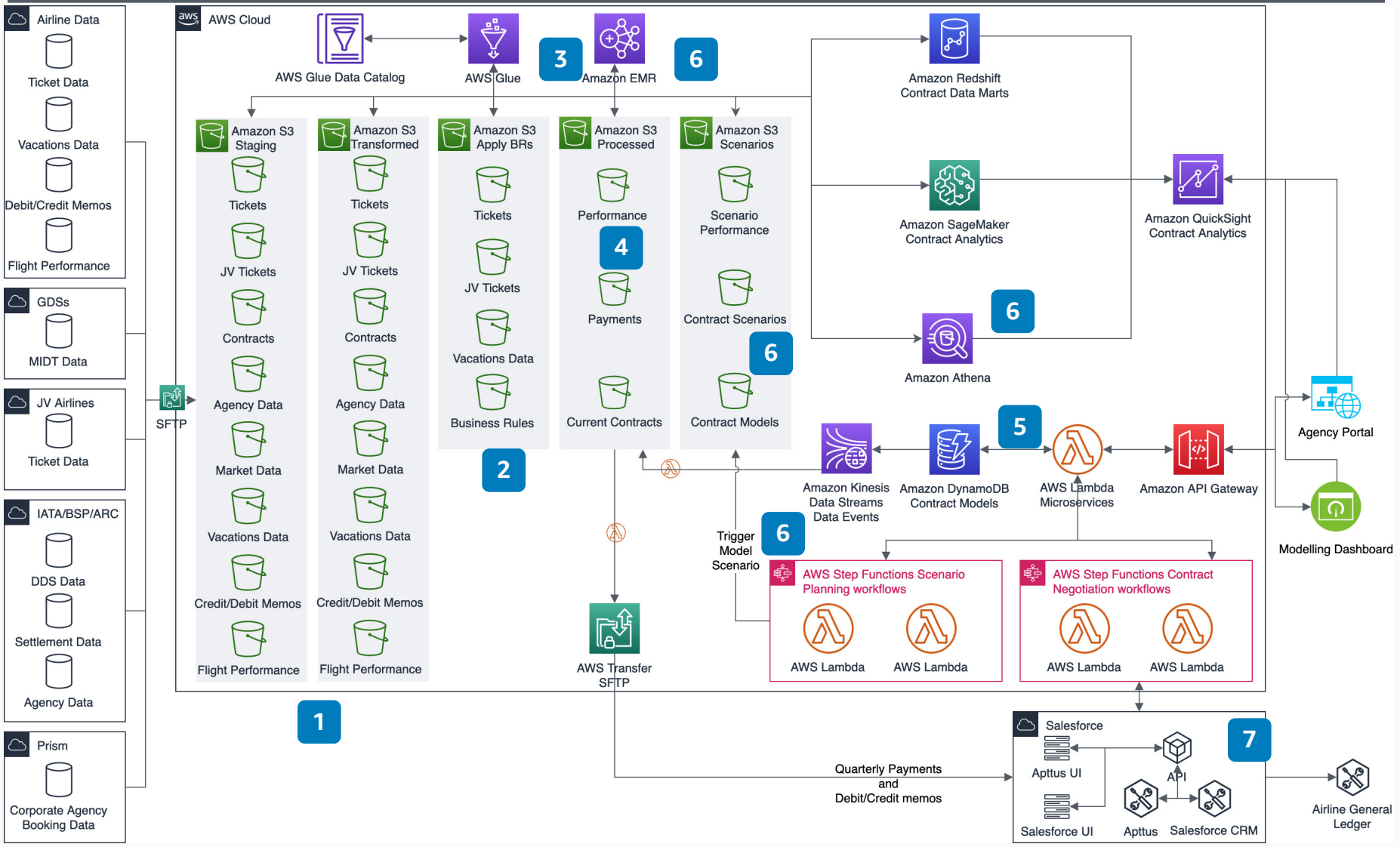
Contract Lifecycle Management and Modeling

Improve contract lifecycle management and facilitate contract modeling by providing seamless access to current and historical transactions, competitive market data, agency data, and contracts data combined with analytics tools and elastic compute.



Airline sales teams managing agency and corporate contracts typically use manual processes and spreadsheets to manage contract negotiation and lifecycle. Data required to analyze and negotiate contracts is in different data silos and requires heavy compute usage (only used during contract negotiation period) and IT resources for running scenarios. For this reason, contract modeling and scenario analysis is applied to select major agency contracts and takes significant time and resources.

This workflow models contracts with scenario analysis and automates the contract negotiation process, eliminating manual processes. Using AWS services, this workflow aggregates all required data and uses elastic compute to temporarily increase compute during the contract negotiation period.

1. Use **Amazon Simple Storage Service (Amazon S3)** to create a data lake with all required data. Maintain raw data as well as the curated and transformed data for processing efficiency and later usage.
2. Use business rules to store data that has been transformed separately. This approach allows for recomputing when business rules change.
3. Use **AWS Glue** and **Amazon EMR** for transformation, business rules application, and payment processing.
4. Performance and payments are processed periodically and stored in Amazon S3. This data can then be used for payment processing and performance reporting.
5. Contract modelling user interface is built using **Amazon DynamoDB**, **AWS Lambda**, and **AWS Step Functions**.
6. Contract scenarios are facilitated through **Amazon EMR**, **AWS Step Functions**, **Amazon S3**, and **Amazon Athena**.
7. Contract negotiation workflows and payment workflows are managed through capabilities in Apttus/Salesforce platform.

Reviewed for technical accuracy March 10, 2021

AWS Reference Architecture