

## **AMAZON WEB SERVICES (AWS)**

### **What is AWS?**

Amazon web service is an online platform that provides scalable and cost-effective cloud computing solutions. AWS is a broadly adopted cloud platform that offers several on-demand operations like compute power, database storage, content delivery, etc., to help corporates scale and grow.

### **What is Cloud Computing?**

Cloud computing is the delivery of online services (such as servers, databases, software) to users. With the help of cloud computing, storing data on local machines is not required. It helps you access data from a remote server. Moreover, it is also used to store and access data from anywhere across the world.

**“Cloud computing is the on-demand delivery of compute power, database, storage, application and other its resource through a cloud service platform via the internet with pay-as-you-go pricing model”**

- **Characteristics of cloud:** -

1. **On demand self service**
2. **Broad network access**
3. **Scalability**
4. **Resource pooling**
5. **Measured services**

- **Advantages of AWS Services**

The power of AWS services lies in the fact that it enables businesses to reach the marketplaces with little initial investment. Here are some advantages of AWS services:

1. **Security:** - There is a false misconception that data stored in a public cloud is not secure. On the contrary, not only does AWS offer security tools that are cheaper than other alternatives, but it is one of the most secure, extensive, and reliable cloud platforms.
2. **Global Availability:** - AWS has 80 Availability Zones across 25 geographic regions global data centers.
3. **Scalability and Flexibility:** - AWS offers unlimited flexibility and scalability on demand. This enables organizations to plan their infrastructure roadmap on a subscription basis without full commitment.
4. **Little Investment:** - AWS cloud services enable companies to save expenditures on extra software and hardware. There is no physical data required, which ultimately lowers down operating costs.

### ❖ AWS Services

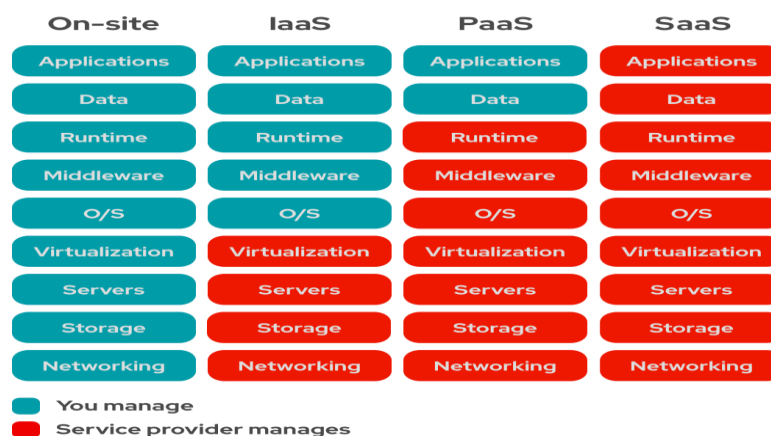
- Amazon has many services for cloud applications. Let us list down a few key services of the AWS ecosystem and a brief description of how developers use them in their business.
- Amazon has a list of services: - Compute service, Storage, Database, Networking and delivery of content, Security tools, Developer tools, Management tools... etc

### ❖ How Has AWS Become So Successful?

1. **Security:** AWS provides a secure and durable platform that provides end-to-end security and storage.
2. **Experience:** The skills and infrastructure management born from Amazon's many years of experience can be very valuable.
3. **Flexibility:** It allows users to select the operating systems, language, database, and other services as per their requirements.
4. **Easy to use:** AWS lets you host your applications quickly and securely, regardless of whether it's an existing or new application.
5. **Scalable:** The applications you use can be scaled up or down, depending on your requirements.
6. **Cost savings:** You only pay for the compute power, storage, and other resources that you use, without any long-term commitments.
7. **Scheduling:** This enables you to start and stop AWS services at predetermined times
8. **Reliability:** AWS takes multiple backups at servers at multiple physical locations.

### ❖ Service in cloud: -

1. **IAAS:** - Infrastructure as a service
2. **PAAS:** Platform as a service
3. **SAAS:** - Software as a service



❖ Deployment model of cloud: -

