IS MULTITENANT YOUR BEST OPTION?

When it comes to public cloud, every business should assess its unique needs with all computing options in mind—single tenant, pure cloud, and hybrid.

Hyperscale public cloud. It's a compelling pitch: Providers have massive economies-of-scale advantages over any alternative, along with rich resources to hire legions of skilled staff and invest in constant innovation. So, if you're adopting a cloud-first strategy, that's the only option, right? Well, not always.

The hyperscalers, led by Amazon Web Services, Microsoft Azure, and Google, are growing by leaps and bounds. And they seemingly have all the infrastructure anybody could need.

For example, with the growth of hyperscale public cloud, software company Atlassian is moving away from operating a mix of its own data centers running on AWS. It's going all-in on AWS. "This is the latest example of a big software company moving its IT operations to AWS or another public cloud so it doesn't have to build or manage data center infrastructure on its own," Barb Darrow reports in _Fortune_.

Even the staid financial services industry is embracing the trend. Capital One, _Computerworld_ reports, "is developing new apps for the cloud, while also steadily migrating its legacy applications. The bank's mobile app, one of its primary customer-facing mediums, began running on the AWS cloud in the past month."

Despite these examples, though, public cloud is not a one-size-fits-all option.

STANDARDIZATION AND COST EFFICIENCIES

Public cloud services are a great platform for efficiency because they are based on a multitenancy model for which multiple businesses are sharing compute resources.

"What makes a cloud service provider's offer compelling are the standardization and cost efficiencies that a cloud provider can achieve, along with the configuration options that allow you to compile different service offerings in a way that best meets your workload and corporate objectives," explains Manek Dubash for _ZDNet_.

In theory, at least, public cloud service providers should be able to offer the lowest prices for computing services—motivated by competition. But sometimes it's not purely about price.

"Price is often the first consideration, and CIOs may assume that public cloud will be the least costly and most flexible option, but that's not always the case, especially for customers with large workloads that don't often fluctuate," Kelly Begeny writes at Channel Partners.

What's more, public cloud may not meet a company's needs for assured performance, data sovereignty, or other technical requirements. Migration can also bring complications. Justin Shepherd, a distinguished architect for Rackspace Private Cloud, says "it's easy to overlook the need to consider current toolchains and processes that surround the application along with the application itself."

DEDICATED RESOURCES WITH FEWER COSTS

So, what's the alternative? On-premises private cloud ensures that the resources are dedicated to your needs, but you're also bearing all the costs.

One option is to colocate dedicated hardware and software resources with an off-site provider. In such a situation, you may only be sharing the physical facility and network infrastructure to gain some cost efficiencies.

Another option: hosted private clouds, which as ZDNet's Larry J. Seltzer explains, "promise dedicated hardware but often share other resources and sometimes limit your control options." These remove even more of the burden from the enterprise, providing the benefits of a hosted solution without the downside of a multitenant environment.

There seems little doubt that the public cloud giants will continue to grow in size and reach. That should definitely be a consideration, but represents one of several choices. Each business should assess its unique needs with all computing options in mind—single tenant, pure cloud, and hybrid.