

TRADITIONAL VERSUS CLOUD (SHARED) RESPONSIBILITY MODEL

Benefits of Cloud computing

- Costs: Cloud computing shifts from the Capex to the Opex model. No Initial investment for infrastructure and resources is required, thereby enabling even small and medium enterprises to adopt the cloud. Maintenance (upgrades, updates, fixes, and backups) are mainly handled by the service provider.
- **Provisioning and Automation**: Provisioning of IT resources in the cloud occurs within minutes as compared to weeks/months that traditional provisioning takes. Provisioning in the cloud can be automated, leading to self-services.
- Scalability and Flexibility: Scaling in the cloud is inadvertently easier as the cloud has the inherent characteristic of elasticity.
- High Availability: Replication and virtualization (migration of virtual machines) are the means of high availability in the cloud.
- Metered Use: In the traditional environment, you pay for the entire infrastructure and resources irrespective of the amount of utilization, whereas one pays only for whatever resources utilized in the cloud.
- Agility (Faster time to market): Cloud computing delivers improved agility because it has ondemand self-service and rapid elasticity. IT resources can be provisioned faster and can scale easily. It means enterprises can innovate, introduce new products and services, enter new markets, and adapt to changing circumstances.
- User Experience: IT applications have business value because they enable people to perform their work more easily and effectively. Following are the number of areas where cloud computing can assist workers:
 - Web-based user interfaces
 - More recent versions of software
 - Access anywhere anytime
 - Easy to use, flexible capacity
- Collaboration: Cloud computing increases collaboration by allowing all employees including executives - wherever they are - to sync up and work on documents and shared apps simultaneously, and receive critical updates in real-time.
- Disaster Recovery: When organizations start relying on Cloud-based services, they no longer need complex disaster recovery plans. Cloud service providers take care of most issues, and they do it faster.
- Strategize Resources to Core Activities: Resources can be coordinated to work on selective projects, as many of the underlying tasks are performed by the cloud service provider.
- High Performance: High-performance computing is no longer limited to those who own supercomputers. It can also be achieved in the cloud where required.
- Green Computing: Businesses using cloud computing only use the server space they need, which decreases their carbon footprint. Using the cloud results in at least 30% less energy consumption and carbon emissions than using on-site servers.