Hands-on Lab: Generative AI for Creating Dashboards

Estimated time needed: 30 minutes

Overview

In this lab, you will learn how to use generative AI to generate various visuals and insights to prepare a dashboard on your dataset.

For this lab, you will be required to create your login on https://chartpixel.com/

Objectives

After completing this lab, you will be able to:

1. Sign in on https://chartpixel.com/
2. Upload a Dataset
3. Generate the charts and customize them
4. Include AI insights on the charts
5. Select the most appropriate charts for Dashboard creation

Prerequisites:

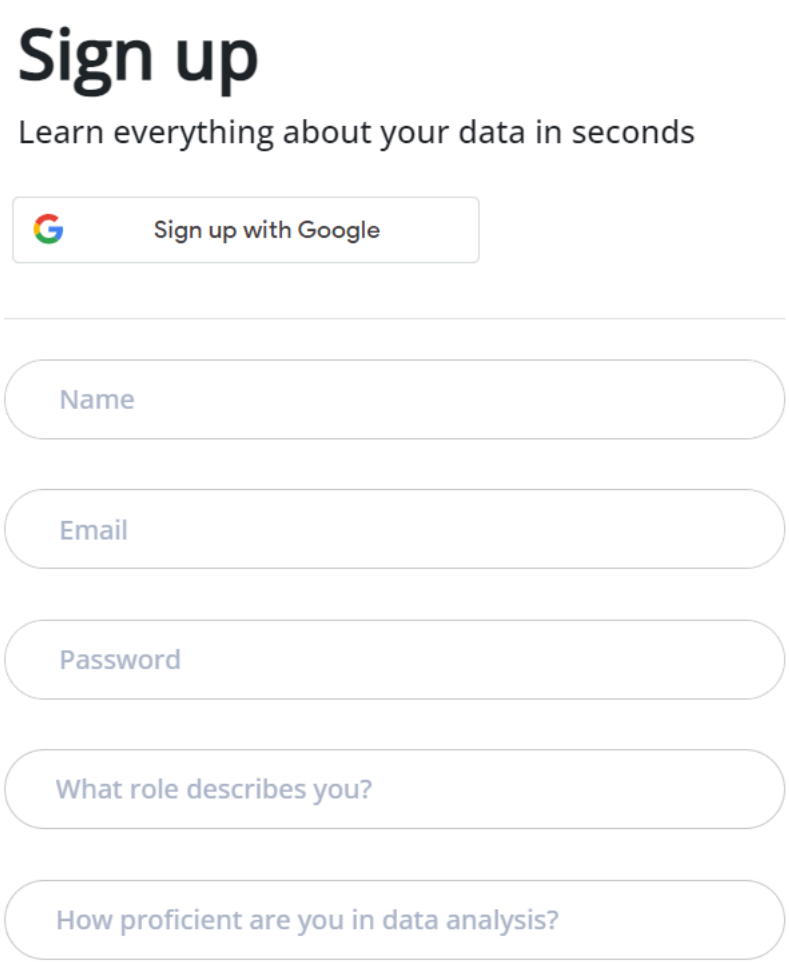
- Knowledge of data visualization (basic chart types)
- Login credentials on chartpixel platform

Dataset

The dataset "eletronics_dataset.csv" is generated using a generative AI prompt. Keeping the Ctrl pressed, you can download it from here.
The attributes of the dataset include product ID, title, price, sales rank, brand, category, and availability. These attributes provide product details, such as identification, pricing, popularity (sales rank), brand, category, and availability status.

Task 1: Log in on chartpixel.com

Step1: Click the link below and then click signup, if you do not have login credentials
https://www.chartpixel.com/
Step 2: Click **Start the free trial** and follow the instructions to create your login credentials for chartpixel.



Once the signup process is complete, log in to the platform.

Task 2: Upload the dataset

Step 1: After logging in, you will see your workspace; click **Upload your data** on the left panel.
Step 2: Then click **Choose file** and select the file 'eletronics_dataset.csv' from the location where you have saved the file on your machine. You can download it from here if you have not downloaded the file.

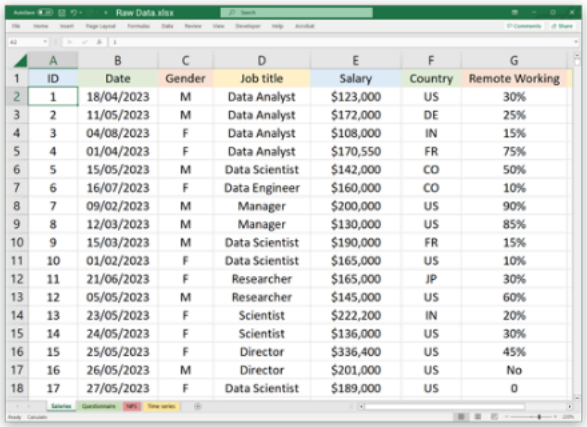
ChartPixel

- Upload your data
- Web data search
- Your projects
- Project settings
- Account
- Logout

DATA UPLOAD

Please upload or drop your data here. The file format needs to be XLSX or CSV, and preferably in a raw format as shown in the image.

You can also explore other upload options, such as, linking with a Google Sheet or directly copying from your clipboard.



	A	B	C	D	E	F	G
1	ID	Date	Gender	Job title	Salary	Country	Remote Working
2	1	18/04/2023	M	Data Analyst	$123,000	US	30%
3	2	11/05/2023	M	Data Analyst	$172,000	DE	25%
4	3	04/08/2023	F	Data Analyst	$108,000	IN	15%
5	4	01/04/2023	F	Data Analyst	$170,550	FR	75%
6	5	15/05/2023	M	Data Scientist	$142,000	CO	50%
7	6	16/07/2023	F	Data Engineer	$160,000	CO	10%
8	7	09/02/2023	M	Manager	$200,000	US	90%
9	8	12/03/2023	M	Manager	$130,000	US	85%
10	9	15/03/2023	M	Data Scientist	$190,000	FR	15%
11	10	01/02/2023	F	Data Scientist	$165,000	US	10%
12	11	21/06/2023	F	Researcher	$165,000	JP	30%
13	12	05/05/2023	M	Researcher	$145,000	US	60%
14	13	23/05/2023	F	Scientist	$222,200	IN	20%
15	14	24/05/2023	F	Scientist	$136,000	US	30%
16	15	25/05/2023	F	Director	$336,400	US	45%
17	16	26/05/2023	M	Director	$201,000	US	No
18	17	27/05/2023	F	Data Scientist	$189,000	US	0

Example of raw data

Choose file

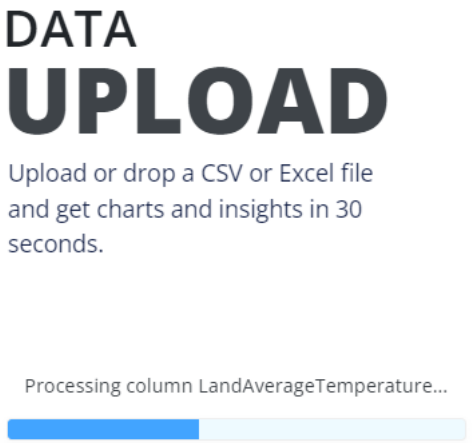
See our blog for detailed instructions on how your file should look like.

No data at hand? Visit our data library for learners.

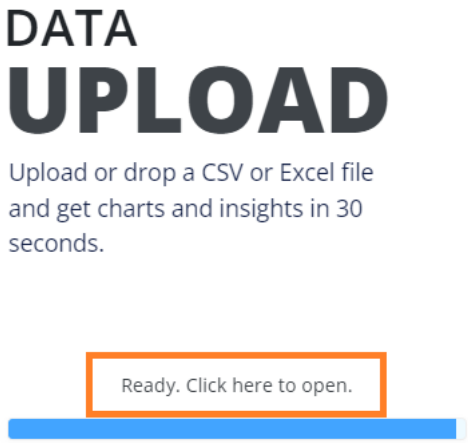
ChartPixel is in **Beta** and free to use. Our core features are still being developed and not all uploads may work as

We are committed to data **privacy** and **security** at the highest standards. Click on the security icon to know more

It will take a while to upload and process the dataset, you will see a progress bar on the 'Data upload' screen.

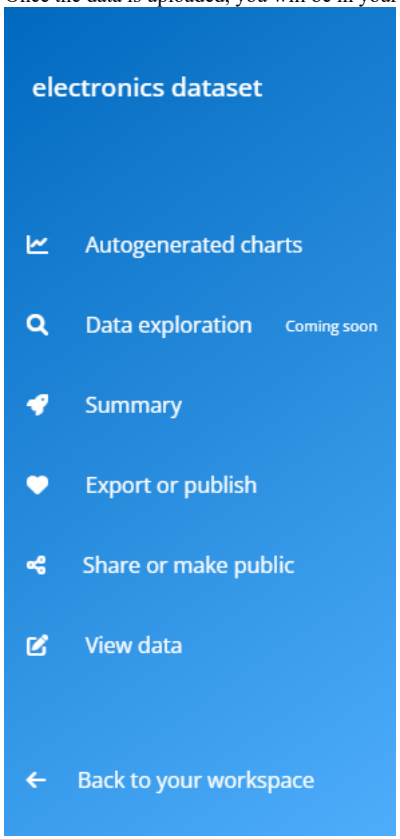


Step 3: Once the processing is complete, you can click **Ready. Click here to open** message above the progress bar.

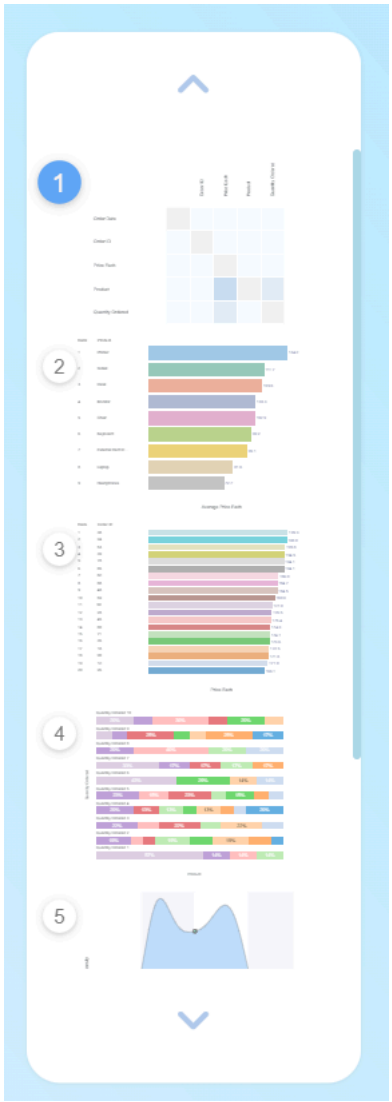


Task 3: Exploring the workspace

Once the data is uploaded, you will be in your project space. On the left side, you will have the left panel to move between your projects, go back to your workspace, etc.



Then, there is a panel for all the charts generated by chartpixel based on the dataset on the right side. The chart selected from this panel is displayed in the main center window.



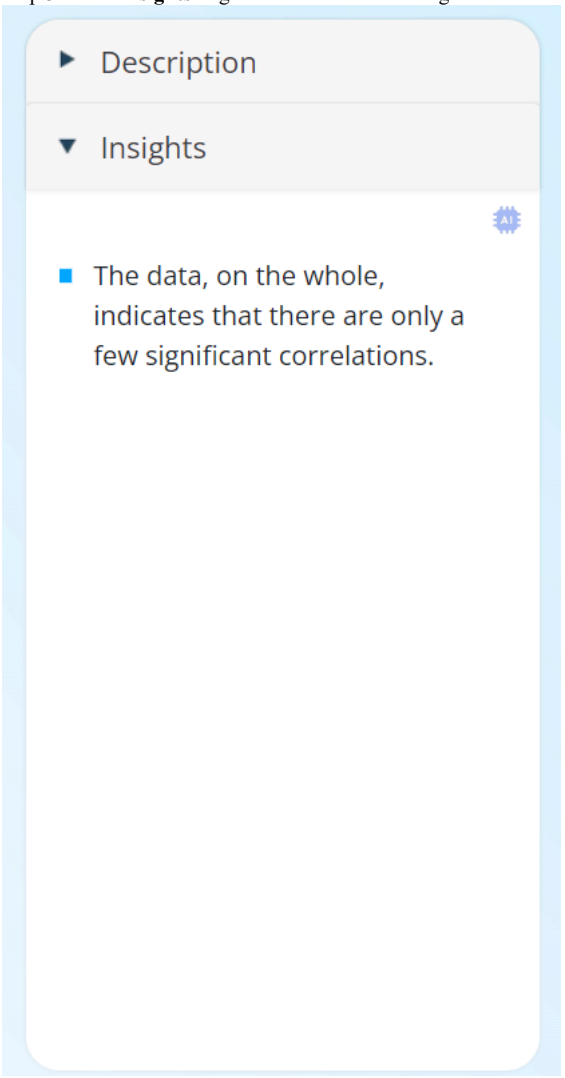
Step 2: Click **Description** to get the details about the chart.

Description

- This matrix demonstrates the predictive ability of one column in relation to another. It utilizes a Predictive Power Index (PPI) that can identify both linear and more complex relationships. The PPI is measured on a scale from 0 (indicating a failure to predict) to 100 (indicating a perfect prediction).
- The squares in darker shades indicate stronger predictions, making them more significant for generating meaningful charts. Additionally, the legend displays both positive and negative correlations, while squares shaded in ■ represent undetermined correlations.

Insights

Step 3: Click **Insights** to get a further understanding of the chart.

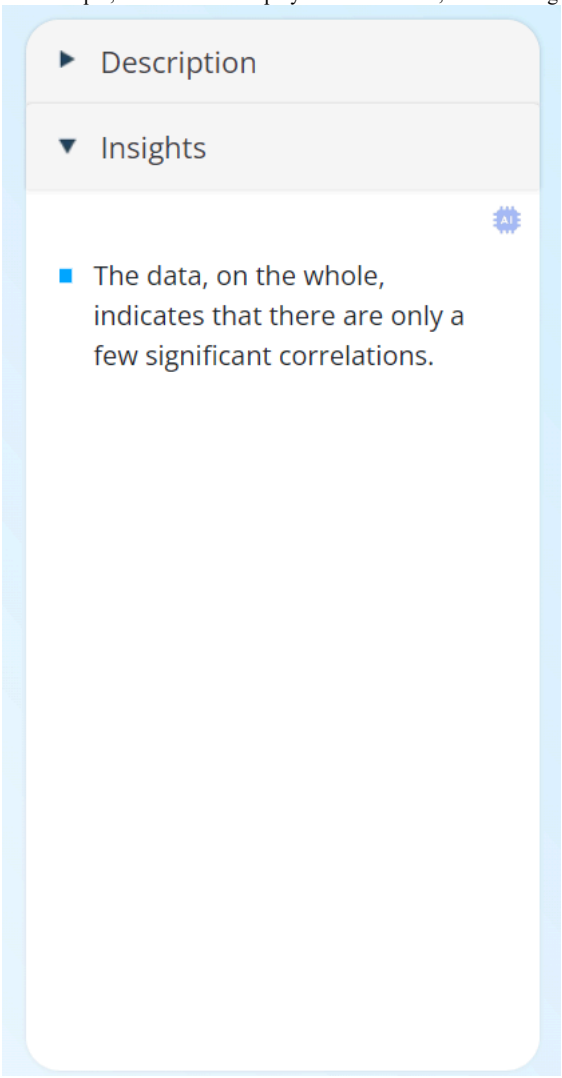


Step 4: You can click the options at the bottom to get an AI insight, change the color, download the chart, delete the chart, and save to export the chart.

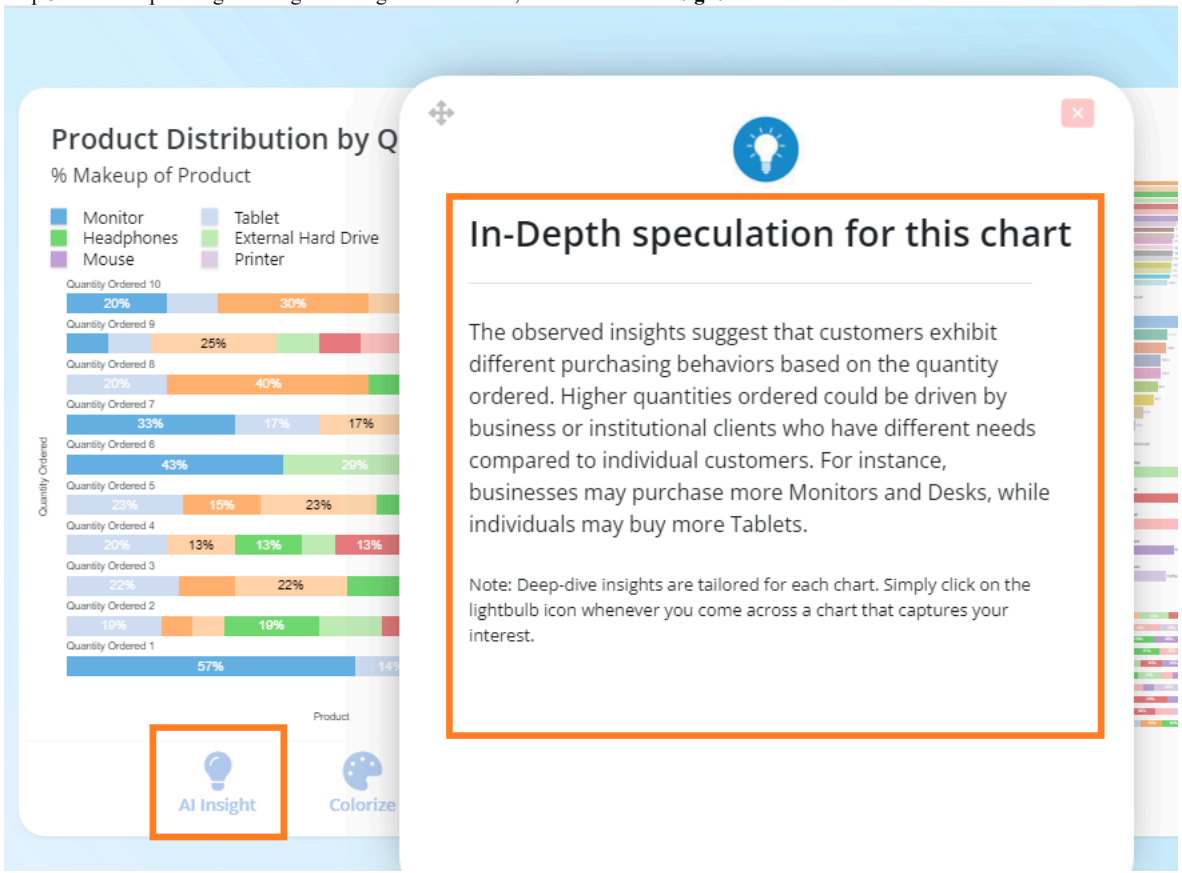
Task 4: Exploring the charts and saving them for the dashboard

For your dataset, chartpixel has generated 5 charts.
Step 1: Click each chart in the left panel one by one.
Step 2: Go through the insights and description for each chart. This will help you know which charts you want to keep for your final dashboard.

For example, the first chart displays the correlation, and the insight displays: "The data, on the whole, indicates that there are only a few significant correlations."



Step 3: Get in-depth insight through AI Insight on this chart; click on the **AI Insight** icon.

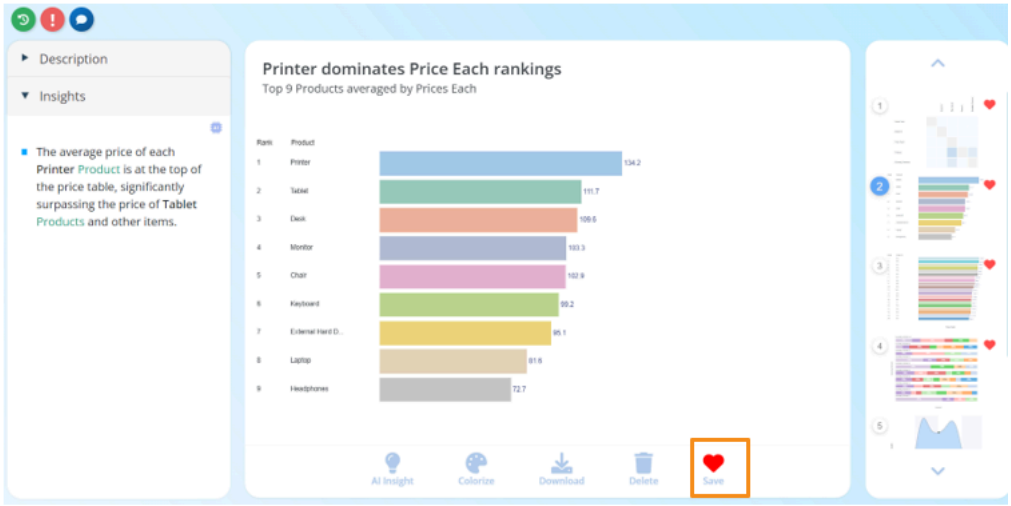


Step 4: Download the chart, if you want to prepare your dashboard on your local machine or save the chart for preparing the presentation later through chartpixel.

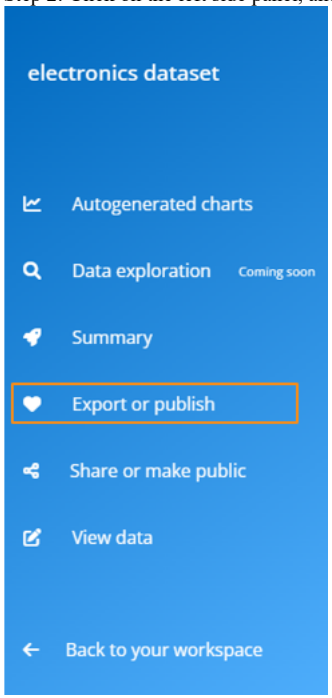
Note: Downloading of the charts is not yet enabled on the chartpixel Dashboard.

Task 5: Exporting the charts

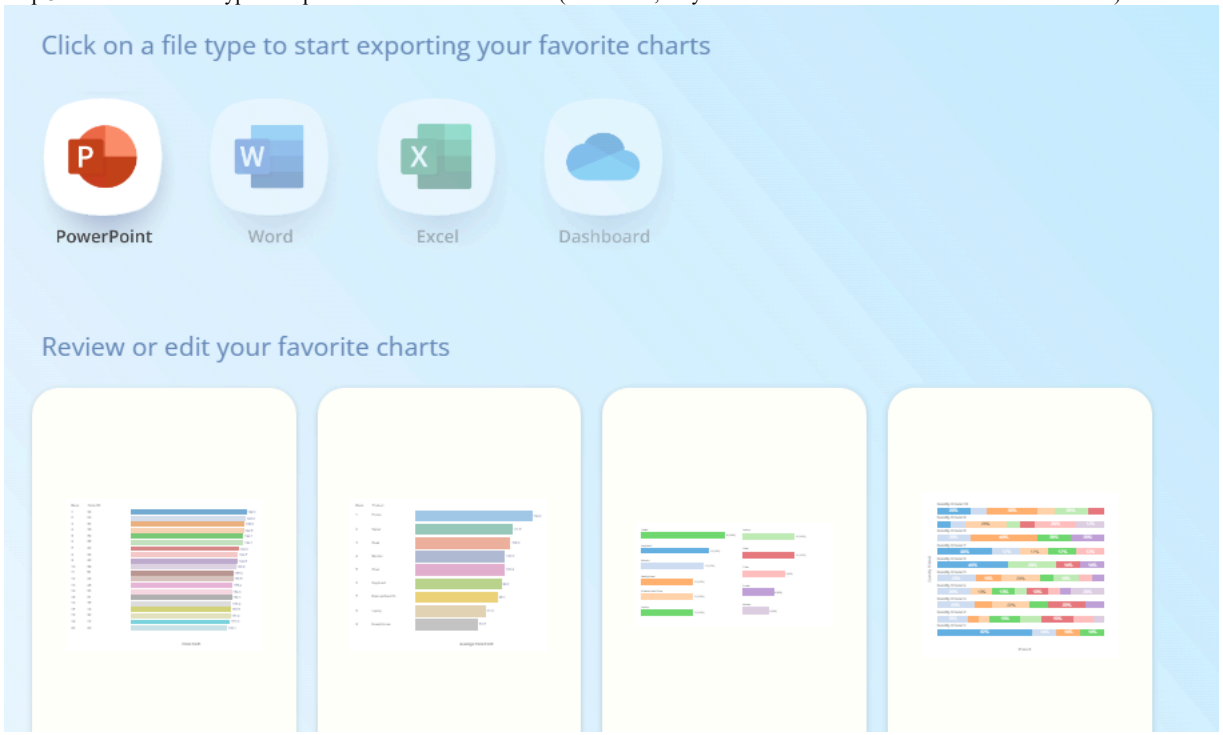
Step 1: Click the **Save** icon at the bottom to save the chart(s) you want to save and export.



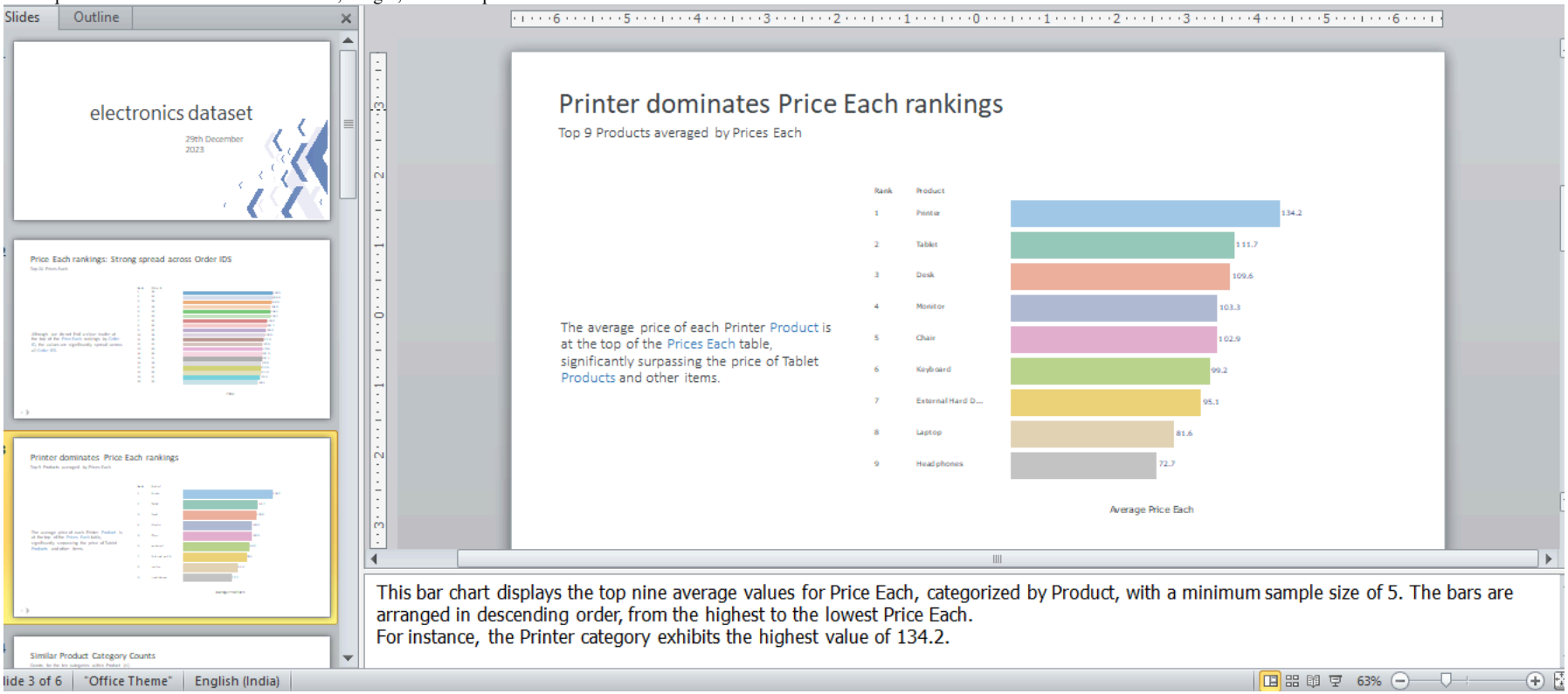
Step 2: Click on the left side panel, and then click **Export or publish**.



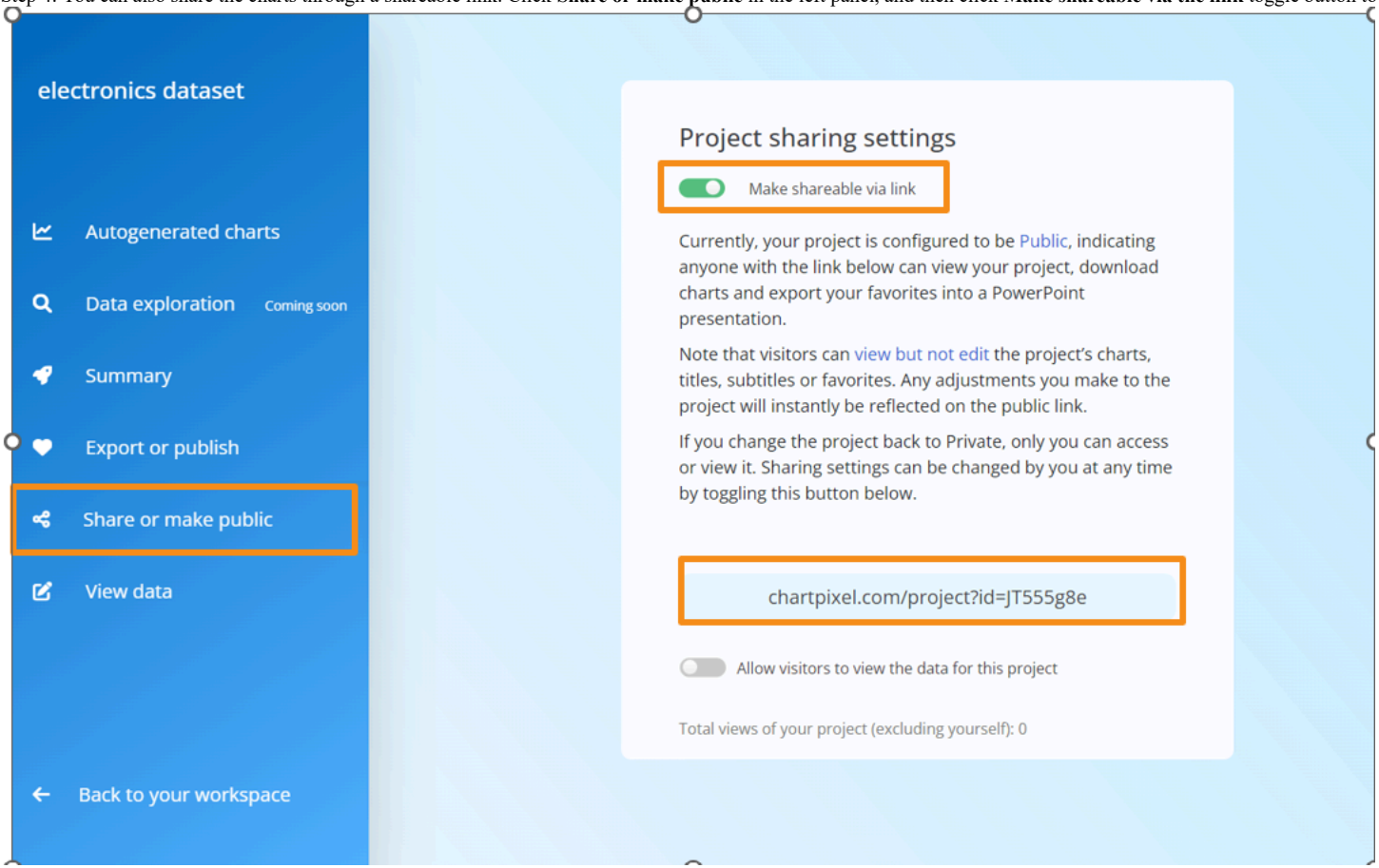
Step 3: Select on the file type to export the charts for dashboard. (As of now, only PowerPoint is available in the free trial version.)



The exported PowerPoint will have the chart, insight, and description as notes for further reference.



Step 4: You can also share the charts through a shareable link. Click **Share or make public** in the left panel, and then click **Make shareable via the link** toggle button to make your project public.



Conclusion

In this lab, you learned how to use generative AI to generate various visuals and insights to prepare a dashboard on your dataset using the chartpixel tool.

Author(s)

Dr. Pooja