Guidance for Immersive Retail on AWS
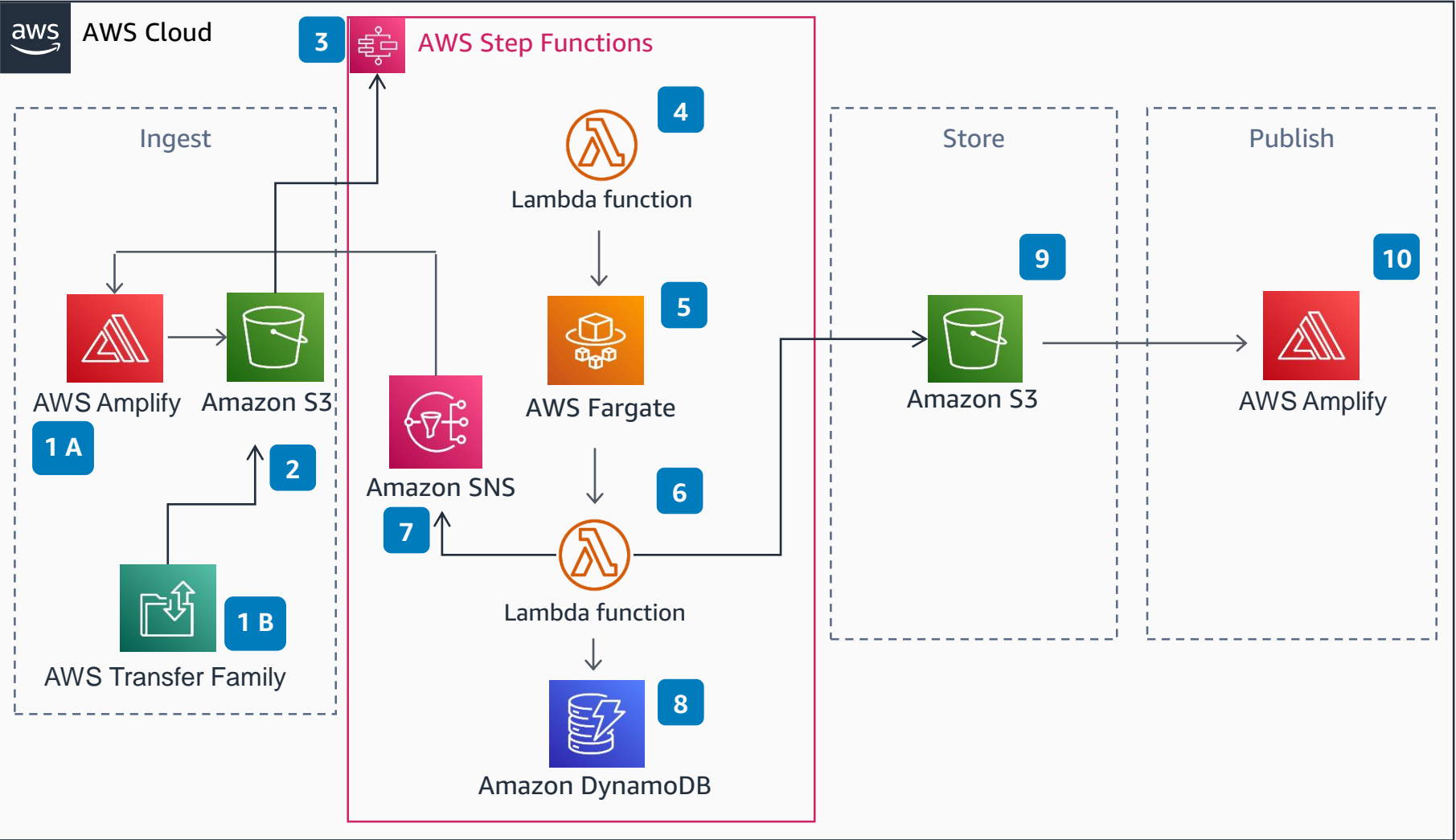
This reference architecture shows how you can use spatial computing to make 3D product images.

AWS Cloud

3 AWS Step Functions

Ingest

4 Lambda function

5 AWS Fargate

Amazon SNS

1 A AWS Amplify

Amazon S3

2

1 B AWS Transfer Family

7

6 Lambda function

8 Amazon DynamoDB

Store

9 Amazon S3

Publish

10 AWS Amplify

AWS Reference Architecture

1 A Upload images through a mobile app hosted in **AWS Amplify**.

1 B Alternatively, a third party uploads images directly through **AWS Transfer Family**.

2 **Amazon Simple Storage Service** (Amazon 3) is used to store the uploaded images.

3 **AWS Step Functions** filters images to the next step, and passes data between services.

4 **AWS Lambda** ensures all images are uploaded for each product before processing.

5 An **AWS Fargate** task stitches images together.

6 A **Lambda** function validates images to meet quality standards.

7 To notify of process failure, **Amazon Simple Notification Service** (Amazon SNS) sends a short message service (SMS) and email.

8 An **Amazon DynamoDB** table maintains image metadata.

9 Once the images are rendered, they are stored in **Amazon S3**.

10 Images are presented through **Amplify**.