How I used Amazon QuickSight to visualise data 📊

[Elena Kroupkin]

BEFORE WE START...

What is Amazon QuickSight?

What it does: **It visualizes and analyzes data to uncover insights, enabling data-driven decisions.**

Why it's useful: **It turns data into insights with charts, graphs and visuals, enabling better decision-making.**

How I'm using it in today's project: **In today's project, I'm utilizing Amazon QuickSight's data visualization capabilities to gain deeper insights through charts, graphs, and other visual aids.**

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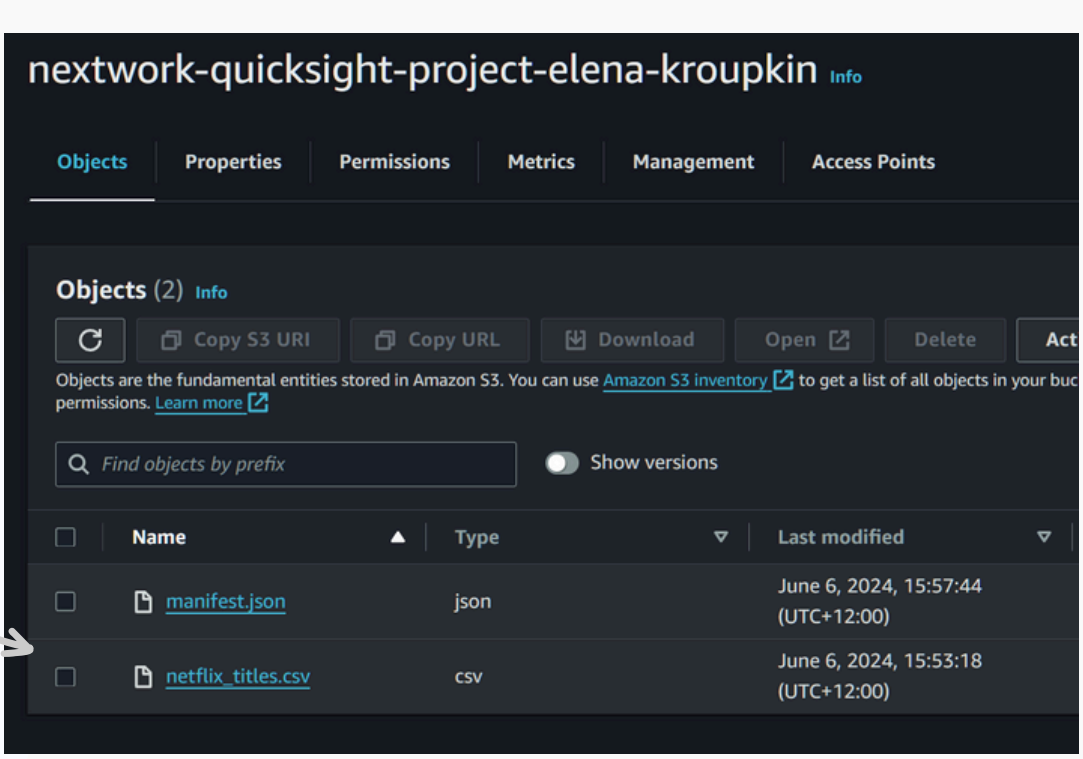
STEP ONE

Upload your dataset and a manifest.json file into S3

- S3 is used in this project to store files
- I edited the manifest.json file by updating the URL name of the project. It's important to edit this file because an accurate URL in the manifest.json file ensures QuickSight accesses the correct data for the project.

Here's my bucket with the CSV file and manifest.json



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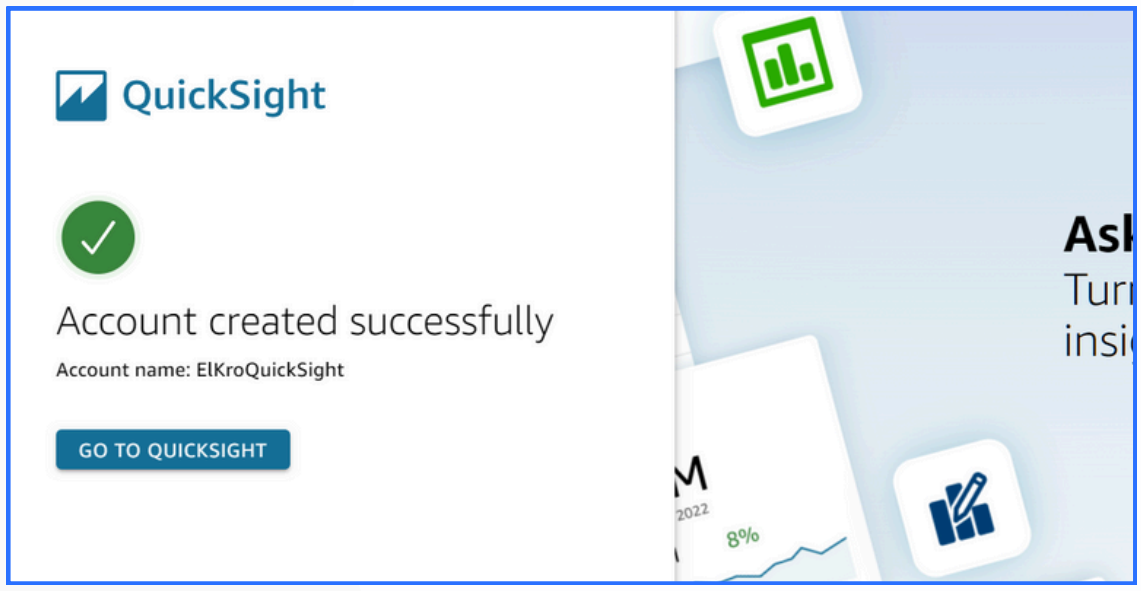
STEP TWO

Create your Amazon Quicksight account

- Does it cost $ to use QuickSight? No, it was free.
- How long did it take to create an account? Abut 5 min.
- I also had to enable QuickSight's access to S3 because QuickSight needs to access my S3 data in order to analyze it.

Voila! I created my QuickSight account successfully



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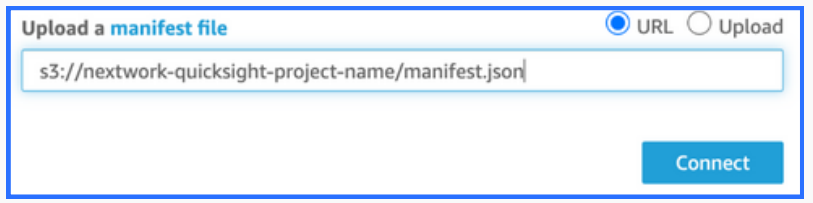
STEP THREE

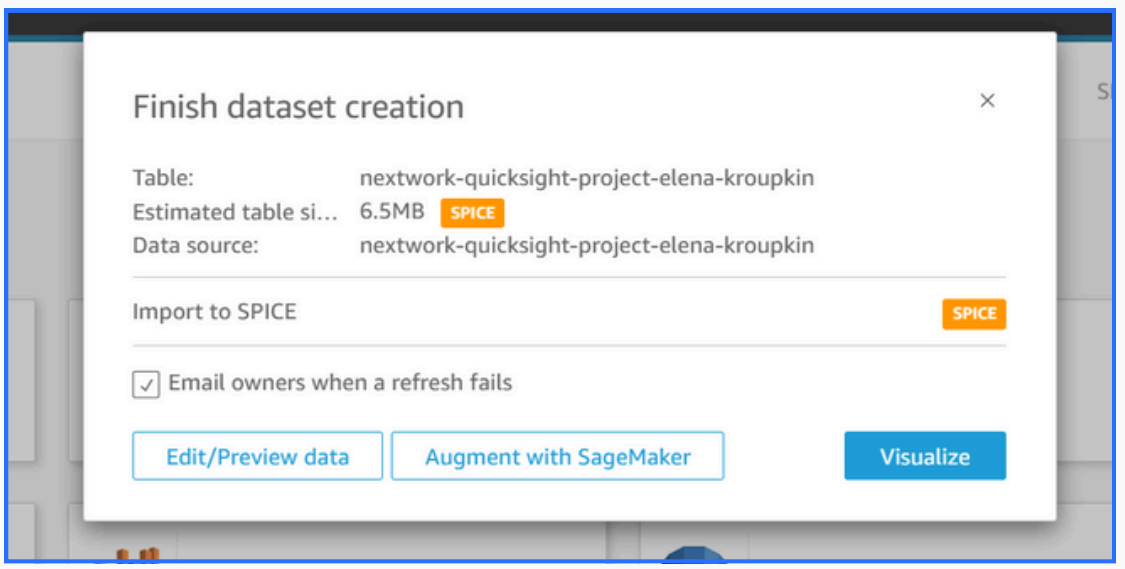
Connect your S3 bucket to Amazon QuickSight

- I connected the S3 bucket to QuickSight by directly referencing the S3 file location within the dataset creation process.

Entering the manifest.json URL



- The manifest.json file was important in this step because it acts as a central list, specifying the locations of all the relevant files within S3.



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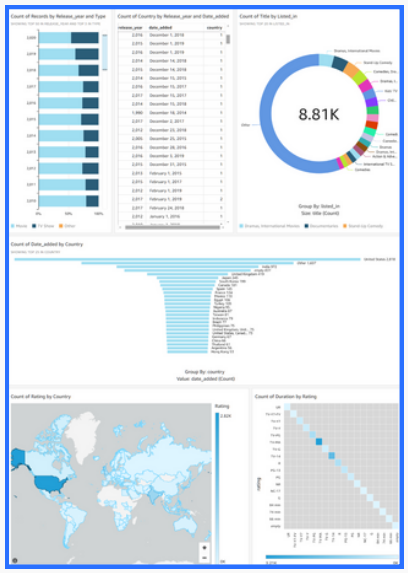
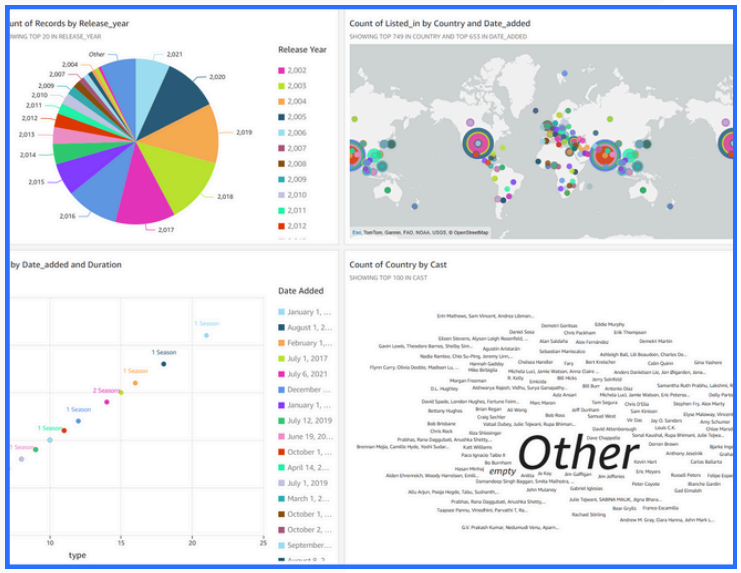
STEP FOUR

Let's make visualisations!

- To create visualisation on QuickSight, you'll have to create a new dataset first. Then, you can move on to building your visualisations.
- This dashboard displays various visualizations to explore the data. I experimented with different chart types, including bar charts, pie charts, word clouds, and maps, to understand how they represent the words data compared to using integers. Interestingly, word clouds provided the most effective way to identify frequently occurring terms.



One of my first visualisations



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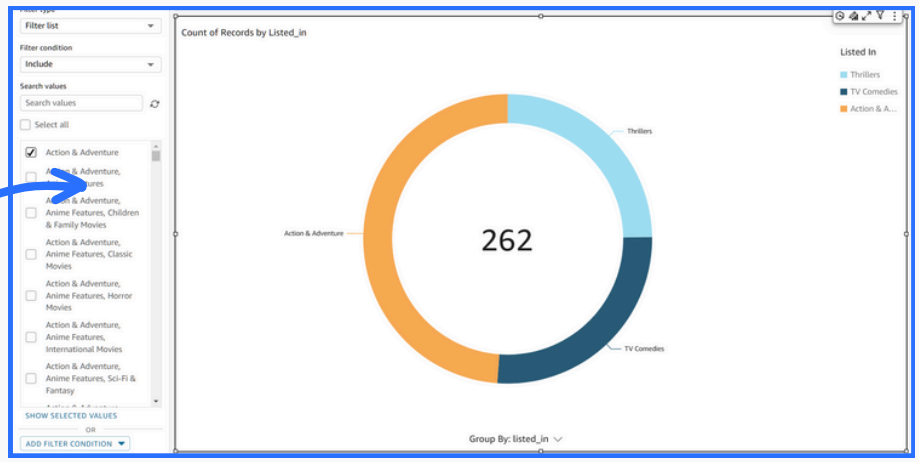
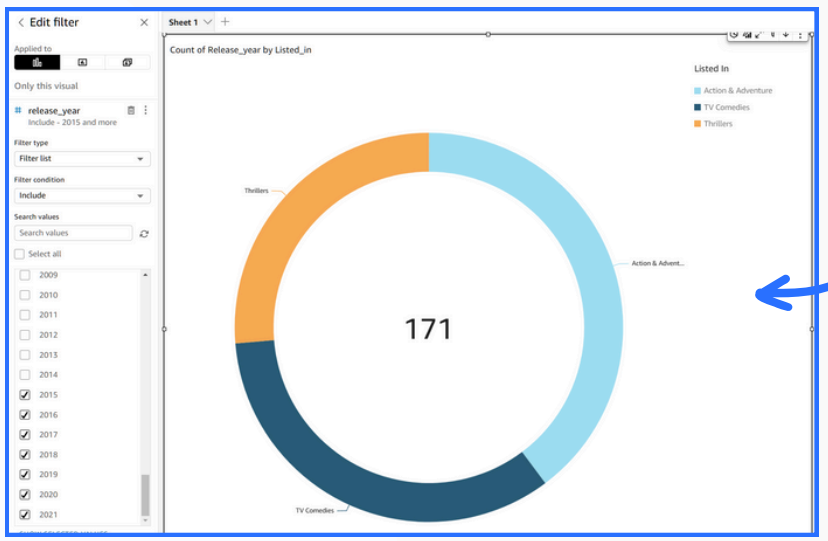
STEP FIVE

Using filters

- Filters are useful for focusing the analysis on specific subsets of the data.
- Here I added a filter by "listed_in" field.

- **Filter:** I filtered by the "listed_in" field, selecting only "Action & Adventure," "Thrillers," and "TV Comedies."
- **Visualization:** The pie chart shows the distribution of TV shows and movies within these three chosen categories. This allows for easy comparison of the popularity of each category.





- Leveraging the First Chart: I used the "duplicate visual" feature to create a second pie chart quickly. This saved time and ensured consistency in chart style.
- Filter: Then I applied a filter to the "release_year" field, selecting only shows and movies released in 2015 or later. This narrowed the focus to recent releases within the previously defined categories.
- Visualization: This second pie chart highlights the distribution of release years (2015 and beyond) for shows and movies within the chosen categories.

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STEP SIX

Set up your dashboard!

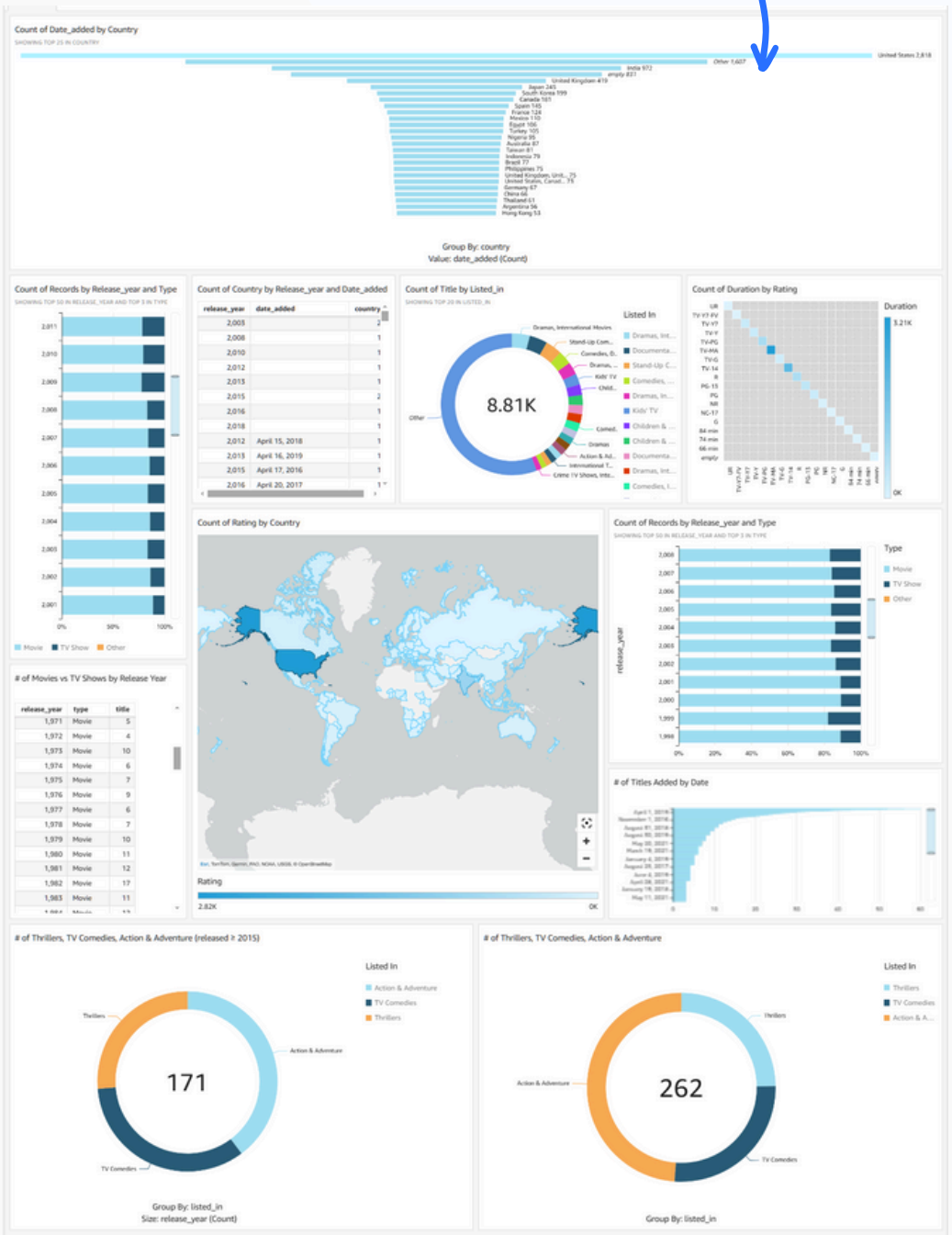
- As a finishing touch, I :

1. Updated chart titles by double-clicking on each title
2. Reorganized chart positions by manually adjusted the layout

- Did you know you could export your dashboard as PDFs too?

1. Locate the **Export** icon in the top right corner of the dashboard.
2. Click the icon and select **Generate PDF**. QuickSight will prepare the PDF version.
3. Once ready, a green banner will appear. Click **Download** to save the PDF file containing the entire dashboard.

Voila! Here's the finished dashboard!



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My Key Learnings

01 QuickSight is a like a data translator that turns numbers and text from your computer storage into charts and graphs, letting you easily see patterns and trends.

02 By connecting your S3 bucket to QuickSight, you establish a bridge between your raw data and the powerful visualization tools within QuickSight.

03 Creating visualizations on QuickSight was surprisingly intuitive! Filters were a powerful tool for manipulating data and uncovering insights.

04 Creating dashboards in QuickSight felt like a natural next step after building visualizations.

05 This project made visualization concepts clearer, and filters were a fun discovery that opened doors to manipulating data.

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Final thoughts...

- The hands-on practice and creating visualizations took about two hours . Most of that fun involved playing with the features to discover what QuickSight can do! Documenting everything afterwards definitely helped solidify my learning.

- To ensure I wouldn't incur any charges, I deleted the S3 bucket and QuickSight account at the end of this practice session.

- I was surprised by the amazing flexibility of the charts. I could resize them, and the data always adjusted perfectly for clear comparison.

- An area of data visualisation I'd like to explore further is... I'm particularly interested in exploring how animation can bring my data visualizations to life and enhance the storytelling aspect of dashboards.

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