

---

LESSON 18 : Part 04 of 04 in the Visualizing Data module

# Data Studio: Make interactive data visualizations

Give life to your datasets by creating powerful  
interactive visualizations with an easy-to-use studio.

# Lesson overview

Learn to build visualizations that tell your story.

Data Studio is a powerful tool to build interactive visualizations that update in real time with data from a variety of sources. In journalism, Data Studio enables you to tell stories with data and gives you freedom in how to present them. These visualizations let users interact with stories from different perspectives.

Geo map



Line



Area



Scatter



- 1 Connecting Google Sheets with Data Studio.
- 2 Editing your data.
- 3 Creating a line chart.
- 4 Adding a table chart.
- 5 Making design changes in your visualization.
- 6 Embedding your interactive visualization.

For more Data Journalism lessons, visit:

[newsinitiative.withgoogle.com/training/course/data-journalism](https://newsinitiative.withgoogle.com/training/course/data-journalism)

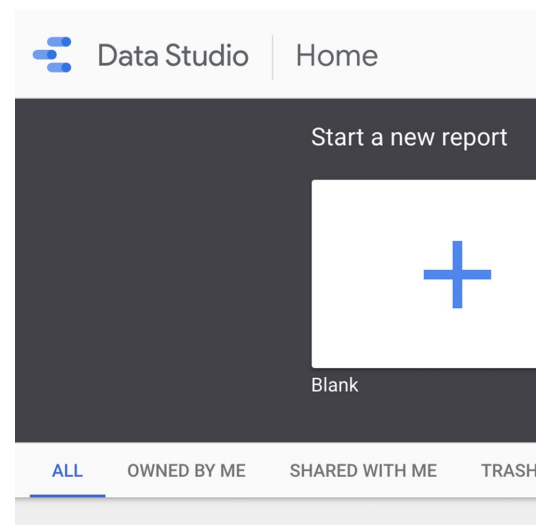
# Connecting Google Sheets with Data Studio.

Before you begin, make sure you've completed our Training Center lessons, [Google Sheets: Scraping data from the internet](#) and [Google Sheets: Cleaning data](#), and that you're logged in with the same account. We'll be using the data sheet we created from the [Wikipedia article](#) in those lessons for this visualization.

---

## STEP 1 OF 5






Go to [datastudio.google.com](https://datastudio.google.com) and begin a new report by clicking the blank square with the **+** icon.



---

## STEP 2 OF 5

In Data Studio, visualizations are called "reports." To connect our Google Sheet to this report, select **Create a New Data Source** from the bottom right.

-  [Sample] Search Console Data (Si
-  [Sample] Search Console Data (UI
-  [Sample] Google Analytics Events
-  [Sample] Google Ads
-  [Sample] Crashlytics Sample Data

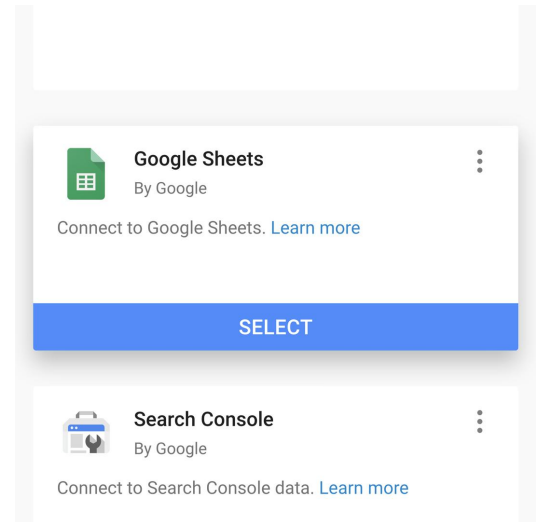
---

 [CREATE NEW DATA SOURCE](#)

---

STEP 3 OF 5

A menu will slide up showing the services we can pull our data from. Scroll to **Google Sheets** and click **SELECT**.

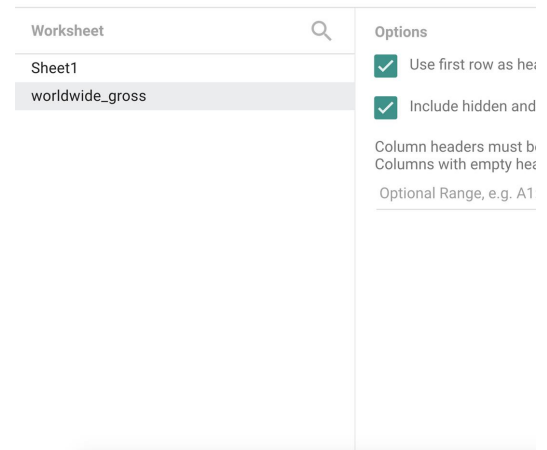


---

STEP 4 OF 5

In the search box, you'll see all the Google Sheet files associated with your Google Drive account. (If this is your first time using Google Data Studio, you may need to grant permission to access your Drive account.)

Select the spreadsheet and its associated worksheet where the data is stored.



---

STEP 5 OF 5

Leave all the **Options** boxes checked and click **Connect**.



# Editing your data.

## STEP 1 OF 4

Let's rename the visualization. Click on the top left corner where it says **Untitled report**. Let's call it "Top 50 Highest Grossing Movies in the World."

Top 50 highest-Grossing Movies in the World

File View Page Help

highest\_grossing\_movies - worldwi

← EDIT CONNECTION

Index	Field
1	Rank
2	Peak

## STEP 2 OF 4

Under **Type**, change the data in row 5 from Number to Date & Time > Year (YYYY). If it's already set as Year (YYYY), leave it.

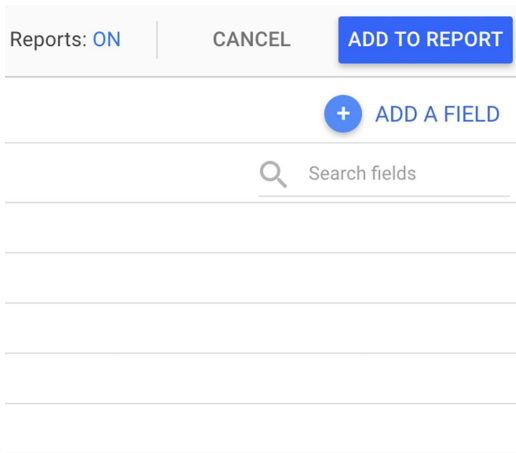
Type

123	Number
123	Number
ABC	Text
123	Number
	Year (YYYY)

---

STEP 3 OF 4

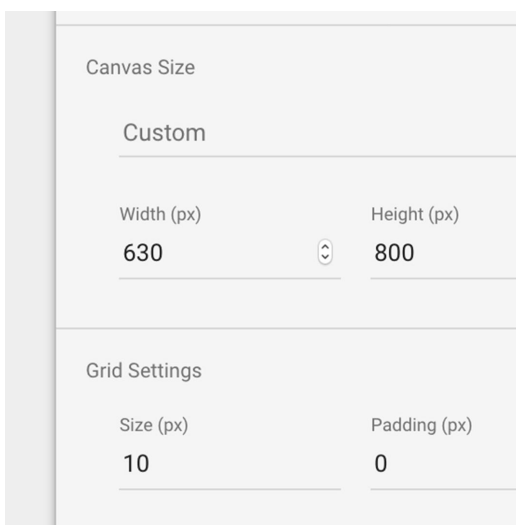
Select **Add to Report**, the blue button on the top right. Click again on the same option that will pop up.



---

STEP 4 OF 4

Let's make the visualization 630 pixels in width and 800 pixels in height. Click anywhere and type the numbers in the **Canvas Size** section.



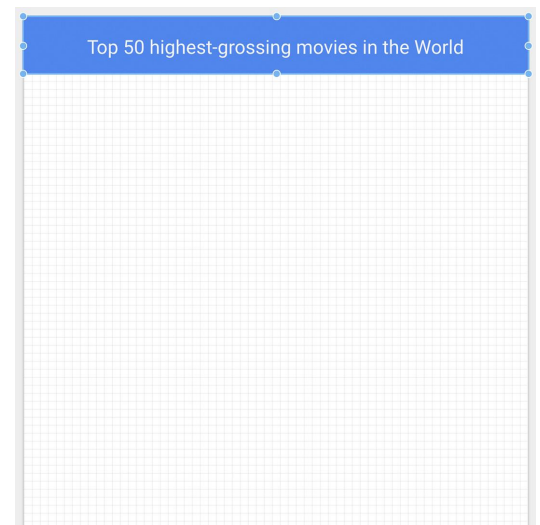
# Creating a line chart.

We're going to add an interactive line chart showing the worldwide gross for a given year. When you click on any year along the line, a table will appear, listing the top films, from highest to lowest grossing.

---

## STEP 1 OF 6

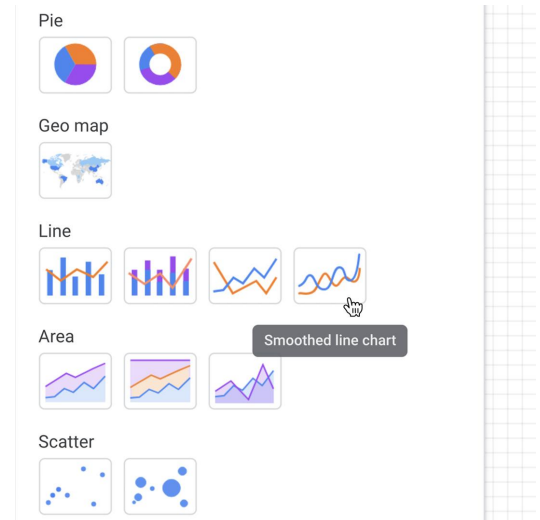
First, select the rectangle tool and drag the mouse cursor across the top of the canvas. Use the **text tool** to add a title. Use the right pane to format the text.



---

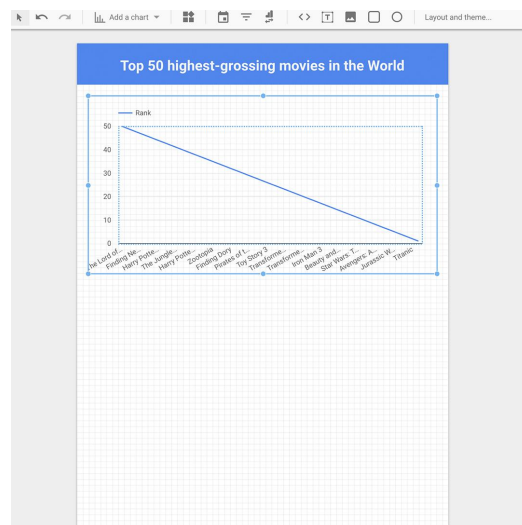
## STEP 2 OF 6

Go to **Add a Chart** and click **Smoothed line chart**.



STEP 3 OF 6

Resize it to fit nicely below the title, but leave space for the next chart.



STEP 4 OF 6

To change the dimension, metric and sort for the line chart, double click it.

For **Dimension**, drag and drop **Year** to replace **Title**. Next, replace **Metric** with **Worldwide gross**.

STEP 5 OF 6

Under **Sort**, click **Worldwide gross**, then click **Year**.

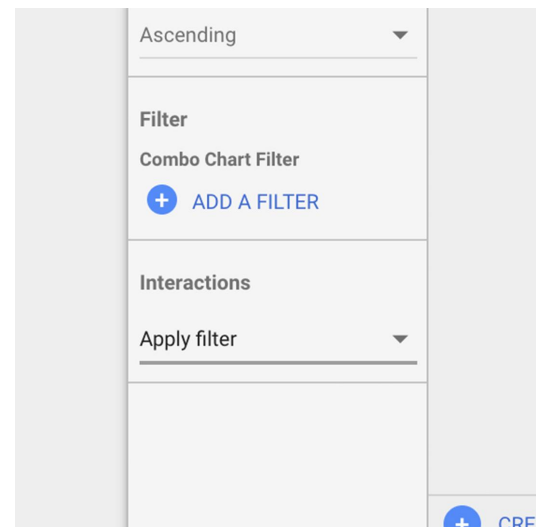
Change the sort option to **Ascending**.



---

STEP 6 OF 6

At the bottom you will see a section called **Interactions**. Select **Apply filter**. This will make every click on the line chart an action to filter the table.



# Adding a table chart.

## STEP 1 OF 5

Choose **Add a chart > Table chart**. Resize it to show the first 10 rows in the list.



## STEP 2 OF 5

Let's set up this table with three metrics in this order: Year, Rank and Worldwide gross. Go to **Metrics** and add these fields, either by dragging from **Available Fields** or clicking **Add metric**.

**Add dimension**

**Metric**

- SUM Year
- SUM Rank
- SUM Worldwide gross

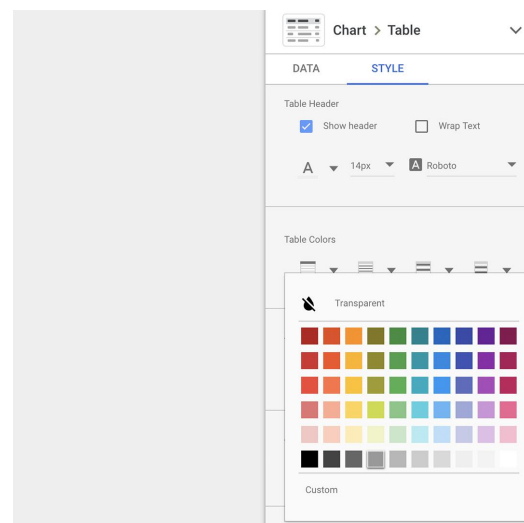
**Add metric**

**Rows per Page**

100

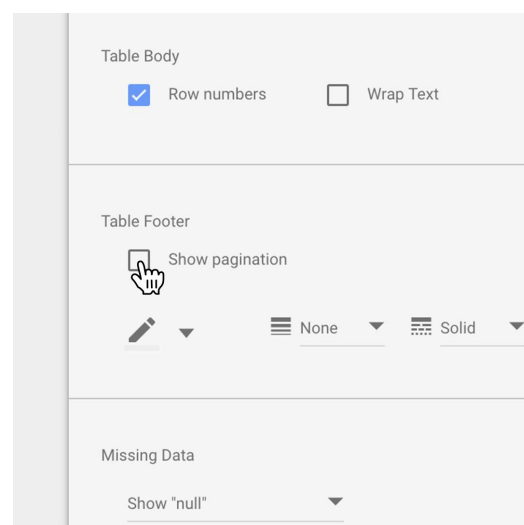
STEP 3 OF 5

Next, go to **Style > Table Colors** to change the color of the header to dark gray.



STEP 4 OF 5

Go to **Table Footer** and uncheck **Show pagination**.



STEP 5 OF 5

Now, you can add text citing your data source and offering instructions for using the chart. Select **Text** and add it to the bottom of the table.



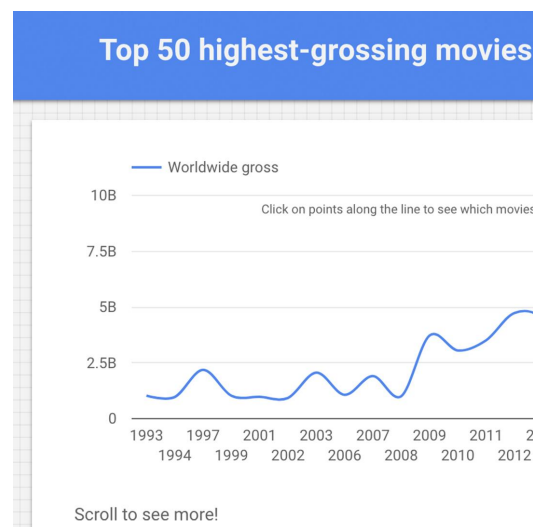
# Making design changes in your visualization.

Let's explore some different types of design elements and text you can use to customize your visualization.

---

## STEP 1 OF 4

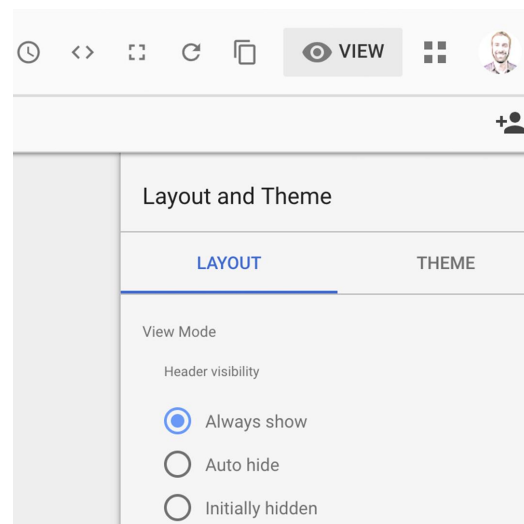
To add directional text, such as “Scroll to see more!”, click **Text** and type your message.



---

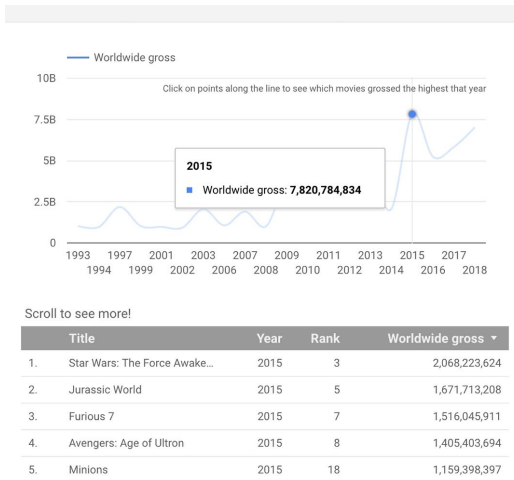
## STEP 2 OF 4

At any time, you can preview your visualization by clicking **View**. To toggle back and forth between **View** mode and **Edit** mode, simply click again.



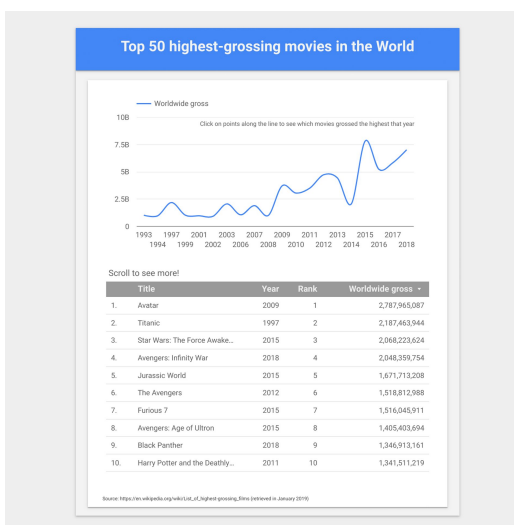
### STEP 3 OF 4

When you're in **View** mode, you can click on any point in the line and the table below will automatically display the top 50 movies from that year.



### STEP 4 OF 4

**View** mode also lets you see the complete visualization you've created, including the title, line chart and table chart.



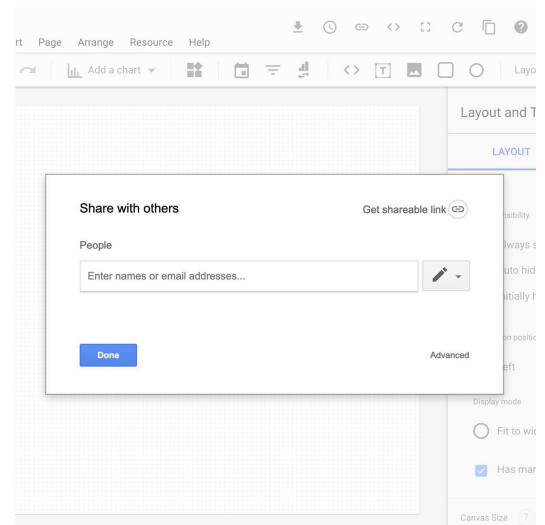
# Embedding your interactive visualization.

You can share your visualization via email or by embedding it on your website.

---

## STEP 1 OF 2

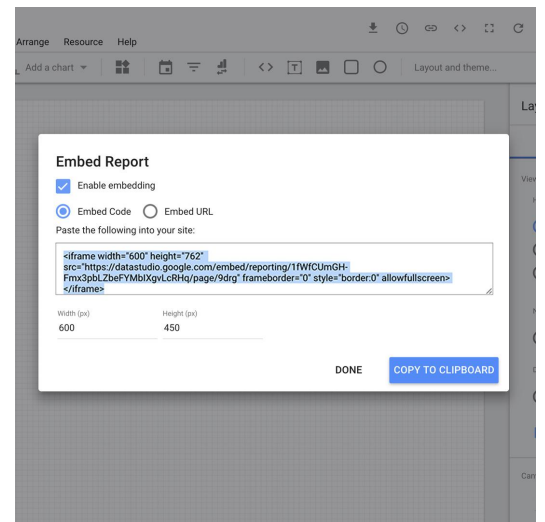
Share this visualization the same way you'd [share any other GSuite document](#).



---

## STEP 2 OF 2

To embed this interactive visualization on your website, click **File > Embed report**. Check the **Enable embedding** box and use the code on your page.



# Congratulations!

You completed “Data Studio: Make interactive data visualizations.”

To continue building your digital journalism skills and work toward Google News Initiative certification, go to our [Training Center](#) website and take another lesson:

For more Data Journalism lessons, visit:

[newsinitiative.withgoogle.com/training/course/data-journalism](https://newsinitiative.withgoogle.com/training/course/data-journalism)