

Introduction to Cloud Computing

Thomas Le Moullec. AWS Solutions Architect
September 29th 2020

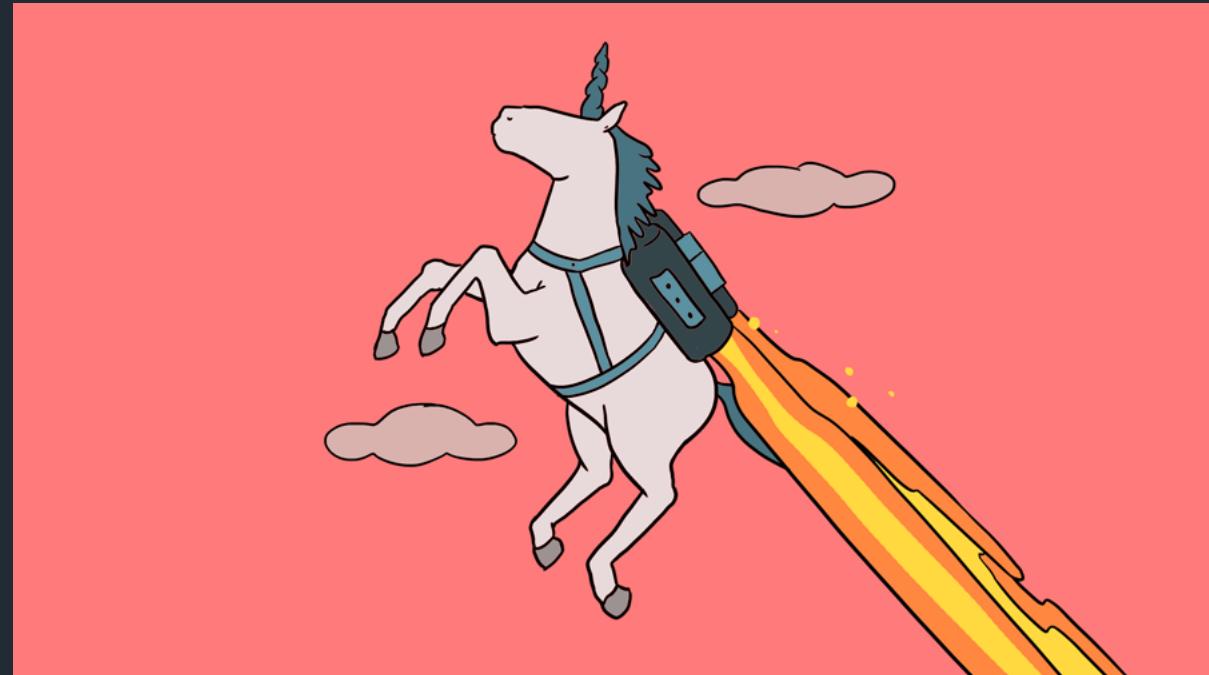
Agenda

- Why Cloud Computing ?
- What is Cloud Computing ?
- Cloud Industry (Customers, Providers)
- AWS Use Case:
 - Cloud Infrastructure
 - Broad set of Services
 - Blockers: Security - Economy
- Cloud Journey (PoC – Modernization)
- Quiz – Q/A

Why Cloud Computing ?



Website owner

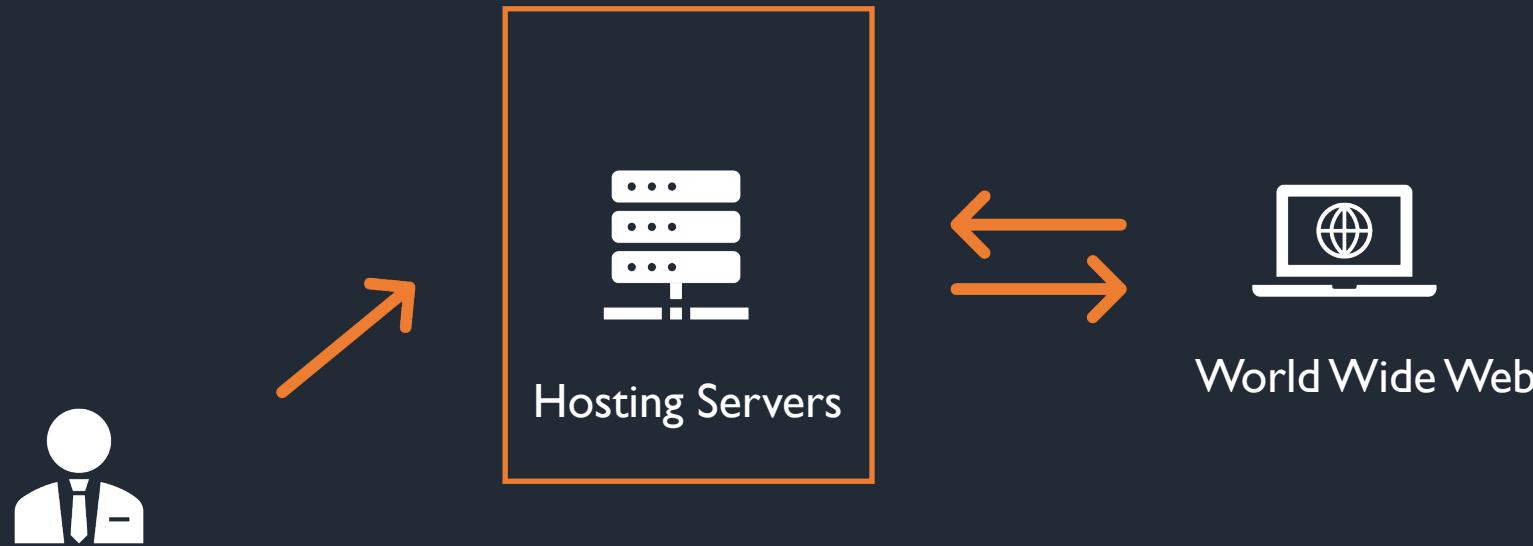


Why Cloud Computing ?



Website owner

Why Cloud Computing ?



Website owner

Why Cloud Computing ?



Website owner

Why Cloud Computing ?



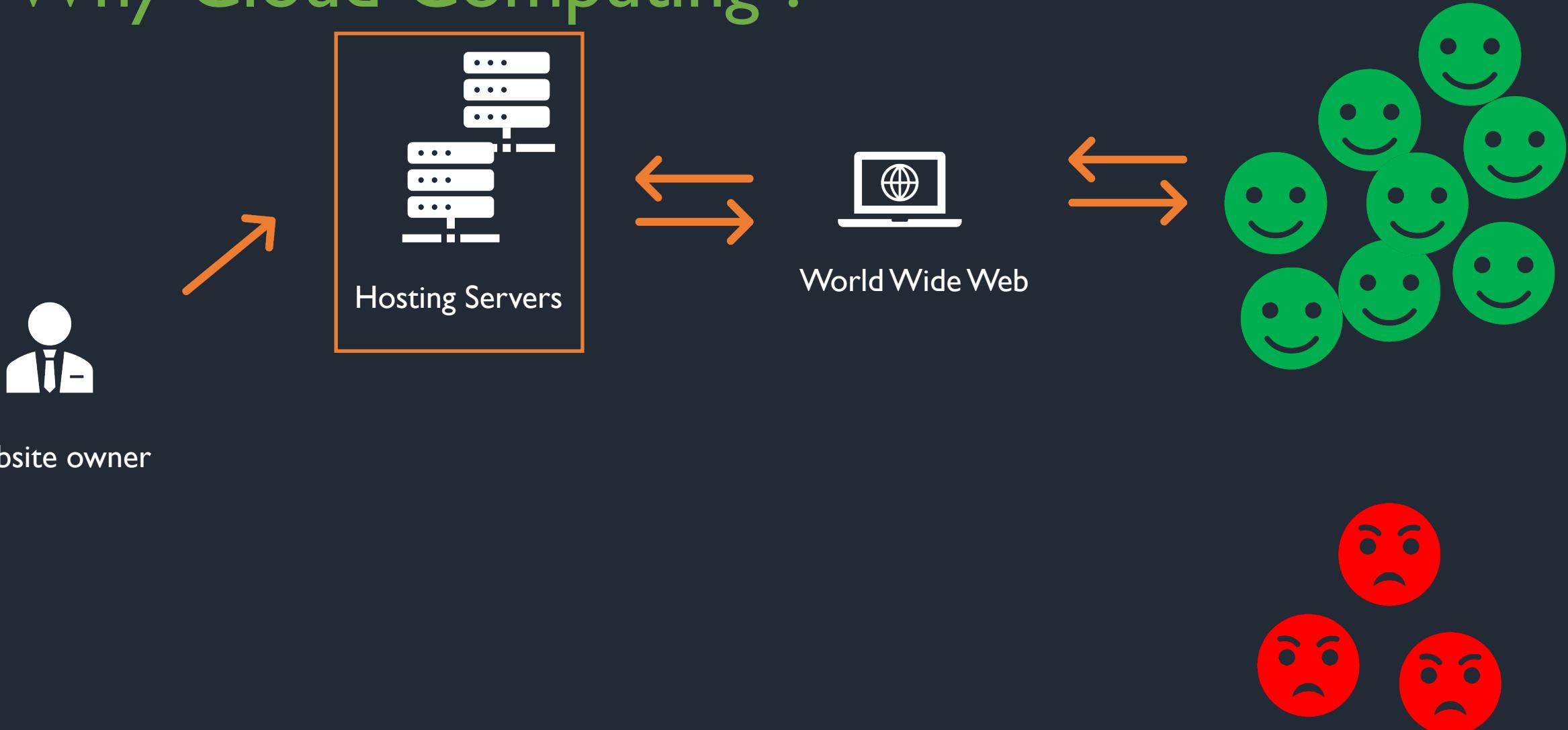
Why Cloud Computing ?



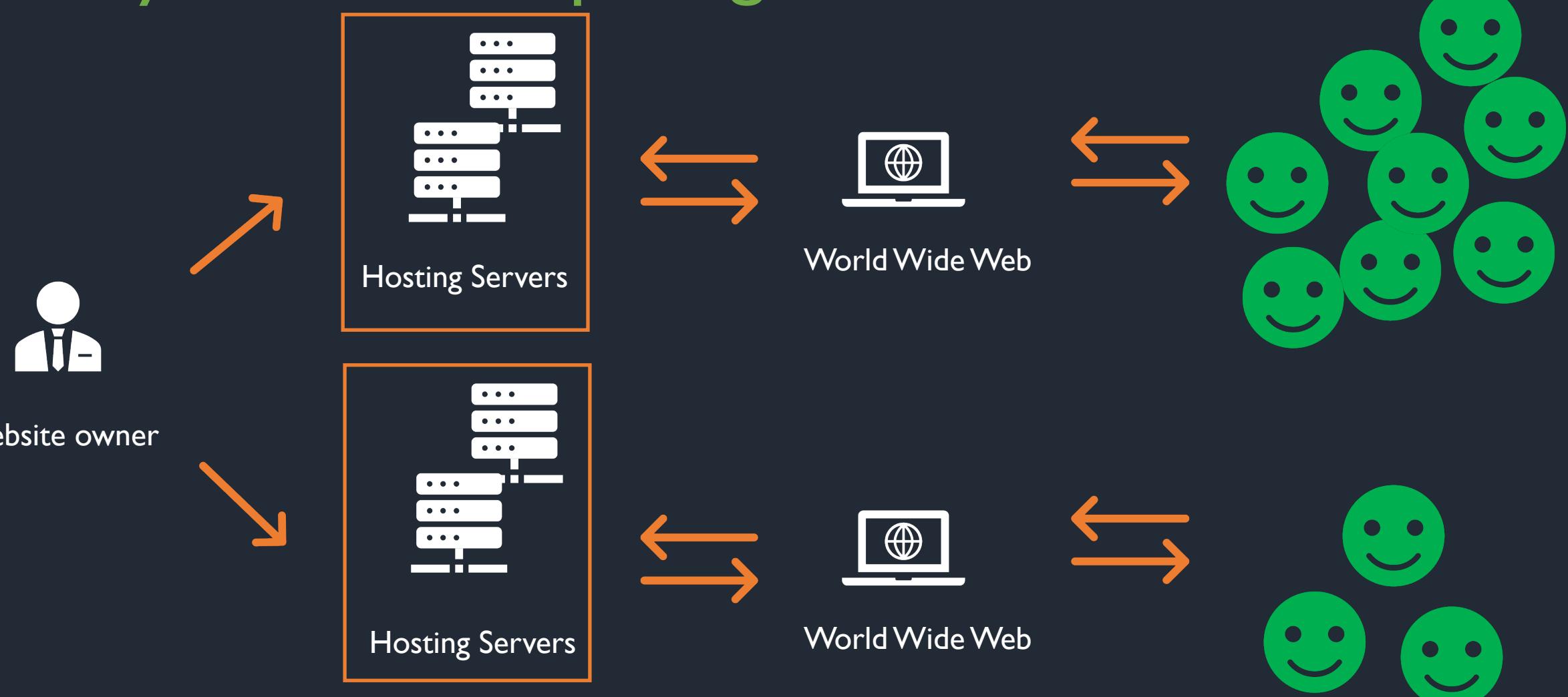
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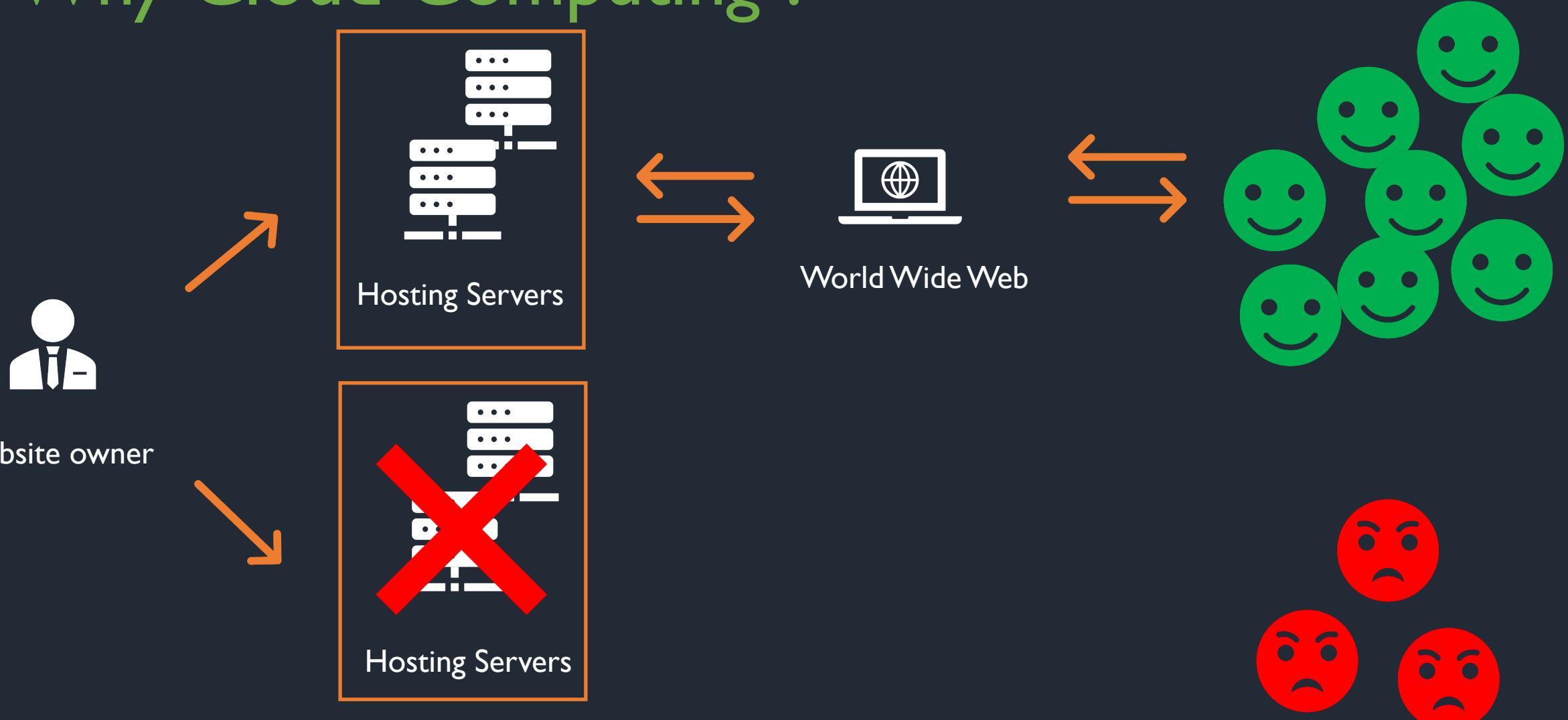
Why Cloud Computing ?



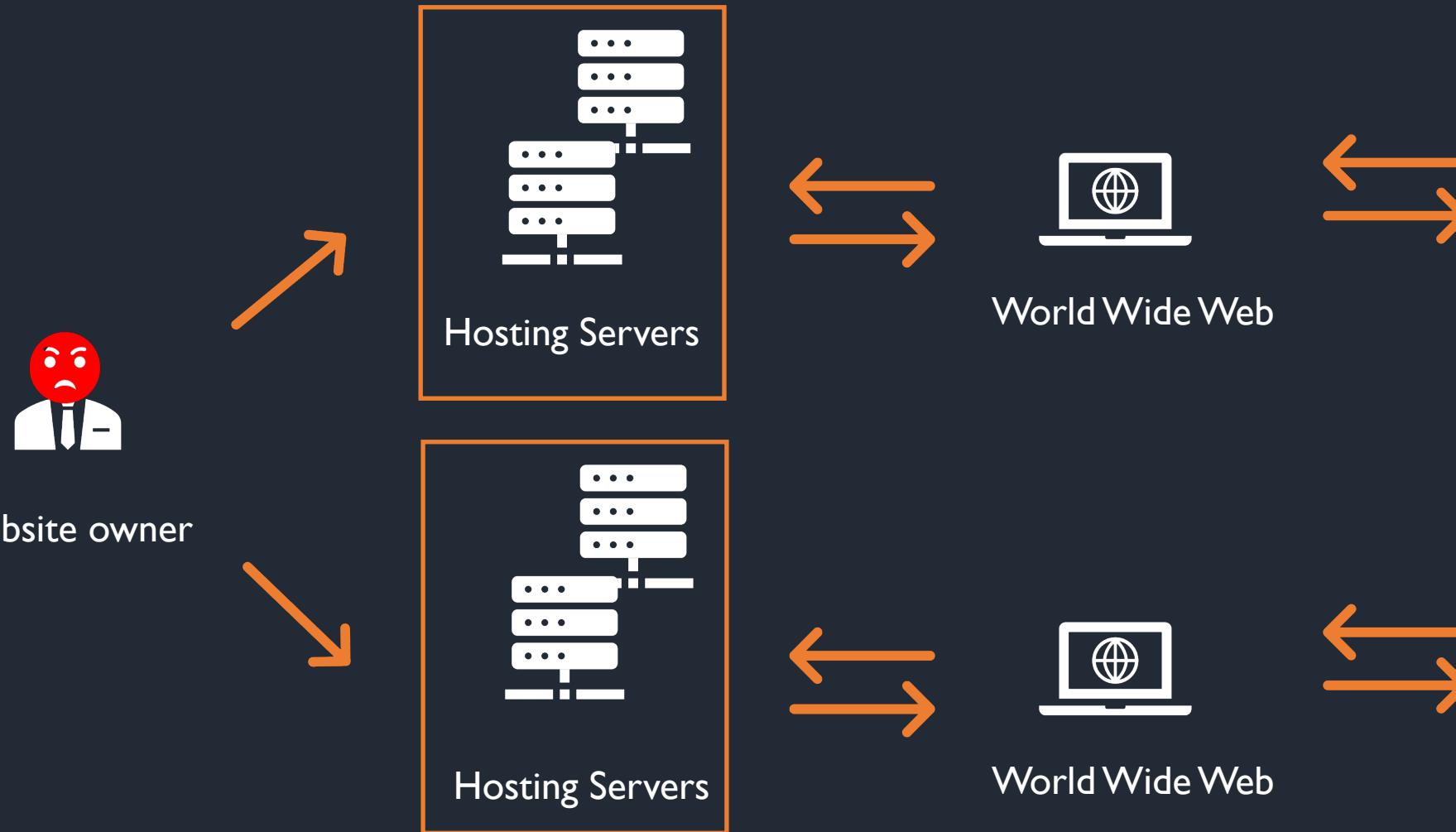
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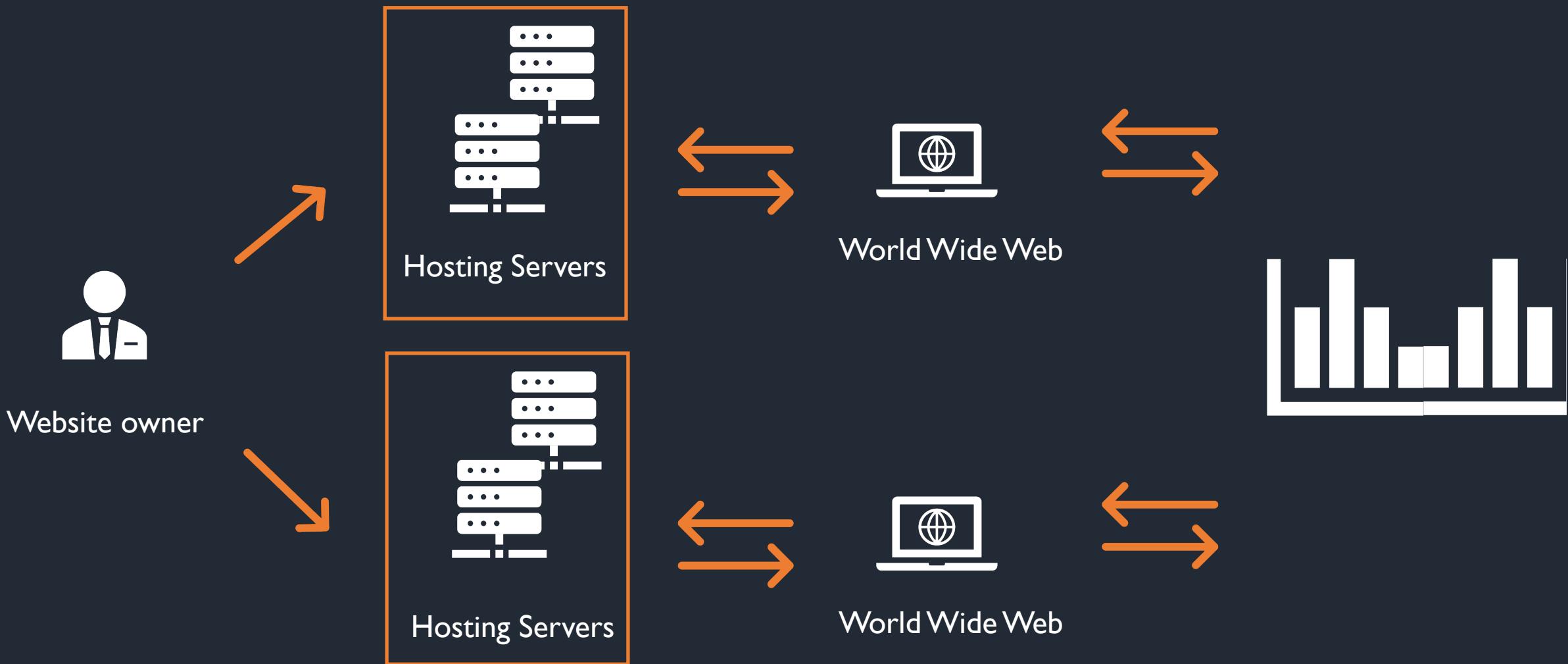
Why Cloud Computing ?



Why Cloud Computing ?



Why Cloud Computing ?



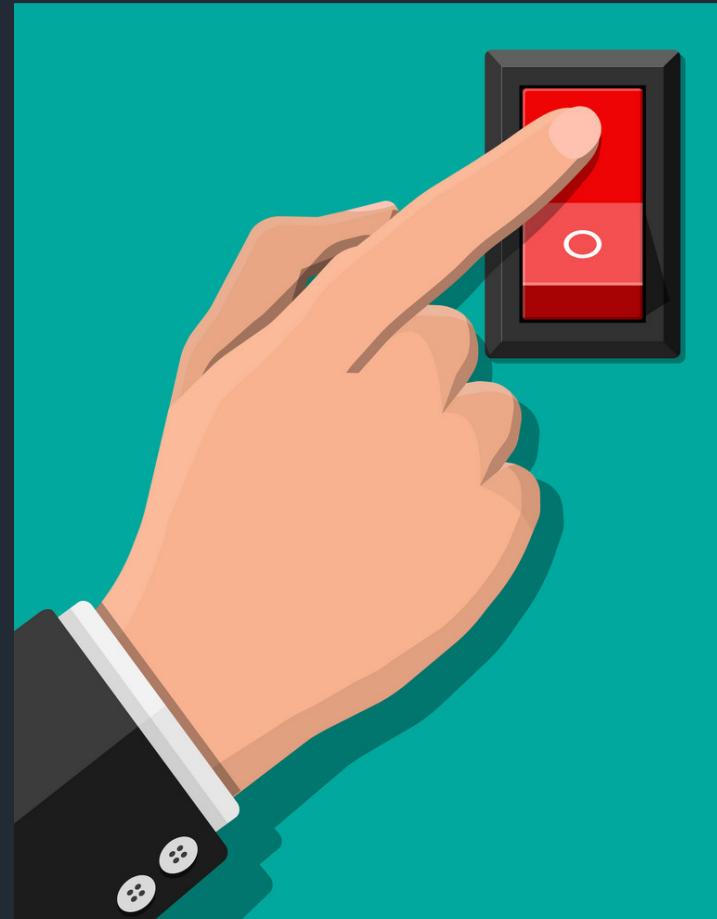
What is Cloud Computing ?



On-Demand delivery of IT resources over the internet, with pay-as-you-go pricing model

What is Cloud Computing ?

Pay for what you use



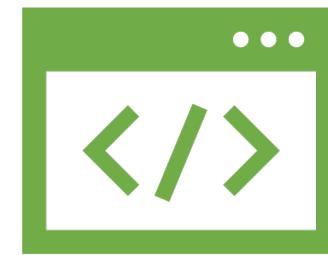
Access Cloud Computing



Web Console



Command Line Interface



Software Development Kit



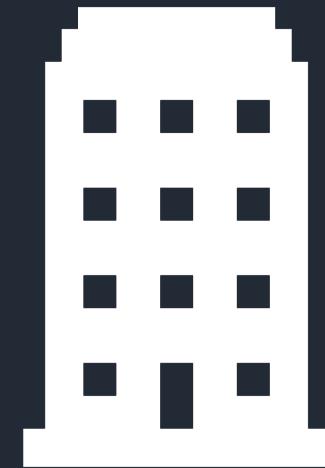
Infrastructure as Code

Cloud Main Benefits



Cloud

VS



On Premise

Benefit I - **Agility**

Allows teams to experiment and innovate quickly and frequently

Benefit 2 – Cost Savings

Only pay for what you use, lower upfront expenses

- Focus budgets on business differentiators, not management of infrastructure.
- Helps reduce the Total Cost of Ownership: Reduce need of Large Capital Expenditures, invest in capacity you need

Benefit 3 – Elasticity

Stop guessing capacity, scale up and down with demand

Benefit 4 – Innovate Faster

Ability to focus on business differentiators, not infrastructure

Benefit 5 – Go Global in Minutes

Most extensive, reliable, and secure global cloud infrastructure

Benefit 6 – Services Breadth & Depth

Support for any workload, drive business with new Features

Cloud Industry



Public Cloud



Private Cloud



Hybrid Cloud

Cloud Industry

7.3%

Worldwide IT spending is projected to total \$3.5 trillion in 2020, a decline of 7.3% from 2019
– Gartner Inc

Cloud Industry

\$257.9 billion

Gartner Forecasts Worldwide Public Cloud Revenue to Grow 6.3% in 2020;
Growing up to \$364,062 billion in 2022

Cloud Industry

AWS Recognized as a Cloud Leader for the
10th Consecutive Year

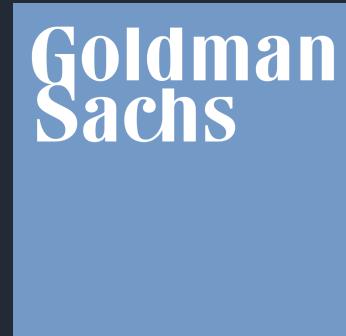
Figure 1. Magic Quadrant for Cloud Infrastructure and Platform Services



Cloud Customers - Native



Cloud Customers – Financial Services



Cloud Customers – Any Type of Customers

NETFLIX

facebook

IMMOBILIEN
SCOUT 24

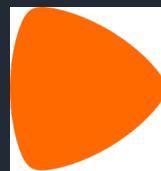


AIRBUS



SAMSUNG



 zalando



AWS – Global Infrastructure

Global Network of AWS Regions

The AWS Cloud spans 77 Availability Zones within 24 geographic regions around the world, with announced plans for nine more Availability Zones and three more AWS Regions in Indonesia, Japan, and Spain.

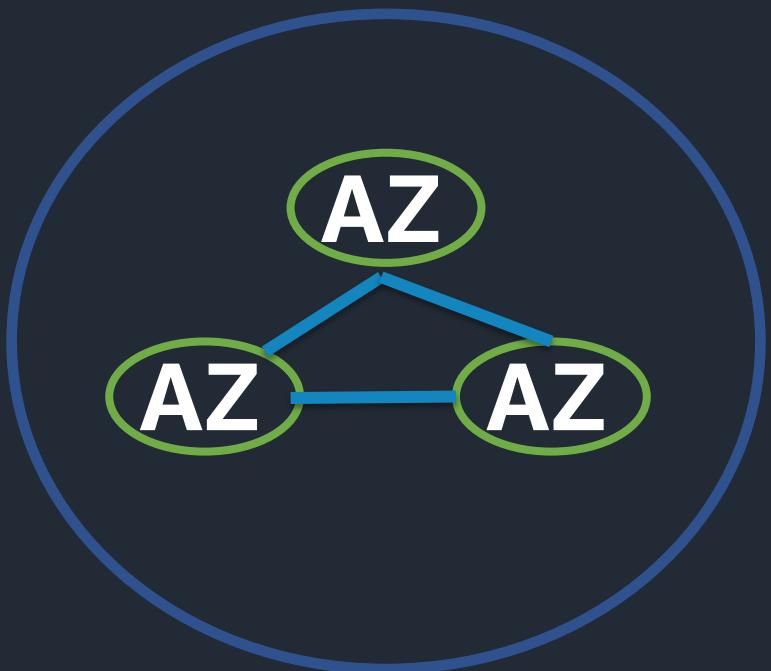


[Learn More »](#)

- Regions
- Coming Soon

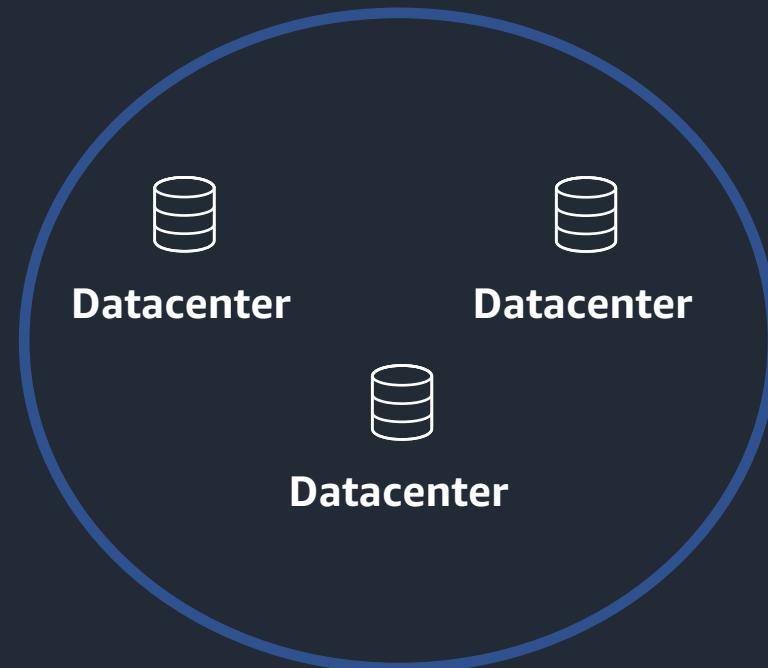
AWS – Cloud Infrastructure

Region



Physical location in the world with several AZ

Availability Zone



Redundant power, networking, and connectivity,
housed in separate facilities

Cloud – Service Model

IAAS vs PAAS vs SAAS

Cloud – Pizza as a Service

On-Premises

Dining Table

Soda

Electric / Gas

Oven

Fire

Pizza Dough

Tomato Sauce

Toppings

Cheese

Made at Home

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On-Premises

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Infrastructure
as a Service

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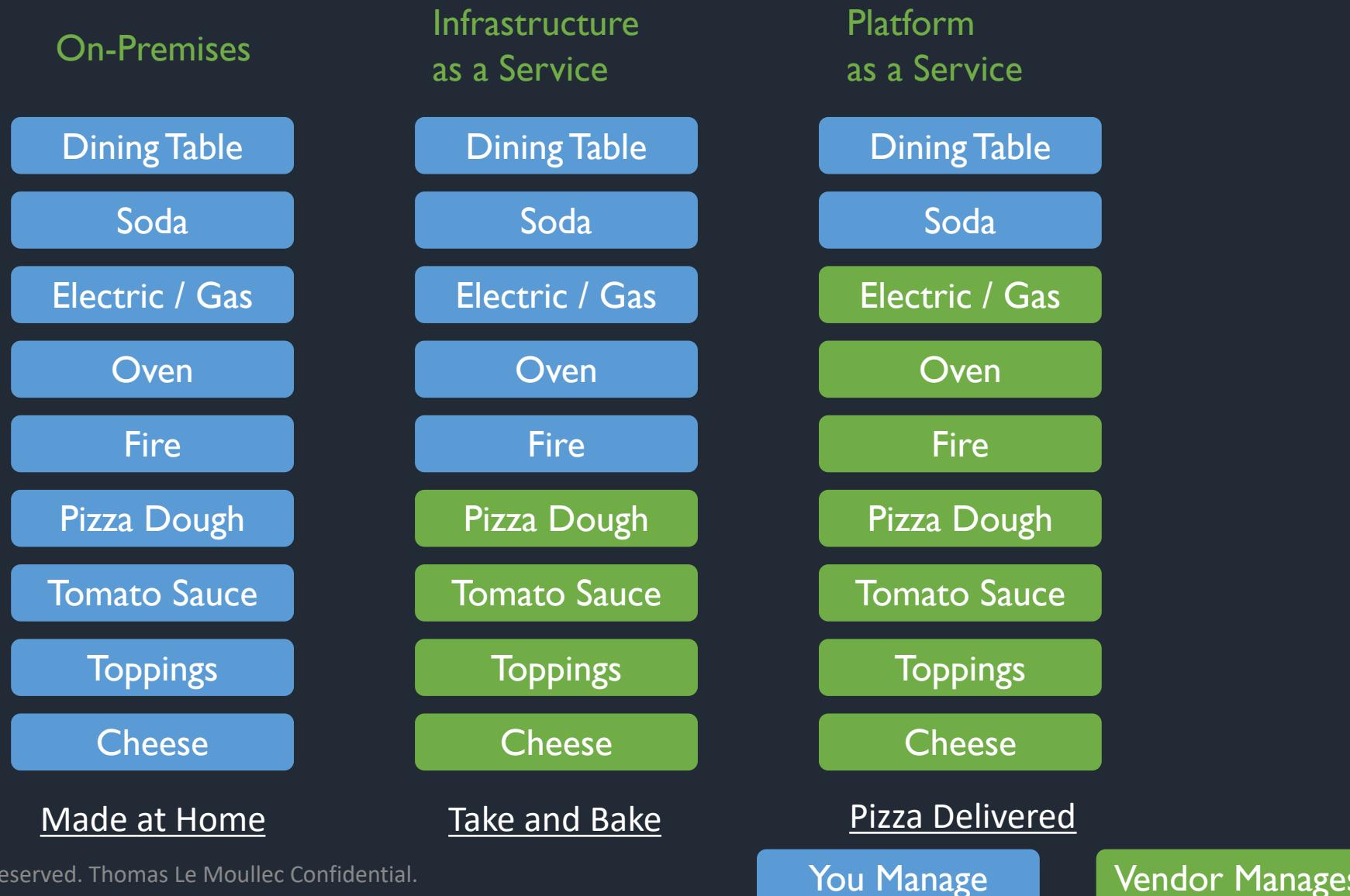
Take and Bake

Pizza Delivered

You Manage

Vendor Manages

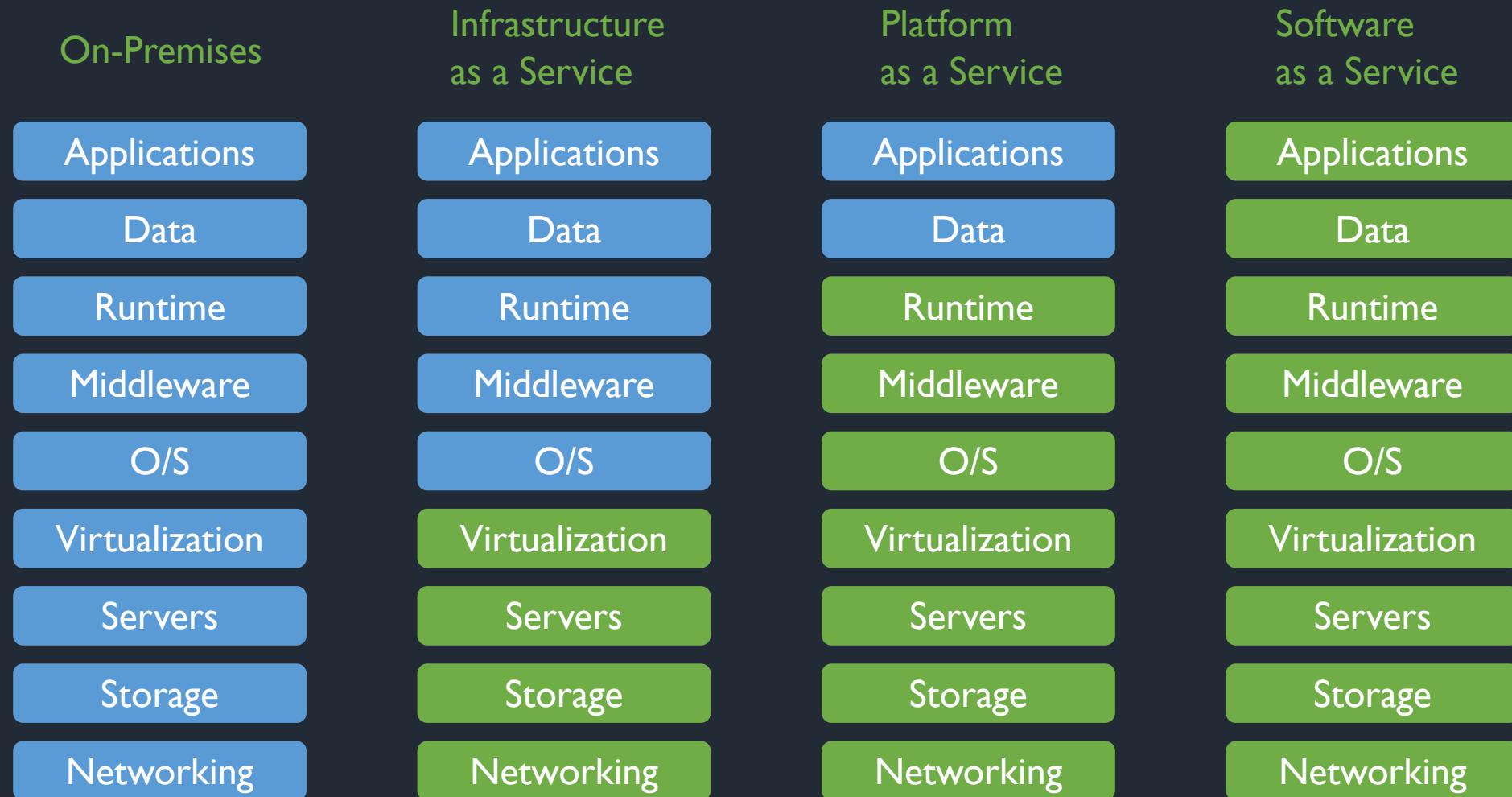
Cloud – Pizza as a Service



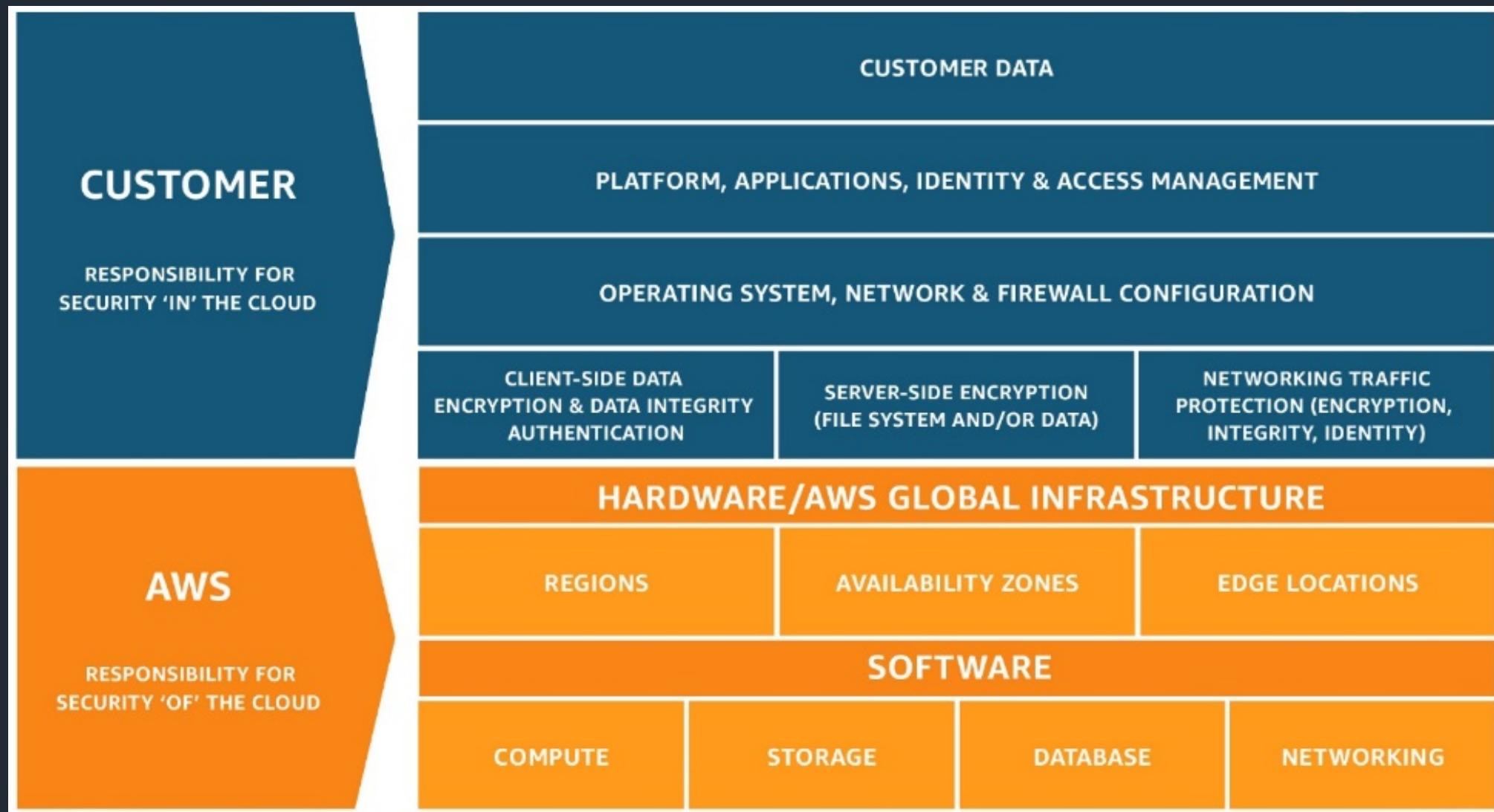
Cloud – Pizza as a Service

On-Premises	Infrastructure as a Service	Platform as a Service	Software as a Service
Dining Table	Dining Table	Dining Table	Dining Table
Soda	Soda	Soda	Soda
Electric / Gas	Electric / Gas	Electric / Gas	Electric / Gas
Oven	Oven	Oven	Oven
Fire	Fire	Fire	Fire
Pizza Dough	Pizza Dough	Pizza Dough	Pizza Dough
Tomato Sauce	Tomato Sauce	Tomato Sauce	Tomato Sauce
Toppings	Toppings	Toppings	Toppings
Cheese	Cheese	Cheese	Cheese
<u>Made at Home</u>	<u>Take and Bake</u>	<u>Pizza Delivered</u>	<u>Dined out</u>
		You Manage	Vendor Manages

Cloud Service Model



AWS – Security



AWS – Data Privacy and Compliance

Highly Regulated industries such as Financial Services, Public Sector, Healthcare



GDPR

General Data
Protection Regulation



Customers inherit best practices of policies, architecture and processes that have been built to
satisfy the needs of most security sensitive customers

Cloud Journey

Cloud Journey

Project



Cloud Journey

Project



Foundation



Cloud Journey

Project



Foundation



Migrations



Cloud Journey

Project



Foundation



Migrations



Modernization



Cloud Journey

Project



Foundation



Migrations

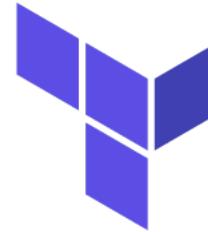


Modernization



Continuous
Reinvention

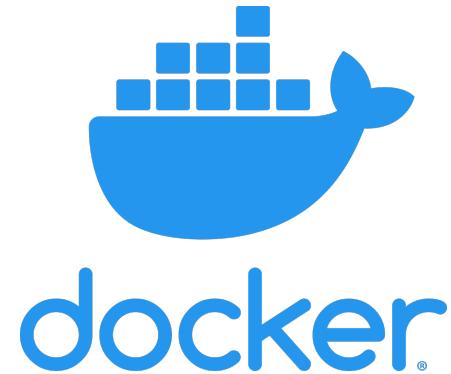
Modern Applications – New Horizons



Terraform



CloudFormation



kubernetes

Modern Applications – Development Framework



AWS Amplify



Firebase

Well Architected Framework

5 pillars to evaluate architectures

- Published by AWS in 2015
- Joined by Azure in 2019
- GCP has similar framework



Thank you !

Find me on Linkedin:
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