Created by Spring 2025 CIS 475 Capstone Students

Table of Contents

Dataset Refresh Tutorial

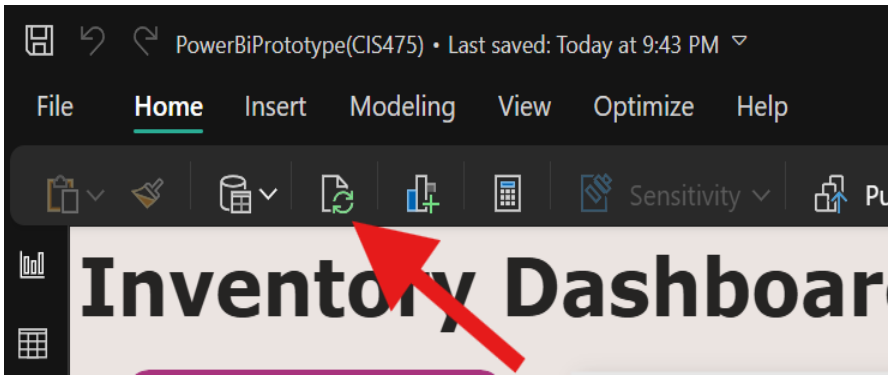
This guide shows how to manually refresh a dataset in Power BI Desktop to ensure that reports reflect the latest available data.

Step 1: Open Your Power BI File

- Launch Power BI Desktop.
- Open the .pbix file connected to your data source. (Example: SalesReport.pbix)

Step 2: Locate and click Refresh

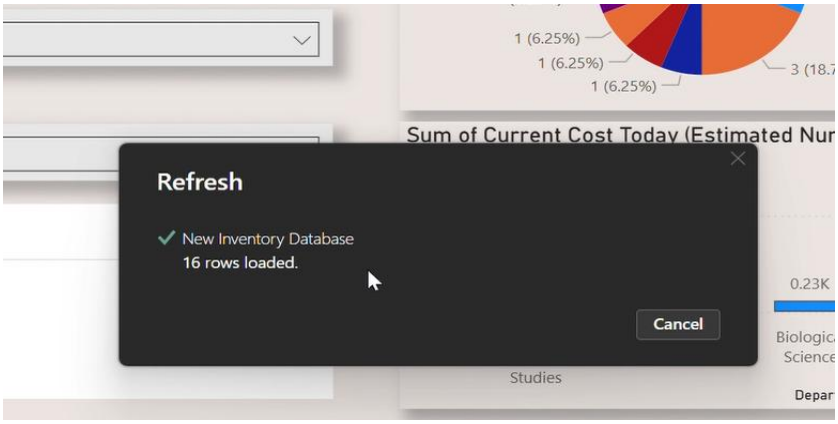
- Navigate to the **Home** tab at the top.
- Locate the **Refresh** button:



  It looks like two circular arrows.
- Hovering over it will show a tooltip labeled **Refresh this dataset**.

Step 3: Refresh the Dataset

- Click **Refresh**.
- Power BI will connect to the underlying data source (e.g., Excel, SQL Server) and retrieve updated records.



Note:

Refresh time may vary based on the size of the dataset and the speed of the connection. Approximately your dataset should refresh in the matter of 5 minutes.

Verifying Data Accuracy

After refreshing, visually scan the dashboard to ensure the updates have taken effect. New entries submitted via Microsoft Forms should now appear in the table at the bottom of the report. You can also use the equipment search bar or dropdown slicers for Building, Department, or Room Number to confirm that recent responses are now available.

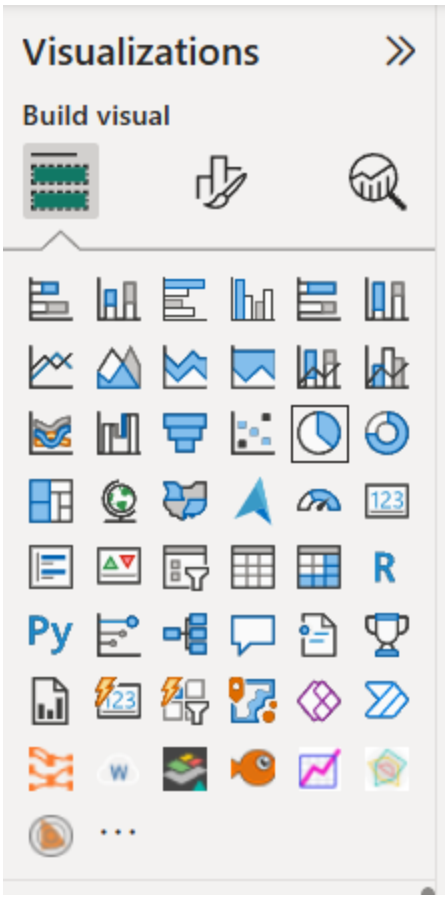
The pie chart and bar chart should also reflect any new departments, updated counts, or changes in current cost estimates. If visuals appear unchanged or outdated, confirm that the Excel file has been updated and saved before refreshing again.

Adding or Removing Charts

Adding a New Visual to the Dashboard

To add a custom visual such as a bar chart, pie chart, or table to your dashboard, follow the steps below:

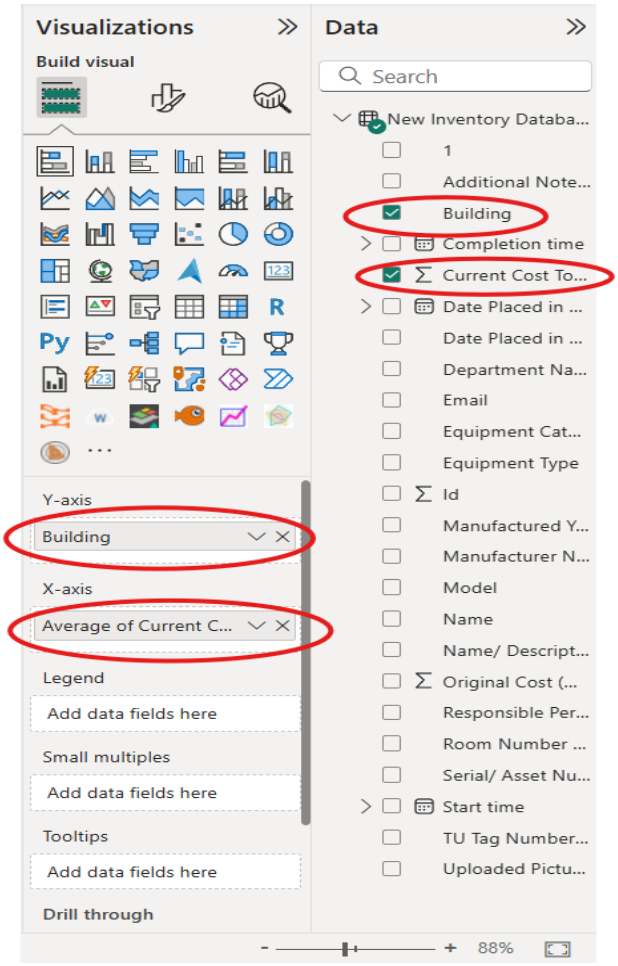
1. **Select an Empty Area of the Report Canvas**
   Click anywhere on a blank portion of the report page to prepare the canvas for a new visual. Ensure no existing visual is selected, so the new visual is created independently.
2. **Choose a Visual Type from the Visualizations Pane**
   On the right-hand side of the Power BI interface, locate the **Visualizations** pane.
   Click on the icon representing the chart type you want to insert (e.g., clustered bar chart, stacked column chart, pie chart, or matrix table).
   Once clicked, a blank visual frame will appear on the canvas.



3. **Resize and Position the Visual**
   Drag the corners of the visual to resize it as needed and move it to your preferred location on the page layout for clarity and balance.
4. **Assign Data Fields from the Fields Pane**
5. Locate the **Fields** pane, usually found below or beside the Visualizations pane.
   Expand your dataset (e.g., the Excel file loaded into Power BI), and identify the relevant columns you wish to visualize.
6. Drag and drop the appropriate fields into the correct placeholders (e.g., *Axis*, *Values*, *Legend*) inside the Visualizations pane.

For example:

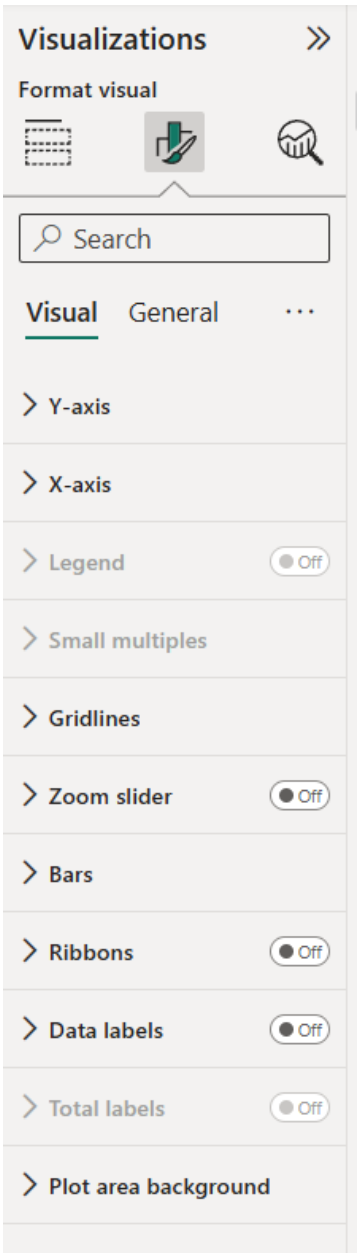
   a. To create a **bar chart of average equipment cost by building**, drag Building into the **Axis** field and Current Cost into the **Values** field.
   b. You may then click the dropdown on the Values field and select "Average" as the aggregation method.



7. Format the Visual

To improve readability or align with your organization's branding, click on the **Format** (paint roller) icon in the Visualizations pane.

From here, you can adjust axis titles, data labels, color themes, font sizes, and more.



Removing an Existing Visual from the Report

If a chart or visual is no longer needed:

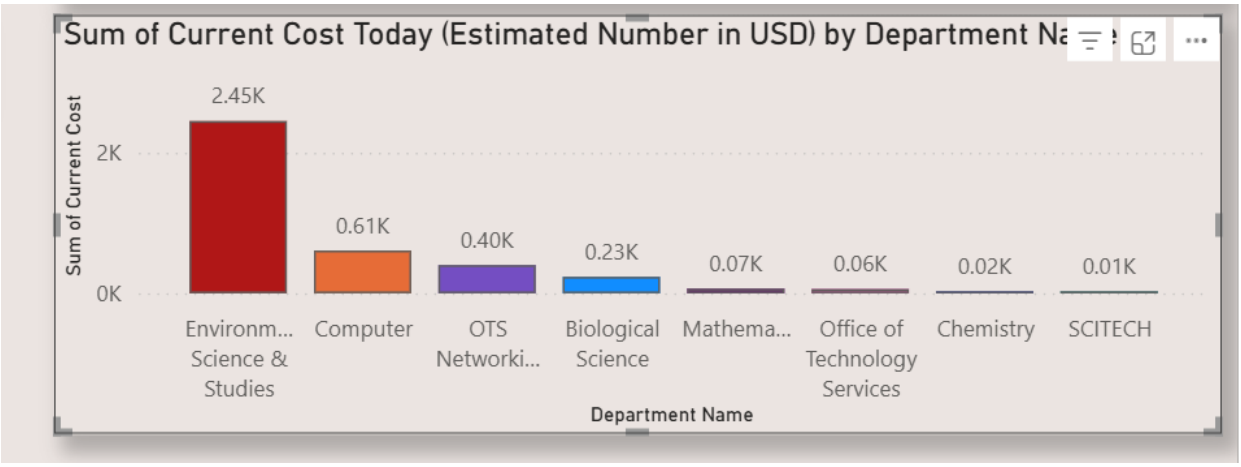
1. **Click once on the chart to select it.**
    - A border will appear around the visual when it is active.
2. **Press the Delete key on your keyboard**
    - You can also right-click and select **Delete** from the context menu.
    - To undo a deletion or accidental change, click **Undo** in the top toolbar, or use the keyboard shortcut **Ctrl + Z** (Cmd + Z on Mac).

Changing Data Color Attributes

If you would like to change the colors of the fields on your graph, such as the color of a bar chart, follow the steps below:

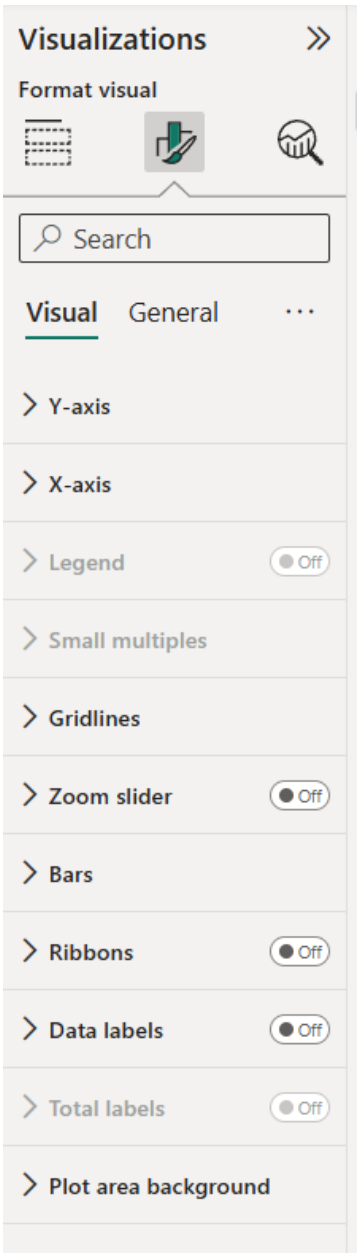
Step 1: Click on the chart you would like to edit

- The chart you would like to edit should have a black outline once it is clicked such as the following image:



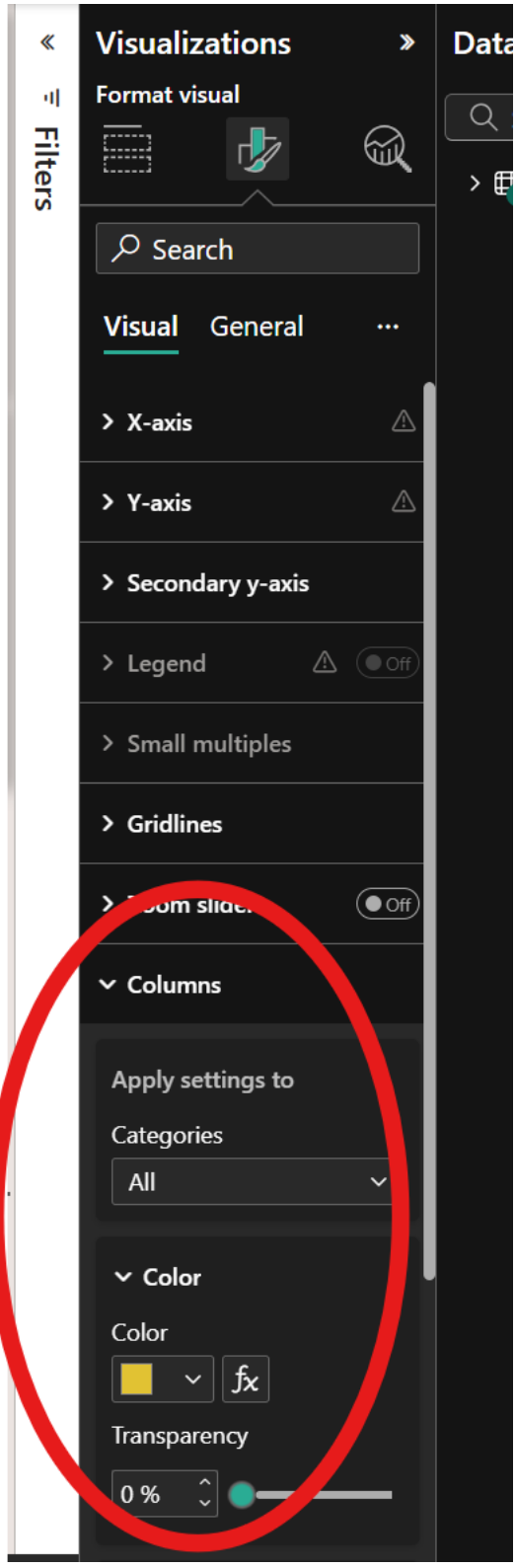
Step 2: Open the visualization pane to the right of the dashboard

- Make sure to select the “Format visual” header at the top as shown below:



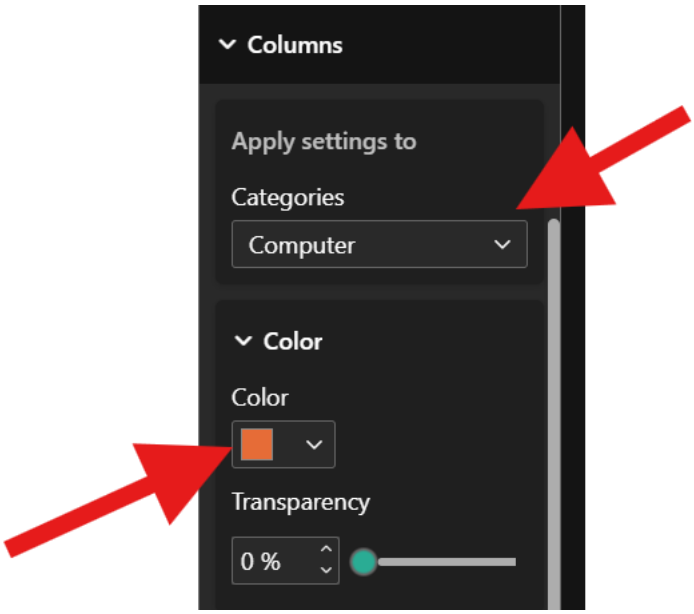
Step 3: In the visualization pane, scroll down to the columns section

- Depending on the graph, the name of this field may be different. For example, when editing a pie chart, this visual field may be titled as “Slices”



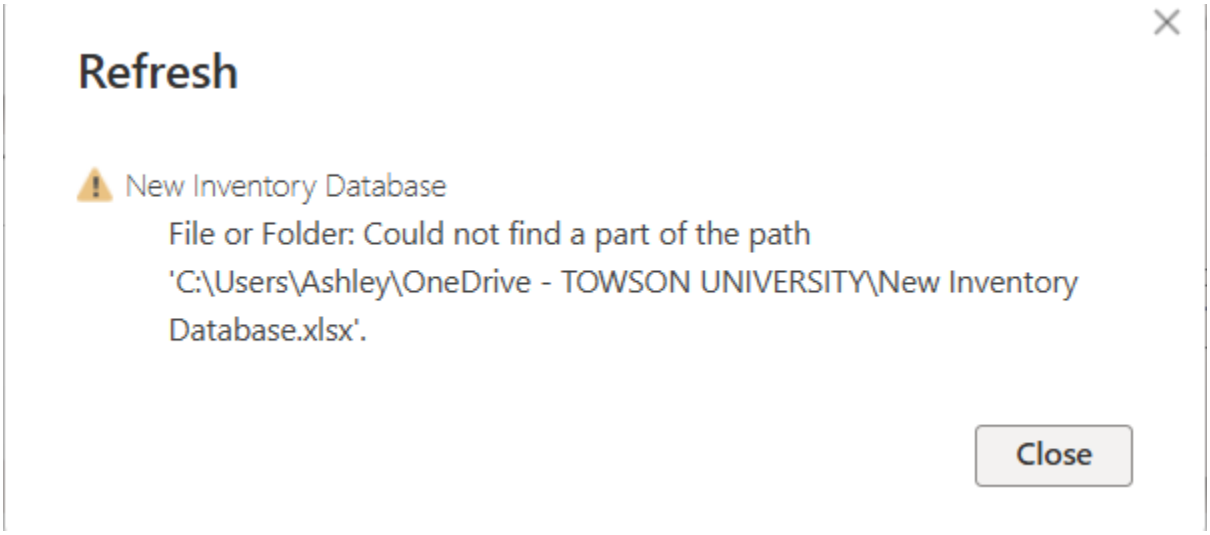
Step 4: Under "Apply settings to", choose which category you would like to apply the color to from the dropdown menu

- If you keep the categories to “All” the color will affect each category on the graph



Changing the File Location or Source

Power BI relies on a fixed path to access your connected Excel file. If that file is moved, renamed, or stored in a different location (e.g., a new folder or OneDrive directory), Power BI will not be able to locate it during refresh. This typically results in a connection error.



To resolve this:

1. Open your Power BI file in Power BI Desktop.
2. Go to the **Home** tab and click **Transform Data** to open the Power Query Editor.
3. In the Power Query window, click **Data Source Settings** (found under the File menu or in the toolbar).
4. Select the Excel data source from the list, then click **Change Source**.
5. Browse to the updated file location and select the correct Excel file.
6. Once selected, click **Close & Apply** to save the changes and reload your data into the dashboard.

For smoother operation, we recommend keeping your Excel file in a consistent location and avoiding renaming it unless absolutely necessary. If you are working in a shared environment, consider storing the file on OneDrive or SharePoint to reduce path-related errors.

Troubleshooting Tips

- If data does not refresh as expected, ensure the Excel file is closed before clicking Refresh in Power BI.
- If a chart does not display new data, double-check that the correct fields are mapped.

- If the dashboard appears unresponsive or incomplete, close Power BI and reopen the file.

Save a Backup Copy

Maintaining a backup of your Power BI file is essential for safeguarding your work and preserving historical versions of your dashboard. Creating backups before making changes allows you to restore a previous version if something goes wrong or if you need to revisit earlier data configurations.

To save a backup:

1. **Click on the File Menu**
   With your Power BI file open, go to the top-left corner of the screen and click **File**. From the dropdown menu, select **Save As**.
2. **Name the Backup File Clearly**
   Use a clear and consistent naming convention that includes the dashboard name and date—for example:
   InventoryDashboard_May2025.pbix
   or
   Inventory_Backup_2025_05_11.pbix
   This helps distinguish it from the current working file and allows you to track when the backup was created.
3. **Choose a Secure Save Location**
   Select a location where your backup will be safe and accessible. Recommended options include:
   a. A dedicated folder on your local computer labeled “Power BI Backups”
   b. A cloud storage platform like OneDrive or SharePoint (preferred if collaborating)
   c. An external drive or network folder (if your organization uses shared servers)
4. **Confirm the Save**
   Once saved, your current Power BI session continues working from the new backup file. If you're only backing up for safekeeping and not planning to make edits immediately, close the file to avoid accidental changes.
5. **Establish a Versioning Habit**
   For long-term projects or dashboards updated frequently (e.g., monthly inventory updates), we recommend creating a new backup each time before refreshing or modifying visuals. This creates a version history that can be referenced in audits or when troubleshooting.