Getting Started with Power BI 8 Easy Steps





Getting Started with Microsoft Power BI

An easy to follow guide for beginners and end users – like me!

This guide is designed for end users like me, to help you to get up and running with Power BI. Maybe you've heard of Microsoft Power BI and even tried playing around with it. However, I find if you don't have a bunch of time upfront, it probably went to the wayside.

Power BI really is a great tool, and with our help, you too can get those reports and dashboards you've dreamed of. In this handy guide, I will explain some basic, need to know concepts, and get you started with timesaving, easy to use templates.

Need-to-know Basics:

Which Power BI is for you? We recommend you start with the Power BI Service.

- 1. Power BI Service (online) general use * Recommended.
- 2. Power BI Desktop used for more advanced options. You can easily move to this later on.
- 1. Sign up for Power BI It's FREE

Go to Power BI and click on the Get started free button



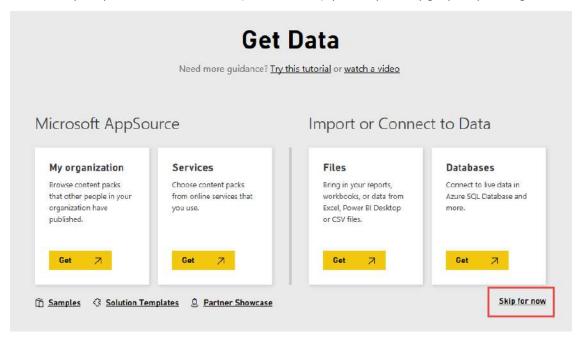
Have questions or need some help with getting started? Microsoft has a great support page if you need assistance.

Understanding the pieces of Power BI:

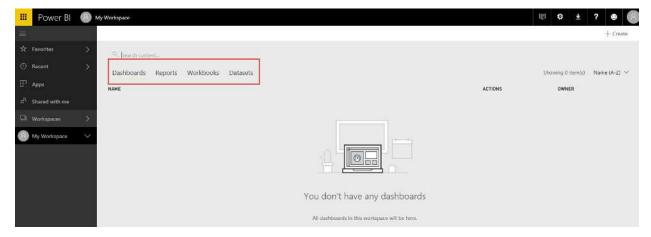
- 1. **Datasets** your data, like Dynamics GP or CRM. You set up a data set, which is a connection to your data, and you can use that over and over again. You're not changing data, just connecting to it to display it in different ways.
- 2. **Reports** a visual way of showing your data lists, charts, & graphs.
- 3. **Dashboards** a screen that has different sections (widgets) on it. Usually these widgets pull in a report. So, you might have 5 reports pulled onto 1 screen. This is the part you then can publish and share with others in your business.

I'm ready to start!

First, when you open the Power BI service (online version), you will probably get prompted to get data.



If you skip this part, "Skip for now", you will see the dashboards area. However, you might not have any dashboards yet. Here you'll see your dashboards, reports, workbooks, and datasets.



If you do have existing items in Power BI, you'll see a *dashboard* displayed. Dashboards are something that differentiates the Power BI service (online) from the desktop version.



You will want to get familiar with the Power BI screen:

- 1. Navigation bar
- 2. Dashboard with tiles
- 3. Q&A question box
- 4. Help and feedback buttons
- 5. Dashboard title
- 6. Office 365 app launcher
- 7. Power BI home buttons
- 8. Additional dashboard actions

Getting Data

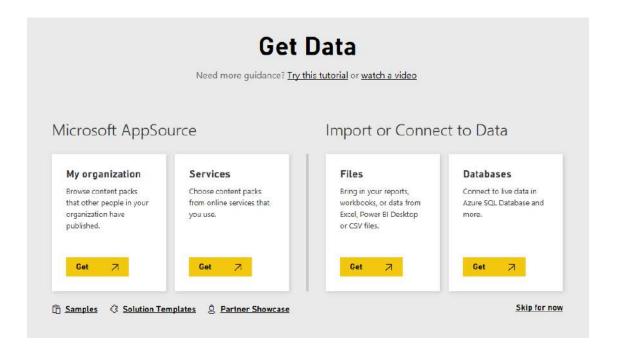
First, you need to specify some data to use. This means connect to a datasource.

2. Setting up a Data Connection

Data is at the heart of Power BI. No matter what you are doing, all those visualizations are coming from the underlying data, your data source. Let's take a look at a couple data types you are likely to use.

Let's take a look at a couple different types of data sources you can connect to with Power BI. Keep in-mind, there are many other types of data sources you can get data from, too. But, for now, we are going to focus on data types people like you generally start with. These are data sources you can connect to right from Power BI easily.

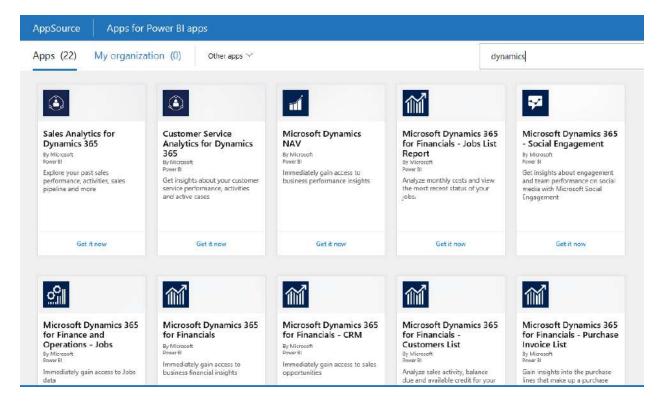
To start, click on: **My Workspace** and you will be prompted to **Get Data**. (or this screen might already be showing)



AppSource Data or Import / Connect to Data:

AppSource (Content Packs) – Recommended! Many apps are creating content packs for you to use with Power BI. These are great! Think of these as a pre-set data connection and ready-made report templates. For example, Acumatica, Dynamics 365, and many more come with easy, downloadable content packs. Microsoft Dynamics GP is scheduled to release a content pack this year too.

Just click on the yellow "Get" button and you will be prompted to choose your content pack. Here are some examples. I typed dynamics in the upper right search box. See if there's one available for your needs.



You can Import data or Connect to data from other sources:

Excel (.xlsx, xlxm) – Lots of people use Microsoft Excel. Either you have manually entered data into a spreadsheet or you possibly queried and loaded data from an external data source. You can easily connect and use a spreadsheet as your datasource.

Comma Separated Value (.csv) – CSV files are similar to Excel but without the formatting. They are simple text files with rows of data. Each row can contain one or more values, each separated by a comma. Sometimes, I get these from business partners, etc.

Other connections:

There are other data connections available, for example, you can connect directly to your SQL Server instance. There are on-premise and cloud connections, depending on where your data is located. You might need to contact your IT department or Crestwood for proper access and assistance with these connections.

Databases on-premises – From the Power BI service, you can connect directly to SQL Server Analysis Services databases. For example, Dynamics GP, Dynamics SL, and on premise Dynamics CRM. For these connections a Power BI Enterprise gateway is required. If you're unsure how to connect to your organization's database, check with your administrator or IT department.

Databases in the Cloud – From the Power BI service, you can connect live to Azure SQL Database, Azure SQL Data Warehouse, and SQL Server Analysis Services. Again, you might have to ask your IT department for the connection information and to make sure you have proper rights to do this.

3. Choose a Dataset:

Once you've figured out where your data is coming from and set up a connection, you'll need a dataset.

Dataset and Data Source are used a lot in Power BI. They're often use synonymously, but they really are two different things, albeit related.

A *dataset* is automatically created in Power BI when you use Get Data to connect to and import data from a content pack, file, or you connect to a live data source. A dataset contains information about the data source, data source credentials, and in many cases, a sub-set of data copied from the data source. In most cases, when you create visualizations in reports and dashboards, you're looking at data in the dataset.

A *data source* is where the data in a dataset really comes from. For example, an online service like Dynamics CRM online or Acumatica, a database in the cloud like Azure SQL Database, or a database or file on a local computer or server in your own organization like SQL Server.

Data Refresh

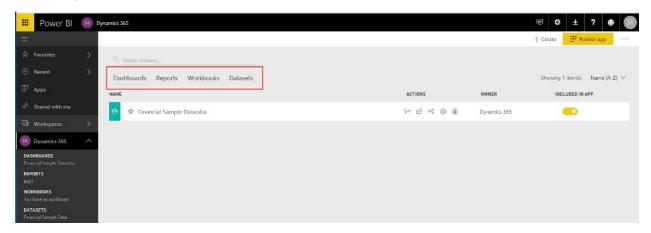
Data refresh is a super important part of Power BI, and much too deep to cover here. Most of the time, the refresh will happen automatically once you have your data connection set up. However, if you set up a connection to files on your local drive or a network location, the computer where the file is saved must be on for the refresh to happen.

You can also re-import your file, or use Publish from Excel or Power BI Desktop, but those are not automated processes.

- There are some data limitations, which you probably won't run into, but here is more information.
- If you want to get a thorough understanding, be sure to read more Data Refresh in Power BI.

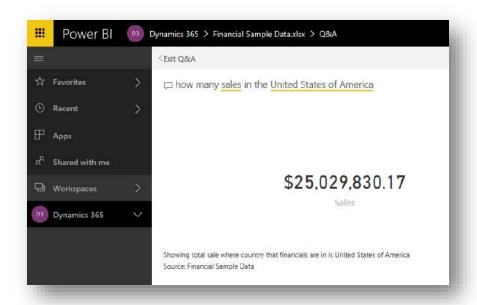
Ok, I have a dataset – what's next?

Next, you will see this screen. You should see your data here. Notice across the top are dashboards, reports, workbooks, and datasets.



Under Dashboard, there is a great new feature to check out - "Ask a question about your data". This lets you explore your data before trying to make reports. I recommend trying this out!

Make sure you've thought about what you want to show in your report. I recommend writing down a few simple ideas to begin with.



Once you're ready to build a report, click on the data box and you will be taken to a blank report canvas to create your own report from scratch.



Making & Understanding Reports

Once you have your Power BI account and have added a data connection, you're ready move on to the next steps. In the simplest of terms, you will:

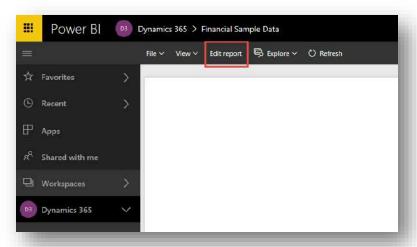
- 1. Make a report or multiple reports
- 2. Then, use your report(s) in a dashboard

4. Try it - Reports

A Power BI report is one or more pages of visualizations (charts and graphs like line charts, pie charts, treemaps, and many more). These visuals all come from a single dataset. Reports can be created from scratch or there are pre-built reports you get when you use content packs.

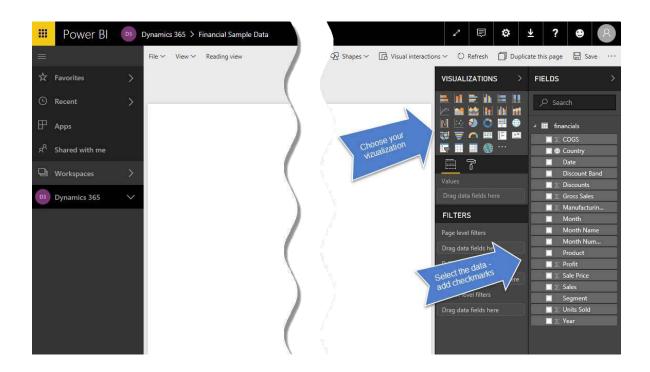
You will use two report modes:

- **Editing View** If you have access, you can design, modify, and share the report.
- Reading View You can explore and interact with the report, just not modify it.



To create a report, make sure you are in the report/edit view. Next, select the type of visualization/chart you want, and then select your data fields.







<u>Try it out</u>: Select different fields and see how the chart changes. Then, select a different visualization. What makes sense for your data? What part of the data do you want to emphasize?

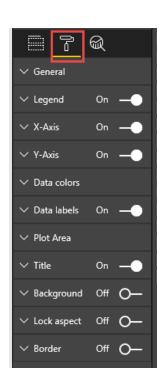
5. Working with Your Report Data

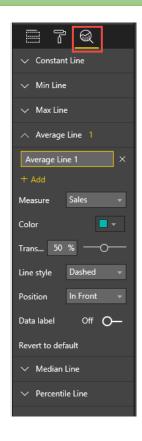
Below visualizations is the place to adjust and work with your data. This column has three icons at the top:

- Fields
- Formats
- Analytics

In here, you can adjust almost everything data related.

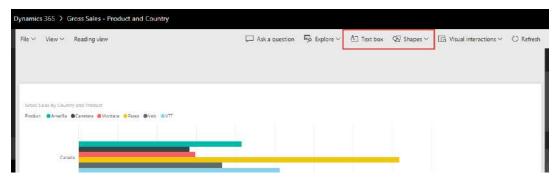
Try adding a median line or adjusting the colors on your chart.



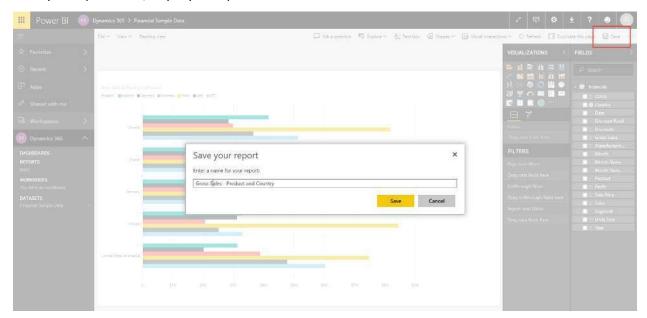




Additionally, you can add a text box or a shape to your report. Across the top are the options to do that.



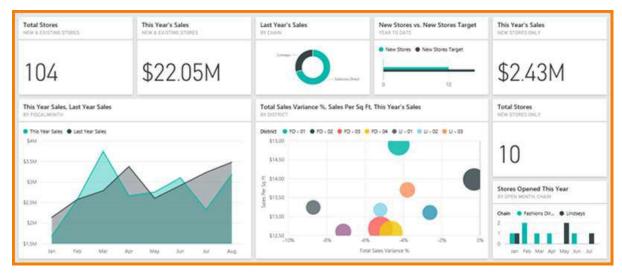
When you are done with your report, make sure to <u>SAVE</u>! Click on save in the upper right of the canvas screen and name your report. Now, stay in your report – but read on first.



Dashboards

6. Understanding Dashboards

A dashboard is a screen with multiple tiles on it. Each tile then can display a report. It is something you create or someone else can and then you share it.



A dashboard can:

- can display visualizations from many different datasets
- can display visualizations from many different reports
- can display visualizations pinned from other tools (e.g., Excel)

In the navigation area, your dashboards will show under the Dashboards heading. "Your" means that you have access to them, not necessarily that you created all of them. If it was a dashboard you created, then you will have a sharing icon available. Meaning you can share it with others.

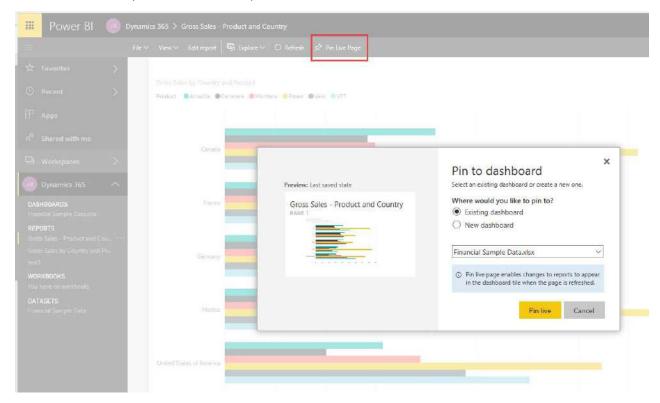


Why do people create dashboards? Here are just some of the reasons:

- to see, in one glance, all the information needed to make decisions
- to monitor the most-important information about their 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, etc.
- to create a personalized view of a larger dashboard -- all the metrics that matter to me

7. Try it – Dashboards

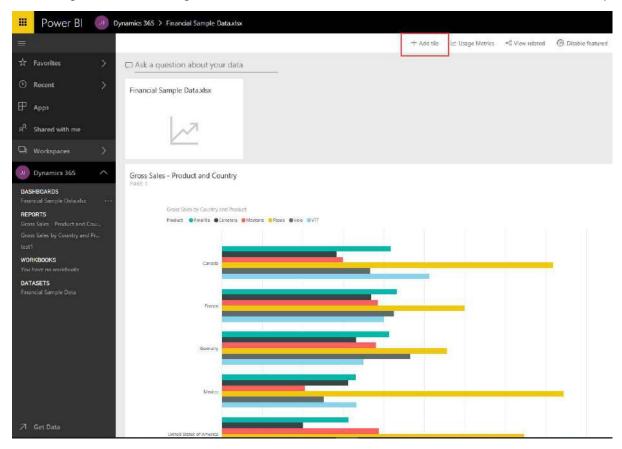
It's easy to make your report show up on a dashboard. In your report, click on Pin Live Page at the top. Then select the dashboard you'd like it to show up on.

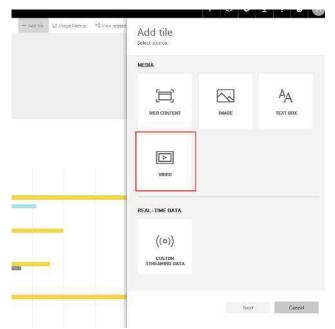




To view the dashboard, go to the dashboards are on the navigation bar. Here, you see the data tile and my report now as a tile. I can move them around and adjust the size. Use the ellipses to click and drag, or the bottom right to resize.

You can add multiple tiles. If you have more reports, just pin them. You can also add standalone tiles; such as, text boxes, images, videos, streaming data, and web content. In the dashboard, click on the Add Tile link at the top.



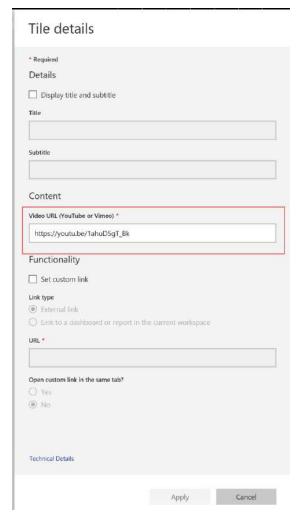


There are options if you'd like to add a title or set a link to leave the dashboard and go to the video.

Then click on Apply at the bottom. The tile might be under your report – so you can move it up to the top.

Click on Add tile at the top and choose what type of external content you would like displayed. Let's do a video from YouTube.

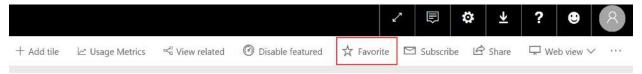
Use the Next button at the bottom and will just have to paste in the YouTube URL.



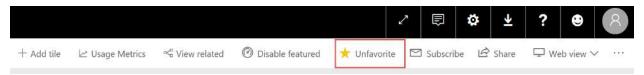
Favorites

8. Mark as a Favorite

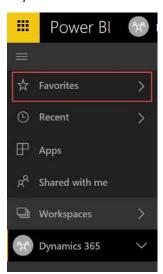
You can mark dashboards and reports to show up in your favorite area. This place is designed for you, to get there quickly and easily. Once you have multiple dashboards in your Power BI interface, this feature comes in handy. To mark something to appear under favorites, just click on the star button at the top.



You will see the star becomes yellow and it changes to now say unfavorite.

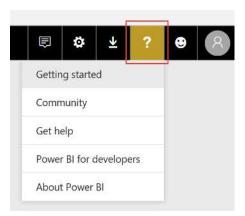


Now when you go into Power BI you can find all your marked items under the favorite menu in the navigation area. Remember, any time you see a star, it means add to favorites. You can add reports, dashboards, or an app to your favorites list.



More Help & Information

Once you've tried it out and gotten familiar with the basics, you might want to improve your skills and enhance your reports. The easiest way to get more information is to use the help feature inside of Power BI. You'll find the help question mark in the upper right.



Additionally, Crestwood has put together a recommended list of training resources for Power BI. There are training videos, eBooks, and more to suit every learning style. Download the Power BI training resources list here.

Many clients also decide they would rather have initial reports and dashboards built for them. This saves time and makes it a little easier to start with. Then you can take over, modify, and create versions of the pre-built reports. Crestwood has Power BI experts, specializing in ERP reporting to assist you. If you'd like more information on report writing services, email us at sales@crestwood.com.