
AWS
re:Invent
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ROB201

Building the industrial kitchen of the future with Miso Robotics

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AWS

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Restaurant challenges

Pandemic

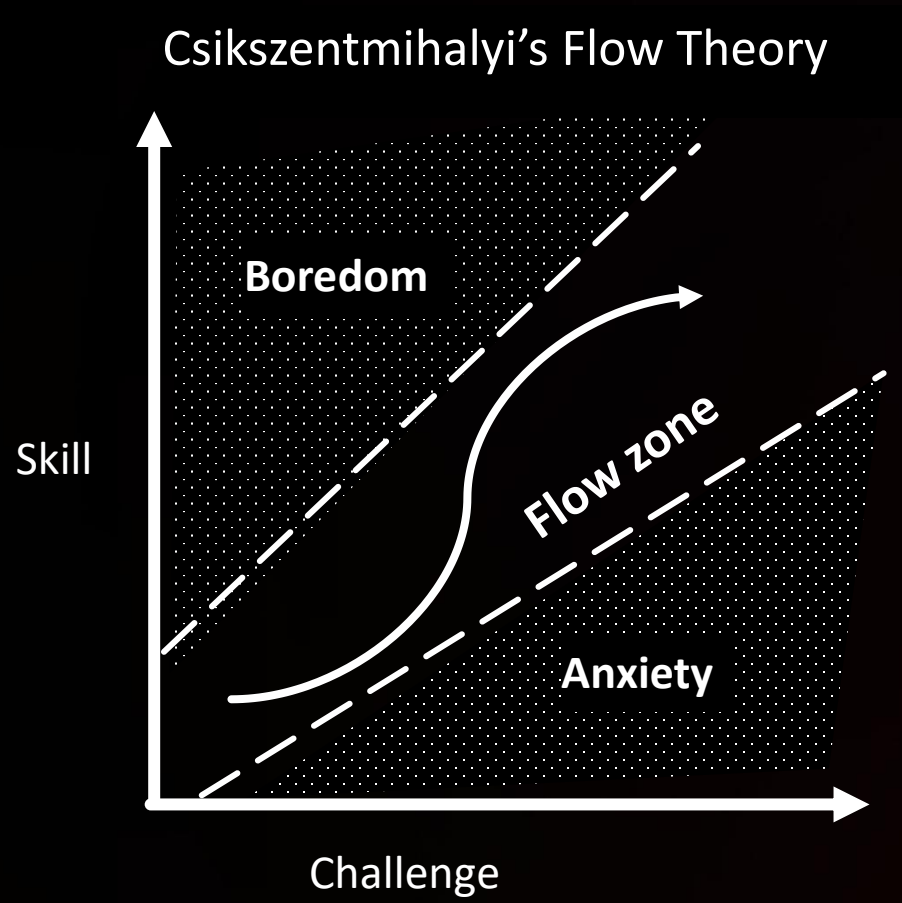
- 100,000 restaurants closed
- 95% of workers lost jobs or wages
- In-house dining lowered 99%

Post-pandemic

- Drive-thru orders rose 20%
- Delivery orders rose 116%
- 1.3 million job openings

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The flow state



“The happiest people spend much time in a state of flow, the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it.”

Mihaly Csikszentmihalyi

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MISO ROBOTICS



Flippy + Employee



Employee Only



0	Fries baskets	0
0	Wings baskets	0
0	Orders packed	0

00:00

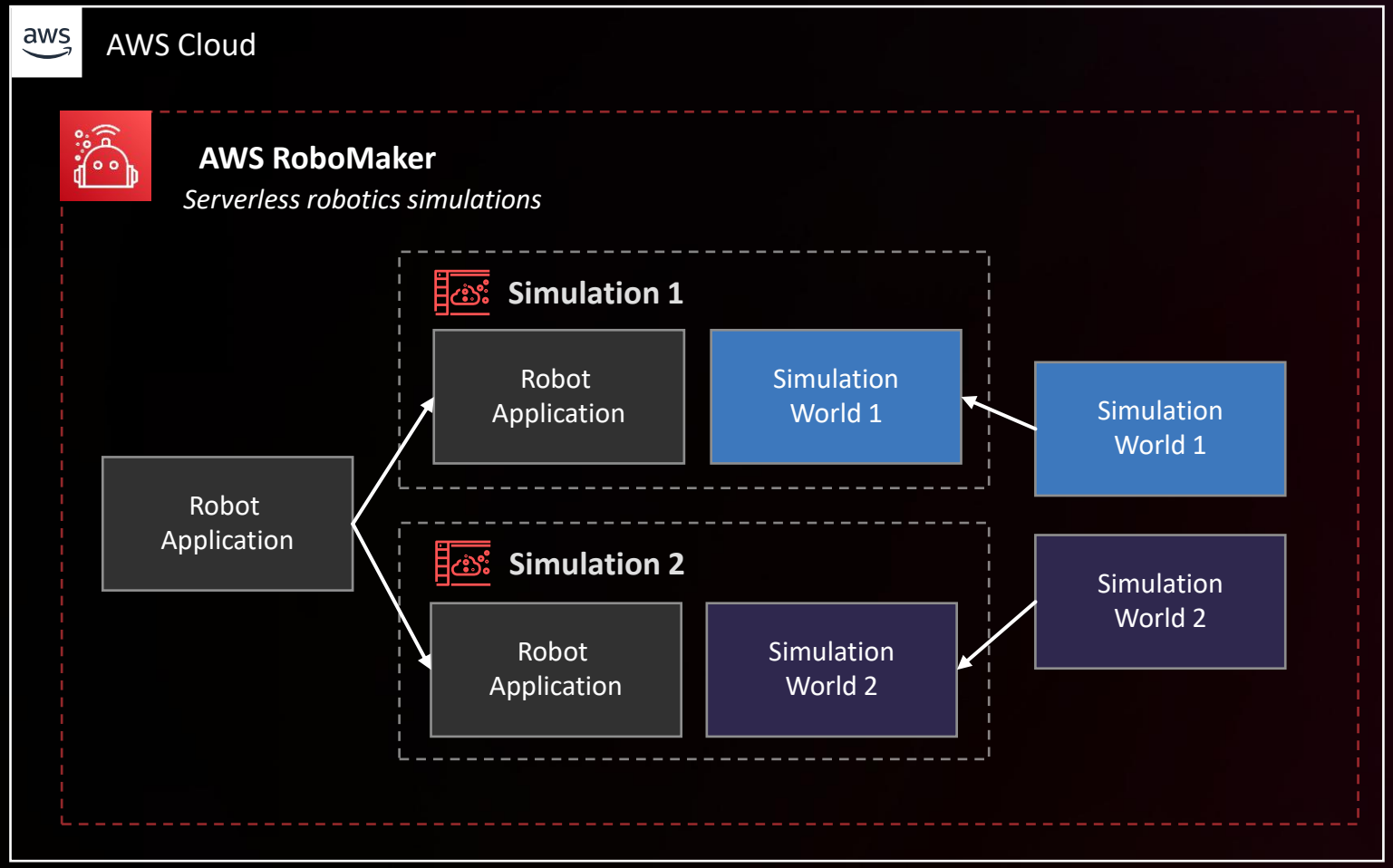
It looks easy, right?

Deploying robots at scale involves myriad challenges

1. Reliably collect data from geographically distributed devices
2. Design for reusability and future products
3. Scale deployments while maintaining operational excellence
4. Create simulation environments to accelerate development

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Simulation drives customer obsession





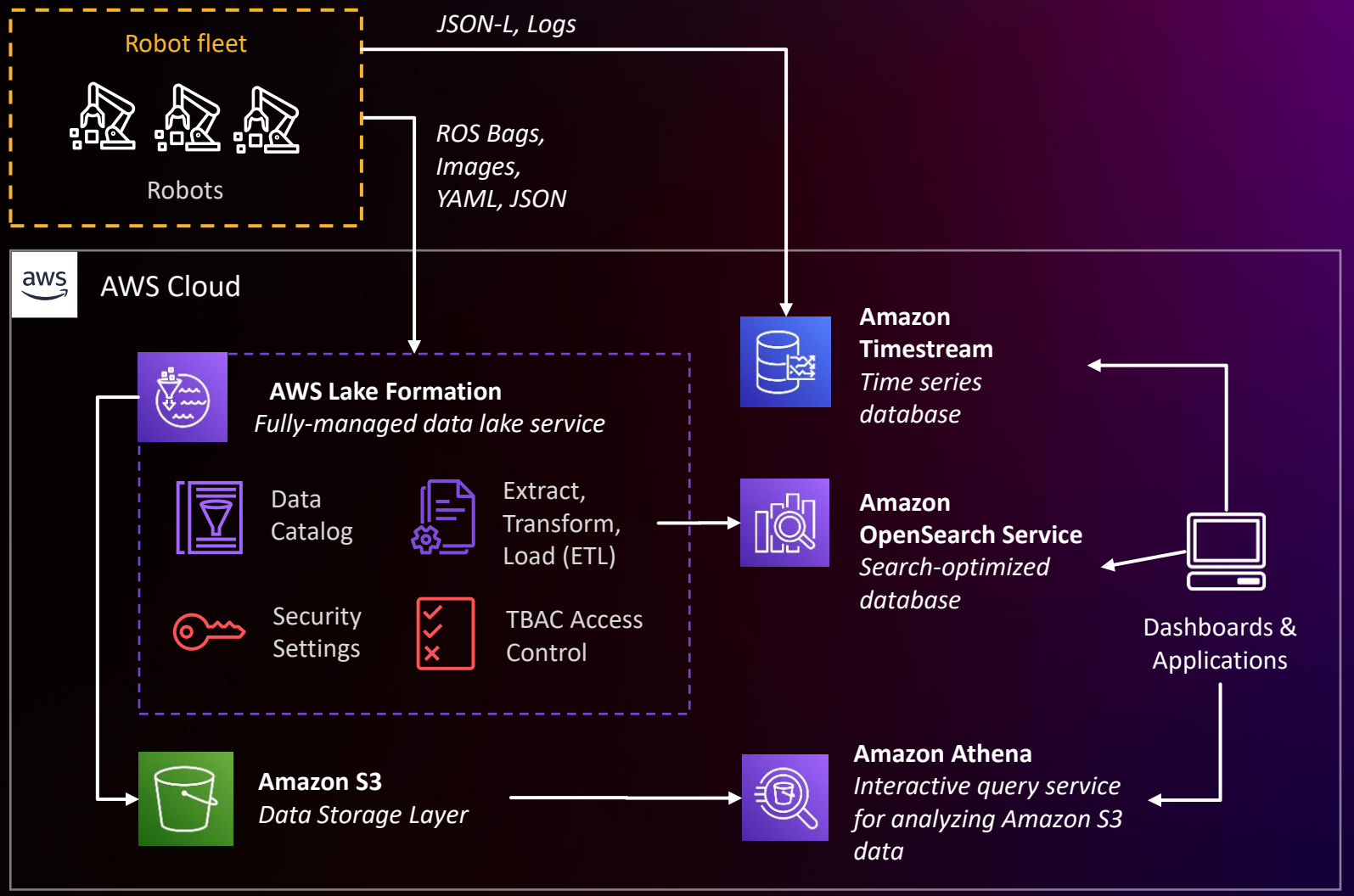
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Setting the stage for scale

First challenge: Build a data lake
*Create **a single source of truth** for robot logs and activity data*

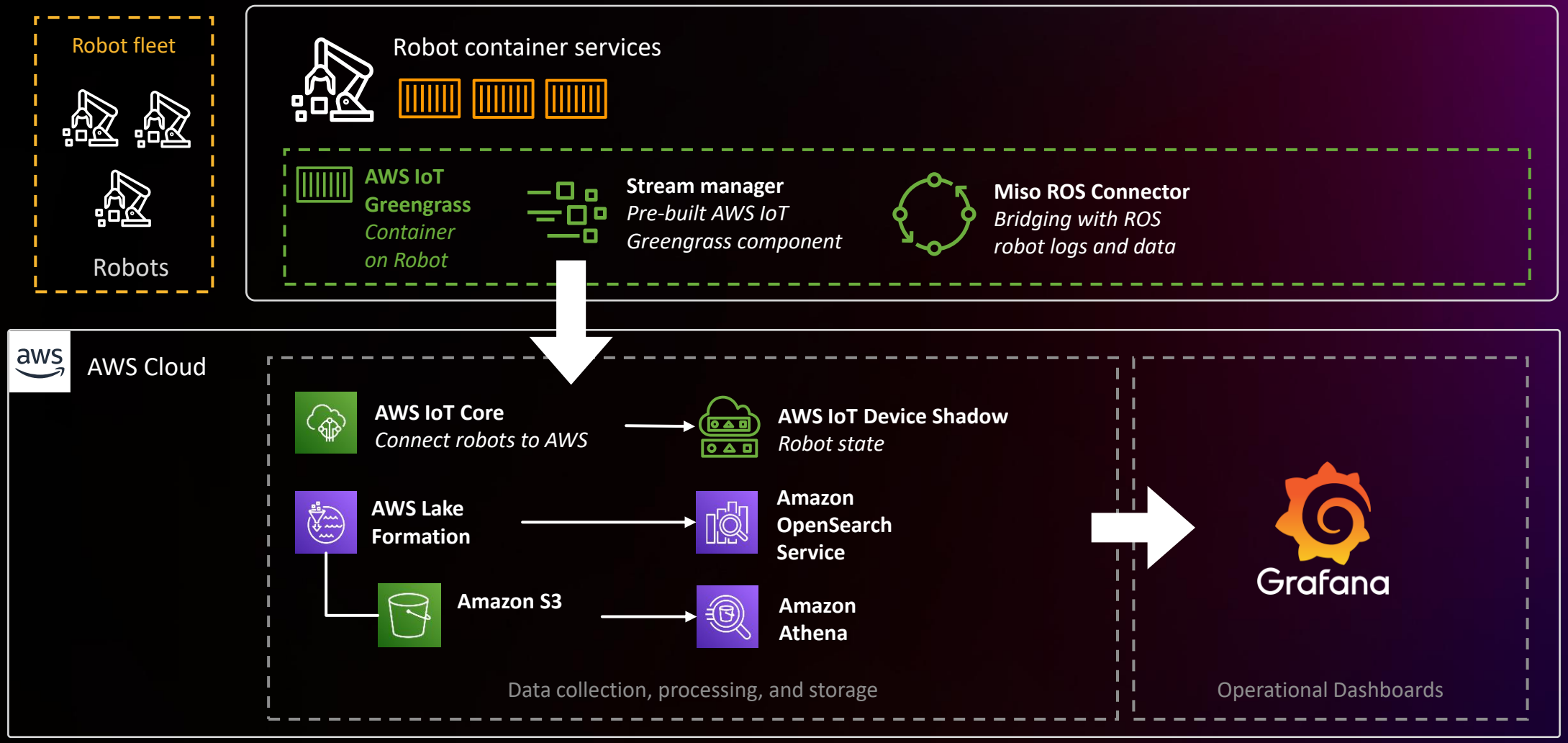
AWS Partner
Eplexity

Created a prototype that **centralized robot log data** from local MySQL databases on 10 robots into a data lake in AWS using **AWS Lake Formation**



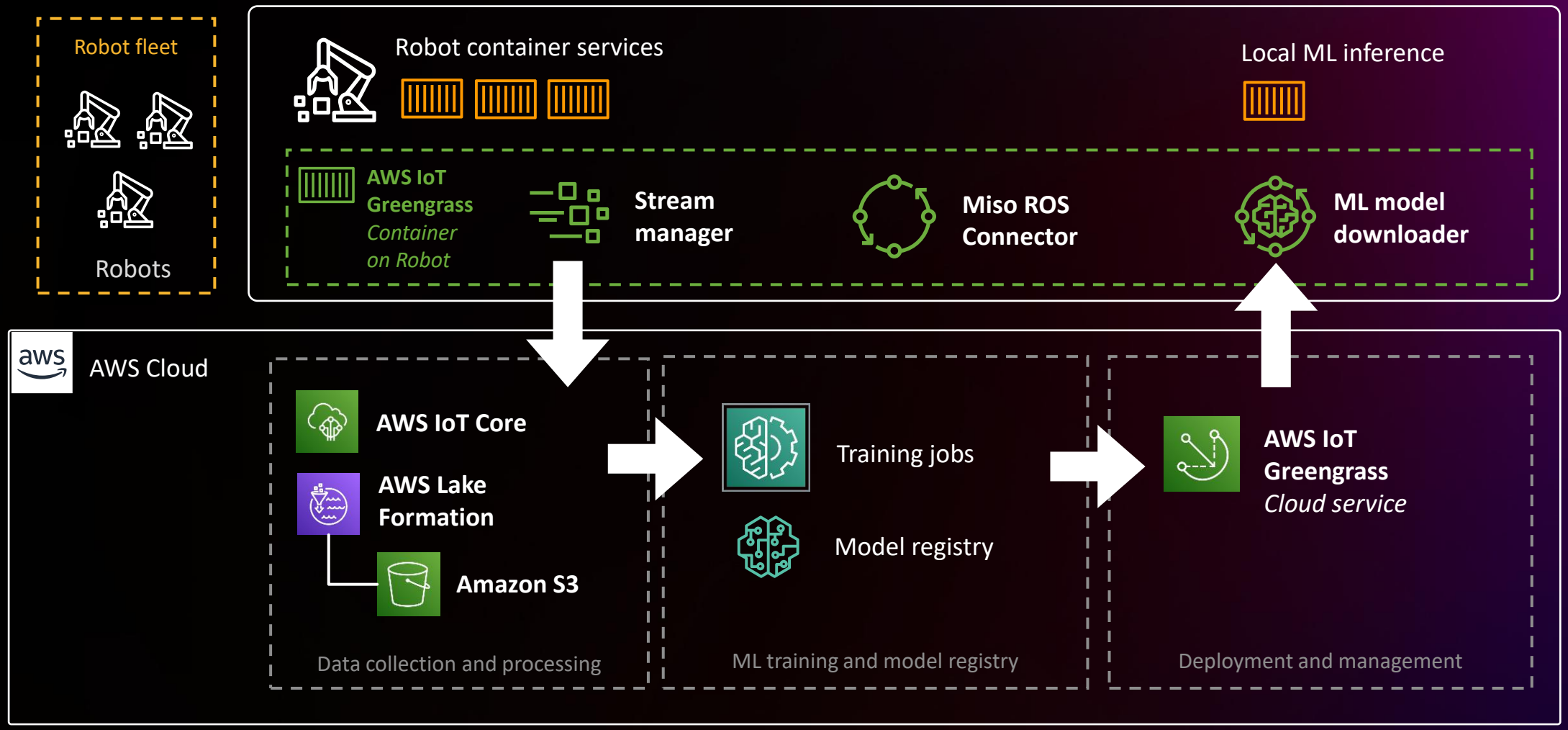
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Deploying Robots at Scale



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Next frontier: Making robots smarter



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“Please don’t take my Flippy away.”

White Castle employee

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Partnering with top restaurants globally









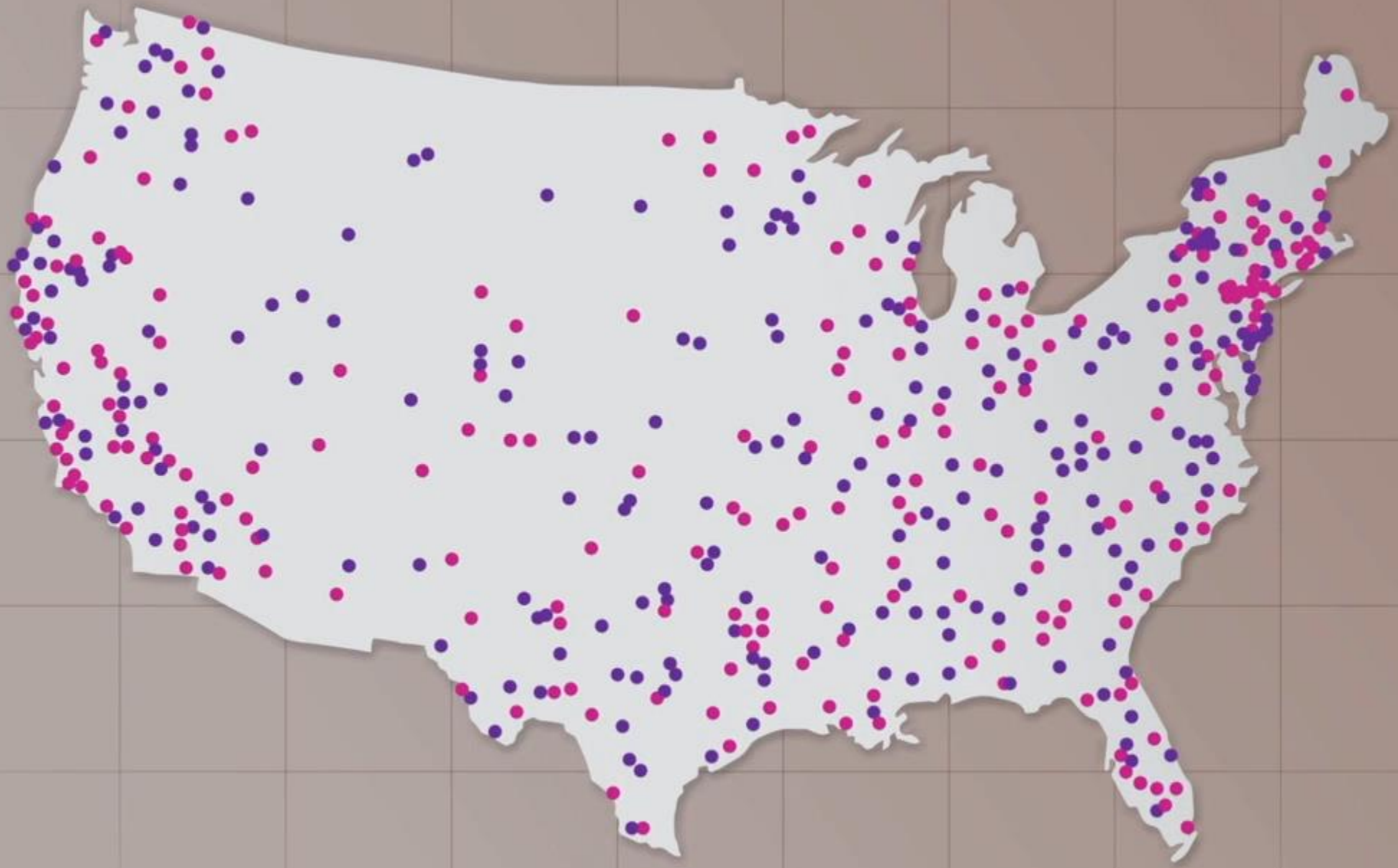


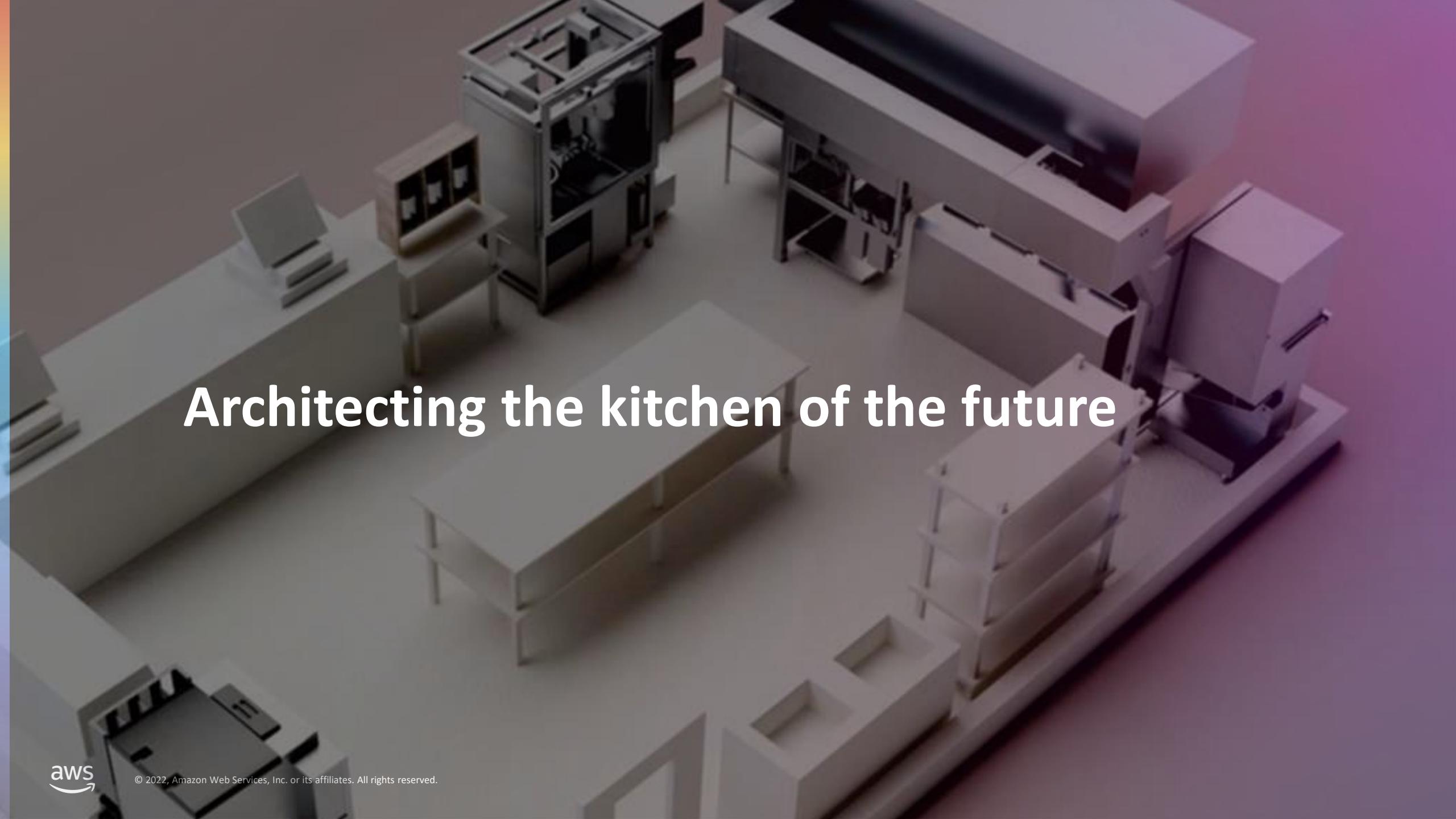






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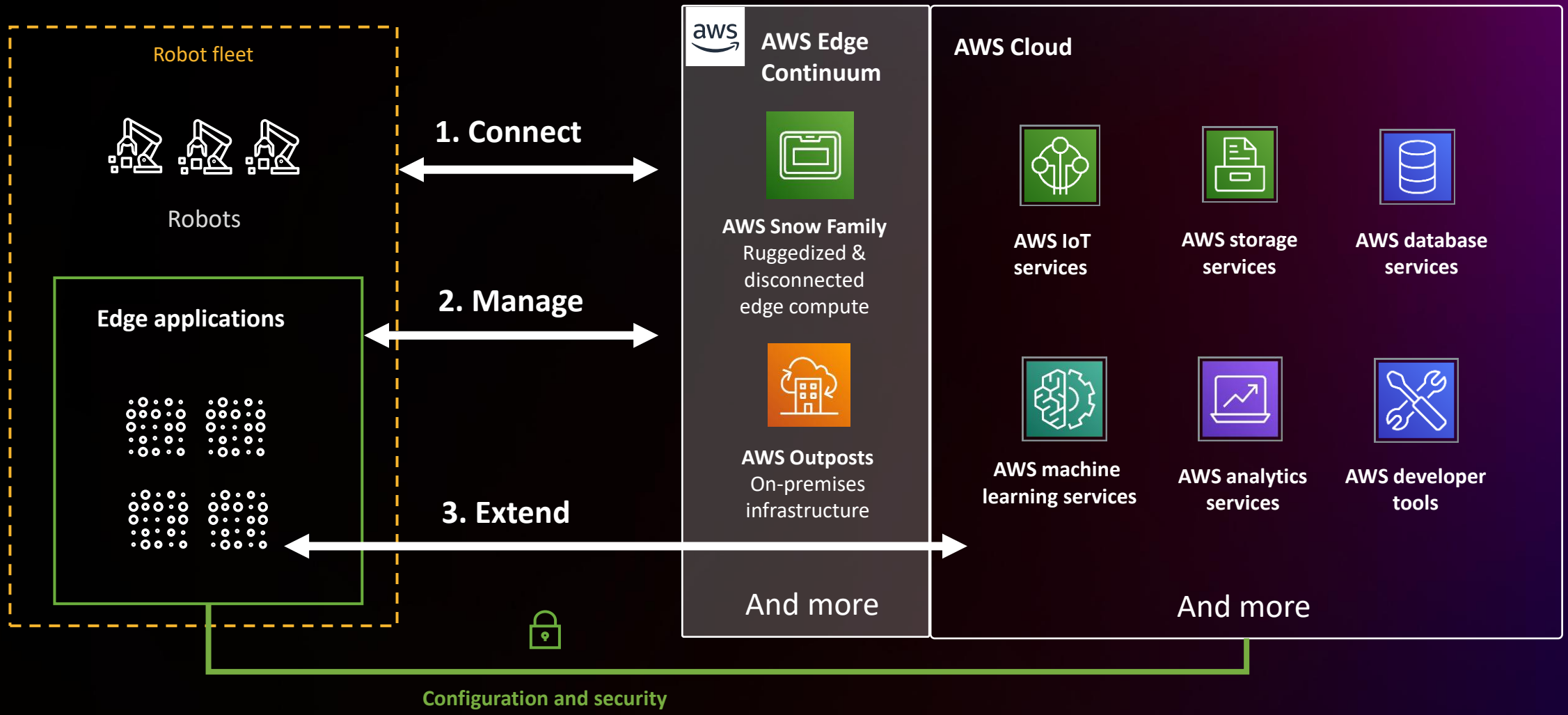




Architecting the kitchen of the future

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AWS for robotics landscape



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Recommended Hospitality Breakout Sessions

AIM327

Deploying no-code automated MLOps for Amazon Forecast

Accurate demand forecasting can help a company maximize revenue and minimize inventory costs. Traditional approaches to deploying ML-based forecasting required customers to click through user interfaces or learn how to use APIs and Jupyter notebooks. Both of these increase the barrier to ongoing, sustainable production operation at scale. In this session, learn how customers like Taco Bell are deploying no-code solutions that automate the Amazon Forecast pipeline using a number of enabling AWS services such as AWS Step Functions and AWS CloudFormation. This solution helps deploy and manage many decoupled and concurrent enterprise-grade workloads.

Featuring: Taco Bell

AIM333

How Taco Bell is improving digital availability with ML forecasting

Accurate demand forecasting can help a company maximize revenue and minimize inventory costs. Traditional approaches to deploying ML-based forecasting required customers to click through user interfaces or learn how to use APIs and Jupyter notebooks. Both of these increase the barrier to ongoing, sustainable production operation at scale. In this session, learn how customers like Taco Bell are deploying no-code solutions that automate the Amazon Forecast pipeline using a number of AWS services.

Featuring: Taco Bell

ARC204

Scaling AWS Well-Architected Reviews through the enterprise

Join this session to learn about how TUI Group has adopted the AWS Well-Architected Framework as part of a transformation journey over the last 5 years, creating a standardized and consistent approach to reviewing workloads and building a new global standard for architectural health. Discover how TUI scaled out AWS Well-Architected across the organization, bridging skills and experience gaps rapidly for over 1,300 IT colleagues in 12 different countries. Finally, find out how they brought together reporting and analytics capabilities through the AWS Well-Architected tool to give a global reporting view of risk across all their architectures.

Featuring: TUI Group

ARC312

Moving from monolith to microservices: Hyperscale environments on AWS

Traditional monolithic architectures can be hard to scale. As an application's code base grows, it becomes complex to update and maintain. A monolithic database design also leads to challenges of scaling and performance. Within a microservices architecture, you can break down an application using various decomposition patterns based on business capability, subdomain, transactions, and more. A microservices architecture also allows for sharding and partitioning of the data layer to each microservice. During this session, DoorDash discusses these patterns for adopting microservices and creating highly available multi-Region architectures to provide high availability, scalability, and reliability for hyperscale environments.

Featuring: DoorDash

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Thank you!

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