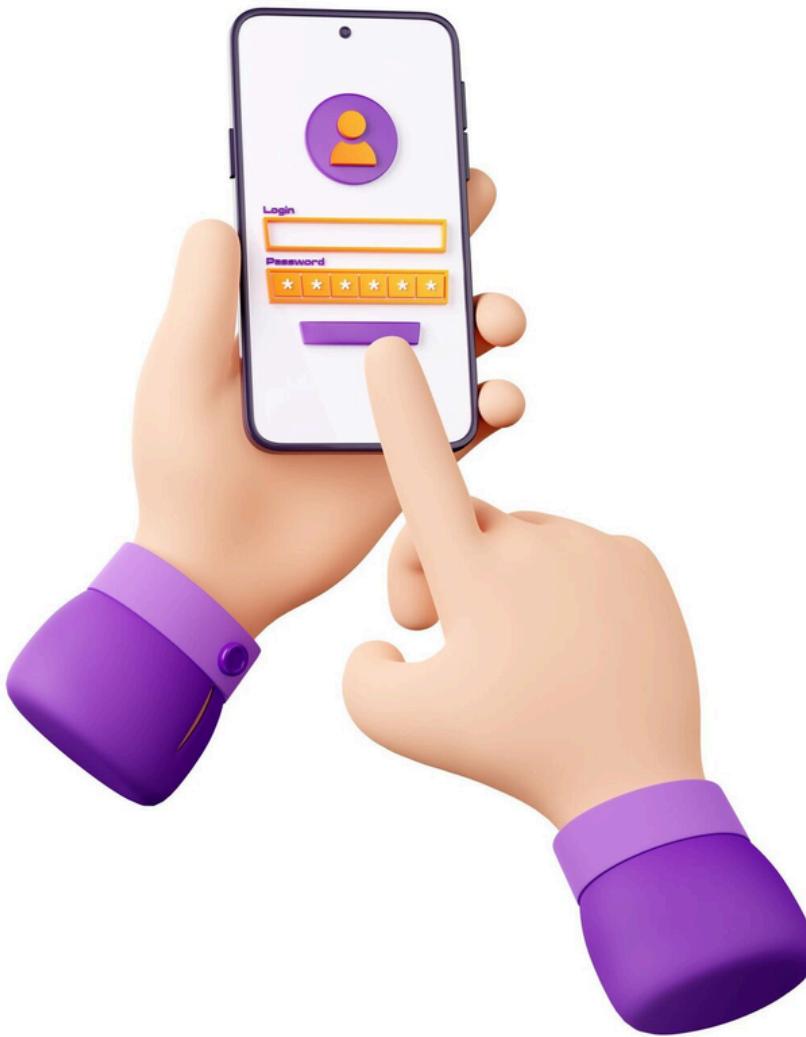


WHAT IS CLOUD?



WHAT IS CLOUD?



I HAVE AN APPLICATION



**ON-PREM
SERVERS**



**CLOUD
PLATFORM**

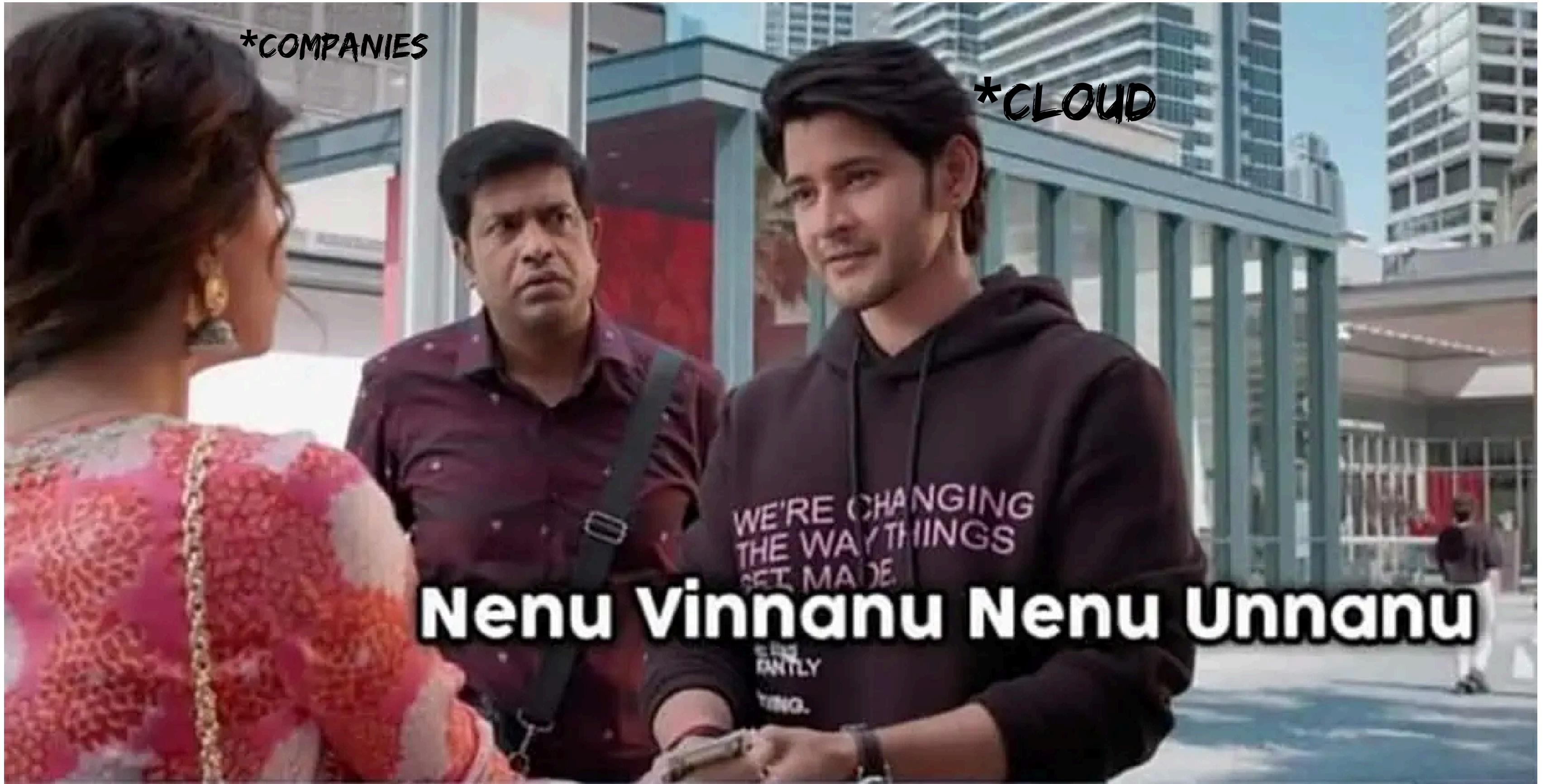
BUT I DONT KNOW WHERE TO RUN THIS APPLICATION

IF I CHOOSE ON-PREM SERVERS



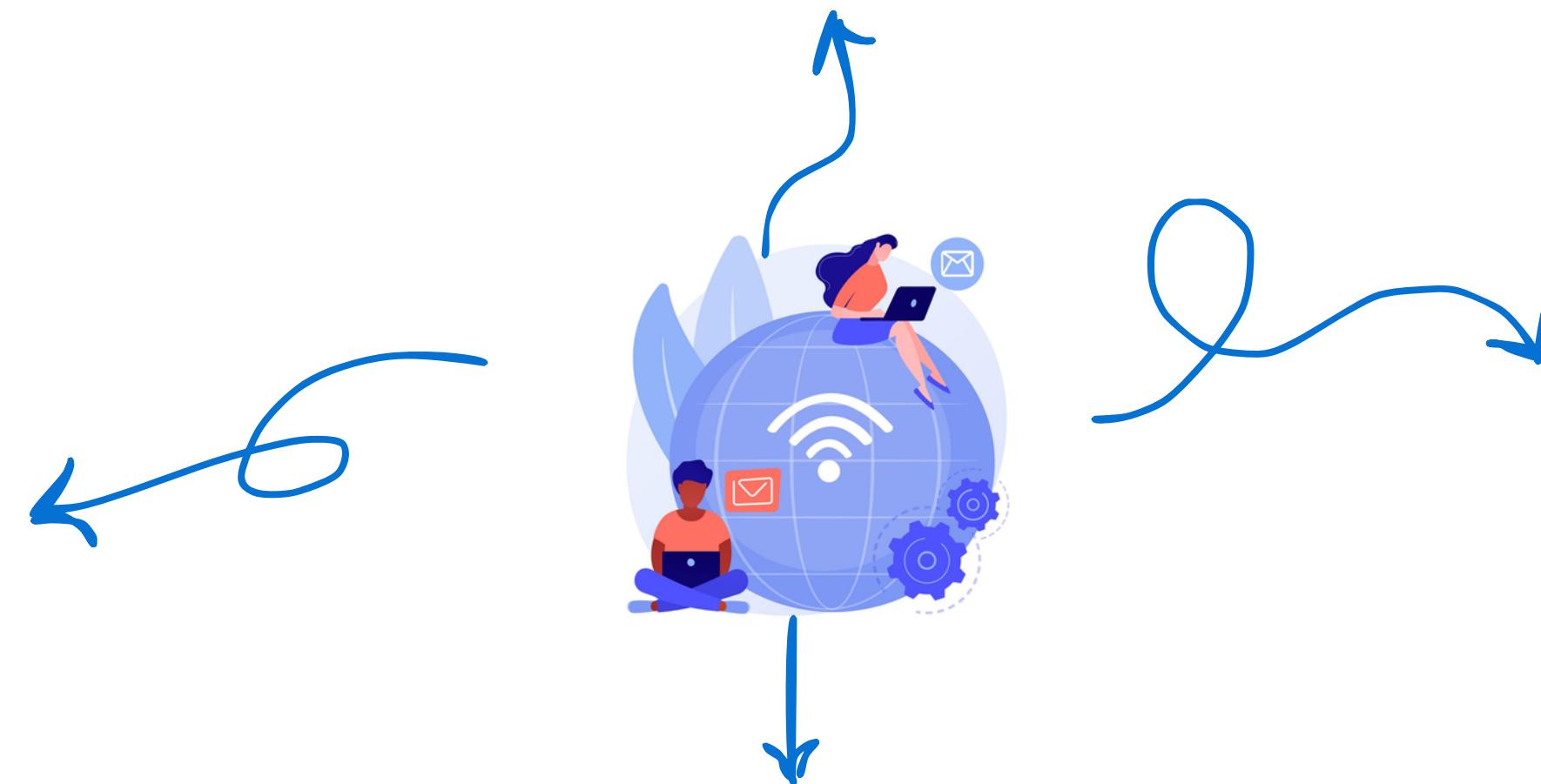
DRAWBACKS

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

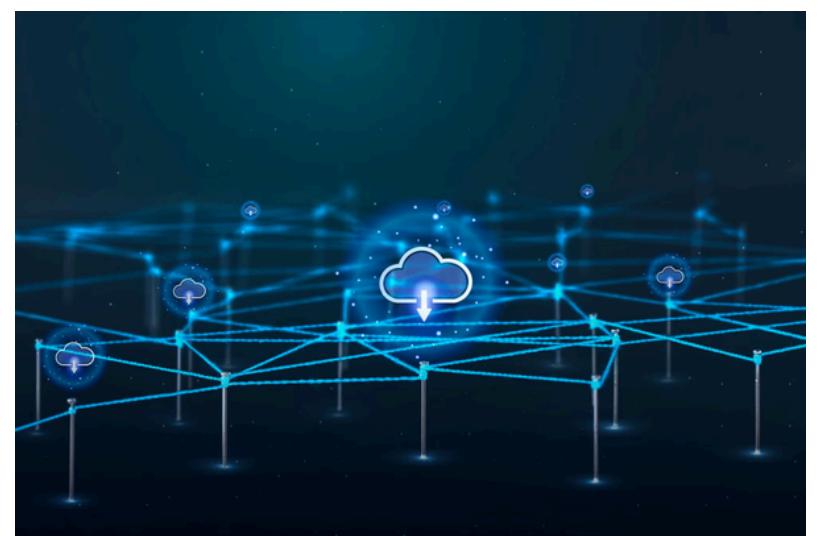




STORAGE



SERVERS



NETWORKING



**OTHER CLOUD
SERVICES**

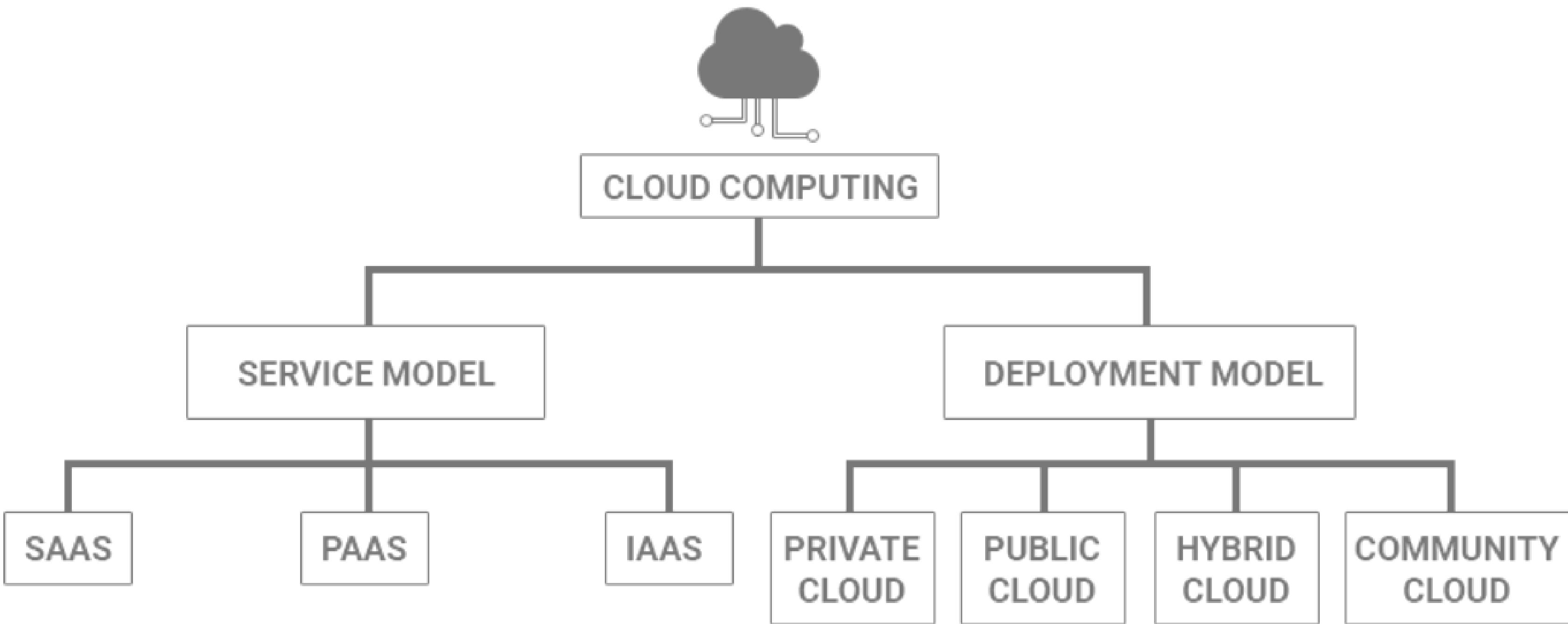
WHAT IS CLOUD COMPUTING

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

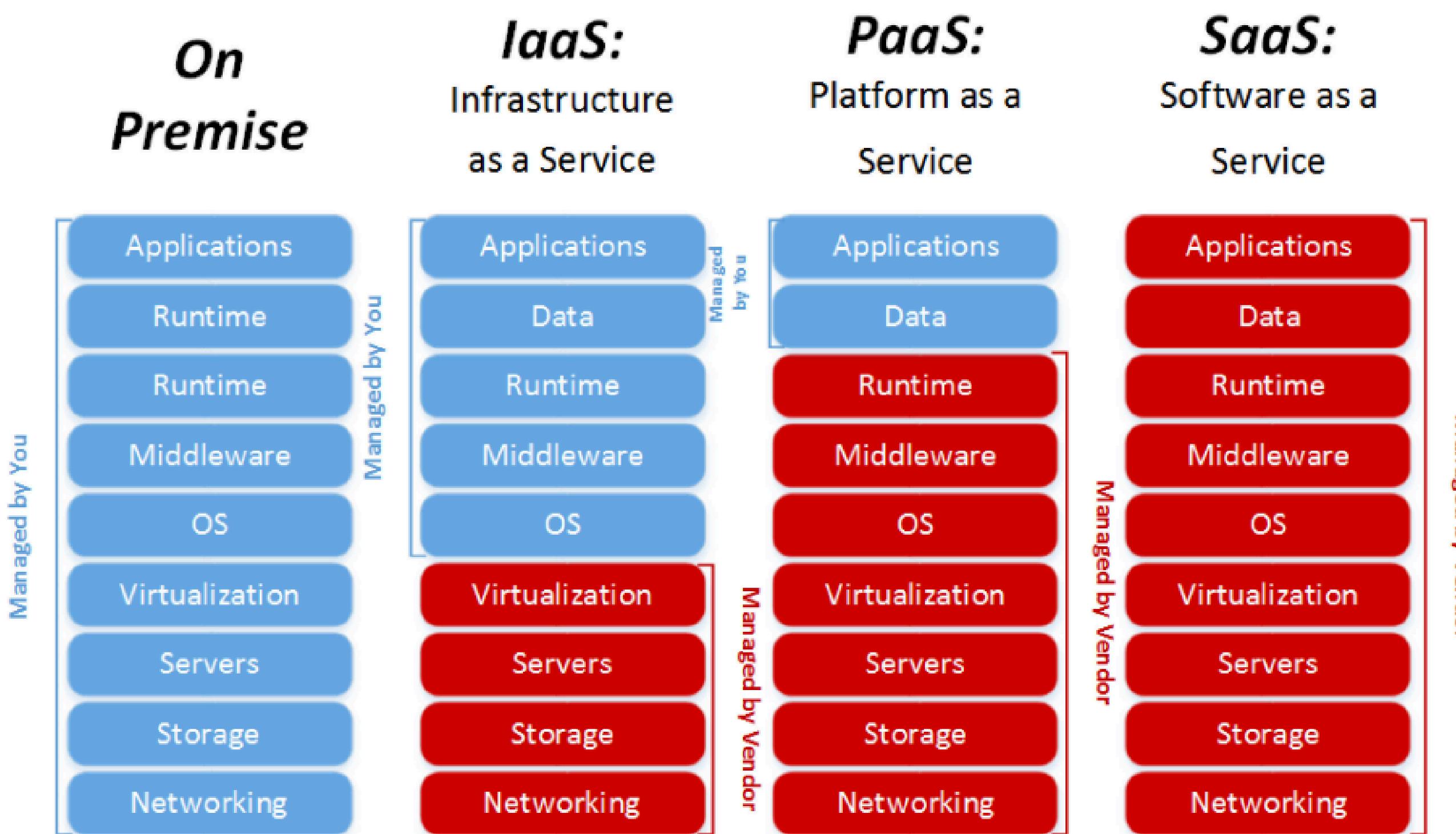


TYPES OF CLOUD COMPUTING





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):

- In PaaS, the cloud provider supplies the infrastructure and the development platform (like OS, databases, and runtime environment).
- You just need to focus on building and deploying your application—no need to worry about the underlying infrastructure or platform maintenance.

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:

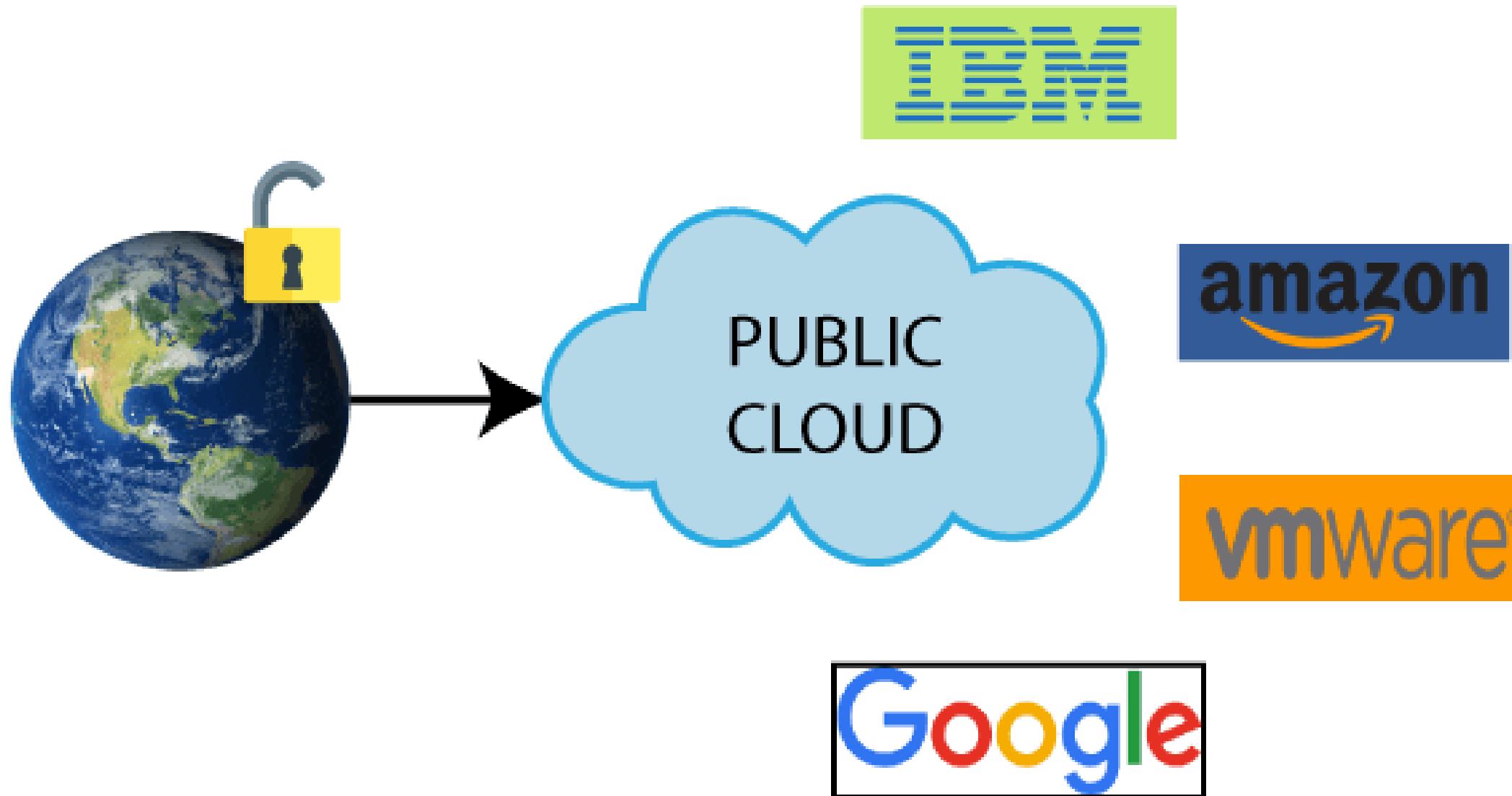
- You book a hotel room (SaaS).
- Everything is set up for you (software is already configured).
- You just enjoy the service without worrying about cleaning or maintenance (the cloud provider handles everything).

DEPLOYMENT MODEL:



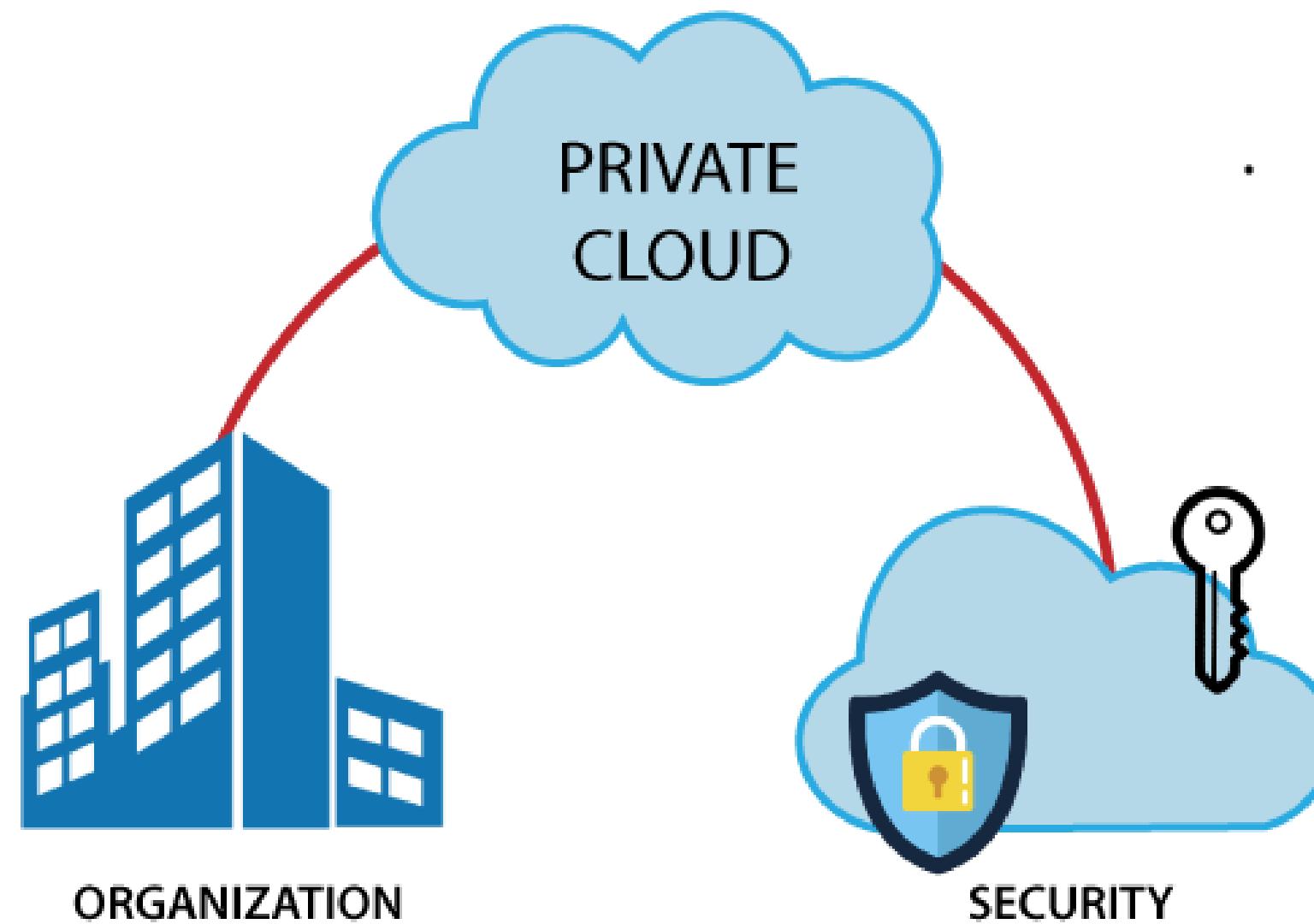
PUBLIC CLOUD:

Public cloud is open to all to store and access information via the Internet. Public clouds are managed by third parties. In public cloud, Security will be less when we compared to private and hybrid.



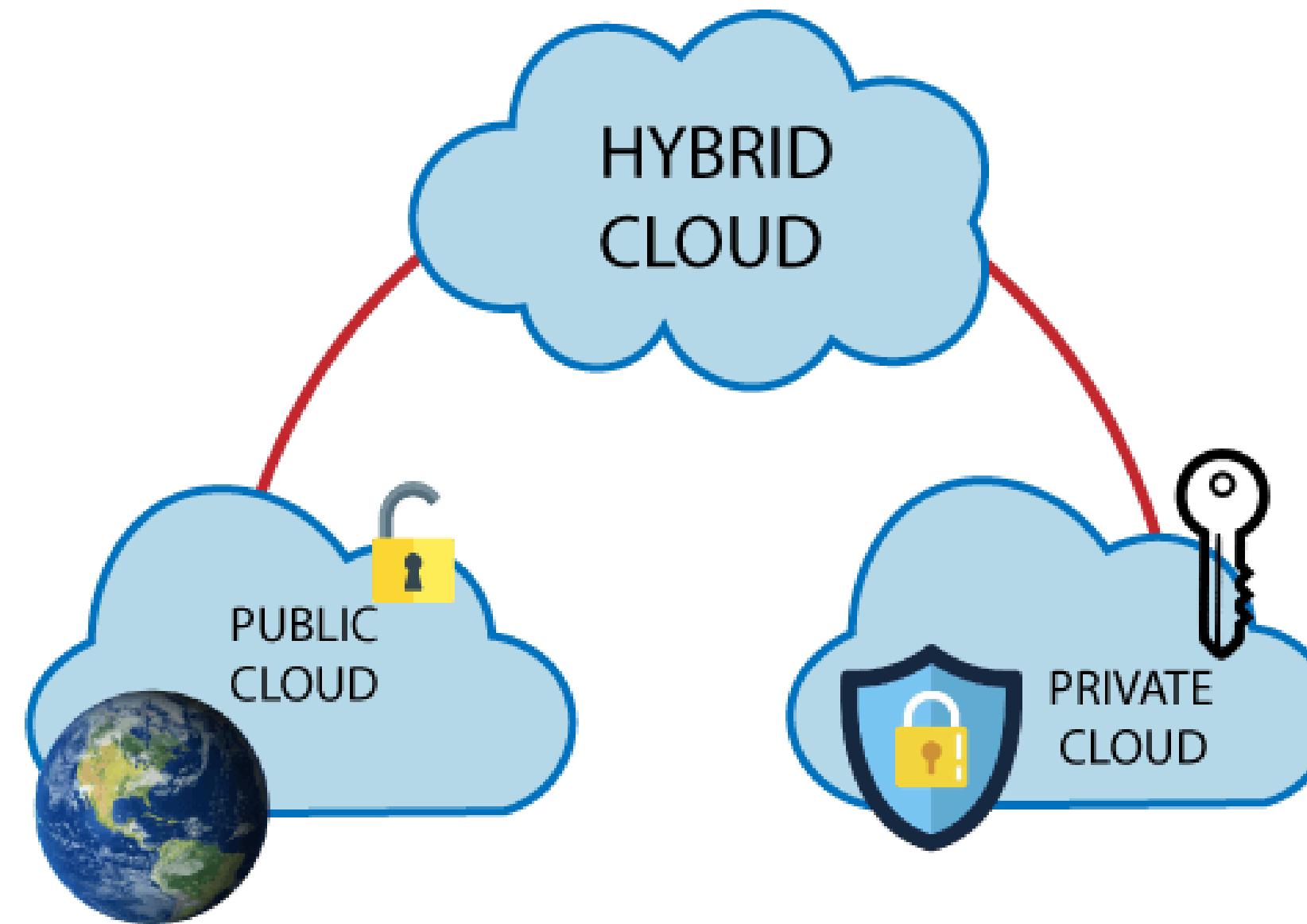
PRIVATE CLOUD:

A private cloud is also known as an internal cloud or corporate cloud. It is used by organizations to build and manage their data centers. In private cloud security will be high.



HYBRID CLOUD:

Hybrid cloud is the combination of both public cloud and private cloud. If the services are running on public then it will not have much security. If the services are running on private then the cloud have high security.



COMMUNITY CLOUD:

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

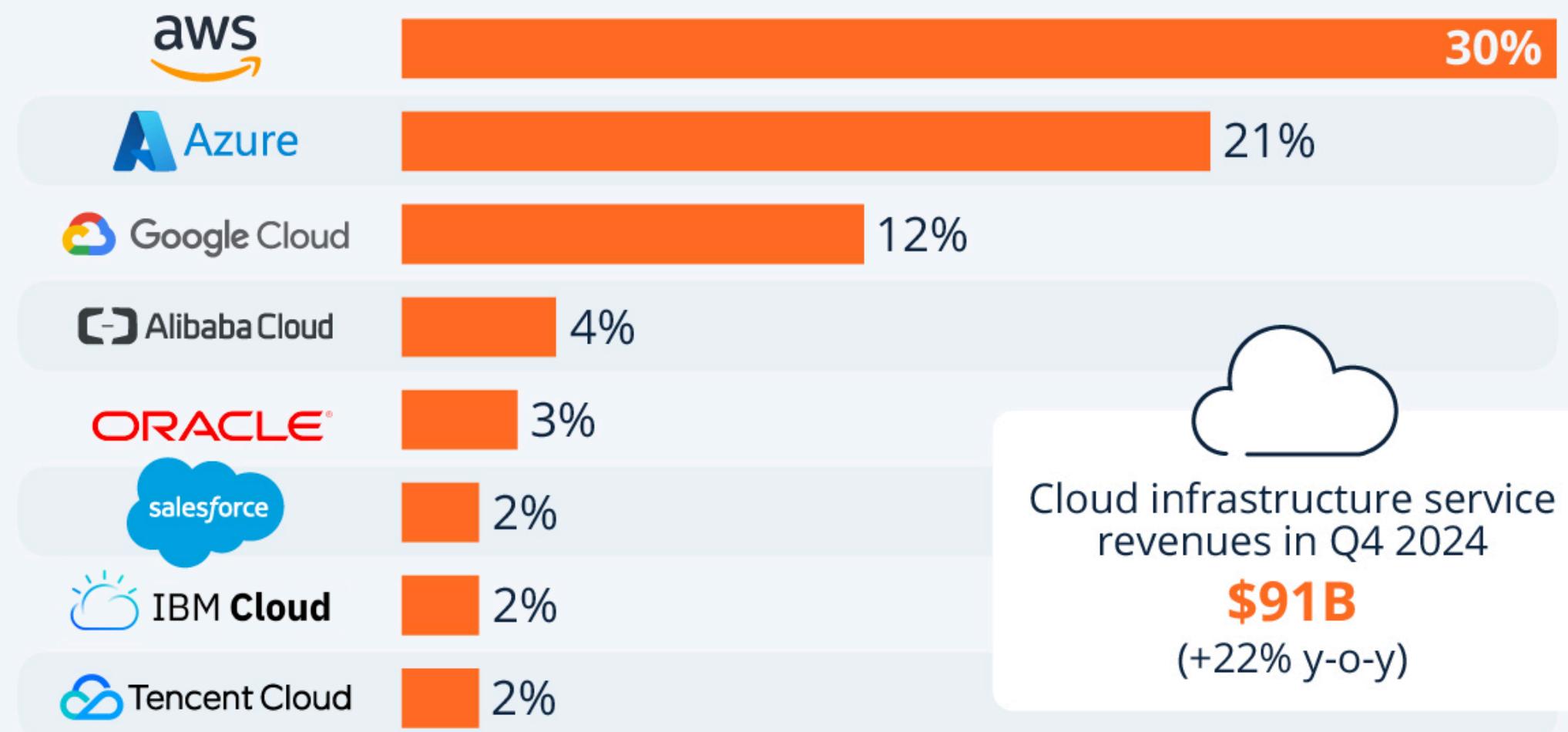


TOP 10 CLOUD PROVIDERS



Amazon and Microsoft Stay Ahead in Global Cloud Market

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



Cloud infrastructure service
revenues in Q4 2024

\$91B

(+22% y-o-y)

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

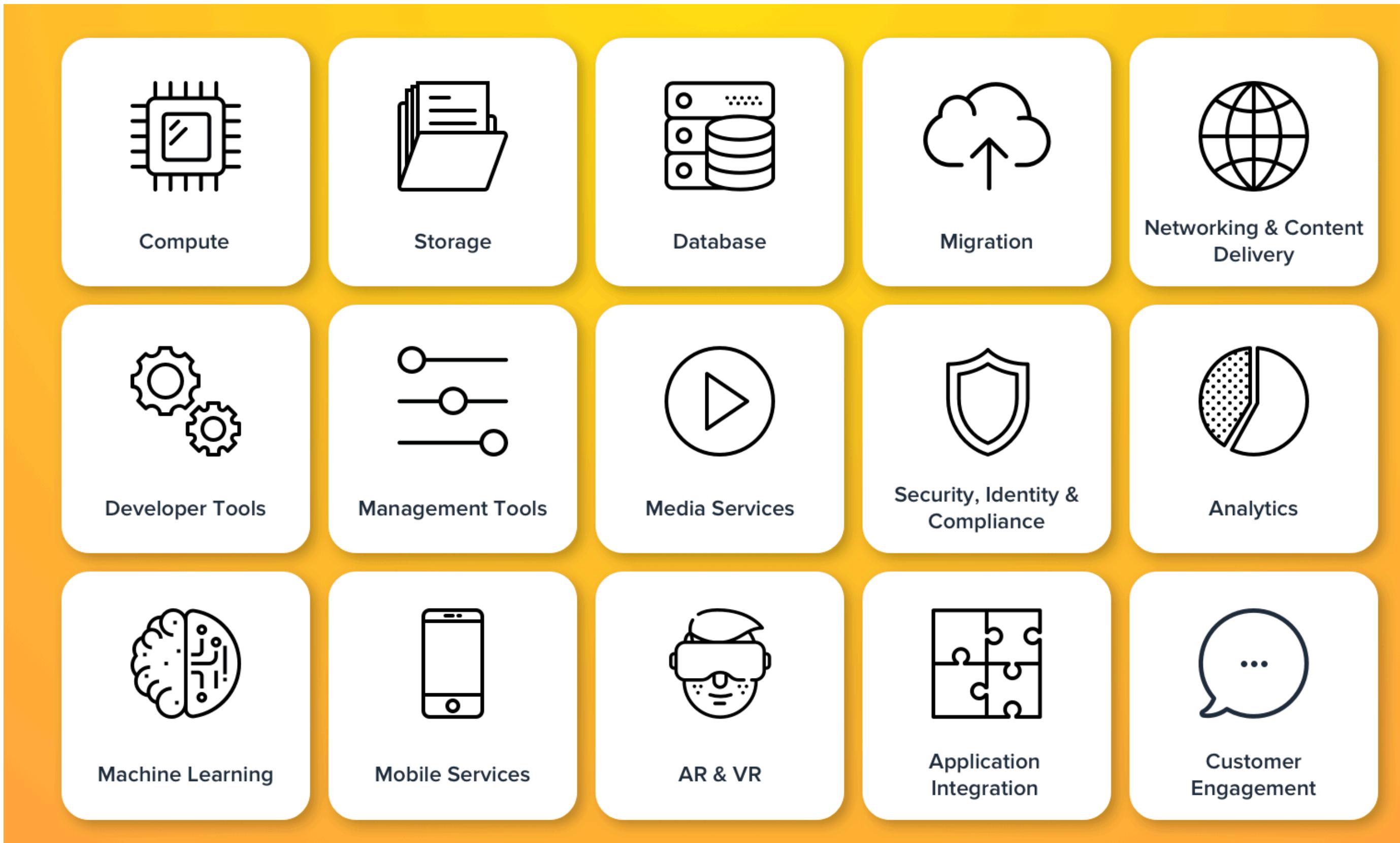
Source: Synergy Research Group

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.

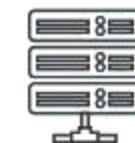
AWS WEB SERVICES LIST



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"

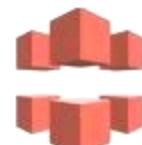


"REGION"



..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

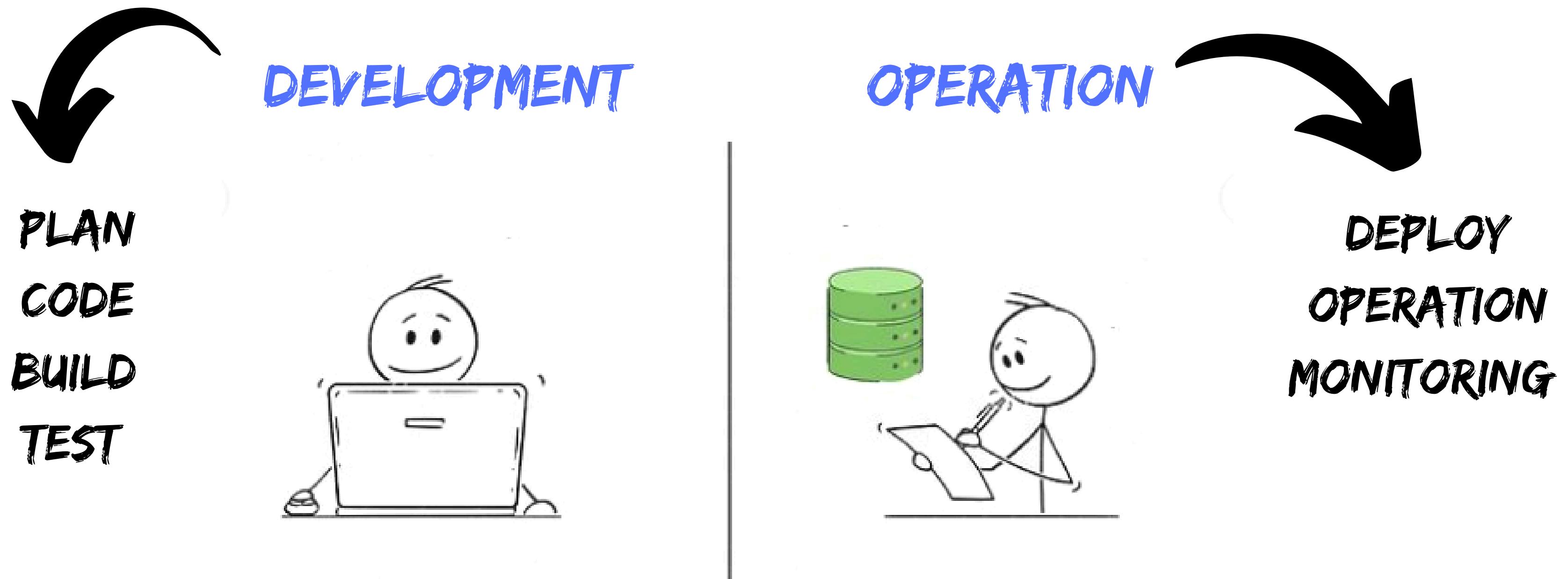




Thank You

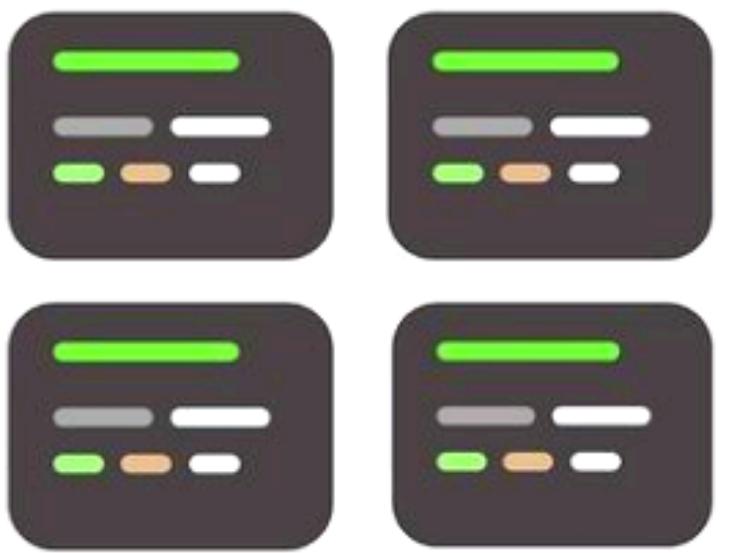
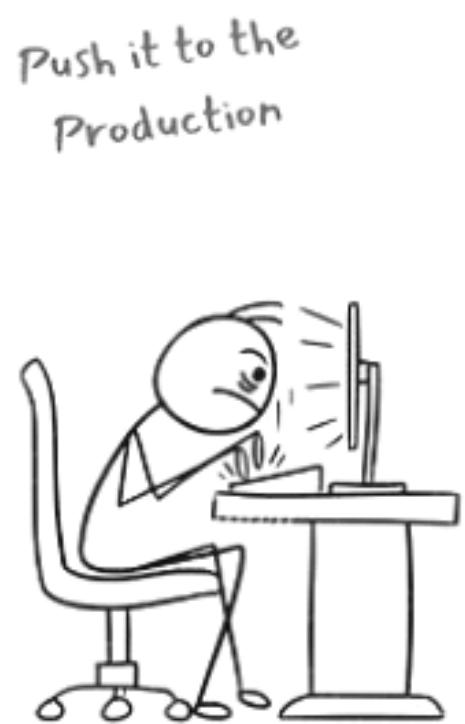
WHAT IS DEVOPS

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

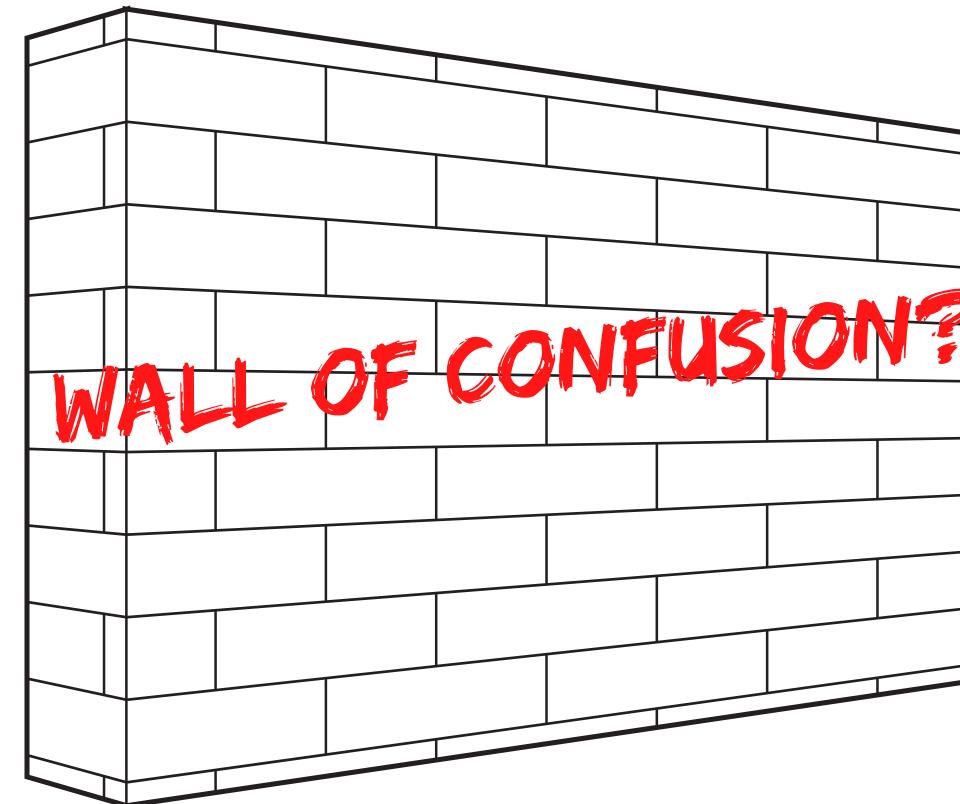
THE OPS TEAM DEPLOYS, MONITOR OPERATE & MAINTAIN THE APPLICATION



DEV TEAM

OPS TEAM

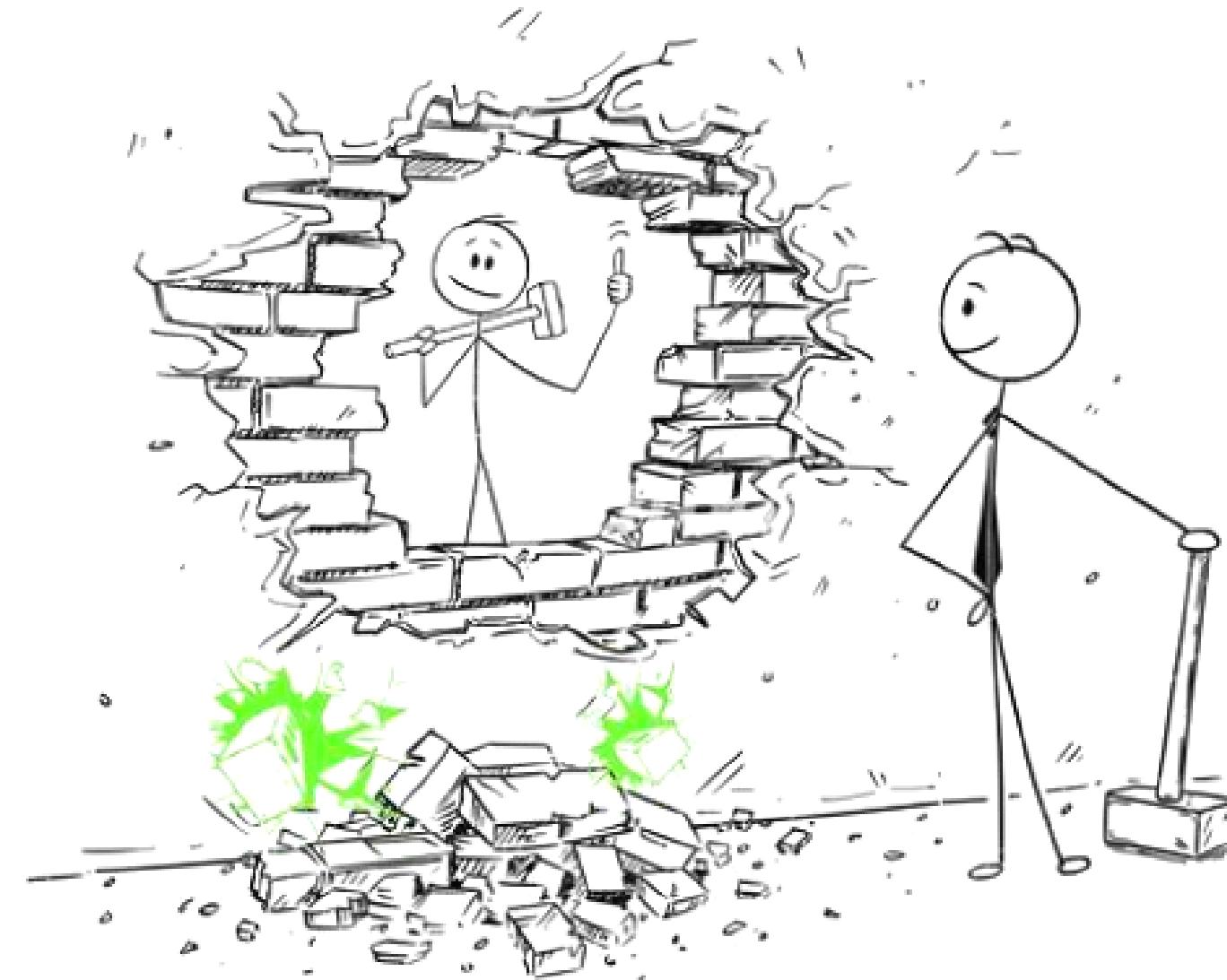
I Have given you the
right code



I have deployed the
code you given to me



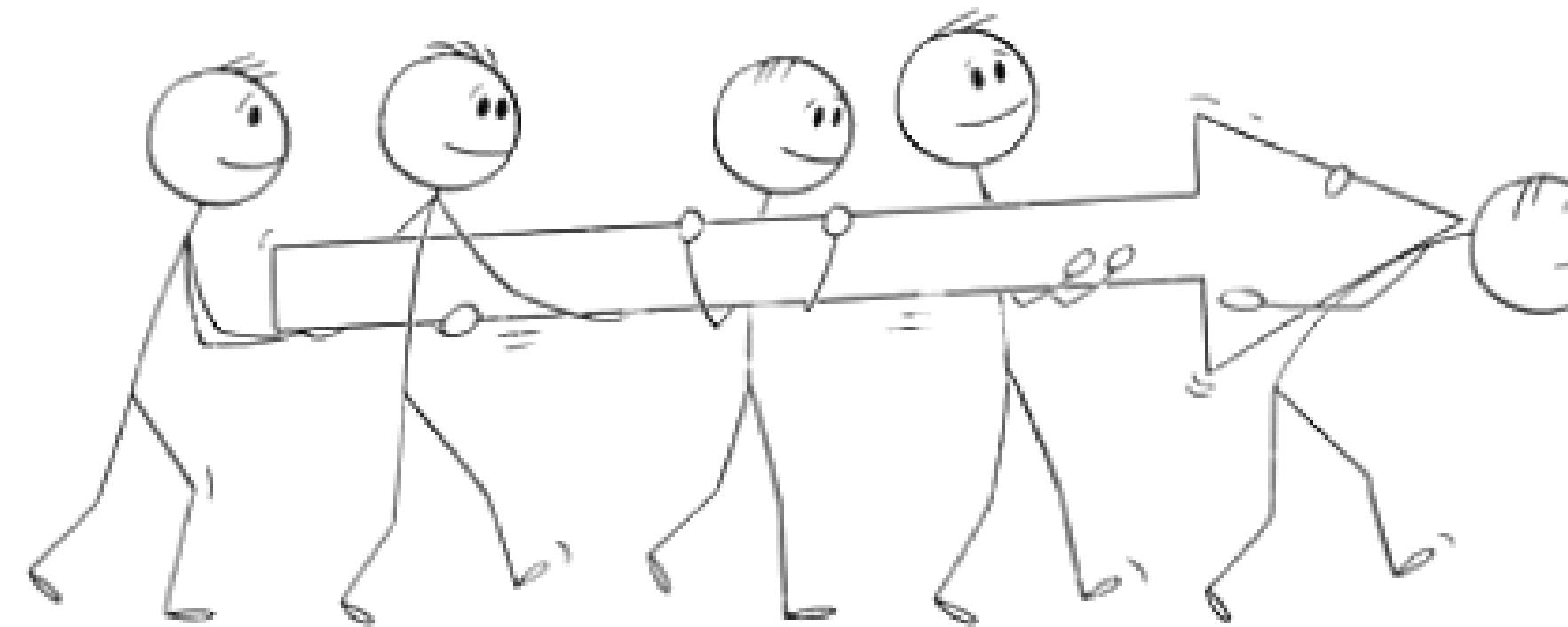
SO WHAT IF WE BREAK THE WALL?



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

