

# CLOUD COMPUTING & AWS

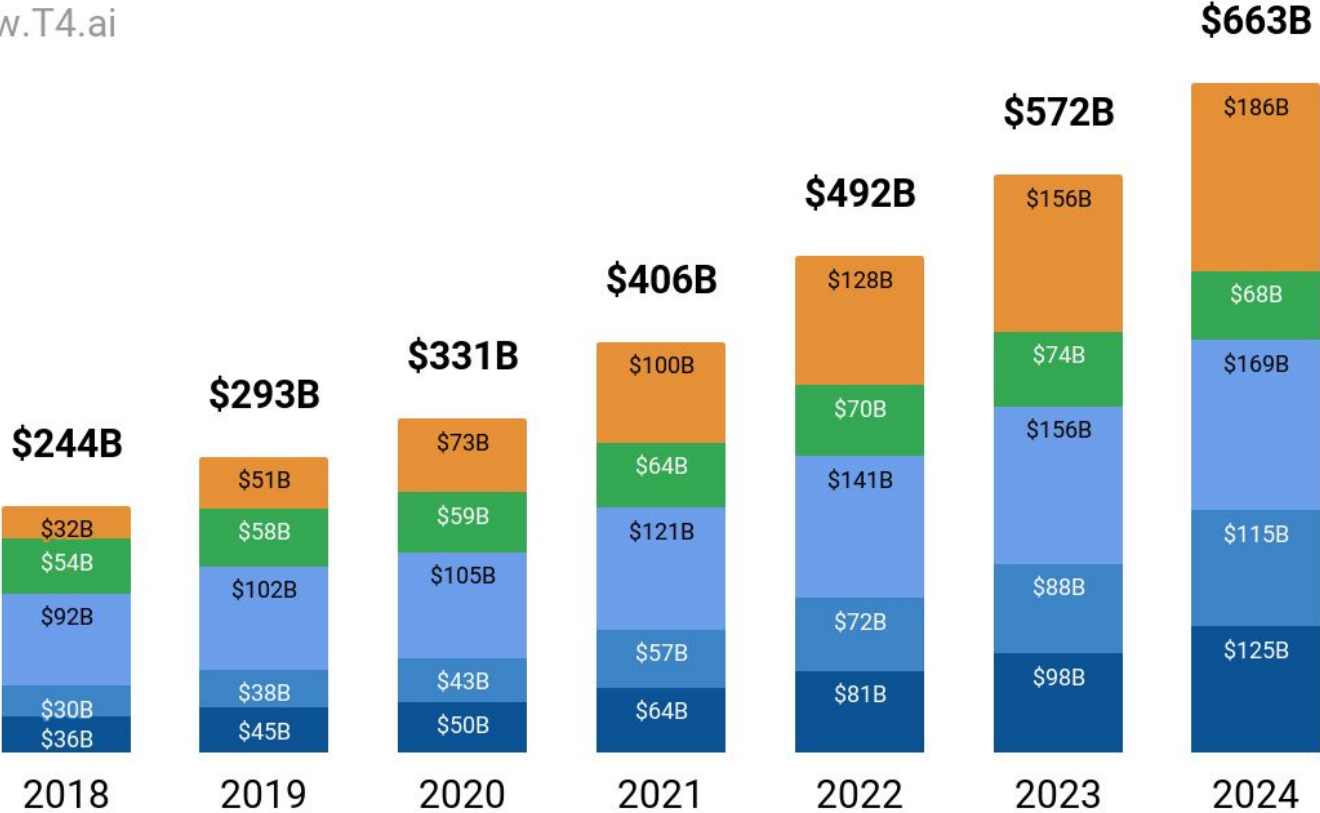
PRESENTATION BY EMMANUEL APIETU

**TKH Phase2 wk1**



# Cloud Computing Market Size, 2018-2024

www.T4.ai



■ Private Cloud ■ Public (Other) ■ Public SaaS ■ Public PaaS ■ Public IaaS

The chart shows the global Cloud Computing Market Size from 2018 to 2024 and cloud market share by deployment model. In 2020, the size of the Cloud Computing Industry was \$331B and is projected to grow by 23% in 2021. Private Cloud market share in 2020 was 22%, Public Cloud market share was 78%. Public Cloud consists of IaaS, PaaS, SaaS, and other categories - Cloud Business Process Services, Cloud Management and Security Services, and Desktop as a Service. From 2018 to 2024 the Cloud Computing Industry growth is projected to average 18% per year

# WHY CLOUD COMPUTING:

COST EFFECTIVE  
RELIABILITY  
SCALABILITY

Simply put, cloud computing is the delivery of computing services—including servers, storage, databases, networking, software, analytics, and intelligence—over the internet (“the cloud”) to offer faster innovation, flexible resources, and economies of scale. You typically pay only for cloud services you use, helping you lower your operating costs, run your infrastructure more efficiently, and scale as your business needs change.



# WHY CLOUD COMPUTING

## 1. COST EFFECTIVE



Cloud computing can be cost-effective for many organizations, as it allows them to pay only for the resources and services they use, rather than investing in and maintaining physical infrastructure. However, the cost-effectiveness of cloud computing can vary depending on factors such as the specific use case, the level of resource utilization, and the pricing models of different cloud service providers. It's important for organizations to carefully assess their needs and compare the costs of different cloud solutions to determine the most cost-effective option for their specific requirements

# RELIABILITY



# What is reliability in cloud computing?

Reliability in cloud computing is related to [cloud technology](#) quality. If the components in a cloud computing service perform their functions and fail rarely, the service is said to be reliable. Thus, when selecting a cloud computing service, it is advisable to look at its reliability. This article discusses the design principles behind reliable cloud computing, the importance of building to scale when it comes to cloud computing, the perceived reliability in cloud computing, and the differences between reliability and availability.



# SCALABILITY



**What is Scalability in Cloud Computing and its Role Towards Business Growth?**

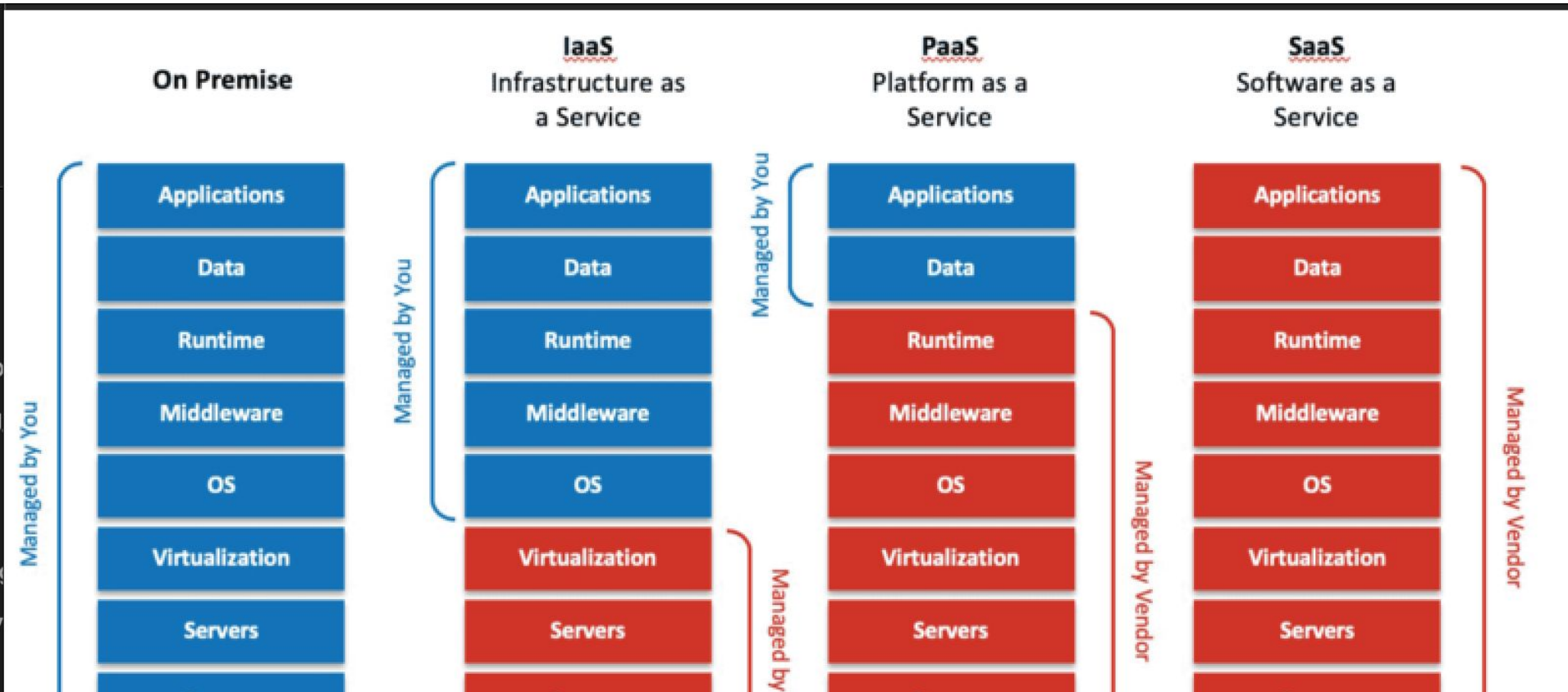
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# What Is Cloud Scalability?

In simple terms, Cloud scalability refers to the ability of a cloud-based system or service to handle an increased or decreasing amount of work or load. This can be achieved through the use of various technologies, such as load balancers and auto-scaling, which automatically add or remove resources as needed.

Cloud scalability allows for the efficient use of resources and the ability to handle a variable workload, which can be beneficial for businesses that experience fluctuations in demand.

# AWS CLOUD SERVICES



# Cloud Deployment Models

1. PUBLIC
2. PRIVATE (MAINLY THE US GOVERNMENT)
3. HYBRID (COMBO OF PUBLIC & PRIVATE)

SERVICE MODULES :

IAAS  
PAAS  
SAAS



Manufacturing organization has its own private cloud



Manufacturing organization shares cloud with general public



Combination of cloud deployment models



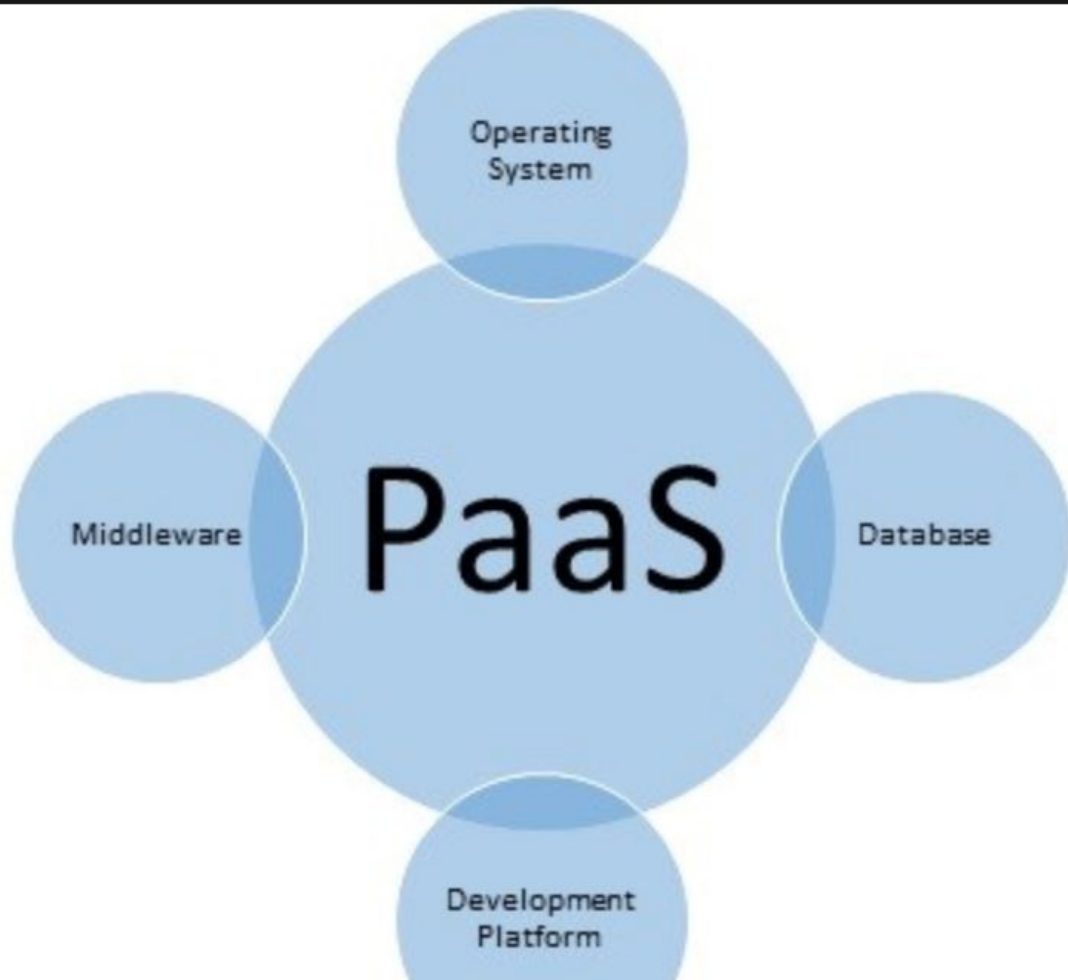
Manufacturing organization shares cloud with other organizations with similar interests

# IAAS



In the IaaS model, the cloud provider manages IT infrastructures such as storage, server and networking resources, and delivers them to subscriber organizations via virtual machines accessible through the internet. IaaS can have many benefits for organizations, such as potentially making workloads faster, easier, more flexible and more cost efficient

# PAAS



Platform as a Service (PaaS) is a complete cloud environment that includes everything developers need to build, run, and manage applications—from servers and operating systems to all the networking, storage, middleware, tools, and more



# SAAS



# What is software-as-a-service (SaaS)?

Software-as-a-service, or SaaS for short, is a cloud-based method of providing software to users. SaaS users subscribe to an application rather than purchasing it once and installing it. Users can log into and use a SaaS application from any compatible device over the Internet. The actual application runs in [cloud](#) servers that may be far removed from a user's location.

A SaaS application may be accessed through a browser or through an app. Online [email](#) applications that users access through a browser, such as Gmail and Office 365, are common examples of SaaS applications.

The difference between SaaS and a software installation on a user's computer is somewhat like the difference between [streaming](#) a TV show online and buying all the seasons of the TV show on DVD.

Someone who buys a TV show on DVD only needs to pay for it once; however, they will need to store and maintain the DVDs, and if they change their hardware – for instance, if they replace their DVD player with a Blu-ray player – then they will need to purchase the physical media again. Streaming the show instead means a third party handles all the storage and upgrades, and all a user needs to do is press play. However, streaming is dependent on an Internet connection, and users typically need to pay a recurring monthly fee to maintain their access.

# CLOUD COMPUTING & DISASTER RECOVERY

