Why 76% of companies are adopting multicloud and hybrid cloud approaches

by Jean Atelsek

Trade-offs are a part of life – you can't have it all. When it comes to public cloud, there are trade-offs between price and performance, fine-tuned control and ease of operation, and customizability versus turnkey deployment.

As public cloud adoption grows and off-premises capabilities continually improve, most businesses realize that just as no two workloads are alike, an assemblage of IT resources is often required to handle application-level tolerances for latency, data isolation, cost and other factors.

The case for multicloud

Over time, cloud provider differentiation has moved beyond basic compute and storage and into higher-level managed services. In fact, according to 451 Research's Voice of the Enterprise: Cloud, Hosting & Managed Services, Vendor Evaluations 2020 survey, a large majority – 76% – of companies are using two or more public clouds, with the average having 2.3 clouds in use. For larger organizations, these figures are even higher: those with more than $1bn in revenue are twice as likely to be using three or more clouds than smaller businesses.

How did this happen? Isn't it easier and more efficient to have all cloud resources on a single integrated platform?

The top reason that enterprises use multiple clouds is to have access to vendor-specific capabilities. These might include best-of-breed services on one platform that simply outshine competing offerings, or it may mean integration with on-premises software that runs mission-critical workloads. One case where vendors have teamed up to make the multicloud approach easier is the arrangement between Oracle Cloud Infrastructure and Microsoft Azure to connect in certain regions via a high-throughput, low-latency private network. The goal of this collaboration is to allow enterprises to migrate to cloud without requiring operational 'islands' due to lack of connectivity.

The second-biggest motivation for multicloud is cost. Several factors figure into this advantage:

– Picking and choosing cloud services based on price can considerably lower direct expenses. In the 10 countries/ regions we track in 451 Research's Cloud Price Index, the average savings possible by using multiple providers for a simple application (compute, storage, bandwidth) is 45%. For a more complex deployment (adding databases and serverless), the global average savings is 29%.

– Better performance also means lower cost. If you're paying for compute by the minute or hour, and your work gets done in half the time on one cloud versus another, chances are you'll save money by using the faster cloud.

– Commitment discounts can be a big factor in total cost of operations. The latest Cloud Price Index benchmarks find that making up-front commitments when buying cloud compute capacity can deliver savings of over 60%. In the survey cited above, almost half (47%) of respondents said that 80% or more of their cloud spending was with a primary vendor – not surprising, since choosing an incumbent vendor when deploying new resources can add value by building on existing relationships, integration and contracts.
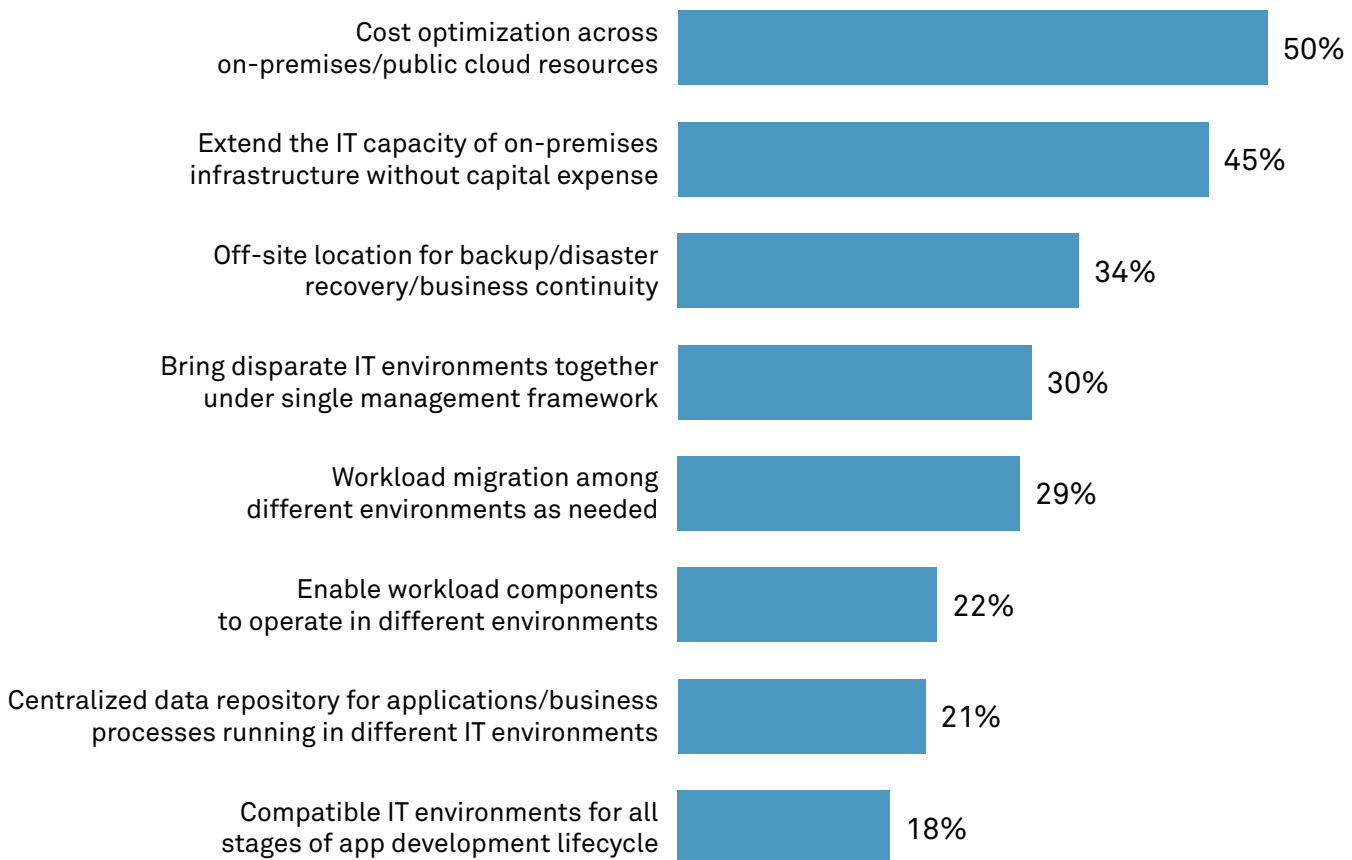
A trade-off in using this best-of-breed strategy is having a deeper bench of vendors to deal with, but for many enterprises the freedom of choice is worth it.

The case for hybrid cloud

With wider cloud adoption, application outcomes are essentially calling the shots: rather than standing up an IT environment to accommodate some unknown future peak capacity, modern architectures can dynamically deploy resources to suit application demands. More enterprises are finding that a hybrid environment – one that uses on-premises resources in coordination with public cloud services – offers the best of both worlds. Oracle's offering in this regard is Oracle Dedicated Region Cloud@Customer, a fully managed IT stack located in the customer's datacenter and operated in the same way as Oracle Cloud Infrastructure.

Especially among large organizations, existing IT investments have been paying the bills for years and can't cost-effectively be abandoned in favor of shiny new technology. Our recent Voice of the Enterprise survey shows that a hybrid strategy confers benefits in terms of cost, agility and resilience (see figure below).

Use Cases Driving Hybrid IT Deployment

Use Case	Percentage
Cost optimization across on-premises/public cloud resources	50%
Extend the IT capacity of on-premises infrastructure without capital expense	45%
Off-site location for backup/disaster recovery/business continuity	34%
Bring disparate IT environments together under single management framework	30%
Workload migration among different environments as needed	29%
Enable workload components to operate in different environments	22%
Centralized data repository for applications/business processes running in different IT environments	21%
Compatible IT environments for all stages of app development lifecycle	18%

Q. Which of the following use cases are driving your organization's implementation of hybrid IT environments? Please select up to 3.

Base: Have or planning formal strategy for hybrid IT (n=125)

Source: 451 Research's Voice of the Enterprise: Cloud, Hosting & Managed Services, Vendor Evaluations 2020

It's clear that cloud computing vendors, driven by customer demand, are forging a commitment to multicloud and hybrid cloud architectures. Partnerships and technologies such as the Oracle Cloud and Microsoft Azure Interconnect and Oracle Dedicated Region Cloud@Customer can reduce the friction and cost of operating such diverse environments, and are likely to find favor with IT teams.