



AWS
re:Invent

AIM 357

Build an ETL pipeline to analyze customer data

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Agenda

- Workshop use-case description
- Description of AWS services used
- Overall use-case workflow
- Diving in!

The use case

Use case: Forecasting and alert notification

- Time-series forecasting using NYC Taxi dataset
 - Explore the data
 - Perform extract, transform, and load (ETL) jobs to clean the data
 - Train a machine learning (ML) model and run inference
 - Assess the response
 - Send an alert if value is outside specified range

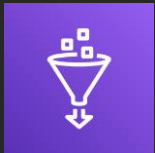
AWS services used

AWS services (data)



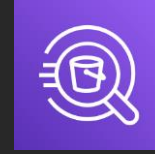
Amazon Simple Storage Service (Amazon S3)

Object storage service that offers industry-leading scalability, data availability, security, and performance



AWS Glue

Fully managed extract, transform, and load (ETL) service



Amazon Athena

Serverless interactive query service that makes it easy to analyze data in Amazon S3 using standard SQL

AWS services



Amazon SageMaker

Fully managed service that covers the entire ML workflow



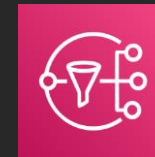
AWS Lambda

Run code without provisioning or managing servers



AWS Step Functions

Coordinate multiple AWS services into serverless workflows so you can build and update apps quickly



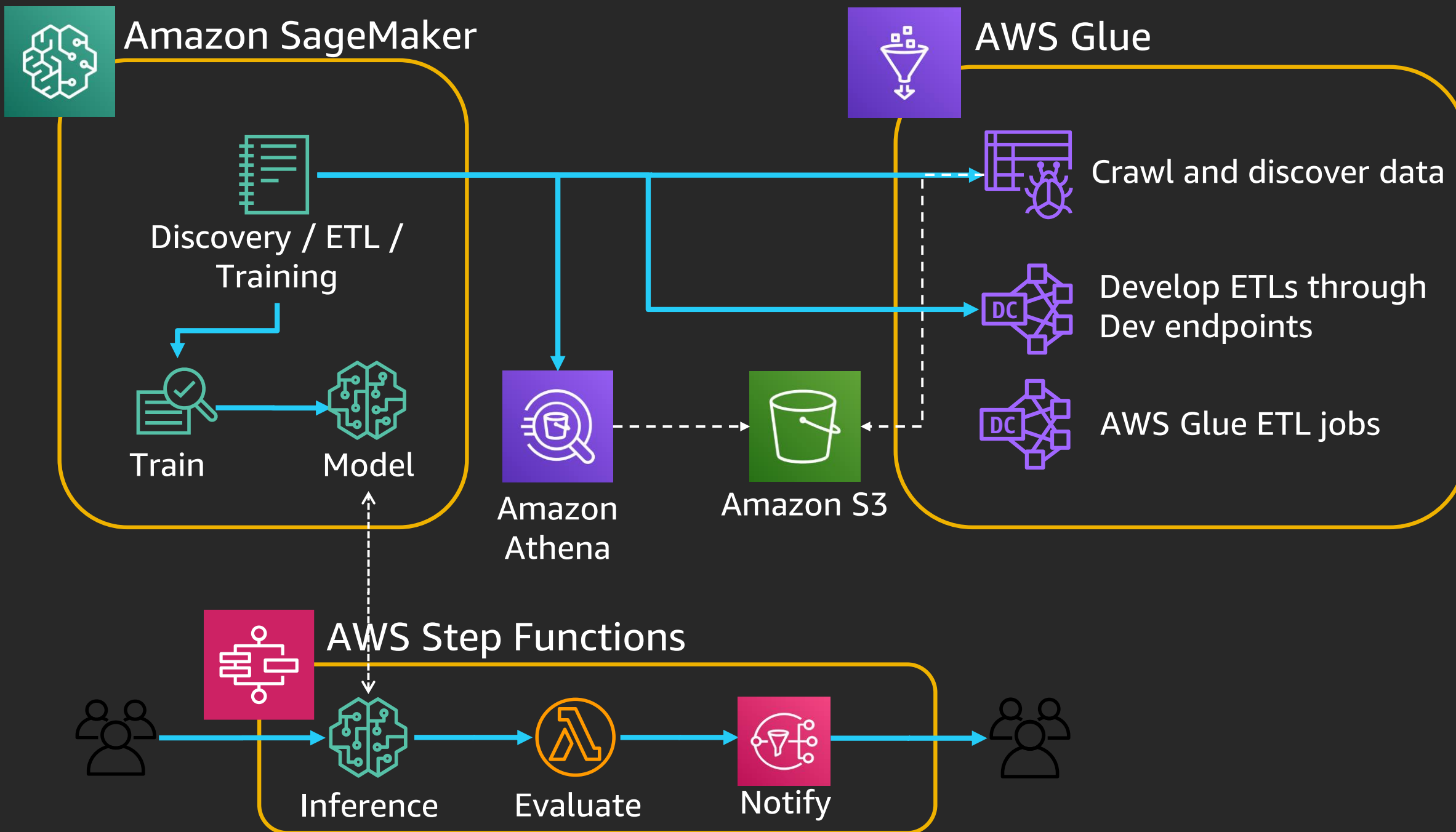
Amazon Simple Notification Service (Amazon SNS)

Highly available, durable, secure, fully managed pub/sub messaging service

What are we building today?



AWS Cloud

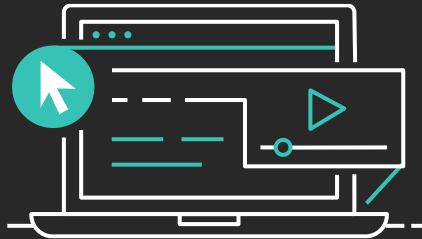


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Thank you!



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