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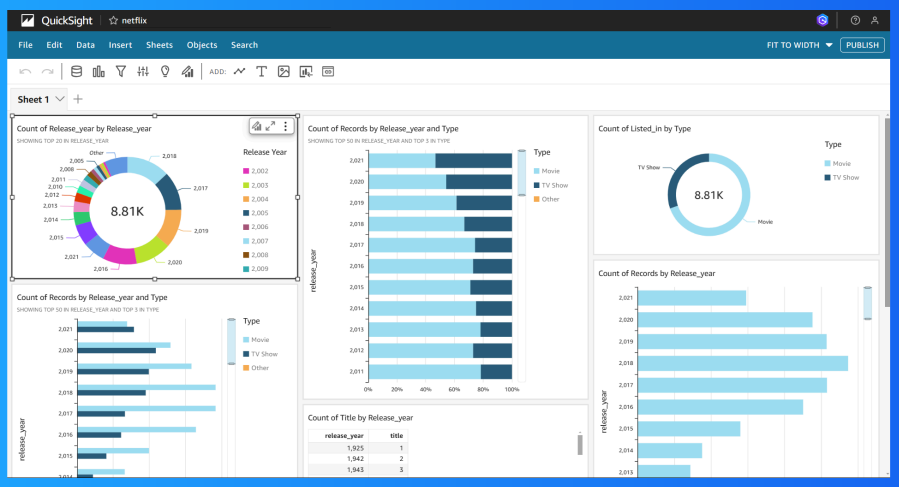
Visualize data with QuickSight

Kamlesh Parihar



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Introducing Today's Project!

What is Amazon QuickSight?

Amazon QuickSight is a cloud-based business intelligence (BI) service that allows users to visualize data, create interactive dashboards, and derive insights. It’s useful for its scalability, ease of integration with AWS services, and ability share.

How I used Amazon QuickSight in this project

I used Amazon QuickSight to create interactive dashboards for real-time monitoring of application performance. It helped visualize data from AWS services like RDS and CloudWatch, enabling stakeholders to quickly analyze metrics and identify trends

One thing I didn't expect in this project was...

I didn’t expect how seamlessly Amazon QuickSight integrates with diverse AWS data sources, simplifying data visualization without extensive configuration, saving time, and providing immediate actionable insights for the project.

This project took me...

The project took about 1 hour, focusing on connecting data sources, designing QuickSight dashboards, and ensuring the visualizations met the project’s requirements for real-time insights and trend analysis.

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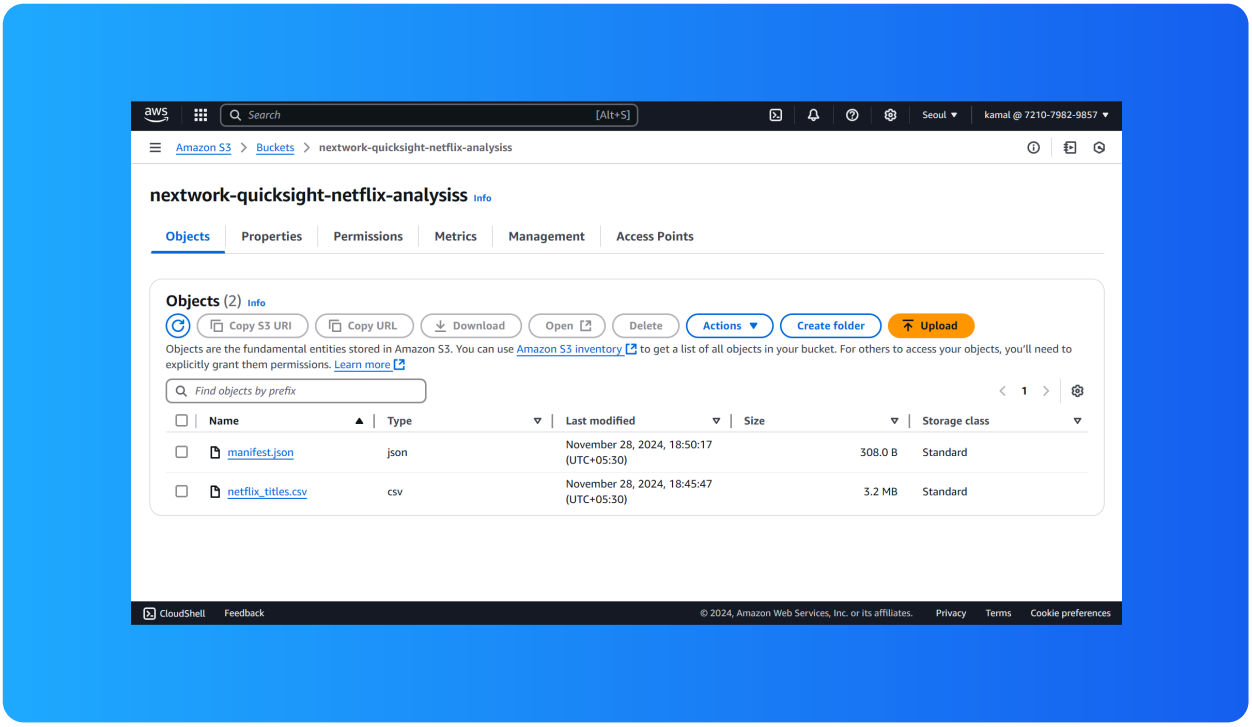
Upload project files into S3

S3 is used in this project to store two files, which are: a CSV file containing application performance metrics and a JSON file with configuration data for QuickSight dashboards. These files ensure seamless data access and visualization.

I edited the manifest.json file by updating the file paths to the new S3 bucket locations and adding metadata for data source configurations. It's important to edit this file because it ensures QuickSight correctly accesses and interprets the stored



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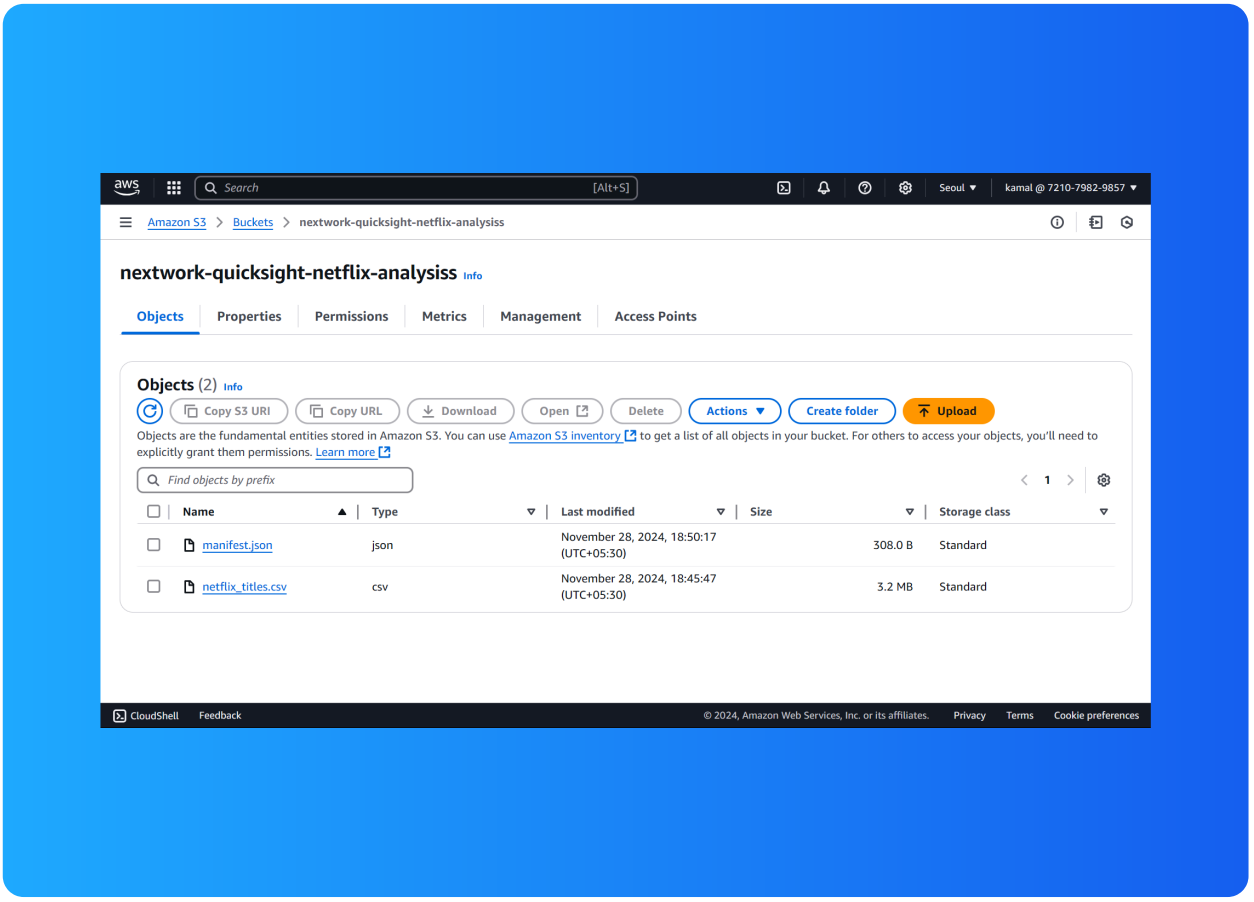
Create QuickSight account

Creating a QuickSight account costs money, as it offers a pay-per-session pricing model or a monthly subscription, depending on the edition (Standard or Enterprise). However, it provides a free trial for new users to explore its features before commi

Creating an account took me about 5-10 minutes, including setting up the account details, selecting the edition, and configuring initial settings for data sources and user access.



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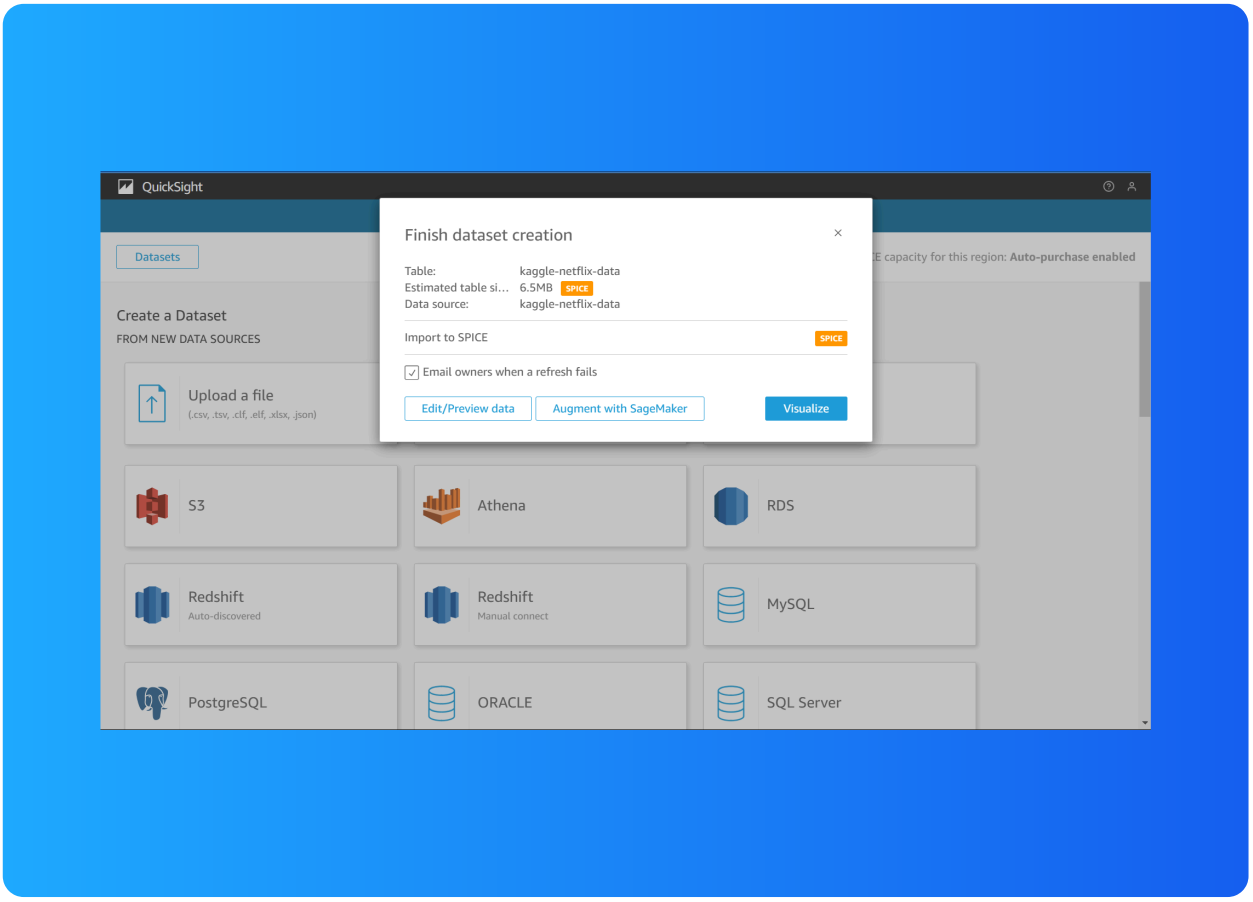
Download the Dataset

I connected the S3 bucket to QuickSight by visiting the "Manage data sources" page, where I selected "S3" as the source, entered the bucket details, and configured permissions for QuickSight to access the data.

The manifest.json file was important in this step because it defines the structure and metadata of the data stored in the S3 bucket, allowing QuickSight to correctly interpret and import the data for visualization. It ensures QuickSight can access an



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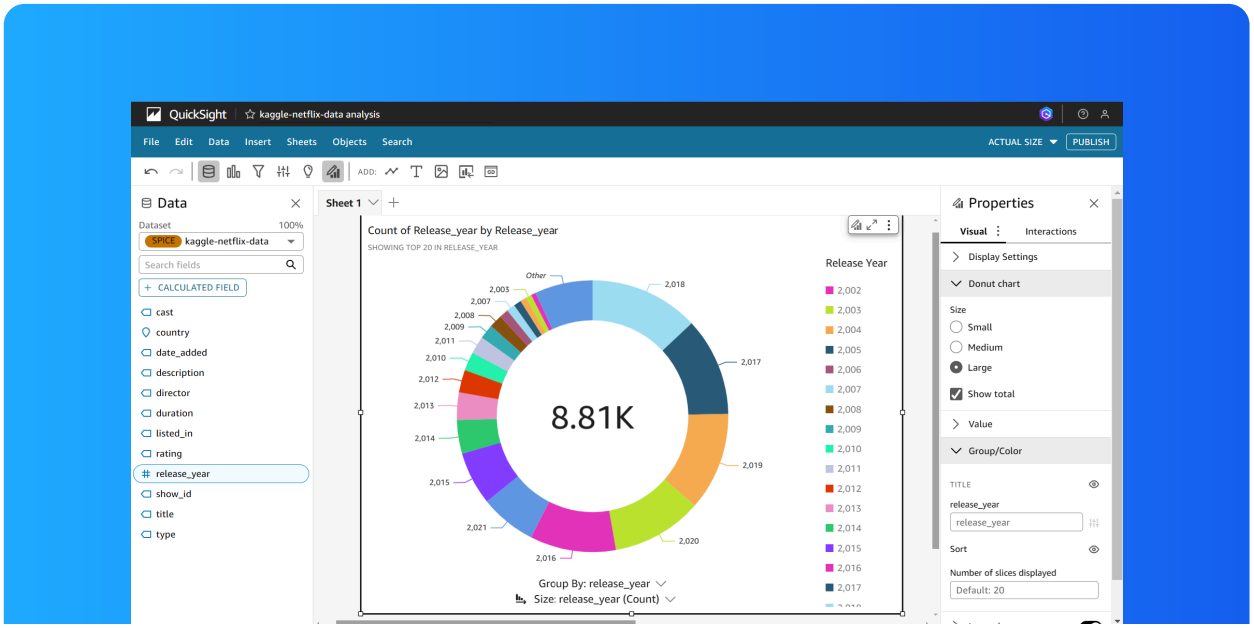
My first visualization

To create visualizations on QuickSight, I first selected a data set, then chose a visualization type (e.g., bar chart, line graph) from the options. I configured fields, applied filters, and customized the design to present the data in a clear.

The chart shown here is a breakdown of application performance metrics, displaying response times and error rates over time. It highlights trends, peaks, and anomalies, helping stakeholders identify periods of high latency or issues in the applicatio

I created this graph by dragging and dropping the "Response Time" and "Error Rate" fields into the value section, with "Timestamp" as the X-axis. I used "Application Name" as a filter to segment the data by different services for better insights.



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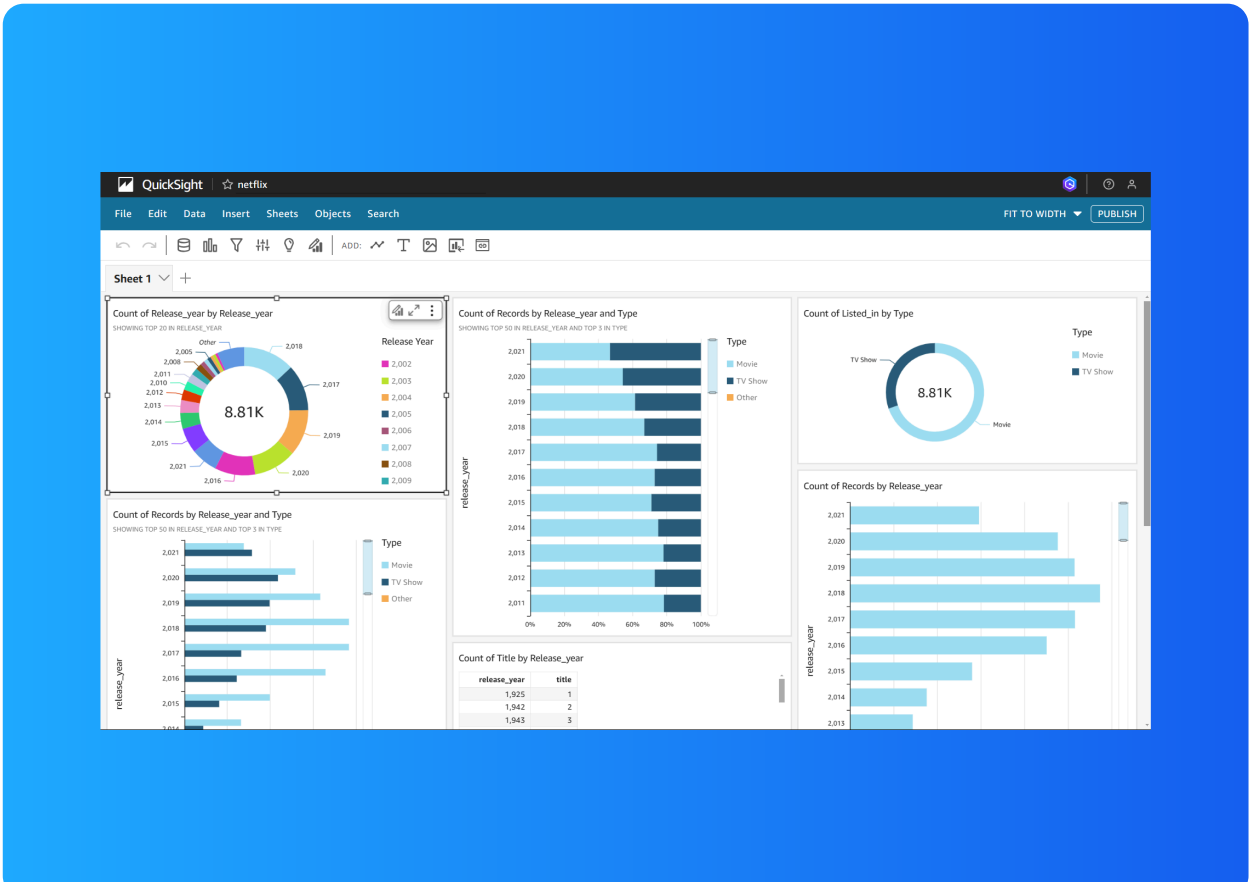
Using filters

Filters are useful for narrowing down data to focus on specific subsets, such as particular time periods or application segments. This helps to highlight trends, detect anomalies, and ensure that visualizations are relevant and actionable for decisio

This visualization is a breakdown of application error rates over the past week. Here I added a filter by "Application Name" to focus on specific services and "Time Period" to zoom in on recent incidents, helping identify patterns or spikes in errors



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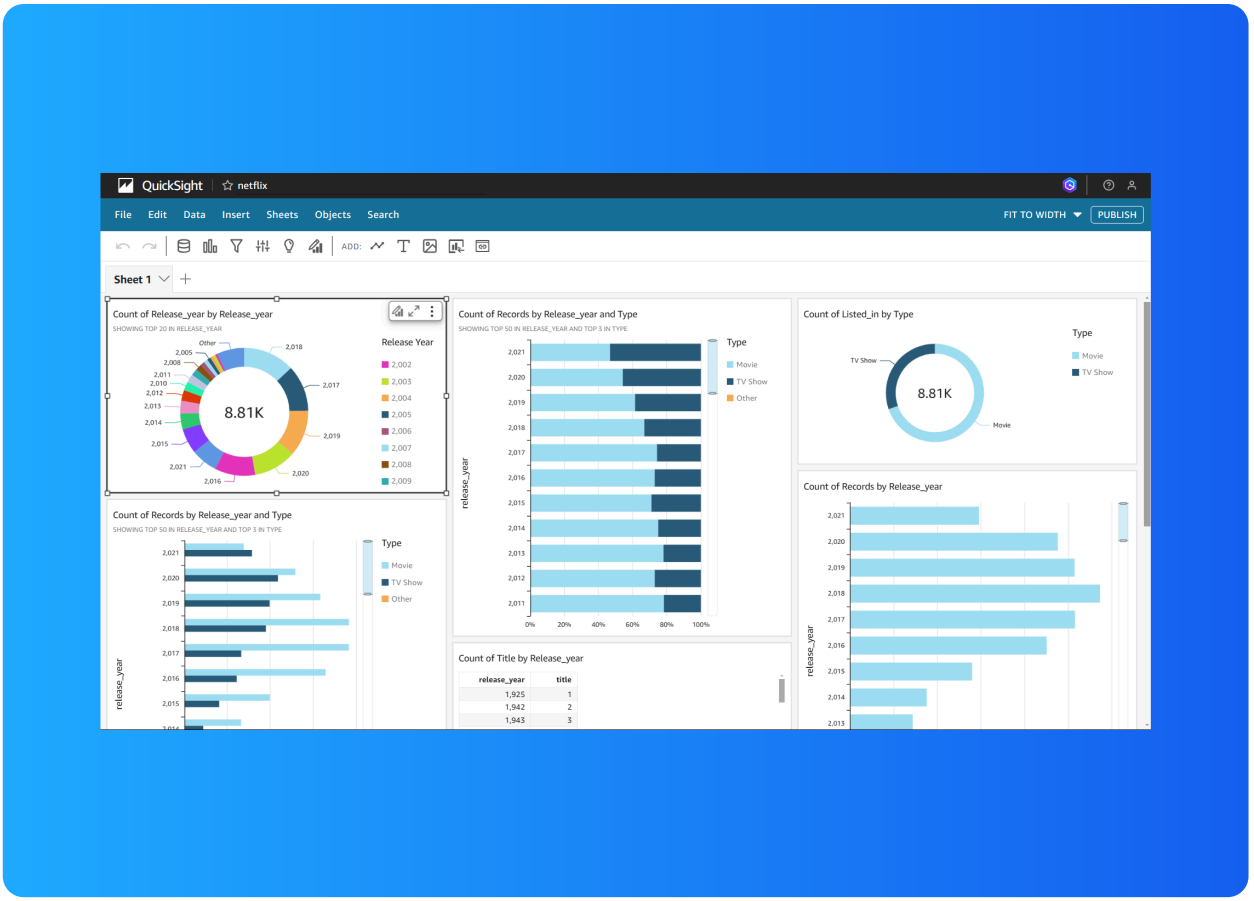
Setting up a dashboard

As a finishing touch, I reviewed the dashboard for clarity, adjusted the layout for better readability, ensured filters were applied correctly, and tested interactivity before publishing it.

Did you know you could export your dashboard as PDFs too? I did this by selecting the "Export" option in QuickSight, choosing the PDF format, and configuring the layout before downloading the report.



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