

## UNIT 2: Chapter 2 CLOUD SOLUTIONS

### ★ Cloud Appl<sup>n</sup> Planning:

- Cloud appl<sup>n</sup> design and planning exercise requires many unique considerations, which are:
  - 1) Business functions
  - 2) Appl<sup>n</sup> architecture
  - 3) Security for cloud computing
  - 4) Cloud delivery model
  - 5) User experience
  - 6) Development, testing, and run-time environments.
- Security aspect of the cloud is the enhancement to the existing security model where data protection & isolation of the data becomes important. Encryption is one way; another is authenticate or authorize users of the appl<sup>n</sup> & services.

### ★★ Business Support Services (BSS) and Operational Support Services (OSS) :-

• Business Support Services (BSS): The elements that are required by the cloud services provider to run the business operations are called business support services (BSS).

• These elements are mostly associated with service providers having utility-based service model.

The services include:

- 1) Accepting customer orders
- 2) Managing customer data
- 3) Billing
- 4) Service offered.



- The IT system used by service providers comes under the category of Operational support services (OSS).
- It is mostly associated with the n/w infrastr & maintenance services such as ::
  - 1) Provisioning
  - 2) Installation & configuration
  - 3) Fault management.
- The various functions provided by OSS & BSS can be utilized properly if the BSS & OSS components are externalized.
- Example, provisioning can be adapted to support the appl's requirements instead of creating that service from scratch.
- Each of the OSS & BSS offered by the cloud environment will continue to support the appl & its consumers & still maintain the cloud computing characteristics.
- The service provider is accountable for offering service instances; also requires ongoing operations, options to manage cloud service instances.
- All technical instances are standardized & put together in a template which also describes OSS, this template is an artefact (doc) to describe the services with respect to the service provider & cloud services.
- Various cloud service instances represent various entities. Example, for IaaS, a hypervisor, cloud orchestrator & provisioning engine are needed. For PaaS, middleware & development platforms are required.
- When cloud services are built in a layered fashion, it is very important to understand the difference bet<sup>n</sup> OSS & BSS available on common platform.
- Any cloud-based service can be treated as an OSS or BSS for cloud vendor. Hence, a service is developed after gathering a lot of requirements data.