GOOGLE ANALYTICS BOOTCAMP

DAY THREE

CHRIS EDWARDS

Day Three Agenda

Data Studio Dashboards 101

- What Is Google Data Studio
- Standard Connectors
- Create A Basic Report
- Style Your Report
- **Q&A Session**
- **5 Minute Break**

Advanced Data Studio Dashboards

- Creating Custom Filters
- How to Create Calculated Fields
- Using Community Connectors
- My Tips & Tricks For Data Studio
- **Q&A Session**

Tomorrow we will learn about creating dashboards!

WHAT IS GOOGLE DATA STUDIO

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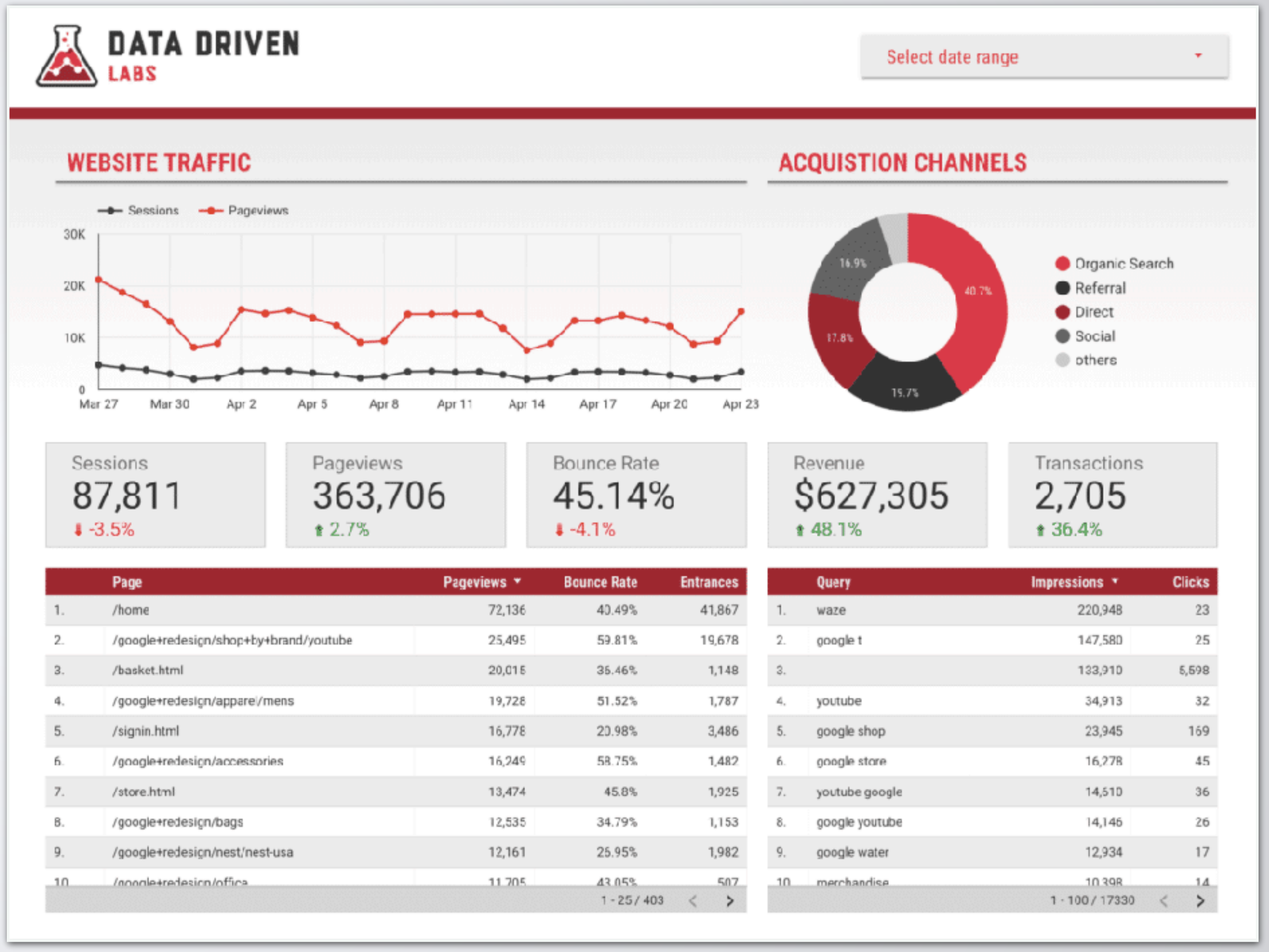
WHAT IS GOOGLE DATA STUDIO

Google Data Studio allows you to build beautiful custom dashboards for a variety of data and analytics.

Google Data Studio makes it easy for anyone to create custom dashboards that pull from multiple sources. Charts are created through a simple drag and drop interface.

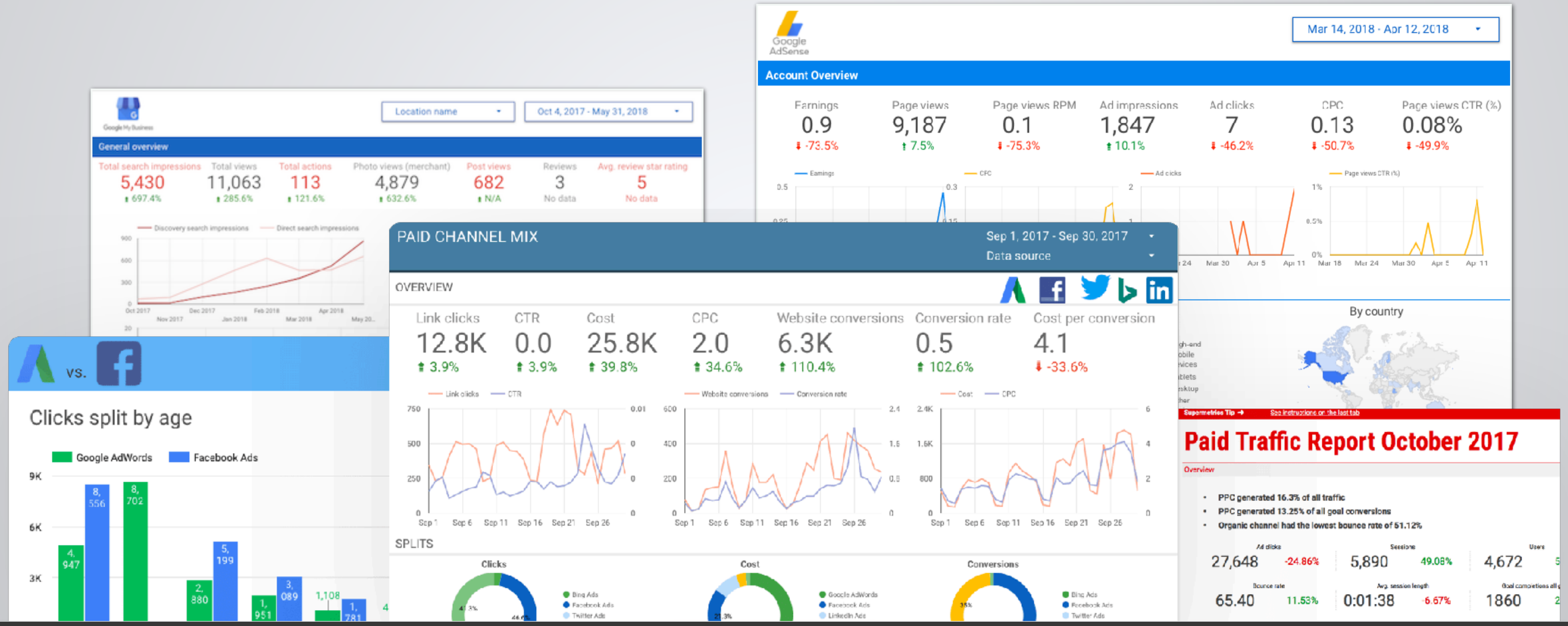


CONNECT TO MANY DATA SOURCES

Google Data Connectors

Community Data Connectors (Paid)

MANY TYPES OF DASHBOARDS



DATA DRIVEN LABS

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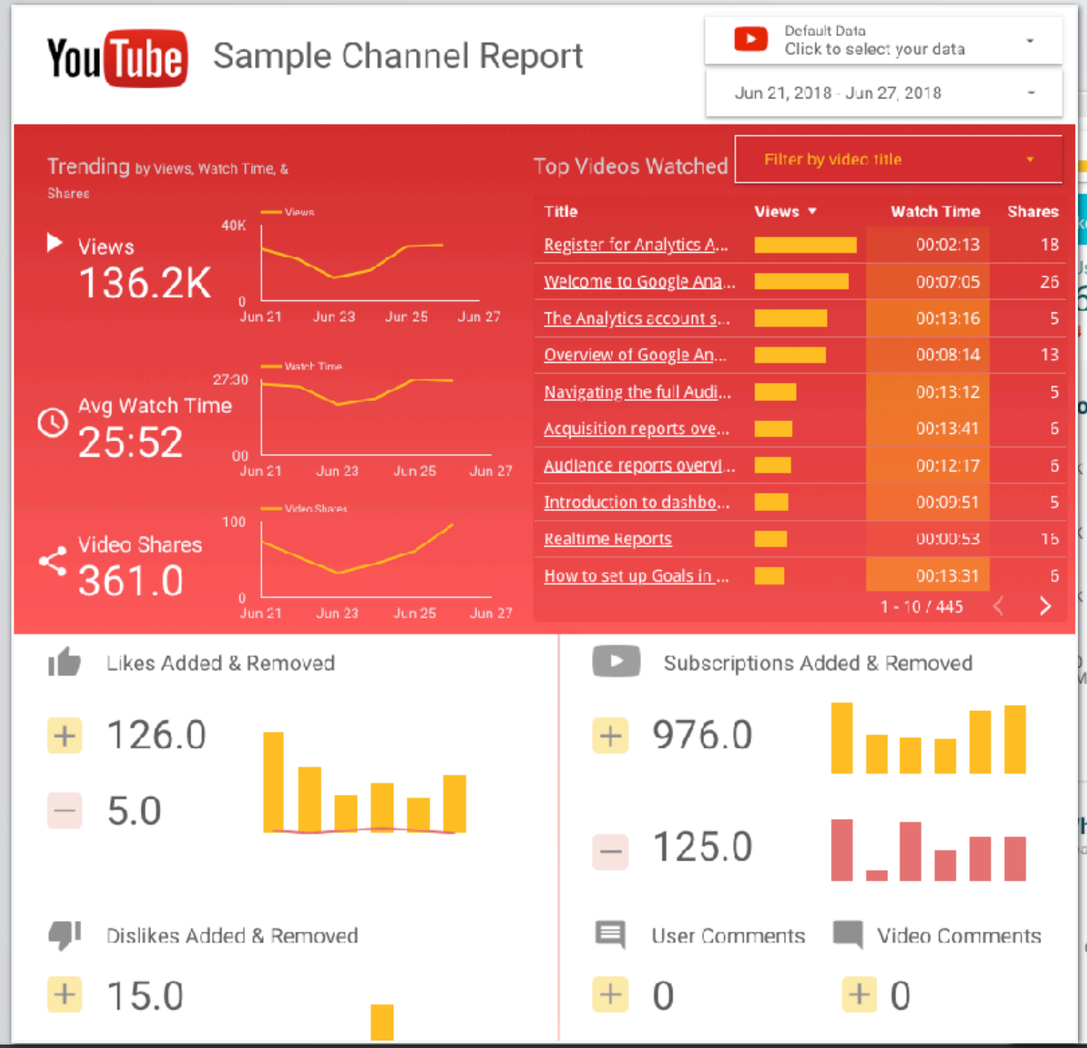
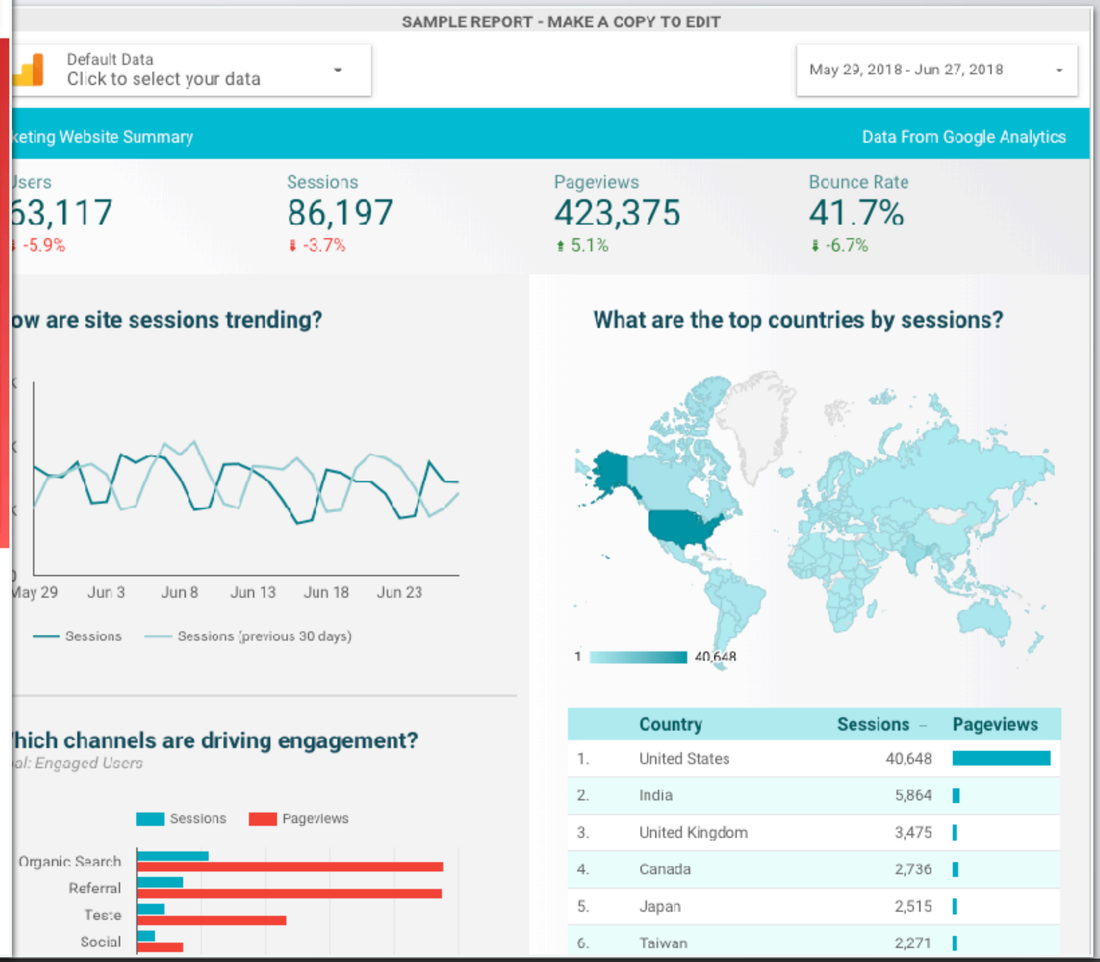
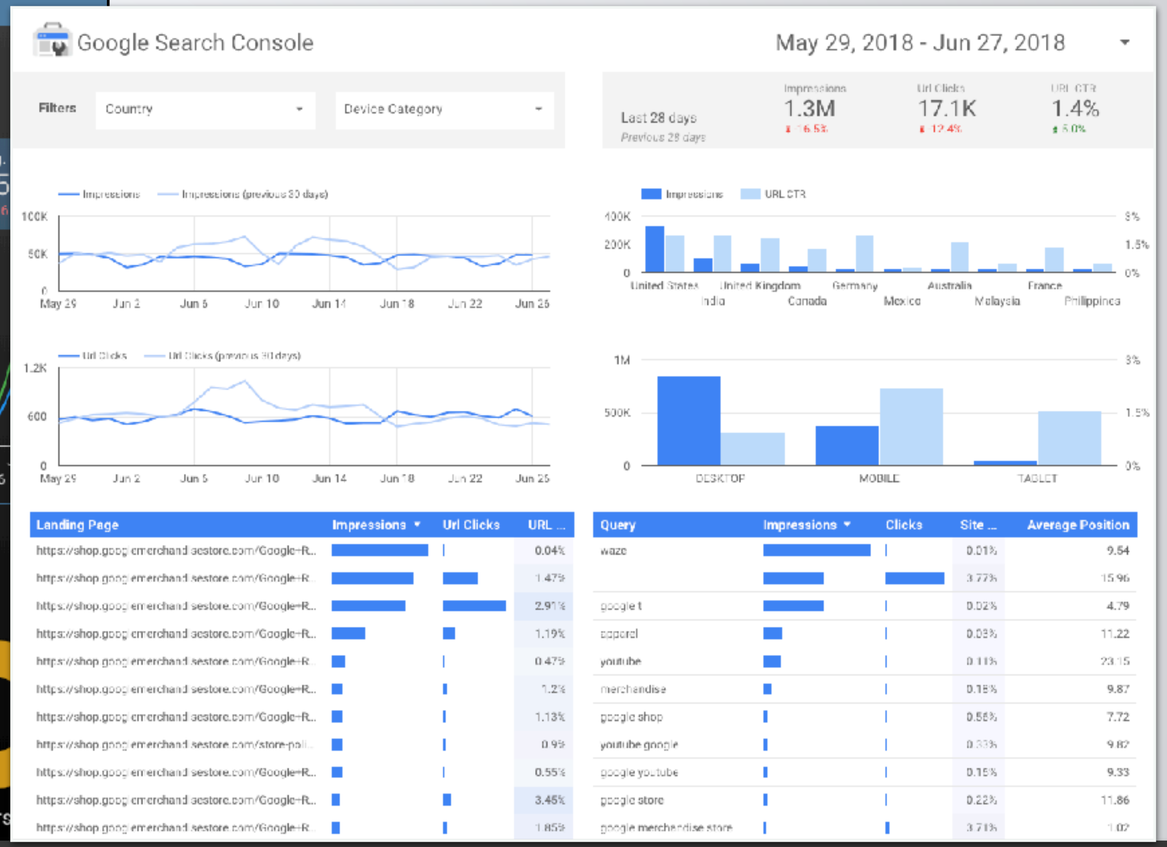
EXAMPLES


YouTube Sample Channel Report
Default Data
Click to select your data
Jun 21, 2018 - Jun 27, 2018
Trending by Views, Watch Time, & Shares
Views
136.2K
Avg Watch Time
25:52
Video Shares
361.0
Top Videos Watched
Filter by video title
Title
Views
Watch Time
Shares
Register for Analytics A... 00:02:13 18
Welcome to Google Ana... 00:07:05 25
The Analytics account s... 00:13:16 5
Overview of Google An... 00:08:14 13
Navigating the full Audi... 00:13:12 5
Acquisition reports ove... 00:13:41 6
Audience reports overvi... 00:12:17 6
Introduction to dashbo... 00:09:51 5
Realtime Reports 00:00:53 15
How to set up Goals in ... 00:13:31 6
1 - 10 / 445
Likes Added & Removed
126.0
5.0
Dislikes Added & Removed
15.0
Subscriptions Added & Removed
976.0
125.0
User Comments
0
Video Comments
0

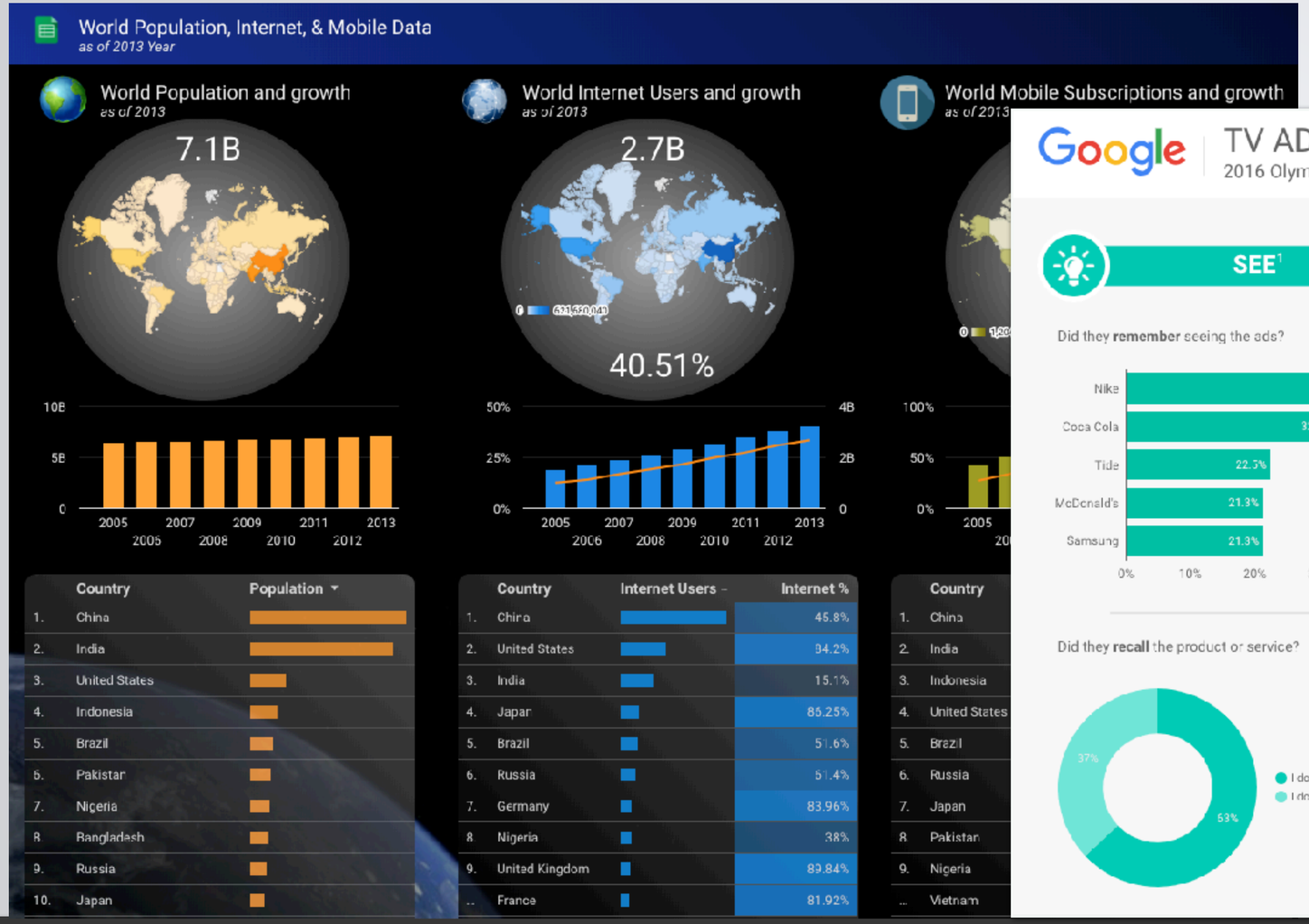

SAMPLE REPORT - MAKE A COPY TO EDIT
Default Data
Click to select your data
May 29, 2018 - Jun 27, 2018
Data From Google Analytics
Sessions
86,197
-3.7%
Pageviews
423,375
5.1%
Bounce Rate
41.7%
-6.7%
What are the top countries by sessions?
Sessions
Sessions (previous 30 days)
Country
Sessions
Pageviews
1. United States 40,648
2. India 5,864
3. United Kingdom 3,475
4. Canada 2,736
5. Japan 2,515
6. Taiwan 2,271

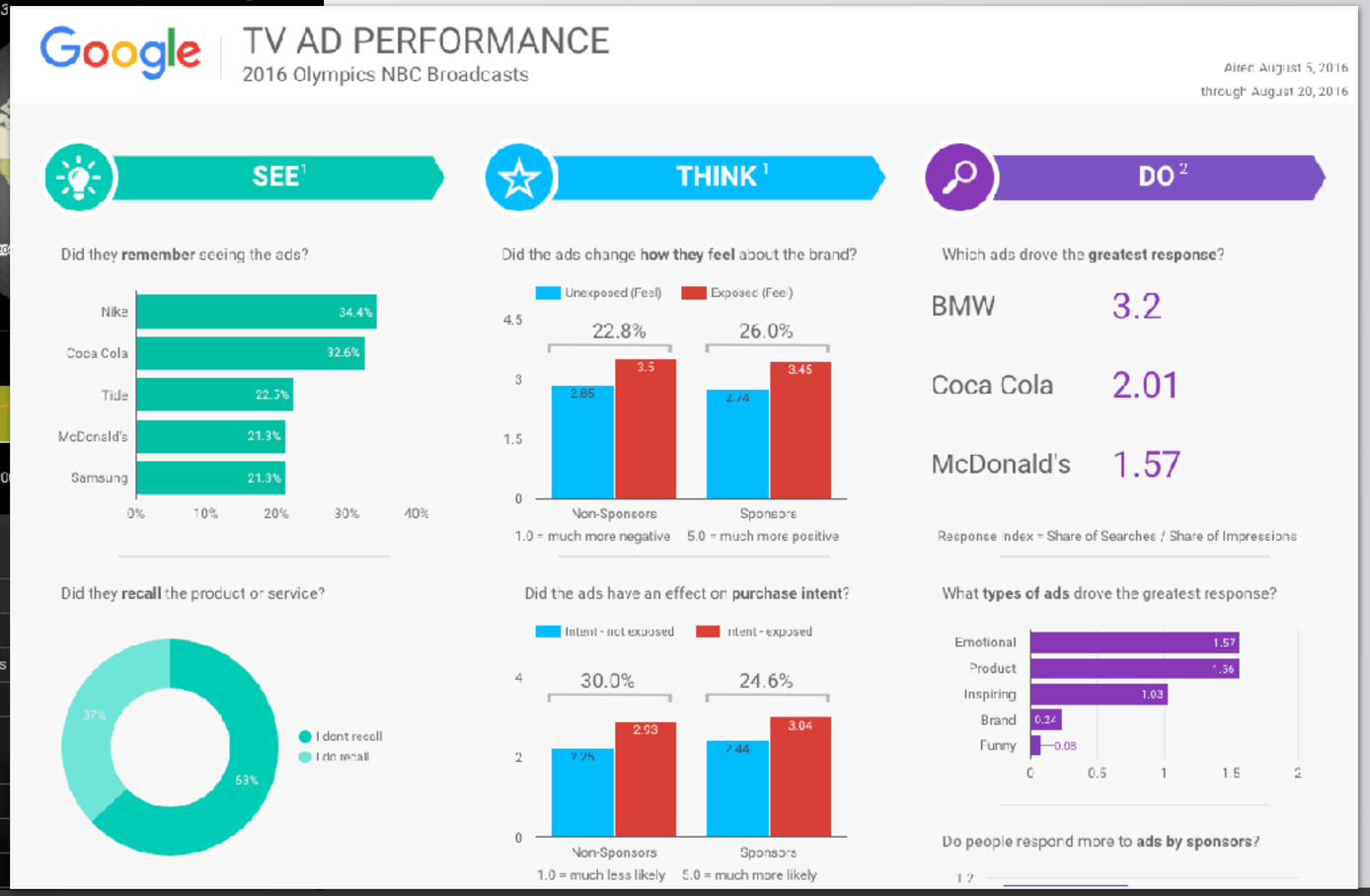
EXAMPLES


Google AdWords
Jun 21, 2018 - Jun 27, 201
Overview
Click Through Rate & Impressions
by Clicks, CTR, and Impressions
Clicks 8.1K
CTR 2.1%
Impressions 391.1K
Conversion Rate & Cost
by Conversions Rate and Cost / Conv.
Conversions 250.0
Conv. rate 3.1%
Cost / Conv. $9.24
Cost Per Click
by Cost, CPC, and CPM
Cost $2.31K
Avg. CPC $0.28
Top Campaigns
by CTR, Avg. CPC, and Cost / Conv.
Campaign
CTR
Avg. CPC
Cost / Conv.
1. Campaign - Wearables 4.21% $0.47 $8.86
2. Campaign - Accessories 3.73% $0.38 $18.7
3. Campaign - Active Wear 1.91% $0 $0.06
4. Campaign - T-Shirts 1.76% $0.23 $4.93
5. Campaign - Dynamic Search Ads 1.59% $0.08 $3
6. Campaign - Biking 0.91% $0.23 $5.18
Device Breakdown
by Clicks, Cost, and Conversions
Clicks
Cost


Google Search Console
May 29, 2018 - Jun 27, 2018
Filters
Country
Device Category
Last 28 days
Previous 28 days
Impressions 1.3M
Url Clicks 17.1K
URL CTR 1.4%
Landing Page
Impressions
Url Clicks
URL ...
Query
Clicks
Site ...
Average Position

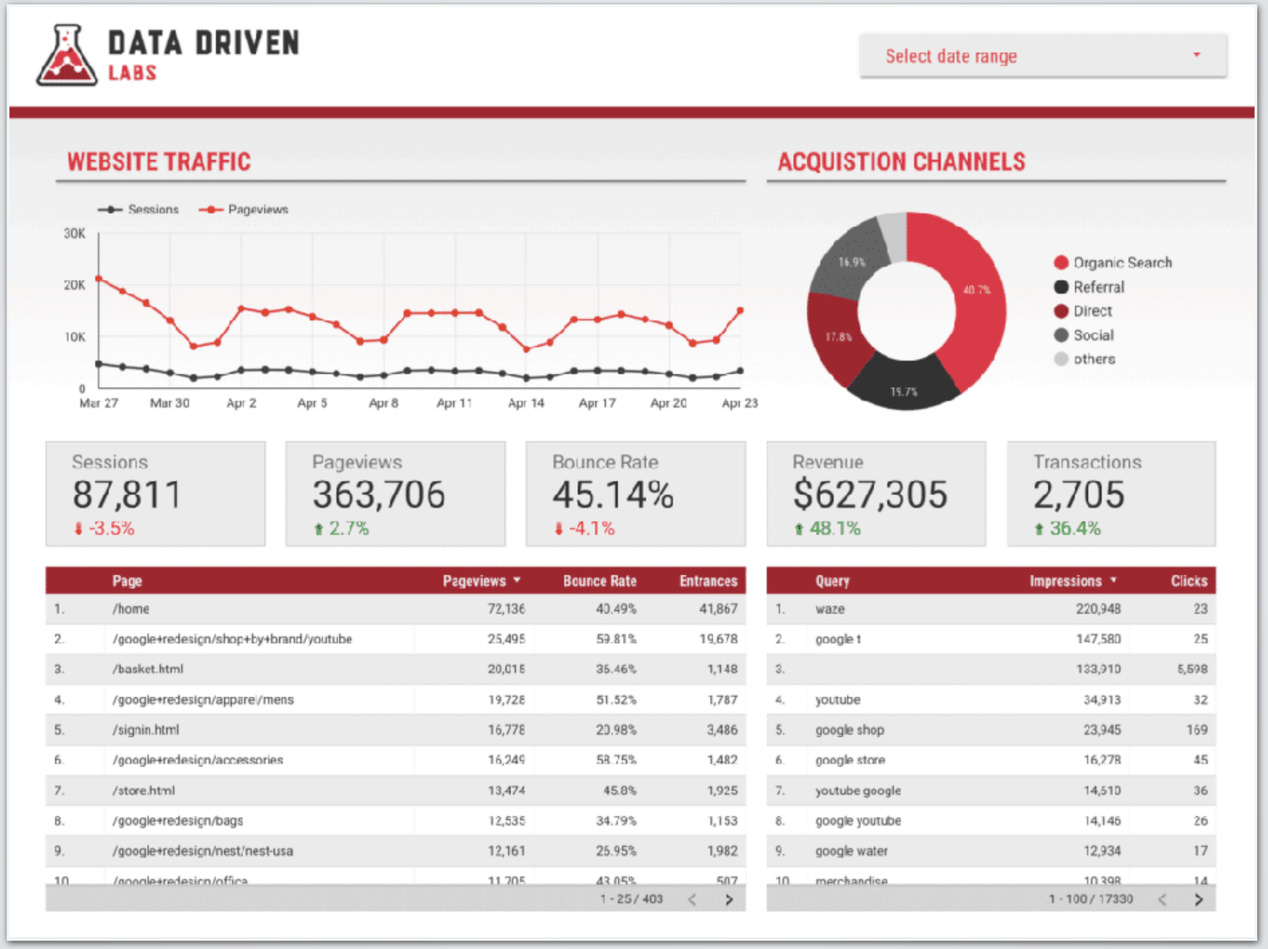
EXAMPLES


World Population, Internet, & Mobile Data
as of 2013 Year
World Population and growth
as of 2013
7.1B
World Internet Users and growth
as of 2013
2.7B
40.51%
World Mobile Subscriptions and growth
10B
5B
0
50%
25%
0%
4B
2B
0
100%
50%
0%
2005
2007
2009
2011
2013
2006
2008
2010
2012
Country
Population
1. China
2. India
3. United States
4. Indonesia
5. Brazil
6. Pakistan
7. Nigeria
8. Bangladesh
9. Russia
10. Japan
Country
Internet Users
Internet %
1. China 45.8%
2. United States 84.2%
3. India 15.1%
4. Japan 86.25%
5. Brazil 51.6%
6. Russia 61.4%
7. Germany 83.96%
8. Nigeria 38%
9. United Kingdom 89.84%
France 81.92%
Country
1. China
2. India
3. Indonesia
4. United States
5. Brazil
6. Russia
7. Japan
8. Pakistan
9. Nigeria
Vietnam


Google
TV AD PERFORMANCE
2016 Olympics NBC Broadcasts
Aired August 5, 2016
through August 20, 2016
SEE 1
THINK 1
DO 2
Did they remember seeing the ads?
Nike 34.4%
Coca Cola 32.6%
Tide 22.5%
McDonald's 21.3%
Samsung 21.3%
0%
10%
20%
30%
40%
Did the ads change how they feel about the brand?
Unexposed (Feel)
Exposed (Feel)
22.8%
26.0%
2.85
3.5
2.74
3.45
Non-Sponsors
Sponsors
1.0 = much more negative
5.0 = much more positive
Which ads drove the greatest response?
BMW 3.2
Coca Cola 2.01
McDonald's 1.57
Response Index = Share of Searches / Share of Impressions
Did they recall the product or service?
37%
63%
I dont recall
I do recall
Did the ads have an effect on purchase intent?
Intent - not exposed
Intent - exposed
30.0%
24.6%
2.93
3.04
Non-Sponsors
Sponsors
1.0 = much less likely
5.0 = much more likely
What types of ads drove the greatest response?
Emotional 1.57
Product 1.36
Inspiring 1.03
Brand 0.24
Funny -0.08
Do people respond more to ads by sponsors?

EXAMPLE

Live Demo



CREATING A REPORT

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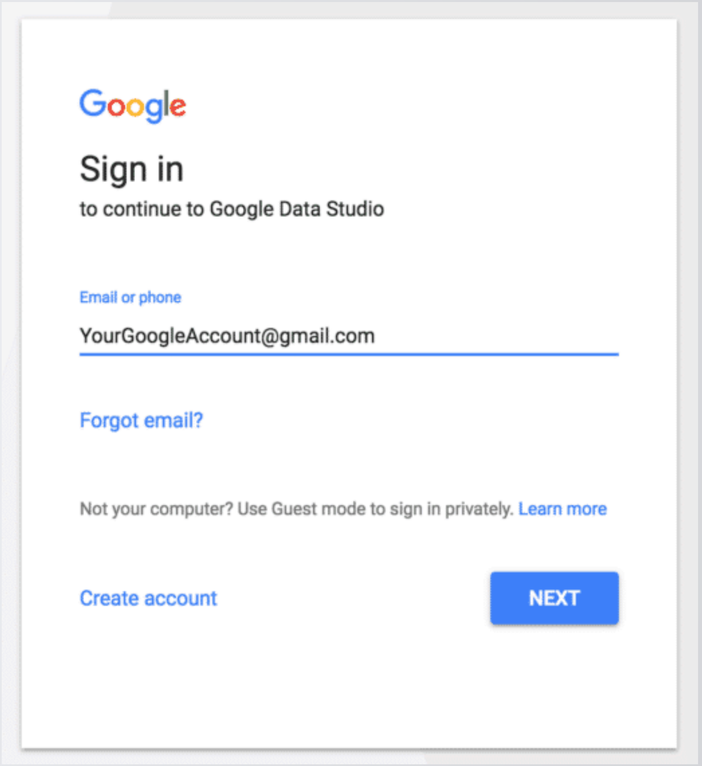
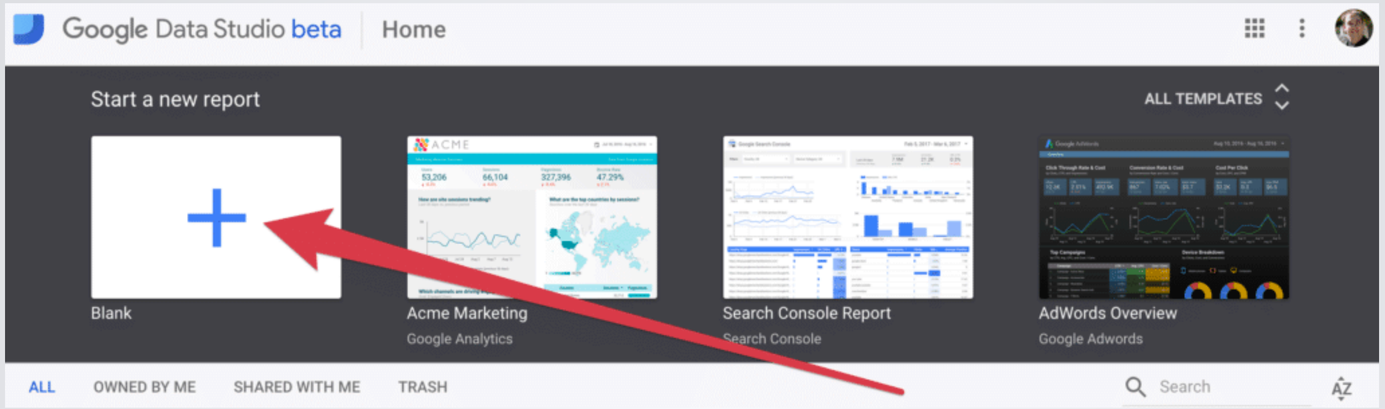
STEP 1: LOGIN & CREATE A BLANK REPORT

The first step is to visit datastudio.google.com and sign in with the account that is the same account as the Google Analytics & Google Search Console you want to create the dashboard for.

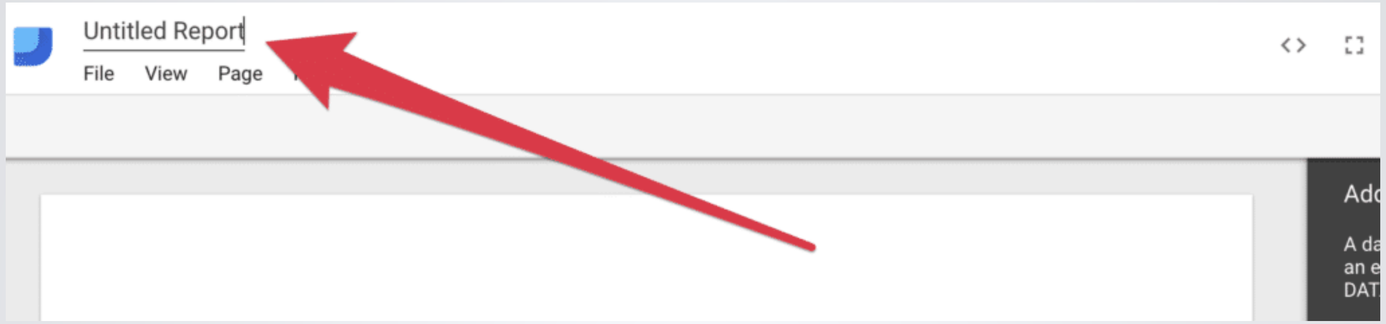


STEP 1: LOGIN & CREATE A BLANK REPORT



Once you have signed in and accepted any Terms of Service notices, we are now ready to create our blank report. Simply click on “+” for the “Blank” report template. There are other pre-built templates you can check out, however, for this tutorial, we are going to create a new blank report.

STEP 1: LOGIN & CREATE A BLANK REPORT



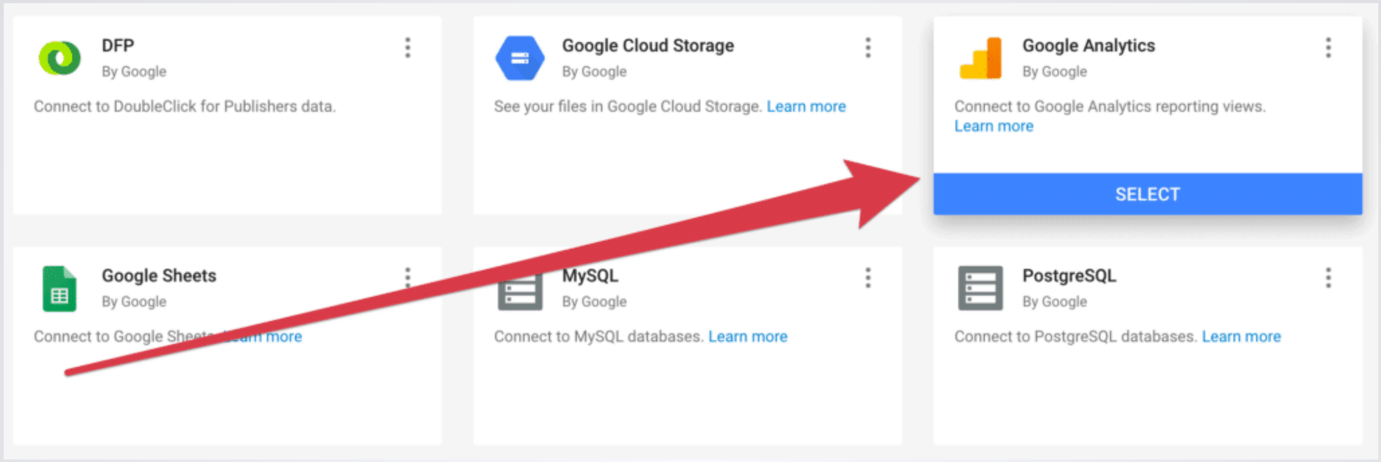
Finally, let's rename this dashboard so it is easy to find. This is an important step. Google will auto-save your dashboard as you go, however, if you leave the name as the default, it will be difficult to find later.

STEP 2: ADD YOUR FIRST DATA SOURCE

For this dashboard, we will need two data sources. We will need to connect to Google Analytics & Google Search Console.

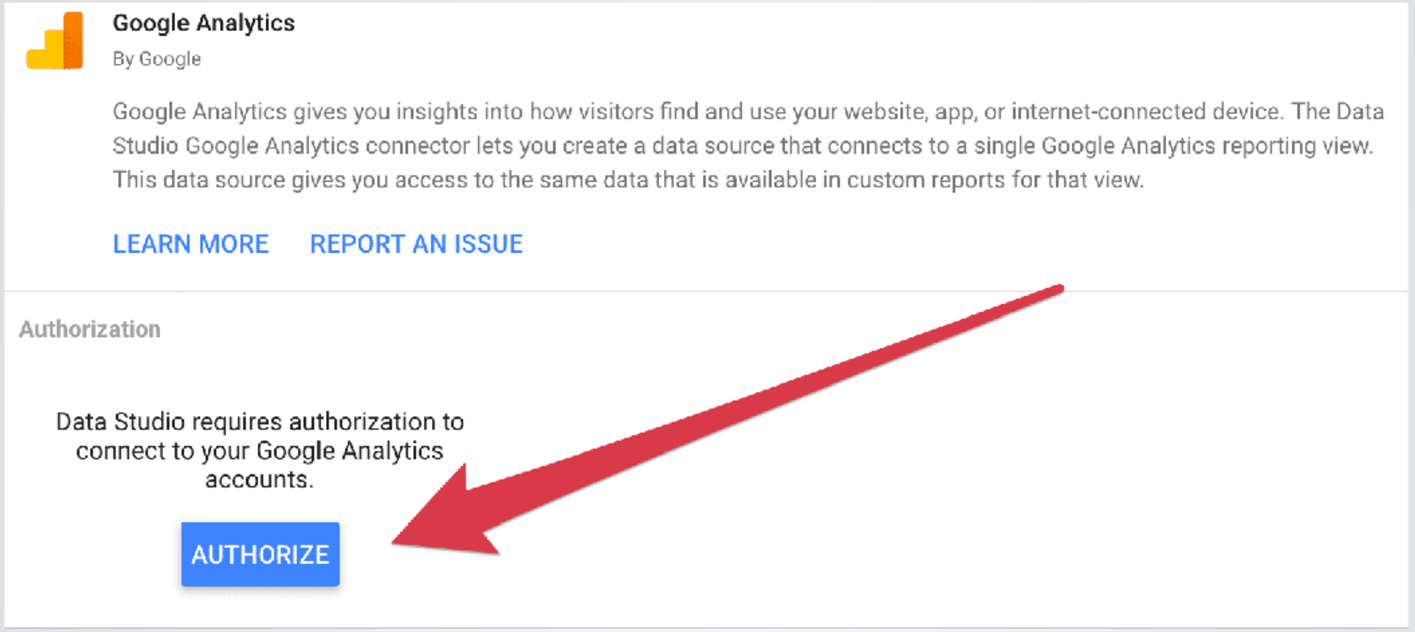
First, click the “Create New Data Source” button.

STEP 2: ADD YOUR FIRST DATA SOURCE



Next, find the Google Analytics connector and select Google Analytics. You will notice there are many other connectors you can choose from. These are all the different data sources that can be pulled into a report. For now, let's stick to our current dashboard.

STEP 2: ADD YOUR FIRST DATA SOURCE



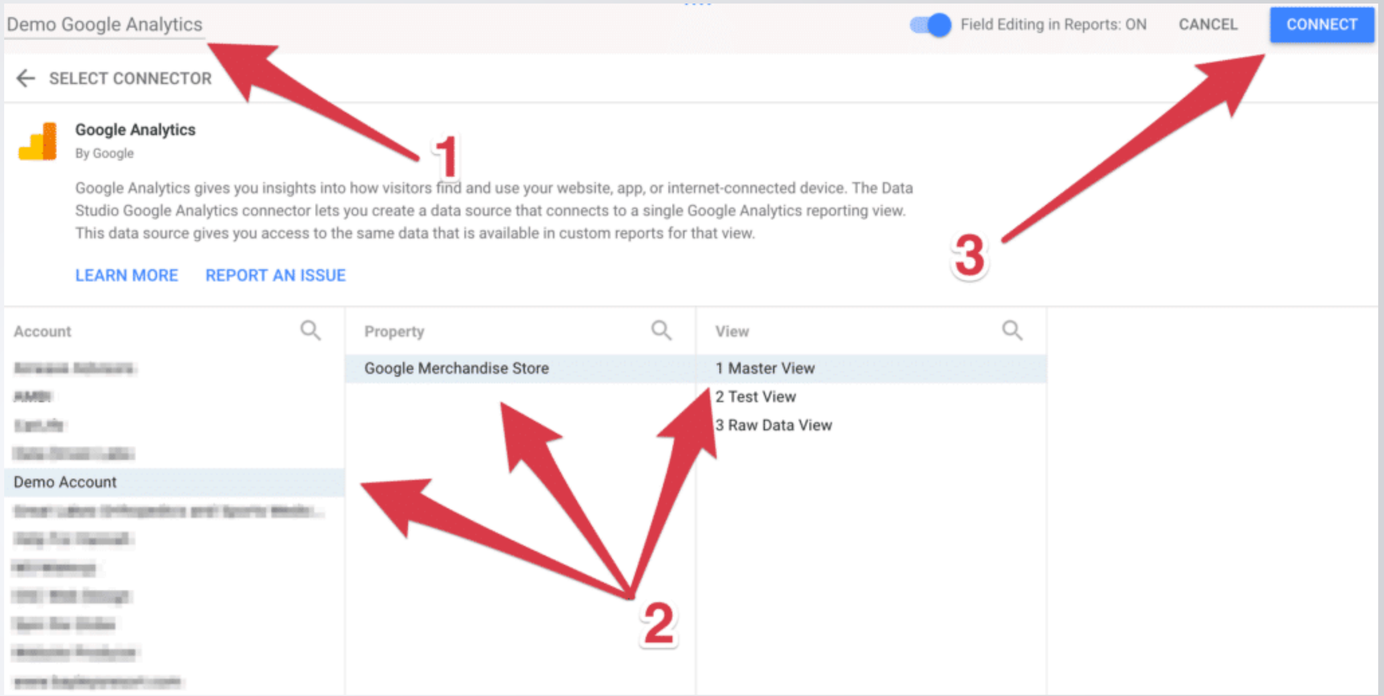
We now need to authorize our connection to Google Analytics. You will need to select “Allow Access” on the authorization popup that follows.

STEP 2: ADD YOUR FIRST DATA SOURCE

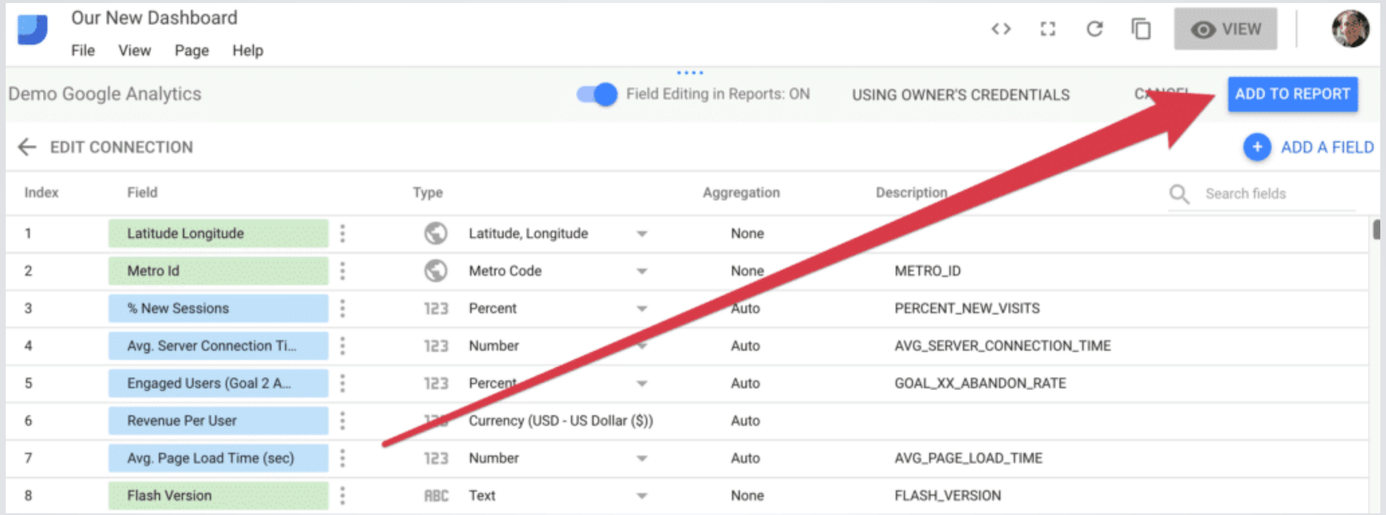
Our next step is to rename this connector to make it easier to find. In this example, “Demo Google Analytics” is being used. (See #1)

Now we must choose our Google Analytics account, then the property followed by the view. This should be your main view that you use when viewing your data in Google Analytics. (See #2)

To finish this step, click the connect button to connect to this data source. (See #3)



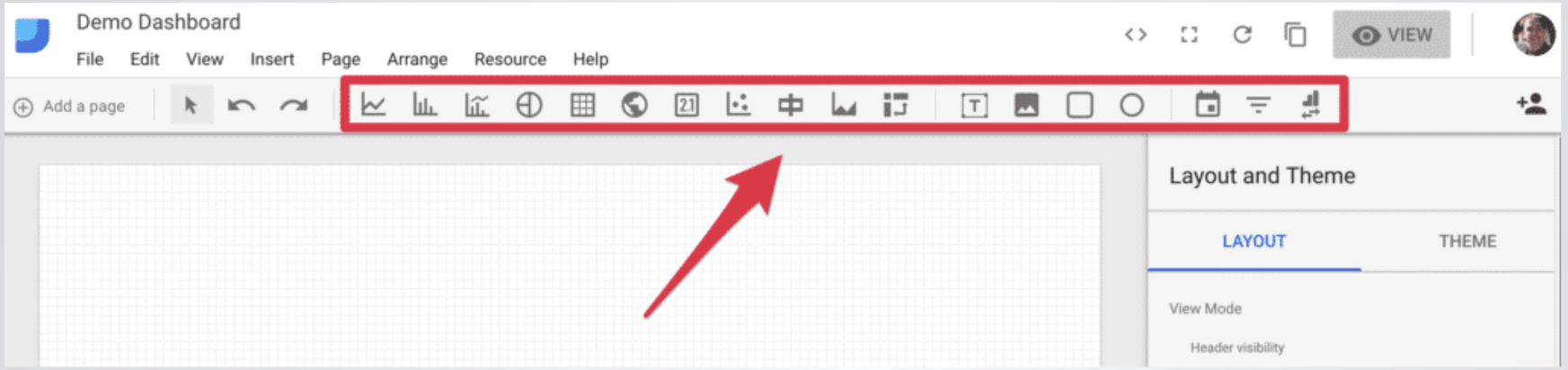
STEP 2: ADD YOUR FIRST DATA SOURCE



Index	Field	Type	Aggregation	Description
1	Latitude Longitude	Latitude, Longitude	None	
2	Metro Id	Metro Code	None	METRO_ID
3	% New Sessions	Percent	Auto	PERCENT_NEW_VISITS
4	Avg. Server Connection Ti...	Number	Auto	AVG_SERVER_CONNECTION_TIME
5	Engaged Users (Goal 2 A...	Percent	Auto	GOAL_XX_ABANDON_RATE
6	Revenue Per User	Currency (USD - US Dollar ($))	Auto	
7	Avg. Page Load Time (sec)	Number	Auto	AVG_PAGE_LOAD_TIME
8	Flash Version	Text	None	FLASH_VERSION

The final stage to adding the data source is to click “Add to Report”. At this state, you are able to modify fields and add calculated fields if needed. This is more advanced and will be covered in a later article. For now, all the fields are setup perfectly fine for our dashboard.

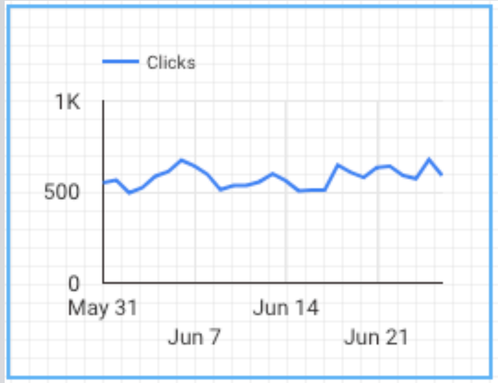
STEP 3: ADDING GRAPHS, CHARTS & OTHER ELEMENTS



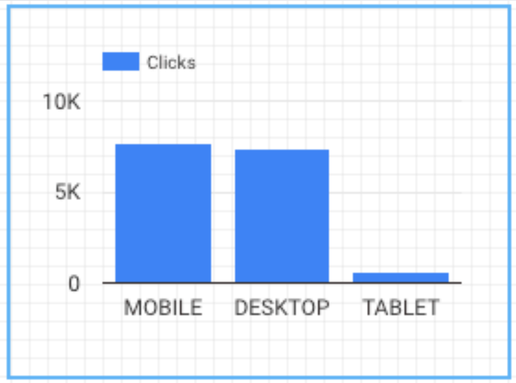
Google Data Studio comes with several types of elements that can be added to your report. These elements include line graphs, pie charts, tables, geo maps, scorecards and many more.

TYPES OF CHARTS & GRAPHS

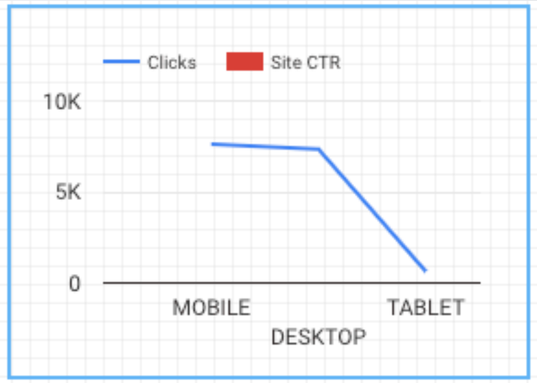
Time Series



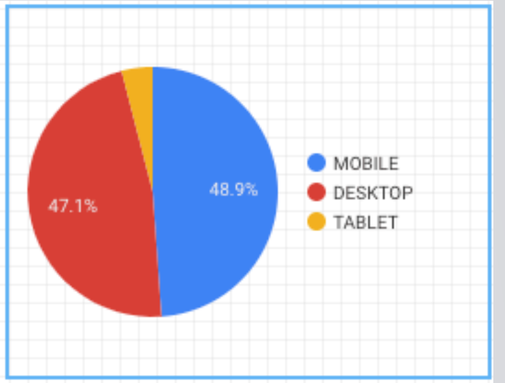
Bar Chart



Combo Chart



Pie Chart

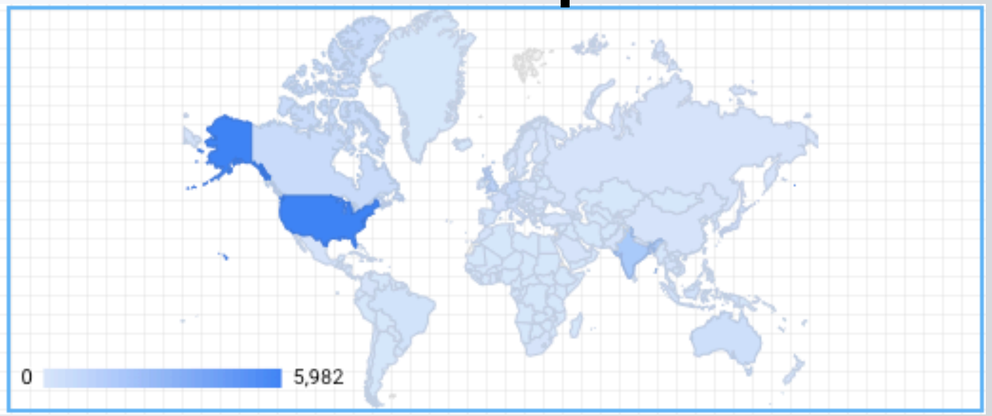


Table

	Device Category	Clicks ▼
1.	MOBILE	7,632
2.	DESKTOP	7,350
3.	TABLET	630

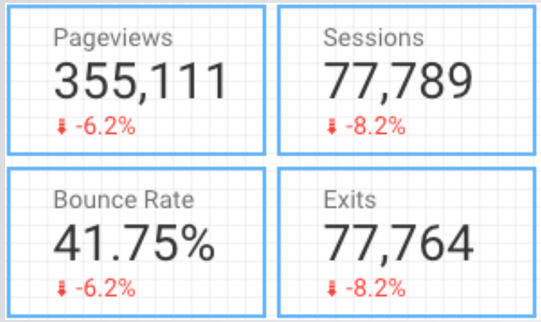
1 - 3 / 3

Geo Map

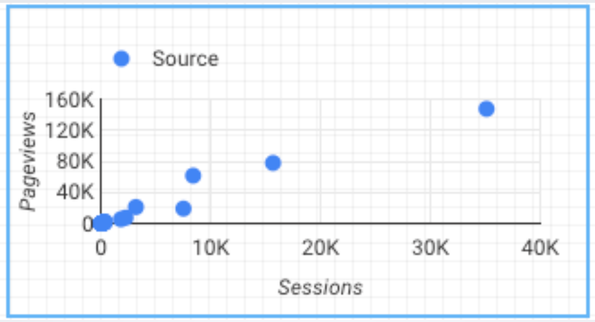


TYPES OF CHARTS & GRAPHS

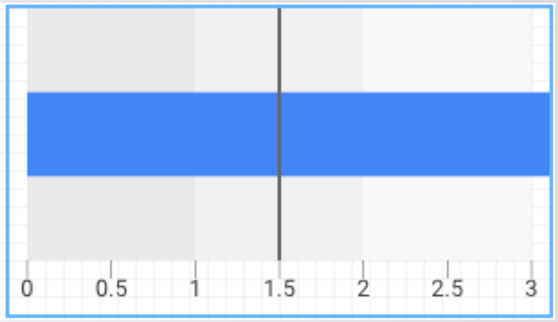
Scorecards



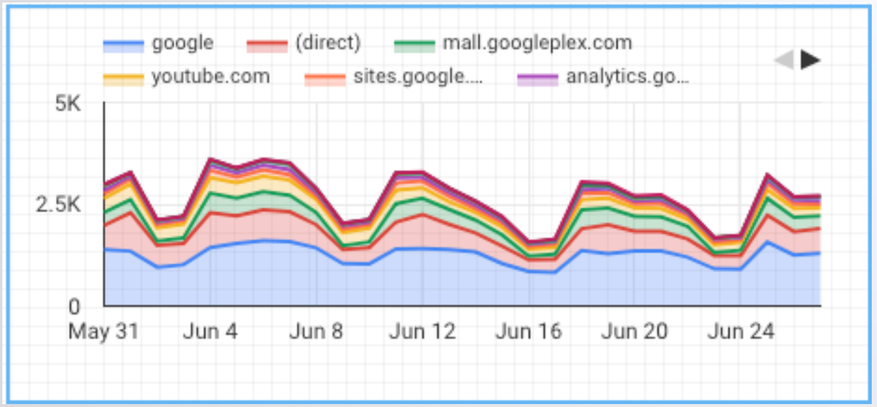
Scatter Chart



Bullet Chart



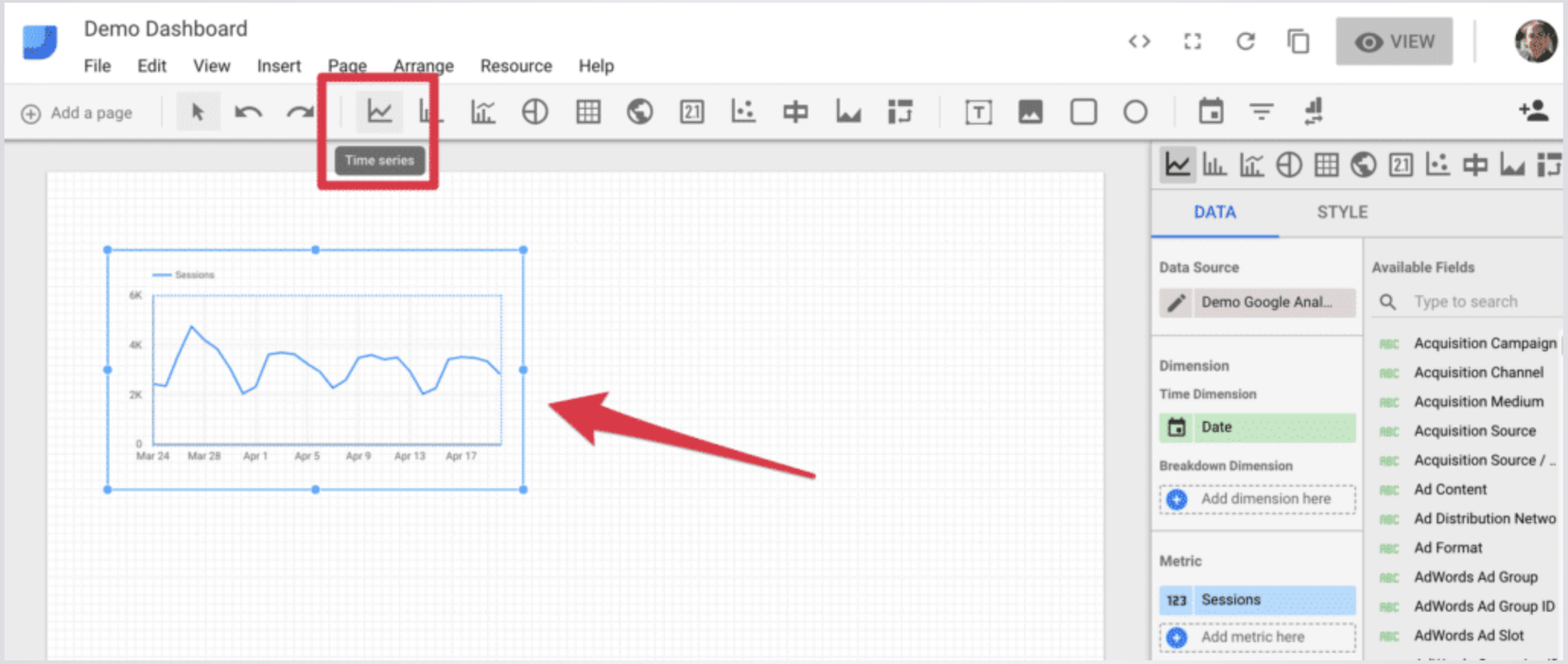
Area Chart



Pivot Tables

		Year / Quarter / Hits			
				2017	
Country	Gender	Q3	Q4	Total	Grand total
United States	male	102,743	29,535	132,278	**132,278**
	female	42,556	10,847	53,403	**53,403**
	Total	**145,299**	**40,382**	**185,681**	**185,681**
Canada	male	6,035	1,550	7,585	**7,585**
	female	2,859	448	3,307	**3,307**
	Total	**8,894**	**1,998**	**10,892**	**10,892**
India	male	5,224	1,160	6,384	**6,384**
	female	1,926	473	2,399	**2,399**
Grand total		**194,434**	**53,827**	**248,261**	**248,261**

STEP 3: ADDING GRAPHS, CHARTS & OTHER ELEMENTS



Once you add a graph, you need to select your data source, dimensions and metrics for the particular graph.

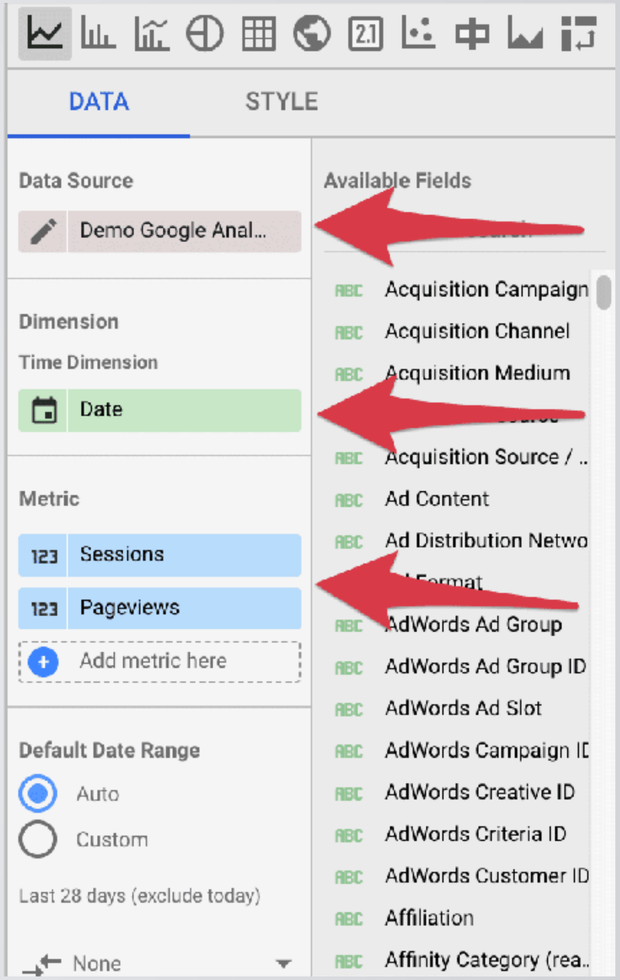
STEP 3: ADDING GRAPHS, CHARTS & OTHER ELEMENTS

First, we will want to select the correct data source. To change this simply select the edit button next to the data source in the panel to the right of your dashboard.

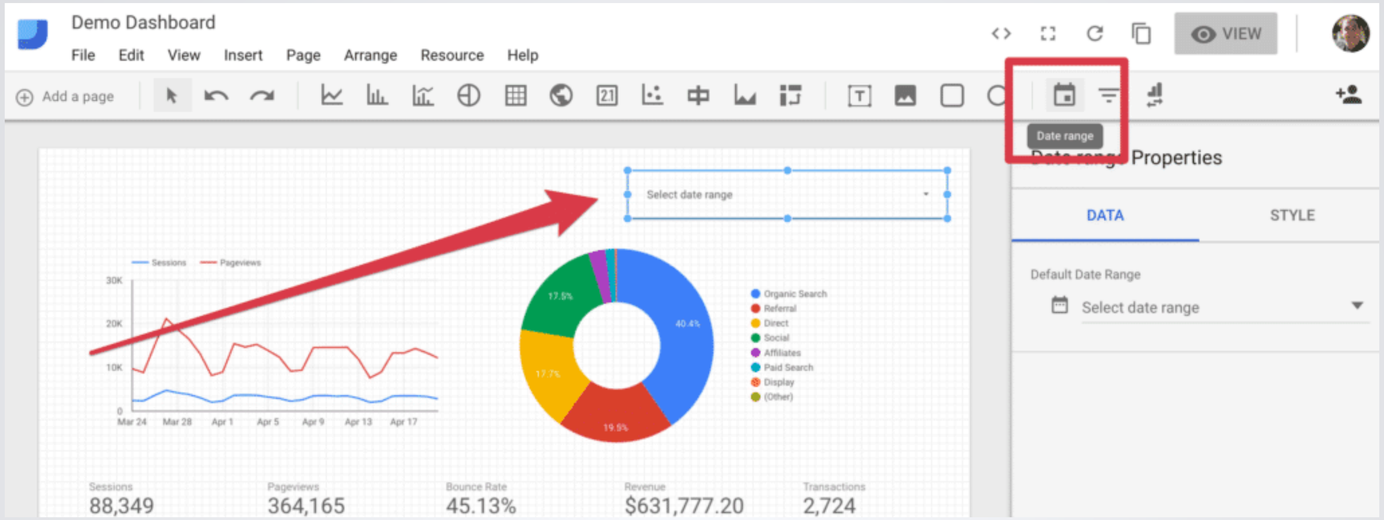
For our time dimension, we will want to break this out by date. There are many options you can choose from, feel free to browse other options.

With this type of graph, you can have multiple metrics which will show up as different colored lines on the line graph. For this example, we want to pick “Sessions” and “Pageviews”.

As you pick these dimensions, pay attention to the line graph in your dashboard. Your graph will update to reflect your changes immediately.



STEP 4: ADDING DATE RANGE FILTERS

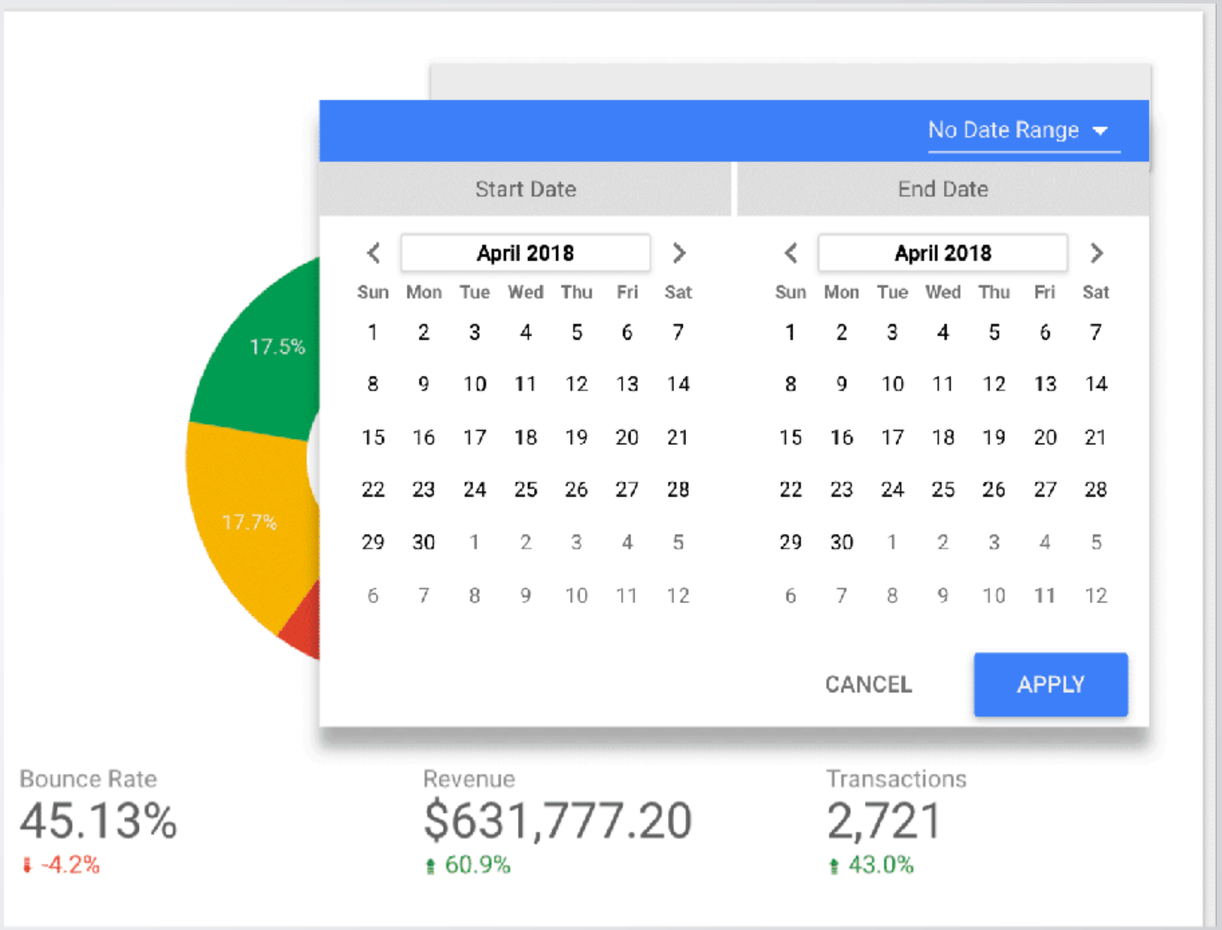


Google Data Studio as an element known as a “Date Range” filter. This is added the same way as all other elements. Just select it from the menu bar and drag out a date range filter at an appropriate size.

STEP 4: ADDING DATE RANGE FILTERS

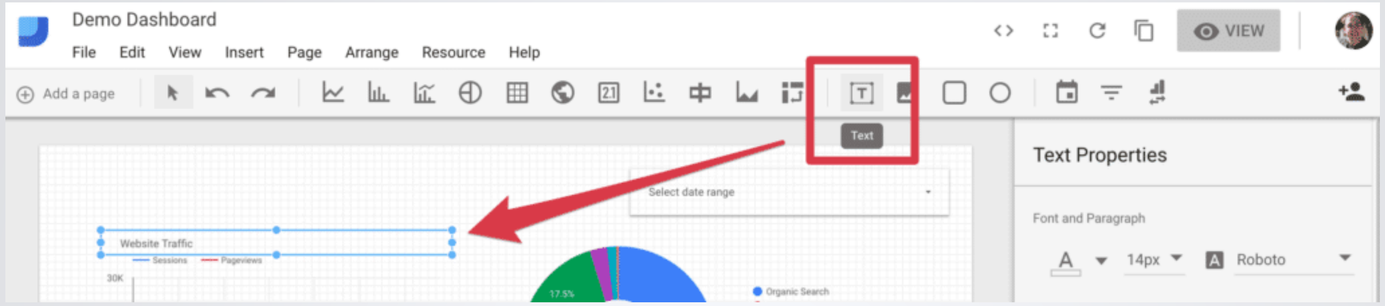
Once you add the filter, switch over to view mode and try it out. This allows you to select a date range for your dashboard.

If you have any comparison elements set to the previous period, such as our scorecards, they will compare whatever date range you select to the previous period. For example, if your date range has 45 days in it, the comparison will be the 45 days prior to that range.

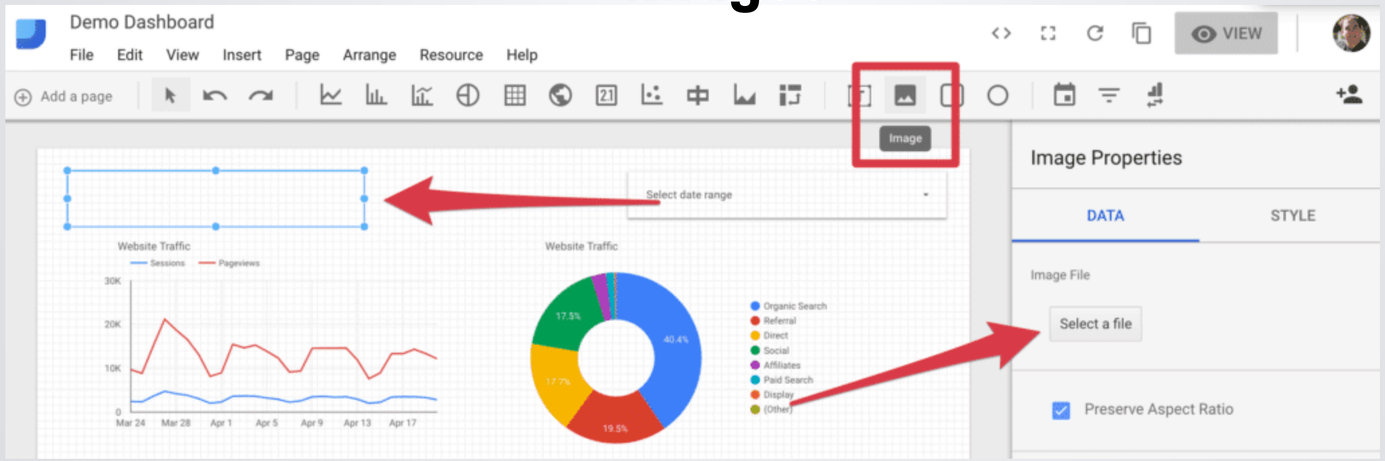


STEP 5: ADDING TEXT HEADERS & IMAGES

Text Headers



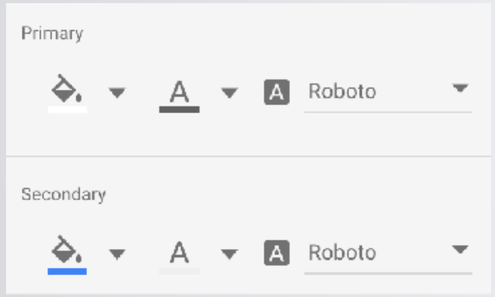
Images

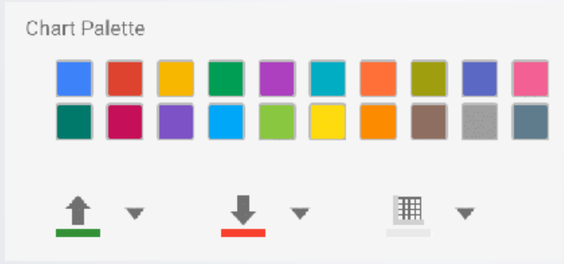


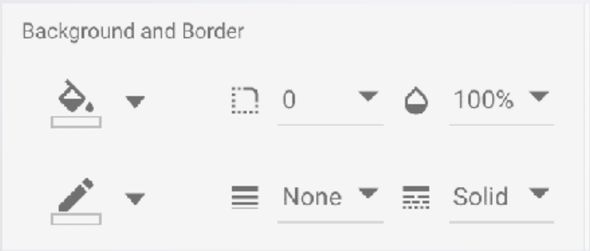
STEP 6: STYLING

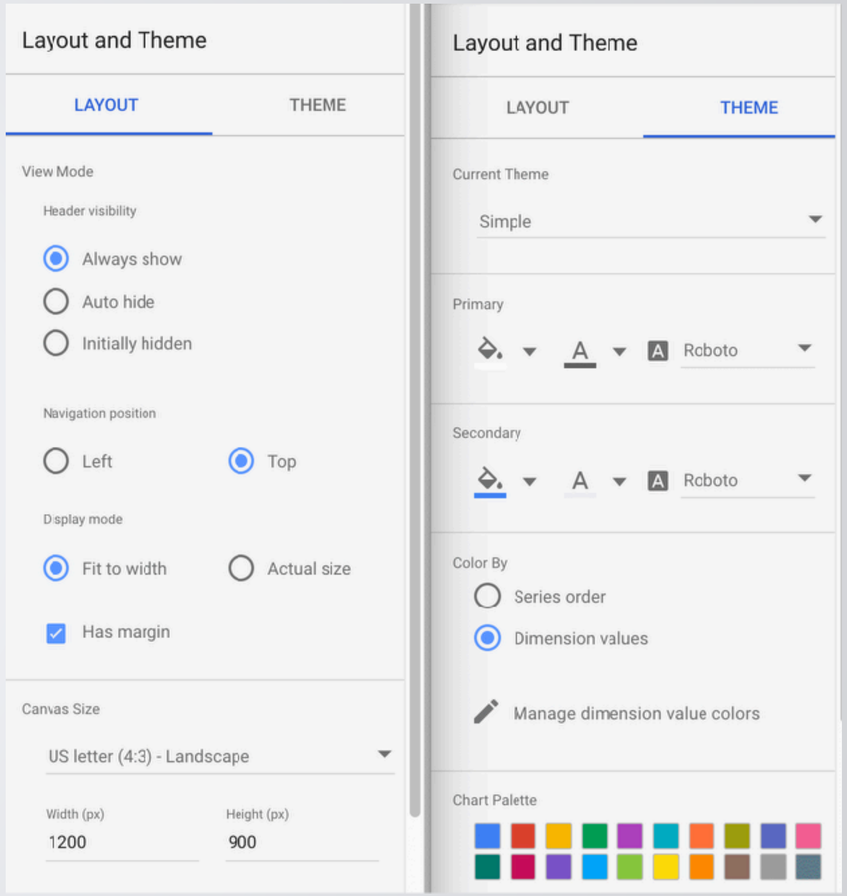
Global Styles

When you don't have any elements selected, you should see the Layout and Theme sidebar. In this sidebar, we have the ability to control the overall layout and theme for our entire dashboard and all elements.









STEP 6: STYLING

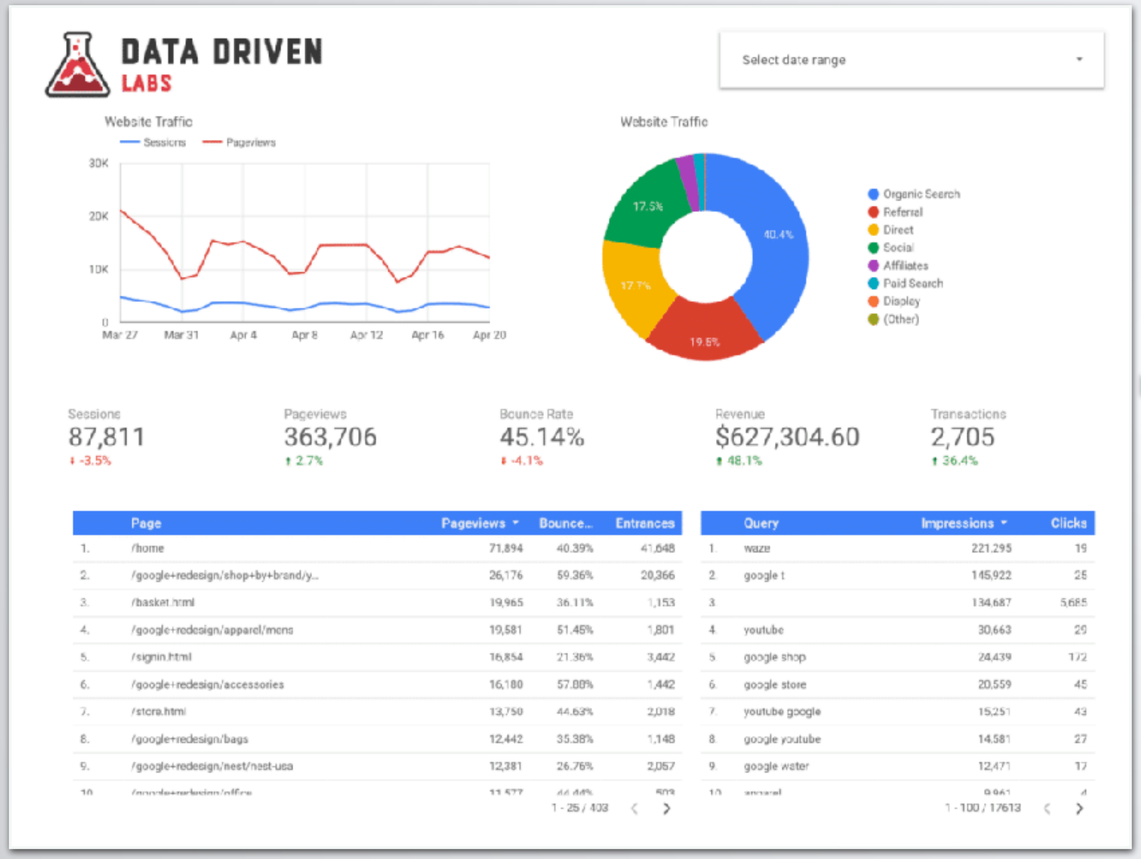
Element Styles

Each element in Google Data Studio has it's own style that can be adjusted. It will automatically pull from the global styles, however, you can fine tune and even override the global styles on each element.

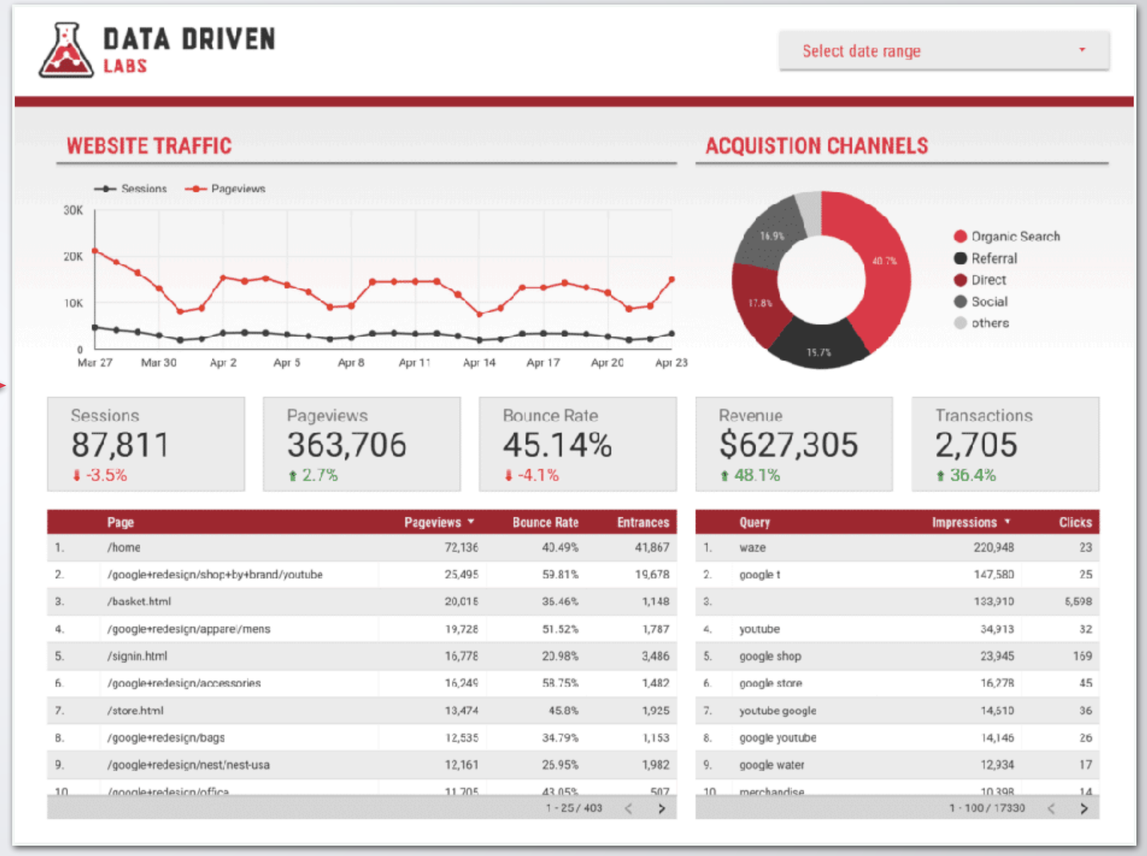
Most elements also contain additional elements that you can style. For example, a table has the ability to set the colors for alternating rows and to adjust headers. Pie charts allow you to change where the legend is positioned and alignment. Each element has it's own styles. Take some time to explore each element.

STEP 6: STYLING

Before

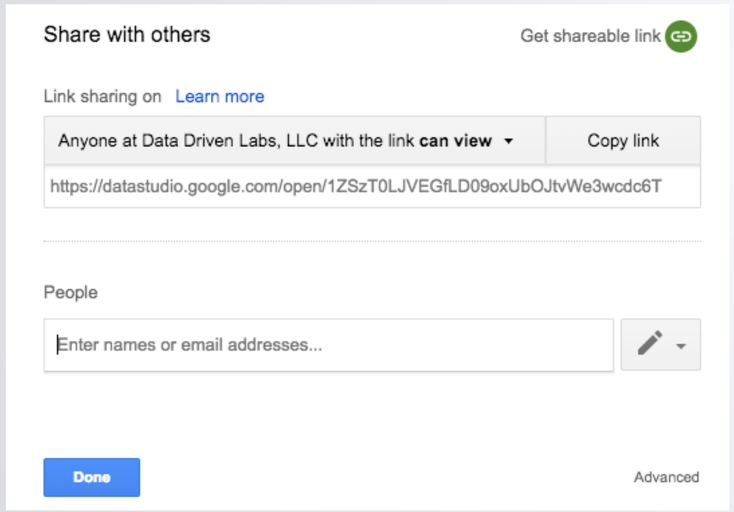


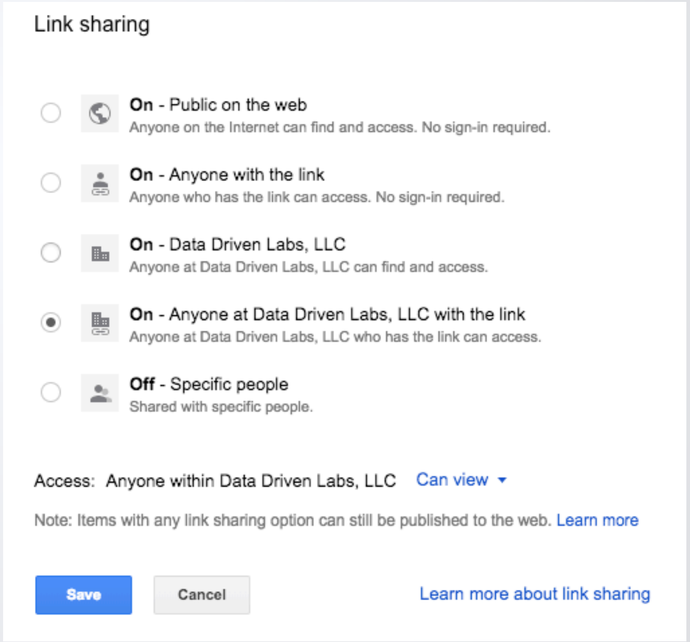
After



STEP 7: SHARING

Once your report is created, you can share it just as you would any other Google Doc. Simply hit the sharing icon in the right corner and select how you want to share it and what access level users will have. View only will allow them to view the reports while edit will give them the ability to edit. They do not have to have access to the data source to view the data.





QUESTIONS?

Data Studio Dashboards 101

- What Is Google Data Studio
- Standard Connectors
- Create A Basic Report
- Style Your Report

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BREAK TIME

Take A Few Minutes

CUSTOM FILTERS

Live Demo

- Filter Control
- Filter Charts
- Page Level Filters

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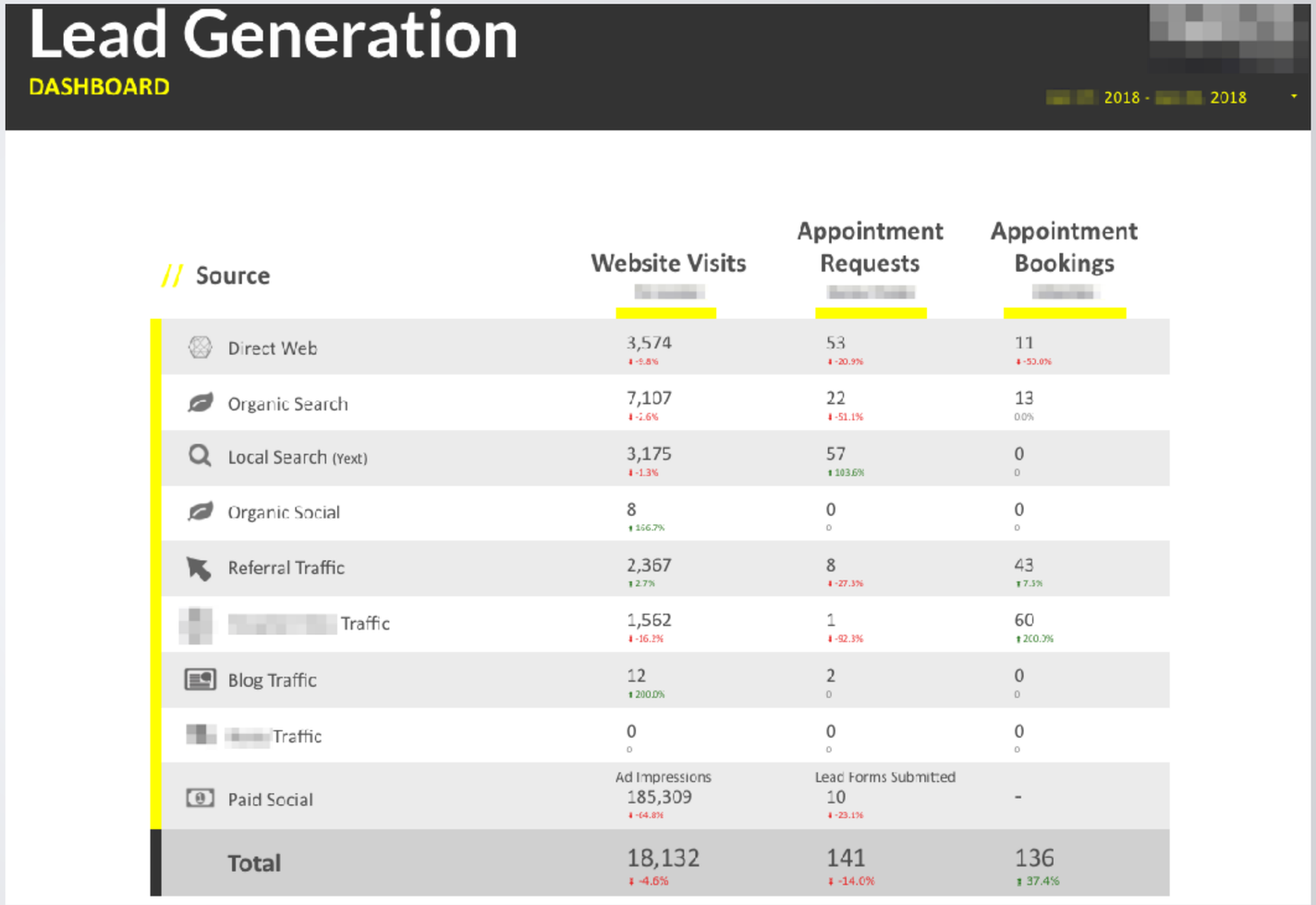
FILTER EXAMPLE

Each numerical value is a scorecard that is filtered down to source. Some have filters based off the UTM campaign information while others are filtered by default channel groupings.

Blog traffic is a filter that checks for traffic where the referral matches the blog URL

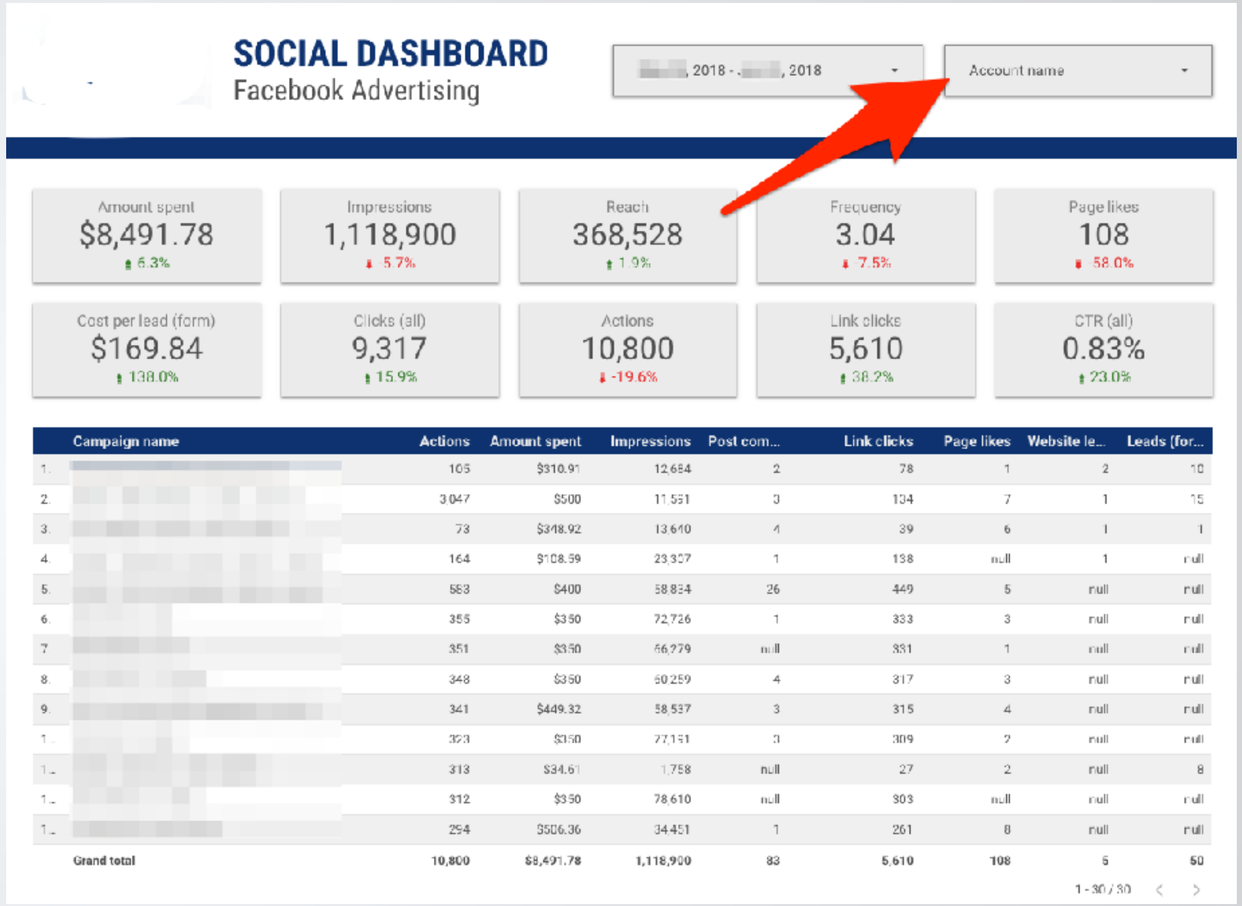


// Source	Website Visits	Appointment Requests	Appointment Bookings
Direct Web	3,574 -5.8%	53 -20.9%	11 -50.0%
Organic Search	7,107 -2.6%	22 -51.1%	13 0.0%
Local Search (Yext)	3,175 -1.3%	57 103.6%	0 0
Organic Social	8 166.7%	0 0	0 0
Referral Traffic	2,367 2.7%	8 -27.3%	43 7.5%
[redacted] Traffic	1,562 -16.2%	1 -92.3%	60 200.0%
Blog Traffic	12 200.0%	2 0	0 0
[redacted] Traffic	0 0	0 0	0 0
Paid Social	Ad Impressions 185,309 -64.8%	Lead Forms Submitted 10 -23.1%	-
Total	18,132 -4.6%	141 -14.0%	136 37.4%

FILTER EXAMPLE

Here we are using a filter control to change all the data for this Facebook Ads dashboard.

This particular client has 40 Facebook ad accounts and wants to be able to narrow the data down to each account.

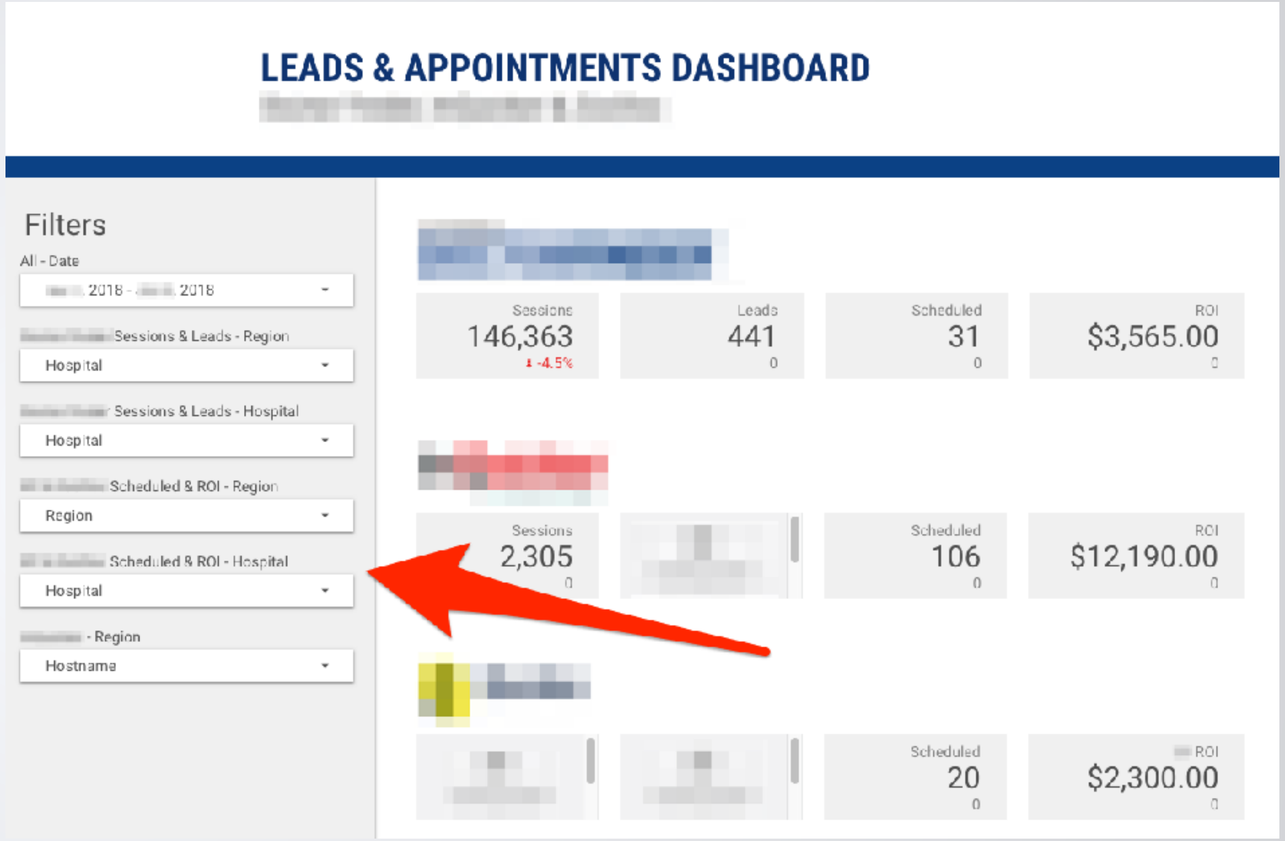


FILTER EXAMPLE

In this example, we use many filters to allow us to filter multiple types of data.

You can add more than one filter control. If one filter control is set, the other filter control will filter the data left over from it.

For example, you can create on filter to filter by channel and a second filter by source. If you set channel to “organic” the only sources in your second filter control will be “Google”, “Bing” etc.



GOOGLE DATA STUIDO CALCULATED FIELDS

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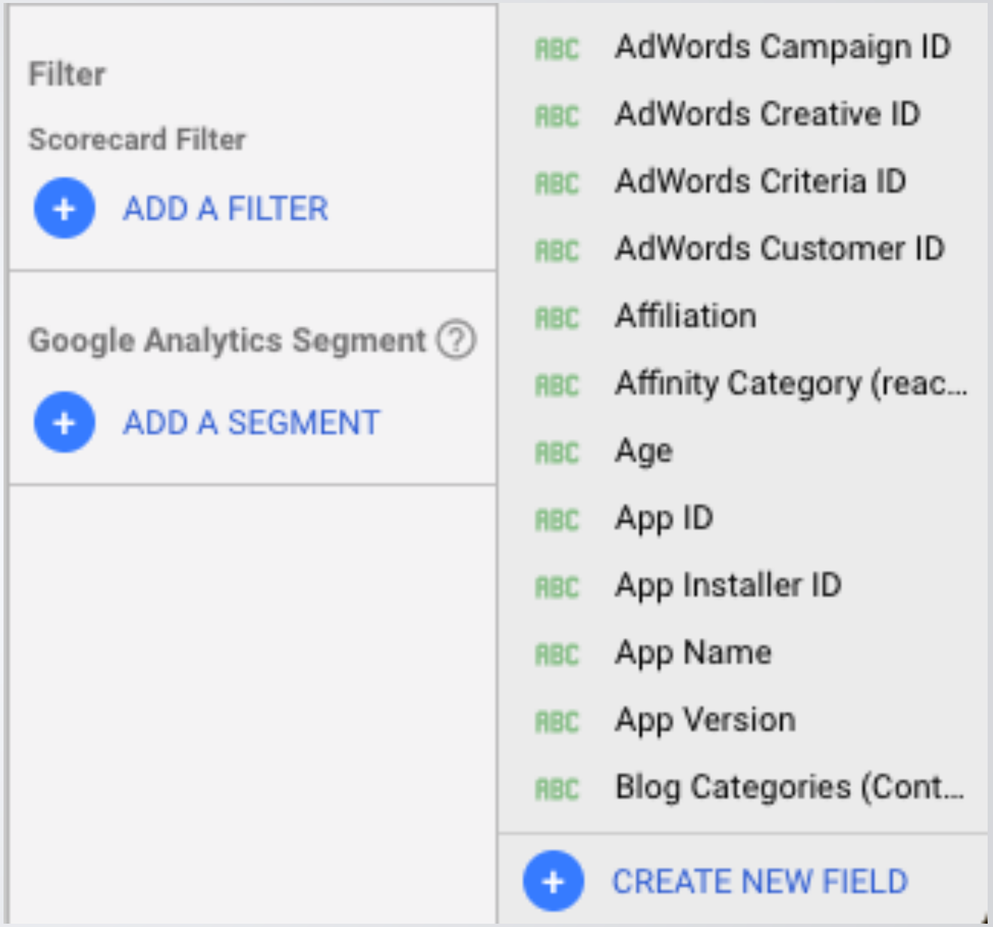
WHAT IS A CALCULATE FIELD

Simply put, it is a user-generated dimension or metric that is created using formulas. These fields come in a variety of different forms such as:

- **Arithmetic:** addition, subtraction, multiplication and division
- **Mathematical Formulas:** Examples include REGEXP_MATCH(), POWER(), MIN(), MAX(), SUM()
- **Data Transformation:** Convert your data to text, numerical values, or even dates. Use functions like LOWER() to standardize text. Re-name fields according to company acronyms, or add unique identifiers.
- **Logical Comparisons:** Utilize branching, IF/ELSE or CASE/WHEN statements within your data to apply categorical connections

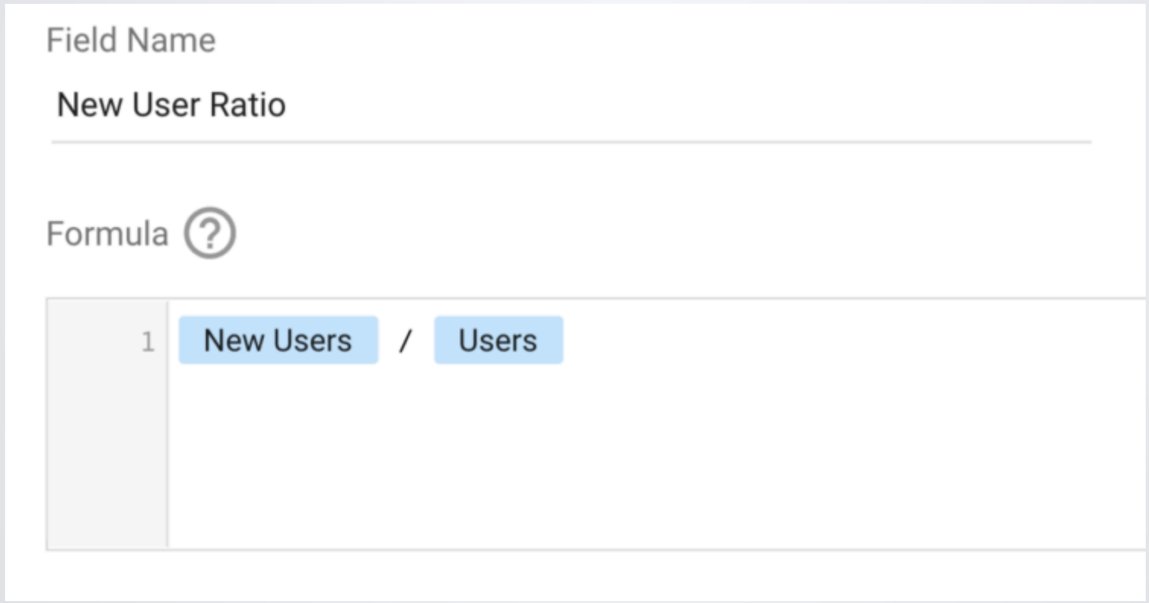
HOW TO CREATE A CALCULATE FIELD

Once you have drawn out your chart or graph, the right sidebar will appear with pre-populated dimensions and metrics. At the bottom of this pre-populated section, you will see a “Create New Field” button.



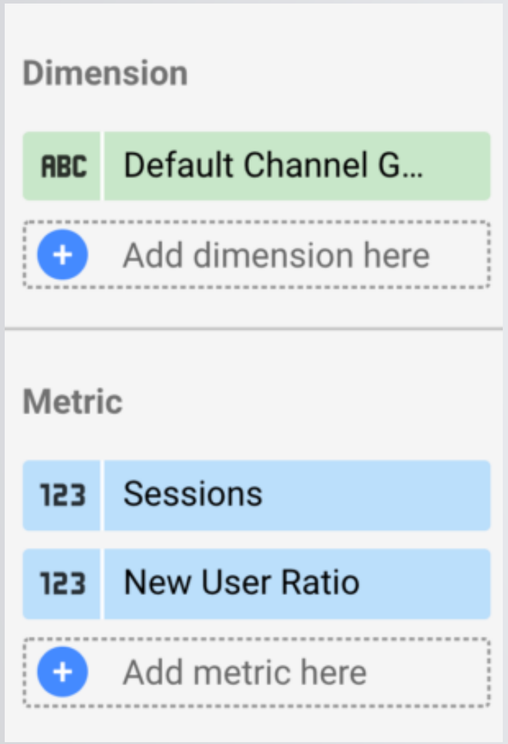
HOW TO CREATE A CALCULATE FIELD

Now, just fill out the field name, field ID and formula. For this example, we will make a new user ratio. Simply add in the already existing “New User” metric and divide by total “Users”.



HOW TO CREATE A CALCULATE FIELD

Once created, you can use this new metric combined with other metrics. Here is how to use it in a table:



	Default Chan...	Sessions ▼	% Δ	New User Ratio	% Δ
1.	Organic Search	16,241	-66.1%	63.55%	-18.2%
2.	Direct	5,763	-51.2%	85.24%	-4.8%
3.	Referral	2,706	-75.1%	46.17%	-39.7%
4.	Paid Search	1,590	-45.2%	86.98%	-1.1%
5.	Display	875	-74.2%	75%	-17.6%
6.	Social	864	-2.2%	47.4%	-16.4%
7.	Paid Social	644	140.3%	85.83%	-7.6%
8.	Email	200	-60.0%	8.7%	-68.9%
9.	Print	54	5.9%	37.5%	275.0%
10.	(Other)	51	-93.4%	94%	-0.5%

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COMMUNITY CONNECTORS

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GOOGLE VS COMMUNITY CONNECTORS

When adding a data source, you will find Google Product Connectors and Community Data Connectors.

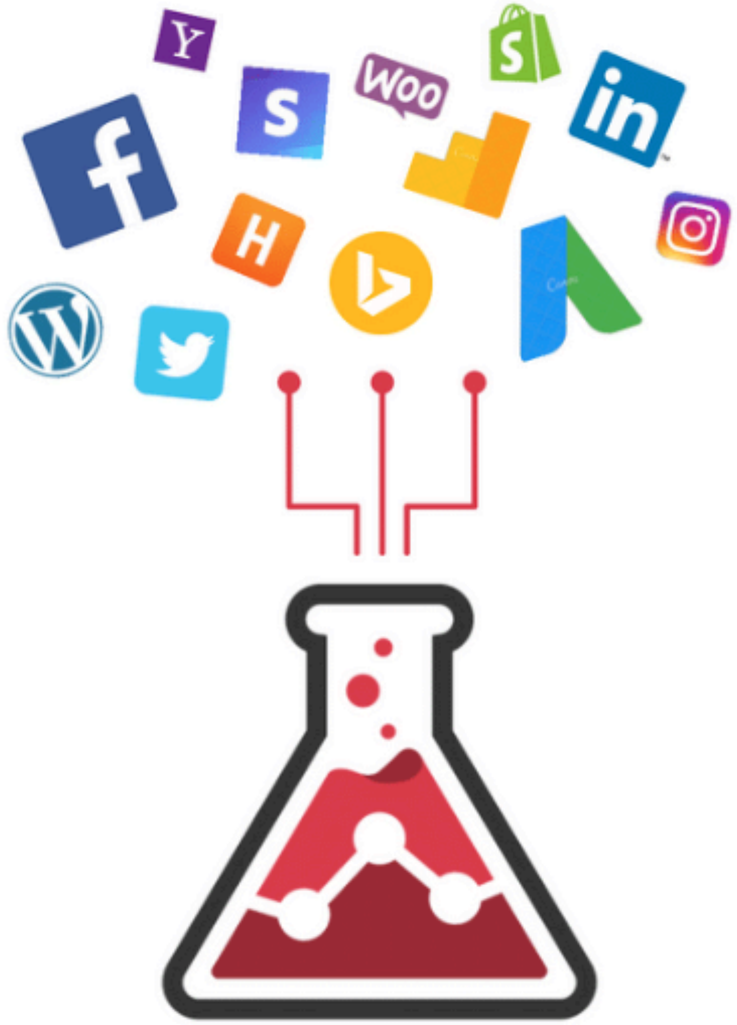
Community Connectors are developed by third-parties for different applications. Here you will find ways to connect to Facebook, Twitter, LinkedIn and more.

Community Data Connectors (Paid)

THIRD PARTY CONNECTOR DEVELOPERS

There are several companies that produce third-party connectors. Some of my favorites are:

Data Studio Connectors



50% Off!

All Your Data Sources In One Place

Pull all your marketing data directly into Google Data Studio and create beautiful dashboards.

RELEASING SOON

datadrivenlabs.io/connectors

TIPS & TRICKS

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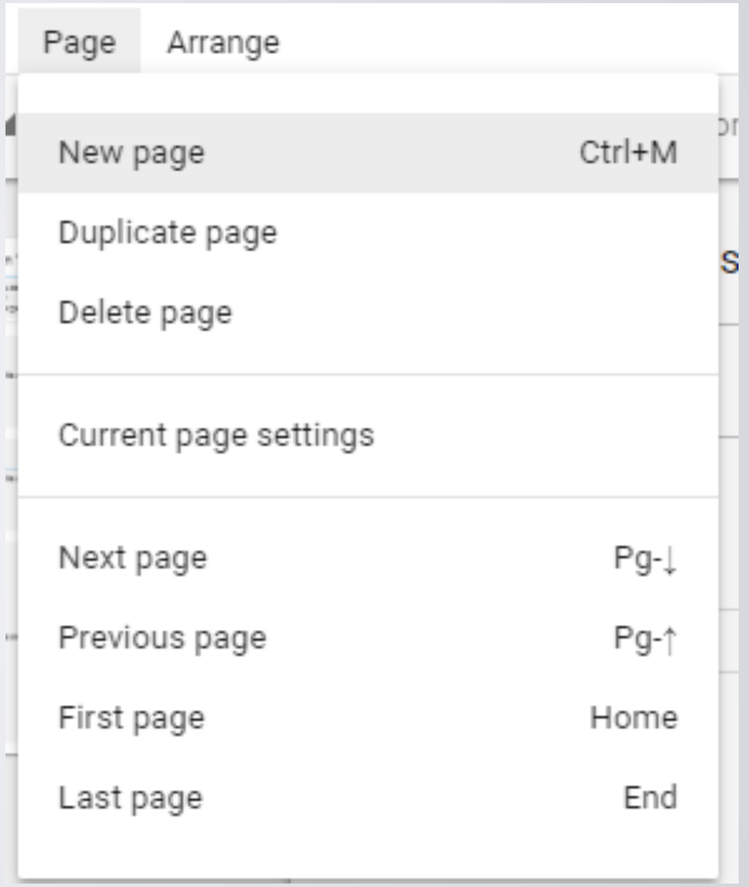
TIP: ADD MULTIPLE PAGES

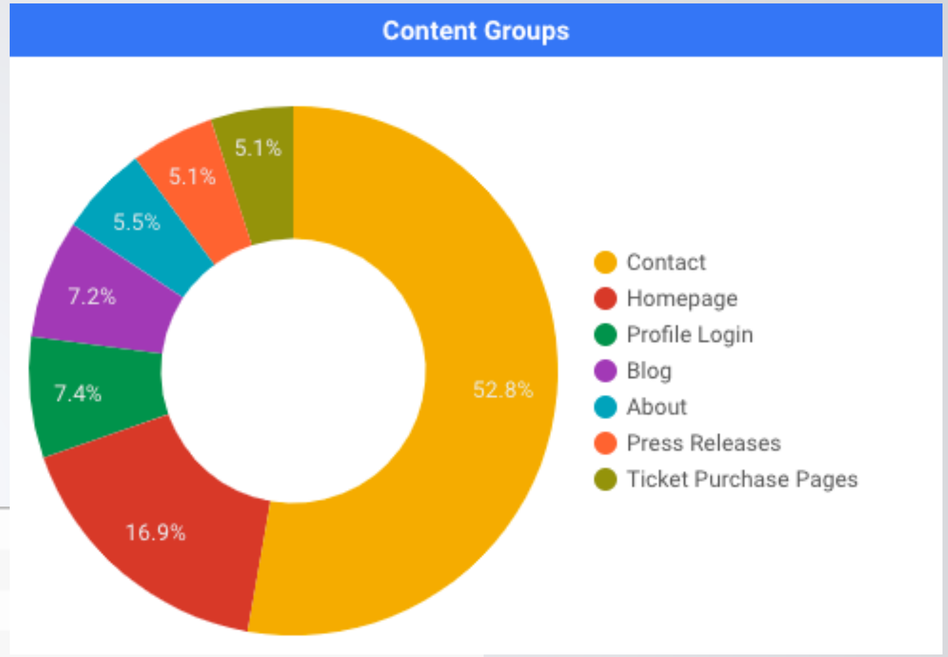
You are not limited to just one page!

You can generate additional pages to your report by just selecting new page. Use this to create an Executive Overview page and then pages that dive into items such as Acquisition, Behavior, Conversions, etc.



TIP: CREATE CONTENT GROUPS

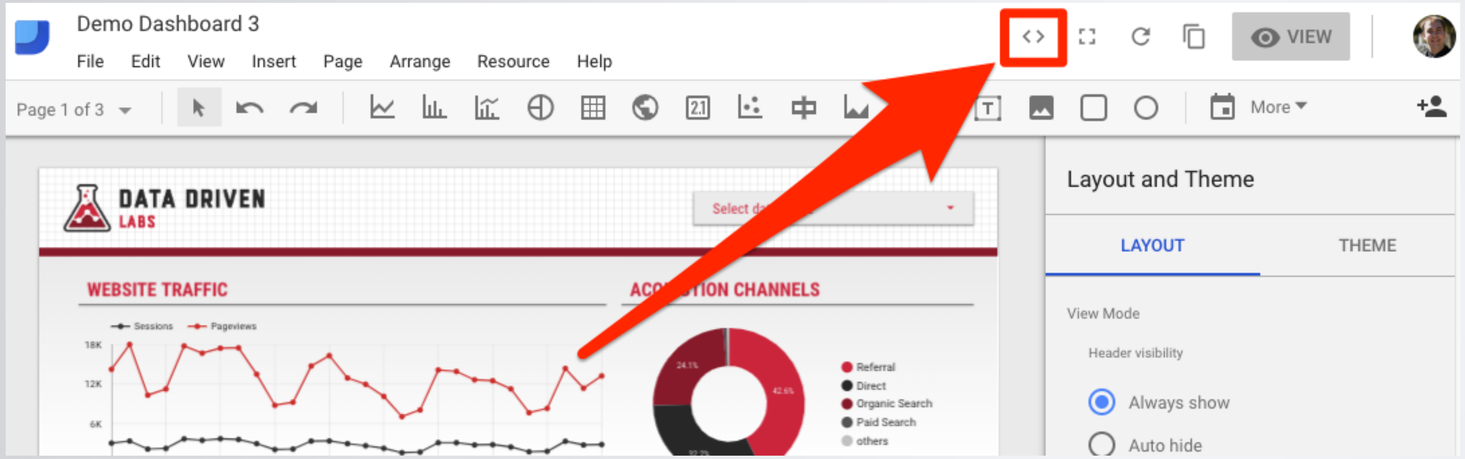
You can use calculated fields to create content groups. This is great for putting your pages into a bucket. For example, you can have your Homepage, Product Pages, Blog Pages, etc all grouped. This does require some knowledge of REGEX.

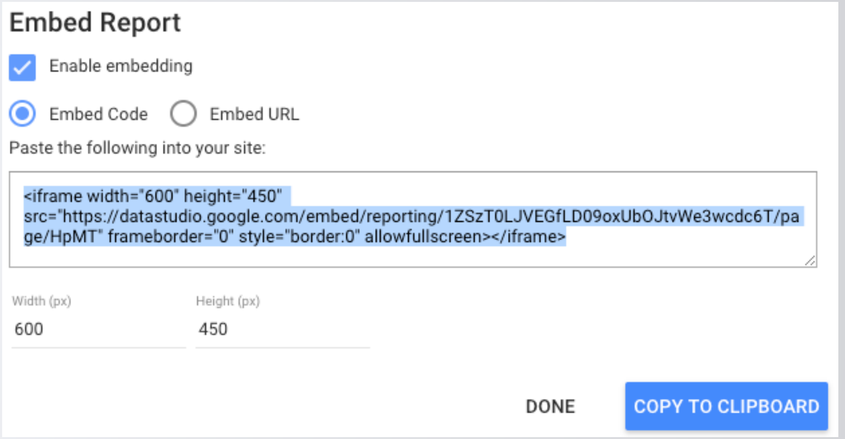



```
CASE
WHEN REGEXP_MATCH(Page, "(^/$|/home$)") THEN "Homepage"
WHEN REGEXP_MATCH(Page, "(/contact.*|/faq.*)") THEN "Contact"
WHEN REGEXP_MATCH(Page, "/gifts.*") THEN "Blog"
WHEN REGEXP_MATCH(Page, "(/about.*|/jobs.*)") THEN "About"
WHEN REGEXP_MATCH(Page, "(^/login/profile|/login$|/login/home)") THEN "Profile Login"
WHEN REGEXP_MATCH(Page, "(.*/step.*|/complete/)") THEN "Ticket Purchase Pages"
WHEN REGEXP_MATCH(Page, "(/press.*)") THEN "Press Releases"
ELSE "Other"
END
```

TIP: EMBED A REPORT

A report can be embedded as an iFrame into any website. If you have a client portal, this could be a great way to pull in a dashboard. Data is automatically refreshed every 12 hours.





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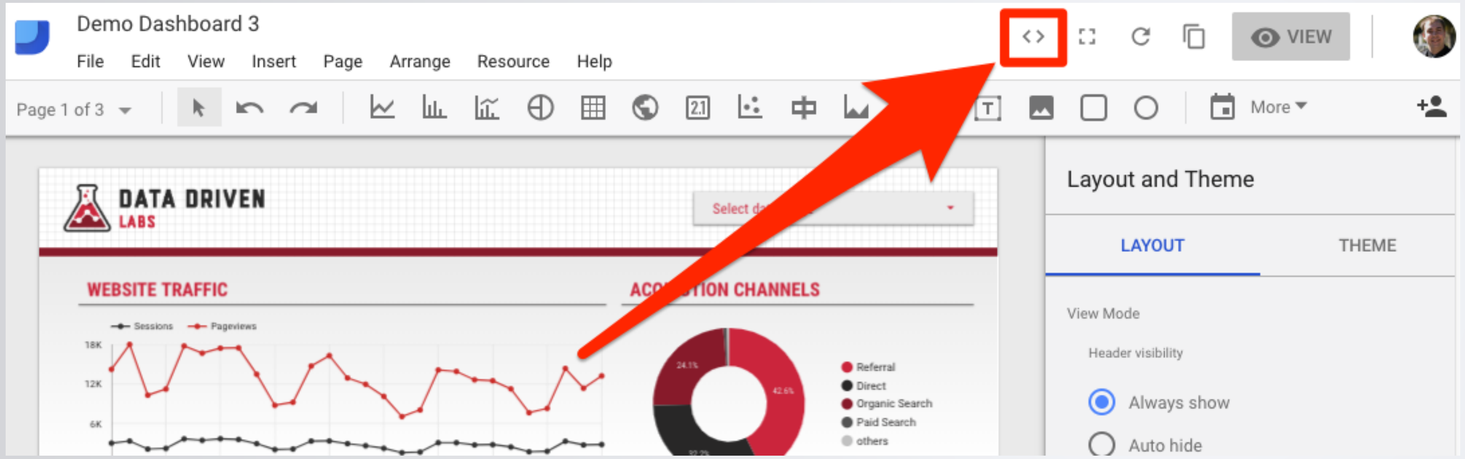
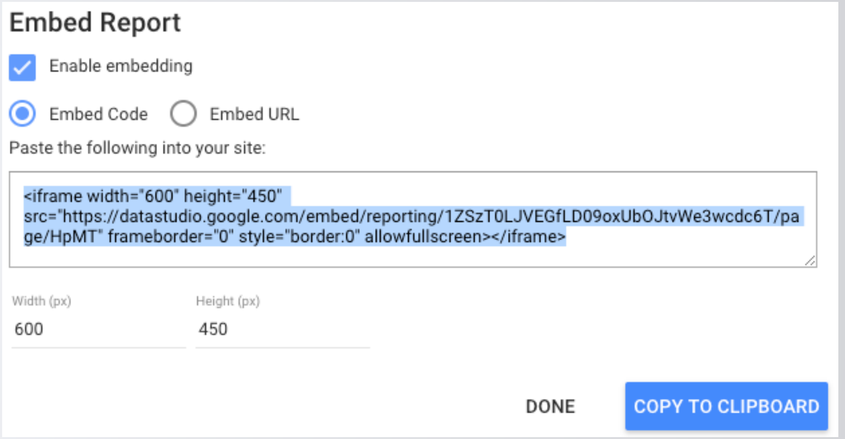
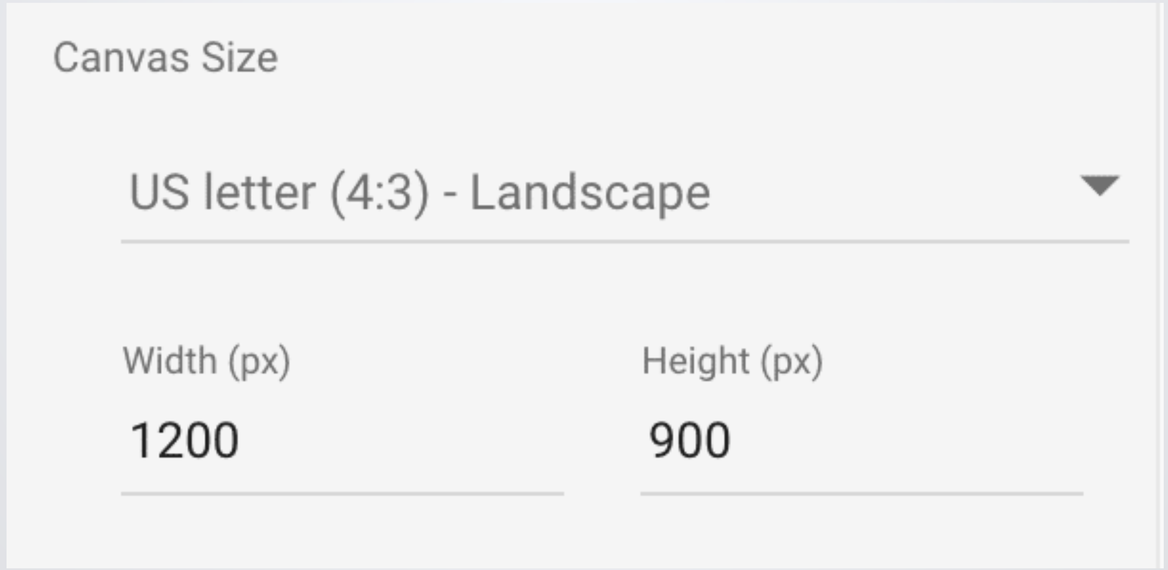




TIP: USE DIFFERENT CANVAS SIZES

Where are you going to show off your dashboard? Google has pre-built sizes, US Letter Portrait, US Letter Landscape, Screen 16:9 and Screen 4:3.

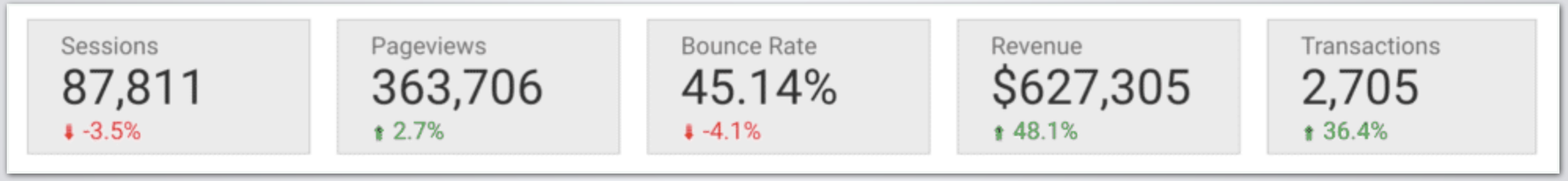
Take into account where you will display your dashboard and use custom canvas sizes to match your destination. This setting is found under the Global Styles section.



TIP: USE COPY PASTE

Just like a Google Doc, you can use copy and paste. When creating an element or text header, get your style right on just the one element, then copy and paste that element as many times as you need to. Then select each element and change the dimensions & metrics as you see fit.

I often use this for scorecards. I will create my first scorecard, get the font sizes just right, background colors set, borders applied and then make sure I like the size. Once done, I use copy/paste to quickly recreate that style.



QUESTIONS?

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