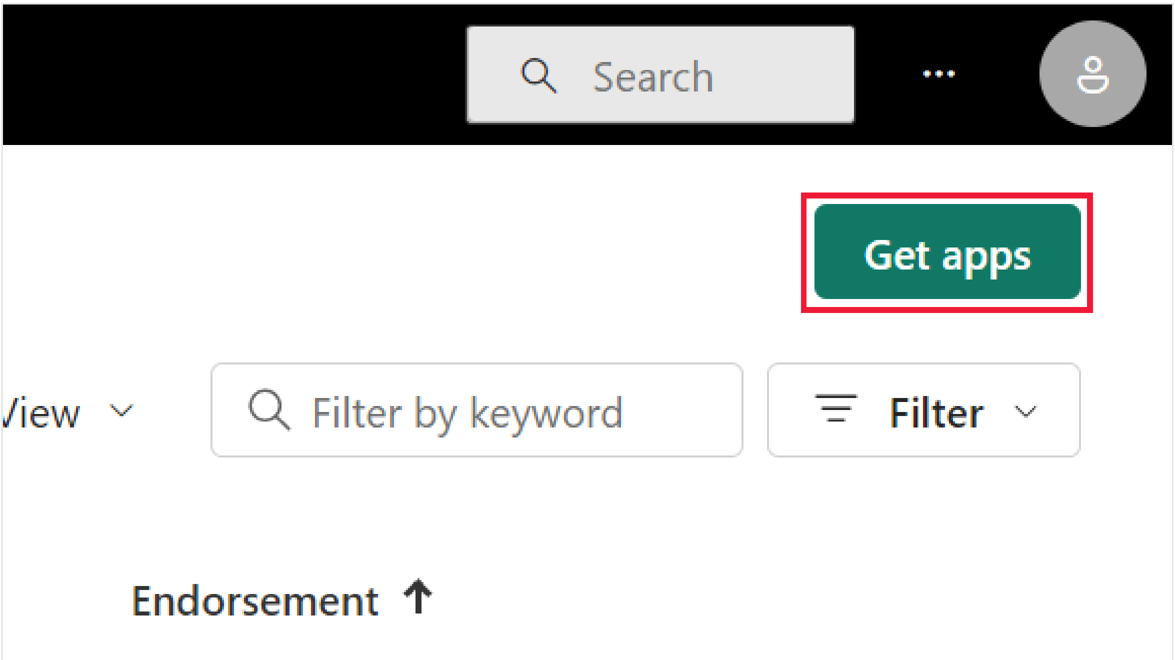
There are several ways to get a new app. You can search, find, and install apps in the apps marketplace, or app designers can share apps with you.

Find and install apps from the Power BI apps marketplace

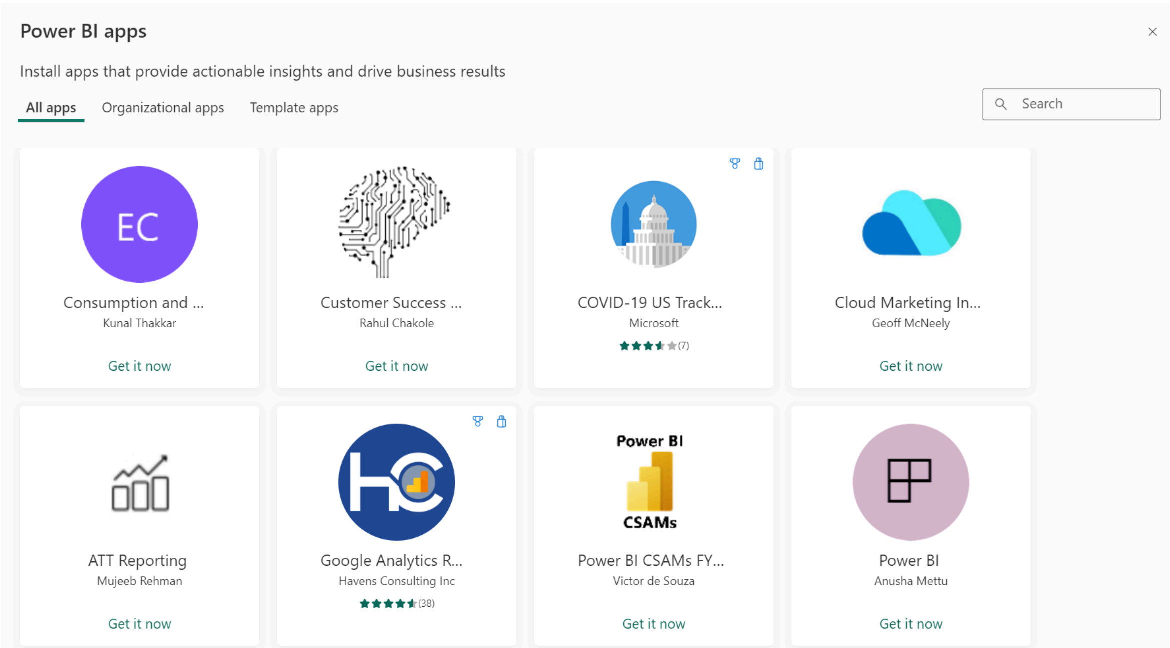
1. To find apps in the apps marketplace, select **Apps** on your navigation pane.



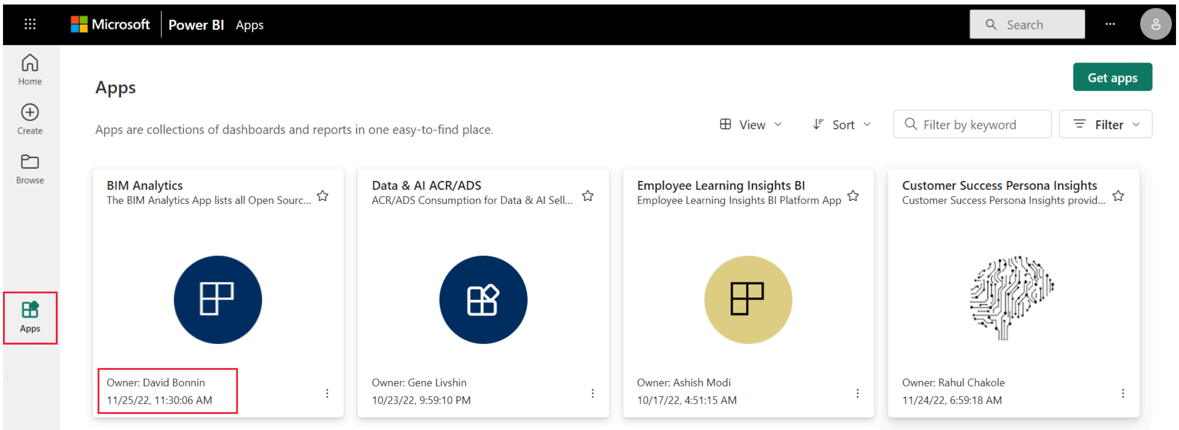
2. On the Apps page, select **Get apps**.



3. Browse through the list of apps in the Power BI apps marketplace until you find one to install. **Organizational apps** are only available to people in your company. **Template apps** are published by Microsoft and the community, and they're available for any Power BI user with a Pro license to install.



4. After you install an app, it's available in your **Apps** content list. Select **Apps** in the navigation pane to display your apps. The last updated date and the owner are on the bottom of each app card.



For detailed step-by-step instructions for getting and exploring an app, see Install and use apps with dashboards and reports in Power BI.

There are a few other ways to get apps.

- The app designer installs the app automatically in your Power BI account. The next time you open the Power BI service, the new app is in your **Apps** content list.
- The app designer emails you a direct link to an app. Selecting the link opens the app in the Power BI service.
- In Power BI on your mobile device, you can only install an app from a direct link, and not from the apps marketplace. If the app author installs the app automatically, it's available in your list of apps.

Related content

- Install and use apps with dashboards and reports in Power BI
- Other ways to share content

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

Install and use apps with dashboards and reports in Power BI

Article • 11/07/2023

APPLIES TO: ✅ Power BI service for ***business users*** ❌ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

Now that you have a basic understanding of apps, you can learn how to open and interact with them.

Ways to get a new app

You can get a new app:

- From the Power BI apps marketplace in the Power BI service.
- By using a direct link to an app that you receive from the app designer.
- When an app designer in your organization installs the app automatically in your Power BI account.

With Power BI mobile, you can only install an app from a direct link. The Power BI apps marketplace isn't available in Power BI mobile. If the app designer installs the app automatically, you'll see it in your list of apps.

Apps and licenses

Not all Power BI users can view and interact with apps. If you have a free license, you can open apps that are stored in Premium capacity and that are shared with you. If you have a Pro license or a Premium Per User license, you can open apps that are shared with you.

So, if you can't open an app, contact your administrator or help desk. For information about licensing, see Power BI licensing.

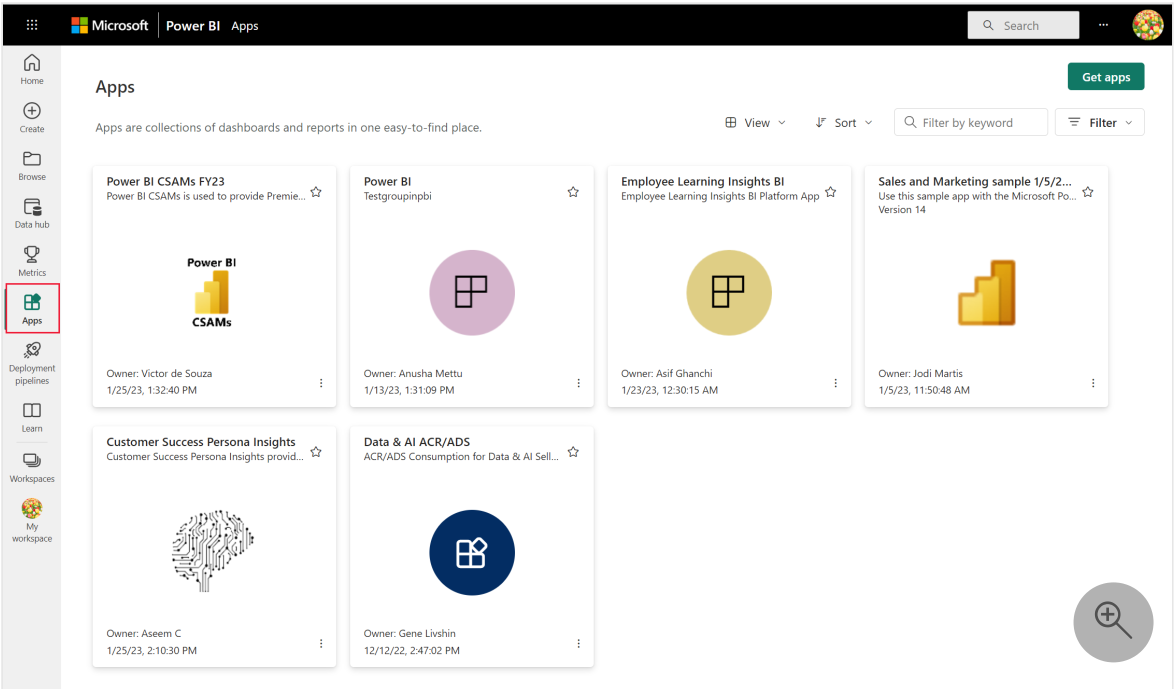
Get the app from the Power BI apps marketplace

You can find and install apps from the Power BI apps marketplace. In the apps marketplace, you'll find both organizational apps and template apps.

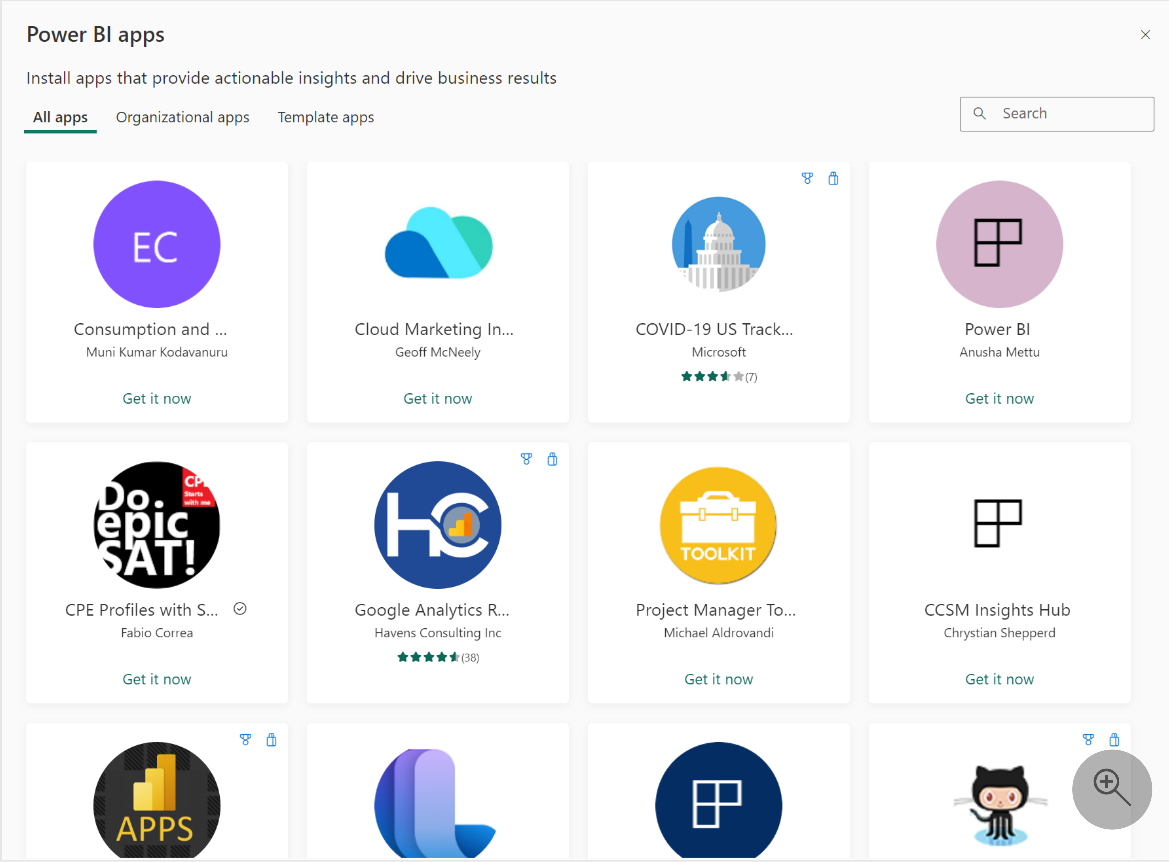
- An *organizational app* is available to Power BI users in your organization. These apps also include pre-built dashboards and reports that you can use as-is or customize and share. Your organization might have apps for things like tracking sales, measuring performance, or analyzing hiring success.
- A *template app* comes with pre-built dashboards and reports that you can use to connect to many of the services you use to run your business, such as SalesForce, Microsoft Dynamics, and Google Analytics.

1. To install an app, sign in to the Power BI service if prompted.

2. Select **Apps** > **Get apps**.
   If you're brand new to Power BI, your App page looks like the following example. If you already have apps installed, select **Get apps** from the upper right corner of the page.

3. The Power BI apps marketplace opens.



Three tabs are available for you to use:

- **All apps** - Browse both template apps and all the organizational apps that are available to you. Template apps are distinguished by the shopping bag icon in the upper right corner of their tiles.
- **Organizational apps** - Browse organizational apps that have been shared with you.
- **Template apps** - Browse template apps that are hosted on AppSource.

Alternatively, you can use the search box to get a filtered selection of apps. Type part of the name of an app or category, such as finance, analytics, or marketing, to make it easier to find the item you're looking for.

The search box is sensitive to the tab you have open. Only apps of the selected type are returned. If the **All apps** tab is open, both organizational and template apps are returned. It can be confusing when an organizational app and a template app have the same name. Just remember that the template app tiles have a shopping bag icon in the top right corner.

4. When you find the app that you want, select **Get it Now** to install it.

- If you're installing an organizational app, it will immediately be added to your list of apps.

- If you're installing a template app, you'll be taken to the template app offering in AppSource. See an example of how to download and install a sample template app from the Power BI apps marketplace. The app is installed, along with a workspace of the same name.

> Note
>
> If you're using a free user license, you can download apps but you can't view them unless you upgrade to a Power BI Pro or Premium Per User license or unless the app is stored in a Premium capacity. For more information, see **Licenses for business users**.

Install an app from a direct link

You can also install an organizational app from a direct link:

- **On your computer**. When you select the link in an email, the Power BI service opens the app in your browser.

- **On your iOS or Android mobile device**. When you select the link in an email on your mobile device, the app installs automatically and opens in the mobile app. You might have to sign in first.

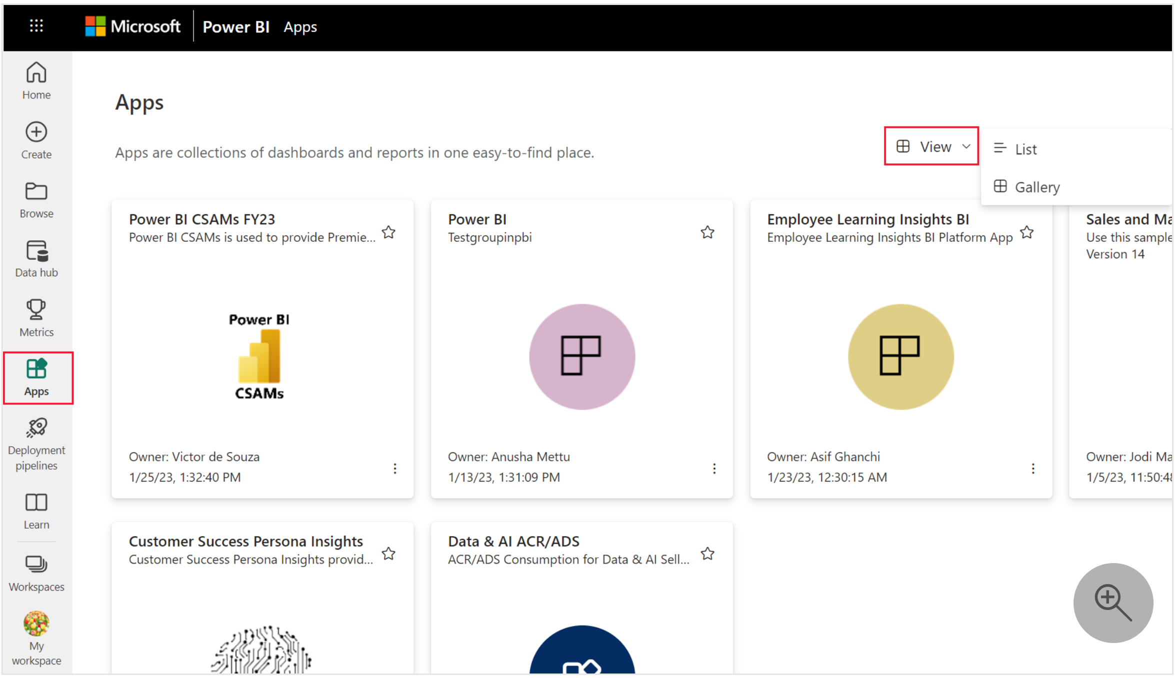
Interact with the dashboards and reports in the app

Take some time to explore the data in the dashboards and reports that make up the app. You have access to all of the standard Power BI interactions, such as filtering, highlighting, sorting, and drilling down. The extent of what you can do with an app is controlled by the permissions that the *designer* assigned to you. How you can interact with the app's dashboards and reports is controlled by the access and roles that the *designer* assigned to you.

Still a little confused by the difference between dashboards and reports? Learn more about dashboards or reports in Power BI.

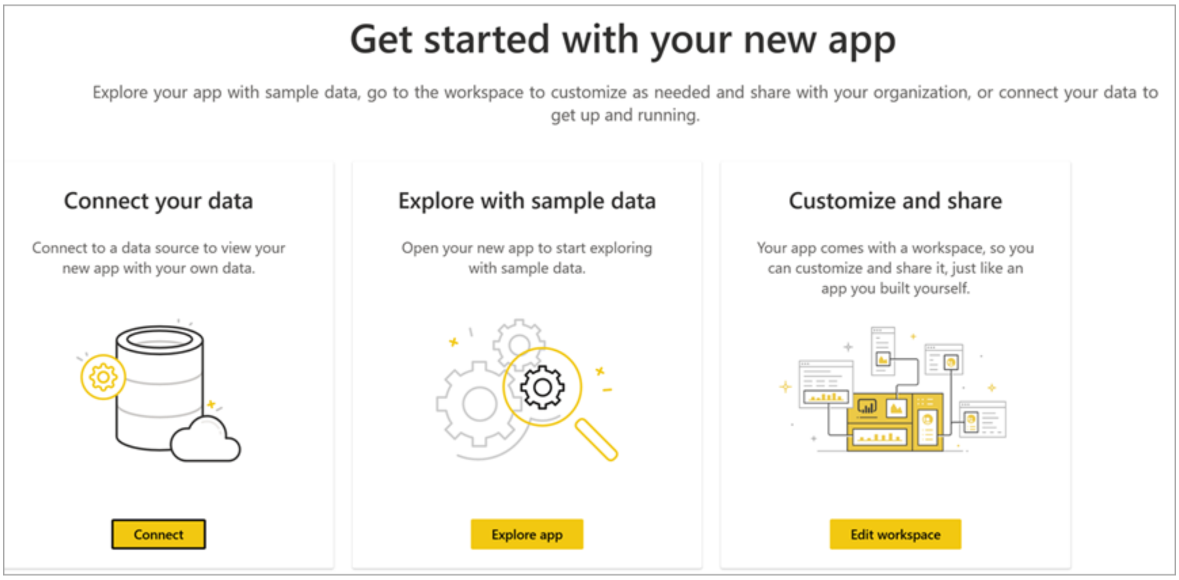
Open an app

1. After you install an app or receive an app from a colleague, view it in your Apps content list by selecting **Apps** from the navigation pane. The following example shows the App page view set to **Gallery**. You can select **View** and then choose **List** to see your apps as a list.

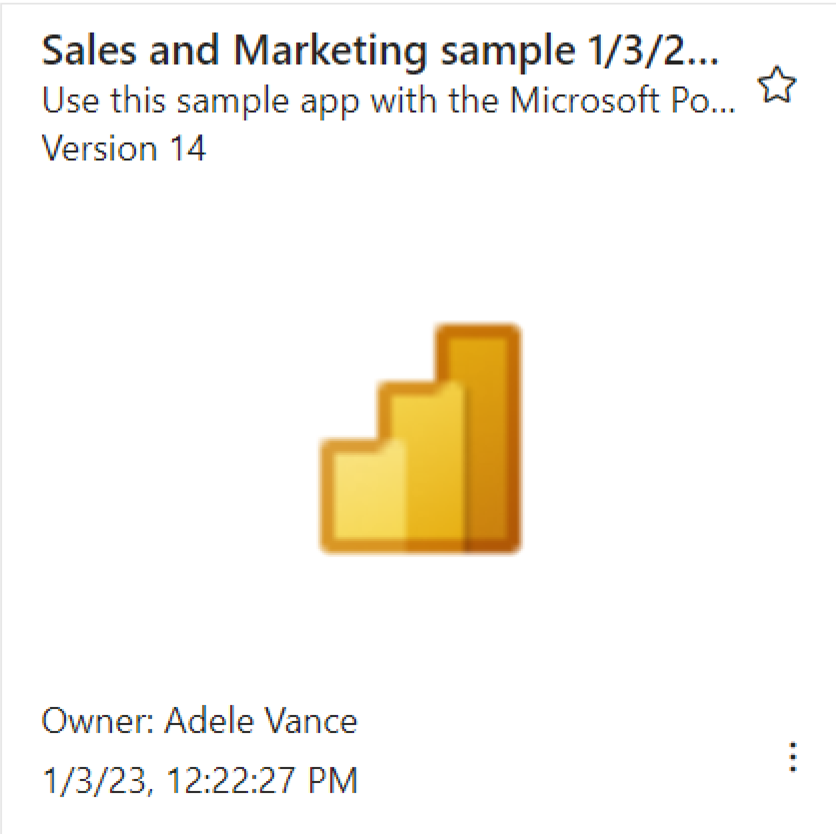


2. Select the app to open it. Depending on the app, you might receive a prompt that looks similar to the following example. Some apps ask you for contact information

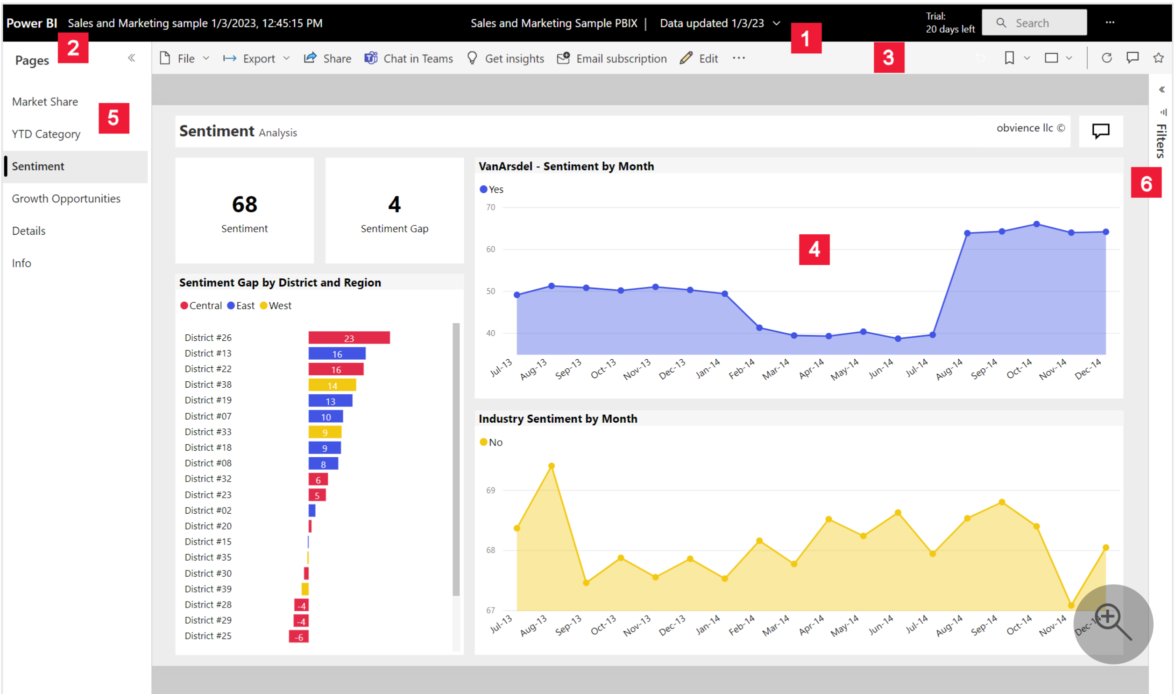
(name and email) or for product details (customer ID, subscription number, or parameters). Many apps load with sample data and provide a link for you to connect your own data. For guidance on which option to select, see Install template apps.



3. Select the app card to open it.



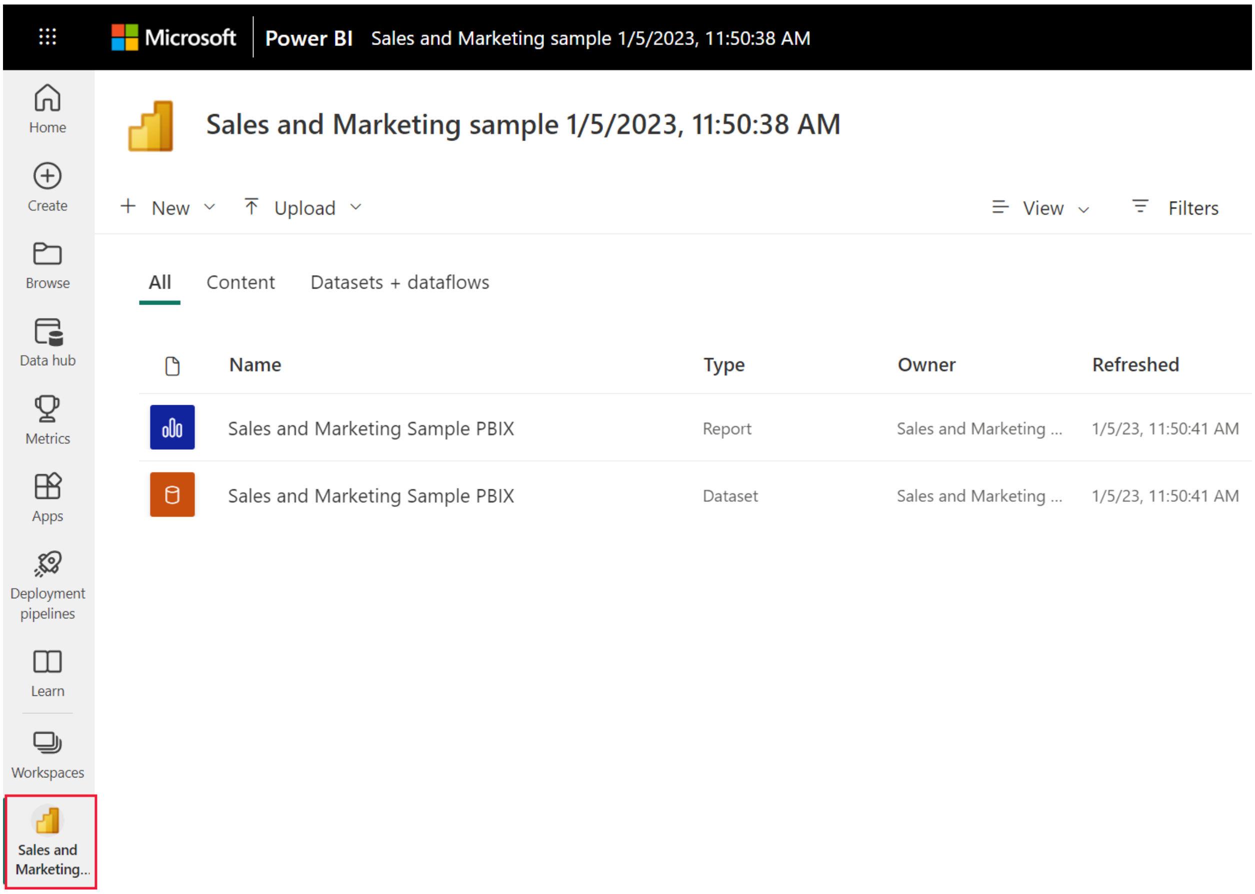
4. The **Sales and Marketing Sample** app opens to a report. The layout might look different if your app opens to a dashboard. If you select a report in the dashboard, the layout will look like the following example.



Apps have different layouts, visuals, colors, and options, but they all have most of the features shown in this example:

1. Name of the app and last updated time. Select the dropdown arrow to look up the owner and Help contact.
2. Select **Power BI** to return to Home.
3. Your menu bar.
4. The report page canvas.
5. The app navigation pane. Below the name of the app is the list of content. This app has one report with six pages. Select a report page name to open it. We currently have the *Return rate* page open.
6. Select the arrow to expand the **Filters** pane.

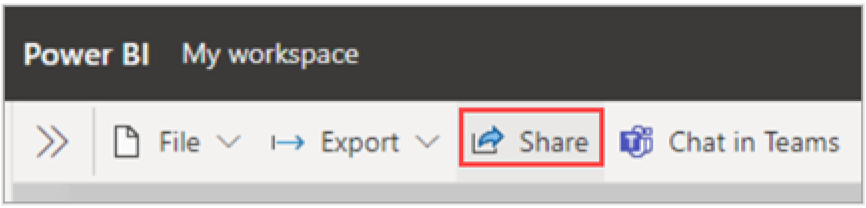
You can explore the associated workspace if you've been given access. When you install or download a template app, the Power BI service creates a workspace for you. When you install an organizational app, it might not include access to the workspace. For more information, see Collaborate in workspaces. Select **Power BI** (number 2) to return to **Home** and choose **Workspaces**.



Share reports and dashboards from an app

You can share reports and dashboards that are in an app the same way you share any other report or dashboard:

- Open the report or dashboard, and select **Share**.



See the article Share Power BI reports and dashboards with coworkers and others for more information.

Get an update of an app

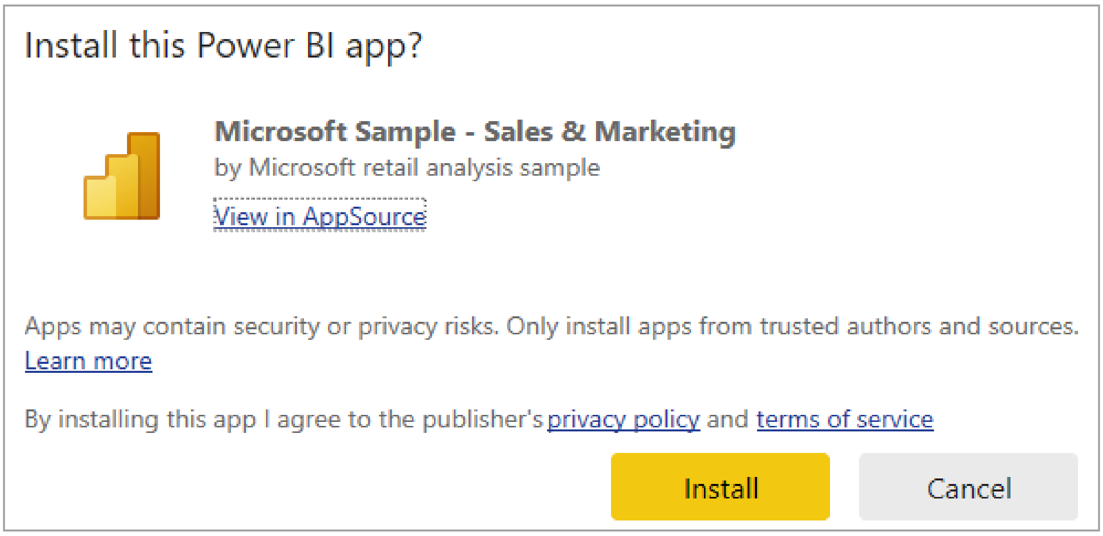
Sometimes app designers release new versions of their apps. How you get the new version depends on how you received the original.

- If you got the app from your organization, the update to the new version is automatic and you don't have to do anything.

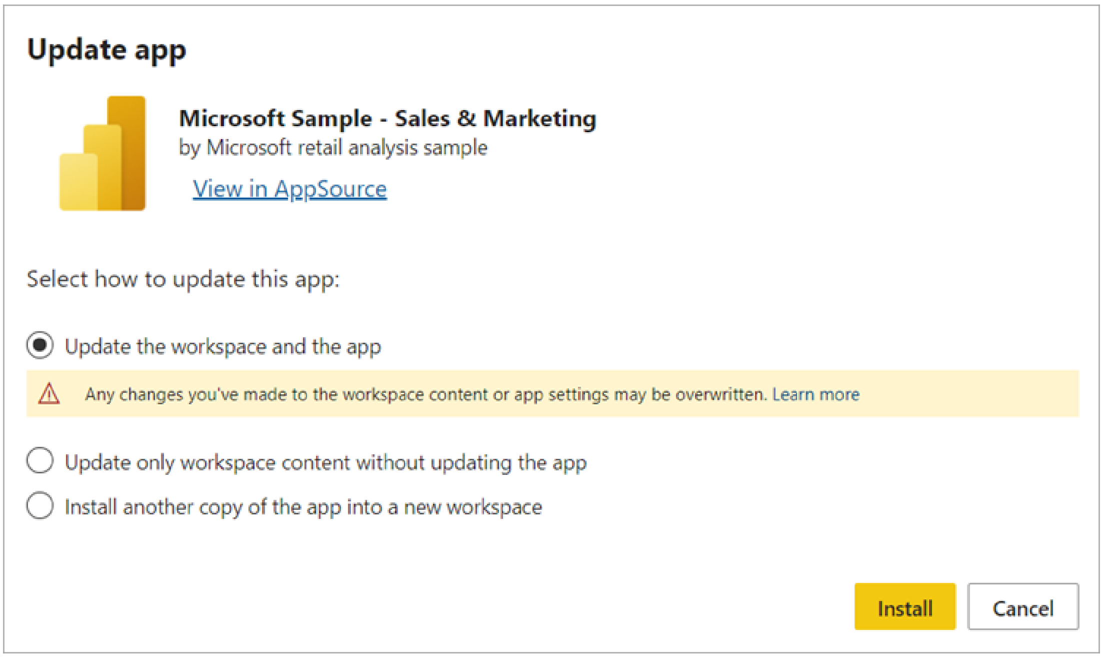
- If you got a template app from AppSource, the next time you open the app you'll see a notification banner. The notification lets you know that a new version is available.

    1. Select **Get it** to update.

    2. When prompted to install the updated app, select **Install**.



    3. Because you already have a version of this app, you can decide whether you want to replace the existing version, update only the workspace content *without* updating the app, or install the updated app in a new workspace.



ⓘ Note

Installing a new version overwrites any changes you might have made to the app's reports and dashboards. To keep your updated reports and dashboards, save them under a different name or in a different location before installing.

4. Once you've installed the updated version, select **Update app** to complete the update process.

Considerations and troubleshooting

- The ability to install apps can be turned on and off by your Power BI administrator. Contact your IT department or help desk if you need this feature enabled.
- The use of apps requires either a Pro or Premium Per User license or for the app to be stored in a workspace in Premium shared capacity. Learn about licenses.

Next steps

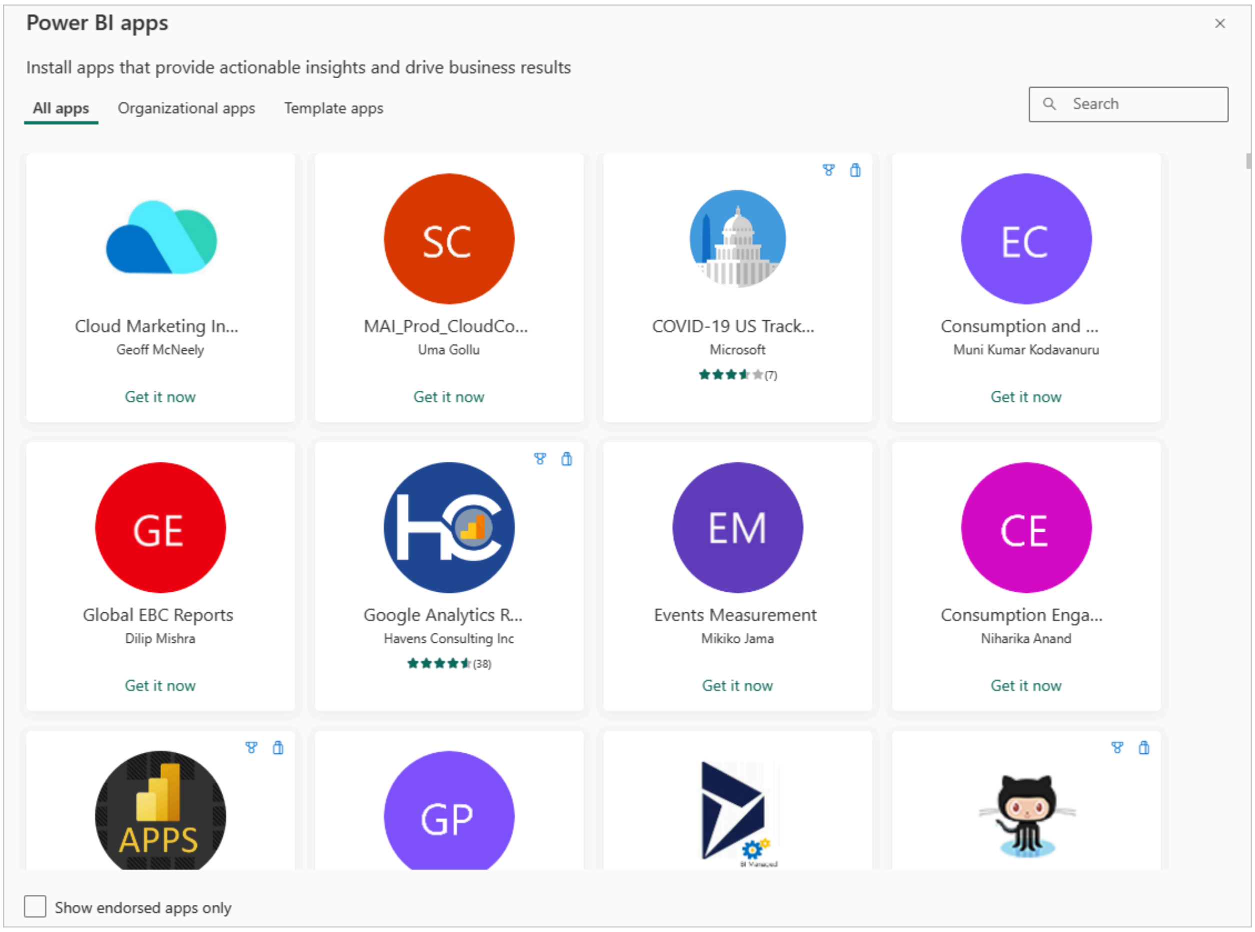
- Back to the apps overview
- View a Power BI report
- Other ways content is shared with you

Connect to the services you use with Power BI

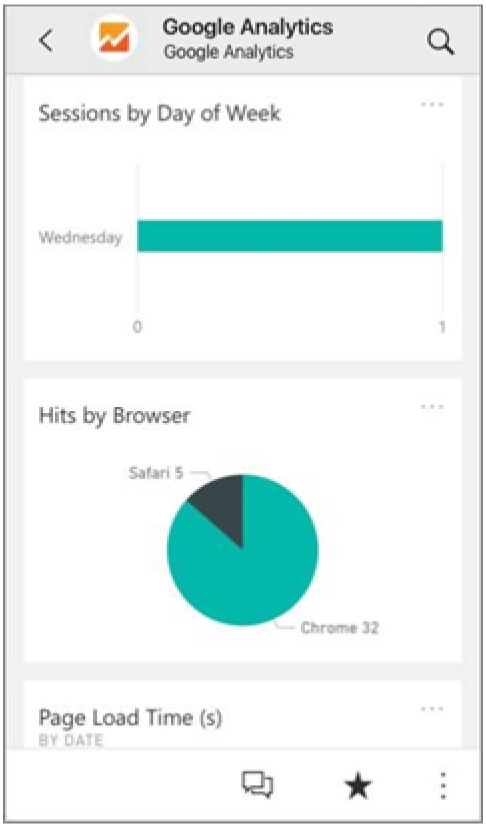
Article • 07/26/2024

With Power BI, you can connect to many of the services you use to run your business, such as Salesforce, Microsoft Dynamics, and Google Analytics. Power BI starts by using your credentials to connect to the service. It creates a Power BI *workspace* with a dashboard and a set of Power BI reports that automatically show your data and provide visual insights about your business.

Sign in to Power BI to view all of the services you can connect to. Select **Apps** > **Get apps**.

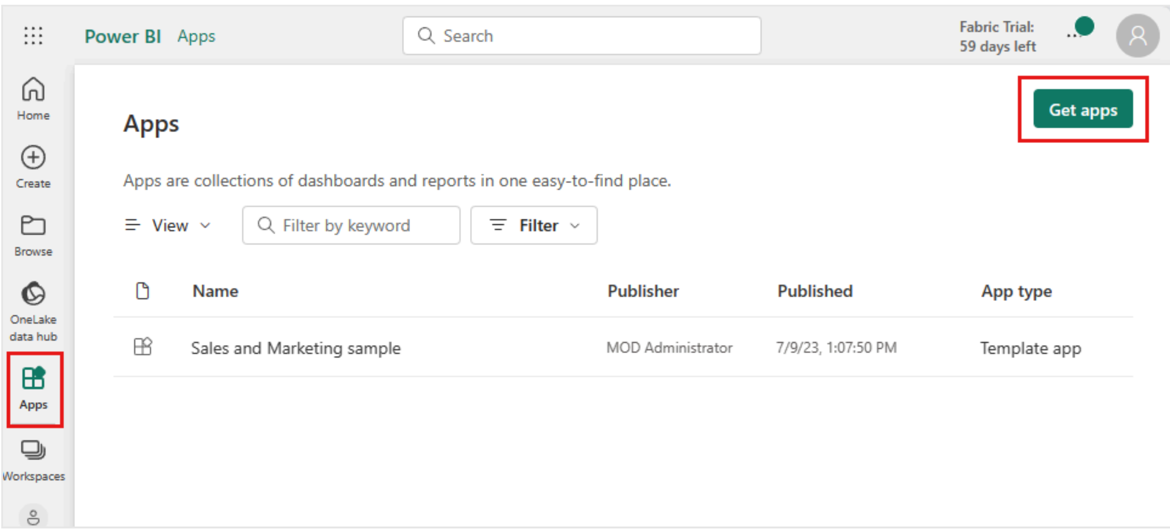


After you install the app, you can view the dashboard and reports in the app and the workspace in the Power BI service (https://powerbi.com). You can also view them in the Power BI mobile apps. In the workspace, you can modify the dashboard and reports to meet the needs of your organization, and then distribute them to your colleagues as an *app*.

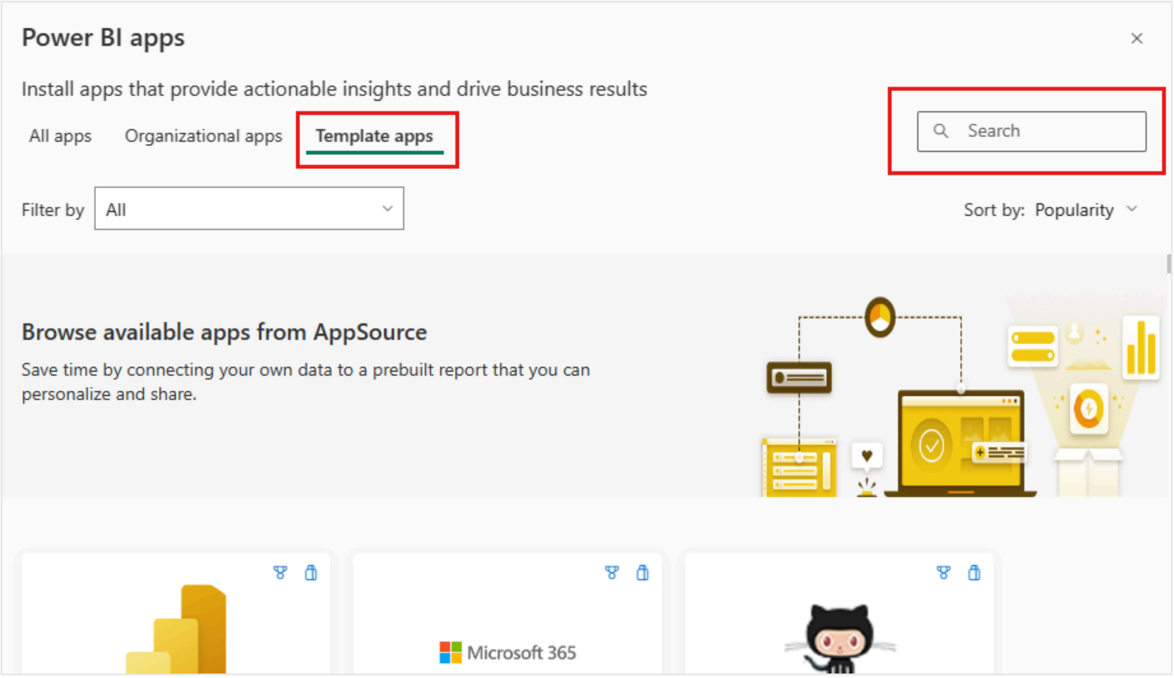


Get started

1. Select **Apps** in the navigation pane, then choose **Get apps** in the upper-right corner.



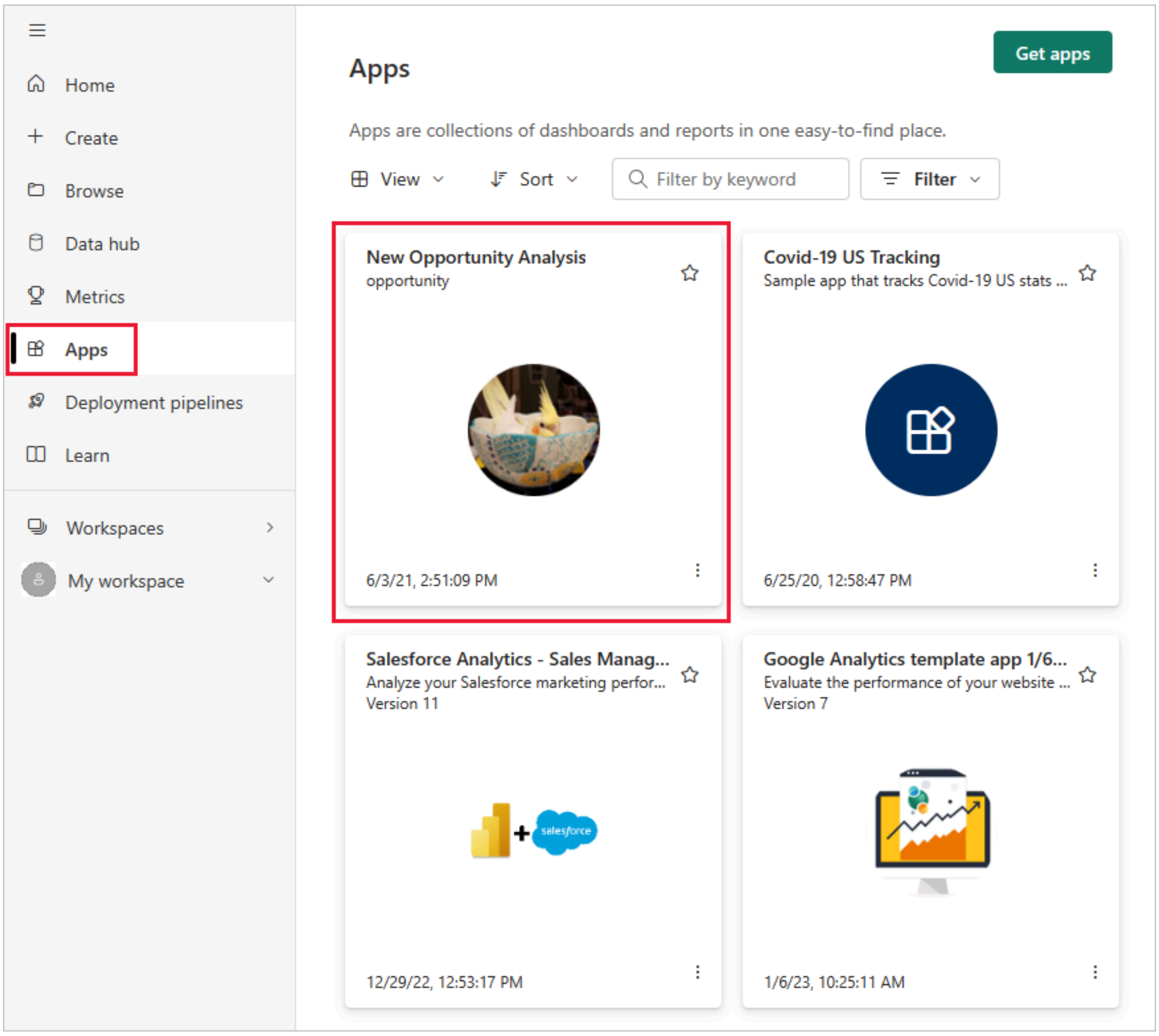
2. In **Power BI apps**, select the **Apps** tab, and search for the service you want.



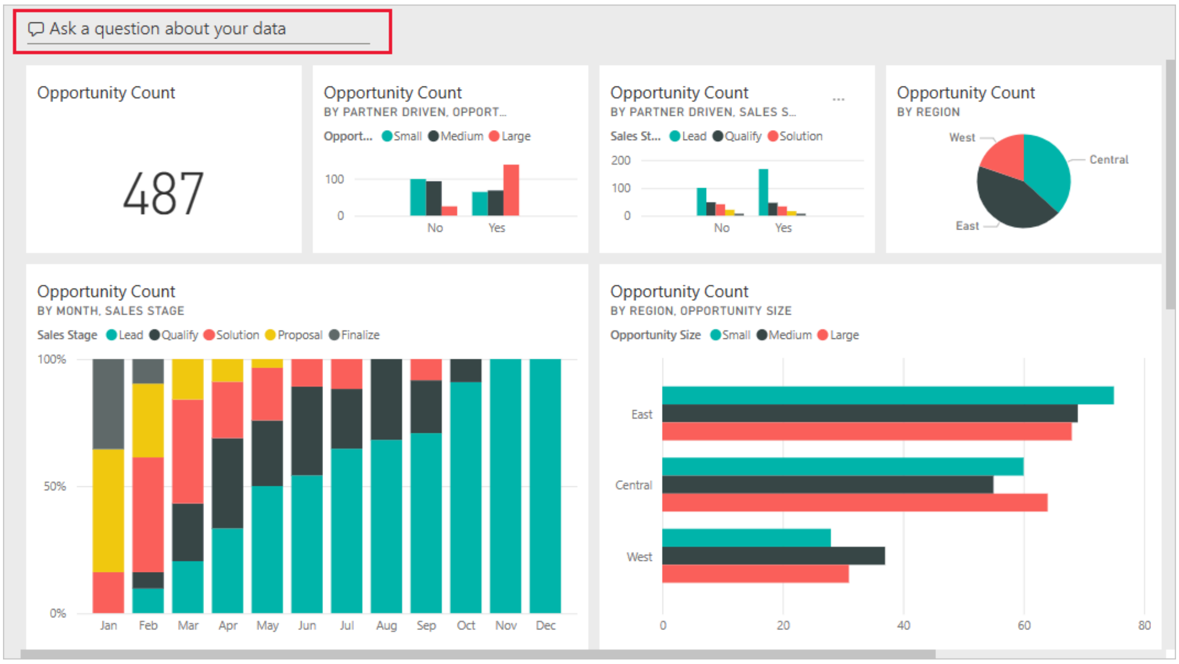
Edit the dashboard and reports

When the import is complete, the new app appears on the Apps page.

1. Select **Apps** in the navigation pane, then choose the app.



2. You can ask a question by typing in the Q&A box, or select a tile to open the underlying report.



Change the dashboard and report to fit the needs of your organization. Then distribute your app to your colleagues

What's included

After connecting to a service, you see a newly created app and workspace with a dashboard, reports, and semantic model. The data from the service is focused on a specific scenario and might not include all the information from the service. The data is scheduled to refresh automatically once per day. You can control the schedule by selecting the semantic model.

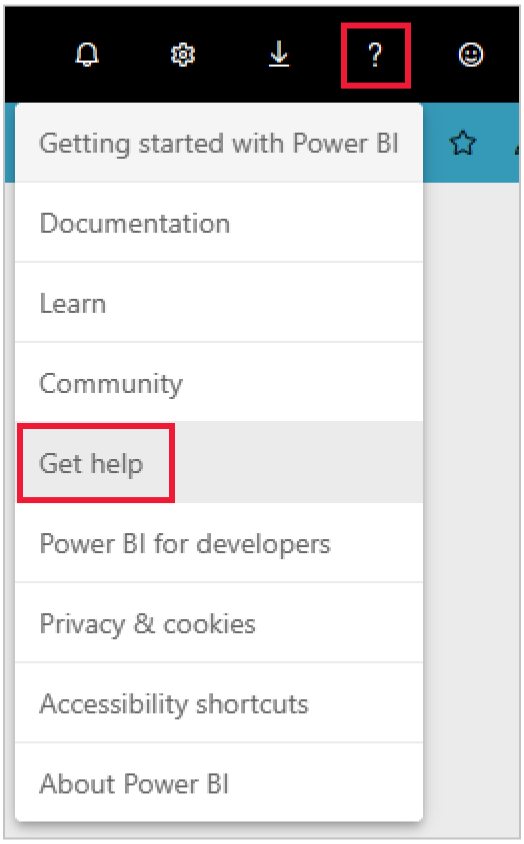
You can also connect to many services in Power BI Desktop, such as Google Analytics, and create your own customized dashboards and reports.

For more information on connecting to specific services, see the individual help pages.

Troubleshooting

Empty tiles: While Power BI is first connecting to the service, you might see an empty set of tiles on your dashboard. If you still see an empty dashboard after two hours, it's likely the connection failed. If you didn't see an error message with information on correcting the issue, file a support ticket.

- Select the question mark icon (**?**) in the upper-right corner > **Get help**.



Missing information: The dashboard and reports include content from the service focused on a specific scenario. If you're looking for a specific metric in the app and don't see it, add an idea on the Power BI Support page.

Suggesting services

Do you use a service you'd like to suggest for a Power BI app? Go to the Power BI Support page and let us know.

If you're interested in creating template apps to distribute yourself, see Create a template app in Power BI. Power BI partners can build Power BI apps with little or no coding, and deploy them to Power BI customers.

Related content

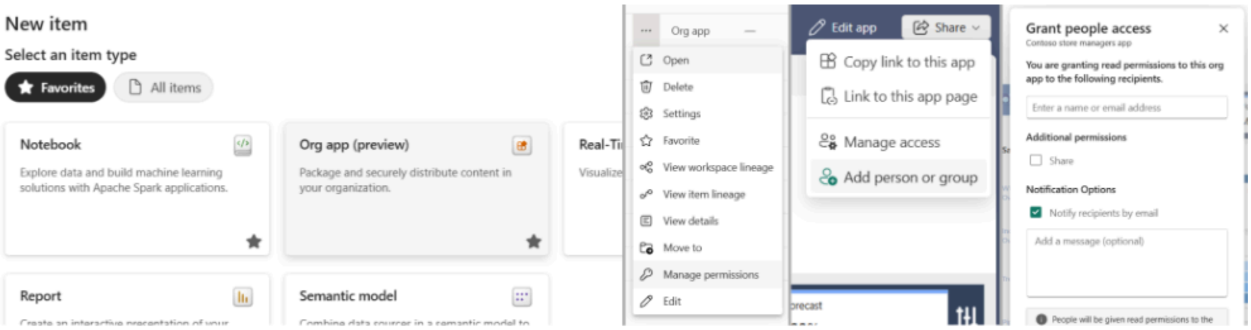
- Distribute apps to your colleagues
- Create workspaces in Power BI
- Questions? Try asking the Power BI Community

Feedback

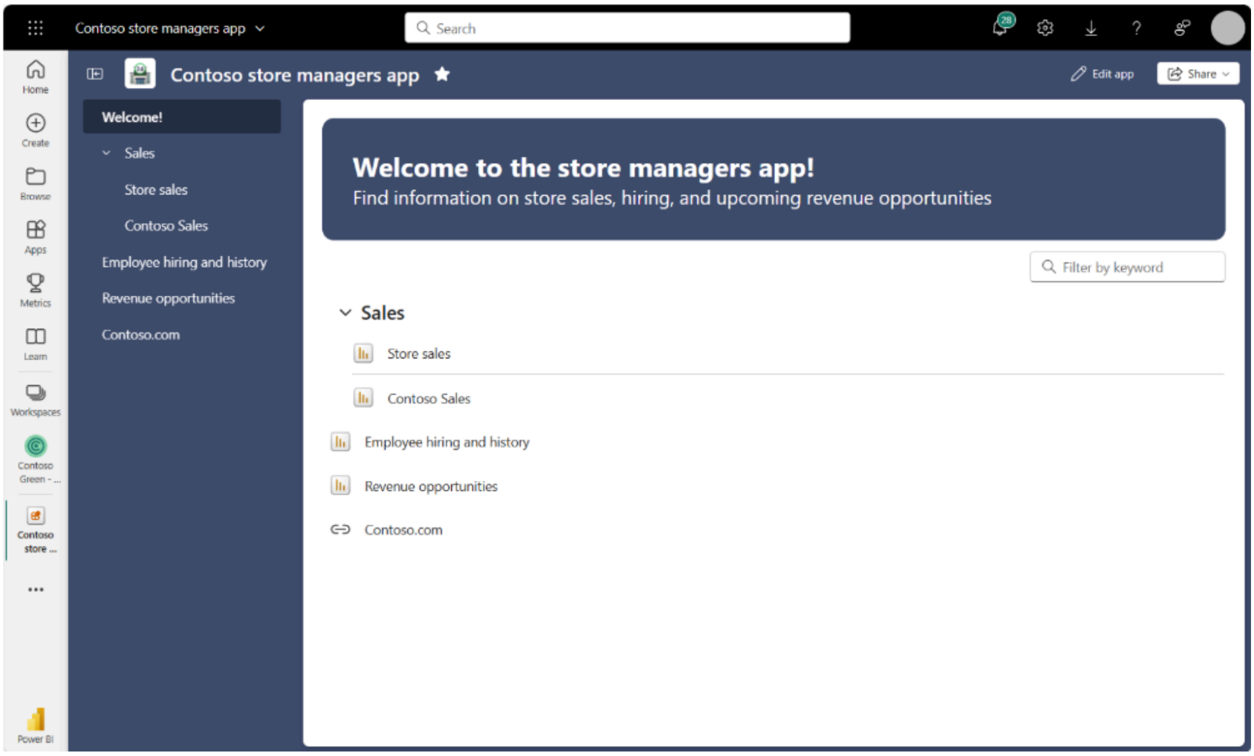
Get started with org apps (preview)

Article • 01/30/2025

Welcome to the preview for org apps as items - Power BI workspace apps rebuilt for Fabric as a new item type. With org apps as items, you can create multiple org apps per workspace. And you can manage org apps the way you would any other item type - from creating a new org app, to managing access, to sharing the org app - all the things you find familiar and easy about managing other items, such as reports, are all familiar with org apps as items as well.

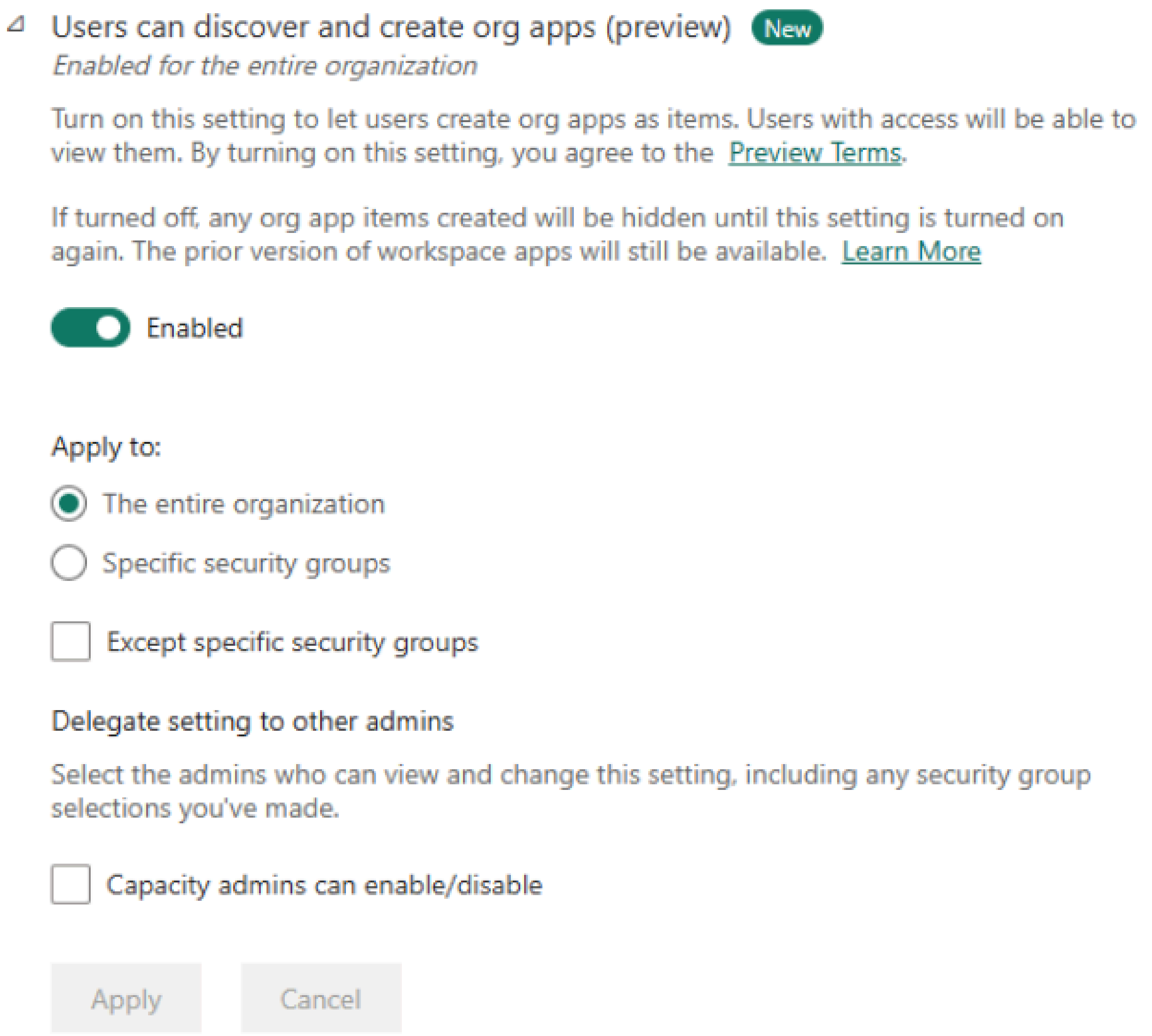


Power BI workspace apps are a great way for content creators, like report authors, to craft secure, beautiful, customized data experiences for your colleagues and consumers. With org apps as items, you can create as many org apps as you need to ensure your team is working efficiently. And with org apps you can customize the consumer experience with any theme color, configure navigation, and build unique landing experiences.



Prerequisites for creating org app items

The preview for org apps is off by default for tenants. To enable the preview, you must be a Microsoft Fabric administrator. From **Settings** > **Admin portal** > **Tenant settings** a Microsoft Fabric administrator needs to enable the switch entitled **Users can discover and create org apps (preview)**. Administrators can use security group inclusion/exclusion settings to control who can or can't create org apps.

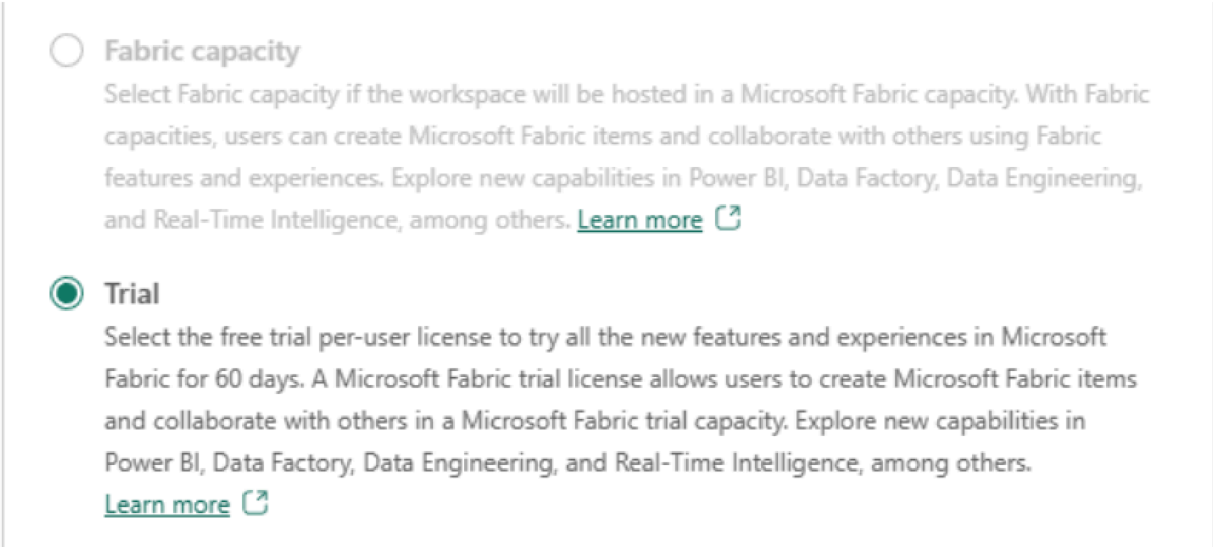


Workspace license mode set to Fabric trial or capacity

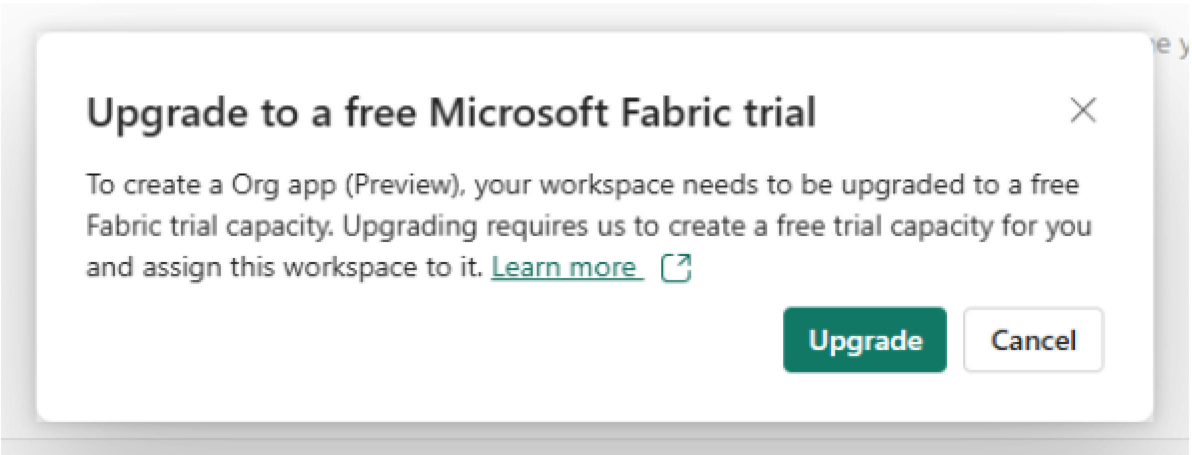
A workspace must be in a specific license mode to create an org app item: trial, Premium capacity, or Fabric capacity. To configure a workspace:

1. Create or open the workspace where you want to create org app items.
2. Select **workspace settings**.
3. Depending on your tenant, select the **Premium** tab or **License info** tab.
4. Select **Edit** to change the license mode for the workspace.

5. Select **Trial**, **Premium capacity**, or **Fabric capacity** (depending on what your tenant administrator configured).



Users who create an org app are prompted to start a trial when a Microsoft tenant administrator turns on Fabric trials.



Workspace roles for creating an org app item

Users in the workspace with an **admin, member, or contributor (with share permissions)*** role can create and manage org app items, although contributors might not have full permissions for managing access on an org app. For more information, see org app access management. Workspace viewers can't create org app items.

See also Contributors and access management and sharing.

How org app items work, and how they're different from workspace apps

With org app items, you can create **multiple org apps per workspace**.

With org app items, you can package up items from the **same workspace** and share them with others in your organization who don't have access to the workspace.

Once you create an org app item, you can include **Power BI reports, Fabric notebooks, and real-time dashboards** in the org app. **These items are referred to as included items**.

When you give users access to the org app item, **at a minimum they gain read access** to the included items as well. For Power BI reports in an org app, **users gain read access to the semantic models associated with the report**. For new org apps in preview, **even if a semantic model is in a different workspace** users gain access to that model.

Key ways that org app items are different from workspace apps (also known as Power BI apps)

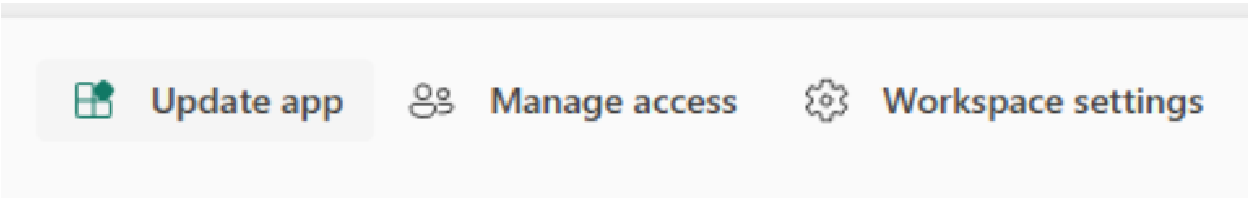
- Multiple org app items can be created per workspace.
  - With workspace apps, only one app could be created per workspace. If you had the need for different apps within a workspace, you could create audiences that would show or hide content in your app based on permissions. With org app items, you can create a unique app per need.
- The included items, like reports, added to an org app aren't versioned copies of the source item. They're the original items in the same workspace as the org app item. Users who have access to the org app have access to the original version of the items added to the org app.
  - With workspace apps, all items added to an item were automatically versioned when the app was published.
- Since users have access to the source items, if provided a direct link to an included item, org app users can view the source items outside of the org app.
  - With workspace apps users couldn't view items outside the app, unless they had access to the original source item via another method, like direct access.
- If a report is built on a semantic model in a different workspace, users who are given access to an org app are automatically granted access to the model in the different workspace.
  - With workspace apps, org app authors had to manually manage access to models in a different workspace.
- If you grant a user share permission on an org app item, that user can share the org app with others.
  - With workspace apps, only specific roles within the workspace could manage access and share the app.
- Users who have access to an org app don't have to install the org app to view it. The org app item appears in lists like other items do, **Recent on Home**.

- With workspace apps, a user had to install an app to see it in lists.
- If a user is removed from an org app, that user's org-app-based access to included report items and semantic model items associated with that org app is automatically revoked. If a user has another form of access to included items or semantic models, that form of access is unaffected. (Automatic revocation of included real-time dashboard and notebook items is coming soon.)
  - With workspace apps, if a user was removed from an app their access to semantic models remained. Revoking access to semantic models had to be done manually. App authors had to be sure that they weren't breaking that user's ability to view other reports when removing model access.

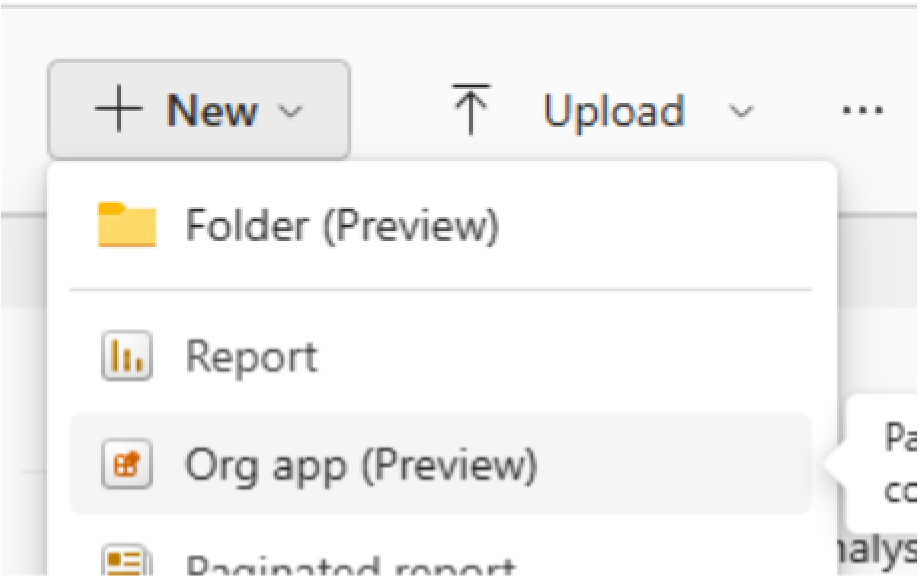
Workspace apps continue to work alongside org app items (preview)

If you have a workspace app configured and published, your org app items don't affect how your workspace app works. You can continue to use workspace apps alongside org app items.

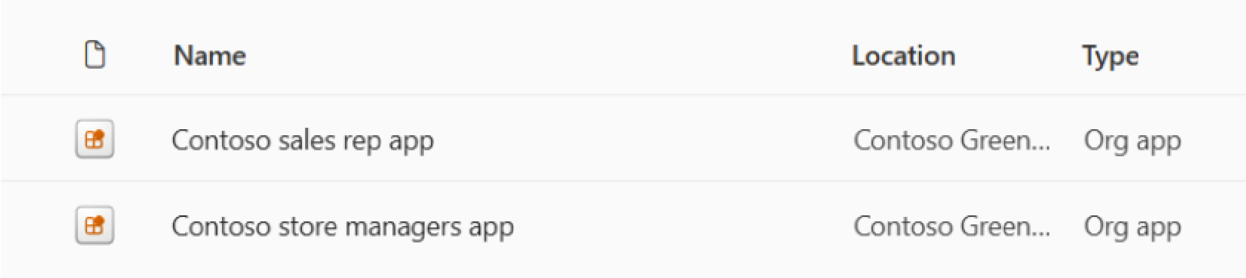
Workspace apps are created and managed at the workspace level:



Org app items are created and managed from the New menu and workspace list:



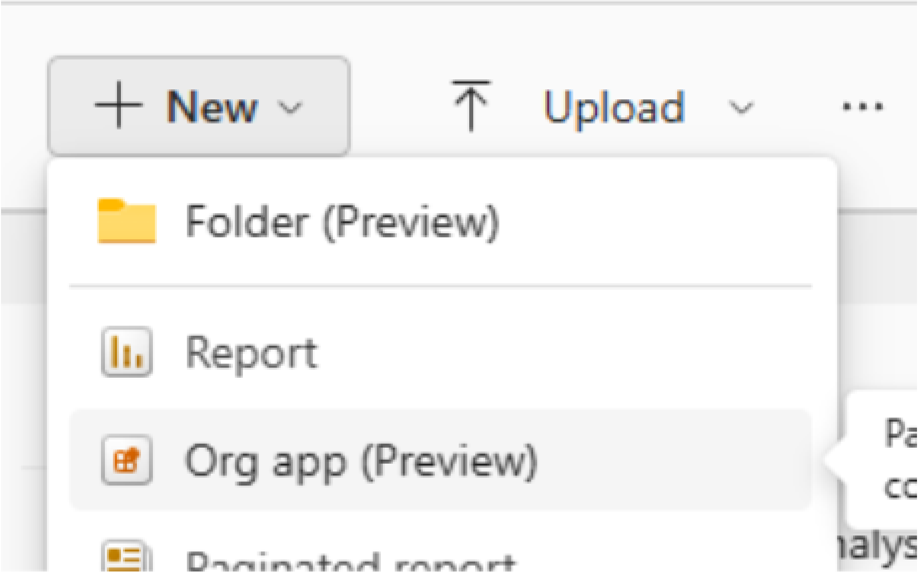
Org app items appear in your workspace list:



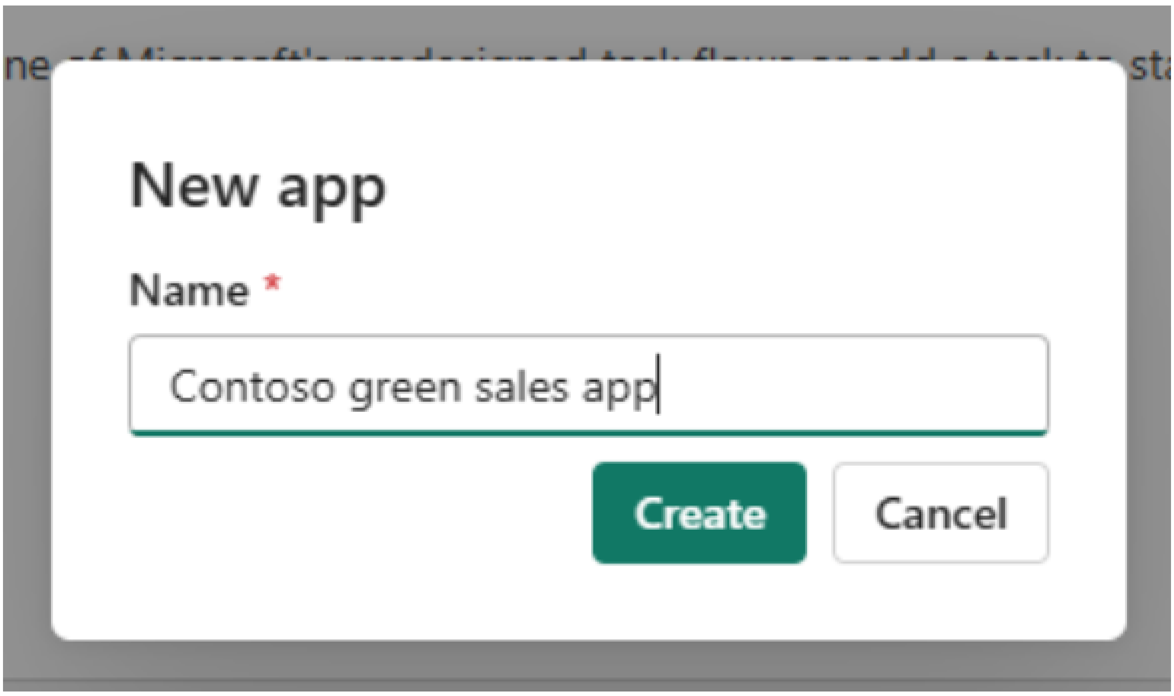
How to create and share an org app

Creating a new org app item and adding content

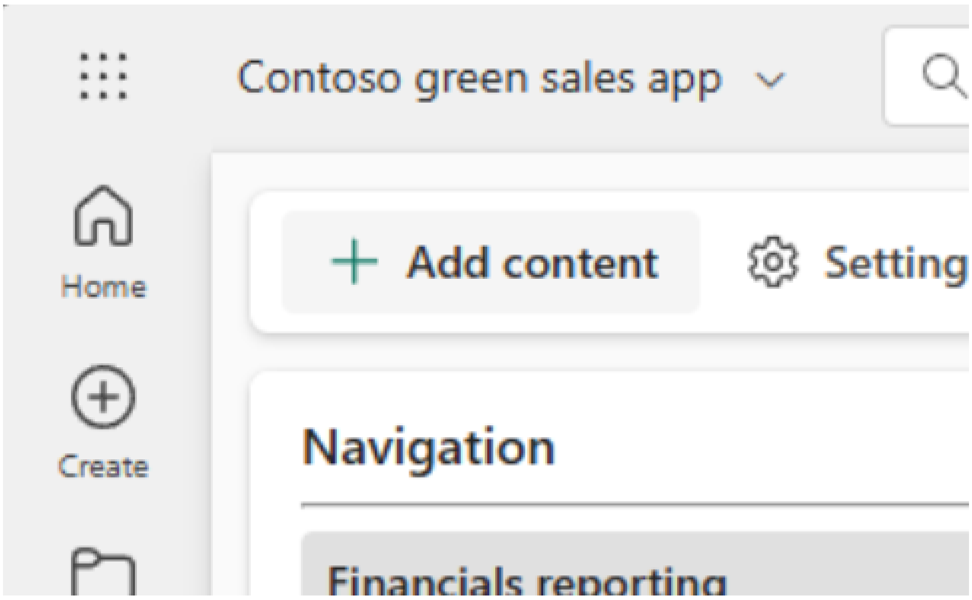
From a shared workspace in the right license mode, select **New** > **Org app (preview)**



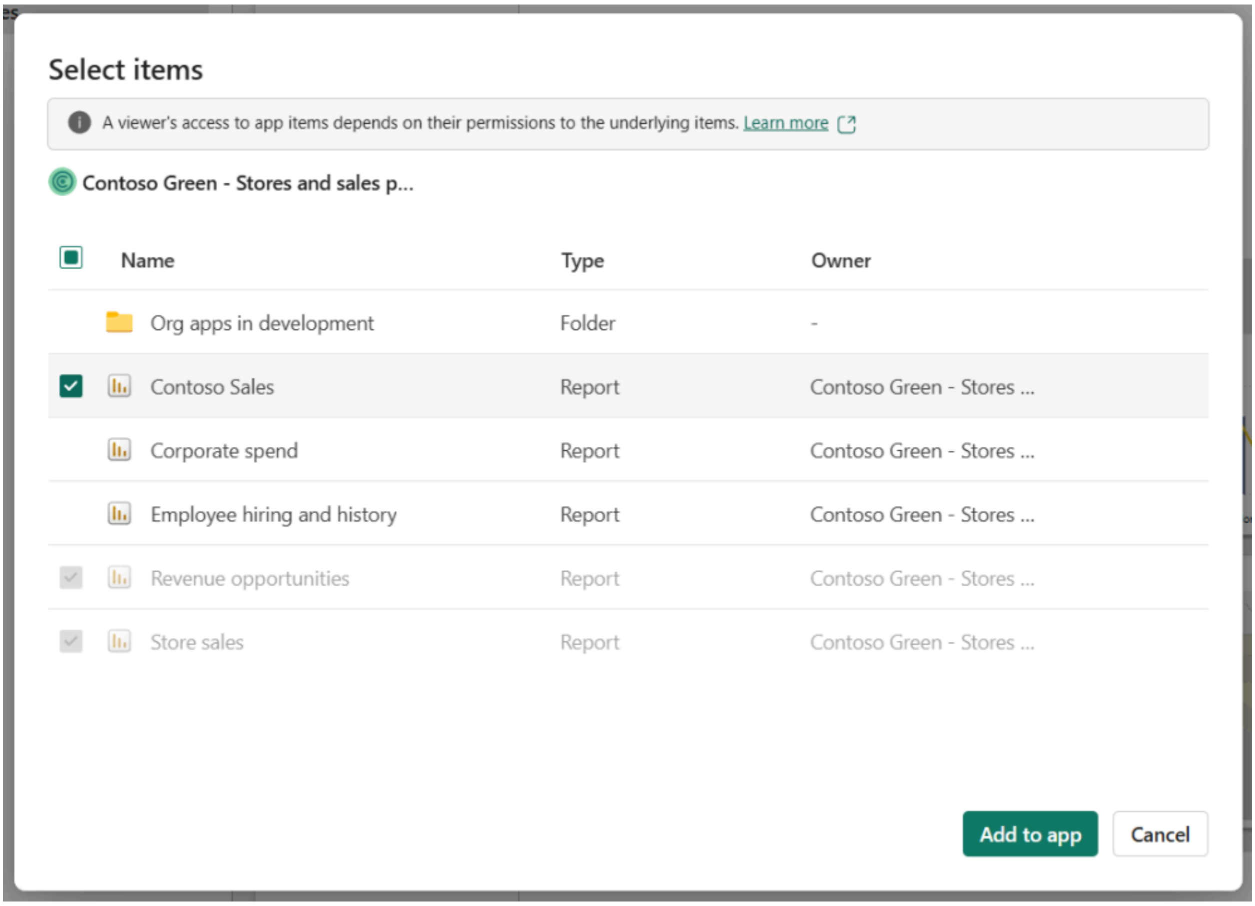
Name your app



Select **Add content** and select reports and notebooks from your workspace, then select **Add to app.**



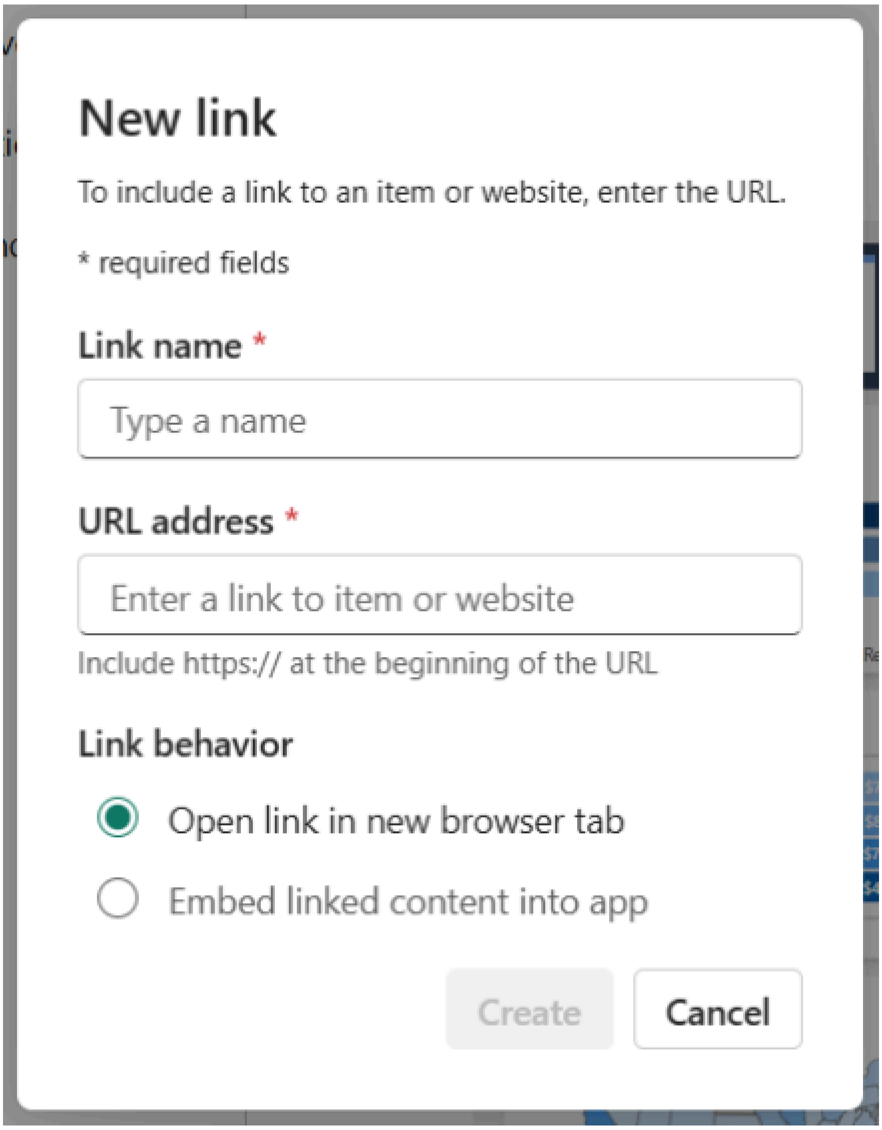
Screenshot of workspace item picker:



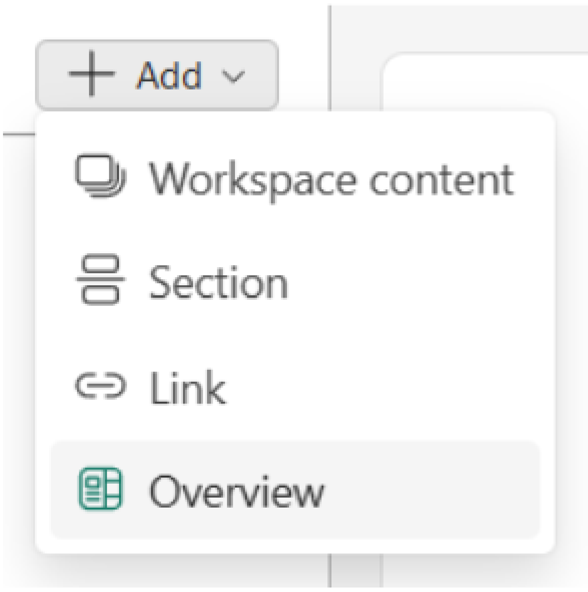
Adding more elements to your org app and arranging the navigation

You can add more elements to your org app, like links and an overview page that lists everything in your org app. And you can arrange the navigation as you'd like in sections and reordering elements.

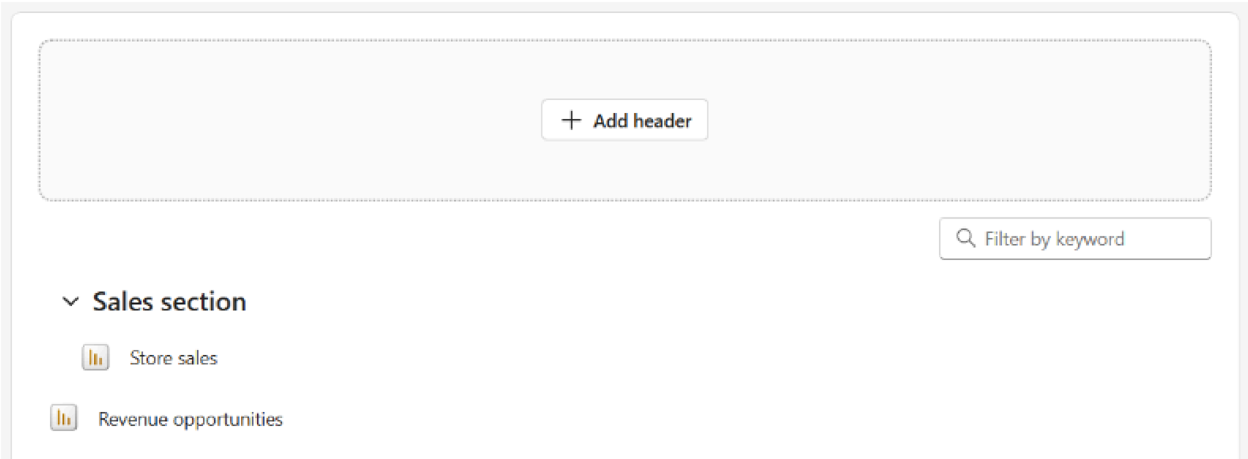
Add links to your org app navigation from **Add** > **Link**.



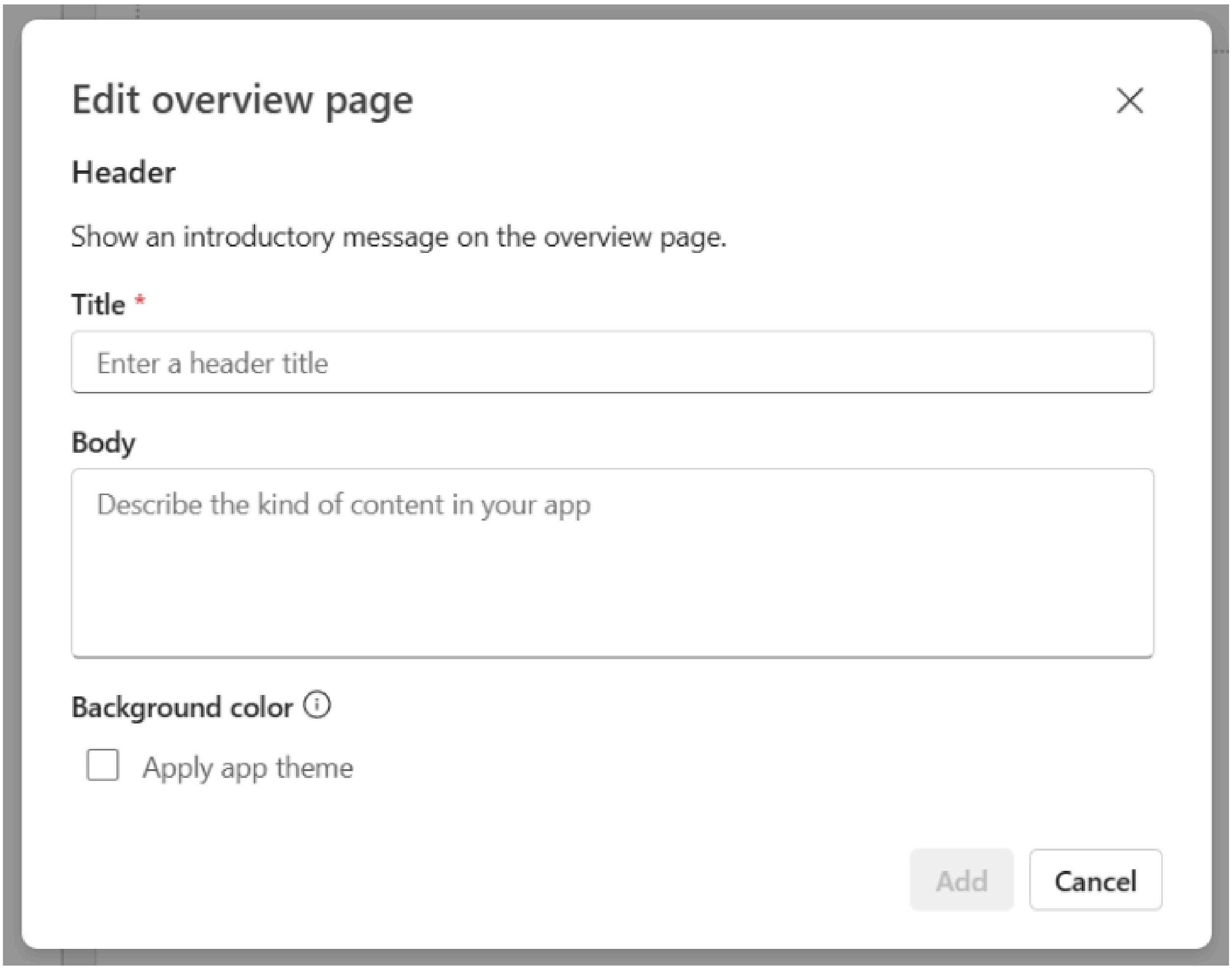
Add an overview page to your org app that lists everything added to your org app. Select **Add** > **Overview**. You can have one overview page in an org app.



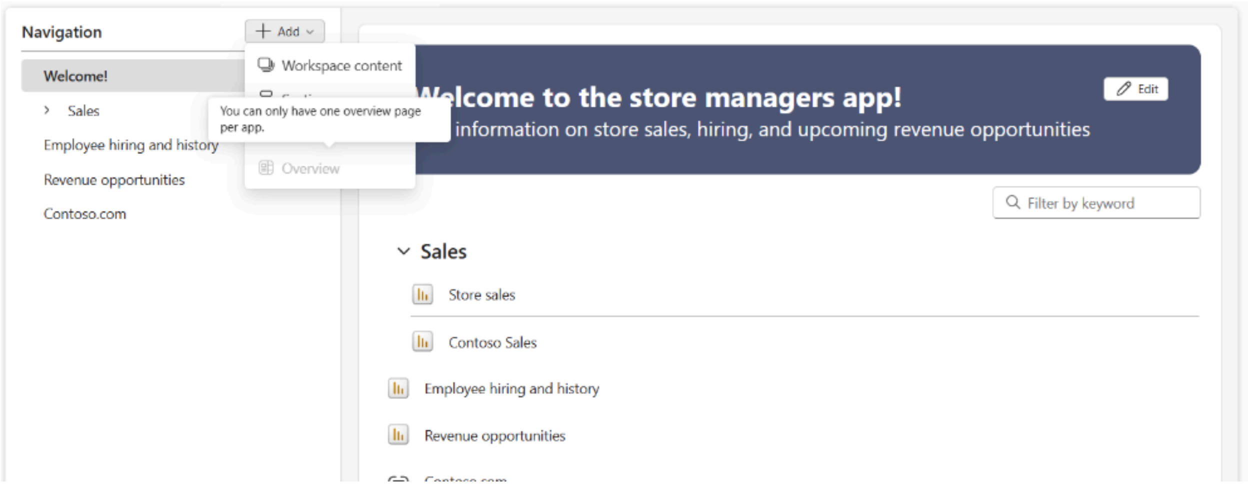
Once the overview page is added, you can add a custom header by selecting **Add header**.



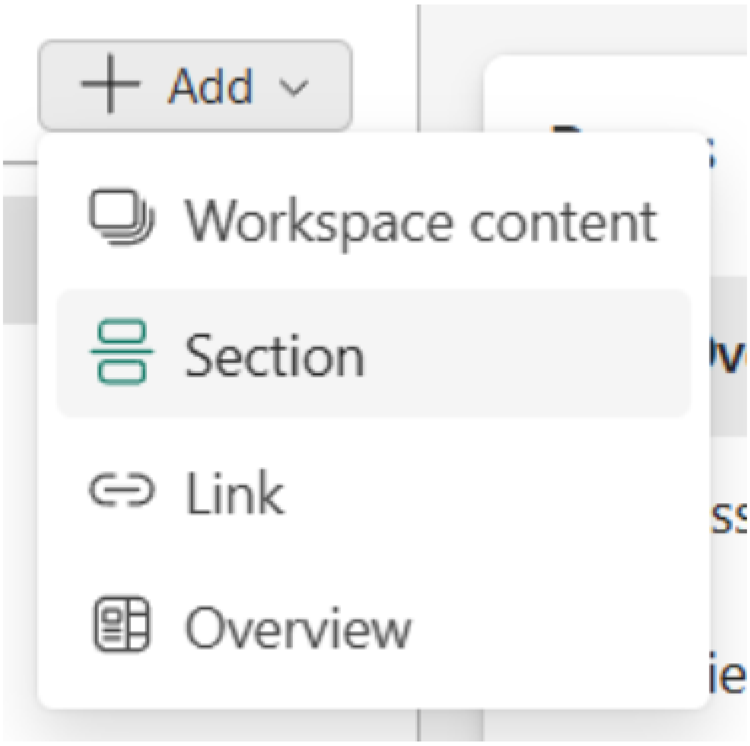
You can enter a header title, body, and choose to apply the org app theme color as the header's background color.



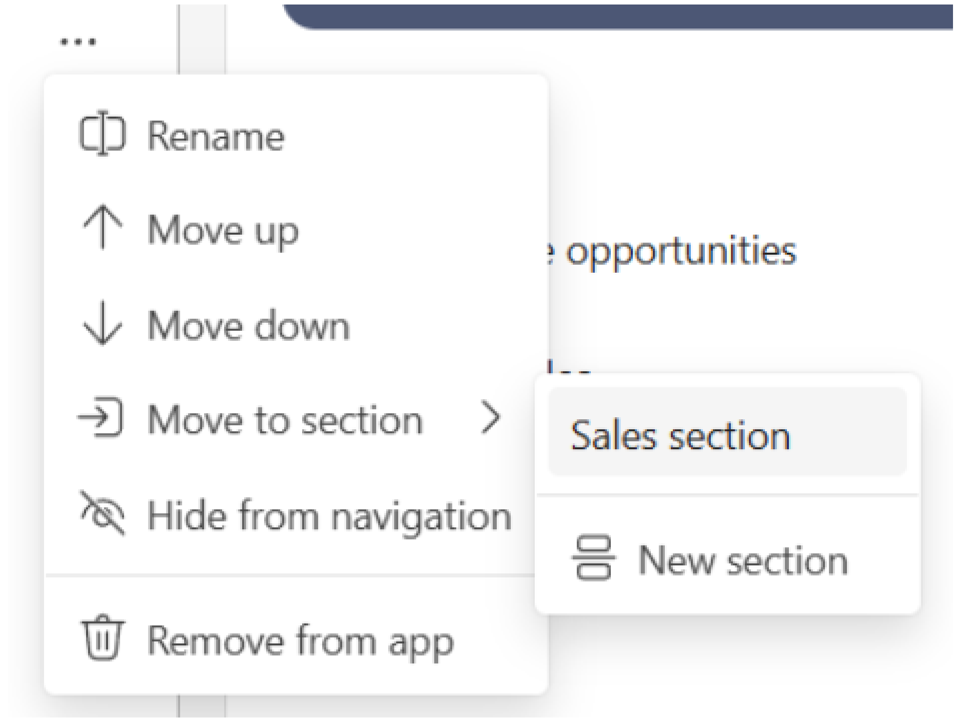
Only one overview page can be added to an org app:



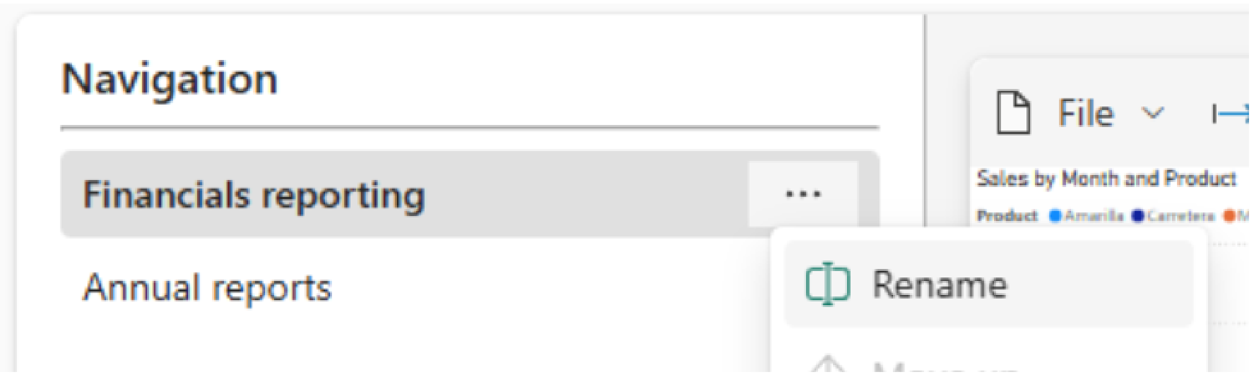
Organize your navigation by adding sections from **Add** > **Section** and naming the section.



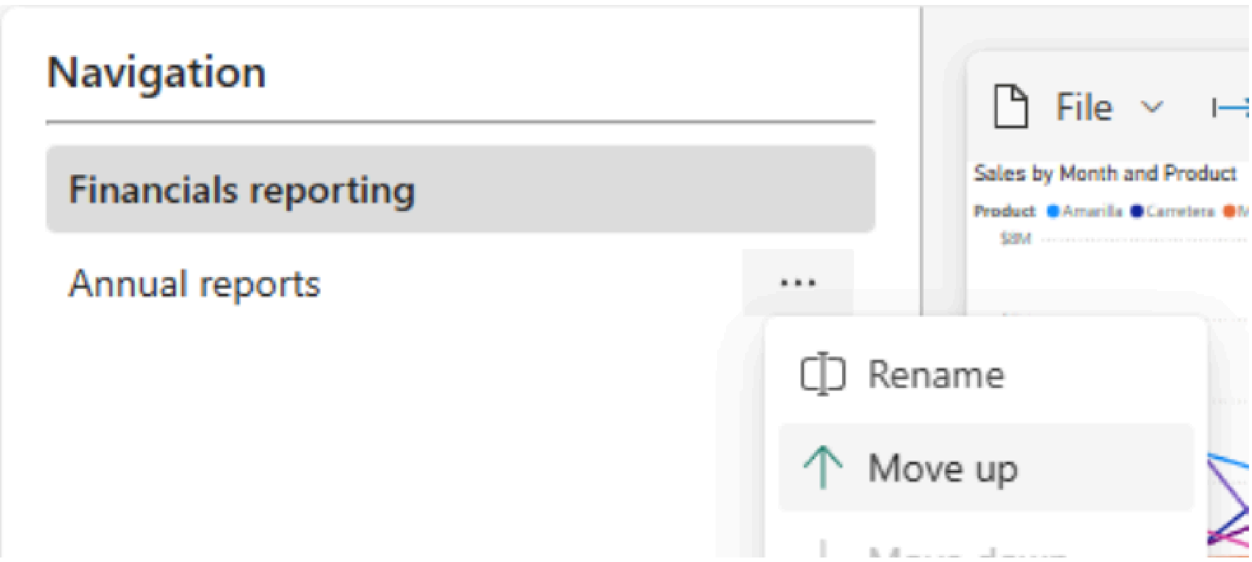
Move elements to a section by selecting **...** > **Move to section**.



To change how elements show up in your org app navigation, you can rename any element added to your org app by hovering over an element added to your app and selecting **...** > **Rename**.



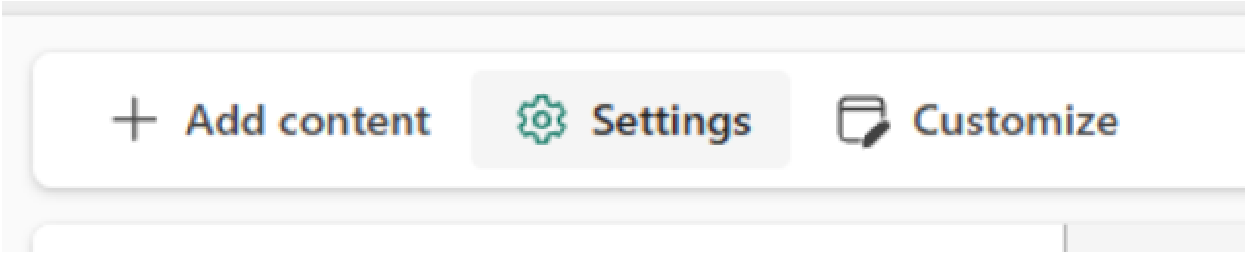
To change the order of elements in your app navigation, you can reorder elements by selecting **...** > and then **Move up** or **Move down**.



The first element in your navigation is the landing experience for your org app.

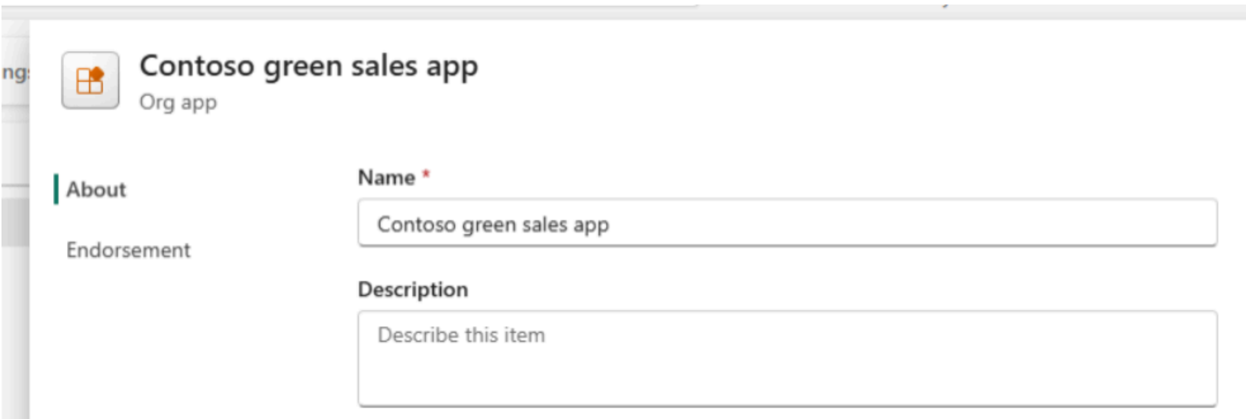
Adjust the settings for your org app

From **Settings** you can change the name, description, and endorsement level.



From the **About** tab you can rename your org app, add a description, and see the details of who the owner and creator of the org app is, plus the last time the item was modified.

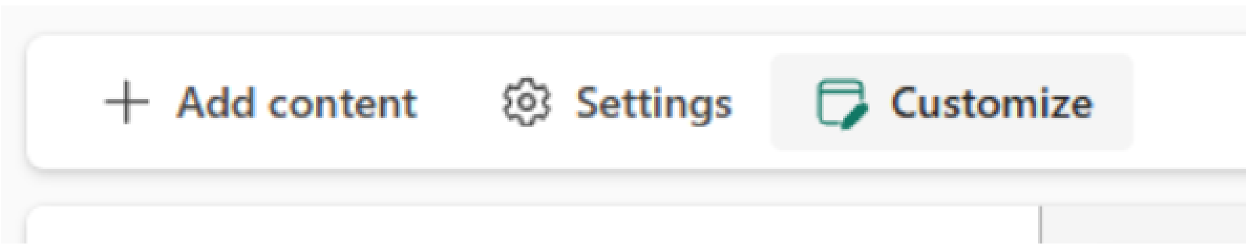
Changes you make from this pane are instantly applied to the org app.



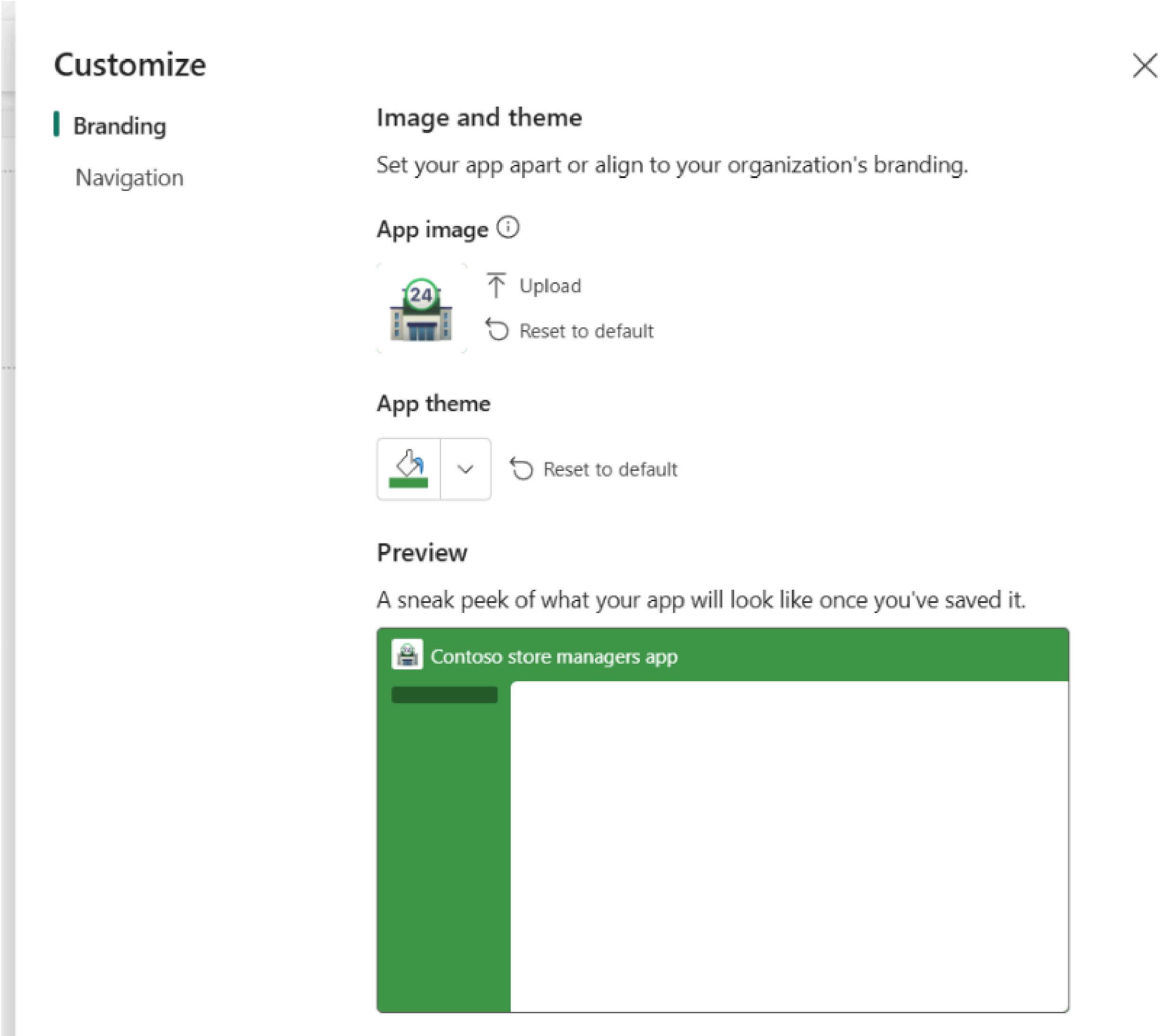
To set the endorsement level on your org app item, view the **Endorsement** tab and, if you have permissions, you can make changes to the endorsement level. Note, the endorsement level set on the org app item is unique to the org app item, not the included items you add to the org app.

Customizing your org app

To change the app image (icon) or theme (color), select **Customize**.

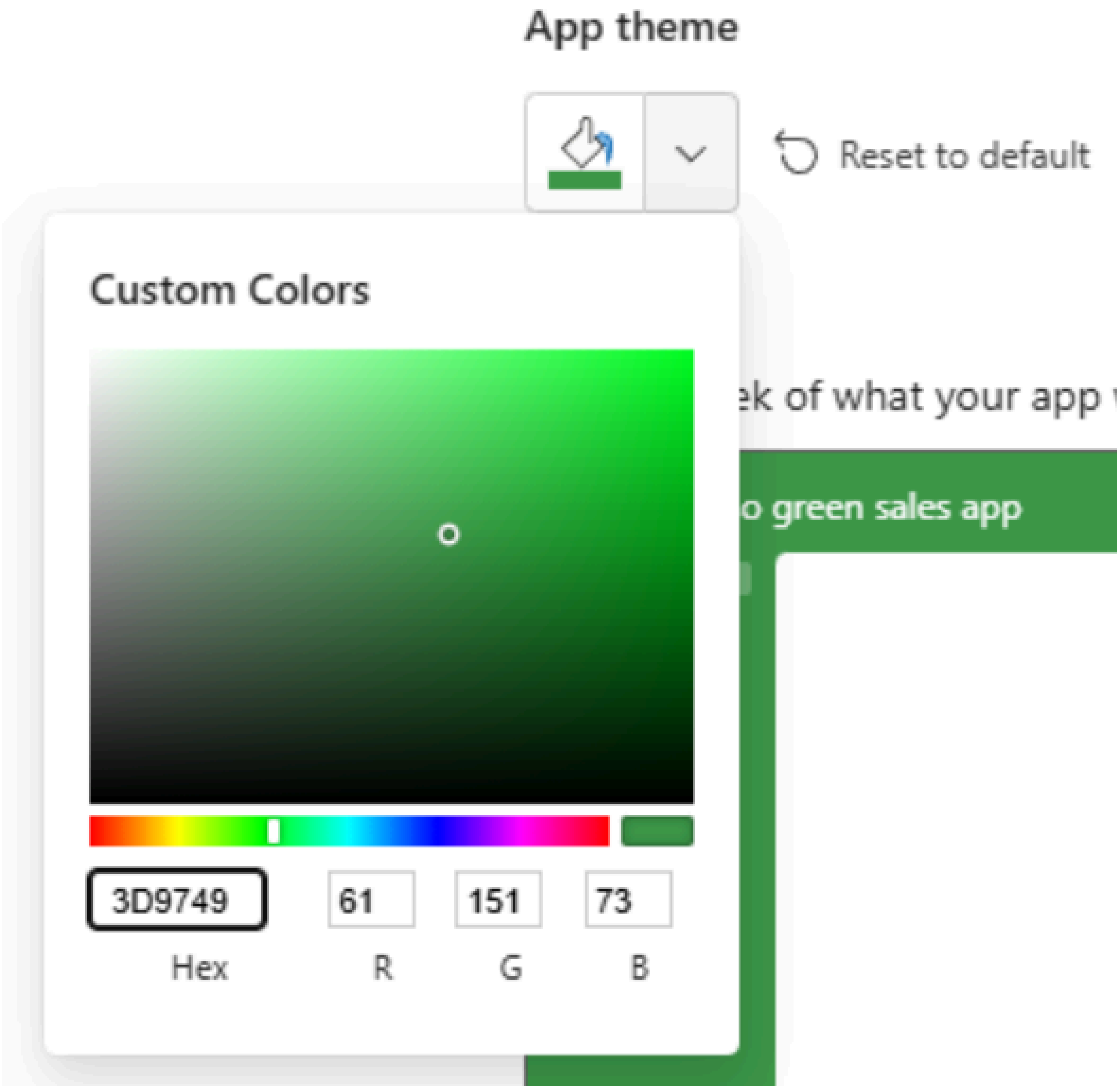


From the **Branding** tab, you can upload your own image as the app icon and select a custom color for your org app. The icon and colors you select are used to customize the org app experience your consumers see once the org app is saved.

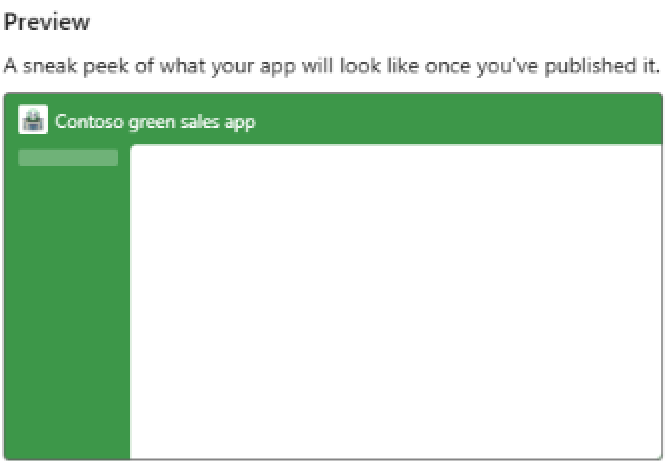


To add a custom app image, select **Upload**. Upload a .jpg or .png file of up to 45 KB. If you need to remove the app image you uploaded, select **Reset to default**.

To add a custom color to your app, select the **down arrow** to open the color picker. From here, you can use the color picker to select any color you would like or enter a hexadecimal or RGB value for a color of your choice.



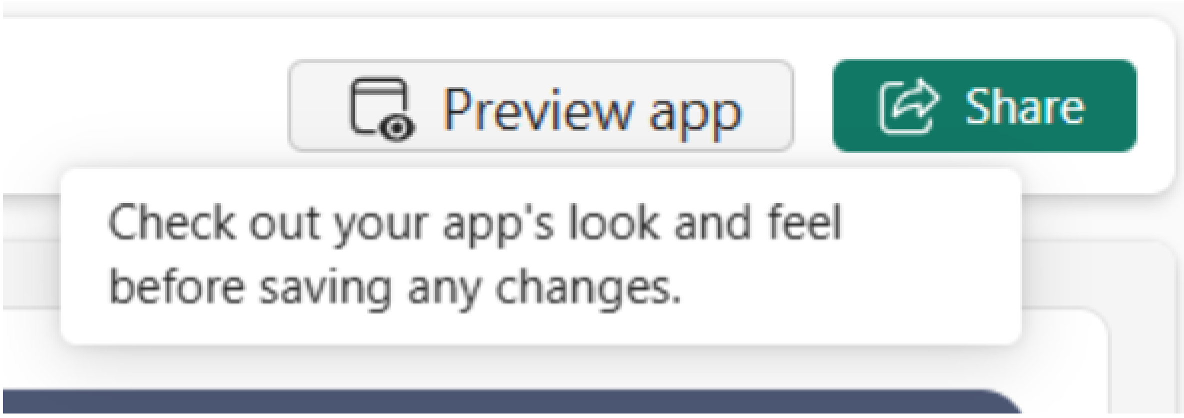
As you make image and theme selections, a sneak peek preview gives you a sense of what your org app looks like for consumers once saved.



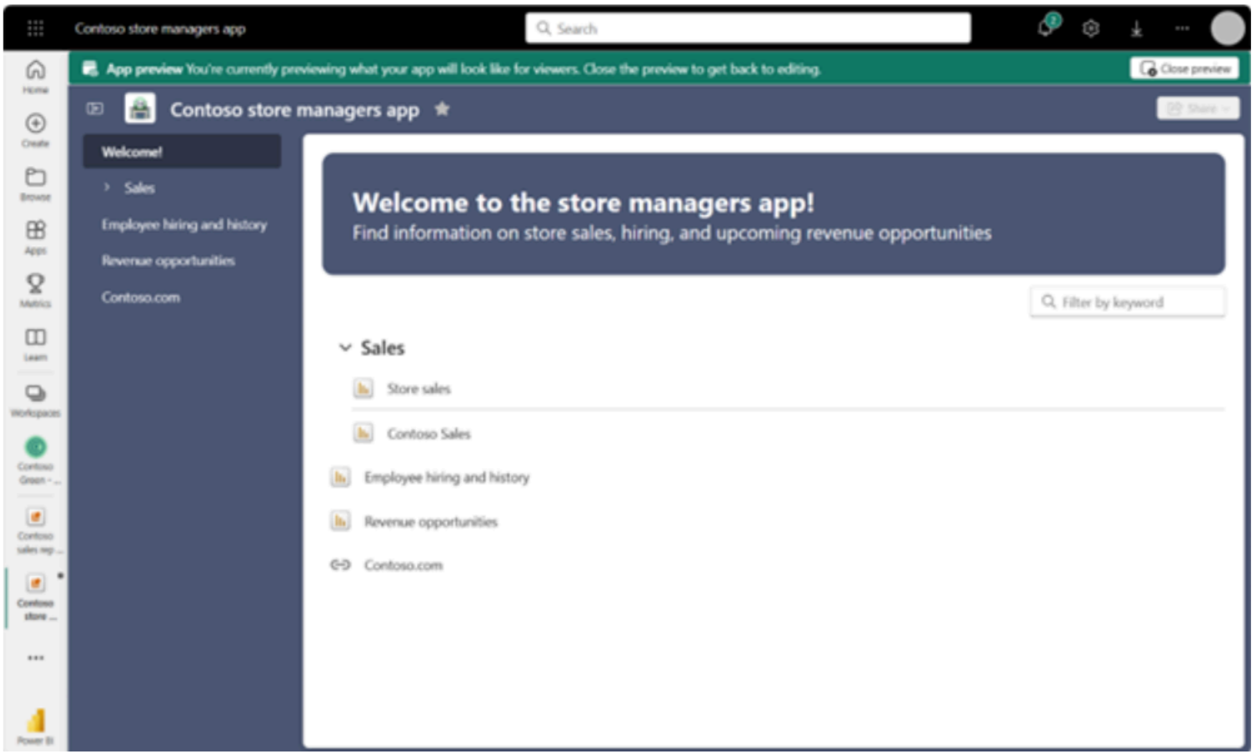
Before closing the pane, select **Apply**. But note, your changes aren't available or visible to consumers until you save your org app.

Preview your org app before saving changes

To get a sense for what your org app looks like for consumers, select **Preview app**.



A preview of your org app is shown. select **Close preview** to make more changes or save your changes.

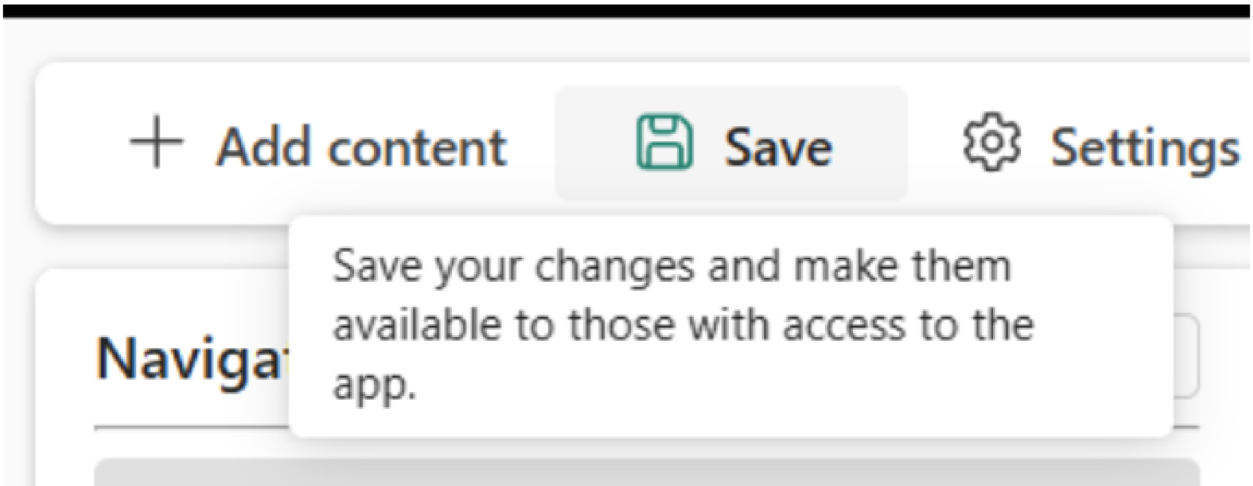


Saving, viewing, and sharing your org app with others

Once you add content, adjust the navigation, review settings, and customize your org app it's time to save and share it with others.

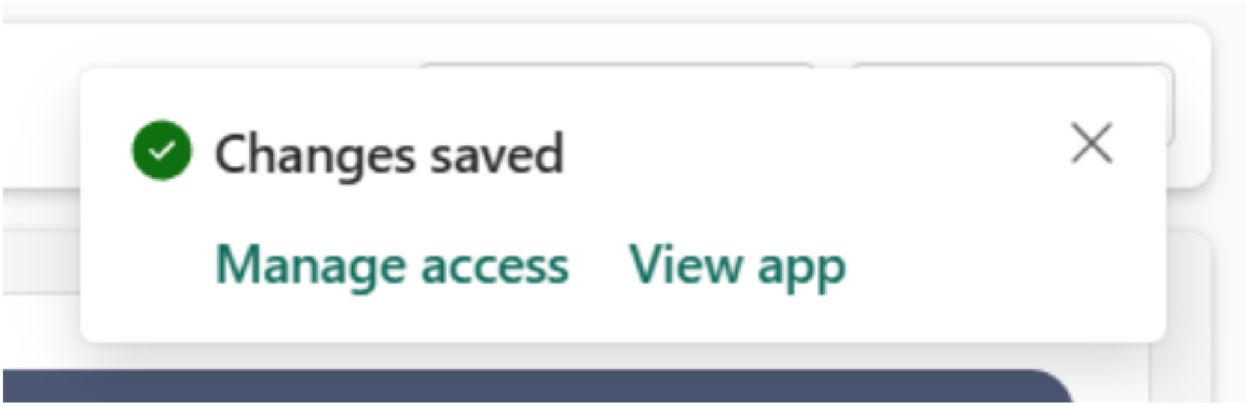
Saving and viewing your org app

When you're ready, select **Save**.

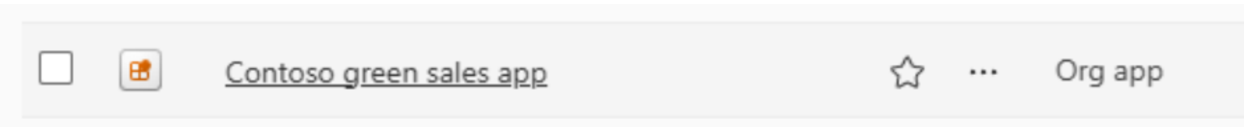


If you get a warning that you couldn't save changes because you don't have share permissions, see more on **managing org app permissions.**

To view your published org app, you can select **View app** from the confirmation dialog that appears:

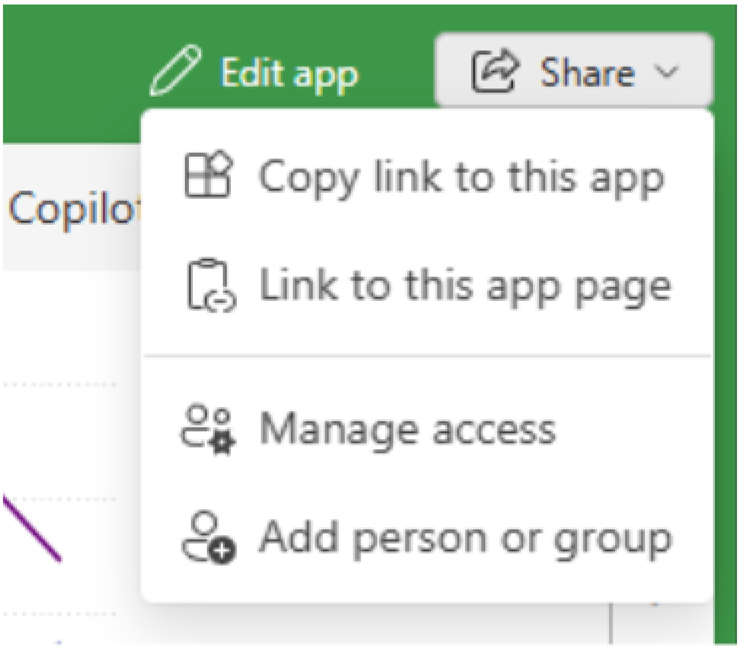


Or you can visit the workspace your org app item was saved to and select the org app you would like to view:



Granting others access to and sharing your org app

You have several ways to share your published org app.



Selecting **Share** shows several options:

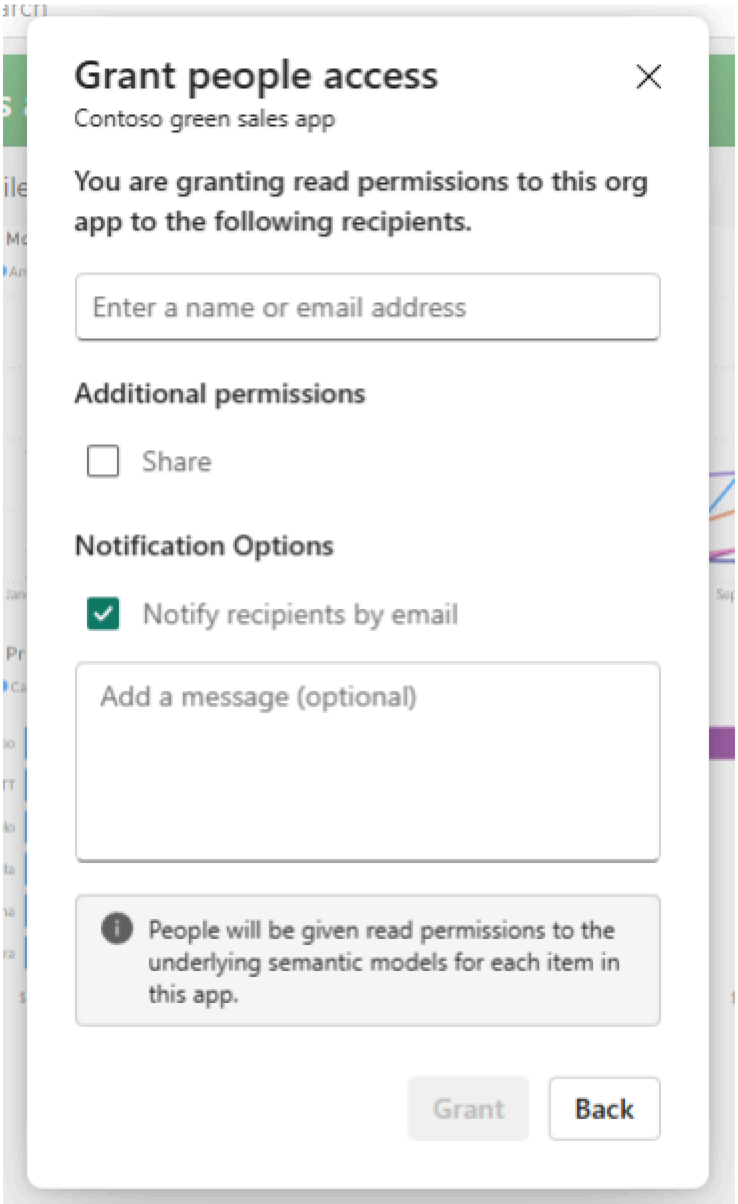
- Copy link to this app
- Link to this app page
- Manage access
- Add person or group

To share with users who already have access to the org app:

- Select **Copy link to this app** to share the org app item. Users who use the link you send must already have access. Users who use the link land on the first item in your org app.
- Select **Link to this app page** and users are taken directly to the item you have in view when copying the link

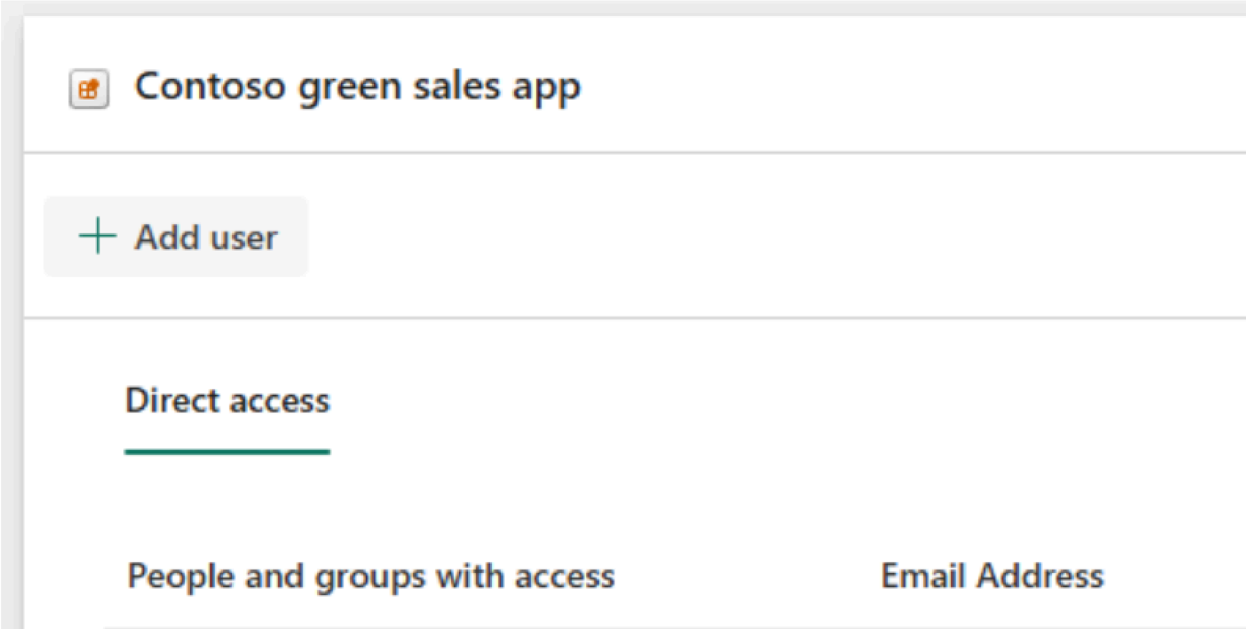
To share with users who don't have access to the org app you can manage access to the org app item the way you do any other item, like reports.

Select **Share** > **Add person or group** and you can add users from your organization from the modal displayed, without leaving your app:



From the modal displayed you have options to grant share permissions or notify the recipients by email, with an optional message.

For the full access management experience, select **Share** > **Manage access** and to see the full access management page with users who have access to the org app and an opportunity to add new users. To add a new user, select **Add user** and the same modal is displayed.



Remember, users who are given access to an org app item are automatically granted access to:

- items included in the org app from the same workspace.
- semantic models that included reports source from in the same workspace *and* different workspaces.

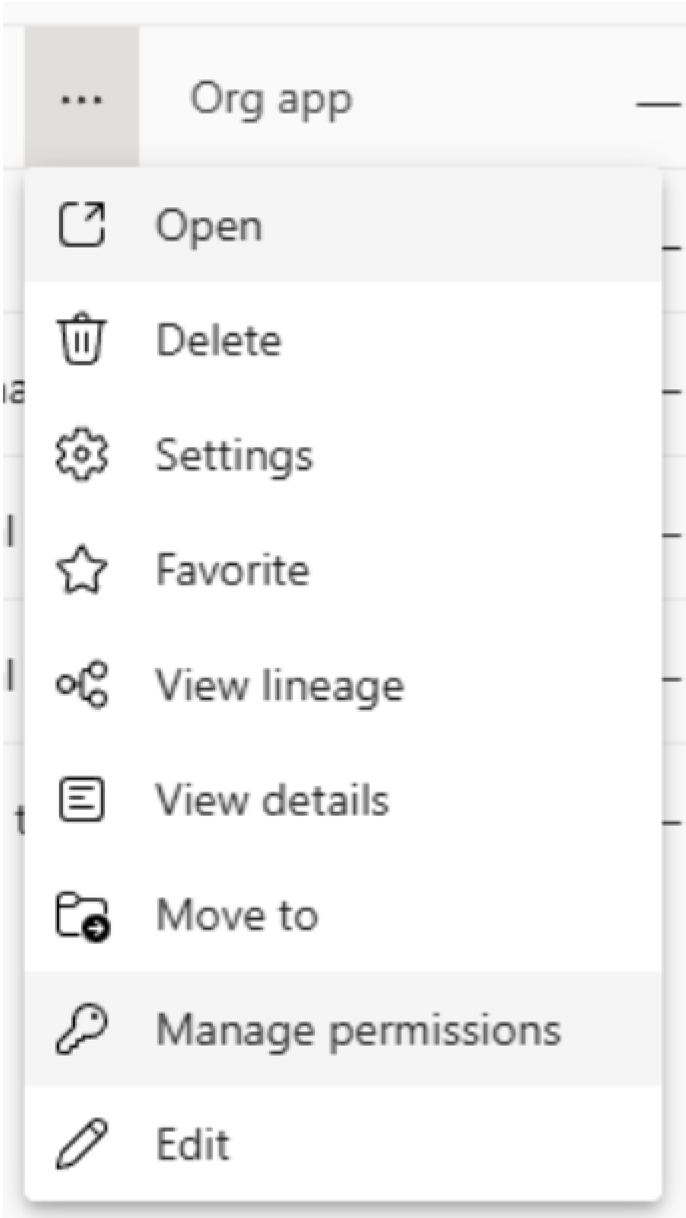
Managing org app permissions, like removing users

Managing permissions on an org app item is similar to managing permissions for any other item, like Power BI reports.

First, view the access management screen:

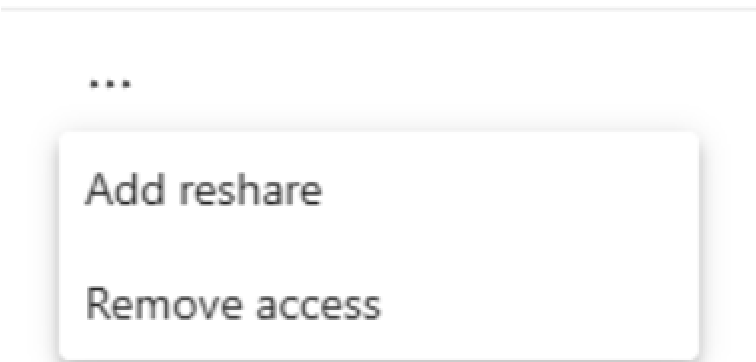
- From the org app, select **Share** > **Manage access**
- From the workspace, select **...** > **Manage permissions**

Screenshot of the "more" menu on an org app item:



By default, users granted access to an org app are given read permissions for the org app item, included items, and underlying items.

Want to grant extra permissions to a user? Find the user you would like to manage and choose what you would like to manage. Manage permissions like share or removing the user's access:



- **Add reshare** allows users to share the org app item, included items, and underlying items with others. This means they can grant others access to the org app and propagate access to all items the org app is dependent on. Items like included reports, notebooks, and real-time dashboards. Plus the underlying semantic models the report items depend on.
- **Remove reshare** removes a user's ability to share the org app item with others. Though anyone who has access to the org app by that user maintains access.
- **Remove access** removes that user's access to the org app item, the included report items, and the semantic model items that reports in the org app source from. Unique to new org app items, access to lineaged report and semantic model items is removed when a user loses access to an org app. However, if a user has another form of access to an item, such as a semantic model, they maintain access to that item. Only their org app-based access is removed. (Automatic revocation of included real-time dashboard and notebook items is coming soon.)

> ⓘ **Note**
>
> There are select cases where your org app doesn't automatically propagate or revoke access to items the org app is dependent on. **Access propagation**: For example, a report with a paginated report visual, also known as a report definition language (RDL) visual, is dependent on a paginated report item. Org apps don't propagate access to underlying paginated reports at this time. If your org app consumers have a broken view in an org app, consider all the items your consumers need access to, grant necessary access, and have your consumers view the org app again. **Access revocation**: Org apps propagate access to Fabric items, such as real-time dashboard and notebook items included in the app, but do not yet revoke access automatically when a user loses access to an org app or those items are removed from the org app. Manage access removal of these items from each item's permissions management page.

Here are the items org apps propagate access to:

- The org app item itself
    - Included report items
        - The underlying semantic model for a report item (for a model in the same workspace or separate workspace)
    - Included notebook or real-time dashboard items

Here are the items org apps revoke access to:

- The org app item itself

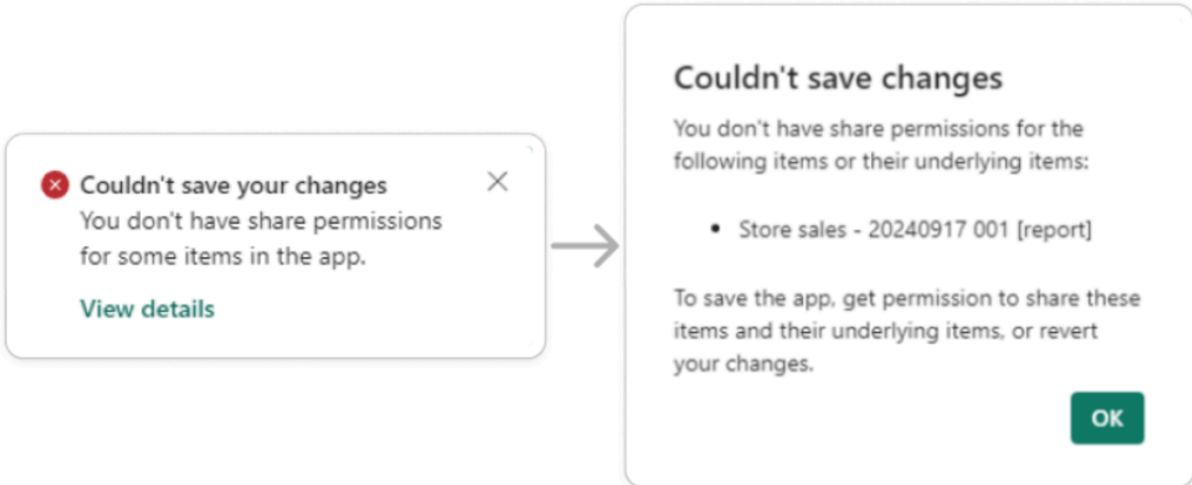
- Included report items
  - The underlying semantic model for a report item (for a model in the same workspace or separate workspace)

Insufficient permissions when managing an org app

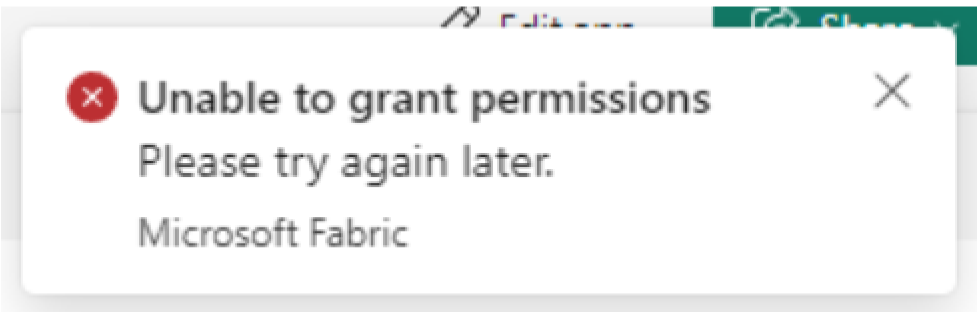
Org app items are built to automatically manage access for included items and underlying items. You don't have to independently manage access for items individually. Your org app works as expected for your consumers, without broken views in the org app.

This means org apps check a user's share permissions to add or remove items from an org app plus add, modify, or remove a user's access to an org app. A user who attempts to manage and org app in these ways must have full share permissions on the org app item, included items, and underlying items. Otherwise their changes or attempt to manage access fails.

Screenshot of a save scenario where a user doesn't have permissions to manage access on included or underlying items.



Screenshot of a share scenario where a user doesn't have permissions to manage access on included or underlying items.



If you encounter these messages, ask for share permissions on items associated with the org app. Or ask someone with share permissions to make changes or manage access for you.

Contributors and access management / sharing

Workspace contributors can create and edit org app items in the workspace. Power BI apps setting that allows contributors to manage and share apps don't apply to org apps.

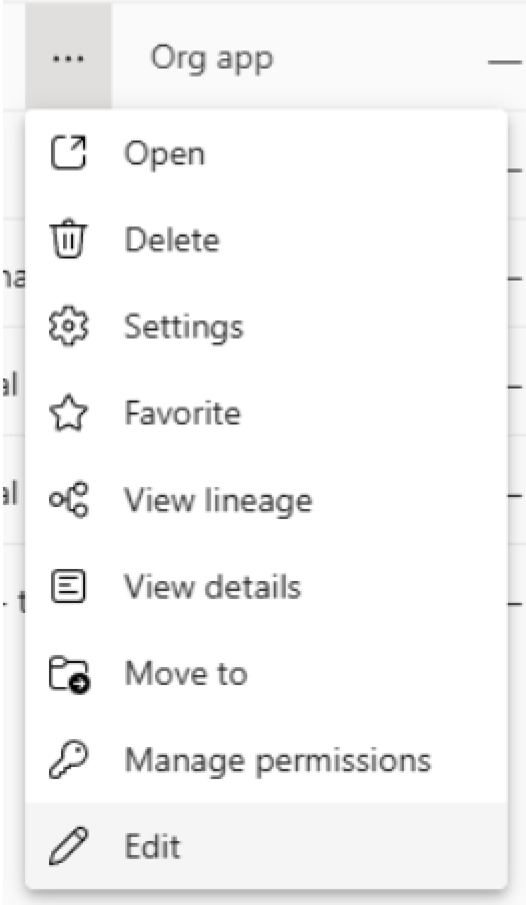
For org apps, some, but not all, workspace contributors have permissions to manage access for included items. Those contributors might experience messages covered in the section, **Insufficient permissions when managing an org app**. When contributors add or remove items from an org app that have nonworkspace users, the app update fails if the contributor user doesn't have permissions to share the included items. Same with sharing an org app. If a user doesn't have permissions to reshare the included items or semantic models associated with the org app the share fails. When expecting contributors to edit org app items or manage access, consider a different workspace role for the user. Or grant them share permissions on necessary items.

How to edit an org app

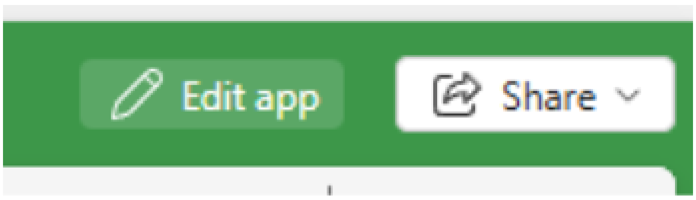
For users with permissions (workspace admins, members, and contributors with share permissions) you can edit an org app by starting from two places:

- workspace list > **edit**
- viewing the org app > **edit**

From the workspace list, find the org app you would like to edit, select the "more" menu **...** > **Edit**.

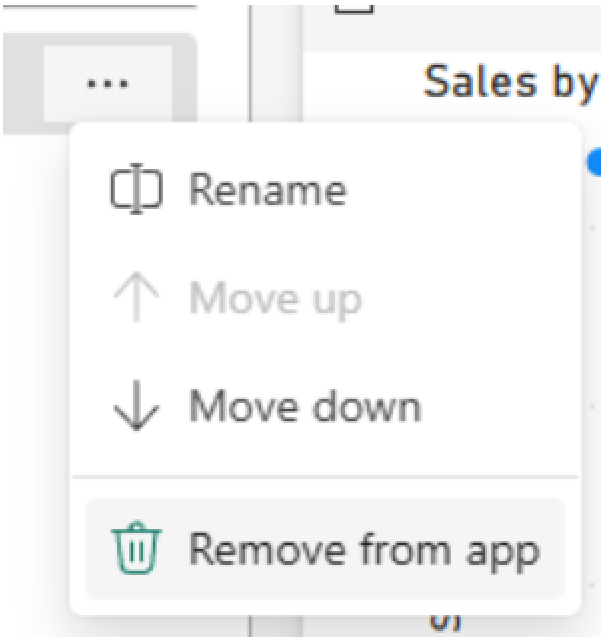


While viewing an org app, select **Edit app**.



Once in the edit view for the org app you can add content, change the navigation structure, adjust settings, and customize your app.

If you would like to remove items from an app, hover over the item you would like to remove and select the "more" menu **...** > **Remove from app**.

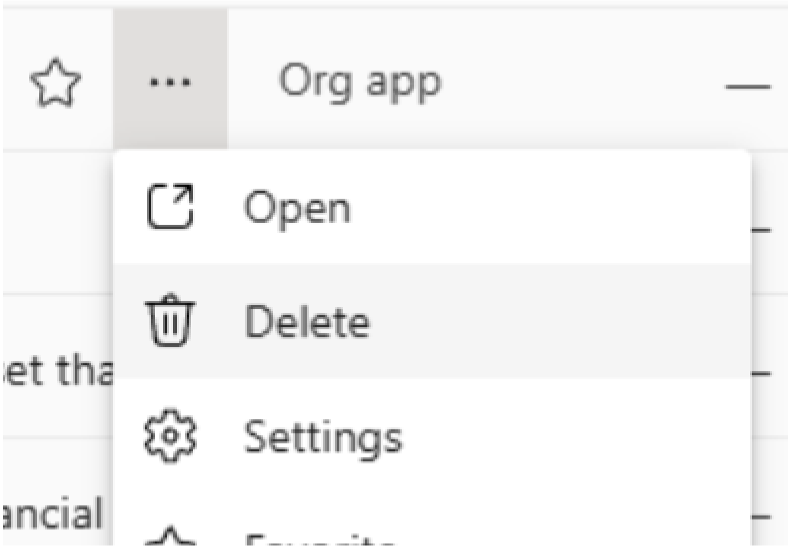


Once your changes are made, select **Save**.

If you removed items from your app, all users who have access to the org app item automatically lose their org app-based access to the removed items and their associated semantic models.

How to delete an org app

Need to delete an org app? From the workspace an org app is located in, select the "more" menu on the org app item you would like to delete, **...** > **Delete**.

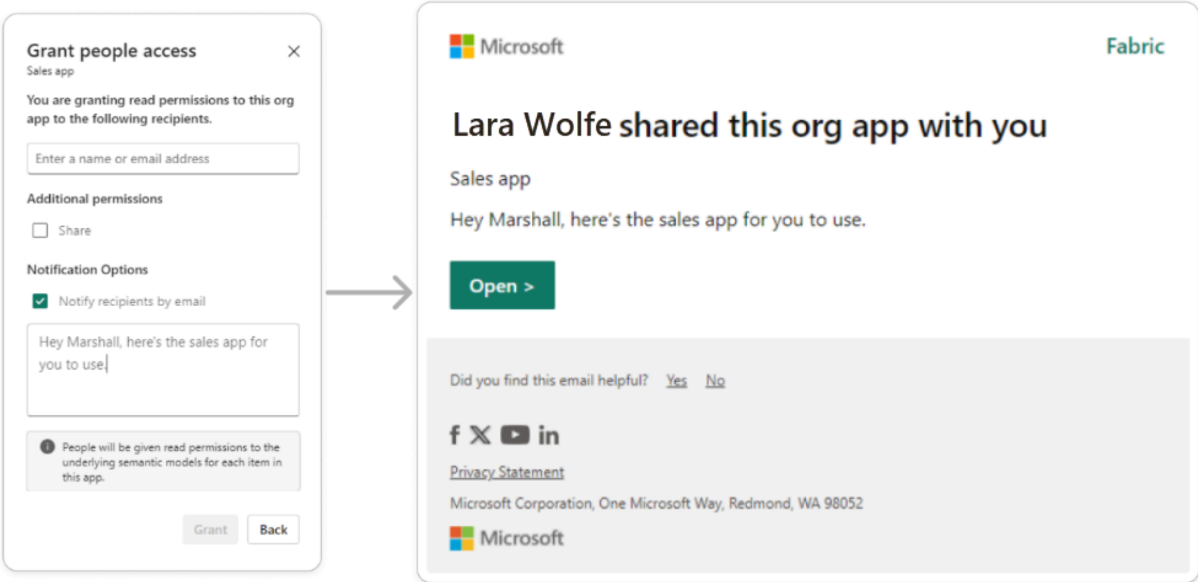


The org app item is deleted. Users who have access to the org app lose their access to items that were included in the org app and the associated semantic models.

Org app consumer experience

Viewing or returning to org apps

Users can be notified via email when an org app is shared.



Users can also grant others to an org app and then choose to share a link.

Users with access to org apps can find their org apps listed in a few places:

- Home > Recents – if they viewed the org app recently.
- Home > Favorites – if they favorited the org app.
- Apps – org apps items a user has access to are listed with Power BI apps the user installed.

In list views, org app items are labeled as "org app" while Power BI apps are labeled as "app."

App type
App
Org app (preview)

Org app consumers without permissions to edit the org app are able to view, favorite, and share the org app. If a consumer doesn't have share permissions, they can only share links with users who already have access.

Feedback

CI/CD for org apps in Fabric (Preview)

06/06/2025

This article explains how Git integration and deployment pipelines work for org apps in Microsoft Fabric. Learn how to set up a connection to your repository, manage your org app through Git, and deploy it across different environments.

Org apps and Git integration

Connect to a Git repository

From your workspace settings, set up a connection to your repo to commit and sync changes. To set up the connection, see Get started with Git integration article.

After you connect, the workspace displays information about source control that allows you to view the connected branch, the status of each item in the branch, and the time of the last sync.

Org apps representation in Git

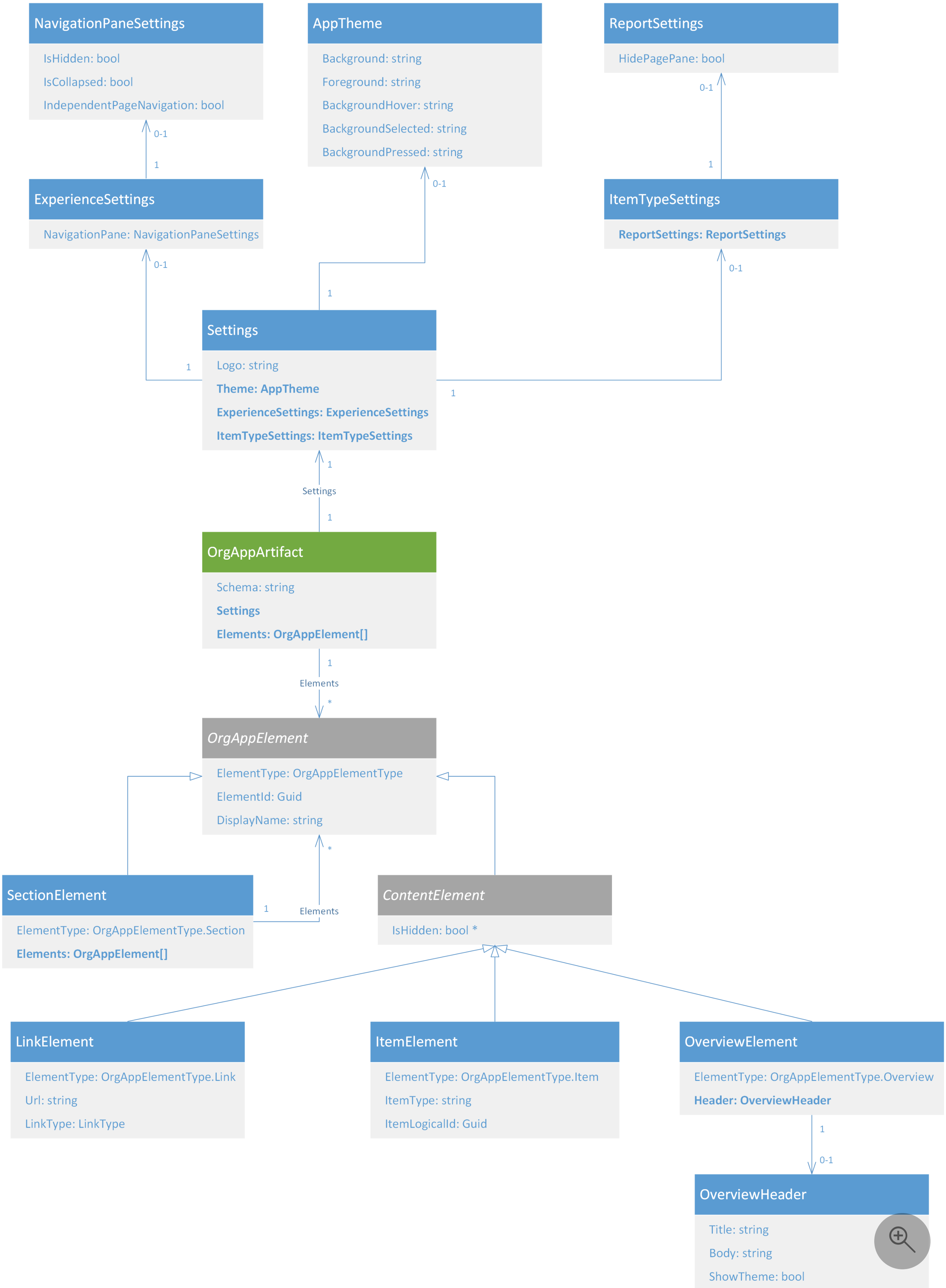
When you commit the org app item to the Git repo, a folder is created for each item and named `{display name}.OrgApp`. It contains two files:

- `.platform` file which is auto generated by the system. Learn more from system file.
- `definition.json` file which is the definition of the org app item.

The definition file is divided into two sections:

- Static settings: describe the app's external appearance, such as the theme, logo, and experience settings.
- Elements: describe the app's internal structure.
  - Section elements: Container elements that have their own collection of Org apps
  - Item elements: Power BI items.

The following diagram shows the structure of the org app.



The definition file contains:

- Settings
  - Logo

- Theme
  - Background
  - Foreground
  - BackgroundHover
  - BackgroundSelected
  - BackgroundPressed
- ExperienceSettings
  - NavigationPane
    - IsHidden
    - IsCollapsed
    - IndependentPageNavigation
- ItemTypeSettings
- Report
  - HidePagePane

- Elements
  - ElementType (can be: *overview*, *section*, *item*, or *link*)
  - ElementId
  - ItemType (only for ElementType: *item*)
  - ItemLogicalId (only for ElementType: *item*)
  - isHidden (not when for ElementType: *overview*)
  - DisplayName
  - Header (only for ElementType: *overview*)
    - Title
    - Body
    - ShowTheme
  - Elements (only for ElementType: *section*)
  - Url (only for ElementType: *link*)
  - LinkType (only for ElementType: *link*. Values are *embedded* or *newtab*)

The following JSON code is an example of the `definition.json` file for an org app item:

JSON

```json
{
  "$schema": "https://developer.microsoft.com/json-schemas/fabric/item/orgapp/definition/orgAppDefinition/1.0.0/schema.json",
  "settings": {
    "theme": {
      "background": "#2fb136",
      "foreground": "#000000",
      "backgroundHover": "#59c15e",
      "backgroundSelected": "#82d086",
      "backgroundPressed": "#ace0af"
    }
```

```
  },
  "elements": [
    {
      "elementType": "item",
      "elementId": "08e649a9-0fe6-40bd-b0c3-7fc900b7550f",
      "itemType": "Report",
      "itemLogicalId": "e0fa7df4-5528-4c37-bf2c-9ec02ffef18d",
      "isHidden": false,
      "displayName": "Daily Dashboard"
    },
    {
      "elementType": "item",
      "elementId": "410f87ee-8402-49b0-abbb-31cb69dc1ebc",
      "itemType": "SemanticModel",
      "itemLogicalId": "8f633535-6fb4-467f-a668-6bc55c5735b8",
      "isHidden": false,
      "displayName": "410f87ee-8402-49b0-abbb-31cb69dc1ebc"
    }
  ]
}
```

Org apps in deployment pipelines

You can use Fabric deployment pipeline to deploy your org app across different environments, such as development, test, and production. And you can use deployment rules to customize the org app.

To learn how to use deployment pipelines, see Introduction to deployment pipelines.

> ⓘ **Note**
>
> Limitation: Org apps (preview) cannot be deployed across stages using service principals.

Related content

- Get started with Org Apps
- Introduction to the CI/CD process as part of application lifecycle management (ALM) in Microsoft Fabric

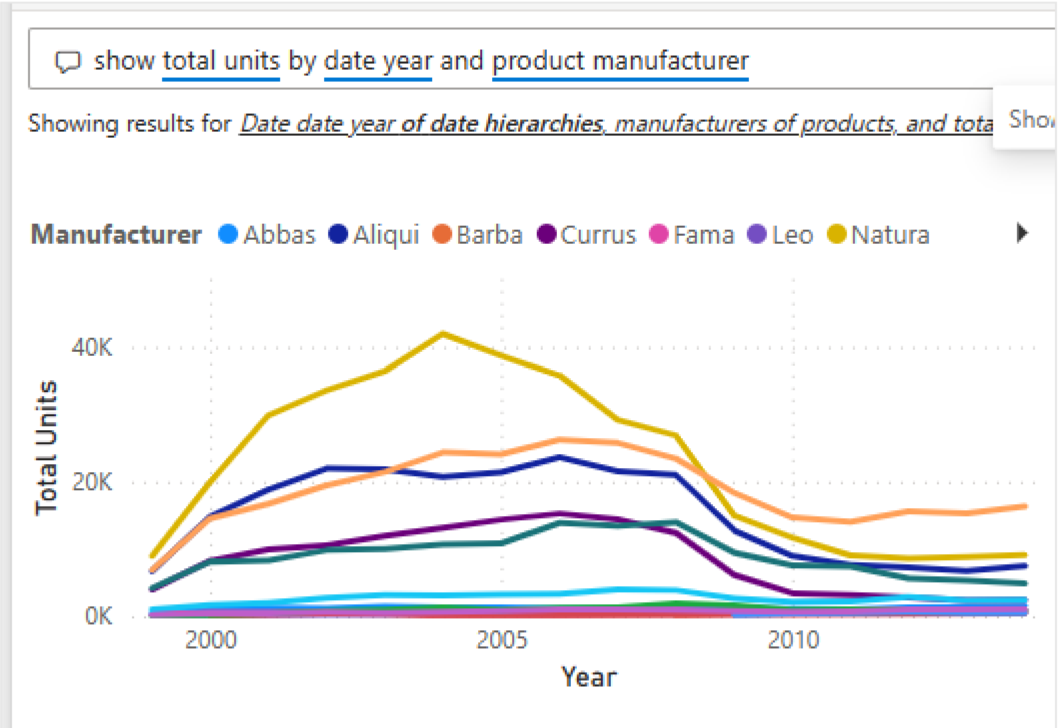
Q&A for Power BI business users

Article • 01/10/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

What is Q&A?

Sometimes the fastest way to get an answer from your data is to ask a question using natural language. For example, "show total units by year and product manufacturer."



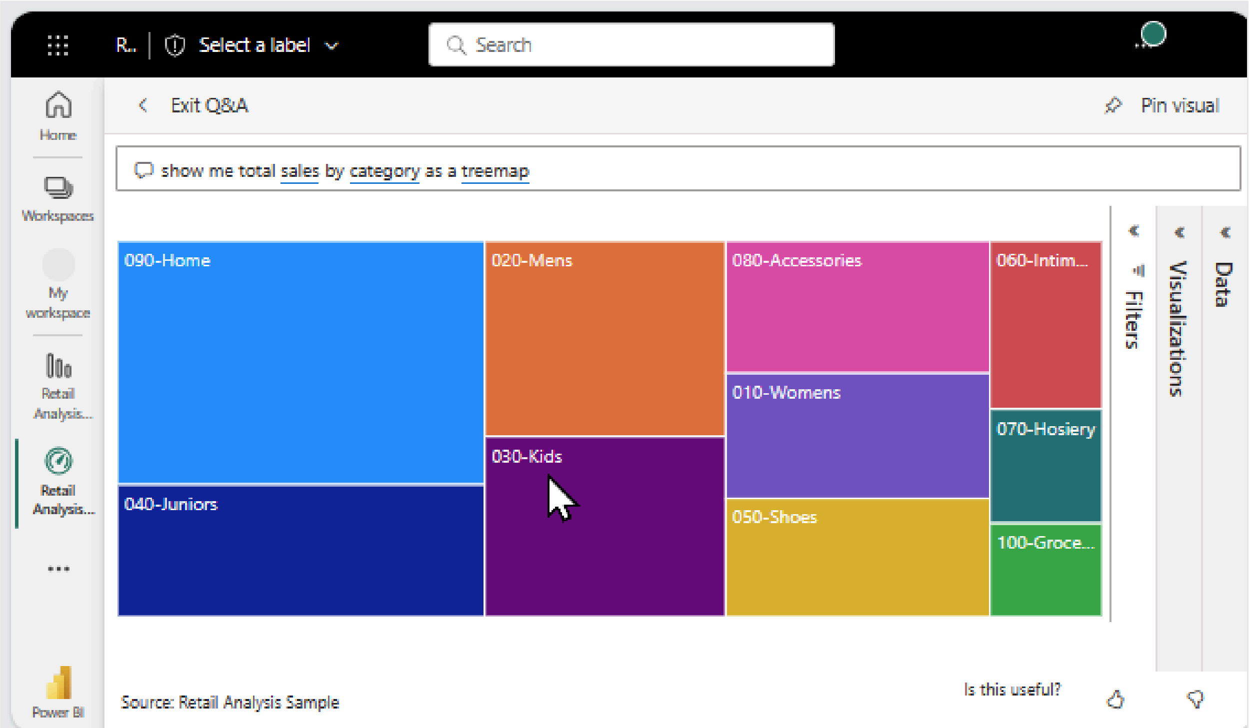
Use Q&A to explore your data using natural language capabilities and receive answers in the form of charts and graphs. Unlike a search engine, Q&A only provides results about the data in Power BI semantic models.

To learn how to use Q&A, see Explore your data and create visuals using Q&A.

Which visualizations does Q&A use?

Q&A picks the best visual based on the data. Sometimes data is defined as a certain type or category, which helps Q&A know how to display it. For example, if data is defined as a date type, it's more likely to be displayed as a line chart. Data that is categorized as a city is more likely to be displayed as a map.

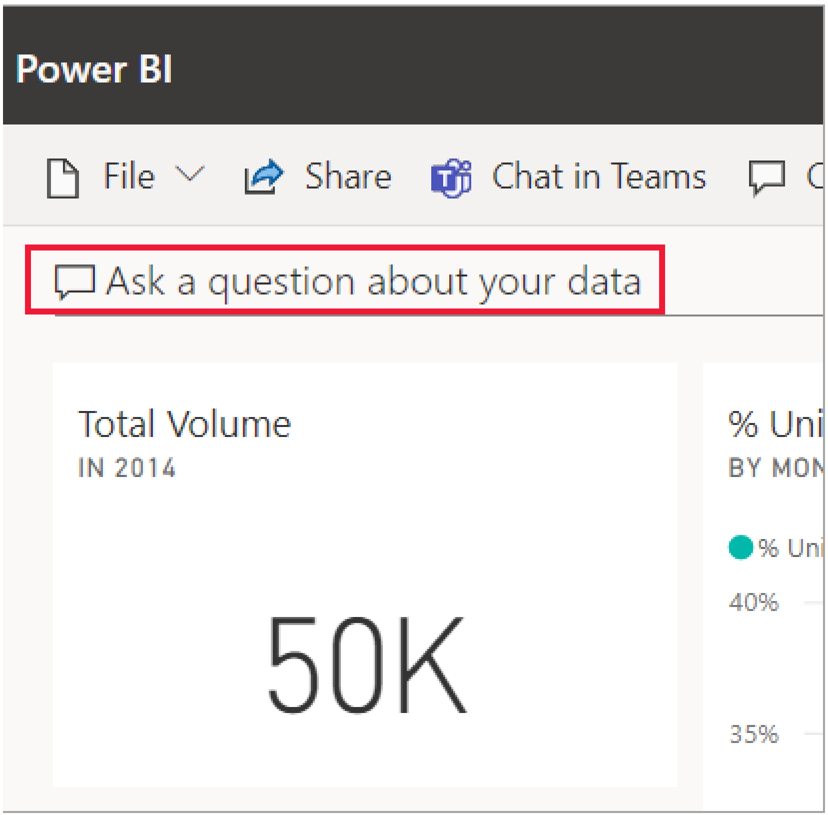
If you want a specific type of visual, tell Q&A which one to use by adding it to your question. For example, "show me total sales by category as a treemap." But keep in mind that it isn't always possible for Q&A to display the data using the visual type you requested. Q&A prompts you with a list of workable visual types.



Where can I use Q&A?

Use Q&A on a dashboard

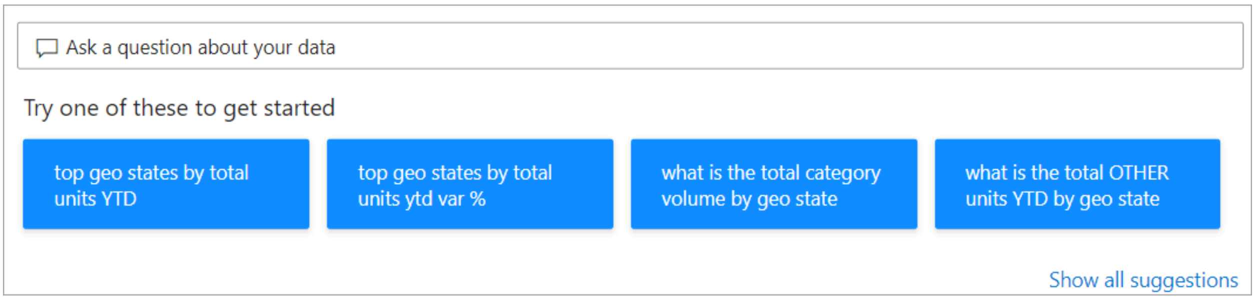
Q&A is available on dashboards in the Power BI service, and at the bottom of the dashboard in Power BI mobile. If the dashboard designer gave you edit permissions, save the visual by pinning it to your dashboard.



To learn more, see Use Q&A on a dashboard.

Use Q&A in a report

Q&A is available in reports if the report designer added a specific type of interactive visual called a Q&A visual or added a Q&A button. Ask natural language questions and create new report visuals that represent the answers to your questions. If you have edit permissions for the report, turn the results into a new visual in the report.



To learn more, see Use Q&A in a report.

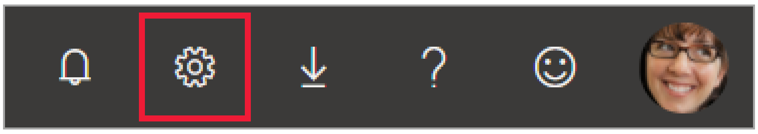
Use Q&A in mobile apps and embedded reports

Q&A is available in Power BI iOS apps and in Power BI embedded analytics as well.

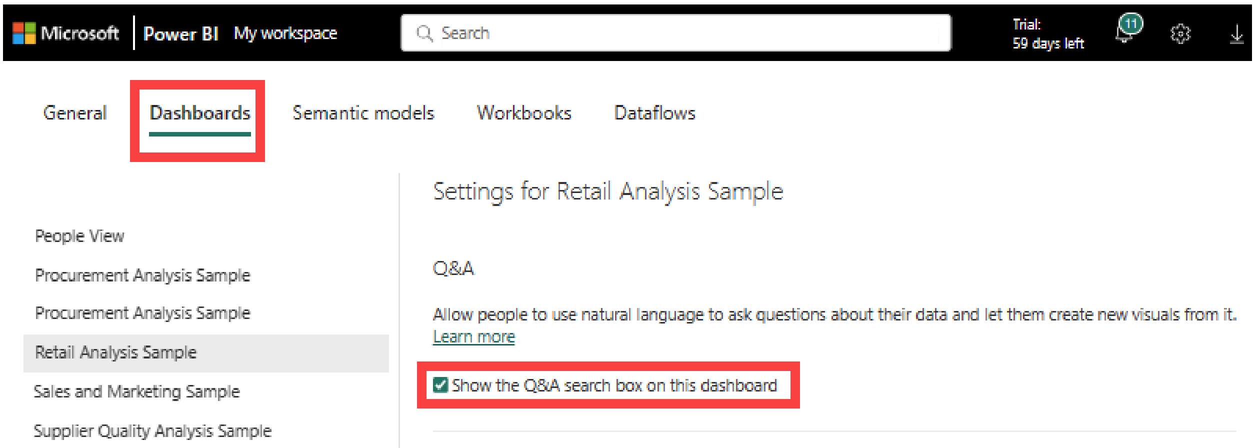
Considerations and limitations

Question: I don't see Q&A on this dashboard.

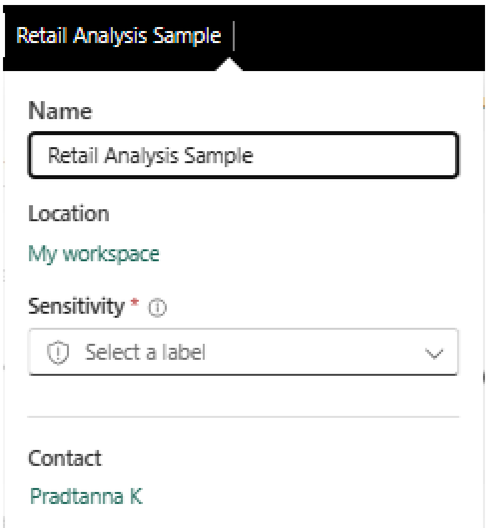
Answer 1: If you don't see a question box, check your settings. Select the **Settings** icon in the upper right corner of your Power BI toolbar.



Choose **Power BI Settings** > **Dashboards**. Highlight the dashboard that doesn't have a Q&A question box. Make sure there's a check mark next to **Show the Q&A search box on this dashboard**.

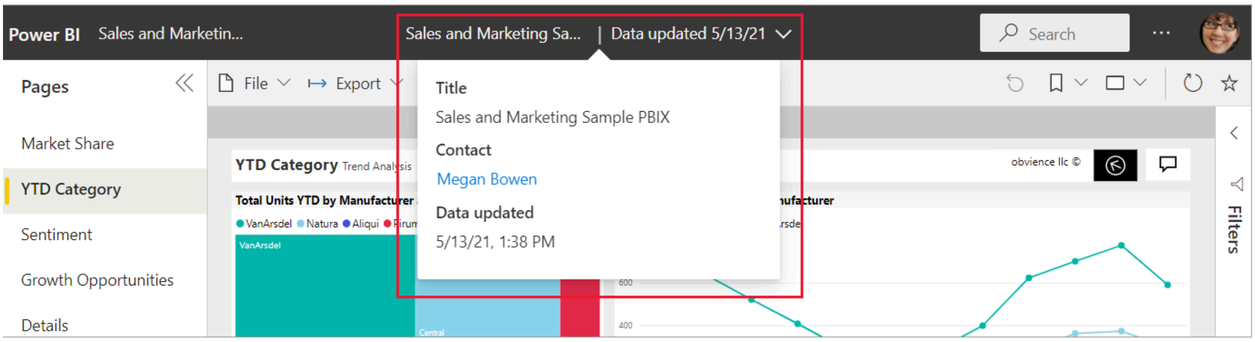


Answer 2: Sometimes you don't have access to the settings. If the dashboard owner or your administrator turned Q&A off, check with them to see if it's OK to turn it back on. To look up the owner, select the name of the dashboard from the top menu bar.



Question: I'm not getting the results I'd like to see when I type a question.

Answer: Select the option to contact the report or dashboard owner. You can find the report or dashboard owner from the Q&A dashboard page or the Q&A visual. Or, you can look up the owner from the Power BI header. There are many things the owner can do to improve the Q&A results. For example, the owner can rename columns in the semantic model to use terms that are easily understood (`CustomerFirstName` instead of `CustFN`). Since the owner knows the semantic model, they can also come up with helpful questions and add them to the Q&A suggested questions.



Privacy

Microsoft might use your questions to improve Power BI. For more information about how Microsoft uses your questions, see the Microsoft Privacy Statement for more information.

Related content

- To learn how to ask your own natural language questions and create answers in the form of visuals, see Use Q&A on a dashboard or Use Q&A in a report.
- For tips on forming questions, see How to ask questions with Q&A.
- If you have edit permissions, learn how to create a Q&A visual on a dashboard and add a Q&A visual in a report.

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

Tutorial: Use Power BI Q&A to explore your data and create visuals on a dashboard

Article • 01/17/2025

APPLIES TO: ✅ Power BI Desktop ✅ Power BI service

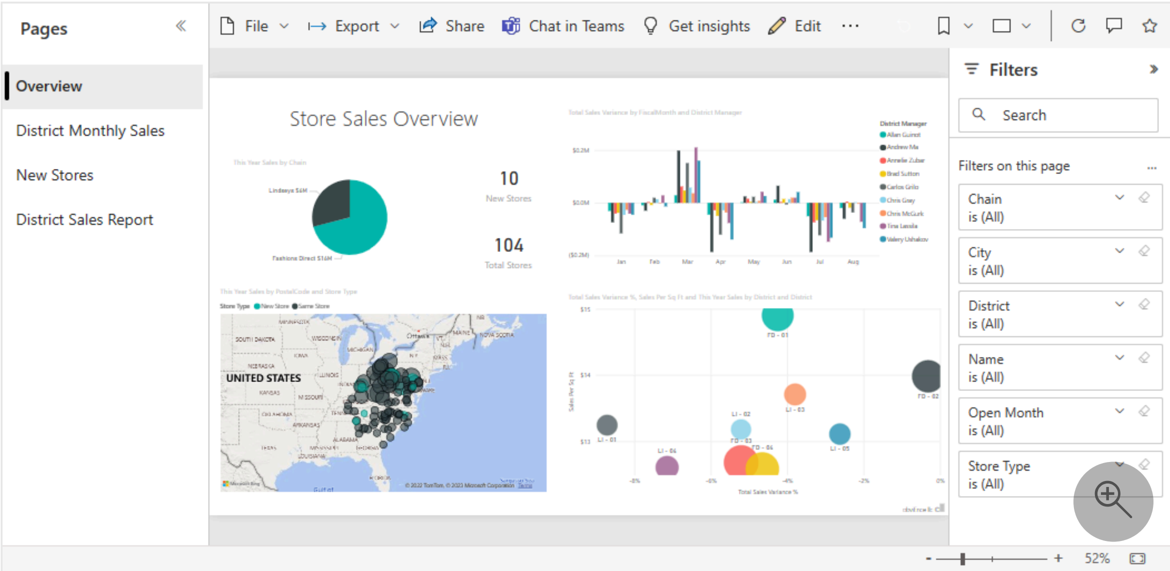
Q&A is available throughout Power BI, and this article focuses on using Q&A on a dashboard. We import a sample and use Q&A to explore our data and pin interesting findings to our dashboard.

Prerequisites

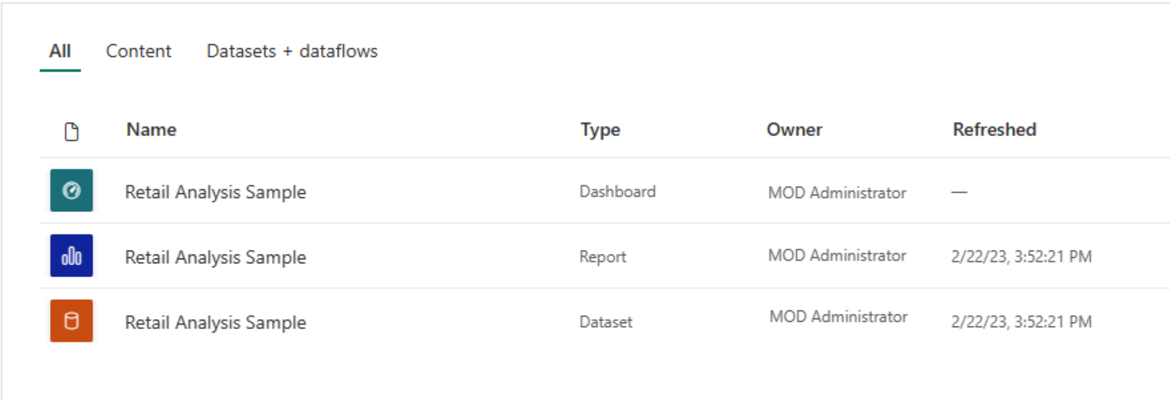
- Read the Q&A intro article Q&A for Power BI business users.
- Sign up for a free or trial license for the Power BI service.
- Open the Power BI service in a browser.
- Download and open the Retail analysis sample.

Import the sample in the Power BI service

1. Open the Power BI service (`app.powerbi.com`), and select **Learn** in the left navigation pane.
2. On the **Learning center** page, under **Sample reports**, scroll until you see the **Retail Analysis Sample.**
3. Select the sample. It opens in Reading mode.

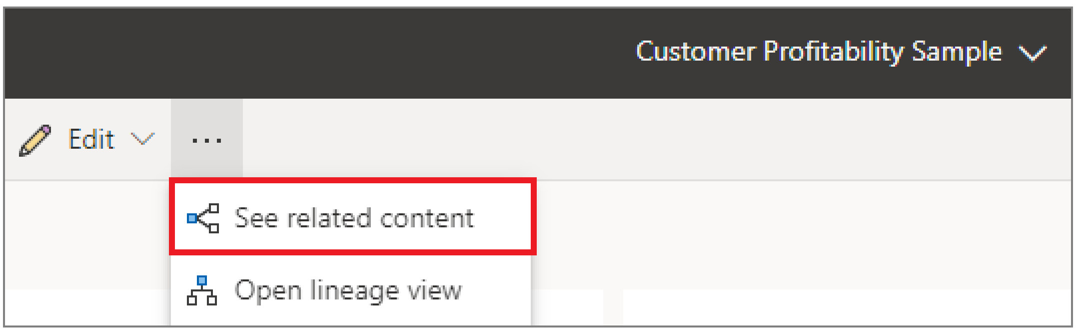


4. Select **My workspace** in the left navigation pane and scroll until you find the Retail Analysis sample. Power BI imports the built-in sample, adding a new dashboard, report, and semantic model to the current Retail Analysis workspace.



Get started using Q&A on a dashboard

In the Power BI service (app.powerbi.com), a dashboard contains tiles pinned from one or more semantic models, so you can ask questions about any of the data contained in any of those semantic models. To see what reports and semantic models were used to create the dashboard, select **More options (...)** from the menu bar, and then choose **See related content**.



When you type a question, Power BI looks for the best answer using any semantic model that has a tile on that dashboard. If all the tiles are from *semantic modelA*, then your answer comes from *semantic modelA*. If there are tiles from *semantic modelA* and *semantic modelB*, then Q&A searches for the best answer from those two semantic models.

> **Tip**
>
> Be careful. If you only have one tile from *semantic modelA* and you remove it from your dashboard, Q&A will no longer have access to *semantic modelA*.

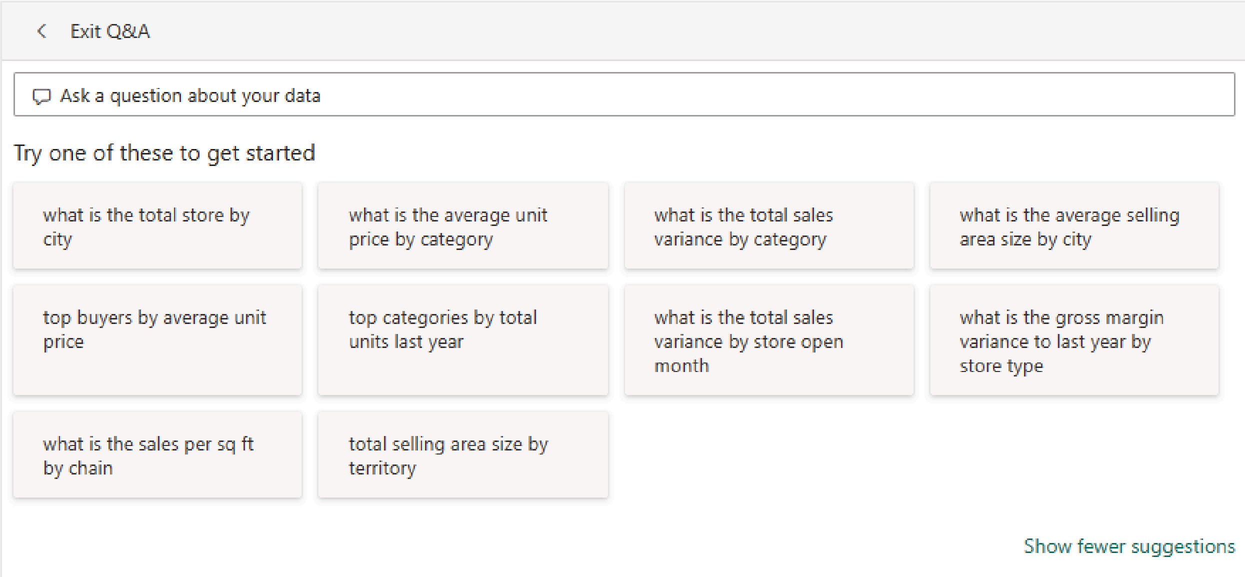
In our example, most of the tiles on this dashboard are from the Retail analysis sample. To help form your questions, get familiar with the Retail analysis sample content. Take a look at the visuals on the dashboard and in the report. Get a feel for the type and range of data that is available to you. Optionally, read the article that describes the sample, Retail Analysis sample for Power BI: Take a tour.

> **Note**
>
> If you already feel comfortable with the data, just place your cursor in the question box to open the Q&A screen.

For example:

- If a visual's axis labels and values include "sales", "account", "month", and "opportunities", then you can confidently ask questions such as: "Which *account* has the highest *opportunity*" or "show *sales* by month as a bar chart."
- If your semantic model has website performance data for Google Analytics, you can ask Q&A about time spent on a web page, number of unique page visits, and user engagement rates. Or, if you're querying demographic data, you might ask questions about age and household income by location.

Once you're familiar with the data, head back to the dashboard and place your cursor in the question box. The Q&A screen opens.



Don't see the Q&A box? See Considerations and limitations in the **Q&A for for Power BI business users** article.

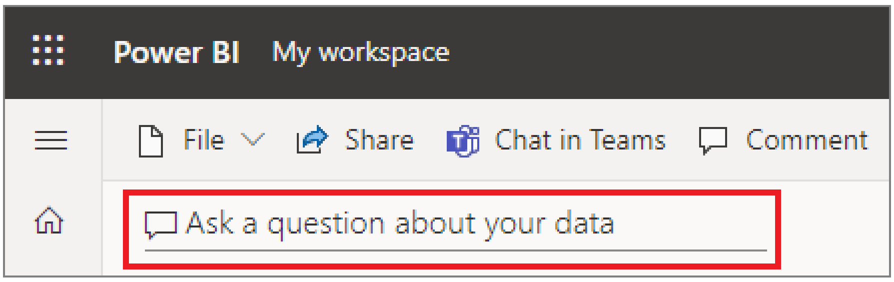
Use Q&A on a dashboard in the Power BI service

The Q&A field is where you type your question using natural language. The Q&A field is in the upper-left corner of your dashboard. Q&A recognizes the words you type and figures out where, and in which semantic model, to find the answer. Q&A also helps you form your question with autocompletion, restatement, and other textual and visual aids.

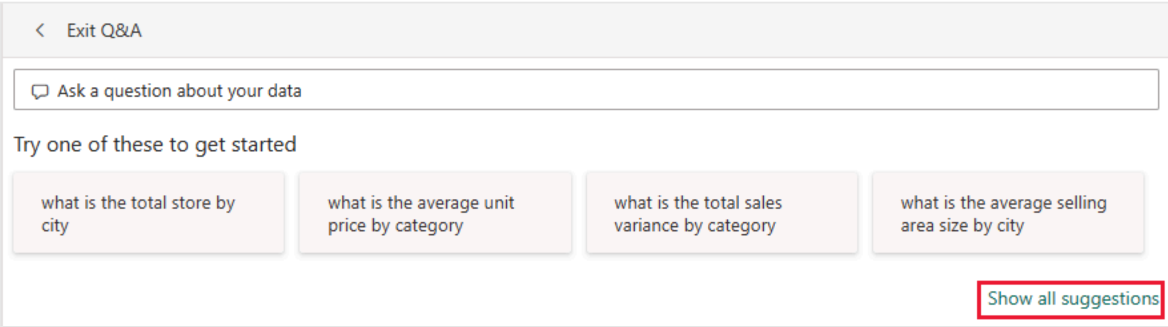
Let's try it out.

Create a visual using the Q&A field on a dashboard

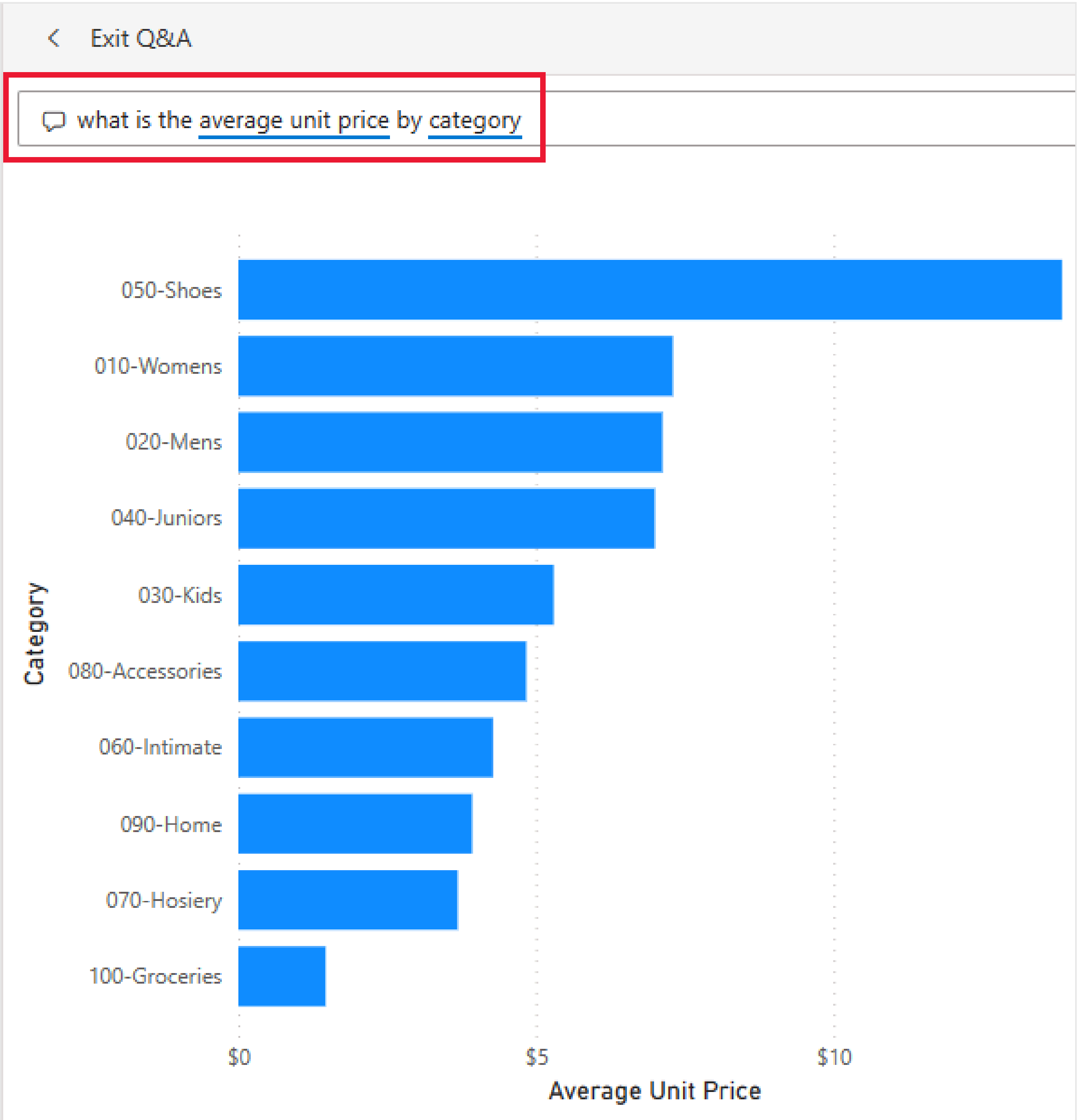
1. Open a dashboard and place your cursor in the Q&A field.



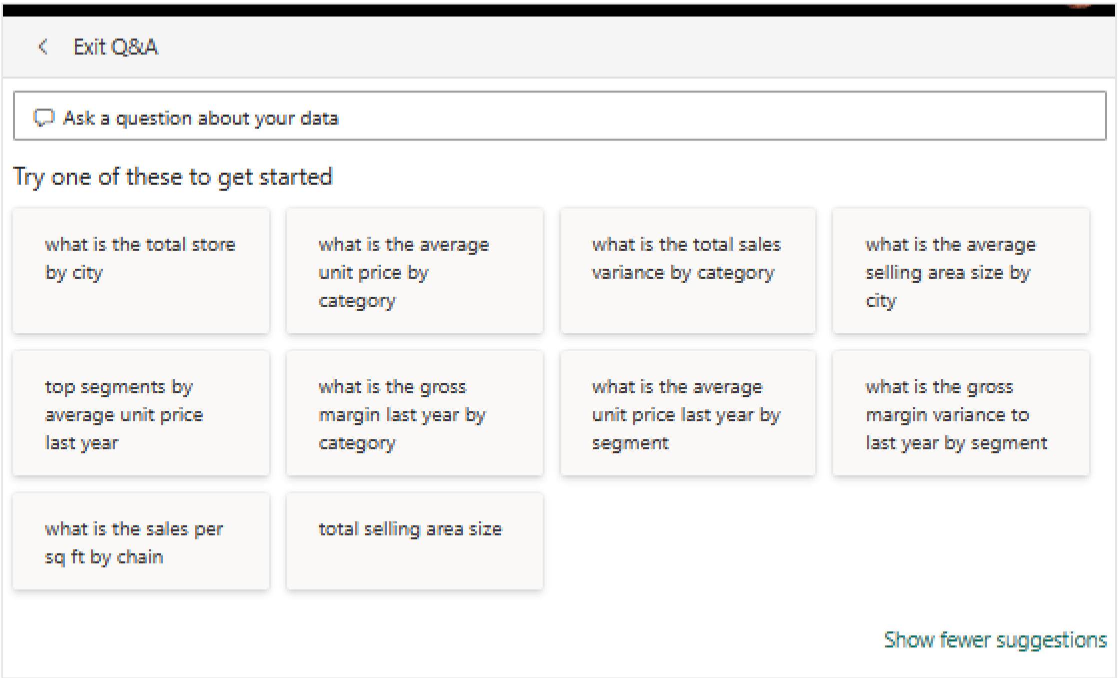
Even before you start typing, Q&A displays a new screen with suggestions to help you form your question. You see phrases and complete questions containing the names of the tables in the underlying semantic models. And, you might even see complete questions listed if the semantic model owner created featured questions.



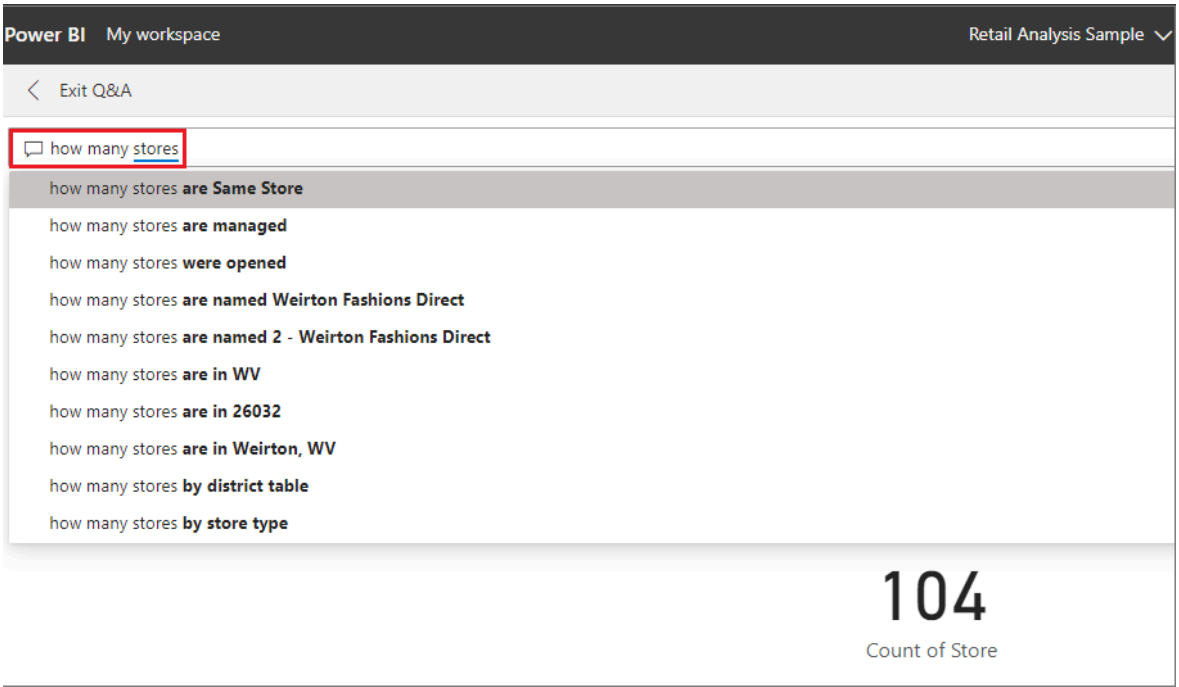
2. You can select any of these options to add them to the question box and then refine the question to find a specific answer.



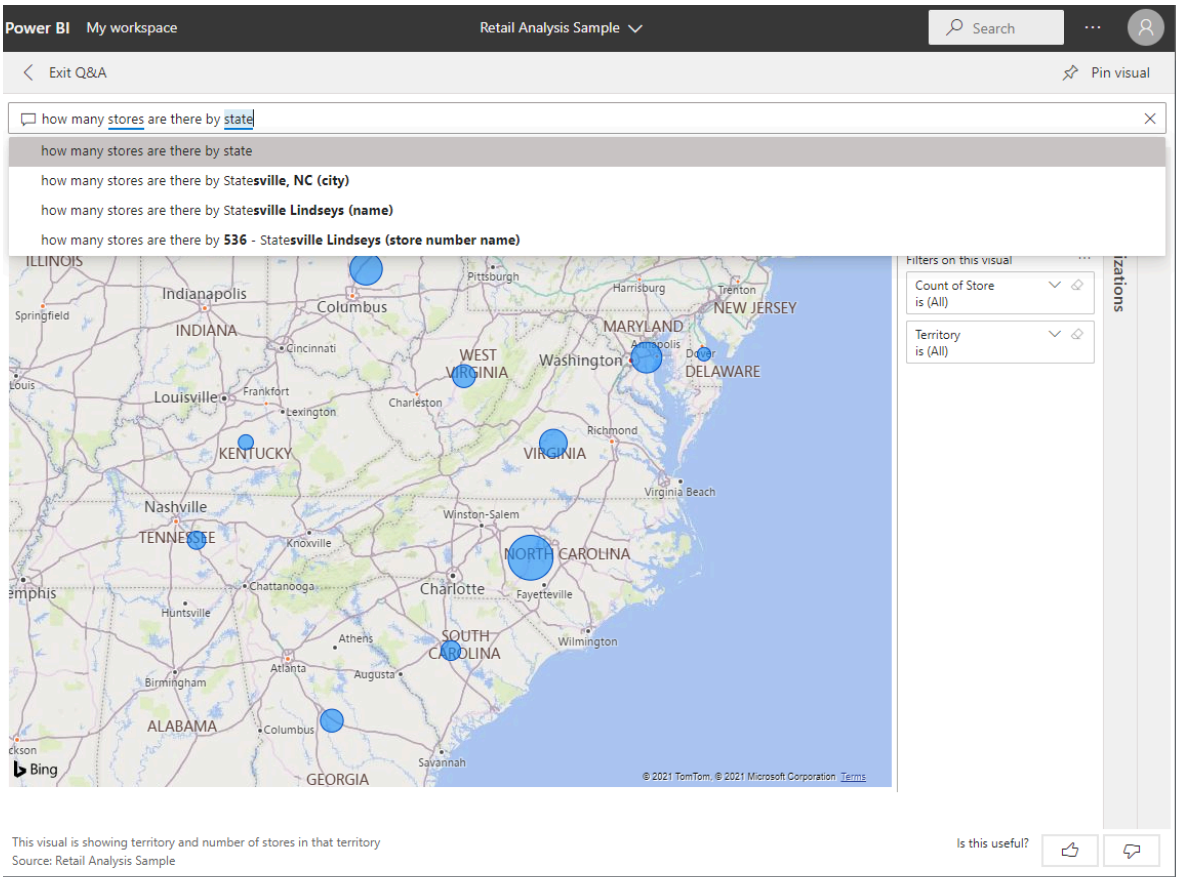
3. If you're unsure what type of questions to ask or terminology to use, expand **Show all suggestions** or look through the other visuals in the report. These techniques get you familiar with the terms and content of the semantic model.



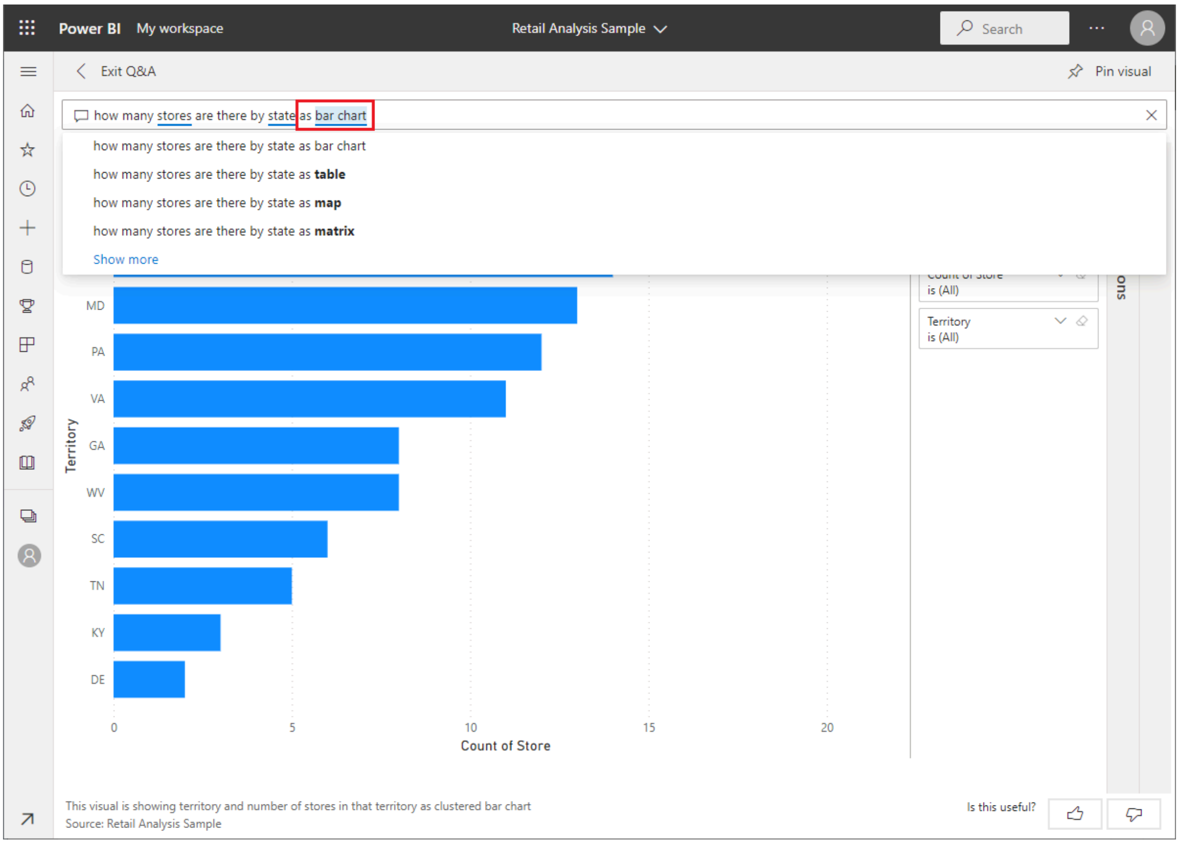
4. Choose one of these questions as a starting point or begin typing your own question and select from the dropdown suggestions.



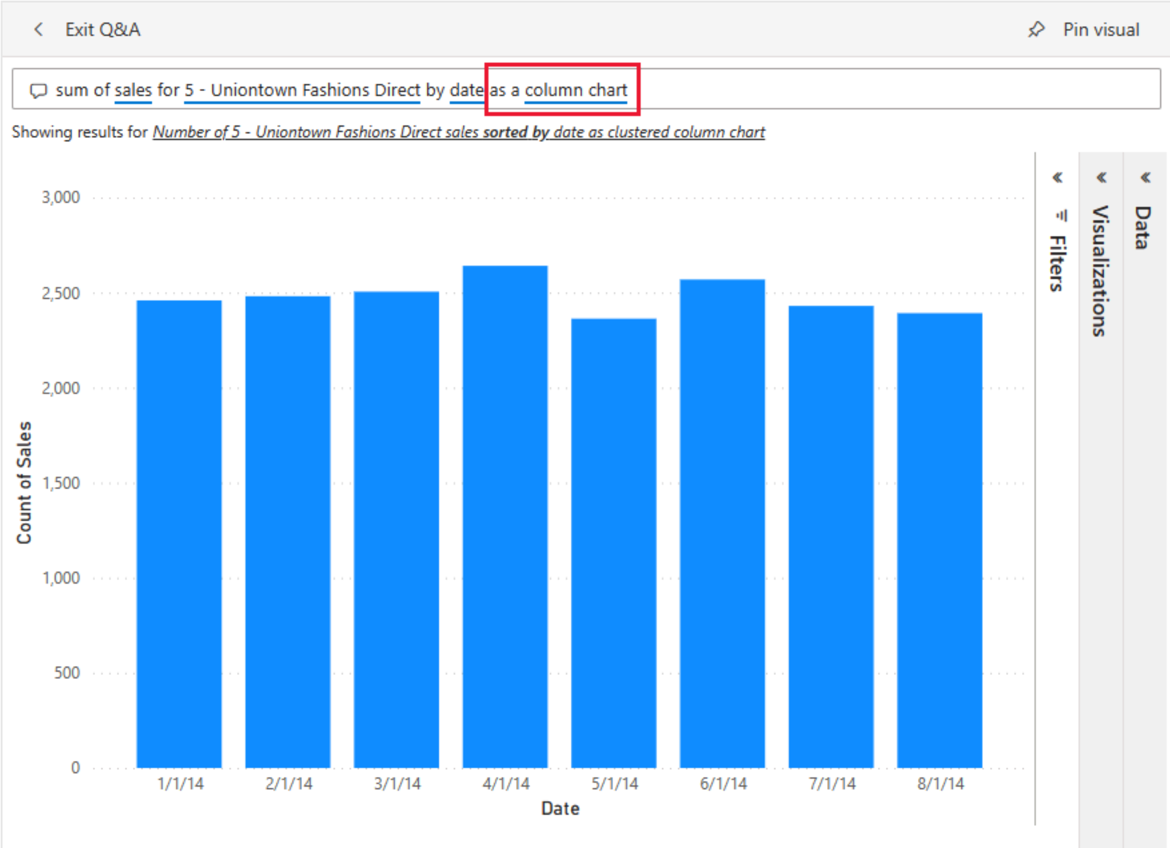
5. As you type a question, Power BI helps you with autocomplete, visual cues, restatement, and feedback. Power BI also picks the best visualization to display your answer.



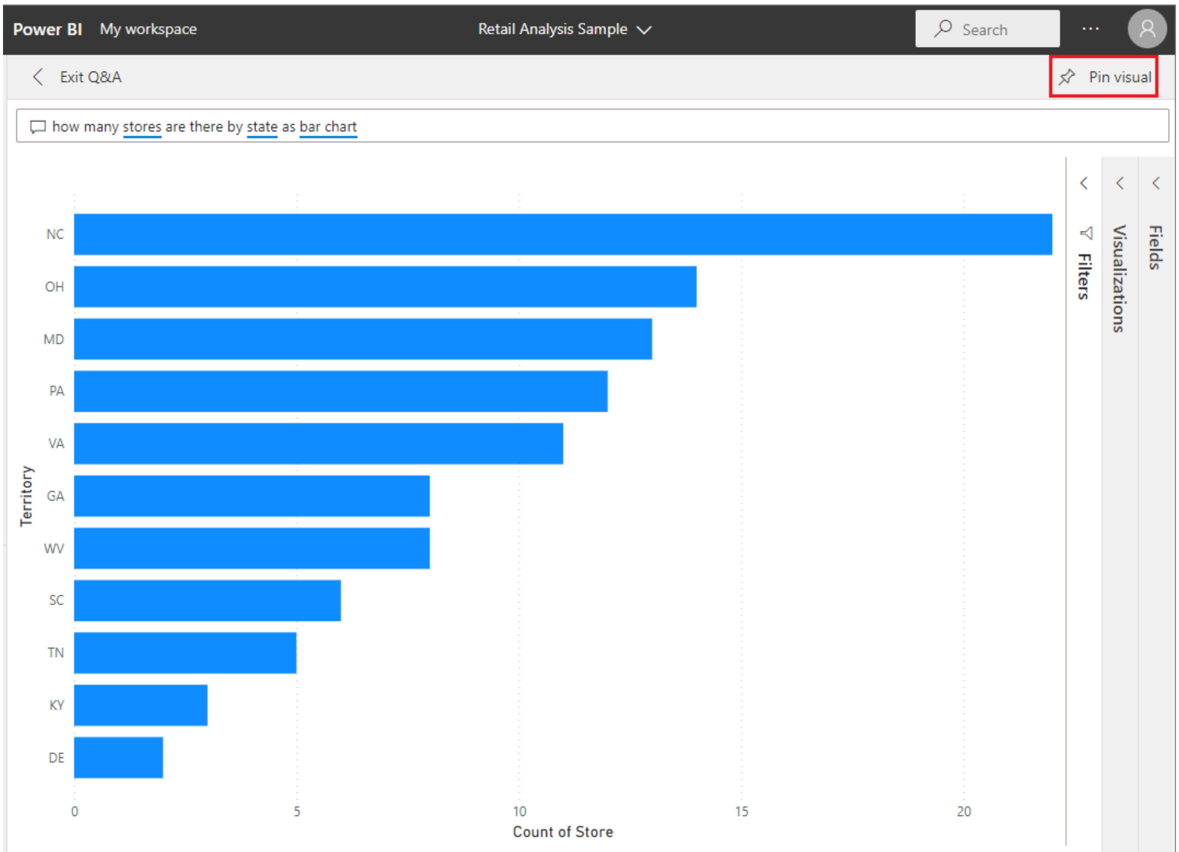
6. The visualization changes dynamically as you modify the question.



7. Don't like the default visualization that Power BI Q&A chose? Edit the natural language question to include the visualization type that you'd prefer.



8. When you're happy with the result, pin the visualization to a dashboard by selecting the pin icon in the top right corner. If the dashboard was shared with you, or is part of an app, you might not be able to pin.



Considerations and limitations

- If you connected to a semantic model using a live connection or gateway, Q&A needs to be enabled for that semantic model.
- At the current time, Power BI Q&A only supports answering natural language queries asked in English. There's a preview available for Spanish that your Power BI administrator can enable.

Related content

- Q&A for Power BI business users
- Tips for asking questions in Power BI Q&A
- Make Excel data work well with Q&A in Power BI
- Enable Q&A for live connections in Power BI
- Pin a tile to the dashboard from Q&A

Feedback

Tips for asking questions in Power BI Q&A

Article • 01/16/2024

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ⊗ Power BI Desktop ✅ Requires Pro or Premium license

Words and terminology that Q&A recognizes

The list of keywords on this page isn't exhaustive. The best way to see if Power BI recognizes a keyword is to try it out by typing it in the question box. If the word or term is grayed out, then Power BI doesn't recognize it. Even when Power BI doesn't recognize a word, it makes a best guess.

The list below uses present tense, but all tenses are recognized in most cases. For example, "is" includes: **are**, **was**, **were**, **will be**, **have**, **has**, **had**, **will have**, **has got**, **do**, **does**, and **did**. And "sort" includes: **sorted** and **sorting**. Power BI also recognizes and includes singular and plural versions of a word.

> ⓘ Note
>
> Q&A is also available in the Microsoft Power BI app for iOS on iPads, iPhones, and iPod Touch devices.

Expand table

Category	Keywords
Aggregates	total, sum, amount, number, quantity, count, average, most, least, fewest, largest, smallest, highest, biggest, maximum, max, greatest, lowest, littlest, minimum, min
Articles	a, an, the
Blank and Boolean	blank, empty, null, prefixed with "non" or "non-", empty string, empty text, true, t, false, f
Comparisons	vs, versus, compared to, compared with
Conjunctions	and, or, each of, with, versus, &, and, but, nor, along with, in addition to

Category	Keywords
Contractions	Q&A recognizes almost all contractions. Try it out. Here are a few examples: didn't, haven't, he'd, he's, isn't, it's, she'll, they'd, weren't, who's, won't, wouldn't
Dates	Power BI recognizes most date terms (day, week, month, year, quarter, decade, ...) and dates written in many different formats (see *Relative dates*). Power BI also recognizes the following keywords: MonthName, Days 1-31, decade. Examples: January 3rd of 1995, January 3rd 1995, Jan 03 1995, 3 Jan 1995, the 3rd of January, January 1995, 1995 January, 1995-01, 01/1995, names of months
Relative dates	today, right now, current time, yesterday, tomorrow, the current, next, the coming, last, previous, ago, before now, sooner than, after, later than, from, at, on, from now, after now, in the future, past, last, previous, within, in, over, N days ago, N days from now, next, once, twice. Example: count of orders in the past six days.
Equality (Range)	in, equal to, =, after, is more than, in, between, before
	Examples: Order year is before 2012? Price equals between 10 and 20? Is the age of John greater than 40? Total sales in 200-300?
Equality (Value)	is, equal, equal to, in, of, for, within, is in, is on
	Examples: Which products are green? Order date equals 2012. Is the age of John 40? Total sales that aren't equal to 200? Order date of 1/1/2016. 10 in price? Green for color?
Names	If a column in the semantic model contains the phrase "name" (for example, EmployeeName), Q&A understands the values in that column are names. You can ask questions like "which employees are named Robert."
Pronouns	he, him, himself, his, she, herself, her, hers, it, itself, its, they, their, them, themselves, theirs, this, these, that, those
Query commands	sorted, sort by, direction, group, group by, by, show, list, display, give me, name, just, only, arrange, rank, compare, to, with, against, alphabetically, ascending, descending, order
Range	greater, more, larger, above, over, >, less, smaller, fewer, below, under, <, at least, no less than, >=, at most, no more than, <=, in, between, in the range of, from, later, earlier, sooner, after, on, at, later than, after, since, starting with, starting from, ending with
Times	am, pm, o'clock, noon, midnight, hour, minute, second, hh:mm:ss
	Examples: 10 pm, 10:35 pm, 10:35:15 pm, 10 o clock, noon, midnight, hour, minute, second.

Category	Keywords
Top N	(order, ranking): top, bottom, highest, lowest, first, last, next, earliest, newest, oldest, latest, most recent, next
Visual types	all visual types native to Power BI. If it's an option in the Visualizations pane, then you can include it in your question. The exception to this rule is Power BI custom visuals that you manually added to the Visualization pane.
	Example: show districts by month and sales total as bar chart
Wh (relationship, qualified)	when, where, which, who, whom, how many, how much, how many times, how often, how frequently, amount, number, quantity, how long, what

Q&A helps you phrase the question

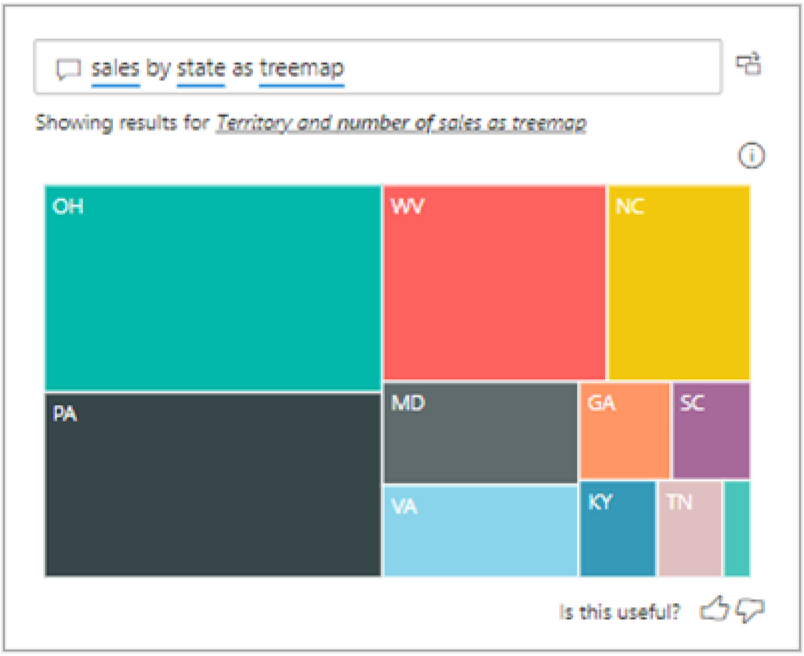
Q&A does its best to understand and answer the question being asked. It tries to understand in several ways. For all of these phrasings, you can accept the action in full, in part, or not at all. As you type your question, Q&A:

- Autocompletes words and questions. It uses various strategies, including autocompleting recognized words, stored questions, and previously used questions that returned valid responses. If more than one autocomplete option is available, they're presented in a dropdown list.
- Corrects spelling.
- Provides a preview of the answer in the form of a visual. The visual updates as you type and edits the question (it doesn't wait for you to press Enter).
- Suggests replacement terms from one or more of the underlying semantic models when you move the cursor back in the question box.
- Restates the question based on the data in the underlying semantic models. Q&A replaces the words you used with synonyms from the underlying semantic models. By reading the restatement, you know whether Q&A understood your question or not.
- Adds a double underline to words it tries to understand.
- Adds a single underline to words it does understand.
- Adds a dotted underline to words it doesn't understand. These words might be in the Recognized words list that you expect Q&A to understand. But, you might have used that word in an unexpected way.
- Allows you to contact the report or dashboard owner when your term isn't found or your question doesn't get results.

Tell Q&A which visual to use

When typing natural language queries with Power BI Q&A, you can specify the visual type in your query. For example:

"*sales by state as treemap*"



Don't stop now

After Q&A displays your results, keep the conversation going. Use the interactive features of the visual and of Q&A to uncover more insights.

Related content

- Go to Q&A for Power BI business users
- See Basic concepts for the Power BI service business user
- More questions? Ask the Power BI Community

Glossary for business users of the Power BI service

Article • 11/13/2024

The Power BI service can introduce terminology that is unfamiliar or confusing. The glossary is a great place to look up terminology—you might want to bookmark it. Another great resource for learning about the building blocks that make up Power BI service is Basic concepts for the Power BI service business user. The article gives a high level overview of the Power BI *pieces* and how they're connected.

This glossary is a community effort. If you don't see a word here, ask us to add it (you can use the documentation feedback button at the bottom of this article).

A

account

Use your work or school account to sign in to Power BI. Administrators manage work or school accounts in Microsoft Entra ID. Your level of access is determined by the Power BI license associated with that account and the capacity type where content is stored. See *license* and *Premium*.

Admin portal

The location where Power BI admins manage users, features, and settings for Power BI in their organization.

> **Note**
>
> Microsoft 365, Azure, and PowerApps use Admin center.)

aggregates

When the values of multiple rows are grouped together as input on criteria to form a single value of more significant meaning or measurement. Only implicit measures (see definition) can be aggregated.

aggregation

The reduction of rows in underlying data sources to fit in a model. The result is an aggregate.

alert, alerts

A feature that notifies users of changes in the data based on limits they set. Alerts can be set on tiles pinned from report visuals. Users receive alerts on the service and on their mobile app.

annotate

To write lines, text, or stamps on a snapshot copy of a tile, report, or visual on the Power BI mobile app for iOS and Android devices.

app, apps

A bundle of dashboards, reports, and semantic models. It also refers to the mobile apps for consuming content, such as the Power BI app for iOS.

AppSource

Centralized online repository where you can browse and discover dashboards, reports, semantic models, and apps to download.

ArcGIS for Power BI**

ArcGIS is a mapping and analytics platform created by the company Esri. The name of the visual included in the Power BI visuals library is called ArcGIS for Power BI.

Auto Insights**

Auto Insights are now called *Quick Insights*.

B

BI

Business intelligence.

bookmark

A view of data captured in the Bookmarks pane of a report in Power BI Desktop or service. In Desktop, the bookmarks are saved in the *pbix* report file for sharing on the Power BI service.

breadcrumbs

The navigation at the top left to quickly navigate between reports and dashboards.

C

calculation

A mathematical determination of the size or number of something.

capacity

[Power BI Premium] Data models running on hardware fully managed by Microsoft in Microsoft cloud data centers to help ensure consistent performance at scale. BI solutions are delivered to the entire organization regardless of Power BI license.

card (visual type)

A Power BI visualization type.

card (Power BI Home)

Power BI Home displays rectangular and square pictures that represent dashboards, reports, apps, and more. These pictures are referred to as *cards*.

certified custom visual

A Power BI custom visual that met requirements and passed strict security testing.

connect live

A method of connecting to SQL Server Analysis Services data models. Also called a live connection.

connector

Power BI Desktop includes an ever-growing collection of data connectors that are built to connect to a specific data source. Examples include: GitHub, MailChimp, Power BI dataflows, Google Analytics, Python, SQL Server, Zendesk, and more than 100 other data sources.

container

The areas on the navigation pane are *containers*. In the nav pane, you find containers for: Browse, Data hub, Apps, Metrics, Deployment pipelines, Learn, Workspaces, and Home.

content

Content for the Power BI service is generally dashboards, reports, and apps. It can also include workbooks and semantic models.

content list

The content index for an app.

content view

The view that lists Power BI content you created or content that designers shared with you.

continuous variable

A continuous variable can be any value between its minimum and maximum limits, otherwise it's a discrete variable. Examples are temperature, weight, age, and time. Continuous variables can include fractions or portions of the value. The total number of blue skateboards sold is a discrete variable since we can't sell half a skateboard.

correlation

A correlation tells us how the behavior of things is related. If their patterns of increase and decrease are similar, then they're positively correlated. And if their patterns are opposite, then they're negatively correlated. For example, if sales of our red skateboard increase each time we run a TV marketing campaign, then sales of the red skateboard and the TV campaign are positively correlated.

cross-filter

Applies to visual interactions. Cross-filtering removes data that doesn't apply. For example, selecting **Moderation** in the doughnut chart cross-filters the line chart. The line chart now displays only data points that apply to the Moderation segment.

cross-highlight

Applies to visual interactions. Cross-highlighting retains all the original data points but dims the portion that doesn't apply to your selection. For example, selecting **Moderation** in the doughnut chart cross-highlights the column chart. The column chart dims all the data that doesn't apply to the Moderation segment, and highlights all the data that does apply to the Moderation segment.

custom visual

Visuals that the community and Microsoft create. They can be downloaded from the Microsoft Store for use in Power BI reports.

D

dashboard

In the Power BI service, a dashboard is a single page, often called a canvas that uses visualizations to tell a story. Because it's limited to one page, a well-designed dashboard contains only the most important elements of that story. Dashboards can be created and viewed only in the Power BI service, not in Power BI Desktop. For more information, see Basic concepts for the Power BI service business user.

data connector

See *connectors*.

data intersections

Data intersections are the common points where different sets of data overlap. For example, if you have a list of customers who bought laptops and another list of customers who bought tablets, the intersection would be the customers who bought both laptops and tablets.

data model, Excel data model

In Power BI content, a data model refers to a map of data structures in a table format. The data model shows the relationships that are being used to build databases. Report designers, administrators, and developers create and work with data models to create Power BI content.

dataflow

Dataflows ingest, transform, integrate, and enrich big data by defining data source connections, Extract Transform Load (ETL) logic, refresh schedules, and more. Formerly called "data pool."

dataset

Refer to **semantic model**.

diamond

Power BI Premium. The shape of the icon that signifies a workspace is a Premium capacity workspace.

dimension

Dimensions are categorical (text) data. A dimension describes a person, object, item, product, place, and time. In a semantic model, dimensions are a way to group *measures* into useful categories. For our skateboard company, some dimensions might include looking at sales (a measure) by model, color, country/region, or marketing campaign.

*### up, drill down, drillthrough

In Power BI, "drill down" and "drill up" refer to the ability to explore the next level of detail in a report or visual. "Drill through" refers to the ability to select a part of a visual and be taken to another page in the report, filtered to the data that relates to the part of the visual you selected on the original page. Drill to details commonly means to show the underlying records.

E

Editing view

The mode in which report *designers* can explore, design, build, and share a report.

ellipsis

(...) menu. Selecting an ellipsis displays the menu options. Also referred to as the **More actions** or **More options** menu, depending on the menu options.

embed code

A common standard across the internet. In Power BI, the customer can generate an embed code and copy it to place content such as a report visual on a website or blog.

embedded

See *Power BI Embedded*.

embedding

In the Power BI developer offering, the process of integrating analytics into apps using the Power BI REST APIs and the Power BI SDK.

environment

[Power BI Desktop, Power BI Mobile, the Power BI service, and others] Another way to refer to one of the Power BI tools. It's OK to use Power BI environment (tenant) in documentation where it might help business analysts who are familiar with the term tenant to know it's the same thing.

Explicit measures

Power BI uses explicit measures and implicit measures (see definition). Explicit measures are created by report designers and saved with the semantic model. They're displayed in Power BI as fields, and can therefore be used over and over. For example, a report designer creates an explicit measure *TotalInvoice* that sums all invoice amounts. Colleagues who use that semantic model, and who have edit access to the report, can select that field and use it to create a visual. When an explicit measure is added or dragged onto a report canvas, Power BI doesn't apply an aggregation. Creating explicit measures requires edit access to the semantic model.

F

favorite, unfavorite

Verb meaning to add to the Favorites list for quick access to frequently visited dashboards and reports in Power BI. When you no longer want them as a favorite, you unfavorite them.

filter versus highlight

A filter removes data that doesn't apply. A highlight grays out the data that doesn't apply.

focus mode

Use focus mode to pop out a visual or tile to see more detail. You can still interact with the visual or tile while in focus mode.

free account

See *account*.

full screen, full-screen mode

Use full screen mode to view Power BI content without the distraction of menus and navigation panes. Full screen is sometimes referred to as TV mode.

G

gateways or on-premises data gateways

A bridge to underlying data sources. It provides quick and secure data transfer between the Power BI service and on-premises data sources that support refresh. Usually managed by IT.

H

**high-density visuals

Visuals with more data points than Power BI can render. Power BI samples the data to show the shape and outliers.

Home

The default landing age for Power BI service users. Doesn't modify anything. Can be called Power BI Home or simply Home.

I

implicit measures

Power BI uses implicit measures and explicit measures (see definition). Implicit measures are created dynamically. For example, when you drag a field onto the report canvas to create a visual. Power BI automatically aggregates the value using one of the built-in standard aggregations (SUM, COUNT, MIN, AVG, and others). Creating implicit measures requires edit access to the report.

insights

See *quick insights*.

J

K

KPIs

Key performance indicators. A type of visual.

L

left navigation (left nav)

This term was replaced with *nav pane* but might still appear in some documentation. The controls along the left edge of Power BI service. First instance: navigation pane. Subsequent mentions or tight spaces: nav pane.

license

Your level of access is determined by the Power BI license associated with your account and the capacity type where content is stored. For example, in shared capacity, a user with a Power BI Pro license can collaborate only with users who are also assigned a Pro license. In shared capacity, a free license enables access to only the user's personal workspace. However, when content is in Premium capacity, users with a Pro license can share that content with users who are assigned a free license. A license is assigned to a user and can be a free, Power BI Premium Per User(PPU) Pro license. Depending on how the license was acquired, it might be paid or unpaid. The accounts are either per-user or organizational. Per-user accounts are available as *free*, *PPU*, or *Pro*. A Power BI *free* user is either using stand-alone Power BI Desktop or the Power BI service. The Power BI per-user *Pro* account is a paid monthly subscription that allows for collaboration and sharing of content with other *Pro* users. The organizational *Premium* (also known as *Premium capacity*) subscription adds a layer of features on top of per-user licenses. For example, *free* per-user account holders within an organization that has a *Premium* subscription, are able to do more with Power BI than *free* users without *Premium*. For example, *free* users in *Premium* organizational accounts, can collaborate with colleagues and can view content hosted on Power BI Premium capacity.

list page or content list

One of the section pages for the elements in the nav pane. For example, Create, Data hub, or My workspace.

M

measure

A measure is a quantitative (numeric) field that can be used to do calculations. Common calculations are sum, average, and minimum. For example, if our company makes and sells skateboards, our measures might be number of skateboards sold and average profit per year.

Microsoft R (R)

R is a programming language and software environment for statistical computing and graphics.

mobile app

Apps that allow you to run Power BI on iOS, Android, and Windows mobile devices.

modeling

[Power BI Desktop] Getting the connected data ready for use in Power BI. "Getting the data ready" includes creating relationships between tables in multiple data sources, creating measures, and assigning metrics.

My workspace

The workspace for each Power BI customer to use to create content. If they want to bundle anything created here into an app, and they have *designer* permissions, they upload it to the appropriate workspace or create a new one.

N

native

Included with the product. For example, Power BI comes with a set of *native* visualization types. But you can also import other types, such as Power BI visuals.

navigation pane or nav pane

The controls along the left edge of the Power BI service. First instance: navigation pane. Subsequent mentions or tight spaces: nav pane.

notification

Messages sent by and to the Power BI Notification center.

Notification center

The location in the service where messages are delivered to users, such as notice of sunsetting certain features.

O

OneDrive for work or school vs OneDrive

OneDrive is a personal account and OneDrive for work or school is for work accounts.

on-premises

The term used to distinguish local computing (in which computing resources are located on a customer's own facilities) from cloud computing.

on-premises data gateways

See *gateways or on-premises data gateways*.

P

PaaS

Platform as a service, for example, Power BI Embedded.

page

Reports have one or more pages. Each tab on the report canvas represents a page.

paginated reports

Paginated reports are designed to be printed or shared. They're called *paginated* because they're formatted to fit well on a page. They display all the data in a table, even if the table spans multiple pages. You can control their report page layout exactly. Power BI Report Builder is the standalone tool for authoring paginated reports.

pbiviz

The file extension for a Power BI custom visual.

pbix

The file extension for a Power BI Desktop file (letters pronounced individually as P-B-I-X).

permissions

What a user can and can't do in Power BI is based on permissions. As a *consumer* you don't have the same permissions as a *designer*, *administrator*, or *developer*.

phone report

The name for a Power BI report formatted for viewing on a phone.

phone view

The user interface in the Power BI service for laying out a phone report.

pin, unpin

The action a report *designer* takes when placing a visual, usually from a report, onto a dashboard.

Power BI, Power BI service, Power BI Desktop, Power BI mobile

Some of the Power BI offerings. *Power BI* is the general term. It can be used in place of a full product name, such as *Power BI service* and *Power BI mobile*.

Power BI Desktop

Also referred to as *Desktop*. The free Windows application of Power BI you can install on your local computer that lets you connect to, transform, and visualize your data. Used by report designers and admins. For more information, see What is Power BI.

Power BI Embedded

A product used by developers to embed Power BI dashboards and reports into their own apps, sites, and tools.

Power BI Premium

An add-on to the Power BI Pro license that enables organizations to predictably scale BI solutions through the purchasing of reserved hardware in the Microsoft cloud. See *account* and *license*.

Power BI Pro

A monthly per-user license that provides the ability to build reports and dashboards, collaborate on shared data, keep data up-to-date automatically, audit and govern how data is accessed and used, and the ability to package content to distribute (Power BI apps). See *account* and *license*.

Power BI Report Builder

It's a free, standalone Windows Desktop application used for authoring paginated reports. Used by report designers. For more information, see Power BI Report Builder. Power BI Report Builder can be downloaded from the Power BI site.

Power BI Report Server

An on-premises report server with a web portal in which you display and manage reports and KPIs. It allows organizations to build distributed, hybrid BI systems (a mix of cloud and on-premises deployments).

Power BI service

An online SaaS (software as a service). For more information, see What is Power BI.

Premium workspace

A workspace running in a capacity, signified to customers by a diamond icon.

Pro license or Pro account

See *account* and *license*.

publish

Power BI service report *designers* bundle the contents of a Power BI workspace to make it available to others as a Power BI app. Power BI Desktop report *designers* use publish to refer to sending a Power BI Desktop report in *pbix* format to the Power BI service so that they can build dashboards from it and easily share it with others.

Q

Q&A

The Power BI feature that allows natural language questions about a semantic model and get responses in the form of visualizations. Appears in the Power BI service and Desktop.

Q&A virtual analyst

[Power BI Mobile] For iOS, the conversational UI for Q&A.

QR codes

[Power BI Mobile] A matrix barcode that can be generated for dashboards or tiles in the Power BI service to identify products. QR codes can be scanned with a QR code reader, or with the Power BI Mobile app on iOS or Android, to link directly to the dashboard or tile.

query string parameter

In the broadest sense, a query string recovers information from a database. Add one to a URL to prefilter the results seen in a Power BI report.

Quick Insights

Quick Insights refer to automatically generated insights that reveal trends and patterns in data.

R

Reading view

Read-only view for reports (as opposed to *Editing View*).

real-time streaming

The ability to stream data and update dashboards in real time from sources such as sensors, social media, usage metrics, and anything else from which time-sensitive data can be collected or transmitted.

recent

The container on the home page that holds all the individual items that were accessed last.

related content

Shows the individual pieces of content that contribute to the current content. For example, for a dashboard, you can see the reports and semantic models providing the data and visualizations on the dashboard.

relative links

Links from dashboard tiles to other dashboards and reports that are shared directly or distributed through a Power BI app. Relative links enable richer dashboards that support drillthrough.

report

A multi-perspective view into a single semantic model, with visualizations that represent different findings and insights from that semantic model. Can have a single visualization or many, a single page, or many pages.

report editor

The report editor is the tool in which new reports are created and changes are made to existing reports by report *designers*.

report measures

Also called custom calculations. Excel calls these *calculated fields*. See also *measures*.

responsive visuals

Visuals that change dynamically to display the maximum amount of data and insights, no matter the screen size.

row-level security (RLS)

Power BI feature that enables database administrators to control access to rows in a database table based on the characteristics of the user executing a query (for example, group membership). Administrators can configure RLS for data models imported into Power BI with Power BI Desktop.

S

SaaS

Software as a service is a way of delivering applications over the internet as a web-based service. Also referred to as: web-based software, on-demand software, or hosted software.

screenshot

Simple screenshots of a report can be emailed using the send a screenshot feature.

semantic model

A **semantic model** is a collection of data used to create visualizations and reports.

Desktop or Power BI Desktop

Free Power BI tool used primarily be report designers, admins, and developers.

service

See *Power BI service*. A standalone resource available to customers by subscription or license. A service is a product offering delivered exclusively via the cloud.

settings

The location for Power BI users to manage their own general settings, such as whether to preview new features, set the default language, close their account, and more. Also, users manage individual settings for content assets, alerts, and subscriptions. Represented by a cog icon.

share, sharing

In Power BI, sharing typically means directly sharing an individual item (a dashboard or report) with one or more people by using their email address. Requires a Power BI Pro license for sender and recipient. On mobile devices, share can refer to native OS share functionality, such as "annotate and share."

Shared with me

The container in the nav pane that holds all the individual items that were directly shared by another Power BI user.

snapshot

In Power BI, a snapshot is a static image compared with a live image of a tile, dashboard, or report.

SQL Server Analysis Services (SSAS)

An online analytical data engine used in decision support and business analytics. It provides the analytical data for business reports and client applications such as Power BI, Excel, Reporting Services reports, and other data visualization tools.

SQL Server Reporting Services (SSRS)

A set of on-premises tools and services to create, deploy, and manage report servers and paginated reports.

streaming data

See *real-time streaming*.

subscriptions, subscribe

You can subscribe to report pages, apps, and dashboards and receive emails containing a snapshot. Requires a Power BI Pro license.

summarization

[Power BI Desktop] The operation being applied to the values in one column.

T

tiles

Power BI dashboards contain report tiles.

time series

A time series is a way of displaying time as successive data points. Those data points could be increments such as seconds, hours, months, or years.

U

V

**value, values

Numerical data to be visualized.

visual, visualization

A chart. Some visuals are: bar chart, treemap, doughnut chart, map.

visual interaction

One of the great features of Power BI is the way all visuals on a report page are interconnected. If you select a data point on one of the visuals, all the other visuals on the page that contain that data change, based on that selection.

Visualizations pane

Name for the visualization templates that ship in the shared report canvas for Power BI Desktop and the Power BI service. Contains small templates, also called icons, for each native visualization type.

W

workbook

An Excel workbook to be used as a data source. Workbooks can contain a data model with one or more tables of data loaded into it by using linked tables, Power Query, or Power Pivot.

workspace

Containers for dashboards, reports, and semantic models in Power BI. Users can collaborate on the content in any workspace except My workspace. The contents can be bundled into a Power BI app. Workspaces stored in Premium capacity can be shared with free users. Personal workspaces (under My workspace) can be hosted in Premium capacity.

X

x-axis

The axis along the bottom, the horizontal axis, of a line graph.

Y

y-axis

The axis along the side, the vertical axis, of a line graph.

Z

Related content

- Basic concepts for Power BI service consumer

Feedback

Frequently asked questions about Power BI

APPLIES TO: ✅ Power BI service for ***business users*** ⊗ Power BI service for designers & developers ⊗ Power BI Desktop ⊗ Requires Pro or Premium license

What's the Microsoft Power BI service?

The Power BI service is a cloud-based business analytics service that enables anyone to visualize and analyze data with greater speed, efficiency, and understanding. It connects users to a broad range of cloud-based and on-premises data through easy-to-use dashboards, interactive reports, and compelling visualizations that bring data to life. For more information, see What is Power BI.

What's a Power BI business user?

The way you interact with Power BI depends on your job role. As an end user or *business user*, you're the person who receives content (dashboards, reports, and apps) from colleagues. If you work in the online or mobile version of Power BI, then you're using the Power BI service to review and interact with content to make business decisions. For more information, see Power BI for business users.

What's the difference between Power BI Pro, Premium Per User (PPU) and Power BI Premium?

Power BI Pro is an individual user license that allows access to all content and capabilities in the Power BI service. You can even share content and collaborate with other Pro users. Only Pro users can publish content to other workspaces, share dashboards, and subscribe to dashboards and reports.

Premium Per User (PPU) gives organizations a way to license premium features on a per-user basis. PPU includes all Power BI Pro license capabilities that were previously only available with a Premium capacity subscription. With a PPU license, you don't need a separate Power BI Pro license because all Pro license capabilities are included.

Power BI Premium is a subscription that provides a capacity to deliver more consistent performance. It also supports larger data volumes in Power BI. For individual users, Premium enables widespread distribution of content by Pro users, and doesn't require per-user Pro licenses for recipients viewing the content. This means *business users* can collaborate with colleagues and view and interact with dashboards, reports, and apps that are shared with them.

To learn more, see What type of license do I have? and Premium Per User FAQ

What if I have questions about Power BI Premium?

For questions related to Power BI Premium, see Power BI Premium FAQ.

What is Power BI Desktop?

Power BI Desktop is a free application you install on your computer. Power BI Desktop works cohesively with the Power BI service. Data scientists, report designers, admins, and developers work with Power BI Desktop to produce reports and make them available to the Power BI service *business users* like you. For more information, see What is Power BI Desktop.

What do I need as a business user to get started with the Power BI service?

If your company purchased Power BI licenses or a Premium capacity account, all you need to start is a Web browser and credentials. To log in, use your work email address and a password (set by your Power BI administrator).

You can also sign up for the Power BI service as an individual. For more information, see the Power BI self-service sign-up process.

Why do I have to sign up with my work email?

Power BI doesn't support email addresses provided by consumer email services or telecommunications providers. To learn more, see the Power BI self-service sign-up process.

Does Power BI support mobile devices?

Yes. Power BI has native apps for Android phones and tablets, iOS devices, and Windows 10 devices. Download one of the Power BI mobile apps from its respective store.

- Apple App Store
- Google Play
- Windows Store

What do I need to install to use Power BI?

To use the Power BI service for free, you need a Web browser and email, then download the Power BI mobile apps from their respective stores (also for free).

- Apple App Store
- Google Play
- Windows Store

Where do I get started with Power BI?

The following resources are available to help get you started:

- Power BI Blog
- Getting started videos on our YouTube Channel
- Get started with Power BI as a *business user* article
- Join our community and ask questions
- See 10 tips for getting help for more suggestions

Which browsers does Power BI support?

Here's a complete list of supported browsers for Power BI.

What regions and languages does Power BI support?

Here's a complete list of regions and languages supported by Power BI.

Where can I learn more about security?

Learn more about Power BI security, privacy, and compliance here:

- Power BI Security white paper
- Power BI security support article

How do I undo in Power BI?

Like many other Microsoft services and software, Power BI provides an easy way to undo your last command.

- To **undo** your last action or last few actions, press CTRL+Z.

Next steps

- What is a Power BI business user?
- How does a business user interact with Power BI?
- More questions? Try asking the Power BI Community
- Still have an issue? Visit the Power BI support page

Supported browsers for Power BI and Fabric

Article • 07/25/2024

Power BI and Fabric are designed to work with any of the supported modern browsers mentioned here. However, performance differs depending on your choice of a browser. If you're using Internet Explorer in particular, which is no longer supported by Power BI or Fabric, you might encounter worse performance. We strongly recommend a supported modern browser, like Microsoft Edge. If you still encounter unacceptable performance, test other supported modern browsers to see if they provide better results for your Power BI solution.

Power BI and Fabric work with these browsers on all platforms where they're available:

- Microsoft Edge version 120 and newer.
- Chrome desktop newest version (newer than Chrome 94) and Windows 10 version 1703 and newer.
- Safari Mac newest version.
- Safari 16.4 and newer.
- Firefox desktop newest version (newer than version 93). Firefox might change the fonts used in Power BI.

> **Note**
>
> Power BI and Fabric don't run in any browsers in iOS10 or previous versions.

Fonts

Power BI and Fabric use the Segoe UI font for text as its default, and the Din font for numbers, and other fonts when creating reports, dashboards, and other items. These fonts might not be available on non-Windows computers such as Macs. As a result the font, alignment of items, and visuals for the same report look different when viewed on a Windows computer versus a Mac.

The Calibri and Cambria fonts are only installed on Macs that have Microsoft Office installed. Calibri and Cambria aren't included in the default set of fonts on Macs.

Limitations and considerations

- If you're creating reports viewed on Mac computers, select fonts that display properly on Macs. The following links provide information about which fonts are available on Macs. Microsoft doesn't support these links. We're providing them only for reference and further reading.
  - Review the list of typefaces included with macOS.
  - Find Calibri and Cambria for Macs.
  - Fix missing Calibri, Cambria, and Segoe UI fonts on a Mac.
- Enable third-party cookies. Many areas of Power BI require third party cookies. Ensure that third-party cookies are enabled in your browser settings.
  - Microsoft Edge: Select **Settings** > **Cookies and site permissions** > **Cookies and data stored** > **Manage and delete cookies and site data**. Ensure that **Allow** is toggled on and **Block 3rd-party cookies** is turned off. Optionally, scroll to **Allow** and add **app.powerbi.com**.
  - Chrome: Select **Settings** > **Privacy and security** > **Third-party cookies** and ensure that third-party cookies isn't turned off. Optionally, add **app.powerbi.com** to **Allowed to use third-party cookies**.
  - Firefox: **Settings -> Privacy and security -> Cookies and site data -> Manage exceptions** and add **app.powerbi.com**.

Related content

- What is Power BI?
- Ask the Community
- Still have an issue? Visit the Power BI support page

Feedback

Was this page helpful? Yes No

Provide product feedback | Ask the community

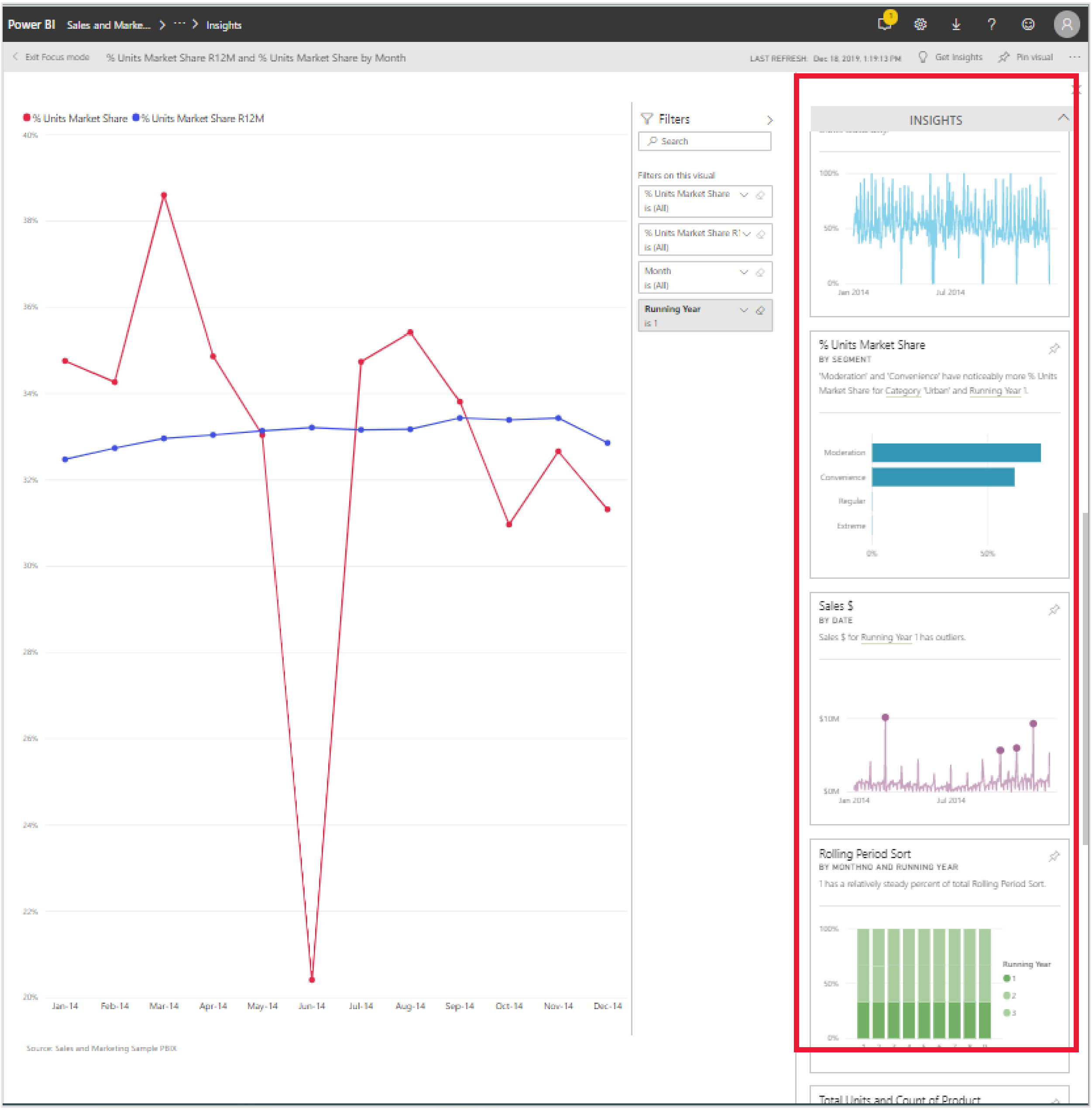
Types of insights supported by Power BI

Article • 01/09/2025

APPLIES TO: ✅ Power BI service for ***business users*** ✅ Power BI service for designers & developers ❌ Power BI Desktop ✅ Requires Pro or Premium license

Ask Power BI to look through your data and find interesting trends and patterns. These trends and patterns are presented as visuals called *Insights*. Insights are available for visuals on dashboards, visuals in reports, and entire report pages.

To learn how to use dashboard Insights, see View data insights on dashboard tiles with Power BI.



How does Insights work?

Power BI searches different subsets of your semantic model and applies a set of sophisticated algorithms to discover potentially interesting insights. You can run Insights on dashboard tiles, report visuals, and report pages.

Some terminology

Power BI uses statistical algorithms to uncover Insights. The algorithms are listed and described in the next section of this article. Before we get to the algorithms, here are definitions for some terms that might be unfamiliar.

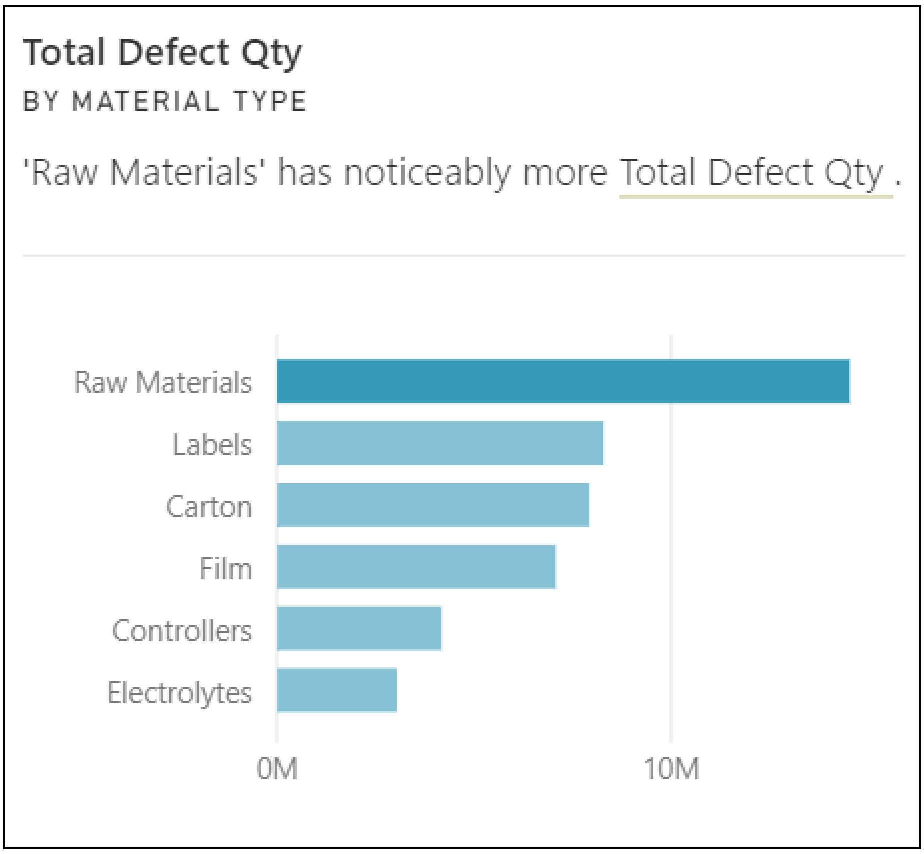
- *Measure* - A measure is a quantitative (numeric) field that can be used to do calculations. Common calculations are sum, average, and minimum. For example, if our company makes and sells skateboards, our measures might be number of skateboards sold and average profit per year.
- *Dimension* - Dimensions are categorical (text) data. A dimension describes a person, object, item, products, place, and time. In a semantic model, dimensions are a way to group *measures* into useful categories. For our skateboard company, some dimensions might include looking at sales (a measure) by model, color, country/region, or marketing campaign.
- *Correlation* - A correlation tells us how the behavior of things relates. If their patterns of increase and decrease are similar, they're positively correlated. If their patterns are opposite, they're negatively correlated. For example, sales of red skateboards increase each time we run a tv marketing campaign. Sales of the red skateboards and the tv marketing campaign are positively correlated.
- *Time series* - A time series is a way of displaying time as successive data points. Those data points could be increments such as seconds, hours, months, or years.
- *Continuous variable* - A continuous variable can be any value between its minimum and maximum limits, otherwise it's a discrete variable. Examples are temperature, weight, age, and time. Continuous variables can include fractions or portions of the value. The total number of blue skateboards sold is a discrete variable since we can't sell half a skateboard.

What types of insights can you find?

For reports, Power BI proactively performs analyses for anomalies, trends, and KPIs. For dashboard tiles, Power BI can find 10 types of Insights.

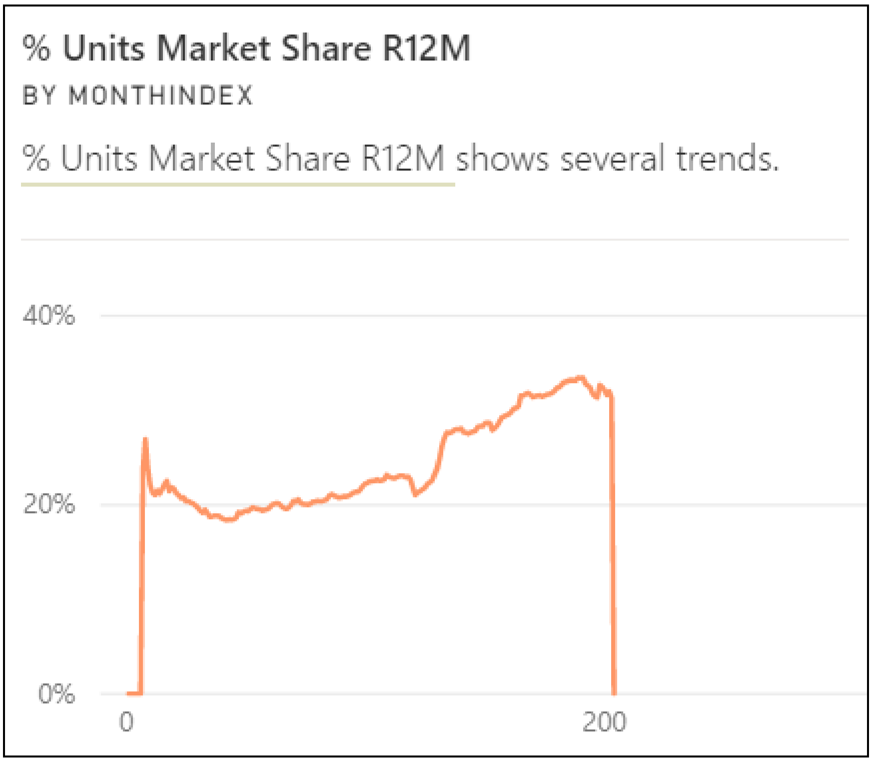
Category outliers (top/bottom)

Highlights cases where one or two categories have larger values than other categories.



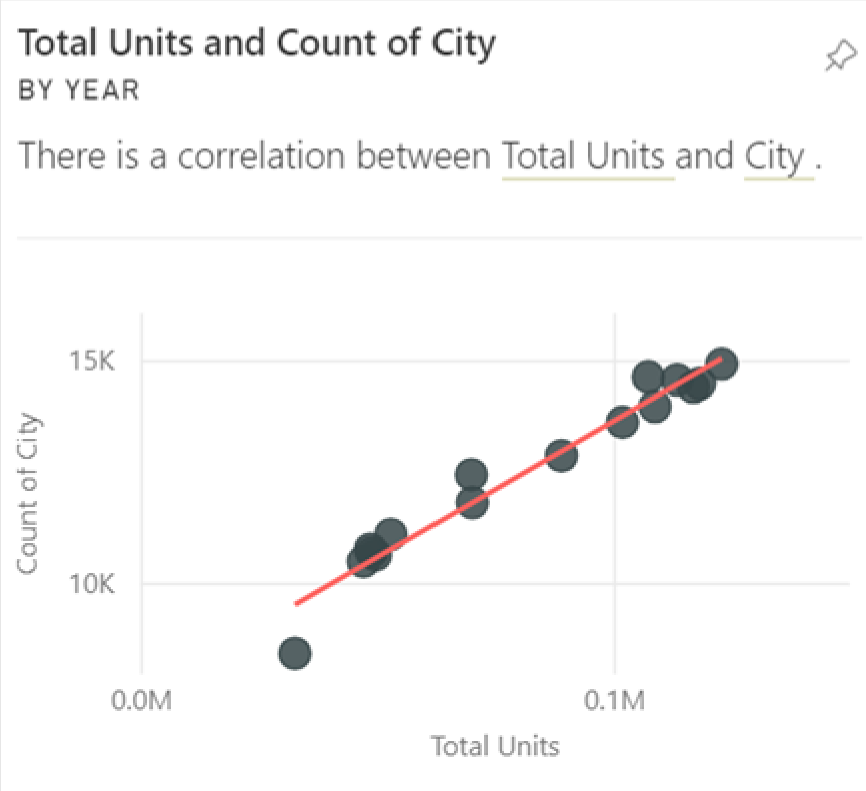
Change points in a time series

Highlights when there are significant changes in trends in a time series of data.



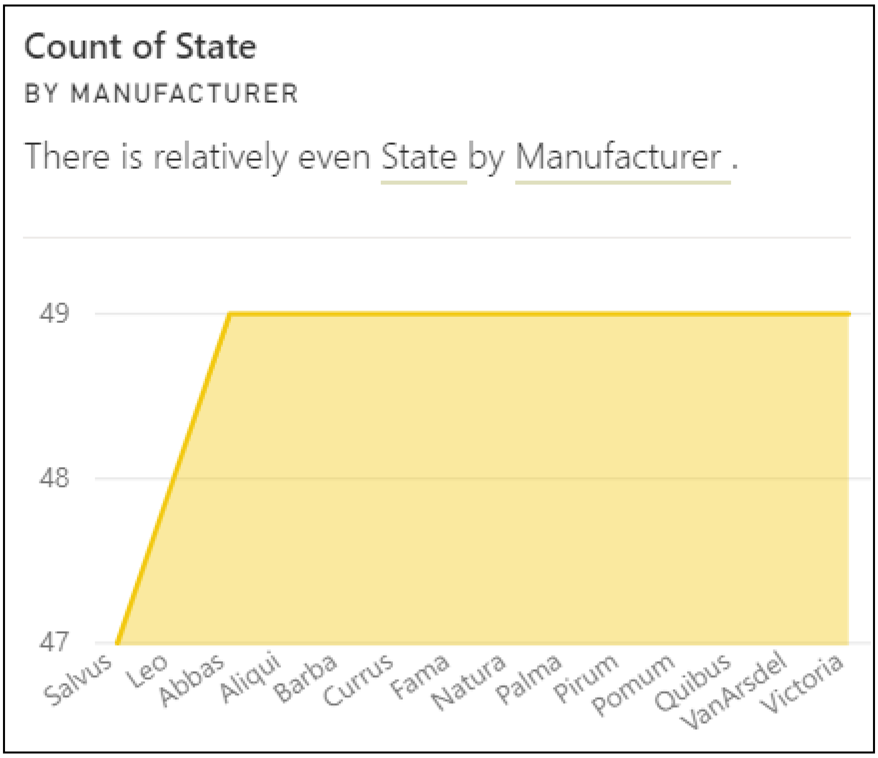
Correlation

Detects cases where multiple measures show a similar pattern or trend when plotted against a category or value in the semantic model.



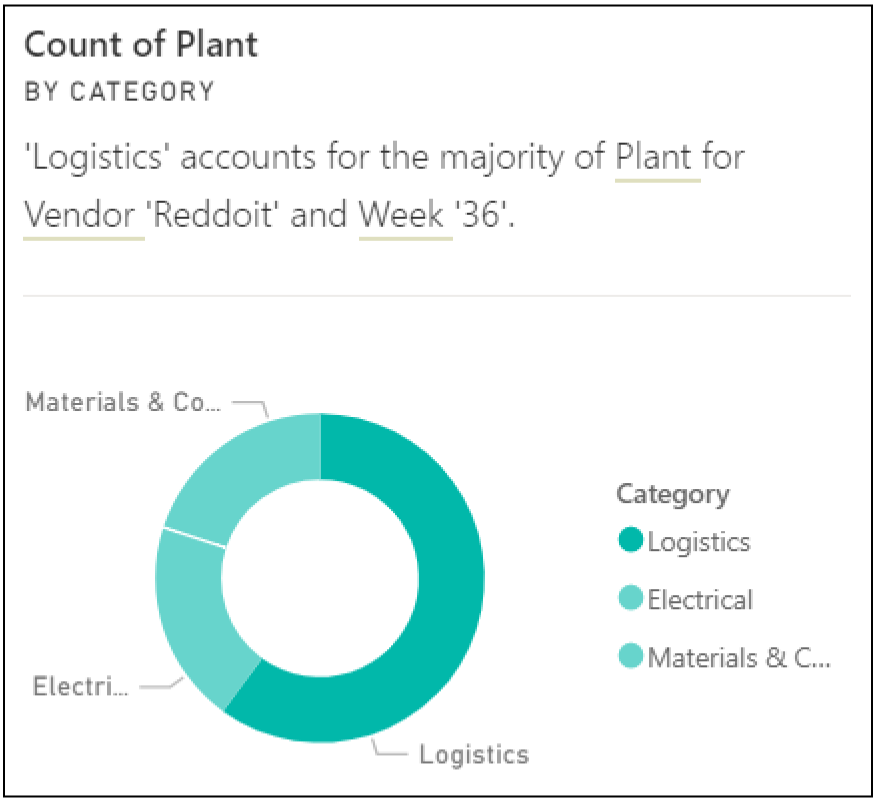
Low Variance

Detects cases where data points for a dimension aren't far from the mean, so the *variance* is low. Let's say you have the measure "sales" and a dimension "region." And looking across the region you see that there's little difference between the data points and the mean (of the data points). The insight triggers when the variance of sales across all regions is below a threshold. In other words, when sales are similar across all regions.



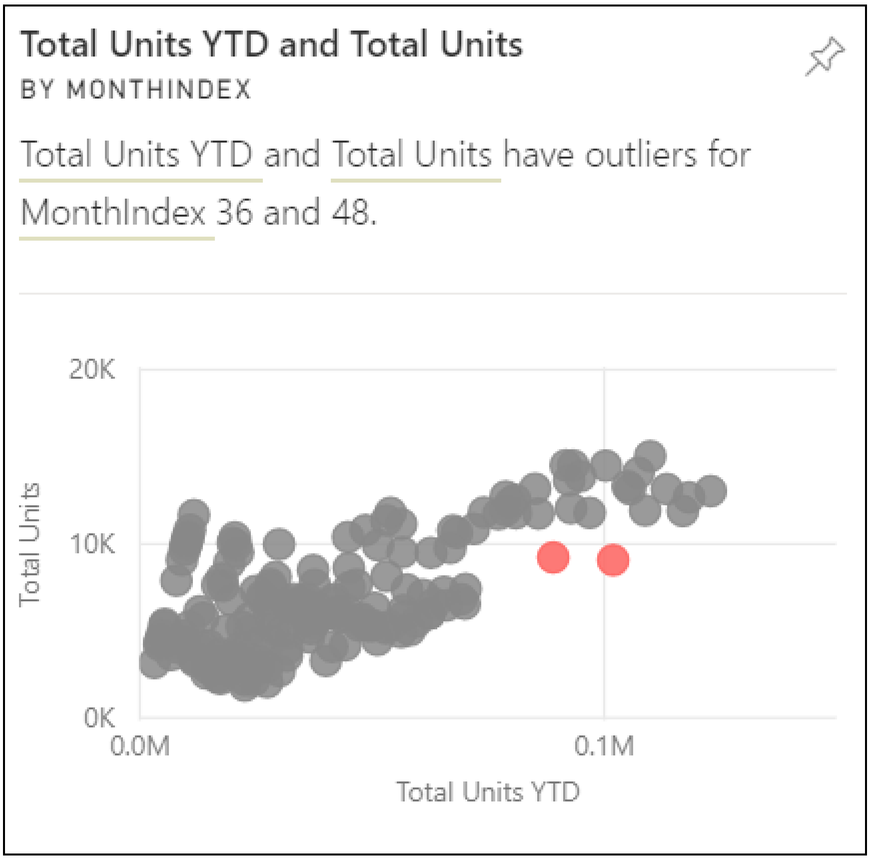
Majority (Major factors)

Finds cases where most of a total value can be attributed to a single factor when broken down by another dimension.



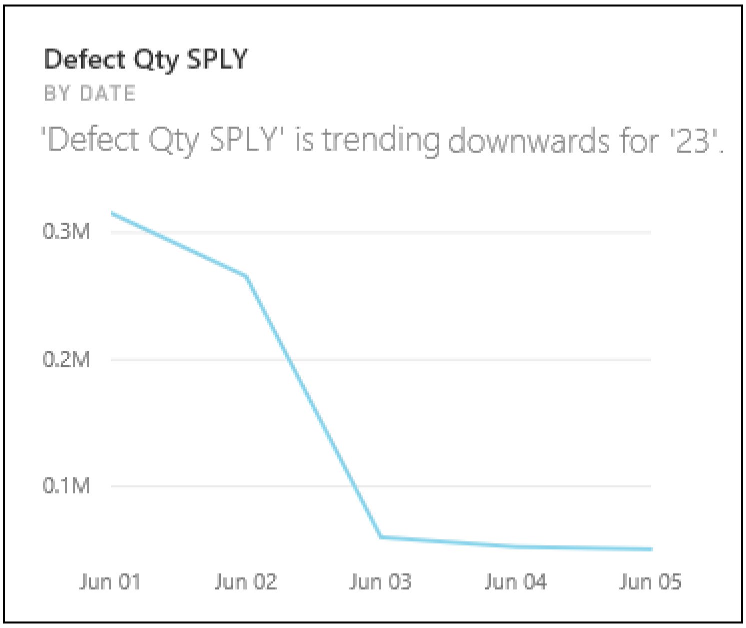
Outliers

This insight type uses a clustering model to find outliers not related to time in series data. Outliers detect when there are specific categories with values significantly different than the other categories.



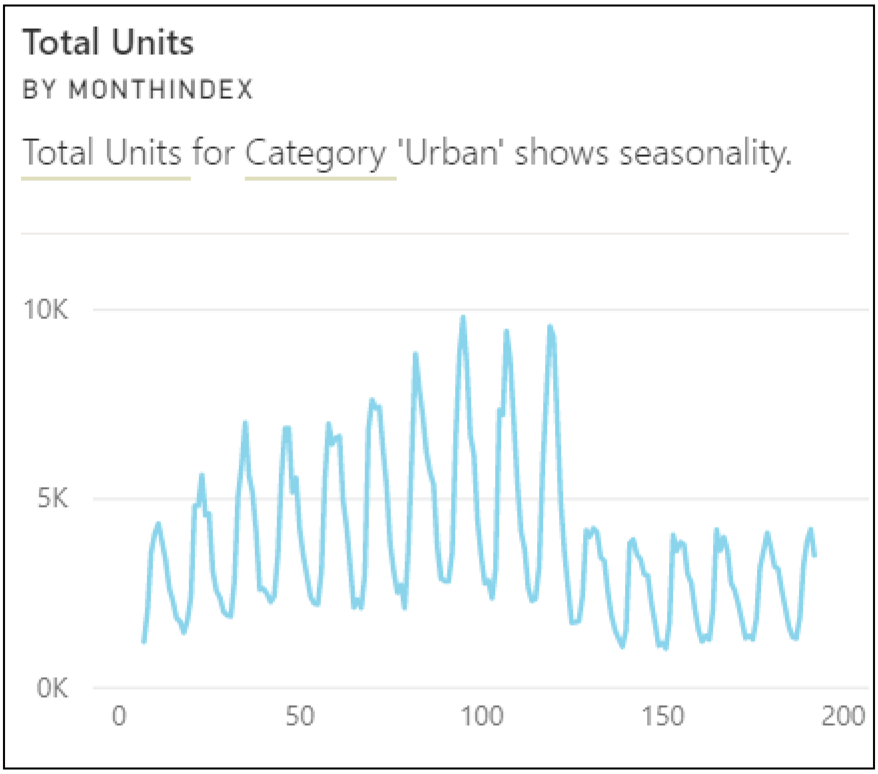
Overall trends in time series

Detects upward or downward trends in time series data.



Seasonality in time series

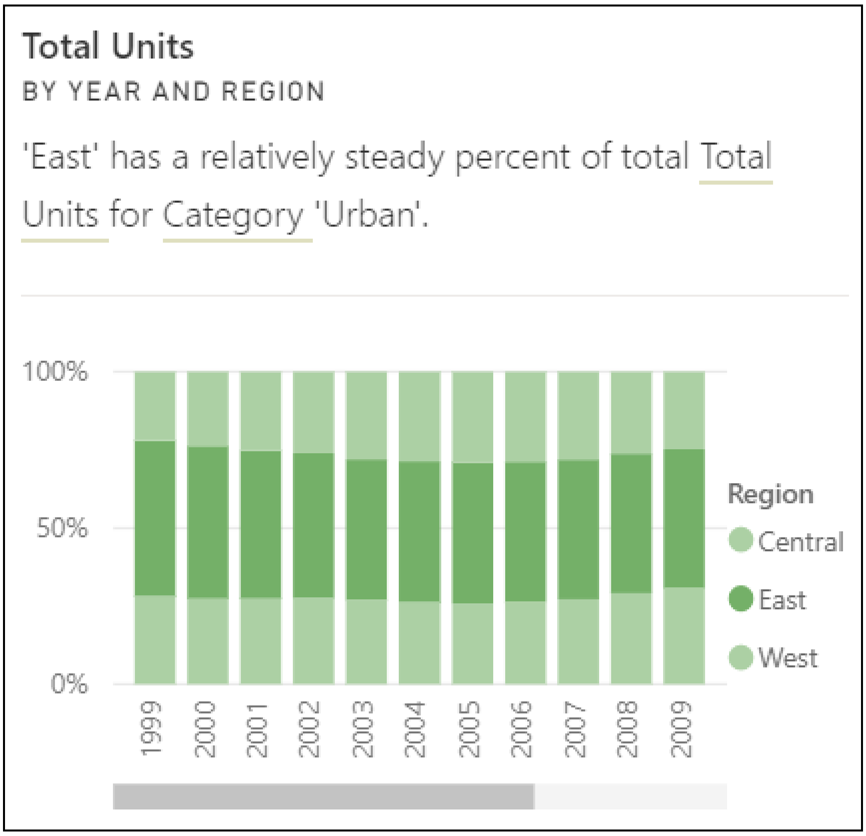
Finds periodic patterns in time series data, such as weekly, monthly, or yearly seasonality.



Steady share

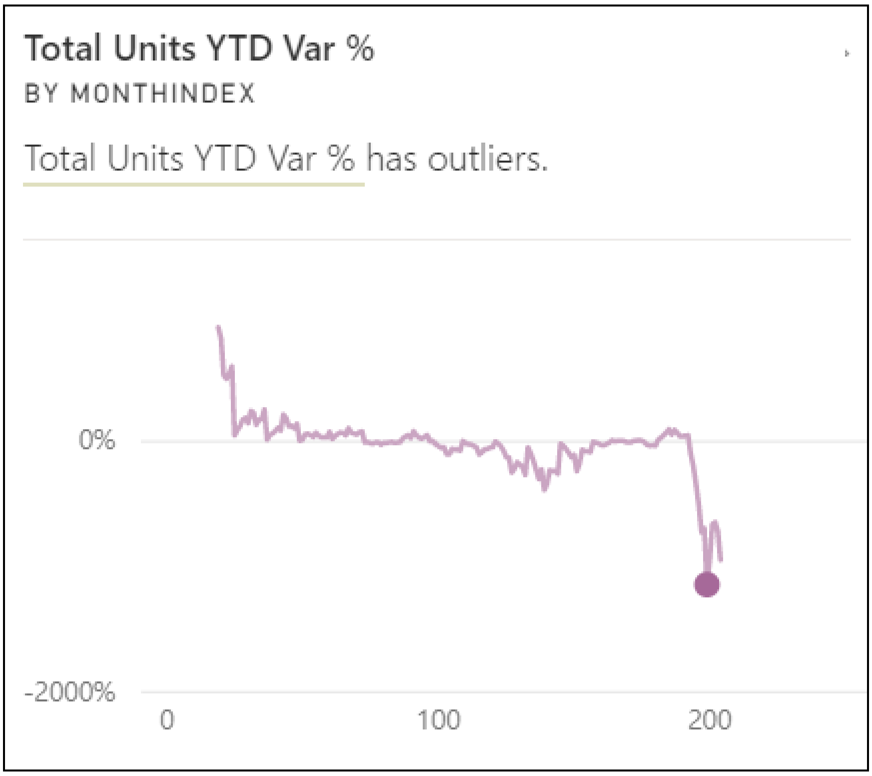
Highlights cases where there's a parent-child correlation between the share of a child value in relation to the overall value of the parent across a continuous variable. The steady share insight applies to the context of a measure, a dimension, and another date/time dimension. This insight triggers when a particular dimension value, for example "the east region," has a steady percentage of overall sales across that date/time dimension.

The steady share insight is similar to the low variance insight, because they both relate to the lack of variance of a value across time. However, the steady share insight measures the lack of variance of the **percentage of overall** across time, while the low variance insight measures the lack of variance of the absolute measure values across a dimension.



Time series outliers

For data across a time series, detects when there are specific dates or times with values significantly different than the other date/time values.



Related content

- View data insights on dashboard tiles with Power BI.

More questions? Ask the Power BI Community.

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