

Create dashboards in Power BI

1. Introduction to dashboards

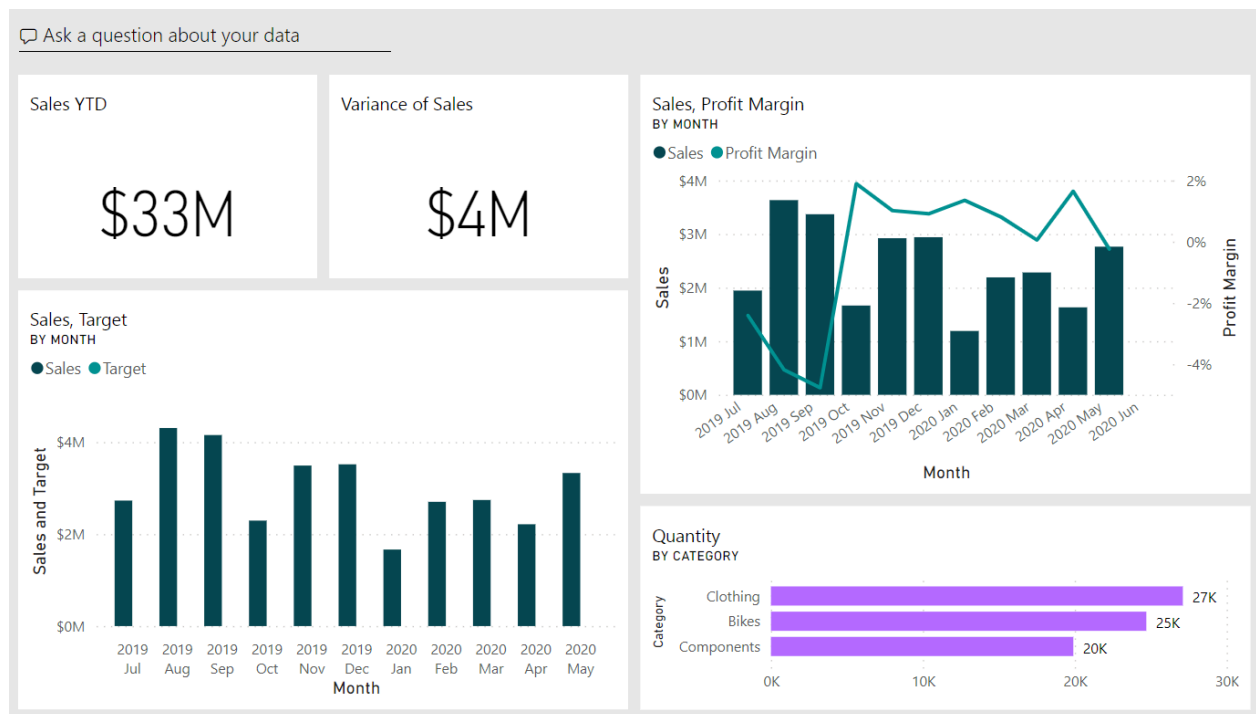
<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/1-introduction>

Introduction to dashboards

Completed

Microsoft Power BI dashboards are different than Power BI reports. Dashboards are made up of visuals from different reports and allow report consumers to create a single page of targeted data insights, with the option to explore more in a report.

Well-built dashboards capture the most important highlights of the story that you're trying to tell.



Dashboards vs. reports

The Power BI dashboard is similar to a dashboard in a car - you want to have the most important information for the consumer to see immediately. For additional insights, consumers can follow

through to the corresponding report.

Dashboards are often the next step after building your reports in Power BI Desktop. Consider the following differences when deciding how to create reports and dashboards:

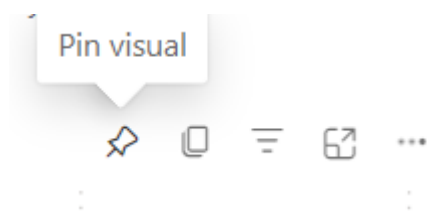
Feature	Dashboards	Reports
Purpose	Provides a high-level overview of key metrics	Offers detailed, multi-page data analysis
Where do you create it?	Power BI service	Power BI Desktop
Pages	Single page	Multiple pages
Interactivity	Static tiles	Highly interactive with features like drill-through, filtering, and highlighting
Data sources	Can connect to multiple data sources	Typically based on a single semantic model
Usage	Ideal for quick insights and monitoring	Suitable for in-depth analysis and exploration

Both dashboards and reports can be refreshed to show the latest data.

Get started with dashboards

Dashboards are created by *pinning* report visuals, and are then called *tiles* within reports. When you make changes to the visuals in the report, and then republish to Power BI Service, changes are reflected on the dashboard.

First log into the Power BI service and navigate to a workspace with reports. Open a report and in the visual header, select the **Pin Visual** icon. You can choose to pin this visual to a new or existing dashboard.





Pin to dashboard

Select an existing dashboard or create a new one.

Where would you like to pin to?

☒ Existing dashboard

☐ New dashboard

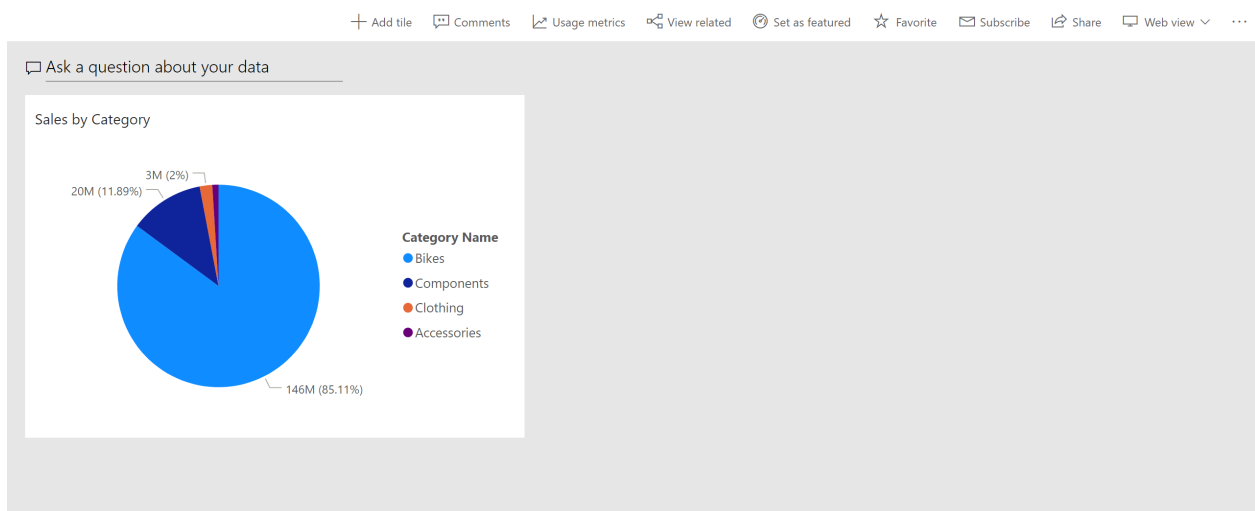
Select existing dashboard

Sales Analysis.pbix

Pin

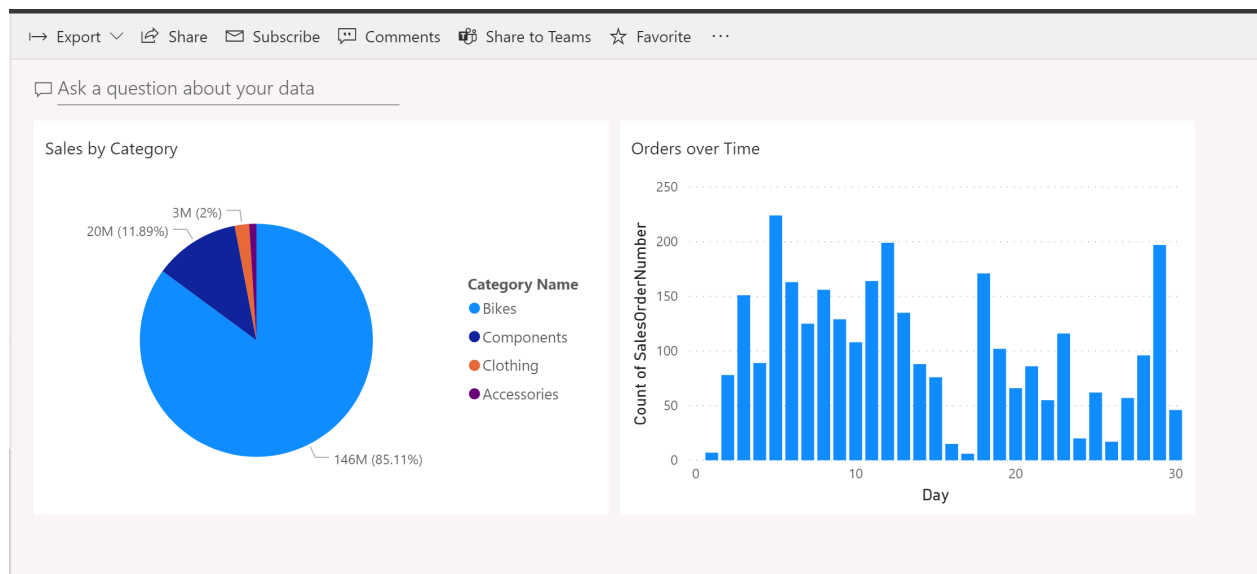
Cancel

After pinning your visuals, you can resize and move the visuals to suit your needs.



Pin a tile from a different report

One of biggest benefits of a dashboard is being able to pin a visual that is sourced from a different semantic model. In the following image, we show two separate tiles pinned from different reports.



Repeat this process until your dashboard has the data you want to show.

For more information, see [Introduction to dashboard tiles](#).

2. Configure data alerts

<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/2-data-alerts>

Configure data alerts

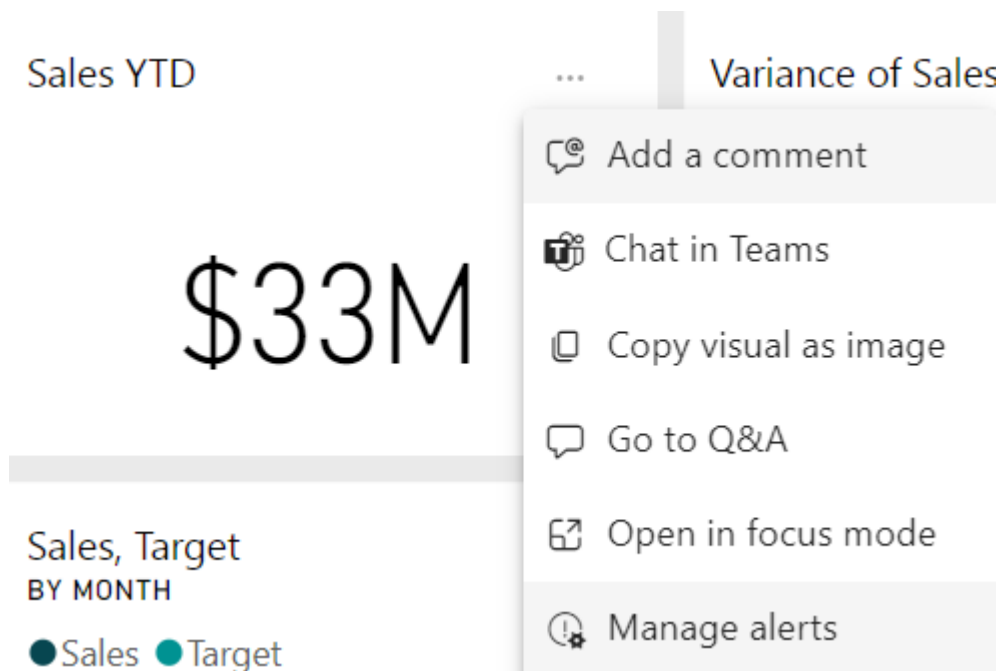
Completed

Configuring data alerts is a simple process to complete for a dashboard in Power BI. Data alerts can notify you or a user that a specific data point is above, below, or at a specific threshold that you can set.

Configure alerts

These alerts are features that are only available on Power BI service and they're available on such report elements such as KPI visuals, gauges, and cards.

After you have uploaded your reports to Power BI service and have pinned your chosen visuals to a dashboard, select the ellipsis (...) in the corner of the tile you want to set an alert for and then select **Manage Alerts**.



Select + **Add Alert Rule**, which will add a new alert. Ensure that the **Active** toggle switch is turned **On**, name the alert, and then set the condition.

Next, you can choose the threshold that you want to create the alert for, which includes options for **Above** or **Below** a specific threshold.

Finally, select how frequently you want alerts. These alerts are sent directly to your Notification Center in Power BI, and you can also configure emails.

Manage alerts

+ Add alert rule

^ Sales YTD



Active

☒ On

Alert title

Sales YTD

Set alerts rule for

Sales YTD

Condition

Above



Threshold

33139748.07

Maximum notification frequency

- ☒ At most every 24 hours
☐ At most once an hour

Alerts are only sent if your data changes.

By default, you'll receive notifications on the service in the notification center.

☒ Send me email, too

This feature is available to all consumers to configure as they so choose. You can also enable or disable the alert by using the toggle switch.

For more information, see [Data Alerts in Power BI service](#).

3. Explore data by asking questions

<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/3-explore-data>

Explore data by asking questions

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Power BI dashboards are about having a user-friendly experience. When users first interact with data, they often have additional questions and reach out to you. A few questions might be manageable to answer, but this isn't sustainable.

Power BI solves this problem with the Q&A visual. From the dashboard view, users can use the **Ask a question about your data** feature, which increases engagement between users and the dashboard.

Q&A feature

The Q&A feature is a tool within Power BI Desktop that allows you to ask natural-language questions about the data.

To locate the Q&A feature, go to your dashboard in Power BI service. Along the top ribbon is the **Ask a question about your data** search box. Some prompts are also available to help get you started.

Ask a question about your data

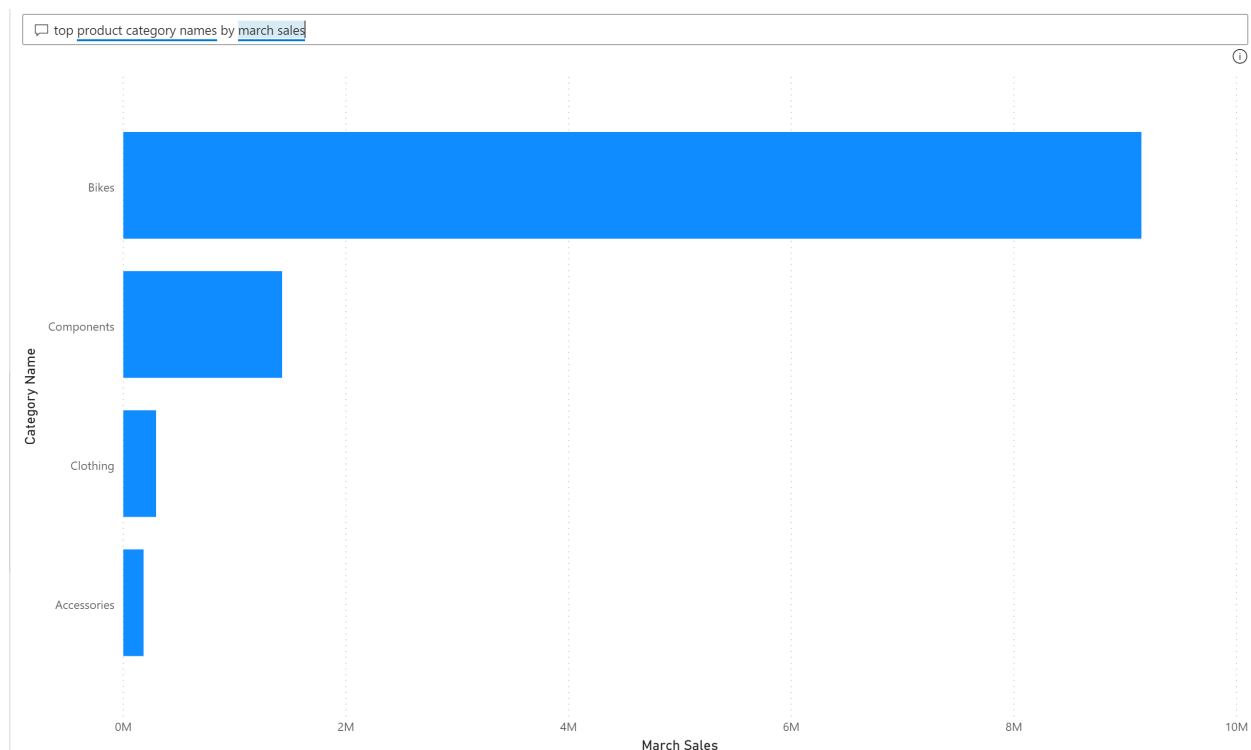
Try one of these to get started

- what is the sales by order date by product category name
- show me sales average per category name for the last year
- show me sales average per category name for the last week
- top colors by sale sales amount
- what is the sales by ship date by color
- top product category names by march sales

[Show all suggestions](#)

The Q&A visual consists of three main elements:

- **Question box:** Use natural language to ask questions about the data. Example: *What were the average sales amount by category?*
- **Pre-populated suggestion tiles:** Questions to help users consider how to phrase their questions. Example, *top product category names by march sales* tile results as a bar chart with category name and March sales.
- **Pin visual:** Pin the visual created with Q&A to a new or existing dashboard.



With the Q&A feature, users can interact directly with the visual to ask their data questions, which will increase their interactions with the visual and save time.

4. Review Quick insights

<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/4-quick-insights>

Review Quick insights

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The **Quick insights** feature in Power BI uses machine learning algorithms to go over your entire semantic model and produce insights (results) for you quickly. This feature is a great way to build dashboards when you don't know where to start. It also helps you find insights you might have missed when building your reports. From the insights that Power BI discovers, you can generate appealing, interactive visualizations.

Note

This feature is available in the Power BI service only. Also, this feature doesn't work with DirectQuery; it only works with data that is imported to Power BI.

Get quick insights on your semantic model

To get quick insights on your semantic model, open your Power BI service and workspace, locate your report, and select the ... > **Quick insights**.

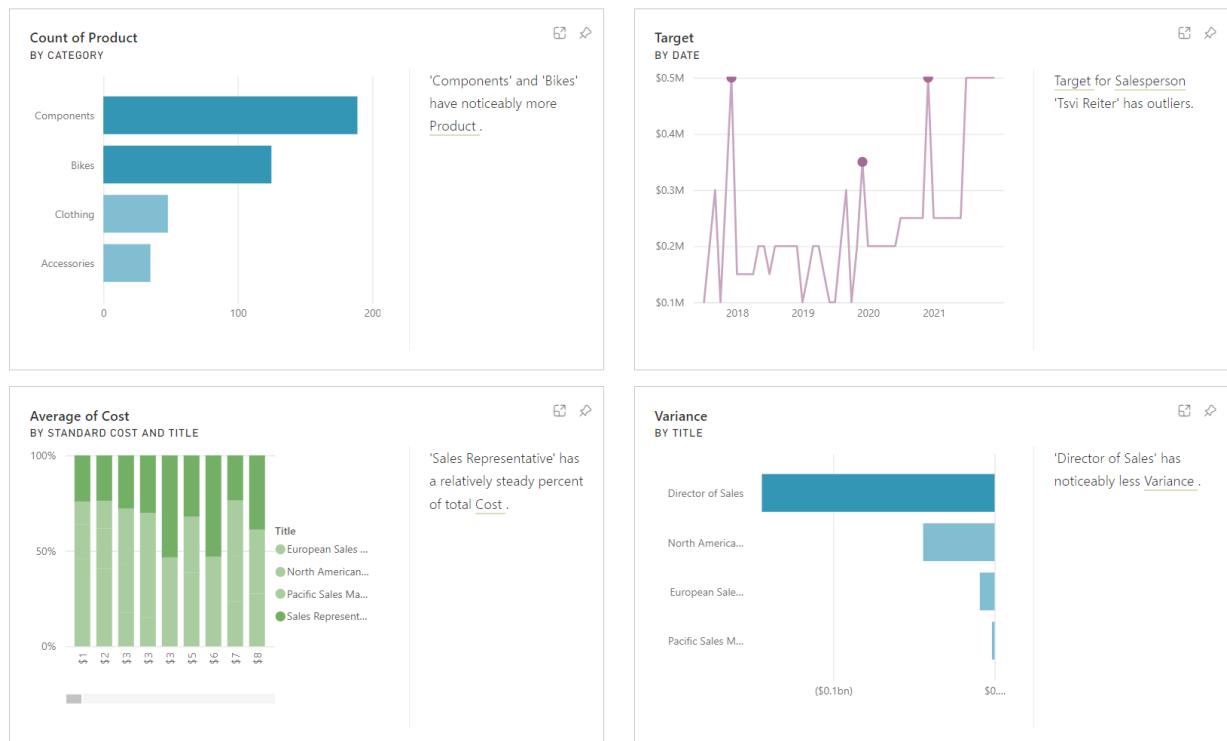
	Name		Type
	 Sales Analysis	 	...
	 Sales Analysis		Explore this data
	 Sales Analysis.pbix		Analyze in Excel
			Delete
			Quick insights

Power BI uses various algorithms to search for trends in your semantic model. This process might take a few seconds, but you receive a pop-up message when the insights are ready.

Select **View insights** to open the **Quick Insights** page for the selected semantic model, and then view the insights that Power BI has found for you. The **Quick Insights** page contains up to 40 separate insight cards, and each card has a chart or graph plus a short description.

Quick Insights for Sales Analysis

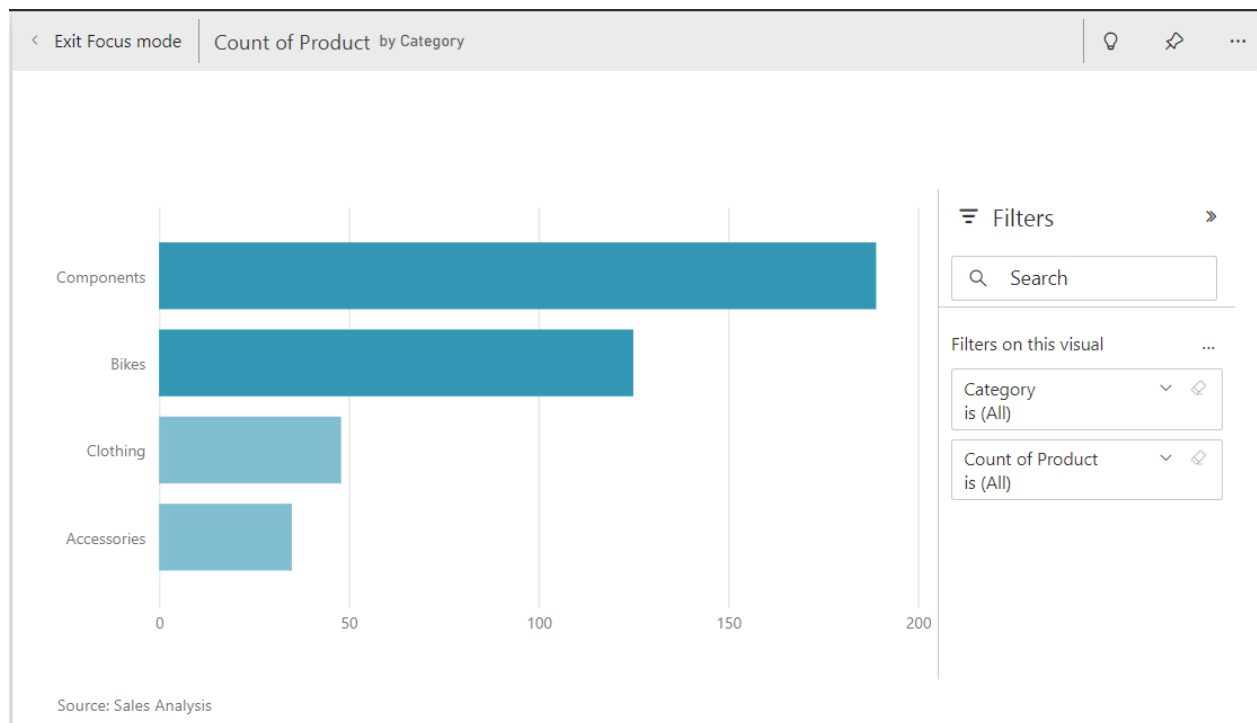
A subset of your data was analyzed and the following insights were found. [Learn more](#)



Interact with the quick insights results

If you see a compelling insight card, you can even pin it to your dashboard.

To take a closer look at a particular insight card on the **Quick Insights** page, select an insight card to open. The insight screen opens in **Focus** mode.



You can then perform the following actions:

- Filter the visualization by using the available options in the **Filters** panel.
- Pin the insight card to a dashboard by selecting **Pin visual**.
- Run insights on the card (scoped insights) by selecting **Get insights** in the upper-right corner. The scoped insights allow you to drill into your data.
- Return to the original insights canvas by selecting **Exit Focus mode** in the upper-left corner.

5. Add a dashboard theme

<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/5-dashboard-theme>

Add a dashboard theme

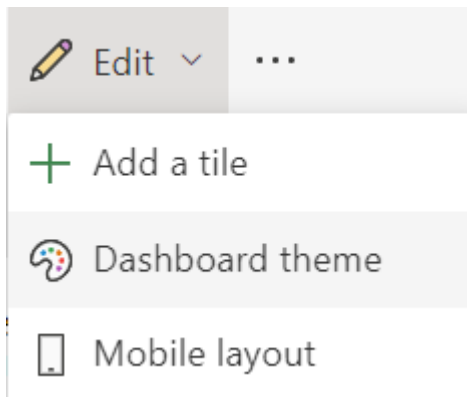
Completed

When building dashboards, you can create a cohesive picture by applying the same theme as in your reports. Or apply a specific theme to reports and dashboards so that all report elements or tiles are uniform.

This consideration is important when you're building multiple dashboards. Power BI provides options to apply a theme directly to a dashboard as well as all visuals of a report.

Themes in Power BI

Various themes are available for use in Power BI service. Go to a dashboard, select the edit dropdown arrow, and then select **Dashboard theme**.

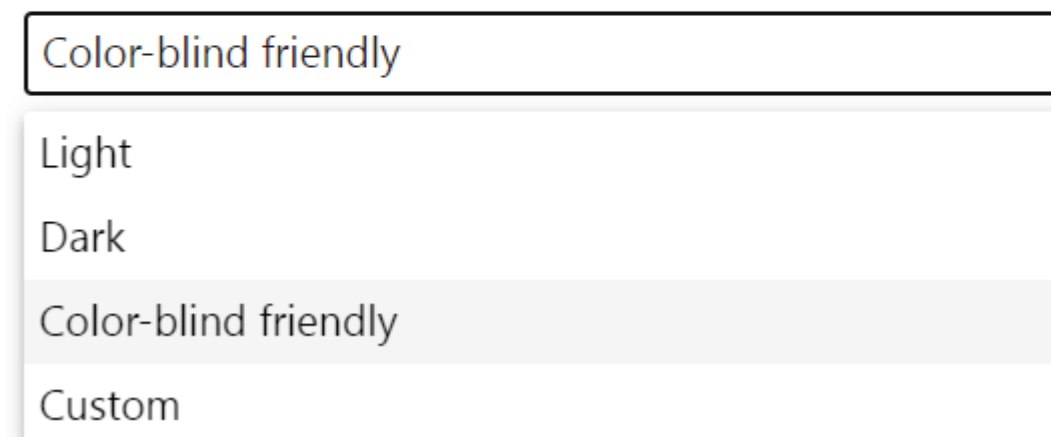


This selection will open a window, where you can choose from various themes, including **Light** (the default theme), **Dark**, **Color-blind friendly**, and **Custom**, where you can create your own theme. You can also upload your own JSON theme or download the current theme.

Dashboard theme

🕒 Sales Analysis

⬆️ Upload JSON theme ⬇️ Download JSON theme



For instance, if you select **Custom**, you can add your own background image, or you can change the background color, tile color, the opacity, or even the font color, as shown in the following figure.

Custom

▼

Background Image

Image URL

Background color

▼

Tile background

▼

Tile font color

▼

Tile opacity

Now, you can customize your report to cater specifically to your needs.

6. Pin a live report page to a dashboard

<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/6-pin-live-report>

Pin a live report page to a dashboard

Completed

Power BI allows you to pin live report pages to dashboards, ensuring that your visuals reflect real-time changes. The iterative process of building reports and dashboards as business requirements evolve becomes easier with this feature.

Pin a live page

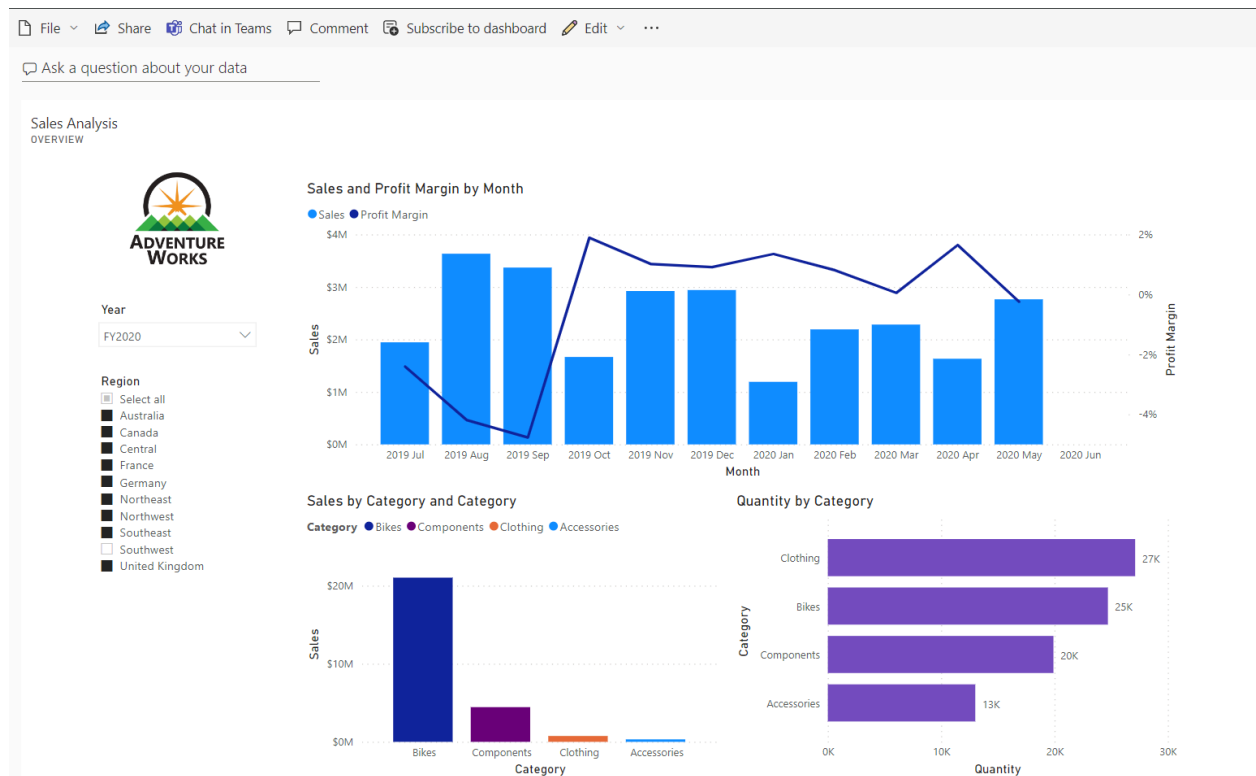
The **Pin a live page** feature reflects real-time changes, ensuring that your reports always stay up-to-date.

You can also pin entire report pages to a dashboard. These visuals are *live*, meaning that any changes you make on the report are immediately reflected on the selected dashboard.

Pinning a report page is a simple way to pin all visuals at once. All slicers and filters still work and that the visuals have the same data as in the report. The visuals appear as a page, so there are no reformatting options.

Any changes that you make to the underlying report automatically show on the dashboard when the page is refreshed.

To pin an entire page, select the ellipsis (...) on the navigation bar of the report and then select **Pin to a dashboard > (Select dashboard) > Pin live**.



Tip

Dashboards are intended to be a collection from various sources, not just as a "launching pad" for reports. We recommend that you pin at the tile level first and foremost, and if needed, the entire report page can also be pinned. Seeing an entire report page in a dashboard tile can be difficult.

For more information, see [Pin an entire report page](#).

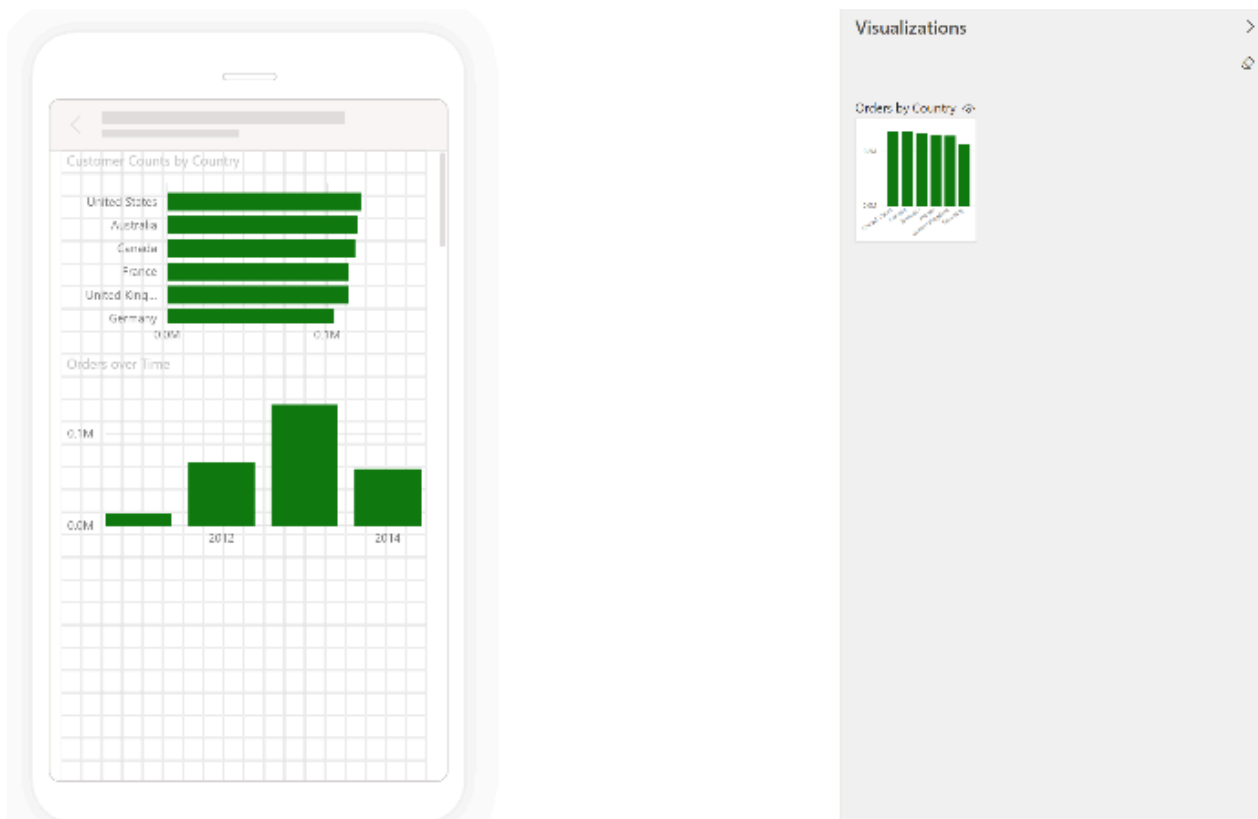
7. Set mobile view

Set mobile view

Completed

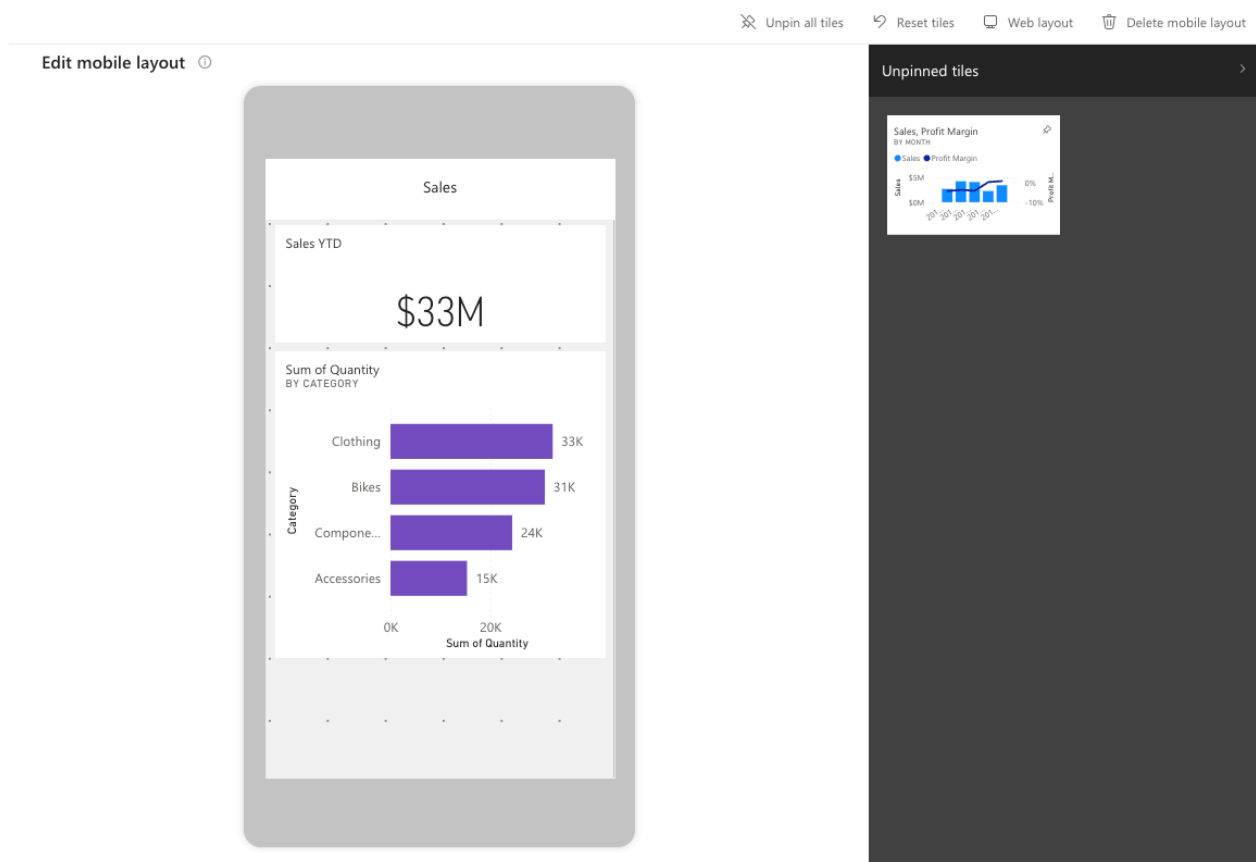
Power BI reports are built in Power BI Desktop and then deployed to Power BI service, where they can be viewed and shared. However, if you're building dashboards for your organization and need reports and dashboards viewable on mobile devices, Power BI offers a mobile layout configuration to meet your needs.

To navigate to mobile view in Power BI Desktop, select **View** on the ribbon and then select **Mobile Layout**, which will redirect you to the mobile view, as shown in the following figure.



In the mobile view in Power BI Desktop, you're able to accomplish several tasks. The mobile view shows you how it will look to users in the Power BI Mobile app. You can add visuals, resize them, and change the formatting. Use the grid view to orient your visuals with more ease and overlay visuals on top of each other. This feature can be useful if you want to insert a visual on top of an image.

Alternatively, you can also optimize your dashboards for mobile view in Power BI service. To see a dashboard in mobile view, select the Edit drop down arrow on the home ribbon and select **Mobile layout**. Then you can choose which tiles that you want to see on the mobile view.



You can also resize and reorient the tiles and visuals in whichever order you want. When you're satisfied with the phone dashboard layout, switch back to web view by selecting **Web layout** in the top menu.

For more information, see [Optimize a dashboard for mobile phones](#).

8. Exercise - Create dashboards in Power BI

<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/10-lab>

Exercise - Create dashboards in Power BI

Completed

Access your environment

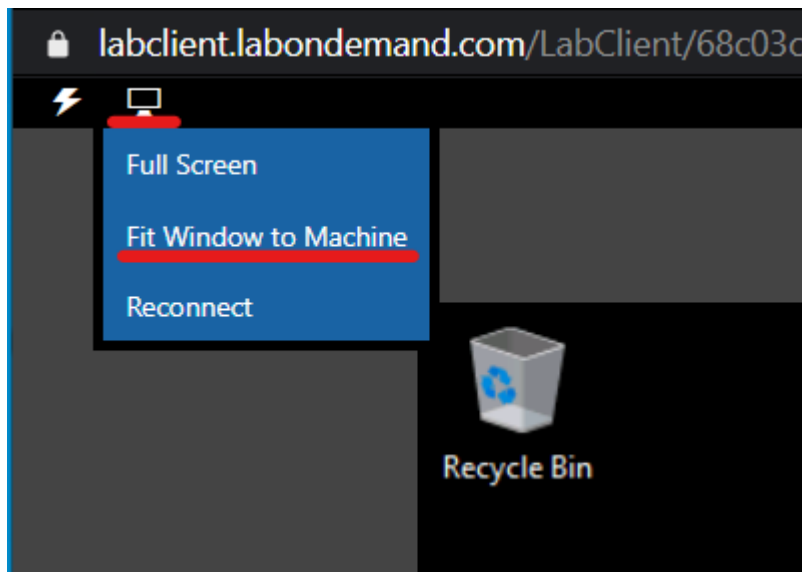
Before you start this lab (unless you are continuing from a previous lab), select **Launch lab** above.

You are automatically logged in to your lab environment as data-ai\student.

You can now begin your work on this lab.

Tip

To dock the lab environment so that it fills the window, select the PC icon at the top and then select **Fit Window to Machine**.



The estimated time to complete the exercise is 30 minutes.

Note

This exercise uses the Power BI service. You'll need to use your organizational account to log in. If you don't have one or can't use yours, you can create a free [Microsoft 365 Developer account](#) to complete the exercise.

Alternatively, you can use these [setup instructions](#) to create your own lab environment, then follow these [exercise instructions](#).

Tip

A virtual machine containing the client tools you need is provided, along with the exercise instructions. Use the button above to launch the virtual machine.

A limited number of concurrent sessions are available - if the hosted environment is unavailable, try again later.

9. Check your knowledge

Check your knowledge

Completed

10. Summary

<https://learn.microsoft.com/en-us/training/modules/create-dashboards-power-bi/12-summary>

Summary

Completed

In this module, you have learned about dashboards: what they are, why you need them, and what tiles and pinning are in relation to dashboards. You have also learned how to accomplish several tasks around dashboards, such as:

- Setting mobile view.
- Adding a theme to the visuals in your dashboard.
- Configuring data classification.
- Pinning a live report page to a dashboard.

With this new knowledge, consider how you can transform the data that you have to create a story. Dashboards can help you visualize that story.

For more information, see [Introduction to dashboards](#).