LEARN TO ENJOY THE PROCESS OF DATA INTERPRETATION AND RETENTION

LEARN TO USE LOOKER STUDIO

LEARN TO VISUALIZE AND ANALYZE DATA

BY HIMANSHU SHARMA
FOUNDER OPTIMIZESMART.COM

OptimizeSmart.com

Learn to Use Looker Studio

Written by Himanshu Sharma, Founder of OptimizeSmart.com

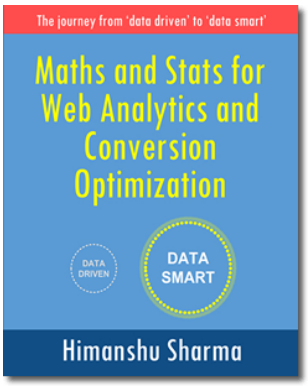
About the author

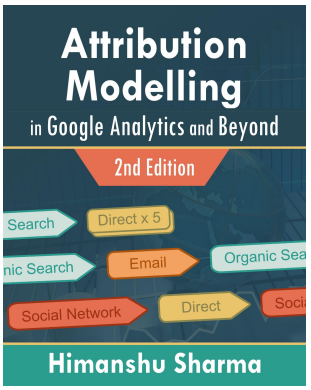
- Founder, OptimizeSmart.com
- Over 15 years of experience in digital analytics and marketing
- Author of four best-selling books on digital analytics and conversion optimization
- Nominated for Digital Analytics Association Awards for Excellence
- Runs one of the most popular blogs in the world on digital analytics
- Consultant to countless small and big businesses over the decade

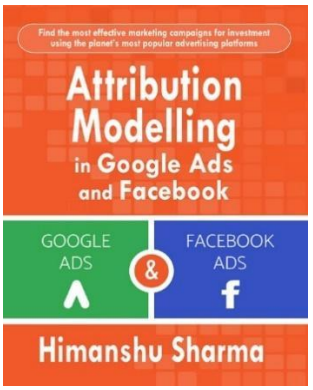
Website: www.optimizesmart.com

Linkedin: https://www.linkedin.com/in/analyticsnerd

Facebook: https://www.facebook.com/optimizesmart







OptimizeSmart.com

Following are our most downloaded ebooks for career advancement:

#1 **Sales and ROI Accelerator (150+ pages)**

WHAT'S INSIDE: My step-by-step blueprint for generating record sales and ROI by leveraging analytics data.

#2 **Set Up Your Google Analytics 4 (GA4) Account Correctly And Fast (70 pages)**

WHAT'S INSIDE: Learn to set up your GA4 account correctly and fast using this 62 points checklist.

FAQ: Do you show "How" to do each item on the checklist? If so, with screenshots?

Yes. There are links to the articles with detailed step by step instructions.

FAQ: Does this ebook cover GTM too?

Yes.

#3 **Google Tag Manager Data Layers (100+ pages)**

WHAT'S INSIDE: My step-by-step blueprint for getting started with data layers. Get the only ebook on GTM data layers ever published. Learn the JavaScript behind it.

#4 Learn to Read E-Commerce Reports in Google Analytics (100+ pages)

WHAT'S INSIDE: My step-by-step guide to reading both standard and enhanced e-commerce reports in Google Analytics. E-commerce reports are the most valuable reports in Google Analytics.

#5 Do you want better skills in digital analytics and marketing? If yes, then register for the free training:

Here's what we're going to cover…

1. Why digital analytics is the key to online business success.
2. The number 1 reason why most marketers are not able to scale their advertising and maximize sales.
3. Why Google and Facebook ads don't work for most businesses & how to make them work.
4. Why you won't get any competitive advantage in the marketplace just by knowing Google Analytics.
5. The number 1 reason why conversion optimization is not working for your business.
6. How to advertise on any marketing platform for FREE with an unlimited budget.
7. How to learn and master digital analytics and conversion optimization in record time.

Get helpful tips on a daily basis

If you are the type of person who finds it helpful to receive short tips on building your website traffic, improving conversions, fixing attribution issues and learning about analytics in general, then follow me on LinkedIn. I post a few short tips each day.

Click here and follow me on LinkedIn

Welcome to my Looker Studio (formerly Google Data Studio) Tutorial.

I am very excited to teach you how to use Looker Studio to visualize and analyze data.

What is Looker Studio?

Looker Studio (formerly Data Studio) is a tool used to visualize data.

Google has renamed Data Studio to Looker Studio since Google acquired the Looker visualization tool.

Google has unified their business intelligence product family under the Looker umbrella by merging the functionality of Data Studio, Looker and artificial intelligence together in Looker Studio.

All the functionality from Data Studio will be the same in the Looker studio.

Looker studio is a cloud-based tool which means you can access it from any device/browser as long as you have access to a stable internet connection.

Looker Studio is a completely free visualization tool that allows you to build great dashboards and reports.

Google also provides **Looker Studio Pro,** which is the paid version of Looker Studio, where you get all the features of Looker Studio plus enhanced enterprise capabilities and technical support.

Note: Looker Studio is built on Google Drive. That means you need a Google Drive account before accessing it.

Why use Looker Studio?

When you have got a lot of data to analyze, you cannot spend days or weeks analyzing hundreds or thousands of rows of data in Excel spreadsheets …. to find hidden trends and insight.

You need a tool that allows you to quickly make sense of data and determine patterns and anomalies which are otherwise….. can be extremely hard to detect in a timely manner.

This is where data visualization tools like Looker Studio come in handy. Through this tool, you can greatly speed up your data analysis.

Data visualization is the presentation of data in a graphical format.

Data visualization helps in data interpretation and data retention. It helps to tell meaningful, emotional and engaging stories to key decision-makers.

If you wish to make your data reporting more meaningful and persuasive then you need to learn the art of storytelling by visualizing your data.

Looker Studio can make your data reporting much more meaningful and persuasive.

What are the benefits of using Looker Studio?

Looker Studio is a great visualization tool since it is very versatile, easy to create, share and collaborate with zero cost.

Following are some of the main benefits of using Looker Studio as a visualization tool.

#1 Multiple data sources:

You can connect Looker Studio to multiple data sources and collect and combine data in one single report.

This way you can measure your marketing activities across platforms and channels and generate cross-platform and multi-channel insights.

#2 Unlimited customization:

You can fully customize the Looker Studio reports.

You can use a blank canvas to design your own report from scratch or you can use a Looker Studio template.

This makes Looker Studio a very convenient and hassle-free way to design reports and dashboards for various data platforms like Google Analytics, Google Ads, YouTube ads, etc.

#3 Dynamic and real-time reporting:

Looker Studio reports are very dynamic in nature. That means you can apply any sort of filter on a data source and narrow down the data based on date range, time, users, device category, country, etc.

Also, these reports can be made in real-time by pulling the data in real-time as it is available in the corresponding data source.

#4 Report sharing and collaboration:

Looker Studio reports can be shared in multiple formats by scheduling email delivery, creating a link for a report or downloading the report as a PDF.

You can also add your peers to the report for editing and reading purposes which makes collaboration painless across the team.

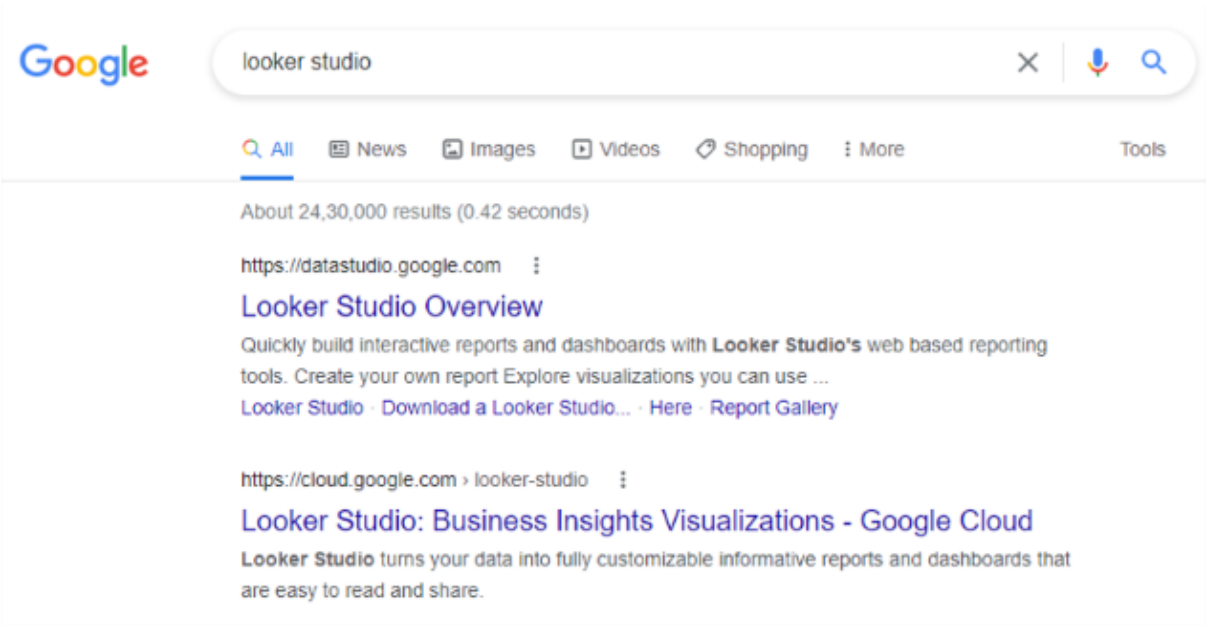
#5 Zero cost:

One of the big advantages of using Looker Studio is that it is completely free to use.

Also, there is no limit to the number of users per Looker Studio account, which makes it more meaningful in a large organization.

How to access Looker Studio

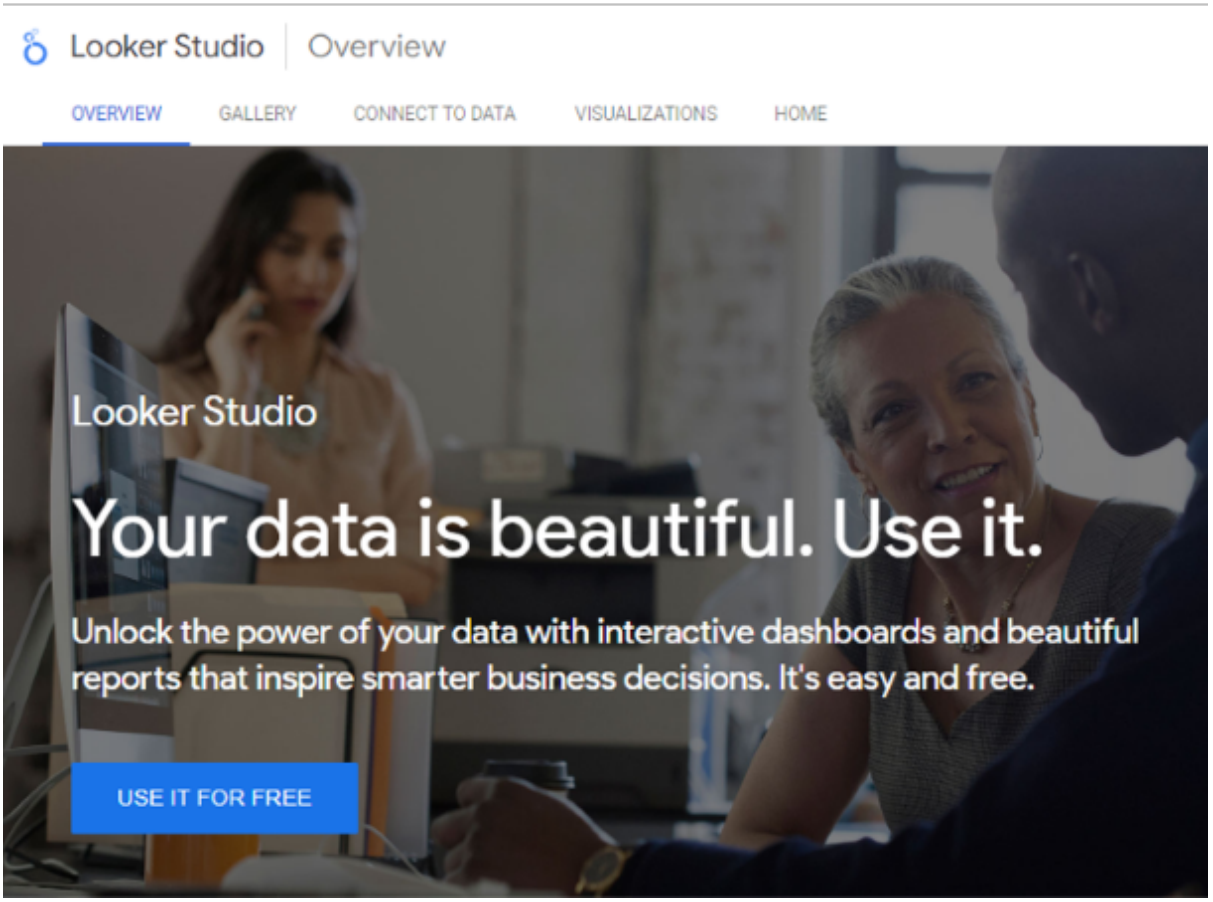
If you have never used Looker Studio before, then the best way to access it is by searching for the keyword ‘Looker Studio’ on google.com and then click on the first search engine listing:



Alternatively, you can access Looker Studio by clicking on this link:

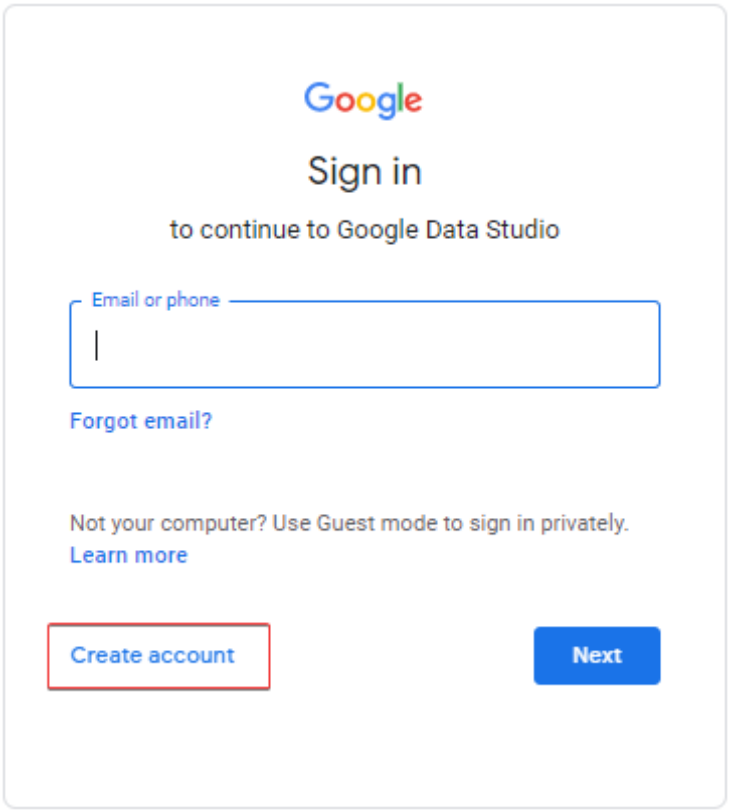
https://datastudio.google.com/overview

Then click on '**Use it for free**' button:

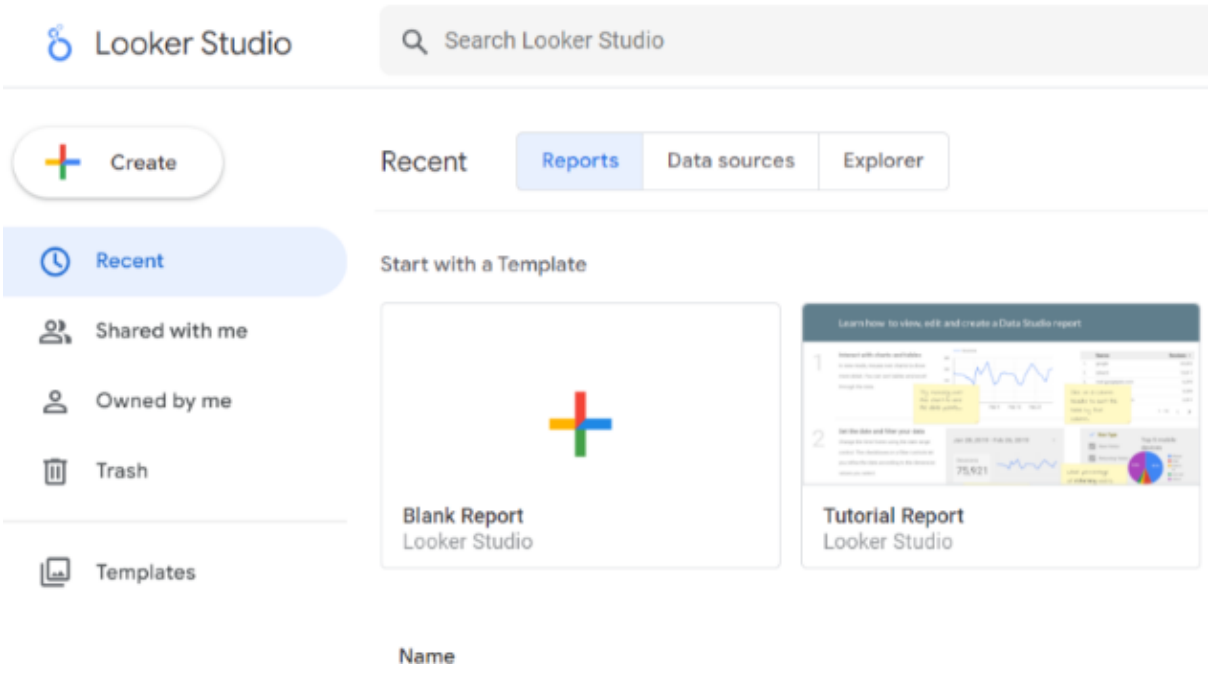


Now log in using your Google email address and password.

If you do not have a Google account then click on the ‘create account’ link:



If you have never used Looker Studio before, then this is what the home page of Looker Studio will look like:



Related Article: [How to use Looker Studio in another language]

Why you should pull data into Looker Studio via a spreadsheet

A rookie mistake that most Looker Studio users make is that they pull data directly from a data platform into Looker Studio and then try to manipulate it there.

But Looker Studio is not meant for data manipulation. It is not a spreadsheet.

When you manipulate data in Looker Studio, it slows down your report. This is especially true for large data sets.

Manipulating data in a spreadsheet is a lot easier than manipulating data in Looker Studio.

When you choose to manipulate data in Looker Studio, you make it unnecessarily hard to use.

That is why we first pull the data from a data platform into a spreadsheet (like Google Sheets or Excel) and manipulate the data there, and only after that use that data in Looker Studio.

How to visualize data in Google Sheets via Looker Studio

Step-1: Prepare your Google Sheet Data for Looker Studio.

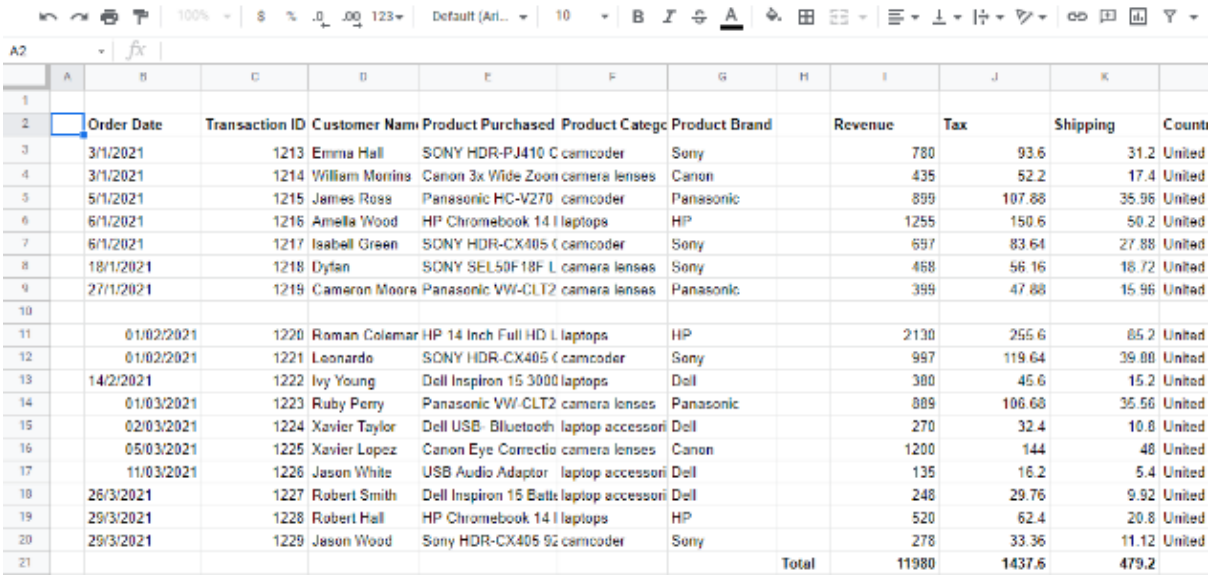
Before you upload data from Google Sheets to Looker Studio, you need to make sure of two things:

1. You pulled data correctly into Google Sheets.
2. The data you pulled into Google Sheets is in the correct format.

Because this is going to affect your data visualization and data analysis in Looker Studio.

> ***If you feed garbage to Looker Studio, then you are going to get garbage.***
>
> ***Garbage in, Garbage out.***

Following is an example of incorrectly formatted data:



	Order Date	Transaction ID	Customer Nam	Product Purchased	Product Categ	Product Brand		Revenue	Tax	Shipping	Count
3	3/1/2021	1213	Emma Hall	SONY HDR-PJ410 C	camcoder	Sony		780	93.6	31.2	United
4	3/1/2021	1214	William Morris	Canon 3x Wide Zoon	camera lenses	Canon		435	52.2	17.4	United
5	5/1/2021	1215	James Ross	Panasonic HC-V270	camcoder	Panasonic		899	107.88	35.96	United
6	6/1/2021	1216	Amelia Wood	HP Chromebook 14 I	laptops	HP		1255	150.6	50.2	United
7	6/1/2021	1217	Isabell Green	SONY HDR-CX405 (	camcoder	Sony		697	83.64	27.88	United
8	18/1/2021	1218	Dylan	SONY SEL50F18F L	camera lenses	Sony		468	56.16	18.72	United
9	27/1/2021	1219	Cameron Moore	Panasonic VW-CLT2	camera lenses	Panasonic		399	47.88	15.96	United
10											
11	01/02/2021	1220	Roman Coleman	HP 14 Inch Full HD L	laptops	HP		2130	255.6	85.2	United
12	01/02/2021	1221	Leonardo	SONY HDR-CX405 (	camcoder	Sony		997	119.64	39.88	United
13	14/2/2021	1222	Ivy Young	Dell Inspiron 15 3000	laptops	Dell		380	45.6	15.2	United
14	01/03/2021	1223	Ruby Perry	Panasonic VW-CLT2	camera lenses	Panasonic		889	106.68	35.56	United
15	02/03/2021	1224	Xavier Taylor	Dell USB- Bluetooth	laptop accessori	Dell		270	32.4	10.8	United
16	05/03/2021	1225	Xavier Lopez	Canon Eye Correctio	camera lenses	Canon		1200	144	48	United
17	11/03/2021	1226	Jason White	USB Audio Adaptor	laptop accessori	Dell		135	16.2	5.4	United
18	26/3/2021	1227	Robert Smith	Dell Inspiron 15 Batt	laptop accessori	Dell		248	29.76	9.92	United
19	29/3/2021	1228	Robert Hall	HP Chromebook 14 I	laptops	HP		520	62.4	20.8	United
20	29/3/2021	1229	Jason Wood	Sony HDR-CX405 92	camcoder	Sony		278	33.36	11.12	United
21							Total	11980	1437.6	479.2	

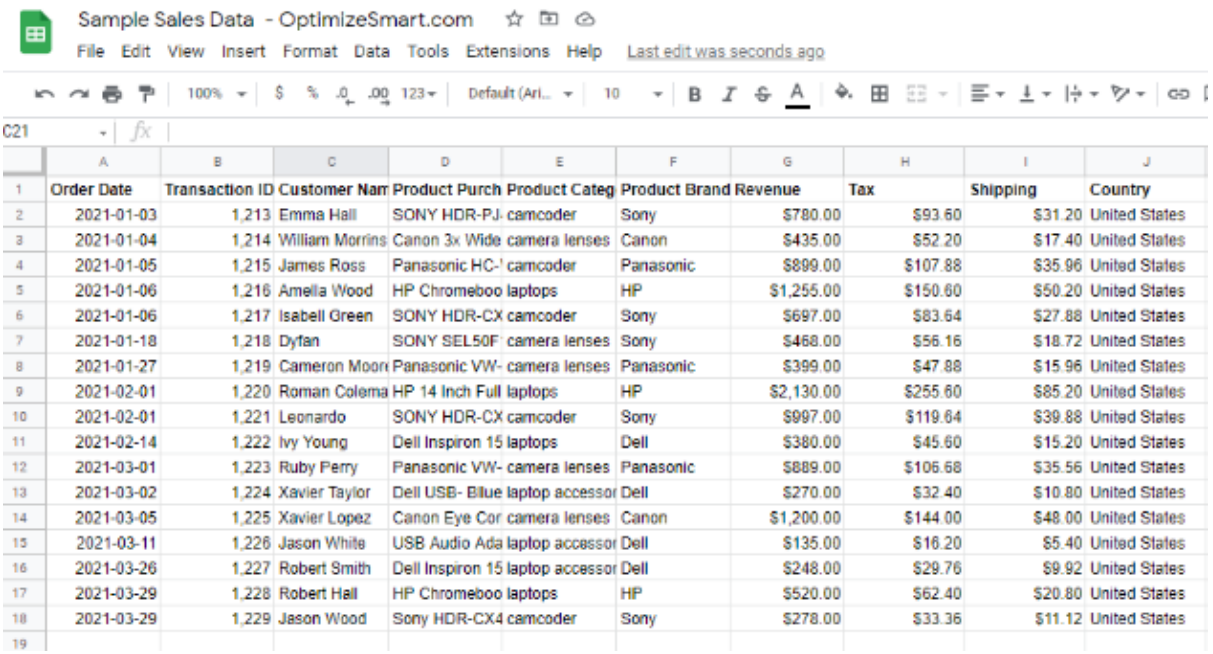
The data is not formatted correctly because it has got empty rows, empty columns, and totals.

The column headers are missing. The data is not using the correct data types.

So, for example, the field ‘order date’ is not of type ‘date’.

The ‘Revenue’, ‘Tax’ and ‘Shipping’ fields are not of type currency.

Following is an example of correctly formatted data:



Sample Sales Data - OptimizeSmart.com

File Edit View Insert Format Data Tools Extensions Help Last edit was seconds ago

C21

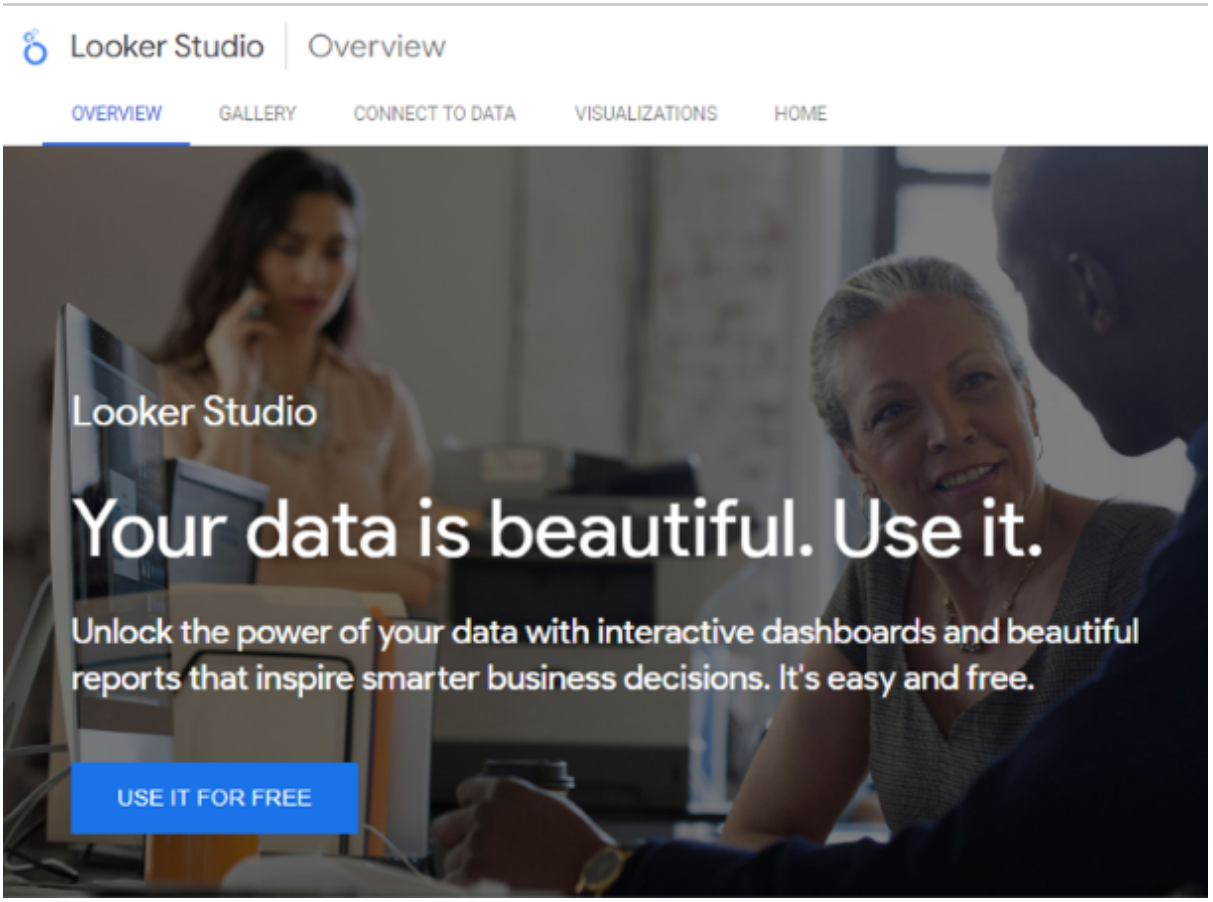
	A	B	C	D	E	F	G	H	I	J
1	Order Date	Transaction ID	Customer Nam	Product Purch	Product Categ	Product Brand	Revenue	Tax	Shipping	Country
2	2021-01-03	1,213	Emma Hall	SONY HDR-PJ	camcoder	Sony	$780.00	$93.60	$31.20	United States
3	2021-01-04	1,214	William Morrins	Canon 3x Wide	camera lenses	Canon	$435.00	$52.20	$17.40	United States
4	2021-01-05	1,215	James Ross	Panasonic HC-	camcoder	Panasonic	$899.00	$107.88	$35.96	United States
5	2021-01-06	1,216	Amelia Wood	HP Chromeboo	laptops	HP	$1,255.00	$150.60	$50.20	United States
6	2021-01-06	1,217	Isabell Green	SONY HDR-CX	camcoder	Sony	$697.00	$83.64	$27.88	United States
7	2021-01-18	1,218	Dyfan	SONY SEL50F	camera lenses	Sony	$468.00	$56.16	$18.72	United States
8	2021-01-27	1,219	Cameron Moor	Panasonic VW-	camera lenses	Panasonic	$399.00	$47.88	$15.96	United States
9	2021-02-01	1,220	Roman Colema	HP 14 Inch Full	laptops	HP	$2,130.00	$255.60	$85.20	United States
10	2021-02-01	1,221	Leonardo	SONY HDR-CX	camcoder	Sony	$997.00	$119.64	$39.88	United States
11	2021-02-14	1,222	Ivy Young	Dell Inspiron 15	laptops	Dell	$380.00	$45.60	$15.20	United States
12	2021-03-01	1,223	Ruby Perry	Panasonic VW-	camera lenses	Panasonic	$889.00	$106.68	$35.56	United States
13	2021-03-02	1,224	Xavier Taylor	Dell USB- Blue	laptop accesso	Dell	$270.00	$32.40	$10.80	United States
14	2021-03-05	1,225	Xavier Lopez	Canon Eye Cor	camera lenses	Canon	$1,200.00	$144.00	$48.00	United States
15	2021-03-11	1,226	Jason White	USB Audio Ada	laptop accesso	Dell	$135.00	$16.20	$5.40	United States
16	2021-03-26	1,227	Robert Smith	Dell Inspiron 15	laptop accesso	Dell	$248.00	$29.76	$9.92	United States
17	2021-03-29	1,228	Robert Hall	HP Chromeboo	laptops	HP	$520.00	$62.40	$20.80	United States
18	2021-03-29	1,229	Jason Wood	Sony HDR-CX4	camcoder	Sony	$278.00	$33.36	$11.12	United States
19										

By correct format, I mean:

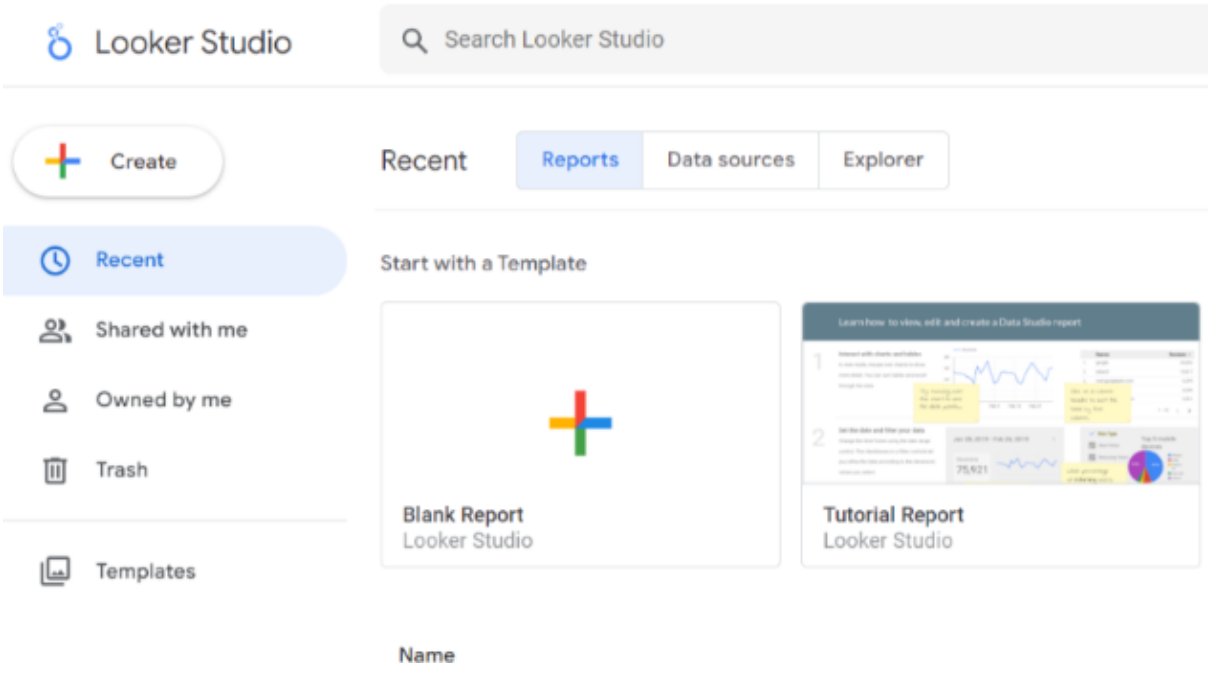
- There are no empty rows or columns.
- Each column has headers, and these headers are meaningful, unique and self-explanatory.
- There should not be subtotals or grand totals in your data source.
- You also need to make sure that you are using the correct data types. So, for example, dates are of type ‘date’, texts are of type ‘text’, numbers are of type ‘number’, and the currency is of types ‘currency’.

Step-2: Navigate to https://datastudio.google.com/overview

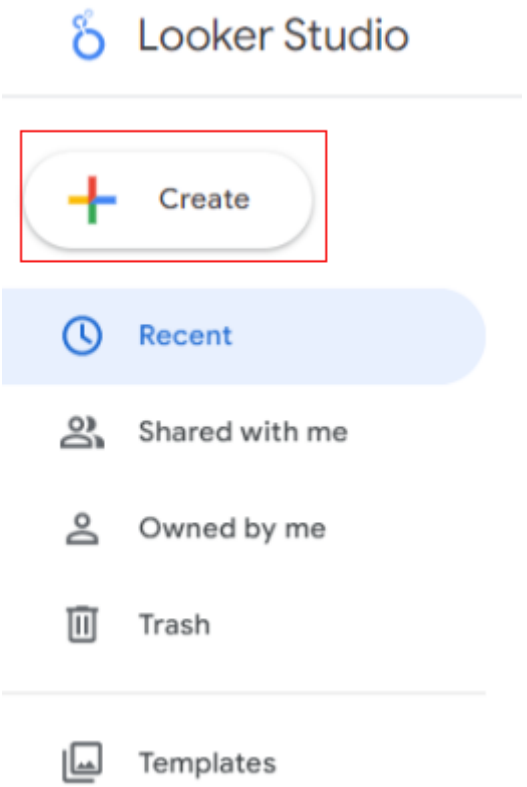
Step-3: Click on the ‘**Use it for free**’ button:



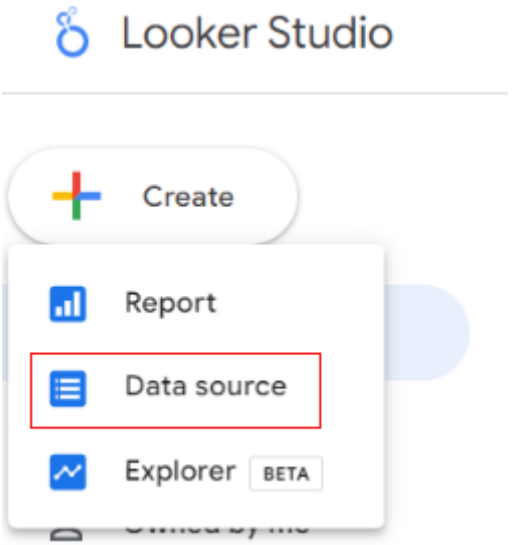
Step-4: Sign in with your Google email and password. You should now see the home page of Looker Studio:



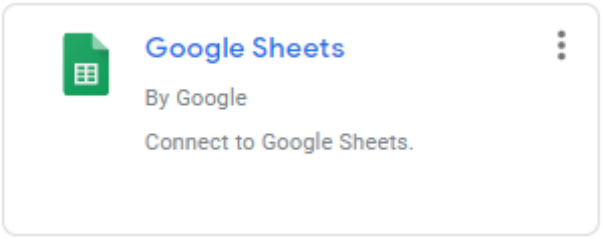
Step-5: Click on the '**Create**' button:



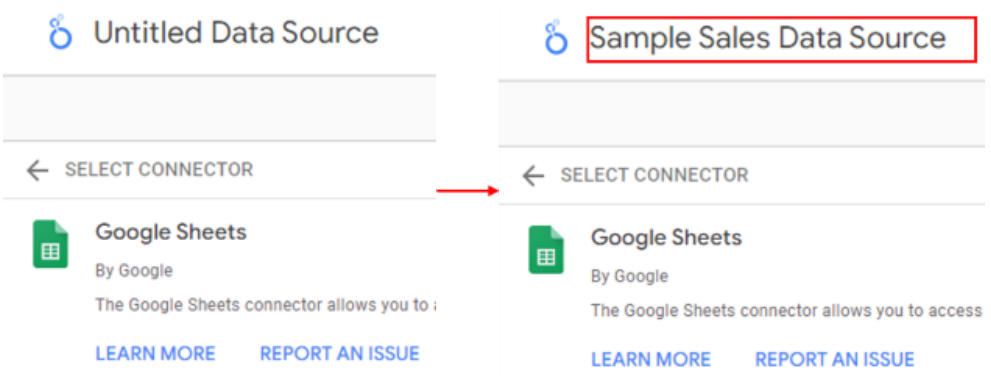
Step-6: Click on '**Data Source**':



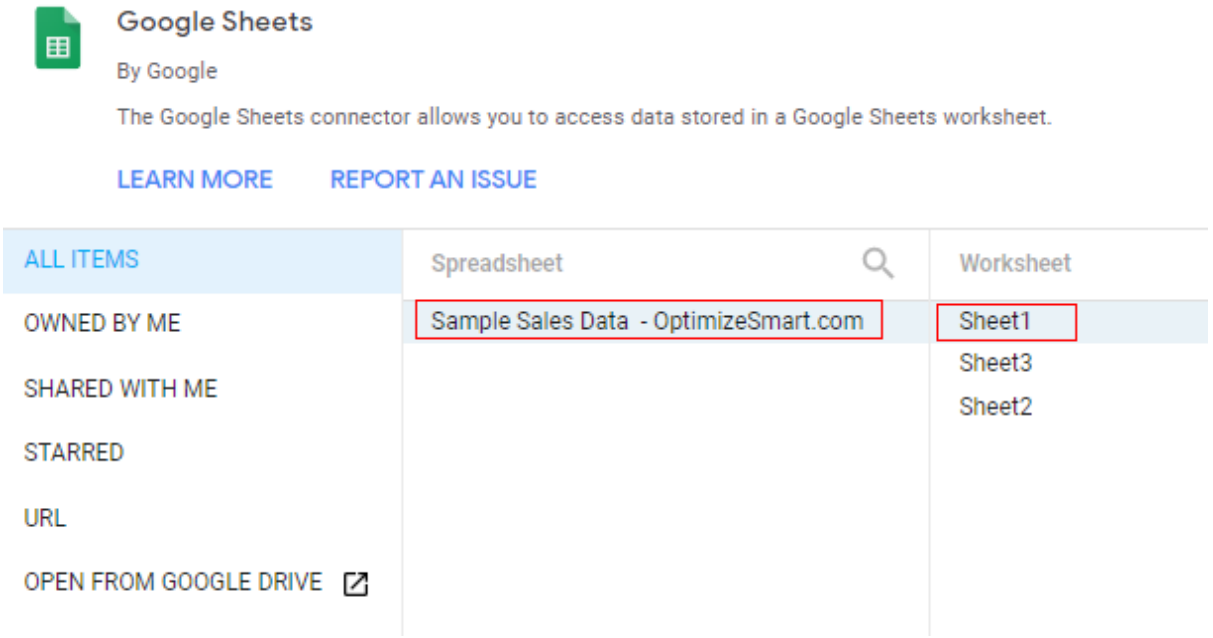
Step-7: Scroll down, find the Google Sheet Connector and then click on it:



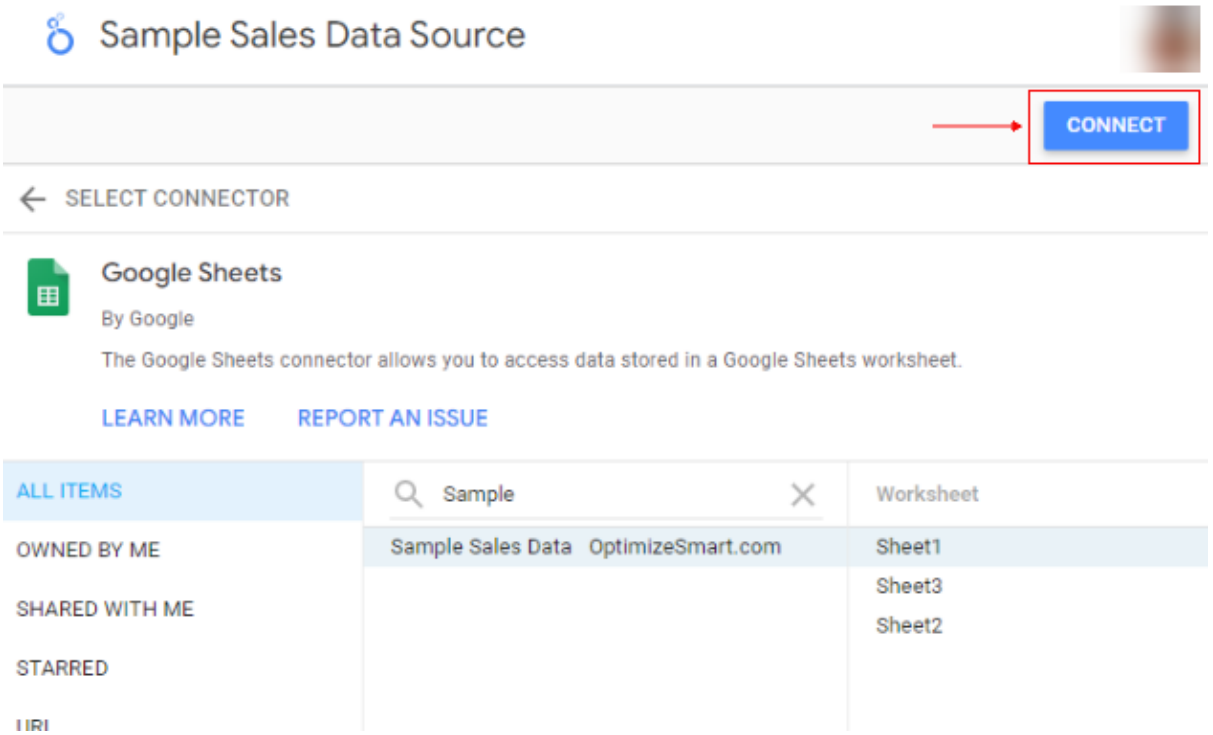
Step-8: Rename your data source by double-clicking on the 'Untitled Data Source' text:



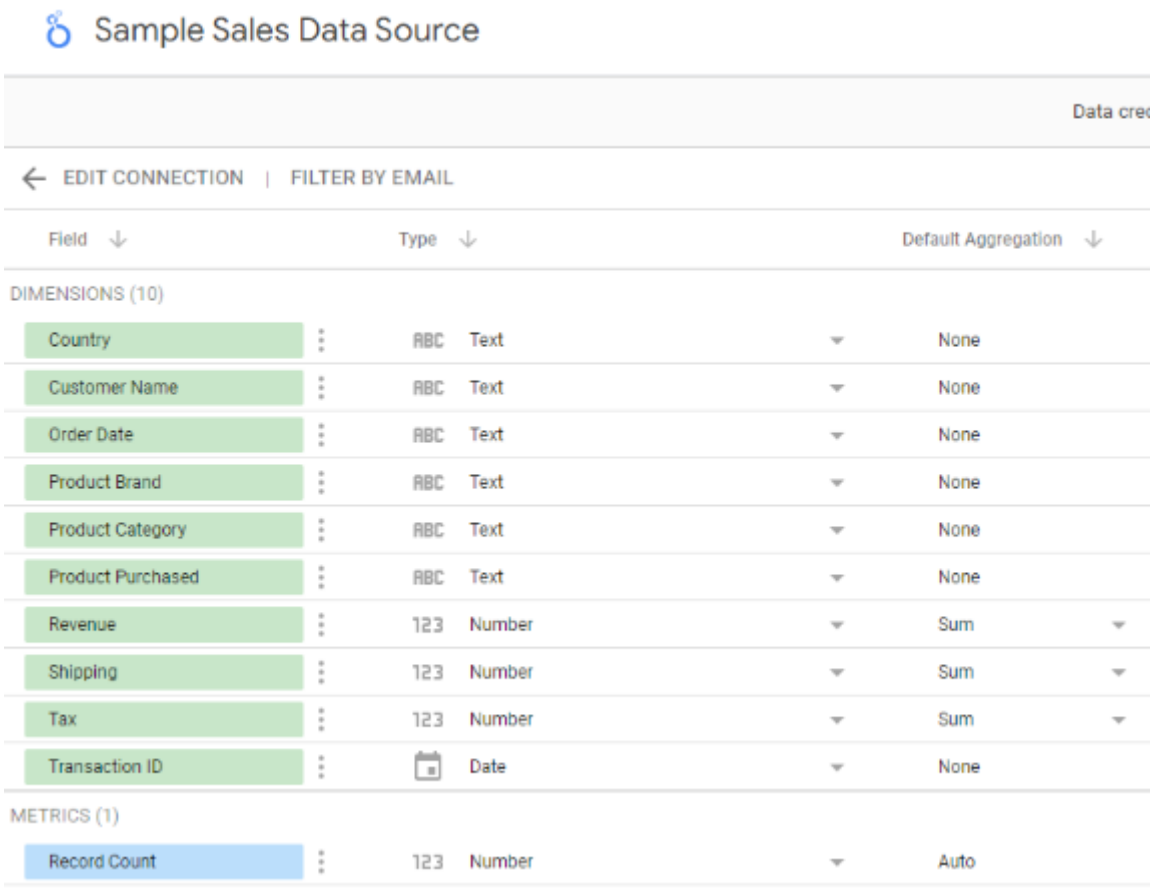
Step-9: Find and click on your Google Sheets which contains the data you want to visualize:



Step-10: Click on the blue '**Connect**' button on the top right-hand side:

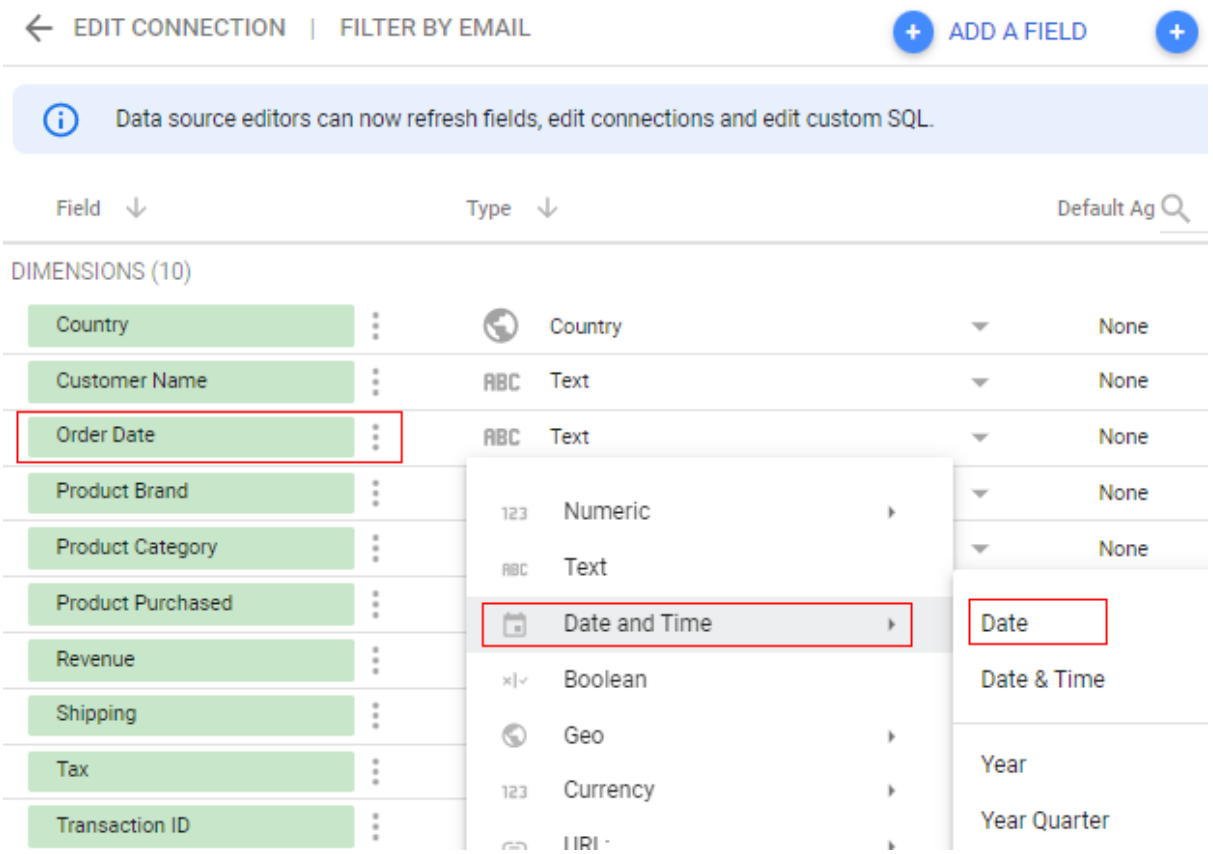


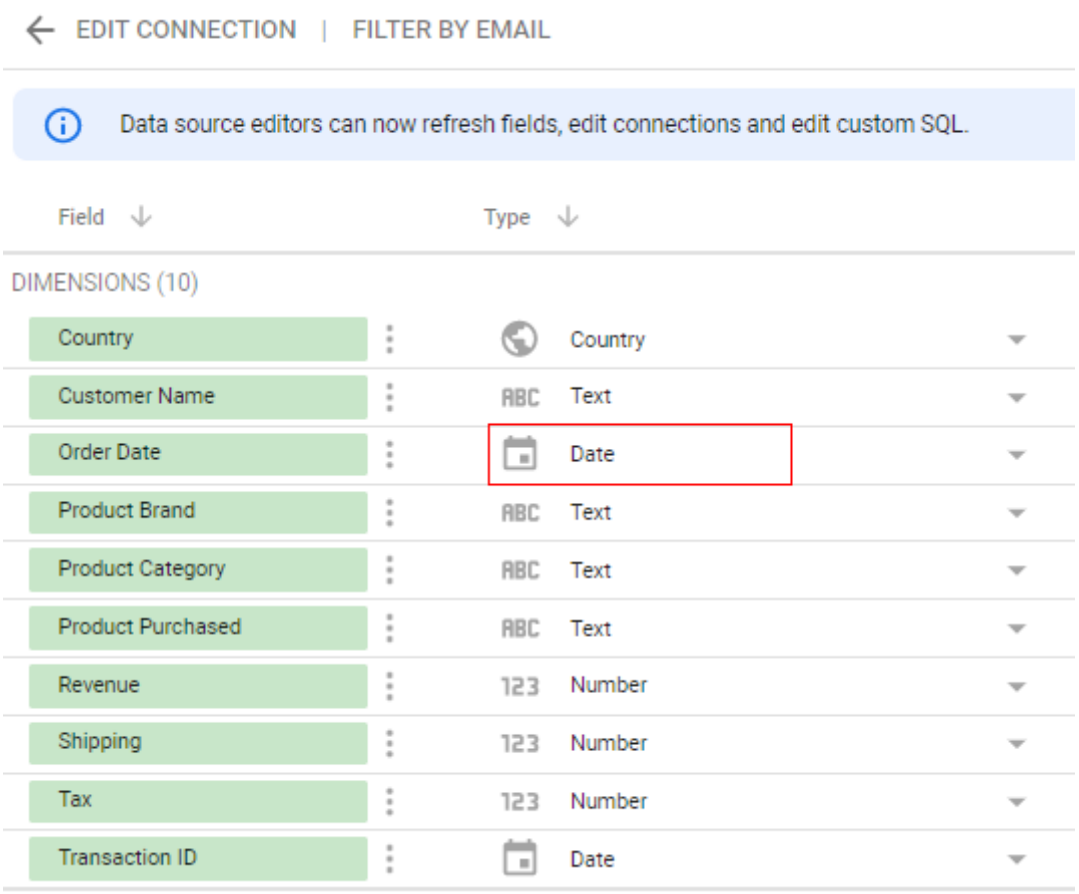
You should now see a screen like the one below:



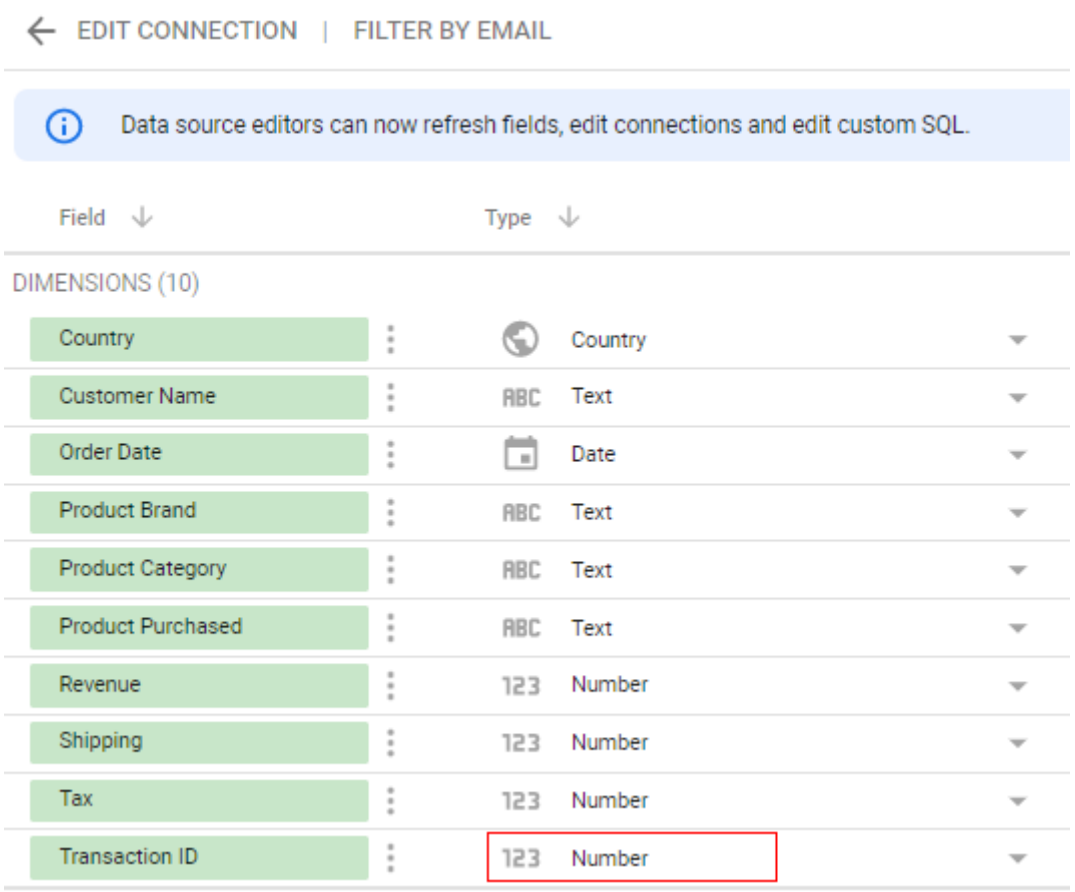
Step-11: Make sure each field is of the correct data type.

For example, from the screenshot above, we can see that the ‘order date’ field is of type text. It should be of type ‘date’:



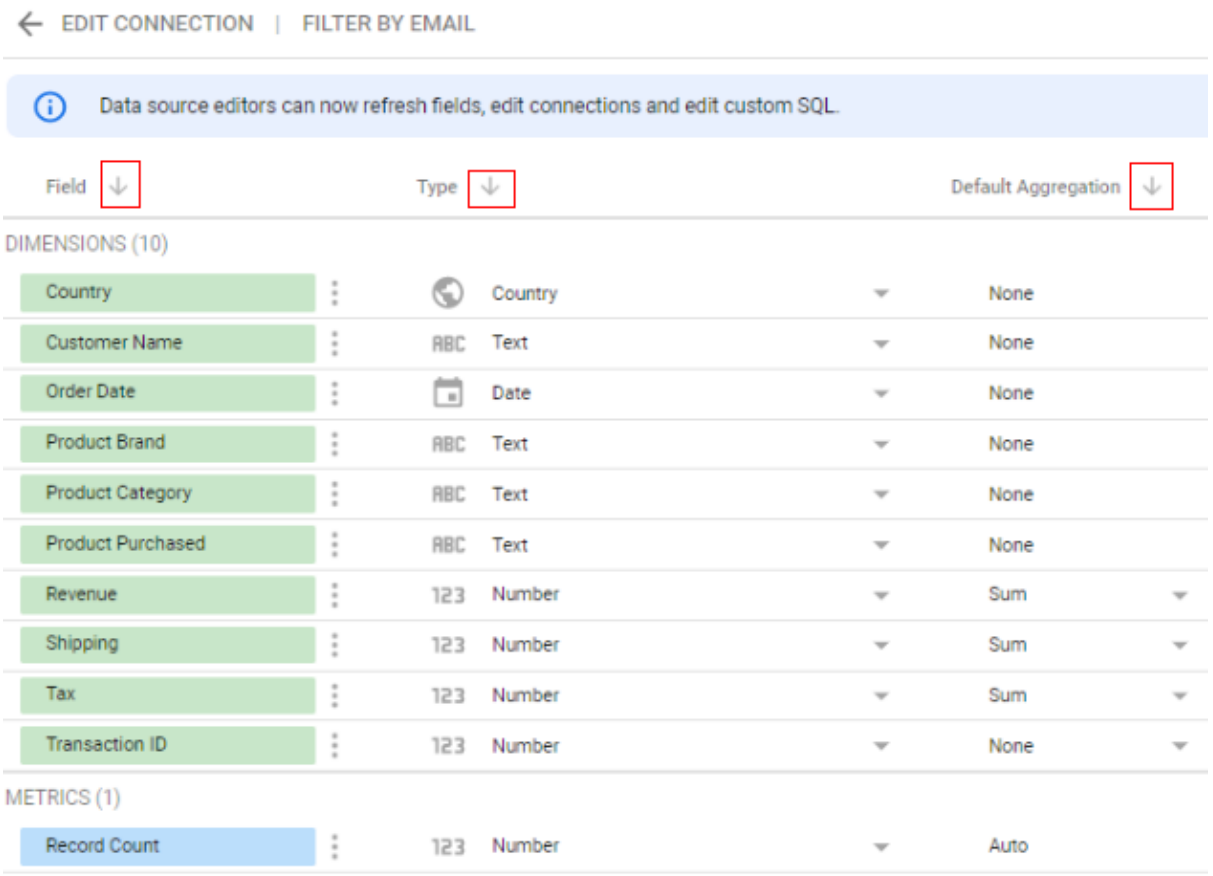


Similarly, the ‘Transaction ID’ field is of type ‘date’. It should be of type ‘number’:

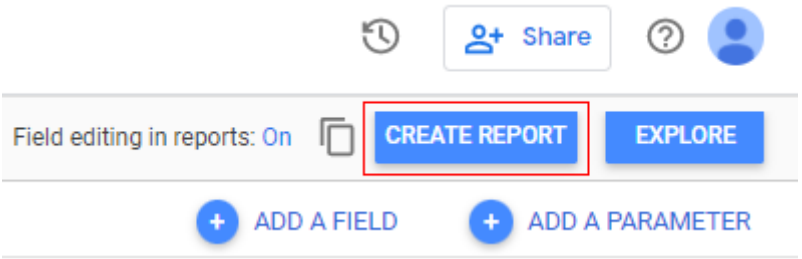


All the green fields represent [dimensions] and all the blue fields represents [metrics].

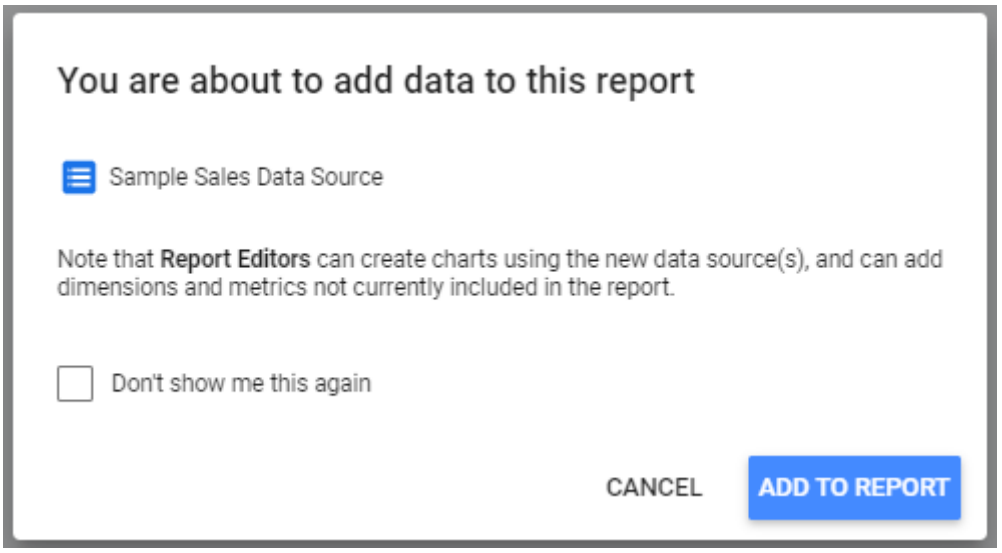
At this point, you cannot change the order of various dimensions and metrics, but you can sort them based on name, type, and default aggregation using the arrow buttons:



Step-12: Once everything looks all right then click on the '**Create Report**' button on the top right-hand side of your screen:

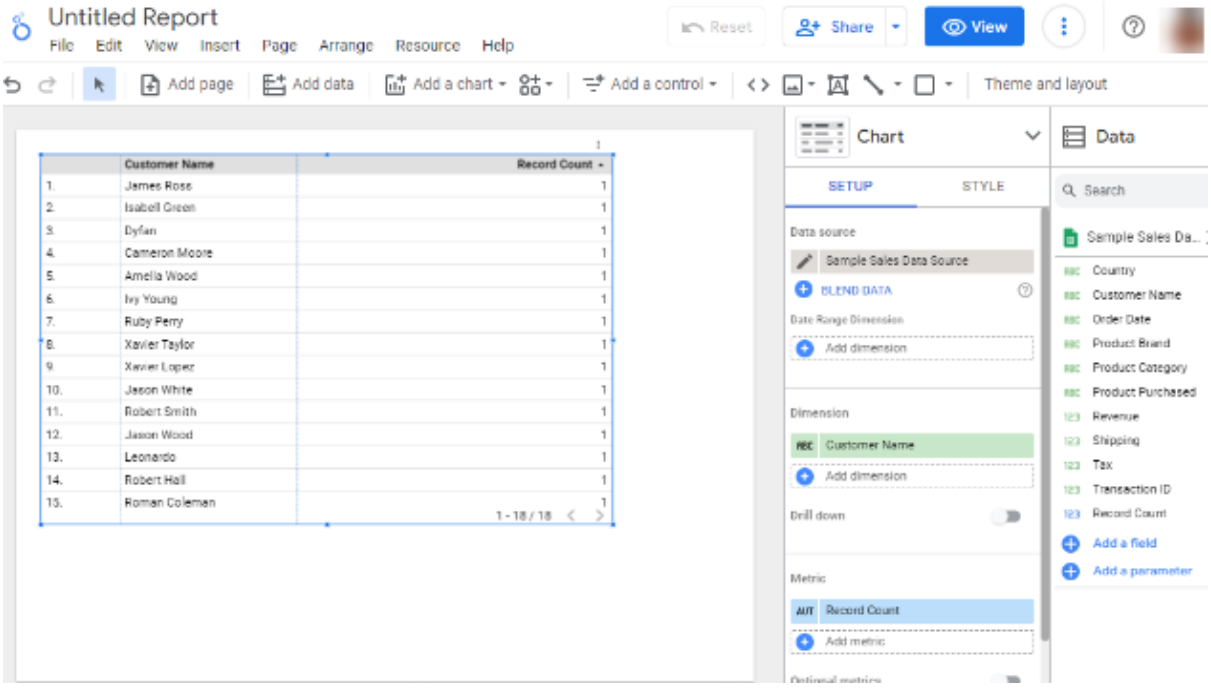


You should now see a dialog box like the one below:

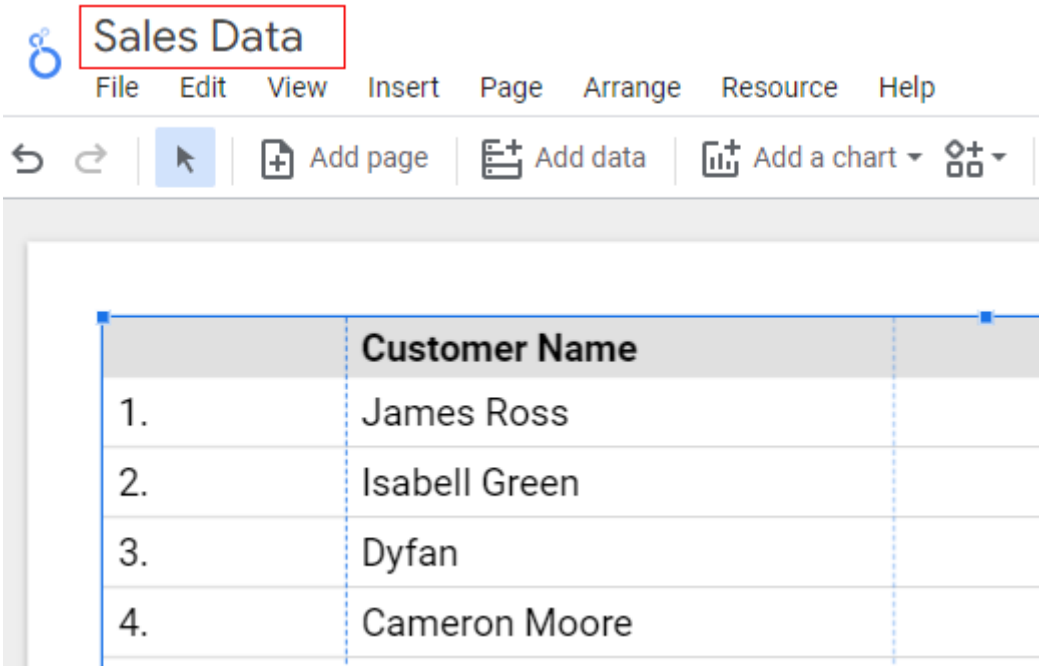


Step-13: Click on the 'Add to Report' button.

You should now see the following similar screen with a table on the canvas:

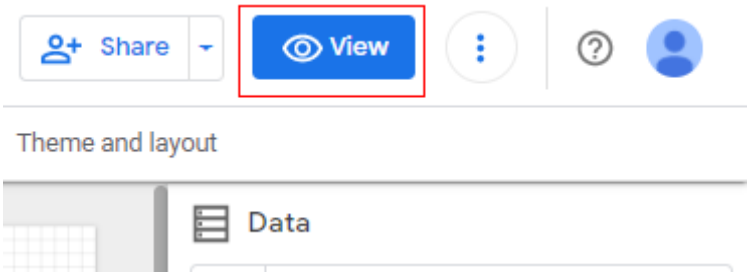


Step-14: Name your report by double-clicking on the text 'Untitled Report':

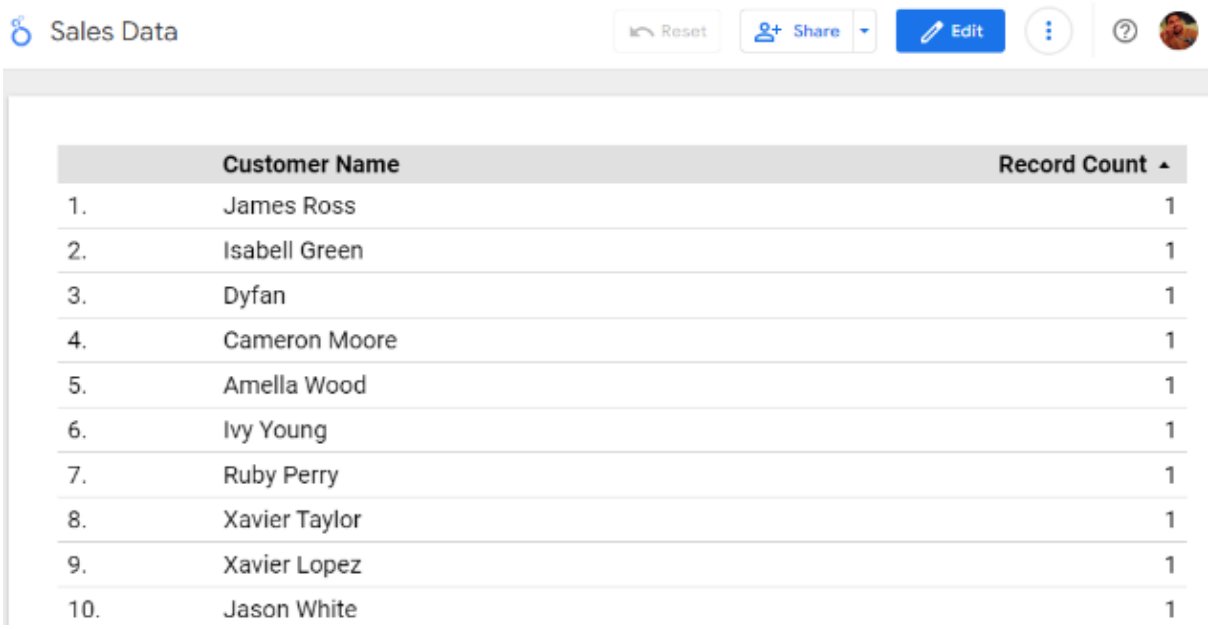


That's how you can create a report in Looker Studio and visualize the data from Google Sheets.

Step-15: In order to see this table in the 'view mode', click on the 'view' button on the top right-hand side:

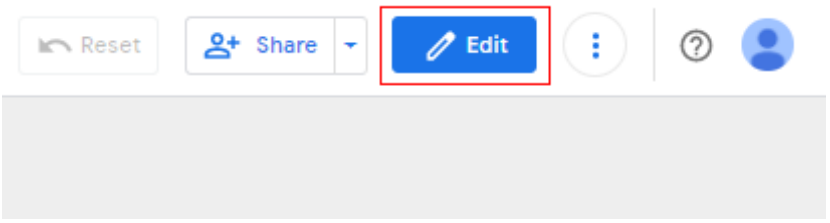


That's how your report will look like in the view mode:



	Customer Name	Record Count
1.	James Ross	1
2.	Isabell Green	1
3.	Dyfan	1
4.	Cameron Moore	1
5.	Amella Wood	1
6.	Ivy Young	1
7.	Ruby Perry	1
8.	Xavier Taylor	1
9.	Xavier Lopez	1
10.	Jason White	1

Step-16: If you want to edit this table again, then click on the 'Edit' button on the top right-hand side:



That's how you can use Looker Studio with Google Sheets.

Let's now learn, how to use Looker Studio with Google Analytics.

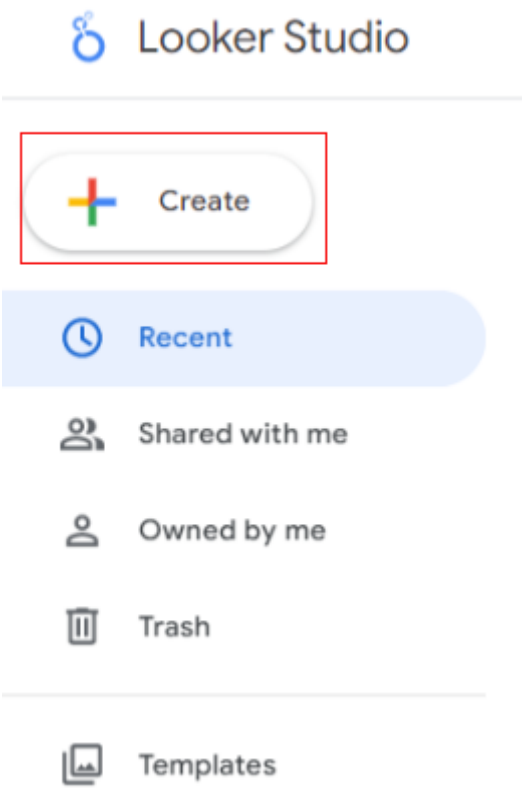
Related Articles:

1. How to format Google Sheets data for Looker Studio
2. How to use Looker Studio with Google Sheets
3. Working with timezones in Google Sheets and Looker Studio

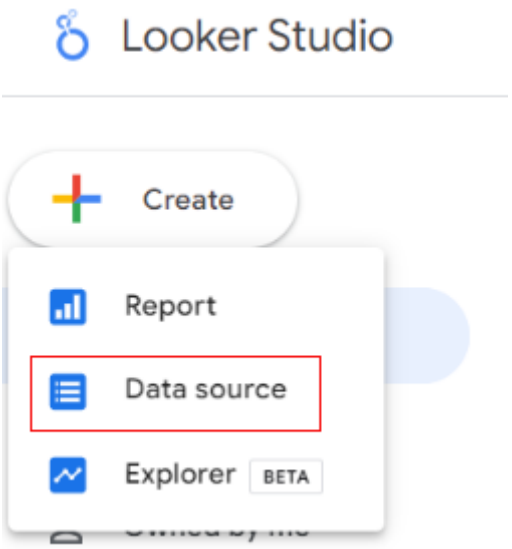
How to visualize Google Analytics data via Looker Studio

Step-1: Navigate to the home page of your Looker Studio account: https://datastudio.google.com/navigation/reporting

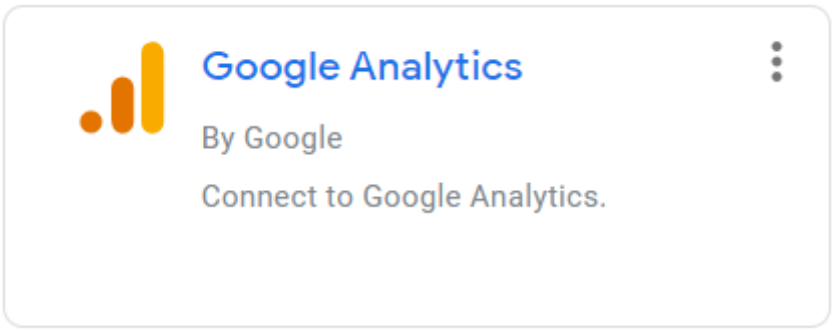
Step-2: Click on the '**Create**' button:



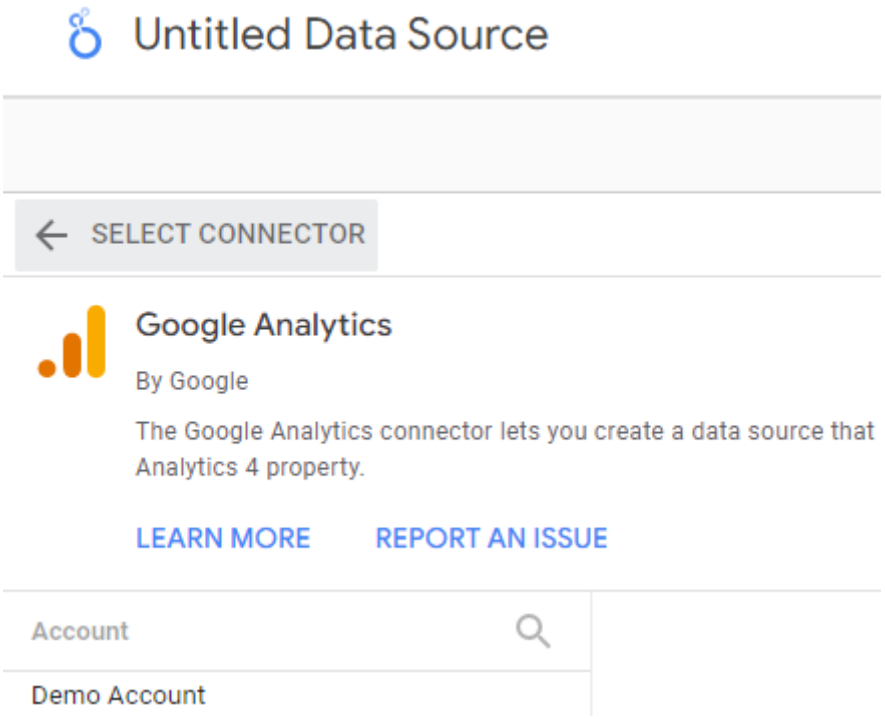
Step-3: Click on '**Data Source**':



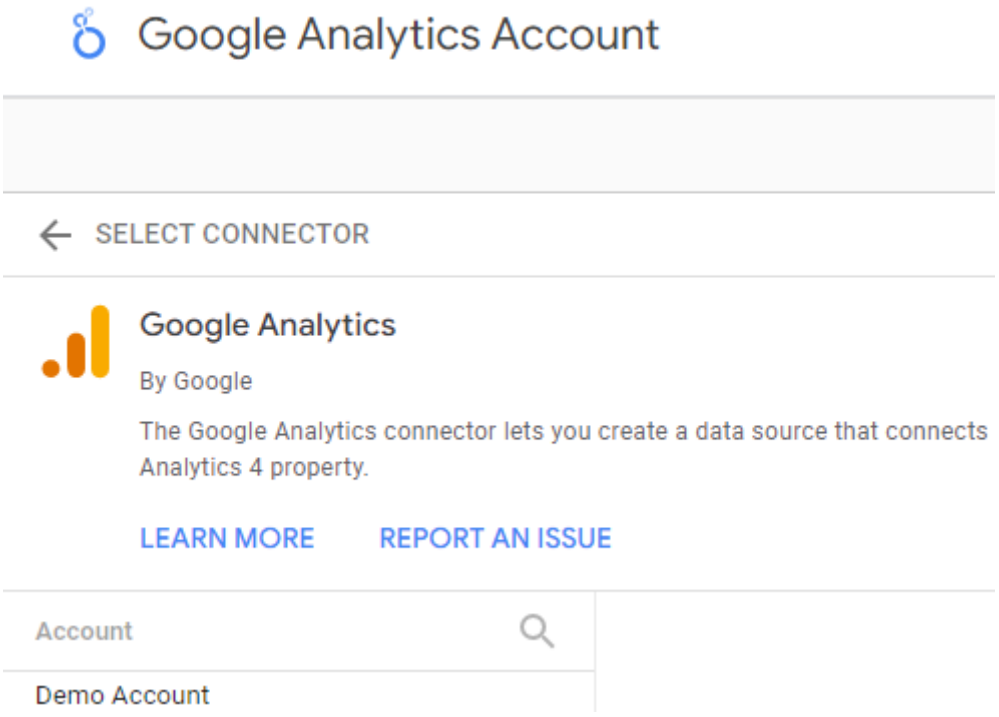
Step-4: Scroll down and find the Google Analytics Connector, then click on it:



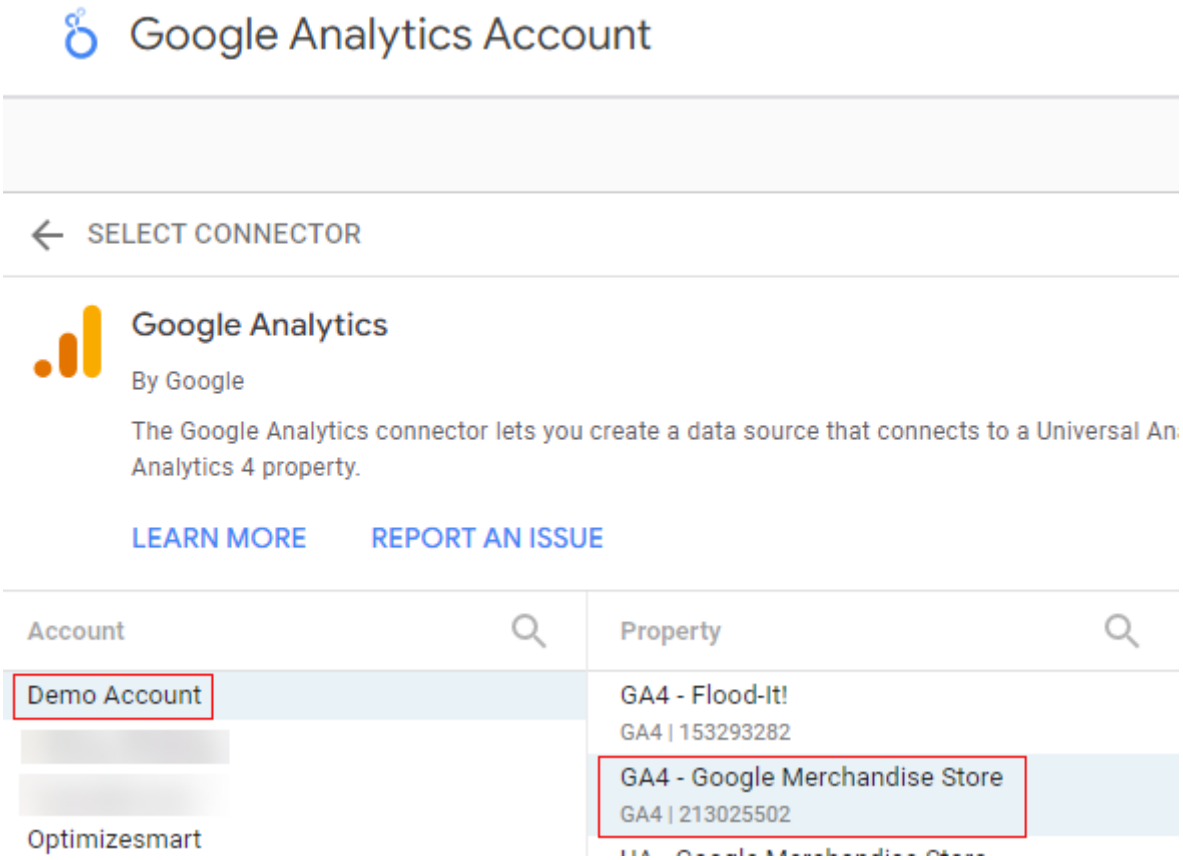
You should now see a screen like the one below:



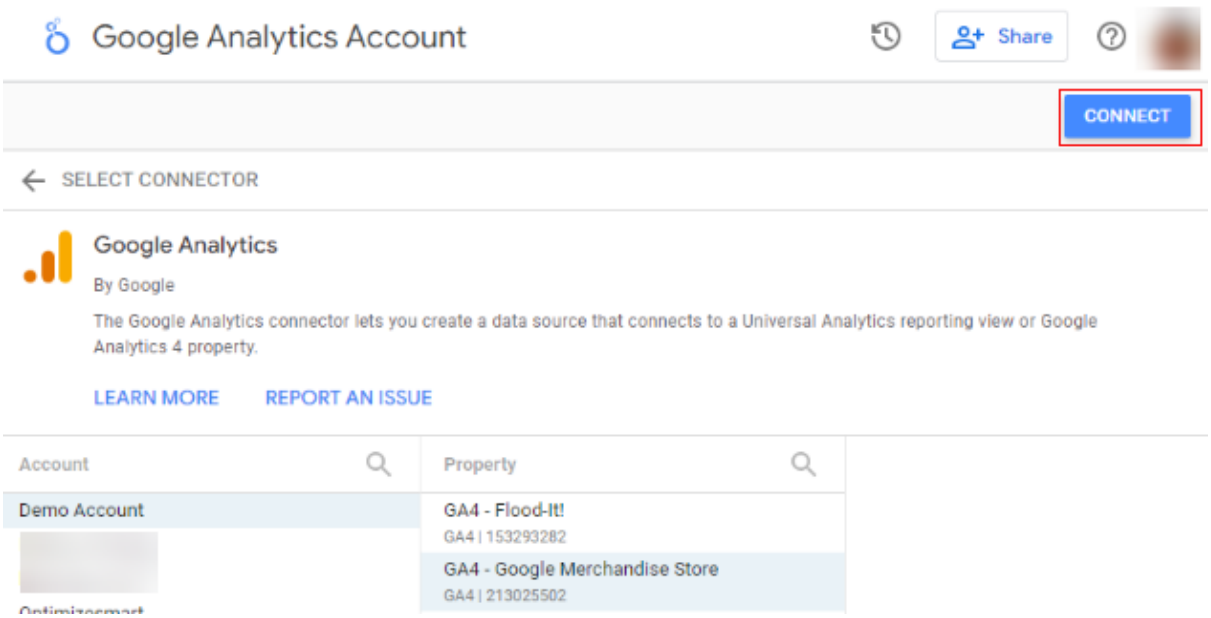
Step-5: Double-click on the text '**Untitled Data Source**' and then rename it (say 'Google Analytics Account'):



Step-6: Find and click on the GA property which contains the data you want to visualize:

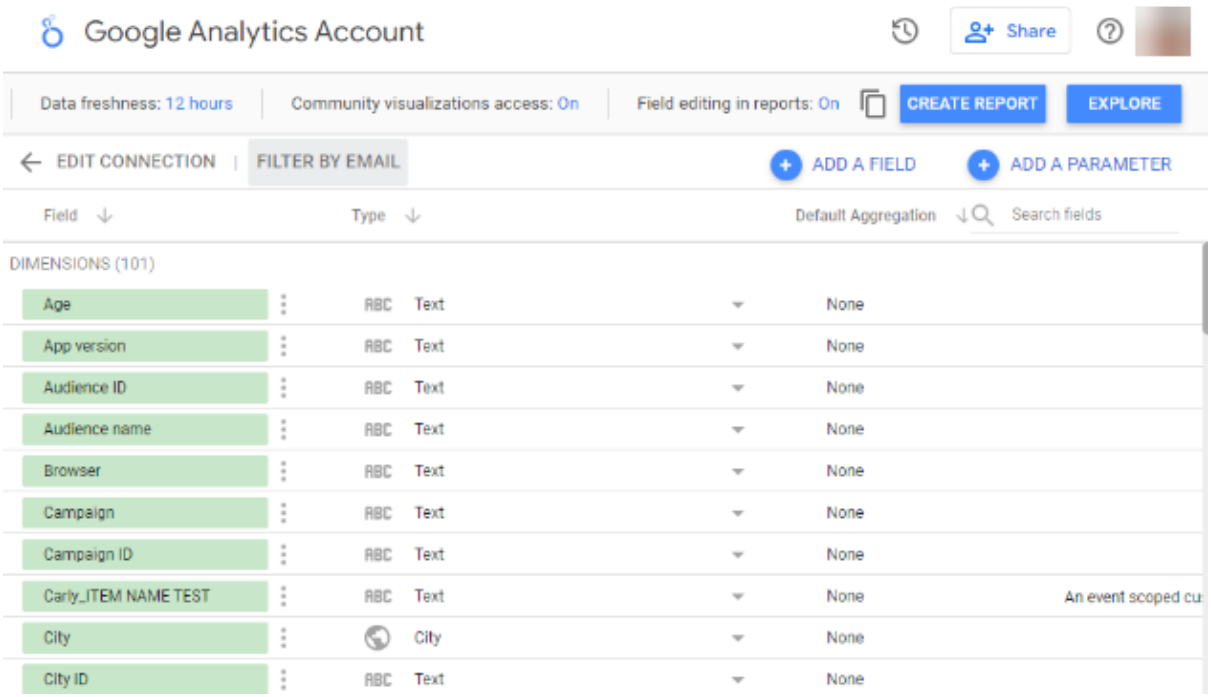


Step-7: Click on the blue '**Connect**' button on the top right-hand side:



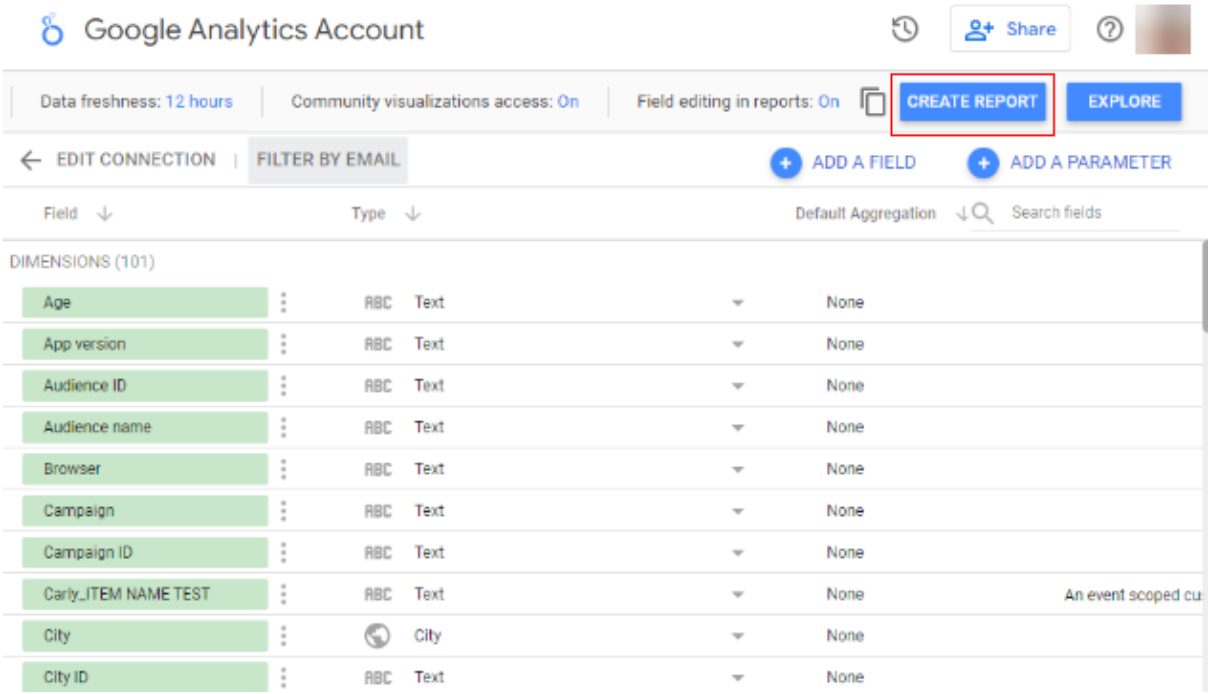
Here we are using the Google demo account.

Once you click on the 'connect' button, you should now see a screen like the one below:

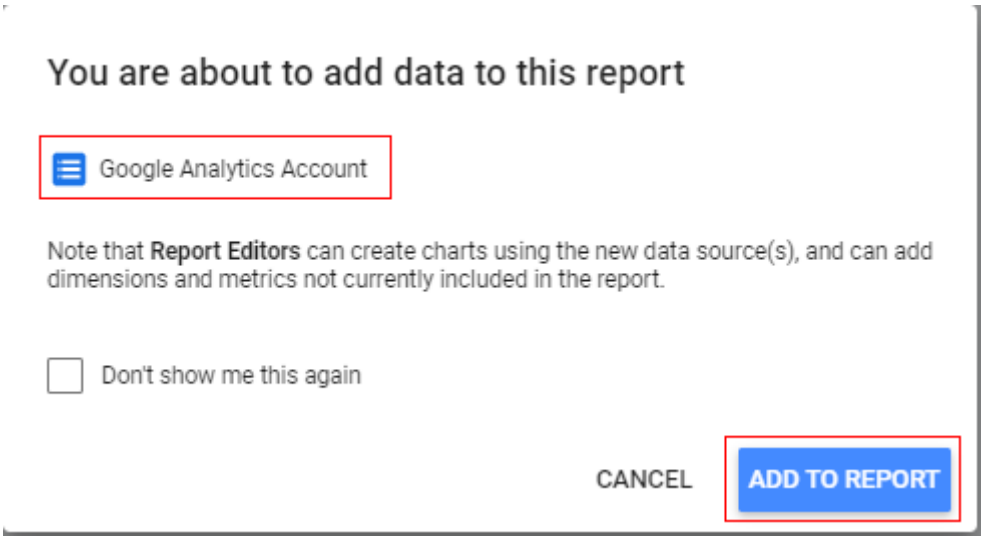


Here, all green fields are Google Analytics dimensions, and blue fields are Google Analytics metrics.

Step-8: click on the '**Create Report**' button on the top right-hand side of your screen:

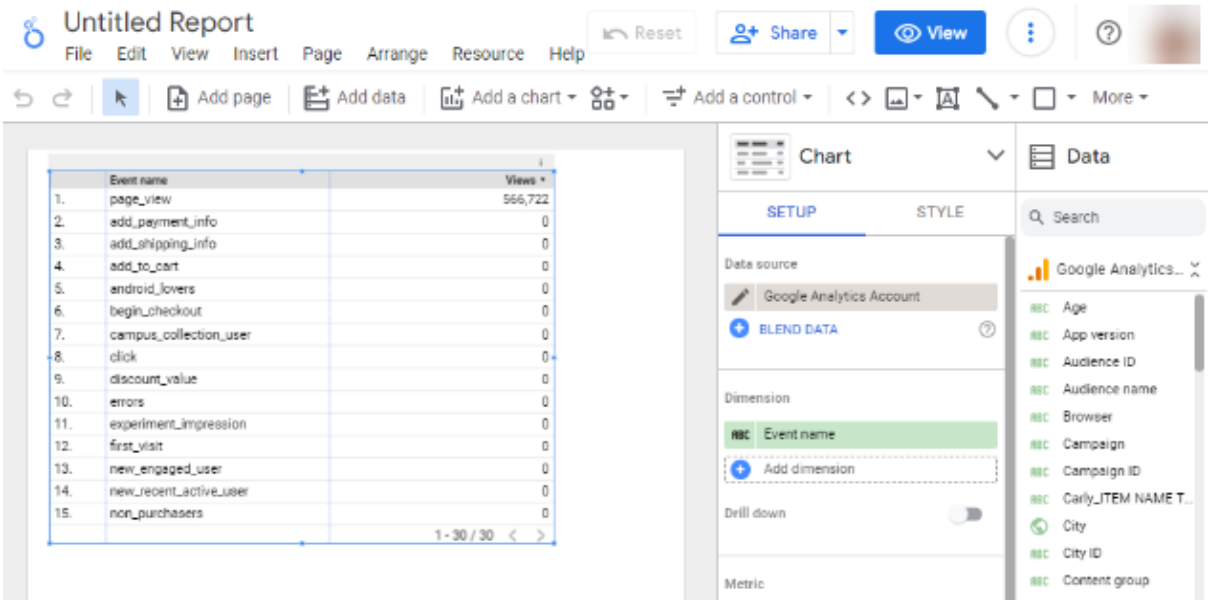


You should now see a dialogue box like the one below:



Step-9: Click on the '**Add to Report**' button.

You should now see the following similar screen with a table on the canvas:



Step-10: Name your report by double-clicking on the text '**Untitled Report**'.

That's how you can visualize Google Analytics data in Looker Studio.

Related Articles

1. How to extract data from Google Analytics into Google Sheets
2. How to extract data from Google Ads into Google Sheets
3. How to extract data from Facebook Ads into Google Sheets
4. How to extract data from Google Search Console into Google Sheets
5. How to extract data from Excel or CSV file into Google Sheets

The building blocks of Looker Studio

The following are the building blocks of Looker Studio:

1. Data platforms
2. Connectors
3. Data sources (aka Data Source Schemas)
4. Data sets
5. Data source schema fields
6. Dimensions
7. Metrics
8. Data types
9. Reports
10. Components (charts)

Introduction to data platforms

Before you can use Looker Studio and create reports to visualize data, you need access to one or more data platforms.

Following are examples of data platforms:

- Google Sheets
- Google Analytics
- Excel Spreadsheet
- BigQuery
- Google Ads
- Google Search Console
- YouTube Analytics
- Facebook Ads
- Adobe Analytics, etc

In order to pull data from these data platforms into Looker Studio, you would need to use a connector(s).

Introduction to connectors

A connector is a mechanism through which you can pull data from a specific data platform.

Any data platform accessible via the internet can be connected with Looker Studio.

There are two broad categories of connectors:

1. Ready-made connectors
2. Custom made connectors

#1 Ready-made connectors

These connectors are ready to use. They are either free to use or require a monthly/annual paid subscription.

Google connectors, partner connectors and open-source connectors are examples of ready-made connectors.

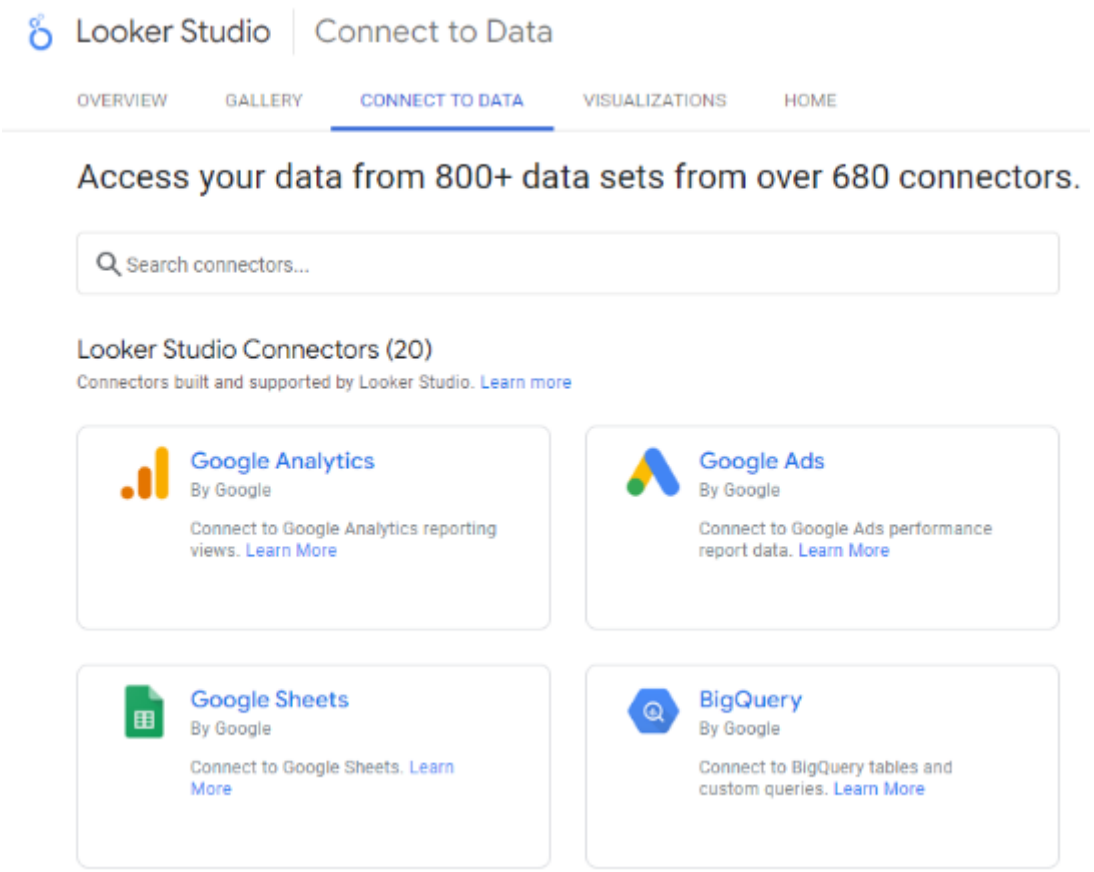
#2 Custom made connectors

These connectors are developed on demand and are used when ready-made connectors can't be used to pull data from a specific data platform.

You can create your own connector by using Google Apps Script.

If you are not a developer, you can hire someone to create a custom-made connector for you.

Looker Studio Connector Gallery



The Looker Studio Connector Gallery lists all the connectors supported by Looker Studio.

Here you can see a list of all the currently available connectors.

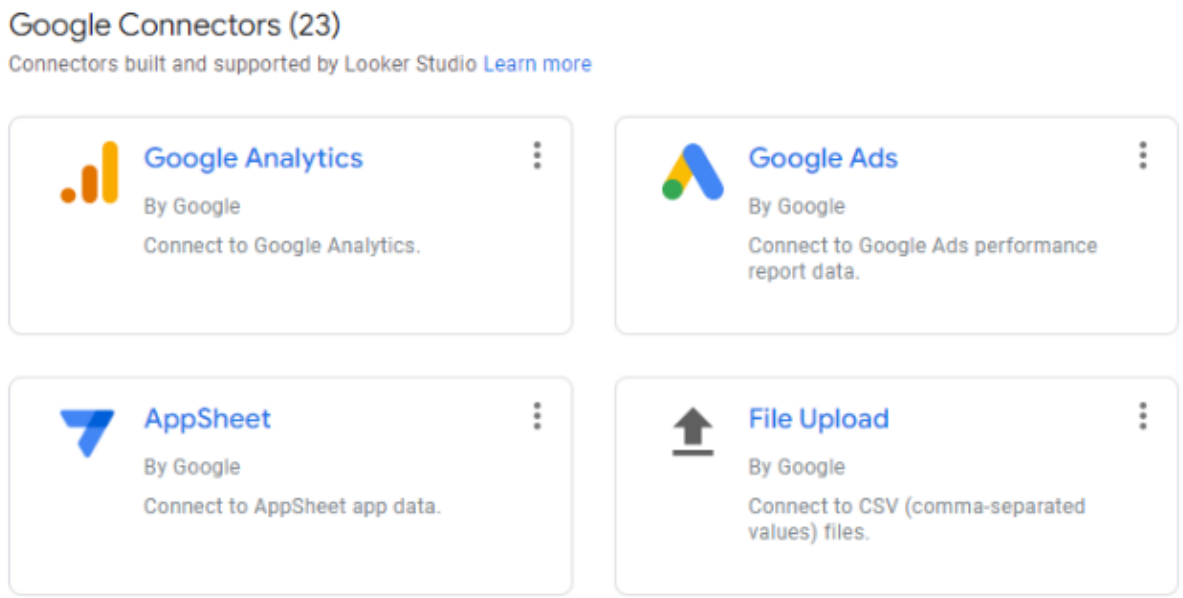
If you build your own connector, you can choose to publish and promote it in the connector gallery.

Here is the link to the Looker Studio Connector Gallery:
https://datastudio.google.com/data

Introduction to Google connectors

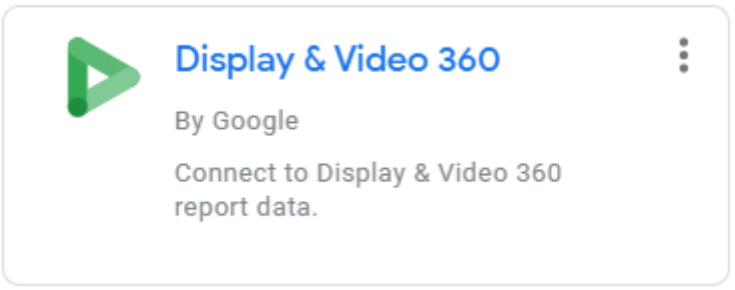
Google connectors are the connectors built and maintained by Google.

At present, Google provides 23 different types of connectors in Looker Studio:



All of the Google connectors are free to use as long as you have access to the right Google product.

For example, if you do not have access to GA 360, then the **Display and Video 360** connector is of no use to you:



There are three categories of Google connectors:

#1 Google product connectors

#2 Google database platform connectors

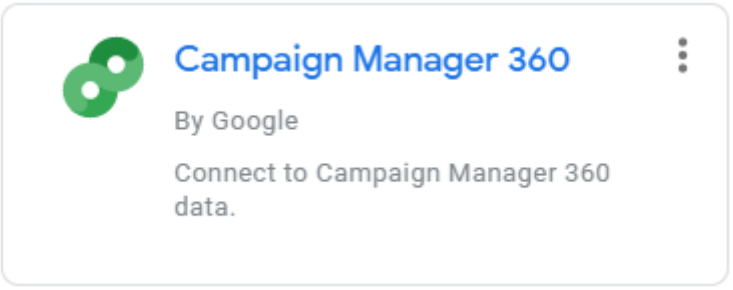
#3 File upload connector

Google product connectors

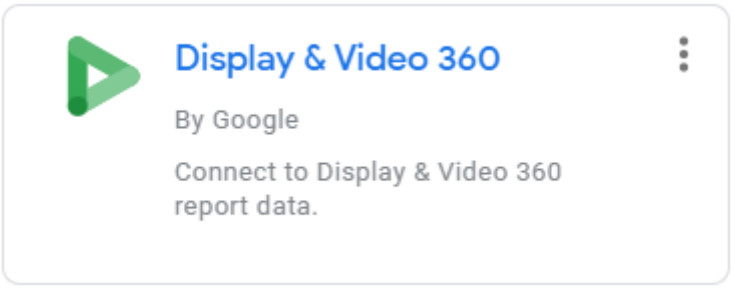
Through Google product connectors, you can pull data from Google products into Looker Studio.

Following are examples of Google product connectors:

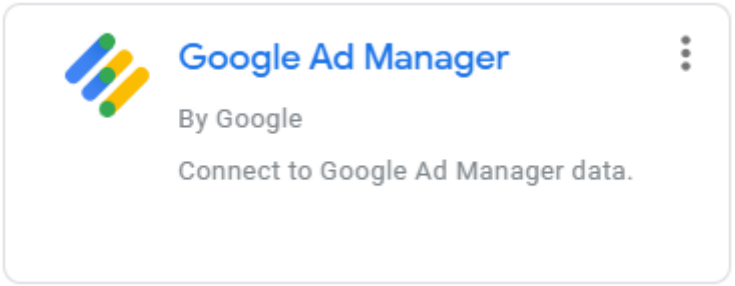
1. **Campaign Manager 360** – use this connector to connect your Looker Studio account to your Campaign Manager network and advertiser data.



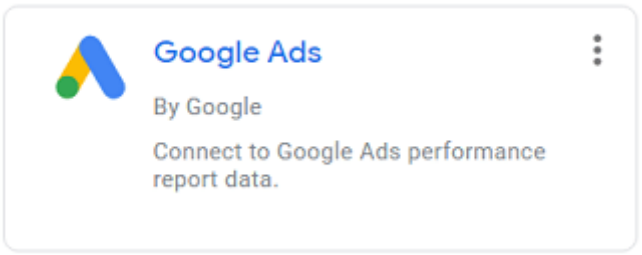
2. **Display & Video 360** – use this connector to connect your Looker Studio account to your Display & Video 360 data.



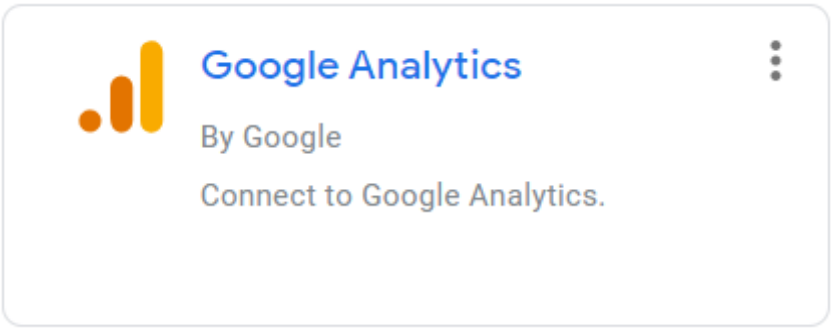
3. **Google Ad Manager** – connect Looker Studio to Google Ad Manager 360



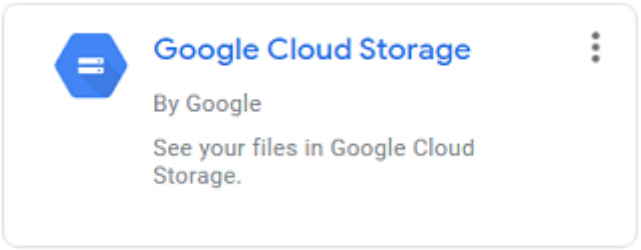
4. **Google Ads** – connect Looker Studio to Google Ads



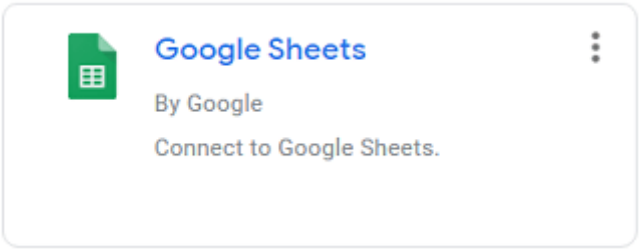
5. **Google Analytics** – connect Looker Studio to Google Analytics.



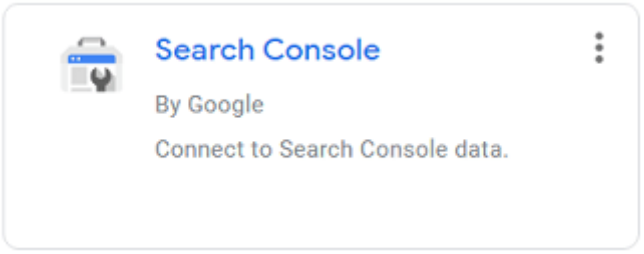
6. **Google Cloud Storage** – connect Looker Studio to Google Cloud Storage.



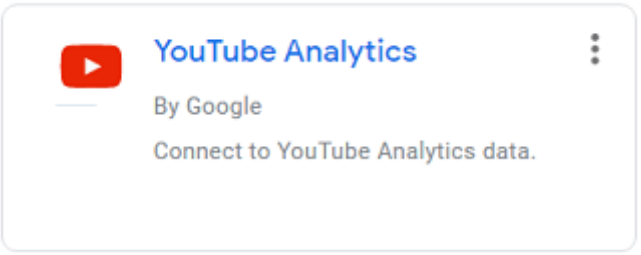
7. **Google Sheets** – connect Looker Studio to a Google Sheets worksheet or range.



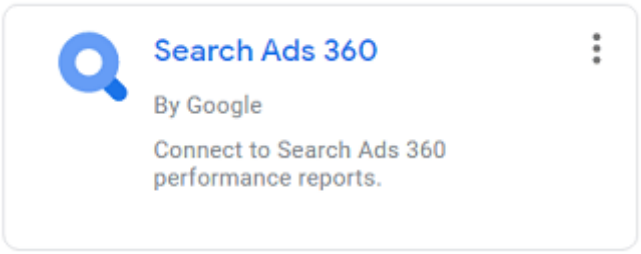
8. **Search Console** – connect Looker Studio to Google Search Console.



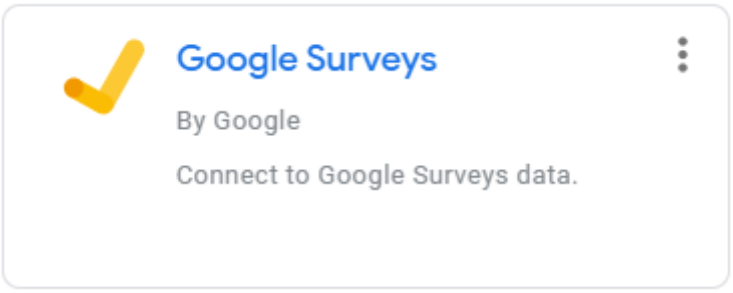
9. **YouTube Analytics** – connect Looker Studio to YouTube Analytics.



10. **Search Ads 360 connector** – connect Looker Studio to Search Ads 360.



11. **Google Surveys** – connect Looker Studio to Google Surveys

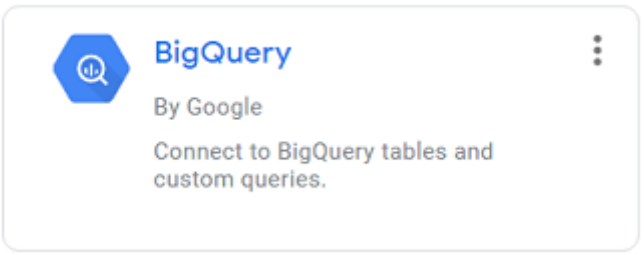


Google database platform connectors

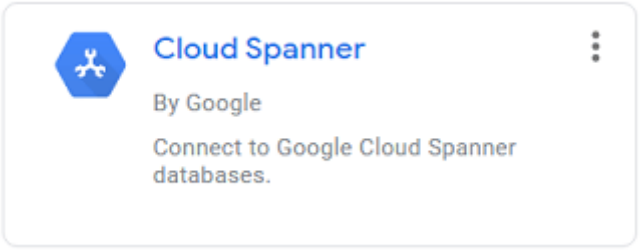
Through Google database platform connectors, you can pull data from Google database platforms into Looker Studio.

Following are examples of Google database platform connectors:

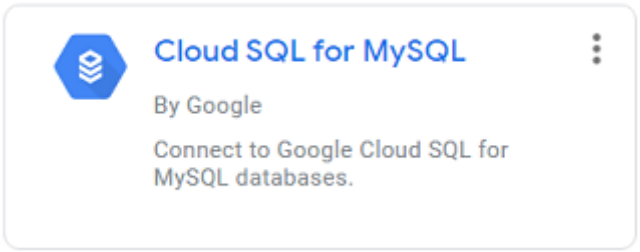
1. **Google BigQuery** – connect Looker Studio to BigQuery tables.



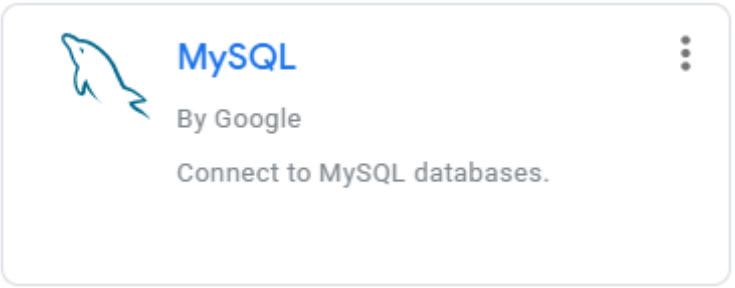
2. **Google Cloud Spanner** – connect Looker Studio to Cloud Spanner databases.



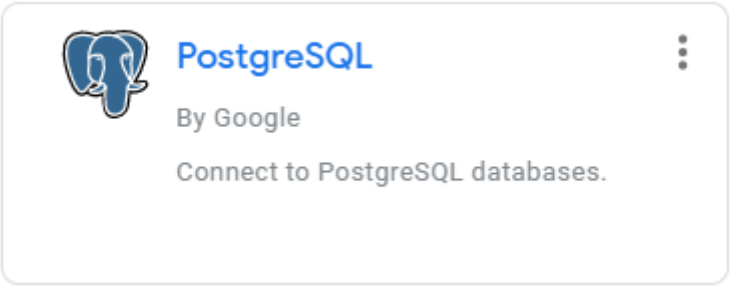
3. **Google Cloud SQL for MySQL** – connect Looker Studio to Google Cloud SQL databases.



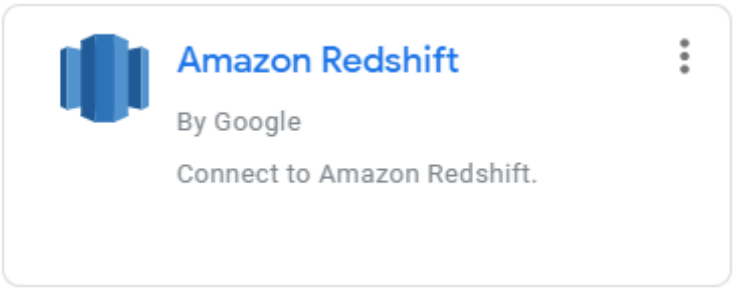
4. **MySQL** – connect Looker Studio to MySQL databases.



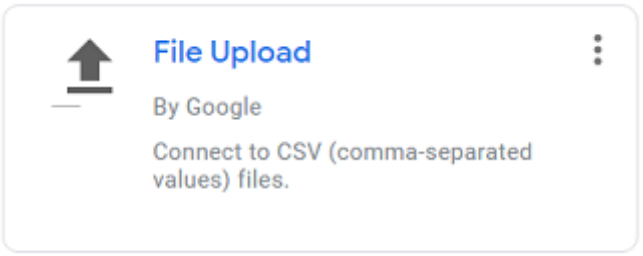
5. **PostgreSQL** – connect Looker Studio to PostgreSQL-based databases.



6. **Amazon Redshift** – connect to the Amazon Redshift database



File upload connector



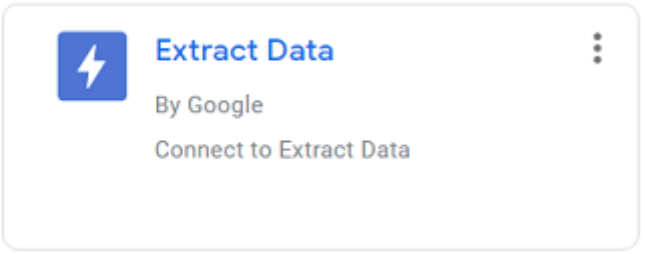
Use the file uploader connector to upload data from any data source (via a CSV file) to Looker Studio that is not supported by a specific connector.

Use this connector if you want to connect your Looker Studio account with Microsoft Excel spreadsheets.

If you prefer using Excel with Looker Studio, then you will find yourself using this connector a lot.

I prefer to use Google sheets because it natively integrates with Looker Studio and other Google products like Google Analytics and Google Ads.

Extract data connector



Extract data connector is used to pull only a subset of data from an existing data source (i.e. data source which is already available in your Looker Studio account).

The subset of data from an existing data source is called the '**Extracted Data Source**'.

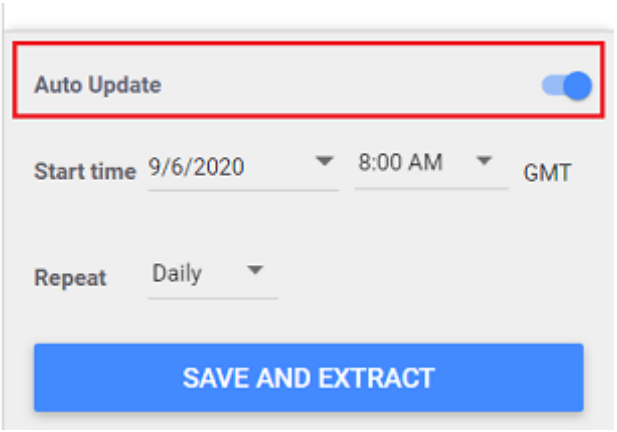
Thus by using the Extract data connector, you can create an extracted data source in Looker Studio.

The advantage of using the Extract data connector is that when you extract only a subset of data (instead of all of the data) from a data source (to create reports and explorations), it can make your Looker Studio reports and explorations load faster.

Not only that but your reports and explorations also become more responsive when applying filters and date ranges.

Note(1): Extracted data sources can contain up to 100MB of data.

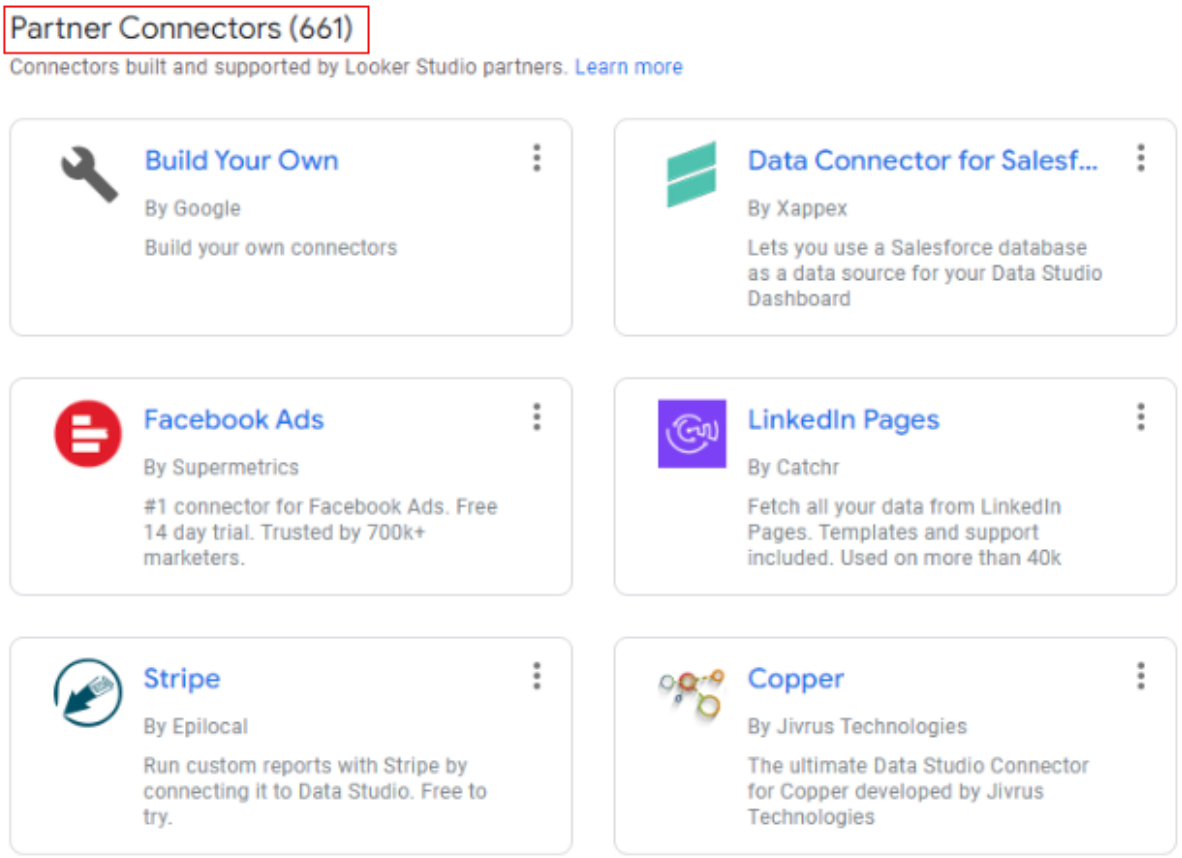
Note(2): By default, the extracted data sources contain static data. If you want the extracted data source to automatically update, then you would need to turn on the 'Auto Update' feature while creating the data source:



Introduction to partner connectors

Partner connectors are connectors built and maintained by third parties like Supermetrics, Funnel, etc.

At the time of writing, 661 different types of partner connectors are available in Looker Studio: https://datastudio.google.com/datasources/create



Note: Partner connectors are usually not free to use and would require a monthly/annual paid subscription.

Why do you need partner connectors?

Google does not provide any connector for non-Google products.

If you want to pull data from a non-Google data platform (like Facebook Ads, Adobe Analytics, Bing Ads, etc) then you need to use/purchase a partner connector.

Partner connectors are required when you want to consolidate data from multiple data platforms and visualize them in Looker Studio.

Through partner connectors, you can unite data from multiple marketing platforms into Looker Studio.

For example, you can report and compare Google Ads, Facebook, Instagram, Twitter, LinkedIn and Bing Ads campaigns in a single Looker Studio report.

Partner connectors make cross-platform reporting possible in Looker Studio.

Supermetrics partner connectors

Supermetrics is a great tool that you can use to get partner connectors. They provide connectors for the following data platforms:

- Facebook Ads
- Hubspot
- Microsoft Advertising
- Twitter Ads
- Instagram Insights
- LinkedIn Ads
- YouTube

- Adobe Analytics
- MailChimp, etc.

Supermetrics for Looker Studio is a Google Sheet add-on that lets you use several connectors for pulling data from multiple non-Google data platforms.

I also use and recommend **Supermetrics for Google Sheets** add-on.

I use this add-on to pull data from Google Analytics into Google Sheets.

Its free version is also available and is good enough, as long as you are using only Google Analytics as a data source.

Related Articles:

1. **How to use Supermetrics for Google Sheets Add-on**
2. **Guide to Supermetrics queries for Google Sheets**

Difference between the Supermetrics for Google Sheets and Google Analytics Spreadsheet add-ons

Both are Google Sheet add-ons and both are free to use. Both are used to pull Google Analytics data into a Google Sheet.

The main difference is in the ease of use.

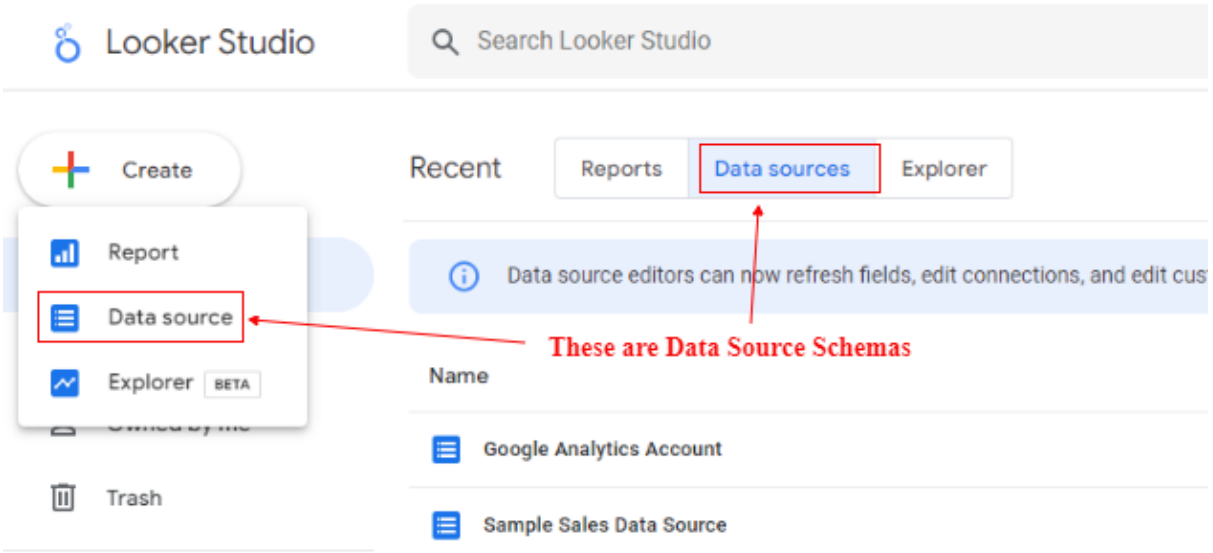
The [Google Analytics Spreadsheet Add-on] (developed by Google) is not as easy to use as the Supermetrics for Google Sheets add-on, so I recommend using the Supermetrics for Google Sheets add-on.

Related Article: **How to use Google Analytics API without any coding**

Introduction to data sources

A data source is a Looker Studio file that is used to define how a connector should pull data from a specific data set and then send it to the report(s) in Looker Studio.

When you log in to Looker Studio, Google gives you the option to create a new data source or edit an existing data source:



But the name 'data source' (in the context of Looker Studio) is a misnomer.

You are not creating a data source in Looker Studio.

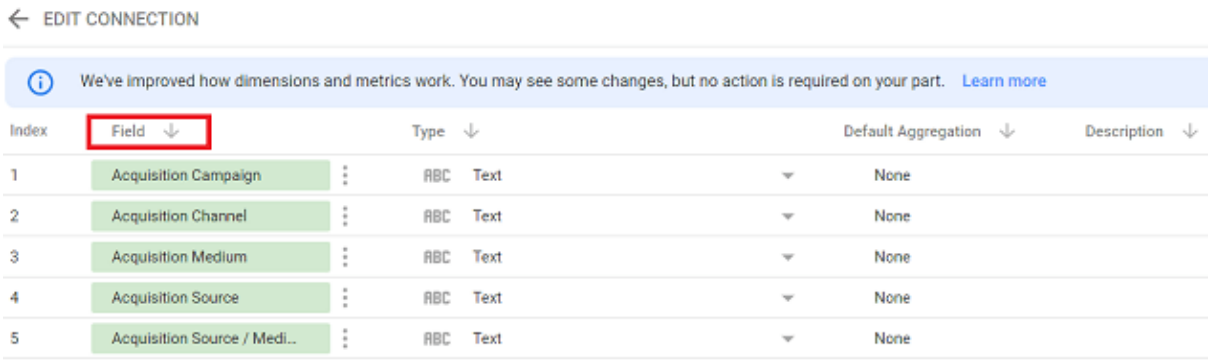
What you are actually creating is data source schema which defines how a connector should pull data from a specific data set and then send it to one or more reports.

The data set that you use is your actual data source. You create a data source schema for a specific **data set.**

So if you want to display data from a data set in your Looker Studio report, then you would need to create a data source schema for that data set and then add the data source schema to your report.

Introduction to data source schema fields

A data source schema is made up of a set of fields called data source schema fields:



A connector pulls these fields from the data source.

Only the fields provided by the connector are the ones available to use in your schema and reports.

Related Articles:

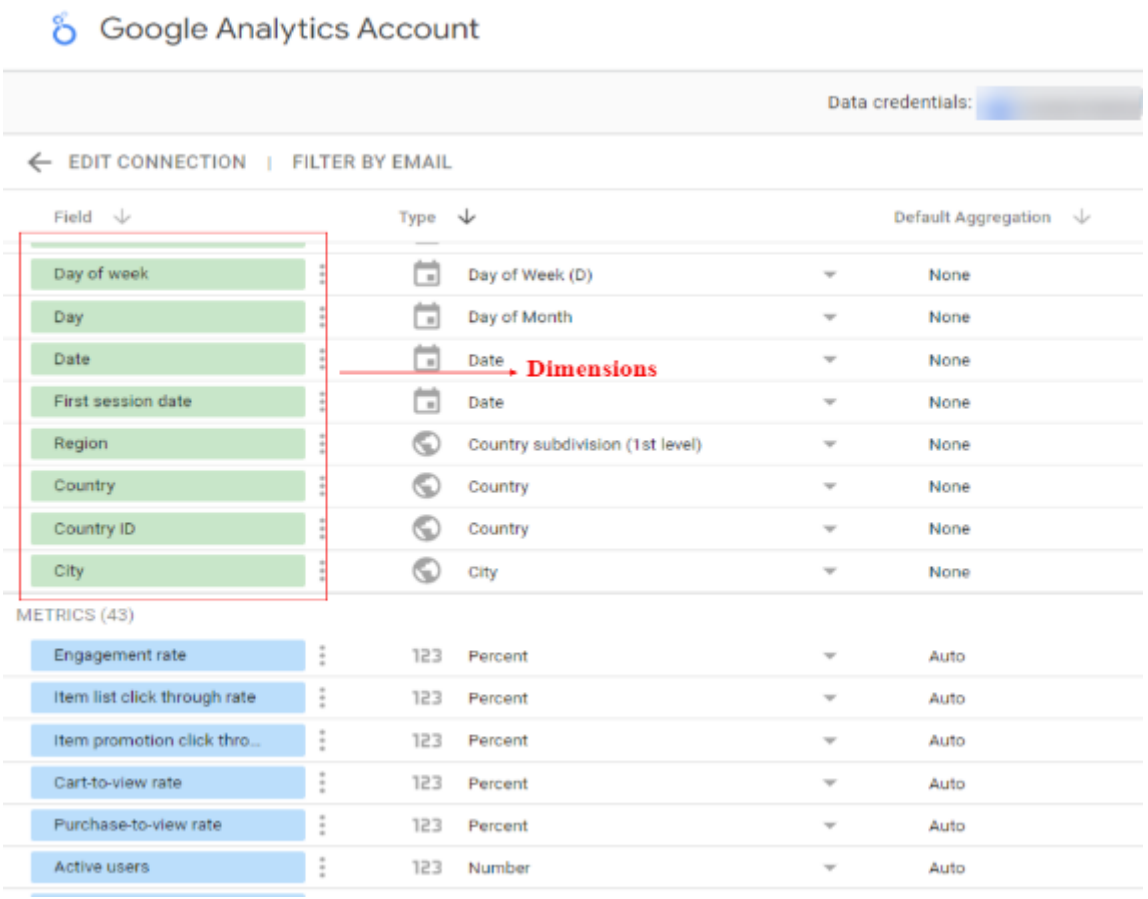
1. Guide to data sources in Looker Studio
2. Guide to data source fields in Looker Studio
3. How to create and configure a data source in Looker Studio
4. How to share a data source with others in Looker Studio
5. Data Source version history in Looker Studio
6. Community visualization access in Looker Studio
7. Understanding data freshness in Looker Studio
8. Understanding data source credentials in Looker Studio
9. Field editing in reports – Looker Studio
10. Refresh data source schema fields in Looker Studio
11. Filter by email in Looker Studio
12. The 'data set configuration error' in Looker Studio
13. Formula Rejection in Looker Studio
14. Understanding functions in Looker Studio
15. Guide to calculated fields in Looker Studio

16. Doing basic maths on numeric fields via calculated fields
17. How to edit a calculated field in Looker Studio
18. Why you should avoid using functions and calculated fields in Looker Studio

Introduction to dimensions in Looker Studio

A dimension is the attribute of your website visitors. It is used to describe or categorize your data.

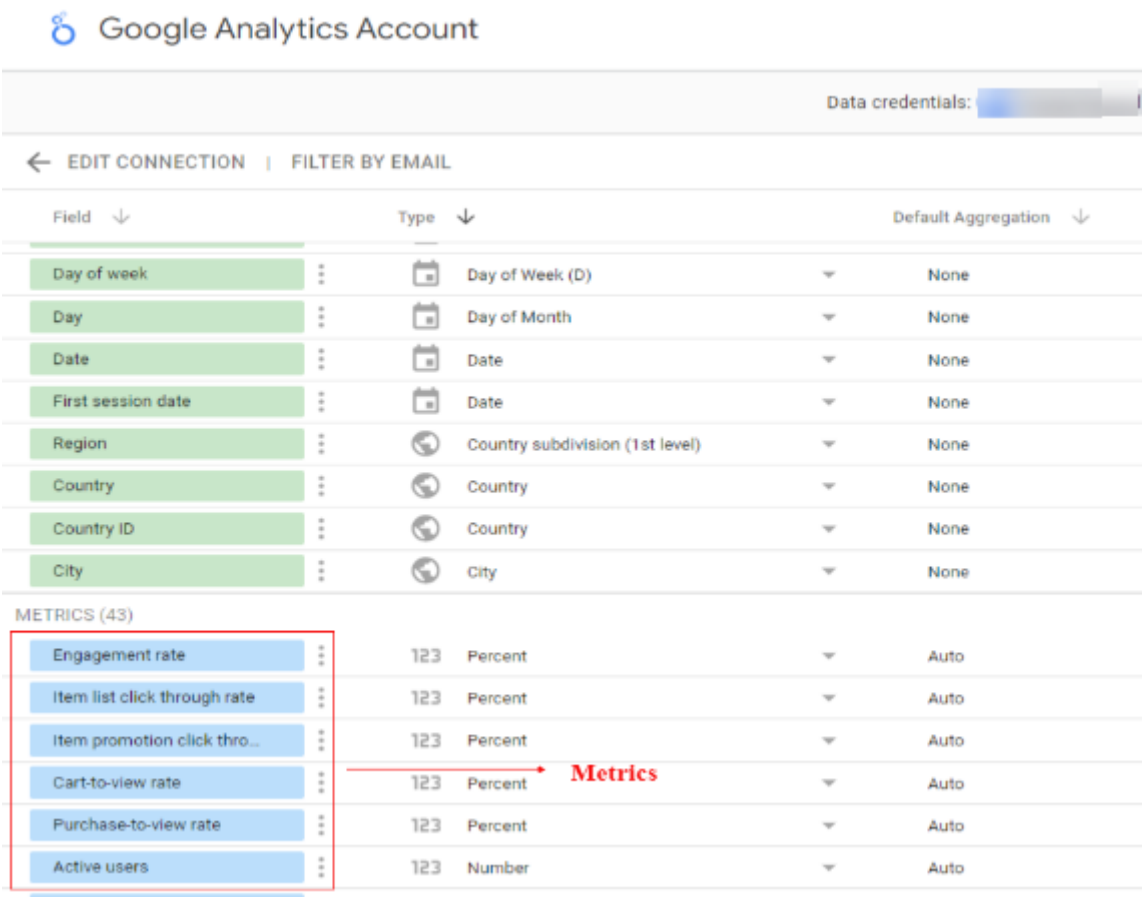
Dimensions in your data source schema appear as green fields:



Introduction to metrics in Looker Studio

A metric is a number that is used to measure one of the characteristics of a dimension.

Metrics in your data source schema appear as blue fields:



Note: In Google Analytics, a dimension cannot be used as a metric and vice versa. Whereas in Looker Studio, a dimension can be used as a metric and vice versa.

Related Articles:

- Dimensions and metrics in Looker Studio

Introduction to parameters in Looker Studio

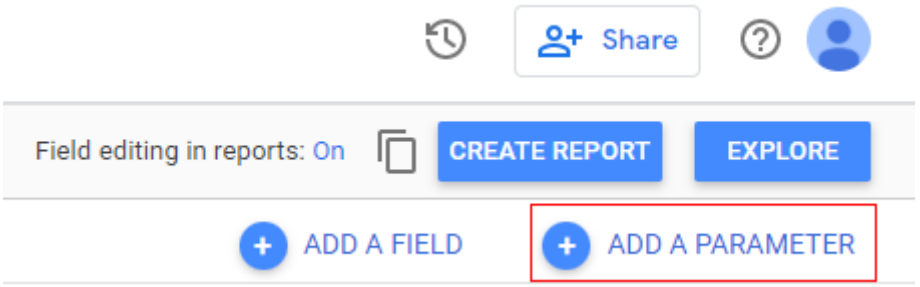
A parameter is a data source schema field whose value is supplied by a report user.

It is used in calculated fields and report components, just like a dimension or a metric.

Through parameters, you can pass user-supplied data to calculated fields and connectors.

So if you want your report to display results based on user input, then you use the parameter field.

While editing a data source schema, you get the option to add one or more parameter fields:



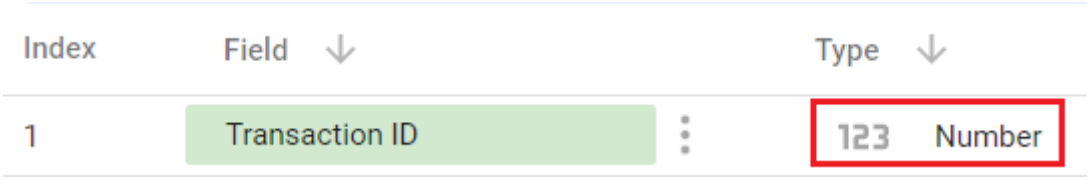
To learn more about parameters in Looker Studio, read this article:

How to create and use parameters in Looker Studio.

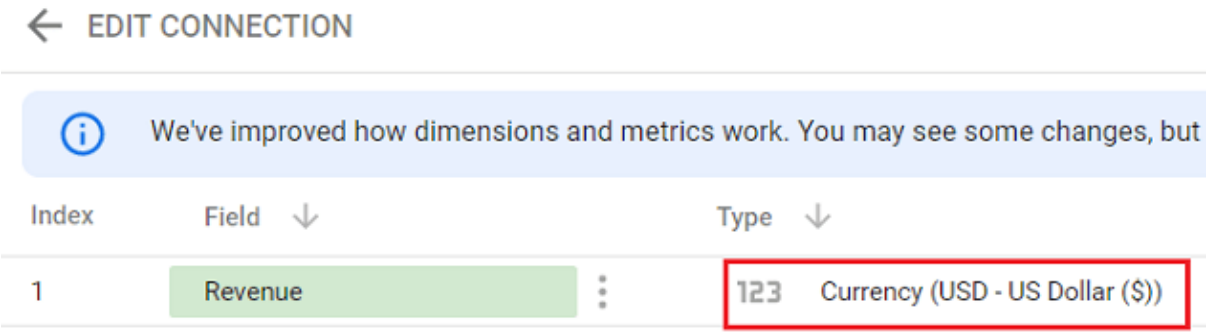
Introduction to data types

The data type of a data source schema field determines the kind of data to expect (in the connected data set) when processing the field.

For example, when the data type of a field is ‘Number’, it tells Looker Studio to expect a number when processing the field:



When the data type of a field is ‘Currency (US – Dollars) ’, it tells Looker Studio to expect currency data in US dollars when processing the field:



The data type determines which operations are allowed and not allowed on a data source schema field.

For example, you can’t apply an arithmetic function to a ‘Text’ field or use a ‘Number’ field as the date range dimension in a report.

Looker Studio supports the following data types:

1. Numeric

2. Text
3. Date and Time
4. Boolean
5. Geo
6. Currency
7. URL
8. Image
9. Image link

Related Articles:

1. **Guide to data types in Looker Studio**
2. **Understanding aggregation in Looker Studio**
3. **Looker Studio number formats/data types**
4. **Guide to date and time data types in Looker Studio**
5. **How to work with text data type in Looker Studio**
6. **How to work with boolean data type in Looker Studio**
7. **Geo Data – Country, Region, Latitude, Longitude in Looker Studio**
8. **Image data type in Looker Studio**

9. Image Link data type in Looker Studio
10. Image function in Looker Studio

Introduction to Looker Studio reports

Reports in Looker Studio are used to tell stories with data. Every report you create should have some purpose.

The purpose can be to provide actionable insight, give recommendations or persuasion.

Following are some best practices for creating a report in Looker Studio:

1. Understand who your report is meant for
2. Keep it short and simple
3. Use a report template whenever you can to create a new report.
4. Avoid pulling data directly from a data platform into your reports.
5. Avoid charting data for the current day in your reports.
6. Avoid using functions and calculated fields in your reports.
7. Distribute related charts across multiple pages

To learn more about reports in Looker Studio, check out this article:

Looker Studio report tutorial

Other articles related to Looker Studio Reports

1. Best practices for creating a report in Looker Studio
2. How to share reports in Looker Studio
3. Seven methods to create a new report in Looker Studio
4. Understanding Report Editor in Looker Studio
5. How to invite people to view or edit a report in Looker Studio
6. How to share the link of your report in Looker Studio
7. Schedule email delivery of a report in Looker Studio
8. How to download Looker Studio report as PDF
9. How to embed a Looker Studio report on a website
10. Working with pages in a Looker Studio report

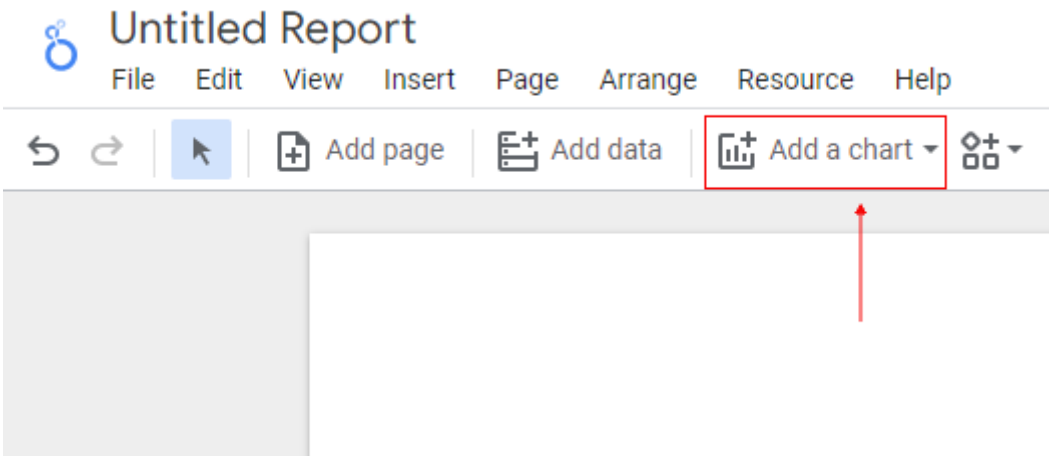
Introduction to chart components

A report in Looker Studio is made up of one or more chart components like:

1. Table
2. Scorecard

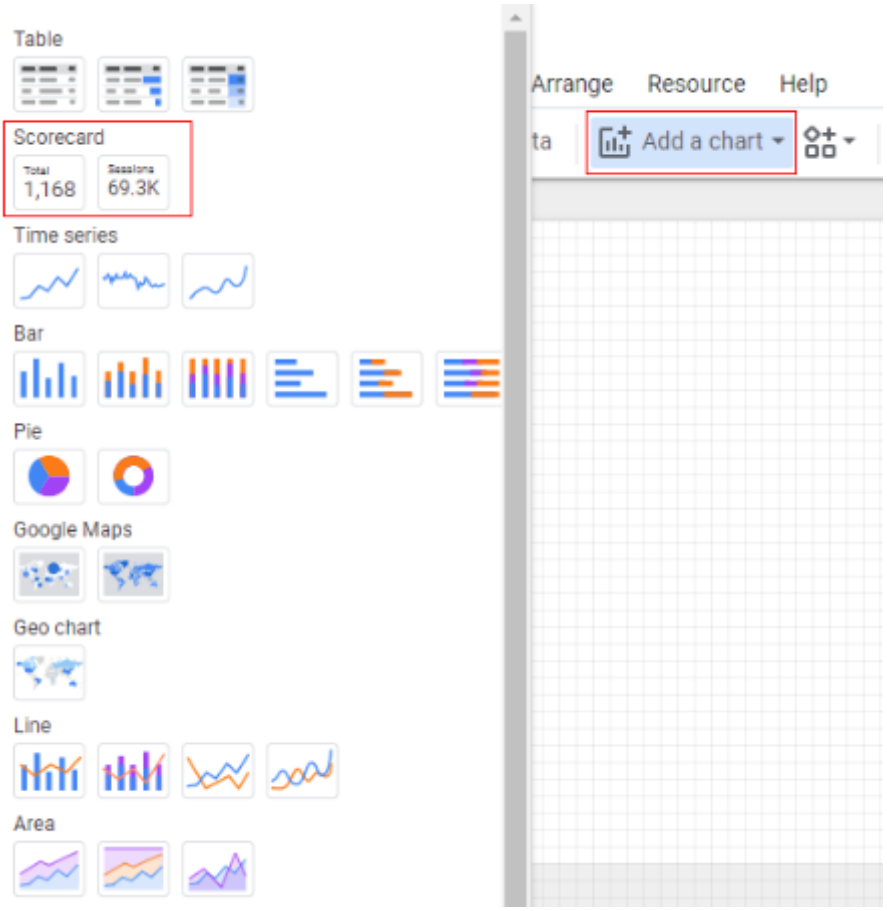
3. Time Series
4. Bar Chart
5. Pie Chart
6. Google Maps
7. Geo Chart
8. Line Chart
9. Area Chart
10. Scatter Chart
11. Pivot Table
12. Bullet Chart
13. Treemap

You can access these chart components by clicking on '**Add a Chart**' drop-down menu in the report editor:



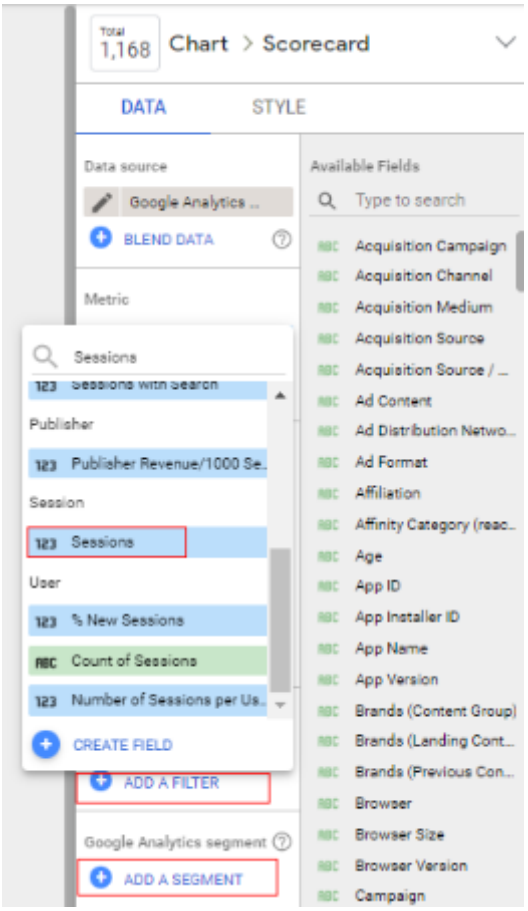
Let's build a chart to show website performance.

Click on the '**Add a Chart**' drop-down menu and then click on 'Score Card':



On the right-hand side of your report editor, you should see the panel where you can select the metric for the scorecard.

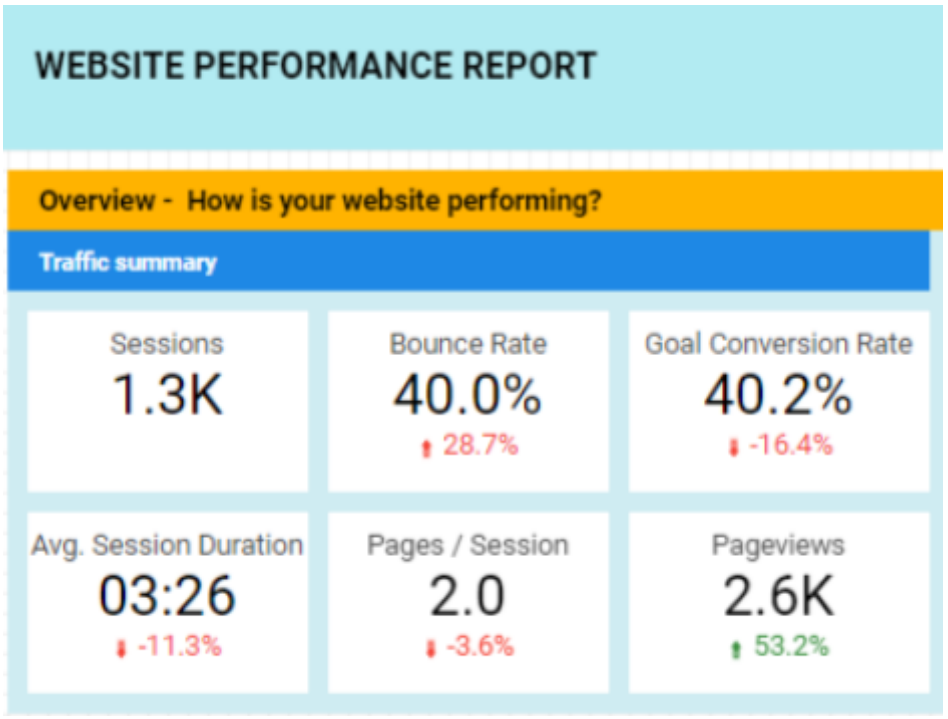
Let's select the '**Sessions**' metric:



Note: You can also add filters or segments to the selected metric.

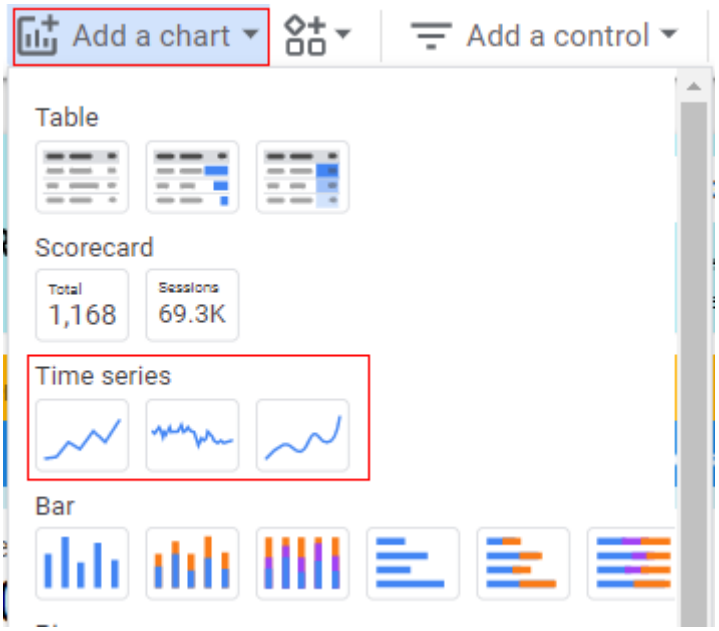
Let's repeat this step to add a few more metrics to our report.

Once you are done, our report may look like the one below:

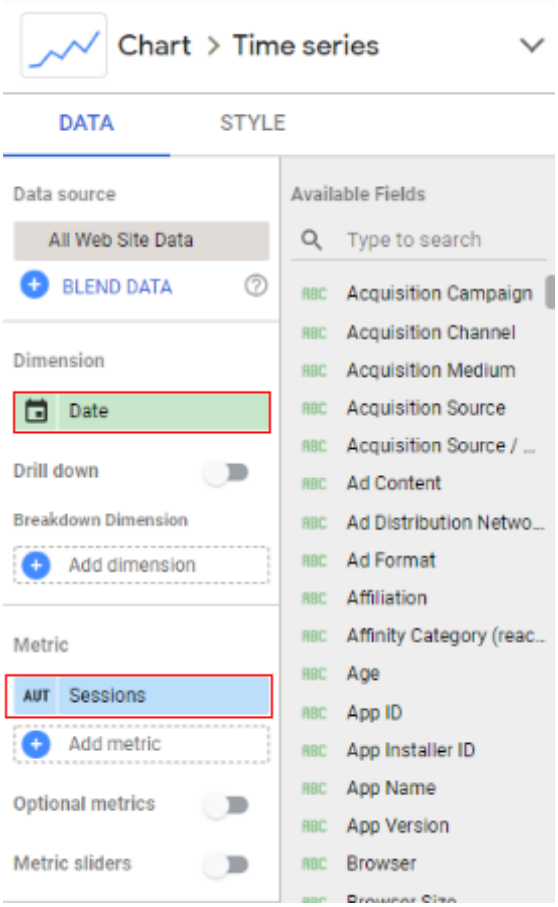


Now let's add a trend chart for 'Visits in Last Week'.

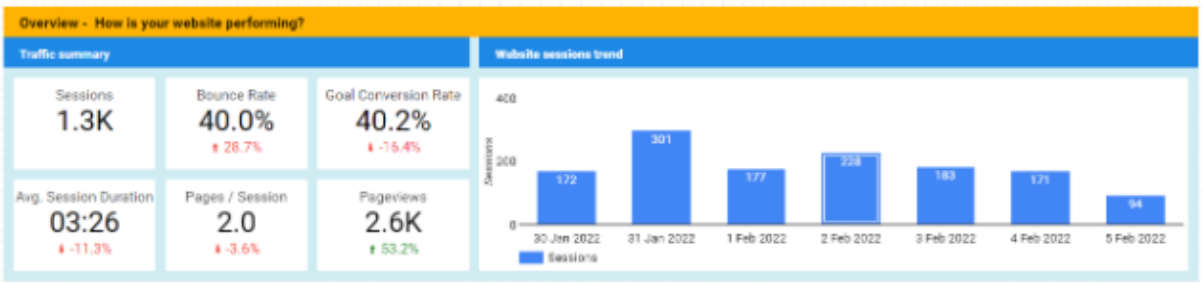
Click on the '**Add to Chart**' drop-down menu and then select '**Time Series**':



Under the ‘Data’ tab on the right-hand side panel, select ‘Date’ as a dimension and ‘Sessions’ as a metric:



Now our chart on the canvas may look like the one below:



Since Looker Studio supports dynamic reporting, you can also add controls to your report, to give your report users more freedom to slice and dice data by selecting a date range, device type, segment etc.

You are doing Google Analytics all wrong. Here is why...

I have dealt with hundreds of Google Analytics accounts in my career.

I have seen many issues, from incorrect tracking code, selecting the wrong KPIs, to analyzing data without using custom reports or advanced segments.

But do you know the biggest issue of all in Google Analytics?....

It is the "misinterpretation of analytics data".

Many marketers make the mistake of crediting conversions to the wrong marketing channel.

And they seem to be making this mistake over and over again.

They give the credit for conversions to the last touchpoint (campaign, ad, search term...).

They can’t help themselves because they believe that the Google Analytics reports are ‘what you see is what you get’.

But they are actually ‘what you interpret is what you get’.

This has resulted in marketers making wrong business decisions and losing money.

All the data you see in Google Analytics reports today lies to you unless you know exactly how to interpret it correctly.

For example, let's talk about direct traffic.

All untagged or incorrectly tagged marketing campaigns, from display ads to emails, could be reported as direct traffic by Google.

Whenever a referrer is not passed, the traffic is reported as direct traffic by Google.

Mobile applications don’t send a referrer. Word/PDF documents don’t send a referrer.

‘302 redirects’ sometimes cause the referrer to be dropped. Sometimes browsers don’t pass the referrer.

During an HTTP to HTTPS redirect (or vice versa), the referrer is not passed because of security reasons.

All such traffic is reported as direct traffic by Google.

So on the surface, it may look like most people are visiting your website directly, but this is not usually the case.

But this analysis does not end here because you are still not looking at the complete picture.

People do not always access your website directly and then make a purchase straight away.

They are generally exposed to multiple marketing channels (display ads, social media, paid search, organic search, referral websites, email, etc.) before they access your website directly.

Before they make a purchase.

So if you are unaware of the role played by prior marketing channels, you will credit conversions to the wrong marketing channels.

Like in the present case, to direct traffic.

To get this type of understanding, you need to understand and implement web analytics.

But **you learn data analysis and data interpretation from web analytics and not from Google Analytics.**

The direction in which your analysis will move will determine the direction in which your marketing campaigns will move.

You get that direction from ‘web analytics’ and not from ‘Google Analytics’.

Web/digital analytics is not about Google Analytics (GA) or Google Tag Manager (GTM). It is about analyzing and interpreting data, setting up goals, strategies and KPIs.

It’s about creating a strategic roadmap for your business.

That's why the knowledge of web/digital analytics is so important.

So, what I have done is put together some completely free training for you.

This training will teach you what digital analytics really is and how I have been able to leverage it to generate floods of new sales and customers.

I will also show you how you can copy what I have done to get similar results.

You can sign up for the free training here:

Reserve My Seat Now

I hope you find it helpful.

All the best,

Himanshu