

Hybrid cloud trends offer lessons for potential Consumers

Hybrid cloud use cases are growing more compelling as the need for workload flexibility increases. Potential adopters should plan ahead with these deployment and migration lessons.

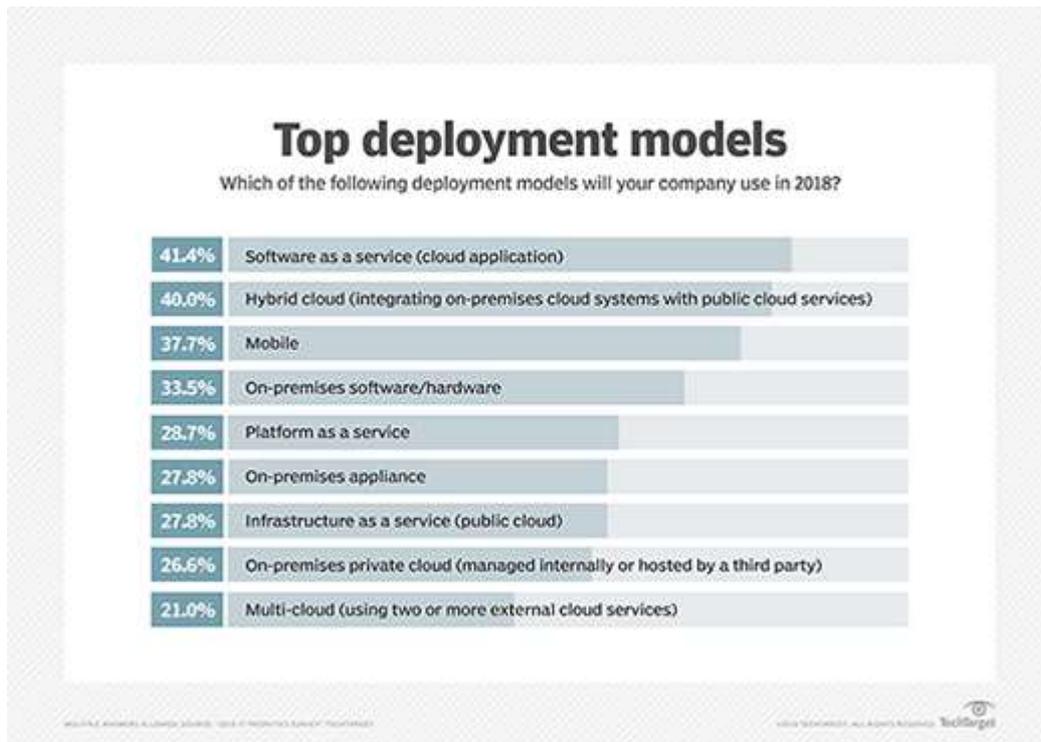
Organizations and IT administrators hoping to follow hybrid cloud trends can save time and energy by planning ahead with these hybrid cloud design, deployment and migration guidelines.

A hybrid cloud system mixes private and public cloud platforms with orchestration that enables workload flexibility between them. Hybrid cloud admins can move workloads between on-premises and third-party clouds as necessary to address business demands and budgetary concerns.

Hybrid cloud trends build on the shift to deployment models that emphasize workload mobility. Orchestration between previously disparate systems can enable admins to prioritize the needs of workloads and host them wherever they would be most efficient. For many organizations, the hybrid cloud provides the ability to use public cloud services while controlling costs by running workloads wherever it's most affordable.

Workload flexibility drives hybrid cloud trends

The ability to host sensitive or critical workloads in an on-premises private cloud and host less critical workloads in the public cloud is an attractive use case for many organizations.



In the financial and healthcare sectors, a hybrid cloud deployment offers the ability to retain sensitive data on premises and **meet strict compliance demands**. Organizations with more dynamic needs can run applications in the private cloud and burst to the public cloud to access additional resources. Similarly, organizations that must process large amounts of data can retain static data on premises and run intensive analytics in the public cloud.

Other uses cases include using the public cloud for development, testing and disaster recovery. Beyond any particular use case, organizations might also determine workload locations based on cost or performance.

Analyze needs to achieve a successful deployment

Organizations considering a hybrid cloud deployment must first evaluate what they need and what the hybrid cloud can offer. It's risky to heedlessly follow hybrid cloud trends without considering how the hybrid cloud can address relevant needs. Before deployment, evaluate which features you need and which services can fulfill those objectives.

Hybrid clouds offer similar features to public clouds, such as self-service and chargeback, but their smaller scale limits the range of these capabilities.

Organizations must closely examine the extent to which they need these features and how they will use them.

A successful hybrid cloud deployment depends on the careful selection of compatible hypervisor, cloud software and public cloud layers. A hybrid cloud deployment must also take into account the various tools necessary to manage and monitor resources across the clouds in use. Without the right tools and their integration into a single pane of glass, organizations risk following hybrid cloud trends without getting any of the benefits.

Beyond technology, organizations must also ensure they have the staff needed to deploy a hybrid cloud. Hybrid cloud success requires a wider skill set than the average system administrator often has. Organizations should consider hiring staff with particular cloud expertise.

No matter the first step, organizations should proceed in phases. Implement a hybrid cloud piece by piece: Start with a limited deployment, address specific workload goals by adding capabilities and then build it out as each success demonstrates value.

Hybrid cloud migration builds on current infrastructure

Before migrating workloads to a hybrid cloud, organizations must first evaluate their current infrastructure.

A lift and shift migration is rarely the right approach, primarily because most organizations fail to fully account for the amount of money and time a migration requires. If an organization has an application that must run all the time, it can prove surprisingly costly to run off site. Lift and shift can also incur significant downtime because some workloads might take weeks to migrate.

Instead, a hybrid cloud migration strategy should begin with an evaluation of the current workloads. Legacy systems, or systems that require a fine level of control, might be worth keeping out of the cloud. Compliance can

also be tricky and costly, so organizations should review those requirements, as well.

Hybrid cloud migration should build on a thorough audit of an organization's applications, the needs of those workloads and the dependencies they have.

Counterintuitively, organizations should also invest in private cloud infrastructure before addressing hybrid cloud trends. Modernized private cloud components, such as flash storage and software-defined networking, can make migration easier and long-term performance and management issues less likely. Additionally, if an organization hasn't already right-sized its infrastructure, it's liable to purchase more resources than it needs.

Organizations must also ensure the underlying hypervisors involved in the migration are compatible.

In addition, management tools should be refreshed and expanded before a hybrid cloud migration. Hybrid clouds need significant automation and monitoring to manage resources across public and private pools.

Monitoring tools must be able to ascertain what's running in all locations, evaluate the current availability and performance levels across systems, and automatically limit activities that would create unnecessary costs.