

Benefits of Cloud Computing

Scalability

- Ability to adjust resources to meet demand
- You aren't overpaying for services



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Scalability

- Ability to adjust resources to meet demand
- You aren't overpaying for services
- Varieties –
 - **Vertical Scaling** – increasing capacity of machine by adding resources to it
 - **Horizontal Scaling** - adding more machines to distribute the load across



Vertical Scaling
(Scaling up)



Horizontal Scaling
(Scaling out)

Benefits of Cloud Computing

Scalability

High availability

- Focuses on ensuring maximum availability, regardless of disruptions
- Uptime guarantees depending on the service, part of the service-level agreements (SLAs)



Benefits of Cloud Computing

Scalability

High availability

Reliability

- Ability of a system to recover from failures and continue to function
- Resources are deployed across regions



Benefits of Cloud Computing

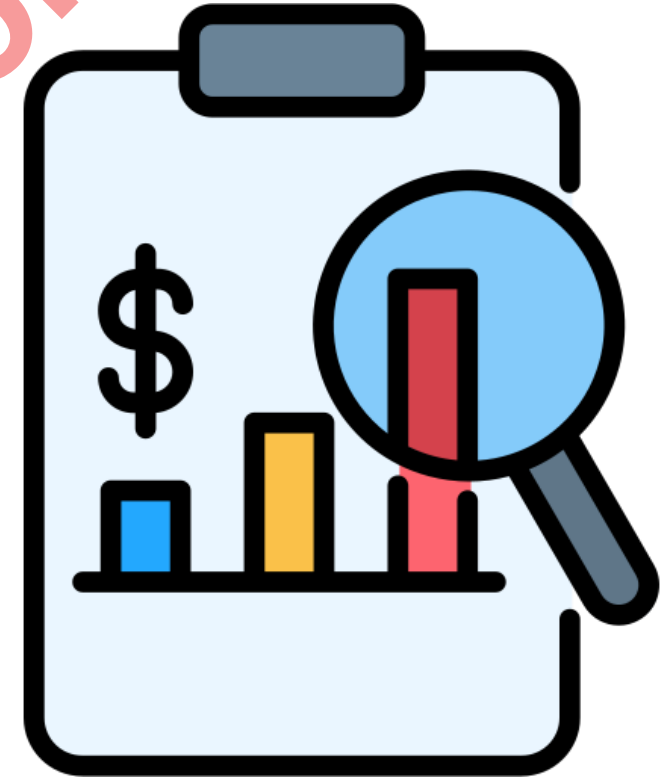
Scalability

High availability

Reliability

Predictability

- We can easily predict and plan performance and cost
- Performance predictability focuses on predicting the resources needed



Benefits of Cloud Computing

Scalability

High availability

Reliability

Predictability

Security & compliance

- Cloud providers invest heavily in security measures
- They implement advanced encryption, authentication, and access control mechanisms



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High availability

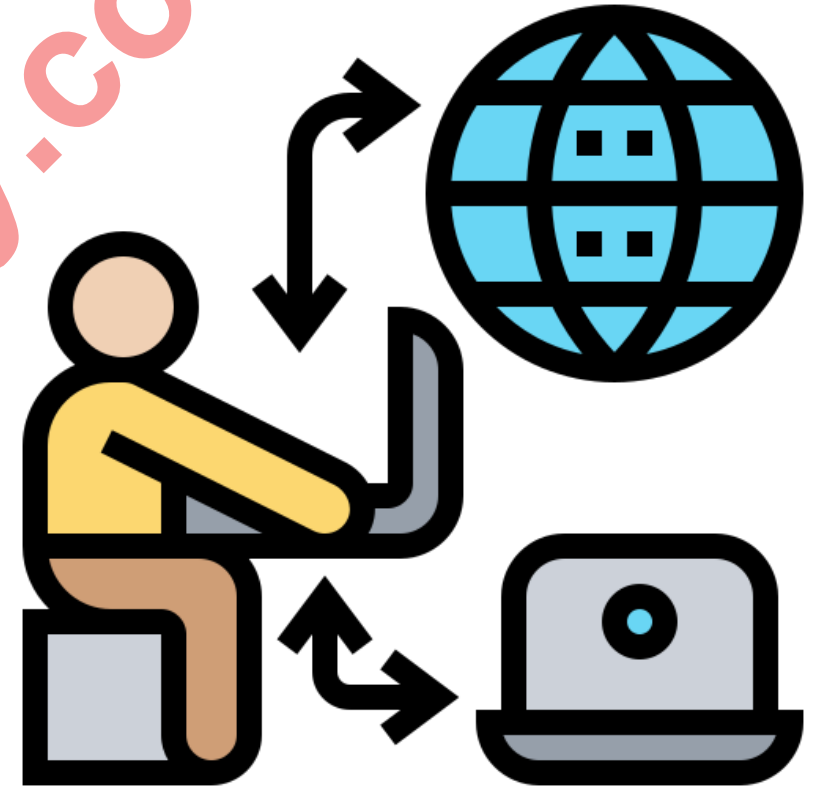
Reliability

Predictability

Security & compliance

Accessibility

- Accessible over the internet from anywhere and any device



Benefits of Cloud Computing

Scalability

High availability

Reliability

Predictability

Security & compliance

Accessibility

Always Up to Date

- They handle software updates, security patches, and maintenance tasks for the underlying infrastructure



Benefits of Cloud Computing

Scalability

High availability

Reliability

Predictability

Security & compliance

Accessibility

Always Up to Date

Go Global in Minutes

- Cloud services are available globally



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Go Global in Minutes

Backup & Restore

- Cloud providers offer built-in data backup and disaster recovery services



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Backup & Restore

Cost Effective

- Eliminates the need for upfront investments in physical infrastructure
- Reduces hardware and maintenance costs

