

Summary: Module 1 - Video 6

This video explores the evolution from traditional computing to cloud computing, highlighting the differences, advantages, and limitations of each model.

Key Notions and Explanations

Traditional Computing

Traditional computing refers to the use of physical hardware and software located on-premises to store, access, and manage data. It involves setting up dedicated infrastructure managed by IT personnel.

Control

Organizations have full control over their hardware, software, and data. They can customize their network infrastructure to meet specific needs, which can enhance confidence in system management.

Compliance

Some industries require data to be stored on-premises due to regulations. Traditional computing supports compliance with such laws and standards.

On-Premises Infrastructure

All computing resources are located in one physical location, limiting access to that site and requiring physical presence for data management.

Limitations of Traditional Computing

Traditional computing is limited by scalability, cost, efficiency, and accessibility. Scaling requires purchasing and setting up new hardware, which is time-consuming and expensive. Software updates are manual and data access is restricted to local devices.

Cloud Computing Advantages

Accessibility

Cloud computing allows access to data, software, and infrastructure from any location via the internet, removing physical constraints.

Scalability

Resources can be expanded or upgraded easily to meet changing needs, without physical limitations.

Cost Savings

Organizations pay only for the resources they use, similar to utility billing, making cloud computing more economical.

Security

Cloud data is encrypted and stored in secure data centers with limited access, offering stronger protection than traditional systems.

Efficiency

Cloud computing enables immediate access to new applications and updates, streamlining operations and reducing downtime.

Managed Services

Third-party providers handle maintenance and support, freeing up staff to focus on strategic tasks.