

## Hands-on Lab: Getting Started with Google Looker Studio

**Estimated time needed:** 60 minutes

Looker Studio, from Google, is a data discovery platform available to analyze and perform data-driven functionalities. Looker is known for its data exploration, visualization, and reporting capabilities. It empowers users to seamlessly connect with diverse data sources, enabling them to build interactive dashboards and generate insightful reports, thereby facilitating a comprehensive understanding of their data.

In this lab, you will learn how to sign up for Looker Studio and learn general navigation around the Looker user interface (UI). Next, you will learn how to upload external data files to Looker through connectors and then learn how to start a new dashboard with templates. Lastly, you will learn how to create a simple dashboard.

### Dataset Used in this Lab

The dataset used in this lab is published by IBM. You can download the dataset file directly from here: [CustomerLoyaltyProgram.csv](#).

### Objectives

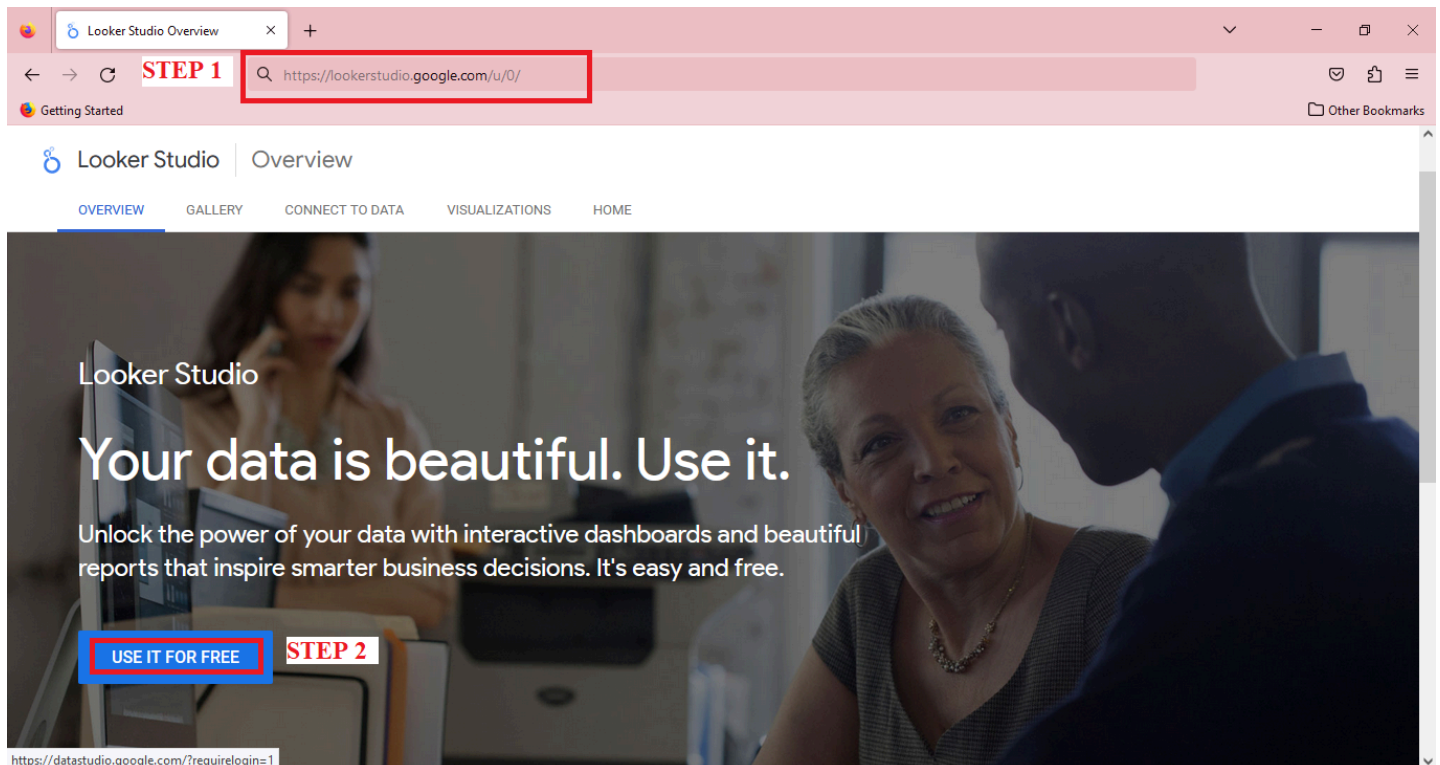
After completing this lab, you will be able to:

- Sign up to use Looker Studio
- Navigate around the Looker Studio user interface
- Create a data source using a connector
- Access report themes and layouts
- Create a simple dashboard report


### Exercise 1: Sign up for Looker Studio

In this exercise, you will learn how to sign up for Google's Looker Studio


1. Go To [Looker Studio](#)



2. Click **USE IT FOR FREE**.
3. A new window will open. If you already have a Google account, enter your credentials and click **Next** as shown below (number 1 and 2). Or click on **Create account** (number 3) and follow the steps.




**Sign in**  
to continue to Looker Studio

1 


Email or phone |

[Forgot email?](#)


Not your computer? Use a private browsing window to sign in. [Learn more](#)

3 


Create account


2 

Next


 Looker Studio


Search Looker Studio


?
⚙️



 Create


Recent
Reports
Data sources
Explorer


 Recent


 Shared with me

 Owned by me


 Trash

 Templates


Start with a Template
Template Gallery 




Blank Report  
Looker Studio













Tutorial Report  
Looker Studio



Acme Marketing  
Google Analytics



Search Console Report  
Search Console

Name	Owned by anyone 	Last opened by me 	↓ Location
 Untitled Report	P P	12:55 PM	 Owned by me
 Untitled Report	P P	Aug 31, 2023	 Owned by me
 Untitled Report	P P	Aug 31, 2023	 Owned by me
 Untitled Report	P P	Aug 30, 2023	 Owned by me

## Exercise 2: Navigate around the Looker Studio User Interface

In this exercise, you will understand Looker Studio UI components which you'll use further to create visuals and dashboards.

The goal of this exercise is to introduce you to the primary components and functionalities within Looker Studio.

On the home page of Looker Studio, you can conveniently create and access all your essential assets, including reports, data sources, and explorations.

The screenshot shows the Looker Studio homepage. At the top left is the Looker Studio logo. Next to it is a search bar labeled 'Search Looker Studio' with a magnifying glass icon and a red box around it, containing the number 5. On the far right are icons for help, settings, and a user profile. Below the header, on the left, is a 'Create' button with a plus icon and a red box around it, containing the number 1. To its right are tabs for 'Recent', 'Reports', 'Data sources', and 'Explorer', with a red box around the 'Reports' tab containing the number 2. Below the 'Create' button is a 'Recent' section with filters for 'Shared with me', 'Owned by me', and 'Trash'. To the right of this is a 'Start with a Template' section with a 'Template Gallery' dropdown menu (red box with number 6) and four template cards: 'Blank Report Looker Studio' (red box with number 3), 'Tutorial Report Looker Studio' (red box with number 7), 'Acme Marketing Google Analytics', and 'Search Console Report Search Console'. Below the templates is a table of recent assets, with a red box around the table header containing the number 4.

Name	Owned by anyone	Last opened by me	Location
Report_Car_Sales		Aug 30, 2023	Owned by me
COVID_19_Dashboard_practice		Aug 30, 2023	Owned by me
BU COVID-19 Report		Aug 29, 2023	Shared with me

Let's understand the major components available on the homepage.

1. From here you can create a new asset such as a Report, a Data source or an Explorer.
2. This is where you access your recent Reports, Data sources, and Explorers.
3. With the Report tab selected, this is how you can start to create a blank report.
4. This lists any recently worked on assets. You can click the ellipsis button (...) next to an asset to perform actions on it, such as sharing, renaming, or removing it.

This screenshot shows the same Looker Studio homepage as before, but with a context menu open over the 'Report\_Car\_Sales' asset in the table. The menu has three options: 'Share', 'Rename', and 'Remove'. A red box highlights the ellipsis button (...) next to the 'Report\_Car\_Sales' row in the table.

Name	Owned by anyone	Last opened by me	Location
Report_Car_Sales	P P	Aug 30, 2023	Owned by me
COVID_19_Dashboard_practice	P P	Aug 30, 2023	Owned by me

5. Here you can search and find your Looker Studio assets quickly and the result will appear in the list at section 4.
6. You can choose a template from the Template Gallery to start creating an asset from.
7. Here you can take a tutorial on Looker Studio.

## Exercise 3: Create a Data Source and Use Report Editor

### Task 1: Create a data source

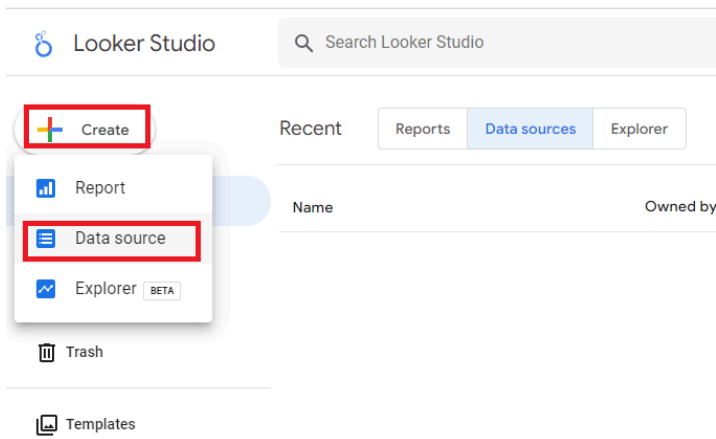
The first thing you need to start creating a report is to acquire some data.

To select an existing data source you would click the **Data sources** tab and your existing data sources will be listed.

The screenshot shows the 'Data sources' page in Looker Studio. At the top left is the Looker Studio logo. Next to it is a search bar labeled 'Search Looker Studio'. On the left side, there is a 'Create' button with a plus icon and a red box around it, containing the number 2. To its right are tabs for 'Recent', 'Reports', 'Data sources', and 'Explorer', with a red box around the 'Data sources' tab containing the number 1. Below the 'Create' button is a 'Recent' section with filters for 'Shared with me', 'Owned by me', and 'Trash'. Below this is a large grey button with a list icon and the text 'Create a Data Source. Use the Create button to add one.'.

However, for this lab, you will create a new data source.

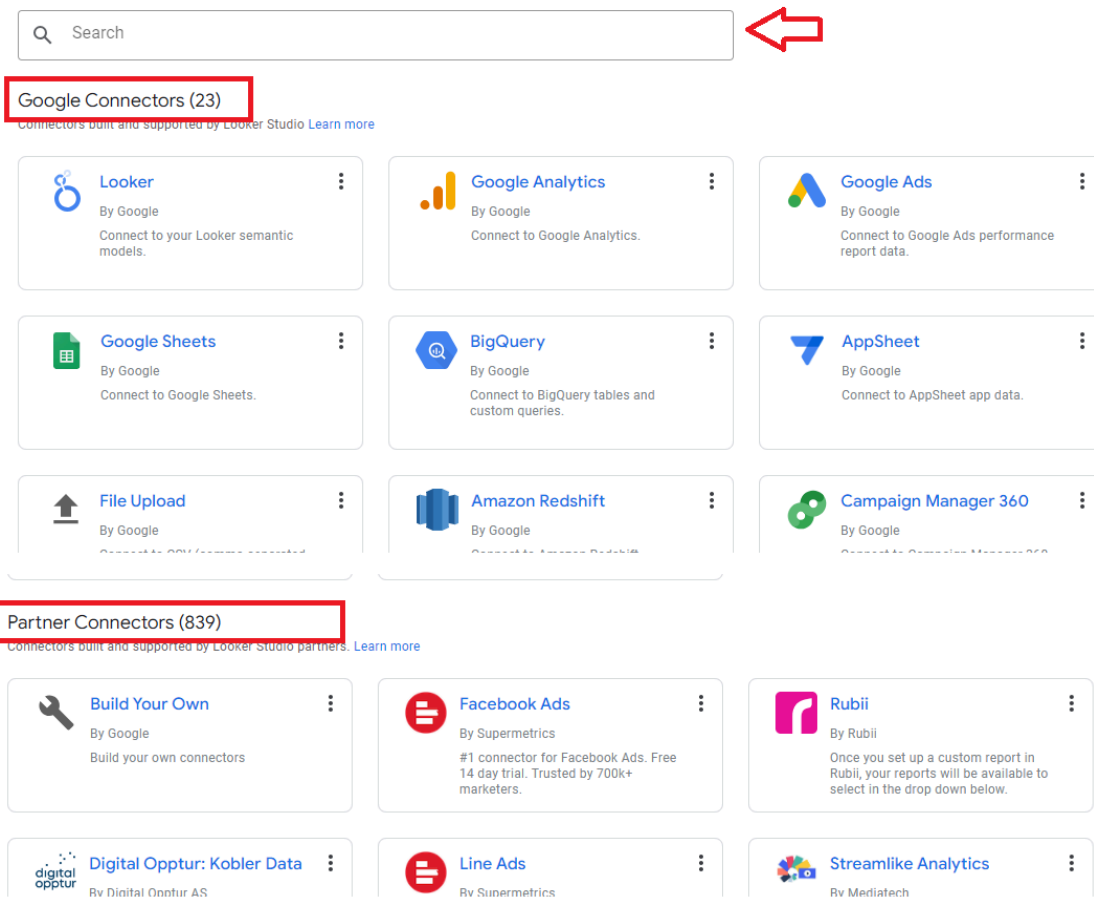
1. In the top left corner, click **Create**, then select **Data source**.



## Crea

The new window that opens displays a lot of options for connecting to your data; these are called *Connectors*. A connector links Looker Studio to your data. Connecting to your data creates a data source within Looker Studio. Looker Studio provides a variety of connectors to connect to different kinds of data to create reports.

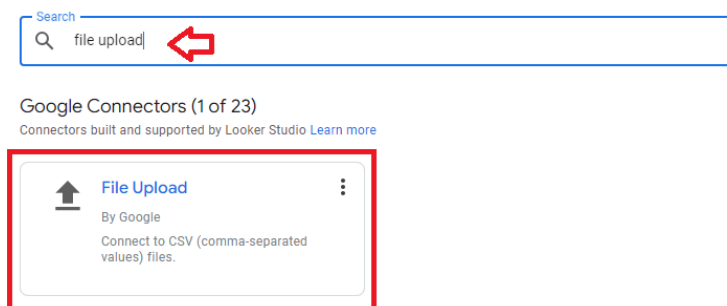
You can use the search field to look for the relevant data connector.



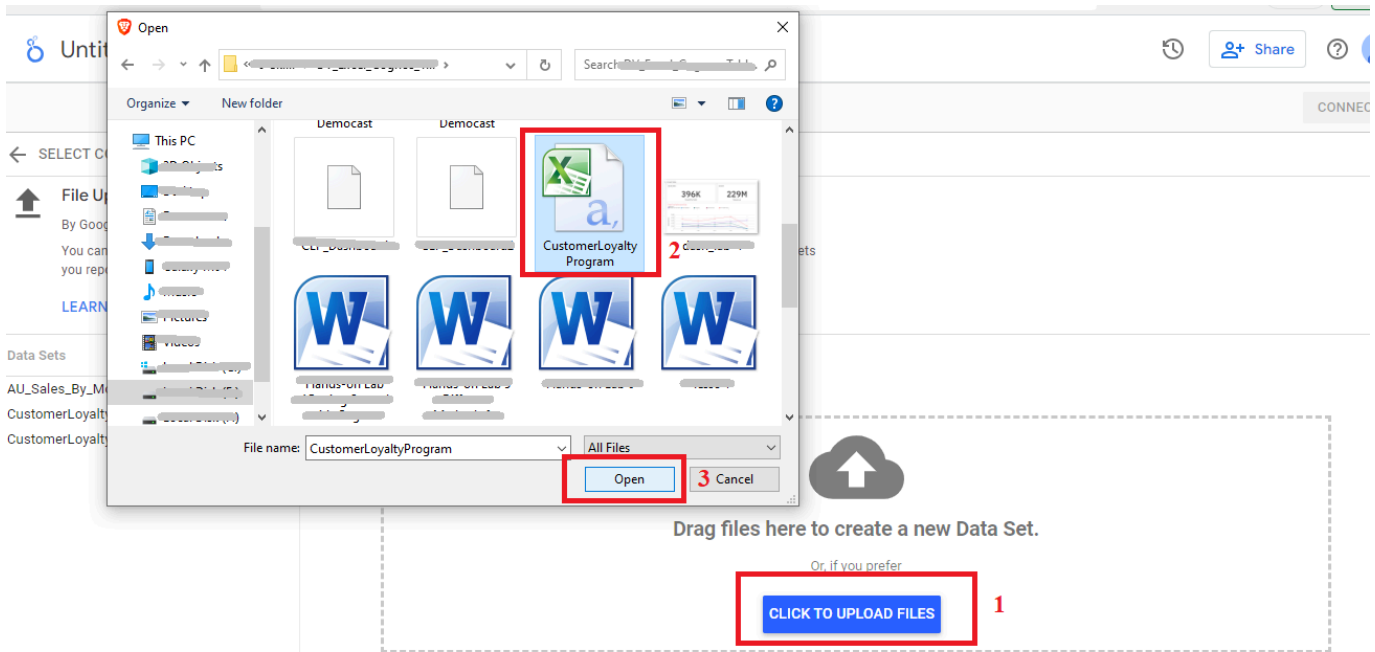
For this lab, you will work on [CustomerLoyaltyProgram.csv](#), which you need to download to your computer first.

You will use the **File Upload** connector to upload the data to Looker Studio to create the data source.

2. In the **Search** box, type *file upload*, then click on the **File Upload** connector.



3. Click the **CLICK TO UPLOAD FILES** button, select the *CustomerLoyaltyProgram.csv* file and click **Open**.



4. Once the data is uploaded, click **CONNECT**.

**CONNECT**

**SELECT CONNECTOR**

**File Upload**  
By Google

You can bring data into Looker Studio from almost any source by uploading CSV (comma-separated values) files. File upload lets you report on data not supported by a specific connector.

[LEARN MORE](#) [REPORT AN ISSUE](#)

**Data Sets**

- CustomerLoyaltyProgram.csv
- AU\_Sales\_By\_Model.xlsx
- CustomerLoyaltyProgram.csv
- CustomerLoyaltyProgram.csv

**CustomerLoyaltyProgram.csv**

TOTAL FILE SIZE	NUMBER OF FILES	CREATION DATE	LAST MODIFIED DATE
17 MB (18% of 100MB used)	1	9/17/23 4:58 PM	9/17/23 4:58 PM

[VIEW FILES IN CLOUD](#)

**ADD FILES** Files must contain the same schema. [Learn More](#)

File name	Uploaded at	Size	Status
CustomerLoyaltyProgram.csv	9/17/23 4:58 PM	17 MB	● Uploaded

Here you can see the contents of the uploaded data source. On this page you can verify or modify the data type of each data attribute, modify the default aggregation, include the description for fields, and add new fields and parameters as well.

5. To start creating the report, click **CREATE REPORT**.

**CustomerLoyaltyProgram.csv**

Scope: [Reusable](#) Data credentials: [P P](#) Data freshness: [12 hours](#) Community visualizations access: [On](#) Field [editing in reports: On](#) **CREATE REPORT** **EXPLORE**

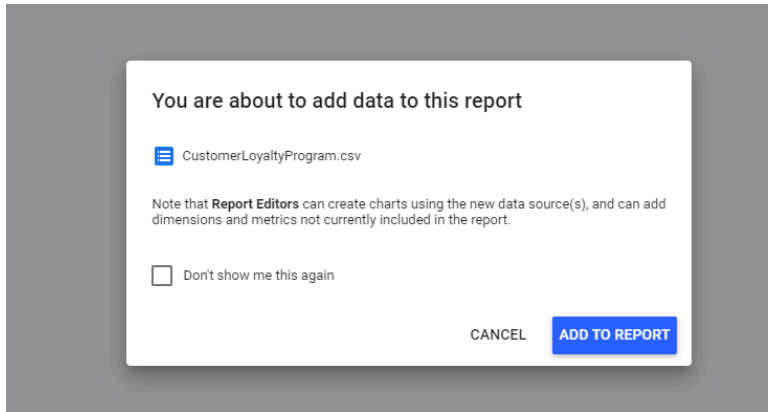
**EDIT CONNECTION** | **FILTER BY EMAIL**

**4** **ADD A FIELD** **5** **ADD A PARAMETER**

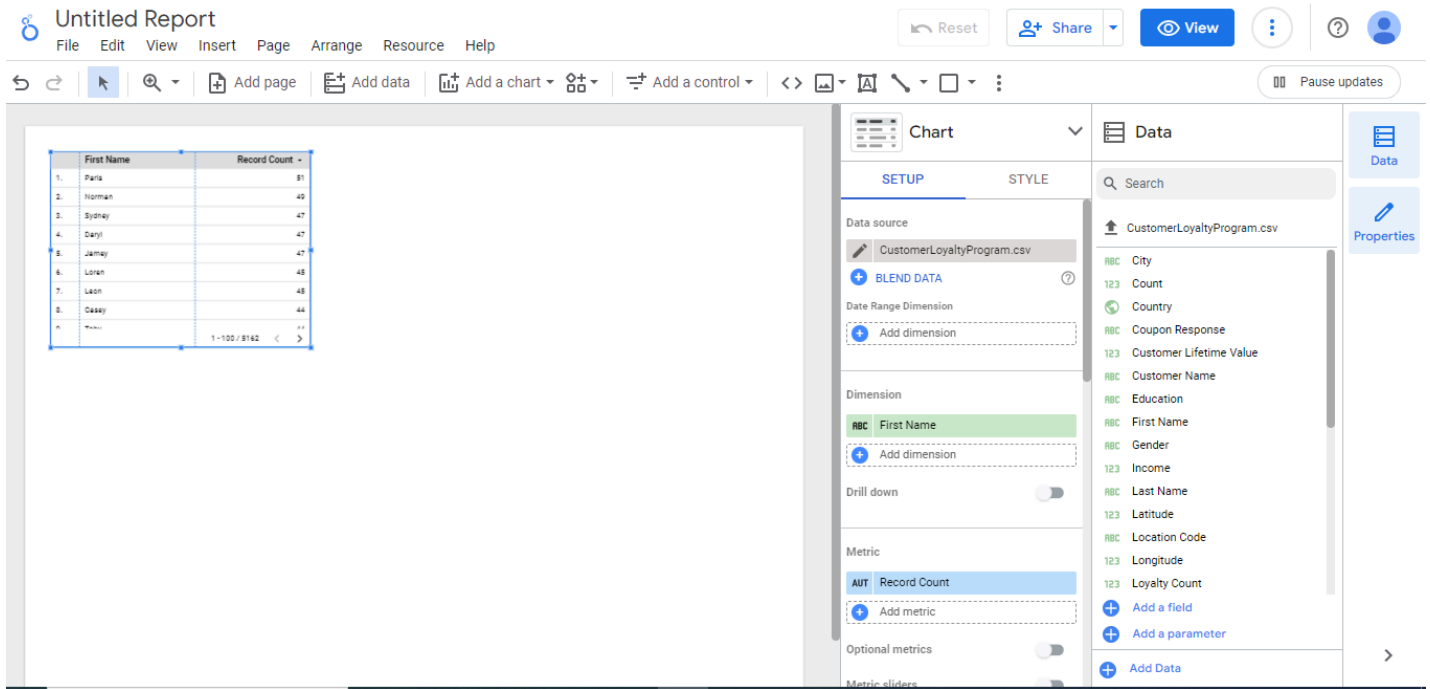
Field	Type	Default Aggregation	Description
City	ABC Text	None	
Count	123 Number	Sum	
Country	Country	None	
Coupon Response	ABC Text	None	
Customer Lifetime Value	123 Number	Sum	
Customer Name	ABC Text	None	
Education	ABC Text	None	
First Name	ABC Text	None	
Gender	ABC Text	None	
Income	123 Number	Sum	
Last Name	ABC Text	None	
Latitude	123 Number	Sum	

**1.1**

6. In the pop-up dialog box, click **ADD TO REPORT**.

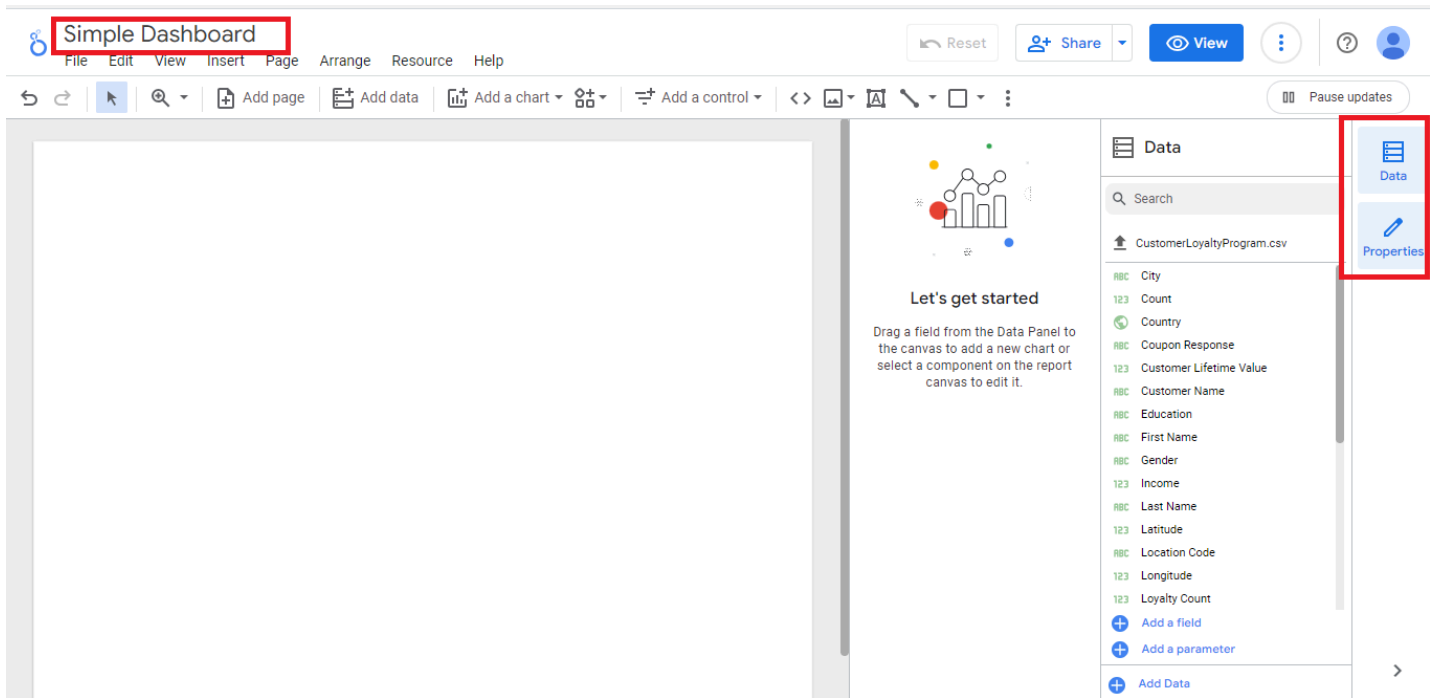


The **Report Editor** tool will open.



By default, the summary table will appear as per the data source.

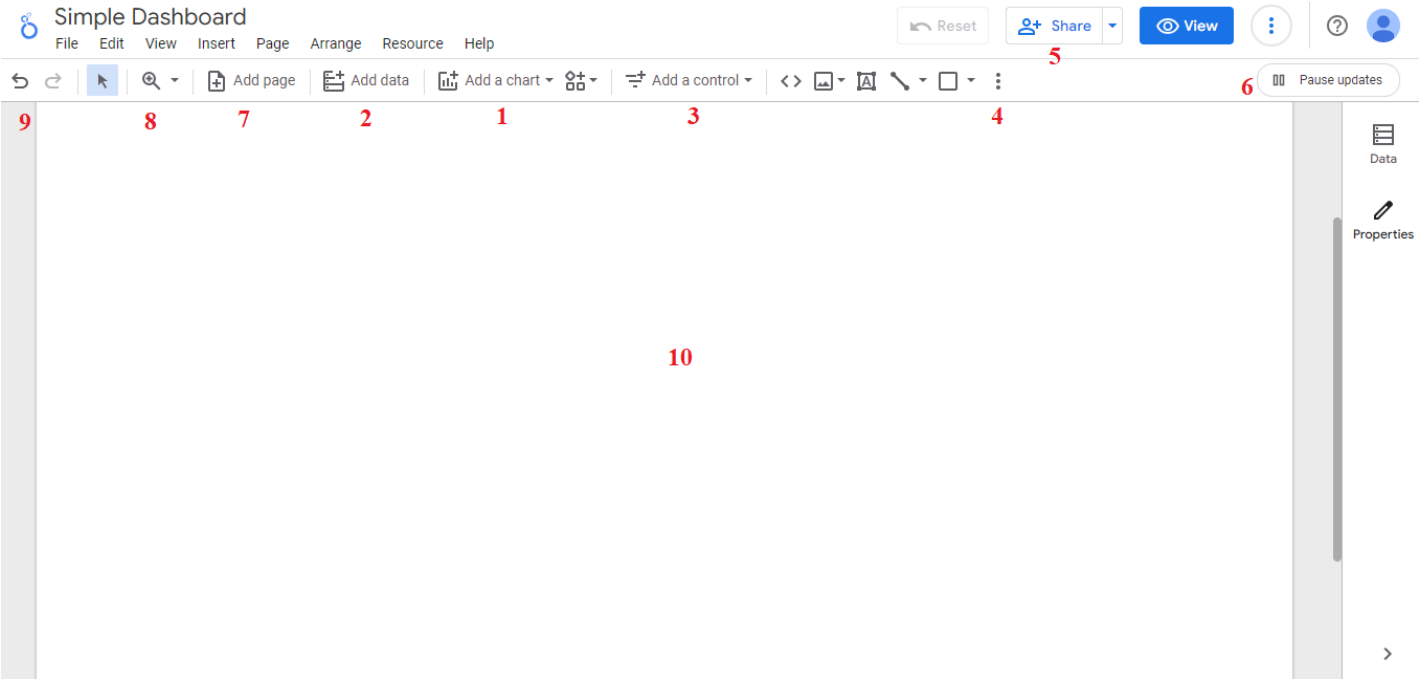
7. Select the table visualization and delete it.
8. Click the existing report title (*Untitled Report*) and rename the report to *Simple Dashboard*.
9. To give yourself more screen space and expand the canvas window, you can close the **Data** and **Properties** panes on the right side of the page.



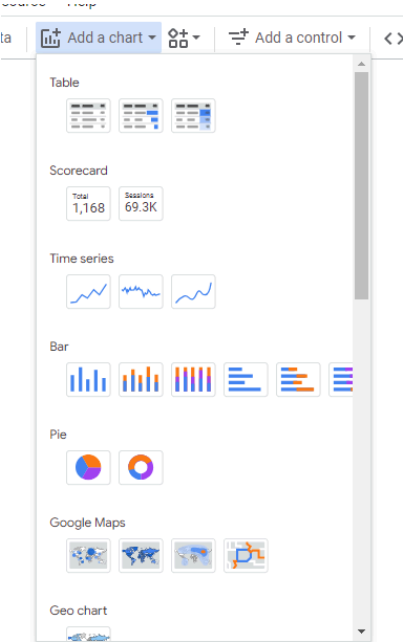
NOTE: To work on data in Excel format, upload the .xls file to your computer, and use the 'Google Sheets' connector to create the data source.

Task 2: Use Report Editor

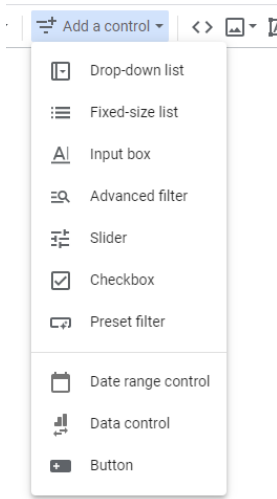
Let's see what tools are available in the Report Editor.



1. To add a new chart, click **Add a chart**. Looker Studio provides a variety of charts to be used for creating visualizations such as tables, scorecards, time series charts, bar charts, line charts, pie charts, and maps to name but a few.

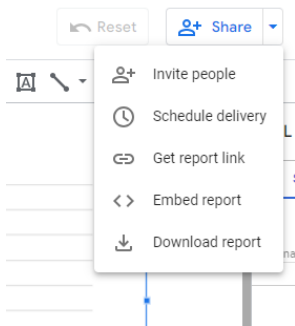


- 2. Scroll down to see all the options. To include data, click **Add data**, then close the **Add data to report** window.
- 3. Click **Add a control**. Controls are used to make your visuals interactive. Looker Studio provides several control options including sliders, filters, checklists, drop-down lists, and buttons.



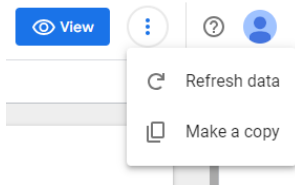
Controls enable you to adjust the data shown in report components by filtering or modifying it. They serve as a means to collect user input and incorporate it into calculated fields.

4. Use the icons to the right of **Add a control** to insert components other than charts and controls to your dashboard or report. These include URLs, images, textboxes, and lines and shapes. To access the **Theme and layout** option, if it is hidden, click the elipsis button (vertical three dots).
5. The **Share** button lets you share your report with others.

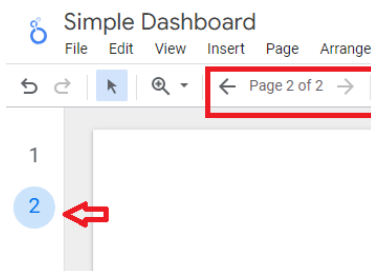


You can invite your colleagues to work on your dashboard with you, you can also get the link or embedded code, and you can download the report. You also have the option to schedule the delivery time of your report.

6. If you prefer not to make edits to the report and simply want to see how it appears in read-only mode, click **View**. You can click **Pause updates** to pause the data updates for the live data, if used, and you can refresh or make a copy of the data by clicking on the elipsis button (three vertical dots) here.

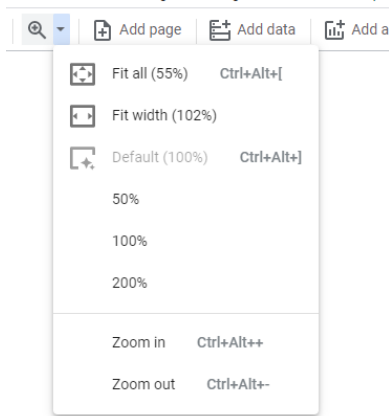


7. Click **Add page** to add more pages to your report. You can easily switch amongst pages using the left navigation bar or the arrows in the toolbar.



8. Looker Studio provides several options to zoom in and out, such as **Fit all**, **Fit width**, and various percentage values.





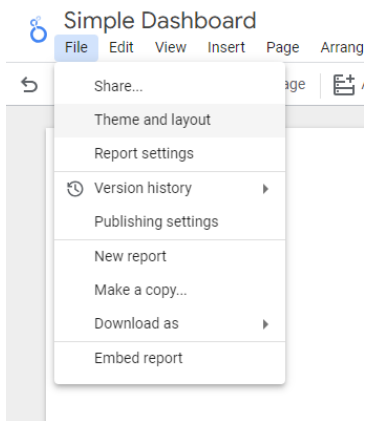
9. Use the **Undo** and **Redo** buttons to fix mistakes or misclicks.

10. The main work area at position 10 is the **canvas** where you add and layout all your visualizations.

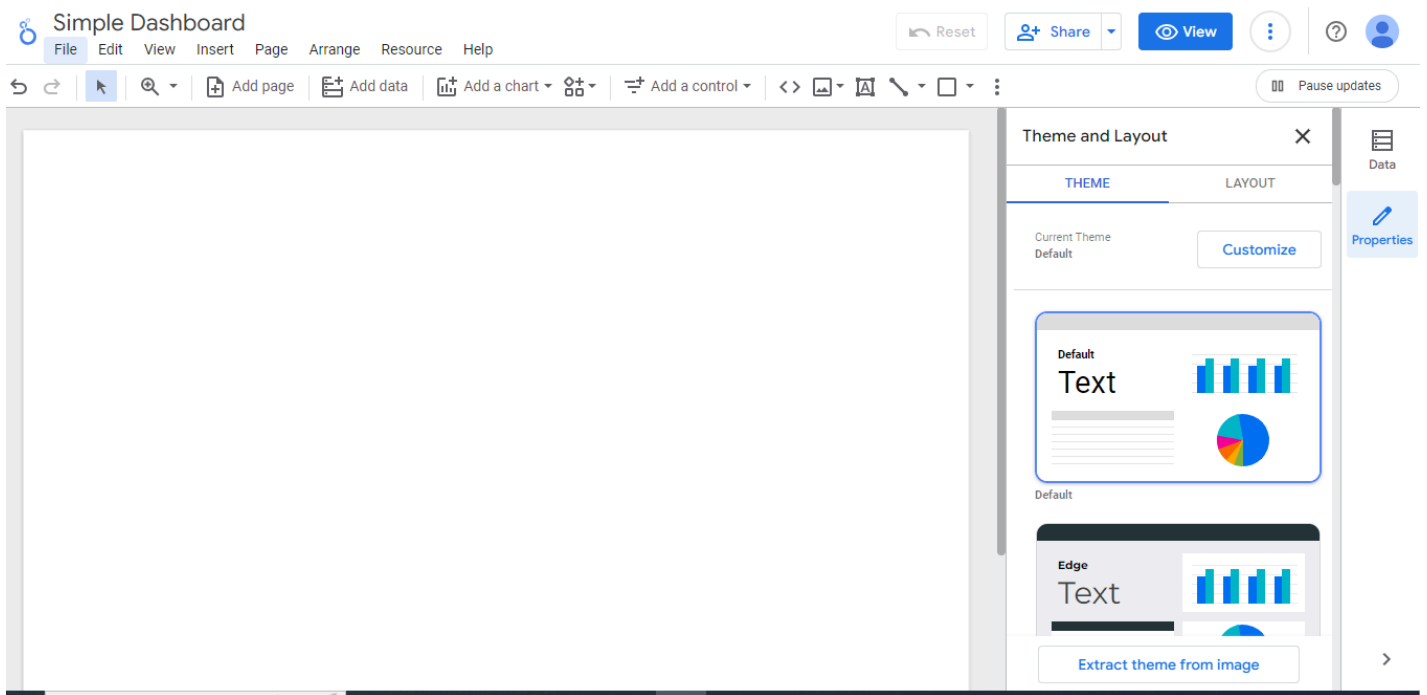
## Exercise 4: Access Report Themes and Layouts

Unlike Cognos Analytics, Looker Studio gives you the flexibility to place the visuals where you like to while you prepare the report or dashboard. So you don't have to select a fixed dashboard template, as you do in Cognos Analytics. However, Looker Studio does have some inbuilt themes with different color and font combinations for you to choose from.

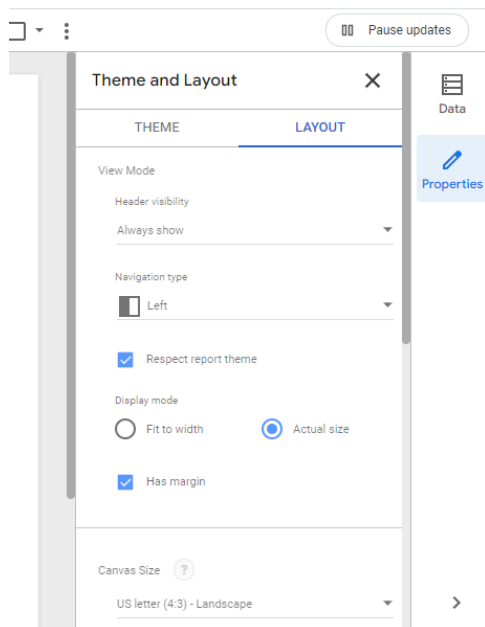
1. To access the *Theme and layout* menu, either click **File** in the main menu, then click **Theme and layout**, or in the toolbar, click **Theme and layout**. If it's hidden, click the elipsis button (...) to show it.



2. Use the **THEME** tab to modify the default theme or select one of the predefined themes for your report.



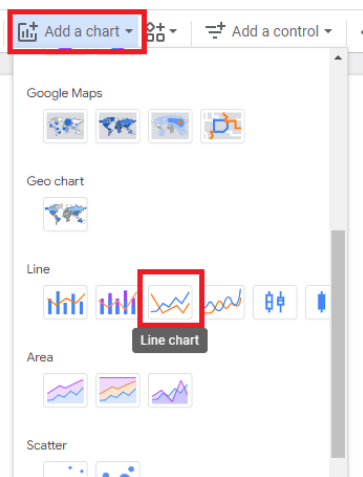
3. Use the **LAYOUT** tab to change the layout of your canvas, such as the type of navigation, canvas size, and grid settings.



## Exercise 5: Create a Simple Dashboard Report

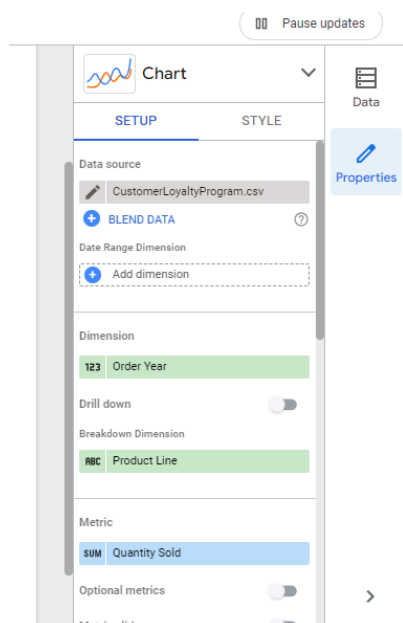
Let's create a simple dashboard on **Product Line Performance by Year**

1. Click **Add a chart** and select the simple **Line chart**.



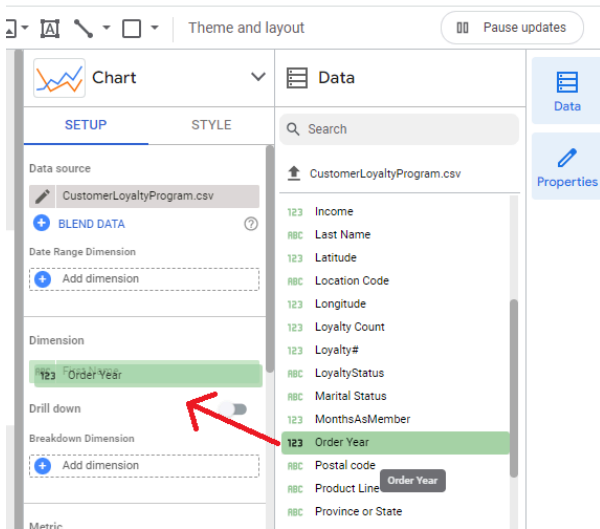
2. Click on the canvas where you want it to be positioned. You can move it anywhere on the canvas later by simply clicking and dragging it to a new position. Looker Studio automatically includes data to create the chart based on the data source.

For your *Product Line Performance by Year* visualization, you place the data as you want it to be displayed. The requirement is to create a line chart for the quantity sold per order year and have separate lines displayed for each product line.

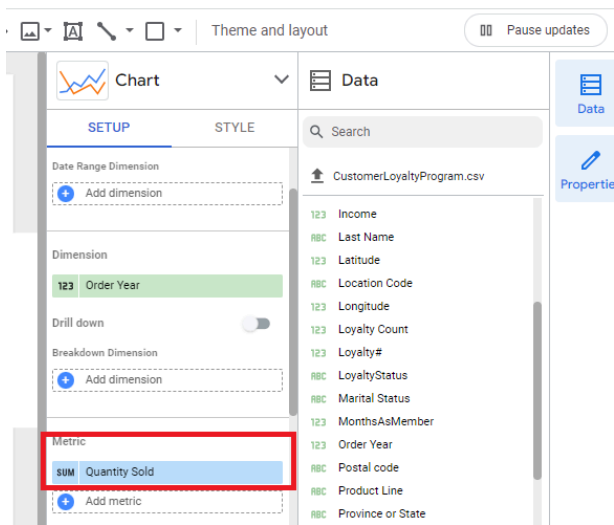


3. Click on the line chart in the canvas, and then click **Properties**.
4. Click **Data** to open that pane on the right too.

5. From the data pane, drag **Order Year** to the **Dimension** field to replace **First Name**.

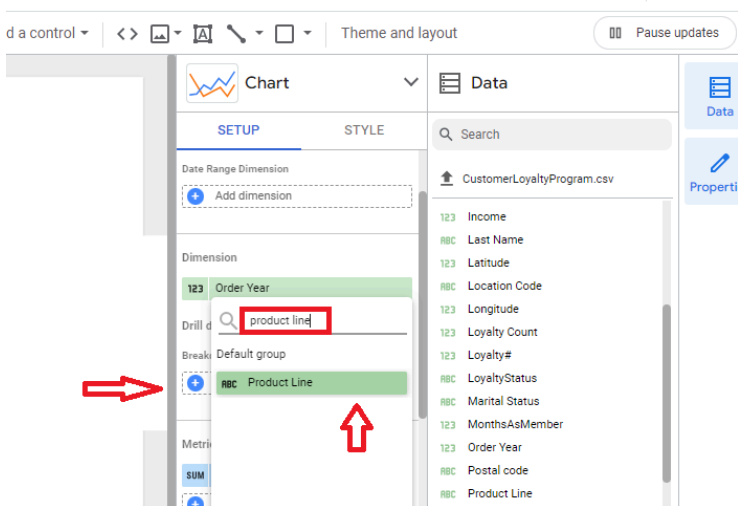


6. From the data pane, drag **Quantity Sold** to the **Metric** field. Remove the **Record Count** item.

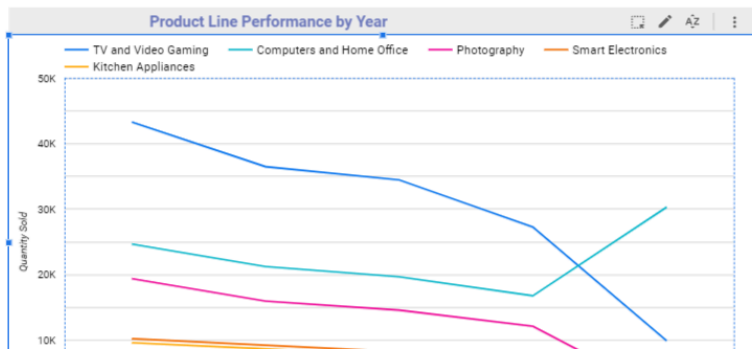


You want to break down the chart by product line, so that it can display a separate line for each product category.

7. From the data pane, drag **Product Line** to the **Breakdown dimension** field.



8. To include the x and y axis labels, click the **STYLE** tab in the chart's **Properties** pane, and check the box for **Show axis title** in both the **Left Y-axis** and the **X-axis** sections.



**Chart**

SETUP **STYLE**

Number of Points: 500 Number of Series: 10

**Axes**

- ☒ Show axes
- ☐ Reverse Y-axis direction
- ☐ Reverse X-axis direction
- ☐ Align both axes to 0

**Left Y-Axis**

- ☒ Show axis title

Axis Min (auto) Axis Max (auto)

9. Hover over the bottom right corner of the chart till you see the white double-headed arrow, then click and drag to make the chart larger.
10. In the main toolbar, select the **Text** tool and click above the visualization to insert a text box for the chart title. Click in the text box and type the title as *Product Line Performance by Year*.
11. Select the text in the new title and use the **Text Properties** in the right pane to style the text as **24pt, bold, and dark blue**.
12. Drag the text box to align it with the center of the line chart visualization, and drag the chart and the title boxes down the page a bit to make some room at the top for the next visualization.

**Simple Dashboard**

File Edit View Insert Page Arrange Resource Help

Reset Share View

Add page Add data Add a chart Add a control Theme and layout Pause updates

**Text Properties**

Font and Design

A 18px

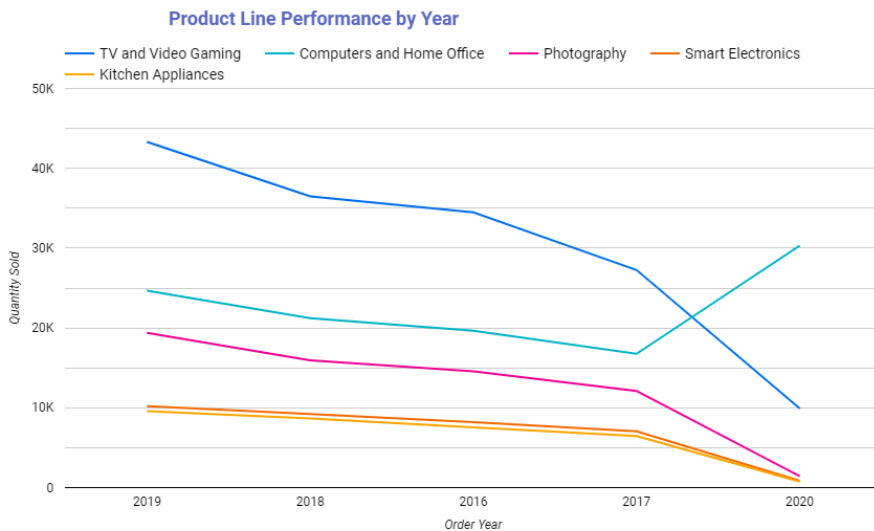
A Roboto

B I

U

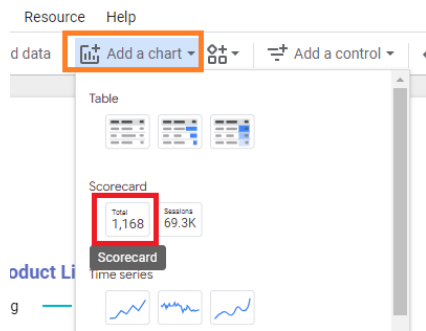
Overflow settings

Your line chart should now look similar to the image below.



Now you will include two scorecards to display the *Total Quantity Sold* and *Revenue* above this line chart.

13. In the toolbar, click **Add a chart**, and select **Scorecard**.
14. Move it above the line chart visualization and to the left side of the canvas.



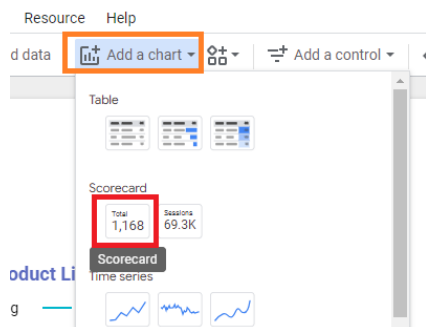
Looker Studio will automatically pick **Quantity Sold** to be displayed on this scorecard.

15. You can change the size and position as you like.

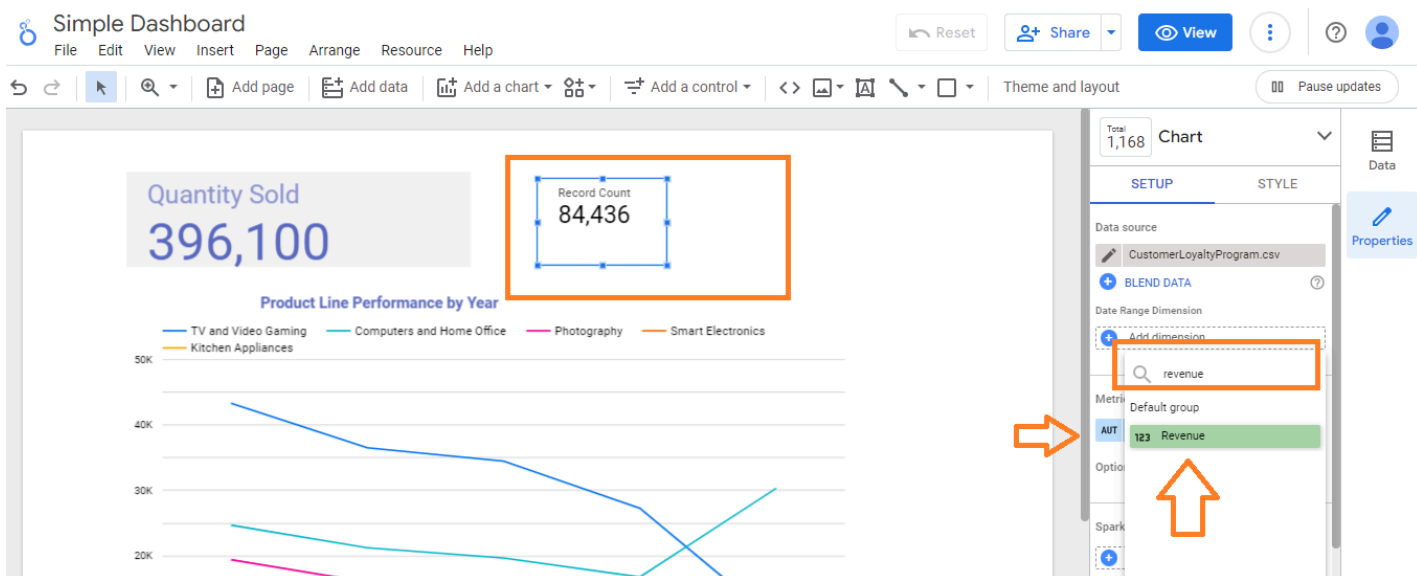
16. Use the **STYLE** tab in the scorecard chart's **Properties** pane to change the font size and color to **48pt** and **dark blue**.

Now you will add the second scorecard chart above the line chart.

17. In the toolbar, click **Add a chart**, and select **Scorecard**.



18. Place it to the right of the **Quantity Sold** scorecard chart.

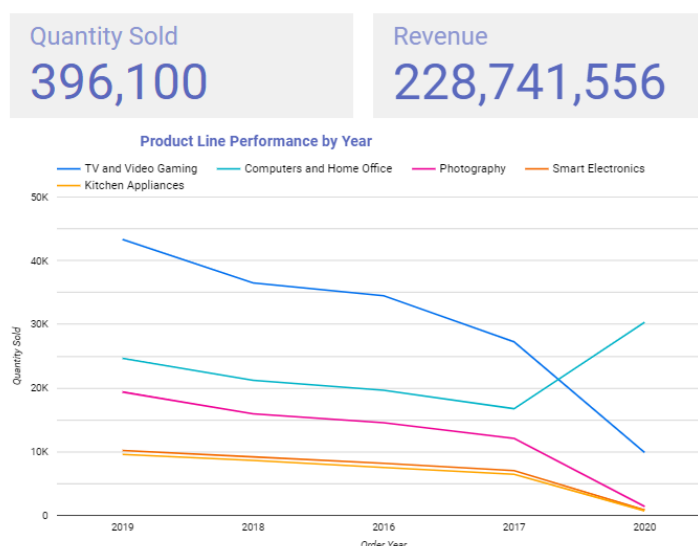


This time Looker Studio has picked **Record Count** to create this scorecard.

Let's change the metric to show *Revenue* instead.

19. Select the **SETUP** tab in the scorecard chart's **Properties** pane.
20. From the **Data** pane, drag **Revenue** to the **Metric** field to replace **Record Count**.
21. Use the **STYLE** tab in the scorecard chart's **Properties** pane to change the font size and color to **48pt** and **dark blue** as you did for the previous scorecard chart.

The final version of your first dashboard should appear similar to the image below.



**Congratulations! You have completed this hands-on lab and you are now ready for the next topic.**

For more help, you can refer to the [Tutorial on Looker Studio by Google](#)

**Author(s)**

[Dr. Pooja](#)