## Lab 5-05: AI-Based Sentiment Dashboard Using Amazon QuickSight

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| **Introduction**  Amazon QuickSight is a fully managed Business Intelligence (BI) service by AWS that allows you to create interactive dashboards, visualizations, and insights from various data sources. It helps transform raw data into meaningful reports that can be shared with teams for quick decision-making. In this lab, you will use Amazon QuickSight to create a sentiment analysis dashboard that displays customer feedback trends, sentiment breakdowns, and examples of customer comments in an easy-to-understand format.  **Challenge**  Your company collects thousands of customer feedback comments from surveys and social media. To understand how customers feel about your products, the data is processed by an AI service such as Amazon Comprehend, which labels each comment as Positive, Negative, or Neutral. However, managers find it hard to interpret large amounts of sentiment data in spreadsheets. They want a visual dashboard that clearly shows how customer sentiment changes over time, what percentage of comments are positive or negative, and lets them filter or review specific feedback easily.  **Lab Diagram**  **C:\Users\Binary Computers\Downloads\35476629-a904-4991-a394-cf9e3ed0ba75.jpg**  **Solution**  **Step 1: Sign in to the AWS Console and Open Amazon QuickSight**   1. Go to the AWS Management Console.      1. In the search bar, type QuickSight and open Amazon QuickSight.      1. If you are using it for the first time, click Sign up for QuickSight, choose the Standard edition, and complete the setup.     **Step 2: Prepare Your Dataset (CSV File)**   1. You need a CSV file containing sentiment results. The CSV should have columns like:  |  |  |  |  |  | | --- | --- | --- | --- | --- | | id | text | sentiment | confidence | timestamp | | 1 | The product quality is amazing! | POSITIVE | 0.98 | 2025-10-18 | | 2 | The delivery was very late. | NEGATIVE | 0.92 | 2025-10-18 | | 3 | It was okay, not too bad. | NEUTRAL | 0.87 | 2025-10-19 |      1. Save it as feedback\_sentiment.csv on your computer.     **Step 3: Upload the Dataset to QuickSight**   1. In QuickSight, click Dataset.      1. Click Create dataset.      1. Choose Upload file.      1. Select your feedback\_sentiment.csv file.      1. Select Sheets from your Excel file, then click Edit/Preview data.      1. Give your dataset a name, such as FeedbackSentimentData.     **Step 4: Verify and Format the Data**   1. Make sure the column types are correct:    * text → String    * sentiment → String    * confidence → Number    * timestamp → Date/Time     If the date is not recognized, click the column name → Change data type → Date.  **Step 5: Create Sentiment Distribution Chart**   1. Click Publish and visualize.      1. In the main QuickSight dashboard, click Add.      1. Choose Pie chart (or Donut chart).      1. Drag the sentiment column to the “Group/Color” field.      1. Drag the id column to the “Value” field (it will automatically count records).      1. The chart will now show how much feedback is Positive, Negative, or Neutral.      1. Add a title: Sentiment Distribution.     **Step 6: Create a Sentiment Trend Over Time**   1. Click Add visual → choose Line chart.      1. Drag the timestamp to the X-axis.      1. Drag sentiment into the Color field.      1. This will show a line for each sentiment over time, so you can see trends like “more negative comments this week.”      1. Title it Sentiment Over Time.     **Step 7: Create a Table of Sample Comments**   1. Add another visual → choose Table.      1. Add columns: timestamp, sentiment, confidence, and text.      1. You can sort by confidence or timestamp to review the latest or strongest sentiments.      1. Title it Customer Feedback Samples.     **Step 8: Add Interactive Filters**   1. Click Filter.      1. Click Add.      1. Choose sentiment.      1. Add a control (dropdown) to allow users to select a sentiment (Positive/Negative/Neutral).     **Step 9: Save and Publish the Dashboard**   1. Click Save to save your analysis.      1. Name your dashboard, for example, Customer Sentiment Dashboard.      1. Then click Publish.      1. Then click Publish dashboard.      1. You can share the dashboard with team members or create a public link (depending on your edition). |