

Myths About The Cloud

And the Truth Behind Them

Myth: Cloud is just a fad.

Truth: Cloud as a term is new, but the concepts and requisite technologies have been evolving for years (many years in some cases). Cloud computing continues to emerge as a game-changing technology, with high adoption rates and investment. Gartner Research predicts that by 2012, 80% of Fortune 1000 enterprises will be paying for some form of cloud computing services. Cloud computing is here to stay.

Myth: The cloud is not secure.

Truth: Public clouds are fundamentally multi-tenant to justify the scale and economics of the cloud. As such, security is a common concern. Whereas the traditional security perimeter is a network firewall, the cloud security perimeter now becomes the hypervisor and/or underlying cloud application. So far, security in the cloud has been good, but this is very cloud-dependent and requires a solid design and operational rigor that prioritizes security. Also, handing your data and systems to someone else requires proper internal controls to ensure that not just anyone has access. Be sure to ask potential cloud computing providers about security from technical, operational, and control perspectives, as well as what experience they have being stewards of customer systems and data. If the public cloud is fundamentally not secure enough, consider an on-premise cloud, virtual private cloud, or some sort of hybrid cloud solution (see Truth #10) that allows you to maintain the level of security you require.

Myth: The cloud is not reliable.

Truth: No system has 100% uptime, and neither does the Cloud. Given the scale, however, cloud computing services are typically designed to provide high redundancy and availability. While this same level of redundancy/availability is possible to achieve in-house or with dedicated hosting, it's generally cost prohibitive except for the most critical systems. The cloud enables a higher level of reliability at a fraction of the cost.

Myth: Performance is a problem in the cloud.

Truth: It depends. There are different types of clouds and use cases. In many instances, performance is higher in the cloud because there is more available capacity and scalability. In other cases (most notably running a database server), performance may be less than a traditional server. It's best to benchmark your application in the cloud to determine any performance impact (good or bad). If performance is an issue, consider a hybrid solution (see Truth # 10) that allows you to synergize the best of both worlds: the scalability and cost efficiencies of cloud computing and the performance of dedicated servers.

Myth: Customers lose control in the cloud and get locked-in.

Truth: There are different types of clouds that offer different levels of customization and flexibility. Clouds that implement standard technology stacks and are participating in cloud standardization efforts are your best bet to enable application mobility. Traction for open clouds is gaining momentum and the future will involve federation between public-to-public as well as public to on-premise/hosted private clouds. Ask your cloud computing provider about their participation in and vision for cloud standardization and federation.

Myth: The cloud is too complex.

Truth: Again, there are different types of clouds that have differing levels of complexity. Many clouds simplify management and involve little to no change in your application to move it to the cloud. Other clouds offer more power and control, but involve a change in application architecture. Simplicity and control are often at odds and the cloud is no different. Depending on your needs, the cloud can offer you a good balance.

Myth: Pay as you go cloud pricing will cost me more.

Truth: Cloud computing has huge economies of scale that get passed on to the consumer. In addition, cloud computing transfers what is typically CapEx (large upfront expenditures) into OpEx (ongoing operational costs) and enables pricing to be commensurate with usage. If pricing variability and budgeting are a concern, consider a pricing plan that offers a predictable price. Also, don't just look at raw cost. Generally, best value solutions are superior to lowest cost. Consider all the factors including support, customer service, reputation, reliability, etc. when measuring value.

Myth: The cloud is hard to integrate with existing systems.

Truth: Many applications are stand-alone and can be moved independent of other existing systems. For integrated applications that are service oriented, integration is relatively simple. For non-service oriented applications that require tight integration, hybrid solutions (see Truth #10) are designed to simplify integration with the cloud. As with all integration considerations, latency is likely a concern, so transparency about where your cloud application lives is important.

Myth: The cloud is not for enterprises.

Truth: The benefits of cloud computing apply equally to enterprises as they do to SMBs, startups and consumers. Since enterprises are typically more risk averse, new technologies are generally adopted by small business first. That said, overall cloud adoption rates are increasing substantially and we are seeing enterprise adoption today. Expect to see a significant inflection point in the next several years where cloud is a standard enterprise fixture (see Truth #1).

Myth: I should move everything to the cloud.

Truth: Not all applications are suitable for cloud computing. While the Cloud is here to stay, it will not replace traditional hosting or on-premise deployments, but rather complement them. There will always be situations where security requirements, flexibility, performance or control will preclude the cloud. In those cases, a hybrid solution involving both cloud and either traditionally hosted or on-premise servers may make sense. Beware of vendors who promote pure cloud for ALL applications. Instead, look for a cloud provider who can offer you hosting options that best fit your application needs. Also, if you are a Managed Hosting customer, recognize that today, the cloud is "unmanaged," meaning the onus for backups, patching, monitoring, etc. is back on you should you move to the Cloud. If management services are important to you (and they probably are if you are already a Managed Hosting customer), consider the ramifications of a move to the cloud and look for a cloud provider that will provide the level of support and service necessary for you to be successful.