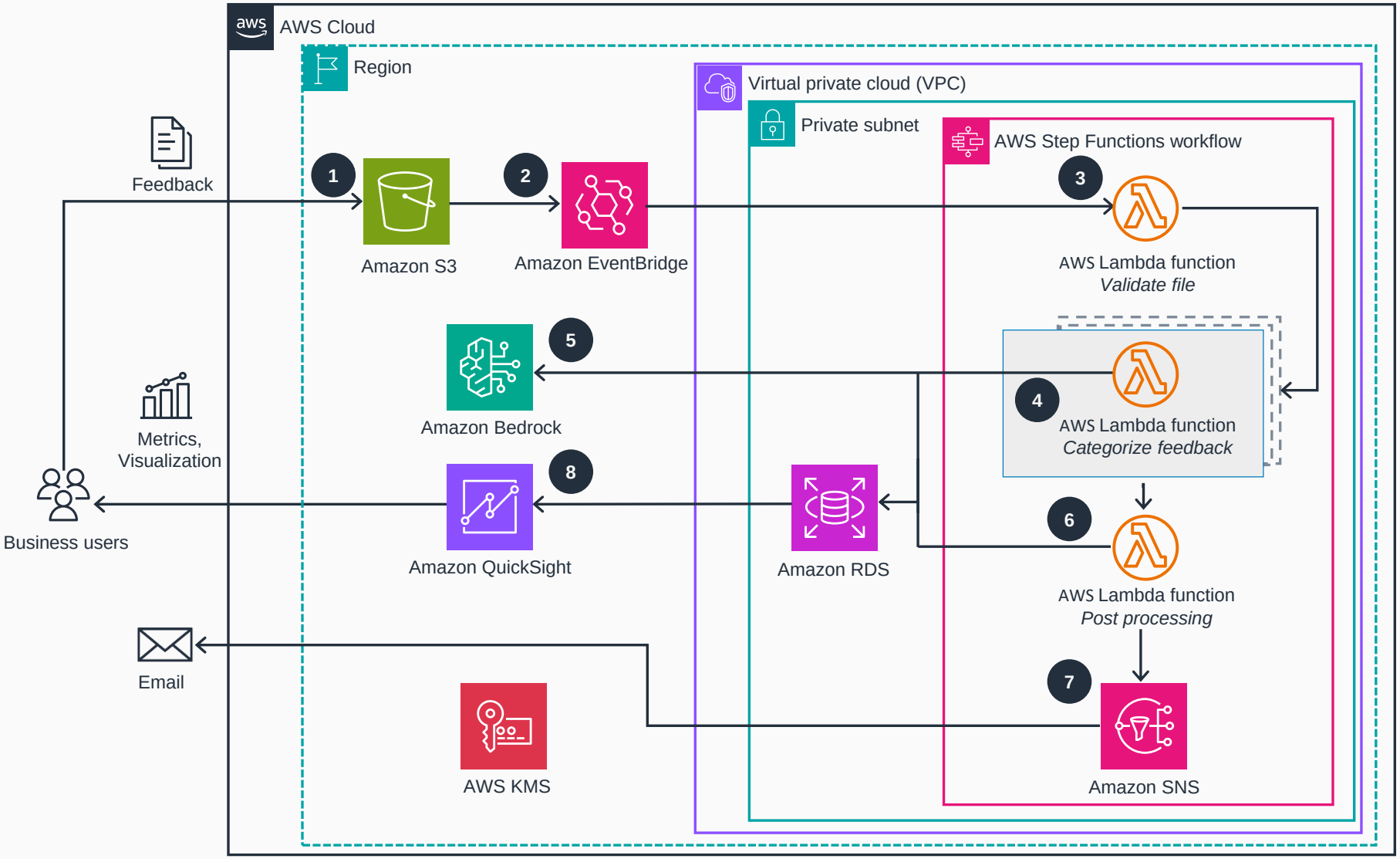
Guidance for Automated Customer Feedback Analysis with Amazon Bedrock

This architecture diagram illustrates how to extract insights from customer feedback using LLMs on AWS.



1. Upload user feedback (for example, a CSV or JSON file) to **Amazon Simple Storage Service (Amazon S3)** bucket.
2. The **Amazon S3** data event of the uploaded files triggers the **AWS Step Functions** through **Amazon EventBridge**.
3. An **AWS Lambda** function validates the uploaded file at the beginning of **Step Functions** workflow.
4. **Step Functions** uses a map state to invoke **Lambda** functions for parallel LLM processing with **Amazon Bedrock**, saving results to encrypted **Amazon Relational Database Service (Amazon RDS)** databases using **AWS Key Management Service (Amazon KMS)**.
5. **Amazon Bedrock** takes the user-defined instruction prompt as a task, a feedback record as input, and generates expected insight analysis.
6. A **Lambda** function performs post-processing on the insight results, for example, summarizing the statistics of input feedback and optionally suggesting new categories.
7. **Step Functions** publishes the results to an **Amazon Simple Notification Service (Amazon SNS)** topic, which sends an email with the results to business users.
8. Configure **Amazon QuickSight** to visualize the results in the **Amazon RDS** database.

Reviewed for technical accuracy October 17, 2024

AWS Reference Architecture