Cloud Deployment Model

**Cloud Deployment Model** is simple a separation which describes where are the company resources deployed. Whenever this is in public cloud provider environment or private datacenter.

Below table presents high level deployment model separation

| Layer | Cloud Provider | Own Datacenter |
| --- | --- | --- |
| **Public** | ✅ | ✖ |
| **Hybrid** | ✅ | ✅ |
| **Private** | ✖ | ✅ |

Public Cloud

| Cloud Provider | Own Datacenter |
| --- | --- |
| ✅ | ✖ |

**Key Characteristics**

* Everything runs on cloud provider hardware
* No local hardware
* Some services share hardware with other customers

**Advantages**

* No CapEx (No initial investment)
* High Availability
* Agility
* Pay as you Go (PAYG) pricing
* No hardware maintenance
* No deep technical skills required

**Disadvantages**

* Not all security and compliance policies can be met
* No ownership over the physical infrastructure
* Rare specific scenarios can’t be done

Private Cloud

| Cloud Provider | Own Datacenter |
| --- | --- |
| ✖ | ✅ |

**Key Characteristics**

* Everything runs on your own datacenter
* Self-service should be provided
* You maintain the hardware

**Advantages**

* Can support any scenario
* Total control over security and infrastructure
* Can meet any security and compliance policy

**Disadvantages**

* Initial investment is required (CapEx)
* Limited agility constrained by server capacity and team skills
* Very dependent on IT skills & expertise

Hybrid Cloud

| Cloud Provider | Own Datacenter |
| --- | --- |
| ✅ | ✅ |

**Key Characteristics**

* Combines both Public & Private cloud

**Advantages**

* Great flexibility
* You can run any legacy apps in private cloud
* Can utilize existing infrastructure
* Meet any security& compliance requirements
* Can take advantage of all public cloud benefits

**Disadvantages**

* Can be more expensive
* Complicated to manage due to larger landscape
* Most dependent on IT skills & expertise from all three models

PRACTICE TEST LINK: https://marczak.io/az-900/episode-06/practice-test/