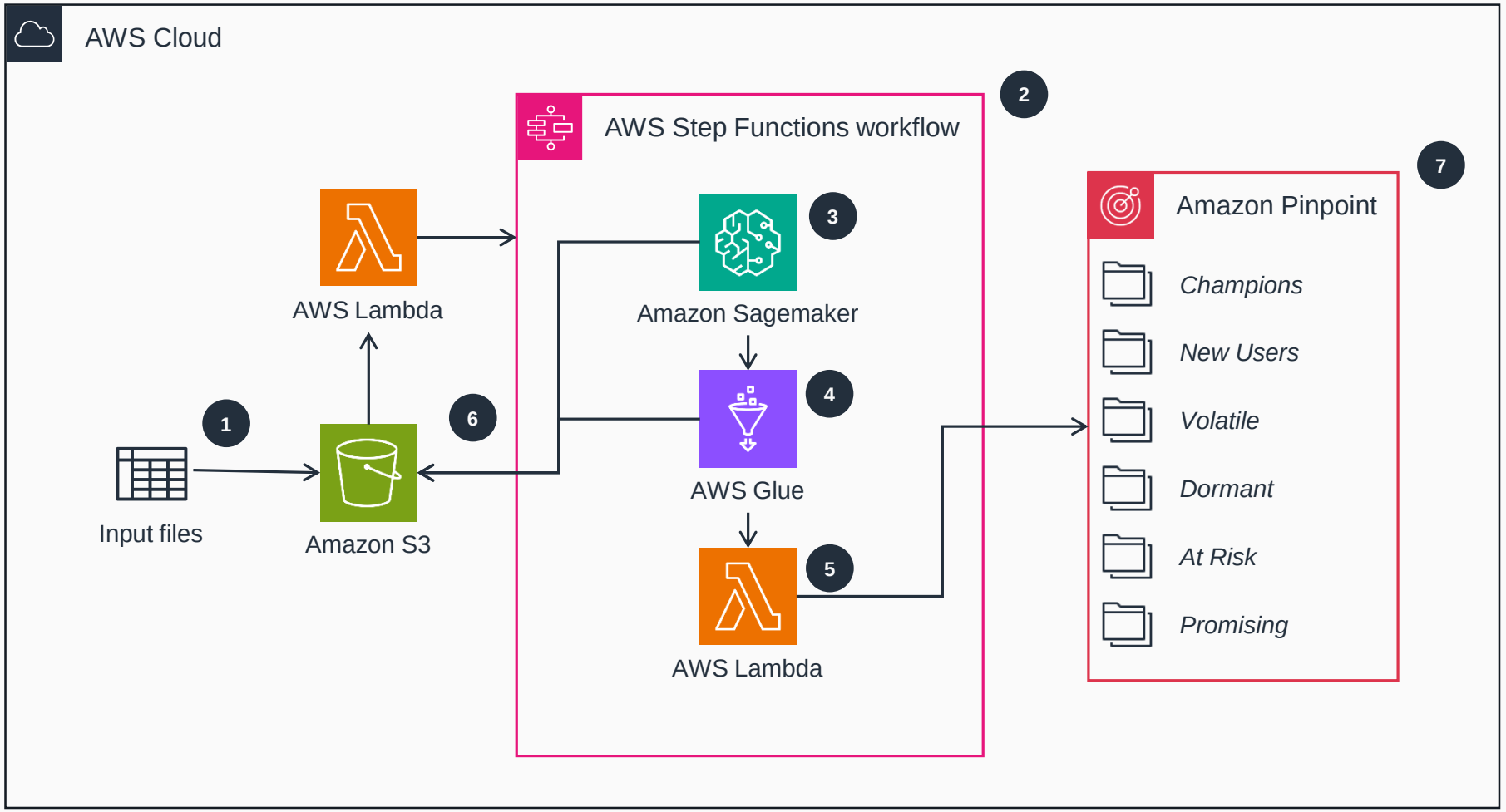
Guidance for Recency, Frequency & Monetization (RFM) Analysis on Amazon Pinpoint

This architecture diagram illustrates using recency, frequency, and monetization (RFM) values for customer segmentation on Amazon Pinpoint.



1. Input files contain business-specific conversion events stored in **Amazon Simple Storage Service (Amazon S3).** These files invoke an **AWS Lambda** function, which initiates an **AWS Step Functions** workflow.
2. The **Step Functions** workflow uses **Amazon SageMaker**, **AWS Glue**, **Lambda**, and **Amazon S3** to generate recency, frequency, and monetization (RFM) segment data ready for upload to **Amazon Pinpoint**.
3. **SageMaker** training and processing jobs use a K-means algorithm to create RFM-clustered data from the input source files.
4. **AWS Glue** prepares the clustered data by creating a schema compatible with **Amazon Pinpoint**. It also merges columns from the input datasets to ensure schema compatibility.
5. **Lambda** uploads the processed data into **Amazon Pinpoint** and also creates the RFM segments based on pre-defined rules for RFM scores.
6. **Amazon S3** stores the intermediate data generated at each step of the **Step Functions** workflow.
7. **Amazon Pinpoint** stores the final segmented data for use in targeted marketing communications. Example segments are also created within **Amazon Pinpoint**.

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AWS Reference Architecture