Cloud Deployment Models – Part 2

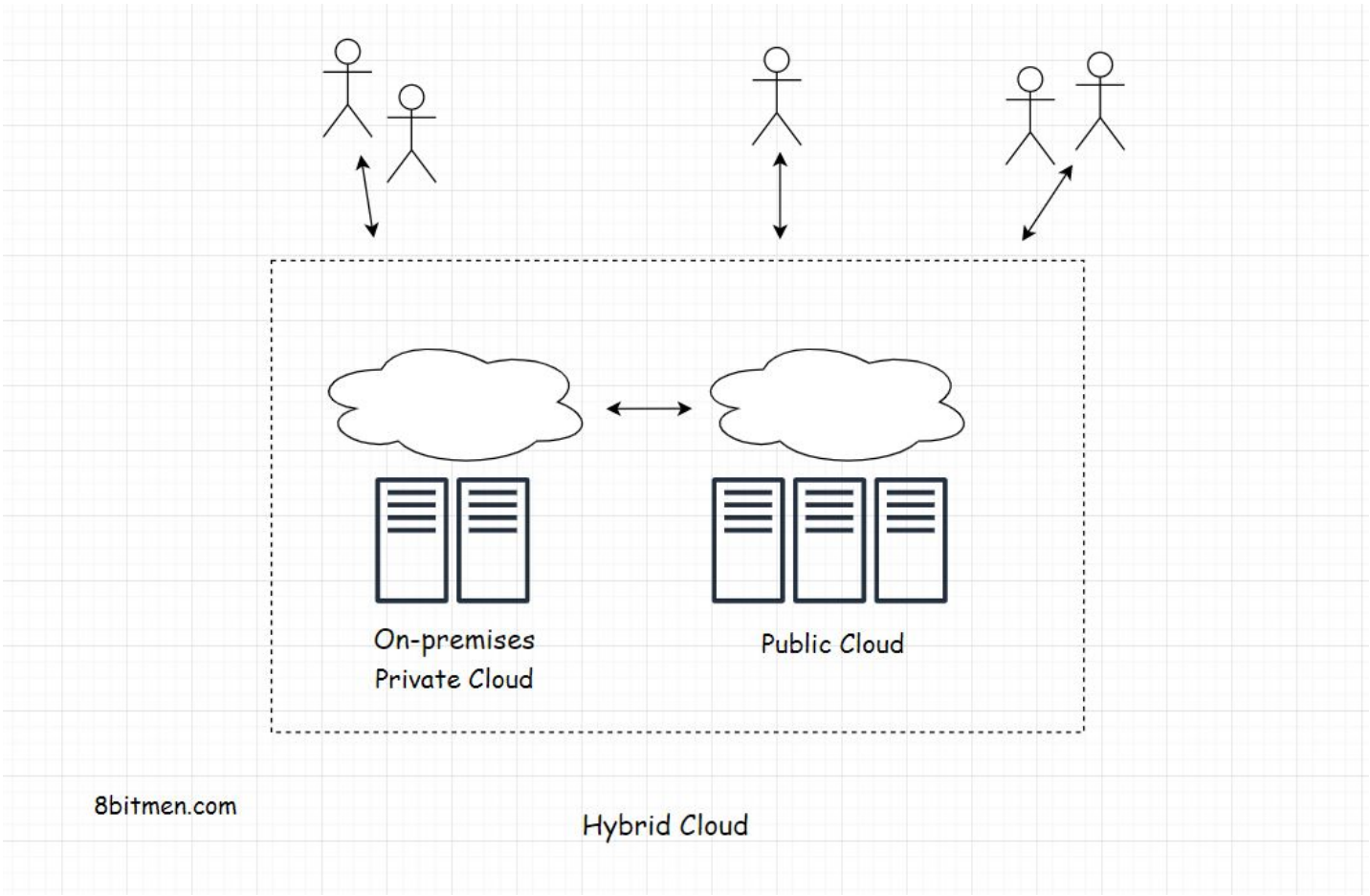
This lesson continues to conversation about types of cloud deployment models.

We'll cover the following

- Hybrid cloud
- Multi-cloud
- Community cloud

Hybrid cloud

A service running on a *hybrid cloud* will have a few modules that run on a *private cloud* and other modules that run on a *public cloud*. Hybrid cloud architecture is a combination of public and private clouds, and it enables businesses to leverage the benefits of more than one cloud deployment model.



There are instances where businesses choose to keep sensitive data on-premises and leverage a public cloud to run other operations. Additionally, businesses

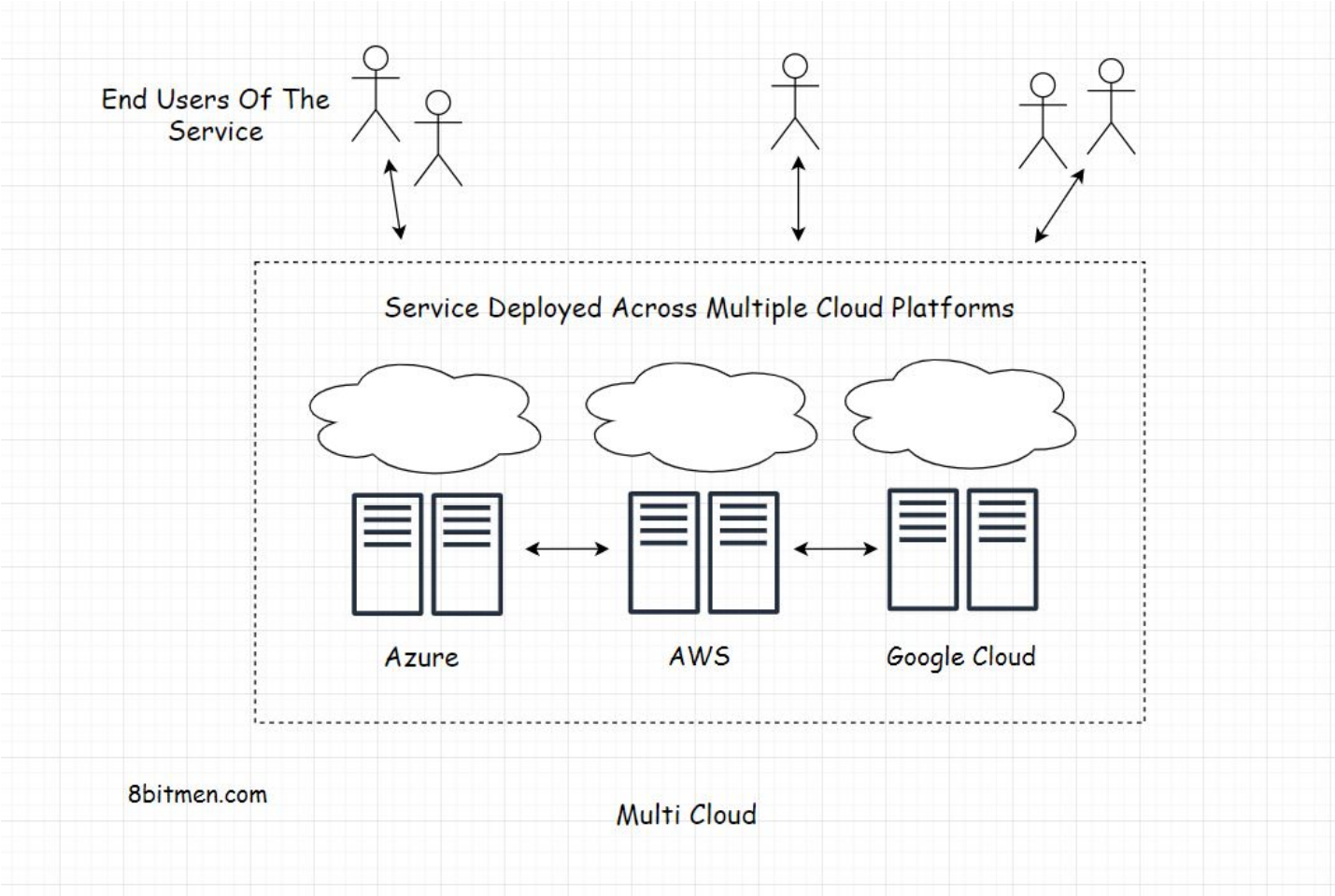
running everything on-prem sometimes leverage the hybrid-cloud deployment model to augment their computing power.

Twitter is one good example of a business that leverages hybrid cloud architecture. According to a report, it runs a part of its infrastructure on *Google Cloud* and the remaining on-prem.

Multi-cloud

Multi-cloud simply means leveraging multiple public cloud platforms to run a service. The upsides of deploying our service across multiple public cloud platforms are avoiding having dependence on a single cloud provider, leveraging different product offerings of multiple platforms, and having a degree of flexibility in cloud architecture.

There are also instances, generally in large corporations, where multiple teams work on dedicated modules of one big service, and they choose to deploy their module on a certain specific cloud platform. The business eventually ends up having its service deployed across multiple cloud platforms.



Being deployed on multiple platforms makes the businesses aware of the

Being deployed on multiple platforms makes the businesses aware of the intricacies of every platform, and this helps significantly when making a decision to switch from one platform to another due to economic, technical, and any other reasons.

Here is one example of this. Gitlab made the switch from Microsoft Azure to Google Cloud Platform to run its services on Kubernetes.

Though one downside of having a multi-cloud architecture is the increase in complexity of the system. In this scenario, we have to manage services on different platforms. Big companies often hire platform specialists for every platform its service runs on to manage its system.

Community cloud

A *community cloud* is a cloud infrastructure that caters to a certain community. It may be *Fintech, Gaming, E-commerce*, or another community. A community cloud focuses on providing solutions with respect to a certain domain.

For instance, a group of banks or financial institutions would join forces to set up a community cloud to address the common infrastructural needs of all the businesses running in the same domain. *Open Science Data Cloud* is one example of this. It's a petabyte-scale scientific community cloud providing the resources for analyzing, storing, and sharing petabyte-scale scientific datasets.

We have come to the end of the discussion on cloud deployment models. Let's move on to talk about the cloud service models in the next lesson.