# Templates for Fast Visualization creation

The Templates feature radically improves the workflow around creating new visualizations (or Swarms) and uploading new data. First-time users should be able to get from zero to 60 in a minute instead of needing training or needing to search for guidance in Flow articles and videos.

The advantages of Templates are:

- Start your building process from a visual interface
- Fast, powerful, reactive mechanism to swap in your own datasets
- Explore more advanced visualization types without learning how to build from scratch
- See where your data is being applied throughout the parameters of the visualization

One of the challenges with Flow is that it does *so much*. So much that it can sometimes feel overwhelming. Templates are the solution!

Here is a 2-minute overview:

https://www.youtube-nocookie.com/embed/Epi_HnQawTY

Templates are the first thing you see when you create a new Flow with the "Create New" button. They also appear when you click the "New Visualization" button.

When you click Create New, it's going to create the Flow and pop up the Templates selector.

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We have dozens of templates, some of them quite sophisticated. Select a template. The system creates that swarm and puts it into the Flow. You can spin it around and take a look at the template with its "default" data.

You can also see the data that was used to create the template chart. It might be handy to download the data and use it as a sample so you know how to structure your data.

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Next, you will replace the template data, through a CSV (comma-separated values) file upload or a Google Sheets link.

The "Remap template sample data with your uploaded data" dialog appears:

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Columns from your dataset are automatically selected based on a simple algorithm, and in the 3D canvas, you can see the result. Sometimes it turns into a pretty reasonable view of the newly uploaded data, and sometimes it needs more user help to pick the appropriate columns. You can see what columns were used in the original template, and you can also see what columns are used now from your data set.

You can swap columns to apply them to other parameters in the Swarms, Maps, Connections, Labels, etc. For example, if you want to change the column that's used to color the dots, click on the "Color" item and it will navigate directly to that parameter in the UI.

 You'll be able to return to the columns view of this Dataset using the button at the top of the Swarm panel:

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Now, after making the appropriate column substitutions, the sample template values don't matter anymore, but now we've got a great way to navigate into the rest of the app.

It'll be interesting to see exactly what columns were used where.  We hope you'll love this new templates feature.

Be aware that there are some restrictions. Not all datasets will map to all visualizations, and messages are displayed to warn you of your dataset doesn't really apply to this Template because it is missing columns of a certain type (numeric, categorical, etc). Here are the column types that Templates are looking for in your uploaded datasets:

- Min number of numeric columns
- Min number of categorical columns
- Min number of date/time columns
- Latitude & Longitude columns present
- Date columns present

If you'd like a deeper dive with a 15-minute video tutorial, here it is:

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https://www.youtube.com/watch?v=OTTcioXhzSw

We hope you enjoy Templates, and get in touch for tips or suggestions on how we can improve this feature!