

How to Visualize Data Using Amazon QuickSight

For my first project, I followed Tech with Lucy's tutorial on the process of visualizing data using Amazon QuickSight, and her instructions were easy to follow.

Step 1: Download Data Sets

Download the datasets you intend to use for your dashboard. You can find a dataset of best-selling Amazon products with 1000 rows of sample data in "Tech with Lucy's" GitHub repository.

Step 2: Create an S3 Bucket

- Log in to your AWS account and navigate to the AWS Management Console.
- In the search bar, type "S3" and select "S3" from the search results.
- Click on the "Create bucket" button to create a new S3 bucket.
- Give your S3 bucket a name. Make sure to choose a unique and descriptive name for your project.

The top-left screenshot shows the AWS search interface with 'S3' selected. The top-right screenshot shows the 'Amazon S3' landing page with a 'Create a bucket' button. The bottom screenshot shows the 'Buckets' list in the AWS Management Console, where a new bucket named 'lynda-amazon-project1' has been created.

Step 3: Upload Data to S3 Bucket

- Upload the downloaded data sets to the S3 bucket you just created.
- Before uploading, ensure that you change the JSON bucket name to match your project name.

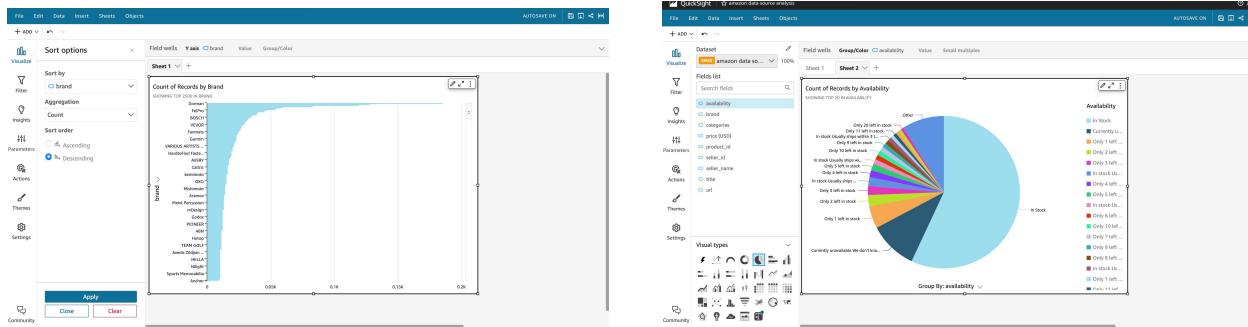
The screenshot shows the 'lynda-amazon-project1' S3 bucket details page. It lists two objects: 'Amazon-Bestseller-Dataset.csv' (Type: csv, Last modified: September 19, 2023, Size: 14.1 MB) and 'manifest.json' (Type: json, Last modified: September 19, 2023, Size: 305.0 B). The 'Upload' button is visible at the top of the object list.

Step 4: Set Up Amazon QuickSight

- In the AWS Management Console, type "QuickSight" in the search bar and select "Amazon QuickSight" from the results.
- Click on "Sign up for QuickSight."
- Select the "Enterprise" option.
- Choose the S3 bucket you created earlier to be linked to QuickSight.
- Go back to the initial QuickSight webpage and copy the manifest object as an S3 URL. You will need this URL to connect your data.

Step 5: Create Visualizations

- Once you have connected your data to QuickSight, you can start creating visualizations.
- To see which brands are more popular, select the "brand" field and drag it to the visualization box.
- To sort the data, click on the "brand" field and choose "Sort by Descending."
- QuickSight will immediately sort the data from the most popular brands to the least popular.



Step 6: Explore and Customize

- Feel free to add more sheets and explore different visualizations. Experiment with different visualizations to find the ones that work best for your data.
- You may encounter challenges when changing visual types, as certain visualizations may not suit specific data groups or may not provide the desired appearance. For instance, I discovered that the pie chart visual type worked exceptionally well for representing the 'availability' group, thanks to its color coding, which makes it easy to visualize stock levels.
- Enjoy the benefits of visualizing data for large datasets using Amazon QuickSight and Amazon S3!
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