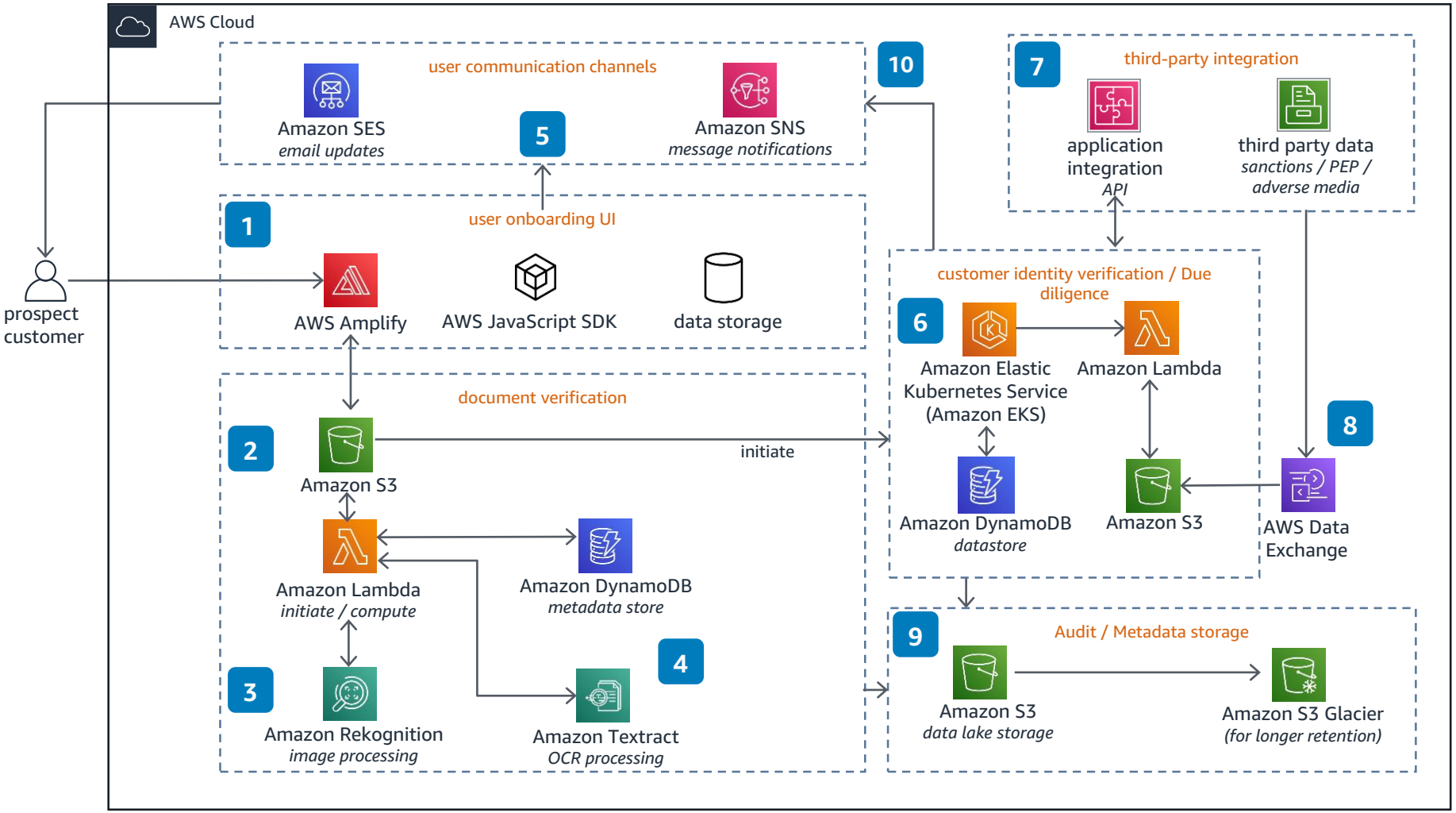
Guidance for Digital User Onboarding in Financial Services on AWS

Use this reference architecture for building a digital onboarding platform on AWS using AI/ML and cloud-native services.



1. The user begins the onboarding process with the onboarding application. The user provides various documents (including drivers license) as part of the Know Your Customer (KYC) process.
2. Once the documents are uploaded, they are automatically processed using various artificial intelligence/machine learning (AI/ML) services.
3. **Amazon Rekognition** performs user verification and compares the user's selfie with the picture in a valid document.
4. **Amazon Textract** extracts text information from all of the uploaded documents (Optical Character Recognition (OCR)).
5. The user is requested to upload any missing documents or provided status updates using **Amazon Simple Email Service** (Amazon SES) or **Amazon Simple Notification Service** (Amazon SNS).
6. Once all of the documents are uploaded, the identity of the user is verified using Department of Motor Vehicles (DMV) verification, and necessary due diligence is performed (a sanctions list and so on).
7. API integration to other third-party sources of data is done at this layer: sanctions/ politically exposed person (PEP)/adverse media.
8. Third-party data is consumed through **AWS Data Exchange** for checks against the user.
9. All of the data that the user provided is stored away for long-term retention in **Amazon Simple Storage Service Glacier** (Amazon S3).
10. The user is notified of successful account creation once the identity is verified and the due diligence performed.

Reviewed for technical accuracy November 02, 2022

AWS Reference Architecture