

# *Cloud Computing: The Future of IT*

Cloud computing is transforming businesses. It delivers on-demand computing services. This includes servers, storage, and databases over the Internet. Discover how this technology is shaping the future.



# *Cost Savings with Cloud Computing*

## *Reduced Capital Expenditure*

Eliminate hardware investments.  
Shift from owning to renting.

## *Lower Operational Expenditure*

Reduce energy, IT staff, and maintenance costs. Save on resources.

## *Real-World Example*

Netflix saves millions annually using AWS. Cloud solutions save money.

# *Scalability and Flexibility*

## **1** *Scale Resources*

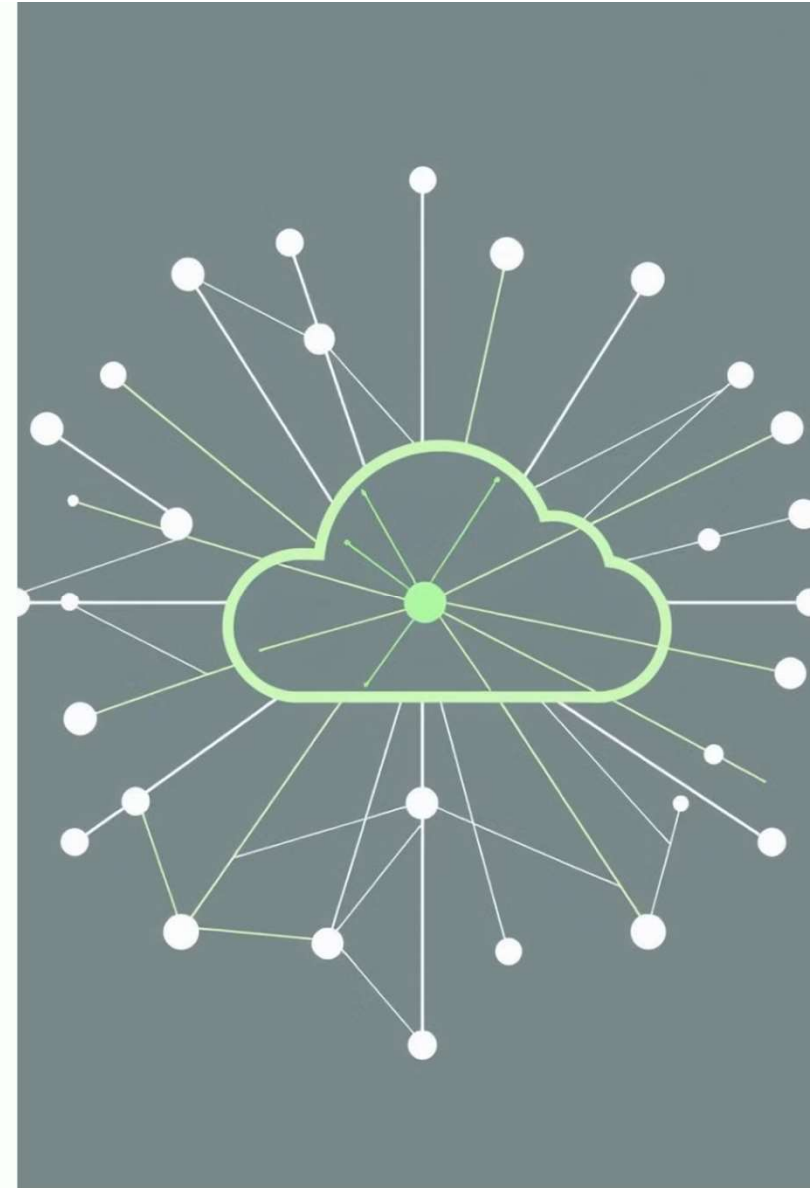
Adjust resources based on demand. Scale up or down as needed.

## **2** *Rapid Provisioning*

Provision resources in minutes. Respond to changes quickly.

## **3** *Global Expansion*

Support global expansion. Enter new markets easily. Companies love this.



# Cloud Service Models

1

## *IaaS*

Virtualized computing infrastructure. AWS EC2 and Azure Virtual Machines are examples.

2

## *PaaS*

Environment for application development. AWS Elastic Beanstalk and Google App Engine are good examples.

3

## *SaaS*

Ready-to-use applications. Salesforce and Microsoft Office 365 are popular SaaS.

Cloud of geend models



# *Cloud Deployment Models*

## *Public Cloud*

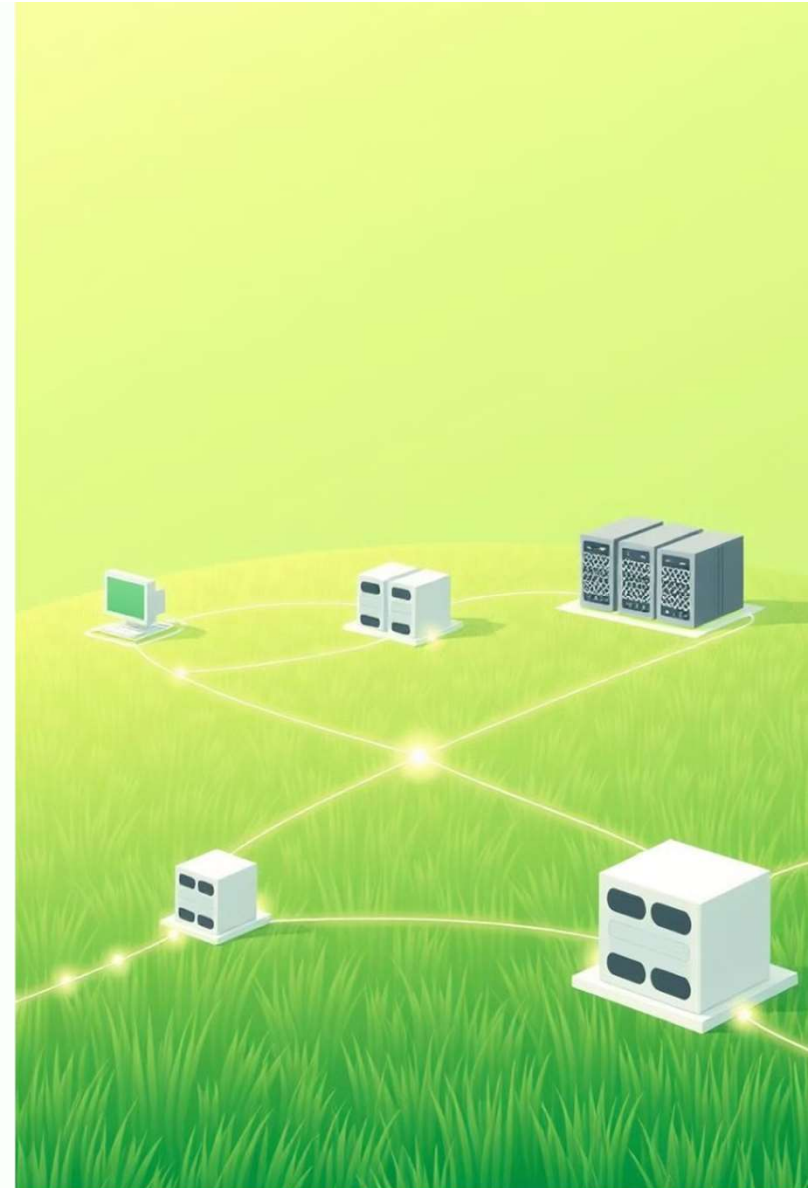
Shared infrastructure. AWS, Azure, and GCP are great examples.

## *Private Cloud*

Exclusive infrastructure for a single organization. VMware and OpenStack are used.

## *Hybrid Cloud*

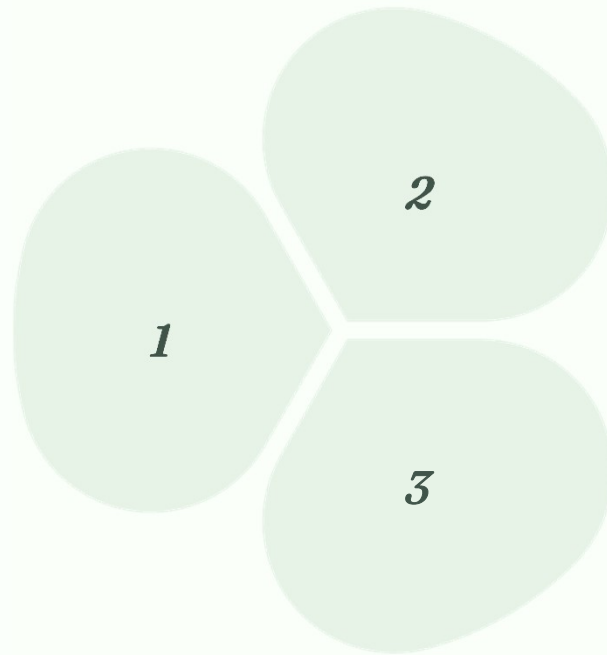
Combination of public and private clouds. It enables burst capacity.



# *Shared Responsibility Model*

## *Provider Security*

Cloud providers secure infrastructure. They protect your data.



## *Customer Security*

Customers secure data and applications. Securing identities is important.

## *Security Measures*

Encryption, access controls, and firewalls. Use identity management.

# *Challenges of Cloud Computing*

*1*

## *Security*

Data breaches and cyberattacks. Be aware of cyber security issues.

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*2*

## *Compliance*

Comply with regulations. GDPR and HIPAA are essential regulations.

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*3*

## *Vendor Lock-in*

Avoid vendor lock-in. It's hard to avoid it completely.

# *Cloud Computing in Action*



## *Healthcare*

Electronic health records and telemedicine. Use data analytics.



## *Finance*

Online banking and fraud detection. Also, manage risks well.



## *Retail*

E-commerce and supply chain management. Focus on customer CRM.







# *Future Trends in Cloud Computing*

## *Serverless Computing*

Focus on writing code. Don't manage servers.

1

2

## *AI and ML*

Cloud platforms provide AI and ML. Very helpful and lucrative.

## *Edge Computing*

Process data closer to the source. This will reduce latency.

3

# *Embracing the Cloud*

Cloud computing transforms industries. It offers cost savings and scalability. It provides greater flexibility. Strategic considerations are security and compliance. The future is serverless and in the cloud. AI/ML and edge computing are the future.



*THANK YOU!*