# Activity: Introduction to Cloud Computing

AWS Academy Introduction to Cloud: Semester 1 | Module 1

**Instructions:** Complete this worksheet by using reputable online sources. Use hints such as the author’s name, date of posting, sources cited, website design, and writing style to judge a website’s reliability. As you work, discuss the information with a partner to help remember the information.

## Definitions

Define each of the following terms in your own words.

### Cloud computing

“Cloud computing” is a flexible, cost-effective computing model that allows remote access via the Internet.

### Cloud storage

“Cloud storage” is a method of storing data on the Internet, helping users save costs and easily access remotely.

### Amazon Web Services (AWS)

AWS is a cloud computing platform developed by Amazon. This concept refers to both Amazon's cloud computing segment and the ecosystem of cloud services within it. Currently, AWS is the largest provider of cloud computing solutions in the world by market share

### Server

A server is a computer or software system specifically designed to provide services, data or resources to other computers on a network. This structure is called the client-server model. Servers can provide various functions, often called “services,” such as sharing data or resources between many different computers or performing calculations for another computer.

## Benefits

List the six main benefits of cloud computing for businesses and write a short description of each.

1. Cost savings: Cloud computing helps reduce costs of server infrastructure and software. Instead, you have to invest in procuring and maintaining your own server; businesses only pay for the resources they actually use.

2. Security: Cloud service providers often have high security measures in place, including data encryption and access controls. This helps protect important business information.

3. Flexibility: Cloud computing allows businesses to expand or contract resources according to usage needs. Increasing or decreasing resources becomes easier and more flexible.

4. Mobility: Employees can access data and applications from anywhere, regardless of the device used. This enhances mobility and productivity.

5. Understanding: Cloud computing provides the ability to analyze data and generate useful information. Businesses can capture information about customers, trends and performance to make informed decisions.

Enhance

6. collaboration: Cloud services allow teams to work together online, share documents and interact effectively. This facilitates collaboration and creativity within the organization

## AWS services

In the following table, briefly describe each AWS service that is listed and then describe what the service is used for.

| AWS Service | What It Is | What It Is Used For |
| --- | --- | --- |
| Amazon Elastic Compute Cloud (Amazon EC2) | Amazon Elastic Computing Cloud (Amazon EC2) is part of Amazon.com's cloud computing platform, called Amazon Web Services (AWS). This service allows users to rent virtual machines to run their own desktop applications | Instances  Amazon Machine Images  Instance types  Key pairs  Amazon EBS volumes  Regions and Zones |
| Amazon Relational Database Service (Amazon RDS) | Amazon Relational Database Service (Amazon RDS) is an easy-to-manage relational database service optimized for total cost of ownership. Here are important points about Amazon RDS: | Easy to manage  Automation  Tool selection  High range of use  Operational expertise  In case of used |
| Amazon CloudFront | Amazon CloudFront is a service within Amazon Web Services (AWS) that distributes business content securely, ensuring low latency and fast transmission speeds. | Global edge network  Security capabilities  Possibility  Edge computing  Store logs and metrics in real time  DevOps-friendly  Cost savings |
| Amazon Simple Storage Service (Amazon S3) | Amazon Simple Storage Service (Amazon S3) is an object storage service from Amazon | Object storage  Ability to change with scale  Availability and low latency  Security  Analysis and management |

## Impact of cloud computing

Answer the following question: What is one way that cloud computing has impacted society as a whole?

Personal data management: We use the cloud to manage personal data, including emails, images and documents. This helps us access information from anywhere and any device with an internet connection.

Reduced storage costs: The cloud has significantly reduced storage costs for organizations and individuals. You don't need to buy and maintain servers and can use cloud storage services at flexible costs.

Quick access to data: The cloud makes it easy for students to access teaching and learning materials. You can access information from anywhere and on any device with an internet connection.

Feasibility and flexibility: The cloud allows businesses and individuals to access and manage data remotely without being forced to use infrastructure.

Social Impact: Cloud can help deliver on social principles, including creating social projects and protecting the environment through efficient use of resources