# Creating and interacting with dashboards

Once you have deployed your datasets and are using them in reports, you're ready to bring together the many elements into a single **dashboard**. Often, your management team is going to want a unified executive dashboard that combines elements such as sales numbers, bank balances, customer satisfaction scores, and more into a single dashboard.

Click

to watch a video about dashboards and Power BI service.

A Power BI dashboard is made up of tiles that, together, tell a story. Because it's limited to one page, a well-designed dashboard contains only the most important elements of that story. You can't edit the dashboard, but there are several ways to use the data to monitor your business and make data-backed decisions.

Suppose that you're the Marketing Manager for a clothing manufacturing company named Van Arsdel. The following **Marketing and sales** dashboard example provides you with a high-level snapshot of your business. By viewing this dashboard, you can monitor how your company is doing versus the competition.
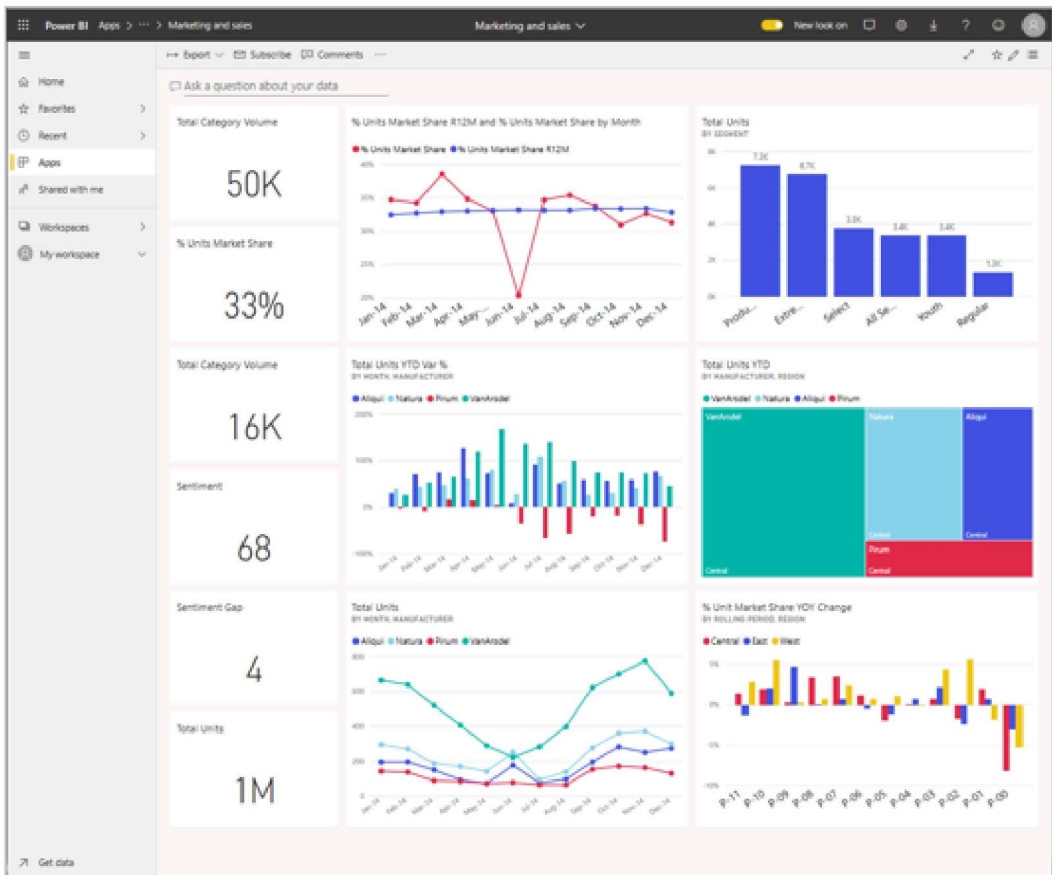
Hover to view details

Tiles on a dashboard are more than just pictures. Hover over a tile to view details about the data behind the visual on both dashboards and reports.
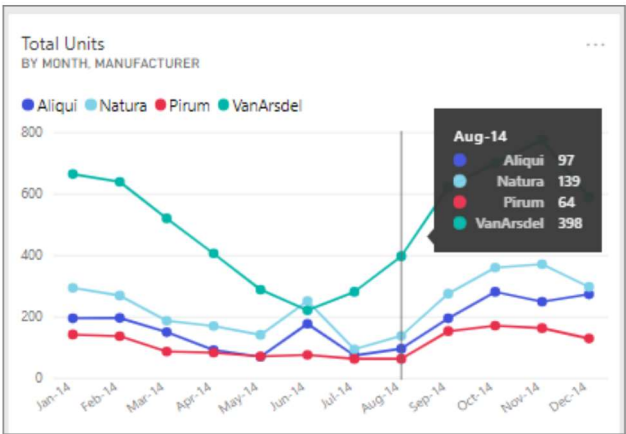
Open a report from a dashboard

The tiles on your dashboard are visualizations from reports. Opening a report is as simple as selecting a tile. The report opens to a page that contains the content that you selected.
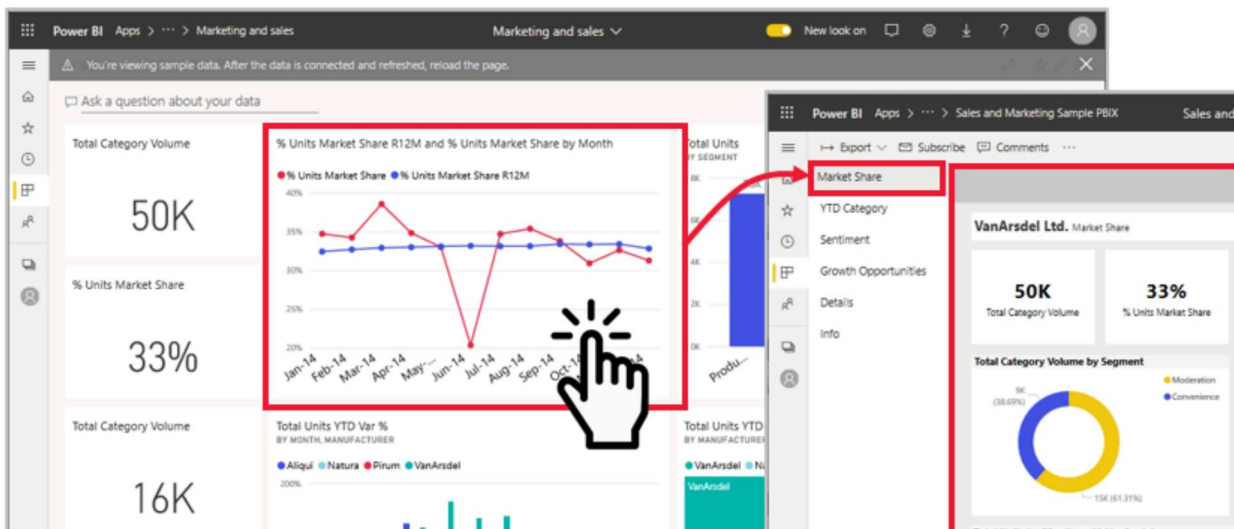
Now that a report is open, you can explore it.

Creating a dashboard

To create a dashboard, follow these steps:

1. Start by opening the report.
2. On each of the charts, tiles, and other elements, you'll see a **pin** icon at the top-right of that object. After you click on the pin, it will ask you which dashboard you wish to pin that report element to. You can, at that point, create a **New dashboard** or choose an **Existing dashboard** to add the element to, as shown in the following screenshot.

3. If you have an existing dashboard, then select **Existing dashboard** and choose which one you want to use. If you don't have a dashboard yet, select **New dashboard**, give it a name, and then click **Pin**.
4. Once you pin the first item to the dashboard, you'll be prompted with a link to the dashboard. The newly created dashboard will allow you to resize elements and add additional tiles of information.

You have the option to click on **Edit** in the upper ribbon and **Add a tile** to add additional interesting data, such as web content, images (such as logos), text data, and videos to the dashboard. Many people use this in the line-manager dashboard to insert a company logo or even a short video from the executive team talking about the initiative that relates to the dashboard.
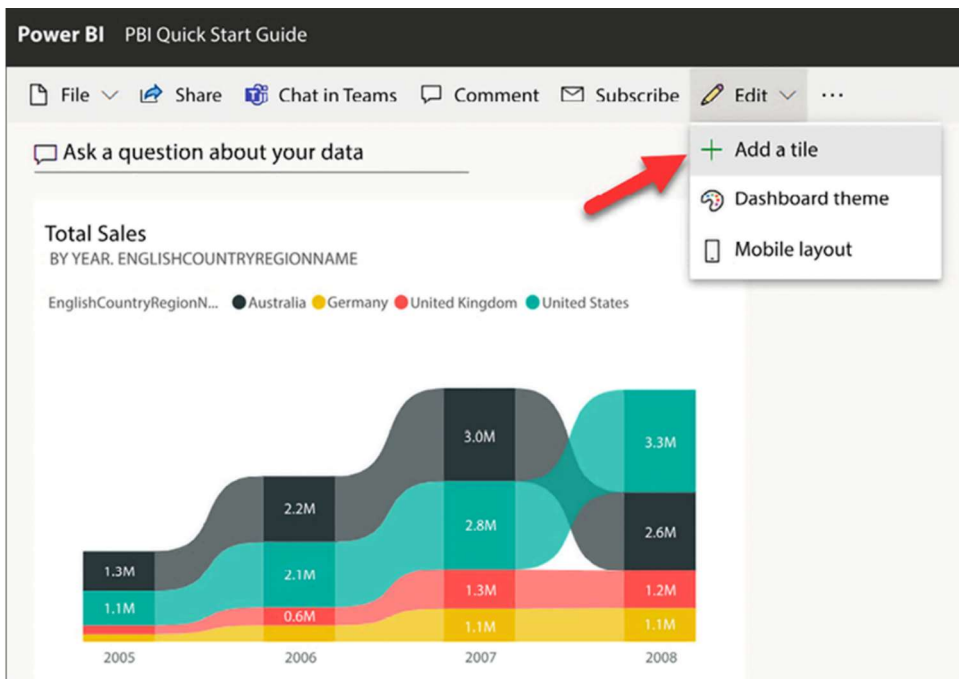
You can also pin real-time data as a tile, using custom streaming data. Under **Edit**, you would choose **Add a tile**. Once you click **Custom Streaming Dataset**, you have the option to add a new dataset from **Azure Stream Analytics** or **PubNub**, or a developer can use an API to push data directly into the dashboard.

Azure Stream Analytics is the most common of these live data streams. In this mechanism, devices can stream data through Azure Event Hubs, for example, which then gets aggregated with **Azure Stream Analytics**.

Imagine the power of a smart power grid sending thousands of records in a second to the cloud, and then **Azure Stream Analytics** aggregating this to a single record every five seconds, the status shown by a moving needle on a gauge or line graph in Power BI.

Another valuable feature is the ability to add Excel workbooks to your dashboard. This can be very helpful for both designers and end consumers of the information, because Excel is still a very common and robust tool in the world of business.

In a world of increased information availability, it's worth noting that a good way to view Power BI is from a phone, either in web view or in the native Power BI client, which is downloadable from the App Store for Android or iPhone.

There are going to be some dashboard elements that you will likely want to exclude from a phone device because the surface area is too small. By the very nature of the device, most people sign into Power BI on their phone to get a quick look at the numbers. For those consumers, you can create a specialized phone view of the dashboard.

In figure below, you can see that the **Edit** option also allows you to view the **Mobile layout**. The default phone view will contain every element from **Web View**. If you want to remove items, hover over each report element and click the pushpin to move it to the **Unpinned Tiles** section, as shown in the following screenshot. Once you're done, you can click the phone icon (or click on **Mobile layout**, based on your resolution) and flip it back to **Web layout** again:
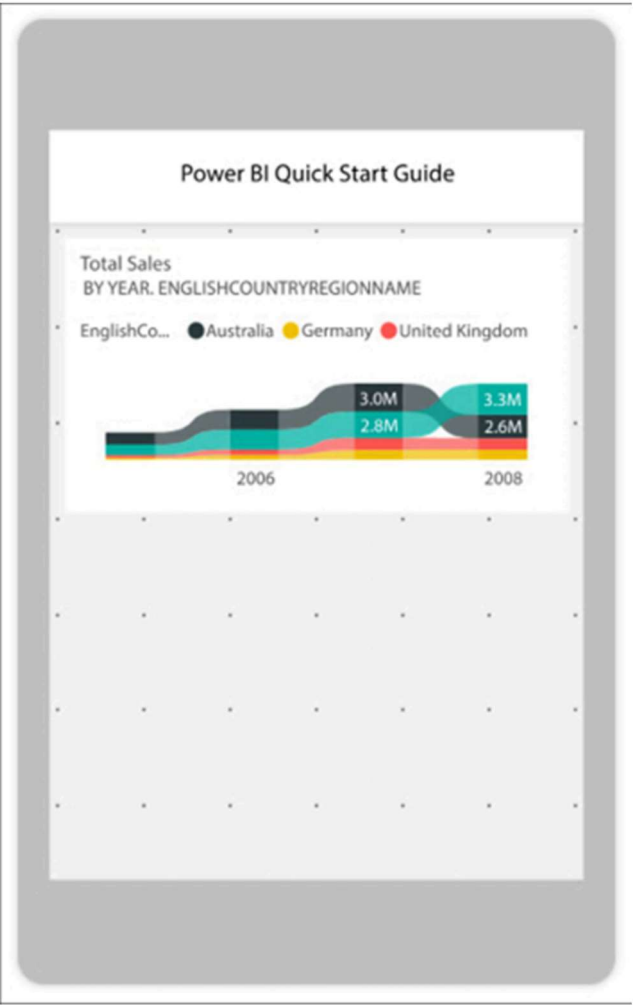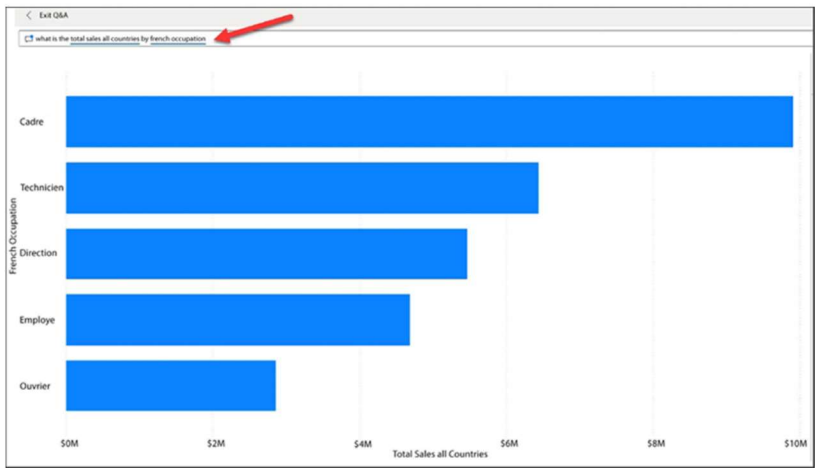

Click

to watch a video about creating a new dashboard by pinning visualizations from a report. This video might use earlier versions of Power BI Desktop or the Power BI service.

Asking your dashboard a question

Once the dashboard is complete, you're able to ask questions about your data. Right above the dashboard data, you'll see the area where you can **Ask a question about your data**, a feature that may be turned off or on for your dashboard. For example, you enter a request to "*Show me the total stores by state*," and Power BI will typically produce a geographical response.

If you'd prefer to see your answer as a bar chart instead of a map, you can explicitly ask for it as a graph element—for example, "*Show me the total stores by state in a bar chart*."

If you like the answer that comes back, you can click **Pin visual** in the top-right corner to pin the report item to a dashboard. You can also expand the **Filters** and **Visualizations** on the right to be very precise with your report item. For example, you may only want to see stores with sales above a certain level. While Power BI is great at answering questions with filters, it sometimes needs fine-tuning. If you're curious as to where Power BI pulled this data from, below your newly created report, you'll see the source of the data from which the report was derived.

A great way to encourage your users to utilize this feature is to provide Power BI with some sample questions. To do this, you would just select the gear icon at the top right, and then go to **Settings**.

Once there, click the dataset that you wish to create sample questions for in the **Datasets** tab, as shown in the following screenshot. Expand the **Featured Q&A questions** section, click **Add a question**, and add several questions that might interest your user:
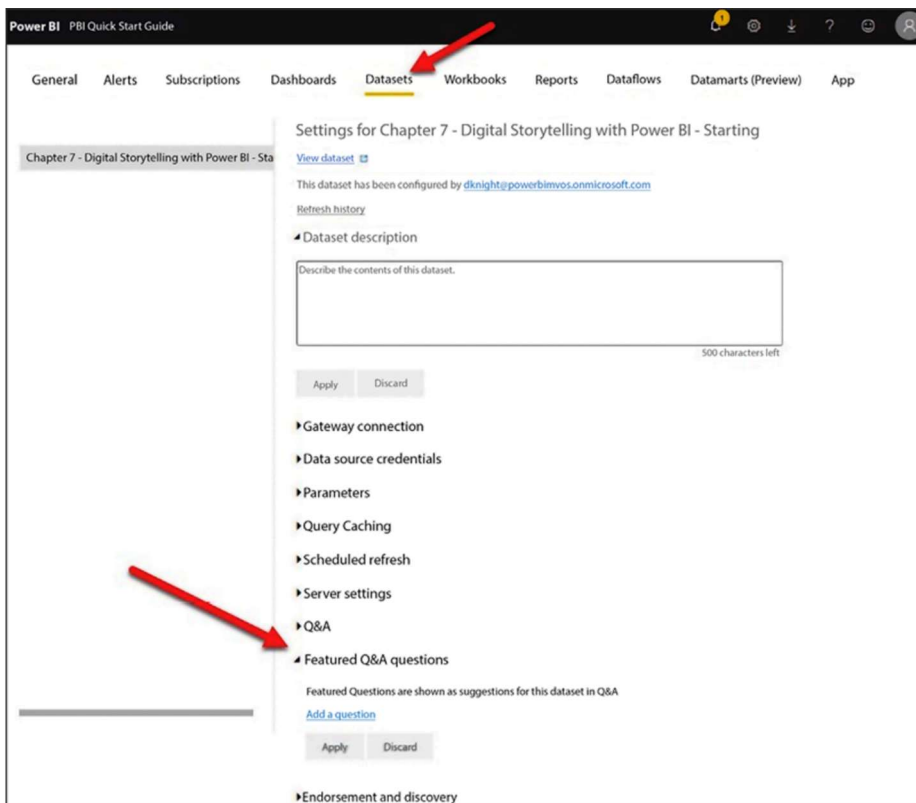
Creating featured questions will help your users to start to use the vocabulary of the report. For example, your sales team may be used to calling someone a "client," but your marketing team uses the term "customer." Featured questions will encourage all users to refer to customers as clients. If you want to use a variety of terms interchangeably, you can create synonyms inside Power BI Desktop. You can do this in the **Modeling** tab in Power BI Desktop when looking at your relationships. You can also create more advanced linguistic models in Power BI Desktop by importing linguistic models if you've developed them.

This can help with questions that you think users might ask, such as "*Who is my best customer in New York?*" or "*Show me the worst employees by office.*" The linguistic model would translate what "*best*" and "*worst*" means to the company.

Dashboards versus reports

Reports and dashboards seem similar because they're both canvases filled with visualizations, but there are major differences, as you can see in the following table.

Capability	Dashboards	Reports
Pages	One page	One or more pages
Data sources	One or more reports and one or more datasets per dashboard	A single dataset per report
Drilling down in visuals	Only if you pin an entire report page to a dashboard.	Yes
Available in Power BI Desktop	No	Yes. You can build and view reports in Power BI Desktop.
Filtering	No. You can't filter or slice a dashboard. You can filter a dashboard tile in focus mode, but can't save the filter.	Yes. There are many different ways to filter, highlight, and slice.
Feature content on colleagues' Home page	Yes	Yes
Favorites	Yes. You can set multiple dashboards as *favorites*.	Yes. You can set multiple reports as *favorites*.
Natural language queries (Q&A)	Yes	Yes, provided you have edit permissions for the report and underlying dataset.
Set alerts	Yes. Available for dashboard tiles in certain circumstances.	No
Subscribe	Yes. You can subscribe to a dashboard.	Yes. You can subscribe to a report page.
See underlying dataset tables and fields	No. You can't see tables and fields in the dashboard itself, but you can export data.	Yes

Sharing your reports and dashboards

◄ Lesson 7 Quiz

Siirry...

Exercise 28 - Power BI workspaces ►

Metropolia