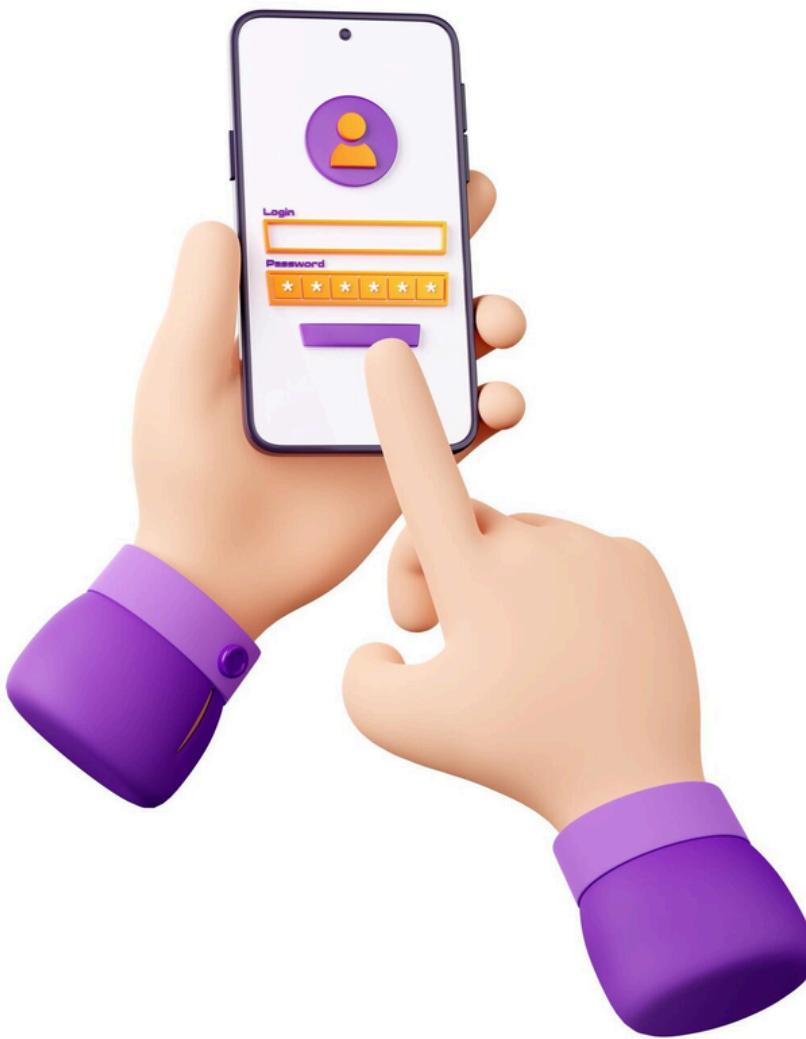


WHAT IS CLOUD?



WHAT IS CLOUD?



I HAVE AN APPLICATION



**ON-PREM
SERVERS**



**CLOUD
PLATFORM**

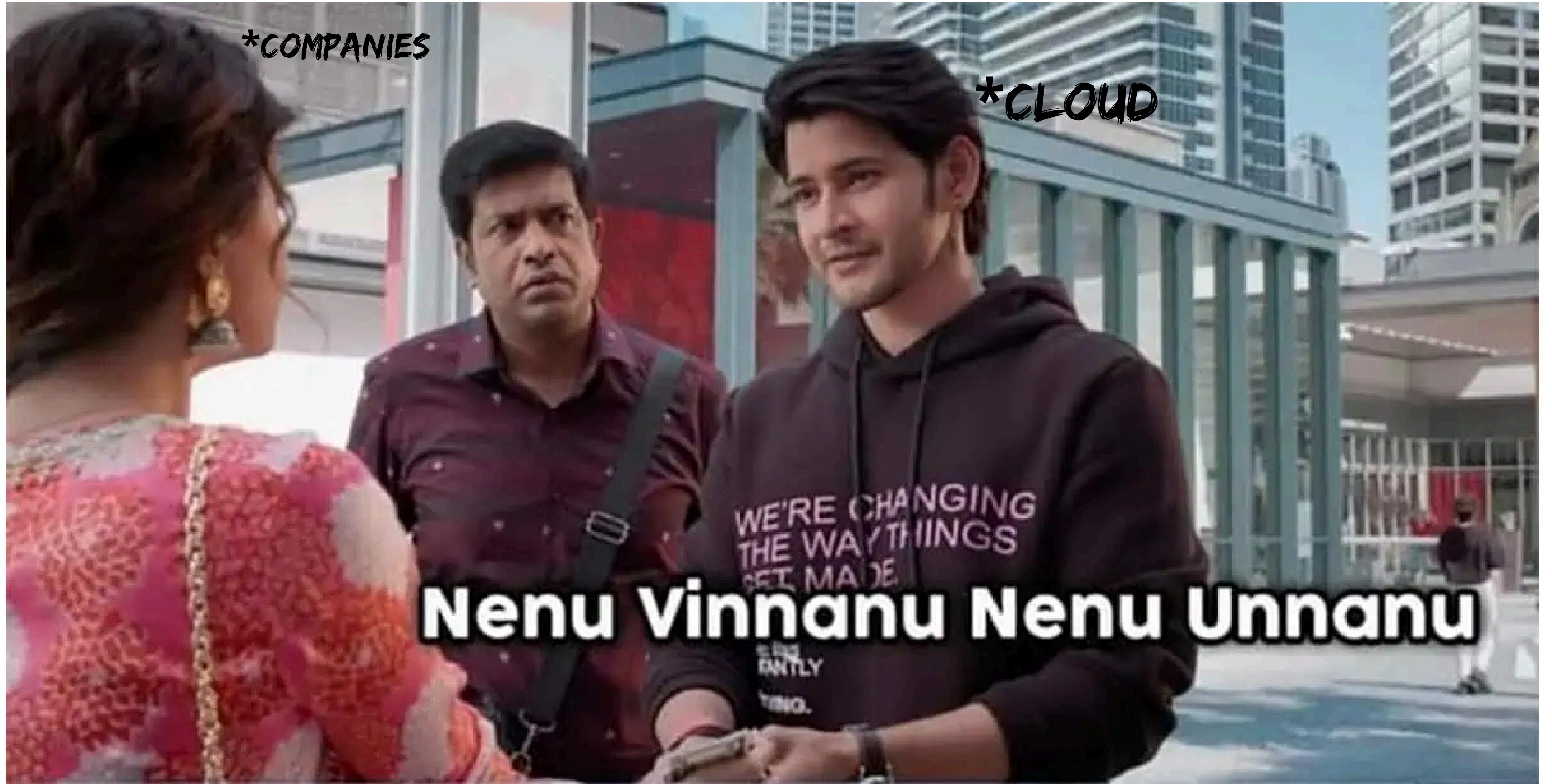
BUT I DONT KNOW WHERE TO RUN THIS APPLICATION

IF I CHOOSE ON-PREM SERVERS



DRAWBACKS

- High Maintenance
- Needs Physical Space
- Hire Technical Team
- 24/7 Technical Team Availability
- Scaling is not an easy task





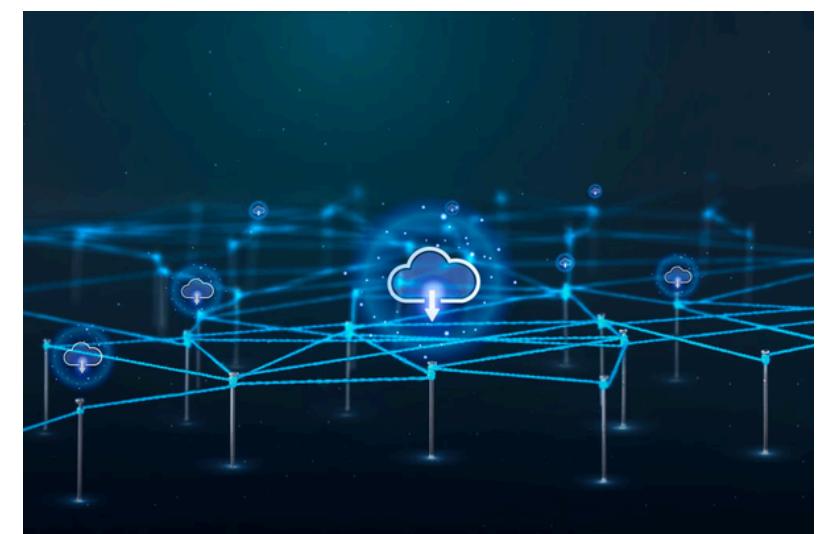
STORAGE



**OTHER CLOUD
SERVICES**



SERVERS



NETWORKING



**IPPUDU COMPANIES KI
NUVVU KAVALI**

*** CLOUD**

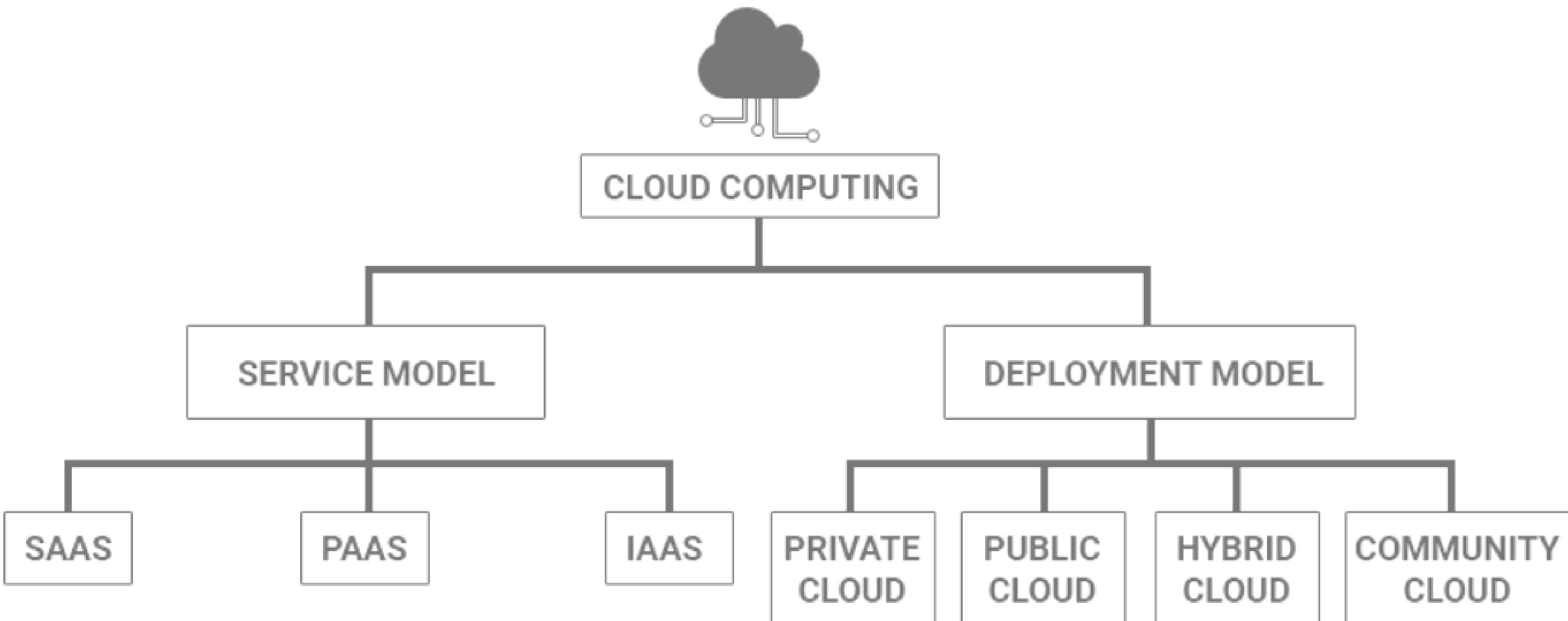
WHAT IS CLOUD COMPUTING

Cloud Computing is the delivery of computing services like Servers, Storage, Database, Networking and software through internet.

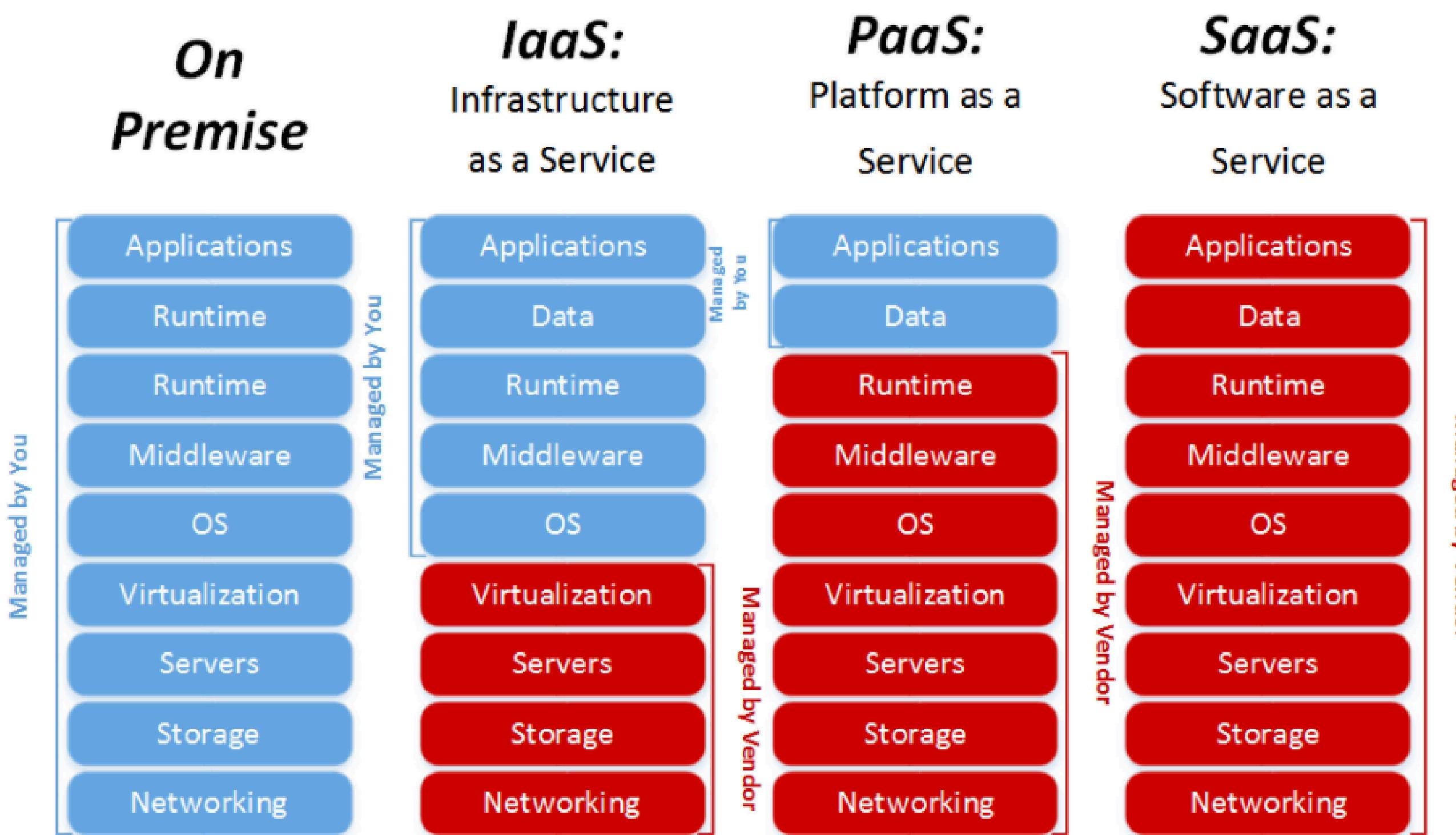


TYPES OF CLOUD COMPUTING





SERVICE MODEL:



Infrastructure as a Service (IaaS):

- In IaaS, the cloud provider gives you the basic infrastructure (like virtual machines, storage, and networking).

Examples:

- AWS EC2 (Elastic Compute Cloud)
- Google Compute Engine
- Azure Virtual Machines

Explanation:

You rent a piece of land (IaaS).

You decide how to design and build the house (setting up servers and network).

The landlord (cloud provider) takes care of the underlying land maintenance (hardware and infrastructure).

Platform as a Service (PaaS):

- The cloud provider offers a platform (runtime + infrastructure) so you only need to focus on developing and deploying code.
- No need to worry about managing servers, OS updates, or scaling

Examples:

- AWS Elastic Beanstalk
- Google App Engine
- Heroku

Explanation:

- You rent a fully furnished apartment (PaaS).
- You only need to bring your personal items and make it your home (develop your app).
- The landlord handles repairs and maintenance of the building (platform maintenance).

Software as a Service (SaaS):

- In SaaS, everything is fully managed for you.
- You simply log in and start using the software—no need to worry about installation, maintenance, or infrastructure.

Examples:

- AWS Code Pipeline
- Azure Code Pipeline

Explanation:

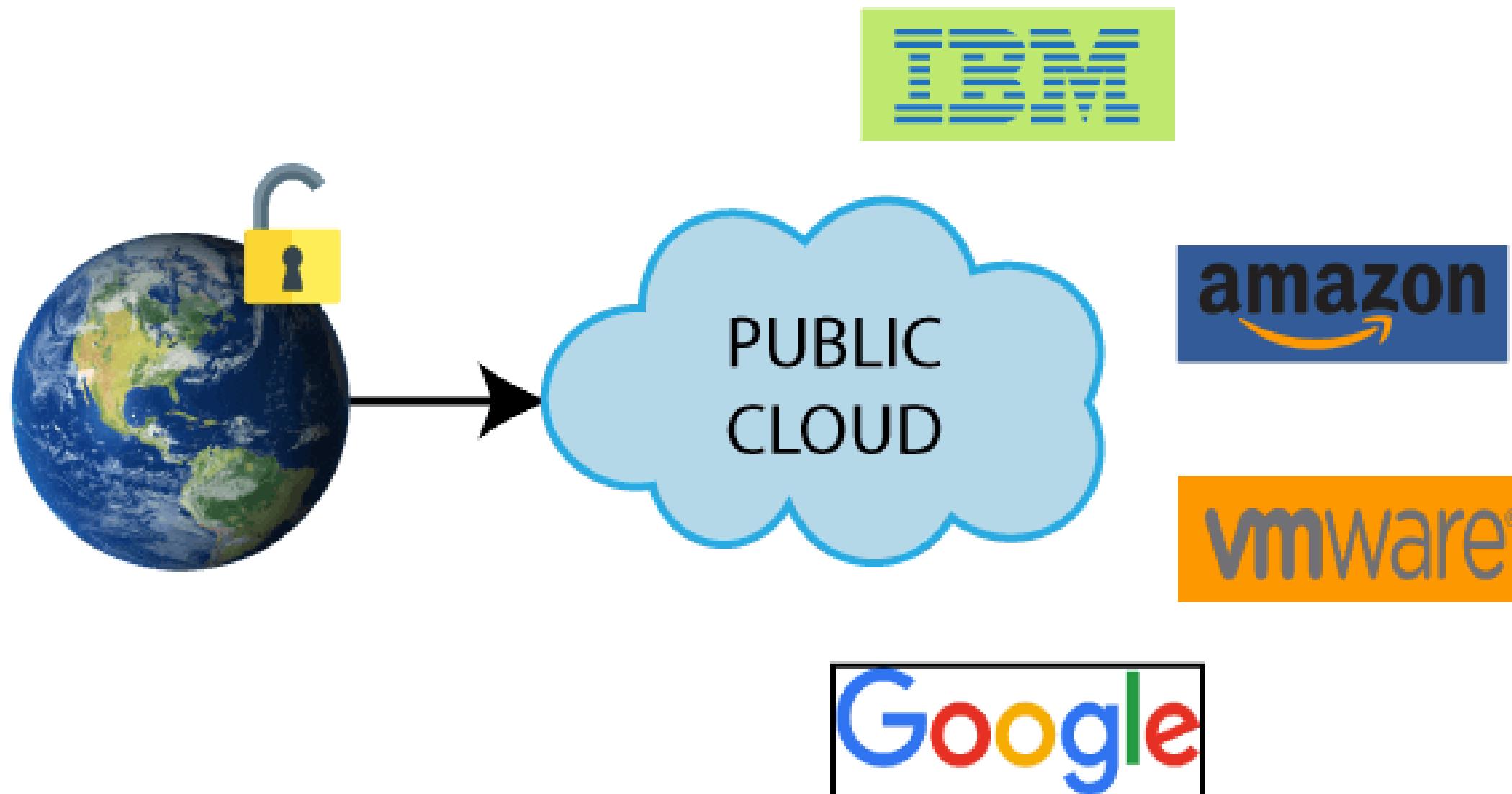
- You book a hotel room (SaaS).
- Everything is set up for you (software is already configured).
- You just enjoy the service without worrying about cleaning or maintenance (the cloud provider handles everything).

DEPLOYMENT MODEL:



PUBLIC CLOUD:

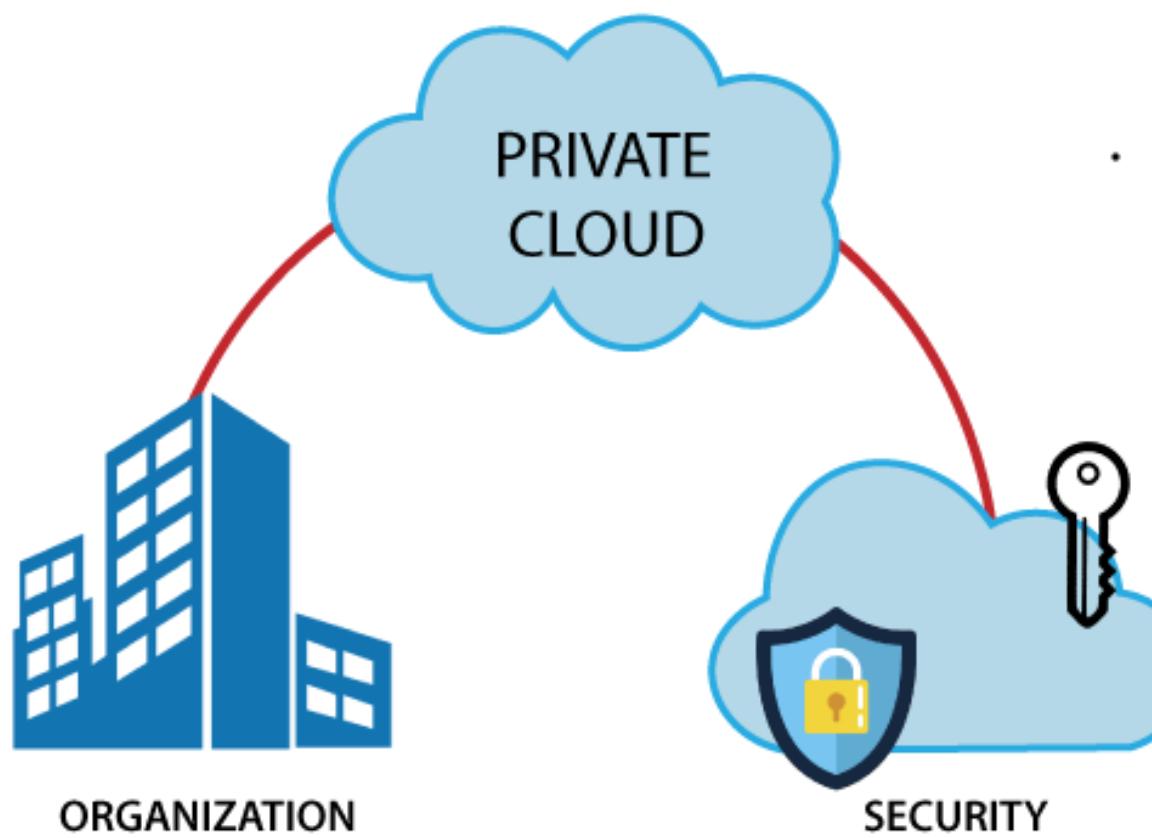
A public cloud is a cloud environment owned and operated by a third-party provider, and resources are shared among multiple organizations (tenants). Users access services over the Internet, paying only for what they use (pay-as-you-go model).



PRIVATE CLOUD:

A private cloud is dedicated exclusively to one organization.

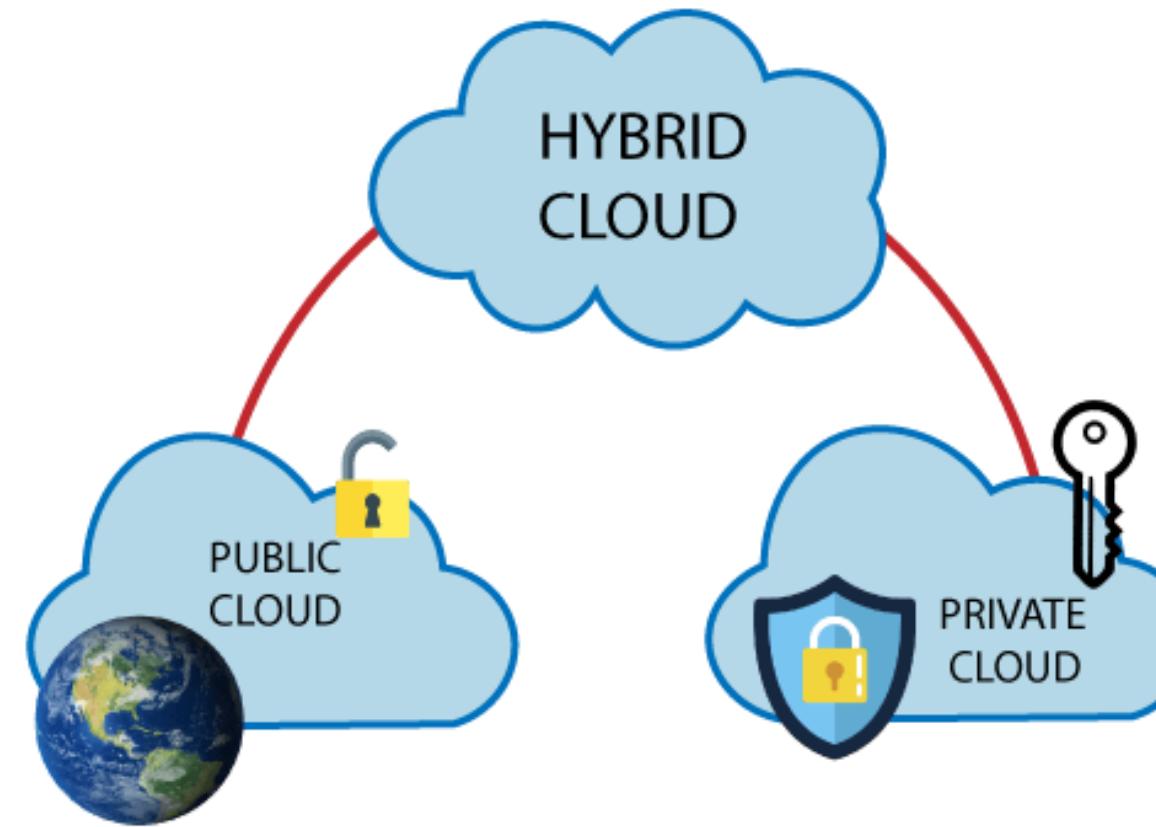
The infrastructure can be on-premises or hosted by a third-party provider, but the resources are not shared with anyone else.



Example: A bank or government organization running its applications on its own private data center for data security.

HYBRID CLOUD:

A hybrid cloud combines both public and private clouds, allowing data and applications to move between them.



Example:

An e-commerce company that stores transaction systems on a private cloud, but uses AWS public cloud for hosting the front-end website

Another example:

Healthcare company storing patient data in a private cloud for compliance, while running data analytics on anonymized data in the public cloud.

COMMUNITY CLOUD:

It allows multiple organizations to use same cloud to store their data.

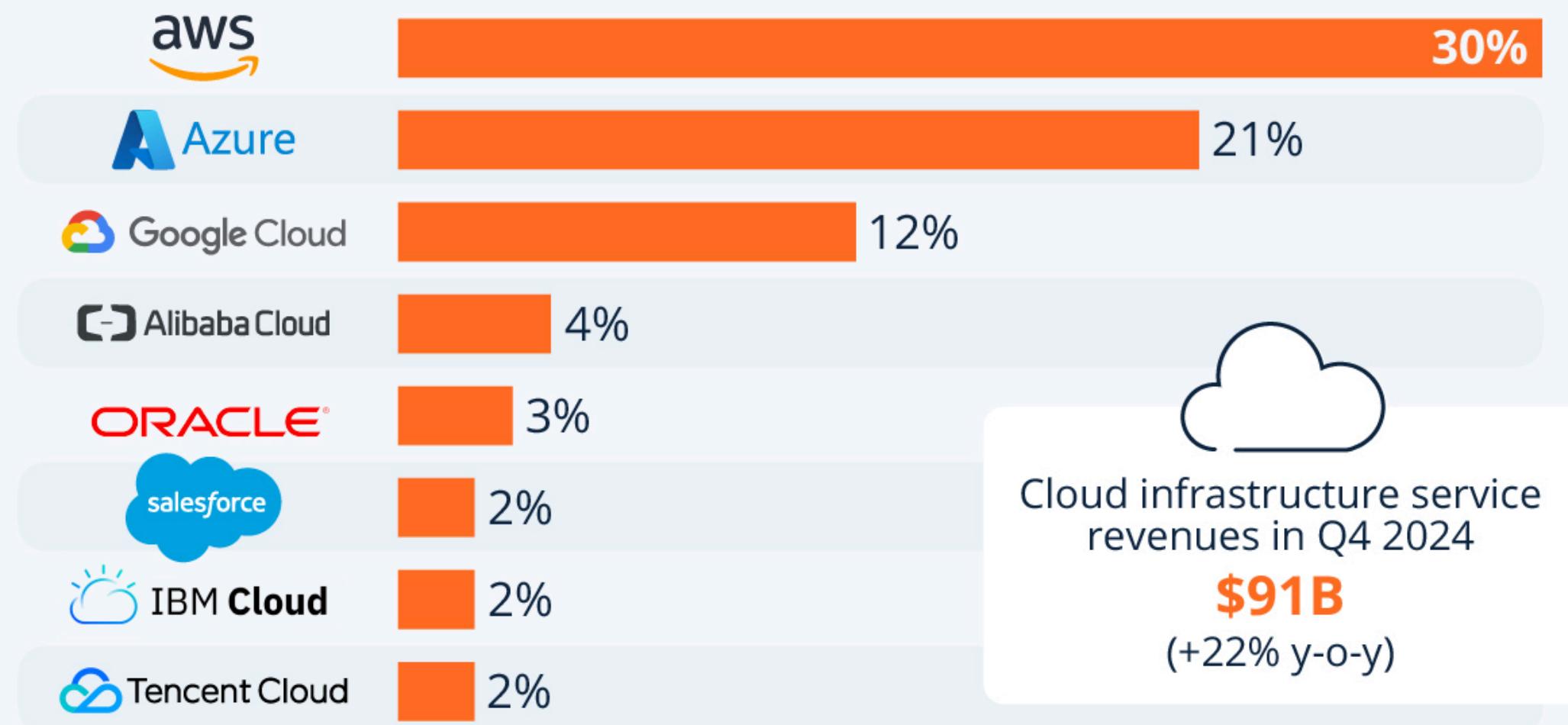


TOP 10 CLOUD PROVIDERS



Amazon and Microsoft Stay Ahead in Global Cloud Market

Worldwide market share of leading cloud infrastructure service providers in Q4 2024*



* Includes platform as a service (PaaS) and infrastructure as a service (IaaS) as well as hosted private cloud services

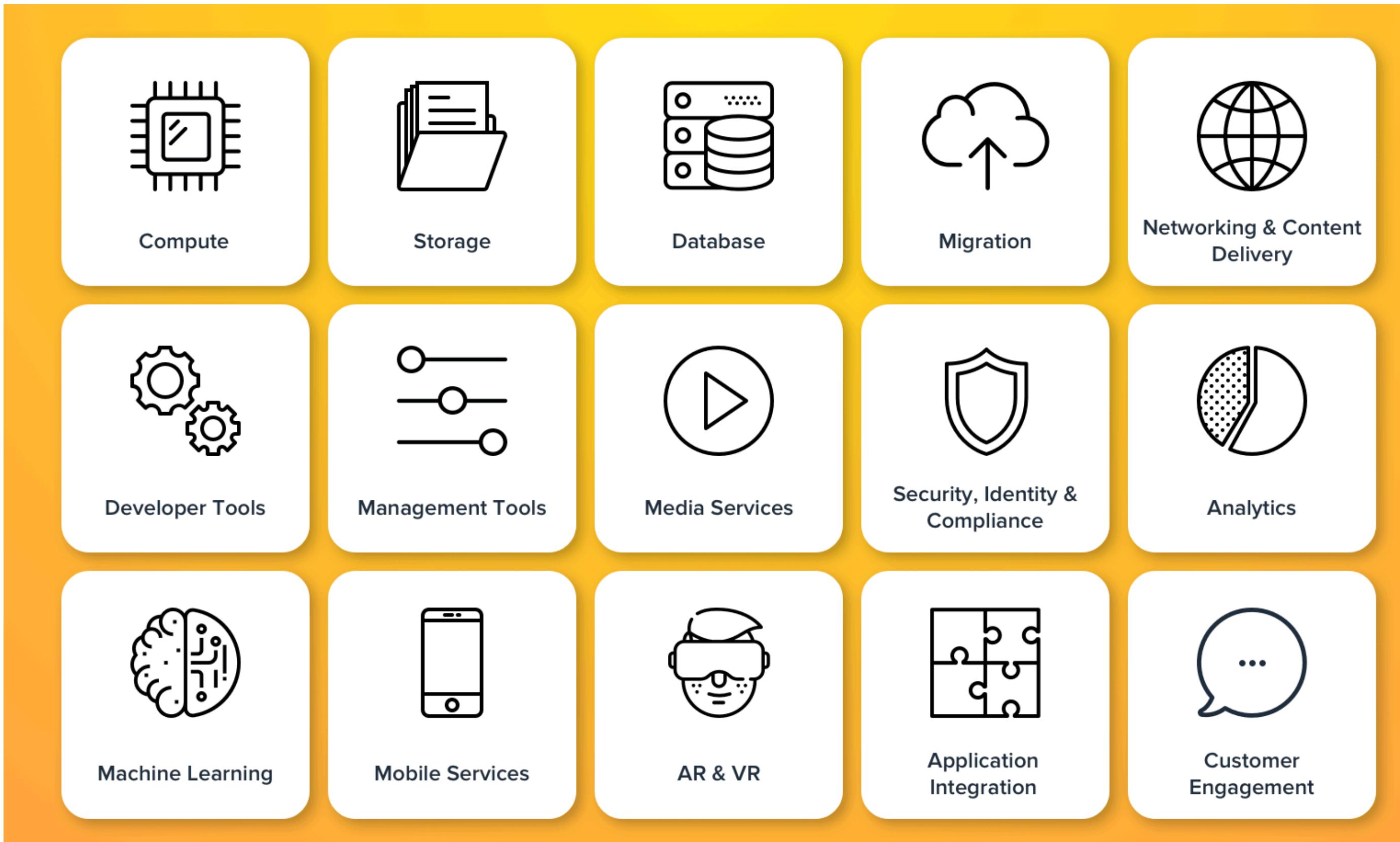
Source: Synergy Research Group

WHAT IS



- AWS is abbreviated as Amazon Web Services.
- It is the best cloud provider
- It is the first among all the clouds
- It offers multiple services on different domains.
- It is the combination of SAAS, PAAS, IAAS.
- It is one of the most popular cloud computing platform. Now a days most of the companies are using this cloud because of numerous that allow them to store their data easily without the need for a physical space.

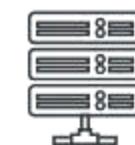
AWS WEB SERVICES LIST



WHY AWS IS SO POPULAR?

- AWS provides a wide range of cloud computing services that can be used to build and run applications.
- It can offer 200+ services on multiple domains.
- AWS covers about 31 geographic regions around the world.
- AWS provides a wide range of security features and compliance certifications that help customers to secure their applications and data in the cloud.
- The AWS Cloud spans 99 Availability Zones.
- It has 7 years of experience compared to another cloud.
- AWS allows users to select different operating systems, databases, and languages.
- It follows the Pay as you go, Model.

KEY TERMS:



"AVAILABILITY ZONE "



..aka "Data Center"

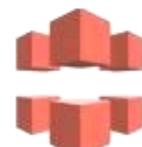


"REGION"



..aka "Geographical Area"

***Each Region consists of
2 or more availability zones*



"EDGE LOCATION"



...aka "AWS Endpoint
used to cache content"

***Reduces latency to end user*

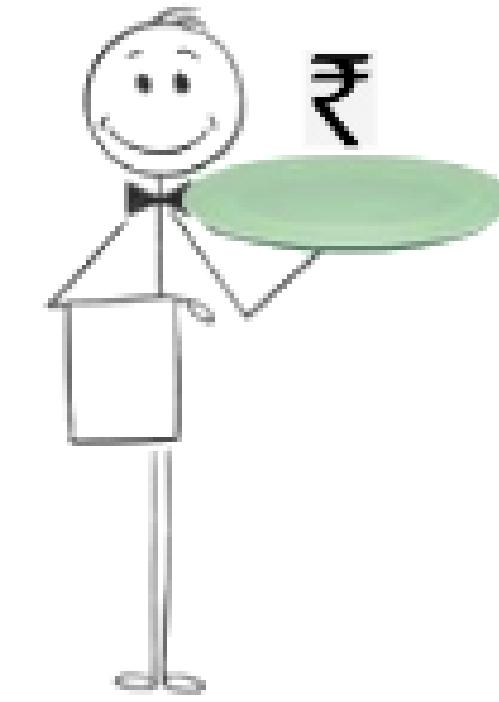
PAY AS YOU GO MODEL



IF YOU GO TO BARBIQUE
NATION RESTURANT



AND ATE ONLY 1 PLATE
OF BIRYNI



SERVER ASKS YOU TO PAY
800RS

INSTEAD

IF YOU GO TO NORMAL
RESTURANT THEY WILL
CHARGE WHAT EVER YOU
ORDER

| ITEM | PRICE |
|-------------|---------|
| BIRYANI | \$60.00 |
| STARTERS | \$65.00 |
| MILK SHAKES | \$80.00 |



ADVANTAGES OF AWS

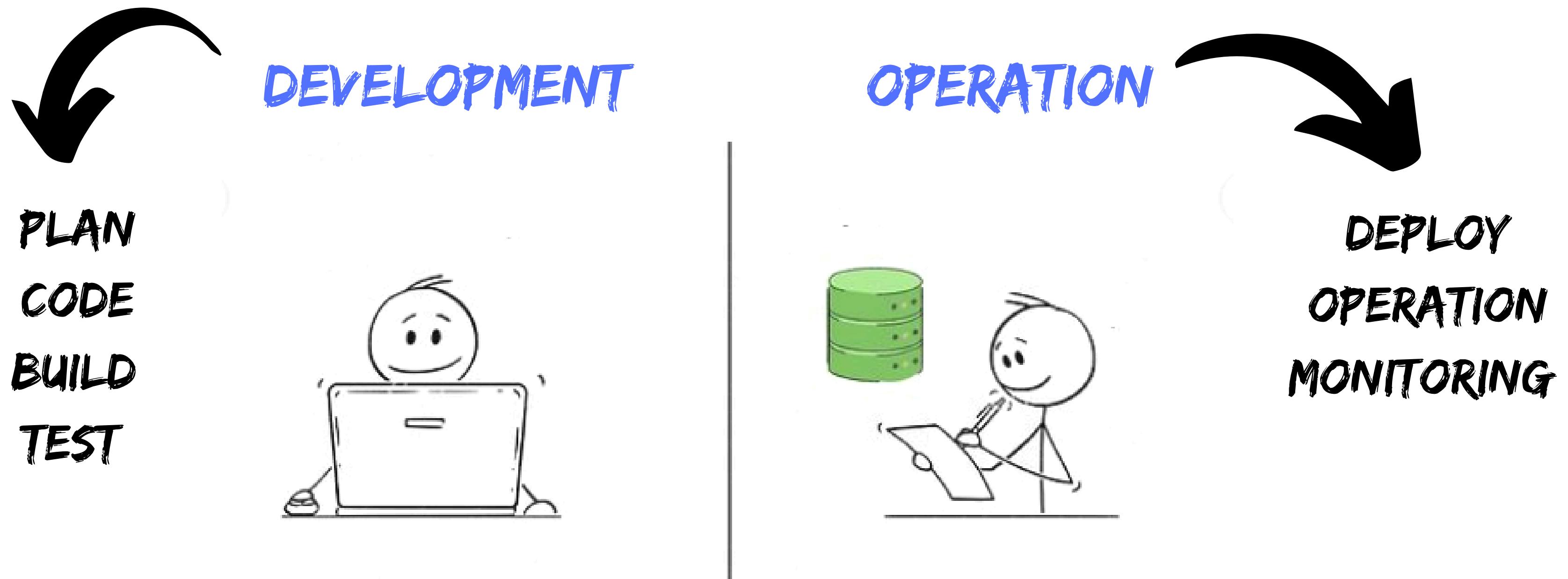




Thank You

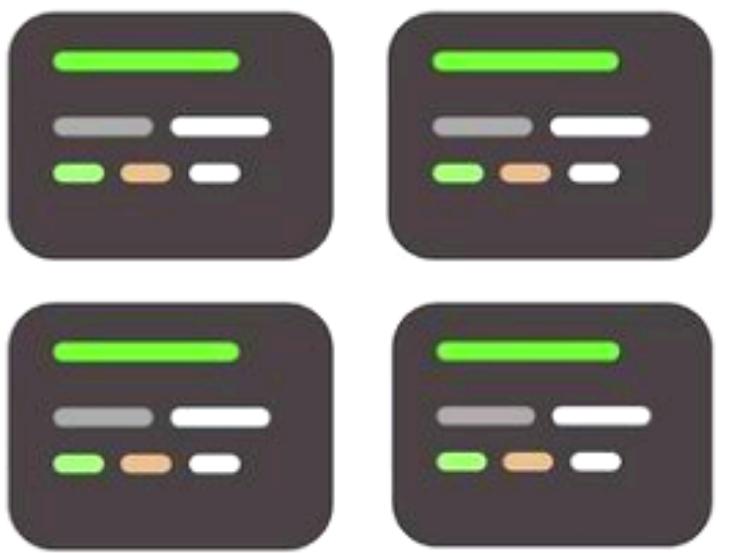
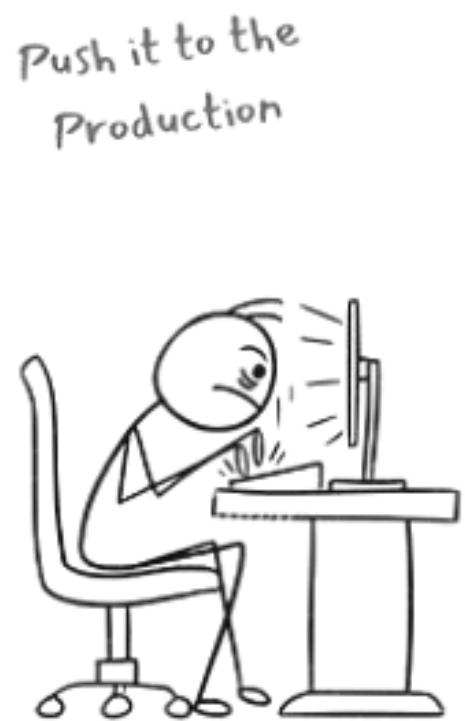
WHAT IS DEVOPS

IN SOFTWARE DOMAIN, WE HAVE 2 TEAMS FOR DEVELOPING THE APPLICATION



DEVELOPMENT

THE DEV TEAM WRITES THE CODE FOR THE ENTIRE APPLICATION AND TOSSES IT TO OPERATIONAL TEAM FOR PRODUCTION



OPERATIONAL

THE OPS TEAM DEPLOYS, MONITOR OPERATE & MAINTAIN THE APPLICATION



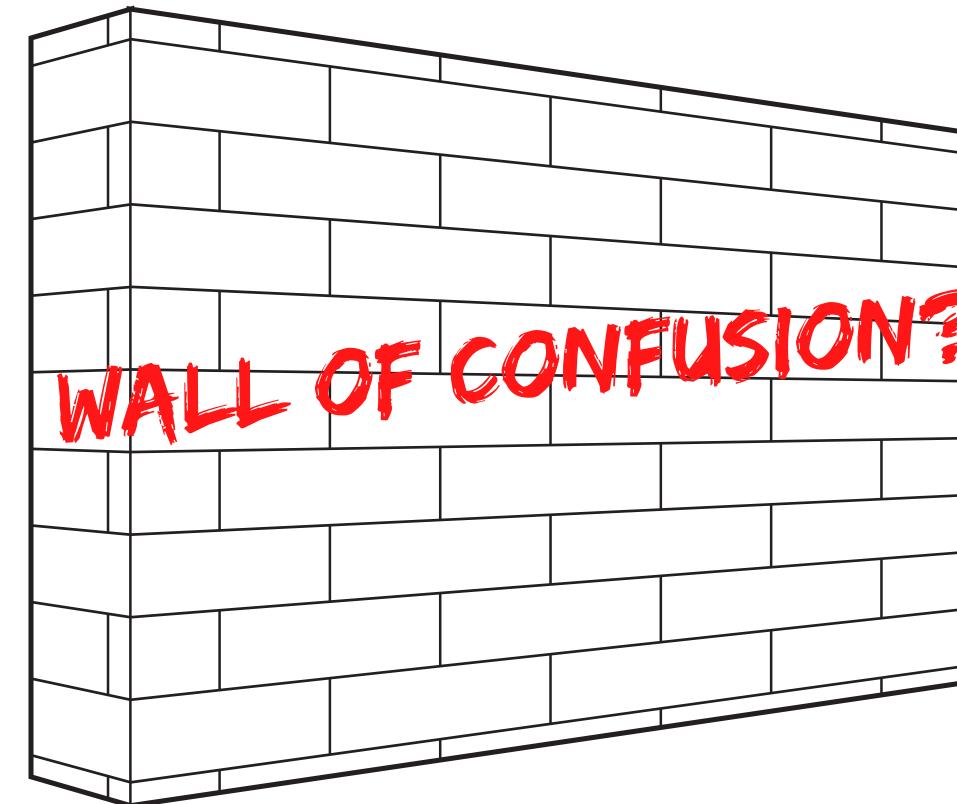
DEV TEAM

I Have given you the
right code

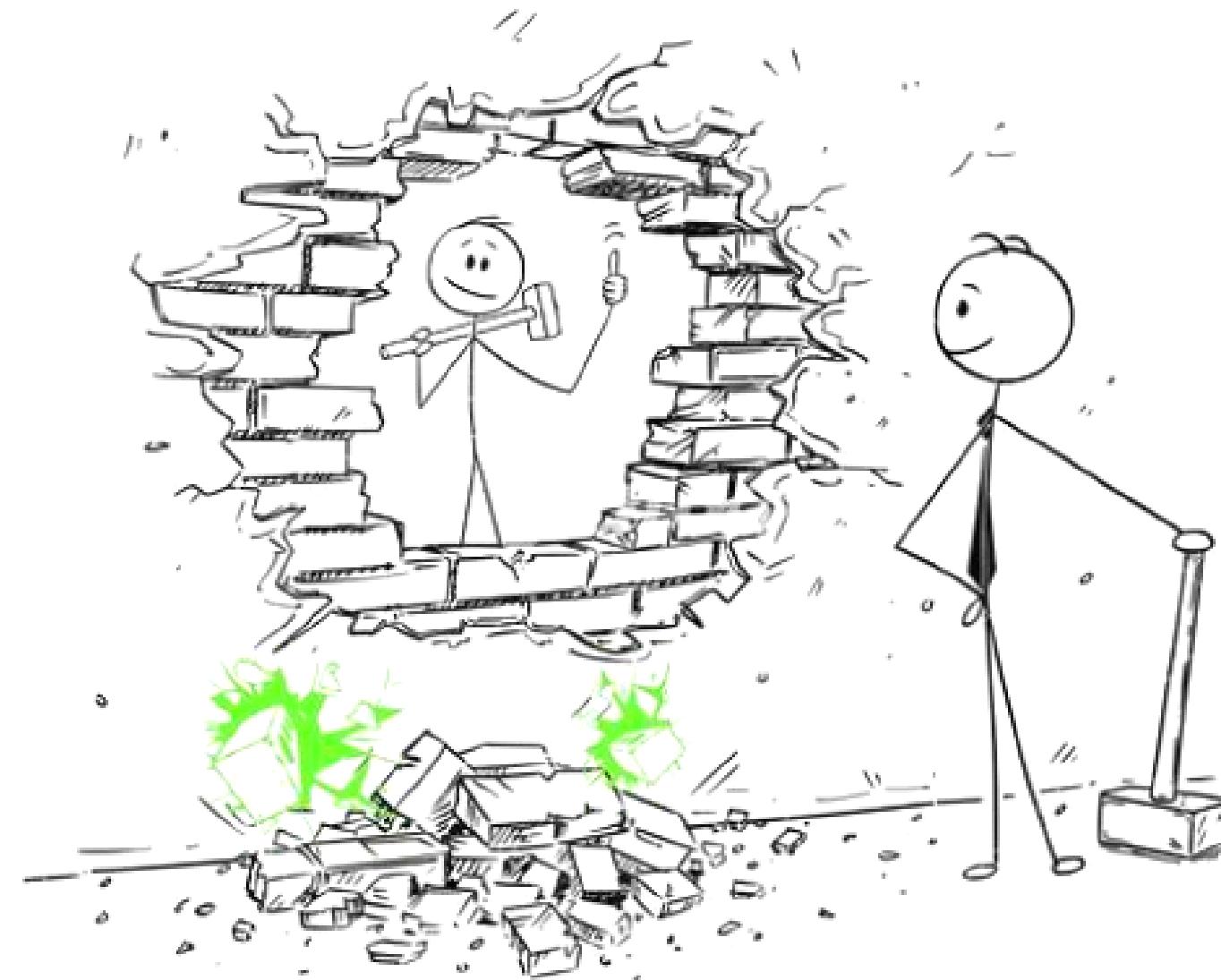


OPS TEAM

I have deployed the
code you given to me



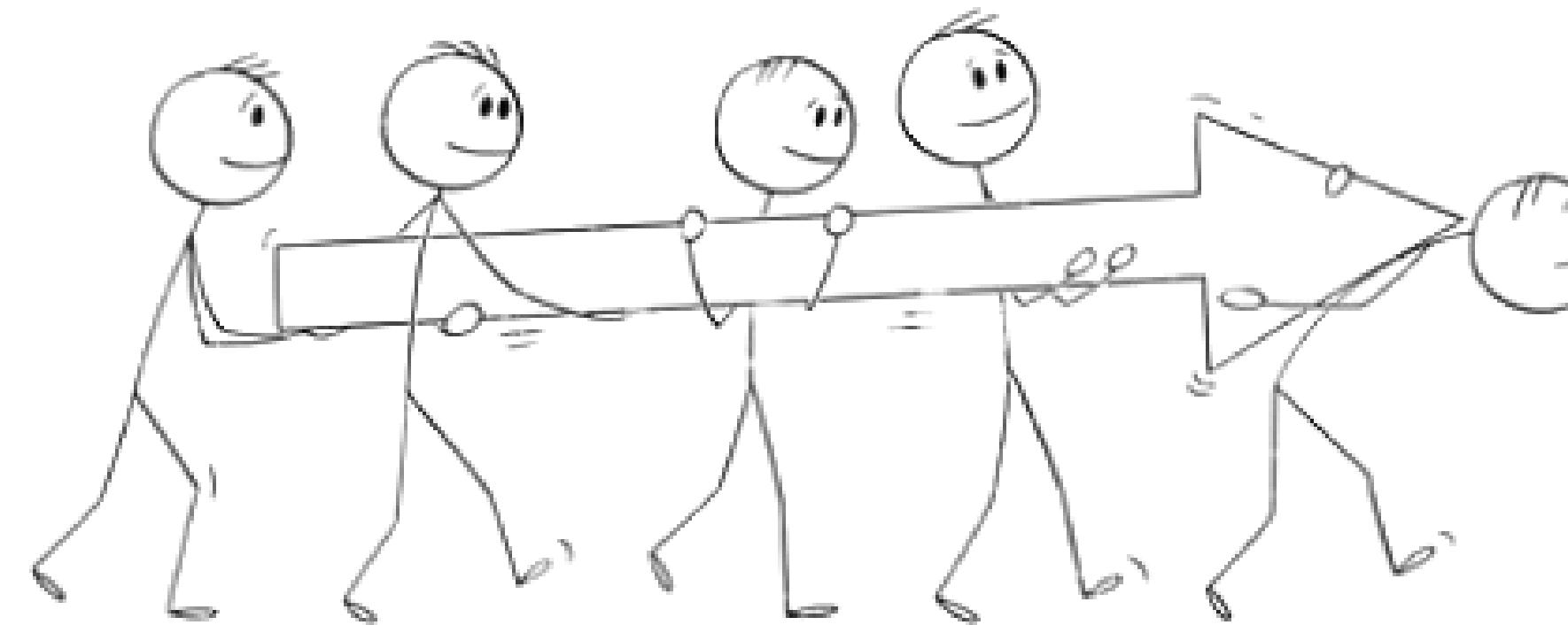
SO WHAT IF WE BREAK THE WALL?



THAT IS DEVOPS ---> DEV + OPS

DEVOPS IS NOT A TOOL, TECHNOLOGY OR FRAME WORK

DevOps is a cultural movement, mindset, philosophy to coordinate produce better, more reliable products



by automating infrastructure, workflow, and continuously measuring application performance for which they use a lot of tools

DEVOPS LIFE CYCLE

The Logo of DevOps represents infinite because its a never ending continuous process

