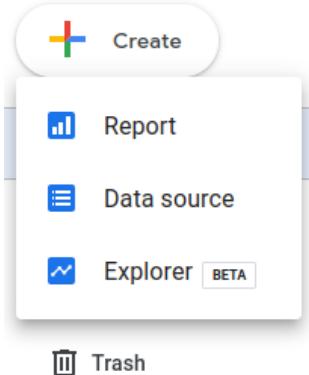


Introduction to Looker Studio: Day 1 Walkthrough

1. Navigate to <https://lookerstudio.google.com/>. In the upper-left corner, select Create -> Report.



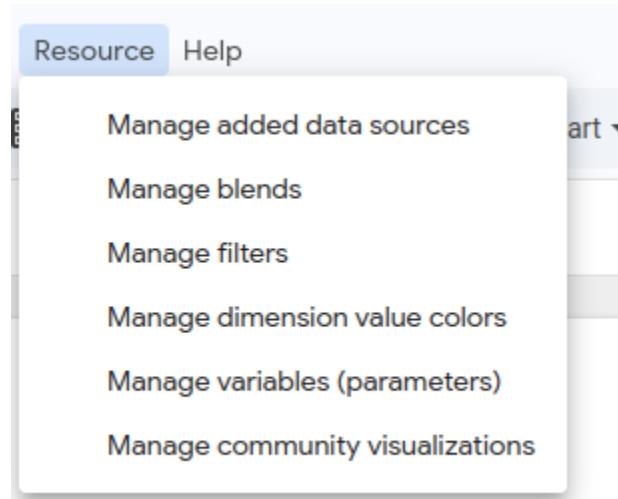
2. The “Add data to report” panel should open. Select “CSV File Upload”.
3. Under Datasets, select “+ Create dataset”. Name this new dataset “gdp_le” and select the gdp_le.csv file. Then click the Add button in the bottom right.
4. Notice that the data you added is now visible in the Data panel on the right side of the screen, along with the data type of each column.

A screenshot of the Looker Studio Data panel. On the left, there's a sidebar with a 'Started' section containing a note about creating a chart. The main area shows a 'Data' section with a search bar and a list of columns from the 'gdp_le' dataset. To the right, there are three floating buttons: 'Data', 'Properties', and 'Filter bar'.

Type	Column Name
RBC	Continent
RBC	Country
123	GDP_Per_Capita
123	Life_Expectancy
123	Year
123	Record Count

5. Click on the title in the upper left corner of the screen and rename it to “GDP and Life Expectancy”.
6. Let’s add our first chart, a table. Click the Add a chart dropdown at the top of the screen and select “Table”. Drop the table on the canvas.

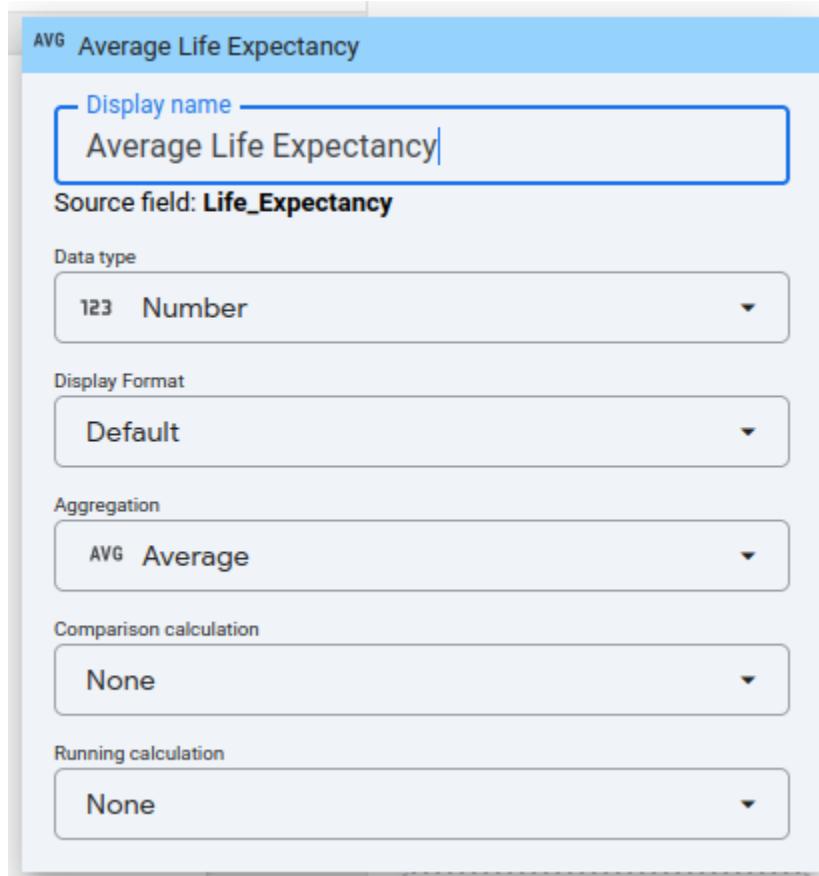
- a. Inspect the Table properties on the right side of the screen. What dimension and what metric are being used for this table?
- b. We'd like to show the average life expectancy by continent for the year 2022. First, adjust the Dimension so that it shows Continent instead of Country. Then change the Metric to Life_Expectancy. Note that the default aggregation is SUM. There are a couple of ways we can fix this in our chart.
 - i. First, you can change the aggregation type by clicking on the "SUM" button to the left of the metric name and change to Average.
 - ii. Second, you can change the default aggregation at the data set level. Do this by clicking on Resource on the top toolbar and selecting "Manage added data sources".



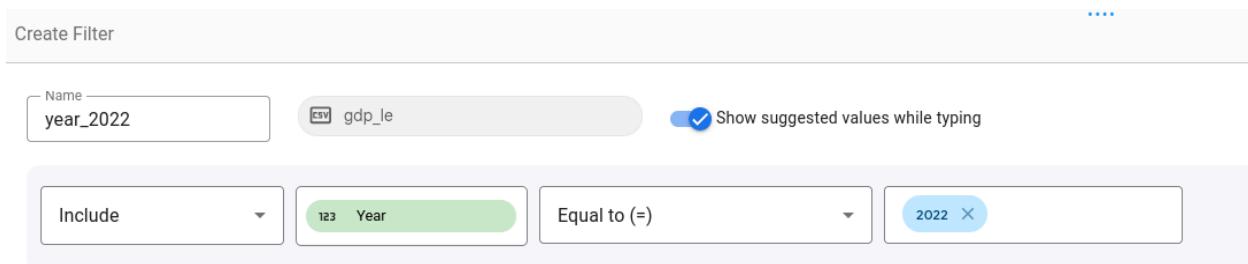
Select “Edit” next to gdp_le. Then change the Default Aggregation for GDP_Per_Capita and Life_Expectancy to Average. Note that this won’t automatically change the aggregation in your table, so you may still need to manually change the aggregation at the table level.

Field ↑	Type	Default Aggregation	Description
Dimensions (5)			
Continent	Text	None	
Country	Text	None	
GDP_Per_Capita	Number	Average	
Life_Expectancy	Number	Average	
Year	Number	Sum	
Metrics (1)			
Record Count	Number	Auto	

- iii. After setting the aggregation, again edit the Life_Expectancy metric and change the Display name to “Average Life Expectancy”.



- iv. Now, we need to filter so that we’re only seeing data for 2022. Under Filter, click “Add filter” and then “Create a filter”. Name this new filter “year_2022”. Select Include Year Equal to (=) 2022.



- v. Next, under “Sort”, sort the table by Continent in Ascending order.
 vi. Finally, click the Style tab under the Table properties menu. Notice that there are a lot of ways that you can further customize this table. Remove the row numbers and set the number of decimals displayed for average life expectancy to 1.

Continent	Average Life Expectancy
Africa	63.3
Asia	75.2
Europe	78.5
North America	74.2
Oceania	70.5
South America	73.1

1 - 6 / 6 < >

- Let's add a second metric to the table. Add in the average GDP Per Capita. Display GDP with no decimals and as currency. Note: you'll have to go back to "Manage added data sources" to adjust the type of GDP Per Capita. Finally, under the Style tab, add a title

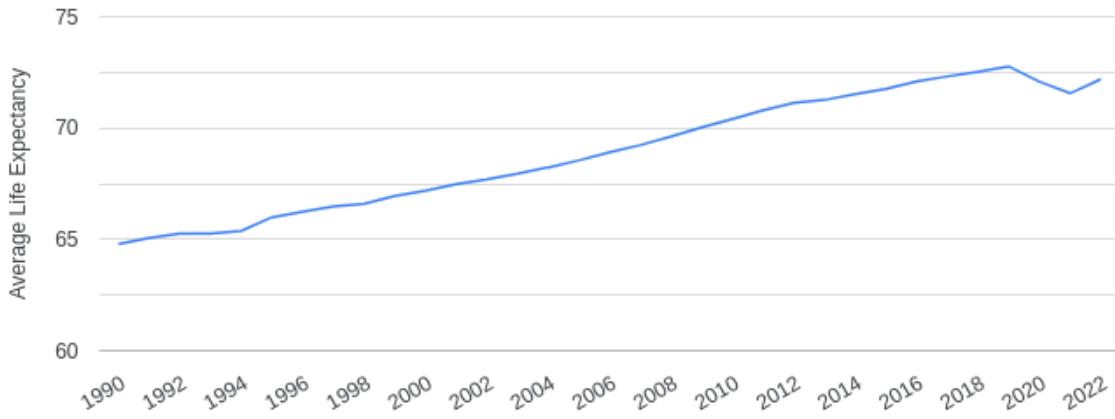
Life Expectancy and GDP in 2022

Continent	Average Life Expectancy	Average GDP Per Capita
Africa	63.3	\$6,012
Asia	75.2	\$26,428
Europe	78.5	\$40,252
North America	74.2	\$22,621
Oceania	70.5	\$13,235
South America	73.1	\$18,017

1 - 6 / 6 < >

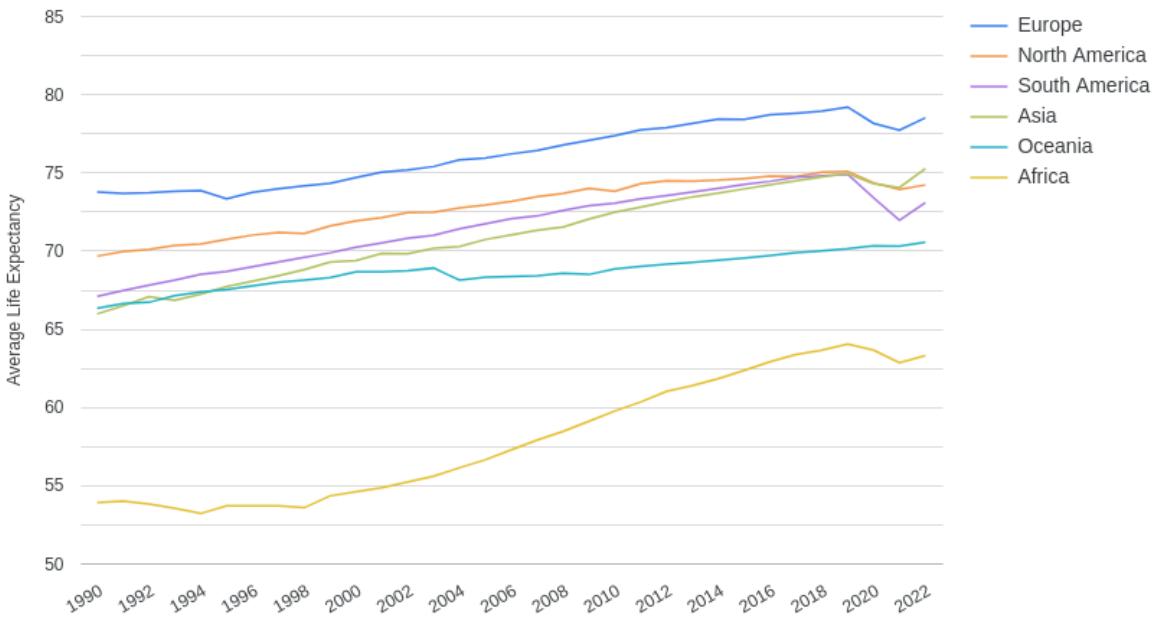
- In the top Page menu, add a New page.
- On this new page, add a line chart that shows the average life expectancy over time. Adjust the settings to try and match the chart below.

Average Life Expectancy by Year



10. Now, let's adjust the plot so that we can see how average life expectancy changed over time broken down by continent. Go back to the properties for your line chart. Under dimension, notice how there is a "Breakdown dimension". This allows us to split out our data across another dimension to see how trends vary. Add continent as a breakdown dimension. Then adjust the style to try and match the chart below.

Average Life Expectancy by Year and Continent



11. Let's add a control to our chart. At the top of the screen select "Add a control" and add a Drop-down list. Place this above the line chart. Under the drop-down list properties, set the control field to Continent. You can remove any Metrics that are selected. Notice how this dropdown controls the line chart.

- a. Note: by default, controls affect all charts using the same data source on the same page at the control. There are a couple of ways you can modify this behavior.
 - i. First, if you want to have a control affect the entire report, you can select it and then at the top of the page, choose Arrange -> Make report-level.
 - ii. Second, if you want the control to affect only certain charts, you can select the control and any charts and then choose Arrange -> Group.

12. Now, add a new page. On this page, we'll make a filled map.

- a. In order to build this map, we'll need the Country column to be set as a Country type. You can do this by going under "Manage added data sources" and changing the type.
- b. Build a map showing the gdp per capita per country in 2022. Hint: use the filter you created earlier for this.

13. Let's add a couple of calculated fields to our data.

- a. First, we'll add a GDP Per Capita (Thousands) column. At the bottom of the Data Panel, select "Add a field" and then "Add calculated field".
 - i. Name this new field "GDP Per Capita (Thousands)", and for the formula use `GDP_Per_Capita/1000`

Field Name e.g. New Calculated Field — GDP Per Capita (Thousands)	Field ID Field Id — calc_tc3yjaluxd
Formula	
<pre>1 GDP_Per_Capita /1000</pre>	

- ii. Then add another field, but this time select "Add group". Use this to create an "GDP Group" field whose value is "Low" if `GDP_Per_Capita` is less than \$10,000, "Middle" if `GDP_Per_Capita` is between \$10,000 and \$30,000, and "High" otherwise.
- iii. You can also create this GDP Group using the "Add calculated field" option. Do this with the same cutoffs but using a CASE WHEN expression.
- b. Then, make a bar chart showing the average life expectancy by GDP Group for the year 2022.