

# Basic concepts for the Power BI service business user

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**APPLIES TO:** ✓ Power BI service for **business users** ✗ Power BI service for designers & developers ✗ Power BI Desktop 🟡 Requires Pro or Premium license

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



This article assumes that you've already read the [Power BI overview](#) and have identified yourself as a [Power BI business user](#). *Business users* receive Power BI content, like dashboards, reports, and apps, from *creator* colleagues. *Business users* work with **the Power BI service** (app.powerbi.com), which is the website-based version of Power BI.

## This article isn't about Power BI Desktop

You'll undoubtedly hear the term "Power BI Desktop" or just "Desktop." It is the stand-alone tool used by *designers* who build and share dashboards and reports with you. It's important to know that there are other Power BI tools out there. But, as long as you're a *business user*, you'll typically work with the Power BI service. This article applies only to the Power BI service.

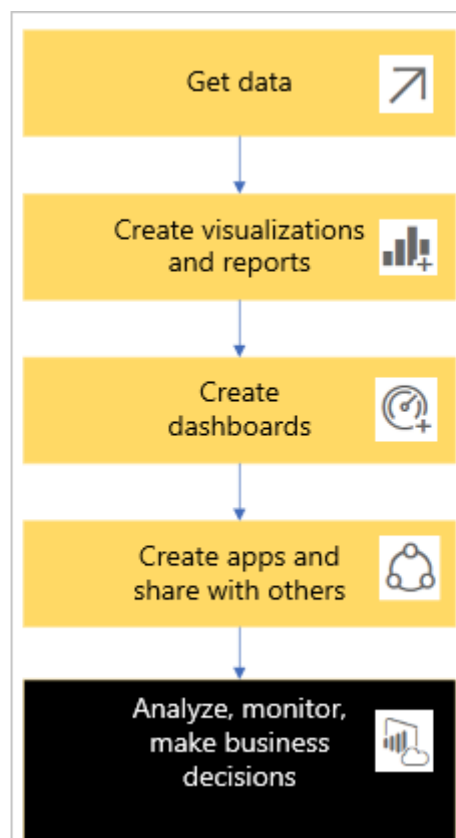
For more information about the full suite of Power BI tools, see [What is Power BI?](#).

## Let's get started

To follow along, open [app.powerbi.com](https://app.powerbi.com) in your browser.

There are many objects and concepts that make up the Power BI service, too many to cover in a single article. So we'll introduce you to the most common: **visualizations**, **dashboards**, **reports**, **apps**, and **semantic models**. These are sometimes referred to as **Power BI content**. Content exists in **workspaces**.

A typical Power BI workflow involves all of the building blocks: A Power BI *designer* (yellow in diagram below) collects data from *semantic models*, brings it into Power BI Desktop for analysis, creates *reports* full of *visualizations* that highlight interesting facts and insights, pins visualizations from reports to *dashboards*, and shares the reports, and dashboards with business users like you (black in diagram below). There are many different ways that a designer can share content with you: as individual pieces of content, content bundled together in an *app*, or by giving you permissions to a workspace where the content is stored. (Don't worry, we'll talk about the different ways that content is shared later in this article.)



At its most basic:



- a **visualization** (or *visual*), is a type of chart built by Power BI *designers*. The visuals display the data from *reports* and *semantic models*. Because they are highly interactive, you can slice, filter, highlight, change, and even drill into visualizations.

For more info, see [Interact with Visuals in reports, dashboards, and apps](#).



- A *semantic model* is a container of data. For example, it might be an Excel file from the World Health Organization. It could also be a company-owned database of customers or it might be a Salesforce file. Semantic models are managed by *designers*.



- A *dashboard* is a single screen with *tiles* of interactive visuals, text, and graphics. A dashboard collects your most important metrics, on one screen, to tell a story or answer a question. The dashboard content comes from one or more reports and one or more semantic models.

For more info, see [Dashboards for the Power BI service business users](#).



- A *report* is one or more pages of interactive visuals, text, and graphics that together make up a single report. Power BI bases a report on a single semantic model. Often, the *designer* organizes report pages to address a central area of interest or answer a single question.

For more info, see [Reports in Power BI](#).



- An *app* is a way for *designers* to bundle and share related dashboards, reports, and semantic models together. *Business users* receive some apps automatically but can go search for other apps created by colleagues or by the community. For example, out-of-the-box apps are available for external services you may already use, like Google Analytics and Microsoft Dynamics CRM.

To be clear, if you're a new user and you've logged in to the Power BI service for the first time, you probably won't see any shared dashboards, apps, or reports yet.

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## Workspaces

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# Semantic models

A *semantic model* is a collection of data that *designers* import or connect to and then use to build reports and dashboards. As a *business user*, it's possible that you'll never interact directly with semantic models, but it's still helpful to learn how they fit into the bigger picture.

Each semantic model represents a single source of data. For example, the source could be an Excel workbook on OneDrive, an on-premises SQL Server Analysis Services tabular dataset, or a Google Analytics dataset. Power BI supports more than 150 data sources and is always adding more.

When a designer shares an app with you, or gives you permissions to a workspace, you can look up which semantic models are being used, but you won't be able to add or change anything in the semantic model. This means that as you interact with dashboards and reports, the underlying data is safe because changes you make do not affect the database.

One semantic model...

- Can be used over and over by report designers to create dashboards, reports, and apps
- Can be used to create many different reports
- Visuals from that one semantic model can appear on many different dashboards



To learn more about semantic models, visit these articles:

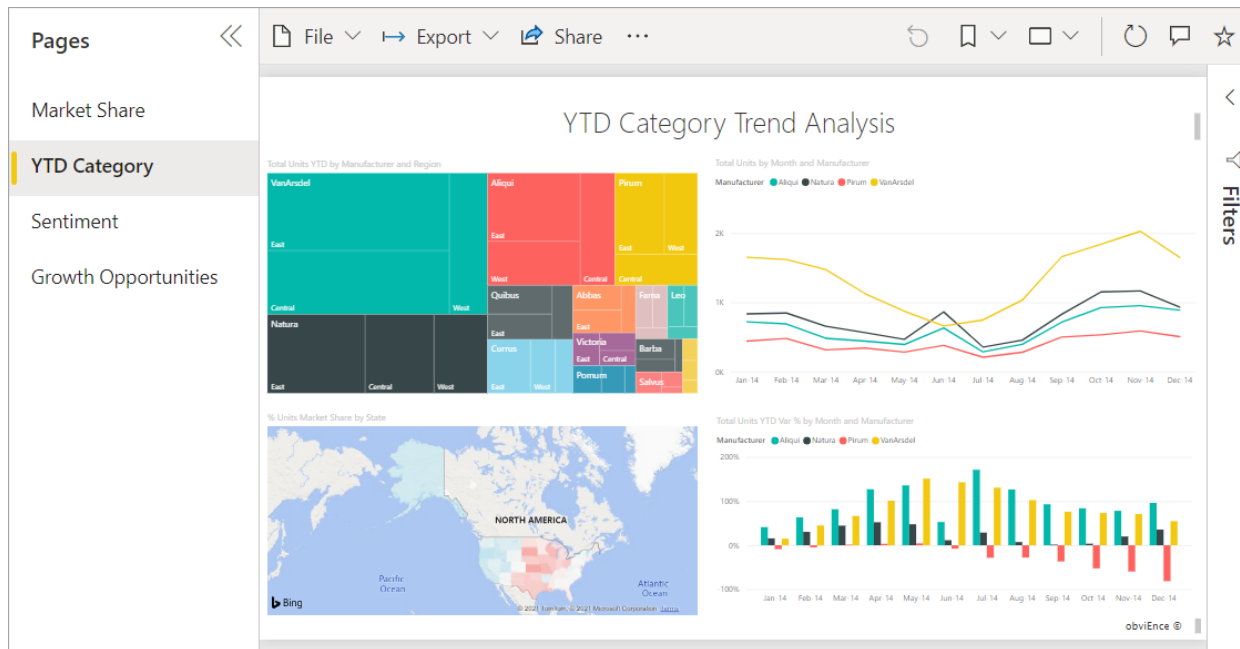
- [How do designers assign permissions to semantic models](#)
- [How semantic models are shared with colleagues](#)

On to the next building block -- visualizations.

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## Reports

A Power BI report is one or more pages of visualizations, graphics, and text. All of the visualizations in a report come from a single semantic model. *Designers* build reports and share them with others; either individually or as part of an app. Typically, *Business users* [interact with reports in Reading view](#).



One report...

- Can be created using data from only one semantic model. Power BI Desktop can combine more than one data source into a single semantic model in a report, and that report can be imported into Power BI.
- Can be associated with multiple dashboards (tiles pinned from that one report can appear on multiple dashboards).
- Can be part of multiple apps.

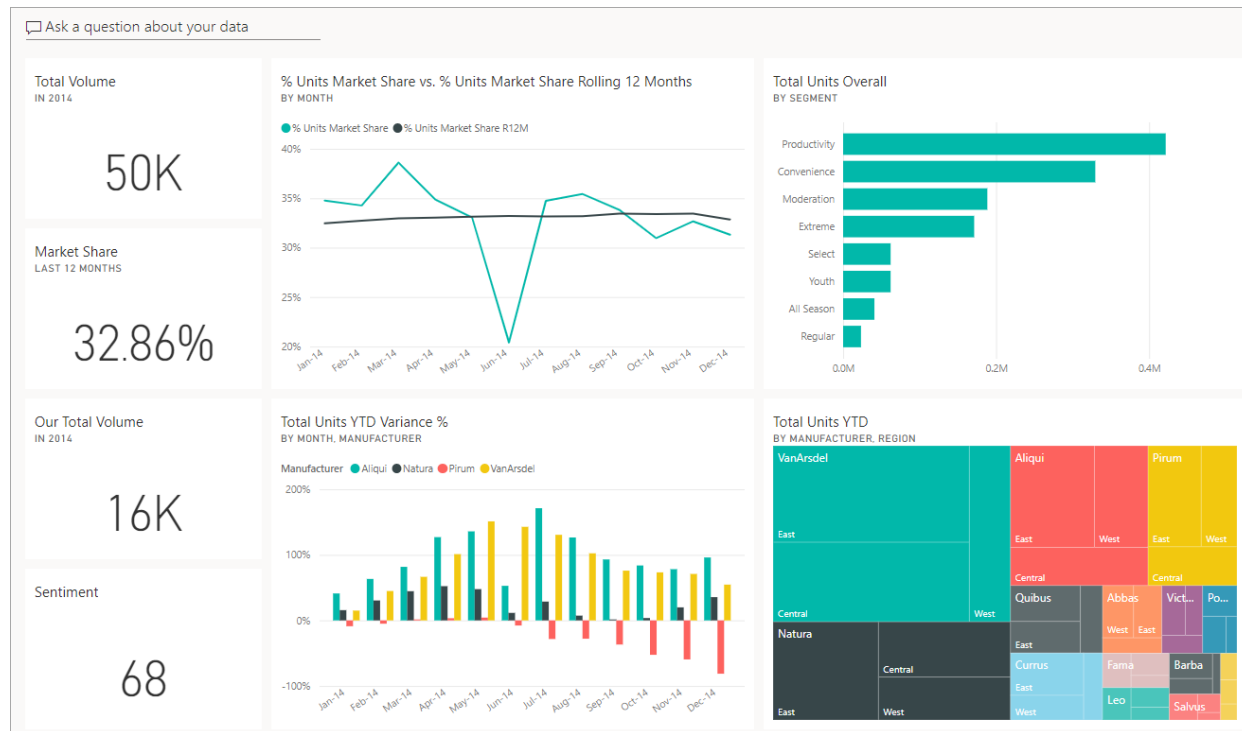


## Dashboards

A dashboard represents a customized graphical view of some subset of the underlying semantic model(s). *Designers* build dashboards and share them with *business users*; either individually or as part of an app. If a *business user* is given permissions to the

report, they can build their own dashboards too. A dashboard is a single canvas that has *tiles*, graphics, and text.

Dashboards can look similar to a report page. Just a few of the differences are that dashboards have a natural language query field in the upper left corner, and when you select a visual tile you are transported to the underlying report or URL or query. For more explanation, see [Reports versus dashboards](#).



A *tile* is a rendering of a visual that a *designer pins*, for example, from a report to a dashboard. The majority of pinned tiles show a [visualization](#) that a designer created from a semantic model and pinned to that dashboard. A tile can also contain an entire report page and can contain live streaming data or a video. There are many ways that *designers* add tiles to dashboards, too many to cover in this overview article. To learn more, see [Dashboard tiles in Power BI](#).

*Business users* can't edit dashboards. You can however add comments, view related data, set it as a favorite, subscribe, and more.

What are some purposes for dashboards? Here are just a few:

- to see, in one glance, all the information needed to make decisions
- to monitor the most-important information about your business
- to ensure all colleagues are on the same page; viewing and using the same information

- to monitor the health of a business or product or business unit or marketing campaign, and so on
- to create a personalized view of a larger dashboard -- all the metrics that matter to you

### ONE dashboard...

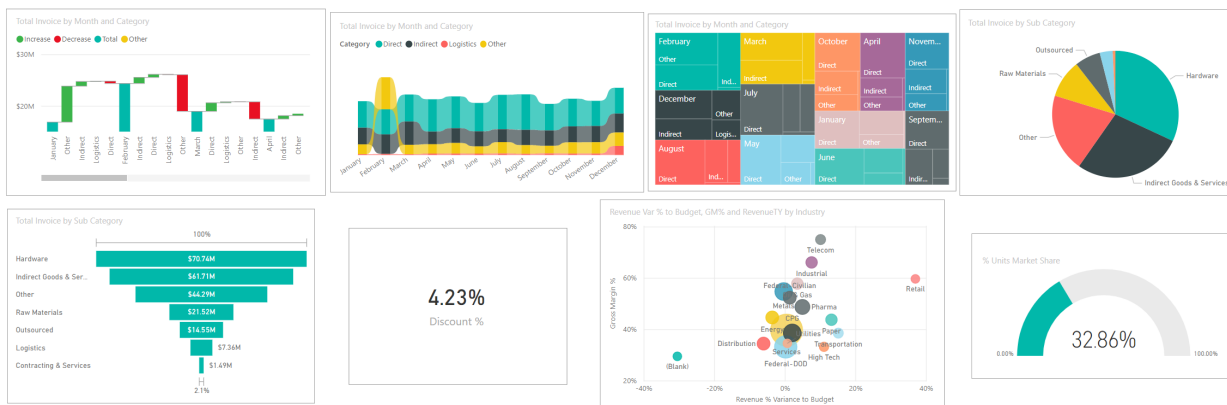
- can display visualizations from many different semantic models
- can display visualizations from many different reports
- can display visualizations pinned from other tools (for example, Excel)



## Visualizations

Visualizations (also known as visuals) display insights that Power BI discovers in the data. Visualizations make it easier to interpret the insight, because your brain can comprehend a picture quicker than it can comprehend a spreadsheet of numbers.

Just some of the visualizations you'll come across in Power BI are: waterfall, ribbon, treemap, pie, funnel, card, scatter, and gauge.



See the [full list of visualizations included with Power BI](#).



## Custom visuals

If you receive a report with a visual you don't recognize, and you don't see it included in the [full list of visualizations included with Power BI](#), likely it's a *custom visual*. Custom visuals are created by Power BI community members and submitted to Power BI for use in reports.

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## Apps

These collections of dashboards and reports organize related content together into a single package. Power BI *designers* build them in workspaces and share apps with individuals, groups, entire organizations, or the public. As a *business user*, you can be confident that you and your colleagues are working with the same information; a single trusted version of the truth.

Sometimes, the app's workspace itself is shared, and there can be many people collaborating and updating both the workspace and the app. The extent of what you can do with an app will be determined by the permissions and access you are given.

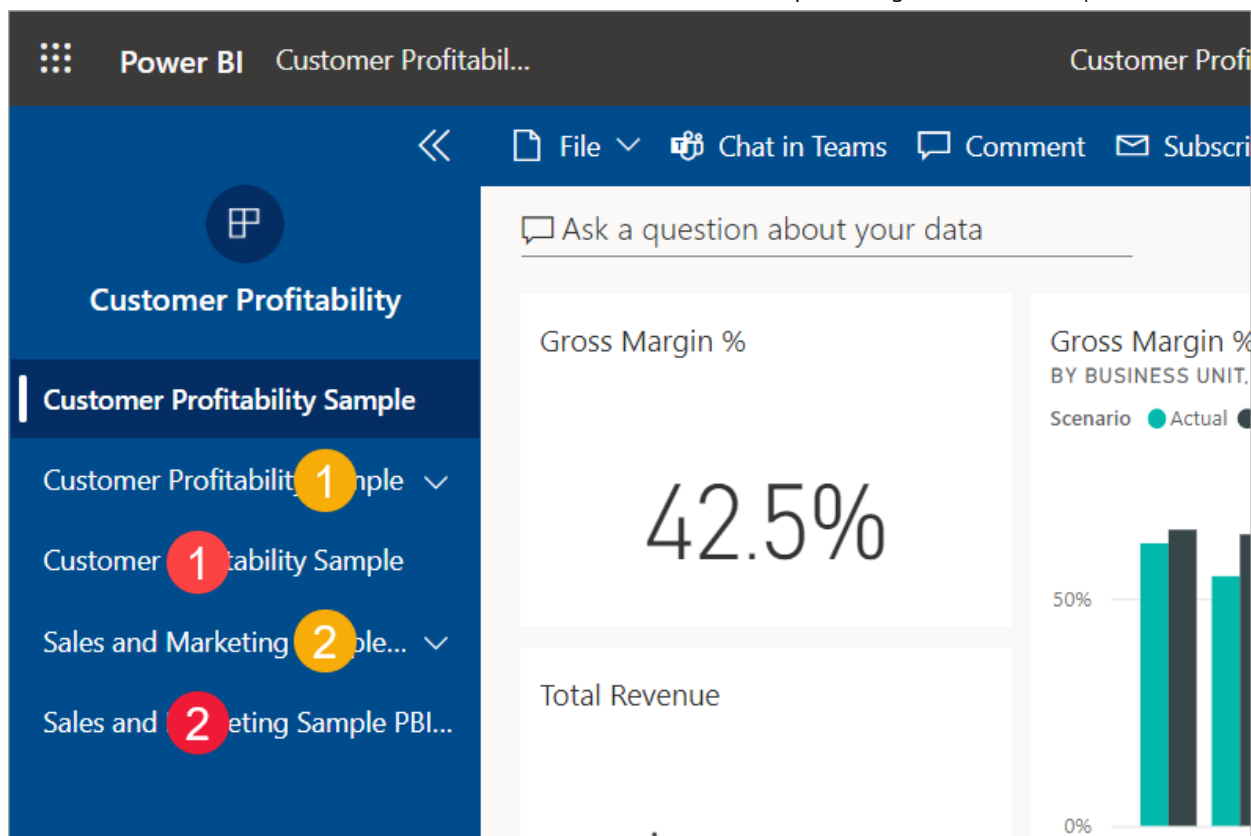
### ⓘ Note

The use of apps requires a Power BI Pro or Premium Per User (PPU) license, or for the app workspace to be stored in Premium capacity. [Learn about licenses.](#)

Apps are easy to find and install in the [Power BI service](#) and on your mobile device. After you install an app, you don't have to remember the names of a lot of different dashboards and reports. They're all together in one app, in your browser, or on your mobile device.

This app has two dashboards and two reports that make up a single app. If you were to select the arrow to the right of a report name, you'd see a list of pages that make up that report.





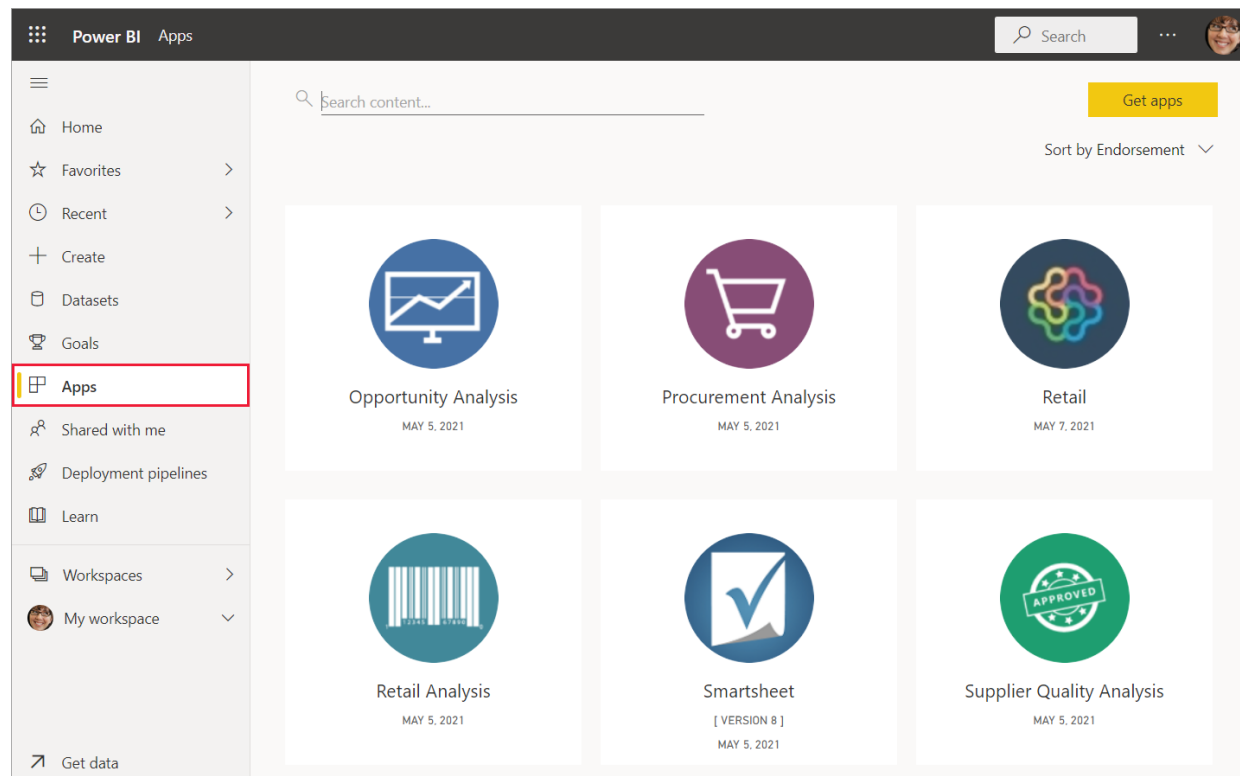
Whenever the app is updated, you automatically see the changes. Also, the designer controls the schedule for how often Power BI refreshes the data. You don't need to worry about keeping it up-to-date.

You can get apps in a few different ways:

- The app designer can install the app automatically in your Power BI account.
- The app designer can send you a direct link to an app.
- You can search from within the Power BI service for apps available to you from your organization or from the community. You can also visit [Microsoft AppSource](https://appsource.microsoft.com/), where you will see all the apps that you can use.

In Power BI on your mobile device, you can only install apps from a direct link, and not from AppSource. If the app designer installs the app automatically, you'll see it in your list of apps.

Once you've installed the app, just select it from your Apps list and select which dashboard or report to open and explore first.



Now that you've been introduced to the building blocks that make up the Power BI service for business users, continue learning using the links below. Or, [start using the Power BI service](#) with some sample data.

## Next steps

- Review and bookmark the [Glossary](#)
- Take a [tour of the Power BI service](#))
- Read the [overview of Power BI written especially for business users](#)
- Watch a video in which Will reviews the basic concepts and gives a tour of the Power BI service.

### ⓘ Note

This video might use earlier versions of Power BI Desktop or the Power BI service.

<https://www.youtube-nocookie.com/embed/B2vd4MQrz4M>