
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

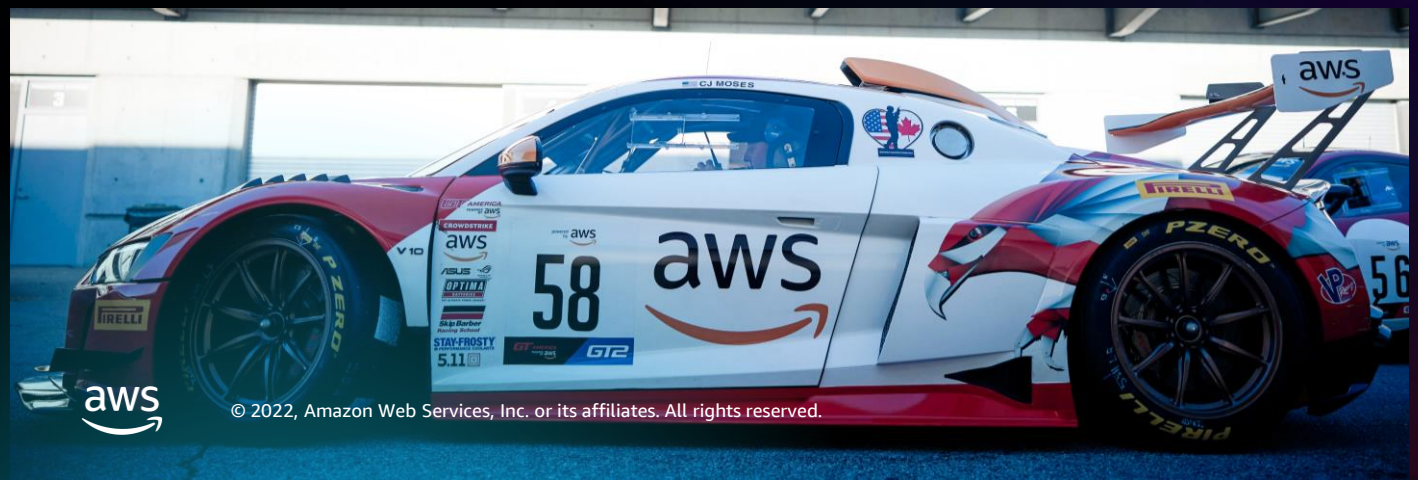
SEC214-L

What we can learn from customers: Accelerating innovation at AWS Security

CJ Moses

Chief Information Security Officer
Amazon Web Services

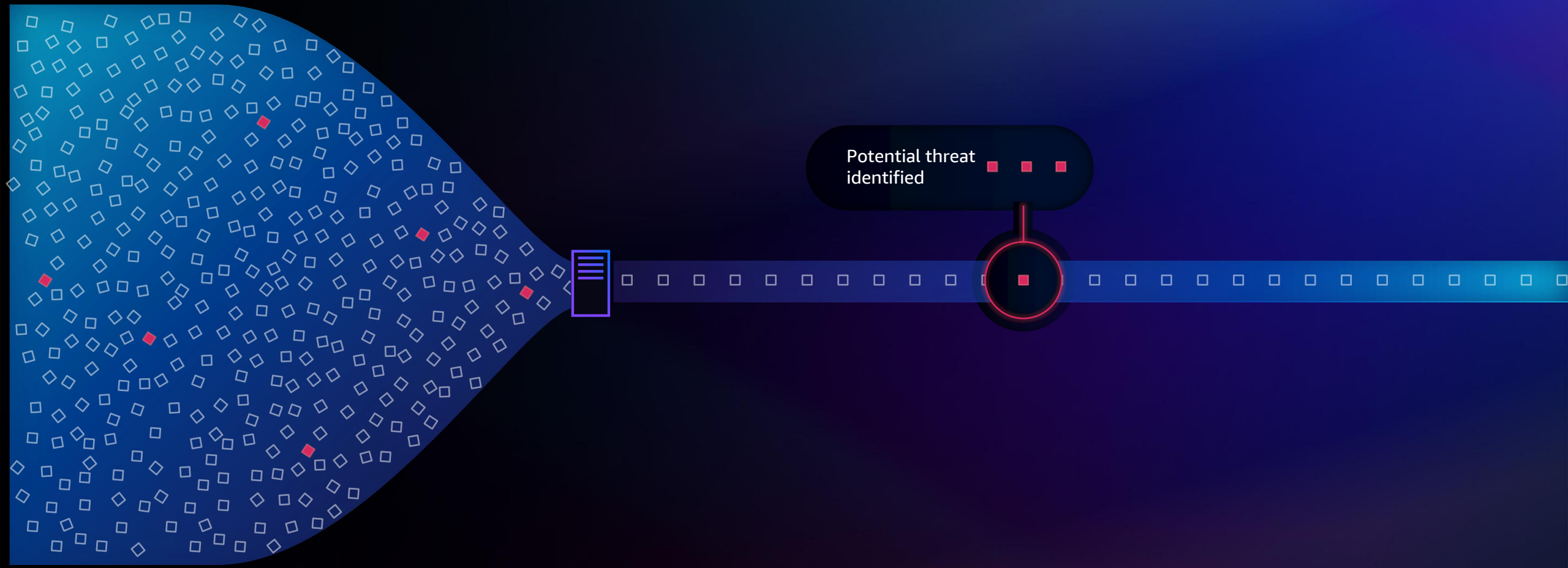
Every one of us is a **builder**



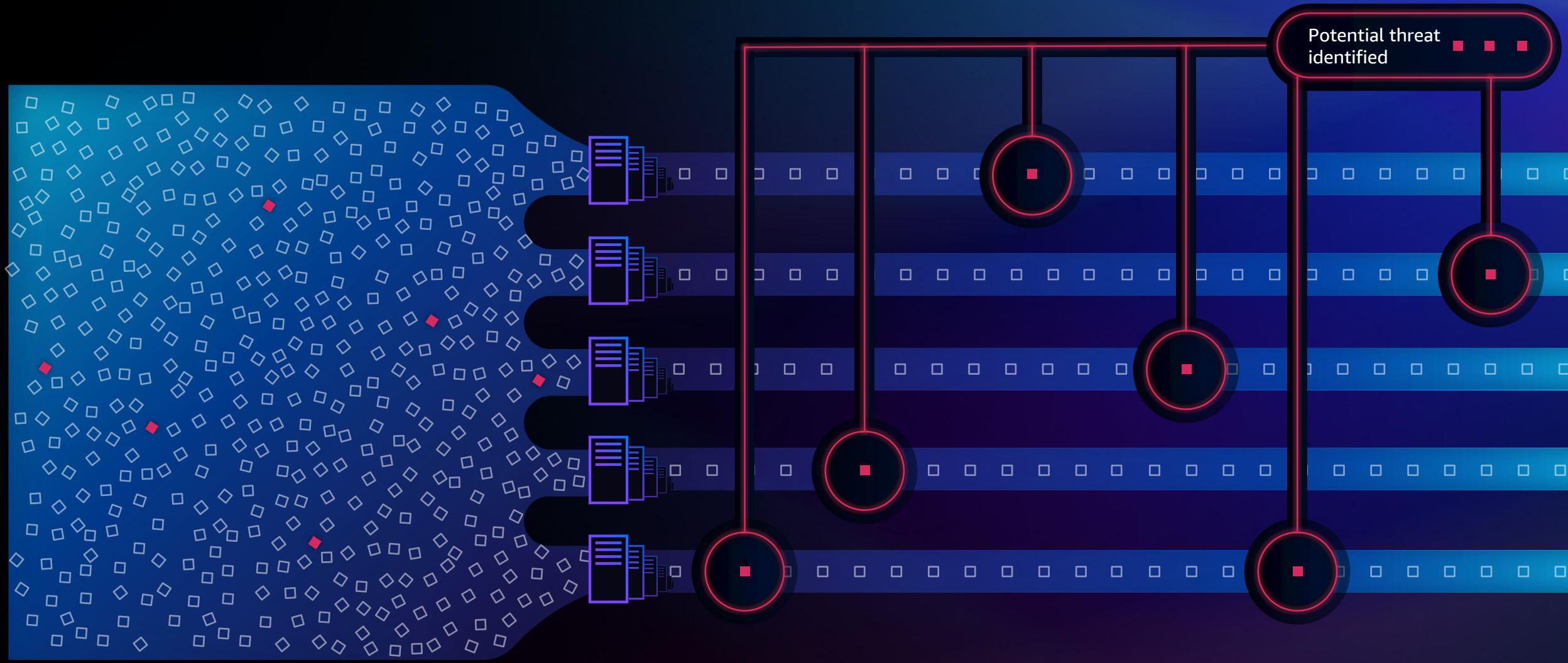
"Customers are always wonderfully, beautifully unsatisfied."

Jeff Bezos

Potential threats hiding in massive amounts of data

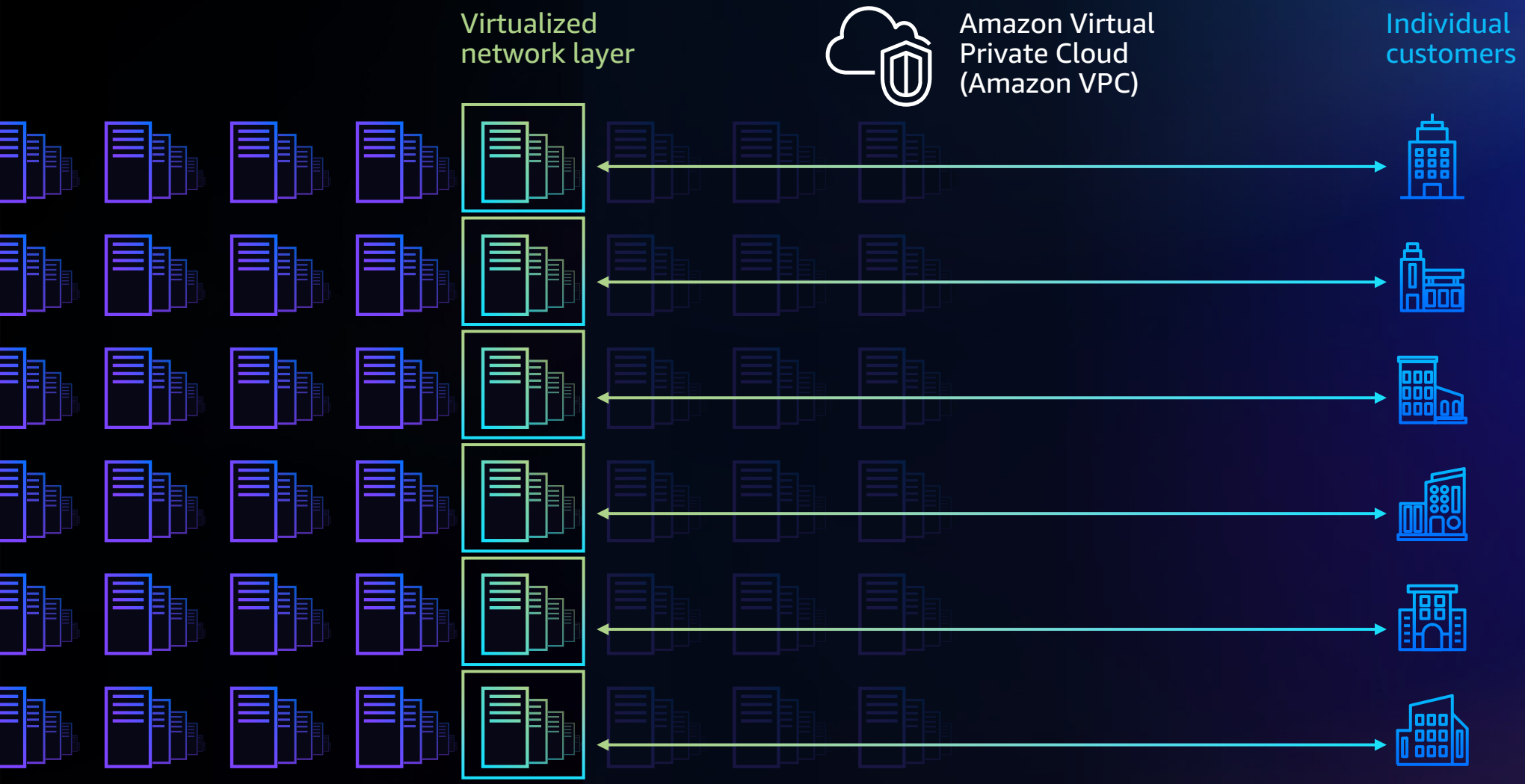


Threat identification at scale



DECEMBER

2007



Unmatched scale and experience

200+

services

1M+

customers

$82B

annual run rate

AWS global network

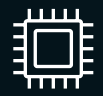
1,000,000,000,000,000

Shared responsibility model

AWS

RESPONSIBLE FOR SECURITY **OF** THE CLOUD

Software



Compute

Storage

Database

Networking

Hardware/AWS Global Infrastructure

AWS Regions

Availability Zones

Edge Locations

CUSTOMER

RESPONSIBLE FOR SECURITY **IN** THE CLOUD

Customer Data

Platform, Applications,
Identity & Access Management

Operating System,
Network & Firewall Configuration

Client-side Data Encryption & Data Integrity Authentication

Server-side Encryption (File System and/or Data)

Networking Traffic Protection (Encryption, Integrity, Identity)

Common threats continue to proliferate

DDoS

Threat actors

Ransomware

DDoS remains a common security threat

35%

increase of DDoS events

256%

increase in compromised instances

106K

DDoS attacks prevented

Build DDoS-resilient architecture

AWS Shield

Maximize application availability and responsiveness with managed DDoS protection

AWS WAF

Protect your web applications from common exploits

Threat actors are continuously deploying malware

AWS sensors processed

>224M

malware samples in six months

AWS distilled them down into

28,673

unique types of malware

Protect EC2 instances

Amazon GuardDuty

Protect your AWS accounts with intelligent threat detection

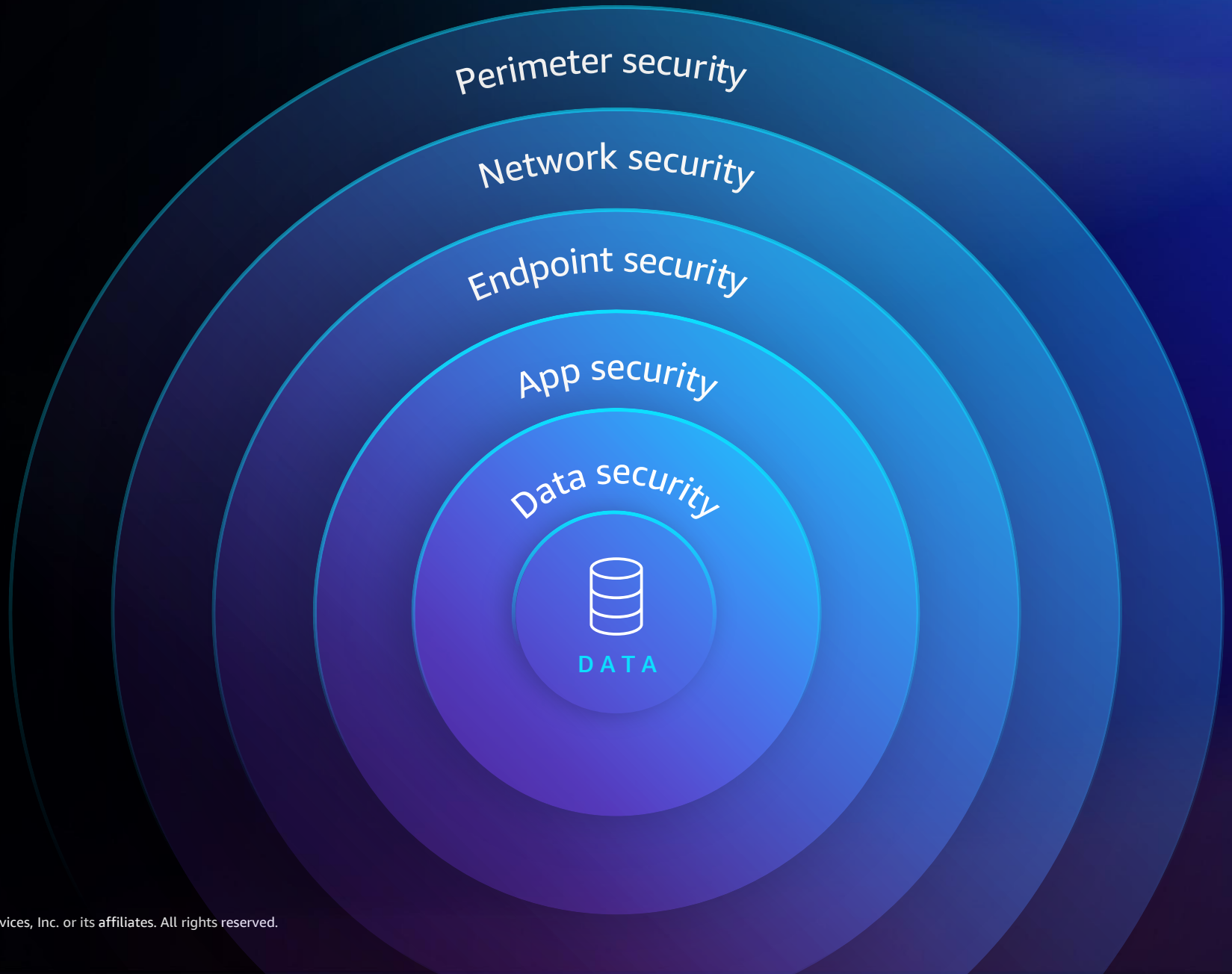
Protect against unintended disclosure of credentials

AWS IAM Identity Center

Centrally manage workforce access to multiple AWS accounts and applications

AWS Security Hub

Automate AWS security checks and centralize security alerts



Six learnings

AS AWS CISO

1

Educate **everyone** about security

2

Security-first culture

Product Managers

Developers

C-Suite

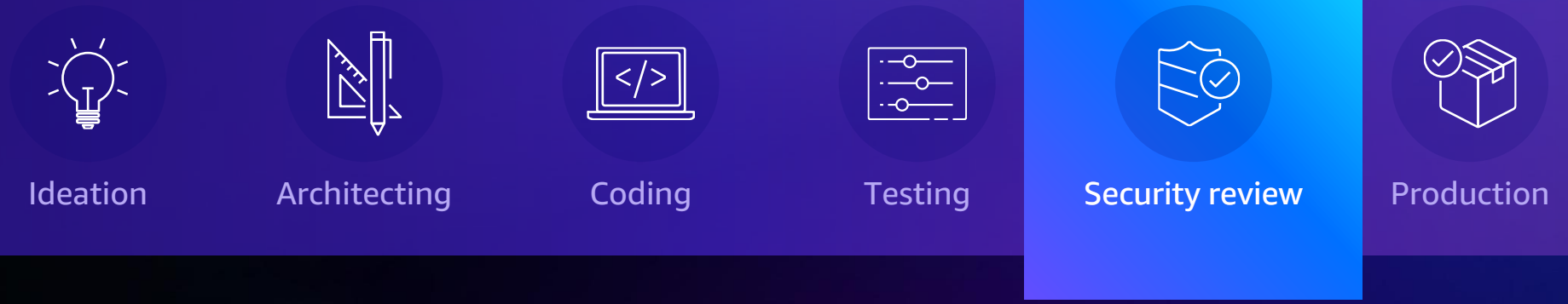
Business Leaders

Front-Office Employees

3

Hire and develop **the best**

4



Shift left and automate

4

Shift left and automate

5

Invest in a **dynamic workforce**

6

Make security the department of **“yes, and…”**

Six learnings

AS AWS CISO

1

Educate **everyone** about security

2

Security-first culture

3

Hire and develop **the best**

4

Shift left and automate

5

Invest in a **dynamic workforce**

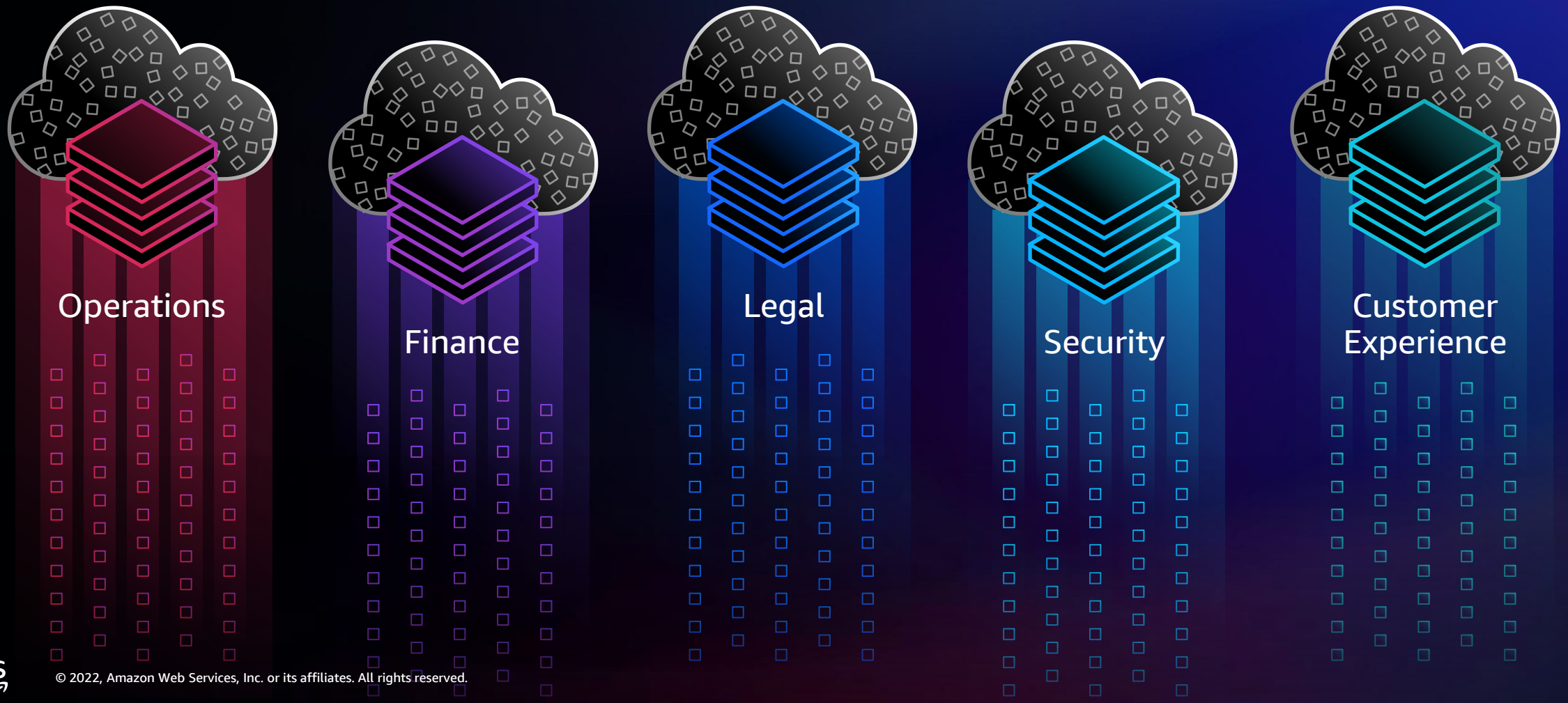
6

Make security the department of "**yes, and...**"

Predictions for 2023

THE OUTLOOK FOR NEXT YEAR

Increasing threats continue to drive the shift to the cloud



NEW

Amazon Security Lake

PREVIEW AVAILABLE TODAY

Analyze data using your preferred analytics tools while retaining control and ownership of your security data

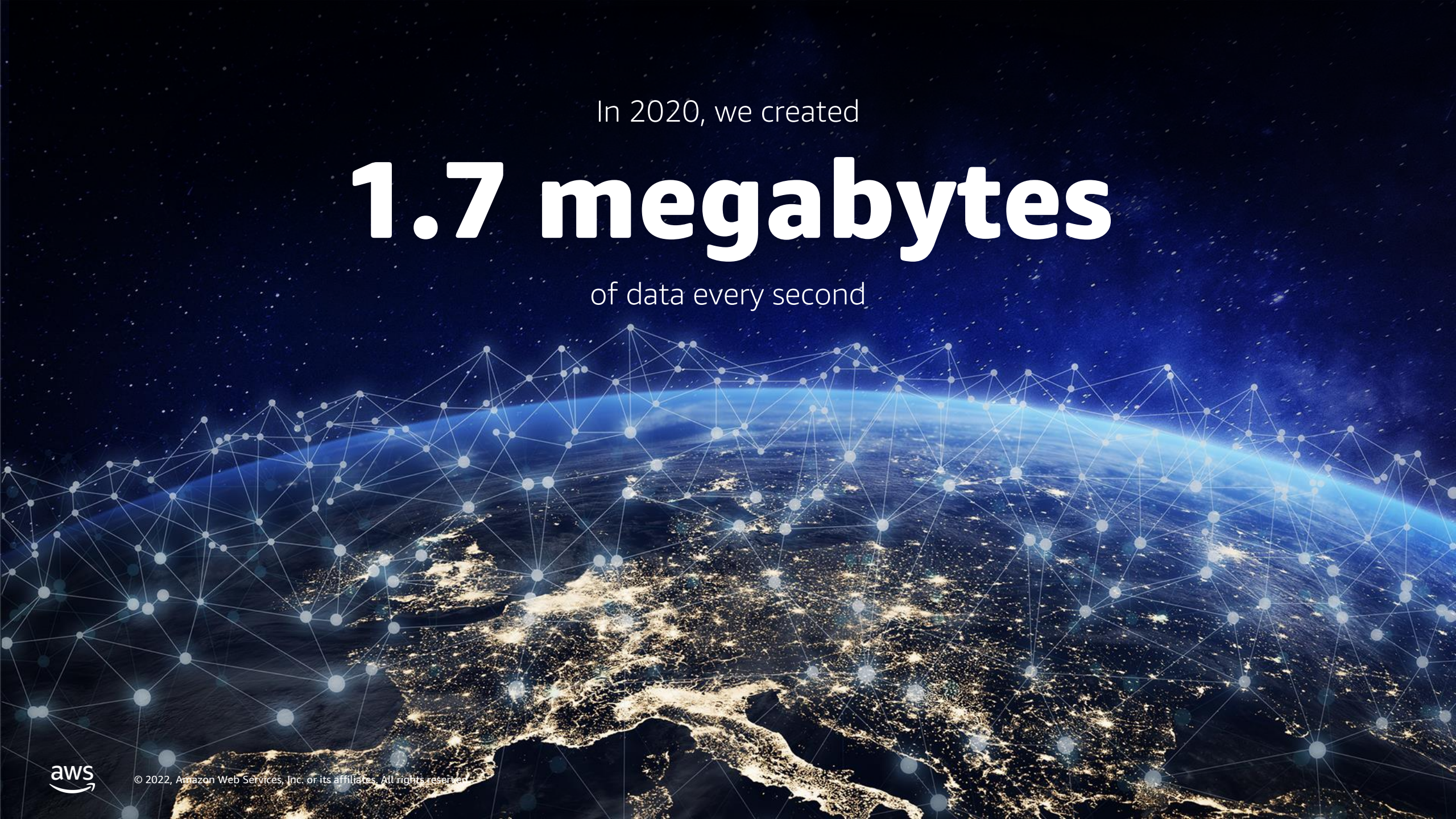
Centralize data from cloud, on-premises, and custom security sources across accounts and Regions

Normalize data to an industry standard to easily share and use with multiple analytics tools

Optimize and manage security data for more efficient storage and query performance

The growing need for **security professionals**

Automation in cloud security



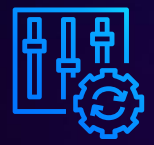
NEW

Amazon Macie introduces automated data discovery

GENERALLY AVAILABLE TODAY

Discover and protect your sensitive data at scale

Gain cost-efficient visibility into sensitive data stored in Amazon S3, with one click



Use the interactive S3 data map to continually strengthen your data security posture

Reduce triage time with actionable reporting of sensitive data and sensitivity score for each bucket

aws

Interactive data map

NEW

External Key Store (XKS) for AWS KMS

GENERALLY AVAILABLE TODAY

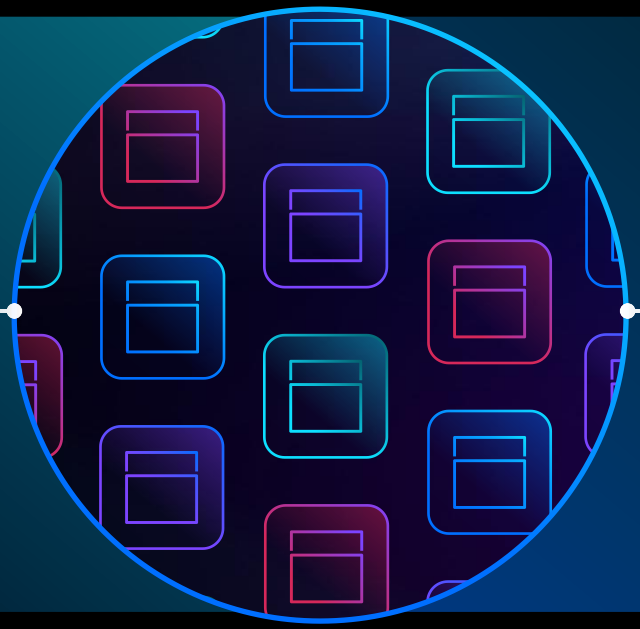
Protect your data with encryption keys stored in an external key management system

Provides the ability to externally track and control every cloud encrypt and decrypt request

Works with over 100 AWS services

Builder teams

App developers



Compliance teams

Security teams

Applications

End users

NEW

Amazon Verified Permissions

PREVIEW AVAILABLE TODAY

Accelerate application development by decoupling authorization from business logic in your application

Save time and resources with centralized permissions and policy lifecycle management

Simplify compliance audits at scale using automated analysis to confirm permissions work as intended

Build applications that support Zero Trust architectures with dynamic, real-time authorization decisions

aws

Multimodal forms of authentication

NEW

Multiple MFA for AWS Identity and Access Management (IAM)

GENERALLY AVAILABLE TODAY

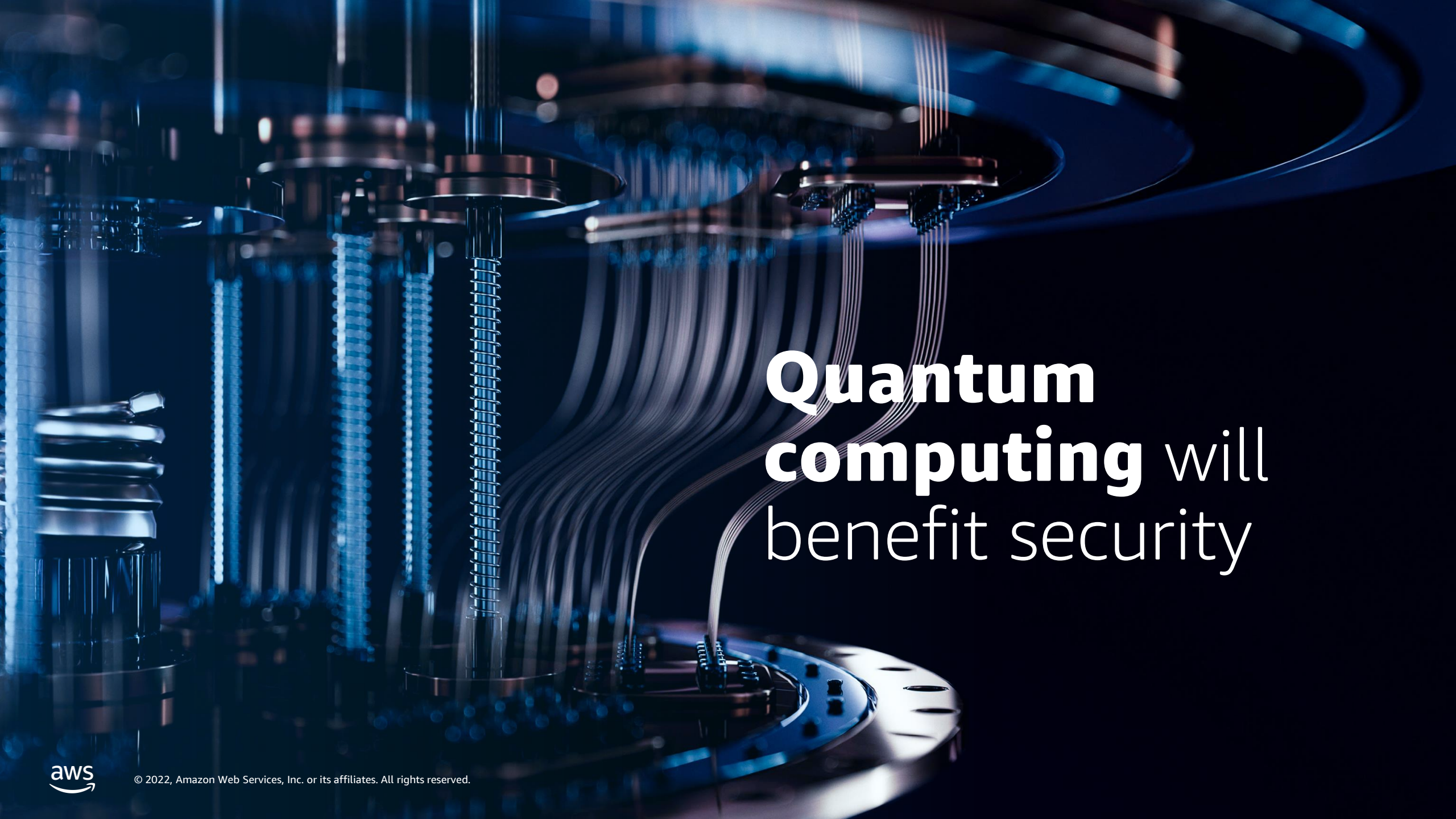
Add up to 8 MFA devices to AWS account root users and IAM users

Raise the security bar and limit access management to highly privileged principals

Use multiple types of MFA methods to secure your organization

Free MFA keys

BOOTH 1335 IN THE VILLAGE



Hybrid post-quantum key agreement

Working on post-quantum standards within the Internet Engineering Task Force


UNITED
N37267

Fireside chat

CJ Moses

Chief Information Security Officer
Amazon Web Services

Deneen DeFiore

Chief Information Security Officer
United Airlines

Thank you!

CJ Moses
Chief Information Security Officer
Amazon Web Services

Deneen DeFiore
Chief Information Security Officer
United Airlines

Please complete the session survey in the **mobile app**