Public Cloud

OVERVIEW

Making a decision to engage the public cloud is not a question of if, but how, when, and how much. Data Strategy works with leading technology and service providers to bring an organization's public cloud strategy to actualization.

Technically, there may be little or no difference between public and private cloud architecture. However, security considerations may be substantially different for services (applications, storage, and other resources) that are made available over an unsecured network.

Public cloud providers like Amazon AWS, Microsoft Azure, and Google own and operate the cloud infrastructure at their data centers, and access is generally via the Internet. AWS and Microsoft also offer direct connect services, and such connections require customers to purchase or lease a private connection to a peering point offered by the cloud provider.

And, most distinctively, public cloud services typically are offered for no- to low-cost, or on a pay-per-usage model.

BUSINESS VALUE

The Data Strategy Public Cloud Team includes subject matter experts certified in the most popular public cloud solutions, and our team partners with the leading providers of traditional co-location services.

CLOUD SERVICES	CO-LOCATION
Amazon Web Services	US Signal
Microsoft Azure	Switch
MS Office 365	Peak 10
VSphere-powered Cloud	Online Tech
Cisco-powered Cloud	Expedient
Bluelock	Windstream

When used to extend existing datacenter footprints, public cloud services can deliver big benefits for data backup and scalability. Providers offer the ability to create virtual machines in the cloud to support and replace physical servers, making cloud virtualization services integral to datacenter infrastructures. But knowing which features to consider and which vendors to compare can be a daunting task.

Software as a service

The provider's applications are provided to the consumer running on a cloud infrastructure, which the consumer does not manager nor control.

Infrastructure as a service

The consumer provisions processor, memory, storage, and network resources from a provider to run chosen software, but without control of the underlying infrastructure.

Platform as a service

The consumer deploys consumer-created or acquired applications to an application hosting environment, furnished by a provider using programming tools and languages support by the provider.

To get started, established organizations with IT resources stationed on-premise should treat the cloud as an extension to the organization's existing IT footprint. Data Strategy experts help organizations develop a hybrid approach to the cloud, building automation and orchestration as a platform to shift – and protect (DRaaS) – business-critical workloads off-premise.

Workload scaling
There are multiple ways a datacenter benefits from being extended to the cloud, and one involves workload scaling. There may be times your organization needs to ramp up a production workload beyond what the local datacenter can comfortably handle. Rather than buy new servers to accommodate temporary spikes in demand, companies can leverage the public cloud.

Business continuity
Another advantage of cloud-based VMs is protecting businesses in case of equipment failures or physical disasters. Organizations can use the public cloud to protect mission-critical workloads, using guest clusters and VM replication.

Not all applications are a good fit for the public cloud. Many mid-size and large enterprises that want to assure the security and safety of their corporate and client data will move to a private cloud. However, there are a number of applications that are ideal for public cloud engagement:

- Development & Test Environments – With the ability to spin up thousands of servers programmatically, regression test time can be reduced to minutes, speeding up software development cycles.
- Compute Intensive Research Applications – At the University of Michigan, for example, researchers are spinning up thousands of cores to run their DNA, genome, and weather analysis programs.
- Noncritical Web Servers – Applications where a crash of the server or loss of data isn't critical to the organization.

CAPABILITIES, EXPERTISE, & CERTIFICATIONS

Data Strategy holds and maintains the highest-level certifications with major public cloud providers, including Microsoft and Amazon.

Microsoft Azure

amazon web services | Partner Network

Microsoft® Office 365

OUR SOLUTIONS

Data Strategy develops a strategic approach to the public cloud by starting with an abbreviated Cloud Strategy Workshop (see Cloud Strategy Workshop solution brief).

This workshop is followed by an assessment of a client's business applications and workloads. Based on the results, Data Strategy will forecast workload performance and operational costs in a public cloud setting versus an on-premise "current state." (Depending on client need, the assessment may also include an examination of Shadow IT; see Security solution brief).

The assessment creates a framework for planning what workloads can and should be migrated to the public cloud. From there, our subject matter experts, engineers, and certified project management professionals (PMP's) lay out a vision and roadmap to actualize the hybrid cloud infrastructure and environment.

OUTCOMES

With Data Strategy's Public Cloud solutions, a client's organization will gain significant benefits from use of the public cloud: shift capital expenses to operational expenses, offer greater elasticity and economies of scale, and get out of the "datacenter business."

At the same time, Data Strategy consultants help businesses mitigate risks that come with a hybrid cloud infrastructure: security and compliance, data loss and fail over, and protection against fraud and spammers.