



# Cloud Computing Foundation and AWS for Startups

HK Tech 300

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Sr. Startup Business Development Manager, AWS

Jul 08, 2021



## Who am I

- Amazonian
- 10+ years in Business Development
- 4+ years at AWS Startup team
- Enterprise Sales
- Business Owner in Manufacturing
- Certified AWS Solutions Architect
- Amateur Developer



## eCommerce

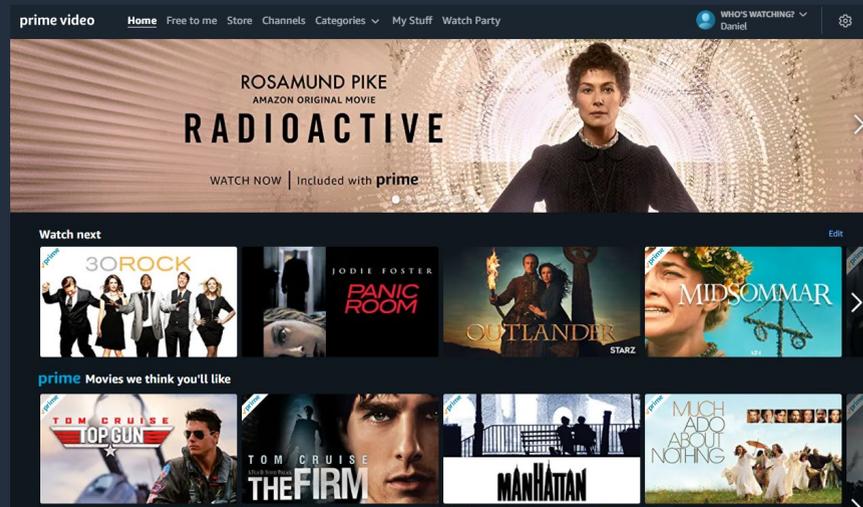
### Explore Our Solutions

<p><b>Machine Learning</b> Build with powerful services and platforms, and the broadest machine learning framework support anywhere.</p> <p><a href="#">Learn More</a></p>	<p><b>Analytics &amp; Data Lakes</b> Securely store, categorize, and analyze all your data in one, centralized repository.</p> <p><a href="#">Learn More</a></p>	<p><b>Internet of Things</b> A system of ubiquitous devices connecting the physical world to the cloud.</p> <p><a href="#">Learn More</a></p>	<p><b>Serverless Computing</b> Build and run applications and services without thinking about servers.</p> <p><a href="#">Learn More</a></p>
<p><b>Containers</b> Package and deploy applications that are lightweight and provide a consistent, portable software environment for applications to easily run and scale anywhere.</p> <p><a href="#">Learn More</a></p>	<p><b>Enterprise Applications</b> Build with a mature set of services specifically designed for the unique security, compliance, privacy, and governance requirements of large organizations.</p> <p><a href="#">Learn More</a></p>	<p><b>Storage</b> Durable, cost-effective options for backup, disaster recovery, and data archiving at petabyte scale.</p> <p><a href="#">Learn More</a></p>	<p><b>Windows Workloads</b> Flexible, scalable compute capacity for Microsoft applications. Easily manage and secure Windows workloads.</p> <p><a href="#">Learn More</a></p>

## Cloud Computing

<p><b>Echo &amp; Alexa Devices</b> Play music, control your smart home, get information, and more using just your voice.</p>	<p><b>Fire Tablets</b> Powerful tablets designed for entertainment—at an affordable price.</p>	<p><b>Fire TV</b> Stream over 500,000 TV episodes and movies. Watch favorites from Netflix, Prime Video, HBO GO, and more.</p>
<p><b>Kindle E-readers</b> The best devices for reading, period. Hold thousands of books with no screen glare.</p>	<p><b>Home Security from Amazon</b> Protect your entire home with security systems and cameras from Amazon.</p>	<p><b>Device Deals</b> Deals, sales, and special offers on Echo &amp; Alexa devices, Fire tablets, Fire TV, and more.</p>

## Devices



## Streaming Content



## Consumables



## Physical Retail



**aws**

is the cloud computing arm of

**amazon**

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\$54B

Revenue run rate

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ANNUALIZED FROM Q1 2021

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32%

Y/Y growth

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Q1 2021 vs. Q1 2020



# What is this cloud thing?



**Dedicated** Infrastructure and Services

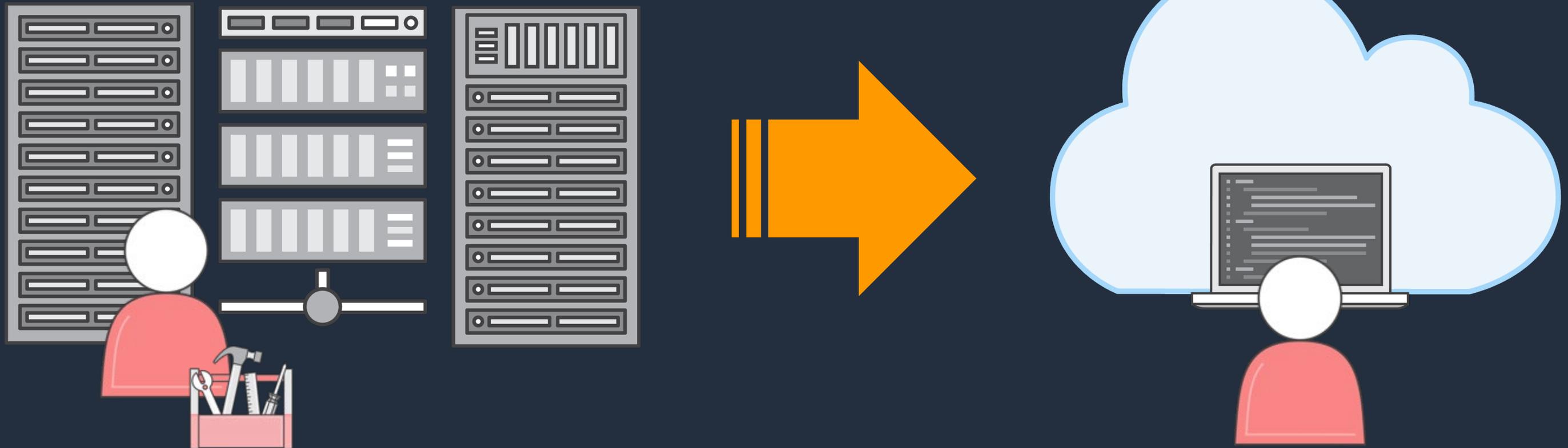


**Shared** hardware and configurable services – networking, compute, storage, etc.

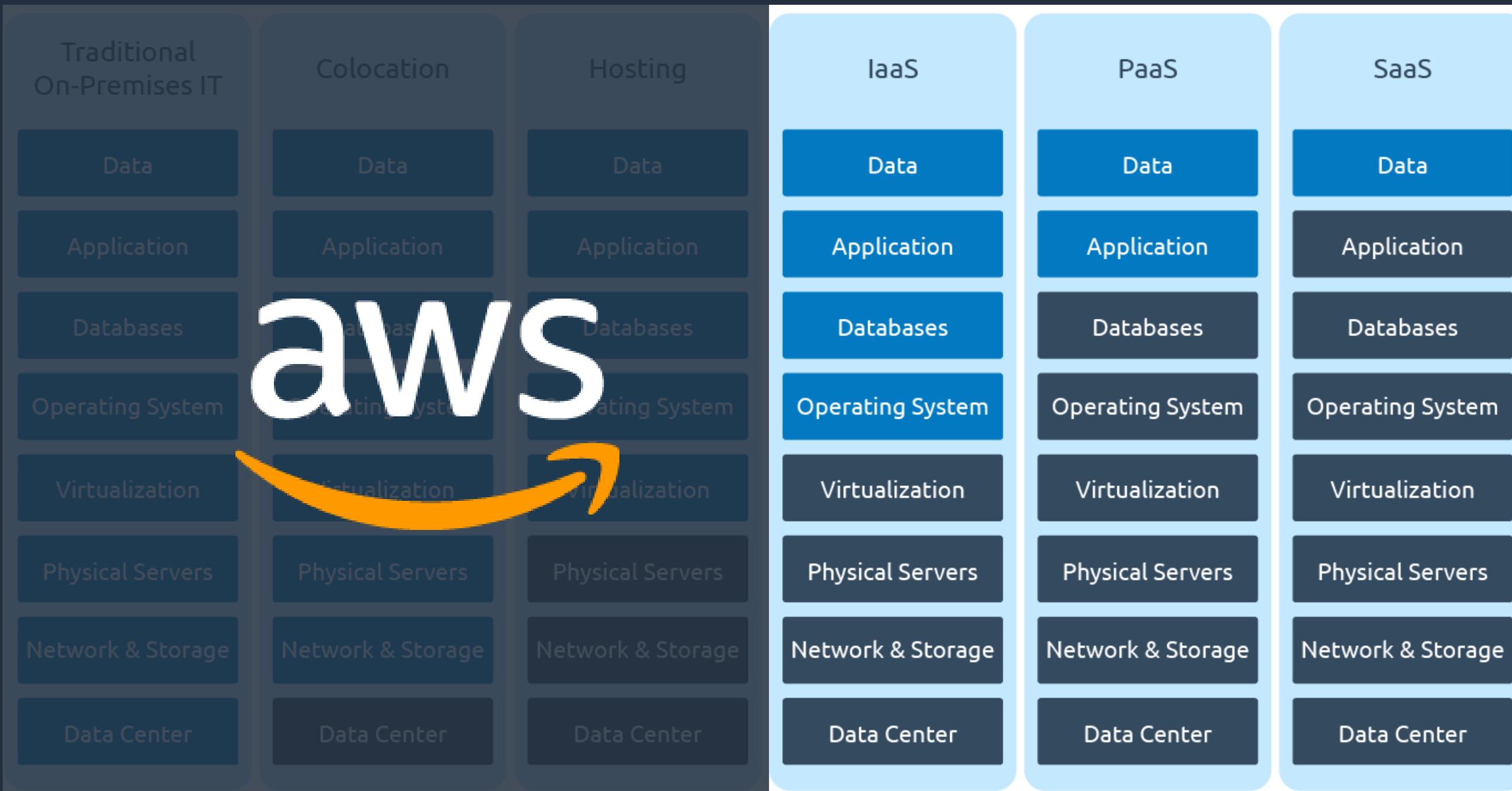
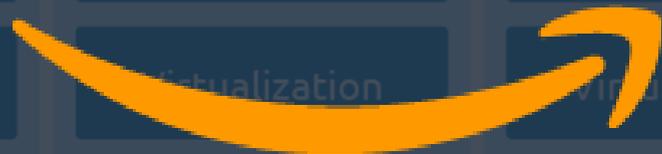


Higher Utilization  
Lower Cost  
Reliable  
Secure

**AWS has enabled on-demand delivery of computing power, database storage and other IT resources via the internet with pay-as-you-go pricing**



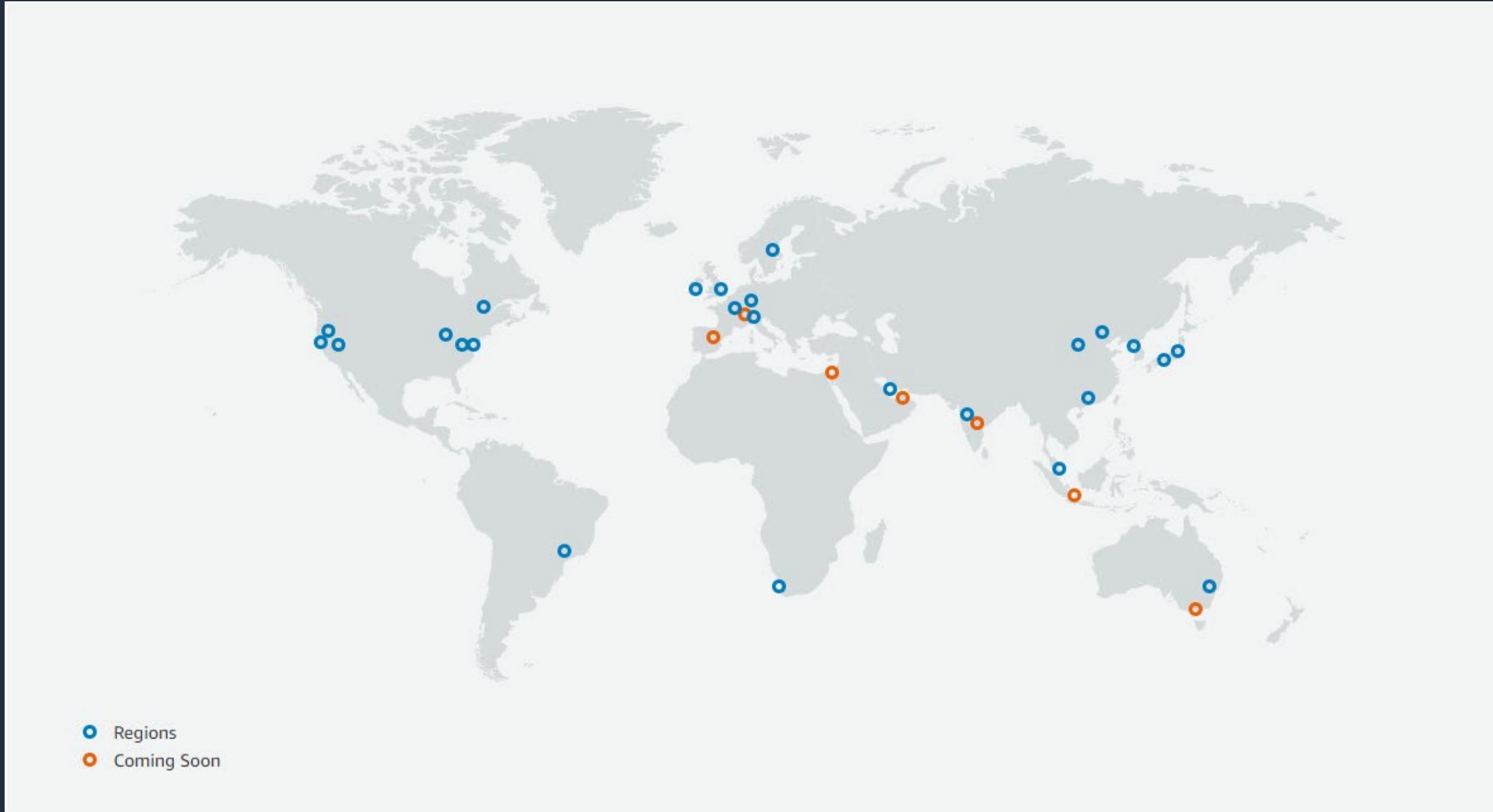
# aws



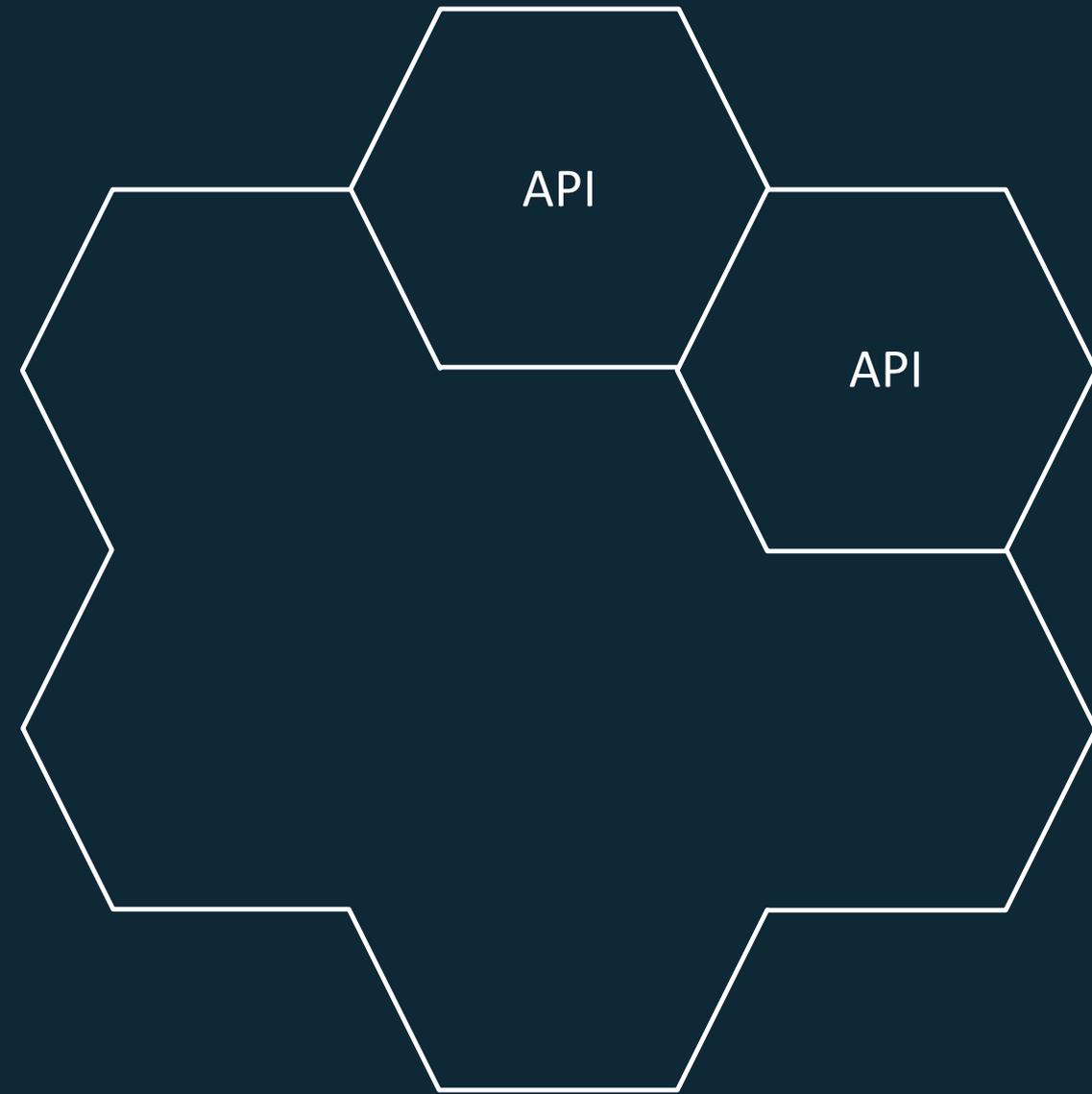
■ Provider-Supplied   ■ Self-Managed

# AWS Global Infrastructure

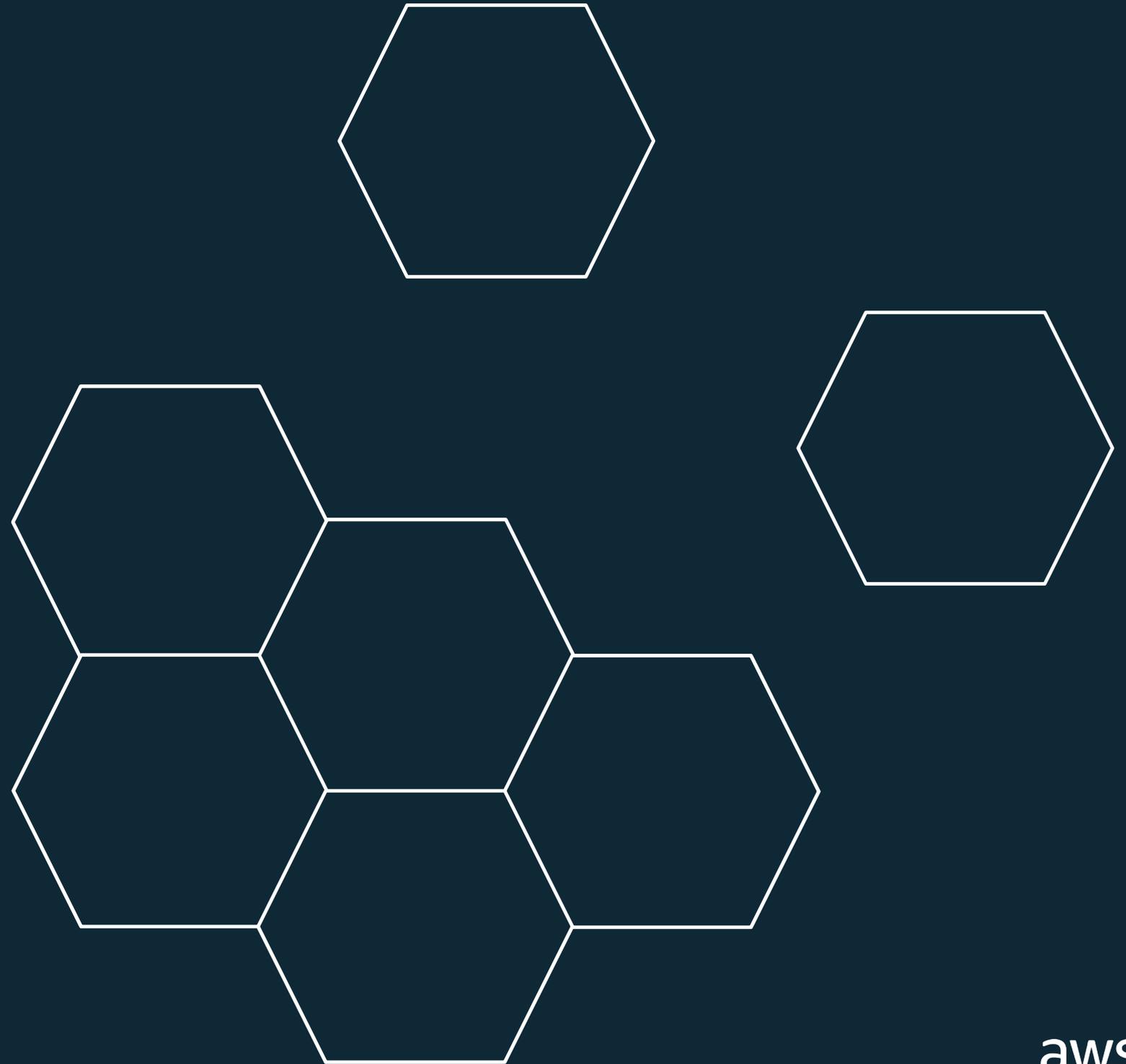
25 geographical regions, 81 availability zones, 230+ POPs



# Service design: Decompose the monolith



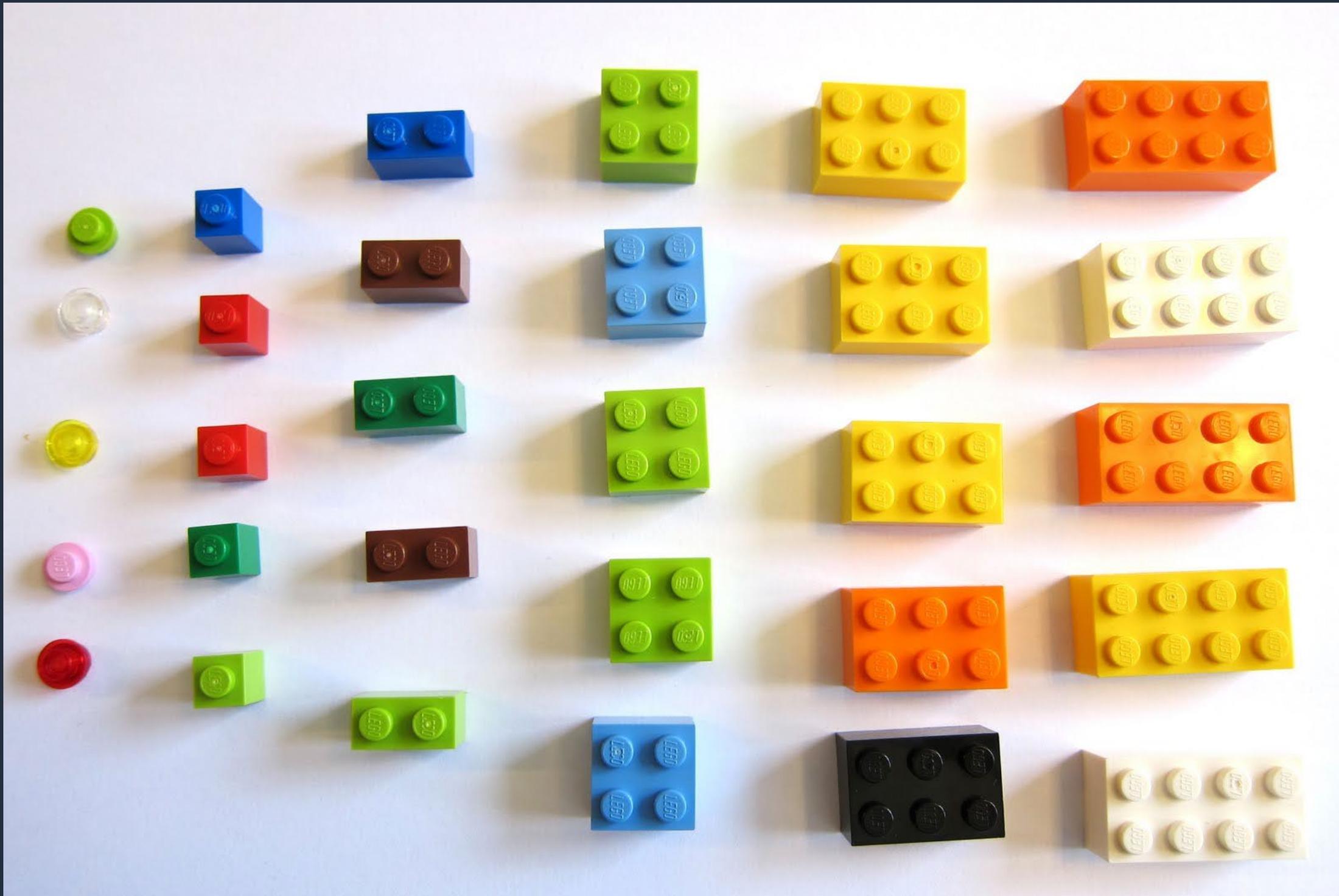
# Splitting into Microservices



# Splitting into Microservices







## ▼ All services

## 🖥️ Compute

EC2  
 Lightsail [↗](#)  
 Lambda  
 Batch  
 Elastic Beanstalk  
 Serverless Application Repository  
 AWS Outposts  
 EC2 Image Builder  
 AWS App Runner

## 🏠 Containers

Elastic Container Registry  
 Elastic Container Service  
 Elastic Kubernetes Service  
 Red Hat OpenShift Service on AWS

## 📁 Storage

S3  
 EFS  
 FSx  
 S3 Glacier  
 Storage Gateway  
 AWS Backup

## 🗄️ Database

RDS  
 DynamoDB  
 ElastiCache  
 Neptune  
 Amazon QLDB  
 Amazon DocumentDB  
 Amazon Keyspaces

## 🔧 Developer Tools

CodeStar  
 CodeCommit  
 CodeArtifact  
 CodeBuild  
 CodeDeploy  
 CodePipeline  
 Cloud9  
 CloudShell  
 X-Ray  
 AWS FIS

## 👤 Customer Enablement

AWS IQ [↗](#)  
 Support  
 Managed Services  
 Activate for Startups

## 🤖 Robotics

AWS RoboMaker

## \*\*\* Blockchain

Amazon Managed Blockchain

## 📡 Satellite

Ground Station

## 🔬 Quantum Technologies

Amazon Braket

## 📁 Management &amp; Governance

AWS Organizations  
 CloudWatch  
 AWS Auto Scaling  
 CloudFormation

## 🧠 Machine Learning

Amazon SageMaker  
 Amazon Augmented AI  
 Amazon CodeGuru  
 Amazon DevOps Guru  
 Amazon Comprehend  
 Amazon Forecast  
 Amazon Fraud Detector  
 Amazon Kendra  
 Amazon Lex  
 Amazon Personalize  
 Amazon Polly  
 Amazon Rekognition  
 Amazon Textract  
 Amazon Transcribe  
 Amazon Translate  
 AWS DeepComposer  
 AWS DeepLens  
 AWS DeepRacer  
 AWS Panorama  
 Amazon Monitron  
 Amazon HealthLake  
 Amazon Lookout for Vision  
 Amazon Lookout for Equipment  
 Amazon Lookout for Metrics

## 📊 Analytics

Athena  
 Amazon Redshift  
 EMR  
 CloudSearch  
 Elasticsearch Service  
 Kinesis

## 📊 AWS Cost Management

AWS Cost Explorer  
 AWS Budgets  
 AWS Marketplace Subscriptions  
 AWS Application Cost Profiler

## 📱 Front-end Web &amp; Mobile

AWS Amplify  
 Mobile Hub  
 AWS AppSync  
 Device Farm  
 Amazon Location Service

## 🕶️ AR &amp; VR

Amazon Sumerian

## 🔗 Application Integration

Step Functions  
 Amazon AppFlow  
 Amazon EventBridge  
 Amazon MQ  
 Simple Notification Service  
 Simple Queue Service  
 SWF  
 Managed Apache Airflow

## 🏢 Business Applications

Amazon Connect  
 Amazon Pinpoint  
 Amazon Honeycode  
 Amazon Chime [↗](#)  
 Amazon Simple Email Service  
 Amazon WorkDocs  
 Amazon WorkMail

dTrail

ig

Works

ice Catalog

ams Manager

AppConfig

ted Advisor

rol Tower

License Manager

Well-Architected Tool

onal Health Dashboard [↗](#)

Chatbot

ich Wizard

Compute Optimizer

urce Groups & Tag Editor

zon Grafana

zon Prometheus

Proton

lent Manager

lia Services

sis Video Streams

iaConnect

iaConvert

MediaLive

MediaPackage

MediaStore

MediaTailor

Elemental Appliances & Software

Amazon Interactive Video Service

Elastic Transcoder

Nimble Studio

QuickSight [↗](#)

Data Pipeline

AWS Data Exchange

AWS Glue

AWS Lake Formation

MSK

AWS Glue DataBrew

Amazon FinSpace

## 🛡️ Security, Identity, &amp; Compliance

IAM

Resource Access Manager

Cognito

Secrets Manager

GuardDuty

Inspector

Amazon Macie

AWS Single Sign-On

Certificate Manager

Key Management Service

CloudHSM

Directory Service

WAF & Shield

AWS Firewall Manager

Artifact

Security Hub

Detective

AWS Audit Manager

AWS Signer

AWS Network Firewall

Alexa for Business

## 👤 End User Computing

WorkSpaces

AppStream 2.0

WorkLink

## 🌐 Internet of Things

IoT Core

FreeRTOS

IoT 1-Click

IoT Analytics

IoT Device Defender

IoT Device Management

IoT Events

IoT Greengrass

IoT SiteWise

IoT Things Graph

## 🎮 Game Development

Amazon GameLift

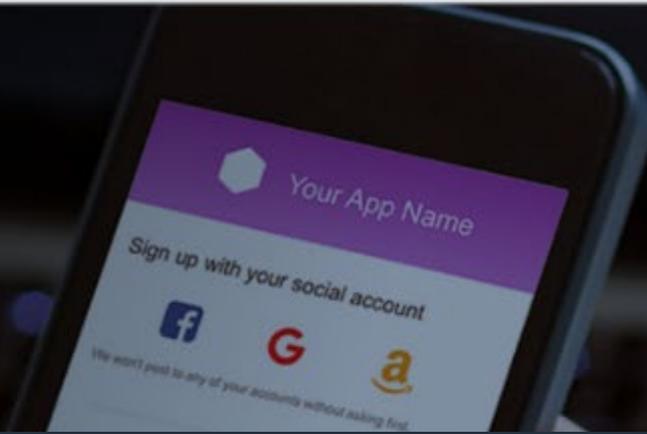


# Amazon Cognito

Simple and Secure User Sign-Up, Sign-In, and Access Control

Amazon Cognito lets you add user sign-up, sign-in, and access control to your web and mobile apps quickly and easily. Amazon Cognito scales to millions of users and supports sign-in with social identity providers, such as Facebook, Google, and Amazon, and enterprise identity providers via SAML 2.0.

Sign up now



## It really is this easy



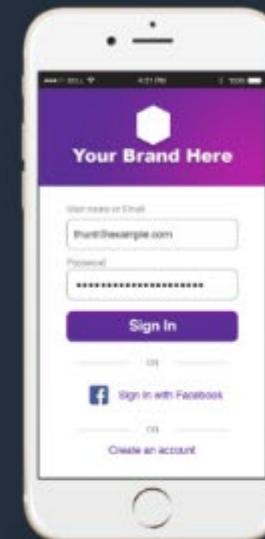
iOS Objective C Android iOS Swift React Native Web Apps

Sign in users and get back tokens using the SDKs and a few lines of code.

```

1 //Android
2 // 1) -- Create an instance of Auth --
3 Auth.Builder builder = new Auth.Builder()
4   .setAppClientId(getString(R.string.cognito_client_id));
5   .setAppCognitoWebDomain(getString(R.string.cognito_web_domain));
6   .setApplicationContext(getApplicationContext());
7   .setAuthHandler(new callback());
8   .setSignInRedirect(getString(R.string.app_redirect_signin));
9   .setSignOutRedirect(getString(R.string.app_redirect_signout));
10  .setScopes(userScopes);
11  auth = builder.build();
12
13 // 2) - Set up url redirect in your app manifest --
14 <intent-filter>
15   <data android:host="YOUR_REDIRECT_URI_AUTHORITY" android:scheme="YOUR_RI
16 </intent-filter>
17
18 // 3) -- Get tokens for your user --
19 auth.getSession();

```



### 6 Episode Live Coding Series | Live with AM & Nicki

Use Amazon Cognito to add user sign in, sign up, and other authentication features to your app  
[Watch now >](#)

# Amazon Rekognition

Deep learning-based visual analysis service  
Search, verify, and organize millions of images and videos

[Try Demo](#)

[Download SDKs](#)



Object and Scene  
Detection



Facial  
Analysis



Face  
Comparison



Facial  
Recognition



Celebrity  
Recognition



Image  
Moderation

Traffic Cam 352 - Riverview West  
Northbound



🕒 03:15:05:41

Mon, Nov 27, 2017



4,000+

**Container Service**

**EC2**

**Import/Export**

**Snowball**

**AWS Storage Gateway**

**Amazon Cognito**

**CodeCommit**

**AWS OpsWorks**

**AWS CodeDeploy**

**Amazon ElastiCache**

**Amazon Config**

**Amazon CloudTrail**

**Elastic Transcoder**

**Amazon SES**

**Container Service**

**Amazon Kinesis**

**CloudHSM**

**Elasticsearch Service**

**AWS Elastic Beanstalk**

**Amazon WorkMail**

**EC2 Container**

**Registry**

**AWS Certificate Manager**

**AWS CodePipeline**

**Amazon EFS**

**Amazon Route 53**

**Redshift**

**Lambda**

**Identity & Access Management**

**AWS CloudFormation**

**Amazon AppStream**

**AWS Device Farm**

**Dynamo DB**

**QuickSight**

**Directory Service**

**Amazon RDS for Aurora**

**AWS Data Pipeline**

**AWS WAF**

**RDS for MariaDB**

**AWS Mobile Hub**

**Amazon SNS**

**Amazon SWF**

**Amazon API Gateway**

**AWS KMS**

**CloudSearch**

**WorkSpaces**

**Amazon Machine Learning**

**AWS Direct Connect**

**WorkDocs**

**AWS IoT**

**CloudWatch Logs**

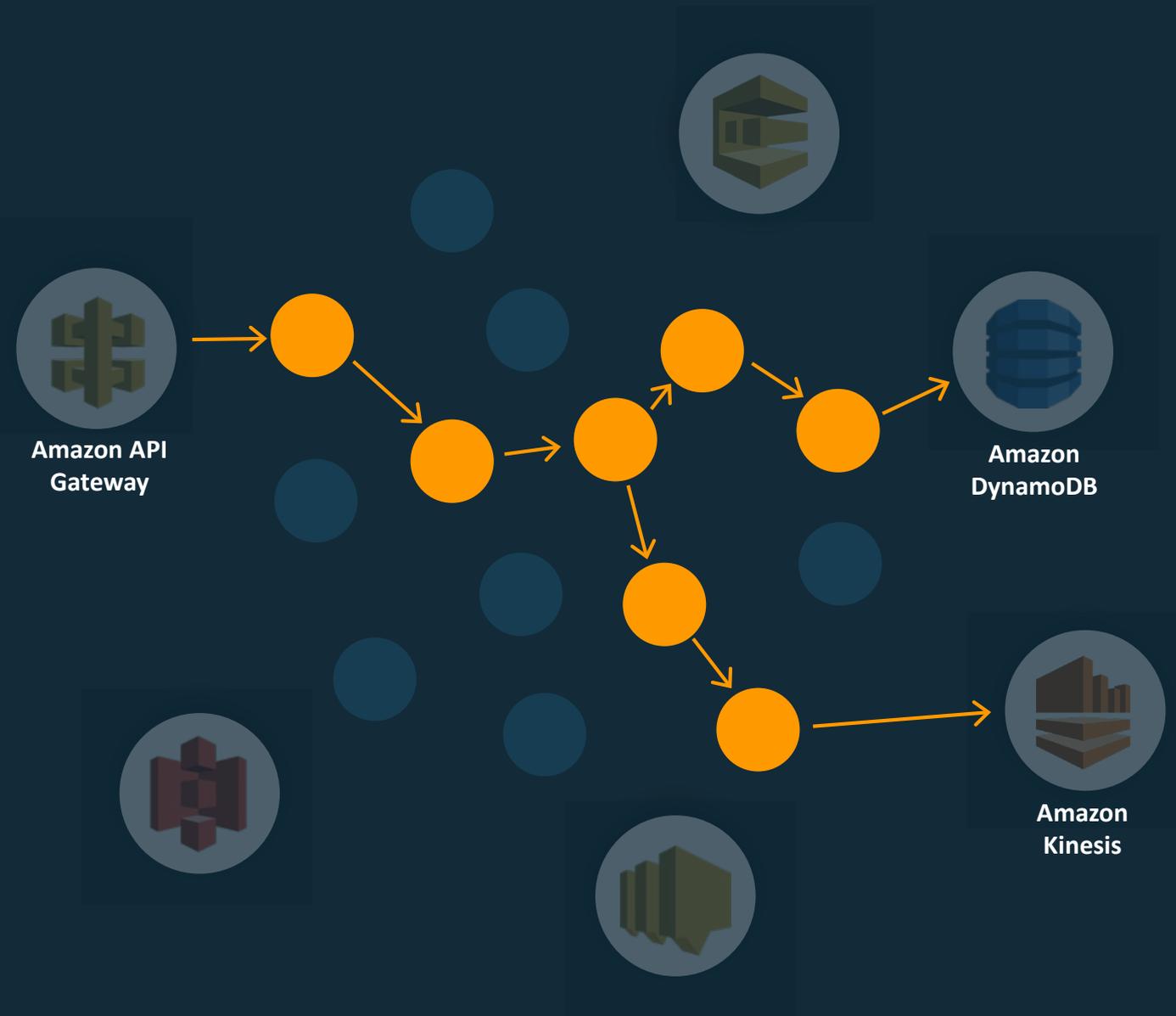
**Mobile Analytics**

**Glacier**

**Amazon Inspector**

**AWS Service Catalog**

# Microservices to Ephemeral Functions

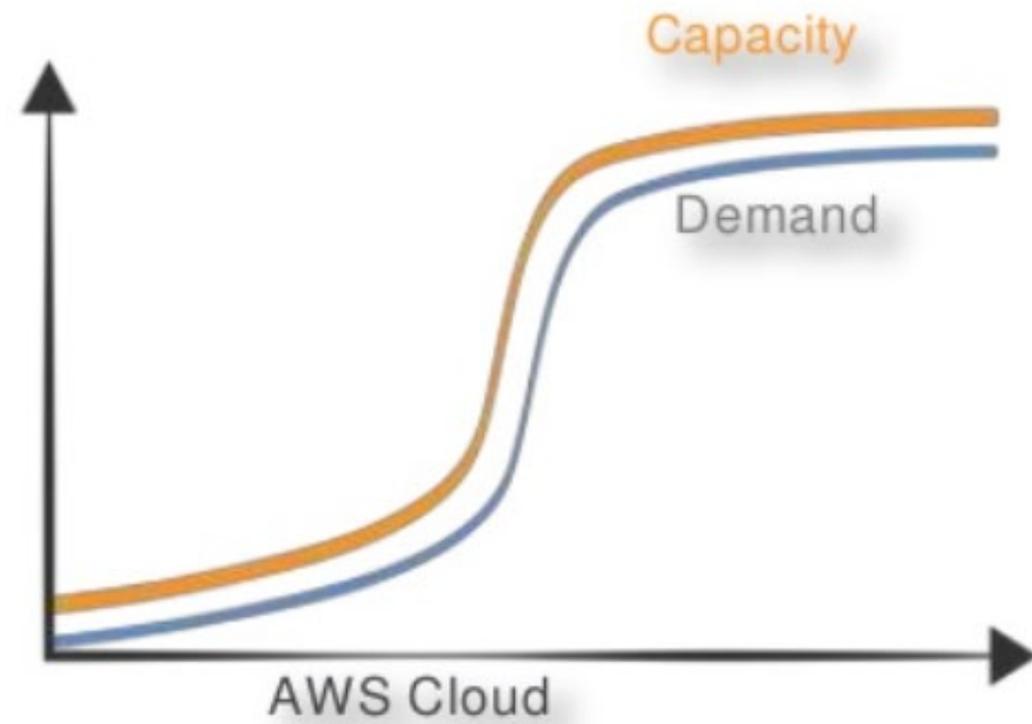


# Microservices to Ephemeral Functions

When the system is idle, it shuts  
down and costs nothing to run



## Startups pre-AWS



# Why customers choose AWS

Most experience

**15**

years helping millions of customers

Global reach & high availability

**83**

availability zones spanning 25 geographic regions

Security & compliance

**203+**

security features

Customer obsession & innovation

**165+**

service offerings

Capable of delivering up to

**80,000** IOPS/  
instance

with consistency

Improve TCO

**77**

price reductions since 2006

Machine learning

**81%**

of all deep learning is running on AWS<sup>1</sup>

Ecosystem

**4,500**

software listings from 1,400 ISVs

Because you can test your idea, very quickly, for **little money**. Then, if you are on to something, you can **scale, rapidly**.

# Startups are building on AWS



# Beyond technology

## Global Startup Business Development team

At AWS, we have a team of **exited founders, former investors and startup mentors** aligned to every VC and accelerator of note

# We focus on helping our startup customers grow

by wiring them into people, resources, opportunities across Amazon

## Technical

- Architecture design/optimization reviews
- Best practices
- Subject matter experts
- Betas/previews
- Security/compliance

## Go-to-market

- Co-marketing
- PoC funding
- Sales referrals
- Distribution
- Capital intros

# aws activate



## Benefits

- Up to USD 1,000 AWS promotional credits in 12 months
- Up to USD 350 Developer Support credits for 12 months
- Possibility to get extra US\$ 4,000 credits after the 1st year

## Eligibility

- Startups undergoing HK Tech 300 Program

## More information

- [hkt-activate@amazon.com](mailto:hkt-activate@amazon.com)

One more thing...

# aws educate



## For Students:

- 11 free Cloud Career Pathways (30+ hours of content per path)
- Up to \$30 US dollars in credits to use on AWS services (renews annually)
- Free access to AWS Technical Essentials Learning Course (a \$600 US dollar value)
- Access to AWS Educate Job Board

Register: <https://aws.amazon.com/education/awseducate/>



# Thank You

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