Objective

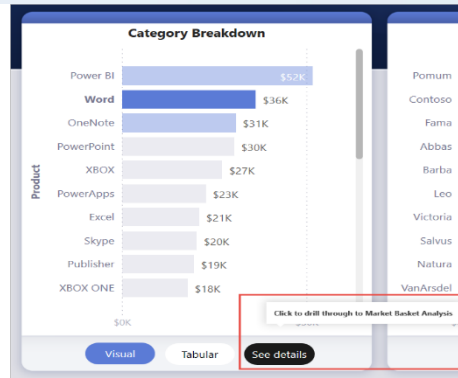After completing this chapter, you will be able to know;

- Drill through function and usage
- Button triggers,
- Bookmark and different use and implementation
- Navigation buttons

Create a drill through button in Power BI

You can create a *drillthrough* button in Power BI. This button drills through to a page with details that are filtered to a specific context.

One way to drill through a report is to right-click in a visual. However, if you want the drillthrough action to be more obvious, you can create a drillthrough button instead. A drillthrough button can increase the discoverability of important drillthrough scenarios in your reports, and you can conditionally determine how the button looks and acts. For example, you can show different text on a button if certain conditions are met.

In this example, after you select the Word bar in the chart, the **See details** drillthrough button is enabled.

When you select the **See details** button, you drill through to the Market Basket Analysis page. As you can see in the following visual, the drillthrough page is now filtered for Word.
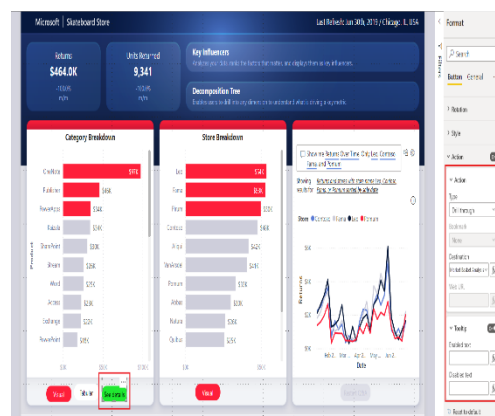
Set up a drillthrough Button.

To set up a drillthrough button, you first need to set up a valid drillthrough page within your report. Then you create a button with **Drill through** as the action type and select the drillthrough page as the **Destination**.

Because the drillthrough button has two states, enabled and disabled, you see two tooltip options.

If you leave the tooltips boxes blank, Power BI automatically generates tooltips. Those tooltips are based on the destination and drillthrough fields.

The following example shows an autogenerated tooltip when the button is disabled:

"To drill through to Market Basket Analysis [the destination page], select a single data point from Product [the drillthrough field]."
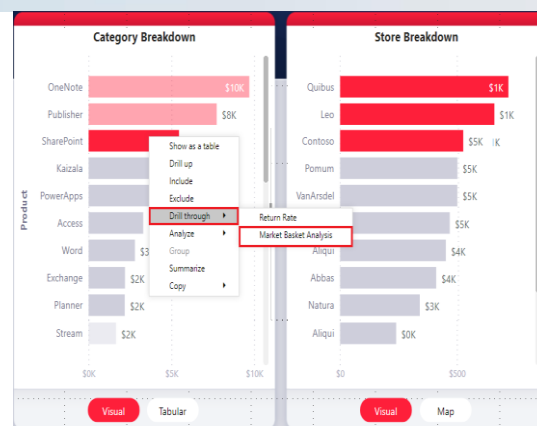
The following example shows an autogenerated tooltip when the button is enabled:

"Click to drill through to Market Basket Analysis [the destination page]."

Set up drillthrough in Power BI reports

With *drillthrough* in Power BI reports, you can create a destination *target* page in your report that focuses on a specific entity such as a supplier, customer, or manufacturer. When your report readers right-click a data point in other *source* report pages, they drill through to the target page to get details that are filtered to that context. You can set up drillthrough in your reports in Power BI Desktop or the Power BI service.
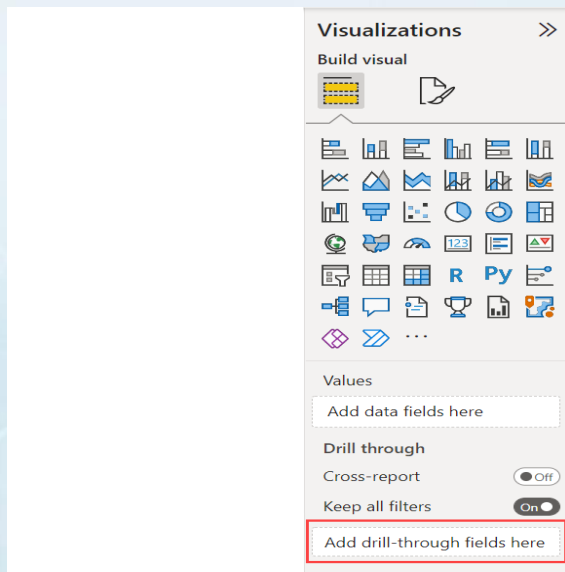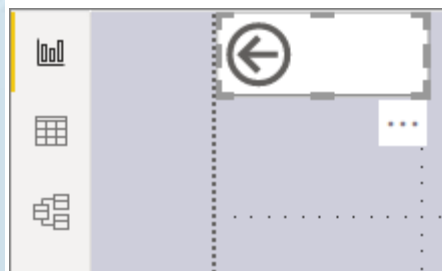

Set up the drillthrough target page

1. To set up drillthrough, create a *target report page* that has the visuals you want for the type of entity that you're going to provide drillthrough for.

    For example, suppose you want to provide drillthrough for manufacturers. You might create a drillthrough target page with visuals that show total sales, total units shipped, sales by category, and so on. That way, when you drill through to that page, the visuals are specific to the manufacturer you selected.

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2. Then, on that drillthrough target page, in the **Build visual** section of the **Visualizations** pane, drag the field for which you want to enable drillthrough into the **Drill through** well.

When you add a field to the **Drillthrough filters** well, Power BI automatically creates a *back* button visual. That visual becomes a button in published reports. Users who view your report in the Power BI service use this button on the target page to get back to the original source report page from which they came.
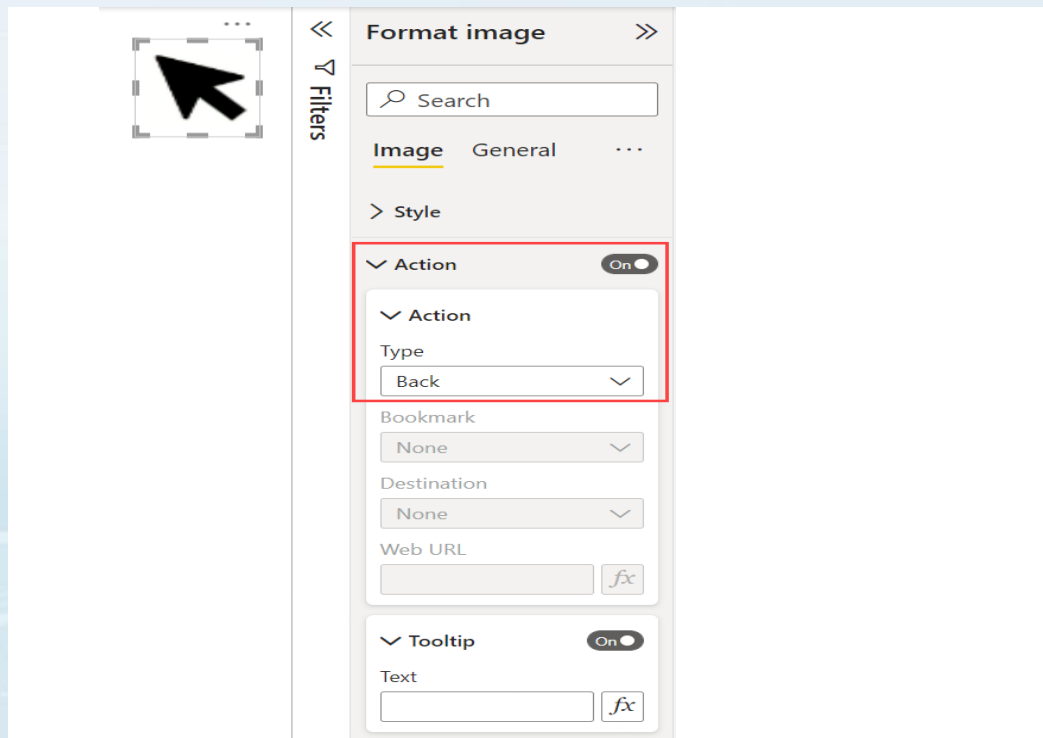

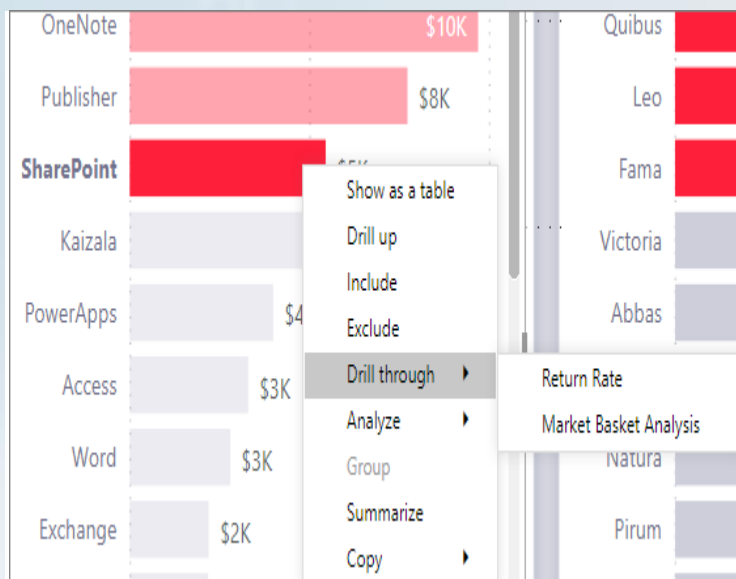**Use your own image for a back button**

Because the back button is an image, you can replace that image with any image you want. It still operates as a back button so that report consumers can go back to the original source page. You can only add your own images in Power BI Desktop, not in the Power BI service.

To use your own image for a back button, follow these steps:

1. In Power BI Desktop, on the **Insert** tab, select **Image**. Then, locate your image and place it on the drillthrough target page.
2. Select your new image on the drillthrough target page. Under the **Format image** pane, set the **Action** slider to **On**, and then set the **Type** to **Back**. Your image now functions as a back button.

Now users can right-click a data point on the other source pages in your report, and get a context menu that supports drillthrough to that target page.

When report readers choose to drill through, the target page is filtered to show information about the data point they right-clicked on. For example, suppose you right-click a data point about Contoso, a manufacturer, and select **Drill through**. The drillthrough page they go to is filtered to Contoso.
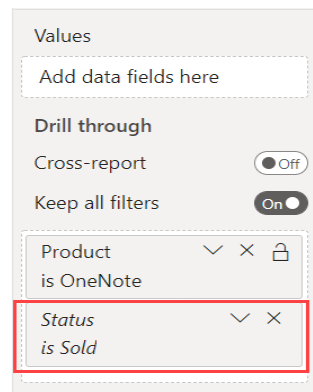
Pass all filters in drillthrough

You can set up drillthrough to pass all applied filters to the drillthrough target page. For example, you can select only a certain category of products and the visuals filtered to that category, and

then select drillthrough on a source. You might be interested in what the drillthrough target page would look like with all those filters applied.

To keep all applied filters, go to the destination page. In the **Drillthrough** section of the **Visualizations** pane, set **Keep all filters** to **On**.
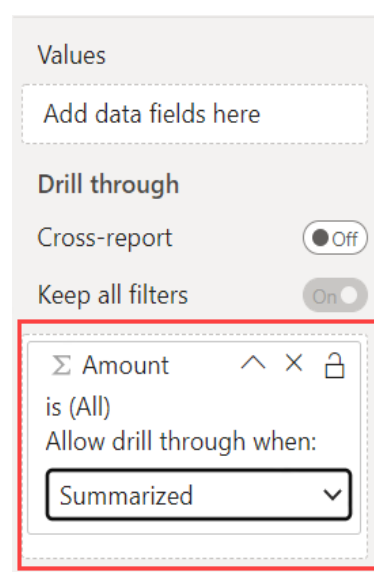
When you then drill through on a visual on a source page, the temporary filters that you applied to the source visual are also applied to the drillthrough target page. In the **Drillthrough** section of the **Visualization** pane, those transient filters are shown in italics.

Although you could do this with tooltips pages, that would be an odd experience because the tooltip wouldn't appear to be working properly. For this reason, we don't recommend doing so with tooltips.

Add a measure to drillthrough.

Besides passing all filters to the drillthrough target page, you can also add a measure or a summarized numeric column to the drillthrough area. Drag the drillthrough field to the **Drillthrough** card on the drillthrough target page to apply it.
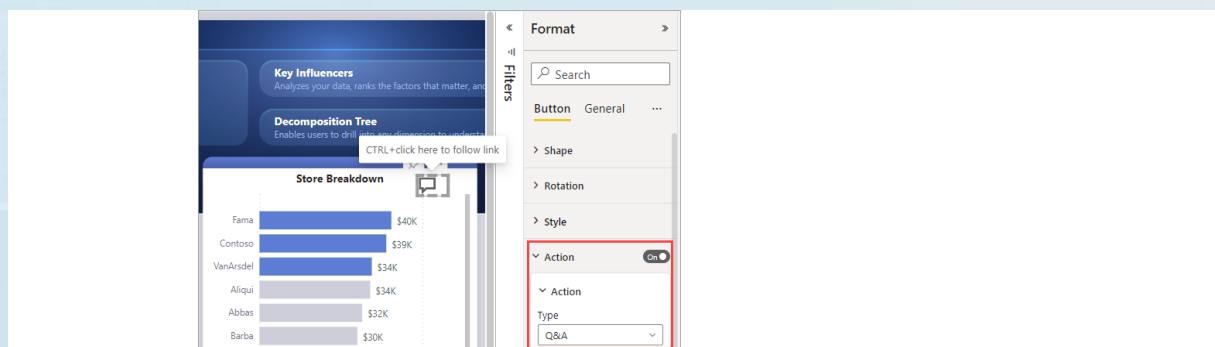

When you add a measure or summarized numeric column, you can drill through to the page when the field is used in the *Value* area of a visual.
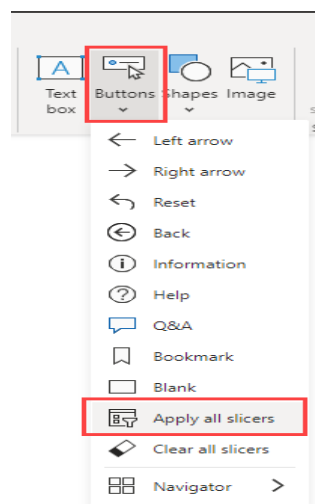
That's all there is to setting up drillthrough in your reports. It's a great way to get an expanded view of the entity information that you selected for your drillthrough filter.

Create buttons in Power BI reports

With *buttons* in Power BI, you can create reports that behave similarly to apps, and create an environment where users can hover, click, and further interact with Power BI content. This article explains how to add buttons to reports in Power BI Desktop and in the Power BI service. When you share your reports in the Power BI service, buttons provide an app-like experience.
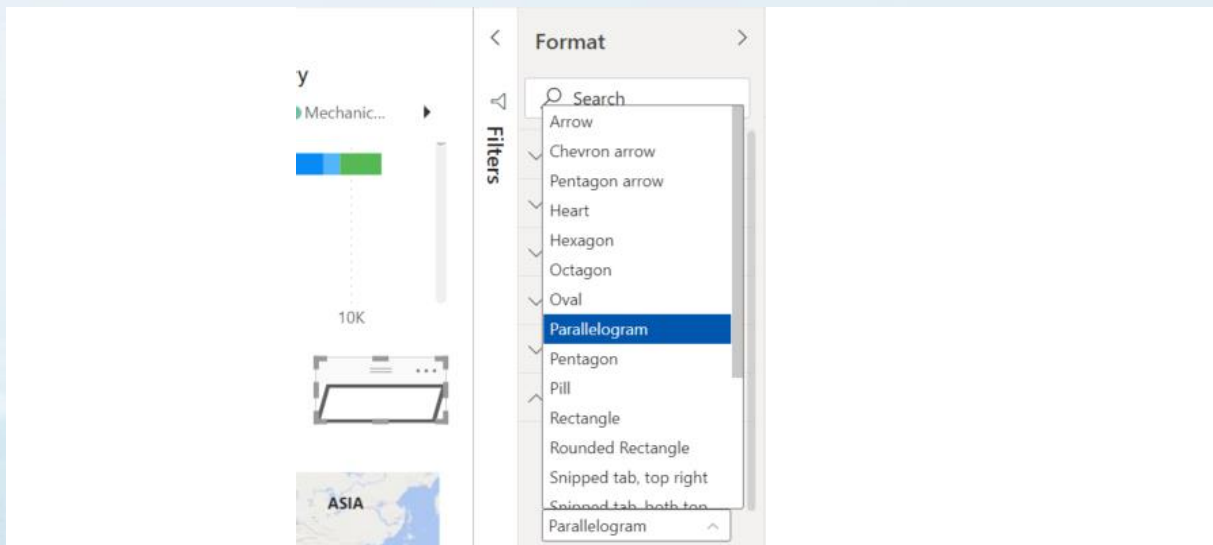

In Power BI Desktop, on the **Insert** ribbon, select **Buttons** to reveal a drop-down menu, where you can select the button you want from a collection of options.

Customize a button

Whether you create a button in Power BI Desktop or the Power BI service, the rest of the process is the same. When you select a button on the report canvas, the **Format** pane shows you the many ways you can customize the button to fit your requirements. For example, you can customize the shape of a button.
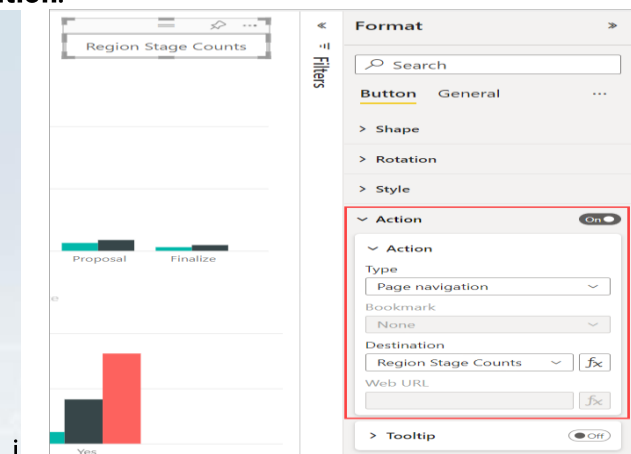
Create Page Navigation.

With the **Type** of an **Action** set to **Page navigation**, you can create a button that links to another page in your report, without creating a bookmark.
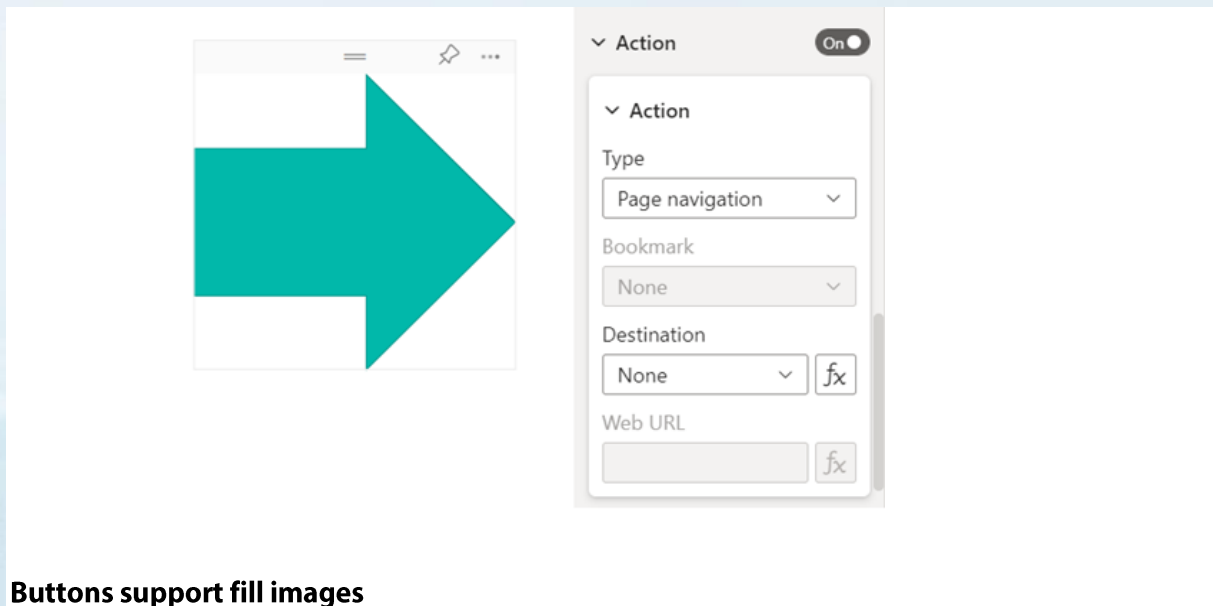
To set up a single-page navigation button:

1. Create a button with **Page navigation** as the **Type** of its **Action**, and then select a page for the **Destination**.

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2. Optionally, you can conditionally format the **Tooltip** under **Action** as you can do with other button types.
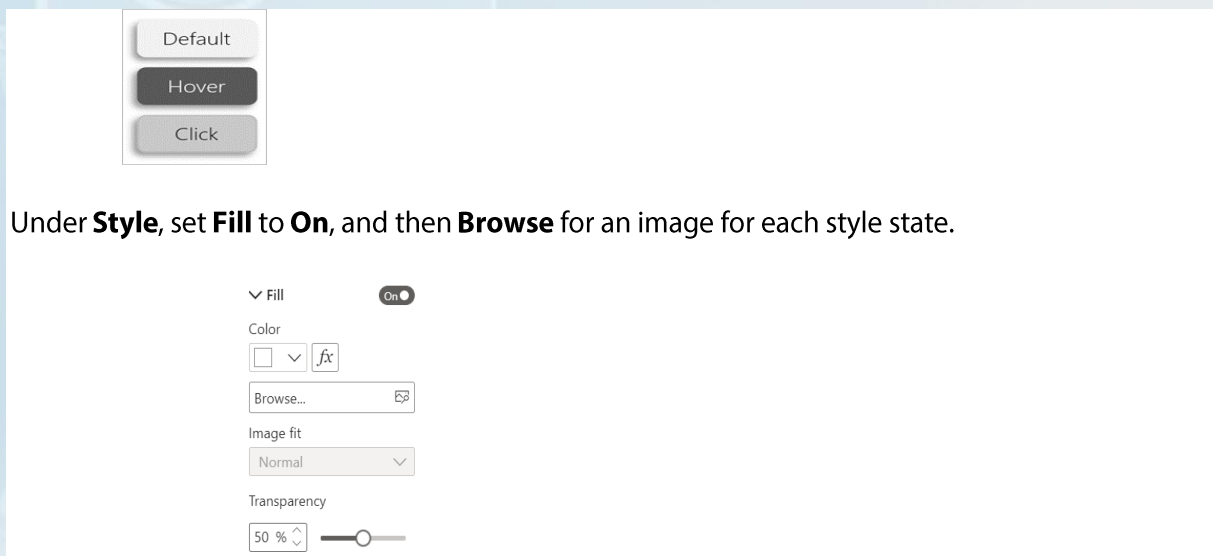
Shapes and images for navigation

Page navigation action is also supported for shapes and images, not just buttons. Here's an example using one of the built-in shapes:

Buttons support fill images

Power BI buttons support fill images. With fill images, you can customize the look and feel of your button, combined with the built-in button states: default, on hover, on press, and disabled (for drillthrough).

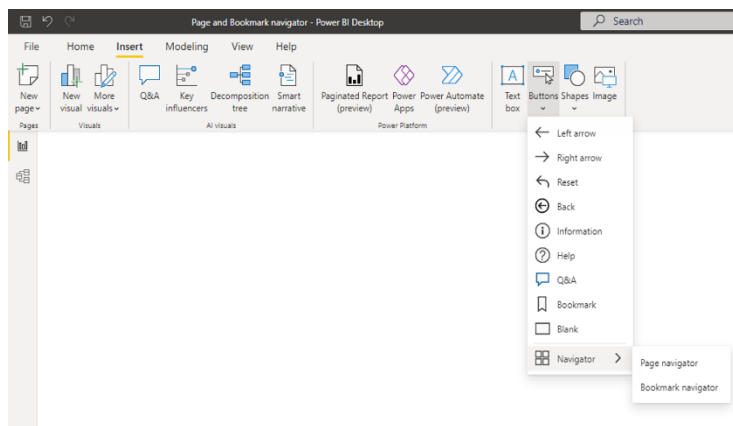Under **Style**, set **Fill** to **On**, and then **Browse** for an image for each style state.

Create page and bookmark navigators

Using Power BI's built-in navigators, you can quickly build page and bookmark navigation experiences with just a few clicks. These navigators should save hours of effort building and managing your page or bookmark navigation experiences.
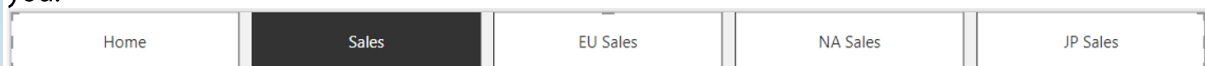
You can find this capability in Power BI Desktop or Power BI service.

On the **Insert** tab, select **Buttons** > **Navigator** > **Page navigator**.
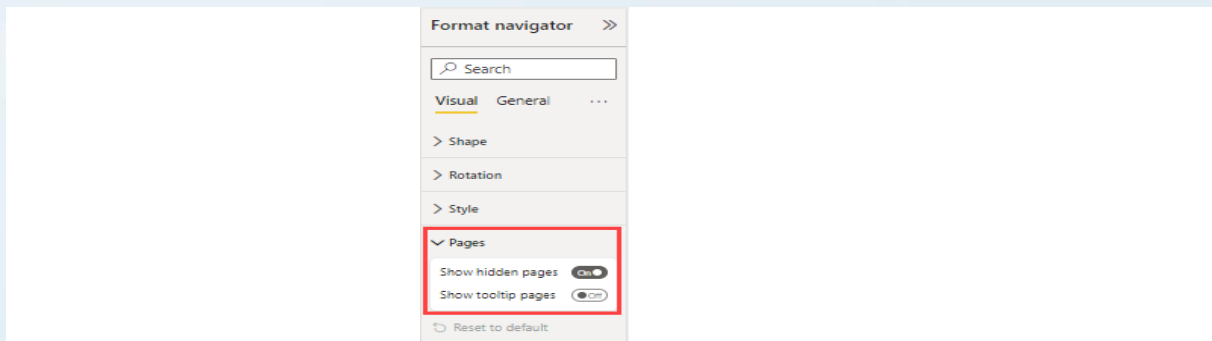

When you select the **Page navigator** option, Power BI automatically creates a page navigator for you:

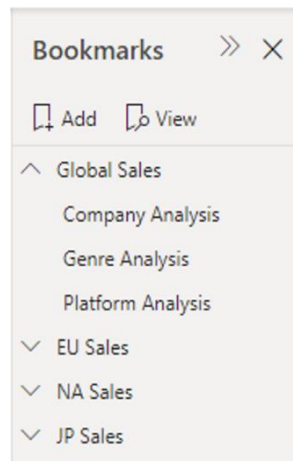The page navigator is automatically in sync with your report pages, meaning:

- The titles of the buttons match the page display names.
- The ordering of the buttons matches the order of your report pages.
- The selected button is the current page.
- The navigator updates automatically as you add or remove pages in your report.
- The titles of the buttons update automatically as you rename pages.

If you want to further customize the pages that show or hide in the page navigator, go to the **Format navigator** pane > **Pages** tab. There, you can **Show/hide hidden pages** or **Show/hide tooltip pages**:
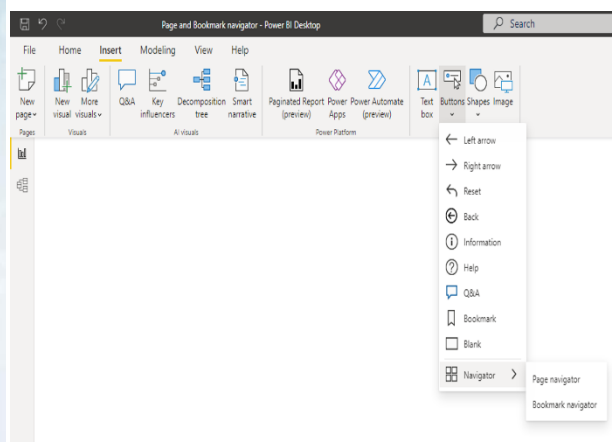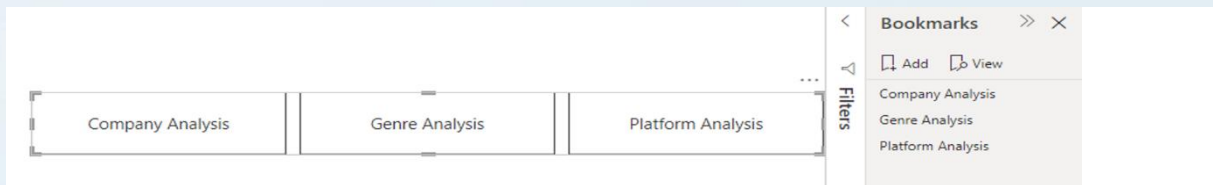
Bookmark navigator

Before you can create the bookmark navigator, you need to create the bookmarks. Additionally, create separate bookmark groups if you plan on creating different bookmark navigators within the same report.

On the **Insert** tab, select **Buttons** > **Navigator** > **Bookmark navigator**.

Power BI automatically creates a bookmark navigator for you:

The bookmark navigator is automatically in sync with your report bookmarks, meaning:

- Titles of the buttons match the bookmark display names.
- Ordering of the buttons matches the order of your report bookmarks.
- The selected button is the last selected bookmark.
- The navigator updates automatically as you add or remove bookmarks in your report.
- The titles of the buttons update automatically as you rename bookmarks.

If you want to further customize the bookmarks that show or hide in the bookmark navigator, go to the **Format navigator** pane > **Bookmarks** tab: