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# Aiding natural-disaster responses with Amazon SageMaker and Amazon Comprehend

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# Agenda

Introductions

Problem statement

Demo: Application walkthrough

Demo Architecture

Demo: How we built the Amazon SageMaker machine learning models

Demo: Amazon Comprehend integration

Q&A

# Related breakouts

AIM366-R, -R1: SpaceNet: ML to solve mapping challenges

AIM329: Using deep learning to track wildfires and air quality

WPS323: Monitoring the Earth without costing the world

AIM205-R, -R1: Starting the enterprise ML journey, featuring ProSiebenSat.1  
Media SE



What happens  
when disaster  
strikes?

# The fundamentals of emergency response

1. Search-and-rescue and emergency medical services come first
2. Widespread injuries occur simultaneously, overwhelming medical systems
3. The urgent need for shelter, food, water, medicine for displaced persons takes precedence
4. The type of disaster affects the types of health services required
5. Attention must be given to displaced communities and their needs
6. Logistical flexibility must be employed as unique challenges present themselves

# The fundamentals of emergency response

1. Search-and-rescue and emergency medical services come first
4. The type of disaster affects the types of health services required

How can machine learning help us respond more effectively to a natural disaster?

5. The urgent need for shelter, food, water, medicine for displaced persons takes precedence
6. Logistical flexibility must be employed as unique challenges present themselves

# Demo application walkthrough

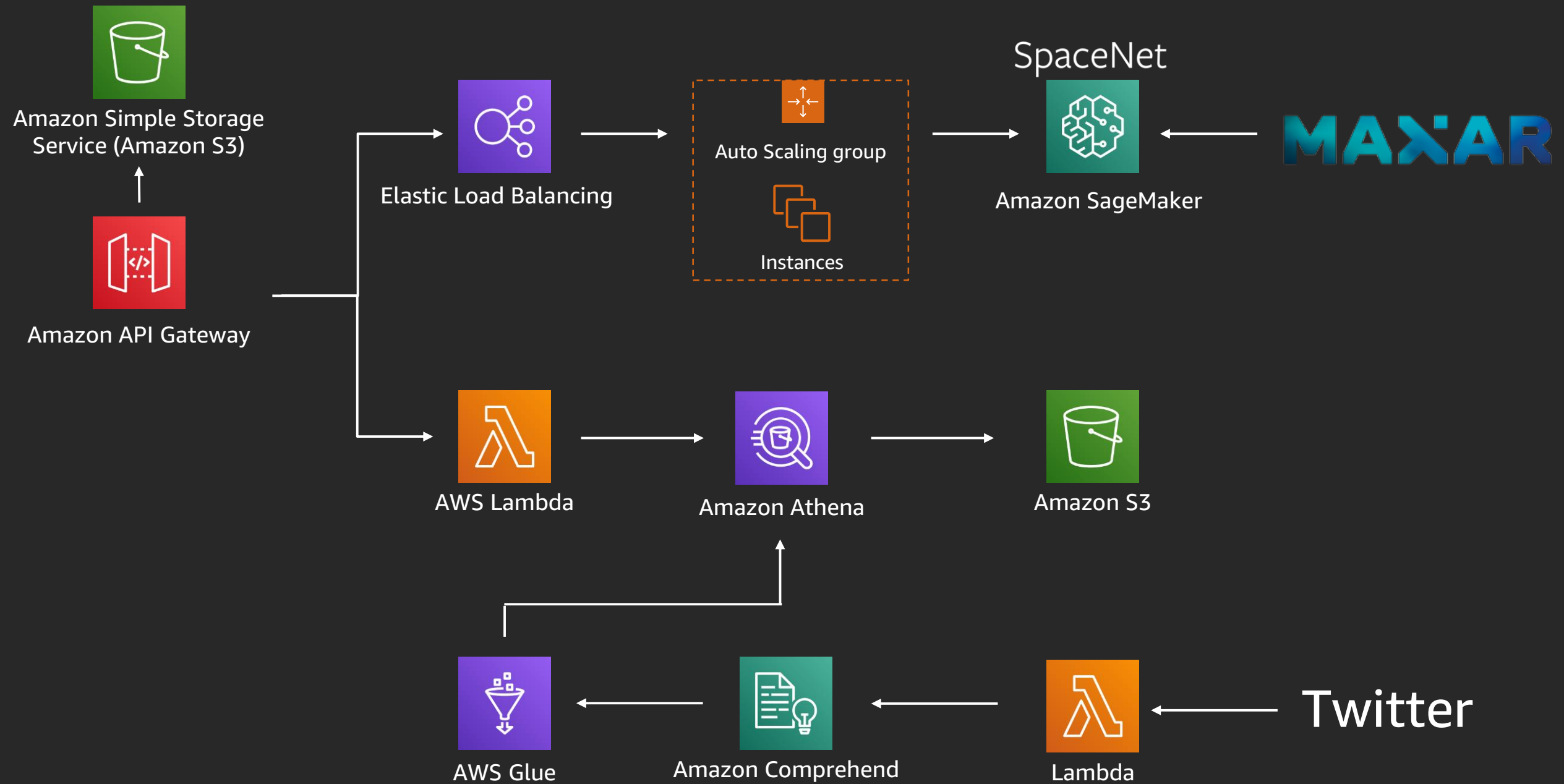




# Natural Disaster Assessment



# Demo application architecture



# Demo: Building the Amazon SageMaker models

# Demo: Integrating Amazon Comprehend

# Thank you!

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