

How does Data Studio work

Before we start using the tool, let's see how Data Studio works. This is the overall workflow when you're trying to use your data set in Data Studio. Let's say you have a data set in some source. First you'll have to connect with a data source, then you analyze and visualize that in Data Studio and then you share whatever you've created.

The first step is connecting. To connect to your data, you use different connectors in Data Studio. There are over 160 connectors available from Google and from other providers, and you can use these connectors to pull your data sets from more than 500 different sources. There are a lot of data sources over here and in this course we'll be focusing mostly on the file upload and Google Sheets connector. And we'll also try to talk a little bit about the BigQuery connector later on. Once you've connected to your data using those connectors, now your data is ready to be used in Data Studio. That's where you both analyze and visualize the data that you have connected.

There are different tools and features available within Data Studio that help you to analyze your data. There is the Explorer feature that lets you quickly do ad hoc analysis to get answers to questions. You can also use Data Blending to merge data from different sources. You can use Custom Functions to create your own fields and columns in your data. Charts and tables let you visualize your data on your dashboards. You can bring External Content using iframes or images. And there's also Report Gallery available which works as templates which you can just use to create your own visualization from an already established template rather than starting from scratch.

So let's say you've used all of these features and you've created a dashboard or a report that visualizes your data. The next step would be to share what you have, whatever you've created. There are different ways of sharing as well. You can share your dashboard directly by using a link or by email addresses. Normally when you create a dashboard you can only see it yourself, but you can then give a view access for the dashboard to other people using their e-mail addresses or you can share by link where you create a link and whoever you give that link to can access that and then view the dashboard. You can also give out edit permissions.

You can take your dashboard and embed it in external websites using iframes or oEmbed. You can also create PDFs and send those out. You can generate scheduled emails where people can get a PDF copy of your report on a regular interval in their email addresses. So that's the broader floor for using Data Studio. Next we'll head into the tool and go through each of these steps one by one using a data set.

To start using Data Studio, open up your browser and go to datastudio.google.com. If this is your first time using the application you probably will have to go to the workflow and provide necessary permissions to the application so that it can run on your account. Once you've completed the workflow this is the home place that we'll see. In this home page you can have a look at all the reports, data sources and explorer views that you have access to. And we'll go to all of these in detail. On the left side you have the list of recent items and also the items that have been shared with you and the "create" button will let you create new items like reports or data sources. Reports are basically your dashboards. These are the files that you create where you attach your data and then create charts

visualizations, add images, text. And you'll be sharing these with your viewers who'll be able to then view and interact with them.

Data sources are what let you bring in data into your report. A very simplistic way to think about data sources are data tables that you have access to in your report and that you can visualize. To create a new data source you'll basically click on the "create" button and select "data source" and from there you can select any of these connectors that are available in Data Studio and then provide the necessary configuration within them. For example, I can select the Google Sheets connector and then from there I can select a specific spreadsheet and then from there select a specific worksheet or arrange and then connect. Once I do that, Data Studio will create a new data source and this data source then can be attached to different reports and then that data from this specific worksheet will be able to you'll be able to access that data in your reports and then visualize that. One thing you should keep in mind is a same data source can be used across different reports and a single report can have one or more data sources attached to it. Next we'll create our first report in Data Studio.