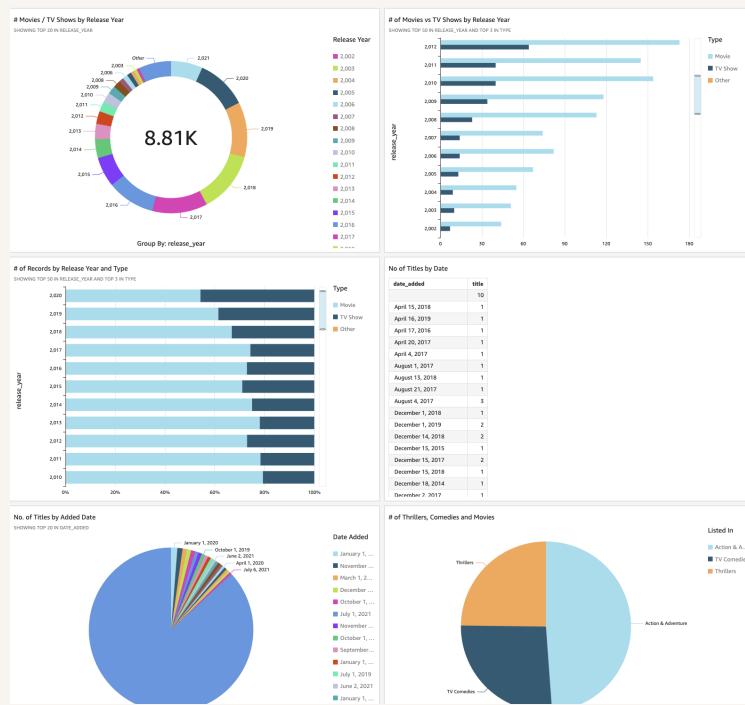




Visualize data with QuickSight

J

Joseph Cole-Showers





Introducing Today's Project!

In this project, I will demonstrate how to use Amazon Quicksight to analyze Netflix data and generate visualizations and insights. I'm doing this project to learn how to use cloud data services for data analysis.

Tools and concepts

Services I used were Quicksight and S3. Key concepts I learnt include manifest.json files, data visualization techniques (e.g different charts using filters).

Project reflection

This project took me approximately 2hrs. The most challenging part was understanding how a manifest.json file works. It was most rewarding to generating a PDF of the data visualization.

After this project, I plan to work on day 3 of the AWS hands-on challenge.



Upload project files into S3

S3 is used in this project to store two files, which are manifest.json which tells quicksight about the structure and format of the data I'm analyzing and netflix_titles.csv which is the raw data.

I edited the manifest.json file by updating the S3 uri that corresponds to the dataset file location. It is important to edit this file because it is how quicksight will find and analyze the data.

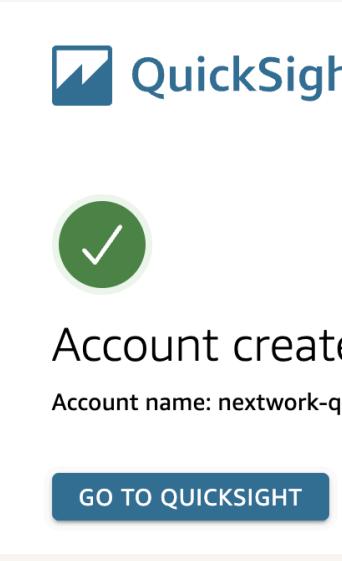
The screenshot shows a list of objects in an S3 bucket. There are two items:

Name	Type	Last modified	Size	Storage class
manifest.json	json	April 18, 2025, 18:13:54 (UTC+01:00)	293.0 B	Standard
netflix_titles.csv	csv	April 18, 2025, 18:08:46 (UTC+01:00)	3.2 MB	Standard

Create QuickSight account

Creating a QuickSight account costs \$0 as it comes with a 30 day free trial. Make sure you UNCHECK an add-on in the sign-up flow called Pixel-Perfect Reports so you don't get charged.

Creating an account took me about 4 minutes, including setting up the S3 permissions.



The screenshot shows the QuickSight logo at the top left. Below it is a large green circular icon containing a white checkmark. To the right of the icon, the text "Account created successfully" is displayed in a large, bold, black font. Underneath this, the account name "Account name: nextwork-quicksight-jc" is shown in a smaller, regular black font. At the bottom of the screenshot is a blue button with the text "GO TO QUICKSIGHT" in white capital letters.

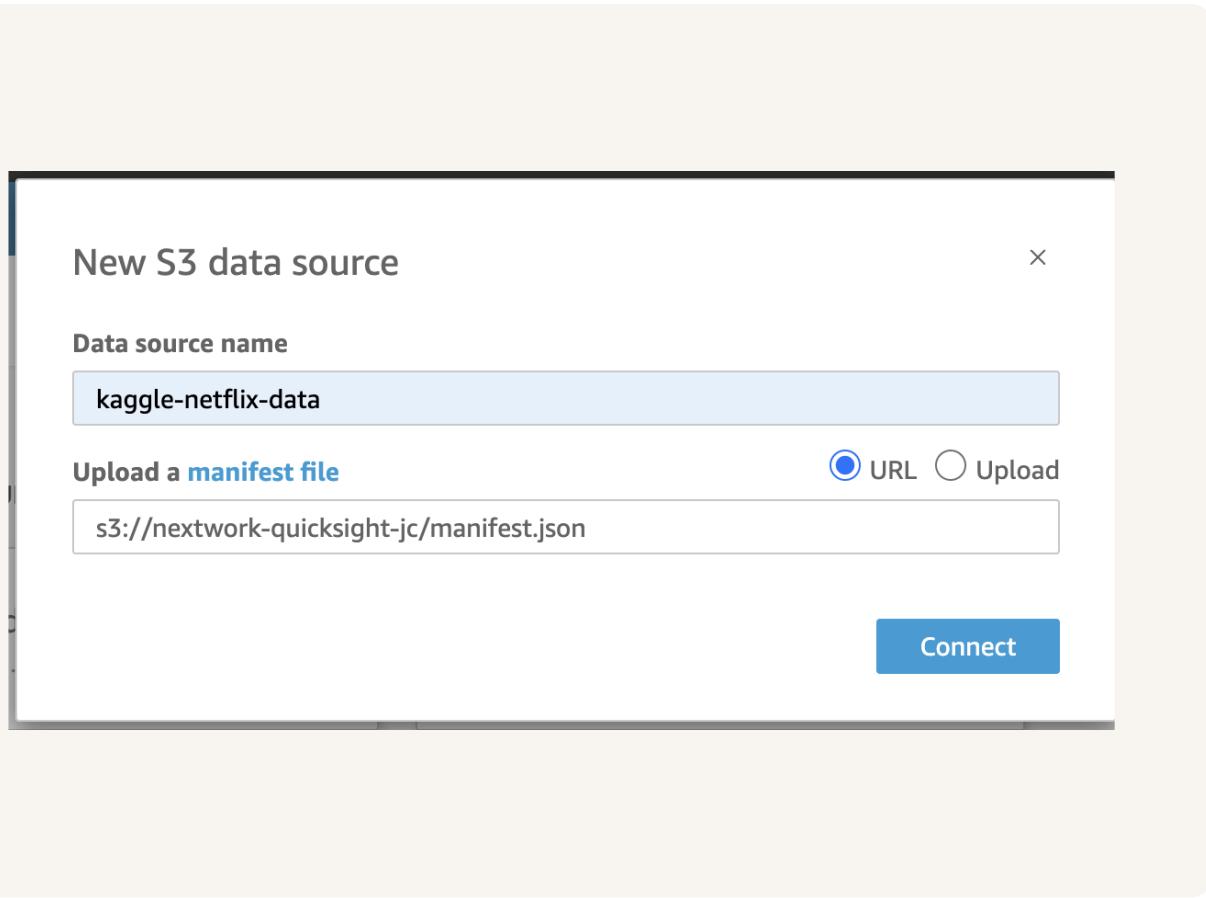


The second screenshot displays a dashboard with various charts and graphs. Overlaid on the dashboard is the word "Share." in a large, bold, black font. Below "Share.", the text "Turn data into insights easily." is written in a smaller, regular black font. The background of this screenshot shows a blurred view of the QuickSight interface, including other dashboards and navigation elements.

Download the Dataset

I connected the S3 bucket to QuickSight by visiting the Datasets page. There was so many options for data sources I could connect to, but I selected S3.

The manifest.json file was important in this step because it tells quicksight how to read the data. In this project, it tells Quicksight that I am uploading a .CSV file (spreadsheet) and the delimiter (i.e commas).

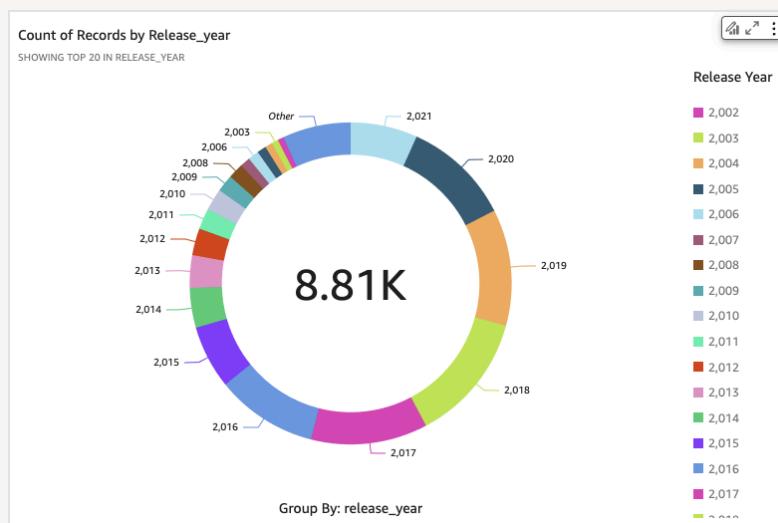


My first visualization

To create visualizations on QuickSight, I click on data fields or tables e.g release_year and Quicksight will automatically create a graphic that best suites that type of data.

The chart/graph shown here is a breakdown of the release years of the content inside Netflix. i.e how many movies were released on xyz year. You can see that there is a total of 8.81k content pieces and 2019 is the year with the peak release.

I created this graph by clicking on the release_year data label and changing automatically generated chart.

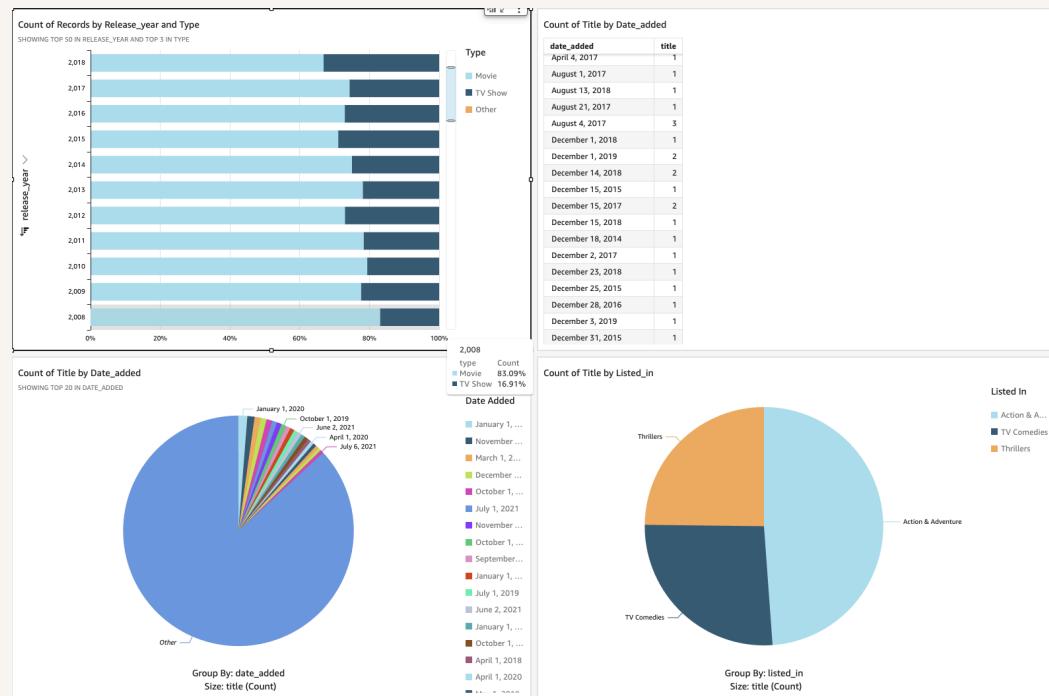




Using filters

Filters are useful for narrowing down data to the subset to focus on and in this case we can use filters to focus on the specific categories we want to analyze.

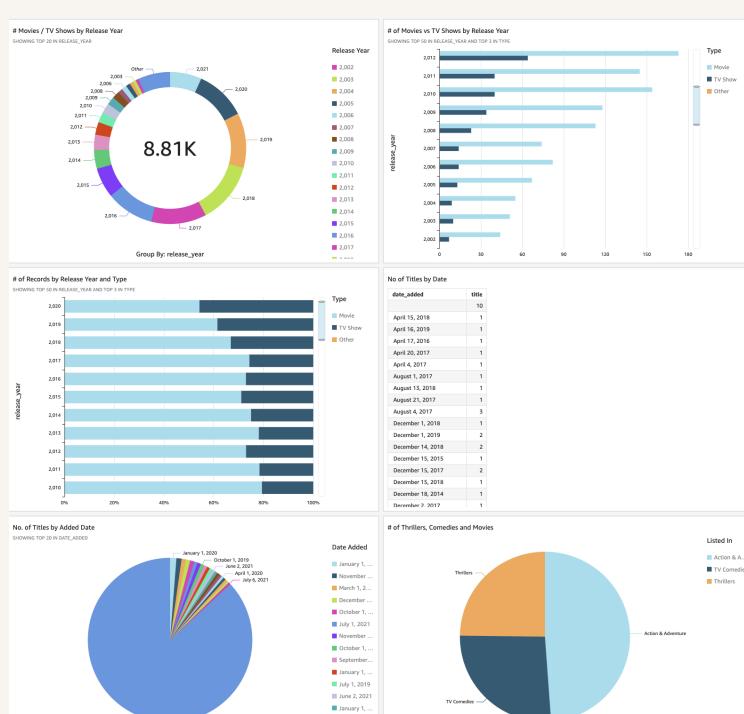
This visualization is a breakdown of TV shows and movies that belong in one of three categories.



Setting up a dashboard

As a finishing touch, I updated the titles of the charts in the dashboard so that they are easily readable.

Did you know you could export your dashboard as PDFs too? I did this by selecting publish and generate pdf on the top right hand corner of the quicksight analysis.





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