Cloud Foundations

Chirag Oswal
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Insert
photo

WHAT I STUDIED

Insert degree

PRIOR
EXPERIENCE
Insert experience

FUN FACT ABOUT ME

insert fun fact

AWS Presenter

Solutions Architect

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Best place to build. Best place to learn.

Our team of Solutions Architects deliver high-touch assistance to guide enterprise customers as they shift and incorporate AWS services into their architecture.

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Cloud Foundations
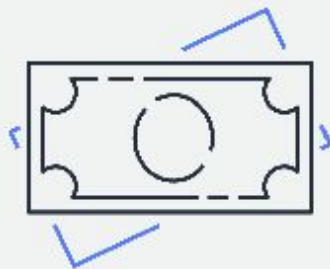
On-Premises vs Cloud

Traditional infrastructure
- Equipment
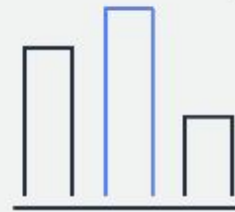- Resources and administration
- Contracts
- Cost

AWS Cloud
- No up-front expense
- Agility
- Lower carbon footprint
- Scale up and down
- Self-service infrastructure

**WHAT IS
CLOUD?**

On-demand delivery of IT resources through the Internet with pay-as-you go pricing

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Cloud Computing Benefits

Agility

The cloud gives you easy access to a broad range of technologies so that you can innovate faster and build nearly anything that you can imagine.

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Agility

Elasticity

With cloud computing, you do not have to over-provision resources up front to handle peak levels of business activity in the future.

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| Agility | Elasticity | **Cost Savings** |

The cloud allows you to trade capital expenses (such as data centers and physical servers) for variable expenses, and only pay for IT as you consume it.

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Agility

Elasticity

Cost Savings

Deploy Globally within Minutes

With the cloud, you can expand to new geographic regions and deploy globally in minutes.
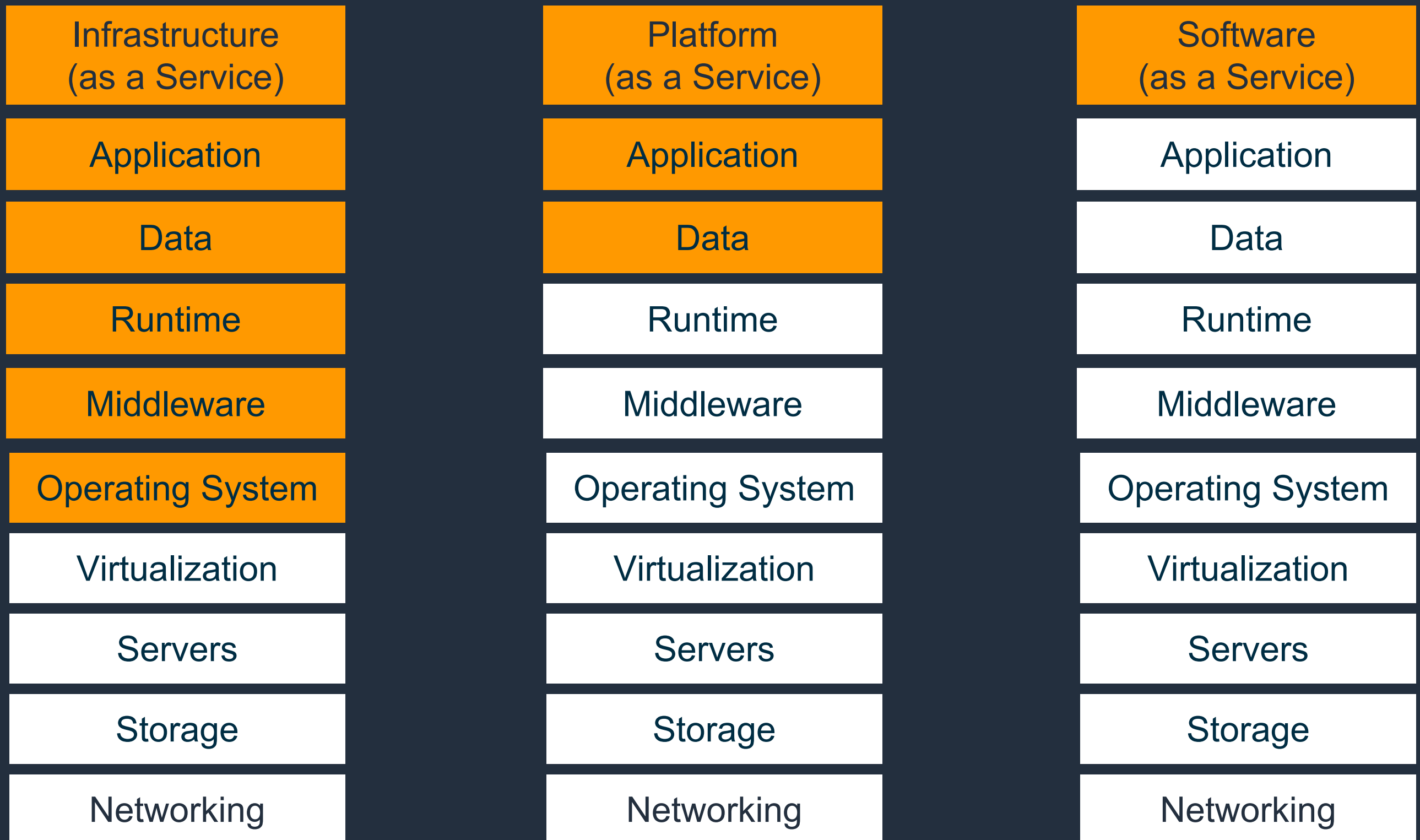
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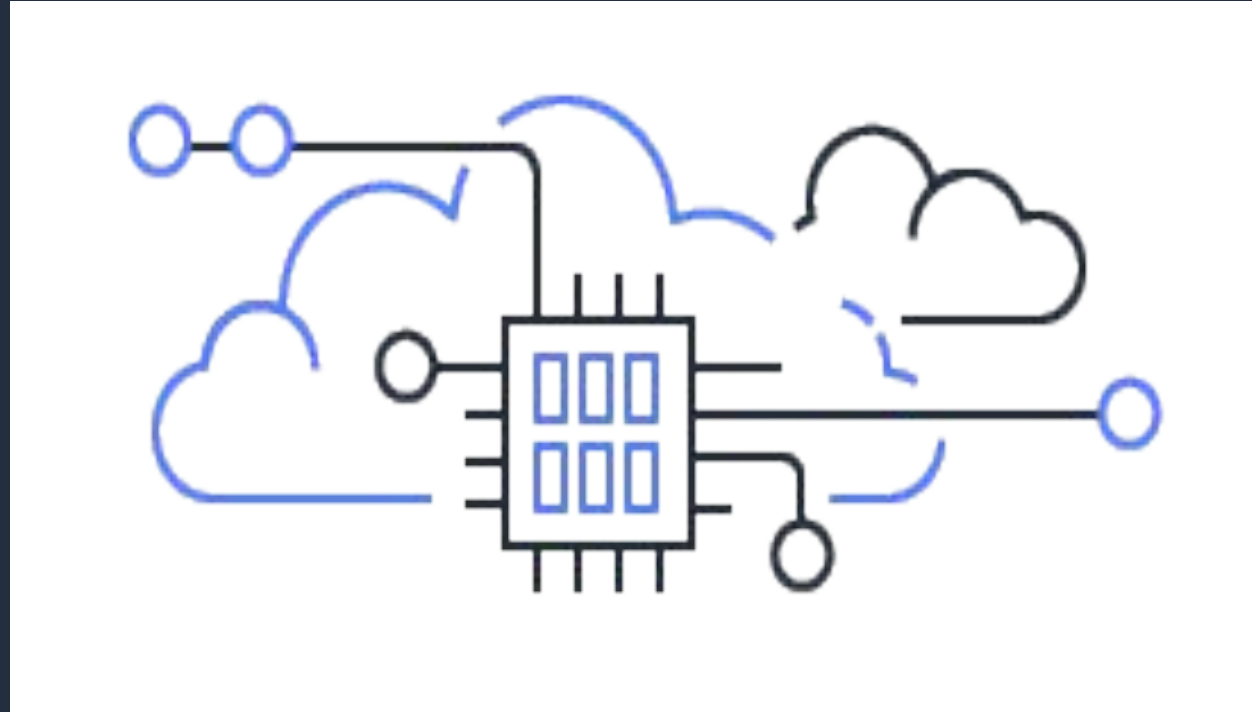# Cloud Computing Models

What is

IaaS vs PaaS vs SaaS

?

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Infrastructure (as a Service)	Platform (as a Service)	Software (as a Service)
Application	Application	Application
Data	Data	Data
Runtime	Runtime	Runtime
Middleware	Middleware	Middleware
Operating System	Operating System	Operating System
Virtualization	Virtualization	Virtualization
Servers	Servers	Servers
Storage	Storage	Storage
Networking	Networking	Networking

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Cloud Computing Deployment Models

Cloud Deployment

A cloud-based application is fully deployed in the cloud and all parts of the application run in the cloud.
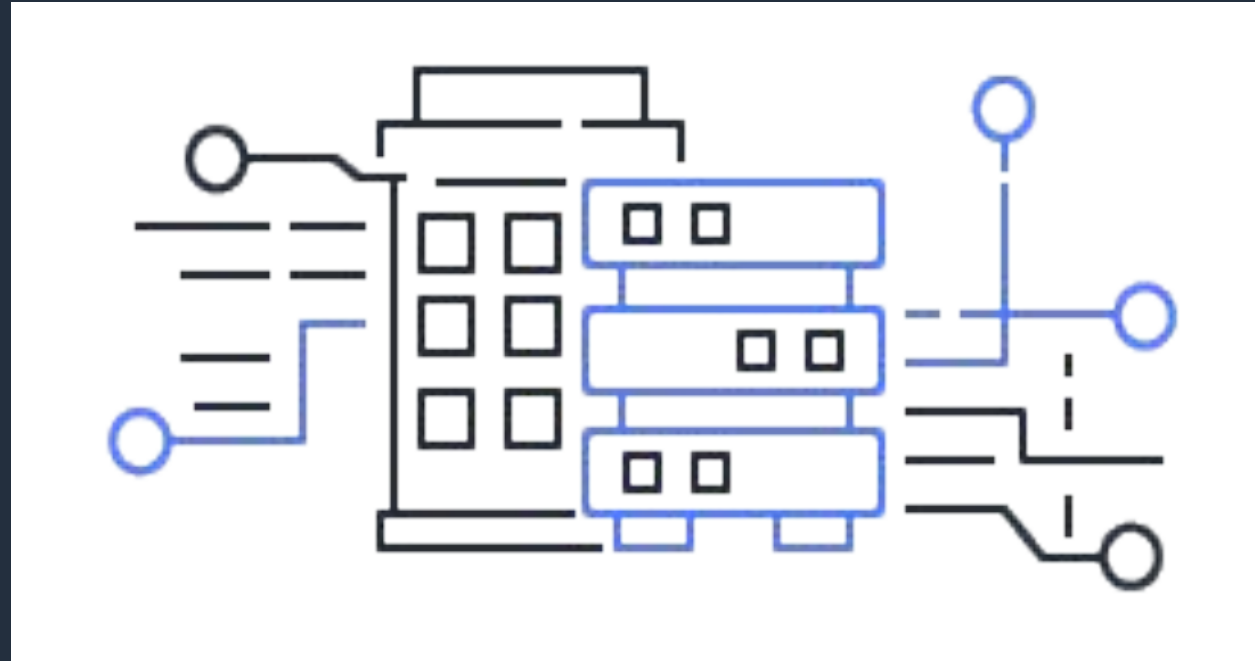
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Hybrid Deployment

A hybrid deployment is a way to connect infrastructure and applications between cloud-based resources and existing resources that are not located in the cloud.

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On-Premises Deployment

Deploying resources on-premises, using virtualization and resource management tools, is sometimes called "private cloud". On-premises deployment does not provide many of the benefits of cloud computing

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Broad and Deep Functionality

TECHNICAL & BUSINESS SUPPORT

MARKETPLACE

ANALYTICS	DEV OPS	MOBILE SERVICES	IoT
MACHINE LEARNING	ENTERPRISE APPS	HYPRID ARCHITECTURE	MIGRATION
APP SERVICES			
INFRASTRUCTURE	CORE SERVICES	SECURITY & COMPLIANCE	MANAGEMENT TOOLS

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200+
SERVICES

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Industry leaders are building on AWS

AWS Global Infrastructure

25
Regions

81
Availability Zones
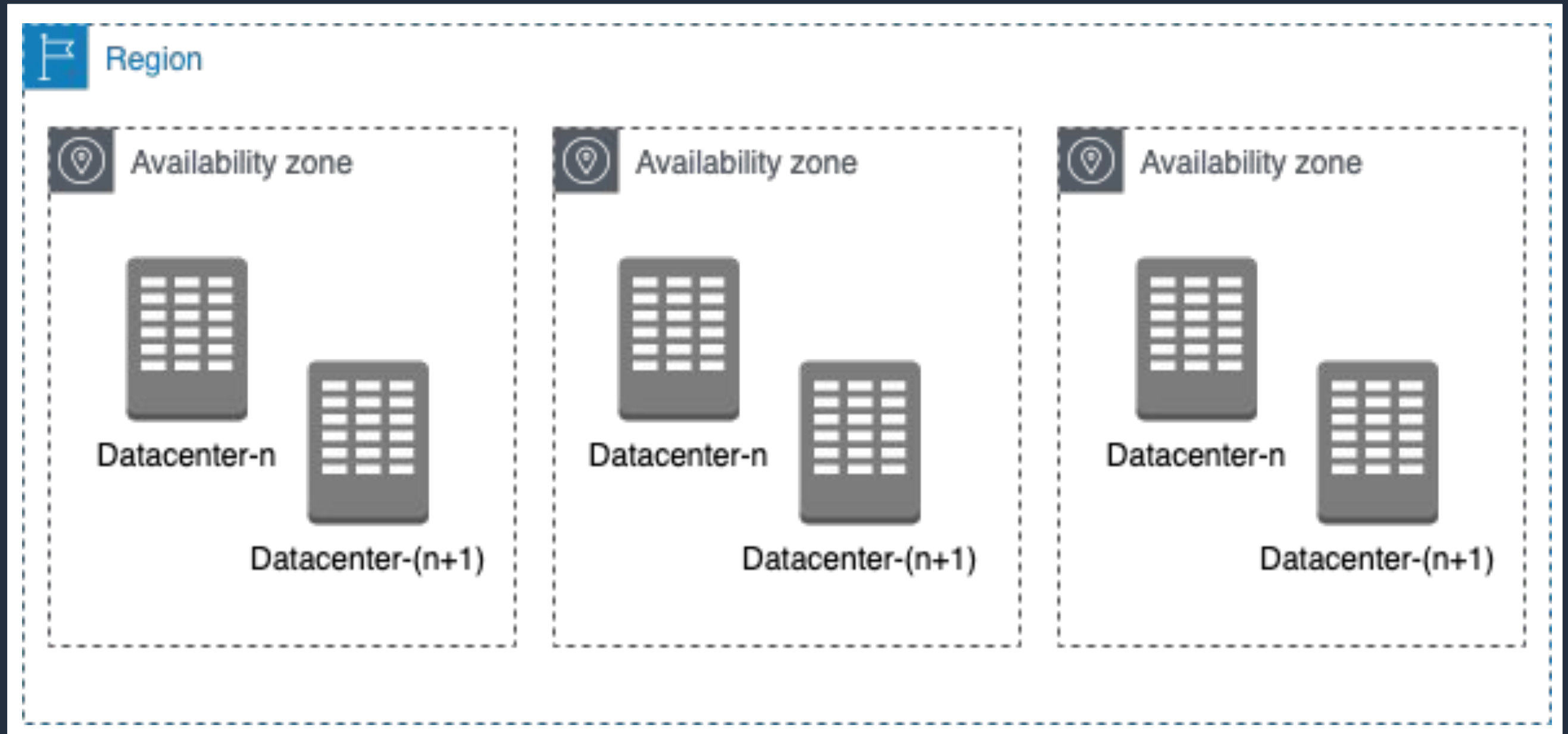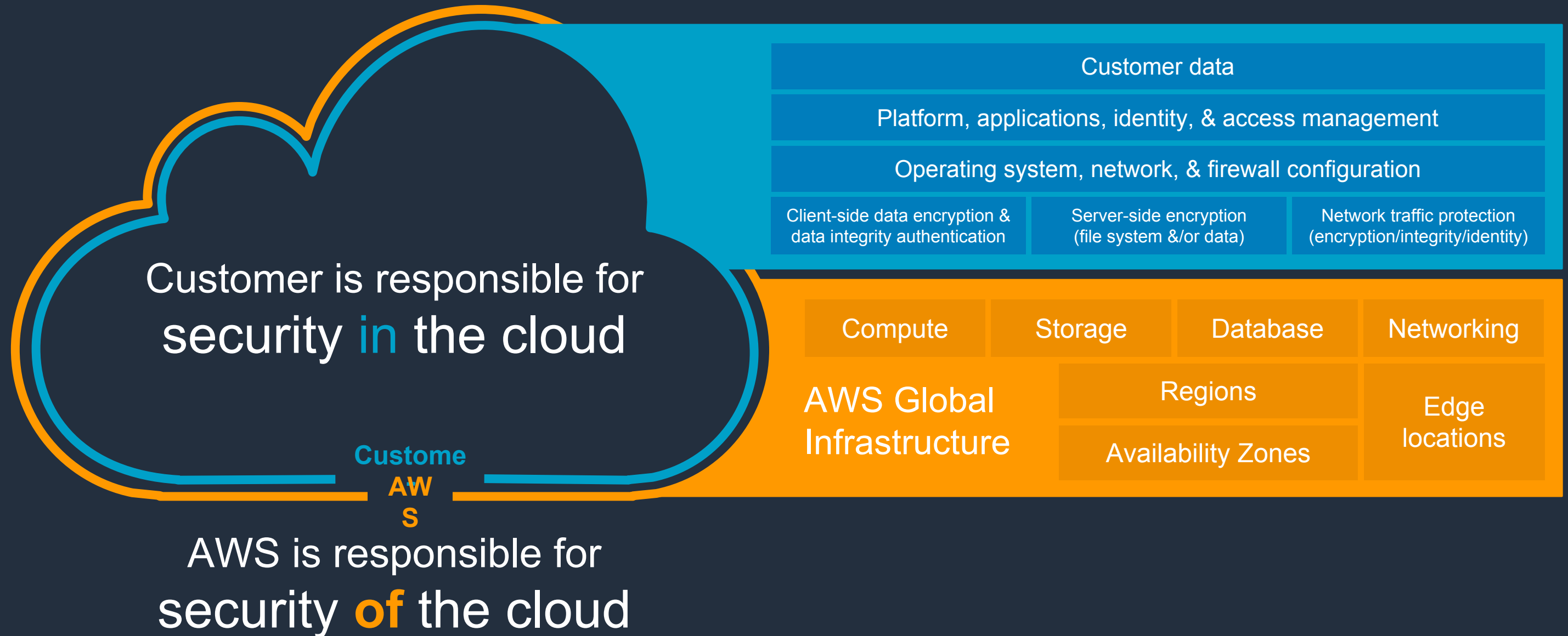
275+
Points of Presence

Announced Regions
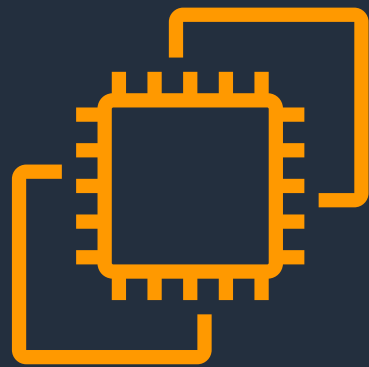Auckland, Melbourne, Jakarta, Hyderabad,, UAE, and Switzerland

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AWS Global Infrastructure

Share your **security responsibility** with AWS

Customer data

Platform, applications, identity, & access management

Operating system, network, & firewall configuration

Client-side data encryption & data integrity authentication	Server-side encryption (file system &/or data)	Network traffic protection (encryption/integrity/identity)

Customer is responsible for security **in** the cloud

Compute	Storage	Database	Networking

AWS Global Infrastructure

Regions	
Availability Zones	Edge locations

Custome
AW
S

AWS is responsible for security **of** the cloud
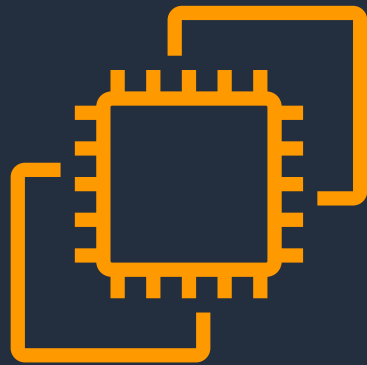
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Foundational Services

Compute

Storage

Database

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Computing on AWS

Amazon EC2

Virtual server instances
in the cloud

Amazon ECS, EKS, and Fargate

Container management service
for running
containerized applications

AWS Lambda

Serverless compute
for stateless code execution in
response to triggers

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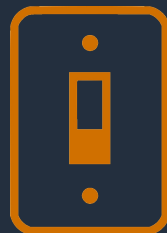# Computing on AWS: Serverless Introduction

No infrastructure provisioning,
no management

Automatic scaling

Pay for value

Highly available and secure

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Real-time data processing with AWS Lambda

Amazon S3

AWS Lambda

Photograph

is taken

Photo is uploaded
to a S3 bucket

Serverless compute
for stateless code
execution in response to
triggers

Photo is resized into web,
mobile, and table sizes

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Storage on AWS

S3

Object storage built to store and retrieve any amount of data from anywhere

EBS

Easy to use, high performance block storage at any scale

EFS

Simple, serverless, set-and-forget, elastic file system

aws

Database on AWS

RDS

Set up, operate, and scale a relational database in the cloud with just a few clicks

DynamoDB

Fast and flexible NoSQL database service for any scale

Redshift

Analyze all of your data with the fastest and most widely used cloud data warehouse

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Q&A

Thank You

Identity and Access Management

What is IAM?

Manage users and their access

Manage roles and their permissions

Manage federated users and their permissions

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Principle of Least Privilege

What area customer wants to learn about on AWS

Get Started on AWS

Get Started

Free Tier
Test Drive AWS Services

AWS Solutions
Vetted Technology Solutions

Training and Certification
Advance Your Skills

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Q&A

Cloud Foundations

Insert Name
Insert Date