How to create an email reporting dashboard with Google Data Studio

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Intro

Email reporting and analytics can be tricky to navigate. ESP reporting doesn't always provide specific data or present the data in ways that can be useful, or easy to digest. The alternative, manually creating email reports can take up to two working days to create, validate, and present in ways that stakeholders could understand.

I eventually came across Google Data Studio, and through a couple of years of experimenting and trial and error, I've found a way of automating email analysis and saved myself a ton of time.

Additionally, I've been able to create detailed reports for myself, and distilled versions for stakeholders who don't need to know the nitty-gritty.

> 📌 **TLDR;** Google Data Studio can (a) visualise your data (b) give you more control over your data reporting and (c) automate the entire process. Boom.

Continue reading to get an in-depth tutorial on how I create an email reporting dashboard in Google Data Studio. You can follow along with the steps using the sample documents provided.

Sample documents

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/c3a2a8ce-f75e-40ff-836f-92c4bd7a32af/SEINO-demo-data.csv

Sample Google Sheet

Sample Google Data Studio report

Requirements

Before you begin, ensure you've got the following:

- A Google account to be able to access **Google Data Studio** and **Google Sheets**

- An email report exported from your ESP that has the following fields at a minimum:

  - Send date

  - Campaign name

  - Number of sent emails

  - Number of delivered emails

  - Number of opens

  - Number of clicks

  - Number of unsubscribes

Instructions

1. Export your email report from your ESP.

Be sure to export data for <u>all time</u> rather than a small window each time.

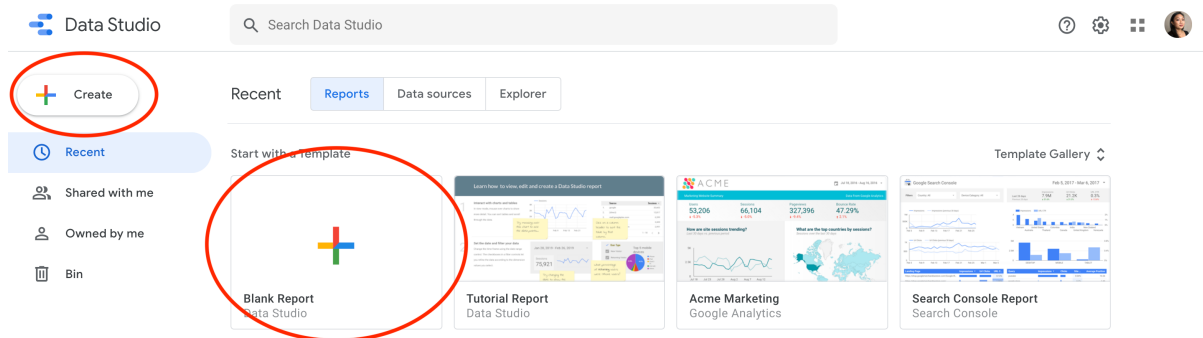## 2. Import the spreadsheet into a <u>Google Sheet</u>

> **!** Ensure that your spreadsheet doesn't have a 'total' line. If it does, just delete it.

You can either just copy and paste the entire contents of the sheet, or click **File > Import** and upload the file.

3. Go to <u>Google Data Studio</u>, and create a new report.

You can click the create button at the top left of the screen or select 'Blank Report'

4. Add data to the report.

When prompted, add data to the report. Select 'Google Sheets'

Select authorise, and then authorise your account.

Then, select the name of the Google sheet that you've just created and click **ADD** at the bottom right of the screen.

Data Studio will ask you to confirm to add data to the report, so just go ahead and click **ADD TO REPORT**

5. Edit the data source

At this point, you want to make sure that you have the right data to work with in your report.

Go to **Resource > Manage added data sources**

This is where you can find the list of data sources added to the current report. Should you want to add Google Analytics or other sources as part of your email reporting dashboard, you can find them easily here.

Right now, just click **EDIT**

6. Create calculated fields for open rates, click rates, click to open rates and unsubscribe rates.

Most ESPs will also export open rates, click rates and unsubscribe rates, but it's more accurate to set these fields up as calculated fields.

We'll start off by creating a field for Open Rates

Click **+ ADD A FIELD** at the top of the page.

What you'll see on the page is:

- **Available Fields** - All of the fields currently available from your Google Sheet.

- **Field Name** - Put in 'open rates'. If you already have a field from your google sheet that has the same name, I would suggest using a naming convention like 'calculated - open rates' or even 'C-OR' so you'll know which field to use.
- **Field ID** - This is generated automatically by Data Studio.
- **Formula** - This is where you'll put in the formula that will automatically calculate your open rate.

If you are familiar with Excel or Google Sheets, creating a formula in Data Studio will be fairly familiar territory to you. The only difference is that instead of referencing cell numbers, you'll be referencing the **Available Fields**.

For open rates, this is the formula you'll want to use:

```
SUM(Open)/SUM(Sent)
```

The text in the brackets are referring to the Available Fields you have, so they might be named differently depending on the data you've exported from your ESP.

Normally I tend to calculate my rates out of emails delivered, rather than sent but that's out of personal preference.

In the sample data I'm using, the field is called Sent all, so the formula looks like this:

```
SUM(Open)/SUM(Sent all)
```

When you start typing the formula, you will notice that when you type 'O' for example, a menu will pop up prompting you to select the correct available field to refer to, like the Open Rate field you've created.

Once you have typed that formula, there should be a green tick at the bottom. That means Data Studio has validated the formula and it will work.

Click **UPDATE** at the bottom right.

Click to go back to **ALL FIELDS** at the top left, scroll down and find the field you've just created. Change the data type it will be from Number to **Number > Percent**. This means that this field will be treated as a percentage.

Repeat so you create fields for click rates, click to open rates and unsubscribe rates. These are the formulae I use to calculate them:

Click rate

```
SUM(Clicks)/SUM(Sent)
```

*Using the sample data, this formula will be: **SUM(Clicks all)/SUM(Sent all)***

Click to open rate

```
SUM(Clicks)/SUM(Opens)
```

*Using the sample data, this formula will be: **SUM(Clicks all)/SUM(Open)***

Unsubscribe rate

```
SUM(Unsubscribe)/SUM(Sent)
```

*Using the sample data, this formula will be: **SUM(Unsubscribes)/SUM(Sent all)***

Once you've created the calculated fields you desire, click **FINISHED** at the top right.

💡 Depending on the data you have available, you could also create additional fields to calculate bounce rates, spam rates and other reporting metrics.

📌 Click here to see other functions available to use in Data Studio.

7. Set your current page settings

This is to ensure that all of the elements you will create will follow specific rules, like which data source they are drawing from and which date field is being used.

Data Settings

Right-click anywhere on the report and select **Current page settings.**

Click on the box that says S**elect Data Source** and select the Email Report data source you've just created and edited.

Click on the plus sign under **Date Range Dimension** and select the **Send date** field.

> 💡 You will notice there is an option to ADD A FILTER. This is where you can create and use filters to exclude or include data. For example, if you wanted to exclude any campaigns named 'Test'.

Style Settings

This is where you can change how big the report is, and the page background colour.

I normally go for a screen size of 1920 x 1080 so I know it'll fit most monitors. You can also choose to pick dimensions that can fit onto a piece of paper should you want to print your reports out.

8. Start creating report elements

This is where the fun begins. Now that you've prepped your data source, you can start using the data to create different elements to make up your dashboard.

To delete anything on the canvas, simply right click on any element and select **Delete**.

Everyone's needs are different, but for the sample dashboard I've created, I've set up some basic elements.

- Monthly summary table

- Monthly chart

- Scorecards

- Campaign performance table

8.a. Creating a monthly summary table

Select **Add a chart > Table**

Click and drag where you would like to place it on the canvas. You can always move this chart after you've created it so don't worry about placing it perfectly.

On the right hand menu, you will see two tabs: **DATA** and **STYLE**.

DATA is where you will manage which fields will show up in the chart.

STYLE is where you will manage how the data is presented.

Edit the Date Range

Click the box under **Date Range Dimension** and select **Send date**. However, you can leave the box blank and it will default to the page settings you've set from earlier.

Edit the Dimension

Under **Dimension** click on the green box and select **Send date** from the pop-up menu.

Since this is a monthly summary, you need to aggregate the data so it appears monthly. Click on the calendar icon next to **Send date**, and click **Date > Date and Time > Year Month**.

You can also change the name of the field in this pop-up menu to say **Month** instead of **Send date**

Edit the metrics

Clear any boxes here by hovering your mouse over them and clicking the 'x'.

Select **Add metric** and type to search for your Sent field.

You can also search from the list of available fields to the right, and click and drag them in.

Keep adding metrics until you have the calculated **open rates**, **click rates**, **click to open rates** and **unsubscribe rates** you created earlier.

Edit which data field to sort by

Scroll down the right-hand menu and select which field to sort the table by. I recommend using the **Send Date** field.
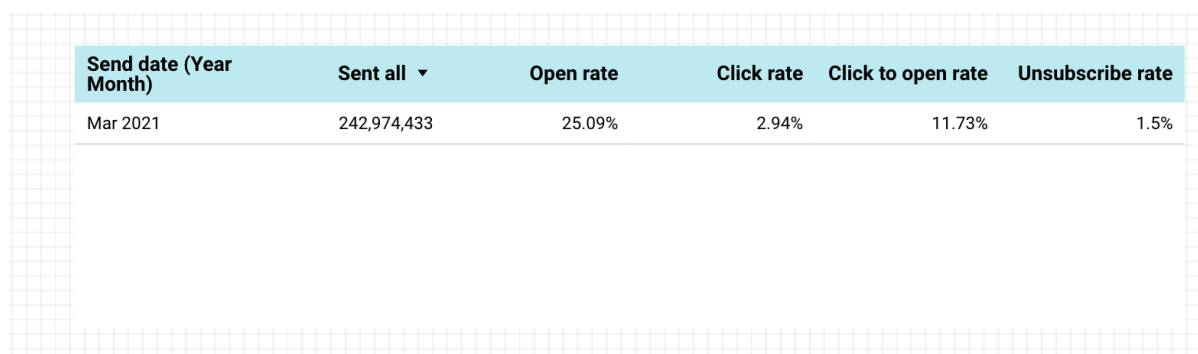
Edit the style

You can choose to change aesthetic of the table like background and border colours. This comes in useful if you need to create client reports.

For monthly summary tables, I would:

- Uncheck **Table Body > Row numbers**. Since you're already sorting by months, there's no need for these.

- Uncheck **Show pagination**.

Congrats! You now have a monthly summary table. This is a useful table to see how your emails have progressed. You could change the send date field to show weekly instead of monthly, depending on your cadence.

Send date (Year Month)	Sent all ▼	Open rate	Click rate	Click to open rate	Unsubscribe rate
Mar 2021	242,974,433	25.09%	2.94%	11.73%	1.5%

8.b. Create a monthly summary chart

The beauty of using a data visualisation tool like Google Data Studio is that you can look at the same data presented in different ways.
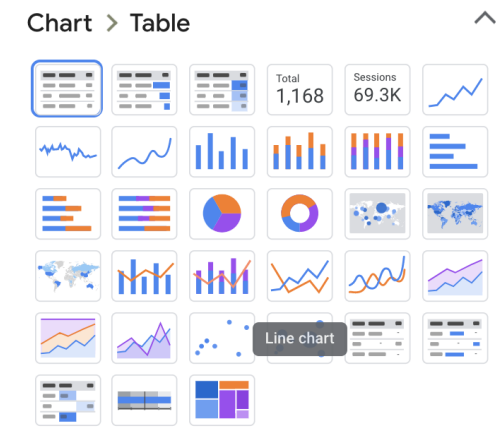
Right-click on the monthly summary table you've just created and click **Duplicate**.

On the right-hand menu, click **Chart >**

Table and select the **Line Chart** option.

And... that's it. Your table is now a chart.

Under the **STYLE** tab, you can change the colours of each of the metrics if you wish.

8.c. Create scorecards

Scorecards are incredibly useful to get a snapshot of your metrics.

Click **Add a chart > Scorecard**

Click anywhere on the canvas to place it.

On the right-hand menu, clear the **Date Range Dimension**.

Under metric, select **Open Rate**

Continue the steps above until you've created scorecards for the calculated **click rates**, **click to open rates** and **unsubscribe rates** you created earlier.
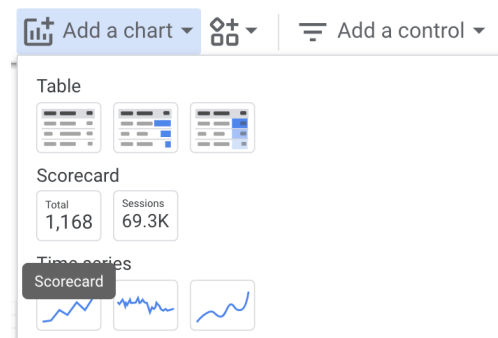
💡 You can bulk format all of the scorecards you've created by clicking shift on your keyboard and selecting the scorecards you want to edit. Then, go to the **STYLE** tab on the right-hand menu and adjust the settings accordingly. This also applies to bulk editing elements.

8.d. Create a campaign performance table

Finally, you'll want to know how your individual campaigns have been doing.

Right-click the monthly summary table and duplicate it.

Edit the Data

Change the **Send date** dimension to **Campaign Name**.

You can drag and drop more metrics into the table such as the number of **emails sent, opens, clicks** and **unsubscribes**.

If you're lucky, your data also includes subject lines which I would recommend including in this table.

Edit the Style

I would personally adjust the style settings to include row numbers and pagination.

9. Add data controls

Data controls are exactly what they sound like – elements that can easily help you filter and control the data on your dashboard.

Date range

It's important to have a date range control, so you can look at how your emails did in specific pockets of time.

Click on **Add a control > Date range control** and click anywhere on your canvas to place it.

Under data, you can leave it as **Auto date range** or you can select a default window of time, like last 30 days.
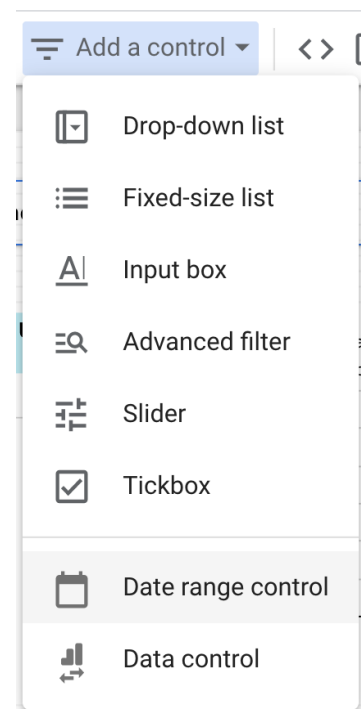
Campaign name search

If you wanted to look for specific campaigns, you can make it easy by putting in a search dropdown box.

Click on **Add a control > Drop down list** and click anywhere on your canvas to place it.

Under Control field select **Campaign name**
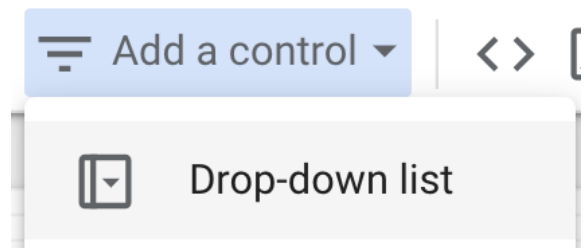
10. Formatting and styling the report

Okay, we're at the home stretch here.

You have now got a pretty functional looking report - it's time to put the finishing touches so you have a data dashboard that can present the information in an easy-to-digest way.

This is vital - data visualisations are the difference between easily spotting meaningful trends and a wall of numbers.

Report-level elements

You can create multiple pages for a single report and make the design consistent by having elements that appear on all of the pages.

I would create a header that has things like branding and data controls as report-level elements.

To make any element report-level, simply right click on it and select **Make report level**

You can also insert shapes to create areas on your canvas by selecting **Insert > Rectangle** or **Insert > Circle**.

Additionally, you can even insert images (**Insert > Image**) to your report - I usually pop in a logo.

Heatmaps or bars

You can make any trends based off the metrics in your tables more visually outstanding by formatting columns to appear as bars or heat maps.

Click on any table and click on the STYLE tab.

Now scroll down and select what number column you would like to format.

Select the **Number** dropdown menu, and select Heat map or Bar/Pub.

You can select either, but I tend to use Bar/Pub for clarity.

A table with bars

A table with heat maps

Colour scheme

You'll probably notice above that each of the columns is a different colour. I tend to match these colours across the whole data dashboard so that the rates are always represented by the same colours. For example, open rates are always magenta no matter which element in the table they are in.

This reduces the cognitive load when you're trying to decipher your email performance and makes it a lot easier for stakeholders to wrap their heads around the data.

You can always choose colours that match your branding requirements, but be sure to use colours that are distinct from each other.

11. Updating your report

This way of using Google Sheets and Data Studio are specifically designed if you have no way of syncing up your ESP's reporting data and have been doing your reporting manually.

To update your report, just export the data for **all time** from your ESP on a regular basis and replace all of the data in the Google Sheet that you are using as a data source. This usually takes me just a few minutes at the beginning of every week.

As long as the columns are exactly the same, this will mean that the data will be automatically and accurately updated in your Data Studio report since you have already done the hard work of creating the calculated fields.

12. Sharing your report

You are now ready to share your report with your teammates or clients.

Simply select **Share** at the top right of the page and add people by email address to view the report. Alternatively, you can click **Manage access** to make the report viewable by anyone who has the link.

I've done this with my sample report here > https://datastudio.google.com/reporting/c03801dd-e707-4ca6-a1fe-11daad8d390c

Wrapping up

Time, as any marketer knows, is a precious resource and while trying to understand Google Data Studio can initially be a challenge, I guarantee that investing the time to gain practical knowledge in the platform can mean a massive return in future. And hopefully, this resource is one of the stepping stones to get you there.

Naturally there may have been some things I have missed so just let me know (email, twitter) if there's anything I should go into more detail about, or whether there are other elements of email analytics and Google Data Studio you'd like to know about!

Back to NajmahSalam.com

Written by Najmah Salam

Email | Website | Twitter | LinkedIn

🙏 Special thanks to SEINō | Email Analytics for providing the sample data.