

## Key Design Principles for Digital Transformation through Multi-Cloud



### Streamline Your Operations with an **Open Source Multi-Cloud Platform**

OpenNebula provides a **vendor-neutral platform to simplify cloud operations, reducing complexity and costs** while avoiding vendor lock-in. It is familiar to many corporate users who have implemented private clouds and who now manage workloads in multi-cloud environments using OpenNebula.



#### 1. Avoid Multi-Cloud through Hyperscalers

Cloud providers are now embracing multi-cloud and hybrid cloud solutions, offering platforms that work on other providers as well as pre-configured appliances. However, these proprietary solutions can be **expensive and come with the risk of single-vendor reliance**.



#### 2. Avoid Proprietary-Source Solutions

Cloud systems are becoming more complex and often rely on expensive proprietary solutions from big vendors. These solutions can be hard to deploy and maintain, and usually require manual migration or rebuilding of workloads. When hardware and software are combined, users become **locked into the vendor's products**.



### 3. Adopt True Multi-Cloud

Multi-cloud is more than just interoperability. A true Multi-cloud solution should provide portability, enhanced security, and expanded service availability to better **manage workloads across different cloud infrastructures.**



### 4. Not All Workloads Are Heading to the Cloud

The use of on-premise data centers is still necessary in the near term, either as part of a hybrid cloud strategy or to host legacy applications. Reasons for using on-premises resources include **cost, control, security, and performance**; modern distributed cloud environments can even include edge micro data centers.



### 5. Be Ready for Cloud Repatriation

Cloud Repatriation is the process of moving application workloads and data from the public cloud to the private cloud or colocation. A well-known 2021 study—*The Cost of Cloud, a Trillion Dollar Paradox*—found that the top 50 **software companies spend 50% of their COGS on cloud expenses**, creating a \$100B market value problem. The loss associated with over-provisioning and always-on resources in 2021 alone was figured at \$26.6B.



### 6. Automate Deployment and Operations

Cloud computing has become a reality, but multi-cloud automation is complex and requires specialized tools. Multi-cloud platforms should be based on the **automated deployment of nodes with dynamic configurations that fit the evolving needs of different environments and workloads.** Deciding where to place an application involves considering infrastructure costs, data fees, performance, uptime, security requirements, and latency.