



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A’ Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(IoT and
Cybersecurity Including BCT)**

COURSE NAME : cloud service management

IV YEAR / VII SEMESTER

Unit II-

**Topic : Basics of Information Technology Service Management
(ITSM):**



Basics of Information Technology Service Management (ITSM):

ITSM is about managing IT services to meet business needs. Here are the basics in an easy format:

Services: ITSM is like running a restaurant. You provide various IT services, like email, network, and support, to your "customers" (employees or users).

Processes: You need organized processes, like taking orders and serving food. ITSM has processes to manage service requests, incidents (when something's broken), and changes (like adding a new menu item).

Service Desk: Think of it as the waiter. It's where users ask for help, report issues, or request services.

SLAs: Just like a restaurant's promise to serve food in 15 minutes, ITSM has Service Level Agreements (SLAs) that define response times and service quality.

ITIL Framework: ITIL (Information Technology Infrastructure Library) is a set of best practices for ITSM. It's like a recipe book for running your IT restaurant efficiently.



Continuous Improvement: You keep improving your restaurant's recipes and service. ITSM is the same; you learn from past experiences to make IT services better.

Basics of Cloud Service Management:

Managing cloud services is like managing a toy store. Here's the basics in an easy format:

Cloud Services: Imagine you sell toys in a store. Cloud services are like toys in your inventory, but they're virtual (online).

Resource Provisioning: You must keep toys in stock. In cloud management, it's about getting the right virtual resources (computing power, storage) when you need them.

User Access: Just like people come to your store to buy toys, users access cloud services online through the internet.

Automation: Sometimes you have automatic doors in your store. In cloud service management, automation tools make things work without you doing everything manually.

Security: You need security cameras and locks to protect your store. In the cloud, security tools and policies keep data and services safe.



Cost Control: You have to manage your toy inventory costs. In cloud service management, you control spending by using resources efficiently and tracking expenses.

Vendor Management: You buy toys from suppliers. In the cloud, you work with cloud service providers (like Amazon, Microsoft, Google) and manage those relationships.

Scalability: If your store gets busy, you need more toys. In the cloud, you scale up resources when there's more demand.

Backup and Recovery: Just as you store extra toys in the back, cloud management includes backups to recover data in case something goes wrong.

Service Levels: Think of it like guaranteeing customers will get toys within a certain time. Cloud service providers often have Service Level Agreements (SLAs).



Cloud service management



Cloud service management involves the administration, monitoring, and optimization of cloud resources and services to ensure they meet organizational needs efficiently and securely. Several essential characteristics of cloud service management include:

Resource Provisioning: Cloud service management involves the provisioning and allocation of cloud resources such as virtual machines, storage, and network resources. It ensures that resources are provisioned as needed, scaling up or down based on demand.

Self-Service Portals: Cloud management often provides self-service portals or dashboards that allow users to request and manage resources without direct IT intervention. Users can request, modify, and decommission resources through a user-friendly interface.

Service Catalogs: Service catalogs list available cloud services and resources, along with their descriptions, pricing, and terms. This helps users make informed decisions and facilitates resource selection.



Automation and Orchestration: Automation tools and orchestration systems are used to streamline processes, such as resource provisioning, scaling, and application deployment. This reduces manual tasks and human errors.



Resource Monitoring and Reporting: Cloud management involves continuous monitoring of cloud resources and services. It provides real-time performance data and generates reports to assess resource utilization, cost, and compliance.

Cost Management: Effective cloud service management includes cost optimization strategies, like rightsizing resources, utilizing reserved instances, and implementing budget controls to manage cloud spending.

Security and Compliance: Cloud management ensures that security measures are in place to protect cloud resources and data. It also helps in maintaining compliance with regulatory requirements through policy enforcement and audits.

User Access Control: Access control and identity management are essential aspects of cloud service management. It involves defining user roles, permissions, and authentication mechanisms to ensure that only authorized users can access resources.

Service Level Agreements (SLAs): Cloud management involves monitoring and enforcing SLAs for performance, availability, and reliability. It ensures that cloud services meet agreed-upon service levels.