Hello everyone! You will learn about different deployment models of the cloud, which are defined according to, where the infrastructure for the deployment resides and who has control over that infrastructure.

The Cloud is deployed for the users based on the scope of access and the access rights. Let us understand the deployment models for clouds.
There are four primary cloud deployment models Public Cloud, Private Cloud, Community Cloud, and Hybrid Cloud Each can exhibit the previously discussed characteristics of clouds. Let's understand them one by one.

In a public cloud, the cloud infrastructure is made available to the general public or a large industry group and is owned by an organization selling cloud services. Also known as external cloud or multi-tenant cloud, this model essentially represents a cloud environment that is openly accessible. Public clouds offer scalability, elasticity, and multi-tenancy. It reduces capital expenditure.

The private cloud on the other hand is operated solely by an organization. It may be managed by the organization or a third party and may exist on premise or off-premise. Also referred as an internal cloud or on premise cloud, a private cloud intentionally limits access to its resources to service consumers that belong to the same organization that owns the cloud. This cloud also provides elasticity, multitenancy

and reduces operational expenditure. The scalability depends on the resources available to the organization.

In the Community cloud, the cloud infrastructure is shared by several organizations and supports a specific community that has shared concerns (e.g., mission, security requirements, policy, and compliance considerations). The educational cloud shared by multiple universities is an example of a Community cloud. Community clouds enjoy most of the benefits of Private clouds but have the biggest issue of ownership and cost for individuals or small companies, as this is higher than for public clouds.

Hybrid cloud is a composition of two or more clouds (private, community, or public) that remain unique entities but are bound together by standardized or proprietary technology that enables data and application portability. These cloud are utilized, when the private cloud is not able to fulfill the resource requirement at a point of time. It is connected to public cloud for fulfilling the requirement. Generally, the sensitive data and apps are kept in private cloud and rest is kept on public cloud.

Thank You