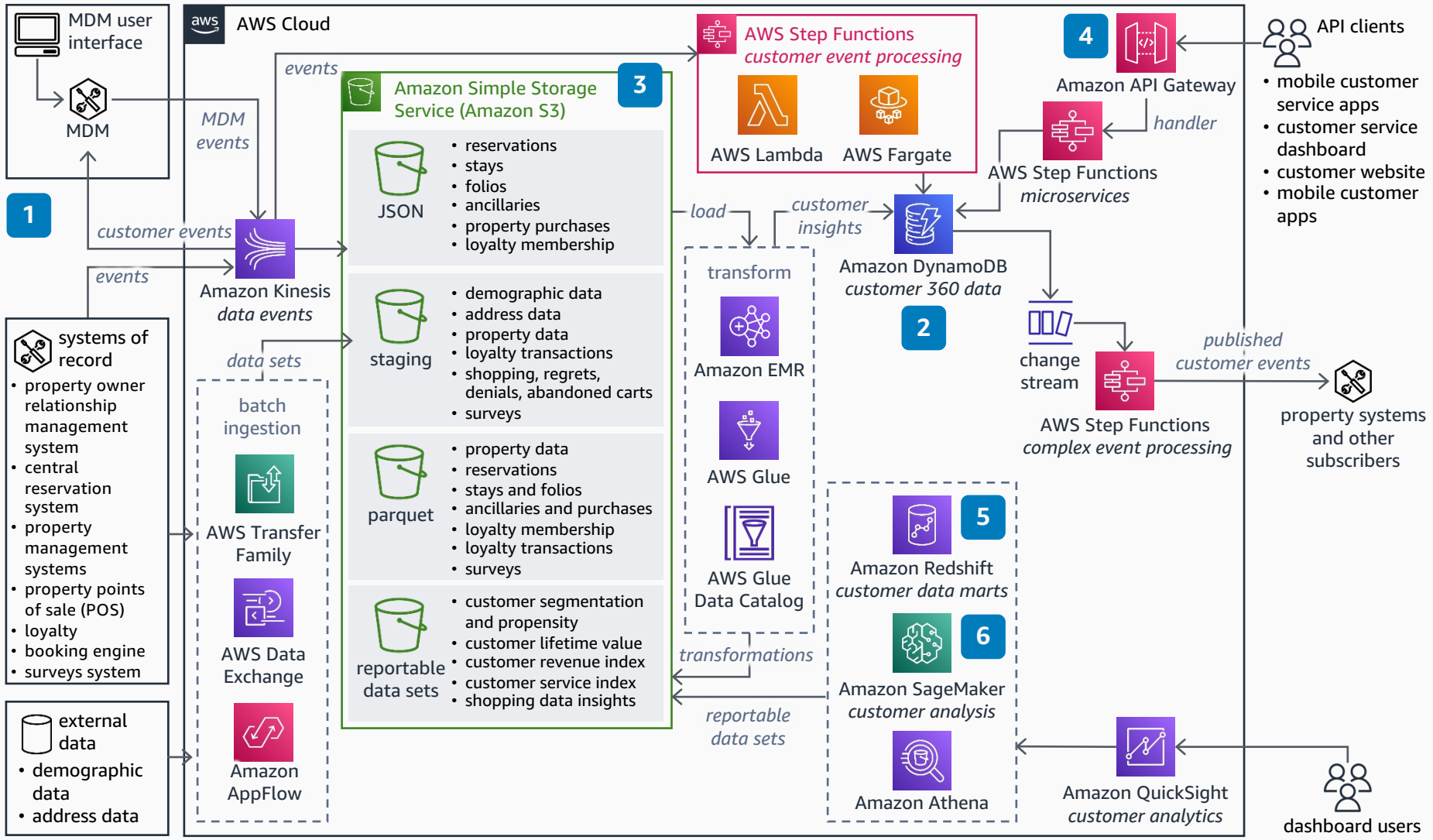
Lodging Data Platform with Master Data Management

Enhance the data platform by using master data management (MDM) tools to identify unique travelers and duplicates in loyalty membership. This approach lets you develop a single view of customer above and beyond loyalty members.



Reviewed for technical accuracy October 7, 2022

AWS Reference Architecture

Lodging company initiatives to build operations data stores and related services typically do not adapt to change because of rigid schemas and long implementation times.

In addition, siloed systems for operations and analytics do not work well together, and building these systems on premises prevents scaling to add new domains.

This data platform architecture helps relieve and eventually replace the on-premises data platform load, leading to cost savings and an agile environment.

This reference architecture uses Data Platform for Lodging as its foundation, and integrates with an MDM.

1 Augment the single view of customer data as a service by using an MDM tool to create a customer master. A simple MDM tool with customer identification and de-duplications can also be built using the ML Transform feature in **AWS Glue**. This machine learning transformation identifies duplicates in loyalty membership and customers that have not signed up for loyalty membership. This information lets you clearly identify customers that have significant travel beyond loyalty members.

2 The operations data stores, data lakes, and analytics platforms must be adapted to new customer data feeds. New capabilities will be delivered as new versions of customer-centric microservices and events are developed.

3 The data lake is enhanced by changing to a customer-centric view for lifetime value, revenue index, and service index.

4 Agile development teams can quickly add new microservices to consume and publish the new customer-centric services.

5 Agile data teams can quickly augment the enterprise data warehouse (EDW) with new customer-centric domain schemas and data marts.

6 Data scientists can use existing raw and curated data as well as new customer data to build new models in **Amazon SageMaker**.