Cloud Computing

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Before Cloud Computing

Suppose you want to host a website, these are the following things that you would need to do:

Buy a stack of servers.

Keeping the peak traffic in mind, buy more servers.

Monitoring and Maintenance of your servers.

Disadvantages

This setup is expensive.

Troubleshooting problems can be tedious and may conflict with your business goals.

Since the traffic is varying, your servers will be idle most of the time.

How it Happens

Put your data on Cloud Servers and voila! No more buying expensive servers!

Scalability! Your server capacity will vary according to traffic, how cool is that?

Your cloud provider will manage your servers, hence no worries about the underlying infrastructure.
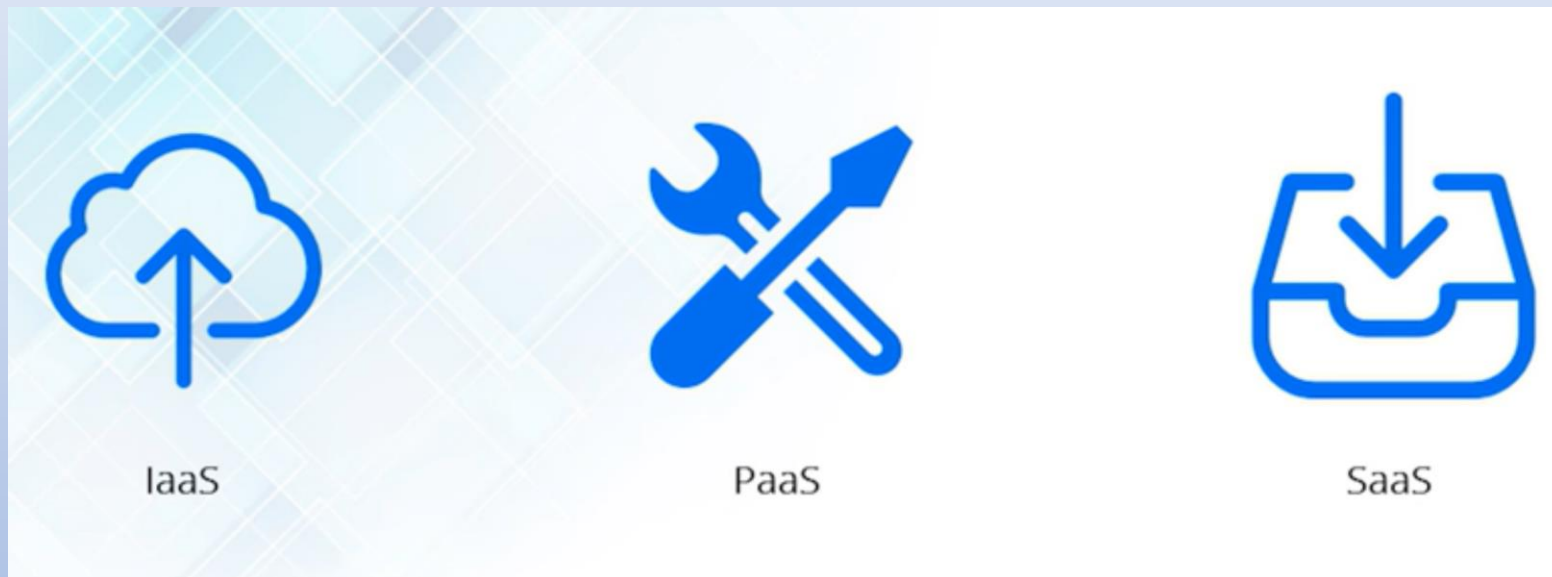
What is Cloud Computing

It is the use of remote servers on the internet to store, manage and process data rather than a local server or your personal computer.
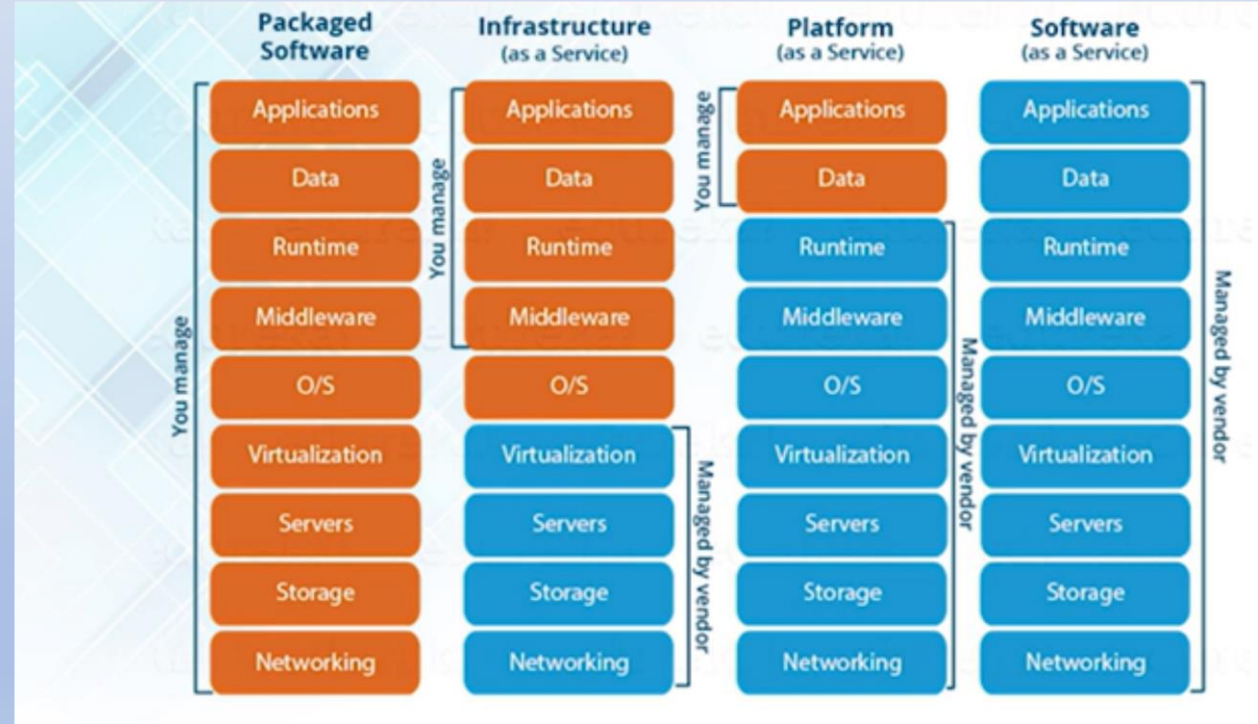
CLOUD COMPUTING

Service Models – Cloud Computing

IaaS   PaaS   SaaS

Service Models – Cloud Computing

Provides virtualized computing resources over the Internet

No worries about the underlying physical machine.

Infrastructure as a Service

Abstract the user from the physical machine

Service Models – Cloud Computing

No control over the underlying architecture including operating systems, storage, servers etc.

the Cloud Provider gives the ability to the customer to deploy customer created application using programming languages, tools etc that are provided by the Cloud Provider.

Platform as a Service

Service Models – Cloud Computing

Cloud Provider leases applications or softwares which are owned by them to its client

Example: salesforce.com provides the CRM(Customer Relation Manager) on a cloud infrastructure to its client and charges them for it, but the software is owned by the salesforce company only

Software as a Service

Service Models – Cloud Computing

Deployment Model – Cloud Computing

Cloud Computing Advantages

Access Anywhere

Maintenance Free

Fast Implementation

Better Security

Instant Scalability

No Upfront Costs

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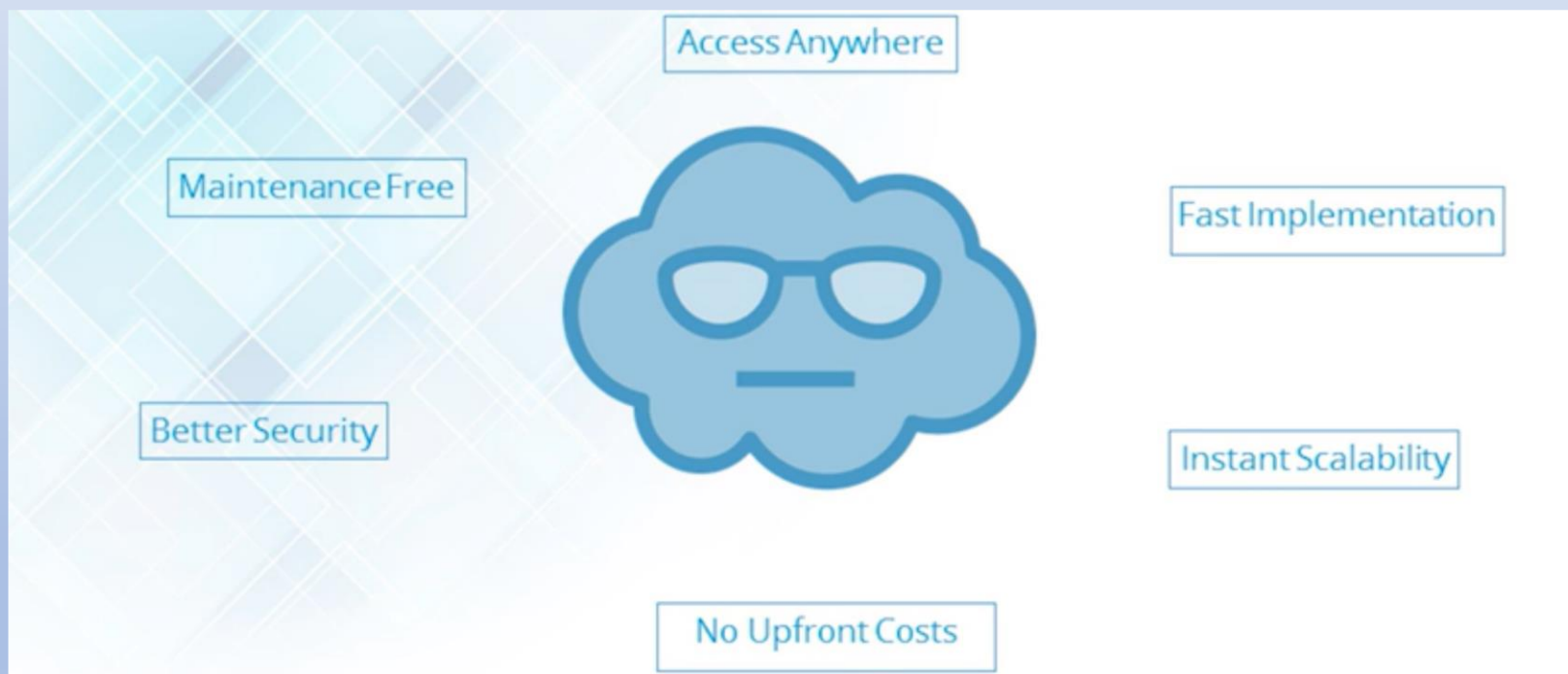
What is AWS

Amazon Web Services is a subsidiary of Amazon.com that provides on-demand cloud computing platforms to individuals, companies and governments, **on a paid subscription basis** with a free-tier option available for 12 months.
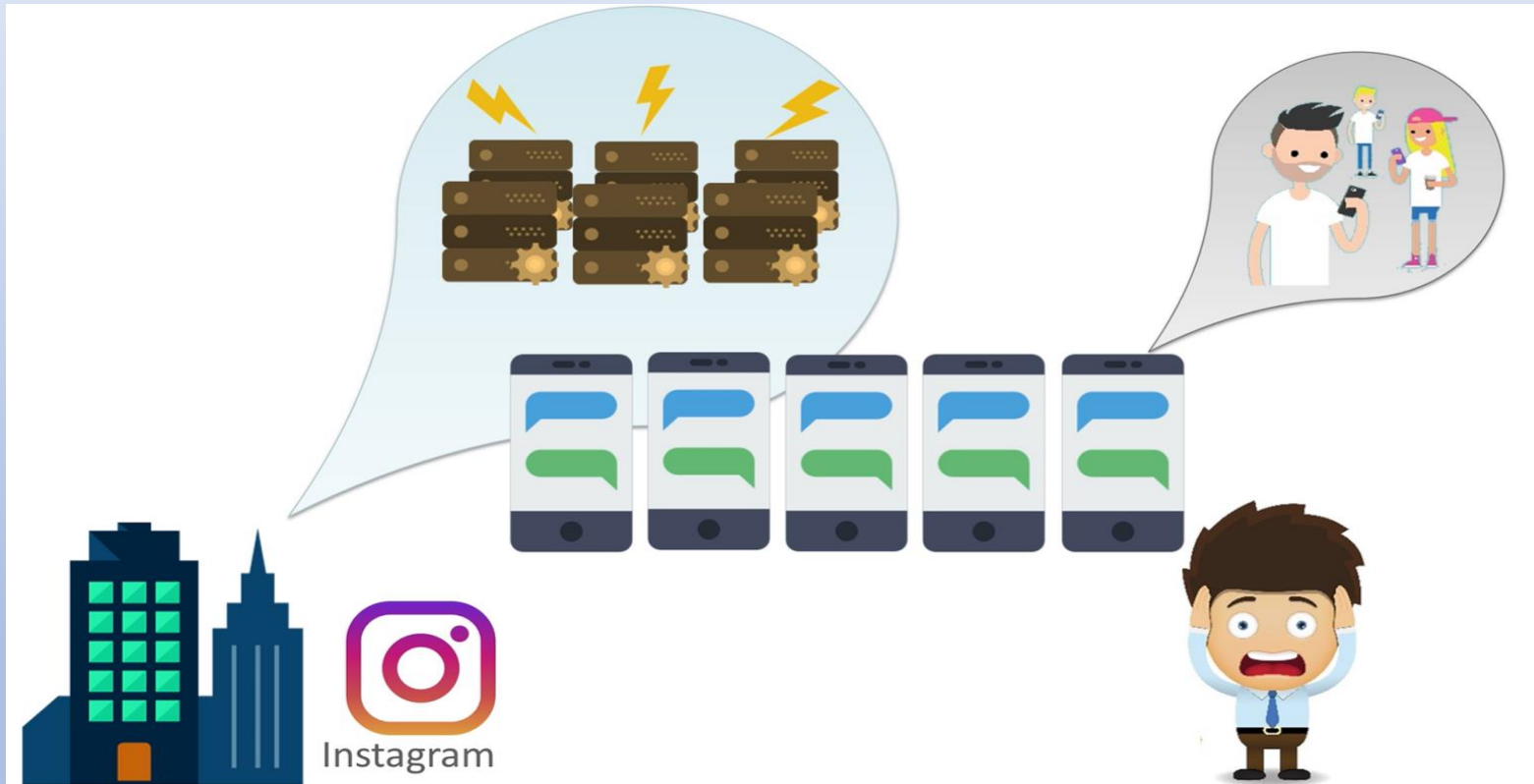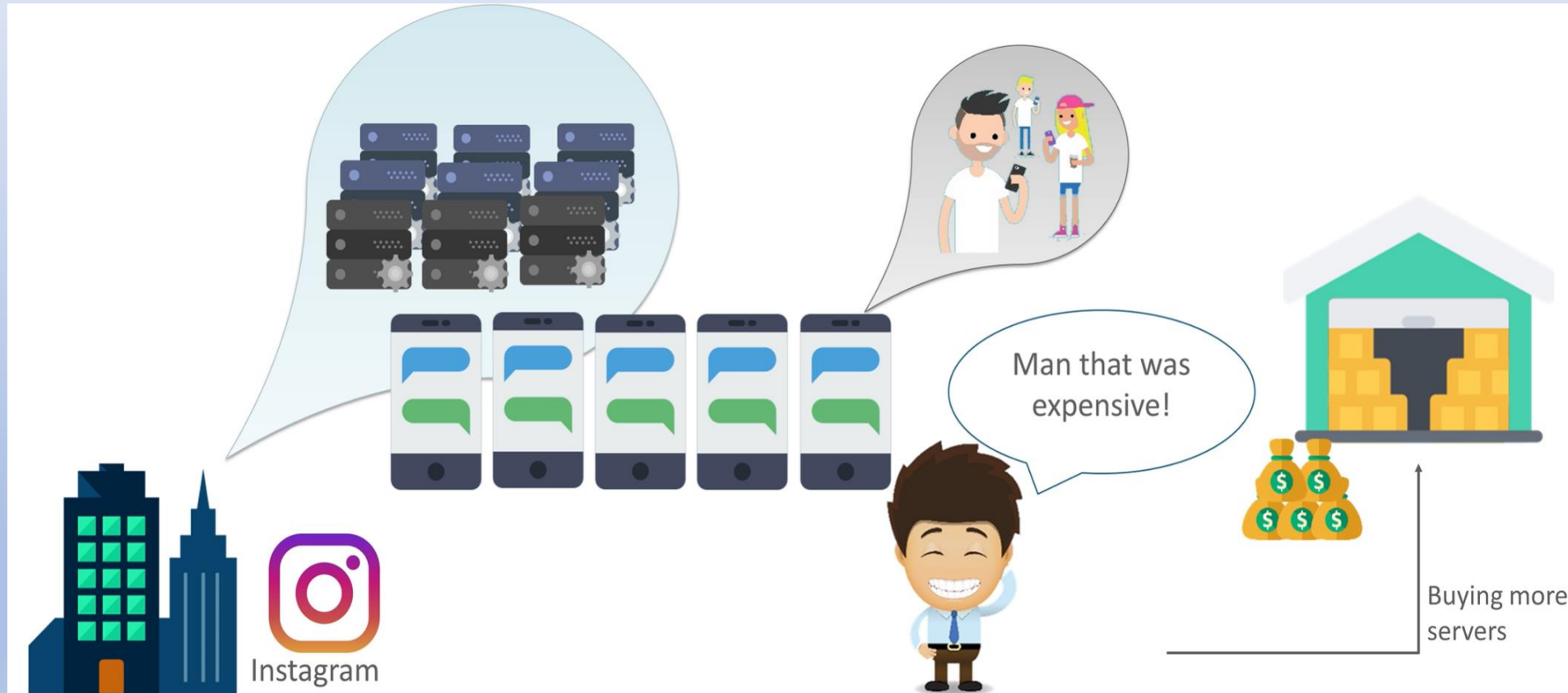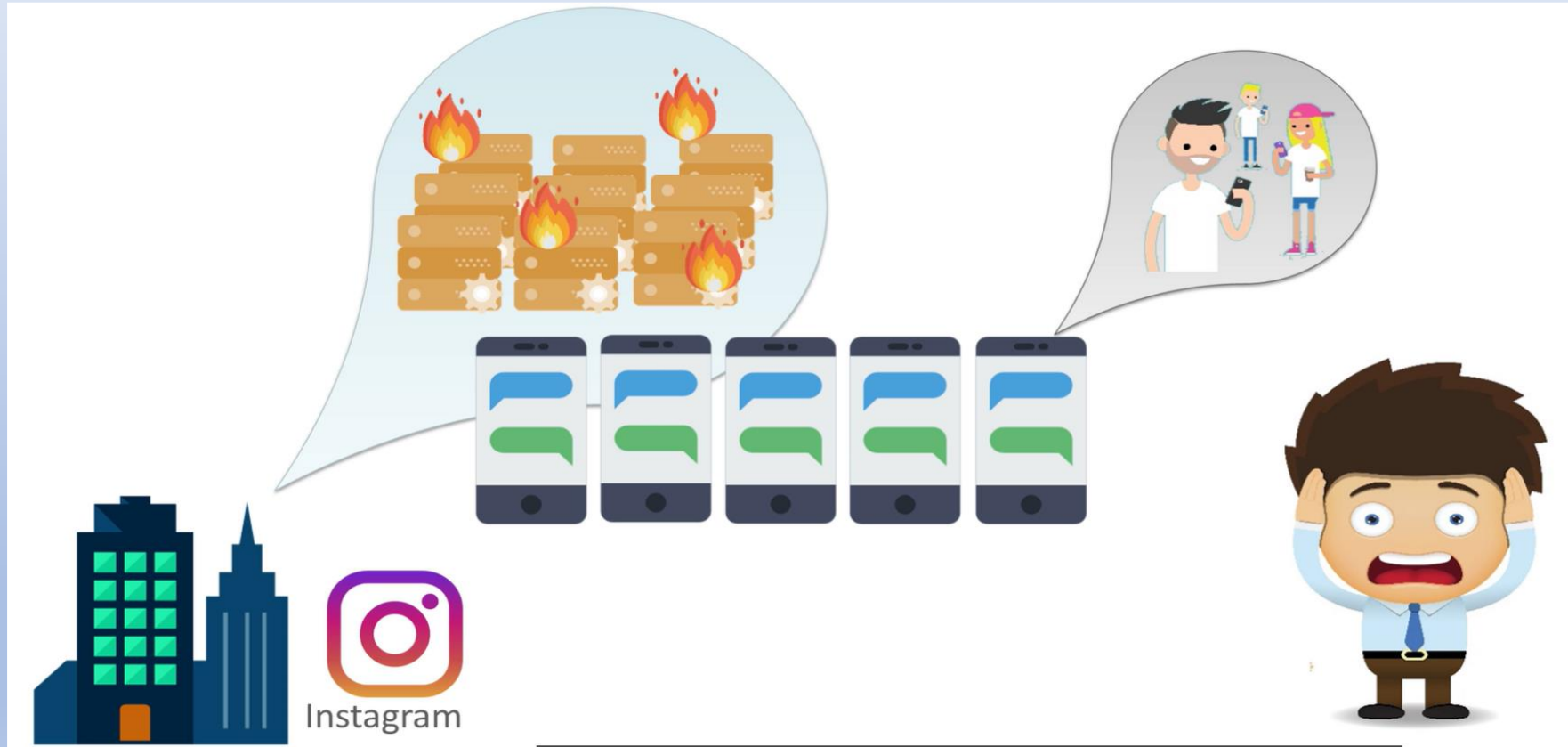
Why Use AWS ?

Buying Servers

Instagram

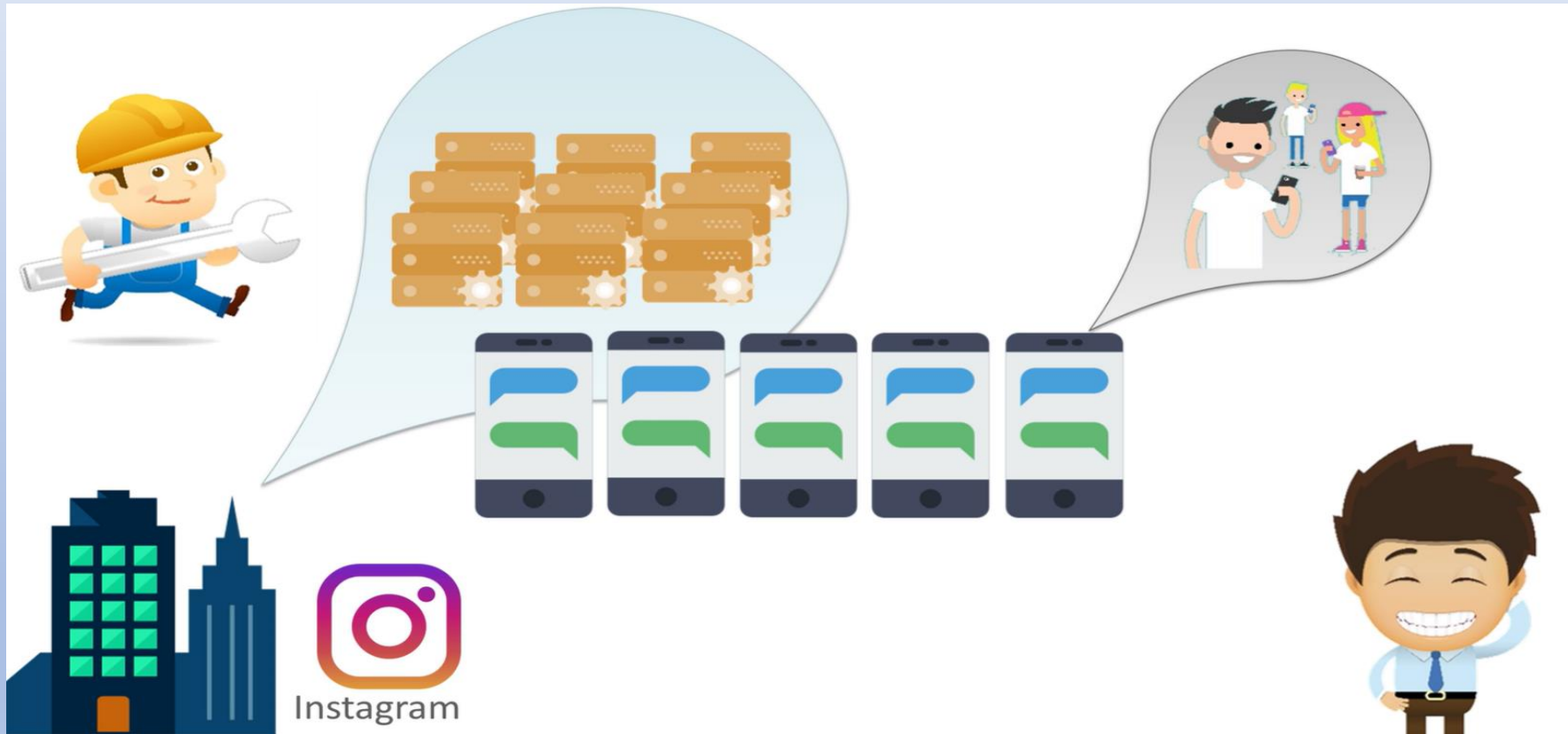Sujata Batra
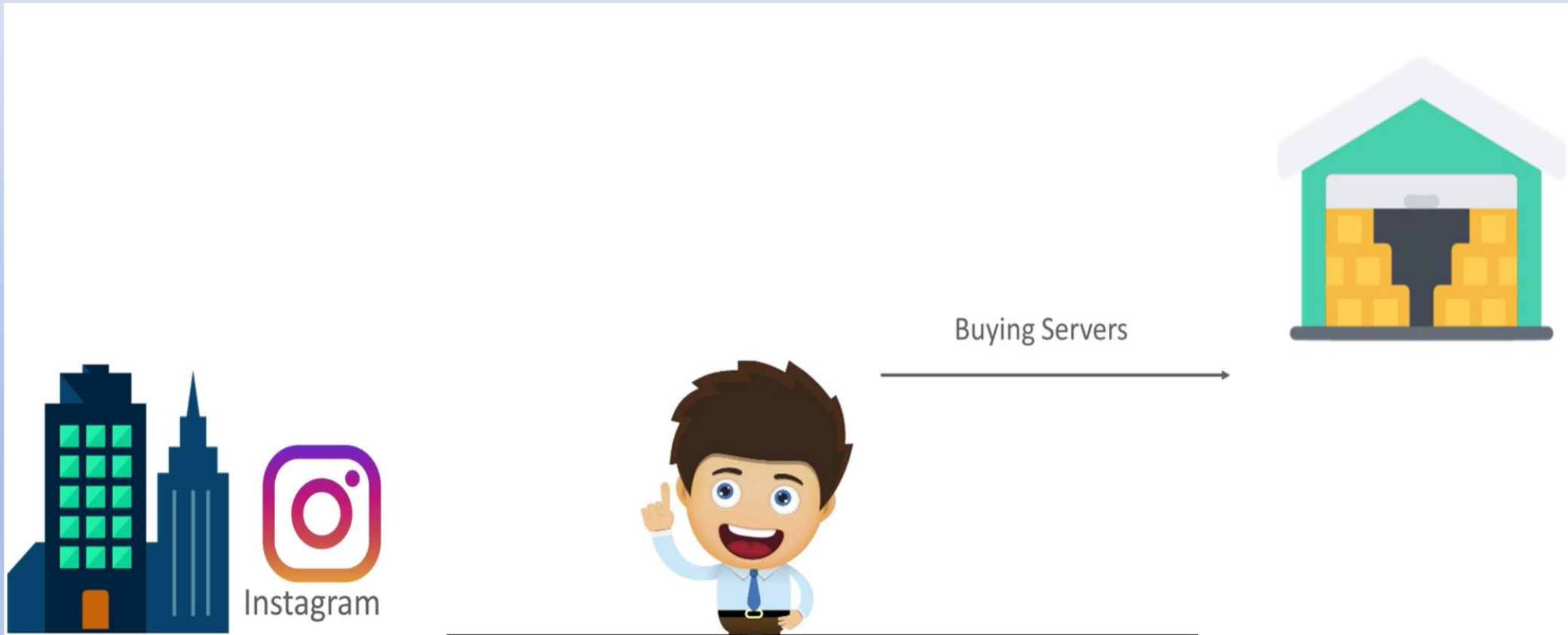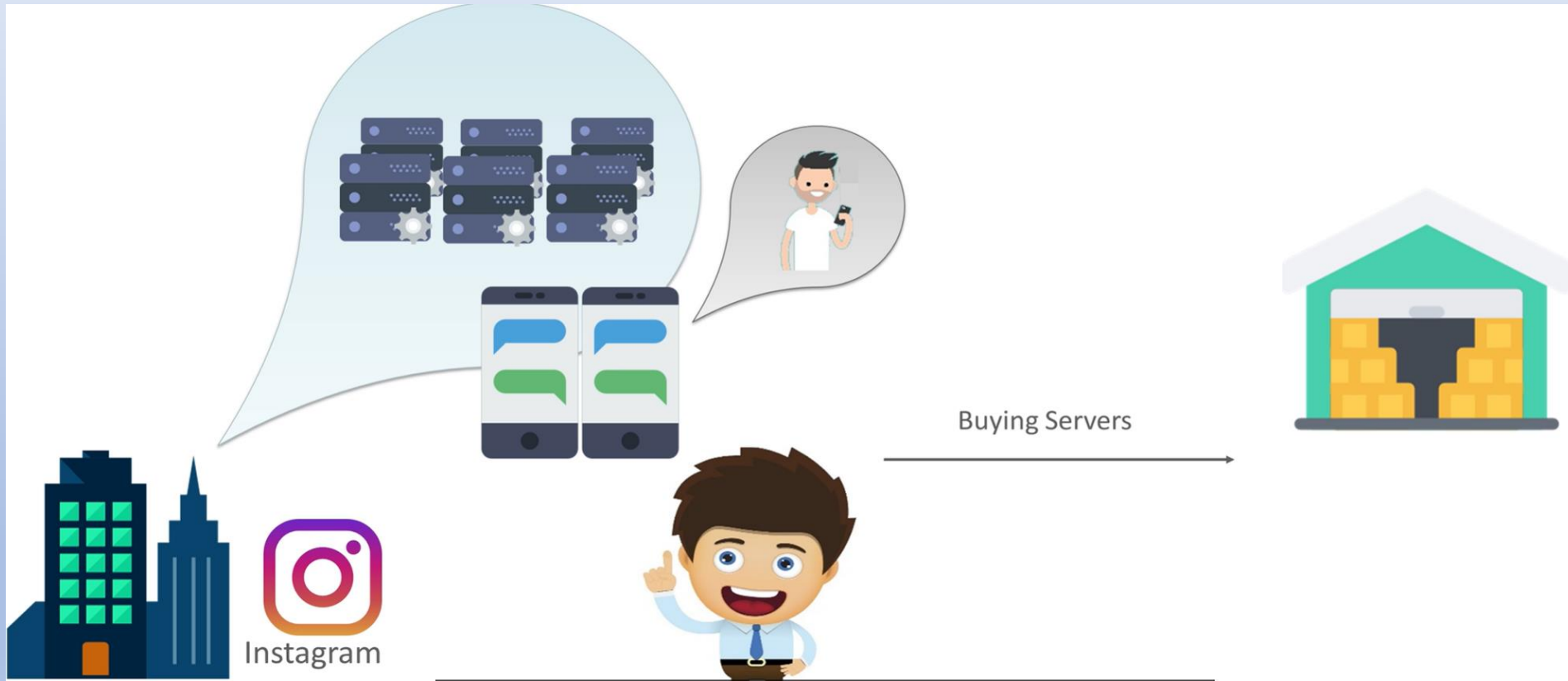
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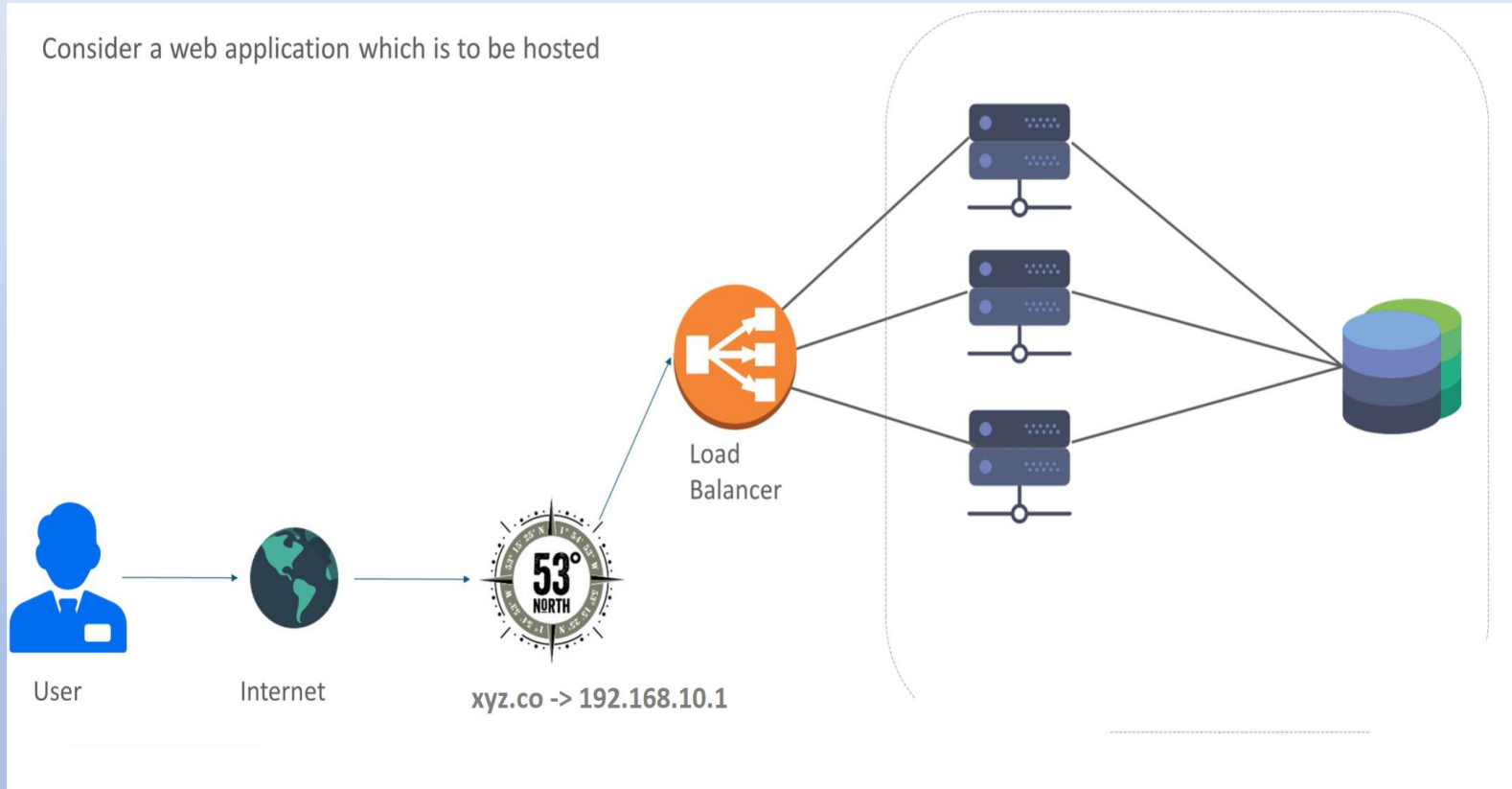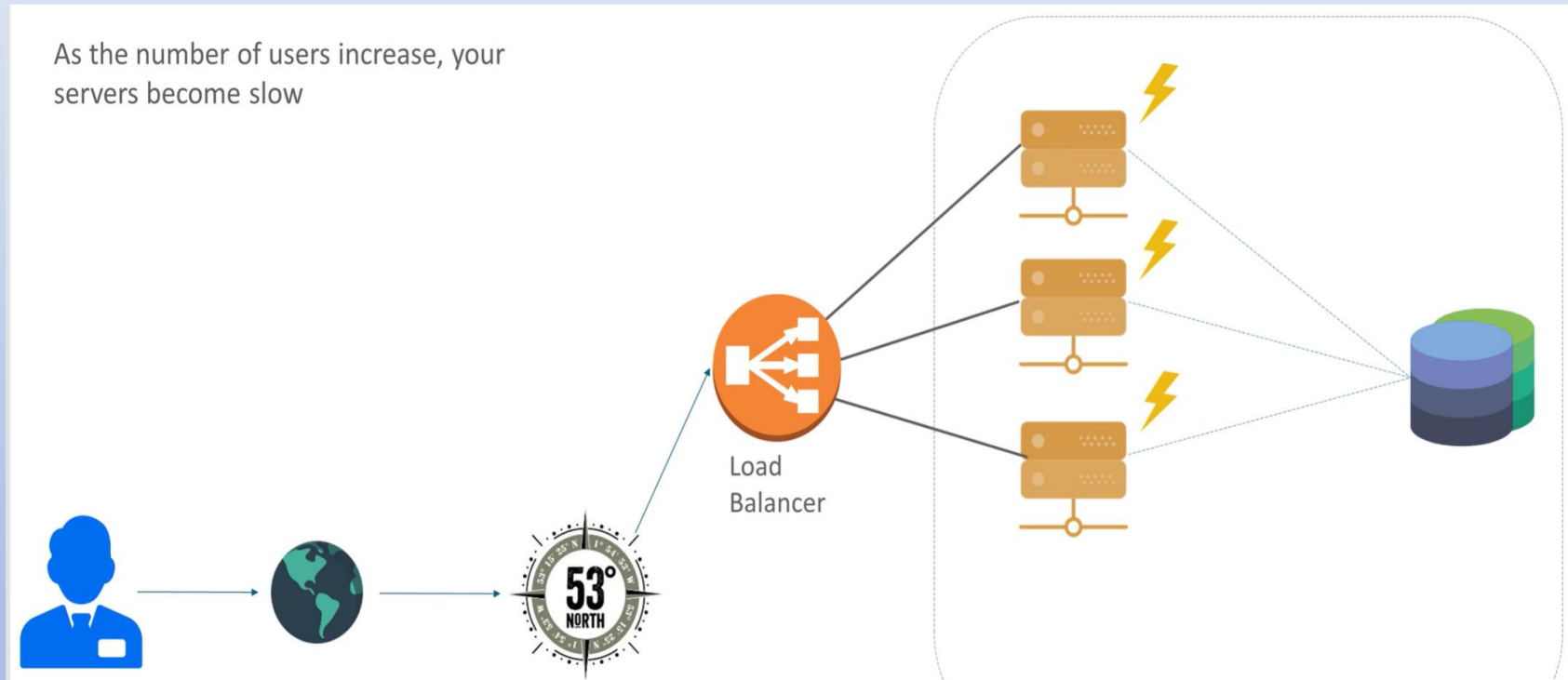# Why Use AWS ?
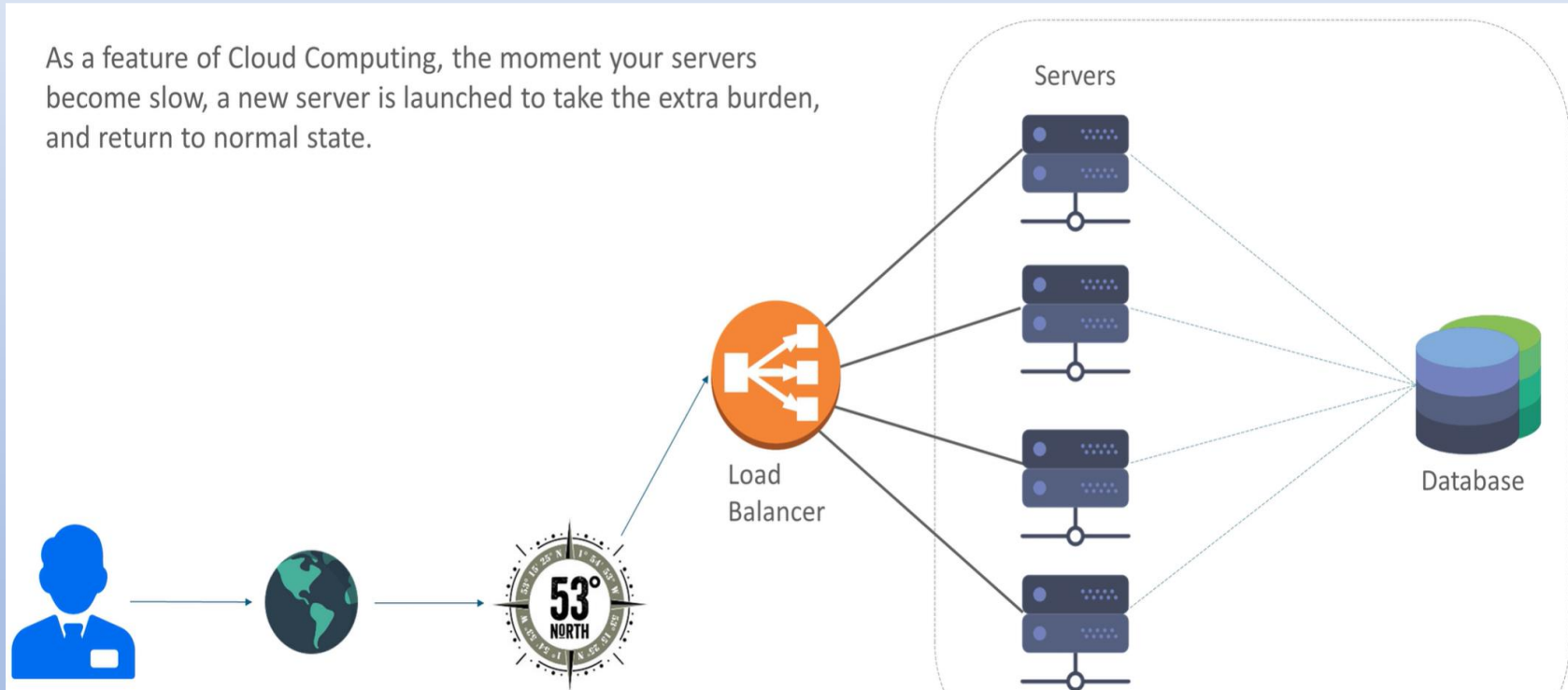
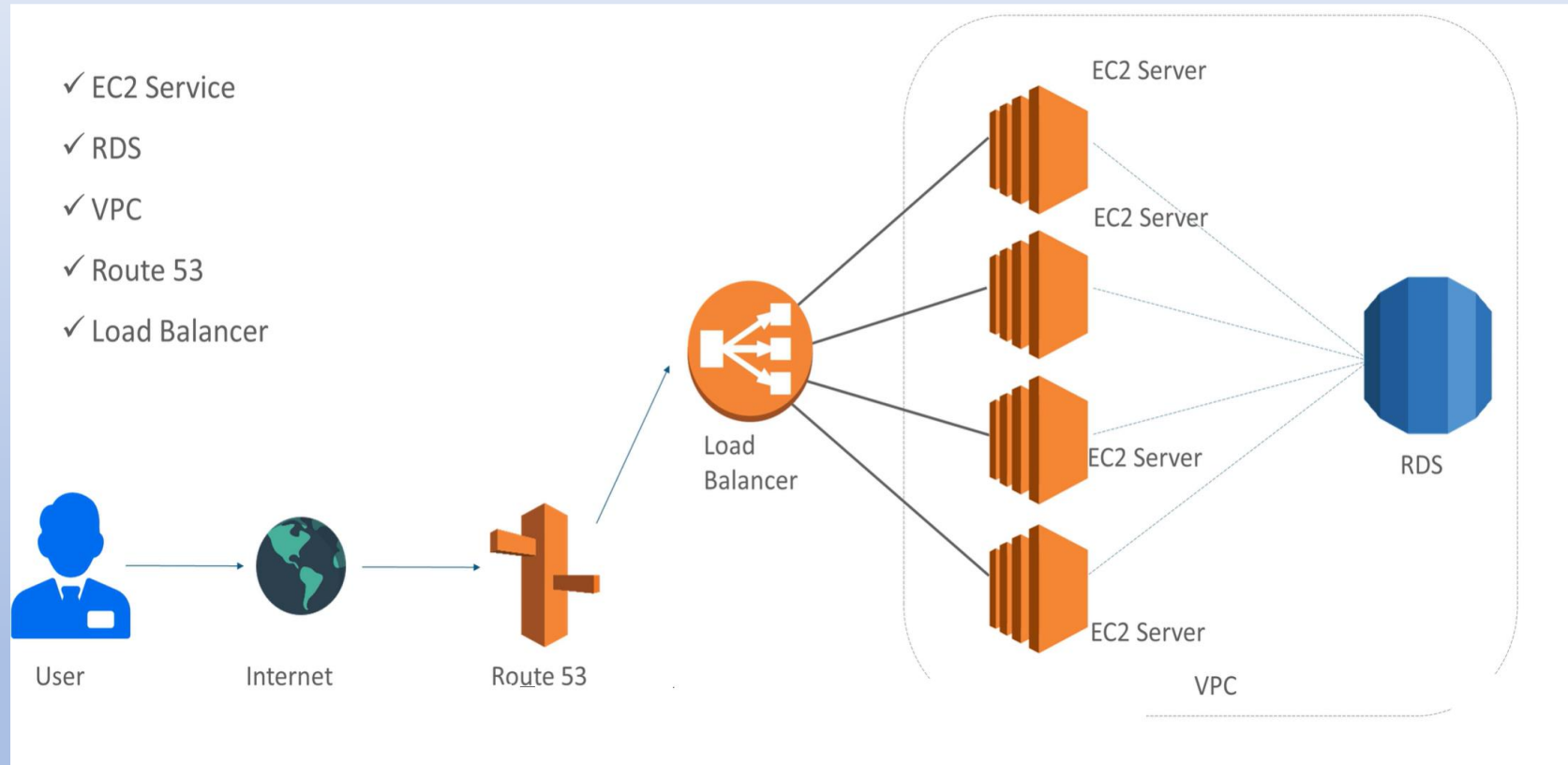# Why Use AWS ?

Why Use AWS ?

What is AWS ?

AWS Services Overview

Consider a web application which is to be hosted

User   Internet   xyz.co -> 192.168.10.1   Load Balancer

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AWS Services Overview

As the number of users increase, your servers become slow

Load Balancer

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AWS Services Overview

AWS Services Overview

- ✓ EC2 Service
- ✓ RDS
- ✓ VPC
- ✓ Route 53
- ✓ Load Balancer

User Internet Route 53 Load Balancer EC2 Server EC2 Server EC2 Server EC2 Server RDS VPC

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AWS Global Infrastructure

✓ 18 Geographic Regions

✓ 50 Availability Zones

AWS Global Infrastructure

- ✓ 18 Geographic Regions
- ✓ 50 Availability Zones
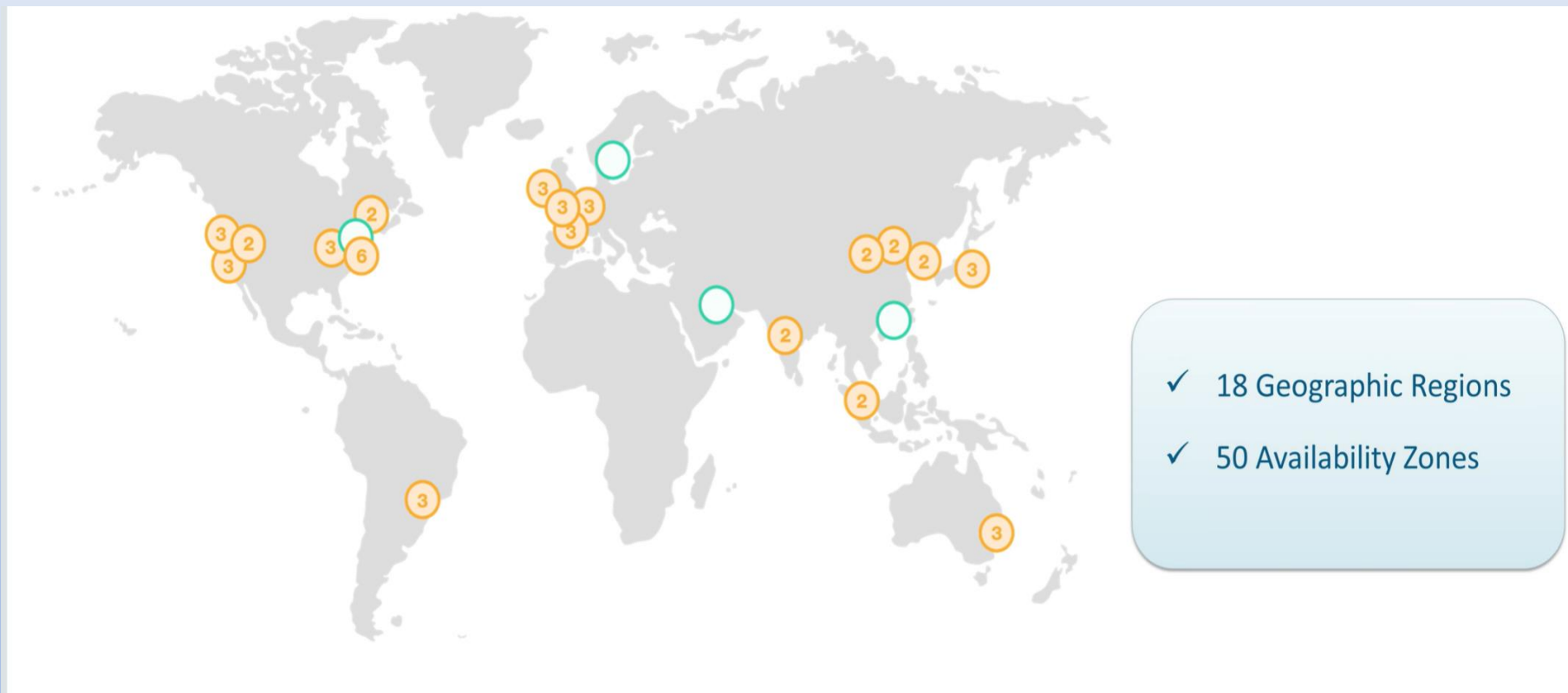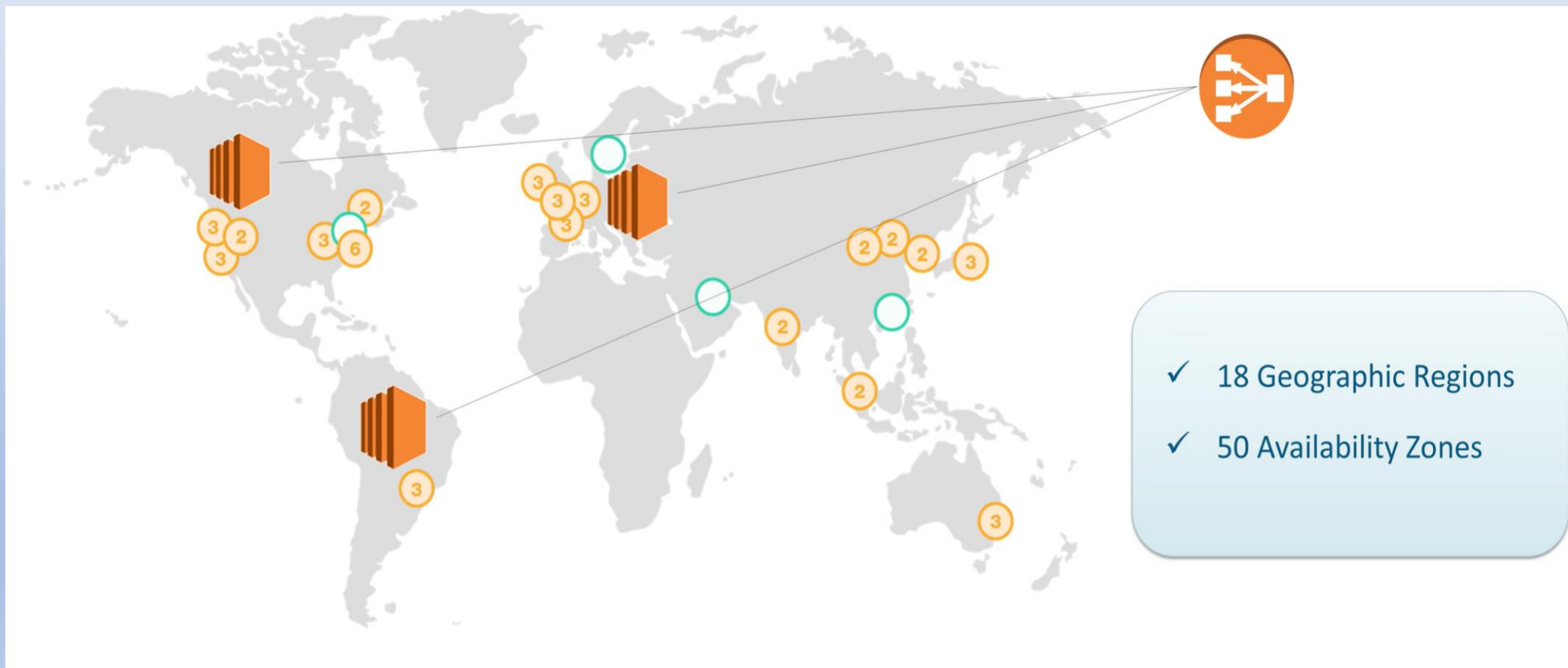
AWS Pricing

- ✓ Per Hour Billing
- ✓ Region Specific Pricing
- ✓ Savings upto 90% on reserved instances
- ✓ Get incredibly low prices using spot pricing

Domains of AWS

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